Part 5
Outdoor Units
High COP Series
(Energy Saving Series)

RXYQ-P(A)H
Heat Pump (50Hz/60Hz)
High COP Series (Energy Saving Series) 615

RXYQ-P(A)H
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High COP Series
(Energy Saving Series)

1. Specifications 616
   1.1 Heat Pump 50Hz/60Hz High COP Series (Energy Saving Series) <RXYQ-P(A)H> 616
2. Dimensions 624
   2.1 Combination Unit 624
3. Field Wiring 629
4. Electric Characteristics 633
   4.1 50Hz 380-415V (RXYQ-PAHY1) 633
   4.2 60Hz 380V (RXYQ-PAHYL) 636
   4.3 60Hz 220V (RXYQ-PHTL) 637
5. Capacity Tables (Heat Pump High COP Series) 640
   5.1 Cooling Capacity (RXYQ-P(A)H) 640
   5.2 Heating Capacity (RXYQ-P(A)H) 656
   5.3 Capacity Correction Factor (RXYQ-P(A)H) 688
   5.4 Notes for Heating Capacity Characteristics 693
6. Sound Levels 694
   6.1 50Hz 694
   6.2 60Hz 695
7. Accessories 696
   7.1 Standard Accessories 696
   7.2 Optional Accessories 697
   7.3 Digital Pressure Gauge Kit BHGP26A1(E) 698

15

1. Specifications

1.1 Heat Pump 50Hz/60Hz High COP Series (Energy Saving Series) <RXYQ-P(A)H>

Model Name (Combination Unit)			**Y1(E)**	**RXYQ16PAHY1(E)**	**RXYQ18PAHY1(E)**
Model Name (Independent Unit)				**RXYQ8PAY1(E)+RXYQ8PAY1(E)**	**RXYQ8PAY1(E)+RXYQ10PAY1(E)**
Model Name (Combination Unit)			**YL(E)**	**RXYQ16PAHYL(E)**	**RXYQ18PAHYL(E)**
Model Name (Independent Unit)				**RXYQ8PAYL(E)+RXYQ8PAYL(E)**	**RXYQ8PAYL(E)+RXYQ10PAYL(E)**
Model Name (Combination Unit)			**TL(E)**	**RXYQ16PHTL(E)**	**RXYQ18PHTL(E)**
Model Name (Independent Unit)				**RXYQ8PTL(E)+RXYQ8PTL(E)**	**RXYQ8PTL(E)+RXYQ10PTL(E)**
★1 Cooling Capacity (19.5°CWB)			kcal / h	38,800	43,600
			Btu / h	154,000	173,000
			kW	45.1	50.7
★2 Cooling Capacity (19.0°CWB)			kW	44.8	50.4
★3 Heating Capacity			kcal / h	43,000	48,600
			Btu / h	171,000	193,000
			kW	50.0	56.5
Casing Color			Without(E)	Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
			With(E)	Light Camel (2.5Y6.5/1.5)	Light Camel (2.5Y6.5/1.5)
Dimensions: (H×W×D)			mm	(1680×930×765)+(1680×930×765)	(1680×930×765)+(1680×930×765)
Heat Exchanger				Cross Fin Coil	Cross Fin Coil
Comp.	Type			Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type
	Piston Displacement	m^3/h	Y1(E)	(16.90)+(16.90)	(16.90)+(13.34+10.53)
			YL(E)	(16.90)+(16.90)	(16.90)+(13.34+12.52)
			TL(E)	(16.90)+(16.90)	(16.90)+(13.34+12.52)
	Number of Revolutions	r.p.m	Y1(E)	(7980)+(7980)	(7980)+(6300, 2900)
			YL(E)	(7980)+(7980)	(7980)+(6300, 3450)
			TL(E)	(7980)+(7980)	(7980)+(6300, 3450)
	Motor Output×Number of Units		kW	(4.5×1)+(4.5×1)	(4.5×1)+((1.4+4.5)×1)
	Starting Method			Soft start	Soft start
Fan	Type			Propeller Fan	Propeller Fan
	Motor Output		kW	(0.75×1)+(0.75×1)	(0.75×1)+(0.75×1)
	Air Flow Rate		m^3/min	180+180	180+185
	Drive			Direct Drive	Direct Drive
Connecting Pipes	Liquid Pipe		mm	ϕ12.7 (Brazing Connection)	ϕ15.9 (Brazing Connection)
	Gas Pipe		mm	ϕ28.6 (Brazing Connection)	ϕ28.6 (Brazing Connection)
Product Mass (Machine weight)			kg	205+205	205+249
Safety Devices				High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector
Defrost Method				Deicer	Deicer
Capacity Control			%	10~100	8~100
Refrigerant	Refrigerant Name			R-410A	R-410A
	Charge		kg	7.2+7.2	7.2+7.9
	Control			Electronic Expansion Valve	Electronic Expansion Valve
Refrigerator Oil				Refer to the nameplate of compressor	Refer to the nameplate of compressor
Standard Accessories				Installation Manual, Operation Manual, Connection Pipes, Clamps	Installation Manual, Operation Manual, Connection Pipes, Clamps
Drawing No.					

Notes:

★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.
★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.
★3 Indoor temp. : 20°CDB / outdoor temp. : 7°CDB, 6°CWB / Equivalent piping length : 7.5m, level difference : 0m.
4 The power input (PI) (Comp.+Outdoor Fan Motor) : Refer to P.640~687.
5 The units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ16PAHY1E.

Conversion Formulae
kcal/h=kW×860 Btu/h=kW×3412 cfm=m^3/min×35.3

Model Name (Combination Unit)			Y1(E)	RXYQ24PAHY1(E)	RXYQ26PAHY1(E)
Model Name (Independent Unit)				RXYQ8PAY1(E)+RXYQ8PAY1(E)+RXYQ8PAY1(E)	RXYQ8PAY1(E)+RXYQ8PAY1(E)+RXYQ10PAY1(E)
Model Name (Combination Unit)			YL(E)	RXYQ24PAHYL(E)	RXYQ26PAHYL(E)
Model Name (Independent Unit)				RXYQ8PAYL(E)+RXYQ8PAYL(E)+RXYQ8PAYL(E)	RXYQ8PAYL(E)+RXYQ8PAYL(E)+RXYQ10PAYL(E)
Model Name (Combination Unit)			TL(E)	RXYQ24PHTL(E)	RXYQ26PHTL(E)
Model Name (Independent Unit)				RXYQ8PTL(E)+RXYQ8PTL(E)+RXYQ8PTL(E)	RXYQ8PTL(E)+RXYQ8PTL(E)+RXYQ10PTL(E)
★1 Cooling Capacity (19.5°CWB)			kcal / h	58,100	63,000
			Btu / h	231,000	250,000
			kW	67.6	73.2
★2 Cooling Capacity (19.0°CWB)			kW	67.2	72.8
★3 Heating Capacity			kcal / h	64,500	70,100
			Btu / h	260,000	278,000
			kW	75.0	81.5
Casing Color			Without(E)	Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
			With(E)	Light Camel (2.5Y6.5/1.5)	Light Camel (2.5Y6.5/1.5)
Dimensions: (H×W×D)			mm	(1680×930×765)+(1680×930×765)+(1680×930×765)	(1680×930×765)+(1680×930×765)+(1680×930×765)
Heat Exchanger				Cross Fin Coil	Cross Fin Coil
Comp.	Type			Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type
	Piston Displacement	m^3/h	Y1(E)	(16.90)+(16.90)+(16.90)	(16.90)+(16.90)+(13.34+10.53)
			YL(E)	(16.90)+(16.90)+(16.90)	(16.90)+(16.90)+(13.34+12.52)
			TL(E)	(16.90)+(16.90)+(16.90)	(16.90)+(16.90)+(13.34+12.52)
	Number of Revolutions	r.p.m	Y1(E)	(7980)+(7980)+(7980)	(7980)+(7980)+(6300, 2900)
			YL(E)	(7980)+(7980)+(7980)	(7980)+(7980)+(6300, 3450)
			TL(E)	(7980)+(7980)+(7980)	(7980)+(7980)+(6300, 3450)
	Motor Output×Number of Units		kW	(4.5×1)+(4.5×1)+(4.5×1)	(4.5×1)+(4.5×1)+((1.4+4.5)×1)
	Starting Method			Soft start	Soft start
Fan	Type			Propeller Fan	Propeller Fan
	Motor Output		kW	(0.75×1)+(0.75×1)+(0.75×1)	(0.75×1)+(0.75×1)+(0.75×1)
	Air Flow Rate		m^3/min	180+180+180	180+180+185
	Drive			Direct Drive	Direct Drive
Connecting Pipes	Liquid Pipe		mm	ϕ15.9 (Brazing Connection)	ϕ19.1 (Brazing Connection)
	Gas Pipe		mm	ϕ34.9 (Brazing Connection)	ϕ34.9 (Brazing Connection)
Product Mass (Machine Weight)			kg	205+205+205	205+205+249
Safety Devices				High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector
Defrost Method				Deicer	Deicer
Capacity Control			%	7~100	6~100
Refrigerant	Refrigerant Name			R-410A	R-410A
	Charge		kg	7.2+7.2+7.2	7.2+7.2+7.9
	Control			Electronic Expansion Valve	Electronic Expansion Valve
Refrigerator Oil				Refer to the nameplate of compressor	Refer to the nameplate of compressor
Standard Accessories				Installation Manual, Operation Manual, Connection Pipes, Clamps	Installation Manual, Operation Manual, Connection Pipes, Clamps
Drawing No.					

Notes:

★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.
★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.
★3 Indoor temp. : 20°CDB / outdoor temp. : 7°CDB, 6°CWB / Equivalent piping length : 7.5m, level difference : 0m.
4 The power input (PI) (Comp.+Outdoor Fan Motor) : Refer to P.640~687.
5 The units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ16PAHY1E.

Conversion Formulae
kcal/h=kW×860 Btu/h=kW×3412 cfm=m^3/min×35.3

Model Name (Combination Unit)			**Y1(E)**	**RXYQ28PAHY1(E)**	**RXYQ30PAHY1(E)**
Model Name (Independent Unit)				**RXYQ8PAY1(E)+RXYQ8PAY1(E)+RXYQ12PAY1(E)**	**RXYQ8PAY1(E)+RXYQ10PAY1(E)+RXYQ12PAY1(E)**
Model Name (Combination Unit)			**YL(E)**	**RXYQ28PAHYL(E)**	**RXYQ30PAHYL(E)**
Model Name (Independent Unit)				**RXYQ8PAYL(E)+RXYQ8PAYL(E)+RXYQ12PAYL(E)**	**RXYQ8PAYL(E)+RXYQ10PAYL(E)+RXYQ12PAYL(E)**
Model Name (Combination Unit)			**TL(E)**	**RXYQ28PHTL(E)**	**RXYQ30PHTL(E)**
Model Name (Independent Unit)				**RXYQ8PTL(E)+RXYQ8PTL(E)+RXYQ12PTL(E)**	**RXYQ8PTL(E)+RXYQ10PTL(E)+RXYQ12PTL(E)**
★1 Cooling Capacity (19.5°CWB)			kcal / h	67,800	72,600
			Btu / h	269,000	288,000
			kW	78.8	84.4
★2 Cooling Capacity (19.0°CWB)			kW	78.3	83.9
★3 Heating Capacity			kcal / h	75,300	80,800
			Btu / h	299,000	321,000
			kW	87.5	94.0
Casing Color			Without(E)	Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
			With(E)	Light Camel (2.5Y6.5/1.5)	Light Camel (2.5Y6.5/1.5)
Dimensions: (H×W×D)			mm	(1680×930×765)+(1680×930×765)+(1680×1240×765)	(1680×930×765)+(1680×930×765)+(1680×1240×765)
Heat Exchanger				Cross Fin Coil	Cross Fin Coil
Comp.	Type			Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type
	Piston Displacement	m³/h	Y1(E)	(16.90)+(16.90)+(13.34+10.53)	(16.90)+(13.34+10.53)+(13.34+10.53)
			YL(E)	(16.90)+(16.90)+(13.34+12.52)	(16.90)+(13.34+12.52)+(13.34+12.52)
			TL(E)	(16.90)+(16.90)+(13.34+12.52)	(16.90)+(13.34+12.52)+(13.34+12.52)
	Number of Revolutions	r.p.m	Y1(E)	(7980)+(7980)+(6300, 2900)	(7980)+(6300, 2900)+(6300, 2900)
			YL(E)	(7980)+(7980)+(6300, 3450)	(7980)+(6300, 3450)+(6300, 3450)
			TL(E)	(7980)+(7980)+(6300, 3450)	(7980)+(6300, 3450)+(6300, 3450)
	Motor Output×Number of Units		kW	(4.5×1)+(4.5×1)+((2.5+4.5)×1)	(4.5×1)+((1.4+4.5)×1)+((2.5+4.5)×1)
	Starting Method			Soft start	Soft start
Fan	Type			Propeller Fan	Propeller Fan
	Motor Output		kW	(0.75×1)+(0.75×1)+(0.35×2)	(0.75×1)+(0.75×1)+(0.35×2)
	Air Flow Rate		m³/min	180+180+233	180+185+233
	Drive			Direct Drive	Direct Drive
Connecting Pipes	Liquid Pipe		mm	ϕ19.1 (Brazing Connection)	ϕ19.1 (Brazing Connection)
	Gas Pipe		mm	ϕ34.9 (Brazing Connection)	ϕ34.9 (Brazing Connection)
Product Mass (Machine Weight)			kg	205+205+285	205+249+285
Safety Devices				High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector
Defrost Method				Deicer	Deicer
Capacity Control			%	6~100	5~100
Refrigerant	Refrigerant Name			R-410A	R-410A
	Charge		kg	7.2+7.2+9.5	7.2+7.9+9.5
	Control			Electronic Expansion Valve	Electronic Expansion Valve
Refrigerator Oil				Refer to the nameplate of compressor	Refer to the nameplate of compressor
Standard Accessories				Installation Manual, Operation Manual, Connection Pipes, Clamps	Installation Manual, Operation Manual, Connection Pipes, Clamps
Drawing No.					

Notes:

★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.
★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.
★3 Indoor temp. : 20°CDB / outdoor temp. : 7°CDB, 6°CWB / Equivalent piping length : 7.5m, level difference : 0m.
4 The power input (PI) (Comp.+Outdoor Fan Motor) : Refer to P.640~687.
5 The units with anti-corrosion treatment will be available as standard. Please specify the suffix “E” as RXYQ16PAHY1E.

Conversion Formulae
kcal/h=kW×860 Btu/h=kW×3412 cfm=m³/min×35.3

Model Name (Combination Unit)			Y1(E)	RXYQ32PAHY1(E)	RXYQ34PAHY1(E)
Model Name (Independent Unit)				RXYQ8PAY1(E)+RXYQ12PAY1(E)+RXYQ12PAY1(E)	RXYQ10PAY1(E)+RXYQ12PAY1(E)+RXYQ12PAY1(E)
Model Name (Combination Unit)			YL(E)	RXYQ32PAHYL(E)	RXYQ34PAHYL(E)
Model Name (Independent Unit)				RXYQ8PAYL(E)+RXYQ12PAYL(E)+RXYQ12PAYL(E)	RXYQ10PAYL(E)+RXYQ12PAYL(E)+RXYQ12PAYL(E)
Model Name (Combination Unit)			TL(E)	RXYQ32PHTL(E)	RXYQ34PHTL(E)
Model Name (Independent Unit)				RXYQ8PTL(E)+RXYQ12PTL(E)+RXYQ12PTL(E)	RXYQ10PTL(E)+RXYQ12PTL(E)+RXYQ12PTL(E)
★1 Cooling Capacity (19.5°CWB)			kcal / h	77,300	82,200
			Btu / h	307,000	326,000
			kW	89.9	95.6
★2 Cooling Capacity (19.0°CWB)			kW	89.4	95.0
★3 Heating Capacity			kcal / h	86,000	92,000
			Btu / h	341,000	365,000
			kW	100	107
Casing Color			Without(E)	Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
			With(E)	Light Camel (2.5Y6.5/1.5)	Light Camel (2.5Y6.5/1.5)
Dimensions: (H×W×D)			mm	(1680×930×765)+(1680×1240×765)+(1680×1240×765)	(1680×930×765)+(1680×1240×765)+(1680×1240×765)
Heat Exchanger				Cross Fin Coil	Cross Fin Coil
Comp.	Type			Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type
	Piston Displacement	m^3/h	Y1(E)	(16.90)+(13.34+10.53)+(13.34+10.53)	(13.34+10.53)+(13.34+10.53)+(13.34+10.53)
			YL(E)	(16.90)+(13.34+12.52)+(13.34+12.52)	(13.34+12.52)+(13.34+12.52)+(13.34+12.52)
			TL(E)	(16.90)+(13.34+12.52)+(13.34+12.52)	(13.34+12.52)+(13.34+12.52)+(13.34+12.52)
	Number of Revolutions	r.p.m	Y1(E)	(7980)+(6300, 2900)+(6300, 2900)	(6300, 2900)+(6300, 2900)+(6300, 2900)
			YL(E)	(7980)+(6300, 3450)+(6300, 3450)	(6300, 3450)+(6300, 3450)+(6300, 3450)
			TL(E)	(7980)+(6300, 3450)+(6300, 3450)	(6300, 3450)+(6300, 3450)+(6300, 3450)
	Motor Output×Number of Units		kW	(4.5×1)+((2.5+4.5)×1)+((2.5+4.5)×1)	((1.4+4.5)×1)+((2.5+4.5)×1)+((2.5+4.5)×1)
	Starting Method			Soft start	Soft start
Fan	Type			Propeller Fan	Propeller Fan
	Motor Output		kW	(0.75×1)+(0.35×2)+(0.35×2)	(0.75×1)+(0.35×2)+(0.35×2)
	Air Flow Rate		m^3/min	180+233+233	185+233+233
	Drive			Direct Drive	Direct Drive
Connecting Pipes	Liquid Pipe		mm	ϕ19.1 (Brazing Connection)	ϕ19.1 (Brazing Connection)
	Gas Pipe		mm	ϕ34.9 (Brazing Connection)	ϕ34.9 (Brazing Connection)
Product Mass (Machine Weight)			kg	205+285+285	249+285+285
Safety Devices				High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector
Defrost Method				Deicer	Deicer
Capacity Control			%	5~100	5~100
Refrigerant	Refrigerant Name			R-410A	R-410A
	Charge		kg	7.2+9.5+9.5	7.9+9.5+9.5
	Control			Electronic Expansion Valve	Electronic Expansion Valve
Refrigerator Oil				Refer to the nameplate of compressor	Refer to the nameplate of compressor
Standard Accessories				Installation Manual, Operation Manual, Connection Pipes, Clamps	Installation Manual, Operation Manual, Connection Pipes, Clamps
Drawing No.					

Notes:

★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.
★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.
★3 Indoor temp. : 20°CDB / outdoor temp. : 7°CDB, 6°CWB / Equivalent piping length : 7.5m, level difference : 0m.
4 The power input (PI) (Comp.+Outdoor Fan Motor) : Refer to P.640~687.
5 The units with anti-corrosion treatment will be available as standard. Please specify the suffix “E” as RXYQ16PAHY1E.

Conversion Formulae
kcal/h=kW×860 Btu/h=kW×3412 cfm=m^3/min×35.3

Model Name (Combination Unit)			**Y1(E)**	**RXYQ36PAHY1(E)**	**RXYQ38PAHY1(E)**
Model Name (Independent Unit)				**RXYQ12PAY1(E)+RXYQ12PAY1(E)+RXYQ12PAY1(E)**	**RXYQ12PAY1(E)+RXYQ12PAY1(E)+RXYQ14PAY1(E)**
Model Name (Combination Unit)			**YL(E)**	**RXYQ36PAHYL(E)**	**RXYQ38PAHYL(E)**
Model Name (Independent Unit)				**RXYQ12PAYL(E)+RXYQ12PAYL(E)+RXYQ12PAYL(E)**	**RXYQ12PAYL(E)+RXYQ12PAYL(E)+RXYQ14PAYL(E)**
Model Name (Combination Unit)			**TL(E)**	**RXYQ36PHTL(E)**	**RXYQ38PHTL(E)**
Model Name (Independent Unit)				**RXYQ12PTL(E)+RXYQ12PTL(E)+RXYQ12PTL(E)**	**RXYQ12PTL(E)+RXYQ12PTL(E)+RXYQ14PTL(E)**
★1 Cooling Capacity (19.5°CWB)			kcal / h	87,700	92,900
			Btu / h	348,000	368,000
			kW	102	108
★2 Cooling Capacity (19.0°CWB)			kW	101	107
★3 Heating Capacity			kcal / h	97,200	103,000
			Btu / h	386,000	409,000
			kW	113	120
Casing Color			Without(E)	Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
			With(E)	Light Camel (2.5Y6.5/1.5)	Light Camel (2.5Y6.5/1.5)
Dimensions: (H×W×D)			mm	(1680×1240×765)+(1680×1240×765)+(1680×1240×765)	(1680×1240×765)+(1680×1240×765)+(1680×1240×765)
Heat Exchanger				Cross Fin Coil	Cross Fin Coil
Comp.	Type			Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type
	Piston Displacement	m^3/h	Y1(E)	(13.34+10.53)+(13.34+10.53)+(13.34+10.53)	(13.34+10.53)+(13.34+10.53)+(13.34+10.53+10.53)
			YL(E)	(13.34+12.52)+(13.34+12.52)+(13.34+12.52)	(13.34+12.52)+(13.34+12.52)+(12.84+12.52+12.52)
			TL(E)	(13.34+12.52)+(13.34+12.52)+(13.34+12.52)	(13.34+12.52)+(13.34+12.52)+(12.84+12.52+12.52)
	Number of Revolutions	r.p.m	Y1(E)	(6300, 2900)+(6300, 2900)+(6300, 2900)	(6300, 2900)+(6300, 2900)+(6300, 2900, 2900)
			YL(E)	(6300, 3450)+(6300, 3450)+(6300, 3450)	(6300, 3450)+(6300, 3450)+(6060, 3450, 3450)
			TL(E)	(6300, 3450)+(6300, 3450)+(6300, 3450)	(6300, 3450)+(6300, 3450)+(6060, 3450, 3450)
	Motor Output×Number of Units		kW	((2.5+4.5)×1)+((2.5+4.5)×1)+((2.5+4.5)×1)	((2.5+4.5)×1)+((2.5+4.5)×1)+((1.6+4.5+4.5)×1)
	Starting Method			Soft start	Soft start
Fan	Type			Propeller Fan	Propeller Fan
	Motor Output		kW	(0.35×2)+(0.35×2)+(0.35×2)	(0.35×2)+(0.35×2)+(0.35×2)
	Air Flow Rate		m^3/min	233+233+233	233+233+233
	Drive			Direct Drive	Direct Drive
Connecting Pipes	Liquid Pipe		mm	ϕ19.1 (Brazing Connection)	ϕ19.1 (Brazing Connection)
	Gas Pipe		mm	ϕ41.3 (Brazing Connection)	ϕ41.3 (Brazing Connection)
Product Mass (Machine Weight)			kg	285+285+285	285+285+329
Safety Devices				High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector
Defrost Method				Deicer	Deicer
Capacity Control			%	5~100	4~100
Refrigerant	Refrigerant Name			R-410A	R-410A
	Charge		kg	9.5+9.5+9.5	9.5+9.5+11.3
	Control			Electronic Expansion Valve	Electronic Expansion Valve
Refrigerator Oil				Refer to the nameplate of compressor	Refer to the nameplate of compressor
Standard Accessories				Installation Manual, Operation Manual, Connection Pipes, Clamps	Installation Manual, Operation Manual, Connection Pipes, Clamps
Drawing No.					

Notes:

★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.
★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.
★3 Indoor temp. : 20°CDB / outdoor temp. : 7°CDB, 6°CWB / Equivalent piping length : 7.5m, level difference : 0m.
4 The power input (PI) (Comp.+Outdoor Fan Motor) : Refer to P.640~687.
5 The units with anti-corrosion treatment will be available as standard. Please specify the suffix “E” as RXYQ16PAHY1E.

Conversion Formulae
kcal/h=kW×860 Btu/h=kW×3412 cfm=m^3/min×35.3

Model Name (Combination Unit)			Y1(E)	RXYQ40PAHY1(E)	RXYQ42PAHY1(E)
Model Name (Independent Unit)				RXYQ12PAY1(E)+RXYQ12PAY1(E)+RXYQ16PAY1(E)	RXYQ12PAY1(E)+RXYQ12PAY1(E)+RXYQ18PAY1(E)
Model Name (Combination Unit)			YL(E)	RXYQ40PAHYL(E)	RXYQ42PAHYL(E)
Model Name (Independent Unit)				RXYQ12PAYL(E)+RXYQ12PAYL(E)+RXYQ16PAYL(E)	RXYQ12PAYL(E)+RXYQ12PAYL(E)+RXYQ18PAYL(E)
Model Name (Combination Unit)			TL(E)	RXYQ40PHTL(E)	RXYQ42PHTL(E)
Model Name (Independent Unit)				RXYQ12PTL(E)+RXYQ12PTL(E)+RXYQ16PTL(E)	RXYQ12PTL(E)+RXYQ12PTL(E)+RXYQ18PTL(E)
★1 Cooling Capacity (19.5°CWB)			kcal / h	97,200	101,000
			Btu / h	386,000	399,000
			kW	113	117
★2 Cooling Capacity (19.0°CWB)			kW	112	116
★3 Heating Capacity			kcal / h	108,000	114,000
			Btu / h	427,000	450,000
			kW	125	132
Casing Color			Without(E)	Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
			With(E)	Light Camel (2.5Y6.5/1.5)	Light Camel (2.5Y6.5/1.5)
Dimensions: (H×W×D)			mm	(1680×1240×765)+(1680×1240×765)+(1680×1240×765)	(1680×1240×765)+(1680×1240×765)+(1680×1240×765)
Heat Exchanger				Cross Fin Coil	Cross Fin Coil
Comp.	Type			Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type
	Piston Displacement	m³/h	Y1(E)	(13.34+10.53)+(13.34+10.53)+(13.34+10.53+10.53)	(13.34+10.53)+(13.34+10.53)+(16.90+10.53+10.53)
			YL(E)	(13.34+12.52)+(13.34+12.52)+(12.84+12.52+12.52)	(13.34+12.52)+(13.34+12.52)+(12.84+12.52+12.52)
			TL(E)	(13.34+12.52)+(13.34+12.52)+(12.84+12.52+12.52)	(13.34+12.52)+(13.34+12.52)+(12.84+12.52+12.52)
	Number of Revolutions	r.p.m	Y1(E)	(6300, 2900)+(6300, 2900)+(6300, 2900, 2900)	(6300, 2900)+(6300, 2900)+(7980, 2900, 2900)
			YL(E)	(6300, 3450)+(6300, 3450)+(6060, 3450, 3450)	(6300, 3450)+(6300, 3450)+(6060, 3450, 3450)
			TL(E)	(6300, 3450)+(6300, 3450)+(6060, 3450, 3450)	(6300, 3450)+(6300, 3450)+(6060, 3450, 3450)
	Motor Output×Number of Units		kW	((2.5+4.5)×1)+((2.5+4.5)×1)+((2.7+4.5+4.5)×1)	((2.5+4.5)×1)+((2.5+4.5)×1)+((4.3+4.5+4.5)×1)
	Starting Method			Soft start	Soft start
Fan	Type			Propeller Fan	Propeller Fan
	Motor Output		kW	(0.35×2)+(0.35×2)+(0.35×2)	(0.35×2)+(0.35×2)+(0.75×2)
	Air Flow Rate		m³/min	233+233+233	233+233+239
	Drive			Direct Drive	Direct Drive
Connecting Pipes	Liquid Pipe		mm	ϕ19.1 (Brazing Connection)	ϕ19.1 (Brazing Connection)
	Gas Pipe		mm	ϕ41.3 (Brazing Connection)	ϕ41.3 (Brazing Connection)
Product Mass (Machine Weight)			kg	285+285+329	285+285+341
Safety Devices				High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector
Defrost Method				Deicer	Deicer
Capacity Control			%	4~100	4~100
Refrigerant	Refrigerant Name			R-410A	R-410A
	Charge		kg	9.5+9.5+11.5	9.5+9.5+11.7
	Control			Electronic Expansion Valve	Electronic Expansion Valve
Refrigerator Oil				Refer to the nameplate of compressor	Refer to the nameplate of compressor
Standard Accessories				Installation Manual, Operation Manual, Connection Pipes, Clamps	Installation Manual, Operation Manual, Connection Pipes, Clamps
Drawing No.					

Notes:

★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.
★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.
★3 Indoor temp. : 20°CDB / outdoor temp. : 7°CDB, 6°CWB / Equivalent piping length : 7.5m, level difference : 0m.
4 The power input (PI) (Comp.+Outdoor Fan Motor) : Refer to P.640~687.
5 The units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ16PAHY1E.

Conversion Formulae
kcal/h=kW×860 Btu/h=kW×3412 cfm=m³/min×35.3

Model Name (Combination Unit)			**Y1(E)**	**RXYQ44PAHY1(E)**	**RXYQ46PAHY1(E)**
Model Name (Independent Unit)				**RXYQ12PAY1(E)+RXYQ16PAY1(E)+RXYQ16PAY1(E)**	**RXYQ12PAY1(E)+RXYQ16PAY1(E)+RXYQ18PAY1(E)**
Model Name (Combination Unit)			**YL(E)**	**RXYQ44PAHYL(E)**	**RXYQ46PAHYL(E)**
Model Name (Independent Unit)				**RXYQ12PAYL(E)+RXYQ16PAYL(E)+RXYQ16PAYL(E)**	**RXYQ12PAYL(E)+RXYQ16PAYL(E)+RXYQ18PAYL(E)**
Model Name (Combination Unit)			**TL(E)**	**RXYQ44PHTL(E)**	**RXYQ46PHTL(E)**
Model Name (Independent Unit)				**RXYQ12PTL(E)+RXYQ16PTL(E)+RXYQ16PTL(E)**	**RXYQ12PTL(E)+RXYQ16PTL(E)+RXYQ18PTL(E)**
★1 Cooling Capacity (19.5°CWB)			kcal / h	108,000	111,000
			Btu / h	427,000	440,000
			kW	125	129
★2 Cooling Capacity (19.0°CWB)			kW	124	128
★3 Heating Capacity			kcal / h	119,000	124,000
			Btu / h	471,000	491,000
			kW	138	144
Casing Color			Without(E)	Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
			With(E)	Light Camel (2.5Y6.5/1.5)	Light Camel (2.5Y6.5/1.5)
Dimensions: (H×W×D)			mm	(1680×1240×765)+(1680×1240×765)+(1680×1240×765)	(1680×1240×765)+(1680×1240×765)+(1680×1240×765)
Heat Exchanger				Cross Fin Coil	Cross Fin Coil
Comp.	Type			Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type
	Piston Displacement	m³/h	Y1(E)	(13.34+10.53)+(13.34+10.53+10.53)+(13.34+10.53+10.53)	(13.34+10.53)+(13.34+10.53+10.53)+(16.90+10.53+10.53)
			YL(E)	(13.34+12.52)+(12.84+12.52+12.52)+(12.84+12.52+12.52)	(13.34+12.52)+(12.84+12.52+12.52)+(12.84+12.52+12.52)
			TL(E)	(13.34+12.52)+(12.84+12.52+12.52)+(12.84+12.52+12.52)	(13.34+12.52)+(12.84+12.52+12.52)+(12.84+12.52+12.52)
	Number of Revolutions	r.p.m	Y1(E)	(6300, 2900)+(6300, 2900, 2900)+(6300, 2900, 2900)	(6300, 2900)+(6300, 2900, 2900)+(7980, 2900, 2900)
			YL(E)	(6300, 3450)+(6060, 3450, 3450)+(6060, 3450, 3450)	(6300, 3450)+(6060, 3450, 3450)+(6060, 3450, 3450)
			TL(E)	(6300, 3450)+(6060, 3450, 3450)+(6060, 3450, 3450)	(6300, 3450)+(6060, 3450, 3450)+(6060, 3450, 3450)
	Motor Output×Number of Units		kW	((2.5+4.5)×1)+((2.7+4.5+4.5)×1)+((2.7+4.5+4.5)×1)	((2.5+4.5)×1)+((2.7+4.5+4.5)×1)+((4.3+4.5+4.5)×1)
	Starting Method			Soft start	Soft start
Fan	Type			Propeller Fan	Propeller Fan
	Motor Output		kW	(0.35×2)+(0.35×2)+(0.35×2)	(0.35×2)+(0.35×2)+(0.75×2)
	Air Flow Rate		m³/min	233+233+233	233+233+239
	Drive			Direct Drive	Direct Drive
Connecting Pipes	Liquid Pipe		mm	ϕ19.1 (Brazing Connection)	ϕ19.1 (Brazing Connection)
	Gas Pipe		mm	ϕ41.3 (Brazing Connection)	ϕ41.3 (Brazing Connection)
Product Mass (Machine Weight)			kg	285+329+329	285+329+341
Safety Devices				High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector
Defrost Method				Deicer	Deicer
Capacity Control			%	4~100	3~100
Refrigerant	Refrigerant Name			R-410A	R-410A
	Charge		kg	9.5+11.5+11.5	9.5+11.5+11.7
	Control			Electronic Expansion Valve	Electronic Expansion Valve
Refrigerator Oil				Refer to the nameplate of compressor	Refer to the nameplate of compressor
Standard Accessories				Installation Manual, Operation Manual, Connection Pipes, Clamps	Installation Manual, Operation Manual, Connection Pipes, Clamps
Drawing No.					

Notes:

★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.
★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.
★3 Indoor temp. : 20°CDB / outdoor temp. : 7°CDB, 6°CWB / Equivalent piping length : 7.5m, level difference : 0m.
4 The power input (PI) (Comp.+Outdoor Fan Motor) : Refer to P.640~687.
5 The units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ16PAHY1E.

Conversion Formulae
kcal/h=kW×860 Btu/h=kW×3412 cfm=m³/min×35.3

Model Name (Combination Unit)			Y1(E)	RXYQ48PAHY1(E)	RXYQ50PAHY1(E)
Model Name (Independent Unit)				RXYQ16PAY1(E)+RXYQ16PAY1(E)+RXYQ16PAY1(E)	RXYQ16PAY1(E)+RXYQ16PAY1(E)+RXYQ18PAY1(E)
Model Name (Combination Unit)			YL(E)	RXYQ48PAHYL(E)	RXYQ50PAHYL(E)
Model Name (Independent Unit)				RXYQ16PAYL(E)+RXYQ16PAYL(E)+RXYQ16PAYL(E)	RXYQ16PAYL(E)+RXYQ16PAYL(E)+RXYQ18PAYL(E)
Model Name (Combination Unit)			TL(E)	RXYQ48PHTL(E)	RXYQ50PHTL(E)
Model Name (Independent Unit)				RXYQ16PTL(E)+RXYQ16PTL(E)+RXYQ16PTL(E)	RXYQ16PTL(E)+RXYQ16PTL(E)+RXYQ18PTL(E)
★1 Cooling Capacity (19.5°CWB)			kcal / h	117,000	120,000
			Btu / h	464,000	478,000
			kW	136	140
★2 Cooling Capacity (19.0°CWB)			kW	135	139
★3 Heating Capacity			kcal / h	129,000	134,000
			Btu / h	512,000	532,000
			kW	150	156
Casing Color			Without(E)	Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
			With(E)	Light Camel (2.5Y6.5/1.5)	Light Camel (2.5Y6.5/1.5)
Dimensions: (H×W×D)			mm	(1680×1240×765)+(1680×1240×765)+(1680×1240×765)	(1680×1240×765)+(1680×1240×765)+(1680×1240×765)
Heat Exchanger				Cross Fin Coil	Cross Fin Coil
Comp.	Type			Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type
	Piston Displacement	m³/h	Y1(E)	(13.34+10.53+10.53)+(13.34+10.53+10.53)+(13.34+10.53 +10.53)	(13.34+10.53+10.53)+(13.34+10.53+10.53)+(16.90+10.53 +10.53)
			YL(E)	(12.84+12.52+12.52)+(12.84+12.52+12.52)+(12.84+12.52 +12.52)	(12.84+12.52+12.52)+(12.84+12.52+12.52)+(12.84+12.52 +12.52)
			TL(E)	(12.84+12.52+12.52)+(12.84+12.52+12.52)+(12.84+12.52 +12.52)	(12.84+12.52+12.52)+(12.84+12.52+12.52)+(12.84+12.52 +12.52)
	Number of Revolutions	r.p.m	Y1(E)	(6300, 2900, 2900)+(6300, 2900, 2900)+(6300, 2900, 2900)	(6300, 2900, 2900)+(6300, 2900, 2900)+(7980, 2900, 2900)
			YL(E)	(6060, 3450, 3450)+(6060, 3450, 3450)+(6060, 3450, 3450)	(6060, 3450, 3450)+(6060, 3450, 3450)+(6060, 3450, 3450)
			TL(E)	(6060, 3450, 3450)+(6060, 3450, 3450)+(6060, 3450, 3450)	(6060, 3450, 3450)+(6060, 3450, 3450)+(6060, 3450, 3450)
	Motor Output×Number of Units		kW	((2.7+4.5+4.5)×1)+((2.7+4.5+4.5)×1)+((2.7+4.5+4.5)×1)	((2.7+4.5+4.5)×1)+((2.7+4.5+4.5)×1)+((4.3+4.5+4.5)×1)
	Starting Method			Soft start	Soft start
Fan	Type			Propeller Fan	Propeller Fan
	Motor Output		kW	(0.35×2)+(0.35×2)+(0.35×2)	(0.35×2)+(0.35×2)+(0.75×2)
	Air Flow Rate		m³/min	233+233+233	233+233+239
	Drive			Direct Drive	Direct Drive
Connecting Pipes	Liquid Pipe		mm	ϕ19.1 (Brazing Connection)	ϕ19.1 (Brazing Connection)
	Gas Pipe		mm	ϕ41.3 (Brazing Connection)	ϕ41.3 (Brazing Connection)
Product Mass (Machine Weight)			kg	329+329+329	329+329+341
Safety Devices				High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector
Defrost Method				Deicer	Deicer
Capacity Control			%	3~100	3~100
Refrigerant	Refrigerant Name			R-410A	R-410A
	Charge		kg	11.5+11.5+11.5	11.5+11.5+11.7
	Control			Electronic Expansion Valve	Electronic Expansion Valve
Refrigerator Oil				Refer to the nameplate of compressor	Refer to the nameplate of compressor
Standard Accessories				Installation Manual, Operation Manual, Connection Pipes, Clamps	Installation Manual, Operation Manual, Connection Pipes, Clamps
Drawing No.					

Notes:

★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.
★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.
★3 Indoor temp. : 20°CDB / outdoor temp. : 7°CDB, 6°CWB / Equivalent piping length : 7.5m, level difference : 0m.
4 The power input (PI) (Comp.+Outdoor Fan Motor) : Refer to P.640~687.
5 The units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ16PAHY1E.

Conversion Formulae
kcal/h=kW×860 Btu/h=kW×3412 cfm=m³/min×35.3

15

2. Dimensions

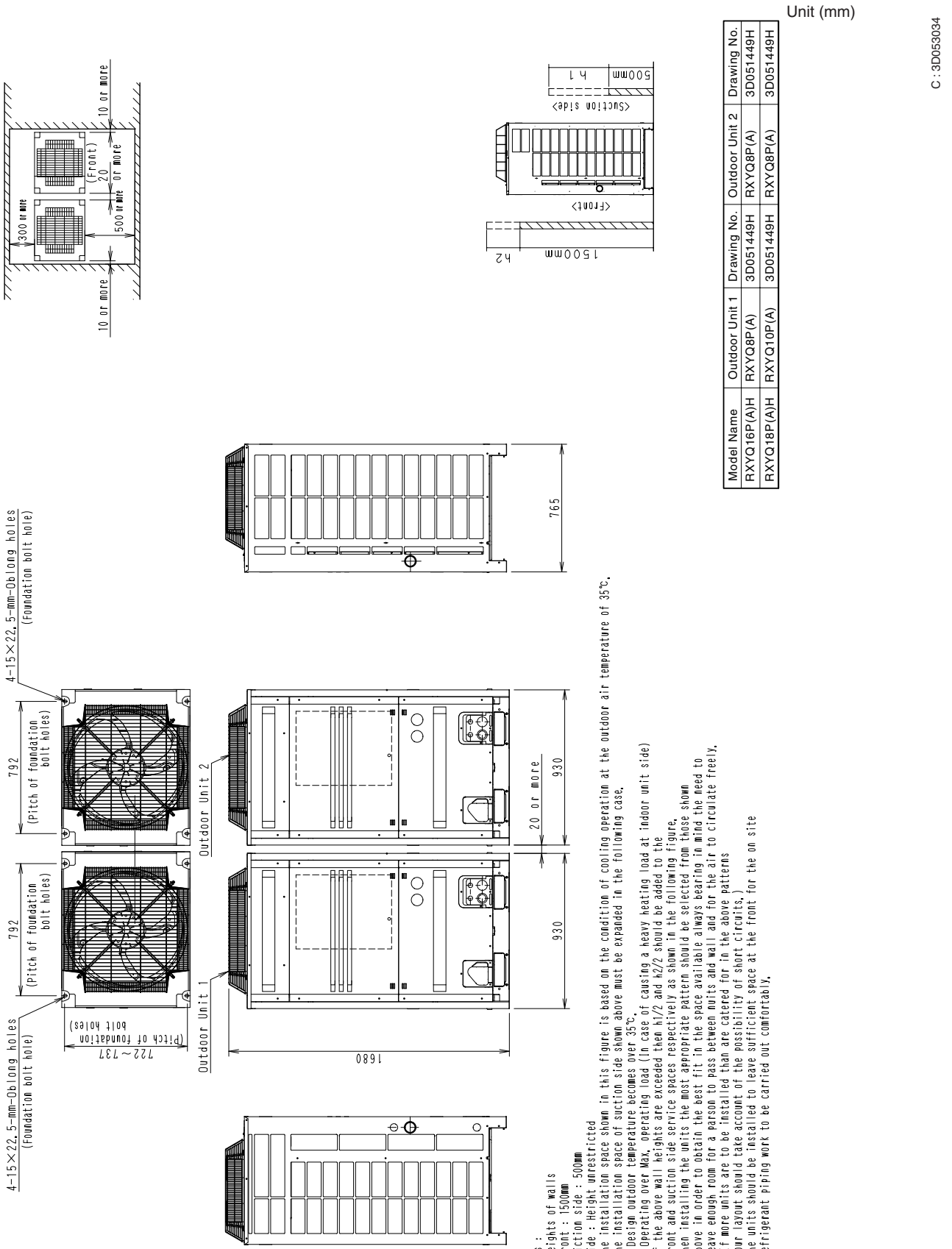
2.1 Combination Unit

RXYQ16P(A)H, RXYQ18P(A)H

Unit (mm)

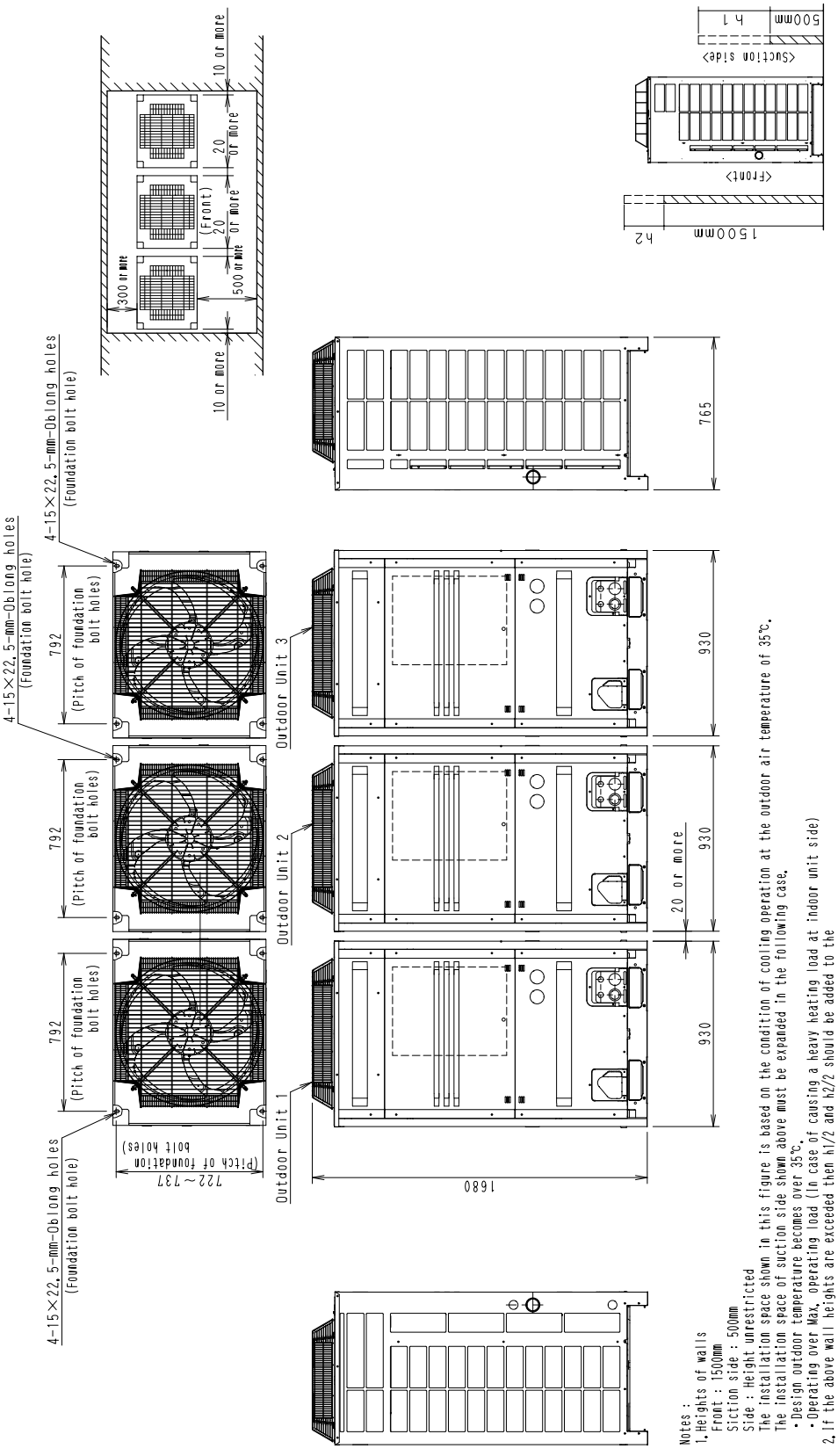
Model Name	Outdoor Unit 1	Drawing No.	Outdoor Unit 2	Drawing No.
RXYQ16P(A)H	RXYQ8P(A)	3D051449H	RXYQ8P(A)	3D051449H
RXYQ18P(A)H	RXYQ10P(A)	3D051449H	RXYQ8P(A)	3D051449H

C:3D053034



Notes :
1. Heights of walls
   Front : 1500mm
   Suction side : 500mm
   Side : Height unrestricted
   The installation space shown in this figure is based on the condition of cooling operation at the outdoor air temperature of 35°C.
   The installation space of suction side shown above must be expanded in the following case.
   • Design outdoor temperature becomes over 35°C.
   • Operating over Max. operating load (In case of causing a heavy heating load at indoor unit side)
2. If the above wall heights are exceeded then h1/2 and h2/2 should be added to the front and suction side service spaces respectively as shown in the following figure.
3. When installing the units the most appropriate pattern should be selected from those shown above in order to obtain the best fit in the space available always bearing in mind the need to leave enough room for a person to pass between units and wall and for the air to circulate freely. (If more units are to be installed than are catered for in the above patterns your layout should take account of the possibility of short circuits.)
4. The units should be installed to leave sufficient space at the front for the on site refrigerant piping work to be carried out comfortably.

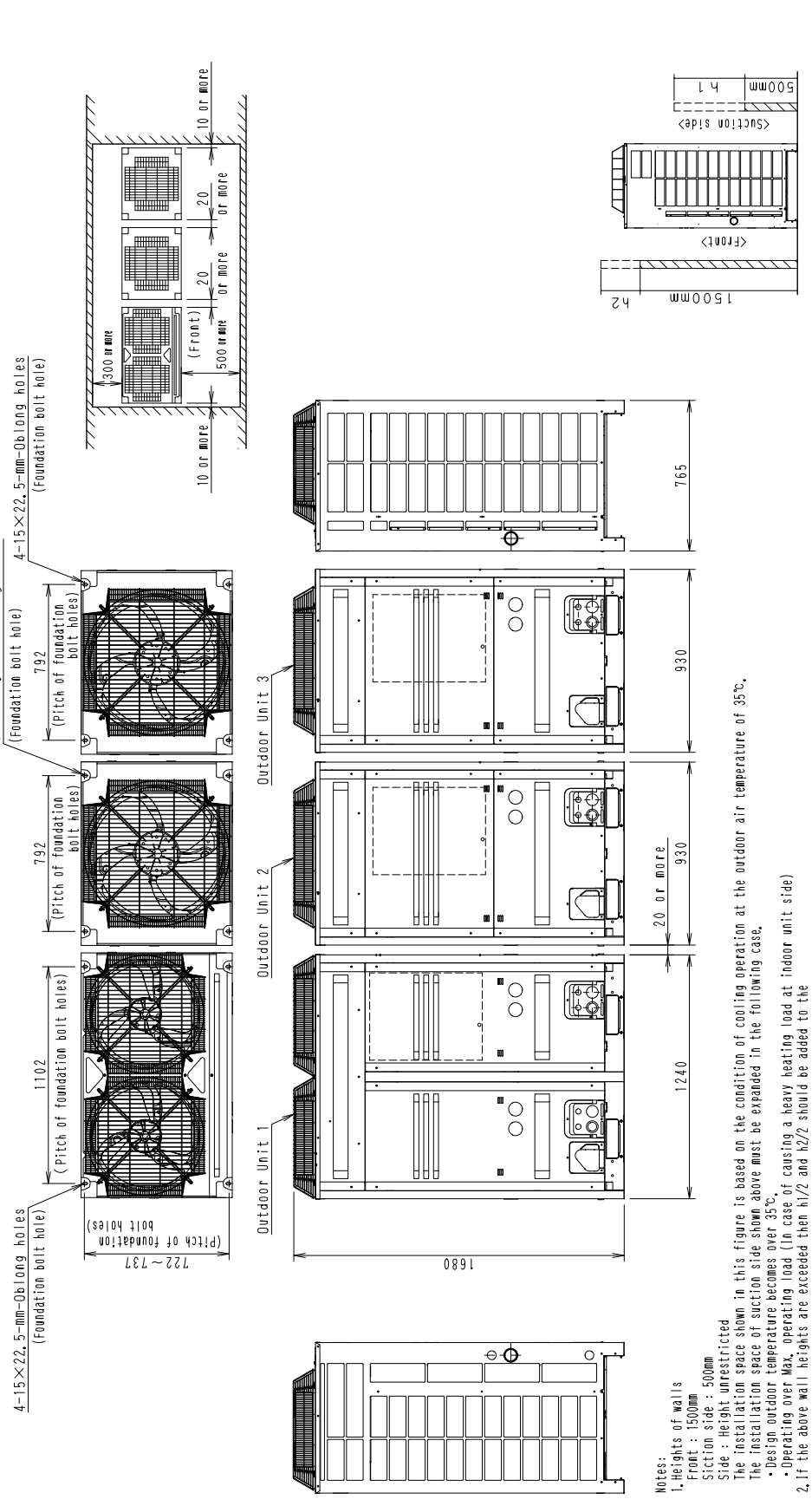
RXYQ24P(A)H, RXYQ26P(A)H



Model Name	Outdoor Unit 1	Drawing No.	Outdoor Unit 2	Drawing No.	Outdoor Unit 3	Drawing No.
RXYQ24P(A)H	RXYQ8P(A)	3D051449H	RXYQ8P(A)	3D051449H	RXYQ8P(A)	3D051449H
RXYQ26P(A)H	RXYQ10P(A)	3D051449H	RXYQ8P(A)	3D051449H	RXYQ8P(A)	3D051449H

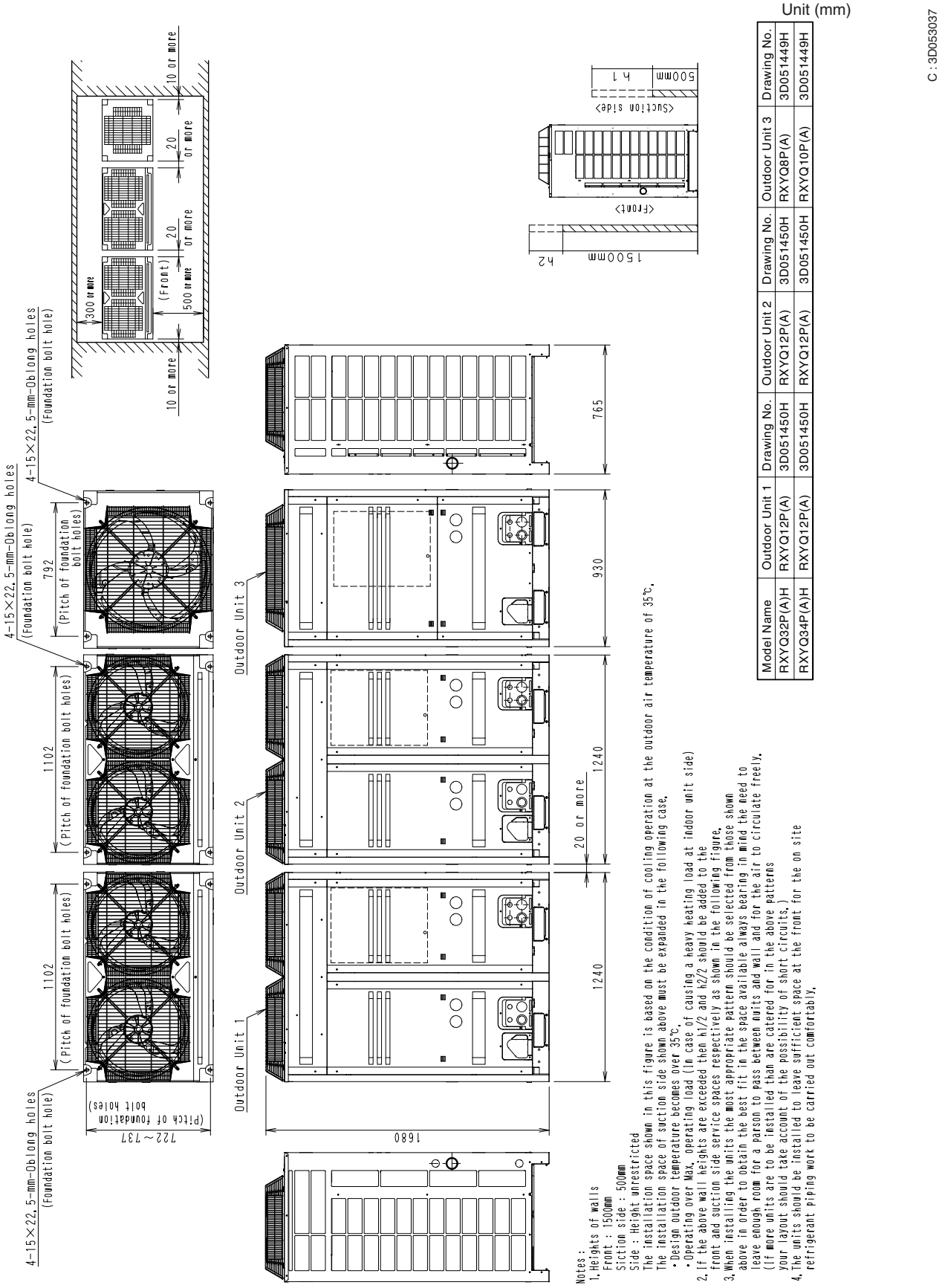
15

RXYQ28P(A)H, RXYQ30P(A)H



Model Name	Outdoor Unit 1	Drawing No.	Outdoor Unit 2	Drawing No.	Outdoor Unit 3	Drawing No.
RXYQ28P(A)H	RXYQ12P(A)	3D051450H	RXYQ8P(A)	3D051449H	RXYQ8P(A)	3D051449H
RXYQ30P(A)H	RXYQ12P(A)	3D051450H	RXYQ10P(A)	3D051449H	RXYQ8P(A)	3D051449H

RXYQ32P(A)H, RXYQ34P(A)H



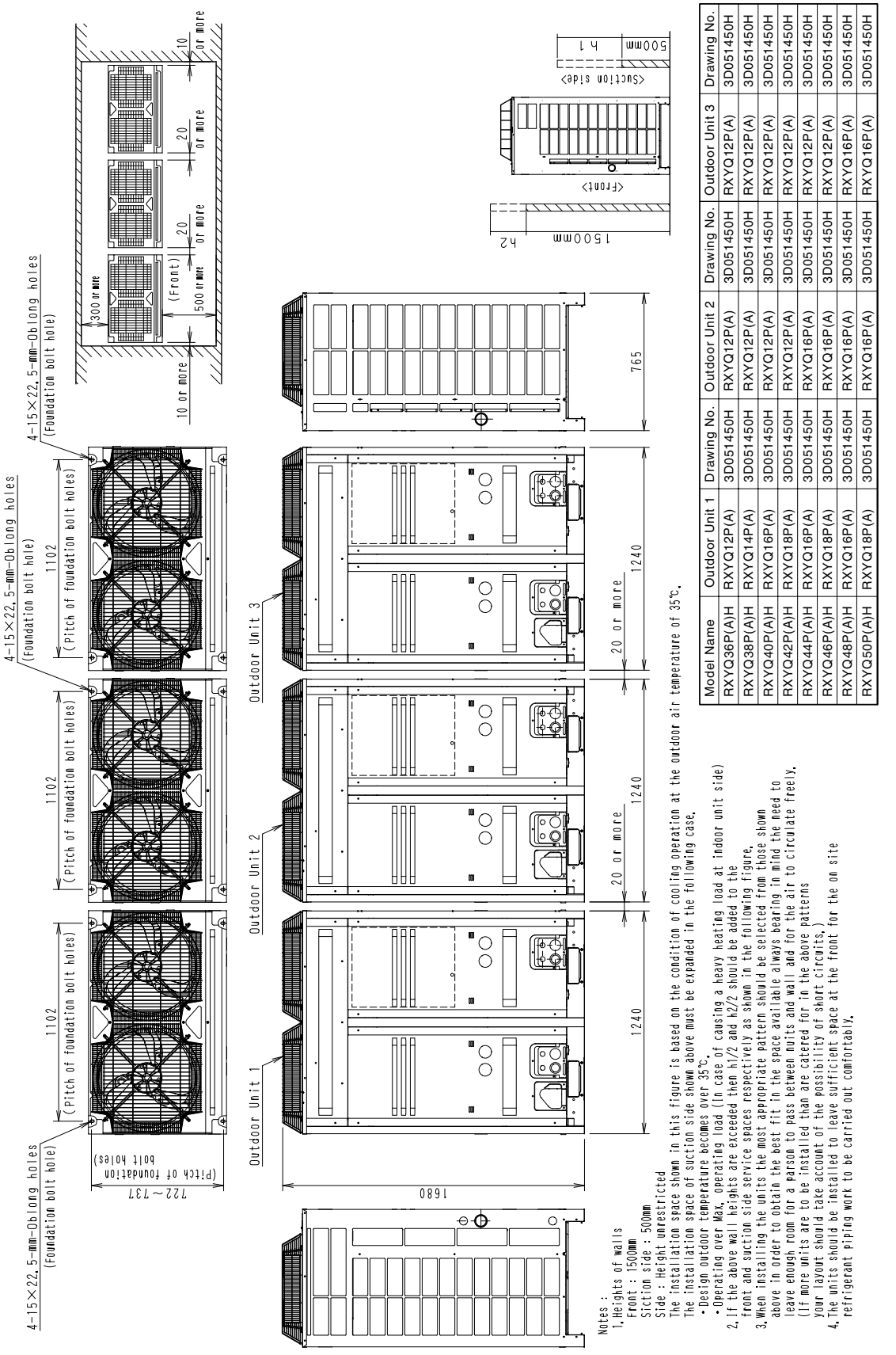
Model Name	Outdoor Unit 1	Drawing No.	Outdoor Unit 2	Drawing No.	Outdoor Unit 3	Drawing No.
RXYQ32P(A)H	RXYQ12P(A)	3D051450H	RXYQ12P(A)	3D051450H	RXYQ8P(A)	3D051449H
RXYQ34P(A)H	RXYQ12P(A)	3D051450H	RXYQ12P(A)	3D051450H	RXYQ10P(A)	3D051449H

15

RXYQ36P(A)H, RXYQ38P(A)H, RXYQ40P(A)H, RXYQ42P(A)H, RXYQ44P(A)H, RXYQ46P(A)H, RXYQ48P(A)H, RXYQ50P(A)H

Unit (mm)

C : 3D053038

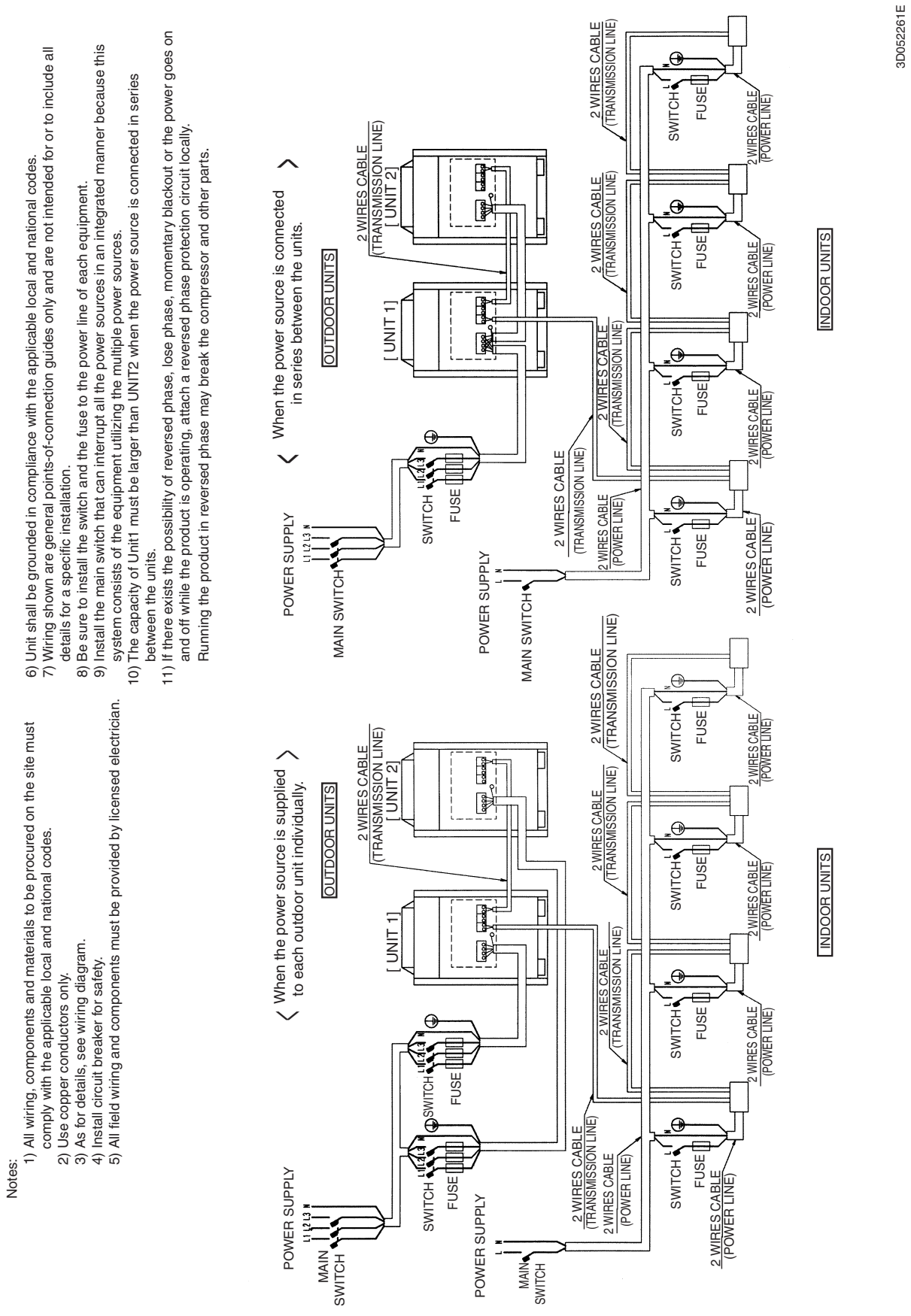


Model Name	Outdoor Unit 1	Drawing No.	Outdoor Unit 2	Drawing No.	Outdoor Unit 3	Drawing No.
RXYQ36P(A)H	RXYQ12P(A)	3D051450H	RXYQ12P(A)	3D051450H	RXYQ12P(A)	3D051450H
RXYQ38P(A)H	RXYQ14P(A)	3D051450H	RXYQ12P(A)	3D051450H	RXYQ12P(A)	3D051450H
RXYQ40P(A)H	RXYQ16P(A)	3D051450H	RXYQ12P(A)	3D051450H	RXYQ12P(A)	3D051450H
RXYQ42P(A)H	RXYQ18P(A)	3D051450H	RXYQ12P(A)	3D051450H	RXYQ12P(A)	3D051450H
RXYQ44P(A)H	RXYQ16P(A)	3D051450H	RXYQ16P(A)	3D051450H	RXYQ12P(A)	3D051450H
RXYQ46P(A)H	RXYQ18P(A)	3D051450H	RXYQ16P(A)	3D051450H	RXYQ12P(A)	3D051450H
RXYQ48P(A)H	RXYQ16P(A)	3D051450H	RXYQ16P(A)	3D051450H	RXYQ16P(A)	3D051450H
RXYQ50P(A)H	RXYQ18P(A)	3D051450H	RXYQ16P(A)	3D051450H	RXYQ16P(A)	3D051450H

Notes :
1. Heights of walls
   Front : 1500mm
   Suction side : 500mm
   Side : Height unrestricted
   The installation space shown in this figure is based on the condition of cooling operation at the outdoor air temperature of 35°C.
   The installation space of suction side shown above must be expanded in the following case.
   • Design outdoor temperature becomes over 35°C.
   • Operating over Max. operating load (In case of causing a heavy heating load at indoor unit side)
2. If the above wall heights are exceeded then h1/2 and h2/2 should be added to the front and suction side service spaces respectively as shown in the following figure.
3. When installing the units the most appropriate pattern should be selected from those shown above in order to obtain the best fit in the space available always bearing in mind the need to leave enough room for a person to pass between units and wall and for the air to circulate freely. (If more units are to be installed than are catered for in the above patterns your layout should take account of the possibility of short circuits.)
4. The units should be installed to leave sufficient space at the front for the on site refrigerant piping work to be carried out comfortably.

3. Field Wiring

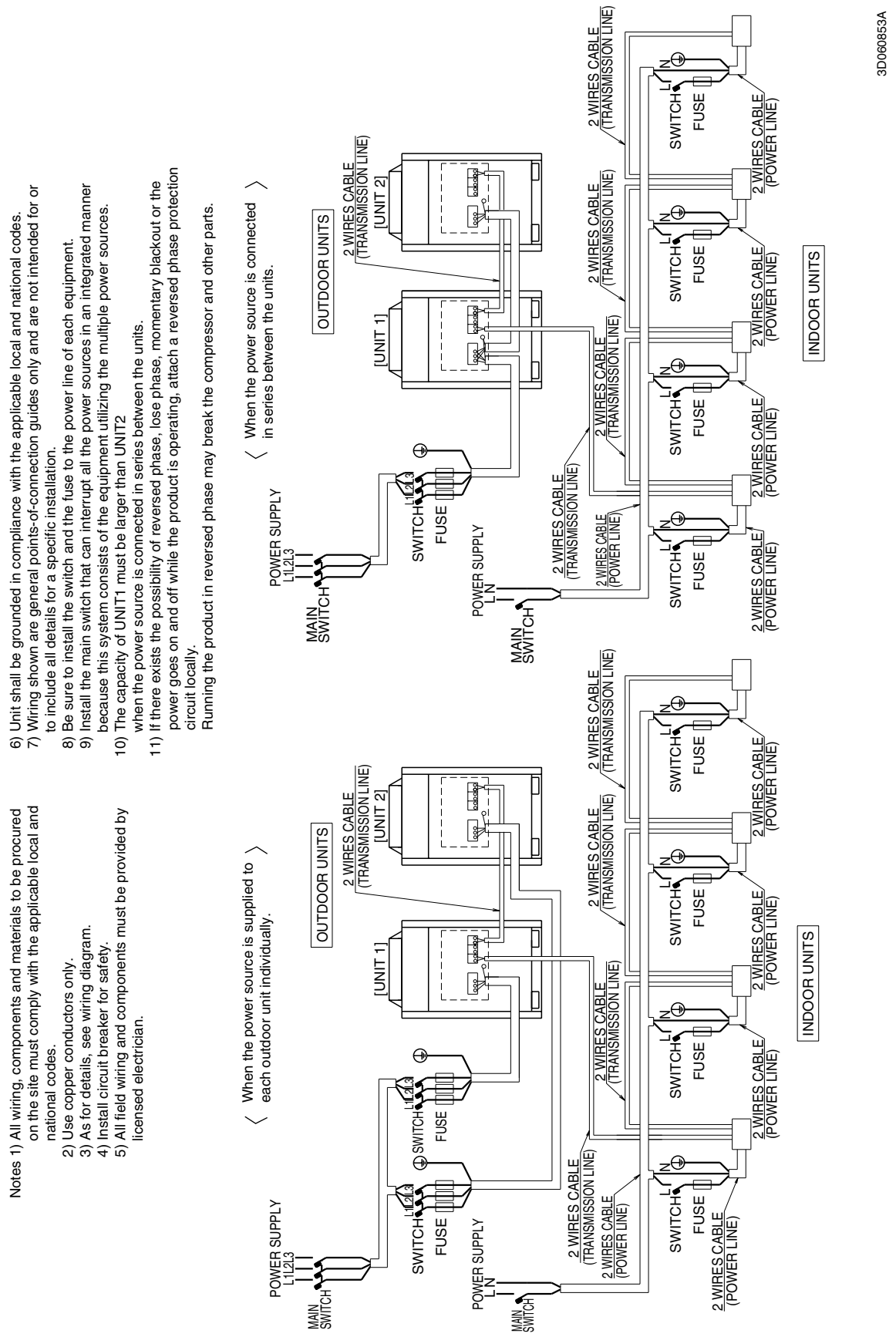
RXYQ16, 18PAHY1
RXYQ16, 18PAHYL



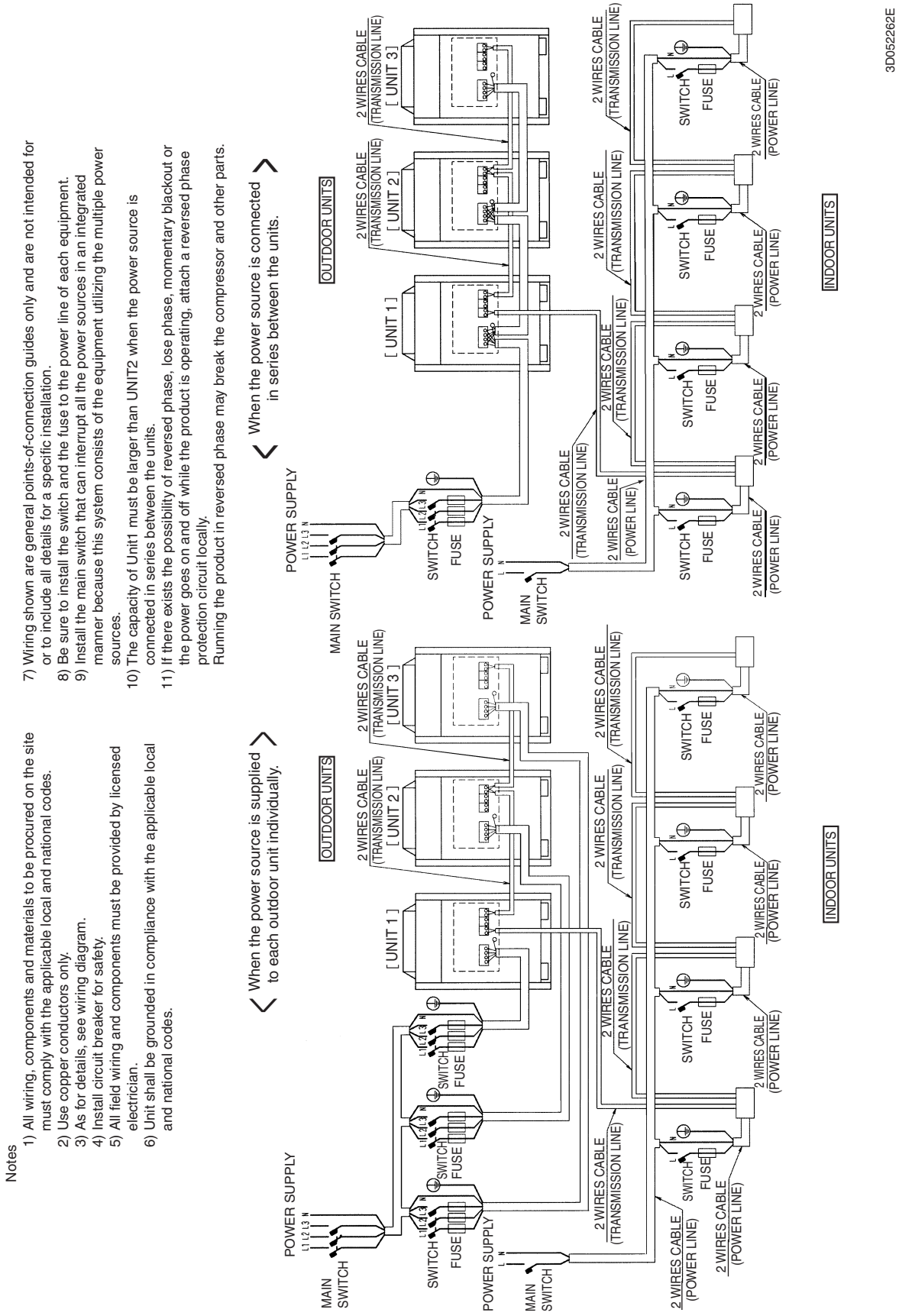
Notes:
1) All wiring, components and materials to be procured on the site must comply with the applicable local and national codes.
2) Use copper conductors only.
3) As for details, see wiring diagram.
4) Install circuit breaker for safety.
5) All field wiring and components must be provided by licensed electrician.
6) Unit shall be grounded in compliance with the applicable local and national codes.
7) Wiring shown are general points-of-connection guides only and are not intended for or to include all details for a specific installation.
8) Be sure to install the switch and the fuse to the power line of each equipment.
9) Install the main switch that can interrupt all the power sources in an integrated manner because this system consists of the equipment utilizing the multiple power sources.
10) The capacity of Unit1 must be larger than UNIT2 when the power source is connected in series between the units.
11) If there exists the possibility of reversed phase, lose phase, momentary blackout or the power goes on and off while the product is operating, attach a reversed phase protection circuit locally. Running the product in reversed phase may break the compressor and other parts.

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RXYQ16, 18PHTL



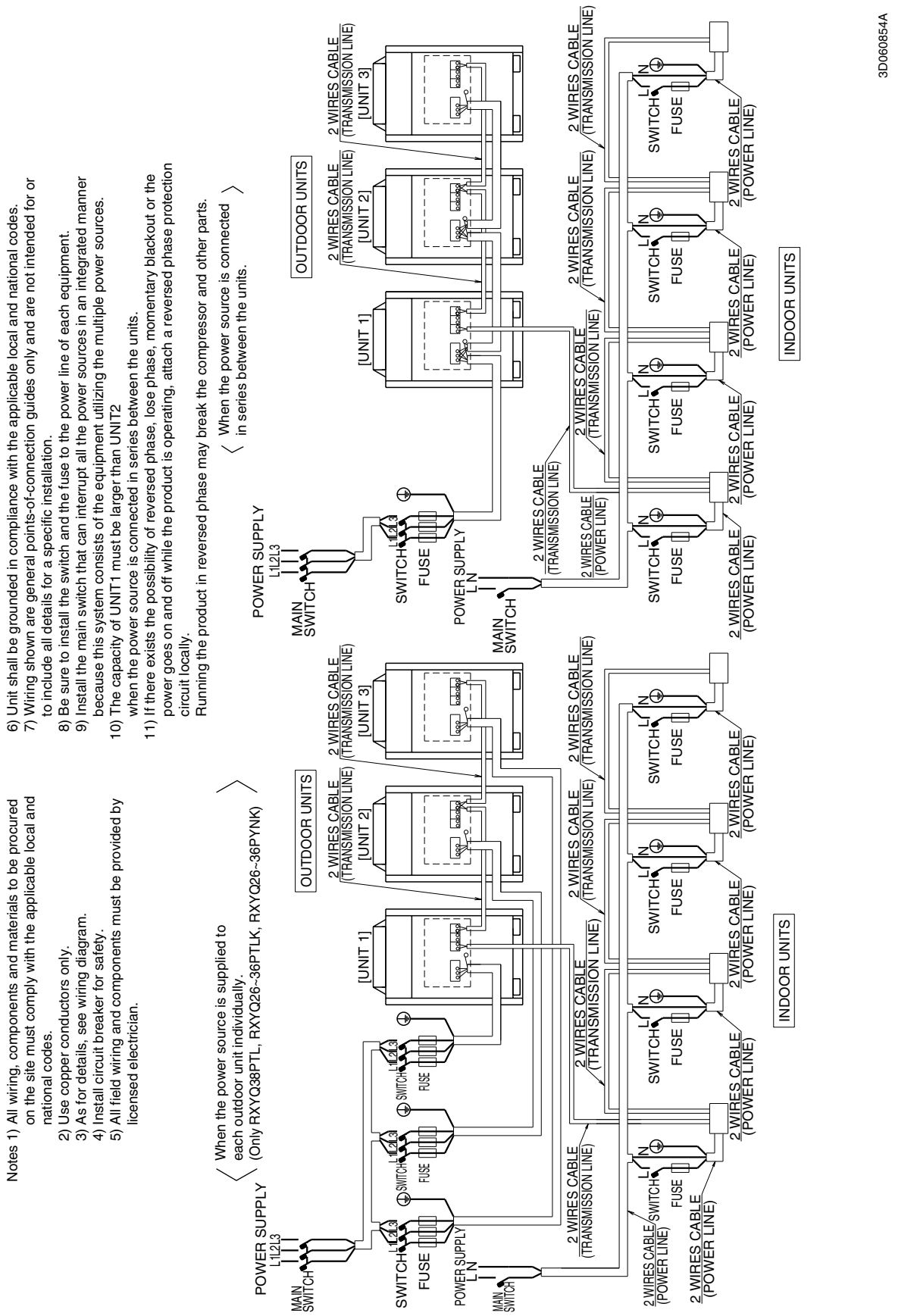
RXYQ24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50PAHY1
RXYQ24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50PAHYL



Notes
1) All wiring, components and materials to be procured on the site must comply with the applicable local and national codes.
2) Use copper conductors only.
3) As for details, see wiring diagram.
4) Install circuit breaker for safety.
5) All field wiring and components must be provided by licensed electrician.
6) Unit shall be grounded in compliance with the applicable local and national codes.
7) Wiring shown are general points-of-connection guides only and are not intended for or to include all details for a specific installation.
8) Be sure to install the switch and the fuse to the power line of each equipment.
9) Install the main switch that can interrupt all the power sources in an integrated manner because this system consists of the equipment utilizing the multiple power sources.
10) The capacity of Unit1 must be larger than UNIT2 when the power source is connected in series between the units.
11) If there exists the possibility of reversed phase, lose phase, momentary blackout or the power goes on and off while the product is operating, attach a reversed phase protection circuit locally.
Running the product in reversed phase may break the compressor and other parts.

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RXYQ24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50PHTL



4. Electric Characteristics

4.1 50Hz 380-415V (RXYQ-PAHY1)

RXYQ16, 18, 24, 26, 28, 30, 32PAHY1

Model Name		Units				Power supply			Comp.		OFM	
Combination Unit	Independent Unit	Hz	Volts	Min.	Max.	MCA	TOCA	MFA	MSC	RLA	KW	FLA
RXYQ16PHY1 RXYQ16PAHY1 RXYQ16PAHY6	RXYQ8PY1 RXYQ8PAY1 RXYQ8PAY6	50	380	342	456	37.0	33.1	45	——	(8.6)×2	(0.75)×2	(0.7)×2
			400						——	(8.2)×2		
			415						——	(7.9)×2		
RXYQ18PHY1 RXYQ18PAHY1 RXYQ18PAHY6	RXYQ8PY1 RXYQ8PAY1 RXYQ8PAY6	50	380	342	456	40.1	48.0	45	82	8.6+4.7+7.2	(0.75)×2	0.7 +0.9
	RXYQ10PY1 RXYQ10PAY1 RXYQ10PAY6		400						78	8.2+4.5+6.8		
			415						75	7.9+4.3+6.6		
RXYQ24PHY1 RXYQ24PAHY1 RXYQ24PAHY6	RXYQ8PY1 RXYQ8PAY1 RXYQ8PAY6	50	380	342	456	55.5	49.6	70	——	(8.6)×3	(0.75)×3	(0.7)×3
	RXYQ8PY1 RXYQ8PAY1 RXYQ8PAY6		400						——	(8.2)×3		
			415						——	(7.9)×3		
RXYQ26PHY1 RXYQ26PAHY1 RXYQ26PAHY6	RXYQ8PY1 RXYQ8PAY1 RXYQ8PAY6	50	380	342	456	58.6	64.6	70	86	(8.6)×2+4.7+7.2	(0.75)×2 +0.75	(0.7)×2 +0.9
	RXYQ10PY1 RXYQ10PAY1 RXYQ10PAY6		400						82	(8.2)×2+4.5+6.8		
			415						79	(7.9)×2+4.3+6.6		
RXYQ28PHY1 RXYQ28PAHY1 RXYQ28PAHY6	RXYQ8PY1 RXYQ8PAY1 RXYQ8PAY6	50	380	342	456	59.7	64.6	70	86	(8.6)×2+6.5+7.0	(0.75)×2 +0.35×2	(0.7)×2 +0.6×2
	RXYQ12PY1 RXYQ12PAY1 RXYQ12PAY6		400						82	(8.2)×2+6.2+6.7		
			415						79	(7.9)×2+6.0+6.4		
RXYQ30PHY1 RXYQ30PAHY1 RXYQ30PAHY6	RXYQ8PY1 RXYQ8PAY1 RXYQ8PAY6	50	380	342	456	62.8	79.5	70	96	8.6+4.7+7.2+6.5+7.0	(0.75)×2 +0.35×2	0.7 +0.9 +0.6×2
	RXYQ10PY1 RXYQ10PAY1 RXYQ10PAY6		400						91	8.2+4.5+6.8+6.2+6.7		
			415						88	7.9+4.3+6.6+6.0+6.4		
RXYQ32PHY1 RXYQ32PAHY1 RXYQ32PAHY6	RXYQ8PY1 RXYQ8PAY1 RXYQ8PAY6	50	380	342	456	63.9	79.5	80	96	8.6+(6.5+7.0)×2	0.75 +(0.35×2)×2	0.7 +(0.6×2)×2
	RXYQ12PY1 RXYQ12PAY1 RXYQ12PAY6		400						92	8.2+(6.2+6.7)×2		
			415						88	7.9+(6.0+6.4)×2		

Symbols:
MCA :Min. Circuit Amps. (A)
TOCA :Total Over-current Amps. (A)
MFA :Max. Fuse Amps. (A)
MSC :Max. Starting current
RLA :Rated Load Amps. (A)
OFM :Outdoor Fan Motor
FLA :Full Load Amps. (A)
kW :Rated Motor Output(kW)

The relationship between the starting time and the starting current.

Notes:
1. RLA is based on the following conditions.
   Indoor temp. 27°C DB/19.0°C WB
   Outdoor temp. 35°C DB
2. TOCA means the total value of each OC set.
3. MSC means the Max. current during the starting of compressor.
4. Voltage range
   Units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits.
5. Maximum allowable voltage variation between phases is 2%.
6. Select wire size based on the larger value of MCA or TOCA.
7. MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker).

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RXYQ34, 36, 38, 40, 42, 44, 46PAHY1

Model Name			Units				Power supply			Comp.		OFM	
Combination Unit	Independent Unit		Hz	Volts	Min.	Max.	MCA	TOCA	MFA	MSC	RLA	KW	FLA
RXYQ34PHY1 RXYQ34PAHY1 RXYQ34PAHY6	RXYQ10PY1 RXYQ10PAY1 RXYQ10PAY6	RXYQ12PY1 RXYQ12PAY1 RXYQ12PAY6	50	380	342	456	67.0	94.4	80	106	4.7+7.2+(6.5+7.0)X2	0.75 +(0.35X2)X2	0.9 +(0.6X2)X2
				400						101	4.5+6.8+(6.2+6.7)X2		
				415						97	4.3+6.6+(6.0+6.4)X2		
RXYQ36PHY1 RXYQ36PAHY1 RXYQ36PAHY6	RXYQ12PY1 RXYQ12PAY1 RXYQ12PAY6	RXYQ12PY1 RXYQ12PAY1 RXYQ12PAY6	50	380	342	456	68.1	94.4	80	107	(6.5+7.0)×3	(0.35X2)X3	(0.6X2)X3
				400						101	(6.2+6.7)×3		
				415						98	(6.0+6.4)×3		
RXYQ38PHY1 RXYQ38PAHY1 RXYQ38PAHY6	RXYQ12PY1 RXYQ12PAY1 RXYQ12PAY6	RXYQ14PY1 RXYQ14PAY1 RXYQ14PAY6	50	380	342	456	76.9	109.4	90	116	(6.5+7.0)X2+3.6+7.9X2	(0.35X2)X2 +0.35X2	(0.6X2)X2 +0.6X2
				400						110	(6.2+6.7)X2+3.4+7.5X2		
				415						106	(6.0+6.4)X2+3.3+7.3X2		
RXYQ40PHY1 RXYQ40PAHY1 RXYQ40PAHY6	RXYQ12PY1 RXYQ12PAY1 RXYQ12PAY6	RXYQ16PY1 RXYQ16PAY1 RXYQ16PAY6	50	380	342	456	76.9	109.4	90	117	(6.5+7.0)X2+6.4+8.0X2	(0.35X2)X2 +0.35X2	(0.6X2)X2 +0.6X2
				400						111	(6.2+6.7)X2+6.1+7.6X2		
				415						107	(6.0+6.4)X2+5.9+7.3X2		
RXYQ42PHY1 RXYQ42PAHY1 RXYQ42PAHY6	RXYQ12PY1 RXYQ12PAY1 RXYQ12PAY6	RXYQ18PY1 RXYQ18PAY1 RXYQ18PAY6	50	380	342	456	77.9	111.2	90	117	(6.5+7.0)X2+9.4+8.3X2	(0.35X2)X2 +0.75X2	(0.6X2)X2 +0.7X2
				400						111	(6.2+6.7)X2+9.0+7.8X2		
				415						107	(6.0+6.4)X2+8.6+7.6X2		
RXYQ44PHY1 RXYQ44PAHY1 RXYQ44PAHY6	RXYQ12PY1 RXYQ12PAY1 RXYQ12PAY6	RXYQ16PY1 RXYQ16PAY1 RXYQ16PAY6	50	380	342	456	85.7	124.3	100	129	6.5+7.0+(6.4+8.0X2)X2	0.35X2 +(0.35X2)X2	0.6X2 +(0.6X2)X2
				400						122	6.2+6.7+(6.1+7.6X2)X2		
				415						118	6.0+6.4+(5.9+7.3X2)X2		
RXYQ46PHY1 RXYQ46PAHY1 RXYQ46PAHY6	RXYQ12PY1 RXYQ12PAY1 RXYQ12PAY6	RXYQ18PY1 RXYQ18PAY1 RXYQ18PAY6	50	380	342	456	86.7	126.2	100	129	6.5+7.0+6.4+8.0X2+9.4+8.3X2	0.35×2 +0.35×2 +0.75×2	0.6×2 +0.6×2 +0.7×2
				400						122	6.2+6.7+6.1+7.6X2+9.0+7.8X2		
				415						118	6.0+6.4+5.9+7.3X2+8.6+7.6X2		

Symbols:
MCA :Min. Circuit Amps. (A)
TOCA :Total Over-current Amps. (A)
MFA :Max. Fuse Amps. (A)
MSC :Max. Starting current
RLA :Rated Load Amps. (A)
OFM :Outdoor Fan Motor
FLA :Full Load Amps. (A)
kW :Rated Motor Output(kW)

The relationship between the starting time and the starting current.

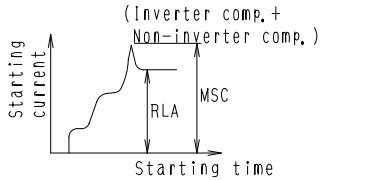
Notes:
1. RLA is based on the following conditions.
   Indoor temp. 27°C DB/19.0°C WB
   Outdoor temp. 35°C DB
2. TOCA means the total value of each OC set.
3. MSC means the Max. current during the starting of compressor.
4. Voltage range
   Units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits.
5. Maximum allowable voltage variation between phases is 2%.
6. Select wire size based on the larger value of MCA or TOCA.
7. MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker).

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RXYQ48, 50PAHY1

Model Name				Units			Power supply			Comp.		OFM	
Combination Unit	Independent Unit			Hz	Volts	Min.	Max.	MCA	TOCA	MFA	MSC	RLA	KW	FLA
RXYQ48PHY1 RXYQ48PAHY1 RXYQ48PAHY6	RXYQ16PY1 RXYQ16PAY1 RXYQ16PAY6	RXYQ16PY1 RXYQ16PAY1 RXYQ16PAY6	RXYQ16PY1 RXYQ16PAY1 RXYQ16PAY6	50	380	342	456	94.5	139.3	110	141	(6.4+8.0×2)×3	(0.35×2)×3	(0.6×2)×3
					400						134	(6.1+7.6×2)×3		
					415						129	(5.9+7.3×2)×3		
RXYQ50PHY1 RXYQ50PAHY1 RXYQ50PAHY6	RXYQ16PY1 RXYQ16PAY1 RXYQ16PAY6	RXYQ16PY1 RXYQ16PAY1 RXYQ16PAY6	RXYQ18PY1 RXYQ18PAY1 RXYQ18PAY6	50	380	342	456	95.5	141.1	110	141	(6.4+8.0×2)×2+9.4+8.3×2	(0.35×2)×2 +0.75×2	(0.6×2)×2 +0.7×2
					400						134	(6.1+7.6×2)×2+9.0+7.8×2		
					415						129	(5.9+7.3×2)×2+8.6+7.6×2		

Symbols:
MCA :Min. Circuit Amps. (A)
TOCA :Total Over-current Amps. (A)
MFA :Max. Fuse Amps. (A)
MSC :Max. Starting current
RLA :Rated Load Amps. (A)
OFM :Outdoor Fan Motor
FLA :Full Load Amps. (A)
kW :Rated Motor Output(kW)



The relationship between the starting time and the starting current.

Notes:
1. RLA is based on the following conditions.
   Indoor temp. 27℃ DB/19.0℃ WB
   Outdoor temp. 35℃ DB
2. TOCA means the total value of each OC set.
3. MSC means the Max. current during the starting of compressor.
4. Voltage range
   Units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits.
5. Maximum allowable voltage variation between phases is 2%.
6. Select wire size based on the larger value of MCA or TOCA.
7. MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker).

3D053229B

4.2 60Hz 380V (RXYQ-PAHYL)

RXYQ16~50PAHYL

Model Name		Units				Power supply			Comp.		OFM	
Combination unit	Independent unit	Hz	Volts	Min.	Max.	MCA	TOCA	MFA	MSC	RLA	KW	FLA
RXYQ16PHYL(E) RXYQ16PAHYL(E)	RXYQ8PYL(E) RXYQ8PAYL(E)	60	380	342	418	37.0	33.0	45	-	(8.6)×2	(0.75)×2	(0.7)×2
RXYQ18PHYL(E) RXYQ18PAHYL(E)	RXYQ8PYL(E) RXYQ10PAYL(E)	60	380	342	418	41.3	48.0	50	82	8.6+3.6+8.3	(0.75)×2	0.7+0.9
RXYQ24PHYL(E) RXYQ24PAHYL(E)	RXYQ8PYL(E) RXYQ8PAYL(E)	60	380	342	418	55.5	49.5	70	-	(8.6)×3	(0.75)×3	(0.7)×3
RXYQ26PHYL(E) RXYQ26PAHYL(E)	RXYQ8PYL(E) RXYQ8PAYL(E)	60	380	342	418	59.8	64.5	70	86	(8.6)×2+3.6+8.3	(0.75)×2+0.75	(0.7)×2+0.9
RXYQ28PHYL(E) RXYQ28PAHYL(E)	RXYQ8PYL(E) RXYQ8PAYL(E)	60	380	342	418	60.9	64.5	70	86	(8.6)×2+5.4+8.9	(0.75)×2+0.35×2	(0.7)×2+0.6×2
RXYQ30PHYL(E) RXYQ30PAHYL(E)	RXYQ8PYL(E) RXYQ8PAYL(E)	60	380	342	418	65.2	79.5	80	96	8.6+3.6+8.3+5.4+8.9	0.75+0.75+0.35×2	0.7+0.9+0.6×2
RXYQ32PHYL(E) RXYQ32PAHYL(E)	RXYQ8PYL(E) RXYQ8PAYL(E)	60	380	342	418	66.3	79.5	80	96	8.6+(5.4+8.9)×2	0.75+(0.35×2)×2	0.7+(0.6×2)×2
RXYQ34PHYL(E) RXYQ34PAHYL(E)	RXYQ10PYL(E) RXYQ10PAYL(E)	60	380	342	418	70.6	94.5	80	106	3.6+8.3+(5.4+8.9)×2	0.75+(0.35×2)×2	0.9+(0.6×2)×2
RXYQ36PHYL(E) RXYQ36PAHYL(E)	RXYQ12PYL(E) RXYQ12PAYL(E)	60	380	342	418	71.7	94.5	80	107	(5.4+8.9)×3	(0.35×2)×3	(0.6×2)×3
RXYQ38PHYL(E) RXYQ38PAHYL(E)	RXYQ12PYL(E) RXYQ12PAYL(E)	60	380	342	418	81.7	109.4	90	116	(5.4+8.9)×2+1.6+8.9×2	(0.35×2)×2+0.35×2	(0.6×2)×2+0.6×2
RXYQ40PHYL(E) RXYQ40PAHYL(E)	RXYQ12PYL(E) RXYQ12PAYL(E)	60	380	342	418	81.7	109.4	90	117	(5.4+8.9)×2+4.4+9.0×2	(0.35×2)×2+0.35×2	(0.6×2)×2+0.6×2
RXYQ42PHYL(E) RXYQ42PAHYL(E)	RXYQ12PYL(E) RXYQ12PAYL(E)	60	380	342	418	82.7	111.3	100	117	(5.4+8.9)×2+7.4+9.3×2	(0.35×2)×2+0.75×2	(0.6×2)×2+0.7×2
RXYQ44PHYL(E) RXYQ44PAHYL(E)	RXYQ12PYL(E) RXYQ12PAYL(E)	60	380	342	418	91.7	124.3	110	129	5.4+8.9+(4.4+9.0×2)×2	0.35×2+(0.35×2)×2	0.6×2+(0.6×2)×2
RXYQ46PHYL(E) RXYQ46PAHYL(E)	RXYQ12PYL(E) RXYQ12PAYL(E)	60	380	342	418	92.7	126.2	110	129	5.4+8.9+4.4+9.0×2+7.4+9.3×2	0.35×2+0.35×2+0.75×2	0.6×2+0.6×2+0.7×2
RXYQ48PHYL(E) RXYQ48PAHYL(E)	RXYQ16PYL(E) RXYQ16PAYL(E)	60	380	342	418	101.7	139.2	120	141	(4.4+9.0×2)×3	(0.35×2)×3	(0.6×2)×3
RXYQ50PHYL(E) RXYQ50PAHYL(E)	RXYQ16PYL(E) RXYQ16PAYL(E)	60	380	342	418	102.7	141.1	120	141	(4.4+9.0×2)×2+7.4+9.3×2	(0.35×2)×2+0.75×2	(0.6×2)×2+0.7×2

Symbols:
MCA : Min. Circuit Amps. (A)
TOCA : Total Over-current Amps. (A)
MFA : Max. Fuse Amps. (A)
MSC : Max. Starting current
RLA : Rated Load Amps. (A)
OFM : Outdoor Fan Motor
FLA : Full Load Amps. (A)
KW : Rated Motor Output(kW)

The relationship between the starting time and the starting current.

Notes:
1. RLA is based on the following conditions.
   Indoor temp. 27°C DB/19.0°C WB
   Outdoor temp. 35°C DB
2. TOCA means the total value of each OC set.
3. MSC means the Max. current during the starting of compressor.
4. Voltage range
   Units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits.
5. Maximum allowable voltage variation between phases is 2%.
6. Select wire size based on the larger value of MCA or TOCA.
7. MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker).

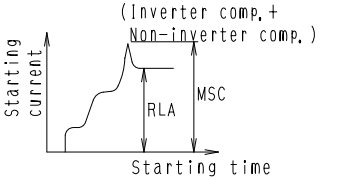
3D056141A

4.3 60Hz 220V (RXYQ-PHTL)

RXYQ16~32PHTL

Model Name				Units				Power supply			Comp.		OFM	
Combination Unit	Independent Unit			Hz	Volts	Min.	Max.	MCA	TOCA	MFA	MSC	RLA	KW	FLA
RXYQ16PHTL(E)	RXYQ8PTL(E)	RXYQ8PTL(E)		60	220	198	242	63.9	59	80	143	14.9×2	0.75X2	1.2 +1.2
RXYQ18PHTL(E)	RXYQ8PTL(E)	RXYQ10PTL(E)		60	220	198	242	71.3	84	80	159	14.9+6.2+14.3	0.75X2	1.2 +1.6
RXYQ24PHTL(E)	RXYQ8PTL(E)	RXYQ8PTL(E)	RXYQ8PTL(E)	60	220	198	242	95.9	89	110	161	14.9×3	0.75X3	1.2 +1.2 +1.2
RXYQ26PHTL(E)	RXYQ8PTL(E)	RXYQ8PTL(E)	RXYQ10PTL(E)	60	220	198	242	103	114	125	161	14.9×2+6.3+14.3	0.75X3	1.2 +1.2 +1.6
RXYQ28PHTL(E)	RXYQ8PTL(E)	RXYQ8PTL(E)	RXYQ12PTL(E)	60	220	198	242	105	114	125	178	14.9×2+9.3+15.4	0.75X2 +0.35X2	1.2 +1.2 +1.0×2
RXYQ30PHTL(E)	RXYQ8PTL(E)	RXYQ10PTL(E)	RXYQ12PTL(E)	60	220	198	242	113	139	125	179	14.9+6.2+14.3+9.3+15.4	0.75X2 +0.35X2	1.2 +1.6 +1.0×2
RXYQ32PHTL(E)	RXYQ8PTL(E)	RXYQ12PTL(E)	RXYQ12PTL(E)	60	220	198	242	115	139	150	199	14.9+(9.3+15.4)×2	0.75 +(0.35X2)X2	1.2 +1.0×2 +1.0×2

Symbols:
MCA :Min. Circuit Amps. (A)
TOCA :Total Over-current Amps. (A)
MFA :Max. Fuse Amps. (A)
MSC :Max. Starting current
RLA :Rated Load Amps. (A)
OFM :Outdoor Fan Motor
FLA :Full Load Amps. (A)
kW :Rated Motor Output(kW)



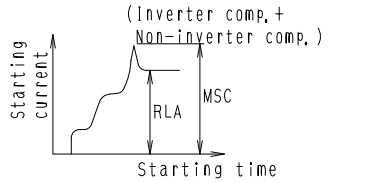
The relationship between the starting time and the starting current.

Notes:
1. RLA is based on the following conditions.
   Indoor temp. 27℃ DB/19.0℃ WB
   Outdoor temp. 35℃ DB
2. TOCA means the total value of each OC set.
3. MSC means the Max. current during the starting of compressor.
4. Voltage range
   Units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits.
5. Maximum allowable voltage variation between phases is 2%.
6. Select wire size based on the larger value of MCA or TOCA.
7. MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker).

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Model Name				Units				Power supply			Comp.		OFM	
Combination Unit	Independent Unit			Hz	Volts	Min.	Max.	MCA	TOCA	MFA	MSC	RLA	KW	FLA
RXYQ34PHTL(E)	RXYQ10PTL(E)	RXYQ12PTL(E)	RXYQ12PTL(E)	60	220	198	242	122	164	150	199	6.2+14.3+(9.3+15.4)X2	0.75 +(0.35x2)x2	1.6 +1.0x2 +1.0x2
RXYQ36PHTL(E)	RXYQ12PTL(E)	RXYQ12PTL(E)	RXYQ12PTL(E)	60	220	198	242	124	164	150	199	(9.3+15.4)X3	(0.35x2)x3	1.0x2 +1.0x2 +1.0x2
RXYQ38PHTL(E)	RXYQ12PTL(E)	RXYQ12PTL(E)	RXYQ14PTL(E)	60	220	198	242	141	188	175	185	(9.3+15.4)X2+2.8+15.4X2	(0.35x2)x3	1.0x2 +1.0x2 +1.0x2
RXYQ40PHTL(E)	RXYQ12PTL(E)	RXYQ12PTL(E)	RXYQ16PTL(E)	60	220	198	242	141	188	175	205	(9.3+15.4)X2+7.6+15.5X2	(0.35x2)x3	1.0x2 +1.0x2 +1.0x2
RXYQ42PHTL(E)	RXYQ12PTL(E)	RXYQ12PTL(E)	RXYQ18PTL(E)	60	220	198	242	143	189	175	205	(9.3+15.4)X2+12.8+16.1X2	(0.35x2)x2 +0.75x2	1.0x2 +1.0x2 +1.2x2
RXYQ44PHTL(E)	RXYQ12PTL(E)	RXYQ16PTL(E)	RXYQ16PTL(E)	60	220	198	242	158	213	175	205	9.3+15.4+(7.6+15.5X2)X2	(0.35x2)x3	1.0x2 +1.0x2 +1.0x2
RXYQ46PHTL(E)	RXYQ12PTL(E)	RXYQ16PTL(E)	RXYQ18PTL(E)	60	220	198	242	160	214	200	222	9.3+15.4+7.6+15.5X2+12.8+16.1X2	(0.35x2)x2 +0.75x2	1.0x2 +1.0x2 +1.2x2

Symbols:
MCA :Min. Circuit Amps. (A)
TOCA :Total Over-current Amps. (A)
MFA :Max. Fuse Amps. (A)
MSC :Max. Starting current
RLA :Rated Load Amps. (A)
OFM :Outdoor Fan Motor
FLA :Full Load Amps. (A)
kW :Rated Motor Output(kW)



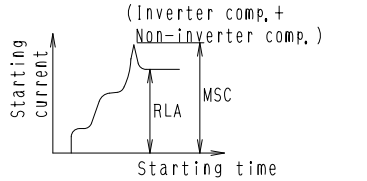
The relationship between the starting time and the starting current.

Notes:
1. RLA is based on the following conditions.
   Indoor temp. 27℃ DB/19.0℃ WB
   Outdoor temp. 35℃ DB
2. TOCA means the total value of each OC set.
3. MSC means the Max. current during the starting of compressor.
4. Voltage range
   Units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits.
5. Maximum allowable voltage variation between phases is 2%.
6. Select wire size based on the larger value of MCA or TOCA.
7. MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker).

3D060897

Model Name				Units				Power supply			Comp.		OFM	
Combination Unit	Independent Unit			Hz	Volts	Min.	Max.	MCA	TOCA	MFA	MSC	RLA	KW	FLA
RXYQ48PHTL(E)	RXYQ16PTL(E)	RXYQ16PTL(E)	RXYQ16PTL(E)	60	220	198	242	176	238	200	223	(7.6+15.5X2)X3	(0.35x2)x3	1.0x2 +1.0x2 +1.0x2
RXYQ50PHTL(E)	RXYQ16PTL(E)	RXYQ16PTL(E)	RXYQ18PTL(E)	60	220	198	242	177	239	200	243	(7.6+15.5X2)X2+12.8+16.1X2	(0.35x2)x2 +0.75x2	1.0x2 +1.0x2 +1.2x2

Symbols:
MCA :Min. Circuit Amps. (A)
TOCA :Total Over-current Amps. (A)
MFA :Max. Fuse Amps. (A)
MSC :Max. Starting current
RLA :Rated Load Amps. (A)
OFM :Outdoor Fan Motor
FLA :Full Load Amps. (A)
kW :Rated Motor Output(kW)



The relationship between the starting time and the starting current.

Notes:
1. RLA is based on the following conditions.
   Indoor temp. 27°C DB/19.0°C WB
   Outdoor temp. 35°C DB
2. TOCA means the total value of each OC set.
3. MSC means the Max. current during the starting of compressor.
4. Voltage range
   Units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits.
5. Maximum allowable voltage variation between phases is 2%.
6. Select wire size based on the larger value of MCA or TOCA.
7. MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker).

3D060898

5. Capacity Tables (Heat Pump High COP Series)

5.1 Cooling Capacity (RXYQ-P(A)H)

RXYQ16PAHY1, PAHYL, PHTL [50/60Hz]

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC	14.0°CWB PI	16.0°CWB TC	16.0°CWB PI	18.0°CWB TC	18.0°CWB PI	19.0°CWB TC	19.0°CWB PI	20.0°CWB TC	20.0°CWB PI	22.0°CWB TC	22.0°CWB PI	24.0°CWB TC	24.0°CWB PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130 (520)	10	39.3	4.83	46.9	5.92	54.5	7.0	56.4	7.2	57.1	7.0	58.6	6.7	60.0	6.44
	12	39.3	4.92	46.9	6.03	54.5	7.2	55.7	7.2	56.4	7.0	57.8	6.7	59.2	6.6
	14	39.3	5.02	46.9	6.15	54.3	7.3	55.0	7.1	55.7	7.0	57.1	6.9	58.5	7.0
	16	39.3	5.11	46.9	6.27	53.5	7.2	54.2	7.2	54.9	7.2	56.4	7.3	57.8	7.3
	18	39.3	5.21	46.9	6.39	52.8	7.5	53.5	7.5	54.2	7.6	55.6	7.7	57.1	7.7
	20	39.3	5.32	46.9	6.8	52.1	7.9	52.8	7.9	53.5	7.9	54.9	8.0	56.3	8.1
	21	39.3	5.47	46.9	7.1	51.7	8.1	52.4	8.1	53.1	8.1	54.5	8.2	56.0	8.3
	23	39.3	5.85	46.9	7.6	51.0	8.4	51.7	8.5	52.4	8.5	53.8	8.6	55.2	8.7
	25	39.3	6.26	46.9	8.1	50.3	8.8	51.0	8.8	51.7	8.9	53.1	9.0	54.5	9.1
	27	39.3	6.7	46.9	8.7	49.5	9.2	50.2	9.2	50.9	9.3	52.4	9.4	53.8	9.4
	29	39.3	7.1	46.9	9.3	48.8	9.5	49.5	9.6	50.2	9.6	51.6	9.7	53.0	9.8
	31	39.3	7.6	46.6	9.8	48.1	9.9	48.8	10.0	49.5	10.0	50.9	10.1	52.3	10.2
	33	39.3	8.1	45.9	10.2	47.3	10.3	48.0	10.3	48.8	10.4	50.2	10.5	51.6	10.6
	35	39.3	8.6	45.2	10.5	46.6	10.7	47.3	10.7	48.0	10.8	49.4	10.9	50.9	11.0
	37	39.3	9.2	44.5	10.9	45.9	11.0	46.6	11.1	47.3	11.2	48.7	11.3	50.1	11.4
	39	39.3	9.8	43.7	11.3	45.1	11.4	45.9	11.5	46.6	11.5	48.0	11.7	49.4	11.8
120 (480)	10	36.3	4.42	43.3	5.40	50.3	6.42	53.8	6.9	56.2	7.2	57.5	7.0	58.9	6.7
	12	36.3	4.50	43.3	5.50	50.3	6.54	53.8	7.1	55.5	7.2	56.8	6.9	58.1	6.6
	14	36.3	4.58	43.3	5.60	50.3	6.7	53.8	7.2	54.8	7.2	56.1	6.9	57.4	6.9
	16	36.3	4.67	43.3	5.71	50.3	6.8	53.4	7.3	54.1	7.2	55.4	7.2	56.7	7.3
	18	36.3	4.76	43.3	5.82	50.3	7.0	52.7	7.5	53.3	7.5	54.6	7.6	55.9	7.7
	20	36.3	4.85	43.3	6.05	50.3	7.6	51.9	7.9	52.6	7.9	53.9	8.0	55.2	8.0
	21	36.3	4.90	43.3	6.27	50.3	7.8	51.6	8.0	52.2	8.1	53.5	8.2	54.8	8.2
	23	36.3	5.23	43.3	6.7	50.2	8.4	50.8	8.4	51.5	8.5	52.8	8.5	54.1	8.6
	25	36.3	5.59	43.3	7.2	49.5	8.7	50.1	8.8	50.8	8.8	52.1	8.9	53.4	9.0
	27	36.3	5.97	43.3	7.7	48.7	9.1	49.4	9.1	50.0	9.2	51.4	9.3	52.7	9.4
	29	36.3	6.37	43.3	8.2	48.0	9.5	48.7	9.5	49.3	9.6	50.6	9.7	51.9	9.8
	31	36.3	6.8	43.3	8.8	47.3	9.8	47.9	9.9	48.6	9.9	49.9	10.0	51.2	10.1
	33	36.3	7.2	43.3	9.3	46.6	10.2	47.2	10.3	47.9	10.3	49.2	10.4	50.5	10.5
	35	36.3	7.7	43.3	10.0	45.8	10.6	46.5	10.6	47.1	10.7	48.4	10.8	49.7	10.9
	37	36.3	8.2	43.3	10.6	45.1	11.0	45.7	11.0	46.4	11.1	47.7	11.2	49.0	11.3
	39	36.3	8.7	43.1	11.2	44.4	11.3	45.0	11.4	45.7	11.5	47.0	11.6	48.3	11.7
110 (440)	10	33.3	4.01	39.7	4.89	46.1	5.80	49.3	6.27	52.5	6.7	56.5	7.2	57.7	6.9
	12	33.3	4.08	39.7	4.98	46.1	5.91	49.3	6.39	52.5	6.9	55.8	7.1	57.0	6.9
	14	33.3	4.16	39.7	5.07	46.1	6.02	49.3	6.51	52.5	7.0	55.1	7.1	56.3	6.9
	16	33.3	4.24	39.7	5.17	46.1	6.14	49.3	6.6	52.5	7.1	54.4	7.2	55.6	7.2
	18	33.3	4.32	39.7	5.27	46.1	6.26	49.3	6.8	52.4	7.5	53.6	7.5	54.8	7.6
	20	33.3	4.40	39.7	5.37	46.1	6.6	49.3	7.3	51.7	7.8	52.9	7.9	54.1	8.0
	21	33.3	4.44	39.7	5.54	46.1	6.9	49.3	7.6	51.3	8.0	52.5	8.1	53.7	8.2
	23	33.3	4.65	39.7	5.93	46.1	7.4	49.3	8.1	50.6	8.4	51.8	8.5	53.0	8.5
	25	33.3	4.97	39.7	6.34	46.1	7.9	49.3	8.7	49.9	8.8	51.1	8.8	52.3	8.9
	27	33.3	5.30	39.7	6.8	46.1	8.4	48.6	9.1	49.2	9.1	50.4	9.2	51.6	9.3
	29	33.3	5.65	39.7	7.2	46.1	9.0	47.8	9.5	48.4	9.5	49.6	9.6	50.8	9.7
	31	33.3	6.01	39.7	7.7	46.1	9.6	47.1	9.8	47.7	9.9	48.9	10.0	50.1	10.1
	33	33.3	6.40	39.7	8.2	45.8	10.2	46.4	10.2	47.0	10.2	48.2	10.3	49.4	10.4
	35	33.3	6.8	39.7	8.8	45.0	10.5	45.6	10.6	46.2	10.6	47.4	10.7	48.6	10.8
	37	33.3	7.2	39.7	9.3	44.3	10.9	44.9	10.9	45.5	11.0	46.7	11.1	47.9	11.2
	39	33.3	7.7	39.7	9.9	43.6	11.3	44.2	11.3	44.8	11.4	46.0	11.5	47.2	11.6
100 (400)	10	30.2	3.62	36.1	4.39	41.9	5.20	44.8	5.62	47.7	6.04	53.5	6.9	56.6	7.1
	12	30.2	3.68	36.1	4.47	41.9	5.30	44.8	5.72	47.7	6.15	53.5	7.0	55.9	7.1
	14	30.2	3.75	36.1	4.55	41.9	5.40	44.8	5.83	47.7	6.27	53.5	7.2	55.2	7.1
	16	30.2	3.81	36.1	4.64	41.9	5.50	44.8	5.94	47.7	6.39	53.4	7.3	54.4	7.2
	18	30.2	3.89	36.1	4.73	41.9	5.61	44.8	6.06	47.7	6.52	52.6	7.5	53.7	7.6
	20	30.2	3.96	36.1	4.82	41.9	5.78	44.8	6.37	47.7	7.0	51.9	7.9	53.0	7.9
	21	30.2	4.00	36.1	4.87	41.9	5.98	44.8	6.6	47.7	7.2	51.5	8.0	52.6	8.1
	23	30.2	4.10	36.1	5.19	41.9	6.41	44.8	7.1	47.7	7.8	50.8	8.4	51.9	8.5
	25	30.2	4.38	36.1	5.55	41.9	6.9	44.8	7.6	47.7	8.3	50.1	8.8	51.2	8.8
	27	30.2	4.67	36.1	5.92	41.9	7.3	44.8	8.1	47.7	8.9	49.4	9.1	50.4	9.2
	29	30.2	4.97	36.1	6.31	41.9	7.8	44.8	8.6	47.5	9.4	48.6	9.5	49.7	9.6
	31	30.2	5.29	36.1	6.7	41.9	8.4	44.8	9.2	46.8	9.8	47.9	9.9	49.0	10.0
	33	30.2	5.62	36.1	7.2	41.9	8.9	44.8	9.8	46.1	10.2	47.2	10.3	48.3	10.4
	35	30.2	5.98	36.1	7.6	41.9	9.5	44.8	10.5	45.3	10.5	46.4	10.6	47.5	10.7
	37	30.2	6.35	36.1	8.1	41.9	10.1	44.1	10.9	44.6	10.9	45.7	11.0	46.8	11.1
	39	30.2	6.7	36.1	8.6	41.9	10.8	43.3	11.2	43.9	11.3	45.0	11.4	46.1	11.5

1. This table indicates the situation of 50~130% combination of indoor units.
2. If connecting the indoor units over 130% of outdoor unit capacity, capacity of indoor unit will decrease.

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC	14.0°CWB PI	16.0°CWB TC	16.0°CWB PI	18.0°CWB TC	18.0°CWB PI	19.0°CWB TC	19.0°CWB PI	20.0°CWB TC	20.0°CWB PI	22.0°CWB TC	22.0°CWB PI	24.0°CWB TC	24.0°CWB PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
90 (360)	10	27.2	3.24	32.5	3.91	37.7	4.61	40.3	4.98	42.9	5.35	48.2	6.11	53.4	6.9
	12	27.2	3.29	32.5	3.98	37.7	4.70	40.3	5.07	42.9	5.45	48.2	6.22	53.4	7.0
	14	27.2	3.35	32.5	4.05	37.7	4.78	40.3	5.17	42.9	5.55	48.2	6.34	53.4	7.2
	16	27.2	3.41	32.5	4.12	37.7	4.88	40.3	5.26	42.9	5.66	48.2	6.47	53.3	7.3
	18	27.2	3.47	32.5	4.20	37.7	4.97	40.3	5.37	42.9	5.77	48.2	6.6	52.6	7.5
	20	27.2	3.53	32.5	4.28	37.7	5.07	40.3	5.48	42.9	5.99	48.2	7.1	51.9	7.9
	21	27.2	3.57	32.5	4.32	37.7	5.16	40.3	5.67	42.9	6.20	48.2	7.3	51.5	8.0
	23	27.2	3.64	32.5	4.50	37.7	5.52	40.3	6.07	42.9	6.6	48.2	7.9	50.8	8.4
	25	27.2	3.83	32.5	4.81	37.7	5.90	40.3	6.49	42.9	7.1	48.2	8.4	50.1	8.8
	27	27.2	4.08	32.5	5.13	37.7	6.30	40.3	6.9	42.9	7.6	48.2	9.0	49.3	9.1
	29	27.2	4.34	32.5	5.46	37.7	6.7	40.3	7.4	42.9	8.1	47.6	9.4	48.6	9.5
	31	27.2	4.61	32.5	5.82	37.7	7.2	40.3	7.9	42.9	8.7	46.9	9.8	47.9	9.9
	33	27.2	4.90	32.5	6.19	37.7	7.6	40.3	8.4	42.9	9.2	46.2	10.2	47.1	10.3
	35	27.2	5.20	32.5	6.6	37.7	8.1	40.3	9.0	42.9	9.9	45.4	10.6	46.4	10.6
	37	27.2	5.52	32.5	7.0	37.7	8.7	40.3	9.6	42.9	10.5	44.7	10.9	45.7	11.0
	39	27.2	5.86	32.5	7.4	37.7	9.2	40.3	10.2	42.9	11.2	44.0	11.3	45.0	11.4
80 (320)	10	24.2	2.87	28.8	3.44	33.5	4.04	35.8	4.36	38.2	4.68	42.8	5.33	47.5	6.01
	12	24.2	2.92	28.8	3.50	33.5	4.12	35.8	4.44	38.2	4.76	42.8	5.43	47.5	6.12
	14	24.2	2.97	28.8	3.56	33.5	4.19	35.8	4.52	38.2	4.85	42.8	5.54	47.5	6.24
	16	24.2	3.02	28.8	3.63	33.5	4.27	35.8	4.60	38.2	4.95	42.8	5.64	47.5	6.36
	18	24.2	3.07	28.8	3.69	33.5	4.35	35.8	4.69	38.2	5.04	42.8	5.76	47.5	6.49
	20	24.2	3.13	28.8	3.76	33.5	4.44	35.8	4.79	38.2	5.14	42.8	5.97	47.5	6.9
	21	24.2	3.15	28.8	3.80	33.5	4.48	35.8	4.83	38.2	5.25	42.8	6.18	47.5	7.2
	23	24.2	3.21	28.8	3.87	33.5	4.70	35.8	5.15	38.2	5.62	42.8	6.6	47.5	7.7
	25	24.2	3.32	28.8	4.12	33.5	5.02	35.8	5.50	38.2	6.00	42.8	7.1	47.5	8.3
	27	24.2	3.53	28.8	4.39	33.5	5.35	35.8	5.87	38.2	6.41	42.8	7.6	47.5	8.8
	29	24.2	3.75	28.8	4.67	33.5	5.71	35.8	6.26	38.2	6.8	42.8	8.1	47.5	9.4
	31	24.2	3.98	28.8	4.97	33.5	6.08	35.8	6.7	38.2	7.3	42.8	8.6	46.8	9.8
	33	24.2	4.22	28.8	5.28	33.5	6.47	35.8	7.1	38.2	7.8	42.8	9.2	46.0	10.2
	35	24.2	4.48	28.8	5.61	33.5	6.9	35.8	7.6	38.2	8.3	42.8	9.8	45.3	10.5
	37	24.2	4.75	28.8	5.96	33.5	7.3	35.8	8.0	38.2	8.8	42.8	10.5	44.6	10.9
	39	24.2	5.03	28.8	6.33	33.5	7.8	35.8	8.6	38.2	9.4	42.8	11.1	43.8	11.3
70 (280)	10	21.2	2.53	25.2	3.00	29.3	3.50	31.4	3.76	33.4	4.03	37.5	4.58	41.6	5.15
	12	21.2	2.57	25.2	3.05	29.3	3.56	31.4	3.83	33.4	4.10	37.5	4.67	41.6	5.25
	14	21.2	2.61	25.2	3.10	29.3	3.63	31.4	3.90	33.4	4.18	37.5	4.75	41.6	5.35
	16	21.2	2.65	25.2	3.15	29.3	3.69	31.4	3.97	33.4	4.26	37.5	4.84	41.6	5.45
	18	21.2	2.69	25.2	3.21	29.3	3.76	31.4	4.04	33.4	4.34	37.5	4.94	41.6	5.56
	20	21.2	2.74	25.2	3.27	29.3	3.83	31.4	4.12	33.4	4.42	37.5	5.04	41.6	5.71
	21	21.2	2.76	25.2	3.30	29.3	3.87	31.4	4.16	33.4	4.46	37.5	5.12	41.6	5.92
	23	21.2	2.81	25.2	3.36	29.3	3.95	31.4	4.30	33.4	4.68	37.5	5.47	41.6	6.34
	25	21.2	2.86	25.2	3.49	29.3	4.21	31.4	4.59	33.4	5.00	37.5	5.85	41.6	6.8
	27	21.2	3.02	25.2	3.72	29.3	4.48	31.4	4.90	33.4	5.33	37.5	6.25	41.6	7.2
	29	21.2	3.21	25.2	3.95	29.3	4.77	31.4	5.22	33.4	5.68	37.5	6.7	41.6	7.7
	31	21.2	3.40	25.2	4.20	29.3	5.08	31.4	5.55	33.4	6.05	37.5	7.1	41.6	8.3
	33	21.2	3.60	25.2	4.45	29.3	5.40	31.4	5.91	33.4	6.44	37.5	7.6	41.6	8.8
	35	21.2	3.82	25.2	4.73	29.3	5.74	31.4	6.28	33.4	6.8	37.5	8.1	41.6	9.4
	37	21.2	4.04	25.2	5.01	29.3	6.09	31.4	6.7	33.4	7.3	37.5	8.6	41.6	10.0
	39	21.2	4.27	25.2	5.31	29.3	6.47	31.4	7.1	33.4	7.7	37.5	9.1	41.6	10.6
60 (240)	10	18.1	2.20	21.6	2.58	25.1	2.99	26.9	3.20	28.6	3.41	32.1	3.86	35.6	4.33
	12	18.1	2.23	21.6	2.62	25.1	3.04	26.9	3.25	28.6	3.47	32.1	3.93	35.6	4.41
	14	18.1	2.26	21.6	2.66	25.1	3.09	26.9	3.31	28.6	3.53	32.1	4.00	35.6	4.49
	16	18.1	2.30	21.6	2.71	25.1	3.14	26.9	3.37	28.6	3.60	32.1	4.08	35.6	4.57
	18	18.1	2.33	21.6	2.75	25.1	3.19	26.9	3.43	28.6	3.66	32.1	4.15	35.6	4.66
	20	18.1	2.37	21.6	2.80	25.1	3.25	26.9	3.49	28.6	3.73	32.1	4.23	35.6	4.75
	21	18.1	2.39	21.6	2.82	25.1	3.28	26.9	3.52	28.6	3.77	32.1	4.27	35.6	4.80
	23	18.1	2.43	21.6	2.87	25.1	3.34	26.9	3.59	28.6	3.84	32.1	4.44	35.6	5.10
	25	18.1	2.47	21.6	2.92	25.1	3.47	26.9	3.77	28.6	4.08	32.1	4.74	35.6	5.45
	27	18.1	2.56	21.6	3.10	25.1	3.70	26.9	4.01	28.6	4.35	32.1	5.06	35.6	5.82
	29	18.1	2.71	21.6	3.29	25.1	3.93	26.9	4.27	28.6	4.63	32.1	5.39	35.6	6.21
	31	18.1	2.87	21.6	3.49	25.1	4.17	26.9	4.54	28.6	4.92	32.1	5.74	35.6	6.6
	33	18.1	3.03	21.6	3.70	25.1	4.43	26.9	4.82	28.6	5.23	32.1	6.10	35.6	7.0
	35	18.1	3.21	21.6	3.92	25.1	4.70	26.9	5.12	28.6	5.56	32.1	6.49	35.6	7.5
	37	18.1	3.39	21.6	4.15	25.1	4.98	26.9	5.43	28.6	5.90	32.1	6.9	35.6	8.0
	39	18.1	3.58	21.6	4.39	25.1	5.28	26.9	5.76	28.6	6.26	32.1	7.3	35.6	8.5
50 (200)	10	15.1	1.89	18.0	2.19	20.9	2.50	22.4	2.67	23.9	2.84	26.8	3.18	29.7	3.55
	12	15.1	1.91	18.0	2.22	20.9	2.54	22.4	2.71	23.9	2.88	26.8	3.24	29.7	3.61
	14	15.1	1.94	18.0	2.25	20.9	2.58	22.4	2.75	23.9	2.93	26.8	3.29	29.7	3.67
	16	15.1	1.97	18.0	2.28	20.9	2.62	22.4	2.80	23.9	2.98	26.8	3.35	29.7	3.74
	18	15.1	1.99	18.0	2.32	20.9	2.66	22.4	2.84	23.9	3.03	26.8	3.41	29.7	3.81
	20	15.1	2.02	18.0	2.36	20.9	2.71	22.4	2.89	23.9	3.08	26.8	3.47	29.7	3.88
	21	15.1	2.04	18.0	2.37	20.9	2.73	22.4	2.92	23.9	3.11	26.8	3.51	29.7	3.92
	23	15.1	2.07	18.0	2.41	20.9	2.78	22.4	2.97	23.9	3.17	26.8	3.57	29.7	4.01
	25	15.1	2.10	18.0	2.45	20.9	2.83	22.4	3.03	23.9	3.26	26.8	3.75	29.7	4.28
	27	15.1	2.13	18.0	2.54	20.9	2.99	22.4	3.22	23.9	3.47	26.8	3.99	29.7	4.56
	29	15.1	2.26	18.0	2.69	20.9	3.17	22.4	3.42	23.9	3.69	26.8	4.25	29.7	4.85
	31	15.1	2.38	18.0	2.85	20.9	3.36	22.4	3.63	23.9	3.92	26.8	4.52	29.7	5.16
	33	15.1	2.52	18.0	3.01	20.9	3.56	22.4	3.85	23.9	4.15	26.8	4.80	29.7	5.49
	35	15.1	2.66	18.0	3.19	20.9	3.77	22.4	4.08	23.9	4.40	26.8	5.09	29.7	5.83
	37	15.1	2.80	18.0	3.37	20.9	3.99	22.4	4.32	23.9	4.67	26.8	5.40	29.7	6.19
	39	15.1	2.95	18.0	3.56	20.9	4.22	22.4	4.58	23.9	4.95	26.8	5.73	29.7	6.6

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)
Note1: The above table shows the average value of conditions which may occur.

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC kW	14.0°CWB PI kW	16.0°CWB TC kW	16.0°CWB PI kW	18.0°CWB TC kW	18.0°CWB PI kW	19.0°CWB TC kW	19.0°CWB PI kW	20.0°CWB TC kW	20.0°CWB PI kW	22.0°CWB TC kW	22.0°CWB PI kW	24.0°CWB TC kW	24.0°CWB PI kW
130 (585)	10	44.2	6.03	52.7	7.38	61.3	8.8	63.5	9.0	64.3	8.8	65.9	8.41	67.5	8.04
	12	44.2	6.14	52.7	7.52	61.3	8.9	62.7	8.9	63.5	8.7	65.0	8.36	66.6	8.23
	14	44.2	6.26	52.7	7.67	61.0	9.1	61.8	8.9	62.6	8.7	64.2	8.6	65.8	8.7
	16	44.2	6.38	52.7	7.82	60.2	9.0	61.0	9.0	61.8	9.0	63.4	9.1	65.0	9.2
	18	44.2	6.50	52.7	7.97	59.4	9.4	60.2	9.4	61.0	9.5	62.6	9.5	64.2	9.6
	20	44.2	6.63	52.7	8.49	58.6	9.8	59.4	9.9	60.2	9.9	61.8	10.0	63.4	10.1
	21	44.2	6.82	52.7	8.8	58.2	10.0	59.0	10.1	59.8	10.1	61.4	10.2	63.0	10.3
	23	44.2	7.30	52.7	9.4	57.4	10.5	58.1	10.6	58.9	10.6	60.5	10.7	62.1	10.8
	25	44.2	7.81	52.7	10.1	56.5	11.0	57.3	11.0	58.1	11.1	59.7	11.2	61.3	11.3
	27	44.2	8.34	52.7	10.8	55.7	11.4	56.5	11.5	57.3	11.5	58.9	11.7	60.5	11.8
	29	44.2	8.9	52.7	11.5	54.9	11.9	55.7	12.0	56.5	12.0	58.1	12.1	59.7	12.3
	31	44.2	9.5	52.5	12.2	54.1	12.4	54.9	12.4	55.7	12.5	57.3	12.6	58.9	12.8
	33	44.2	10.1	51.7	12.7	53.3	12.8	54.0	12.9	54.8	13.0	56.4	13.1	58.0	13.3
	35	44.2	10.8	50.8	13.1	52.4	13.3	53.2	13.4	54.0	13.4	55.6	13.6	57.2	13.7
	37	44.2	11.5	50.0	13.6	51.6	13.8	52.4	13.8	53.2	13.9	54.8	14.1	56.4	14.2
	39	44.2	12.2	49.2	14.1	50.8	14.2	51.6	14.3	52.4	14.4	54.0	14.6	55.6	14.7
120 (540)	10	40.8	5.51	48.7	6.73	56.5	8.00	60.5	8.7	63.3	9.0	64.7	8.7	66.2	8.33
	12	40.8	5.61	48.7	6.86	56.5	8.16	60.5	8.8	62.5	9.0	63.9	8.6	65.4	8.28
	14	40.8	5.72	48.7	6.99	56.5	8.31	60.5	9.0	61.6	8.9	63.1	8.6	64.6	8.6
	16	40.8	5.82	48.7	7.13	56.5	8.47	60.1	9.1	60.8	8.9	62.3	9.0	63.8	9.1
	18	40.8	5.94	48.7	7.27	56.5	8.8	59.3	9.4	60.0	9.4	61.5	9.5	62.9	9.6
	20	40.8	6.05	48.7	7.55	56.5	9.4	58.4	9.8	59.2	9.9	60.6	9.9	62.1	10.0
	21	40.8	6.12	48.7	7.82	56.5	9.8	58.0	10.0	58.8	10.1	60.2	10.2	61.7	10.3
	23	40.8	6.53	48.7	8.38	56.5	10.4	57.2	10.5	57.9	10.5	59.4	10.6	60.9	10.7
	25	40.8	6.98	48.7	9.0	55.6	10.9	56.4	11.0	57.1	11.0	58.6	11.1	60.1	11.2
	27	40.8	7.45	48.7	9.6	54.8	11.4	55.6	11.4	56.3	11.5	57.8	11.6	59.2	11.7
	29	40.8	7.95	48.7	10.2	54.0	11.8	54.7	11.9	55.5	11.9	57.0	12.1	58.4	12.2
	31	40.8	8.47	48.7	10.9	53.2	12.3	53.9	12.3	54.7	12.4	56.1	12.5	57.6	12.7
	33	40.8	9.0	48.7	11.7	52.4	12.7	53.1	12.8	53.8	12.9	55.3	13.0	56.8	13.1
	35	40.8	9.6	48.7	12.4	51.6	13.2	52.3	13.3	53.0	13.3	54.5	13.5	56.0	13.6
	37	40.8	10.2	48.7	13.2	50.7	13.7	51.5	13.7	52.2	13.8	53.7	14.0	55.1	14.1
	39	40.8	10.9	48.4	14.0	49.9	14.1	50.6	14.2	51.4	14.3	52.9	14.5	54.3	14.6
110 (495)	10	37.4	5.00	44.6	6.09	51.8	7.24	55.4	7.82	59.0	8.42	63.6	8.9	65.0	8.6
	12	37.4	5.09	44.6	6.21	51.8	7.37	55.4	7.97	59.0	8.6	62.8	8.9	64.1	8.6
	14	37.4	5.19	44.6	6.32	51.8	7.52	55.4	8.12	59.0	8.7	62.0	8.8	63.3	8.6
	16	37.4	5.28	44.6	6.45	51.8	7.66	55.4	8.28	59.0	8.9	61.2	9.0	62.5	9.0
	18	37.4	5.38	44.6	6.57	51.8	7.81	55.4	8.51	59.0	9.3	60.3	9.4	61.7	9.5
	20	37.4	5.49	44.6	6.70	51.8	8.28	55.4	9.1	58.2	9.8	59.5	9.9	60.9	10.0
	21	37.4	5.54	44.6	6.91	51.8	8.6	55.4	9.5	57.8	10.0	59.1	10.1	60.5	10.2
	23	37.4	5.80	44.6	7.40	51.8	9.2	55.4	10.2	56.9	10.5	58.3	10.6	59.6	10.7
	25	37.4	6.20	44.6	7.91	51.8	9.8	55.4	10.9	56.1	10.9	57.5	11.0	58.8	11.1
	27	37.4	6.61	44.6	8.45	51.8	10.5	54.6	11.3	55.3	11.4	56.6	11.5	58.0	11.6
	29	37.4	7.05	44.6	9.0	51.8	11.2	53.8	11.8	54.5	11.9	55.8	12.0	57.2	12.1
	31	37.4	7.50	44.6	9.6	51.8	12.0	53.0	12.3	53.7	12.3	55.0	12.4	56.4	12.5
	33	37.4	7.99	44.6	10.3	51.5	12.7	52.2	12.7	52.8	12.8	54.2	12.9	55.5	13.0
	35	37.4	8.49	44.6	10.9	50.7	13.1	51.3	13.2	52.0	13.3	53.4	13.4	54.7	13.5
	37	37.4	9.0	44.6	11.6	49.8	13.6	50.5	13.7	51.2	13.7	52.5	13.9	53.9	14.0
	39	37.4	9.6	44.6	12.4	49.0	14.1	49.7	14.1	50.4	14.2	51.7	14.3	53.1	14.5
100 (450)	10	34.0	4.51	40.6	5.47	47.1	6.49	50.4	7.01	53.7	7.54	60.2	8.6	63.7	8.9
	12	34.0	4.59	40.6	5.57	47.1	6.61	50.4	7.14	53.7	7.68	60.2	8.8	62.9	8.9
	14	34.0	4.67	40.6	5.68	47.1	6.73	50.4	7.28	53.7	7.83	60.2	8.9	62.1	8.8
	16	34.0	4.76	40.6	5.78	47.1	6.86	50.4	7.42	53.7	7.98	60.0	9.1	61.3	9.0
	18	34.0	4.85	40.6	5.90	47.1	7.00	50.4	7.56	53.7	8.14	59.2	9.4	60.4	9.4
	20	34.0	4.94	40.6	6.01	47.1	7.21	50.4	7.94	53.7	8.7	58.4	9.8	59.6	9.9
	21	34.0	4.99	40.6	6.07	47.1	7.46	50.4	8.23	53.7	9.0	58.0	10.0	59.2	10.1
	23	34.0	5.12	40.6	6.48	47.1	8.00	50.4	8.8	53.7	9.7	57.2	10.5	58.4	10.6
	25	34.0	5.46	40.6	6.92	47.1	8.56	50.4	9.4	53.7	10.4	56.3	11.0	57.6	11.0
	27	34.0	5.82	40.6	7.39	47.1	9.1	50.4	10.1	53.7	11.1	55.5	11.4	56.7	11.5
	29	34.0	6.20	40.6	7.88	47.1	9.8	50.4	10.8	53.5	11.8	54.7	11.9	55.9	12.0
	31	34.0	6.60	40.6	8.40	47.1	10.4	50.4	11.5	52.7	12.2	53.9	12.3	55.1	12.4
	33	34.0	7.02	40.6	8.9	47.1	11.1	50.4	12.3	51.8	12.7	53.1	12.8	54.3	12.9
	35	34.0	7.46	40.6	9.5	47.1	11.8	50.4	13.1	51.0	13.2	52.2	13.3	53.5	13.4
	37	34.0	7.92	40.6	10.1	47.1	12.6	49.6	13.6	50.2	13.6	51.4	13.7	52.6	13.9
	39	34.0	8.41	40.6	10.8	47.1	13.4	48.8	14.0	49.4	14.1	50.6	14.2	51.8	14.3

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC kW	14.0°CWB PI kW	16.0°CWB TC kW	16.0°CWB PI kW	18.0°CWB TC kW	18.0°CWB PI kW	19.0°CWB TC kW	19.0°CWB PI kW	20.0°CWB TC kW	20.0°CWB PI kW	22.0°CWB TC kW	22.0°CWB PI kW	24.0°CWB TC kW	24.0°CWB PI kW
90 (405)	10	30.6	4.04	36.5	4.87	42.4	5.75	45.4	6.21	48.3	6.67	54.2	7.62	60.1	8.6
	12	30.6	4.11	36.5	4.96	42.4	5.86	45.4	6.32	48.3	6.80	54.2	7.77	60.1	8.8
	14	30.6	4.18	36.5	5.05	42.4	5.97	45.4	6.44	48.3	6.93	54.2	7.92	60.1	8.9
	16	30.6	4.25	36.5	5.14	42.4	6.08	45.4	6.57	48.3	7.06	54.2	8.07	60.0	9.1
	18	30.6	4.33	36.5	5.24	42.4	6.20	45.4	6.70	48.3	7.20	54.2	8.23	59.2	9.4
	20	30.6	4.41	36.5	5.34	42.4	6.32	45.4	6.83	48.3	7.47	54.2	8.8	58.4	9.8
	21	30.6	4.45	36.5	5.39	42.4	6.43	45.4	7.07	48.3	7.74	54.2	9.2	58.0	10.0
	23	30.6	4.54	36.5	5.62	42.4	6.89	45.4	7.57	48.3	8.29	54.2	9.8	57.1	10.5
	25	30.6	4.78	36.5	6.00	42.4	7.36	45.4	8.10	48.3	8.9	54.2	10.5	56.3	10.9
	27	30.6	5.09	36.5	6.40	42.4	7.86	45.4	8.7	48.3	9.5	54.2	11.3	55.5	11.4
	29	30.6	5.41	36.5	6.82	42.4	8.39	45.4	9.2	48.3	10.1	53.6	11.8	54.7	11.9
	31	30.6	5.75	36.5	7.26	42.4	8.9	45.4	9.9	48.3	10.8	52.8	12.2	53.9	12.3
	33	30.6	6.11	36.5	7.72	42.4	9.5	45.4	10.5	48.3	11.5	51.9	12.7	53.0	12.8
	35	30.6	6.49	36.5	8.21	42.4	10.1	45.4	11.2	48.3	12.3	51.1	13.2	52.2	13.3
	37	30.6	6.89	36.5	8.7	42.4	10.8	45.4	11.9	48.3	13.1	50.3	13.6	51.4	13.7
	39	30.6	7.31	36.5	9.3	42.4	11.5	45.4	12.7	48.3	14.0	49.5	14.1	50.6	14.2
80 (360)	10	27.2	3.59	32.5	4.29	37.7	5.05	40.3	5.44	42.9	5.83	48.2	6.65	53.4	7.50
	12	27.2	3.64	32.5	4.37	37.7	5.14	40.3	5.54	42.9	5.94	48.2	6.78	53.4	7.64
	14	27.2	3.70	32.5	4.45	37.7	5.23	40.3	5.64	42.9	6.05	48.2	6.91	53.4	7.78
	16	27.2	3.77	32.5	4.53	37.7	5.33	40.3	5.74	42.9	6.17	48.2	7.04	53.4	7.94
	18	27.2	3.83	32.5	4.61	37.7	5.43	40.3	5.86	42.9	6.29	48.2	7.18	53.4	8.09
	20	27.2	3.90	32.5	4.69	37.7	5.54	40.3	5.97	42.9	6.42	48.2	7.44	53.4	8.7
	21	27.2	3.94	32.5	4.74	37.7	5.59	40.3	6.03	42.9	6.55	48.2	7.71	53.4	9.0
	23	27.2	4.01	32.5	4.83	37.7	5.86	40.3	6.42	42.9	7.01	48.2	8.26	53.4	9.6
	25	27.2	4.14	32.5	5.14	37.7	6.26	40.3	6.86	42.9	7.49	48.2	8.8	53.4	10.3
	27	27.2	4.40	32.5	5.48	37.7	6.68	40.3	7.32	42.9	8.00	48.2	9.4	53.4	11.0
	29	27.2	4.68	32.5	5.83	37.7	7.12	40.3	7.81	42.9	8.54	48.2	10.1	53.4	11.8
	31	27.2	4.97	32.5	6.20	37.7	7.58	40.3	8.32	42.9	9.1	48.2	10.8	52.6	12.2
	33	27.2	5.27	32.5	6.59	37.7	8.07	40.3	8.9	42.9	9.7	48.2	11.5	51.8	12.7
	35	27.2	5.59	32.5	7.00	37.7	8.6	40.3	9.4	42.9	10.3	48.2	12.2	51.0	13.2
	37	27.2	5.93	32.5	7.44	37.7	9.1	40.3	10.0	42.9	11.0	48.2	13.0	50.1	13.6
	39	27.2	6.28	32.5	7.90	37.7	9.7	40.3	10.7	42.9	11.7	48.2	13.9	49.3	14.1
70 (315)	10	23.8	3.15	28.4	3.74	33.0	4.37	35.3	4.69	37.6	5.03	42.2	5.72	46.8	6.43
	12	23.8	3.20	28.4	3.80	33.0	4.44	35.3	4.78	37.6	5.12	42.2	5.82	46.8	6.55
	14	23.8	3.25	28.4	3.87	33.0	4.52	35.3	4.86	37.6	5.21	42.2	5.93	46.8	6.67
	16	23.8	3.30	28.4	3.93	33.0	4.60	35.3	4.95	37.6	5.31	42.2	6.04	46.8	6.80
	18	23.8	3.36	28.4	4.00	33.0	4.69	35.3	5.05	37.6	5.41	42.2	6.16	46.8	6.93
	20	23.8	3.41	28.4	4.08	33.0	4.78	35.3	5.14	37.6	5.52	42.2	6.28	46.8	7.13
	21	23.8	3.44	28.4	4.11	33.0	4.82	35.3	5.19	37.6	5.57	42.2	6.38	46.8	7.38
	23	23.8	3.50	28.4	4.19	33.0	4.92	35.3	5.37	37.6	5.84	42.2	6.83	46.8	7.91
	25	23.8	3.57	28.4	4.36	33.0	5.25	35.3	5.73	37.6	6.23	42.2	7.30	46.8	8.46
	27	23.8	3.77	28.4	4.64	33.0	5.59	35.3	6.11	37.6	6.65	42.2	7.80	46.8	9.0
	29	23.8	4.00	28.4	4.93	33.0	5.96	35.3	6.51	37.6	7.09	42.2	8.32	46.8	9.7
	31	23.8	4.24	28.4	5.23	33.0	6.34	35.3	6.93	37.6	7.55	42.2	8.9	46.8	10.3
	33	23.8	4.50	28.4	5.56	33.0	6.74	35.3	7.37	37.6	8.03	42.2	9.4	46.8	11.0
	35	23.8	4.76	28.4	5.90	33.0	7.16	35.3	7.83	37.6	8.54	42.2	10.1	46.8	11.7
	37	23.8	5.04	28.4	6.25	33.0	7.60	35.3	8.33	37.6	9.1	42.2	10.7	46.8	12.5
	39	23.8	5.33	28.4	6.63	33.0	8.07	35.3	8.8	37.6	9.7	42.2	11.4	46.8	13.3
60 (270)	10	20.4	2.74	24.3	3.22	28.3	3.73	30.2	3.99	32.2	4.26	36.1	4.82	40.1	5.40
	12	20.4	2.78	24.3	3.27	28.3	3.79	30.2	4.06	32.2	4.33	36.1	4.90	40.1	5.50
	14	20.4	2.82	24.3	3.32	28.3	3.85	30.2	4.13	32.2	4.41	36.1	4.99	40.1	5.60
	16	20.4	2.87	24.3	3.37	28.3	3.92	30.2	4.20	32.2	4.49	36.1	5.09	40.1	5.71
	18	20.4	2.91	24.3	3.43	28.3	3.99	30.2	4.27	32.2	4.57	36.1	5.18	40.1	5.82
	20	20.4	2.95	24.3	3.49	28.3	4.06	30.2	4.35	32.2	4.66	36.1	5.28	40.1	5.93
	21	20.4	2.98	24.3	3.52	28.3	4.09	30.2	4.39	32.2	4.70	36.1	5.33	40.1	5.99
	23	20.4	3.03	24.3	3.58	28.3	4.17	30.2	4.48	32.2	4.79	36.1	5.54	40.1	6.37
	25	20.4	3.08	24.3	3.65	28.3	4.33	30.2	4.70	32.2	5.09	36.1	5.92	40.1	6.80
	27	20.4	3.19	24.3	3.87	28.3	4.61	30.2	5.01	32.2	5.42	36.1	6.31	40.1	7.26
	29	20.4	3.38	24.3	4.10	28.3	4.90	30.2	5.33	32.2	5.77	36.1	6.72	40.1	7.74
	31	20.4	3.58	24.3	4.35	28.3	5.21	30.2	5.66	32.2	6.14	36.1	7.16	40.1	8.25
	33	20.4	3.79	24.3	4.61	28.3	5.53	30.2	6.02	32.2	6.53	36.1	7.61	40.1	8.8
	35	20.4	4.00	24.3	4.89	28.3	5.86	30.2	6.39	32.2	6.93	36.1	8.10	40.1	9.4
	37	20.4	4.23	24.3	5.17	28.3	6.22	30.2	6.78	32.2	7.36	36.1	8.6	40.1	10.0
	39	20.4	4.47	24.3	5.48	28.3	6.59	30.2	7.19	32.2	7.81	36.1	9.1	40.1	10.6
50 (225)	10	17.0	2.36	20.3	2.73	23.6	3.12	25.2	3.33	26.8	3.54	30.1	3.97	33.4	4.43
	12	17.0	2.39	20.3	2.77	23.6	3.17	25.2	3.38	26.8	3.60	30.1	4.04	33.4	4.50
	14	17.0	2.42	20.3	2.81	23.6	3.22	25.2	3.43	26.8	3.65	30.1	4.11	33.4	4.58
	16	17.0	2.45	20.3	2.85	23.6	3.27	25.2	3.49	26.8	3.72	30.1	4.18	33.4	4.67
	18	17.0	2.49	20.3	2.89	23.6	3.32	25.2	3.55	26.8	3.78	30.1	4.26	33.4	4.75
	20	17.0	2.52	20.3	2.94	23.6	3.38	25.2	3.61	26.8	3.85	30.1	4.33	33.4	4.84
	21	17.0	2.54	20.3	2.96	23.6	3.41	25.2	3.64	26.8	3.88	30.1	4.37	33.4	4.89
	23	17.0	2.58	20.3	3.01	23.6	3.47	25.2	3.71	26.8	3.95	30.1	4.46	33.4	5.00
	25	17.0	2.62	20.3	3.06	23.6	3.53	25.2	3.78	26.8	4.07	30.1	4.68	33.4	5.33
	27	17.0	2.66	20.3	3.17	23.6	3.73	25.2	4.02	26.8	4.33	30.1	4.98	33.4	5.68
	29	17.0	2.81	20.3	3.36	23.6	3.95	25.2	4.27	26.8	4.60	30.1	5.30	33.4	6.05
	31	17.0	2.97	20.3	3.55	23.6	4.19	25.2	4.53	26.8	4.89	30.1	5.63	33.4	6.44
	33	17.0	3.14	20.3	3.76	23.6	4.44	25.2	4.80	26.8	5.18	30.1	5.98	33.4	6.85
	35	17.0	3.31	20.3	3.98	23.6	4.70	25.2	5.09	26.8	5.50	30.1	6.35	33.4	7.27
	37	17.0	3.50	20.3	4.20	23.6	4.98	25.2	5.39	26.8	5.82	30.1	6.74	33.4	7.73
	39	17.0	3.68	20.3	4.44	23.6	5.27	25.2	5.71	26.8	6.17	30.1	7.15	33.4	8.21

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)
Note1: The above table shows the average value of conditions which may occur.

RXYQ24PAHY1, PAHYL, PHTL [50/60Hz]

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC kW	PI kW	16.0°CWB TC kW	PI kW	18.0°CWB TC kW	PI kW	19.0°CWB TC kW	PI kW	20.0°CWB TC kW	PI kW	22.0°CWB TC kW	PI kW	24.0°CWB TC kW	PI kW
130 (780)	10	59.0	7.23	70.3	8.8	81.7	10.5	84.6	10.7	85.7	10.5	87.8	10.1	90.0	9.6
	12	59.0	7.4	70.3	9.0	81.7	10.7	83.5	10.7	84.6	10.5	86.7	10.0	88.9	9.9
	14	59.0	7.5	70.3	9.2	81.4	10.9	82.5	10.6	83.5	10.4	85.6	10.3	87.8	10.4
	16	59.0	7.6	70.3	9.4	80.3	10.8	81.4	10.7	82.4	10.8	84.5	10.9	86.7	11.0
	18	59.0	7.8	70.3	9.6	79.2	11.2	80.3	11.3	81.3	11.3	83.5	11.4	85.6	11.6
	20	59.0	8.0	70.3	10.2	78.1	11.8	79.2	11.8	80.2	11.9	82.4	12.0	84.5	12.1
	21	59.0	8.2	70.3	10.5	77.6	12.0	78.6	12.1	79.7	12.2	81.8	12.3	83.9	12.4
	23	59.0	8.8	70.3	11.3	76.5	12.6	77.5	12.7	78.6	12.7	80.7	12.8	82.8	13.0
	25	59.0	9.4	70.3	12.1	75.4	13.1	76.4	13.2	77.5	13.3	79.6	13.4	81.8	13.6
	27	59.0	10.0	70.3	12.9	74.3	13.7	75.3	13.8	76.4	13.8	78.5	14.0	80.7	14.1
	29	59.0	10.7	70.3	13.8	73.2	14.2	74.3	14.3	75.3	14.4	77.4	14.6	79.6	14.7
	31	59.0	11.4	70.0	14.6	72.1	14.8	73.2	14.9	74.2	15.0	76.3	15.1	78.5	15.3
	33	59.0	12.1	68.9	15.2	71.0	15.4	72.1	15.5	73.1	15.5	75.3	15.7	77.4	15.9
	35	59.0	12.9	67.8	15.7	69.9	15.9	71.0	16.0	72.0	16.1	74.2	16.3	76.3	16.5
	37	59.0	13.8	66.7	16.3	68.8	16.5	69.9	16.6	70.9	16.7	73.1	16.9	75.2	17.1
	39	59.0	14.6	65.6	16.9	67.7	17.1	68.8	17.2	69.8	17.3	72.0	17.5	74.1	17.7
120 (720)	10	54.4	6.61	64.9	8.1	75.4	9.6	80.6	10.4	84.4	10.8	86.3	10.4	88.3	10.0
	12	54.4	6.73	64.9	8.2	75.4	9.8	80.6	10.6	83.3	10.7	85.2	10.3	87.2	9.9
	14	54.4	6.85	64.9	8.4	75.4	10.0	80.6	10.8	82.2	10.7	84.1	10.3	86.1	10.3
	16	54.4	6.98	64.9	8.5	75.4	10.2	80.1	10.8	81.1	10.7	83.0	10.8	85.0	10.9
	18	54.4	7.12	64.9	8.7	75.4	10.5	79.0	11.2	80.0	11.3	82.0	11.4	83.9	11.5
	20	54.4	7.26	64.9	9.1	75.4	11.3	77.9	11.8	78.9	11.8	80.9	11.9	82.8	12.0
	21	54.4	7.33	64.9	9.4	75.4	11.7	77.4	12.0	78.3	12.1	80.3	12.2	82.3	12.3
	23	54.4	7.8	64.9	10.0	75.3	12.5	76.3	12.6	77.3	12.6	79.2	12.8	81.2	12.9
	25	54.4	8.4	64.9	10.8	74.2	13.1	75.2	13.2	76.2	13.2	78.1	13.3	80.1	13.4
	27	54.4	8.9	64.9	11.5	73.1	13.7	74.1	13.7	75.1	13.7	77.0	13.9	79.0	14.0
	29	54.4	9.5	64.9	12.3	72.0	14.2	73.0	14.2	74.0	14.3	75.9	14.4	77.9	14.6
	31	54.4	10.1	64.9	13.1	70.9	14.7	71.9	14.8	72.9	14.9	74.8	15.0	76.8	15.2
	33	54.4	10.8	64.9	14.0	69.8	15.3	70.8	15.4	71.8	15.4	73.8	15.6	75.7	15.7
	35	54.4	11.5	64.9	14.9	68.7	15.8	69.7	15.9	70.7	16.0	72.7	16.2	74.6	16.3
	37	54.4	12.2	64.9	15.9	67.6	16.4	68.6	16.5	69.6	16.6	71.6	16.7	73.5	16.9
	39	54.4	13.0	64.6	16.6	66.5	17.0	67.5	17.1	68.5	17.1	70.5	17.3	72.4	17.5
110 (660)	10	49.9	6.00	59.5	7.30	69.1	8.7	73.9	9.4	78.7	10.1	84.8	10.7	86.6	10.3
	12	49.9	6.11	59.5	7.4	69.1	8.8	73.9	9.6	78.7	10.3	83.7	10.7	85.5	10.3
	14	49.9	6.22	59.5	7.6	69.1	9.0	73.9	9.7	78.7	10.5	82.6	10.6	84.4	10.3
	16	49.9	6.33	59.5	7.7	69.1	9.2	73.9	9.9	78.7	10.7	81.5	10.7	83.3	10.8
	18	49.9	6.45	59.5	7.9	69.1	9.4	73.9	10.2	78.6	11.2	80.4	11.3	82.2	11.4
	20	49.9	6.58	59.5	8.0	69.1	9.9	73.9	11.0	77.6	11.7	79.4	11.8	81.2	11.9
	21	49.9	6.64	59.5	8.3	69.1	10.3	73.9	11.4	77.0	12.0	78.8	12.1	80.6	12.2
	23	49.9	6.95	59.5	8.9	69.1	11.0	73.9	12.2	75.9	12.6	77.7	12.7	79.5	12.8
	25	49.9	7.4	59.5	9.5	69.1	11.8	73.9	13.0	74.8	13.1	76.6	13.2	78.4	13.3
	27	49.9	7.9	59.5	10.1	69.1	12.6	72.8	13.6	73.7	13.7	75.5	13.8	77.3	13.9
	29	49.9	8.4	59.5	10.8	69.1	13.5	71.7	14.1	72.6	14.2	74.4	14.3	76.2	14.5
	31	49.9	9.0	59.5	11.5	69.1	14.4	70.6	14.7	71.5	14.8	73.3	14.9	75.1	15.0
	33	49.9	9.6	59.5	12.3	68.7	15.2	69.6	15.3	70.5	15.3	72.2	15.5	74.0	15.6
	35	49.9	10.2	59.5	13.1	67.6	15.7	68.5	15.8	69.4	15.9	71.2	16.0	73.0	16.2
	37	49.9	10.8	59.5	13.9	66.5	16.3	67.4	16.4	68.3	16.4	70.1	16.6	71.9	16.8
	39	49.9	11.5	59.5	14.8	65.4	16.8	66.3	16.9	67.2	17.0	69.0	17.2	70.8	17.4
100 (600)	10	45.4	5.41	54.1	6.56	62.8	7.8	67.2	8.4	71.6	9.0	80.3	10.3	85.0	10.7
	12	45.4	5.50	54.1	6.68	62.8	7.9	67.2	8.6	71.6	9.2	80.3	10.5	83.9	10.6
	14	45.4	5.60	54.1	6.80	62.8	8.1	67.2	8.7	71.6	9.4	80.3	10.7	82.8	10.6
	16	45.4	5.70	54.1	6.93	62.8	8.2	67.2	8.9	71.6	9.6	80.0	10.9	81.7	10.7
	18	45.4	5.81	54.1	7.07	62.8	8.4	67.2	9.1	71.6	9.8	78.9	11.2	80.6	11.3
	20	45.4	5.92	54.1	7.21	62.8	8.6	67.2	9.5	71.6	10.4	77.9	11.8	78.9	11.8
	21	45.4	5.98	54.1	7.28	62.8	8.9	67.2	9.9	71.6	10.8	77.3	12.0	78.4	12.1
	23	45.4	6.14	54.1	7.8	62.8	9.6	67.2	10.6	71.6	11.6	76.2	12.6	77.8	12.7
	25	45.4	6.55	54.1	8.3	62.8	10.3	67.2	11.3	71.6	12.4	75.1	13.1	76.8	13.2
	27	45.4	6.98	54.1	8.9	62.8	11.0	67.2	12.1	71.6	13.3	74.0	13.7	75.7	13.8
	29	45.4	7.4	54.1	9.4	62.8	11.7	67.2	12.9	71.3	14.1	72.9	14.2	74.6	14.3
	31	45.4	7.9	54.1	10.1	62.8	12.5	67.2	13.8	70.2	14.7	71.8	14.8	73.5	14.9
	33	45.4	8.4	54.1	10.7	62.8	13.3	67.2	14.7	69.1	15.2	70.7	15.3	72.4	15.5
	35	45.4	8.9	54.1	11.4	62.8	14.2	67.2	15.7	68.0	15.8	69.7	15.9	71.3	16.0
	37	45.4	9.5	54.1	12.1	62.8	15.1	66.1	16.3	66.9	16.3	68.6	16.5	70.2	16.6
	39	45.4	10.1	54.1	12.9	62.8	16.1	65.0	16.8	65.8	16.9	67.5	17.0	69.1	17.2

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC kW	PI kW	16.0°CWB TC kW	PI kW	18.0°CWB TC kW	PI kW	19.0°CWB TC kW	PI kW	20.0°CWB TC kW	PI kW	22.0°CWB TC kW	PI kW	24.0°CWB TC kW	PI kW
90 (540)	10	40.8	4.84	48.7	5.84	56.5	6.90	60.5	7.4	64.4	8.0	72.3	9.1	80.1	10.3
	12	40.8	4.92	48.7	5.94	56.5	7.02	60.5	7.6	64.4	8.1	72.3	9.3	80.1	10.5
	14	40.8	5.01	48.7	6.05	56.5	7.15	60.5	7.7	64.4	8.3	72.3	9.5	80.1	10.7
	16	40.8	5.10	48.7	6.16	56.5	7.29	60.5	7.9	64.4	8.5	72.3	9.7	80.0	10.9
	18	40.8	5.19	48.7	6.28	56.5	7.4	60.5	8.0	64.4	8.6	72.3	9.9	78.9	11.2
	20	40.8	5.29	48.7	6.40	56.5	7.6	60.5	8.2	64.4	9.0	72.3	10.6	77.8	11.8
	21	40.8	5.33	48.7	6.46	56.5	7.7	60.5	8.5	64.4	9.3	72.3	11.0	77.3	12.0
	23	40.8	5.44	48.7	6.73	56.5	8.3	60.5	9.1	64.4	9.9	72.3	11.8	76.2	12.6
	25	40.8	5.72	48.7	7.19	56.5	8.8	60.5	9.7	64.4	10.6	72.3	12.6	75.1	13.1
	27	40.8	6.10	48.7	7.7	56.5	9.4	60.5	10.4	64.4	11.4	72.3	13.5	74.0	13.7
	29	40.8	6.49	48.7	8.2	56.5	10.1	60.5	11.1	64.4	12.1	71.4	14.1	72.9	14.2
	31	40.8	6.89	48.7	8.7	56.5	10.7	60.5	11.8	64.4	13.0	70.3	14.7	71.8	14.8
	33	40.8	7.32	48.7	9.3	56.5	11.4	60.5	12.6	64.4	13.8	69.2	15.2	70.7	15.3
	35	40.8	7.8	48.7	9.8	56.5	12.2	60.5	13.4	64.4	14.7	68.2	15.8	69.6	15.9
	37	40.8	8.3	48.7	10.5	56.5	12.9	60.5	14.3	64.4	15.7	67.1	16.3	68.5	16.5
	39	40.8	8.8	48.7	11.1	56.5	13.8	60.5	15.2	64.4	16.7	66.0	16.9	67.4	17.0
80 (480)	10	36.3	4.30	43.3	5.15	50.3	6.05	53.8	6.52	57.3	6.99	64.2	8.0	71.2	9.0
	12	36.3	4.37	43.3	5.24	50.3	6.16	53.8	6.63	57.3	7.12	64.2	8.1	71.2	9.2
	14	36.3	4.44	43.3	5.33	50.3	6.27	53.8	6.76	57.3	7.26	64.2	8.3	71.2	9.3
	16	36.3	4.52	43.3	5.42	50.3	6.39	53.8	6.89	57.3	7.4	64.2	8.4	71.2	9.5
	18	36.3	4.59	43.3	5.52	50.3	6.51	53.8	7.02	57.3	7.5	64.2	8.6	71.2	9.7
	20	36.3	4.67	43.3	5.63	50.3	6.63	53.8	7.16	57.3	7.7	64.2	8.9	71.2	10.4
	21	36.3	4.72	43.3	5.68	50.3	6.70	53.8	7.23	57.3	7.8	64.2	9.2	71.2	10.7
	23	36.3	4.80	43.3	5.79	50.3	7.02	53.8	7.7	57.3	8.4	64.2	9.9	71.2	11.5
	25	36.3	4.96	43.3	6.16	50.3	7.5	53.8	8.2	57.3	9.0	64.2	10.6	71.2	12.3
	27	36.3	5.28	43.3	6.57	50.3	8.0	53.8	8.8	57.3	9.6	64.2	11.3	71.2	13.2
	29	36.3	5.61	43.3	6.99	50.3	8.5	53.8	9.4	57.3	10.2	64.2	12.1	71.2	14.1
	31	36.3	5.95	43.3	7.4	50.3	9.1	53.8	10.0	57.3	10.9	64.2	12.9	70.1	14.7
	33	36.3	6.32	43.3	7.9	50.3	9.7	53.8	10.6	57.3	11.6	64.2	13.8	69.0	15.2
	35	36.3	6.70	43.3	8.4	50.3	10.3	53.8	11.3	57.3	12.4	64.2	14.7	68.0	15.8
	37	36.3	7.10	43.3	8.9	50.3	10.9	53.8	12.0	57.3	13.2	64.2	15.6	66.9	16.3
	39	36.3	7.5	43.3	9.5	50.3	11.6	53.8	12.8	57.3	14.0	64.2	16.7	65.8	16.9
70 (420)	10	31.7	3.78	37.9	4.49	44.0	5.24	47.0	5.63	50.1	6.03	56.2	6.85	62.3	7.7
	12	31.7	3.84	37.9	4.56	44.0	5.33	47.0	5.73	50.1	6.13	56.2	6.98	62.3	7.8
	14	31.7	3.90	37.9	4.64	44.0	5.42	47.0	5.83	50.1	6.25	56.2	7.11	62.3	8.0
	16	31.7	3.96	37.9	4.72	44.0	5.52	47.0	5.94	50.1	6.36	56.2	7.24	62.3	8.1
	18	31.7	4.02	37.9	4.80	44.0	5.63	47.0	6.05	50.1	6.48	56.2	7.4	62.3	8.3
	20	31.7	4.09	37.9	4.88	44.0	5.73	47.0	6.16	50.1	6.61	56.2	7.5	62.3	8.5
	21	31.7	4.13	37.9	4.93	44.0	5.78	47.0	6.22	50.1	6.67	56.2	7.6	62.3	8.8
	23	31.7	4.20	37.9	5.02	44.0	5.90	47.0	6.43	50.1	6.99	56.2	8.2	62.3	9.5
	25	31.7	4.27	37.9	5.22	44.0	6.29	47.0	6.87	50.1	7.5	56.2	8.8	62.3	10.1
	27	31.7	4.52	37.9	5.56	44.0	6.71	47.0	7.32	50.1	8.0	56.2	9.3	62.3	10.8
	29	31.7	4.80	37.9	5.91	44.0	7.14	47.0	7.8	50.1	8.5	56.2	10.0	62.3	11.6
	31	31.7	5.08	37.9	6.27	44.0	7.6	47.0	8.3	50.1	9.0	56.2	10.6	62.3	12.3
	33	31.7	5.39	37.9	6.66	44.0	8.1	47.0	8.8	50.1	9.6	56.2	11.3	62.3	13.2
	35	31.7	5.71	37.9	7.07	44.0	8.6	47.0	9.4	50.1	10.2	56.2	12.1	62.3	14.0
	37	31.7	6.04	37.9	7.5	44.0	9.1	47.0	10.0	50.1	10.9	56.2	12.8	62.3	14.9
	39	31.7	6.39	37.9	7.9	44.0	9.7	47.0	10.6	50.1	11.6	56.2	13.7	62.3	15.9
60 (360)	10	27.2	3.29	32.5	3.86	37.7	4.47	40.3	4.78	42.9	5.11	48.2	5.78	53.4	6.47
	12	27.2	3.33	32.5	3.92	37.7	4.54	40.3	4.86	42.9	5.19	48.2	5.88	53.4	6.59
	14	27.2	3.38	32.5	3.98	37.7	4.62	40.3	4.95	42.9	5.28	48.2	5.98	53.4	6.71
	16	27.2	3.43	32.5	4.04	37.7	4.69	40.3	5.03	42.9	5.38	48.2	6.09	53.4	6.84
	18	27.2	3.49	32.5	4.11	37.7	4.78	40.3	5.12	42.9	5.48	48.2	6.21	53.4	6.97
	20	27.2	3.54	32.5	4.18	37.7	4.86	40.3	5.22	42.9	5.58	48.2	6.33	53.4	7.11
	21	27.2	3.57	32.5	4.22	37.7	4.91	40.3	5.27	42.9	5.63	48.2	6.39	53.4	7.18
	23	27.2	3.63	32.5	4.29	37.7	5.00	40.3	5.37	42.9	5.74	48.2	6.64	53.4	7.6
	25	27.2	3.69	32.5	4.37	37.7	5.19	40.3	5.64	42.9	6.10	48.2	7.09	53.4	8.2
	27	27.2	3.82	32.5	4.63	37.7	5.53	40.3	6.00	42.9	6.50	48.2	7.6	53.4	8.7
	29	27.2	4.05	32.5	4.92	37.7	5.87	40.3	6.39	42.9	6.92	48.2	8.1	53.4	9.3
	31	27.2	4.29	32.5	5.22	37.7	6.24	40.3	6.79	42.9	7.4	48.2	8.6	53.4	9.9
	33	27.2	4.54	32.5	5.53	37.7	6.62	40.3	7.21	42.9	7.8	48.2	9.1	53.4	10.5
	35	27.2	4.80	32.5	5.86	37.7	7.03	40.3	7.7	42.9	8.3	48.2	9.7	53.4	11.2
	37	27.2	5.07	32.5	6.20	37.7	7.5	40.3	8.1	42.9	8.8	48.2	10.3	53.4	11.9
	39	27.2	5.36	32.5	6.56	37.7	7.9	40.3	8.6	42.9	9.4	48.2	11.0	53.4	12.7
50 (300)	10	22.7	2.83	27.0	3.27	31.4	3.74	33.6	3.99	35.8	4.24	40.2	4.76	44.5	5.30
	12	22.7	2.86	27.0	3.32	31.4	3.80	33.6	4.05	35.8	4.31	40.2	4.84	44.5	5.40
	14	22.7	2.90	27.0	3.37	31.4	3.86	33.6	4.12	35.8	4.38	40.2	4.92	44.5	5.49
	16	22.7	2.94	27.0	3.42	31.4	3.92	33.6	4.18	35.8	4.45	40.2	5.01	44.5	5.59
	18	22.7	2.98	27.0	3.47	31.4	3.98	33.6	4.25	35.8	4.53	40.2	5.10	44.5	5.70
	20	22.7	3.02	27.0	3.52	31.4	4.05	33.6	4.33	35.8	4.61	40.2	5.19	44.5	5.80
	21	22.7	3.05	27.0	3.55	31.4	4.09	33.6	4.36	35.8	4.65	40.2	5.24	44.5	5.86
	23	22.7	3.09	27.0	3.61	31.4	4.16	33.6	4.44	35.8	4.74	40.2	5.34	44.5	5.99
	25	22.7	3.14	27.0	3.67	31.4	4.23	33.6	4.54	35.8	4.88	40.2	5.61	44.5	6.39
	27	22.7	3.19	27.0	3.80	31.4	4.47	33.6	4.82	35.8	5.19	40.2	5.97	44.5	6.81
	29	22.7	3.37	27.0	4.02	31.4	4.74	33.6	5.12	35.8	5.51	40.2	6.35	44.5	7.25
	31	22.7	3.56	27.0	4.26	31.4	5.02	33.6	5.43	35.8	5.85	40.2	6.75	44.5	7.7
	33	22.7	3.76	27.0	4.51	31.4	5.32	33.6	5.76	35.8	6.21	40.2	7.17	44.5	8.2
	35	22.7	3.97	27.0	4.77	31.4	5.64	33.6	6.10	35.8	6.59	40.2	7.6	44.5	8.7
	37	22.7	4.19	27.0	5.04	31.4	5.97	33.6	6.46	35.8	6.98	40.2	8.1	44.5	9.3
	39	22.7	4.42	27.0	5.32	31.4	6.31	33.6	6.84	35.8	7.4	40.2	8.6	44.5	9.8

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)
Note1: The above table shows the average value of conditions which may occur.

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC kW	14.0°CWB PI kW	16.0°CWB TC kW	16.0°CWB PI kW	18.0°CWB TC kW	18.0°CWB PI kW	19.0°CWB TC kW	19.0°CWB PI kW	20.0°CWB TC kW	20.0°CWB PI kW	22.0°CWB TC kW	22.0°CWB PI kW	24.0°CWB TC kW	24.0°CWB PI kW
130 (845)	10	63.9	8.5	76.2	10.4	88.5	12.3	91.7	12.6	92.8	12.3	95.1	11.8	97.4	11.3
	12	63.9	8.6	76.2	10.6	88.5	12.6	90.5	12.5	91.7	12.3	94.0	11.7	96.3	11.6
	14	63.9	8.8	76.2	10.8	88.2	12.7	89.3	12.5	90.5	12.2	92.8	12.1	95.1	12.2
	16	63.9	9.0	76.2	11.0	87.0	12.7	88.1	12.6	89.3	12.6	91.6	12.8	93.9	12.9
	18	63.9	9.1	76.2	11.2	85.8	13.2	87.0	13.2	88.1	13.3	90.4	13.4	92.7	13.5
	20	63.9	9.3	76.2	11.9	84.6	13.8	85.8	13.9	86.9	13.9	89.2	14.1	91.5	14.2
	21	63.9	9.6	76.2	12.4	84.0	14.1	85.2	14.2	86.3	14.3	88.6	14.4	90.9	14.5
	23	63.9	10.3	76.2	13.2	82.8	14.8	84.0	14.8	85.1	14.9	87.4	15.1	89.7	15.2
	25	63.9	11.0	76.2	14.2	81.7	15.4	82.8	15.5	84.0	15.6	86.3	15.7	88.6	15.9
	27	63.9	11.7	76.2	15.2	80.5	16.0	81.6	16.1	82.8	16.2	85.1	16.4	87.4	16.6
	29	63.9	12.5	76.2	16.2	79.3	16.7	80.4	16.8	81.6	16.9	83.9	17.1	86.2	17.2
	31	63.9	13.3	75.8	17.2	78.1	17.4	79.3	17.4	80.4	17.5	82.7	17.7	85.0	17.9
	33	63.9	14.2	74.6	17.8	76.9	18.0	78.1	18.1	79.2	18.2	81.5	18.4	83.8	18.6
	35	63.9	15.1	73.4	18.5	75.7	18.7	76.9	18.8	78.0	18.9	80.3	19.1	82.6	19.3
	37	63.9	16.1	72.2	19.1	74.6	19.3	75.7	19.4	76.9	19.6	79.2	19.8	81.5	20.0
	39	63.9	17.2	71.1	19.8	73.4	20.0	74.5	20.1	75.7	20.2	78.0	20.5	80.3	20.7
120 (780)	10	59.0	7.7	70.3	9.5	81.7	11.2	87.4	12.2	91.4	12.7	93.5	12.2	95.6	11.7
	12	59.0	7.9	70.3	9.6	81.7	11.5	87.4	12.4	90.2	12.6	92.3	12.1	94.5	11.6
	14	59.0	8.0	70.3	9.8	81.7	11.7	87.4	12.6	89.0	12.5	91.1	12.0	93.3	12.1
	16	59.0	8.2	70.3	10.0	81.7	11.9	86.8	12.7	87.8	12.6	90.0	12.7	92.1	12.8
	18	59.0	8.3	70.3	10.2	81.7	12.3	85.6	13.1	86.7	13.2	88.8	13.3	90.9	13.4
	20	59.0	8.5	70.3	10.6	81.7	13.2	84.4	13.8	85.5	13.8	87.6	14.0	89.7	14.1
	21	59.0	8.6	70.3	11.0	81.7	13.7	83.8	14.1	84.9	14.2	87.0	14.3	89.1	14.4
	23	59.0	9.2	70.3	11.8	81.6	14.7	82.6	14.7	83.7	14.8	85.8	15.0	87.9	15.1
	25	59.0	9.8	70.3	12.6	80.4	15.3	81.4	15.4	82.5	15.5	84.6	15.6	86.8	15.8
	27	59.0	10.5	70.3	13.5	79.2	16.0	80.3	16.0	81.3	16.1	83.5	16.3	85.6	16.4
	29	59.0	11.2	70.3	14.4	78.0	16.6	79.1	16.7	80.1	16.8	82.3	16.9	84.4	17.1
	31	59.0	11.9	70.3	15.4	76.8	17.2	77.9	17.3	79.0	17.4	81.1	17.6	83.2	17.8
	33	59.0	12.7	70.3	16.4	75.6	17.9	76.7	18.0	77.8	18.1	79.9	18.3	82.0	18.5
	35	59.0	13.5	70.3	17.5	74.5	18.6	75.5	18.7	76.6	18.7	78.7	18.9	80.8	19.1
	37	59.0	14.4	70.3	18.6	73.3	19.2	74.3	19.3	75.4	19.4	77.5	19.6	79.7	19.8
	39	59.0	15.3	70.0	19.7	72.1	19.9	73.2	20.0	74.2	20.1	76.3	20.3	78.5	20.5
110 (715)	10	54.0	7.03	64.5	8.6	74.9	10.2	80.1	11.0	85.3	11.8	91.9	12.6	93.8	12.1
	12	54.0	7.16	64.5	8.7	74.9	10.4	80.1	11.2	85.3	12.0	90.7	12.5	92.7	12.0
	14	54.0	7.29	64.5	8.9	74.9	10.6	80.1	11.4	85.3	12.3	89.5	12.4	91.5	12.0
	16	54.0	7.42	64.5	9.1	74.9	10.8	80.1	11.6	85.3	12.5	88.3	12.6	90.3	12.7
	18	54.0	7.56	64.5	9.2	74.9	11.0	80.1	12.0	85.2	13.1	87.2	13.2	89.1	13.3
	20	54.0	7.7	64.5	9.4	74.9	11.6	80.1	12.8	84.0	13.8	86.0	13.9	87.9	14.0
	21	54.0	7.8	64.5	9.7	74.9	12.0	80.1	13.3	83.4	14.1	85.4	14.2	87.3	14.3
	23	54.0	8.2	64.5	10.4	74.9	12.9	80.1	14.3	82.2	14.7	84.2	14.8	86.1	15.0
	25	54.0	8.7	64.5	11.1	74.9	13.8	80.1	15.3	81.1	15.4	83.0	15.5	85.0	15.6
	27	54.0	9.3	64.5	11.9	74.9	14.8	78.9	15.9	79.9	16.0	81.8	16.1	83.8	16.3
	29	54.0	9.9	64.5	12.7	74.9	15.8	77.7	16.6	78.7	16.7	80.6	16.8	82.6	17.0
	31	54.0	10.5	64.5	13.5	74.9	16.9	76.5	17.2	77.5	17.3	79.5	17.5	81.4	17.6
	33	54.0	11.2	64.5	14.4	74.4	17.8	75.3	17.9	76.3	18.0	78.3	18.1	80.2	18.3
	35	54.0	11.9	64.5	15.3	73.2	18.4	74.2	18.5	75.1	18.6	77.1	18.8	79.0	19.0
	37	54.0	12.7	64.5	16.3	72.0	19.1	73.0	19.2	74.0	19.3	75.9	19.5	77.8	19.7
	39	54.0	13.5	64.5	17.4	70.8	19.7	71.8	19.8	72.8	19.9	74.7	20.1	76.7	20.3
100 (650)	10	49.1	6.34	58.6	7.7	68.1	9.1	72.8	9.8	77.5	10.6	87.0	12.1	92.0	12.5
	12	49.1	6.45	58.6	7.8	68.1	9.3	72.8	10.0	77.5	10.8	87.0	12.3	90.8	12.5
	14	49.1	6.57	58.6	8.0	68.1	9.5	72.8	10.2	77.5	11.0	87.0	12.6	89.7	12.4
	16	49.1	6.69	58.6	8.1	68.1	9.6	72.8	10.4	77.5	11.2	86.7	12.7	88.5	12.6
	18	49.1	6.81	58.6	8.3	68.1	9.8	72.8	10.6	77.5	11.4	85.5	13.1	87.3	13.2
	20	49.1	6.94	58.6	8.4	68.1	10.1	72.8	11.2	77.5	12.2	84.3	13.8	86.1	13.9
	21	49.1	7.01	58.6	8.5	68.1	10.5	72.8	11.6	77.5	12.7	83.7	14.1	85.5	14.2
	23	49.1	7.19	58.6	9.1	68.1	11.2	72.8	12.4	77.5	13.6	82.6	14.7	84.3	14.9
	25	49.1	7.7	58.6	9.7	68.1	12.0	72.8	13.3	77.5	14.6	81.4	15.4	83.2	15.5
	27	49.1	8.2	58.6	10.4	68.1	12.8	72.8	14.2	77.5	15.6	80.2	16.0	82.0	16.2
	29	49.1	8.7	58.6	11.1	68.1	13.7	72.8	15.1	77.2	16.5	79.0	16.7	80.8	16.8
	31	49.1	9.3	58.6	11.8	68.1	14.6	72.8	16.2	76.1	17.2	77.8	17.3	79.6	17.5
	33	49.1	9.9	58.6	12.6	68.1	15.6	72.8	17.3	74.9	17.8	76.6	18.0	78.4	18.1
	35	49.1	10.5	58.6	13.4	68.1	16.6	72.8	18.4	73.7	18.5	75.5	18.6	77.2	18.8
	37	49.1	11.1	58.6	14.2	68.1	17.7	71.6	19.0	72.5	19.1	74.3	19.3	76.0	19.5
	39	49.1	11.8	58.6	15.1	68.1	18.9	70.4	19.7	71.3	19.8	73.1	20.0	74.9	20.2

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC kW	14.0°CWB PI kW	16.0°CWB TC kW	16.0°CWB PI kW	18.0°CWB TC kW	18.0°CWB PI kW	19.0°CWB TC kW	19.0°CWB PI kW	20.0°CWB TC kW	20.0°CWB PI kW	22.0°CWB TC kW	22.0°CWB PI kW	24.0°CWB TC kW	24.0°CWB PI kW
90 (585)	10	44.2	5.68	52.7	6.84	61.3	8.1	65.5	8.7	69.8	9.4	78.3	10.7	86.8	12.1
	12	44.2	5.77	52.7	6.97	61.3	8.2	65.5	8.9	69.8	9.5	78.3	10.9	86.8	12.3
	14	44.2	5.87	52.7	7.09	61.3	8.4	65.5	9.1	69.8	9.7	78.3	11.1	86.8	12.5
	16	44.2	5.97	52.7	7.22	61.3	8.5	65.5	9.2	69.8	9.9	78.3	11.3	86.7	12.7
	18	44.2	6.08	52.7	7.36	61.3	8.7	65.5	9.4	69.8	10.1	78.3	11.6	85.5	13.1
	20	44.2	6.19	52.7	7.50	61.3	8.9	65.5	9.6	69.8	10.5	78.3	12.4	84.3	13.8
	21	44.2	6.25	52.7	7.58	61.3	9.0	65.5	9.9	69.8	10.9	78.3	12.9	83.7	14.1
	23	44.2	6.37	52.7	7.9	61.3	9.7	65.5	10.6	69.8	11.6	78.3	13.8	82.5	14.7
	25	44.2	6.71	52.7	8.4	61.3	10.3	65.5	11.4	69.8	12.5	78.3	14.8	81.3	15.4
	27	44.2	7.14	52.7	9.0	61.3	11.0	65.5	12.2	69.8	13.3	78.3	15.8	80.2	16.0
	29	44.2	7.60	52.7	9.6	61.3	11.8	65.5	13.0	69.8	14.2	77.4	16.6	79.0	16.7
	31	44.2	8.1	52.7	10.2	61.3	12.6	65.5	13.8	69.8	15.2	76.2	17.2	77.8	17.3
	33	44.2	8.6	52.7	10.8	61.3	13.4	65.5	14.8	69.8	16.2	75.0	17.8	76.6	18.0
	35	44.2	9.1	52.7	11.5	61.3	14.3	65.5	15.7	69.8	17.3	73.8	18.5	75.4	18.6
	37	44.2	9.7	52.7	12.3	61.3	15.2	65.5	16.7	69.8	18.4	72.6	19.1	74.2	19.3
	39	44.2	10.3	52.7	13.0	61.3	16.1	65.5	17.8	69.8	19.6	71.5	19.8	73.1	20.0
80 (520)	10	39.3	5.04	46.9	6.03	54.5	7.09	58.2	7.64	62.0	8.2	69.6	9.3	77.2	10.5
	12	39.3	5.12	46.9	6.14	54.5	7.22	58.2	7.8	62.0	8.3	69.6	9.5	77.2	10.7
	14	39.3	5.20	46.9	6.24	54.5	7.35	58.2	7.9	62.0	8.5	69.6	9.7	77.2	10.9
	16	39.3	5.29	46.9	6.36	54.5	7.48	58.2	8.1	62.0	8.7	69.6	9.9	77.2	11.1
	18	39.3	5.38	46.9	6.47	54.5	7.63	58.2	8.2	62.0	8.8	69.6	10.1	77.2	11.4
	20	39.3	5.48	46.9	6.59	54.5	7.8	58.2	8.4	62.0	9.0	69.6	10.5	77.2	12.2
	21	39.3	5.53	46.9	6.66	54.5	7.9	58.2	8.5	62.0	9.2	69.6	10.8	77.2	12.6
	23	39.3	5.63	46.9	6.79	54.5	8.2	58.2	9.0	62.0	9.8	69.6	11.6	77.2	13.5
	25	39.3	5.81	46.9	7.22	54.5	8.8	58.2	9.6	62.0	10.5	69.6	12.4	77.2	14.5
	27	39.3	6.18	46.9	7.7	54.5	9.4	58.2	10.3	62.0	11.2	69.6	13.3	77.2	15.5
	29	39.3	6.57	46.9	8.2	54.5	10.0	58.2	11.0	62.0	12.0	69.6	14.2	77.2	16.5
	31	39.3	6.98	46.9	8.7	54.5	10.6	58.2	11.7	62.0	12.8	69.6	15.1	76.0	17.2
	33	39.3	7.40	46.9	9.3	54.5	11.3	58.2	12.5	62.0	13.6	69.6	16.1	74.8	17.8
	35	39.3	7.9	46.9	9.8	54.5	12.1	58.2	13.3	62.0	14.5	69.6	17.2	73.6	18.5
	37	39.3	8.3	46.9	10.4	54.5	12.8	58.2	14.1	62.0	15.4	69.6	18.3	72.4	19.1
	39	39.3	8.8	46.9	11.1	54.5	13.6	58.2	15.0	62.0	16.4	69.6	19.5	71.3	19.8
70 (455)	10	34.4	4.43	41.0	5.26	47.6	6.14	51.0	6.59	54.3	7.06	60.9	8.0	67.5	9.0
	12	34.4	4.50	41.0	5.34	47.6	6.24	51.0	6.71	54.3	7.19	60.9	8.2	67.5	9.2
	14	34.4	4.57	41.0	5.43	47.6	6.35	51.0	6.83	54.3	7.32	60.9	8.3	67.5	9.4
	16	34.4	4.64	41.0	5.53	47.6	6.47	51.0	6.96	54.3	7.46	60.9	8.5	67.5	9.6
	18	34.4	4.72	41.0	5.62	47.6	6.59	51.0	7.09	54.3	7.60	60.9	8.7	67.5	9.7
	20	34.4	4.80	41.0	5.72	47.6	6.71	51.0	7.22	54.3	7.7	60.9	8.8	67.5	10.0
	21	34.4	4.84	41.0	5.78	47.6	6.77	51.0	7.29	54.3	7.8	60.9	9.0	67.5	10.4
	23	34.4	4.92	41.0	5.88	47.6	6.91	51.0	7.54	54.3	8.2	60.9	9.6	67.5	11.1
	25	34.4	5.01	41.0	6.12	47.6	7.37	51.0	8.0	54.3	8.8	60.9	10.3	67.5	11.9
	27	34.4	5.30	41.0	6.51	47.6	7.9	51.0	8.6	54.3	9.3	60.9	11.0	67.5	12.7
	29	34.4	5.62	41.0	6.92	47.6	8.4	51.0	9.1	54.3	10.0	60.9	11.7	67.5	13.6
	31	34.4	5.96	41.0	7.35	47.6	8.9	51.0	9.7	54.3	10.6	60.9	12.5	67.5	14.5
	33	34.4	6.31	41.0	7.8	47.6	9.5	51.0	10.4	54.3	11.3	60.9	13.3	67.5	15.4
	35	34.4	6.69	41.0	8.3	47.6	10.1	51.0	11.0	54.3	12.0	60.9	14.1	67.5	16.4
	37	34.4	7.08	41.0	8.8	47.6	10.7	51.0	11.7	54.3	12.8	60.9	15.0	67.5	17.5
	39	34.4	7.49	41.0	9.3	47.6	11.3	51.0	12.4	54.3	13.6	60.9	16.0	67.5	18.7
60 (390)	10	29.5	3.85	35.2	4.52	40.8	5.23	43.7	5.60	46.5	5.98	52.2	6.77	57.9	7.58
	12	29.5	3.91	35.2	4.59	40.8	5.32	43.7	5.70	46.5	6.09	52.2	6.89	57.9	7.7
	14	29.5	3.97	35.2	4.66	40.8	5.41	43.7	5.80	46.5	6.19	52.2	7.01	57.9	7.9
	16	29.5	4.02	35.2	4.74	40.8	5.50	43.7	5.90	46.5	6.30	52.2	7.14	57.9	8.0
	18	29.5	4.09	35.2	4.82	40.8	5.60	43.7	6.00	46.5	6.42	52.2	7.28	57.9	8.2
	20	29.5	4.15	35.2	4.90	40.8	5.70	43.7	6.11	46.5	6.54	52.2	7.42	57.9	8.3
	21	29.5	4.18	35.2	4.94	40.8	5.75	43.7	6.17	46.5	6.60	52.2	7.49	57.9	8.4
	23	29.5	4.25	35.2	5.03	40.8	5.86	43.7	6.29	46.5	6.73	52.2	7.8	57.9	8.9
	25	29.5	4.32	35.2	5.12	40.8	6.09	43.7	6.61	46.5	7.15	52.2	8.3	57.9	9.6
	27	29.5	4.48	35.2	5.43	40.8	6.48	43.7	7.04	46.5	7.62	52.2	8.9	57.9	10.2
	29	29.5	4.75	35.2	5.76	40.8	6.88	43.7	7.48	46.5	8.1	52.2	9.4	57.9	10.9
	31	29.5	5.03	35.2	6.11	40.8	7.31	43.7	8.0	46.5	8.6	52.2	10.1	57.9	11.6
	33	29.5	5.32	35.2	6.48	40.8	7.8	43.7	8.4	46.5	9.2	52.2	10.7	57.9	12.3
	35	29.5	5.62	35.2	6.86	40.8	8.2	43.7	9.0	46.5	9.7	52.2	11.4	57.9	13.1
	37	29.5	5.94	35.2	7.27	40.8	8.7	43.7	9.5	46.5	10.3	52.2	12.1	57.9	14.0
	39	29.5	6.28	35.2	7.7	40.8	9.3	43.7	10.1	46.5	11.0	52.2	12.8	57.9	14.9
50 (325)	10	24.6	3.31	29.3	3.83	34.0	4.39	36.4	4.67	38.8	4.97	43.5	5.58	48.2	6.22
	12	24.6	3.35	29.3	3.89	34.0	4.45	36.4	4.75	38.8	5.05	43.5	5.67	48.2	6.32
	14	24.6	3.40	29.3	3.94	34.0	4.52	36.4	4.82	38.8	5.13	43.5	5.77	48.2	6.44
	16	24.6	3.45	29.3	4.00	34.0	4.59	36.4	4.90	38.8	5.22	43.5	5.87	48.2	6.55
	18	24.6	3.49	29.3	4.06	34.0	4.67	36.4	4.99	38.8	5.31	43.5	5.98	48.2	6.67
	20	24.6	3.54	29.3	4.13	34.0	4.75	36.4	5.07	38.8	5.40	43.5	6.09	48.2	6.80
	21	24.6	3.57	29.3	4.16	34.0	4.79	36.4	5.12	38.8	5.45	43.5	6.14	48.2	6.87
	23	24.6	3.62	29.3	4.23	34.0	4.87	36.4	5.21	38.8	5.55	43.5	6.26	48.2	7.02
	25	24.6	3.68	29.3	4.30	34.0	4.96	36.4	5.32	38.8	5.72	43.5	6.57	48.2	7.49
	27	24.6	3.74	29.3	4.45	34.0	5.23	36.4	5.65	38.8	6.08	43.5	7.00	48.2	8.0
	29	24.6	3.95	29.3	4.72	34.0	5.55	36.4	6.00	38.8	6.46	43.5	7.45	48.2	8.5
	31	24.6	4.18	29.3	4.99	34.0	5.89	36.4	6.36	38.8	6.86	43.5	7.9	48.2	9.0
	33	24.6	4.41	29.3	5.28	34.0	6.24	36.4	6.75	38.8	7.28	43.5	8.4	48.2	9.6
	35	24.6	4.65	29.3	5.58	34.0	6.61	36.4	7.15	38.8	7.7	43.5	8.9	48.2	10.2
	37	24.6	4.91	29.3	5.90	34.0	6.99	36.4	7.57	38.8	8.2	43.5	9.5	48.2	10.9
	39	24.6	5.18	29.3	6.23	34.0	7.40	36.4	8.0	38.8	8.7	43.5	10.0	48.2	11.5

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)
Note1: The above table shows the average value of conditions which may occur.

RXYQ28PAHY1, PAHYL, PHTL [50/60Hz]

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC kW	14.0°CWB PI kW	16.0°CWB TC kW	16.0°CWB PI kW	18.0°CWB TC kW	18.0°CWB PI kW	19.0°CWB TC kW	19.0°CWB PI kW	20.0°CWB TC kW	20.0°CWB PI kW	22.0°CWB TC kW	22.0°CWB PI kW	24.0°CWB TC kW	24.0°CWB PI kW
130 (910)	10	68.7	8.9	81.9	10.9	95.2	13.0	98.6	13.3	100	13.0	102	12.5	105	11.9
	12	68.7	9.1	81.9	11.1	95.2	13.3	97.3	13.2	98.6	12.9	101	12.4	104	12.2
	14	68.7	9.3	81.9	11.4	94.8	13.4	96.1	13.1	97.3	12.9	100	12.8	102	12.9
	16	68.7	9.4	81.9	11.6	93.6	13.4	94.8	13.3	96.0	13.3	98.5	13.4	101	13.6
	18	68.7	9.6	81.9	11.8	92.3	13.9	93.5	13.9	94.8	14.0	97.2	14.1	100	14.3
	20	68.7	9.8	81.9	12.6	91.0	14.5	92.2	14.6	93.5	14.7	96.0	14.8	98.4	15.0
	21	68.7	10.1	81.9	13.0	90.4	14.9	91.6	15.0	92.8	15.0	95.3	15.2	97.8	15.3
	23	68.7	10.8	81.9	14.0	89.1	15.6	90.3	15.6	91.6	15.7	94.1	15.9	96.5	16.0
	25	68.7	11.6	81.9	15.0	87.8	16.2	89.1	16.3	90.3	16.4	92.8	16.6	95.3	16.7
	27	68.7	12.4	81.9	16.0	86.6	16.9	87.8	17.0	89.0	17.1	91.5	17.3	94.0	17.5
	29	68.7	13.2	81.9	17.1	85.3	17.6	86.5	17.7	87.8	17.8	90.2	18.0	92.7	18.2
	31	68.7	14.1	81.5	18.1	84.0	18.3	85.2	18.4	86.5	18.5	89.0	18.7	91.4	18.9
	33	68.7	15.0	80.3	18.8	82.7	19.0	84.0	19.1	85.2	19.2	87.7	19.4	90.2	19.6
	35	68.7	16.0	79.0	19.5	81.5	19.7	82.7	19.8	83.9	19.9	86.4	20.1	88.9	20.4
	37	68.7	17.0	77.7	20.1	80.2	20.4	81.4	20.5	82.7	20.6	85.1	20.9	87.6	21.1
	39	68.7	18.1	76.4	20.8	78.9	21.1	80.1	21.2	81.4	21.3	83.9	21.6	86.3	21.8
120 (840)	10	63.4	8.2	75.6	10.0	87.9	11.9	94.0	12.8	98.3	13.3	101	12.8	103	12.3
	12	63.4	8.3	75.6	10.2	87.9	12.1	94.0	13.1	97.0	13.3	99.3	12.8	102	12.3
	14	63.4	8.5	75.6	10.4	87.9	12.3	94.0	13.3	95.7	13.2	98.0	12.7	100	12.8
	16	63.4	8.6	75.6	10.6	87.9	12.6	93.3	13.4	94.5	13.2	96.8	13.4	99.0	13.5
	18	63.4	8.8	75.6	10.8	87.9	13.0	92.1	13.9	93.2	13.9	95.5	14.0	97.8	14.2
	20	63.4	9.0	75.6	11.2	87.9	14.0	90.8	14.5	91.9	14.6	94.2	14.7	96.5	14.9
	21	63.4	9.1	75.6	11.6	87.9	14.5	90.1	14.9	91.3	14.9	93.6	15.1	95.9	15.2
	23	63.4	9.7	75.6	12.4	87.7	15.5	88.9	15.5	90.0	15.6	92.3	15.8	94.6	15.9
	25	63.4	10.3	75.6	13.3	86.5	16.1	87.6	16.2	88.7	16.3	91.0	16.5	93.3	16.6
	27	63.4	11.0	75.6	14.2	85.2	16.8	86.3	16.9	87.5	17.0	89.8	17.2	92.0	17.3
	29	63.4	11.8	75.6	15.2	83.9	17.5	85.1	17.6	86.2	17.7	88.5	17.9	90.8	18.0
	31	63.4	12.5	75.6	16.2	82.6	18.2	83.8	18.3	84.9	18.4	87.2	18.6	89.5	18.7
	33	63.4	13.4	75.6	17.3	81.4	18.9	82.5	19.0	83.6	19.1	85.9	19.3	88.2	19.5
	35	63.4	14.2	75.6	18.4	80.1	19.6	81.2	19.7	82.4	19.8	84.7	20.0	86.9	20.2
	37	63.4	15.1	75.6	19.6	78.8	20.3	80.0	20.4	81.1	20.5	83.4	20.7	85.7	20.9
	39	63.4	16.1	75.3	20.7	77.5	20.9	78.7	21.1	79.8	21.2	82.1	21.4	84.4	21.6
110 (770)	10	58.1	7.41	69.3	9.0	80.5	10.7	86.1	11.6	91.7	12.5	98.8	13.2	101	12.8
	12	58.1	7.54	69.3	9.2	80.5	10.9	86.1	11.8	91.7	12.7	97.6	13.2	99.7	12.7
	14	58.1	7.7	69.3	9.4	80.5	11.1	86.1	12.0	91.7	12.9	96.3	13.1	98.4	12.7
	16	58.1	7.8	69.3	9.5	80.5	11.3	86.1	12.3	91.7	13.2	95.0	13.3	97.1	13.4
	18	58.1	8.0	69.3	9.7	80.5	11.6	86.1	12.6	91.6	13.8	93.7	13.9	95.8	14.1
	20	58.1	8.1	69.3	9.9	80.5	12.3	86.1	13.5	90.4	14.5	92.5	14.6	94.6	14.7
	21	58.1	8.2	69.3	10.2	80.5	12.7	86.1	14.0	89.7	14.8	91.8	15.0	93.9	15.1
	23	58.1	8.6	69.3	11.0	80.5	13.6	86.1	15.1	88.5	15.5	90.6	15.7	92.6	15.8
	25	58.1	9.2	69.3	11.7	80.5	14.6	86.1	16.1	87.2	16.2	89.3	16.3	91.4	16.5
	27	58.1	9.8	69.3	12.5	80.5	15.6	84.9	16.8	85.9	16.9	88.0	17.0	90.1	17.2
	29	58.1	10.4	69.3	13.4	80.5	16.7	83.6	17.5	84.6	17.6	86.7	17.7	88.8	17.9
	31	58.1	11.1	69.3	14.2	80.5	17.8	82.3	18.2	83.4	18.2	85.5	18.4	87.6	18.6
	33	58.1	11.8	69.3	15.2	80.0	18.8	81.0	18.8	82.1	18.9	84.2	19.1	86.3	19.3
	35	58.1	12.6	69.3	16.2	78.7	19.4	79.8	19.5	80.8	19.6	82.9	19.8	85.0	20.0
	37	58.1	13.4	69.3	17.2	77.4	20.1	78.5	20.2	79.5	20.3	81.6	20.5	83.7	20.7
	39	58.1	14.2	69.3	18.3	76.2	20.8	77.2	20.9	78.3	21.0	80.4	21.2	82.5	21.4
100 (700)	10	52.8	6.69	63.0	8.1	73.2	9.6	78.3	10.4	83.4	11.2	93.6	12.8	99.0	13.2
	12	52.8	6.80	63.0	8.3	73.2	9.8	78.3	10.6	83.4	11.4	93.6	13.0	97.7	13.1
	14	52.8	6.92	63.0	8.4	73.2	10.0	78.3	10.8	83.4	11.6	93.6	13.2	96.4	13.1
	16	52.8	7.05	63.0	8.6	73.2	10.2	78.3	11.0	83.4	11.8	93.3	13.4	95.2	13.3
	18	52.8	7.18	63.0	8.7	73.2	10.4	78.3	11.2	83.4	12.0	92.0	13.8	93.9	14.0
	20	52.8	7.32	63.0	8.9	73.2	10.7	78.3	11.8	83.4	12.9	90.7	14.5	92.6	14.6
	21	52.8	7.39	63.0	9.0	73.2	11.1	78.3	12.2	83.4	13.4	90.1	14.9	92.0	15.0
	23	52.8	7.58	63.0	9.6	73.2	11.8	78.3	13.1	83.4	14.3	88.8	15.5	90.7	15.7
	25	52.8	8.1	63.0	10.2	73.2	12.7	78.3	14.0	83.4	15.4	87.5	16.2	89.4	16.3
	27	52.8	8.6	63.0	10.9	73.2	13.5	78.3	14.9	83.4	16.4	86.3	16.9	88.2	17.0
	29	52.8	9.2	63.0	11.7	73.2	14.5	78.3	16.0	83.1	17.4	85.0	17.6	86.9	17.7
	31	52.8	9.8	63.0	12.4	73.2	15.4	78.3	17.1	81.8	18.1	83.7	18.3	85.6	18.4
	33	52.8	10.4	63.0	13.2	73.2	16.5	78.3	18.2	80.5	18.8	82.4	19.0	84.3	19.1
	35	52.8	11.0	63.0	14.1	73.2	17.5	78.3	19.4	79.3	19.5	81.2	19.7	83.1	19.8
	37	52.8	11.7	63.0	15.0	73.2	18.7	77.0	20.1	78.0	20.2	79.9	20.4	81.8	20.5
	39	52.8	12.5	63.0	16.0	73.2	19.9	75.8	20.8	76.7	20.9	78.6	21.1	80.5	21.2

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC kW	14.0°CWB PI kW	16.0°CWB TC kW	16.0°CWB PI kW	18.0°CWB TC kW	18.0°CWB PI kW	19.0°CWB TC kW	19.0°CWB PI kW	20.0°CWB TC kW	20.0°CWB PI kW	22.0°CWB TC kW	22.0°CWB PI kW	24.0°CWB TC kW	24.0°CWB PI kW
90 (630)	10	47.6	5.98	56.7	7.22	65.9	8.5	70.5	9.2	75.1	9.9	84.2	11.3	93.4	12.7
	12	47.6	6.08	56.7	7.34	65.9	8.7	70.5	9.4	75.1	10.1	84.2	11.5	93.4	13.0
	14	47.6	6.19	56.7	7.48	65.9	8.8	70.5	9.5	75.1	10.3	84.2	11.7	93.4	13.2
	16	47.6	6.30	56.7	7.62	65.9	9.0	70.5	9.7	75.1	10.5	84.2	12.0	93.2	13.4
	18	47.6	6.41	56.7	7.8	65.9	9.2	70.5	9.9	75.1	10.7	84.2	12.2	91.9	13.8
	20	47.6	6.53	56.7	7.9	65.9	9.4	70.5	10.1	75.1	11.1	84.2	13.1	90.7	14.5
	21	47.6	6.59	56.7	8.0	65.9	9.5	70.5	10.5	75.1	11.5	84.2	13.6	90.0	14.9
	23	47.6	6.72	56.7	8.3	65.9	10.2	70.5	11.2	75.1	12.3	84.2	14.6	88.8	15.5
	25	47.6	7.07	56.7	8.9	65.9	10.9	70.5	12.0	75.1	13.1	84.2	15.6	87.5	16.2
	27	47.6	7.53	56.7	9.5	65.9	11.6	70.5	12.8	75.1	14.0	84.2	16.7	86.2	16.9
	29	47.6	8.0	56.7	10.1	65.9	12.4	70.5	13.7	75.1	15.0	83.2	17.5	84.9	17.6
	31	47.6	8.5	56.7	10.7	65.9	13.2	70.5	14.6	75.1	16.0	82.0	18.1	83.7	18.3
	33	47.6	9.0	56.7	11.4	65.9	14.1	70.5	15.6	75.1	17.1	80.7	18.8	82.4	19.0
	35	47.6	9.6	56.7	12.2	65.9	15.0	70.5	16.6	75.1	18.2	79.4	19.5	81.1	19.7
	37	47.6	10.2	56.7	12.9	65.9	16.0	70.5	17.7	75.1	19.4	78.1	20.2	79.8	20.4
	39	47.6	10.8	56.7	13.7	65.9	17.0	70.5	18.8	75.1	20.7	76.9	20.9	78.6	21.1
80 (560)	10	42.3	5.31	50.4	6.36	58.6	7.47	62.6	8.1	66.7	8.6	74.9	9.9	83.0	11.1
	12	42.3	5.40	50.4	6.47	58.6	7.61	62.6	8.2	66.7	8.8	74.9	10.0	83.0	11.3
	14	42.3	5.49	50.4	6.58	58.6	7.7	62.6	8.3	66.7	9.0	74.9	10.2	83.0	11.5
	16	42.3	5.58	50.4	6.70	58.6	7.9	62.6	8.5	66.7	9.1	74.9	10.4	83.0	11.8
	18	42.3	5.68	50.4	6.82	58.6	8.0	62.6	8.7	66.7	9.3	74.9	10.6	83.0	12.0
	20	42.3	5.78	50.4	6.95	58.6	8.2	62.6	8.8	66.7	9.5	74.9	11.0	83.0	12.8
	21	42.3	5.83	50.4	7.02	58.6	8.3	62.6	8.9	66.7	9.7	74.9	11.4	83.0	13.3
	23	42.3	5.94	50.4	7.15	58.6	8.7	62.6	9.5	66.7	10.4	74.9	12.2	83.0	14.2
	25	42.3	6.13	50.4	7.62	58.6	9.3	62.6	10.2	66.7	11.1	74.9	13.1	83.0	15.2
	27	42.3	6.52	50.4	8.1	58.6	9.9	62.6	10.8	66.7	11.8	74.9	14.0	83.0	16.3
	29	42.3	6.93	50.4	8.6	58.6	10.5	62.6	11.6	66.7	12.6	74.9	14.9	83.0	17.4
	31	42.3	7.36	50.4	9.2	58.6	11.2	62.6	12.3	66.7	13.5	74.9	15.9	81.7	18.1
	33	42.3	7.8	50.4	9.8	58.6	11.9	62.6	13.1	66.7	14.4	74.9	17.0	80.5	18.8
	35	42.3	8.3	50.4	10.4	58.6	12.7	62.6	14.0	66.7	15.3	74.9	18.1	79.2	19.5
	37	42.3	8.8	50.4	11.0	58.6	13.5	62.6	14.9	66.7	16.3	74.9	19.3	77.9	20.2
	39	42.3	9.3	50.4	11.7	58.6	14.4	62.6	15.8	66.7	17.3	74.9	20.6	76.6	20.9
70 (490)	10	37.0	4.67	44.1	5.54	51.2	6.47	54.8	6.95	58.4	7.45	65.5	8.5	72.6	9.5
	12	37.0	4.74	44.1	5.63	51.2	6.58	54.8	7.08	58.4	7.58	65.5	8.6	72.6	9.7
	14	37.0	4.82	44.1	5.73	51.2	6.70	54.8	7.20	58.4	7.7	65.5	8.8	72.6	9.9
	16	37.0	4.89	44.1	5.83	51.2	6.82	54.8	7.33	58.4	7.9	65.5	8.9	72.6	10.1
	18	37.0	4.97	44.1	5.93	51.2	6.94	54.8	7.47	58.4	8.0	65.5	9.1	72.6	10.3
	20	37.0	5.06	44.1	6.04	51.2	7.08	54.8	7.62	58.4	8.2	65.5	9.3	72.6	10.6
	21	37.0	5.10	44.1	6.09	51.2	7.14	54.8	7.7	58.4	8.2	65.5	9.5	72.6	10.9
	23	37.0	5.19	44.1	6.20	51.2	7.29	54.8	8.0	58.4	8.6	65.5	10.1	72.6	11.7
	25	37.0	5.28	44.1	6.45	51.2	7.8	54.8	8.5	58.4	9.2	65.5	10.8	72.6	12.5
	27	37.0	5.58	44.1	6.86	51.2	8.3	54.8	9.0	58.4	9.8	65.5	11.5	72.6	13.4
	29	37.0	5.93	44.1	7.30	51.2	8.8	54.8	9.6	58.4	10.5	65.5	12.3	72.6	14.3
	31	37.0	6.28	44.1	7.8	51.2	9.4	54.8	10.3	58.4	11.2	65.5	13.1	72.6	15.2
	33	37.0	6.66	44.1	8.2	51.2	10.0	54.8	10.9	58.4	11.9	65.5	14.0	72.6	16.3
	35	37.0	7.05	44.1	8.7	51.2	10.6	54.8	11.6	58.4	12.7	65.5	14.9	72.6	17.3
	37	37.0	7.46	44.1	9.3	51.2	11.3	54.8	12.3	58.4	13.5	65.5	15.9	72.6	18.5
	39	37.0	7.9	44.1	9.8	51.2	12.0	54.8	13.1	58.4	14.3	65.5	16.9	72.6	19.7
60 (420)	10	31.7	4.06	37.8	4.77	43.9	5.52	47.0	5.91	50.0	6.31	56.1	7.14	62.3	8.0
	12	31.7	4.12	37.8	4.84	43.9	5.61	47.0	6.01	50.0	6.42	56.1	7.26	62.3	8.1
	14	31.7	4.18	37.8	4.92	43.9	5.70	47.0	6.11	50.0	6.53	56.1	7.39	62.3	8.3
	16	31.7	4.24	37.8	5.00	43.9	5.80	47.0	6.22	50.0	6.65	56.1	7.53	62.3	8.4
	18	31.7	4.31	37.8	5.08	43.9	5.90	47.0	6.33	50.0	6.77	56.1	7.7	62.3	8.6
	20	31.7	4.38	37.8	5.17	43.9	6.01	47.0	6.45	50.0	6.89	56.1	7.8	62.3	8.8
	21	31.7	4.41	37.8	5.21	43.9	6.06	47.0	6.51	50.0	6.96	56.1	7.9	62.3	8.9
	23	31.7	4.48	37.8	5.30	43.9	6.18	47.0	6.63	50.0	7.10	56.1	8.2	62.3	9.4
	25	31.7	4.56	37.8	5.40	43.9	6.42	47.0	6.97	50.0	7.54	56.1	8.8	62.3	10.1
	27	31.7	4.72	37.8	5.72	43.9	6.83	47.0	7.42	50.0	8.0	56.1	9.3	62.3	10.8
	29	31.7	5.00	37.8	6.08	43.9	7.26	47.0	7.9	50.0	8.6	56.1	10.0	62.3	11.5
	31	31.7	5.30	37.8	6.44	43.9	7.7	47.0	8.4	50.0	9.1	56.1	10.6	62.3	12.2
	33	31.7	5.61	37.8	6.83	43.9	8.2	47.0	8.9	50.0	9.7	56.1	11.3	62.3	13.0
	35	31.7	5.93	37.8	7.24	43.9	8.7	47.0	9.5	50.0	10.3	56.1	12.0	62.3	13.9
	37	31.7	6.26	37.8	7.7	43.9	9.2	47.0	10.0	50.0	10.9	56.1	12.7	62.3	14.7
	39	31.7	6.62	37.8	8.1	43.9	9.8	47.0	10.6	50.0	11.6	56.1	13.5	62.3	15.7
50 (350)	10	26.4	3.49	31.5	4.04	36.6	4.62	39.2	4.93	41.7	5.24	46.8	5.88	51.9	6.56
	12	26.4	3.54	31.5	4.10	36.6	4.70	39.2	5.01	41.7	5.32	46.8	5.98	51.9	6.67
	14	26.4	3.58	31.5	4.16	36.6	4.77	39.2	5.09	41.7	5.41	46.8	6.09	51.9	6.79
	16	26.4	3.63	31.5	4.22	36.6	4.84	39.2	5.17	41.7	5.50	46.8	6.19	51.9	6.91
	18	26.4	3.68	31.5	4.28	36.6	4.92	39.2	5.26	41.7	5.60	46.8	6.30	51.9	7.04
	20	26.4	3.74	31.5	4.35	36.6	5.01	39.2	5.35	41.7	5.70	46.8	6.42	51.9	7.17
	21	26.4	3.76	31.5	4.39	36.6	5.05	39.2	5.39	41.7	5.75	46.8	6.48	51.9	7.24
	23	26.4	3.82	31.5	4.46	36.6	5.14	39.2	5.49	41.7	5.85	46.8	6.60	51.9	7.40
	25	26.4	3.88	31.5	4.53	36.6	5.23	39.2	5.60	41.7	6.03	46.8	6.93	51.9	7.9
	27	26.4	3.94	31.5	4.69	36.6	5.52	39.2	5.96	41.7	6.41	46.8	7.38	51.9	8.4
	29	26.4	4.17	31.5	4.97	36.6	5.86	39.2	6.33	41.7	6.81	46.8	7.9	51.9	9.0
	31	26.4	4.40	31.5	5.26	36.6	6.21	39.2	6.71	41.7	7.23	46.8	8.3	51.9	9.5
	33	26.4	4.65	31.5	5.57	36.6	6.58	39.2	7.12	41.7	7.7	46.8	8.9	51.9	10.1
	35	26.4	4.91	31.5	5.89	36.6	6.97	39.2	7.54	41.7	8.1	46.8	9.4	51.9	10.8
	37	26.4	5.18	31.5	6.22	36.6	7.37	39.2	8.0	41.7	8.6	46.8	10.0	51.9	11.4
	39	26.4	5.46	31.5	6.57	36.6	7.8	39.2	8.5	41.7	9.1	46.8	10.6	51.9	12.2

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)
Note1: The above table shows the average value of conditions which may occur.

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC kW	14.0°CWB PI kW	16.0°CWB TC kW	16.0°CWB PI kW	18.0°CWB TC kW	18.0°CWB PI kW	19.0°CWB TC kW	19.0°CWB PI kW	20.0°CWB TC kW	20.0°CWB PI kW	22.0°CWB TC kW	22.0°CWB PI kW	24.0°CWB TC kW	24.0°CWB PI kW
130 (975)	10	73.6	10.2	87.8	12.5	102	14.8	106	15.1	107	14.8	110	14.2	112	13.6
	12	73.6	10.4	87.8	12.7	102	15.1	104	15.1	106	14.7	108	14.1	111	13.9
	14	73.6	10.6	87.8	12.9	102	15.3	103	15.0	104	14.7	107	14.5	110	14.7
	16	73.6	10.8	87.8	13.2	100	15.2	102	15.1	103	15.2	106	15.3	108	15.5
	18	73.6	11.0	87.8	13.4	99	15.8	100	15.9	102	16.0	104	16.1	107	16.3
	20	73.6	11.2	87.8	14.3	97.5	16.6	99	16.6	100	16.7	103	16.9	105	17.1
	21	73.6	11.5	87.8	14.8	96.8	16.9	98.2	17.0	99	17.1	102	17.3	105	17.5
	23	73.6	12.3	87.8	15.9	95.5	17.7	96.8	17.8	98.1	17.9	101	18.1	103	18.3
	25	73.6	13.2	87.8	17.0	94.1	18.5	95.4	18.6	96.8	18.7	99	18.9	102	19.1
	27	73.6	14.1	87.8	18.2	92.7	19.3	94.1	19.4	95.4	19.5	98.1	19.7	101	19.9
	29	73.6	15.0	87.8	19.5	91.4	20.1	92.7	20.2	94.0	20.3	96.7	20.5	99	20.7
	31	73.6	16.0	87.4	20.6	90.0	20.8	91.3	21.0	92.7	21.1	95.3	21.3	98.0	21.5
	33	73.6	17.1	86.0	21.4	88.6	21.6	90.0	21.8	91.3	21.9	94.0	22.1	96.6	22.4
	35	73.6	18.2	84.6	22.2	87.3	22.4	88.6	22.6	89.9	22.7	92.6	22.9	95.2	23.2
	37	73.6	19.4	83.3	23.0	85.9	23.2	87.2	23.4	88.6	23.5	91.2	23.8	93.9	24.0
	39	73.6	20.6	81.9	23.7	84.6	24.0	85.9	24.2	87.2	24.3	89.9	24.6	92.5	24.9
120 (900)	10	67.9	9.3	81.0	11.4	94.1	13.5	101	14.6	105	15.2	108	14.6	110	14.1
	12	67.9	9.5	81.0	11.6	94.1	13.8	101	14.9	104	15.1	106	14.6	109	14.0
	14	67.9	9.6	81.0	11.8	94.1	14.0	101	15.2	103	15.1	105	14.5	107	14.6
	16	67.9	9.8	81.0	12.0	94.1	14.3	100	15.3	101	15.1	104	15.2	106	15.4
	18	67.9	10.0	81.0	12.3	94.1	14.8	98.6	15.8	100	15.9	102	16.0	105	16.1
	20	67.9	10.2	81.0	12.7	94.1	15.9	97.3	16.5	98.5	16.6	101	16.8	103	16.9
	21	67.9	10.3	81.0	13.2	94.1	16.5	96.6	16.9	97.8	17.0	100	17.2	103	17.3
	23	67.9	11.0	81.0	14.1	94.0	17.6	95.2	17.7	96.5	17.8	99	18.0	101	18.1
	25	67.9	11.8	81.0	15.1	92.6	18.4	93.9	18.5	95.1	18.6	97.5	18.7	100	18.9
	27	67.9	12.6	81.0	16.2	91.3	19.2	92.5	19.3	93.7	19.4	96.2	19.5	98.6	19.7
	29	67.9	13.4	81.0	17.3	89.9	19.9	91.1	20.0	92.4	20.1	94.8	20.3	97.3	20.5
	31	67.9	14.3	81.0	18.4	88.5	20.7	89.8	20.8	91.0	20.9	93.4	21.1	95.9	21.3
	33	67.9	15.2	81.0	19.7	87.2	21.5	88.4	21.6	89.6	21.7	92.1	21.9	94.5	22.2
	35	67.9	16.2	81.0	21.0	85.8	22.3	87.0	22.4	88.3	22.5	90.7	22.8	93.2	23.0
	37	67.9	17.2	81.0	22.4	84.5	23.1	85.7	23.2	86.9	23.3	89.4	23.6	91.8	23.8
	39	67.9	18.3	80.6	23.6	83.1	23.9	84.3	24.0	85.5	24.1	88.0	24.4	90.4	24.6
110 (825)	10	62.3	8.4	74.3	10.3	86.3	12.2	92.3	13.2	98.3	14.2	106	15.1	108	14.6
	12	62.3	8.6	74.3	10.5	86.3	12.4	92.3	13.4	98.3	14.5	105	15.0	107	14.5
	14	62.3	8.8	74.3	10.7	86.3	12.7	92.3	13.7	98.3	14.7	103	14.9	105	14.5
	16	62.3	8.9	74.3	10.9	86.3	12.9	92.3	14.0	98.3	15.0	102	15.1	104	15.2
	18	62.3	9.1	74.3	11.1	86.3	13.2	92.3	14.4	98.2	15.8	100	15.9	103	16.0
	20	62.3	9.3	74.3	11.3	86.3	14.0	92.3	15.4	96.8	16.5	99	16.7	101	16.8
	21	62.3	9.4	74.3	11.7	86.3	14.5	92.3	16.0	96.1	16.9	98.4	17.0	101	17.2
	23	62.3	9.8	74.3	12.5	86.3	15.5	92.3	17.1	94.8	17.7	97.0	17.8	99	18.0
	25	62.3	10.5	74.3	13.3	86.3	16.6	92.3	18.4	93.4	18.4	95.7	18.6	97.9	18.8
	27	62.3	11.2	74.3	14.3	86.3	17.8	90.9	19.1	92.1	19.2	94.3	19.4	96.5	19.6
	29	62.3	11.9	74.3	15.2	86.3	19.0	89.6	19.9	90.7	20.0	92.9	20.2	95.2	20.4
	31	62.3	12.7	74.3	16.2	86.3	20.3	88.2	20.7	89.3	20.8	91.6	21.0	93.8	21.2
	33	62.3	13.5	74.3	17.3	85.7	21.4	86.8	21.5	88.0	21.6	90.2	21.8	92.4	22.0
	35	62.3	14.3	74.3	18.4	84.3	22.1	85.5	22.3	86.6	22.4	88.8	22.6	91.1	22.8
	37	62.3	15.2	74.3	19.6	83.0	22.9	84.1	23.0	85.2	23.2	87.5	23.4	89.7	23.6
	39	62.3	16.2	74.3	20.9	81.6	23.7	82.7	23.8	83.9	23.9	86.1	24.2	88.4	24.4
100 (750)	10	56.6	7.6	67.5	9.2	78.4	10.9	83.9	11.8	89.4	12.7	100	14.5	106	15.0
	12	56.6	7.7	67.5	9.4	78.4	11.1	83.9	12.0	89.4	13.0	100	14.8	105	15.0
	14	56.6	7.9	67.5	9.6	78.4	11.4	83.9	12.3	89.4	13.2	100	15.1	103	14.9
	16	56.6	8.0	67.5	9.8	78.4	11.6	83.9	12.5	89.4	13.5	100	15.3	102	15.1
	18	56.6	8.2	67.5	9.9	78.4	11.8	83.9	12.8	89.4	13.7	98.6	15.8	101	15.9
	20	56.6	8.3	67.5	10.1	78.4	12.2	83.9	13.4	89.4	14.7	97.2	16.5	99	16.7
	21	56.6	8.4	67.5	10.2	78.4	12.6	83.9	13.9	89.4	15.2	96.5	16.9	98.6	17.1
	23	56.6	8.6	67.5	10.9	78.4	13.5	83.9	14.9	89.4	16.3	95.2	17.7	97.2	17.8
	25	56.6	9.2	67.5	11.7	78.4	14.4	83.9	15.9	89.4	17.5	93.8	18.5	95.8	18.6
	27	56.6	9.8	67.5	12.5	78.4	15.4	83.9	17.0	89.4	18.7	92.4	19.3	94.5	19.4
	29	56.6	10.5	67.5	13.3	78.4	16.5	83.9	18.2	89.0	19.9	91.1	20.0	93.1	20.2
	31	56.6	11.1	67.5	14.2	78.4	17.6	83.9	19.4	87.7	20.6	89.7	20.8	91.7	21.0
	33	56.6	11.8	67.5	15.1	78.4	18.7	83.9	20.7	86.3	21.4	88.3	21.6	90.4	21.8
	35	56.6	12.6	67.5	16.1	78.4	20.0	83.9	22.1	84.9	22.2	87.0	22.4	89.0	22.6
	37	56.6	13.4	67.5	17.1	78.4	21.3	82.5	22.9	83.6	23.0	85.6	23.2	87.6	23.4
	39	56.6	14.2	67.5	18.2	78.4	22.7	81.2	23.7	82.2	23.8	84.2	24.0	86.3	24.2

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC kW	14.0°CWB PI kW	16.0°CWB TC kW	16.0°CWB PI kW	18.0°CWB TC kW	18.0°CWB PI kW	19.0°CWB TC kW	19.0°CWB PI kW	20.0°CWB TC kW	20.0°CWB PI kW	22.0°CWB TC kW	22.0°CWB PI kW	24.0°CWB TC kW	24.0°CWB PI kW
90 (675)	10	51.0	6.82	60.8	8.2	70.6	9.7	75.5	10.5	80.4	11.3	90.2	12.9	100	14.5
	12	51.0	6.93	60.8	8.4	70.6	9.9	75.5	10.7	80.4	11.5	90.2	13.1	100	14.8
	14	51.0	7.05	60.8	8.5	70.6	10.1	75.5	10.9	80.4	11.7	90.2	13.4	100	15.1
	16	51.0	7.18	60.8	8.7	70.6	10.3	75.5	11.1	80.4	11.9	90.2	13.6	100	15.3
	18	51.0	7.30	60.8	8.8	70.6	10.5	75.5	11.3	80.4	12.1	90.2	13.9	98.5	15.8
	20	51.0	7.44	60.8	9.0	70.6	10.7	75.5	11.5	80.4	12.6	90.2	14.9	97.2	16.5
	21	51.0	7.51	60.8	9.1	70.6	10.9	75.5	11.9	80.4	13.1	90.2	15.5	96.5	16.9
	23	51.0	7.7	60.8	9.5	70.6	11.6	75.5	12.8	80.4	14.0	90.2	16.6	95.1	17.7
	25	51.0	8.1	60.8	10.1	70.6	12.4	75.5	13.7	80.4	15.0	90.2	17.8	93.7	18.5
	27	51.0	8.6	60.8	10.8	70.6	13.3	75.5	14.6	80.4	16.0	90.2	19.0	92.4	19.2
	29	51.0	9.1	60.8	11.5	70.6	14.1	75.5	15.6	80.4	17.1	89.2	19.9	91.0	20.0
	31	51.0	9.7	60.8	12.2	70.6	15.1	75.5	16.6	80.4	18.2	87.8	20.7	89.7	20.8
	33	51.0	10.3	60.8	13.0	70.6	16.1	75.5	17.7	80.4	19.4	86.5	21.4	88.3	21.6
	35	51.0	10.9	60.8	13.9	70.6	17.1	75.5	18.9	80.4	20.7	85.1	22.2	86.9	22.4
	37	51.0	11.6	60.8	14.7	70.6	18.2	75.5	20.1	80.4	22.1	83.7	23.0	85.6	23.2
	39	51.0	12.3	60.8	15.7	70.6	19.4	75.5	21.4	80.4	23.5	82.4	23.8	84.2	24.0
80 (600)	10	45.3	6.05	54.0	7.25	62.8	8.5	67.1	9.2	71.5	9.8	80.2	11.2	88.9	12.6
	12	45.3	6.15	54.0	7.37	62.8	8.7	67.1	9.3	71.5	10.0	80.2	11.4	88.9	12.9
	14	45.3	6.25	54.0	7.50	62.8	8.8	67.1	9.5	71.5	10.2	80.2	11.7	88.9	13.1
	16	45.3	6.36	54.0	7.6	62.8	9.0	67.1	9.7	71.5	10.4	80.2	11.9	88.9	13.4
	18	45.3	6.47	54.0	7.8	62.8	9.2	67.1	9.9	71.5	10.6	80.2	12.1	88.9	13.7
	20	45.3	6.58	54.0	7.9	62.8	9.3	67.1	10.1	71.5	10.8	80.2	12.6	88.9	14.6
	21	45.3	6.64	54.0	8.0	62.8	9.4	67.1	10.2	71.5	11.0	80.2	13.0	88.9	15.1
	23	45.3	6.76	54.0	8.2	62.8	9.9	67.1	10.8	71.5	11.8	80.2	13.9	88.9	16.2
	25	45.3	6.98	54.0	8.7	62.8	10.6	67.1	11.6	71.5	12.6	80.2	14.9	88.9	17.4
	27	45.3	7.43	54.0	9.2	62.8	11.3	67.1	12.4	71.5	13.5	80.2	15.9	88.9	18.6
	29	45.3	7.9	54.0	9.8	62.8	12.0	67.1	13.2	71.5	14.4	80.2	17.0	88.9	19.9
	31	45.3	8.4	54.0	10.5	62.8	12.8	67.1	14.0	71.5	15.4	80.2	18.2	87.6	20.6
	33	45.3	8.9	54.0	11.1	62.8	13.6	67.1	15.0	71.5	16.4	80.2	19.4	86.2	21.4
	35	45.3	9.4	54.0	11.8	62.8	14.5	67.1	15.9	71.5	17.4	80.2	20.7	84.8	22.2
	37	45.3	10.0	54.0	12.5	62.8	15.4	67.1	16.9	71.5	18.6	80.2	22.0	83.5	23.0
	39	45.3	10.6	54.0	13.3	62.8	16.4	67.1	18.0	71.5	19.7	80.2	23.4	82.1	23.8
70 (525)	10	39.6	5.32	47.3	6.31	54.9	7.37	58.7	7.9	62.5	8.5	70.2	9.6	77.8	10.8
	12	39.6	5.40	47.3	6.42	54.9	7.50	58.7	8.1	62.5	8.6	70.2	9.8	77.8	11.0
	14	39.6	5.49	47.3	6.53	54.9	7.6	58.7	8.2	62.5	8.8	70.2	10.0	77.8	11.3
	16	39.6	5.57	47.3	6.64	54.9	7.8	58.7	8.4	62.5	9.0	70.2	10.2	77.8	11.5
	18	39.6	5.67	47.3	6.75	54.9	7.9	58.7	8.5	62.5	9.1	70.2	10.4	77.8	11.7
	20	39.6	5.76	47.3	6.88	54.9	8.1	58.7	8.7	62.5	9.3	70.2	10.6	77.8	12.0
	21	39.6	5.81	47.3	6.94	54.9	8.1	58.7	8.8	62.5	9.4	70.2	10.8	77.8	12.5
	23	39.6	5.91	47.3	7.07	54.9	8.3	58.7	9.1	62.5	9.8	70.2	11.5	77.8	13.3
	25	39.6	6.02	47.3	7.35	54.9	8.9	58.7	9.7	62.5	10.5	70.2	12.3	77.8	14.3
	27	39.6	6.36	47.3	7.8	54.9	9.4	58.7	10.3	62.5	11.2	70.2	13.2	77.8	15.2
	29	39.6	6.75	47.3	8.3	54.9	10.0	58.7	11.0	62.5	12.0	70.2	14.0	77.8	16.3
	31	39.6	7.16	47.3	8.8	54.9	10.7	58.7	11.7	62.5	12.7	70.2	15.0	77.8	17.4
	33	39.6	7.6	47.3	9.4	54.9	11.4	58.7	12.4	62.5	13.6	70.2	15.9	77.8	18.5
	35	39.6	8.0	47.3	9.9	54.9	12.1	58.7	13.2	62.5	14.4	70.2	17.0	77.8	19.7
	37	39.6	8.5	47.3	10.5	54.9	12.8	58.7	14.0	62.5	15.3	70.2	18.1	77.8	21.0
	39	39.6	9.0	47.3	11.2	54.9	13.6	58.7	14.9	62.5	16.3	70.2	19.2	77.8	22.4
60 (450)	10	34.0	4.63	40.5	5.43	47.1	6.29	50.3	6.73	53.6	7.19	60.2	8.1	66.7	9.1
	12	34.0	4.69	40.5	5.52	47.1	6.39	50.3	6.84	53.6	7.31	60.2	8.3	66.7	9.3
	14	34.0	4.76	40.5	5.60	47.1	6.50	50.3	6.96	53.6	7.44	60.2	8.4	66.7	9.4
	16	34.0	4.83	40.5	5.69	47.1	6.61	50.3	7.08	53.6	7.6	60.2	8.6	66.7	9.6
	18	34.0	4.91	40.5	5.79	47.1	6.72	50.3	7.21	53.6	7.7	60.2	8.7	66.7	9.8
	20	34.0	4.98	40.5	5.89	47.1	6.84	50.3	7.34	53.6	7.9	60.2	8.9	66.7	10.0
	21	34.0	5.02	40.5	5.94	47.1	6.91	50.3	7.41	53.6	7.9	60.2	9.0	66.7	10.1
	23	34.0	5.11	40.5	6.04	47.1	7.04	50.3	7.6	53.6	8.1	60.2	9.3	66.7	10.7
	25	34.0	5.19	40.5	6.15	47.1	7.31	50.3	7.9	53.6	8.6	60.2	10.0	66.7	11.5
	27	34.0	5.38	40.5	6.52	47.1	7.8	50.3	8.5	53.6	9.2	60.2	10.6	66.7	12.3
	29	34.0	5.70	40.5	6.92	47.1	8.3	50.3	9.0	53.6	9.7	60.2	11.3	66.7	13.1
	31	34.0	6.04	40.5	7.34	47.1	8.8	50.3	9.6	53.6	10.4	60.2	12.1	66.7	13.9
	33	34.0	6.39	40.5	7.8	47.1	9.3	50.3	10.1	53.6	11.0	60.2	12.8	66.7	14.8
	35	34.0	6.75	40.5	8.2	47.1	9.9	50.3	10.8	53.6	11.7	60.2	13.7	66.7	15.8
	37	34.0	7.14	40.5	8.7	47.1	10.5	50.3	11.4	53.6	12.4	60.2	14.5	66.7	16.8
	39	34.0	7.5	40.5	9.2	47.1	11.1	50.3	12.1	53.6	13.2	60.2	15.4	66.7	17.9
50 (375)	10	28.3	3.98	33.8	4.60	39.2	5.27	42.0	5.61	44.7	5.97	50.1	6.70	55.6	7.47
	12	28.3	4.03	33.8	4.67	39.2	5.35	42.0	5.70	44.7	6.06	50.1	6.82	55.6	7.6
	14	28.3	4.08	33.8	4.74	39.2	5.43	42.0	5.79	44.7	6.16	50.1	6.93	55.6	7.7
	16	28.3	4.14	33.8	4.81	39.2	5.52	42.0	5.89	44.7	6.27	50.1	7.05	55.6	7.9
	18	28.3	4.20	33.8	4.88	39.2	5.61	42.0	5.99	44.7	6.38	50.1	7.18	55.6	8.0
	20	28.3	4.26	33.8	4.96	39.2	5.70	42.0	6.09	44.7	6.49	50.1	7.31	55.6	8.2
	21	28.3	4.29	33.8	5.00	39.2	5.75	42.0	6.14	44.7	6.55	50.1	7.38	55.6	8.2
	23	28.3	4.35	33.8	5.08	39.2	5.85	42.0	6.25	44.7	6.67	50.1	7.5	55.6	8.4
	25	28.3	4.42	33.8	5.16	39.2	5.96	42.0	6.38	44.7	6.87	50.1	7.9	55.6	9.0
	27	28.3	4.49	33.8	5.35	39.2	6.29	42.0	6.79	44.7	7.31	50.1	8.4	55.6	9.6
	29	28.3	4.75	33.8	5.66	39.2	6.67	42.0	7.21	44.7	7.8	50.1	8.9	55.6	10.2
	31	28.3	5.02	33.8	6.00	39.2	7.07	42.0	7.6	44.7	8.2	50.1	9.5	55.6	10.9
	33	28.3	5.30	33.8	6.34	39.2	7.49	42.0	8.1	44.7	8.7	50.1	10.1	55.6	11.5
	35	28.3	5.59	33.8	6.71	39.2	7.9	42.0	8.6	44.7	9.3	50.1	10.7	55.6	12.3
	37	28.3	5.90	33.8	7.09	39.2	8.4	42.0	9.1	44.7	9.8	50.1	11.4	55.6	13.0
	39	28.3	6.22	33.8	7.49	39.2	8.9	42.0	9.6	44.7	10.4	50.1	12.1	55.6	13.8

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)
Note1: The above table shows the average value of conditions which may occur.

RXYQ32PAHY1, PAHYL, PHTL [50/60Hz]

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC	14.0°CWB PI	16.0°CWB TC	16.0°CWB PI	18.0°CWB TC	18.0°CWB PI	19.0°CWB TC	19.0°CWB PI	20.0°CWB TC	20.0°CWB PI	22.0°CWB TC	22.0°CWB PI	24.0°CWB TC	24.0°CWB PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130 (1040)	10	78.4	10.6	93.5	13.0	109	15.5	113	15.8	114	15.5	117	14.8	120	14.2
	12	78.4	10.8	93.5	13.3	109	15.8	111	15.7	113	15.4	115	14.7	118	14.5
	14	78.4	11.0	93.5	13.5	108	16.0	110	15.6	111	15.3	114	15.2	117	15.3
	16	78.4	11.2	93.5	13.8	107	15.9	108	15.8	110	15.9	112	16.0	115	16.2
	18	78.4	11.5	93.5	14.1	105	16.5	107	16.6	108	16.7	111	16.8	114	17.0
	20	78.4	11.7	93.5	15.0	104	17.3	105	17.4	107	17.5	110	17.7	112	17.8
	21	78.4	12.0	93.5	15.5	103	17.7	105	17.8	106	17.9	109	18.1	112	18.3
	23	78.4	12.9	93.5	16.6	102	18.5	103	18.6	105	18.7	107	18.9	110	19.1
	25	78.4	13.8	93.5	17.8	100	19.3	102	19.4	103	19.5	106	19.7	109	19.9
	27	78.4	14.7	93.5	19.0	98.8	20.1	100	20.3	102	20.4	104	20.6	107	20.8
	29	78.4	15.7	93.5	20.4	97.4	21.0	98.8	21.1	100	21.2	103	21.4	106	21.6
	31	78.4	16.7	93.1	21.5	95.9	21.8	97.3	21.9	98.7	22.0	102	22.3	104	22.5
	33	78.4	17.8	91.6	22.4	94.5	22.6	95.9	22.7	97.3	22.9	100	23.1	103	23.4
	35	78.4	19.0	90.2	23.2	93.0	23.4	94.4	23.6	95.8	23.7	98.7	24.0	101	24.2
	37	78.4	20.2	88.7	24.0	91.6	24.3	93.0	24.4	94.4	24.6	97.2	24.8	100	25.1
	39	78.4	21.6	87.3	24.8	90.1	25.1	91.5	25.3	92.9	25.4	95.8	25.7	98.6	26.0
120 (960)	10	72.4	9.7	86.4	11.9	100	14.1	107	15.3	112	15.9	115	15.3	117	14.7
	12	72.4	9.9	86.4	12.1	100	14.4	107	15.5	111	15.8	113	15.2	116	14.6
	14	72.4	10.1	86.4	12.3	100	14.7	107	15.8	109	15.7	112	15.1	115	15.2
	16	72.4	10.3	86.4	12.6	100	14.9	107	16.0	108	15.8	110	15.9	113	16.0
	18	72.4	10.5	86.4	12.8	100	15.5	105	16.5	106	16.6	109	16.7	112	16.9
	20	72.4	10.7	86.4	13.3	100	16.6	104	17.3	105	17.4	108	17.5	110	17.7
	21	72.4	10.8	86.4	13.8	100	17.2	103	17.7	104	17.8	107	17.9	109	18.1
	23	72.4	11.5	86.4	14.8	100	18.4	101	18.5	103	18.6	105	18.8	108	18.9
	25	72.4	12.3	86.4	15.8	98.7	19.2	100	19.3	101	19.4	104	19.6	107	19.8
	27	72.4	13.1	86.4	16.9	97.3	20.0	98.6	20.1	100	20.2	102	20.4	105	20.6
	29	72.4	14.0	86.4	18.1	95.8	20.8	97.1	20.9	98.4	21.0	101	21.3	104	21.5
	31	72.4	14.9	86.4	19.3	94.3	21.7	95.7	21.8	97.0	21.9	100	22.1	102	22.3
	33	72.4	15.9	86.4	20.6	92.9	22.5	94.2	22.6	95.5	22.7	98.1	22.9	101	23.2
	35	72.4	16.9	86.4	21.9	91.4	23.3	92.7	23.4	94.1	23.5	96.7	23.8	99.3	24.0
	37	72.4	18.0	86.4	23.4	90.0	24.1	91.3	24.2	92.6	24.4	95.2	24.6	97.8	24.9
	39	72.4	19.2	85.9	24.7	88.5	24.9	89.8	25.1	91.1	25.2	93.8	25.5	96.4	25.8
110 (880)	10	66.4	8.8	79.2	10.7	91.9	12.8	98.3	13.8	105	14.8	113	15.8	115	15.2
	12	66.4	9.0	79.2	10.9	91.9	13.0	98.3	14.1	105	15.1	111	15.7	114	15.1
	14	66.4	9.1	79.2	11.2	91.9	13.3	98.3	14.3	105	15.4	110	15.6	112	15.1
	16	66.4	9.3	79.2	11.4	91.9	13.5	98.3	14.6	105	15.7	108	15.8	111	15.9
	18	66.4	9.5	79.2	11.6	91.9	13.8	98.3	15.0	105	16.5	107	16.6	109	16.7
	20	66.4	9.7	79.2	11.8	91.9	14.6	98.3	16.1	103	17.3	106	17.4	108	17.6
	21	66.4	9.8	79.2	12.2	91.9	15.1	98.3	16.7	102	17.7	105	17.8	107	18.0
	23	66.4	10.2	79.2	13.0	91.9	16.2	98.3	17.9	101	18.5	103	18.6	106	18.8
	25	66.4	10.9	79.2	13.9	91.9	17.4	98.3	19.2	100	19.3	102	19.5	104	19.6
	27	66.4	11.7	79.2	14.9	91.9	18.6	96.9	20.0	98.1	20.1	100	20.3	103	20.5
	29	66.4	12.4	79.2	15.9	91.9	19.8	95.4	20.8	96.6	20.9	99.0	21.1	101	21.3
	31	66.4	13.2	79.2	17.0	91.9	21.2	94.0	21.6	95.2	21.7	97.6	21.9	100	22.1
	33	66.4	14.1	79.2	18.1	91.3	22.3	92.5	22.4	93.7	22.5	96.1	22.8	98.5	23.0
	35	66.4	15.0	79.2	19.3	89.9	23.1	91.1	23.3	92.3	23.4	94.7	23.6	97.1	23.8
	37	66.4	15.9	79.2	20.5	88.4	24.0	89.6	24.1	90.8	24.2	93.2	24.4	95.6	24.7
	39	66.4	16.9	79.2	21.8	87.0	24.8	88.2	24.9	89.4	25.0	91.8	25.3	94.1	25.5
100 (800)	10	60.3	8.0	72.0	9.7	83.6	11.4	89.4	12.4	95.2	13.3	107	15.2	113	15.7
	12	60.3	8.1	72.0	9.8	83.6	11.6	89.4	12.6	95.2	13.5	107	15.5	112	15.6
	14	60.3	8.2	72.0	10.0	83.6	11.9	89.4	12.8	95.2	13.8	107	15.8	110	15.5
	16	60.3	8.4	72.0	10.2	83.6	12.1	89.4	13.1	95.2	14.1	106	16.0	109	15.8
	18	60.3	8.5	72.0	10.4	83.6	12.3	89.4	13.3	95.2	14.3	105	16.5	107	16.6
	20	60.3	8.7	72.0	10.6	83.6	12.7	89.4	14.0	95.2	15.4	104	17.3	106	17.4
	21	60.3	8.8	72.0	10.7	83.6	13.2	89.4	14.5	95.2	15.9	103	17.7	105	17.8
	23	60.3	9.0	72.0	11.4	83.6	14.1	89.4	15.5	95.2	17.1	101	18.5	104	18.6
	25	60.3	9.6	72.0	12.2	83.6	15.1	89.4	16.6	95.2	18.3	100	19.3	102	19.5
	27	60.3	10.3	72.0	13.0	83.6	16.1	89.4	17.8	95.2	19.6	98.5	20.1	101	20.3
	29	60.3	10.9	72.0	13.9	83.6	17.2	89.4	19.0	94.9	20.8	97.0	20.9	99.2	21.1
	31	60.3	11.6	72.0	14.8	83.6	18.4	89.4	20.3	93.4	21.6	95.6	21.8	97.7	21.9
	33	60.3	12.4	72.0	15.8	83.6	19.6	89.4	21.7	91.9	22.4	94.1	22.6	96.3	22.8
	35	60.3	13.1	72.0	16.8	83.6	20.9	89.4	23.1	90.5	23.2	92.7	23.4	94.8	23.6
	37	60.3	14.0	72.0	17.9	83.6	22.2	87.9	23.9	89.0	24.0	91.2	24.2	93.4	24.5
	39	60.3	14.8	72.0	19.0	83.6	23.7	86.5	24.7	87.6	24.8	89.8	25.1	91.9	25.3

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC	14.0°CWB PI	16.0°CWB TC	16.0°CWB PI	18.0°CWB TC	18.0°CWB PI	19.0°CWB TC	19.0°CWB PI	20.0°CWB TC	20.0°CWB PI	22.0°CWB TC	22.0°CWB PI	24.0°CWB TC	24.0°CWB PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
90 (720)	10	54.3	7.1	64.8	8.6	75.2	10.1	80.5	10.9	85.7	11.8	96.2	13.4	107	15.2
	12	54.3	7.2	64.8	8.7	75.2	10.3	80.5	11.2	85.7	12.0	96.2	13.7	107	15.4
	14	54.3	7.4	64.8	8.9	75.2	10.5	80.5	11.4	85.7	12.2	96.2	14.0	107	15.7
	16	54.3	7.5	64.8	9.1	75.2	10.7	80.5	11.6	85.7	12.5	96.2	14.2	106	16.0
	18	54.3	7.6	64.8	9.2	75.2	10.9	80.5	11.8	85.7	12.7	96.2	14.5	105	16.5
	20	54.3	7.8	64.8	9.4	75.2	11.2	80.5	12.0	85.7	13.2	96.2	15.6	104	17.3
	21	54.3	7.8	64.8	9.5	75.2	11.3	80.5	12.5	85.7	13.6	96.2	16.2	103	17.7
	23	54.3	8.0	64.8	9.9	75.2	12.1	80.5	13.4	85.7	14.6	96.2	17.3	101	18.5
	25	54.3	8.4	64.8	10.6	75.2	13.0	80.5	14.3	85.7	15.6	96.2	18.6	100	19.3
	27	54.3	9.0	64.8	11.3	75.2	13.9	80.5	15.3	85.7	16.7	96.2	19.9	98.4	20.1
	29	54.3	9.5	64.8	12.0	75.2	14.8	80.5	16.3	85.7	17.9	95.0	20.8	97.0	20.9
	31	54.3	10.1	64.8	12.8	75.2	15.8	80.5	17.4	85.7	19.1	93.6	21.6	95.5	21.8
	33	54.3	10.8	64.8	13.6	75.2	16.8	80.5	18.5	85.7	20.3	92.1	22.4	94.1	22.6
	35	54.3	11.4	64.8	14.5	75.2	17.9	80.5	19.7	85.7	21.7	90.7	23.2	92.6	23.4
	37	54.3	12.1	64.8	15.4	75.2	19.0	80.5	21.0	85.7	23.1	89.2	24.0	91.2	24.2
	39	54.3	12.9	64.8	16.4	75.2	20.3	80.5	22.4	85.7	24.6	87.8	24.9	89.7	25.1
80 (640)	10	48.3	6.32	57.6	7.6	66.9	8.9	71.5	9.6	76.2	10.3	85.5	11.7	94.8	13.2
	12	48.3	6.43	57.6	7.7	66.9	9.1	71.5	9.8	76.2	10.5	85.5	12.0	94.8	13.5
	14	48.3	6.53	57.6	7.8	66.9	9.2	71.5	9.9	76.2	10.7	85.5	12.2	94.8	13.7
	16	48.3	6.64	57.6	8.0	66.9	9.4	71.5	10.1	76.2	10.9	85.5	12.4	94.8	14.0
	18	48.3	6.76	57.6	8.1	66.9	9.6	71.5	10.3	76.2	11.1	85.5	12.7	94.8	14.3
	20	48.3	6.88	57.6	8.3	66.9	9.8	71.5	10.5	76.2	11.3	85.5	13.1	94.8	15.3
	21	48.3	6.94	57.6	8.4	66.9	9.9	71.5	10.6	76.2	11.5	85.5	13.6	94.8	15.8
	23	48.3	7.07	57.6	8.5	66.9	10.3	71.5	11.3	76.2	12.4	85.5	14.6	94.8	17.0
	25	48.3	7.3	57.6	9.1	66.9	11.0	71.5	12.1	76.2	13.2	85.5	15.6	94.8	18.2
	27	48.3	7.8	57.6	9.7	66.9	11.8	71.5	12.9	76.2	14.1	85.5	16.7	94.8	19.4
	29	48.3	8.2	57.6	10.3	66.9	12.6	71.5	13.8	76.2	15.1	85.5	17.8	94.8	20.8
	31	48.3	8.8	57.6	10.9	66.9	13.4	71.5	14.7	76.2	16.1	85.5	19.0	93.3	21.6
	33	48.3	9.3	57.6	11.6	66.9	14.2	71.5	15.6	76.2	17.1	85.5	20.3	91.9	22.4
	35	48.3	9.9	57.6	12.4	66.9	15.1	71.5	16.6	76.2	18.2	85.5	21.6	90.4	23.2
	37	48.3	10.4	57.6	13.1	66.9	16.1	71.5	17.7	76.2	19.4	85.5	23.0	89.0	24.0
	39	48.3	11.1	57.6	13.9	66.9	17.1	71.5	18.8	76.2	20.6	85.5	24.5	87.5	24.8
70 (560)	10	42.2	5.56	50.4	6.60	58.5	7.7	62.6	8.3	66.6	8.9	74.8	10.1	82.9	11.3
	12	42.2	5.65	50.4	6.71	58.5	7.8	62.6	8.4	66.6	9.0	74.8	10.3	82.9	11.5
	14	42.2	5.73	50.4	6.82	58.5	8.0	62.6	8.6	66.6	9.2	74.8	10.5	82.9	11.8
	16	42.2	5.83	50.4	6.94	58.5	8.1	62.6	8.7	66.6	9.4	74.8	10.7	82.9	12.0
	18	42.2	5.92	50.4	7.06	58.5	8.3	62.6	8.9	66.6	9.5	74.8	10.9	82.9	12.2
	20	42.2	6.02	50.4	7.2	58.5	8.4	62.6	9.1	66.6	9.7	74.8	11.1	82.9	12.6
	21	42.2	6.07	50.4	7.3	58.5	8.5	62.6	9.2	66.6	9.8	74.8	11.3	82.9	13.0
	23	42.2	6.18	50.4	7.4	58.5	8.7	62.6	9.5	66.6	10.3	74.8	12.0	82.9	13.9
	25	42.2	6.29	50.4	7.7	58.5	9.3	62.6	10.1	66.6	11.0	74.8	12.9	82.9	14.9
	27	42.2	6.65	50.4	8.2	58.5	9.9	62.6	10.8	66.6	11.7	74.8	13.7	82.9	15.9
	29	42.2	7.06	50.4	8.7	58.5	10.5	62.6	11.5	66.6	12.5	74.8	14.7	82.9	17.0
	31	42.2	7.5	50.4	9.2	58.5	11.2	62.6	12.2	66.6	13.3	74.8	15.6	82.9	18.2
	33	42.2	7.9	50.4	9.8	58.5	11.9	62.6	13.0	66.6	14.2	74.8	16.7	82.9	19.4
	35	42.2	8.4	50.4	10.4	58.5	12.6	62.6	13.8	66.6	15.1	74.8	17.7	82.9	20.6
	37	42.2	8.9	50.4	11.0	58.5	13.4	62.6	14.7	66.6	16.0	74.8	18.9	82.9	22.0
	39	42.2	9.4	50.4	11.7	58.5	14.2	62.6	15.6	66.6	17.0	74.8	20.1	82.9	23.4
60 (480)	10	36.2	4.84	43.2	5.68	50.2	6.57	53.6	7.04	57.1	7.5	64.1	8.5	71.1	9.5
	12	36.2	4.91	43.2	5.77	50.2	6.68	53.6	7.15	57.1	7.6	64.1	8.6	71.1	9.7
	14	36.2	4.98	43.2	5.86	50.2	6.79	53.6	7.3	57.1	7.8	64.1	8.8	71.1	9.9
	16	36.2	5.05	43.2	5.95	50.2	6.91	53.6	7.4	57.1	7.9	64.1	9.0	71.1	10.1
	18	36.2	5.13	43.2	6.05	50.2	7.03	53.6	7.5	57.1	8.1	64.1	9.1	71.1	10.5
	20	36.2	5.21	43.2	6.15	50.2	7.15	53.6	7.7	57.1	8.2	64.1	9.3	71.1	10.6
	21	36.2	5.25	43.2	6.21	50.2	7.2	53.6	7.7	57.1	8.3	64.1	9.4	71.1	10.6
	23	36.2	5.34	43.2	6.31	50.2	7.4	53.6	7.9	57.1	8.4	64.1	9.8	71.1	11.2
	25	36.2	5.43	43.2	6.43	50.2	7.6	53.6	8.3	57.1	9.0	64.1	10.4	71.1	12.0
	27	36.2	5.62	43.2	6.82	50.2	8.1	53.6	8.8	57.1	9.6	64.1	11.1	71.1	12.8
	29	36.2	5.96	43.2	7.2	50.2	8.6	53.6	9.4	57.1	10.2	64.1	11.9	71.1	13.7
	31	36.2	6.31	43.2	7.7	50.2	9.2	53.6	10.0	57.1	10.8	64.1	12.6	71.1	14.6
	33	36.2	6.68	43.2	8.1	50.2	9.7	53.6	10.6	57.1	11.5	64.1	13.4	71.1	15.5
	35	36.2	7.06	43.2	8.6	50.2	10.3	53.6	11.3	57.1	12.2	64.1	14.3	71.1	16.5
	37	36.2	7.5	43.2	9.1	50.2	11.0	53.6	12.0	57.1	13.0	64.1	15.2	71.1	17.5
	39	36.2	7.9	43.2	9.7	50.2	11.6	53.6	12.7	57.1	13.8	64.1	16.1	71.1	18.7
50 (400)	10	30.2	4.16	36.0	4.81	41.8	5.51	44.7	5.87	47.6	6.24	53.4	7.01	59.2	7.8
	12	30.2	4.21	36.0	4.88	41.8	5.59	44.7	5.96	47.6	6.34	53.4	7.12	59.2	7.9
	14	30.2	4.27	36.0	4.95	41.8	5.68	44.7	6.06	47.6	6.44	53.4	7.2	59.2	8.1
	16	30.2	4.33	36.0	5.02	41.8	5.77	44.7	6.16	47.6	6.55	53.4	7.4	59.2	8.2
	18	30.2	4.39	36.0	5.10	41.8	5.86	44.7	6.26	47.6	6.66	53.4	7.5	59.2	8.4
	20	30.2	4.45	36.0	5.18	41.8	5.96	44.7	6.37	47.6	6.78	53.4	7.6	59.2	8.5
	21	30.2	4.48	36.0	5.22	41.8	6.01	44.7	6.42	47.6	6.84	53.4	7.7	59.2	8.6
	23	30.2	4.55	36.0	5.31	41.8	6.12	44.7	6.54	47.6	6.97	53.4	7.9	59.2	8.8
	25	30.2	4.62	36.0	5.40	41.8	6.22	44.7	6.67	47.6	7.18	53.4	8.3	59.2	9.4
	27	30.2	4.69	36.0	5.59	41.8	6.57	44.7	7.09	47.6	7.6	53.4	8.8	59.2	10.0
	29	30.2	4.96	36.0	5.92	41.8	6.97	44.7	7.5	47.6	8.1	53.4	9.3	59.2	10.7
	31	30.2	5.24	36.0	6.27	41.8	7.4	44.7	8.0	47.6	8.6	53.4	9.9	59.2	11.4
	33	30.2	5.54	36.0	6.63	41.8	7.8	44.7	8.5	47.6	9.1	53.4	10.6	59.2	12.1
	35	30.2	5.84	36.0	7.01	41.8	8.3	44.7	9.0	47.6	9.7	53.4	11.2	59.2	12.8
	37	30.2	6.16	36.0	7.4	41.8	8.8	44.7	9.5	47.6	10.3	53.4	11.9	59.2	13.6
	39	30.2	6.50	36.0	7.8	41.8	9.3	44.7	10.1	47.6	10.9	53.4	12.6	59.2	14.5

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)
Note1: The above table shows the average value of conditions which may occur.

RXYQ34PAHY1, PAHYL, PHTL [50/60Hz]

Cooling capacity

Combination (%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC kW	14.0°CWB PI kW	16.0°CWB TC kW	16.0°CWB PI kW	18.0°CWB TC kW	18.0°CWB PI kW	19.0°CWB TC kW	19.0°CWB PI kW	20.0°CWB TC kW	20.0°CWB PI kW	22.0°CWB TC kW	22.0°CWB PI kW	24.0°CWB TC kW	24.0°CWB PI kW
130 (1105)	10	83.3	11.9	99	14.5	115	17.3	120	17.7	121	17.3	124	16.6	127	15.8
	12	83.3	12.1	99	14.8	115	17.6	118	17.6	120	17.2	123	16.5	126	16.2
	14	83.3	12.3	99	15.1	115	17.8	117	17.5	118	17.1	121	17.0	124	17.1
	16	83.3	12.6	99	15.4	114	17.8	115	17.6	117	17.7	120	17.9	123	18.1
	18	83.3	12.8	99	15.7	112	18.4	113	18.5	115	18.6	118	18.8	121	19.0
	20	83.3	13.1	99	16.7	110	19.3	112	19.4	113	19.5	116	19.7	119	19.9
	21	83.3	13.4	99	17.3	110	19.8	111	19.9	113	20.0	116	20.2	119	20.4
	23	83.3	14.4	99	18.6	108	20.7	110	20.8	111	20.9	114	21.1	117	21.3
	25	83.3	15.4	99	19.9	107	21.6	108	21.7	110	21.8	113	22.0	116	22.3
	27	83.3	16.4	99	21.3	105	22.5	107	22.6	108	22.7	111	23.0	114	23.2
	29	83.3	17.5	99	22.7	103	23.4	105	23.5	106	23.7	109	23.9	112	24.2
	31	83.3	18.7	99	24.1	102	24.3	103	24.5	105	24.6	108	24.9	111	25.1
	33	83.3	19.9	97.4	25.0	100	25.3	102	25.4	103	25.5	106	25.8	109	26.1
	35	83.3	21.2	95.8	25.9	98.8	26.2	100	26.3	102	26.5	105	26.8	108	27.1
	37	83.3	22.6	94.3	26.8	97.3	27.1	98.8	27.3	100	27.4	103	27.7	106	28.0
	39	83.3	24.1	92.7	27.7	95.7	28.0	97.2	28.2	98.7	28.4	102	28.7	105	29.0
120 (1020)	10	76.9	10.9	91.8	13.3	107	15.8	114	17.0	119	17.8	122	17.1	125	16.4
	12	76.9	11.1	91.8	13.5	107	16.1	114	17.4	118	17.7	120	17.0	123	16.3
	14	76.9	11.3	91.8	13.8	107	16.4	114	17.7	116	17.6	119	16.9	122	17.0
	16	76.9	11.5	91.8	14.0	107	16.7	113	17.8	115	17.6	117	17.8	120	17.9
	18	76.9	11.7	91.8	14.3	107	17.3	112	18.4	113	18.5	116	18.7	119	18.8
	20	76.9	11.9	91.8	14.9	107	18.6	110	19.3	112	19.4	114	19.6	117	19.8
	21	76.9	12.0	91.8	15.4	107	19.2	109	19.8	111	19.9	114	20.0	116	20.2
	23	76.9	12.9	91.8	16.5	106	20.6	108	20.7	109	20.8	112	21.0	115	21.2
	25	76.9	13.7	91.8	17.7	105	21.5	106	21.6	108	21.7	110	21.9	113	22.1
	27	76.9	14.7	91.8	18.9	103	22.4	105	22.5	106	22.6	109	22.8	112	23.0
	29	76.9	15.6	91.8	20.2	102	23.3	103	23.4	105	23.5	107	23.7	110	24.0
	31	76.9	16.7	91.8	21.5	100	24.2	102	24.3	103	24.4	106	24.4	109	24.9
	33	76.9	17.8	91.8	23.0	98.7	25.1	100	25.2	101	25.4	104	25.6	107	25.9
	35	76.9	18.9	91.8	24.5	97.2	26.0	98.6	26.2	100	26.3	103	26.6	105	26.8
	37	76.9	20.1	91.8	26.1	95.6	26.9	97.0	27.1	98.4	27.2	101	27.5	104	27.8
	39	76.9	21.4	91.3	27.6	94.1	27.9	95.5	28.0	96.9	28.2	100	28.6	102	28.8
110 (935)	10	70.5	9.9	84.1	12.0	97.7	14.3	105	15.4	111	16.6	120	17.6	122	17.0
	12	70.5	10.0	84.1	12.2	97.7	14.5	105	15.7	111	16.9	118	17.5	121	16.9
	14	70.5	10.2	84.1	12.5	97.7	14.8	105	16.0	111	17.2	117	17.4	119	16.9
	16	70.5	10.4	84.1	12.7	97.7	15.1	105	16.3	111	17.5	115	17.6	118	17.8
	18	70.5	10.6	84.1	12.9	97.7	15.4	105	16.8	111	18.4	114	18.5	116	18.7
	20	70.5	10.8	84.1	13.2	97.7	16.3	105	18.0	110	19.3	112	19.5	115	19.6
	21	70.5	10.9	84.1	13.6	97.7	16.9	105	18.7	109	19.7	111	19.9	114	20.1
	23	70.5	11.4	84.1	14.6	97.7	18.1	105	20.0	107	20.6	110	20.8	112	21.0
	25	70.5	12.2	84.1	15.6	97.7	19.4	105	21.4	106	21.5	108	21.7	111	21.9
	27	70.5	13.0	84.1	16.6	97.7	20.7	103	22.3	104	22.4	107	22.6	109	22.8
	29	70.5	13.9	84.1	17.8	97.7	22.2	101	23.2	103	23.4	105	23.6	108	23.8
	31	70.5	14.8	84.1	18.9	97.7	23.7	100	24.2	101	24.3	104	24.5	106	24.7
	33	70.5	15.7	84.1	20.2	97.1	24.9	98.3	25.1	100	25.2	102	25.4	105	25.7
	35	70.5	16.7	84.1	21.5	95.5	25.8	96.8	26.0	98.0	26.1	101	26.4	103	26.6
	37	70.5	17.8	84.1	22.9	94.0	26.8	95.2	26.9	96.5	27.0	99	27.3	102	27.6
	39	70.5	18.9	84.1	24.4	92.4	27.7	93.7	27.8	95.0	28.0	97.5	28.2	100	28.5
100 (850)	10	64.1	8.9	76.5	10.8	88.8	12.8	95.0	13.8	101	14.8	114	17.0	120	17.6
	12	64.1	9.0	76.5	11.0	88.8	13.0	95.0	14.1	101	15.1	114	17.3	119	17.5
	14	64.1	9.2	76.5	11.2	88.8	13.3	95.0	14.3	101	15.4	114	17.6	117	17.4
	16	64.1	9.4	76.5	11.4	88.8	13.5	95.0	14.6	101	15.7	113	17.8	115	17.7
	18	64.1	9.5	76.5	11.6	88.8	13.8	95.0	14.9	101	16.0	112	18.4	114	18.6
	20	64.1	9.7	76.5	11.8	88.8	14.2	95.0	15.6	101	17.2	110	19.3	112	19.5
	21	64.1	9.8	76.5	12.0	88.8	14.7	95.0	16.2	101	17.8	109	19.8	112	19.9
	23	64.1	10.1	76.5	12.8	88.8	15.7	95.0	17.4	101	19.1	108	20.7	110	20.8
	25	64.1	10.8	76.5	13.6	88.8	16.8	95.0	18.6	101	20.4	106	21.6	109	21.7
	27	64.1	11.5	76.5	14.5	88.8	18.0	95.0	19.9	101	21.8	105	22.5	107	22.7
	29	64.1	12.2	76.5	15.5	88.8	19.2	95.0	21.2	101	23.2	103	23.4	105	23.6
	31	64.1	13.0	76.5	16.5	88.8	20.5	95.0	22.7	99	24.1	102	24.3	104	24.5
	33	64.1	13.8	76.5	17.6	88.8	21.9	95.0	24.2	97.7	25.0	100	25.2	102	25.4
	35	64.1	14.7	76.5	18.7	88.8	23.3	95.0	25.8	96.2	25.9	98.5	26.1	101	26.4
	37	64.1	15.6	76.5	19.9	88.8	24.8	93.5	26.7	94.6	26.8	96.9	27.1	99	27.3
	39	64.1	16.6	76.5	21.2	88.8	26.5	91.9	27.6	93.1	27.7	95.4	28.0	97.7	28.3

Cooling capacity

Combination (%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC kW	14.0°CWB PI kW	16.0°CWB TC kW	16.0°CWB PI kW	18.0°CWB TC kW	18.0°CWB PI kW	19.0°CWB TC kW	19.0°CWB PI kW	20.0°CWB TC kW	20.0°CWB PI kW	22.0°CWB TC kW	22.0°CWB PI kW	24.0°CWB TC kW	24.0°CWB PI kW
90 (765)	10	57.7	7.96	68.8	9.6	79.9	11.3	85.5	12.2	91.1	13.1	102	15.0	113	16.9
	12	57.7	8.09	68.8	9.8	79.9	11.5	85.5	12.5	91.1	13.4	102	15.3	113	17.2
	14	57.7	8.23	68.8	9.9	79.9	11.8	85.5	12.7	91.1	13.6	102	15.6	113	17.6
	16	57.7	8.38	68.8	10.1	79.9	12.0	85.5	12.9	91.1	13.9	102	15.9	113	17.9
	18	57.7	8.53	68.8	10.3	79.9	12.2	85.5	13.2	91.1	14.2	102	16.2	112	18.4
	20	57.7	8.69	68.8	10.5	79.9	12.5	85.5	13.5	91.1	14.7	102	17.4	110	19.3
	21	57.7	8.77	68.8	10.6	79.9	12.7	85.5	13.9	91.1	15.2	102	18.0	109	19.8
	23	57.7	8.9	68.8	11.1	79.9	13.6	85.5	14.9	91.1	16.3	102	19.4	108	20.7
	25	57.7	9.4	68.8	11.8	79.9	14.5	85.5	15.9	91.1	17.5	102	20.7	106	21.6
	27	57.7	10.0	68.8	12.6	79.9	15.5	85.5	17.0	91.1	18.7	102	22.2	105	22.5
	29	57.7	10.7	68.8	13.4	79.9	16.5	85.5	18.2	91.1	19.9	101	23.2	103	23.4
	31	57.7	11.3	68.8	14.3	79.9	17.6	85.5	19.4	91.1	21.3	99	24.1	102	24.3
	33	57.7	12.0	68.8	15.2	79.9	18.8	85.5	20.7	91.1	22.7	97.9	25.0	100	25.2
	35	57.7	12.8	68.8	16.2	79.9	20.0	85.5	22.0	91.1	24.2	96.3	25.9	98.4	26.1
	37	57.7	13.6	68.8	17.2	79.9	21.3	85.5	23.5	91.1	25.8	94.8	26.8	96.9	27.1
	39	57.7	14.4	68.8	18.3	79.9	22.6	85.5	25.0	91.1	27.5	93.3	27.8	95.3	28.0
80 (680)	10	51.3	7.06	61.2	8.46	71.1	9.9	76.0	10.7	80.9	11.5	90.8	13.1	101	14.8
	12	51.3	7.18	61.2	8.60	71.1	10.1	76.0	10.9	80.9	11.7	90.8	13.3	101	15.0
	14	51.3	7.30	61.2	8.76	71.1	10.3	76.0	11.1	80.9	11.9	90.8	13.6	101	15.3
	16	51.3	7.42	61.2	8.9	71.1	10.5	76.0	11.3	80.9	12.2	90.8	13.9	101	15.6
	18	51.3	7.55	61.2	9.1	71.1	10.7	76.0	11.5	80.9	12.4	90.8	14.1	101	15.9
	20	51.3	7.68	61.2	9.2	71.1	10.9	76.0	11.8	80.9	12.6	90.8	14.7	101	17.0
	21	51.3	7.75	61.2	9.3	71.1	11.0	76.0	11.9	80.9	12.9	90.8	15.2	101	17.7
	23	51.3	7.89	61.2	9.5	71.1	11.5	76.0	12.6	80.9	13.8	90.8	16.3	101	18.9
	25	51.3	8.15	61.2	10.1	71.1	12.3	76.0	13.5	80.9	14.8	90.8	17.4	101	20.3
	27	51.3	8.67	61.2	10.8	71.1	13.2	76.0	14.4	80.9	15.8	90.8	18.6	101	21.7
	29	51.3	9.2	61.2	11.5	71.1	14.0	76.0	15.4	80.9	16.8	90.8	19.9	101	23.2
	31	51.3	9.8	61.2	12.2	71.1	14.9	76.0	16.4	80.9	17.9	90.8	21.2	99	24.1
	33	51.3	10.4	61.2	13.0	71.1	15.9	76.0	17.5	80.9	19.1	90.8	22.6	97.6	25.0
	35	51.3	11.0	61.2	13.8	71.1	16.9	76.0	18.6	80.9	20.3	90.8	24.1	96.1	25.9
	37	51.3	11.7	61.2	14.6	71.1	18.0	76.0	19.8	80.9	21.7	90.8	25.7	94.5	26.8
	39	51.3	12.4	61.2	15.6	71.1	19.1	76.0	21.0	80.9	23.1	90.8	27.4	93.0	27.7
70 (595)	10	44.9	6.21	53.5	7.37	62.2	8.60	66.5	9.2	70.8	9.9	79.5	11.3	88.1	12.7
	12	44.9	6.31	53.5	7.49	62.2	8.75	66.5	9.4	70.8	10.1	79.5	11.5	88.1	12.9
	14	44.9	6.40	53.5	7.62	62.2	8.9	66.5	9.6	70.8	10.3	79.5	11.7	88.1	13.1
	16	44.9	6.51	53.5	7.75	62.2	9.1	66.5	9.8	70.8	10.5	79.5	11.9	88.1	13.4
	18	44.9	6.61	53.5	7.89	62.2	9.2	66.5	9.9	70.8	10.7	79.5	12.1	88.1	13.7
	20	44.9	6.73	53.5	8.03	62.2	9.4	66.5	10.1	70.8	10.9	79.5	12.4	88.1	14.0
	21	44.9	6.78	53.5	8.10	62.2	9.5	66.5	10.2	70.8	11.0	79.5	12.6	88.1	14.5
	23	44.9	6.90	53.5	8.25	62.2	9.7	66.5	10.6	70.8	11.5	79.5	13.5	88.1	15.6
	25	44.9	7.02	53.5	8.58	62.2	10.3	66.5	11.3	70.8	12.3	79.5	14.4	88.1	16.7
	27	44.9	7.42	53.5	9.1	62.2	11.0	66.5	12.0	70.8	13.1	79.5	15.4	88.1	17.8
	29	44.9	7.88	53.5	9.7	62.2	11.7	66.5	12.8	70.8	14.0	79.5	16.4	88.1	19.0
	31	44.9	8.36	53.5	10.3	62.2	12.5	66.5	13.6	70.8	14.9	79.5	17.5	88.1	20.3
	33	44.9	8.9	53.5	10.9	62.2	13.3	66.5	14.5	70.8	15.8	79.5	18.6	88.1	21.6
	35	44.9	9.4	53.5	11.6	62.2	14.1	66.5	15.4	70.8	16.8	79.5	19.8	88.1	23.0
	37	44.9	9.9	53.5	12.3	62.2	15.0	66.5	16.4	70.8	17.9	79.5	21.1	88.1	24.6
	39	44.9	10.5	53.5	13.1	62.2	15.9	66.5	17.4	70.8	19.0	79.5	22.4	88.1	26.2
60 (510)	10	38.5	5.40	45.9	6.34	53.3	7.34	57.0	7.86	60.7	8.39	68.1	9.5	75.5	10.6
	12	38.5	5.48	45.9	6.44	53.3	7.46	57.0	7.99	60.7	8.53	68.1	9.7	75.5	10.8
	14	38.5	5.56	45.9	6.54	53.3	7.58	57.0	8.13	60.7	8.68	68.1	9.8	75.5	11.0
	16	38.5	5.64	45.9	6.65	53.3	7.71	57.0	8.27	60.7	8.8	68.1	10.0	75.5	11.2
	18	38.5	5.73	45.9	6.76	53.3	7.85	57.0	8.42	60.7	9.0	68.1	10.2	75.5	11.5
	20	38.5	5.82	45.9	6.87	53.3	7.99	57.0	8.57	60.7	9.2	68.1	10.4	75.5	11.7
	21	38.5	5.87	45.9	6.93	53.3	8.06	57.0	8.65	60.7	9.3	68.1	10.5	75.5	11.8
	23	38.5	5.96	45.9	7.05	53.3	8.21	57.0	8.8	60.7	9.4	68.1	10.9	75.5	12.5
	25	38.5	6.06	45.9	7.18	53.3	8.53	57.0	9.3	60.7	10.0	68.1	11.7	75.5	13.4
	27	38.5	6.28	45.9	7.61	53.3	9.1	57.0	9.9	60.7	10.7	68.1	12.4	75.5	14.3
	29	38.5	6.66	45.9	8.08	53.3	9.7	57.0	10.5	60.7	11.4	68.1	13.2	75.5	15.3
	31	38.5	7.05	45.9	8.57	53.3	10.3	57.0	11.2	60.7	12.1	68.1	14.1	75.5	16.3
	33	38.5	7.46	45.9	9.1	53.3	10.9	57.0	11.8	60.7	12.9	68.1	15.0	75.5	17.3
	35	38.5	7.88	45.9	9.6	53.3	11.5	57.0	12.6	60.7	13.7	68.1	15.9	75.5	18.4
	37	38.5	8.33	45.9	10.2	53.3	12.2	57.0	13.3	60.7	14.5	68.1	17.0	75.5	19.6
	39	38.5	8.8	45.9	10.8	53.3	13.0	57.0	14.2	60.7	15.4	68.1	18.0	75.5	20.8
50 (425)	10	32.1	4.64	38.2	5.37	44.4	6.15	47.5	6.55	50.6	6.97	56.8	7.83	62.9	8.72
	12	32.1	4.70	38.2	5.45	44.4	6.24	47.5	6.66	50.6	7.08	56.8	7.96	62.9	8.9
	14	32.1	4.77	38.2	5.53	44.4	6.34	47.5	6.76	50.6	7.20	56.8	8.09	62.9	9.0
	16	32.1	4.83	38.2	5.61	44.4	6.44	47.5	6.87	50.6	7.32	56.8	8.23	62.9	9.2
	18	32.1	4.90	38.2	5.70	44.4	6.55	47.5	6.99	50.6	7.44	56.8	8.38	62.9	9.4
	20	32.1	4.97	38.2	5.79	44.4	6.66	47.5	7.11	50.6	7.56	56.8	8.54	62.9	9.5
	21	32.1	5.00	38.2	5.83	44.4	6.71	47.5	7.17	50.6	7.64	56.8	8.62	62.9	9.6
	23	32.1	5.08	38.2	5.93	44.4	6.83	47.5	7.30	50.6	7.78	56.8	8.8	62.9	9.8
	25	32.1	5.16	38.2	6.03	44.4	6.95	47.5	7.45	50.6	8.02	56.8	9.2	62.9	10.5
	27	32.1	5.24	38.2	6.24	44.4	7.34	47.5	7.92	50.6	8.53	56.8	9.8	62.9	11.2
	29	32.1	5.54	38.2	6.61	44.4	7.79	47.5	8.41	50.6	9.1	56.8	10.4	62.9	11.9
	31	32.1	5.86	38.2	7.00	44.4	8.26	47.5	8.9	50.6	9.6	56.8	11.1	62.9	12.7
	33	32.1	6.18	38.2	7.41	44.4	8.75	47.5	9.5	50.6	10.2	56.8	11.8	62.9	13.5
	35	32.1	6.53	38.2	7.83	44.4	9.3	47.5	10.0	50.6	10.8	56.8	12.5	62.9	14.3
	37	32.1	6.88	38.2	8.28	44.4	9.8	47.5	10.6	50.6	11.5	56.8	13.3	62.9	15.2
	39	32.1	7.26	38.2	8.74	44.4	10.4	47.5	11.2	50.6	12.2	56.8	14.1	62.9	16.2

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)
Note1: The above table shows the average value of conditions which may occur.

15

RXYQ36PAHY1, PAHYL, PHTL [50/60Hz]

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC	14.0°CWB PI	16.0°CWB TC	16.0°CWB PI	18.0°CWB TC	18.0°CWB PI	19.0°CWB TC	19.0°CWB PI	20.0°CWB TC	20.0°CWB PI	22.0°CWB TC	22.0°CWB PI	24.0°CWB TC	24.0°CWB PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130 (1170)	10	88.2	12.3	105	15.1	122	18.0	127	18.3	128	18.0	131	17.2	135	16.4
	12	88.2	12.6	105	15.4	122	18.3	125	18.3	127	17.9	130	17.1	133	16.8
	14	88.2	12.8	105	15.7	122	18.5	123	18.2	125	17.8	128	17.6	131	17.8
	16	88.2	13.1	105	16.0	120	18.4	122	18.3	123	18.4	126	18.6	130	18.8
	18	88.2	13.3	105	16.3	118	19.2	120	19.2	122	19.3	125	19.5	128	19.7
	20	88.2	13.6	105	17.4	117	20.1	118	20.2	120	20.3	123	20.5	126	20.7
	21	88.2	14.0	105	18.0	116	20.6	118	20.7	119	20.8	122	21.0	126	21.2
	23	88.2	14.9	105	19.3	114	21.5	116	21.6	118	21.7	121	21.9	124	22.1
	25	88.2	16.0	105	20.7	113	22.4	114	22.5	116	22.7	119	22.9	122	23.1
	27	88.2	17.1	105	22.1	111	23.4	113	23.5	114	23.6	117	23.9	121	24.1
	29	88.2	18.2	105	23.6	109	24.3	111	24.5	113	24.6	116	24.8	119	25.1
	31	88.2	19.4	105	25.0	108	25.3	109	25.4	111	25.6	114	25.8	117	26.1
	33	88.2	20.7	103	25.9	106	26.2	108	26.4	109	26.5	113	26.8	116	27.1
	35	88.2	22.1	101	26.9	105	27.2	106	27.3	108	27.5	111	27.8	114	28.1
	37	88.2	23.5	100	27.8	103	28.2	105	28.3	106	28.5	109	28.8	112	29.1
	39	88.2	25.0	98.1	28.8	101	29.1	103	29.3	104	29.5	108	29.8	111	30.2
120 (1080)	10	81.4	11.3	97.1	13.8	113	16.4	121	17.7	126	18.4	129	17.8	132	17.0
	12	81.4	11.5	97.1	14.0	113	16.7	121	18.0	125	18.3	127	17.6	130	16.9
	14	81.4	11.7	97.1	14.3	113	17.0	121	18.4	123	18.3	126	17.5	129	17.7
	16	81.4	11.9	97.1	14.6	113	17.3	120	18.5	121	18.3	124	18.5	127	18.6
	18	81.4	12.1	97.1	14.9	113	17.9	118	19.1	120	19.2	123	19.4	125	19.6
	20	81.4	12.4	97.1	15.5	113	19.3	117	20.1	118	20.2	121	20.3	124	20.5
	21	81.4	12.5	97.1	16.0	113	20.0	116	20.5	117	20.6	120	20.8	123	21.0
	23	81.4	13.4	97.1	17.1	113	21.4	114	21.5	116	21.6	118	21.8	121	22.0
	25	81.4	14.3	97.1	18.4	111	22.3	112	22.4	114	22.5	117	22.7	120	22.9
	27	81.4	15.2	97.1	19.6	109	23.2	111	23.4	112	23.5	115	23.7	118	23.9
	29	81.4	16.3	97.1	21.0	108	24.2	109	24.3	111	24.4	114	24.7	117	24.9
	31	81.4	17.3	97.1	22.4	106	25.1	108	25.3	109	25.4	112	25.6	115	25.9
	33	81.4	18.5	97.1	23.9	104	26.1	106	26.2	107	26.3	110	26.6	113	26.9
	35	81.4	19.6	97.1	25.4	103	27.0	104	27.2	106	27.3	109	27.6	112	27.9
	37	81.4	20.9	97.1	27.1	101	28.0	103	28.1	104	28.3	107	28.6	110	28.9
	39	81.4	22.2	96.6	28.6	101	28.9	101	29.0	102	29.2	105	29.5	108	29.8
110 (990)	10	74.6	10.2	89.0	12.5	103	14.8	111	16.0	116	16.7	127	18.3	130	17.6
	12	74.6	10.4	89.0	12.7	103	15.1	111	16.3	118	17.5	125	18.2	128	17.5
	14	74.6	10.6	89.0	12.9	103	15.4	111	16.6	118	17.9	124	18.1	126	17.5
	16	74.6	10.8	89.0	13.2	103	15.7	111	16.9	118	18.2	122	18.3	125	18.5
	18	74.6	11.0	89.0	13.4	103	16.0	111	17.4	118	19.1	120	19.3	123	19.4
	20	74.6	11.2	89.0	13.7	103	16.9	111	18.7	116	20.0	119	20.2	121	20.4
	21	74.6	11.3	89.0	14.1	103	17.5	111	19.4	115	20.5	118	20.7	121	20.8
	23	74.6	11.9	89.0	15.1	103	18.8	111	20.8	114	21.4	116	21.6	119	21.8
	25	74.6	12.7	89.0	16.2	103	20.1	111	22.3	112	22.4	115	22.6	117	22.8
	27	74.6	13.5	89.0	17.3	103	21.5	109	23.2	110	23.3	113	23.5	116	23.7
	29	74.6	14.4	89.0	18.5	103	23.0	107	24.1	109	24.3	111	24.5	114	24.7
	31	74.6	15.3	89.0	19.7	103	24.6	106	25.1	107	25.2	110	25.4	112	25.7
	33	74.6	16.3	89.0	21.0	103	25.9	104	26.0	105	26.2	108	26.4	111	26.6
	35	74.6	17.4	89.0	22.4	101	26.9	102	27.0	104	27.1	106	27.4	109	27.6
	37	74.6	18.5	89.0	23.8	99.4	27.8	101	27.9	102	28.1	105	28.3	107	28.6
	39	74.6	19.6	89.0	25.3	97.8	28.7	99.1	28.9	100	29.0	103	29.3	106	29.6
100 (900)	10	67.8	9.2	80.9	11.2	94.0	13.3	101	14.3	107	15.4	120	17.6	127	18.2
	12	67.8	9.4	80.9	11.4	94.0	13.5	101	14.6	107	15.7	120	18.0	125	18.1
	14	67.8	9.6	80.9	11.6	94.0	13.8	101	14.9	107	16.0	120	18.3	124	18.0
	16	67.8	9.7	80.9	11.8	94.0	14.0	101	15.2	107	16.3	120	18.5	122	18.3
	18	67.8	9.9	80.9	12.1	94.0	14.3	101	15.5	107	16.6	118	19.1	121	19.3
	20	67.8	10.1	80.9	12.3	94.0	14.7	101	16.3	107	17.8	116	20.1	119	20.2
	21	67.8	10.2	80.9	12.4	94.0	15.3	101	16.8	107	18.5	116	20.5	118	20.7
	23	67.8	10.5	80.9	13.2	94.0	16.4	101	18.0	107	19.8	114	21.5	116	21.6
	25	67.8	11.2	80.9	14.2	94.0	17.5	101	19.3	107	21.2	112	22.4	115	22.6
	27	67.8	11.9	80.9	15.1	94.0	18.7	101	20.7	107	22.7	111	23.3	113	23.5
	29	67.8	12.7	80.9	16.1	94.0	20.0	101	22.1	107	24.1	109	24.3	112	24.5
	31	67.8	13.5	80.9	17.2	94.0	21.3	101	23.6	105	25.0	107	25.2	110	25.5
	33	67.8	14.4	80.9	18.3	94.0	22.7	101	25.1	103	26.0	106	26.2	108	26.4
	35	67.8	15.3	80.9	19.5	94.0	24.2	101	26.8	102	26.9	104	27.2	107	27.4
	37	67.8	16.2	80.9	20.7	94.0	25.8	98.9	27.7	100	27.9	103	28.1	105	28.4
	39	67.8	17.2	80.9	22.0	94.0	27.5	97.2	28.7	98.5	28.8	101	29.1	103	29.4

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC	14.0°CWB PI	16.0°CWB TC	16.0°CWB PI	18.0°CWB TC	18.0°CWB PI	19.0°CWB TC	19.0°CWB PI	20.0°CWB TC	20.0°CWB PI	22.0°CWB TC	22.0°CWB PI	24.0°CWB TC	24.0°CWB PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
90 (810)	10	61.0	8.27	72.8	10.0	84.6	11.8	90.5	12.7	96.3	13.7	108	15.6	120	17.6
	12	61.0	8.4	72.8	10.1	84.6	12.0	90.5	12.9	96.3	13.9	108	15.9	120	17.9
	14	61.0	8.6	72.8	10.3	84.6	12.2	90.5	13.2	96.3	14.2	108	16.2	120	18.3
	16	61.0	8.7	72.8	10.5	84.6	12.4	90.5	13.4	96.3	14.4	108	16.5	120	18.5
	18	61.0	8.9	72.8	10.7	84.6	12.7	90.5	13.7	96.3	14.7	108	16.8	118	19.1
	20	61.0	9.0	72.8	10.9	84.6	12.9	90.5	14.0	96.3	15.3	108	18.1	116	20.1
	21	61.0	9.1	72.8	11.0	84.6	13.2	90.5	14.5	96.3	15.8	108	18.7	116	20.5
	23	61.0	9.3	72.8	11.5	84.6	14.1	90.5	15.5	96.3	17.0	108	20.1	114	21.5
	25	61.0	9.8	72.8	12.3	84.6	15.1	90.5	16.6	96.3	18.1	108	21.5	112	22.4
	27	61.0	10.4	72.8	13.1	84.6	16.1	90.5	17.7	96.3	19.4	108	23.0	111	23.3
	29	61.0	11.1	72.8	13.9	84.6	17.2	90.5	18.9	96.3	20.7	107	24.1	109	24.3
	31	61.0	11.8	72.8	14.8	84.6	18.3	90.5	20.2	96.3	22.1	105	25.0	107	25.2
	33	61.0	12.5	72.8	15.8	84.6	19.5	90.5	21.5	96.3	23.6	104	26.0	106	26.2
	35	61.0	13.3	72.8	16.8	84.6	20.8	90.5	22.9	96.3	25.1	102	26.9	104	27.2
	37	61.0	14.1	72.8	17.9	84.6	22.1	90.5	24.4	96.3	26.8	100	27.9	102	28.1
	39	61.0	14.9	72.8	19.0	84.6	23.5	90.5	26.0	96.3	28.5	98.7	28.8	101	29.1
80 (720)	10	54.3	7.34	64.7	8.8	75.2	10.3	80.4	11.1	85.6	11.9	96.1	13.6	107	15.3
	12	54.3	7.46	64.7	8.9	75.2	10.5	80.4	11.3	85.6	12.2	96.1	13.9	107	15.6
	14	54.3	7.58	64.7	9.1	75.2	10.7	80.4	11.5	85.6	12.4	96.1	14.1	107	15.9
	16	54.3	7.71	64.7	9.3	75.2	10.9	80.4	11.8	85.6	12.6	96.1	14.4	107	16.2
	18	54.3	7.84	64.7	9.4	75.2	11.1	80.4	12.0	85.6	12.9	96.1	14.7	107	16.6
	20	54.3	7.98	64.7	9.6	75.2	11.3	80.4	12.2	85.6	13.1	96.1	15.2	107	17.7
	21	54.3	8.05	64.7	9.7	75.2	11.4	80.4	12.3	85.6	13.4	96.1	15.8	107	18.3
	23	54.3	8.20	64.7	9.9	75.2	12.0	80.4	13.1	85.6	14.3	96.1	16.9	107	19.7
	25	54.3	8.5	64.7	10.5	75.2	12.8	80.4	14.0	85.6	15.3	96.1	18.1	107	21.1
	27	54.3	9.0	64.7	11.2	75.2	13.7	80.4	15.0	85.6	16.4	96.1	19.3	107	22.5
	29	54.3	9.6	64.7	11.9	75.2	14.6	80.4	16.0	85.6	17.5	96.1	20.6	107	24.1
	31	54.3	10.2	64.7	12.7	75.2	15.5	80.4	17.0	85.6	18.6	96.1	22.0	105	25.0
	33	54.3	10.8	64.7	13.5	75.2	16.5	80.4	18.1	85.6	19.8	96.1	23.5	103	26.0
	35	54.3	11.4	64.7	14.3	75.2	17.6	80.4	19.3	85.6	21.1	96.1	25.0	102	26.9
	37	54.3	12.1	64.7	15.2	75.2	18.7	80.4	20.5	85.6	22.5	96.1	26.7	100	27.9
	39	54.3	12.8	64.7	16.2	75.2	19.9	80.4	21.9	85.6	23.9	96.1	28.4	98.4	28.8
70 (630)	10	47.5	6.45	56.6	7.66	65.8	8.9	70.4	9.6	74.9	10.3	84.1	11.7	93.2	13.1
	12	47.5	6.55	56.6	7.78	65.8	9.1	70.4	9.8	74.9	10.5	84.1	11.9	93.2	13.4
	14	47.5	6.65	56.6	7.91	65.8	9.3	70.4	9.9	74.9	10.7	84.1	12.1	93.2	13.6
	16	47.5	6.76	56.6	8.05	65.8	9.4	70.4	10.1	74.9	10.9	84.1	12.4	93.2	13.9
	18	47.5	6.87	56.6	8.19	65.8	9.6	70.4	10.3	74.9	11.1	84.1	12.6	93.2	14.2
	20	47.5	6.99	56.6	8.34	65.8	9.8	70.4	10.5	74.9	11.3	84.1	12.9	93.2	14.6
	21	47.5	7.05	56.6	8.4	65.8	9.9	70.4	10.6	74.9	11.4	84.1	13.1	93.2	15.1
	23	47.5	7.17	56.6	8.6	65.8	10.1	70.4	11.0	74.9	11.9	84.1	14.0	93.2	16.2
	25	47.5	7.30	56.6	8.9	65.8	10.7	70.4	11.7	74.9	12.7	84.1	14.9	93.2	17.3
	27	47.5	7.71	56.6	9.5	65.8	11.4	70.4	12.5	74.9	13.6	84.1	15.9	93.2	18.5
	29	47.5	8.19	56.6	10.1	65.8	12.2	70.4	13.3	74.9	14.5	84.1	17.0	93.2	19.7
	31	47.5	8.7	56.6	10.7	65.8	13.0	70.4	14.2	74.9	15.4	84.1	18.1	93.2	21.1
	33	47.5	9.2	56.6	11.4	65.8	13.8	70.4	15.1	74.9	16.4	84.1	19.3	93.2	22.5
	35	47.5	9.7	56.6	12.1	65.8	14.6	70.4	16.0	74.9	17.5	84.1	20.6	93.2	23.9
	37	47.5	10.3	56.6	12.8	65.8	15.5	70.4	17.0	74.9	18.6	84.1	21.9	93.2	25.5
	39	47.5	10.9	56.6	13.6	65.8	16.5	70.4	18.1	74.9	19.8	84.1	23.3	93.2	27.2
60 (540)	10	40.7	5.61	48.5	6.59	56.4	7.62	60.3	8.16	64.2	8.7	72.1	9.9	78.9	11.0
	12	40.7	5.69	48.5	6.69	56.4	7.75	60.3	8.30	64.2	8.9	72.1	10.0	78.9	11.2
	14	40.7	5.78	48.5	6.79	56.4	7.88	60.3	8.4	64.2	9.0	72.1	10.2	78.9	11.5
	16	40.7	5.86	48.5	6.90	56.4	8.01	60.3	8.6	64.2	9.2	72.1	10.4	78.9	11.7
	18	40.7	5.95	48.5	7.02	56.4	8.15	60.3	8.7	64.2	9.4	72.1	10.6	78.9	11.9
	20	40.7	6.04	48.5	7.14	56.4	8.30	60.3	8.9	64.2	9.5	72.1	10.8	78.9	12.1
	21	40.7	6.09	48.5	7.20	56.4	8.4	60.3	9.0	64.2	9.6	72.1	10.9	78.9	12.3
	23	40.7	6.19	48.5	7.33	56.4	8.5	60.3	9.2	64.2	9.8	72.1	11.3	78.9	13.0
	25	40.7	6.30	48.5	7.46	56.4	8.9	60.3	9.6	64.2	10.4	72.1	12.1	78.9	13.9
	27	40.7	6.52	48.5	7.91	56.4	9.4	60.3	10.2	64.2	11.1	72.1	12.9	78.9	14.9
	29	40.7	6.91	48.5	8.4	56.4	10.0	60.3	10.9	64.2	11.8	72.1	13.8	78.9	15.8
	31	40.7	7.32	48.5	8.9	56.4	10.7	60.3	11.6	64.2	12.6	72.1	14.6	78.9	16.9
	33	40.7	7.74	48.5	9.4	56.4	11.3	60.3	12.3	64.2	13.4	72.1	15.6	78.9	18.0
	35	40.7	8.19	48.5	10.0	56.4	12.0	60.3	13.1	64.2	14.2	72.1	16.6	78.9	19.1
	37	40.7	8.7	48.5	10.6	56.4	12.7	60.3	13.9	64.2	15.1	72.1	17.6	78.9	20.4
	39	40.7	9.1	48.5	11.2	56.4	13.5	60.3	14.7	64.2	16.0	72.1	18.7	78.9	21.7
50 (450)	10	33.9	4.82	40.4	5.58	47.0	6.39	50.3	6.81	53.5	7.24	60.1	8.13	66.6	9.1
	12	33.9	4.89	40.4	5.66	47.0	6.49	50.3	6.92	53.5	7.35	60.1	8.26	66.6	9.2
	14	33.9	4.95	40.4	5.74	47.0	6.59	50.3	7.03	53.5	7.48	60.1	8.4	66.6	9.4
	16	33.9	5.02	40.4	5.83	47.0	6.69	50.3	7.14	53.5	7.60	60.1	8.6	66.6	9.5
	18	33.9	5.09	40.4	5.92	47.0	6.80	50.3	7.26	53.5	7.73	60.1	8.7	66.6	9.7
	20	33.9	5.16	40.4	6.01	47.0	6.92	50.3	7.39	53.5	7.87	60.1	8.9	66.6	9.9
	21	33.9	5.20	40.4	6.06	47.0	6.97	50.3	7.45	53.5	7.94	60.1	8.9	66.6	10.0
	23	33.9	5.28	40.4	6.16	47.0	7.10	50.3	7.58	53.5	8.08	60.1	9.1	66.6	10.2
	25	33.9	5.36	40.4	6.26	47.0	7.22	50.3	7.74	53.5	8.33	60.1	9.6	66.6	10.9
	27	33.9	5.44	40.4	6.48	47.0	7.62	50.3	8.23	53.5	8.9	60.1	10.2	66.6	11.6
	29	33.9	5.76	40.4	6.87	47.0	8.09	50.3	8.7	53.5	9.4	60.1	10.8	66.6	12.4
	31	33.9	6.08	40.4	7.27	47.0	8.6	50.3	9.3	53.5	10.0	60.1	11.5	66.6	13.2
	33	33.9	6.42	40.4	7.69	47.0	9.1	50.3	9.8	53.5	10.6	60.1	12.2	66.6	14.0
	35	33.9	6.78	40.4	8.13	47.0	9.6	50.3	10.4	53.5	11.2	60.1	13.0	66.6	14.9
	37	33.9	7.15	40.4	8.6	47.0	10.2	50.3	11.0	53.5	11.9	60.1	13.8	66.6	15.8
	39	33.9	7.54	40.4	9.1	47.0	10.8	50.3	11.7	53.5	12.6	60.1	14.6	66.6	16.8

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)
Note1: The above table shows the average value of conditions which may occur.

RXYQ38PAHY1, PAHYL, PHTL [50/60Hz]

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC	14.0°CWB PI	16.0°CWB TC	16.0°CWB PI	18.0°CWB TC	18.0°CWB PI	19.0°CWB TC	19.0°CWB PI	20.0°CWB TC	20.0°CWB PI	22.0°CWB TC	22.0°CWB PI	24.0°CWB TC	24.0°CWB PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130 (1235)	10	93.9	14.0	112	17.1	130	20.3	135	20.7	136	20.3	140	19.5	143	18.6
	12	93.9	14.2	112	17.4	130	20.7	133	20.6	135	20.2	138	19.3	141	19.0
	14	93.9	14.5	112	17.7	130	21.0	131	20.5	133	20.1	136	19.9	140	20.1
	16	93.9	14.8	112	18.1	128	20.9	130	20.7	131	20.8	135	21.0	138	21.2
	18	93.9	15.0	112	18.4	126	21.7	128	21.8	129	21.9	133	22.1	136	22.3
	20	93.9	15.3	112	19.6	124	22.7	126	22.8	128	22.9	131	23.2	135	23.4
	21	93.9	15.8	112	20.3	123	23.2	125	23.4	127	23.5	130	23.7	134	23.9
	23	93.9	16.9	112	21.8	122	24.3	123	24.4	125	24.5	129	24.8	132	25.0
	25	93.9	18.1	112	23.4	120	25.4	122	25.5	123	25.6	127	25.9	130	26.2
	27	93.9	19.3	112	25.0	118	26.4	120	26.6	122	26.7	125	27.0	128	27.3
	29	93.9	20.6	112	26.7	117	27.5	118	27.6	120	27.8	123	28.1	127	28.4
	31	93.9	22.0	111	28.3	115	28.6	116	28.7	118	28.9	122	29.2	125	29.5
	33	93.9	23.4	110	29.3	113	29.7	115	29.8	116	30.0	120	30.3	123	30.6
	35	93.9	24.9	108	30.4	111	30.7	113	30.9	115	31.1	118	31.4	121	31.8
	37	93.9	26.6	106	31.5	110	31.8	111	32.0	113	32.2	116	32.6	120	32.9
	39	93.9	28.3	104	32.5	108	32.9	110	33.1	111	33.3	115	33.7	118	34.1
120 (1140)	10	86.7	12.7	103	15.6	120	18.5	128	20.0	134	20.8	137	20.1	141	19.3
	12	86.7	13.0	103	15.9	120	18.9	128	20.4	133	20.7	136	20.0	139	19.1
	14	86.7	13.2	103	16.2	120	19.2	128	20.8	131	20.6	134	19.8	137	20.0
	16	86.7	13.5	103	16.5	120	19.6	128	20.9	129	20.7	132	20.7	135	21.0
	18	86.7	13.7	103	16.8	120	20.3	126	21.6	127	21.7	130	21.9	134	22.1
	20	86.7	14.0	103	17.5	120	21.8	124	22.7	126	22.8	129	23.0	132	23.2
	21	86.7	14.1	103	18.1	120	22.6	123	23.2	125	23.3	128	23.5	131	23.8
	23	86.7	15.1	103	19.4	120	24.2	121	24.3	123	24.4	126	24.6	129	24.8
	25	86.7	16.1	103	20.7	118	25.2	120	25.3	121	25.5	124	25.7	128	25.9
	27	86.7	17.2	103	22.2	116	26.3	118	26.4	120	26.5	123	26.8	126	27.0
	29	86.7	18.4	103	23.7	115	27.3	116	27.5	118	27.6	121	27.9	124	28.2
	31	86.7	19.6	103	25.3	113	28.4	114	28.5	116	28.7	119	29.0	122	29.3
	33	86.7	20.9	103	27.0	111	29.5	113	29.6	114	29.8	117	30.1	121	30.4
	35	86.7	22.2	103	28.8	109	30.6	111	30.7	113	31.0	116	31.2	119	31.5
	37	86.7	23.6	103	30.6	108	31.6	109	31.8	111	32.0	114	32.3	117	32.6
	39	86.7	25.1	103	32.4	106	32.7	108	32.9	109	33.1	112	33.4	115	33.8
110 (1045)	10	79.4	11.6	94.7	14.1	110	16.7	118	18.1	125	19.5	135	20.7	138	20.0
	12	79.4	11.8	94.7	14.4	110	17.1	118	18.4	125	19.8	133	20.6	136	19.8
	14	79.4	12.0	94.7	14.6	110	17.4	118	18.8	125	20.2	132	20.5	134	19.8
	16	79.4	12.2	94.7	14.9	110	17.7	118	19.2	125	20.6	130	20.7	133	20.9
	18	79.4	12.5	94.7	15.2	110	18.1	118	19.7	125	21.6	128	21.8	131	22.0
	20	79.4	12.7	94.7	15.5	110	19.1	118	21.2	123	22.7	126	22.8	129	23.0
	21	79.4	12.8	94.7	16.0	110	19.8	118	21.9	123	23.2	125	23.4	128	23.6
	23	79.4	13.4	94.7	17.1	110	21.3	118	23.5	121	24.2	124	24.4	127	24.7
	25	79.4	14.3	94.7	18.3	110	22.8	118	25.2	119	25.3	122	25.5	125	25.7
	27	79.4	15.3	94.7	19.5	110	24.3	116	26.2	117	26.4	120	26.6	123	26.8
	29	79.4	16.3	94.7	20.9	110	26.0	114	27.3	116	27.4	119	27.7	121	27.9
	31	79.4	17.4	94.7	22.3	110	27.8	112	28.4	114	28.5	117	28.8	120	29.0
	33	79.4	18.5	94.7	23.7	109	29.3	111	29.4	112	29.6	115	29.9	118	30.1
	35	79.4	19.6	94.7	25.3	108	30.4	109	30.5	110	30.7	113	30.9	116	31.2
	37	79.4	20.9	94.7	26.9	106	31.4	107	31.6	109	31.7	112	32.1	114	32.4
	39	79.4	22.2	94.7	28.7	104	32.5	106	32.7	107	32.8	110	33.2	113	33.5
100 (950)	10	72.2	10.4	86.1	12.7	100	15.0	107	16.2	114	17.4	128	19.9	135	20.6
	12	72.2	10.6	86.1	12.9	100	15.3	107	16.5	114	17.8	128	20.3	134	20.5
	14	72.2	10.8	86.1	13.1	100	15.6	107	16.8	114	18.1	128	20.7	132	20.4
	16	72.2	11.0	86.1	13.4	100	15.9	107	17.2	114	18.5	127	21.0	130	20.7
	18	72.2	11.2	86.1	13.6	100	16.2	107	17.5	114	18.8	126	21.6	126	21.8
	20	72.2	11.4	86.1	13.9	100	16.7	107	18.4	114	20.2	124	22.7	127	22.9
	21	72.2	11.5	86.1	14.0	100	17.3	107	19.0	114	20.9	123	23.2	126	23.4
	23	72.2	11.8	86.1	15.0	100	18.5	107	20.4	114	22.4	121	24.3	124	24.5
	25	72.2	12.6	86.1	16.0	100	19.8	107	21.8	114	24.0	120	25.3	122	25.5
	27	72.2	13.5	86.1	17.1	100	21.1	107	23.3	114	25.7	118	26.4	120	26.6
	29	72.2	14.3	86.1	18.2	100	22.6	107	24.9	114	27.2	116	27.5	119	27.7
	31	72.2	15.3	86.1	19.4	100	24.1	107	26.6	112	28.3	114	28.5	117	28.8
	33	72.2	16.2	86.1	20.7	100	25.7	107	28.4	110	29.4	113	29.6	115	29.9
	35	72.2	17.2	86.1	22.0	100	27.4	107	30.3	108	30.4	111	30.7	114	31.0
	37	72.2	18.3	86.1	23.4	100	29.2	105	31.4	107	31.5	109	31.8	112	32.1
	39	72.2	19.5	86.1	24.9	100	31.1	104	32.4	105	32.6	107	32.9	110	33.2

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC	14.0°CWB PI	16.0°CWB TC	16.0°CWB PI	18.0°CWB TC	18.0°CWB PI	19.0°CWB TC	19.0°CWB PI	20.0°CWB TC	20.0°CWB PI	22.0°CWB TC	22.0°CWB PI	24.0°CWB TC	24.0°CWB PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
90 (855)	10	65.0	9.3	77.5	11.3	90.0	13.3	96.3	14.4	103	15.4	115	17.6	128	19.9
	12	65.0	9.5	77.5	11.5	90.0	13.6	96.3	14.6	103	15.7	115	18.0	128	20.2
	14	65.0	9.7	77.5	11.7	90.0	13.8	96.3	14.9	103	16.0	115	18.3	128	20.6
	16	65.0	9.8	77.5	11.9	90.0	14.1	96.3	15.2	103	16.3	115	18.7	127	21.0
	18	65.0	10.0	77.5	12.1	90.0	14.3	96.3	15.5	103	16.7	115	19.0	126	21.6
	20	65.0	10.2	77.5	12.4	90.0	14.6	96.3	15.8	103	17.3	115	20.5	124	22.7
	21	65.0	10.3	77.5	12.5	90.0	14.9	96.3	16.4	103	17.9	115	21.2	123	23.2
	23	65.0	10.5	77.5	13.0	90.0	15.9	96.3	17.5	103	19.2	115	22.7	121	24.3
	25	65.0	11.0	77.5	13.9	90.0	17.0	96.3	18.7	103	20.5	115	24.3	120	25.3
	27	65.0	11.8	77.5	14.8	90.0	18.2	96.3	20.0	103	21.9	115	26.0	118	26.4
	29	65.0	12.5	77.5	15.8	90.0	19.4	96.3	21.4	103	23.4	114	27.3	116	27.5
	31	65.0	13.3	77.5	16.8	90.0	20.7	96.3	22.8	103	25.0	112	28.3	114	28.5
	33	65.0	14.1	77.5	17.9	90.0	22.0	96.3	24.3	103	26.7	110	29.4	113	29.6
	35	65.0	15.0	77.5	19.0	90.0	23.5	96.3	25.9	103	28.4	109	30.5	111	30.7
	37	65.0	15.9	77.5	20.2	90.0	25.0	96.3	27.6	103	30.3	107	31.5	109	31.8
	39	65.0	16.9	77.5	21.5	90.0	26.6	96.3	29.4	103	32.3	105	32.6	107	32.9
80 (760)	10	57.8	8.30	68.9	9.9	80.0	11.7	85.6	12.6	91.2	13.5	102	15.4	113	17.3
	12	57.8	8.43	68.9	10.1	80.0	11.9	85.6	12.8	91.2	13.7	102	15.7	113	17.7
	14	57.8	8.57	68.9	10.3	80.0	12.1	85.6	13.0	91.2	14.0	102	16.0	113	18.0
	16	57.8	8.71	68.9	10.5	80.0	12.3	85.6	13.3	91.2	14.3	102	16.3	113	18.4
	18	57.8	8.86	68.9	10.7	80.0	12.6	85.6	13.5	91.2	14.5	102	16.6	113	18.7
	20	57.8	9.02	68.9	10.9	80.0	12.8	85.6	13.8	91.2	14.8	102	17.2	113	20.0
	21	57.8	9.10	68.9	11.0	80.0	12.9	85.6	13.9	91.2	15.1	102	17.8	113	20.7
	23	57.8	9.3	68.9	11.2	80.0	13.6	85.6	14.9	91.2	16.2	102	19.1	113	22.2
	25	57.8	9.6	68.9	11.9	80.0	14.5	85.6	15.9	91.2	17.3	102	20.4	113	23.8
	27	57.8	10.2	68.9	12.7	80.0	15.4	85.6	16.9	91.2	18.5	102	21.8	113	25.5
	29	57.8	10.8	68.9	13.5	80.0	16.5	85.6	18.1	91.2	19.7	102	23.3	113	27.2
	31	57.8	11.5	68.9	14.3	80.0	17.5	85.6	19.3	91.2	21.1	102	24.9	112	28.3
	33	57.8	12.2	68.9	15.2	80.0	18.7	85.6	20.5	91.2	22.4	102	26.6	110	29.4
	35	57.8	12.9	68.9	16.2	80.0	19.9	85.6	21.8	91.2	23.9	102	28.3	108	30.4
	37	57.8	13.7	68.9	17.2	80.0	21.1	85.6	23.2	91.2	25.4	102	30.2	106	31.5
	39	57.8	14.5	68.9	18.3	80.0	22.4	85.6	24.7	91.2	27.1	102	32.1	105	32.6
70 (665)	10	50.5	7.29	60.3	8.66	70.0	10.1	74.9	10.9	79.8	11.6	89.5	13.2	99.3	14.9
	12	50.5	7.41	60.3	8.80	70.0	10.3	74.9	11.1	79.8	11.8	89.5	13.5	99.3	15.1
	14	50.5	7.52	60.3	8.95	70.0	10.5	74.9	11.2	79.8	12.1	89.5	13.7	99.3	15.4
	16	50.5	7.64	60.3	9.10	70.0	10.7	74.9	11.5	79.8	12.3	89.5	14.0	99.3	15.7
	18	50.5	7.77	60.3	9.3	70.0	10.8	74.9	11.7	79.8	12.5	89.5	14.2	99.3	16.0
	20	50.5	7.90	60.3	9.4	70.0	11.1	74.9	11.9	79.8	12.8	89.5	14.5	99.3	16.5
	21	50.5	7.97	60.3	9.5	70.0	11.2	74.9	12.0	79.8	12.9	89.5	14.8	99.3	17.1
	23	50.5	8.10	60.3	9.7	70.0	11.4	74.9	12.4	79.8	13.5	89.5	15.8	99.3	18.3
	25	50.5	8.25	60.3	10.1	70.0	12.1	74.9	13.3	79.8	14.4	89.5	16.9	99.3	19.6
	27	50.5	8.72	60.3	10.7	70.0	12.9	74.9	14.1	79.8	15.4	89.5	18.0	99.3	20.9
	29	50.5	9.3	60.3	11.4	70.0	13.8	74.9	15.1	79.8	16.4	89.5	19.2	99.3	22.3
	31	50.5	9.8	60.3	12.1	70.0	14.7	74.9	16.0	79.8	17.5	89.5	20.5	99.3	23.8
	33	50.5	10.4	60.3	12.9	70.0	15.6	74.9	17.0	79.8	18.6	89.5	21.9	99.3	25.4
	35	50.5	11.0	60.3	13.6	70.0	16.6	74.9	18.1	79.8	19.8	89.5	23.3	99.3	27.1
	37	50.5	11.7	60.3	14.5	70.0	17.6	74.9	19.3	79.8	21.0	89.5	24.8	99.3	28.8
	39	50.5	12.3	60.3	15.3	70.0	18.7	74.9	20.5	79.8	22.3	89.5	26.4	99.3	30.7
60 (570)	10	43.3	6.35	51.7	7.45	60.0	8.62	64.2	9.2	68.4	9.9	76.7	11.1	85.1	12.5
	12	43.3	6.53	51.7	7.56	60.0	8.76	64.2	9.4	68.4	10.0	76.7	11.3	85.1	12.7
	14	43.3	6.53	51.7	7.68	60.0	8.91	64.2	9.5	68.4	10.2	76.7	11.5	85.1	13.0
	16	43.3	6.73	51.7	7.81	60.0	9.06	64.2	9.7	68.4	10.4	76.7	11.8	85.1	13.2
	18	43.3	6.73	51.7	7.94	60.0	9.2	64.2	9.9	68.4	10.6	76.7	12.0	85.1	13.5
	20	43.3	6.83	51.7	8.07	60.0	9.4	64.2	10.1	68.4	10.8	76.7	12.2	85.1	13.7
	21	43.3	6.89	51.7	8.14	60.0	9.5	64.2	10.2	68.4	10.9	76.7	12.3	85.1	13.9
	23	43.3	7.00	51.7	8.28	60.0	9.6	64.2	10.4	68.4	11.1	76.7	12.8	85.1	14.7
	25	43.3	7.12	51.7	8.43	60.0	10.0	64.2	10.9	68.4	11.8	76.7	13.7	85.1	15.7
	27	43.3	7.38	51.7	8.94	60.0	10.7	64.2	11.6	68.4	12.5	76.7	14.6	85.1	16.8
	29	43.3	7.82	51.7	9.5	60.0	11.3	64.2	12.0	68.4	13.4	76.7	15.5	85.1	17.9
	31	43.3	8.28	51.7	10.1	60.0	12.0	64.2	13.1	68.4	14.2	76.7	16.6	85.1	19.1
	33	43.3	8.76	51.7	10.7	60.0	12.8	64.2	13.9	68.4	15.1	76.7	17.6	85.1	20.3
	35	43.3	9.3	51.7	11.3	60.0	13.6	64.2	14.8	68.4	16.0	76.7	18.7	85.1	21.6
	37	43.3	9.8	51.7	12.0	60.0	14.4	64.2	15.7	68.4	17.0	76.7	19.9	85.1	23.0
	39	43.3	10.3	51.7	12.7	60.0	15.2	64.2	16.6	68.4	18.1	76.7	21.2	85.1	24.5
50 (475)	10	36.1	5.45	43.1	6.31	50.0	7.22	53.5	7.70	57.0	8.18	63.9	9.2	70.9	10.2
	12	36.1	5.52	43.1	6.40	50.0	7.33	53.5	7.82	57.0	8.32	63.9	9.3	70.9	10.4
	14	36.1	5.60	43.1	6.49	50.0	7.45	53.5	7.94	57.0	8.45	63.9	9.5	70.9	10.6
	16	36.1	5.67	43.1	6.59	50.0	7.57	53.5	8.07	57.0	8.59	63.9	9.7	70.9	10.8
	18	36.1	5.75	43.1	6.69	50.0	7.69	53.5	8.21	57.0	8.74	63.9	9.8	70.9	11.0
	20	36.1	5.83	43.1	6.80	50.0	7.82	53.5	8.35	57.0	8.90	63.9	10.0	70.9	11.2
	21	36.1	5.88	43.1	6.85	50.0	7.88	53.5	8.42	57.0	8.98	63.9	10.1	70.9	11.3
	23	36.1	5.96	43.1	6.96	50.0	8.02	53.5	8.57	57.0	9.1	63.9	10.3	70.9	11.6
	25	36.1	6.06	43.1	7.08	50.0	8.16	53.5	8.75	57.0	9.44	63.9	10.8	70.9	12.3
	27	36.1	6.15	43.1	7.33	50.0	8.62	53.5	9.3	57.0	10.0	63.9	11.5	70.9	13.1
	29	36.1	6.51	43.1	7.77	50.0	9.1	53.5	9.9	57.0	10.6	63.9	12.3	70.9	14.0
	31	36.1	6.88	43.1	8.22	50.0	9.7	53.5	10.5	57.0	11.3	63.9	13.0	70.9	14.9
	33	36.1	7.26	43.1	8.70	50.0	10.3	53.5	11.1	57.0	12.0	63.9	13.8	70.9	15.8
	35	36.1	7.66	43.1	9.2	50.0	10.9	53.5	11.8	57.0	12.7	63.9	14.7	70.9	16.8
	37	36.1	8.08	43.1	9.7	50.0	11.5	53.5	12.5	57.0	13.5	63.9	15.6	70.9	17.9
	39	36.1	8.52	43.1	10.3	50.0	12.2	53.5	13.2	57.0	14.3	63.9	16.5	70.9	19.0

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)
Note1: The above table shows the average value of conditions which may occur.

RXYQ40PAHY1, PAHYL, PHTL [50/60Hz]

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC	14.0°CWB PI	16.0°CWB TC	16.0°CWB PI	18.0°CWB TC	18.0°CWB PI	19.0°CWB TC	19.0°CWB PI	20.0°CWB TC	20.0°CWB PI	22.0°CWB TC	22.0°CWB PI	24.0°CWB TC	24.0°CWB PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130 (1300)	10	98.3	14.8	117	18.1	136	21.5	141	22.0	143	21.5	146	20.6	150	19.7
	12	98.3	15.1	117	18.4	136	21.9	139	21.9	141	21.4	145	20.5	148	20.2
	14	98.3	15.3	117	18.8	136	22.2	137	21.7	139	21.3	143	21.1	146	21.3
	16	98.3	15.6	117	19.2	134	22.1	136	21.9	137	22.0	141	22.3	144	22.5
	18	98.3	15.9	117	19.5	132	22.9	134	23.1	136	23.2	139	23.4	143	23.6
	20	98.3	16.3	117	20.8	130	24.1	132	24.2	134	24.3	137	24.5	141	24.8
	21	98.3	16.7	117	21.6	129	24.6	131	24.7	133	24.9	136	25.1	140	25.4
	23	98.3	17.9	117	23.1	127	25.7	129	25.9	131	26.0	135	26.3	138	26.5
	25	98.3	19.1	117	24.7	126	26.9	127	27.0	129	27.1	133	27.4	136	27.7
	27	98.3	20.4	117	26.5	124	28.0	126	28.1	127	28.3	131	28.6	134	28.9
	29	98.3	21.8	117	28.3	122	29.1	124	29.3	126	29.4	129	29.8	133	30.1
	31	98.3	23.3	117	29.9	120	30.3	122	30.4	124	30.6	127	30.9	131	31.3
	33	98.3	24.8	115	31.1	118	31.4	120	31.6	122	31.8	125	32.1	129	32.5
	35	98.3	26.4	113	32.2	117	32.6	118	32.8	120	32.9	124	33.3	127	33.7
	37	98.3	28.1	111	33.3	115	33.7	116	33.9	118	34.1	122	34.5	125	34.9
	39	98.3	29.9	109	34.5	113	34.9	115	35.1	116	35.3	120	35.7	124	36.1
120 (1200)	10	90.7	13.5	108	16.5	126	19.6	134	21.2	141	22.1	144	21.3	147	20.4
	12	90.7	13.8	108	16.8	126	20.0	134	21.6	139	22.0	142	21.1	145	20.3
	14	90.7	14.0	108	17.1	126	20.4	134	22.0	137	21.9	140	21.0	143	21.2
	16	90.7	14.3	108	17.5	126	20.8	133	22.2	135	21.9	138	22.1	140	22.3
	18	90.7	14.5	108	17.8	126	21.5	132	22.9	133	23.0	137	23.2	140	23.4
	20	90.7	14.8	108	18.5	126	23.1	130	24.0	131	24.1	135	24.4	138	24.6
	21	90.7	15.0	108	19.2	126	23.9	129	24.6	131	24.7	134	24.9	137	25.2
	23	90.7	16.0	108	20.5	125	25.6	127	25.7	129	25.8	132	26.1	135	26.3
	25	90.7	17.1	108	22.0	124	26.7	125	26.8	127	27.0	130	27.2	133	27.5
	27	90.7	18.3	108	23.5	122	27.8	123	28.0	125	28.1	128	28.4	132	28.7
	29	90.7	19.5	108	25.1	120	29.0	122	29.1	123	29.2	127	29.5	130	29.8
	31	90.7	20.8	108	26.8	118	30.1	120	30.2	121	30.4	125	30.7	128	31.0
	33	90.7	22.1	108	28.6	116	31.2	118	31.4	120	31.5	123	31.9	126	32.2
	35	90.7	23.5	108	30.5	115	32.4	116	32.5	118	32.7	121	33.0	124	33.4
	37	90.7	25.0	108	32.5	113	33.5	114	33.7	116	33.9	119	34.2	123	34.6
	39	90.7	26.6	108	34.3	113	34.7	113	34.9	114	35.0	117	35.4	121	35.8
110 (1100)	10	83.1	12.3	99	14.9	115	17.7	123	19.2	129	20.6	141	21.9	144	21.1
	12	83.1	12.5	99	15.2	115	18.1	123	19.5	131	21.0	140	21.8	143	21.0
	14	83.1	12.7	99	15.5	115	18.4	123	19.9	131	21.4	138	21.7	141	21.0
	16	83.1	12.9	99	15.8	115	18.8	123	20.3	131	21.8	136	22.0	139	22.1
	18	83.1	13.2	99	16.1	115	19.1	123	20.9	131	22.9	134	23.1	137	23.3
	20	83.1	13.5	99	16.4	115	20.3	123	22.4	129	24.0	132	24.2	135	24.4
	21	83.1	13.6	99	16.9	115	21.0	123	23.2	128	24.6	131	24.8	134	25.0
	23	83.1	14.2	99	18.1	115	22.5	123	24.9	127	25.7	130	25.9	133	26.1
	25	83.1	15.2	99	19.4	115	24.1	123	26.7	125	26.8	128	27.0	131	27.3
	27	83.1	16.2	99	20.7	115	25.8	121	27.8	123	27.9	126	28.2	129	28.4
	29	83.1	17.3	99	22.1	115	27.6	120	28.9	121	29.1	124	29.3	127	29.6
	31	83.1	18.4	99	23.6	115	29.4	118	30.0	119	30.2	122	30.5	125	30.7
	33	83.1	19.6	99	25.1	114	31.0	116	31.2	117	31.3	120	31.6	123	31.9
	35	83.1	20.8	99	26.8	113	32.2	114	32.3	116	32.5	119	32.8	122	33.1
	37	83.1	22.1	99	28.5	111	33.3	112	33.5	114	33.6	117	34.0	120	34.3
	39	83.1	23.5	99	30.4	109	34.4	110	34.6	112	34.8	115	35.1	118	35.5
100 (1000)	10	75.6	11.1	90.2	13.4	105	15.9	112	17.2	119	18.5	134	21.1	142	21.8
	12	75.6	11.3	90.2	13.7	105	16.2	112	17.5	119	18.8	134	21.5	140	21.7
	14	75.6	11.5	90.2	13.9	105	16.5	112	17.8	119	19.2	134	21.9	138	21.6
	16	75.6	11.7	90.2	14.2	105	16.8	112	18.2	119	19.5	133	22.2	136	22.0
	18	75.6	11.9	90.2	14.4	105	17.1	112	18.5	119	19.9	132	22.9	134	23.1
	20	75.6	12.1	90.2	14.7	105	17.7	112	19.5	119	21.4	130	24.0	132	24.2
	21	75.6	12.2	90.2	14.9	105	18.3	112	20.2	119	22.1	129	24.6	132	24.8
	23	75.6	12.5	90.2	15.9	105	19.6	112	21.6	119	23.7	127	25.7	130	25.9
	25	75.6	13.4	90.2	17.0	105	21.0	112	23.1	119	25.4	125	26.8	128	27.0
	27	75.6	14.3	90.2	18.1	105	22.4	112	24.7	119	27.2	123	28.0	126	28.2
	29	75.6	15.2	90.2	19.3	105	23.9	112	26.4	119	28.9	122	29.1	124	29.3
	31	75.6	16.2	90.2	20.6	105	25.5	112	28.2	117	30.0	120	30.2	122	30.5
	33	75.6	17.2	90.2	21.9	105	27.2	112	30.1	115	31.1	118	31.4	121	31.6
	35	75.6	18.3	90.2	23.3	105	29.0	112	32.1	113	32.2	116	32.5	119	32.8
	37	75.6	19.4	90.2	24.8	105	30.9	110	33.2	112	33.4	114	33.7	117	34.0
	39	75.6	20.6	90.2	26.4	105	32.9	108	34.4	110	34.5	112	34.8	115	35.2

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC	14.0°CWB PI	16.0°CWB TC	16.0°CWB PI	18.0°CWB TC	18.0°CWB PI	19.0°CWB TC	19.0°CWB PI	20.0°CWB TC	20.0°CWB PI	22.0°CWB TC	22.0°CWB PI	24.0°CWB TC	24.0°CWB PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
90 (900)	10	68.0	9.9	81.1	11.9	94.2	14.1	101	15.2	107	16.4	120	18.7	134	21.1
	12	68.0	10.1	81.1	12.2	94.2	14.4	101	15.5	107	16.7	120	19.0	134	21.5
	14	68.0	10.2	81.1	12.4	94.2	14.6	101	15.8	107	17.0	120	19.4	134	21.9
	16	68.0	10.4	81.1	12.6	94.2	14.9	101	16.1	107	17.3	120	19.8	133	22.2
	18	68.0	10.6	81.1	12.8	94.2	15.2	101	16.4	107	17.6	120	20.2	132	22.9
	20	68.0	10.8	81.1	13.1	94.2	15.5	101	16.7	107	18.3	120	20.8	130	24.0
	21	68.0	10.9	81.1	13.2	94.2	15.8	101	17.3	107	19.0	120	22.5	129	24.6
	23	68.0	11.1	81.1	13.8	94.2	16.9	101	18.6	107	20.3	120	24.1	127	25.7
	25	68.0	11.7	81.1	14.7	94.2	18.0	101	19.8	107	21.7	120	25.8	125	26.8
	27	68.0	12.5	81.1	15.7	94.2	19.3	101	21.2	107	23.2	120	27.6	123	28.0
	29	68.0	13.3	81.1	16.7	94.2	20.6	101	22.6	107	24.8	119	28.9	122	29.1
	31	68.0	14.1	81.1	17.8	94.2	21.9	101	24.1	107	26.5	117	30.0	120	30.2
	33	68.0	15.0	81.1	18.9	94.2	23.3	101	25.7	107	28.2	115	31.1	118	31.4
	35	68.0	15.9	81.1	20.1	94.2	24.9	101	27.4	107	30.1	114	32.3	116	32.5
	37	68.0	16.9	81.1	21.4	94.2	26.5	101	29.2	107	32.1	112	33.4	114	33.7
	39	68.0	17.9	81.1	22.7	94.2	28.2	101	31.1	107	34.2	110	34.5	112	34.8
80 (800)	10	60.5	8.8	72.1	10.5	83.8	12.4	89.6	13.3	95.4	14.3	107	16.3	119	18.4
	12	60.5	8.9	72.1	10.7	83.8	12.6	89.6	13.6	95.4	14.6	107	16.6	119	18.7
	14	60.5	9.1	72.1	10.9	83.8	12.8	89.6	13.8	95.4	14.8	107	16.9	119	19.1
	16	60.5	9.2	72.1	11.1	83.8	13.1	89.6	14.1	95.4	15.1	107	17.3	119	19.4
	18	60.5	9.4	72.1	11.3	83.8	13.3	89.6	14.3	95.4	15.4	107	17.6	119	19.8
	20	60.5	9.6	72.1	11.5	83.8	13.6	89.6	14.6	95.4	15.7	107	18.2	119	21.2
	21	60.5	9.6	72.1	11.6	83.8	13.7	89.6	14.8	95.4	16.0	107	18.9	119	22.0
	23	60.5	9.8	72.1	11.8	83.8	14.4	89.6	15.7	95.4	17.2	107	20.2	119	23.6
	25	60.5	10.1	72.1	12.6	83.8	15.3	89.6	16.8	95.4	18.4	107	21.7	119	25.2
	27	60.5	10.8	72.1	13.4	83.8	16.4	89.6	17.9	95.4	19.6	107	23.1	119	27.0
	29	60.5	11.5	72.1	14.3	83.8	17.4	89.6	19.1	95.4	20.9	107	24.7	119	28.8
	31	60.5	12.2	72.1	15.2	83.8	18.6	89.6	20.4	95.4	22.3	107	26.4	119	30.0
	33	60.5	12.9	72.1	16.2	83.8	19.8	89.6	21.7	95.4	23.8	107	28.1	115	31.1
	35	60.5	13.7	72.1	17.2	83.8	21.0	89.6	23.1	95.4	25.3	107	30.0	113	32.2
	37	60.5	14.5	72.1	18.2	83.8	22.4	89.6	24.6	95.4	26.9	107	32.0	111	33.4
	39	60.5	15.4	72.1	19.3	83.8	23.8	89.6	26.2	95.4	28.7	107	34.1	110	34.5
70 (700)	10	52.9	7.73	63.1	9.2	73.3	10.7	78.4	11.5	83.5	12.3	93.7	14.0	104	15.7
	12	52.9	7.85	63.1	9.3	73.3	10.9	78.4	11.7	83.5	12.5	93.7	14.3	104	16.0
	14	52.9	7.97	63.1	9.5	73.3	11.1	78.4	11.9	83.5	12.8	93.7	14.5	104	16.3
	16	52.9	8.10	63.1	9.6	73.3	11.3	78.4	12.1	83.5	13.0	93.7	14.8	104	16.7
	18	52.9	8.23	63.1	9.8	73.3	11.5	78.4	12.4	83.5	13.3	93.7	15.1	104	17.0
	20	52.9	8.37	63.1	10.0	73.3	11.7	78.4	12.6	83.5	13.5	93.7	15.4	104	17.5
	21	52.9	8.44	63.1	10.1	73.3	11.8	78.4	12.7	83.5	13.6	93.7	15.6	104	18.1
	23	52.9	8.6	63.1	10.3	73.3	12.1	78.4	13.2	83.5	14.3	93.7	16.7	104	19.4
	25	52.9	8.7	63.1	10.7	73.3	12.9	78.4	14.0	83.5	15.3	93.7	17.9	104	20.7
	27	52.9	9.2	63.1	11.4	73.3	13.7	78.4	15.0	83.5	16.3	93.7	19.1	104	22.1
	29	52.9	9.8	63.1	12.1	73.3	14.6	78.4	15.9	83.5	17.4	93.7	20.4	104	23.6
	31	52.9	10.4	63.1	12.8	73.3	15.5	78.4	17.0	83.5	18.5	93.7	21.7	104	25.2
	33	52.9	11.0	63.1	13.6	73.3	16.5	78.4	18.1	83.5	19.7	93.7	23.1	104	26.9
	35	52.9	11.7	63.1	14.4	73.3	17.5	78.4	19.2	83.5	20.9	93.7	24.7	104	28.7
	37	52.9	12.4	63.1	15.3	73.3	18.6	78.4	20.4	83.5	22.3	93.7	26.2	104	30.6
	39	52.9	13.1	63.1	16.2	73.3	19.8	78.4	21.7	83.5	23.7	93.7	27.9	104	32.5
60 (600)	10	45.4	6.72	54.1	7.89	62.8	9.1	67.2	9.8	71.6	10.4	80.3	11.8	89.0	13.2
	12	45.4	6.82	54.1	8.01	62.8	9.3	67.2	9.9	71.6	10.6	80.3	12.0	89.0	13.5
	14	45.4	6.92	54.1	8.14	62.8	9.4	67.2	10.1	71.6	10.8	80.3	12.2	89.0	13.7
	16	45.4	7.02	54.1	8.27	62.8	9.6	67.2	10.3	71.6	11.0	80.3	12.5	89.0	14.0
	18	45.4	7.13	54.1	8.41	62.8	9.8	67.2	10.5	71.6	11.2	80.3	12.7	89.0	14.2
	20	45.4	7.24	54.1	8.55	62.8	9.9	67.2	10.7	71.6	11.4	80.3	12.9	89.0	14.5
	21	45.4	7.30	54.1	8.6	62.8	10.0	67.2	10.8	71.6	11.5	80.3	13.1	89.0	14.7
	23	45.4	7.42	54.1	8.8	62.8	10.2	67.2	11.0	71.6	11.7	80.3	13.6	89.0	15.6
	25	45.4	7.54	54.1	8.9	62.8	10.6	67.2	11.5	71.6	12.5	80.3	14.5	89.0	16.7
	27	45.4	7.82	54.1	9.5	62.8	11.3	67.2	12.3	71.6	13.3	80.3	15.5	89.0	17.8
	29	45.4	8.28	54.1	10.1	62.8	12.0	67.2	13.1	71.6	14.1	80.3	16.5	89.0	19.0
	31	45.4	8.8	54.1	10.7	62.8	12.8	67.2	13.9	71.6	15.0	80.3	17.5	89.0	20.2
	33	45.4	9.3	54.1	11.3	62.8	13.5	67.2	14.7	71.6	16.0	80.3	18.7	89.0	21.5
	35	45.4	9.8	54.1	12.0	62.8	14.4	67.2	15.6	71.6	17.0	80.3	19.8	89.0	22.9
	37	45.4	10.4	54.1	12.7	62.8	15.2	67.2	16.6	71.6	18.0	80.3	21.1	89.0	24.4
	39	45.4	10.9	54.1	13.4	62.8	16.2	67.2	17.6	71.6	19.1	80.3	22.4	89.0	25.9
50 (500)	10	37.8	5.78	45.1	6.69	52.4	7.65	56.0	8.15	59.6	8.7	66.9	9.7	74.2	10.8
	12	37.8	5.85	45.1	6.78	52.4	7.77	56.0	8.28	59.6	8.8	66.9	9.9	74.2	11.0
	14	37.8	5.93	45.1	6.88	52.4	7.89	56.0	8.42	59.6	9.0	66.9	10.1	74.2	11.2
	16	37.8	6.01	45.1	6.98	52.4	8.02	56.0	8.55	59.6	9.1	66.9	10.2	74.2	11.4
	18	37.8	6.09	45.1	7.09	52.4	8.15	56.0	8.7	59.6	9.3	66.9	10.4	74.2	11.6
	20	37.8	6.18	45.1	7.20	52.4	8.28	56.0	8.8	59.6	9.4	66.9	10.6	74.2	11.9
	21	37.8	6.23	45.1	7.26	52.4	8.35	56.0	8.9	59.6	9.5	66.9	10.7	74.2	12.0
	23	37.8	6.32	45.1	7.38	52.4	8.50	56.0	9.1	59.6	9.7	66.9	10.9	74.2	12.3
	25	37.8	6.42	45.1	7.50	52.4	8.7	56.0	9.3	59.6	10.0	66.9	11.5	74.2	13.1
	27	37.8	6.52	45.1	7.77	52.4	9.1	56.0	9.9	59.6	10.6	66.9	12.2	74.2	13.9
	29	37.8	6.90	45.1	8.23	52.4	9.7	56.0	10.5	59.6	11.3	66.9	13.0	74.2	14.8
	31	37.8	7.29	45.1	8.7	52.4	10.3	56.0	11.1	59.6	12.0	66.9	13.8	74.2	15.8
	33	37.8	7.69	45.1	9.2	52.4	10.9	56.0	11.8	59.6	12.7	66.9	14.7	74.2	16.8
	35	37.8	8.12	45.1	9.7	52.4	11.5	56.0	12.5	59.6	13.5	66.9	15.6	74.2	17.8
	37	37.8	8.56	45.1	10.3	52.4	12.2	56.0	13.2	59.6	14.3	66.9	16.5	74.2	18.9
	39	37.8	9.0	45.1	10.9	52.4	12.9	56.0	14.0	59.6	15.1	66.9	17.5	74.2	20.1

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)
Note1: The above table shows the average value of conditions which may occur.

RXYQ42PAHY1, PAHYL, PHTL [50/60Hz]

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC	14.0°CWB PI	16.0°CWB TC	16.0°CWB PI	18.0°CWB TC	18.0°CWB PI	19.0°CWB TC	19.0°CWB PI	20.0°CWB TC	20.0°CWB PI	22.0°CWB TC	22.0°CWB PI	24.0°CWB TC	24.0°CWB PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130 (1365)	10	102	15.8	121	19.3	141	23.0	146	23.5	148	23.0	152	22.0	155	21.0
	12	102	16.1	121	19.7	141	23.4	144	23.4	146	22.9	150	21.9	153	21.5
	14	102	16.4	121	20.1	140	23.7	142	23.2	144	22.7	148	22.6	151	22.8
	16	102	16.7	121	20.5	139	23.6	140	23.4	142	23.6	146	23.8	150	24.0
	18	102	17.0	121	20.9	137	24.5	139	24.6	140	24.8	144	25.0	148	25.2
	20	102	17.4	121	22.2	135	25.7	137	25.8	138	26.0	142	26.2	146	26.5
	21	102	17.9	121	23.0	134	26.3	136	26.4	138	26.6	141	26.8	145	27.1
	23	102	19.1	121	24.7	132	27.5	134	27.6	136	27.8	139	28.1	143	28.3
	25	102	20.4	121	26.4	130	28.7	132	28.9	134	29.0	137	29.3	141	29.6
	27	102	21.8	121	28.3	128	29.9	130	30.1	132	30.2	136	30.5	139	30.9
	29	102	23.3	121	30.2	126	31.1	128	31.3	130	31.5	134	31.8	137	32.1
	31	102	24.9	121	32.0	124	32.3	126	32.5	128	32.7	132	33.1	135	33.4
	33	102	26.5	119	33.2	123	33.6	124	33.8	126	33.9	130	34.3	134	34.7
	35	102	28.2	117	34.4	121	34.8	123	35.0	124	35.2	128	35.6	132	36.0
	37	102	30.1	115	35.6	119	36.0	121	36.2	122	36.5	126	36.9	130	37.3
	39	102	32.0	113	36.8	117	37.3	119	37.5	121	37.7	124	38.2	128	38.6
120 (1260)	10	93.9	14.4	112	17.6	130	21.0	139	22.7	146	23.6	149	22.7	152	21.8
	12	93.9	14.7	112	18.0	130	21.4	139	23.1	144	23.5	147	22.6	151	21.7
	14	93.9	15.0	112	18.3	130	21.8	139	23.5	142	23.4	145	22.4	149	22.6
	16	93.9	15.3	112	18.7	130	22.2	138	23.7	140	23.4	143	23.6	147	23.8
	18	93.9	15.5	112	19.0	130	23.0	136	24.5	138	24.6	141	24.8	145	25.0
	20	93.9	15.9	112	19.8	130	24.7	134	25.7	136	25.8	138	26.0	143	26.0
	21	93.9	16.0	112	20.5	130	25.6	134	26.3	135	26.4	139	26.6	142	26.9
	23	93.9	17.1	112	21.9	130	27.4	132	27.5	133	27.6	137	27.9	140	28.1
	25	93.9	18.3	112	23.5	128	28.5	130	28.7	131	28.8	135	29.1	138	29.4
	27	93.9	19.5	112	25.1	126	29.7	128	29.9	130	30.0	133	30.3	136	30.6
	29	93.9	20.8	112	26.8	124	30.9	126	31.1	128	31.3	130	31.6	134	31.9
	31	93.9	22.2	112	28.6	122	32.2	124	32.3	126	32.5	129	32.8	133	33.1
	33	93.9	23.6	112	30.5	121	33.4	122	33.5	124	33.7	127	34.1	131	34.4
	35	93.9	25.1	112	32.6	119	34.6	120	34.8	122	34.9	125	35.3	129	35.7
	37	93.9	26.8	112	34.7	117	35.8	119	36.0	120	36.2	124	36.6	127	37.0
	39	93.9	28.5	111	36.6	115	37.0	117	37.2	118	37.4	122	37.8	125	38.2
110 (1155)	10	86.1	13.1	103	16.0	119	19.0	128	20.5	136	22.0	146	22.0	146	22.6
	12	86.1	13.3	103	16.3	119	19.3	128	20.9	136	22.5	145	23.3	148	22.4
	14	86.1	13.6	103	16.6	119	19.7	128	21.3	136	22.9	143	23.2	146	22.4
	16	86.1	13.8	103	16.9	119	20.1	128	21.7	136	23.3	141	23.5	144	23.6
	18	86.1	14.1	103	17.2	119	20.5	128	22.3	136	24.5	139	24.7	142	24.9
	20	86.1	14.4	103	17.6	119	21.7	128	23.9	134	25.6	137	25.9	140	26.1
	21	86.1	14.5	103	18.1	119	22.5	128	24.8	133	26.2	136	26.5	139	26.7
	23	86.1	15.2	103	19.4	119	24.1	128	26.6	131	27.4	134	27.7	137	27.9
	25	86.1	16.2	103	20.7	119	25.8	128	28.5	129	28.6	132	28.9	135	29.1
	27	86.1	17.3	103	22.1	119	27.6	126	29.7	127	29.8	130	30.1	133	30.4
	29	86.1	18.4	103	23.6	119	29.4	124	30.9	125	31.0	128	31.3	132	31.6
	31	86.1	19.6	103	25.2	119	31.4	122	32.1	123	32.3	127	32.6	130	32.9
	33	86.1	20.9	103	26.9	119	33.2	120	33.3	122	33.5	125	33.8	128	34.1
	35	86.1	22.2	103	28.6	117	34.4	118	34.5	120	34.7	123	35.0	126	35.4
	37	86.1	23.7	103	30.5	115	35.6	116	35.8	118	35.9	121	36.3	124	36.6
	39	86.1	25.1	103	32.4	113	36.8	114	37.0	116	37.2	119	37.5	122	37.9
100 (1050)	10	78.3	11.8	93.4	14.3	108	17.0	116	18.3	124	19.7	139	22.6	147	23.3
	12	78.3	12.0	93.4	14.6	108	17.3	116	18.7	124	20.1	139	23.0	145	23.2
	14	78.3	12.2	93.4	14.9	108	17.6	116	19.0	124	20.5	139	23.4	143	23.1
	16	78.3	12.5	93.4	15.1	108	18.0	116	19.4	124	20.9	138	23.7	141	23.5
	18	78.3	12.7	93.4	15.4	108	18.3	116	19.8	124	21.3	136	24.5	139	24.7
	20	78.3	12.9	93.4	15.7	108	18.9	116	20.8	124	22.8	134	25.7	137	25.9
	21	78.3	13.1	93.4	15.9	108	19.5	116	21.5	124	23.6	133	26.3	136	26.5
	23	78.3	13.4	93.4	17.0	108	20.9	116	23.1	124	25.3	132	27.5	134	27.7
	25	78.3	14.3	93.4	18.1	108	22.4	116	24.7	124	27.1	130	28.7	132	28.9
	27	78.3	15.2	93.4	19.3	108	23.9	116	26.4	124	29.0	128	29.9	131	30.1
	29	78.3	16.2	93.4	20.6	108	25.6	116	28.2	123	30.8	126	31.1	129	31.3
	31	78.3	17.3	93.4	22.0	108	27.3	116	30.1	121	32.0	124	32.3	127	32.6
	33	78.3	18.4	93.4	23.4	108	29.1	116	32.2	119	33.2	122	33.5	125	33.8
	35	78.3	19.5	93.4	24.9	108	31.0	116	34.3	117	34.5	120	34.8	123	35.1
	37	78.3	20.7	93.4	26.5	108	33.0	114	35.5	116	35.7	118	36.0	121	36.3
	39	78.3	22.0	93.4	28.2	108	35.2	112	36.7	114	36.9	116	37.2	119	37.6

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC	14.0°CWB PI	16.0°CWB TC	16.0°CWB PI	18.0°CWB TC	18.0°CWB PI	19.0°CWB TC	19.0°CWB PI	20.0°CWB TC	20.0°CWB PI	22.0°CWB TC	22.0°CWB PI	24.0°CWB TC	24.0°CWB PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
90 (945)	10	70.5	10.6	84.0	12.8	97.6	15.1	104	16.3	111	17.5	125	20.0	138	22.5
	12	70.5	10.8	84.0	13.0	97.6	15.3	104	16.6	111	17.8	125	20.3	138	22.9
	14	70.5	10.9	84.0	13.2	97.6	15.6	104	16.9	111	18.1	125	20.7	138	23.4
	16	70.5	11.1	84.0	13.5	97.6	15.9	104	17.2	111	18.5	125	21.1	138	23.7
	18	70.5	11.3	84.0	13.7	97.6	16.2	104	17.5	111	18.9	125	21.6	136	24.5
	20	70.5	11.5	84.0	14.0	97.6	16.6	104	17.9	111	19.6	125	23.2	134	25.7
	21	70.5	11.7	84.0	14.1	97.6	16.8	104	18.5	111	20.3	125	24.0	133	26.3
	23	70.5	11.9	84.0	14.7	97.6	18.0	104	19.8	111	21.7	125	25.7	132	27.5
	25	70.5	12.5	84.0	15.7	97.6	19.3	104	21.2	111	23.2	125	27.6	130	28.7
	27	70.5	13.3	84.0	16.7	97.6	20.6	104	22.7	111	24.8	125	29.5	128	29.9
	29	70.5	14.2	84.0	17.8	97.6	22.0	104	24.2	111	26.5	123	30.9	126	31.1
	31	70.5	15.1	84.0	19.0	97.6	23.4	104	25.8	111	28.3	121	32.1	124	32.3
	33	70.5	16.0	84.0	20.2	97.6	24.9	104	27.5	111	30.2	120	33.3	122	33.5
	35	70.5	17.0	84.0	21.5	97.6	26.6	104	29.3	111	32.2	118	34.5	120	34.7
	37	70.5	18.0	84.0	22.9	97.6	28.3	104	31.2	111	34.3	116	35.7	118	36.0
	39	70.5	19.1	84.0	24.3	97.6	30.1	104	33.2	111	36.5	114	36.9	116	37.2
80 (840)	10	62.6	9.4	74.7	11.2	86.8	13.2	92.8	14.2	99	15.3	111	17.4	123	19.6
	12	62.6	9.5	74.7	11.4	86.8	13.5	92.8	14.5	99	15.6	111	17.7	123	20.0
	14	62.6	9.7	74.7	11.6	86.8	13.7	92.8	14.8	99	15.9	111	18.1	123	20.4
	16	62.6	10.0	74.7	12.1	86.8	14.2	92.8	15.3	99	16.5	111	18.8	123	21.2
	18	62.6	10.2	74.7	12.3	86.8	14.5	92.8	15.6	99	16.8	111	19.5	123	22.7
	20	62.6	10.3	74.7	12.4	86.8	14.6	92.8	15.8	99	17.1	111	20.2	123	23.5
	21	62.6	10.5	74.7	12.6	86.8	15.3	92.8	16.8	99	18.3	111	21.6	123	25.2
	23	62.6	10.8	74.7	13.5	86.8	16.4	92.8	18.0	99	19.6	111	23.1	123	27.0
	25	62.6	11.5	74.7	14.3	86.8	17.5	92.8	19.2	99	20.9	111	24.7	123	28.8
	27	62.6	12.2	74.7	15.3	86.8	18.6	92.8	20.5	99	22.4	111	26.4	123	30.8
	29	62.6	13.0	74.7	16.2	86.8	19.8	92.8	21.8	99	23.8	111	28.2	121	32.0
	31	62.6	13.8	74.7	17.3	86.8	21.1	92.8	23.2	99	25.4	111	30.1	119	33.2
	33	62.6	14.6	74.7	18.3	86.8	22.5	92.8	24.7	99	27.0	111	32.1	117	34.4
	35	62.6	15.5	74.7	19.5	86.8	23.9	92.8	26.3	99	28.8	111	34.2	115	35.7
	37	62.6	16.4	74.7	20.7	86.8	25.4	92.8	28.0	99	30.6	111	36.4	114	36.9
	39	62.6	17.4	74.7	22.0	86.8	27.0	92.8	29.8	99	32.6	111	38.7	112	38.2
70 (735)	10	54.8	8.26	65.4	9.8	75.9	11.4	81.2	12.3	86.5	13.2	97.0	15.0	108	16.8
	12	54.8	8.38	65.4	10.0	75.9	11.6	81.2	12.5	86.5	13.4	97.0	15.2	108	17.1
	14	54.8	8.51	65.4	10.1	75.9	11.8	81.2	12.7	86.5	13.6	97.0	15.5	108	17.5
	16	54.8	8.7	65.4	10.3	75.9	12.1	81.2	13.0	86.5	13.9	97.0	15.8	108	17.8
	18	54.8	8.8	65.4	10.5	75.9	12.3	81.2	13.2	86.5	14.2	97.0	16.1	108	18.2
	20	54.8	8.9	65.4	10.7	75.9	12.5	81.2	13.5	86.5	14.4	97.0	16.4	108	18.7
	21	54.8	9.0	65.4	10.8	75.9	12.6	81.2	13.6	86.5	14.6	97.0	16.7	108	19.3
	23	54.8	9.2	65.4	11.0	75.9	12.9	81.2	14.1	86.5	15.3	97.0	17.9	108	20.7
	25	54.8	9.3	65.4	11.4	75.9	13.7	81.2	15.0	86.5	16.3	97.0	19.1	108	22.1
	27	54.8	9.9	65.4	12.1	75.9	14.6	81.2	16.0	86.5	17.4	97.0	20.4	108	23.7
	29	54.8	10.5	65.4	12.9	75.9	15.6	81.2	17.0	86.5	18.6	97.0	21.8	108	25.3
	31	54.8	11.1	65.4	13.7	75.9	16.6	81.2	18.1	86.5	19.8	97.0	23.2	108	27.0
	33	54.8	11.8	65.4	14.5	75.9	17.6	81.2	19.3	86.5	21.0	97.0	24.7	108	28.7
	35	54.8	12.5	65.4	15.4	75.9	18.7	81.2	20.5	86.5	22.4	97.0	26.3	108	30.6
	37	54.8	13.2	65.4	16.4	75.9	19.9	81.2	21.8	86.5	23.8	97.0	28.0	108	32.6
	39	54.8	14.0	65.4	17.4	75.9	21.1	81.2	23.2	86.5	25.3	97.0	29.8	108	34.8
60 (630)	10	47.0	7.18	56.0	8.43	65.1	9.8	69.6	10.4	74.1	11.2	83.2	12.6	92.2	14.1
	12	47.0	7.29	56.0	8.56	65.1	9.9	69.6	10.6	74.1	11.3	83.2	12.8	92.2	14.4
	14	47.0	7.39	56.0	8.7	65.1	10.1	69.6	10.8	74.1	11.5	83.2	13.1	92.2	14.7
	16	47.0	7.50	56.0	8.8	65.1	10.3	69.6	11.0	74.1	11.8	83.2	13.3	92.2	14.9
	18	47.0	7.62	56.0	9.0	65.1	10.4	69.6	11.2	74.1	12.0	83.2	13.6	92.2	15.2
	20	47.0	7.74	56.0	9.1	65.1	10.6	69.6	11.4	74.1	12.2	83.2	13.8	92.2	15.5
	21	47.0	7.80	56.0	9.2	65.1	10.7	69.6	11.5	74.1	12.3	83.2	14.0	92.2	15.7
	23	47.0	7.93	56.0	9.4	65.1	10.9	69.6	11.7	74.1	12.5	83.2	14.5	92.2	16.7
	25	47.0	8.06	56.0	9.5	65.1	11.3	69.6	12.3	74.1	13.3	83.2	15.5	92.2	17.8
	27	47.0	8.35	56.0	10.1	65.1	12.1	69.6	13.1	74.1	14.2	83.2	16.5	92.2	19.0
	29	47.0	8.8	56.0	10.7	65.1	12.8	69.6	14.0	74.1	15.1	83.2	17.6	92.2	20.3
	31	47.0	9.4	56.0	11.4	65.1	13.6	69.6	14.8	74.1	16.1	83.2	18.7	92.2	21.6
	33	47.0	9.9	56.0	12.1	65.1	14.5	69.6	15.8	74.1	17.1	83.2	19.9	92.2	23.0
	35	47.0	10.5	56.0	12.8	65.1	15.4	69.6	16.7	74.1	18.2	83.2	21.2	92.2	24.5
	37	47.0	11.1	56.0	13.5	65.1	16.3	69.6	17.7	74.1	19.3	83.2	22.5	92.2	26.1
	39	47.0	11.7	56.0	14.3	65.1	17.3	69.6	18.8	74.1	20.5	83.2	23.9	92.2	27.7
50 (525)	10	39.1	6.17	46.7	7.15	54.2	8.18	58.0	8.7	61.8	9.3	69.3	10.4	76.9	11.6
	12	39.1	6.25	46.7	7.25	54.2	8.30	58.0	8.9	61.8	9.4	69.3	10.6	76.9	11.8
	14	39.1	6.34	46.7	7.35	54.2	8.43	58.0	9.0	61.8	9.6	69.3	10.8	76.9	12.0
	16	39.1	6.42	46.7	7.46	54.2	8.56	58.0	9.1	61.8	9.7	69.3	10.9	76.9	12.2
	18	39.1	6.51	46.7	7.58	54.2	8.7	58.0	9.3	61.8	9.9	69.3	11.1	76.9	12.4
	20	39.1	6.61	46.7	7.69	54.2	8.9	58.0	9.5	61.8	10.1	69.3	11.3	76.9	12.7
	21	39.1	6.65	46.7	7.75	54.2	8.9	58.0	9.5	61.8	10.2	69.3	11.5	76.9	12.8
	23	39.1	6.75	46.7	7.88	54.2	9.1	58.0	9.7	61.8	10.3	69.3	11.7	76.9	13.1
	25	39.1	6.86	46.7	8.01	54.2	9.2	58.0	9.9	61.8	10.7	69.3	12.3	76.9	14.0
	27	39.1	6.97	46.7	8.30	54.2	9.8	58.0	10.5	61.8	11.3	69.3	13.0	76.9	14.9
	29	39.1	7.37	46.7	8.8	54.2	10.4	58.0	11.2	61.8	12.0	69.3	13.9	76.9	15.8
	31	39.1	7.79	46.7	9.3	54.2	11.0	58.0	11.9	61.8	12.8	69.3	14.8	76.9	16.9
	33	39.1	8.22	46.7	9.8	54.2	11.6	58.0	12.6	61.8	13.6	69.3	15.7	76.9	17.9
	35	39.1	8.7	46.7	10.4	54.2	12.3	58.0	13.3	61.8	14.4	69.3	16.6	76.9	19.0
	37	39.1	9.2	46.7	11.0	54.2	13.0	58.0	14.1	61.8	15.3	69.3	17.7	76.9	20.2
	39	39.1	9.6	46.7	11.6	54.2	13.8	58.0	15.0	61.8	16.2	69.3	18.7	76.9	21.5

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)
Note1: The above table shows the average value of conditions which may occur.

15

RXYQ44PAHY1, PAHYL, PHTL [50/60Hz]

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC	14.0°CWB PI	16.0°CWB TC	16.0°CWB PI	18.0°CWB TC	18.0°CWB PI	19.0°CWB TC	19.0°CWB PI	20.0°CWB TC	20.0°CWB PI	22.0°CWB TC	22.0°CWB PI	24.0°CWB TC	24.0°CWB PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130 (1430)	10	108	17.2	129	21.0	150	25.0	156	25.5	157	25.0	161	24.0	165	22.9
	12	108	17.5	129	21.4	150	25.5	154	25.4	155	24.9	159	23.8	163	23.4
	14	108	17.8	129	21.8	150	25.8	152	25.3	153	24.7	157	24.5	161	24.8
	16	108	18.2	129	22.3	148	25.7	150	25.5	151	25.6	155	25.9	159	26.1
	18	108	18.5	129	22.7	146	26.7	148	26.8	149	26.9	153	27.2	157	27.4
	20	108	18.9	129	24.2	144	28.0	145	28.1	147	28.2	151	28.5	155	28.8
	21	108	19.4	129	25.0	143	28.6	144	28.8	146	28.9	150	29.2	154	29.5
	23	108	20.8	129	26.9	141	29.9	142	30.1	144	30.2	148	30.5	152	30.8
	25	108	22.2	129	28.8	139	31.2	140	31.4	142	31.5	146	31.9	150	32.2
	27	108	23.8	129	30.8	137	32.5	138	32.7	140	32.9	144	33.2	148	33.6
	29	108	25.3	129	32.9	135	33.9	136	34.0	138	34.2	142	34.6	146	34.9
	31	108	27.0	129	34.8	132	35.2	134	35.4	136	35.6	140	35.9	144	36.3
	33	108	28.8	127	36.1	130	36.5	132	36.7	134	36.9	138	37.3	142	37.7
	35	108	30.7	125	37.4	128	37.8	130	38.1	132	38.3	136	38.7	140	39.1
	37	108	32.7	123	38.7	126	39.2	128	39.4	130	39.6	134	40.1	138	40.5
	39	108	34.8	121	40.1	124	40.5	126	40.8	128	41.0	132	41.5	136	42.0
120 (1320)	10	100	15.7	119	19.2	139	22.8	148	24.6	155	25.7	159	24.7	162	23.7
	12	100	16.0	119	19.5	139	23.2	148	25.1	153	25.5	157	24.6	160	23.6
	14	100	16.3	119	19.9	139	23.7	148	25.6	151	25.4	155	24.4	158	24.6
	16	100	16.6	119	20.3	139	24.1	147	25.8	149	25.5	153	25.7	156	25.9
	18	100	16.9	119	20.7	139	25.0	145	26.6	147	26.8	151	27.0	154	27.2
	20	100	17.2	119	21.5	139	26.8	143	27.9	145	28.1	149	28.3	152	28.6
	21	100	17.4	119	22.3	139	27.8	142	28.6	144	28.7	148	29.0	151	29.2
	23	100	18.6	119	23.9	138	29.7	140	29.9	142	30.0	146	30.3	149	30.6
	25	100	19.9	119	25.5	136	31.0	138	31.2	140	31.3	144	31.6	147	31.9
	27	100	21.2	119	27.3	134	32.3	136	32.5	138	32.7	142	33.0	145	33.3
	29	100	22.6	119	29.2	132	33.7	134	33.8	136	34.0	140	34.3	143	34.7
	31	100	24.1	119	31.1	130	35.0	132	35.1	134	35.3	138	35.7	141	36.0
	33	100	25.7	119	33.2	128	36.3	130	36.5	132	36.7	136	37.0	139	37.4
	35	100	27.3	119	35.4	126	37.6	128	37.8	130	38.0	134	38.4	137	38.8
	37	100	29.1	119	37.7	124	38.9	126	39.1	128	39.4	132	39.8	135	40.2
	39	100	31.0	119	39.8	124	40.3	124	40.5	126	40.8	130	41.2	133	41.6
110 (1210)	10	91.7	14.3	109	17.4	127	20.6	136	22.3	145	24.0	156	25.4	159	24.6
	12	91.7	14.5	109	17.7	127	21.0	136	22.7	145	24.4	154	25.3	157	24.4
	14	91.7	14.8	109	18.0	127	21.4	136	23.1	145	24.9	152	25.2	155	24.4
	16	91.7	15.0	109	18.4	127	21.8	136	23.6	145	25.4	150	25.5	153	25.7
	18	91.7	15.3	109	18.7	127	22.2	136	24.2	145	26.6	148	26.8	151	27.0
	20	91.7	15.6	109	19.1	127	23.6	136	26.0	143	27.9	146	28.1	149	28.4
	21	91.7	15.8	109	19.7	127	24.4	136	27.0	142	28.5	145	28.8	148	29.0
	23	91.7	16.5	109	21.1	127	26.2	136	28.9	140	29.8	143	30.1	146	30.3
	25	91.7	17.6	109	22.5	127	28.0	136	31.0	138	31.1	141	31.4	144	31.7
	27	91.7	18.8	109	24.1	127	30.0	134	32.3	135	32.4	139	32.7	142	33.0
	29	91.7	20.1	109	25.7	127	32.0	132	33.6	133	33.8	137	34.1	140	34.4
	31	91.7	21.4	109	27.4	127	34.2	130	34.9	131	35.1	135	35.4	138	35.7
	33	91.7	22.7	109	29.2	126	36.1	128	36.2	129	36.4	133	36.7	136	37.1
	35	91.7	24.2	109	31.1	124	37.4	126	37.6	127	37.7	131	38.1	134	38.5
	37	91.7	25.7	109	33.1	122	38.7	124	38.9	125	39.1	129	39.5	132	39.8
	39	91.7	27.3	109	35.3	120	40.0	122	40.2	123	40.4	127	40.8	130	41.2
100 (1100)	10	83.3	12.9	99.4	15.6	115	18.5	124	20.0	132	21.5	148	24.5	156	25.4
	12	83.3	13.1	99.4	15.9	115	18.8	124	20.3	132	21.9	148	25.0	154	25.2
	14	83.3	13.3	99.4	16.2	115	19.2	124	20.7	132	22.3	148	25.5	152	25.1
	16	83.3	13.6	99.4	16.5	115	19.5	124	21.1	132	22.7	147	25.8	150	25.5
	18	83.3	13.8	99.4	16.8	115	19.9	124	21.5	132	23.2	145	26.6	148	26.8
	20	83.3	14.1	99.4	17.1	115	20.5	124	22.6	132	24.8	143	27.9	146	28.1
	21	83.3	14.2	99.4	17.3	115	21.3	124	23.4	132	25.7	142	28.6	145	28.8
	23	83.3	14.6	99.4	18.4	115	22.8	124	25.1	132	27.6	140	29.9	143	30.1
	25	83.3	15.6	99.4	19.7	115	24.4	124	26.9	132	29.5	138	31.2	141	31.4
	27	83.3	16.6	99.4	21.0	115	26.0	124	28.7	132	31.6	136	32.5	139	32.8
	29	83.3	17.7	99.4	22.4	115	27.8	124	30.7	131	33.5	134	33.8	137	34.1
	31	83.3	18.8	99.4	23.9	115	29.7	124	32.8	129	34.8	132	35.1	135	35.4
	33	83.3	20.0	99.4	25.5	115	31.6	124	35.0	127	36.1	130	36.5	133	36.8
	35	83.3	21.2	99.4	27.1	115	33.7	124	37.3	125	37.5	128	37.8	131	38.1
	37	83.3	22.6	99.4	28.8	115	35.9	121	38.6	123	38.8	126	39.1	129	39.5
	39	83.3	24.0	99.4	30.7	115	38.3	119	39.9	121	40.1	124	40.5	127	40.8

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC	14.0°CWB PI	16.0°CWB TC	16.0°CWB PI	18.0°CWB TC	18.0°CWB PI	19.0°CWB TC	19.0°CWB PI	20.0°CWB TC	20.0°CWB PI	22.0°CWB TC	22.0°CWB PI	24.0°CWB TC	24.0°CWB PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
90 (990)	10	75.0	11.5	89.5	13.9	104	16.4	111	17.7	118	19.0	133	21.7	147	24.5
	12	75.0	11.7	89.5	14.1	104	16.7	111	18.0	118	19.4	133	22.1	147	24.9
	14	75.0	11.9	89.5	14.4	104	17.0	111	18.3	118	19.7	133	22.5	147	25.4
	16	75.0	12.1	89.5	14.6	104	17.3	111	18.7	118	20.1	133	23.0	147	25.8
	18	75.0	12.3	89.5	14.9	104	17.7	111	19.1	118	20.5	133	23.4	145	26.6
	20	75.0	12.6	89.5	15.2	104	18.0	111	19.5	118	21.3	133	25.2	143	27.9
	21	75.0	12.7	89.5	15.4	104	18.3	111	20.1	118	22.0	133	26.1	142	28.6
	23	75.0	12.9	89.5	16.0	104	19.6	111	21.6	118	23.6	133	28.0	140	29.9
	25	75.0	13.6	89.5	17.1	104	21.0	111	23.1	118	25.3	133	30.0	138	31.2
	27	75.0	14.5	89.5	18.2	104	22.4	111	24.6	118	27.0	133	32.1	136	32.5
	29	75.0	15.4	89.5	19.4	104	23.9	111	26.3	118	28.8	131	33.6	134	33.8
	31	75.0	16.4	89.5	20.7	104	25.5	111	28.1	118	30.8	129	34.9	132	35.1
	33	75.0	17.4	89.5	22.0	104	27.1	111	29.9	118	32.8	127	36.2	130	36.5
	35	75.0	18.5	89.5	23.4	104	28.9	111	31.9	118	35.0	125	37.5	128	37.8
	37	75.0	19.6	89.5	24.9	104	30.8	111	33.9	118	37.3	123	38.8	126	39.1
	39	75.0	20.8	89.5	26.4	104	32.7	111	36.1	118	39.7	121	40.1	124	40.5
80 (880)	10	66.7	10.2	79.5	12.2	92.4	14.4	98.8	15.5	105	16.6	118	18.9	131	21.3
	12	66.7	10.4	79.5	12.4	92.4	14.6	98.8	15.8	105	16.9	118	19.3	131	21.7
	14	66.7	10.5	79.5	12.7	92.4	14.9	98.8	16.1	105	17.2	118	19.7	131	22.2
	16	66.7	10.7	79.5	12.9	92.4	15.2	98.8	16.4	105	17.6	118	20.0	131	22.6
	18	66.7	10.9	79.5	13.1	92.4	15.5	98.8	16.7	105	17.9	118	20.4	131	23.0
	20	66.7	11.1	79.5	13.4	92.4	15.8	98.8	17.0	105	18.3	118	20.8	131	24.6
	21	66.7	11.2	79.5	13.5	92.4	15.9	98.8	17.2	105	18.6	118	21.9	131	25.5
	23	66.7	11.4	79.5	13.8	92.4	16.7	98.8	18.3	105	20.0	118	23.5	131	27.4
	25	66.7	11.8	79.5	14.6	92.4	17.8	98.8	19.5	105	21.3	118	25.2	131	29.3
	27	66.7	12.5	79.5	15.6	92.4	19.0	98.8	20.9	105	22.8	118	26.9	131	31.4
	29	66.7	13.3	79.5	16.6	92.4	20.3	98.8	22.2	105	24.3	118	28.7	131	33.5
	31	66.7	14.1	79.5	17.7	92.4	21.6	98.8	23.7	105	25.9	118	30.7	129	34.8
	33	66.7	15.0	79.5	18.8	92.4	23.0	98.8	25.2	105	27.6	118	32.7	127	36.1
	35	66.7	15.9	79.5	19.9	92.4	24.4	98.8	26.9	105	29.4	118	34.9	125	37.5
	37	66.7	16.9	79.5	21.2	92.4	26.0	98.8	28.6	105	31.3	118	37.1	123	38.8
	39	66.7	17.9	79.5	22.5	92.4	27.6	98.8	30.4	105	33.3	118	39.6	121	40.1
70 (770)	10	58.3	8.98	69.6	10.7	80.8	12.4	86.5	13.4	92.1	14.3	103	16.3	115	18.3
	12	58.3	9.1	69.6	10.8	80.8	12.7	86.5	13.6	92.1	14.6	103	16.6	115	18.6
	14	58.3	9.3	69.6	11.0	80.8	12.9	86.5	13.8	92.1	14.8	103	16.9	115	19.0
	16	58.3	9.4	69.6	11.2	80.8	13.1	86.5	14.1	92.1	15.1	103	17.2	115	19.4
	18	58.3	9.6	69.6	11.4	80.8	13.4	86.5	14.4	92.1	15.4	103	17.5	115	19.7
	20	58.3	9.7	69.6	11.6	80.8	13.6	86.5	14.6	92.1	15.7	103	17.9	115	20.3
	21	58.3	9.8	69.6	11.7	80.8	13.7	86.5	14.8	92.1	15.9	103	18.2	115	21.0
	23	58.3	10.0	69.6	11.9	80.8	14.0	86.5	15.3	92.1	16.6	103	19.4	115	22.5
	25	58.3	10.2	69.6	12.4	80.8	14.9	86.5	16.3	92.1	17.7	103	20.8	115	24.1
	27	58.3	10.7	69.6	13.2	80.8	15.9	86.5	17.4	92.1	18.9	103	22.2	115	25.7
	29	58.3	11.4	69.6	14.0	80.8	17.0	86.5	18.5	92.1	20.2	103	23.7	115	27.5
	31	58.3	12.1	69.6	14.9	80.8	18.0	86.5	19.7	92.1	21.5	103	25.2	115	29.3
	33	58.3	12.8	69.6	15.8	80.8	19.2	86.5	21.0	92.1	22.9	103	26.9	115	31.3
	35	58.3	13.6	69.6	16.8	80.8	20.4	86.5	22.3	92.1	24.3	103	28.6	115	33.3
	37	58.3	14.4	69.6	17.8	80.8	21.6	86.5	23.7	92.1	25.9	103	30.5	115	35.5
	39	58.3	15.2	69.6	18.9	80.8	23.0	86.5	25.2	92.1	27.5	103	32.4	115	37.8
60 (660)	10	50.0	7.81	59.6	9.2	69.3	10.6	74.1	11.4	78.9	12.1	88.6	13.7	98.2	15.4
	12	50.0	7.92	59.6	9.3	69.3	10.8	74.1	11.6	78.9	12.3	88.6	14.0	98.2	15.7
	14	50.0	8.04	59.6	9.5	69.3	11.0	74.1	11.8	78.9	12.6	88.6	14.2	98.2	15.9
	16	50.0	8.16	59.6	9.6	69.3	11.2	74.1	12.0	78.9	12.8	88.6	14.5	98.2	16.2
	18	50.0	8.28	59.6	9.8	69.3	11.3	74.1	12.2	78.9	13.0	88.6	14.8	98.2	16.6
	20	50.0	8.41	59.6	9.9	69.3	11.6	74.1	12.4	78.9	13.3	88.6	15.0	98.2	16.9
	21	50.0	8.48	59.6	10.0	69.3	11.7	74.1	12.5	78.9	13.4	88.6	15.2	98.2	17.1
	23	50.0	8.62	59.6	10.2	69.3	11.9	74.1	12.7	78.9	13.6	88.6	15.8	98.2	18.1
	25	50.0	8.76	59.6	10.4	69.3	12.3	74.1	13.4	78.9	14.5	88.6	16.8	98.2	19.4
	27	50.0	9.1	59.6	11.0	69.3	13.1	74.1	14.3	78.9	15.4	88.6	18.0	98.2	20.7
	29	50.0	9.6	59.6	11.7	69.3	14.0	74.1	15.2	78.9	16.4	88.6	19.1	98.2	22.0
	31	50.0	10.2	59.6	12.4	69.3	14.8	74.1	16.1	78.9	17.5	88.6	20.4	98.2	23.5
	33	50.0	10.8	59.6	13.1	69.3	15.7	74.1	17.1	78.9	18.6	88.6	21.7	98.2	25.0
	35	50.0	11.4	59.6	13.9	69.3	16.7	74.1	18.2	78.9	19.7	88.6	23.1	98.2	26.6
	37	50.0	12.0	59.6	14.7	69.3	17.7	74.1	19.3	78.9	21.0	88.6	24.5	98.2	28.3
	39	50.0	12.7	59.6	15.6	69.3	18.8	74.1	20.5	78.9	22.3	88.6	26.0	98.2	30.1
50 (550)	10	41.7	6.71	49.7	7.77	57.7	8.89	61.8	9.5	65.8	10.1	73.8	11.3	81.8	12.6
	12	41.7	6.80	49.7	7.88	57.7	9.0	61.8	9.6	65.8	10.2	73.8	11.5	81.8	12.8
	14	41.7	6.89	49.7	7.99	57.7	9.2	61.8	9.8	65.8	10.4	73.8	11.7	81.8	13.0
	16	41.7	6.98	49.7	8.11	57.7	9.3	61.8	9.9	65.8	10.6	73.8	11.9	81.8	13.3
	18	41.7	7.08	49.7	8.24	57.7	9.5	61.8	10.1	65.8	10.8	73.8	12.1	81.8	13.5
	20	41.7	7.18	49.7	8.37	57.7	9.6	61.8	10.3	65.8	11.0	73.8	12.3	81.8	13.8
	21	41.7	7.23	49.7	8.43	57.7	9.7	61.8	10.4	65.8	11.0	73.8	12.5	81.8	13.9
	23	41.7	7.34	49.7	8.57	57.7	9.9	61.8	10.6	65.8	11.3	73.8	12.7	81.8	14.2
	25	41.7	7.46	49.7	8.71	57.7	10.1	61.8	10.8	65.8	11.6	73.8	13.3	81.8	15.2
	27	41.7	7.58	49.7	9.02	57.7	10.6	61.8	11.5	65.8	12.3	73.8	14.2	81.8	16.2
	29	41.7	8.01	49.7	9.6	57.7	11.3	61.8	12.2	65.8	13.1	73.8	15.1	81.8	17.2
	31	41.7	8.47	49.7	10.1	57.7	11.9	61.8	12.9	65.8	13.9	73.8	16.0	81.8	18.3
	33	41.7	8.94	49.7	10.7	57.7	12.6	61.8	13.7	65.8	14.8	73.8	17.0	81.8	19.5
	35	41.7	9.4	49.7	11.3	57.7	13.4	61.8	14.5	65.8	15.6	73.8	18.1	81.8	20.7
	37	41.7	10.0	49.7	12.0	57.7	14.2	61.8	15.4	65.8	16.6	73.8	19.2	81.8	22.0
	39	41.7	10.5	49.7	12.6	57.7	15.0	61.8	16.3	65.8	17.6	73.8	20.4	81.8	23.4

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)
Note1: The above table shows the average value of conditions which may occur.

RXYQ46PAHY1, PAHYL, PHTL [50/60Hz]

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC	14.0°CWB PI	16.0°CWB TC	16.0°CWB PI	18.0°CWB TC	18.0°CWB PI	19.0°CWB TC	19.0°CWB PI	20.0°CWB TC	20.0°CWB PI	22.0°CWB TC	22.0°CWB PI	24.0°CWB TC	24.0°CWB PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130 (1495)	10	112	18.2	133	22.3	155	26.5	161	27.0	163	26.5	167	25.4	171	24.2
	12	112	18.5	133	22.7	155	27.0	159	26.9	161	26.3	165	25.2	169	24.8
	14	112	18.9	133	23.1	154	27.3	156	26.8	158	26.2	162	26.0	167	26.2
	16	112	19.2	133	23.6	152	27.2	154	27.0	156	27.1	160	27.4	164	27.6
	18	112	19.6	133	24.0	150	28.2	152	28.4	154	28.5	158	28.8	162	29.1
	20	112	20.0	133	25.6	148	29.6	150	29.8	152	29.9	156	30.2	160	30.5
	21	112	20.6	133	26.5	147	30.3	149	30.4	151	30.6	155	30.9	159	31.2
	23	112	22.0	133	28.4	145	31.7	147	31.8	149	32.0	153	32.3	157	32.6
	25	112	23.5	133	30.4	143	33.1	145	33.2	147	33.4	151	33.7	155	34.1
	27	112	25.2	133	32.6	141	34.5	143	34.6	145	34.8	149	35.2	153	35.5
	29	112	26.8	133	34.8	139	35.9	141	36.0	143	36.2	147	36.6	151	37.0
	31	112	28.6	133	36.8	137	37.3	139	37.5	141	37.7	145	38.1	149	38.5
	33	112	30.5	131	38.2	135	38.7	137	38.9	139	39.1	143	39.5	147	40.0
	35	112	32.5	129	39.6	133	40.1	135	40.3	137	40.5	141	41.0	145	41.4
	37	112	34.6	127	41.0	131	41.5	133	41.7	135	42.0	139	42.5	143	42.9
	39	112	36.9	124	42.4	128	42.9	131	43.2	133	43.4	137	43.9	141	44.4
120 (1380)	10	103	16.6	123	20.3	143	24.1	153	26.1	160	27.2	164	26.2	168	25.1
	12	103	16.9	123	20.7	143	24.6	153	26.6	158	27.0	162	26.0	165	25.0
	14	103	17.2	123	21.1	143	25.1	153	27.1	156	26.9	160	25.9	163	26.0
	16	103	17.6	123	21.5	143	25.6	152	27.3	154	27.0	158	27.2	161	27.4
	18	103	17.9	123	21.9	143	26.4	150	28.2	152	28.3	155	28.6	159	28.8
	20	103	18.3	123	22.8	143	28.4	148	29.6	150	29.7	153	30.0	157	30.3
	21	103	18.4	123	23.6	143	29.4	147	30.3	149	30.4	152	30.7	156	31.0
	23	103	19.7	123	25.3	143	31.5	145	31.6	147	31.8	150	32.1	154	32.4
	25	103	21.0	123	27.0	141	32.9	143	33.0	145	33.2	148	33.5	152	33.8
	27	103	22.5	123	28.9	139	34.3	141	34.4	142	34.6	146	34.9	150	35.3
	29	103	24.0	123	30.9	137	35.6	138	35.8	140	36.0	144	36.3	148	36.7
	31	103	25.5	123	33.0	135	37.0	136	37.2	138	37.4	142	37.8	146	38.2
	33	103	27.2	123	35.2	132	38.4	134	38.6	136	38.8	140	39.2	144	39.6
	35	103	29.0	123	37.5	130	39.8	132	40.0	134	40.2	138	40.7	142	41.1
	37	103	30.8	123	40.0	128	41.2	130	41.5	132	41.7	136	42.1	140	42.6
	39	103	32.8	123	42.2	128	42.6	128	42.9	130	43.1	134	43.6	137	44.0
110 (1265)	10	94.7	15.1	113	18.4	131	21.8	140	23.6	149	25.4	161	26.9	164	26.0
	12	94.7	15.4	113	18.7	131	22.2	140	24.0	149	25.9	159	26.8	162	25.8
	14	94.7	15.6	113	19.1	131	22.7	140	24.5	149	26.4	157	26.7	160	25.8
	16	94.7	15.9	113	19.4	131	23.1	140	25.0	149	26.9	155	27.0	158	27.2
	18	94.7	16.2	113	19.8	131	23.6	140	25.7	147	28.2	153	28.4	156	28.6
	20	94.7	16.6	113	20.2	131	25.0	140	27.6	147	29.5	151	29.8	154	30.0
	21	94.7	16.7	113	20.8	131	25.9	140	28.6	146	30.2	150	30.5	153	30.7
	23	94.7	17.5	113	22.3	131	27.7	140	30.6	144	31.6	147	31.9	151	32.1
	25	94.7	18.7	113	23.9	131	29.7	140	32.8	142	33.0	145	33.3	149	33.6
	27	94.7	19.9	113	25.5	131	31.7	138	34.2	140	34.4	143	34.7	147	35.0
	29	94.7	21.2	113	27.2	131	33.9	136	35.6	138	35.8	141	36.1	145	36.4
	31	94.7	22.6	113	29.0	131	36.2	134	37.0	136	37.1	139	37.5	143	37.8
	33	94.7	24.1	113	30.9	130	38.2	132	38.4	134	38.6	137	38.9	140	39.3
	35	94.7	25.6	113	32.9	128	39.6	130	39.8	132	40.0	135	40.3	138	40.7
	37	94.7	27.2	113	35.1	126	41.0	128	41.2	130	41.4	133	41.8	136	42.2
	39	94.7	28.0	113	37.4	124	42.4	126	42.6	127	42.8	131	43.2	134	43.7
100 (1150)	10	86.0	13.6	103	16.5	119	19.6	128	21.1	136	22.7	152	26.0	161	26.9
	12	86.0	13.8	103	16.8	119	19.9	128	21.5	136	23.2	152	26.5	159	26.7
	14	86.0	14.1	103	17.1	119	20.3	128	21.9	136	23.6	152	27.0	157	26.6
	16	86.0	14.4	103	17.4	119	20.7	128	22.4	136	24.1	152	27.3	155	27.0
	18	86.0	14.6	103	17.8	119	21.1	128	22.8	136	24.5	150	28.2	153	28.4
	20	86.0	14.9	103	18.1	119	21.7	128	24.0	136	26.3	148	29.6	151	29.8
	21	86.0	15.0	103	18.3	119	22.5	128	24.8	136	27.2	147	30.3	150	30.5
	23	86.0	15.4	103	19.5	119	24.1	128	26.6	136	29.2	145	31.6	148	31.9
	25	86.0	16.5	103	20.9	119	25.8	128	28.5	136	31.3	143	33.0	146	33.3
	27	86.0	17.6	103	22.3	119	27.6	128	30.4	136	33.4	140	34.4	144	34.7
	29	86.0	18.7	103	23.8	119	29.4	128	32.5	135	35.5	138	35.8	141	36.1
	31	86.0	19.9	103	25.3	119	31.4	128	34.7	133	36.9	136	37.2	139	37.5
	33	86.0	21.2	103	27.0	119	33.5	128	37.0	131	38.3	134	38.6	137	38.9
	35	86.0	22.5	103	28.7	119	35.7	128	39.5	129	39.7	132	40.0	135	40.4
	37	86.0	23.9	103	30.5	119	38.0	125	40.9	127	41.1	130	41.4	133	41.8
	39	86.0	25.4	103	32.5	119	40.5	123	42.3	125	42.5	128	42.9	131	43.3

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC	14.0°CWB PI	16.0°CWB TC	16.0°CWB PI	18.0°CWB TC	18.0°CWB PI	19.0°CWB TC	19.0°CWB PI	20.0°CWB TC	20.0°CWB PI	22.0°CWB TC	22.0°CWB PI	24.0°CWB TC	24.0°CWB PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
90 (1035)	10	77.4	12.2	92.4	14.7	107	17.3	115	18.7	122	20.1	137	23.0	152	25.9
	12	77.4	12.4	92.4	15.0	107	17.7	115	19.1	122	20.5	137	23.4	152	26.4
	14	77.4	12.6	92.4	15.2	107	18.0	115	19.4	122	20.9	137	23.9	152	26.9
	16	77.4	12.8	92.4	15.5	107	18.3	115	19.8	122	21.3	137	24.3	152	27.3
	18	77.4	13.1	92.4	15.8	107	18.7	115	20.2	122	21.7	137	24.8	150	28.2
	20	77.4	13.4	92.4	16.1	107	19.1	115	20.6	122	22.5	137	26.7	148	29.6
	21	77.4	13.4	92.4	16.3	107	19.4	115	21.3	122	23.3	137	27.6	147	30.3
	23	77.4	13.7	92.4	16.9	107	20.8	115	22.8	122	25.0	137	29.6	145	31.6
	25	77.4	14.4	92.4	18.1	107	22.2	115	24.4	122	26.7	137	31.7	142	33.0
	27	77.4	15.3	92.4	19.3	107	23.7	115	26.1	122	28.6	137	33.9	140	34.4
	29	77.4	16.3	92.4	20.5	107	25.3	115	27.8	122	30.5	136	35.5	138	35.8
	31	77.4	17.3	92.4	21.9	107	27.0	115	29.7	122	32.6	133	36.9	136	37.2
	33	77.4	18.4	92.4	23.3	107	28.7	115	31.7	122	34.8	131	38.3	134	38.6
	35	77.4	19.6	92.4	24.8	107	30.6	115	33.7	122	37.1	129	39.7	132	40.0
	37	77.4	20.8	92.4	26.3	107	32.6	115	35.9	122	39.5	127	41.1	130	41.4
	39	77.4	22.0	92.4	28.0	107	34.7	115	38.3	122	42.1	125	42.5	128	42.9
80 (920)	10	68.8	10.8	82.1	13.0	95.4	15.2	102	16.4	109	17.6	122	20.1	135	22.6
	12	68.8	11.0	82.1	13.2	95.4	15.5	102	16.7	109	17.9	122	20.4	135	23.0
	14	68.8	11.2	82.1	13.4	95.4	15.8	102	17.0	109	18.3	122	20.8	135	23.5
	16	68.8	11.4	82.1	13.6	95.4	16.1	102	17.3	109	18.6	122	21.2	135	23.9
	18	68.8	11.6	82.1	13.9	95.4	16.4	102	17.7	109	19.0	122	21.7	135	24.4
	20	68.8	11.8	82.1	14.2	95.4	16.7	102	18.0	109	19.3	122	22.4	135	26.1
	21	68.8	11.9	82.1	14.3	95.4	16.9	102	18.2	109	19.7	122	23.2	135	27.0
	23	68.8	12.1	82.1	14.6	95.4	17.7	102	19.4	109	21.1	122	24.9	135	29.0
	25	68.8	12.5	82.1	15.5	95.4	18.9	102	20.7	109	22.6	122	26.6	135	31.0
	27	68.8	13.3	82.1	16.5	95.4	20.1	102	22.1	109	24.1	122	28.5	135	33.2
	29	68.8	14.1	82.1	17.6	95.4	21.5	102	23.6	109	25.7	122	30.4	135	35.5
	31	68.8	15.0	82.1	18.7	95.4	22.9	102	25.1	109	27.4	122	32.5	133	36.9
	33	68.8	15.9	82.1	19.9	95.4	24.3	102	26.7	109	29.2	122	34.6	131	38.3
	35	68.8	16.9	82.1	21.1	95.4	25.9	102	28.5	109	31.1	122	36.9	129	39.7
	37	68.8	17.9	82.1	22.4	95.4	27.5	102	30.3	109	33.2	122	39.3	127	41.1
	39	68.8	18.9	82.1	23.8	95.4	29.3	102	32.2	109	35.3	122	41.9	125	42.5
70 (805)	10	60.2	9.5	71.8	11.3	83.4	13.2	89.3	14.2	95.1	15.2	107	17.2	118	19.4
	12	60.2	9.7	71.8	11.5	83.4	13.4	89.3	14.4	95.1	15.4	107	17.6	118	19.7
	14	60.2	9.8	71.8	11.7	83.4	13.6	89.3	14.7	95.1	15.7	107	17.9	118	20.1
	16	60.2	10.0	71.8	11.9	83.4	13.9	89.3	14.9	95.1	16.0	107	18.2	118	20.5
	18	60.2	10.1	71.8	12.1	83.4	14.1	89.3	15.2	95.1	16.3	107	18.6	118	20.9
	20	60.2	10.3	71.8	12.3	83.4	14.4	89.3	15.5	95.1	16.6	107	18.9	118	21.5
	21	60.2	10.4	71.8	12.4	83.4	14.5	89.3	15.7	95.1	16.8	107	19.2	118	22.3
	23	60.2	10.6	71.8	12.6	83.4	14.8	89.3	16.2	95.1	17.6	107	20.6	118	23.8
	25	60.2	10.8	71.8	13.1	83.4	15.8	89.3	17.3	95.1	18.8	107	22.0	118	25.5
	27	60.2	11.4	71.8	14.0	83.4	16.9	89.3	18.4	95.1	20.0	107	23.5	118	27.3
	29	60.2	12.1	71.8	14.9	83.4	18.0	89.3	19.6	95.1	21.4	107	25.1	118	29.1
	31	60.2	12.8	71.8	15.8	83.4	19.1	89.3	20.9	95.1	22.8	107	26.7	118	31.0
	33	60.2	13.6	71.8	16.8	83.4	20.3	89.3	22.2	95.1	24.2	107	28.5	118	33.1
	35	60.2	14.4	71.8	17.8	83.4	21.6	89.3	23.6	95.1	25.8	107	30.3	118	35.3
	37	60.2	15.2	71.8	18.9	83.4	22.9	89.3	25.1	95.1	27.4	107	32.3	118	37.6
	39	60.2	16.1	71.8	20.0	83.4	24.3	89.3	26.7	95.1	29.1	107	34.4	118	40.0
60 (690)	10	51.6	8.27	61.6	9.7	71.5	11.2	76.5	12.0	81.5	12.8	91.4	14.5	101	16.3
	12	51.6	8.39	61.6	9.9	71.5	11.4	76.5	12.2	81.5	13.1	91.4	14.8	101	16.6
	14	51.6	8.51	61.6	10.0	71.5	11.6	76.5	12.4	81.5	13.3	91.4	15.1	101	16.9
	16	51.6	8.64	61.6	10.2	71.5	11.8	76.5	12.7	81.5	13.5	91.4	15.3	101	17.2
	18	51.6	8.8	61.6	10.3	71.5	12.0	76.5	12.9	81.5	13.8	91.4	15.6	101	17.5
	20	51.6	8.9	61.6	10.5	71.5	12.2	76.5	13.1	81.5	14.0	91.4	15.9	101	17.9
	21	51.6	9.0	61.6	10.6	71.5	12.3	76.5	13.2	81.5	14.2	91.4	16.1	101	18.1
	23	51.6	9.1	61.6	10.8	71.5	12.6	76.5	13.5	81.5	14.4	91.4	16.7	101	19.2
	25	51.6	9.3	61.6	11.0	71.5	13.1	76.5	14.2	81.5	15.4	91.4	17.8	101	20.5
	27	51.6	9.6	61.6	11.7	71.5	13.9	76.5	15.1	81.5	16.4	91.4	19.0	101	21.9
	29	51.6	10.2	61.6	12.4	71.5	14.8	76.5	16.1	81.5	17.4	91.4	20.3	101	23.3
	31	51.6	10.8	61.6	13.1	71.5	15.7	76.5	17.1	81.5	18.5	91.4	21.6	101	24.9
	33	51.6	11.4	61.6	13.9	71.5	16.7	76.5	18.1	81.5	19.7	91.4	23.0	101	26.5
	35	51.6	12.1	61.6	14.7	71.5	17.7	76.5	19.3	81.5	20.9	91.4	24.4	101	28.2
	37	51.6	12.8	61.6	15.6	71.5	18.7	76.5	20.4	81.5	22.2	91.4	26.0	101	29.9
	39	51.6	13.5	61.6	16.5	71.5	19.9	76.5	21.7	81.5	23.6	91.4	27.6	101	31.9
50 (575)	10	43.0	7.11	51.3	8.23	59.6	9.4	63.8	10.0	67.9	10.7	76.2	12.0	84.5	13.3
	12	43.0	7.30	51.3	8.35	59.6	9.6	63.8	10.2	67.9	10.8	76.2	12.2	84.5	13.6
	14	43.0	7.40	51.3	8.47	59.6	9.7	63.8	10.4	67.9	11.0	76.2	12.4	84.5	13.8
	16	43.0	7.50	51.3	8.59	59.6	9.9	63.8	10.5	67.9	11.2	76.2	12.6	84.5	14.1
	18	43.0	7.61	51.3	8.7	59.6	10.0	63.8	10.7	67.9	11.4	76.2	12.8	84.5	14.3
	20	43.0	7.66	51.3	8.9	59.6	10.2	63.8	10.9	67.9	11.6	76.2	13.1	84.5	14.6
	21	43.0	7.68	51.3	8.9	59.6	10.3	63.8	11.0	67.9	11.7	76.2	13.2	84.5	14.7
	23	43.0	7.78	51.3	9.1	59.6	10.5	63.8	11.2	67.9	11.9	76.2	13.4	84.5	15.1
	25	43.0	7.89	51.3	9.2	59.6	10.6	63.8	11.4	67.9	12.3	76.2	14.1	84.5	16.1
	27	43.0	8.02	51.3	9.6	59.6	11.2	63.8	12.1	67.9	13.1	76.2	15.0	84.5	17.1
	29	43.0	8.48	51.3	10.1	59.6	11.9	63.8	12.9	67.9	13.9	76.2	16.0	84.5	18.2
	31	43.0	9.0	51.3	10.7	59.6	12.6	63.8	13.7	67.9	14.7	76.2	17.0	84.5	19.4
	33	43.0	9.5	51.3	11.3	59.6	13.4	63.8	14.5	67.9	15.6	76.2	18.0	84.5	20.6
	35	43.0	10.0	51.3	12.0	59.6	14.2	63.8	15.4	67.9	16.6	76.2	19.2	84.5	21.9
	37	43.0	10.5	51.3	12.7	59.6	15.0	63.8	16.3	67.9	17.6	76.2	20.3	84.5	23.3
	39	43.0	11.1	51.3	13.4	59.6	15.9	63.8	17.2	67.9	18.6	76.2	21.6	84.5	24.7

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)
Note1: The above table shows the average value of conditions which may occur.

15

RXYQ48PAHY1, PAHYL, PHTL [50/60Hz]

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB 16.0°CWB			18.0°CWB			19.0°CWB			20.0°CWB			22.0°CWB			24.0°CWB		
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130 (1560)	10	118	19.6	141	24.0	164	28.6	170	29.2	172	28.6	176	27.4	181	26.1	187	24.8	161	27.9
	12	118	20.0	141	24.5	164	29.1	168	29.0	170	28.4	174	27.2	179	26.8	185	25.3	161	28.5
	14	118	20.4	141	24.9	164	29.5	166	28.9	168	28.2	172	28.0	176	28.3	183	25.7	161	29.0
	16	118	20.7	141	25.4	161	29.3	163	29.1	166	29.2	170	29.5	174	29.8	180	26.2	161	29.5
	18	118	21.2	141	25.9	159	30.4	161	30.6	163	30.7	168	31.0	172	31.3	178	26.8	159	30.4
	20	118	21.6	141	27.6	157	31.9	159	32.1	161	32.2	165	32.6	170	32.9	176	28.8	156	31.9
	21	118	22.2	141	28.6	156	32.7	158	32.8	160	33.0	164	33.3	169	33.7	175	29.8	155	32.6
	23	118	23.7	141	30.7	154	34.2	156	34.3	158	34.5	162	34.9	166	35.2	173	32.0	153	34.1
	25	118	25.4	141	32.8	151	35.7	154	35.8	156	36.0	160	36.4	164	36.8	171	34.2	151	35.6
	27	118	27.1	141	35.1	149	37.2	151	37.4	153	37.5	158	37.9	162	38.3	169	36.6	149	37.1
	29	118	29.0	141	37.5	147	38.7	149	38.9	151	39.1	156	39.5	160	39.9	167	38.3	146	38.6
	31	118	30.9	141	39.7	145	40.2	147	40.4	149	40.6	153	41.1	158	41.5	165	39.8	144	40.1
	33	118	32.9	138	41.2	143	41.7	145	41.9	147	42.2	151	42.6	155	43.1	163	41.3	142	41.6
	35	118	35.1	136	42.7	140	43.2	143	43.5	145	43.7	149	44.2	153	44.7	161	42.8	140	43.2
	37	118	37.3	134	44.2	138	44.8	140	45.0	143	45.3	147	45.8	151	46.3	159	44.3	138	44.7
	39	118	39.7	132	45.8	136	46.3	138	46.6	140	46.8	145	47.4	149	47.9	157	45.9	135	46.2
120 (1440)	10	109	17.9	130	21.9	151	26.0	162	28.1	169	29.3	173	28.2	177	27.1	182	25.9	143	24.4
	12	109	18.2	130	22.3	151	26.5	162	28.7	167	29.2	171	28.1	175	26.9	180	25.8	143	24.8
	14	109	18.6	130	22.7	151	27.0	162	29.2	165	29.0	169	28.1	173	28.1	178	25.8	143	25.3
	16	109	18.9	130	23.2	151	27.6	161	29.4	163	29.1	167	29.3	171	29.6	176	26.3	143	25.8
	18	109	19.3	130	23.6	151	28.5	159	30.4	161	30.6	165	30.8	169	31.1	174	26.9	143	26.3
	20	109	19.7	130	24.6	151	30.6	157	31.9	158	32.0	162	32.3	166	32.6	172	28.1	143	28.1
	21	109	19.9	130	25.4	151	31.7	155	32.6	157	32.8	161	33.1	165	33.4	171	29.2	143	29.2
	23	109	21.2	130	27.3	151	34.0	153	34.1	155	34.3	159	34.6	163	34.9	169	31.3	143	31.3
	25	109	22.7	130	29.2	149	35.5	151	35.6	153	35.8	157	36.1	161	36.5	167	33.5	143	33.5
	27	109	24.2	130	31.2	147	36.9	149	37.1	151	37.3	155	37.7	159	38.0	165	35.8	143	35.8
	29	109	25.8	130	33.3	145	38.4	147	38.6	149	38.8	153	39.2	156	39.6	163	38.3	143	38.3
	31	109	27.5	130	35.6	142	39.9	144	40.1	146	40.3	150	40.7	154	41.1	161	39.8	141	39.8
	33	109	29.3	130	37.9	140	41.4	142	41.7	144	41.9	148	42.3	152	42.7	159	41.3	139	41.3
	35	109	31.2	130	40.4	138	43.0	140	43.2	142	43.4	146	43.9	150	44.3	157	42.8	137	42.8
	37	109	33.2	130	43.1	136	44.5	138	44.7	140	44.9	144	45.4	148	45.9	155	44.3	134	44.3
	39	109	35.4	130	45.5	136	46.3	138	46.3	138	46.6	142	47.0	146	47.5	153	45.9	132	45.9
110 (1320)	10	100	16.3	120	19.8	139	23.5	149	25.4	158	27.4	170	29.1	174	28.0	179	26.9	125	20.9
	12	100	16.6	120	20.2	139	24.0	149	25.9	158	27.9	168	28.9	172	27.9	177	26.9	125	21.3
	14	100	16.9	120	20.6	139	24.4	149	26.4	158	28.4	166	28.8	170	27.9	175	27.0	125	21.7
	16	100	17.2	120	21.0	139	24.9	149	26.9	158	29.0	164	29.1	167	29.4	173	27.1	125	22.1
	18	100	17.5	120	21.4	139	25.4	149	27.7	158	30.4	162	30.6	165	30.9	171	27.6	125	22.5
	20	100	17.9	120	21.8	139	26.9	149	29.7	156	31.8	159	32.1	163	32.4	169	28.1	125	23.2
	21	100	18.0	120	22.5	139	27.9	149	30.8	155	32.6	158	32.9	162	33.1	168	28.9	125	24.0
	23	100	18.9	120	24.1	139	29.9	149	33.0	153	34.1	156	34.4	160	34.7	166	30.2	125	25.7
	25	100	20.2	120	25.7	139	32.0	149	35.4	150	35.6	154	35.9	158	36.2	164	31.6	125	27.5
	27	100	21.5	120	27.5	139	34.2	146	36.9	148	37.1	152	37.4	155	37.7	162	33.1	125	29.4
	29	100	22.9	120	29.3	139	36.6	144	38.4	146	38.6	150	38.9	153	39.3	160	34.7	125	31.4
	31	100	24.4	120	31.3	139	39.1	142	39.9	144	40.1	147	40.4	151	40.8	158	36.4	125	33.5
	33	100	26.0	120	33.4	138	41.2	140	41.4	142	41.6	145	42.0	149	42.4	156	38.2	125	35.7
	35	100	27.6	120	35.5	136	42.7	138	42.9	139	43.1	143	43.5	147	43.9	154	40.1	125	38.1
	37	100	29.4	120	37.8	134	44.2	135	44.4	137	44.6	141	45.1	144	45.5	152	42.0	125	40.5
	39	100	31.2	120	40.3	131	45.7	133	45.9	135	46.2	139	46.6	142	47.1	150	44.0	125	43.2
100 (1200)	10	91.1	14.7	109	17.8	126	21.1	135	22.8	144	24.5	161	28.0	171	29.0	176	27.9	107	17.6
	12	91.1	14.9	109	18.1	126	21.5	135	23.2	144	25.0	161	28.5	168	28.8	174	27.9	107	17.9
	14	91.1	15.2	109	18.5	126	21.9	135	23.7	144	25.4	161	29.1	166	28.7	172	28.0	107	18.2
	16	91.1	15.5	109	18.8	126	22.3	135	24.1	144	25.9	161	29.5	164	29.2	170	28.1	107	18.6
	18	91.1	15.8	109	19.2	126	22.8	135	24.6	144	26.5	159	30.4	162	30.6	168	28.3	107	19.3
	20	91.1	16.1	109	19.6	126	23.4	135	25.8	144	28.3	156	31.9	160	32.1	166	28.7	107	19.5
	21	91.1	16.2	109	19.7	126	24.3	135	26.8	144	29.4	155	32.6	159	32.9	165	28.9	107	20.7
	23	91.1	16.6	109	21.1	126	26.0	135	28.7	144	31.5	153	34.1	156	34.4	162	29.8	107	22.1
	25	91.1	17.8	109	22.5	126	27.8	135	30.7	144	33.7	151	35.6	154	35.9	160	30.9	107	23.6
	27	91.1	18.9	109	24.0	126	29.7	135	32.8	144	36.1	149	37.1	152	37.4	158	32.0	107	25.2
	29	91.1	20.2	109	25.6	126	31.8	135	35.1	143	38.3	147	38.6	150	38.9	156	33.1	107	26.8
	31	91.1	21.5	109	27.3	126	33.9	135	37.4	141	39.8	144	40.1	148	40.5	154	34.3	107	28.6
	33	91.1	22.8	109	29.1	126	36.1	135	39.9	139	41.3	142	41.6	145	42.0	152	35.5	107	30.4
	35	91.1	24.2	109	31.0	126	38.5	135	42.6	137	42.8	140	43.2	143	43.5	150	36.8	107	32.4
	37	91.1	25.8	109	32.9	126	41.0	133	44.1	134	44.3	138	44.7	141	45.1	148	38.2	107	34.4
	39	91.1	27.4	109	35.0	126	43.7	131	45.6	132	45.8	136	46.2	139	46.7	146	39.7	107	36.7

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB 16.0°CWB			18.0°CWB			19.0°CWB			20.0°CWB			22.0°CWB			24.0°CWB		
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
90 (1080)	10	82.0	13.1	97.8	15.8	114	18.7	122	20.2	129	21.7	145	24.8	161	27.9				
	12	82.0	13.4	97.8	16.1	114	19.1	122	20.6	129	22.1	145	25.3	161	28.5				
	14	82.0	13.6	97.8	16.4	114	19.4	122	21.0	129	22.5	145	25.7	161	29.0				
	16	82.0	13.8	97.8	16.7	114	19.8	122	21.4	129	23.0	145	26.2	161	29.5				
	18	82.0	14.1	97.8	17.0	114	20.2	122	21.8	129	23.4	145	26.8	159	30.4				
	20	82.0	14.3	97.8	17.4	114	20.6	122	22.2	129	24.3	145	28.8	156	31.9				
	21	82.0	14.5	97.8	17.5	114	20.9	122	23.0	129	25.2	145	29.8	155	32.6				
	23	82.0	14.8	97.8	18.3	114	22.4	122	24.6	129	27.0	145	32.0	153	34.1				
	25	82.0	15.5	97.8	19.5	114	23.9	122	26.3	129	28.8	145	34.2	151	35.6				
	27	82.0	16.5	97.8	20.8	114	25.6	122	28.1	129	30.8	145	36.6	149	37.1				
	29	82.0	17.6	97.8	22.2	114	27.3	122	30.0	129	32.9	143	38.3	146	38.6				
	31	82.0	18.7	97.8	23.6	114	29.1	122	32.0	129	35.1	141	39.8	144	40.1				
	33	82.0	19.9	97.8	25.1	114	31.0	122	34.2	129	37.5	139	41.3	142	41.6				
	35	82.0	21.1	97.8	26.7	114	33.0	122	36.4	129	40.0	137	42.8	140	43.2				
	37	82.0	22.4	97.8	28.4	114	35.1	122	38.8	129	42.6	135	44.3	138	44.7				
	39	82.0	23.8	97.8	30.2	114	37.4	122	41.3	129	45.4	133	45.9	135	46.2				
80 (960)	10	72.9	11.7	86.9	14.0	101	16.4	108	17.7	115	19.0	129	21.6	143	24.4				
	12	72.9	11.9	86.9	14.2	101	16.7	108	18.0	115	19.3	129	22.0	143	24.8				
	14	72.9	12.0	86.9	14.5	101	17.0	108	18.3	115	19.7	129	22.5	143	25.3				
	16	72.9	12.3	86.9	14.7	101	17.3	108	18.6	115	20.1	129	22.9	143	25.8				
	18	72.9	12.5	86.9	15.0	101	17.7	108	19.0	115	20.5	129	23.4	143	26.3				
	20	72.9	12.7	86.9	15.3	101	18.0	108	19.4	115	20.9	129	24.2	143	28.1				
	21	72.9	12.8	86.9	15.4	101	18.2	108	19.6	115	21.3	129	25.1	143	29.2				
	23	72.9	13.0	86.9	15.7	101	19.1	108	20.9	115	22.8	129	26.9	143	31.3				
	25	72.9	13.5	86.9	16.7	101	20.4	108	22.3	115	24.4	129	28.7	143	33.5				
	27	72.9	14.3	86.9	17.8	101	21.7	108	23.8	115	26.0	129	30.7	143	35.8				
	29	72.9	15.2	86.9	19.0	101	23.1	108	25.4	115	27.8	129	32.8	143	38.3				
	31	72.9	16.2	86.9	20.2	101	24.7	108	27.1	115	29.6	129	35.0	141	39.8				
	33	72.9	17.1	86.9	21.4	101	26.2	108	28.8	115	31.5	129	37.3	139	41.3				
	35	72.9	18.2	86.9	22.8	101	27.9	108	30.7	115	33.6	129	39.8	137	42.8				
	37	72.9	19.3	86.9	24.2	101	29.7	108	32.7	115	35.8	129	42.4	134	44.3				
	39	72.9	20.4	86.9	25.7	101	31.6	108	34.7	115	38.1	129	45.2	132	45.9				
70 (840)	10	63.8	10.3	76.1	12.2	88.4	14.2	94.5	15.3	101	16.4	113	18.6	125	20.9				
	12	63.8	10.4	76.1	12.4	88.4	14.5	94.5	15.5	101	16.6	113	18.9	125	21.3				
	14	63.8	10.6	76.1	12.6	88.4	14.7	94.5	15.8	101	16.9	113	19.3	125	21.7				
	16	63.8	10.7	76.1	12.8	88.4	15.0	94.5	16.1	101	17.3	113	19.7	125	22.1				
	18	63.8	10.9	76.1	13.0	88.4	15.2	94.5	16.4	101	17.6	113	20.0	125	22.5				
	20	63.8	11.1	76.1	13.3	88.4	15.5	94.5	16.7	101	17.9	113	20.4	125	23.2				
	21	63.8	11.2	76.1	13.4	88.4	15.7	94.5	16.9	101	18.1	113	20.8	125	24.0				
	23	63.8	11.4	76.1	13.6	88.4	16.0	94.5	17.5	101	19.0	113	22.2	125	25.7				
	25	63.8	11.6	76.1	14.2	88.4	17.1	94.5	18.6	101	20.3	113	23.7	125	27.5				
	27	63.8	12.3	76.1	15.1	88.4	18.2	94.5	19.9	101	21.6	113	25.4	125	29.4				
	29	63.8	13.0	76.1	16.0	88.4	19.4	94.5	21.2	101	23.0	113	27.0	125	31.4				
	31	63.8	13.8	76.1	17.0	88.4	20.6	94.5	22.5	101	24.5	113	28.8	125	33.5				
	33	63.8	14.6	76.1	18.1	88.4	21.9	94.5	24.0	101	26.1	113	30.7	125	35.7				
	35	63.8	15.5	76.1	19.2	88.4	23.3	94.5	25.5	101	27.8	113	32.7	125	38.1				
	37	63.8	16.4	76.1	20.3	88.4	24.7	94.5	27.1	101	29.5	113	34.8	125	40.5				
	39	63.8	17.3	76.1	21.6	88.4	26.2	94.5	28.8	101	31.4	113	37.1	125	43.2				
60 (720)	10	54.7	8.9	65.2	10.5	75.7	12.1	81.0	13.0	86.3	13.9	96.8	15.7	107	17.6				
	12	54.7	9.0	65.2	10.6	75.7	12.3	81.0	13.2	86.3	14.1	96.8	15.9	107	17.9				
	14	54.7	9.2	65.2	10.8	75.7	12.5	81.0	13.4	86.3	14.3	96.8	16.2	107	18.2				
	16	54.7	9.3	65.2	11.0	75.7	12.7	81.0	13.7	86.3	14.6	96.8	16.5	107	18.6				
	18	54.7	9.5	65.2	11.2	75.7	13.0	81.0	13.9	86.3	14.9	96.8	16.8	107	19.3				
	20	54.7	9.6	65.2	11.3	75.7	13.2	81.0	14.2	86.3	15.1	96.8	17.2	107	19.5				
	21	54.7	9.7	65.2	11.4	75.7	13.3	81.0	14.3	86.3	15.3	96.8	17.3	107	20.7				
	23	54.7	9.8	65.2	11.6	75.7	13.6	81.0	14.6	86.3	15.6	96.8	18.0	107	22.1				
	25	54.7	10.0	65.2	11.9	75.7	14.1	81.0	15.3	86.3	16.6	96.8	19.2	107	23.6				
	27	54.7	10.4	65.2	12.6	75.7	15.0	81.0	16.3	86.3	17.6	96.8	20.5	107	25.2				
	29	54.7	11.0	65.2	13.3	75.7	15.9	81.0	17.3	86.3	18.8	96.8	21.9	107	26.8				
	31	54.7	11.6	65.2	14.2	75.7	16.9	81.0	18.4	86.3	20.0	96.8	23.3	107	28.6				
	33	54.7	12.3	65.2	15.0	75.7	18.0	81.0	19.6	86.3	21.2	96.8	24.8	107	30.4				
	35	54.7	13.0	65.2	15.9	75.7	19.1	81.0	20.8	86.3	22.5	96.8	26.3	107	32.4				
	37	54.7	13.8	65.2	16.8	75.7	20.2	81.0	22.0	86.3	23.9	96.8	28.0	107	34.4				
	39	54.7	14.5	65.2	17.8	75.7	21.4	81.0	23.4	86.3	25.4	96.8	29.7	107	36.7				
50 (600)	10	45.6	7.67	54.3	8.9	63.1	10.2	67.5	10.8	71.9	11.5	80.7	12.9	89.4	14.4				
	12	45.6	7.77	54.3	9.0	63.1	10.3	67.5	11.0	71.9	11.7	80.7	13.1	89.4	14.6				
	14	45.6	7.87	54.3	9.1	63.1	10.5	67.5	11.2	71.9	11.9	80.7	13.4	89.4	14.9				
	16	45.6	7.98	54.3	9.3	63.1	10.6	67.5	11.4	71.9	12.1	80.7	13.6	89.4	15.2				
	18	45.6	8.09	54.3	9.4	63.1	10.8	67.5	11.5	71.9	12.3	80.7	13.8	89.4	15.5				
	20	45.6	8.20	54.3	9.6	63.1	11.0	67.5	11.7	71.9	12.5	80.7	14.1	89.4	15.7				
	21	45.6	8.26	54.3	9.6	63.1	11.1	67.5	11.8	71.9	12.6	80.7	14.2	89.4	15.9				
	23	45.6	8.39	54.3	9.8	63.1	11.3	67.5	12.1	71.9	12.8	80.7	14.5	89.4	16.3				
	25	45.6	8.51	54.3	10.0	63.1	11.5	67.5	12.3	71.9	13.2	80.7	15.2	89.4	17.3				
	27	45.6	8.65	54.3	10.3	63.1	12.1	67.5	13.1	71.9	14.1	80.7	16.2	89.4	18.5				
	29	45.6	9.2	54.3	10.9	63.1	12.9	67.5	13.9	71.9	15.0	80.7	17.2	89.4	19.7				
	31	45.6	9.7	54.3	11.6	63.1	13.6	67.5	14.7	71.9	15.9	80.7	18.3	89.4	20.9				
	33	45.6	10.2	54.3	12.2	63.1	14.4	67.5	15.6	71.9	16.9	80.7	19.5	89.4	22.3				
	35	45.6	10.8	54.3	12.9	63.1	15.3	67.5	16.6	71.9	17.9	80.7	20.7	89.4	23.7				
	37	45.6	11.4	54.3	13.7	63.1	16.2	67.5	17.5	71.9	18.9	80.7	21.9	89.4	25.1				
	39	45.6	12.0	54.3	14.4	63.1	17.1	67.5	18.6	71.9	20.1	80.7	23.3	89.4	26.7				

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)
Note1: The above table shows the average value of conditions which may occur.

RXYQ50PAHY1, PAHYL, PHTL [50/60Hz]

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC	14.0°CWB PI	16.0°CWB TC	16.0°CWB PI	18.0°CWB TC	18.0°CWB PI	19.0°CWB TC	19.0°CWB PI	20.0°CWB TC	20.0°CWB PI	22.0°CWB TC	22.0°CWB PI	24.0°CWB TC	24.0°CWB PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130 (1625)	10	122	20.6	145	25.3	169	30.0	175	30.7	177	30.0	182	28.6	186	27.5
	12	122	21.0	145	25.7	169	30.6	173	30.5	175	29.9	179	28.6	184	28.1
	14	122	21.4	145	26.2	168	31.0	171	30.3	173	29.7	177	29.5	182	29.7
	16	122	21.8	145	26.7	166	30.8	168	30.6	170	30.8	175	31.1	179	31.3
	18	122	22.2	145	27.3	164	32.0	166	32.2	168	32.3	173	32.6	177	33.0
	20	122	22.7	145	29.0	162	33.6	164	33.7	166	33.9	170	34.2	175	34.6
	21	122	23.3	145	30.1	160	34.4	163	34.5	165	34.7	169	35.0	174	35.4
	23	122	25.0	145	32.3	158	35.9	160	36.1	163	36.3	167	36.7	171	37.0
	25	122	26.7	145	34.5	156	37.5	158	37.7	160	37.9	165	38.3	169	38.7
	27	122	28.5	145	36.9	154	39.1	156	39.3	158	39.5	162	39.9	167	40.3
	29	122	30.4	145	39.5	151	40.7	154	40.9	156	41.1	160	41.5	165	42.0
	31	122	32.5	145	41.8	149	42.3	151	42.5	154	42.7	158	43.2	162	43.6
	33	122	34.6	142	43.4	147	43.9	149	44.1	151	44.3	156	44.8	160	45.3
	35	122	36.9	140	44.9	145	45.5	147	45.7	149	46.0	153	46.5	158	47.0
	37	122	39.3	138	46.5	142	47.1	145	47.3	147	47.6	151	48.2	156	48.7
	39	122	41.8	136	48.1	140	48.7	142	49.0	144	49.3	149	49.8	153	50.4
120 (1500)	10	113	18.8	134	23.0	156	27.4	167	29.6	174	30.8	179	29.7	183	28.5
	12	113	19.2	134	23.5	156	27.9	167	30.2	172	30.7	176	29.5	180	28.3
	14	113	19.5	134	23.9	156	28.4	167	30.7	170	30.5	174	29.3	178	29.5
	16	113	19.9	134	24.4	156	29.0	166	31.0	168	30.6	172	30.6	176	31.1
	18	113	20.3	134	24.8	156	30.0	163	32.0	165	32.1	170	32.4	174	32.7
	20	113	20.7	134	25.8	156	32.2	161	33.5	163	33.7	167	34.0	171	34.3
	21	113	20.9	134	26.8	156	33.4	160	34.3	162	34.5	166	34.8	170	35.1
	23	113	22.3	134	28.7	156	35.7	158	35.9	160	36.1	164	36.4	168	36.7
	25	113	23.9	134	30.7	153	37.3	156	37.5	158	37.6	162	38.0	166	38.4
	27	113	25.5	134	32.8	151	38.8	153	39.0	155	39.2	159	39.6	163	40.0
	29	113	27.2	134	35.0	149	40.4	151	40.6	153	40.8	157	41.2	161	41.6
	31	113	29.0	134	37.4	147	42.0	149	42.2	151	42.4	155	42.8	159	43.3
	33	113	30.8	134	39.9	144	43.6	146	43.8	148	44.0	153	44.5	157	44.9
	35	113	32.8	134	42.5	142	45.2	144	45.4	146	45.6	150	46.1	154	46.6
	37	113	34.9	134	45.3	140	46.8	142	47.0	144	47.3	148	47.8	152	48.3
	39	113	37.2	134	47.8	138	48.4	140	48.6	142	48.9	146	49.4	150	49.9
110 (1375)	10	103	17.1	123	20.8	143	24.8	153	26.8	163	28.8	175	30.6	179	29.5
	12	103	17.4	123	21.2	143	25.2	153	27.3	163	29.3	173	30.4	177	29.3
	14	103	17.7	123	21.6	143	25.7	153	27.8	163	29.9	171	30.2	175	29.3
	16	103	18.1	123	22.0	143	26.2	153	28.3	163	30.5	169	30.6	172	30.9
	18	103	18.4	123	22.5	143	26.7	153	29.1	163	31.9	166	32.2	170	32.5
	20	103	18.8	123	22.9	143	28.3	153	31.3	160	33.5	164	33.8	168	34.1
	21	103	19.0	123	23.6	143	29.3	153	32.4	159	34.3	163	34.6	167	34.9
	23	103	19.8	123	25.3	143	31.4	153	34.8	157	35.8	161	36.1	164	36.5
	25	103	21.2	123	27.1	143	33.7	153	37.2	155	37.4	158	37.7	162	38.1
	27	103	22.6	123	28.9	143	36.0	151	38.8	153	39.0	156	39.3	160	39.7
	29	103	24.1	123	30.8	143	38.5	148	40.4	150	40.5	154	40.9	158	41.3
	31	103	25.7	123	32.9	143	41.1	146	41.9	148	42.1	152	42.5	155	42.9
	33	103	27.3	123	35.1	142	43.3	144	43.5	146	43.7	149	44.1	153	44.5
	35	103	29.1	123	37.4	140	44.9	142	45.1	143	45.3	147	45.8	151	46.2
	37	103	30.9	123	39.8	137	46.5	139	46.7	141	46.9	145	47.4	149	47.8
	39	103	32.8	123	42.4	135	48.1	137	48.3	139	48.5	143	49.0	146	49.5
100 (1250)	10	93.8	15.4	112	18.7	130	22.2	139	24.0	148	25.8	166	29.5	176	30.5
	12	93.8	15.7	112	19.1	130	22.6	139	24.4	148	26.3	166	30.0	173	30.3
	14	93.8	16.0	112	19.4	130	23.0	139	24.9	148	26.8	166	30.6	171	30.2
	16	93.8	16.3	112	19.8	130	23.5	139	25.4	148	27.3	166	31.0	169	30.7
	18	93.8	16.6	112	20.2	130	23.9	139	25.9	148	27.8	163	32.0	167	32.2
	20	93.8	16.9	112	20.6	130	24.7	139	27.2	148	29.8	161	33.5	164	33.8
	21	93.8	17.1	112	20.8	130	25.5	139	28.1	148	30.9	160	34.3	163	34.6
	23	93.8	17.5	112	22.1	130	27.3	139	30.2	148	33.1	158	35.9	161	36.2
	25	93.8	18.7	112	23.7	130	29.3	139	32.3	148	35.5	155	37.5	159	37.8
	27	93.8	19.9	112	25.3	130	31.3	139	34.5	148	37.9	153	39.0	157	39.3
	29	93.8	21.2	112	26.9	130	33.4	139	36.9	147	40.3	151	40.6	154	40.9
	31	93.8	22.6	112	28.7	130	35.6	139	39.4	145	41.8	149	42.2	152	42.6
	33	93.8	24.0	112	30.6	130	38.0	139	42.0	143	43.4	146	43.8	150	44.2
	35	93.8	25.5	112	32.6	130	40.5	139	44.8	141	45.0	144	45.4	147	45.8
	37	93.8	27.1	112	34.6	130	43.1	137	46.4	138	46.6	142	47.0	145	47.4
	39	93.8	28.8	112	36.9	130	46.0	134	48.0	136	48.2	140	48.6	143	49.1

Cooling capacity

Combination(%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. 14.0°CWB TC	14.0°CWB PI	16.0°CWB TC	16.0°CWB PI	18.0°CWB TC	18.0°CWB PI	19.0°CWB TC	19.0°CWB PI	20.0°CWB TC	20.0°CWB PI	22.0°CWB TC	22.0°CWB PI	24.0°CWB TC	24.0°CWB PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
90 (1125)	10	84.4	13.8	100.7	16.7	117	19.7	125	21.2	133	22.8	150	26.1	166	29.4
	12	84.4	14.1	100.7	17.0	117	20.0	125	21.6	133	23.2	150	26.6	166	29.9
	14	84.4	14.3	100.7	17.3	117	20.4	125	22.0	133	23.7	150	27.1	166	30.5
	16	84.4	14.5	100.7	17.6	117	20.8	125	22.5	133	24.2	150	27.6	165	31.0
	18	84.4	14.8	100.7	17.9	117	21.2	125	22.9	133	24.6	150	28.1	163	32.0
	20	84.4	15.1	100.7	18.3	117	21.6	125	23.4	133	25.5	150	30.2	161	33.5
	21	84.4	15.2	100.7	18.4	117	22.0	125	24.2	133	26.5	150	31.3	160	34.3
	23	84.4	15.5	100.7	19.2	117	23.6	125	25.9	133	28.3	150	33.6	158	35.9
	25	84.4	16.3	100.7	20.5	117	25.2	125	27.7	133	30.3	150	36.0	155	37.4
	27	84.4	17.4	100.7	21.9	117	26.9	125	29.6	133	32.4	150	38.5	153	39.0
	29	84.4	18.5	100.7	23.3	117	28.7	125	31.6	133	34.6	148	40.3	151	40.6
	31	84.4	19.7	100.7	24.8	117	30.6	125	33.7	133	37.0	145	41.9	149	42.2
	33	84.4	20.9	100.7	26.4	117	32.6	125	35.9	133	39.4	143	43.4	146	43.8
	35	84.4	22.2	100.7	28.1	117	34.7	125	38.3	133	42.0	141	45.0	144	45.4
	37	84.4	23.5	100.7	29.9	117	36.9	125	40.8	133	44.8	139	46.6	142	47.0
	39	84.4	25.0	100.7	31.7	117	39.3	125	43.4	133	47.7	136	48.2	139	48.6
80 (1000)	10	75.0	12.3	89.5	14.7	104	17.3	111	18.6	118	20.0	133	22.8	147	25.6
	12	75.0	12.5	89.5	14.9	104	17.6	111	18.9	118	20.3	133	23.2	147	26.1
	14	75.0	12.7	89.5	15.2	104	17.9	111	19.3	118	20.7	133	23.6	147	26.6
	16	75.0	12.9	89.5	15.5	104	18.2	111	19.6	118	21.1	133	24.1	147	27.1
	18	75.0	13.1	89.5	15.8	104	18.6	111	20.0	118	21.5	133	24.6	147	27.7
	20	75.0	13.3	89.5	16.1	104	18.9	111	20.4	118	21.9	133	25.5	147	29.6
	21	75.0	13.5	89.5	16.2	104	19.1	111	20.6	118	22.4	133	26.4	147	30.7
	23	75.0	13.7	89.5	16.5	104	20.0	111	22.0	118	24.0	133	28.2	147	32.9
	25	75.0	14.2	89.5	17.6	104	21.4	111	23.5	118	25.6	133	30.2	147	35.2
	27	75.0	15.1	89.5	18.7	104	22.8	111	25.0	118	27.4	133	32.3	147	37.7
	29	75.0	16.0	89.5	19.9	104	24.3	111	26.7	118	29.2	133	34.5	147	40.3
	31	75.0	17.0	89.5	21.2	104	25.9	111	28.5	118	31.1	133	36.8	145	41.8
	33	75.0	18.0	89.5	22.5	104	27.6	111	30.3	118	33.2	133	39.3	143	43.4
	35	75.0	19.1	89.5	24.0	104	29.4	111	32.3	118	35.3	133	41.9	141	45.0
	37	75.0	20.3	89.5	25.4	104	31.2	111	34.3	118	37.6	133	44.6	138	46.6
	39	75.0	21.5	89.5	27.0	104	33.2	111	36.5	118	40.0	133	47.5	136	48.2
70 (875)	10	65.7	10.8	78.3	12.8	91.0	14.9	97.3	16.1	104	17.2	116	19.5	129	22.0
	12	65.7	10.9	78.3	13.0	91.0	15.2	97.3	16.3	104	17.5	116	19.9	129	22.4
	14	65.7	11.1	78.3	13.2	91.0	15.5	97.3	16.6	104	17.8	116	20.3	129	22.8
	16	65.7	11.3	78.3	13.5	91.0	15.7	97.3	16.9	104	18.2	116	20.7	129	23.3
	18	65.7	11.5	78.3	13.7	91.0	16.0	97.3	17.3	104	18.5	116	21.1	129	23.7
	20	65.7	11.7	78.3	13.9	91.0	16.3	97.3	17.6	104	18.9	116	21.5	129	24.4
	21	65.7	11.8	78.3	14.1	91.0	16.5	97.3	17.8	104	19.0	116	21.8	129	25.2
	23	65.7	12.0	78.3	14.3	91.0	16.8	97.3	18.4	104	20.0	116	23.4	129	27.0
	25	65.7	12.2	78.3	14.9	91.0	18.0	97.3	19.6	104	21.3	116	25.0	129	28.9
	27	65.7	12.9	78.3	15.9	91.0	19.1	97.3	20.9	104	22.7	116	26.7	129	30.9
	29	65.7	13.7	78.3	16.9	91.0	20.4	97.3	22.3	104	24.2	116	28.4	129	33.0
	31	65.7	14.5	78.3	17.9	91.0	21.7	97.3	23.7	104	25.8	116	30.3	129	35.2
	33	65.7	15.4	78.3	19.0	91.0	23.0	97.3	25.2	104	27.5	116	32.3	129	37.6
	35	65.7	16.3	78.3	20.2	91.0	24.5	97.3	26.8	104	29.2	116	34.4	129	40.0
	37	65.7	17.2	78.3	21.4	91.0	26.0	97.3	28.5	104	31.1	116	36.6	129	42.6
	39	65.7	18.2	78.3	22.7	91.0	27.6	97.3	30.3	104	33.0	116	39.0	129	45.4
60 (750)	10	56.3	9.4	67.1	11.0	78.0	12.7	83.4	13.6	88.8	14.6	99.7	16.5	111	18.5
	12	56.3	9.5	67.1	11.2	78.0	13.0	83.4	13.9	88.8	14.8	99.7	16.8	111	18.8
	14	56.3	9.7	67.1	11.4	78.0	13.2	83.4	14.1	88.8	15.1	99.7	17.1	111	19.1
	16	56.3	9.8	67.1	11.5	78.0	13.4	83.4	14.4	88.8	15.3	99.7	17.4	111	19.5
	18	56.3	9.9	67.1	11.7	78.0	13.6	83.4	14.6	88.8	15.6	99.7	17.7	111	19.9
	20	56.3	10.1	67.1	11.9	78.0	13.9	83.4	14.9	88.8	15.9	99.7	18.1	111	20.3
	21	56.3	10.2	67.1	12.0	78.0	14.0	83.4	15.0	88.8	16.1	99.7	18.2	111	20.5
	23	56.3	10.4	67.1	12.2	78.0	14.3	83.4	15.3	88.8	16.4	99.7	19.0	111	21.8
	25	56.3	10.5	67.1	12.5	78.0	14.8	83.4	16.1	88.8	17.4	99.7	20.2	111	23.3
	27	56.3	10.9	67.1	13.2	78.0	15.8	83.4	17.1	88.8	18.6	99.7	21.6	111	24.8
	29	56.3	11.6	67.1	14.0	78.0	16.8	83.4	18.2	88.8	19.7	99.7	23.0	111	26.5
	31	56.3	12.2	67.1	14.9	78.0	17.8	83.4	19.4	88.8	21.0	99.7	24.5	111	28.2
	33	56.3	12.9	67.1	15.8	78.0	18.9	83.4	20.6	88.8	22.3	99.7	26.0	111	30.1
	35	56.3	13.7	67.1	16.7	78.0	20.1	83.4	21.8	88.8	23.7	99.7	27.7	111	32.0
	37	56.3	14.5	67.1	17.7	78.0	21.3	83.4	23.2	88.8	25.2	99.7	29.4	111	34.0
	39	56.3	15.3	67.1	18.7	78.0	22.5	83.4	24.6	88.8	26.7	99.7	31.3	111	36.2
50 (625)	10	46.9	8.06	55.9	9.3	65.0	10.7	69.5	11.4	74.0	12.1	83.1	13.6	92.1	15.1
	12	46.9	8.17	55.9	9.5	65.0	10.8	69.5	11.6	74.0	12.3	83.1	13.8	92.1	15.4
	14	46.9	8.28	55.9	9.6	65.0	11.0	69.5	11.7	74.0	12.5	83.1	14.1	92.1	15.7
	16	46.9	8.39	55.9	9.7	65.0	11.2	69.5	11.9	74.0	12.7	83.1	14.3	92.1	16.0
	18	46.9	8.51	55.9	9.9	65.0	11.4	69.5	12.1	74.0	12.9	83.1	14.6	92.1	16.3
	20	46.9	8.63	55.9	10.0	65.0	11.6	69.5	12.3	74.0	13.2	83.1	14.8	92.1	16.6
	21	46.9	8.69	55.9	10.1	65.0	11.7	69.5	12.5	74.0	13.3	83.1	15.0	92.1	16.7
	23	46.9	8.82	55.9	10.3	65.0	11.9	69.5	12.7	74.0	13.5	83.1	15.2	92.1	17.1
	25	46.9	8.95	55.9	10.5	65.0	12.1	69.5	12.9	74.0	13.9	83.1	16.0	92.1	18.2
	27	46.9	9.10	55.9	10.8	65.0	12.7	69.5	13.8	74.0	14.8	83.1	17.0	92.1	19.4
	29	46.9	9.6	55.9	11.5	65.0	13.5	69.5	14.6	74.0	15.7	83.1	18.1	92.1	20.7
	31	46.9	10.2	55.9	12.2	65.0	14.3	69.5	15.5	74.0	16.7	83.1	19.3	92.1	22.0
	33	46.9	10.7	55.9	12.9	65.0	15.2	69.5	16.4	74.0	17.7	83.1	20.5	92.1	23.4
	35	46.9	11.3	55.9	13.6	65.0	16.1	69.5	17.4	74.0	18.8	83.1	21.7	92.1	24.9
	37	46.9	12.0	55.9	14.4	65.0	17.0	69.5	18.4	74.0	19.9	83.1	23.1	92.1	26.4
	39	46.9	12.6	55.9	15.2	65.0	18.0	69.5	19.5	74.0	21.1	83.1	24.5	92.1	28.1

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)
Note1: The above table shows the average value of conditions which may occur.

15

5.2 Heating Capacity (RXYQ-P(A)H)

RXYQ16PAHY1, PAHYL, PHTL [50/60Hz]

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB													
			16.0		18.0		20.0		21.0		22.0		24.0			
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI		
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW		
130 (520)	-19.8	-20.0	32.5	7.83	32.3	8.39	32.2	8.95	32.2	9.23	32.1	9.51	32.0	10.06		
	-18.8	-19.0	33.4	8.14	33.3	8.67	33.2	9.21	33.1	9.48	33.1	9.75	33.0	10.29		
	-16.7	-17.0	35.3	8.68	35.2	9.19	35.1	9.70	35.1	9.96	35.0	10.21	34.9	10.72		
	-13.7	-15.0	37.3	9.17	37.1	9.65	37.0	10.14	37.0	10.38	36.9	10.62	36.8	11.10		
	-11.8	-13.0	39.2	9.61	39.1	10.07	39.0	10.53	38.9	10.75	38.8	10.98	38.7	11.44		
	-9.8	-11.0	41.1	10.01	41.0	10.44	40.9	10.88	40.8	11.09	40.8	11.31	40.7	11.7		
	-9.5	-10.0	42.1	10.19	42.0	10.62	41.8	11.04	41.8	11.25	41.7	11.5	41.6	11.9		
	-8.5	-9.1	42.9	10.35	42.8	10.77	42.7	11.18	42.6	11.39	42.6	11.6	42.5	12.0		
	-7.0	-7.6	44.4	10.60	44.3	11.00	44.1	11.4	44.1	11.6	44.0	11.8	43.9	12.2		
	-5.0	-5.6	46.3	10.91	46.2	11.29	46.1	11.7	46.0	11.9	46.0	12.1	45.8	12.4		
	-3.0	-3.7	48.1	11.18	48.0	11.5	47.9	11.9	47.8	12.1	47.8	12.3	47.7	12.7		
	0.0	-0.7	51.0	11.6	50.9	11.9	50.8	12.3	50.7	12.4	50.7	12.6	50.6	13.0		
	3.0	2.2	53.8	11.9	53.7	12.2	53.6	12.6	53.5	12.7	53.5	12.9	53.3	13.2		
	5.0	4.1	55.6	12.1	55.5	12.4	55.4	12.7	55.3	12.9	55.3	13.0	55.2	13.4		
	7.0	6.0	57.4	12.3	57.3	12.6	57.2	12.9	57.2	13.0	57.1	13.2	56.6	13.4		
	9.0	7.9	59.3	12.5	59.2	12.8	59.0	13.1	59.0	13.2	58.9	13.3	56.6	12.9		
	11.0	9.8	61.1	12.6	61.0	12.9	60.9	13.2	60.8	13.3	60.8	13.5	56.6	12.4		
	13.0	11.8	63.0	12.8	62.9	13.1	62.8	13.3	62.7	13.5	60.8	13.0	56.6	11.9		
	15.0	13.7	64.8	12.9	64.7	13.2	64.6	13.5	62.9	13.1	60.8	12.5	56.6	11.5		
120 (480)	-19.8	-20.0	32.3	8.59	32.2	9.10	32.1	9.61	32.0	9.87	32.0	10.13	31.9	10.64		
	-18.8	-19.0	33.3	8.86	33.2	9.36	33.1	9.86	33.0	10.11	32.9	10.36	32.8	10.86		
	-16.7	-17.0	35.2	9.37	35.1	9.84	35.0	10.31	34.9	10.55	34.9	10.78	34.8	11.25		
	-13.7	-15.0	37.1	9.82	37.0	10.27	36.9	10.71	36.8	10.93	36.8	11.16	36.7	11.6		
	-11.8	-13.0	39.0	10.23	38.9	10.65	38.8	11.07	38.8	11.28	38.7	11.5	38.6	11.9		
	-9.8	-11.0	41.0	10.60	40.8	11.00	40.7	11.40	40.7	11.6	40.6	11.8	40.5	12.2		
	-9.5	-10.0	41.9	10.77	41.8	11.16	41.7	11.5	41.7	11.7	41.6	11.9	41.5	12.3		
	-8.5	-9.1	42.8	10.91	42.7	11.30	42.6	11.7	42.5	11.9	42.5	12.1	42.4	12.4		
	-7.0	-7.6	44.2	11.14	44.1	11.5	44.0	11.9	44.0	12.1	43.9	12.3	43.8	12.6		
	-5.0	-5.6	46.1	11.4	46.0	11.8	45.9	12.1	45.9	12.3	45.8	12.5	45.7	12.8		
	-3.0	-3.7	48.0	11.7	47.9	12.0	47.8	12.4	47.7	12.5	47.7	12.7	47.5	13.0		
	0.0	-0.7	50.9	12.0	50.7	12.4	50.6	12.7	50.6	12.8	50.5	13.0	50.4	13.3		
	3.0	2.2	53.6	12.3	53.5	12.6	53.4	12.9	53.4	13.1	53.3	13.2	52.3	13.2		
	5.0	4.1	55.5	12.5	55.4	12.8	55.3	13.1	55.2	13.3	55.2	13.4	52.3	12.6		
	7.0	6.0	57.3	12.7	57.2	13.0	57.1	13.3	57.0	13.4	56.1	13.2	52.3	12.1		
	9.0	7.9	59.1	12.9	59.0	13.1	58.9	13.4	58.1	13.3	56.1	12.7	52.3	11.7		
	11.0	9.8	60.9	13.0	60.8	13.3	60.0	13.3	58.1	12.8	56.1	12.2	52.3	11.2		
	13.0	11.8	62.9	13.2	62.8	13.4	60.0	12.8	58.1	12.3	56.1	11.8	52.3	10.8		
	15.0	13.7	64.7	13.3	63.9	13.3	60.0	12.3	58.1	11.9	56.1	11.4	52.3	10.5		
110 (440)	-19.8	-20.0	32.1	9.34	32.1	9.81	32.0	10.28	31.9	10.52	31.9	10.75	31.8	11.22		
	-18.8	-19.0	33.1	9.59	33.0	10.05	32.9	10.51	32.9	10.74	32.8	10.96	32.7	11.42		
	-16.7	-17.0	35.0	10.06	34.9	10.49	34.8	10.92	34.8	11.13	34.7	11.35	34.6	11.8		
	-13.7	-15.0	37.0	10.47	36.9	10.88	36.8	11.29	36.7	11.49	36.7	11.7	36.6	12.1		
	-11.8	-13.0	38.9	10.85	38.8	11.23	38.7	11.6	38.6	11.8	38.6	12.0	38.5	12.4		
	-9.8	-11.0	40.8	11.18	40.7	11.5	40.6	11.9	40.6	12.1	40.5	12.3	40.4	12.7		
	-9.5	-10.0	41.8	11.34	41.7	11.7	41.6	12.1	41.5	12.2	41.5	12.4	41.4	12.8		
	-8.5	-9.1	42.6	11.5	42.5	11.8	42.4	12.2	42.4	12.3	42.3	12.5	42.2	12.9		
	-7.0	-7.6	44.1	11.7	44.0	12.0	43.9	12.4	43.8	12.5	43.8	12.7	43.7	13.0		
	-5.0	-5.6	46.0	11.9	45.9	12.3	45.8	12.6	45.7	12.8	45.7	12.9	45.6	13.2		
	-3.0	-3.7	47.8	12.2	47.7	12.5	47.6	12.8	47.6	13.0	47.5	13.1	47.4	13.4		
	0.0	-0.7	50.7	12.5	50.6	12.8	50.5	13.1	50.5	13.2	50.4	13.4	47.9	12.7		
	3.0	2.2	53.5	12.8	53.4	13.1	53.3	13.3	53.2	13.5	51.5	12.9	47.9	11.9		
	5.0	4.1	55.3	13.0	55.2	13.2	55.0	13.4	53.2	12.9	51.5	12.4	47.9	11.4		
	7.0	6.0	57.1	13.1	57.0	13.4	55.0	12.9	53.2	12.4	51.5	11.9	47.9	10.9		
	9.0	7.9	59.0	13.3	58.5	13.4	55.0	12.4	53.2	11.9	51.5	11.5	47.9	10.5		
	11.0	9.8	60.8	13.4	58.5	12.9	55.0	11.9	53.2	11.5	51.5	11.0	47.9	10.2		
	13.0	11.8	62.1	13.3	58.5	12.4	55.0	11.5	53.2	11.1	51.5	10.6	47.9	9.8		
	15.0	13.7	62.1	12.8	58.5	12.0	55.0	11.1	53.2	10.7	51.5	10.3	47.9	9.5		

1. This table indicates the situation of 50~130% combination of indoor units.
2. If connecting the indoor units over 130% of outdoor unit capacity, capacity of indoor unit will decrease.

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB													
			16.0		18.0		20.0		21.0		22.0		24.0			
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI		
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW		
100 (400)	-19.8	-20.0	32.0	10.09	31.9	10.52	31.8	10.95	31.8	11.16	31.7	11.38	31.6	11.8		
	-18.8	-19.0	33.0	10.32	32.9	10.74	32.8	11.15	32.7	11.36	32.7	11.57	32.6	12.0		
	-16.7	-17.0	34.9	10.75	34.8	11.14	34.7	11.53	34.7	11.7	34.6	11.9	34.5	12.3		
	-13.7	-15.0	36.8	11.12	36.7	11.49	36.6	11.9	36.6	12.0	36.5	12.2	36.4	12.6		
	-11.8	-13.0	38.7	11.46	38.6	11.8	38.5	12.2	38.5	12.3	38.5	12.5	38.4	12.9		
	-9.8	-11.0	40.6	11.8	40.6	12.1	40.5	12.4	40.4	12.6	40.4	12.8	40.3	13.1		
	-9.5	-10.0	41.6	11.9	41.5	12.2	41.4	12.6	41.4	12.7	41.3	12.9	41.3	13.2		
	-8.5	-9.1	42.5	12.0	42.4	12.4	42.3	12.7	42.3	12.8	42.2	13.0	42.1	13.3		
	-7.0	-7.6	43.9	12.2	43.8	12.5	43.7	12.8	43.7	13.0	43.6	13.2	43.6	13.5		
	-5.0	-5.6	45.8	12.5	45.7	12.8	45.7	13.1	45.6	13.2	45.6	13.3	43.6	12.8		
	-3.0	-3.7	47.7	12.7	47.6	13.0	47.5	13.2	47.4	13.4	46.8	13.2	43.6	12.1		
	0.0	-0.7	50.5	13.0	50.5	13.2	50.0	13.3	48.4	12.8	46.8	12.3	43.6	11.3		
	3.0	2.2	53.3	13.2	53.2	13.5	50.0	12.5	48.4	12.0	46.8	11.5	43.6	10.6		
	5.0	4.1	55.2	13.4	53.2	12.9	50.0	12.0	48.4	11.5	46.8	11.1	43.6	10.2		
	7.0	6.0	56.4	13.3	53.2	12.4	50.0	11.5	48.4	11.1	46.8	10.6	43.6	9.8		
	9.0	7.9	56.4	12.8	53.2	11.9	50.0	11.1	48.4	10.6	46.8	10.2	43.6	9.4		
	11.0	9.8	56.4	12.3	53.2	11.5	50.0	10.7	48.4	10.3	46.8	9.9	43.6	9.1		
	13.0	11.8	56.4	11.9	53.2	11.1	50.0	10.3	48.4	9.9	46.8	9.5	43.6	8.8		
	15.0	13.7	56.4	11.4	53.2	10.7	50.0	9.9	48.4	9.6	46.8	9.2	43.6	8.49		
90 (360)	-19.8	-20.0	31.8	10.84	31.8	11.23	31.7	11.61	31.6	11.8	31.6	12.0	31.5	12.4		
	-18.8	-19.0	32.8	11.05	32.7	11.43	32.6	11.8	32.6	12.0	32.6	12.2	32.5	12.5		
	-16.7	-17.0	34.7	11.43	34.6	11.8	34.6	12.1	34.5	12.3	34.5	12.5	34.4	12.8		
	-13.7	-15.0	36.6	11.8	36.6	12.1	36.5	12.4	36.4	12.6	36.4	12.8	36.3	13.1		
	-11.8	-13.0	38.6	12.1	38.5	12.4	38.4	12.7	38.4	12.9	38.3	13.0	38.3	13.3		
	-9.8	-11.0	40.5	12.4	40.4	12.7	40.3	13.0	40.3	13.1	40.3	13.3	39.2	13.1		
	-9.5	-10.0	41.5	12.5	41.4	12.8	41.3	13.1	41.3	13.2	41.2	13.4	39.2	12.7		
	-8.5	-9.1	42.3	12.6	42.2	12.9	42.2	13.2	42.1	13.3	42.1	13.5	39.2	12.3		
	-7.0	-7.6	43.8	12.8	43.7	13.0	43.6	13.3	43.6	13.5	42.1	12.9	39.2	11.8		
	-5.0	-5.6	45.7	13.0	45.6	13.2	45.0	13.3	43.6	12.7	42.1	12.2	39.2	11.2		
	-3.0	-3.7	47.5	13.2	47.4	13.4	45.0	12.6	43.6	12.1	42.1	11.7	39.2	10.7		
	0.0	-0.7	50.4	13.4	47.9	12.7	45.0	11.7	43.6	11.3	42.1	10.8	39.2	10.0		
	3.0	2.2	50.8	12.7	47.9	11.8	45.0	11.0	43.6	10.6	42.1	10.2	39.2	9.4		
	5.0	4.1	50.8	12.2	47.9	11.4	45.0	10.6	43.6	10.2	42.1	9.8	39.2	9.0		
	7.0	6.0	50.8	11.7	47.9	10.9	45.0	10.2	43.6	9.8	42.1	9.4	39.2	8.7		
	9.0	7.9	50.8	11.3	47.9	10.5	45.0	9.8	43.6	9.4	42.1	9.1	39.2	8.37		
	11.0	9.8	50.8	10.9	47.9	10.1	45.0	9.4	43.6	9.1	42.1	8.8	39.2	8.09		
	13.0	11.8	50.8	10.5	47.9	9.8	45.0	9.1	43.6	8.8	42.1	8.45	39.2	7.81		
	15.0	13.7	50.8	10.1	47.9	9.5	45.0	8.8	43.6	8.49	42.1	8.18	39.2	7.56		
80 (320)	-19.8	-20.0	31.7	11.60	31.6	11.9	31.5	12.3	31.5	12.5	31.5	12.6	31.4	13.0		
	-18.8	-19.0	32.6	11.8	32.6	12.1	32.5	12.4	32.5	12.6	32.4	12.8	32.4	13.1		
	-16.7	-17.0	34.6	12.1	34.5	12.4	34.4	12.7	34.4	12.9	34.4	13.1	34.3	13.4		
	-13.7	-15.0	36.5	12.4	36.4	12.7	36.3	13.0	36.3	13.2	36.3	13.3	34.9	12.8		
	-11.8	-13.0	38.4	12.7	38.3	13.0	38.3	13.3	38.2	13.4	37.4	13.1	34.9	12.0		
	-9.8	-11.0	40.3	12.9	40.3	13.2	40.0	13.4	38.7	12.8	37.4	12.3	34.9	11.3		
	-9.5	-10.0	41.3	13.1	41.2	13.3	40.0	13.0	38.7	12.5	37.4	12.0	34.9	11.0		
	-8.5	-9.1	42.2	13.2	42.1	13.4	40.0	12.6	38.7	12.2	37.4	11.7	34.9	10.7		
	-7.0	-7.6	43.6	13.3	42.6	13.1	40.0	12.1	38.7	11.7	37.4	11.2	34.9	10.3		
	-5.0	-5.6	45.1	13.3	42.6	12.4	40.0	11.5	38.7	11.1	37.4	10.6	34.9	9.8		
	-3.0	-3.7	45.1	12.7	42.6	11.8	40.0	11.0	38.7	10.6	37.4	10.1	34.9	9.3		
	0.0	-0.7	45.1	11.8	42.6	11.0	40.0	10.2	38.7	9.8	37.4	9.5	34.9	8.7		
	3.0	2.2	45.1	11.0	42.6	10.3	40.0	9.6	38.7	9.2	37.4	8.9	34.9	8.21		
	5.0	4.1	45.1	10.6	42.6	9.9	40.0	9.2	38.7	8.9	37.4	8.55	34.9	7.90		
	7.0	6.0	45.1	10.2	42.6	9.5	40.0	8.9	38.7	8.55	37.4	8.24	34.9	7.62		
	9.0	7.9	45.1	9.8	42.6	9.2	40.0	8.56	38.7	8.25	37.4	7.95	34.9	7.36		
	11.0	9.8	45.1	9.5	42.6	8.9	40.0	8.26	38.7	7.97	37.4	7.68	34.9	7.11		
	13.0	11.8	45.1	9.1	42.6	8.55	40.0	7.98	38.7	7.70	37.4	7.42	34.9	6.88		
	15.0	13.7	45.1	8.8	42.6	8.28	40.0	7.73	38.7	7.46	37.4	7.19	34.9	6.67		

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: ▒ is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range shown by ▒.
Note2: The above table shows the average value of conditions which may occur.

[50/60Hz]

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB															
			16.0		18.0		20.0		21.0		22.0		24.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70 (280)	-19.8	-20.0	31.5	12.3	31.5	12.6	31.4	12.9	31.4	13.1	31.3	13.2	30.5	13.0
	-18.8	-19.0	32.5	12.5	32.4	12.8	32.4	13.1	32.3	13.2	32.3	13.4	30.5	12.5
	-16.7	-17.0	34.4	12.8	34.4	13.1	34.3	13.4	33.9	13.3	32.8	12.7	30.5	11.7
	-13.7	-15.0	36.3	13.1	36.3	13.3	35.0	12.9	33.9	12.4	32.8	11.9	30.5	10.9
	-11.8	-13.0	38.3	13.3	37.2	13.0	35.0	12.1	33.9	11.6	32.8	11.2	30.5	10.3
	-9.8	-11.0	39.5	13.2	37.2	12.3	35.0	11.4	33.9	10.9	32.8	10.5	30.5	9.7
	-9.5	-10.0	39.5	12.8	37.2	11.9	35.0	11.1	33.9	10.6	32.8	10.2	30.5	9.4
	-8.5	-9.1	39.5	12.5	37.2	11.6	35.0	10.8	33.9	10.4	32.8	10.0	30.5	9.2
	-7.0	-7.6	39.5	11.9	37.2	11.1	35.0	10.3	33.9	10.0	32.8	9.6	30.5	8.8
	-5.0	-5.6	39.5	11.3	37.2	10.6	35.0	9.8	33.9	9.5	32.8	9.1	30.5	8.41
	-3.0	-3.7	39.5	10.8	37.2	10.1	35.0	9.4	33.9	9.0	32.8	8.7	30.5	8.04
	0.0	-0.7	39.5	10.1	37.2	9.4	35.0	8.8	33.9	8.45	32.8	8.14	30.5	7.53
	3.0	2.2	39.5	9.4	37.2	8.8	35.0	8.24	33.9	7.95	32.8	7.66	30.5	7.09
	5.0	4.1	39.5	9.1	37.2	8.50	35.0	7.93	33.9	7.66	32.8	7.38	30.5	6.84
	7.0	6.0	39.5	8.7	37.2	8.19	35.0	7.65	33.9	7.38	32.8	7.12	30.5	6.60
	9.0	7.9	39.5	8.44	37.2	7.91	35.0	7.39	33.9	7.13	32.8	6.88	30.5	6.38
	11.0	9.8	39.5	8.15	37.2	7.64	35.0	7.14	33.9	6.90	32.8	6.66	30.5	6.18
	13.0	11.8	39.5	7.87	37.2	7.38	35.0	6.91	33.9	6.67	32.8	6.44	30.5	5.98
	15.0	13.7	39.5	7.62	37.2	7.15	35.0	6.69	33.9	6.47	32.8	6.25	30.5	5.81
60 (240)	-19.8	-20.0	31.4	13.1	31.3	13.4	30.0	12.8	29.0	12.3	28.1	11.8	26.1	10.8
	-18.8	-19.0	32.3	13.2	31.9	13.3	30.0	12.3	29.0	11.8	28.1	11.3	26.1	10.4
	-16.7	-17.0	33.9	13.2	31.9	12.3	30.0	11.4	29.0	11.0	28.1	10.6	26.1	9.7
	-13.7	-15.0	33.9	12.4	31.9	11.5	30.0	10.7	29.0	10.3	28.1	9.9	26.1	9.1
	-11.8	-13.0	33.9	11.6	31.9	10.8	30.0	10.1	29.0	9.7	28.1	9.3	26.1	8.6
	-9.8	-11.0	33.9	10.9	31.9	10.2	30.0	9.5	29.0	9.1	28.1	8.8	26.1	8.13
	-9.5	-10.0	33.9	10.6	31.9	9.9	30.0	9.2	29.0	8.9	28.1	8.6	26.1	7.92
	-8.5	-9.1	33.9	10.4	31.9	9.7	30.0	9.0	29.0	8.7	28.1	8.4	26.1	7.74
	-7.0	-7.6	33.9	10.0	31.9	9.3	30.0	8.7	29.0	8.36	28.1	8.05	26.1	7.45
	-5.0	-5.6	33.9	9.5	31.9	8.9	30.0	8.25	29.0	7.96	28.1	7.67	26.1	7.10
	-3.0	-3.7	33.9	9.0	31.9	8.46	30.0	7.90	29.0	7.62	28.1	7.35	26.1	6.81
	0.0	-0.7	33.9	8.44	31.9	7.91	30.0	7.39	29.0	7.14	28.1	6.89	26.1	6.39
	3.0	2.2	33.9	7.94	31.9	7.45	30.0	6.97	29.0	6.73	28.1	6.50	26.1	6.04
	5.0	4.1	33.9	7.65	31.9	7.18	30.0	6.72	29.0	6.49	28.1	6.27	26.1	5.83
	7.0	6.0	33.9	7.38	31.9	6.93	30.0	6.49	29.0	6.27	28.1	6.06	26.1	5.63
	9.0	7.9	33.9	7.13	31.9	6.70	30.0	6.28	29.0	6.07	28.1	5.86	26.1	5.46
	11.0	9.8	33.9	6.89	31.9	6.48	30.0	6.08	29.0	5.88	28.1	5.68	26.1	5.29
	13.0	11.8	33.9	6.67	31.9	6.27	30.0	5.88	29.0	5.69	28.1	5.50	26.1	5.13
	15.0	13.7	33.9	6.47	31.9	6.08	30.0	5.71	29.0	5.53	28.1	5.34	26.1	4.98
50 (200)	-19.8	-20.0	28.2	11.8	26.6	11.0	25.0	10.3	24.2	9.9	23.4	9.5	21.8	8.8
	-18.8	-19.0	28.2	11.4	26.6	10.6	25.0	9.9	24.2	9.5	23.4	9.2	21.8	8.5
	-16.7	-17.0	28.2	10.6	26.6	9.9	25.0	9.2	24.2	8.9	23.4	8.6	21.8	7.92
	-13.7	-15.0	28.2	10.0	26.6	9.3	25.0	8.7	24.2	8.4	23.4	8.06	21.8	7.46
	-11.8	-13.0	28.2	9.4	26.6	8.8	25.0	8.18	24.2	7.89	23.4	7.61	21.8	7.04
	-9.8	-11.0	28.2	8.9	26.6	8.3	25.0	7.74	24.2	7.47	23.4	7.20	21.8	6.68
	-9.5	-10.0	28.2	8.6	26.6	8.07	25.0	7.54	24.2	7.28	23.4	7.02	21.8	6.51
	-8.5	-9.1	28.2	8.4	26.6	7.89	25.0	7.37	24.2	7.11	23.4	6.86	21.8	6.37
	-7.0	-7.6	28.2	8.10	26.6	7.59	25.0	7.10	24.2	6.86	23.4	6.62	21.8	6.14
	-5.0	-5.6	28.2	7.71	26.6	7.24	25.0	6.77	24.2	6.54	23.4	6.32	21.8	5.87
	-3.0	-3.7	28.2	7.38	26.6	6.93	25.0	6.49	24.2	6.28	23.4	6.06	21.8	5.64
	0.0	-0.7	28.2	6.92	26.6	6.51	25.0	6.10	24.2	5.90	23.4	5.70	21.8	5.31
	3.0	2.2	28.2	6.53	26.6	6.15	25.0	5.77	24.2	5.58	23.4	5.40	21.8	5.03
	5.0	4.1	28.2	6.30	26.6	5.93	25.0	5.57	24.2	5.39	23.4	5.21	21.8	4.87
	7.0	6.0	28.2	6.09	26.6	5.74	25.0	5.39	24.2	5.22	23.4	5.05	21.8	4.71
	9.0	7.9	28.2	5.89	26.6	5.55	25.0	5.22	24.2	5.06	23.4	4.89	21.8	4.57
	11.0	9.8	28.2	5.71	26.6	5.38	25.0	5.06	24.2	4.90	23.4	4.75	21.8	4.44
	13.0	11.8	28.2	5.53	26.6	5.22	25.0	4.91	24.2	4.76	23.4	4.61	21.8	4.31
	15.0	13.7	28.2	5.37	26.6	5.07	25.0	4.77	24.2	4.63	23.4	4.48	21.8	4.20

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: ▒ is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range ▒ shown by ▒.
Note2: The above table shows the average value of conditions which may occur.

15

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB													
			16.0		18.0		20.0		21.0		22.0		24.0			
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI		
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW		
130 (585)	-19.8	-20.0	36.6	9.29	36.5	9.95	36.3	10.60	36.3	10.93	36.2	11.26	36.1	11.9		
	-18.8	-19.0	37.4	9.57	37.3	10.21	37.2	10.85	37.1	11.17	37.0	11.5	36.9	12.1		
	-16.7	-17.0	39.2	10.11	39.0	10.72	38.9	11.33	38.8	11.6	38.8	11.9	38.7	12.6		
	-13.7	-15.0	41.0	10.63	40.9	11.21	40.8	11.8	40.7	12.1	40.6	12.4	40.5	13.0		
	-11.8	-13.0	42.9	11.12	42.8	11.7	42.7	12.2	42.6	12.5	42.6	12.8	42.4	13.4		
	-9.8	-11.0	45.0	11.6	44.9	12.1	44.7	12.7	44.7	12.9	44.6	13.2	44.5	13.7		
	-9.5	-10.0	46.0	11.8	45.9	12.3	45.8	12.9	45.7	13.1	45.6	13.4	45.5	13.9		
	-8.5	-9.1	47.0	12.0	46.9	12.5	46.7	13.0	46.7	13.3	46.6	13.6	46.5	14.1		
	-7.0	-7.6	48.7	12.4	48.5	12.8	48.4	13.3	48.3	13.6	48.3	13.8	48.1	14.3		
	-5.0	-5.6	50.9	12.8	50.8	13.2	50.7	13.7	50.6	13.9	50.6	14.2	50.4	14.6		
	-3.0	-3.7	53.2	13.1	53.1	13.6	53.0	14.0	52.9	14.3	52.8	14.5	52.7	14.9		
	0.0	-0.7	57.0	13.7	56.8	14.1	56.7	14.5	56.6	14.7	56.6	14.9	56.5	15.4		
	3.0	2.2	60.8	14.2	60.7	14.6	60.5	15.0	60.5	15.2	60.4	15.4	60.3	15.8		
	5.0	4.1	63.4	14.5	63.3	14.9	63.2	15.2	63.1	15.4	63.0	15.6	62.9	16.0		
	7.0	6.0	66.1	14.8	66.0	15.1	65.9	15.5	65.8	15.7	65.8	15.9	64.0	15.6		
	9.0	7.9	68.9	15.1	68.8	15.4	68.7	15.7	68.6	15.9	68.6	16.1	64.0	14.8		
	11.0	9.8	71.8	15.3	71.7	15.7	71.6	16.0	71.1	16.0	68.7	15.3	64.0	14.1		
	13.0	11.8	75.0	15.6	74.8	15.9	73.5	15.8	71.1	15.2	68.7	14.6	64.0	13.4		
	15.0	13.7	78.0	15.8	77.9	16.1	73.5	15.0	71.1	14.4	68.7	13.9	64.0	12.7		
120 (540)	-19.8	-20.0	36.4	10.18	36.3	10.79	36.2	11.39	36.1	11.7	36.1	12.0	35.9	12.6		
	-18.8	-19.0	37.3	10.44	37.1	11.03	37.0	11.6	37.0	11.9	36.9	12.2	36.8	12.8		
	-16.7	-17.0	39.0	10.94	38.9	11.5	38.8	12.1	38.7	12.4	38.6	12.6	38.5	13.2		
	-13.7	-15.0	40.8	11.4	40.7	12.0	40.6	12.5	40.5	12.8	40.5	13.0	40.4	13.6		
	-11.8	-13.0	42.8	11.9	42.7	12.4	42.5	12.9	42.5	13.2	42.4	13.4	42.3	13.9		
	-9.8	-11.0	44.8	12.3	44.7	12.8	44.6	13.3	44.5	13.5	44.4	13.8	44.3	14.3		
	-9.5	-10.0	45.9	12.5	45.7	13.0	45.6	13.5	45.6	13.7	45.5	14.0	45.4	14.4		
	-8.5	-9.1	46.8	12.7	46.7	13.2	46.6	13.7	46.5	13.9	46.5	14.1	46.3	14.6		
	-7.0	-7.6	48.5	13.0	48.4	13.5	48.2	13.9	48.2	14.1	48.1	14.4	48.0	14.8		
	-5.0	-5.6	50.8	13.4	50.7	13.8	50.5	14.3	50.5	14.5	50.4	14.7	50.3	15.1		
	-3.0	-3.7	53.0	13.7	52.9	14.2	52.8	14.6	52.7	14.8	52.7	15.0	52.6	15.4		
	0.0	-0.7	56.8	14.3	56.7	14.6	56.6	15.0	56.5	15.2	56.4	15.4	56.3	15.8		
	3.0	2.2	60.6	14.7	60.5	15.1	60.4	15.4	60.3	15.6	60.3	15.8	59.1	15.7		
	5.0	4.1	63.3	15.0	63.1	15.3	63.0	15.7	63.0	15.9	62.9	16.0	59.1	14.9		
	7.0	6.0	66.0	15.3	65.8	15.6	65.7	15.9	65.6	16.1	63.4	15.4	59.1	14.1		
	9.0	7.9	68.8	15.5	68.6	15.8	67.8	15.9	65.6	15.3	63.4	14.6	59.1	13.4		
	11.0	9.8	71.6	15.8	71.5	16.1	67.8	15.1	65.6	14.5	63.4	13.9	59.1	12.8		
	13.0	11.8	74.8	16.0	72.2	15.4	67.8	14.3	65.6	13.8	63.4	13.2	59.1	12.2		
	15.0	13.7	76.5	15.8	72.2	14.7	67.8	13.6	65.6	13.1	63.4	12.6	59.1	11.6		
110 (495)	-19.8	-20.0	36.2	11.07	36.1	11.6	36.0	12.2	36.0	12.5	35.9	12.7	35.8	13.3		
	-18.8	-19.0	37.1	11.30	37.0	11.8	36.9	12.4	36.8	12.7	36.8	12.9	36.6	13.5		
	-16.7	-17.0	38.8	11.8	38.7	12.3	38.6	12.8	38.6	13.1	38.5	13.3	38.4	13.8		
	-13.7	-15.0	40.7	12.2	40.6	12.7	40.4	13.2	40.4	13.4	40.3	13.7	40.2	14.2		
	-11.8	-13.0	42.6	12.6	42.5	13.1	42.4	13.6	42.3	13.8	42.3	14.0	42.2	14.5		
	-9.8	-11.0	44.6	13.0	44.5	13.5	44.4	13.9	44.4	14.2	44.3	14.4	44.2	14.8		
	-9.5	-10.0	45.7	13.2	45.6	13.7	45.5	14.1	45.4	14.3	45.4	14.5	45.2	15.0		
	-8.5	-9.1	46.7	13.4	46.5	13.8	46.4	14.3	46.4	14.5	46.3	14.7	46.2	15.1		
	-7.0	-7.6	48.3	13.7	48.2	14.1	48.1	14.5	48.0	14.7	48.0	14.9	47.9	15.3		
	-5.0	-5.6	50.6	14.0	50.5	14.4	50.4	14.8	50.3	15.0	50.3	15.2	50.2	15.6		
	-3.0	-3.7	52.9	14.4	52.8	14.7	52.6	15.1	52.6	15.3	52.5	15.5	52.4	15.9		
	0.0	-0.7	56.6	14.8	56.5	15.2	56.4	15.5	56.3	15.7	56.3	15.9	54.2	15.3		
	3.0	2.2	60.5	15.2	60.3	15.6	60.2	15.9	60.2	16.1	58.2	15.4	54.2	14.1		
	5.0	4.1	63.1	15.5	63.0	15.8	62.2	15.8	60.2	15.2	58.2	14.6	54.2	13.4		
	7.0	6.0	65.8	15.8	65.7	16.1	62.2	15.0	60.2	14.4	58.2	13.9	54.2	12.7		
	9.0	7.9	68.6	16.0	66.1	15.4	62.2	14.3	60.2	13.7	58.2	13.2	54.2	12.1		
	11.0	9.8	70.1	15.7	66.1	14.6	62.2	13.6	60.2	13.1	58.2	12.6	54.2	11.6		
	13.0	11.8	70.1	14.9	66.1	13.9	62.2	12.9	60.2	12.4	58.2	11.9	54.2	11.0		
	15.0	13.7	70.1	14.2	66.1	13.2	62.2	12.3	60.2	11.8	58.2	11.4	54.2	10.5		

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB													
			16.0		18.0		20.0		21.0		22.0		24.0			
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI		
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW		
100 (450)	-19.8	-20.0	36.1	12.0	36.0	12.5	35.9	13.0	35.8	13.2	35.8	13.5	35.7	14.0		
	-18.8	-19.0	36.9	12.2	36.8	12.7	36.7	13.2	36.7	13.4	36.6	13.7	36.5	14.2		
	-16.7	-17.0	38.6	12.6	38.5	13.1	38.5	13.5	38.4	13.8	38.4	14.0	38.3	14.5		
	-13.7	-15.0	40.5	13.0	40.4	13.4	40.3	13.9	40.2	14.1	40.2	14.3	40.1	14.8		
	-11.8	-13.0	42.4	13.4	42.3	13.8	42.2	14.2	42.2	14.5	42.1	14.7	42.0	15.1		
	-9.8	-11.0	44.5	13.8	44.4	14.2	44.3	14.6	44.2	14.8	44.2	15.0	44.1	15.4		
	-9.5	-10.0	45.5	13.9	45.4	14.3	45.3	14.7	45.3	14.9	45.2	15.1	45.1	15.5		
	-8.5	-9.1	46.5	14.1	46.4	14.5	46.3	14.9	46.2	15.1	46.2	15.3	46.1	15.6		
	-7.0	-7.6	48.1	14.3	48.0	14.7	47.9	15.1	47.9	15.3	47.8	15.5	47.7	15.8		
	-5.0	-5.6	50.4	14.7	50.3	15.0	50.2	15.4	50.2	15.6	50.1	15.7	49.2	15.7		
	-3.0	-3.7	52.7	15.0	52.6	15.3	52.5	15.6	52.4	15.8	52.4	16.0	49.2	14.9		
	0.0	-0.7	56.4	15.4	56.3	15.7	56.2	16.0	54.7	15.5	52.9	14.9	49.2	13.6		
	3.0	2.2	60.3	15.8	60.1	16.0	56.5	14.9	54.7	14.3	52.9	13.7	49.2	12.6		
	5.0	4.1	62.9	16.0	60.1	15.2	56.5	14.1	54.7	13.6	52.9	13.0	49.2	12.0		
	7.0	6.0	63.8	15.5	60.1	14.4	56.5	13.4	54.7	12.9	52.9	12.4	49.2	11.4		
	9.0	7.9	63.8	14.7	60.1	13.7	56.5	12.7	54.7	12.3	52.9	11.8	49.2	10.9		
	11.0	9.8	63.8	14.0	60.1	13.1	56.5	12.1	54.7	11.7	52.9	11.2	49.2	10.4		
	13.0	11.8	63.8	13.3	60.1	12.4	56.5	11.5	54.7	11.1	52.9	10.7	49.2	9.9		
	15.0	13.7	63.8	12.7	60.1	11.8	56.5	11.0	54.7	10.6	52.9	10.2	49.2	9.4		
90 (405)	-19.8	-20.0	35.9	12.8	35.8	13.3	35.7	13.8	35.7	14.0	35.6	14.2	35.5	14.7		
	-18.8	-19.0	36.7	13.0	36.6	13.5	36.6	13.9	36.5	14.2	36.5	14.4	36.4	14.8		
	-16.7	-17.0	38.5	13.4	38.4	13.8	38.3	14.3	38.3	14.5	38.2	14.7	38.1	15.1		
	-13.7	-15.0	40.3	13.8	40.2	14.2	40.1	14.6	40.1	14.8	40.0	15.0	40.0	15.4		
	-11.8	-13.0	42.3	14.1	42.2	14.5	42.1	14.9	42.0	15.1	42.0	15.3	41.9	15.7		
	-9.8	-11.0	44.3	14.5	44.2	14.8	44.1	15.2	44.1	15.4	44.0	15.6	43.9	15.9		
	-9.5	-10.0	45.3	14.6	45.2	15.0	45.2	15.3	45.1	15.5	45.1	15.7	44.3	15.7		
	-8.5	-9.1	46.3	14.8	46.2	15.1	46.1	15.5	46.1	15.6	46.0	15.8	44.3	15.3		
	-7.0	-7.6	48.0	15.0	47.9	15.3	47.8	15.7	47.7	15.8	47.6	16.0	44.3	14.6		
	-5.0	-5.6	50.3	15.3	50.2	15.6	50.1	15.9	49.2	15.7	47.6	15.1	44.3	13.8		
	-3.0	-3.7	52.5	15.6	52.4	15.9	50.9	15.5	49.2	14.8	47.6	14.3	44.3	13.1		
	0.0	-0.7	56.3	15.9	54.1	15.3	50.9	14.2	49.2	13.6	47.6	13.1	44.3	12.0		
	3.0	2.2	57.4	15.2	54.1	14.1	50.9	13.1	49.2	12.6	47.6	12.1	44.3	11.1		
	5.0	4.1	57.4	14.4	54.1	13.4	50.9	12.4	49.2	12.0	47.6	11.5	44.3	10.6		
	7.0	6.0	57.4	13.7	54.1	12.7	50.9	11.8	49.2	11.4	47.6	11.0	44.3	10.1		
	9.0	7.9	57.4	13.0	54.1	12.1	50.9	11.3	49.2	10.9	47.6	10.4	44.3	9.6		
	11.0	9.8	57.4	12.4	54.1	11.5	50.9	10.7	49.2	10.4	47.6	10.0	44.3	9.2		
	13.0	11.8	57.4	11.7	54.1	11.0	50.9	10.2	49.2	9.9	47.6	9.5	44.3	8.8		
	15.0	13.7	57.4	11.2	54.1	10.5	50.9	9.8	49.2	9.4	47.6	9.1	44.3	8.41		
80 (360)	-19.8	-20.0	35.7	13.7	35.6	14.1	35.6	14.5	35.5	14.7	35.5	15.0	35.4	15.4		
	-18.8	-19.0	36.6	13.9	36.5	14.3	36.4	14.7	36.4	14.9	36.3	15.1	36.2	15.5		
	-16.7	-17.0	38.3	14.2	38.2	14.6	38.1	15.0	38.1	15.2	38.1	15.4	38.0	15.8		
	-13.7	-15.0	40.1	14.6	40.1	14.9	40.0	15.3	39.9	15.5	39.9	15.7	39.4	15.7		
	-11.8	-13.0	42.1	14.9	42.0	15.2	41.9	15.6	41.9	15.7	41.8	15.9	39.4	14.8		
	-9.8	-11.0	44.1	15.2	44.0	15.5	43.9	15.8	43.7	15.9	42.3	15.3	39.4	14.0		
	-9.5	-10.0	45.2	15.3	45.1	15.6	45.0	16.0	43.7	15.4	42.3	14.8	39.4	13.6		
	-8.5	-9.1	46.1	15.5	46.0	15.8	45.2	15.7	43.7	15.0	42.3	14.4	39.4	13.2		
	-7.0	-7.6	47.8	15.7	47.7	16.0	45.2	15.0	43.7	14.4	42.3	13.8	39.4	12.7		
	-5.0	-5.6	50.1	15.9	48.1	15.3	45.2	14.1	43.7	13.6	42.3	13.1	39.4	12.0		
	-3.0	-3.7	51.0	15.5	48.1	14.4	45.2	13.4	43.7	12.9	42.3	12.4	39.4	11.4		
	0.0	-0.7	51.0	14.2	48.1	13.3	45.2	12.3	43.7	11.9	42.3	11.4	39.4	10.5		
	3.0	2.2	51.0	13.1	48.1	12.3	45.2	11.4	43.7	11.0	42.3	10.6	39.4	9.8		
	5.0	4.1	51.0	12.5	48.1	11.7	45.2	10.9	43.7	10.5	42.3	10.1	39.4	9.3		
	7.0	6.0	51.0	11.9	48.1	11.1	45.2	10.3	43.7	10.0	42.3	9.6	39.4	8.9		
	9.0	7.9	51.0	11.3	48.1	10.6	45.2	9.9	43.7	9.5	42.3	9.2	39.4	8.48		
	11.0	9.8	51.0	10.8	48.1	10.1	45.2	9.4	43.7	9.1	42.3	8.8	39.4	8.11		
	13.0	11.8	51.0	10.3	48.1	9.6	45.2	9.0	43.7	8.7	42.3	8.35	39.4	7.75		
	15.0	13.7	51.0	9.8	48.1	9.2	45.2	8.6	43.7	8.29	42.3	8.00	39.4	7.42		

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: ▒ is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range shown by ▒.
Note2: The above table shows the average value of conditions which may occur.

[50/60Hz]

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB															
			16.0		18.0		20.0		21.0		22.0		24.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70 (315)	-19.8	-20.0	35.5	14.6	35.5	15.0	35.4	15.3	35.4	15.5	35.3	15.7	34.5	15.5
	-18.8	-19.0	36.4	14.8	36.3	15.1	36.2	15.5	36.2	15.6	36.2	15.8	34.5	15.0
	-16.7	-17.0	38.1	15.1	38.1	15.4	38.0	15.7	38.0	15.9	37.0	15.5	34.5	14.2
	-13.7	-15.0	40.0	15.4	39.9	15.7	39.6	15.8	38.3	15.2	37.0	14.6	34.5	13.4
	-11.8	-13.0	41.9	15.6	41.8	15.9	39.6	14.9	38.3	14.3	37.0	13.8	34.5	12.6
	-9.8	-11.0	43.9	15.9	42.1	15.2	39.6	14.1	38.3	13.5	37.0	13.0	34.5	11.9
	-9.5	-10.0	44.6	15.8	42.1	14.7	39.6	13.7	38.3	13.1	37.0	12.6	34.5	11.6
	-8.5	-9.1	44.6	15.4	42.1	14.3	39.6	13.3	38.3	12.8	37.0	12.3	34.5	11.3
	-7.0	-7.6	44.6	14.8	42.1	13.7	39.6	12.8	38.3	12.3	37.0	11.8	34.5	10.9
	-5.0	-5.6	44.6	13.9	42.1	13.0	39.6	12.1	38.3	11.6	37.0	11.2	34.5	10.3
	-3.0	-3.7	44.6	13.2	42.1	12.3	39.6	11.4	38.3	11.0	37.0	10.6	34.5	9.8
	0.0	-0.7	44.6	12.1	42.1	11.3	39.6	10.6	38.3	10.2	37.0	9.8	34.5	9.06
	3.0	2.2	44.6	11.2	42.1	10.5	39.6	9.8	38.3	9.5	37.0	9.1	34.5	8.43
	5.0	4.1	44.6	10.7	42.1	10.0	39.6	9.3	38.3	9.0	37.0	8.69	34.5	8.05
	7.0	6.0	44.6	10.2	42.1	9.5	39.6	8.9	38.3	8.60	37.0	8.30	34.5	7.69
	9.0	7.9	44.6	9.7	42.1	9.1	39.6	8.52	38.3	8.22	37.0	7.93	34.5	7.36
	11.0	9.8	44.6	9.3	42.1	8.7	39.6	8.14	38.3	7.87	37.0	7.59	34.5	7.05
	13.0	11.8	44.6	8.9	42.1	8.31	39.6	7.78	38.3	7.52	37.0	7.26	34.5	6.75
	15.0	13.7	44.6	8.5	42.1	7.96	39.6	7.46	38.3	7.21	37.0	6.96	34.5	6.48
60 (270)	-19.8	-20.0	35.4	15.5	35.3	15.8	33.9	15.2	32.8	14.6	31.7	14.0	29.5	12.8
	-18.8	-19.0	36.2	15.6	36.1	15.9	33.9	14.7	32.8	14.1	31.7	13.6	29.5	12.5
	-16.7	-17.0	38.0	15.9	36.1	15.0	33.9	13.9	32.8	13.4	31.7	12.8	29.5	11.8
	-13.7	-15.0	38.3	15.2	36.1	14.1	33.9	13.1	32.8	12.6	31.7	12.1	29.5	11.2
	-11.8	-13.0	38.3	14.3	36.1	13.3	33.9	12.4	32.8	11.9	31.7	11.5	29.5	10.6
	-9.8	-11.0	38.3	13.5	36.1	12.6	33.9	11.7	32.8	11.3	31.7	10.8	29.5	10.0
	-9.5	-10.0	38.3	13.1	36.1	12.2	33.9	11.4	32.8	11.0	31.7	10.6	29.5	9.7
	-8.5	-9.1	38.3	12.8	36.1	11.9	33.9	11.1	32.8	10.7	31.7	10.3	29.5	9.5
	-7.0	-7.6	38.3	12.3	36.1	11.5	33.9	10.7	32.8	10.3	31.7	9.9	29.5	9.14
	-5.0	-5.6	38.3	11.6	36.1	10.8	33.9	10.1	32.8	9.7	31.7	9.4	29.5	8.68
	-3.0	-3.7	38.3	11.0	36.1	10.3	33.9	9.6	32.8	9.27	31.7	8.93	29.5	8.27
	0.0	-0.7	38.3	10.2	36.1	9.5	33.9	8.90	32.8	8.59	31.7	8.28	29.5	7.68
	3.0	2.2	38.3	9.4	36.1	8.86	33.9	8.28	32.8	8.00	31.7	7.72	29.5	7.17
	5.0	4.1	38.3	9.0	36.1	8.45	33.9	7.91	32.8	7.64	31.7	7.38	29.5	6.86
	7.0	6.0	38.3	8.60	36.1	8.07	33.9	7.56	32.8	7.31	31.7	7.06	29.5	6.57
	9.0	7.9	38.3	8.22	36.1	7.72	33.9	7.24	32.8	7.00	31.7	6.76	29.5	6.30
	11.0	9.8	38.3	7.86	36.1	7.39	33.9	6.93	32.8	6.71	31.7	6.48	29.5	6.04
	13.0	11.8	38.3	7.51	36.1	7.07	33.9	6.64	32.8	6.42	31.7	6.21	29.5	5.79
	15.0	13.7	38.3	7.20	36.1	6.78	33.9	6.37	32.8	6.17	31.7	5.97	29.5	5.57
50 (225)	-19.8	-20.0	31.9	14.1	30.1	13.1	28.3	12.2	27.3	11.7	26.4	11.3	24.6	10.4
	-18.8	-19.0	31.9	13.7	30.1	12.7	28.3	11.8	27.3	11.4	26.4	11.0	24.6	10.1
	-16.7	-17.0	31.9	12.9	30.1	12.0	28.3	11.2	27.3	10.8	26.4	10.4	24.6	9.6
	-13.7	-15.0	31.9	12.2	30.1	11.4	28.3	10.6	27.3	10.2	26.4	9.8	24.6	9.10
	-11.8	-13.0	31.9	11.5	30.1	10.8	28.3	10.0	27.3	9.7	26.4	9.33	24.6	8.63
	-9.8	-11.0	31.9	10.9	30.1	10.2	28.3	9.5	27.3	9.18	26.4	8.85	24.6	8.20
	-9.5	-10.0	31.9	10.6	30.1	9.9	28.3	9.27	27.3	8.95	26.4	8.62	24.6	7.99
	-8.5	-9.1	31.9	10.4	30.1	9.7	28.3	9.06	27.3	8.74	26.4	8.42	24.6	7.81
	-7.0	-7.6	31.9	10.0	30.1	9.32	28.3	8.71	27.3	8.41	26.4	8.11	24.6	7.52
	-5.0	-5.6	31.9	9.4	30.1	8.85	28.3	8.27	27.3	7.99	26.4	7.71	24.6	7.16
	-3.0	-3.7	31.9	8.98	30.1	8.43	28.3	7.89	27.3	7.62	26.4	7.36	24.6	6.84
	0.0	-0.7	31.9	8.33	30.1	7.82	28.3	7.33	27.3	7.09	26.4	6.85	24.6	6.37
	3.0	2.2	31.9	7.76	30.1	7.30	28.3	6.84	27.3	6.62	26.4	6.40	24.6	5.97
	5.0	4.1	31.9	7.41	30.1	6.98	28.3	6.55	27.3	6.34	26.4	6.13	24.6	5.72
	7.0	6.0	31.9	7.09	30.1	6.68	28.3	6.28	27.3	6.08	26.4	5.88	24.6	5.49
	9.0	7.9	31.9	6.80	30.1	6.41	28.3	6.02	27.3	5.83	26.4	5.65	24.6	5.28
	11.0	9.8	31.9	6.52	30.1	6.15	28.3	5.78	27.3	5.60	26.4	5.43	24.6	5.08
	13.0	11.8	31.9	6.24	30.1	5.89	28.3	5.55	27.3	5.38	26.4	5.21	24.6	4.88
	15.0	13.7	31.9	6.00	30.1	5.67	28.3	5.34	27.3	5.18	26.4	5.02	24.6	4.70

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: ▒ is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range ▒ shown by ▒.
Note2: The above table shows the average value of conditions which may occur.

15

RXYQ24PAHY1, PAHYL, PHTL [50/60Hz]

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB											
			16.0		18.0		20.0		21.0		22.0		24.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130 (786)	-19.8	-20.0	48.7	11.72	48.5	12.6	48.3	13.4	48.3	13.8	48.2	14.2	48.0	15.0
	-18.8	-19.0	50.1	12.2	50.0	13.0	49.8	13.8	49.7	14.2	49.6	14.6	49.4	15.4
	-16.7	-17.0	53.0	13.0	52.8	13.7	52.7	14.5	52.6	14.9	52.5	15.3	52.3	16.0
	-13.7	-15.0	55.9	13.7	55.7	14.4	55.6	15.2	55.5	15.5	55.4	15.9	55.2	16.6
	-11.8	-13.0	58.8	14.4	58.6	15.1	58.4	15.7	58.3	16.1	58.3	16.4	58.1	17.1
	-9.8	-11.0	61.7	15.0	61.5	15.6	61.3	16.3	61.2	16.6	61.1	16.9	61.0	17.6
	-9.5	-10.0	63.1	15.2	62.9	15.9	62.8	16.5	62.7	16.8	62.6	17.1	62.4	17.8
	-8.5	-9.1	64.4	15.5	64.2	16.1	64.1	16.7	64.0	17.0	63.9	17.3	63.7	18.0
	-7.0	-7.6	66.6	15.9	66.4	16.5	66.2	17.1	66.1	17.4	66.0	17.7	65.9	18.3
	-5.0	-5.6	69.4	16.3	69.3	16.9	69.1	17.5	69.0	17.8	68.9	18.0	68.8	18.6
	-3.0	-3.7	72.2	16.7	72.0	17.3	71.8	17.8	71.8	18.1	71.7	18.4	71.5	18.9
	0.0	-0.7	76.5	17.3	76.3	17.8	76.2	18.3	76.1	18.6	76.0	18.9	75.8	19.4
	3.0	2.2	80.7	17.8	80.5	18.3	80.3	18.8	80.3	19.0	80.2	19.3	80.0	19.8
	5.0	4.1	83.4	18.1	83.3	18.6	83.1	19.0	83.0	19.3	82.9	19.5	82.7	20.0
	7.0	6.0	86.2	18.4	86.0	18.8	85.8	19.3	85.7	19.5	85.7	19.7	85.0	20.0
	9.0	7.9	88.9	18.6	88.7	19.1	88.6	19.5	88.5	19.7	88.4	20.0	85.0	19.2
	11.0	9.8	91.7	18.9	91.5	19.3	91.3	19.7	91.2	20.0	91.1	20.2	85.0	18.5
	13.0	11.8	94.5	19.1	94.4	19.5	94.2	20.0	94.1	20.2	91.2	19.4	85.0	17.8
	15.0	13.7	97.3	19.3	97.1	19.7	96.9	20.1	94.4	19.5	91.2	18.7	85.0	17.2
120 (726)	-19.8	-20.0	48.5	12.8	48.3	13.6	48.1	14.4	48.1	14.8	48.0	15.1	47.8	15.9
	-18.8	-19.0	49.9	13.3	49.7	14.0	49.6	14.7	49.5	15.1	49.4	15.5	49.3	16.2
	-16.7	-17.0	52.8	14.0	52.6	14.7	52.5	15.4	52.4	15.8	52.3	16.1	52.1	16.8
	-13.7	-15.0	55.7	14.7	55.5	15.4	55.3	16.0	55.3	16.4	55.2	16.7	55.0	17.3
	-11.8	-13.0	58.5	15.3	58.4	15.9	58.2	16.6	58.2	16.9	58.1	17.2	57.9	17.8
	-9.8	-11.0	61.4	15.8	61.3	16.4	61.1	17.0	61.0	17.3	61.0	17.6	60.8	18.2
	-9.5	-10.0	62.9	16.1	62.7	16.7	62.6	17.3	62.5	17.6	62.4	17.9	62.2	18.4
	-8.5	-9.1	64.2	16.3	64.0	16.9	63.9	17.5	63.8	17.8	63.7	18.0	63.5	18.6
	-7.0	-7.6	66.3	16.7	66.2	17.2	66.0	17.8	65.9	18.0	65.9	18.3	65.7	18.9
	-5.0	-5.6	69.2	17.1	69.1	17.6	68.9	18.2	68.8	18.4	68.7	18.7	68.6	19.2
	-3.0	-3.7	72.0	17.5	71.8	18.0	71.6	18.5	71.6	18.7	71.5	19.0	71.3	19.5
	0.0	-0.7	76.3	18.0	76.1	18.5	76.0	19.0	75.9	19.2	75.8	19.4	75.6	19.9
	3.0	2.2	80.5	18.5	80.3	18.9	80.1	19.4	80.1	19.6	80.0	19.8	78.4	19.7
	5.0	4.1	83.2	18.7	83.0	19.2	82.9	19.6	82.8	19.8	82.7	20.0	78.4	18.9
	7.0	6.0	85.9	19.0	85.8	19.4	85.6	19.8	85.5	20.0	84.2	19.8	78.4	18.1
	9.0	7.9	88.7	19.2	88.5	19.6	88.4	20.1	87.1	19.8	84.2	19.0	78.4	17.5
	11.0	9.8	91.4	19.5	91.3	19.9	90.0	19.9	87.1	19.1	84.2	18.3	78.4	16.8
	13.0	11.8	94.3	19.7	94.1	20.1	90.0	19.1	87.1	18.4	84.2	17.6	78.4	16.2
	15.0	13.7	97.0	19.9	95.8	19.9	90.0	18.4	87.1	17.7	84.2	17.0	78.4	15.7
110 (666)	-19.8	-20.0	48.2	14.0	48.1	14.7	47.9	15.4	47.9	15.7	47.8	16.1	47.6	16.8
	-18.8	-19.0	49.7	14.3	49.5	15.0	49.4	15.7	49.3	16.1	49.2	16.4	49.1	17.1
	-16.7	-17.0	52.5	15.0	52.4	15.7	52.3	16.3	52.2	16.7	52.1	17.0	52.0	17.6
	-13.7	-15.0	55.4	15.7	55.3	16.3	55.1	16.9	55.1	17.2	55.0	17.5	54.9	18.1
	-11.8	-13.0	58.3	16.2	58.2	16.8	58.0	17.4	58.0	17.7	57.9	18.0	57.7	18.5
	-9.8	-11.0	61.2	16.7	61.1	17.3	60.9	17.8	60.8	18.1	60.8	18.4	60.6	18.9
	-9.5	-10.0	62.6	17.0	62.5	17.5	62.3	18.0	62.3	18.3	62.2	18.6	62.1	19.1
	-8.5	-9.1	63.9	17.2	63.8	17.7	63.6	18.2	63.6	18.5	63.5	18.7	63.4	19.3
	-7.0	-7.6	66.1	17.5	66.0	18.0	65.8	18.5	65.7	18.7	65.7	19.0	65.5	19.5
	-5.0	-5.6	69.0	17.9	68.8	18.4	68.7	18.8	68.6	19.1	68.5	19.3	68.4	19.8
	-3.0	-3.7	71.7	18.2	71.6	18.7	71.4	19.1	71.4	19.4	71.3	19.6	71.1	20.1
	0.0	-0.7	76.0	18.7	75.9	19.1	75.8	19.6	75.7	19.8	75.6	20.0	71.9	19.0
	3.0	2.2	80.2	19.1	80.1	19.5	79.9	19.9	79.8	20.2	77.2	19.3	71.9	17.7
	5.0	4.1	83.0	19.4	82.8	19.8	82.5	20.1	79.8	19.3	77.2	18.5	71.9	17.0
	7.0	6.0	85.7	19.6	85.6	20.0	82.5	19.3	79.8	18.5	77.2	17.8	71.9	16.4
	9.0	7.9	88.4	19.8	87.8	20.0	82.5	18.6	79.8	17.8	77.2	17.1	71.9	15.7
	11.0	9.8	91.2	20.0	87.8	19.3	82.5	17.9	79.8	17.2	77.2	16.5	71.9	15.2
	13.0	11.8	93.1	19.9	87.8	18.5	82.5	17.2	79.8	16.5	77.2	15.9	71.9	14.6
	15.0	13.7	93.1	19.2	87.8	17.9	82.5	16.6	79.8	16.0	77.2	15.4	71.9	14.2

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB											
			16.0		18.0		20.0		21.0		22.0		24.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100 (605)	-19.8	-20.0	48.0	15.1	47.9	15.7	47.7	16.4	47.7	16.7	47.6	17.0	47.5	17.7
	-18.8	-19.0	49.4	15.4	49.3	16.1	49.2	16.7	49.1	17.0	49.0	17.3	48.9	17.9
	-16.7	-17.0	52.3	16.1	52.2	16.7	52.1	17.2	52.0	17.5	51.9	17.8	51.8	18.4
	-13.7	-15.0	55.2	16.6	55.1	17.2	54.9	17.7	54.9	18.0	54.8	18.3	54.7	18.9
	-11.8	-13.0	58.1	17.1	58.0	17.7	57.8	18.2	57.8	18.5	57.7	18.7	57.6	19.2
	-9.8	-11.0	61.0	17.6	60.8	18.1	60.7	18.6	60.6	18.8	60.6	19.1	60.4	19.6
	-9.5	-10.0	62.4	17.8	62.3	18.3	62.1	18.8	62.1	19.0	62.0	19.3	61.9	19.8
	-8.5	-9.1	63.7	18.0	63.6	18.5	63.4	19.0	63.4	19.2	63.3	19.4	63.2	19.9
	-7.0	-7.6	65.9	18.3	65.7	18.7	65.6	19.2	65.5	19.4	65.5	19.7	65.3	20.1
	-5.0	-5.6	68.8	18.6	68.6	19.1	68.5	19.5	68.4	19.7	68.4	20.0	65.4	19.1
	-3.0	-3.7	71.5	19.0	71.4	19.4	71.2	19.8	71.2	20.0	70.2	19.8	65.4	18.2
	0.0	-0.7	75.8	19.4	75.7	19.8	75.0	20.0	72.6	19.2	70.2	18.4	65.4	16.9
	3.0	2.2	80.0	19.8	79.8	20.1	75.0	18.7	72.6	17.9	70.2	17.2	65.4	15.8
	5.0	4.1	82.7	20.0	79.8	19.3	75.0	17.9	72.6	17.2	70.2	16.5	65.4	15.2
	7.0	6.0	84.6	19.9	79.8	18.5	75.0	17.2	72.6	16.5	70.2	15.9	65.4	14.6
	9.0	7.9	84.6	19.1	79.8	17.8	75.0	16.6	72.6	15.9	70.2	15.3	65.4	14.1
	11.0	9.8	84.6	18.4	79.8	17.2	75.0	16.0	72.6	15.4	70.2	14.8	65.4	13.6
	13.0	11.8	84.6	17.7	79.8	16.5	75.0	15.4	72.6	14.8	70.2	14.2	65.4	13.1
	15.0	13.7	84.6	17.1	79.8	16.0	75.0	14.9	72.6	14.3	70.2	13.8	65.4	12.7
90 (545)	-19.8	-20.0	47.8	16.2	47.6	16.8	47.5	17.4	47.5	17.7	47.4	17.9	47.3	18.5
	-18.8	-19.0	49.2	16.5	49.1	17.1	49.0	17.6	48.9	17.9	48.8	18.2	48.7	18.8
	-16.7	-17.0	52.1	17.1	52.0	17.6	51.8	18.2	51.8	18.4	51.7	18.7	51.6	19.2
	-13.7	-15.0	55.0	17.6	54.8	18.1	54.7	18.6	54.7	18.9	54.6	19.1	54.5	19.6
	-11.8	-13.0	57.9	18.1	57.7	18.5	57.6	19.0	57.6	19.2	57.5	19.5	57.4	20.0
	-9.8	-11.0	60.7	18.5	60.6	18.9	60.5	19.4	60.4	19.6	60.4	19.8	58.8	19.5
	-9.5	-10.0	62.2	18.7	62.1	19.1	61.9	19.5	61.9	19.8	61.8	20.0	58.8	19.0
	-8.5	-9.1	63.5	18.8	63.4	19.3	63.2	19.7	63.2	19.9	63.1	20.1	58.8	18.5
	-7.0	-7.6	65.6	19.1	65.5	19.5	65.4	19.9	65.3	20.1	63.2	19.3	58.8	17.7
	-5.0	-5.6	68.5	19.4	68.4	19.8	67.5	19.8	65.3	19.1	63.2	18.3	58.8	16.8
	-3.0	-3.7	71.3	19.7	71.1	20.1	67.5	18.9	65.3	18.2	63.2	17.4	58.8	16.0
	0.0	-0.7	75.6	20.1	71.8	18.9	67.5	17.6	65.3	16.9	63.2	16.2	58.8	14.9
	3.0	2.2	76.2	19.0	71.8	17.7	67.5	16.4	65.3	15.8	63.2	15.2	58.8	14.0
	5.0	4.1	76.2	18.2	71.8	17.0	67.5	15.8	65.3	15.2	63.2	14.6	58.8	13.5
	7.0	6.0	76.2	17.5	71.8	16.3	67.5	15.2	65.3	14.6	63.2	14.1	58.8	13.0
	9.0	7.9	76.2	16.9	71.8	15.7	67.5	14.6	65.3	14.1	63.2	13.6	58.8	12.5
	11.0	9.8	76.2	16.2	71.8	15.2	67.5	14.1	65.3	13.6	63.2	13.1	58.8	12.1
	13.0	11.8	76.2	15.7	71.8	14.6	67.5	13.6	65.3	13.1	63.2	12.6	58.8	11.7
	15.0	13.7	76.2	15.1	71.8	14.1	67.5	13.2	65.3	12.7	63.2	12.2	58.8	11.3
80 (484)	-19.8	-20.0	47.5	17.3	47.4	17.9	47.3	18.4	47.3	18.6	47.2	18.9	47.1	19.4
	-18.8	-19.0	49.0	17.6	48.9	18.1	48.8	18.6	48.7	18.9	48.7	19.1	48.5	19.6
	-16.7	-17.0	51.9	18.1	51.7	18.6	51.6	19.1	51.6	19.3	51.5	19.5	51.4	20.0
	-13.7	-15.0	54.7	18.6	54.6	19.0	54.5	19.5	54.5	19.7	54.4	19.9	52.3	19.2
	-11.8	-13.0	57.6	19.0	57.5	19.4	57.4	19.8	57.4	20.0	56.1	19.6	52.3	18.0
	-9.8	-11.0	60.5	19.4	60.4	19.8	60.0	20.0	58.1	19.2	56.1	18.4	52.3	16.9
	-9.5	-10.0	61.9	19.5	61.8	19.9	60.0	19.4	58.1	18.7	56.1	17.9	52.3	16.4
	-8.5	-9.1	63.2	19.7	63.1	20.1	60.0	18.9	58.1	18.2	56.1	17.5	52.3	16.0
	-7.0	-7.6	65.4	19.9	63.9	19.6	60.0	18.1	58.1	17.4	56.1	16.8	52.3	15.4
	-5.0	-5.6	67.7	19.9	63.9	18.5	60.0	17.2	58.1	16.5	56.1	15.9	52.3	14.6
	-3.0	-3.7	67.7	19.0	63.9	17.7	60.0	16.4	58.1	15.8	56.1	15.2	52.3	14.0
	0.0	-0.7	67.7	17.6	63.9	16.4	60.0	15.3	58.1	14.7	56.1	14.1	52.3	13.1
	3.0	2.2	67.7	16.5	63.9	15.4	60.0	14.3	58.1	13.8	56.1	13.3	52.3	12.3
	5.0	4.1	67.7	15.9	63.9	14.8	60.0	13.8	58.1	13.3	56.1	12.8	52.3	11.8
	7.0	6.0	67.7	15.2	63.9	14.2	60.0	13.3	58.1	12.8	56.1	12.3	52.3	11.4
	9.0	7.9	67.7	14.7	63.9	13.7	60.0	12.8	58.1	12.3	56.1	11.9	52.3	11.0
	11.0	9.8	67.7	14.2	63.9	13.3	60.0	12.4	58.1	11.9	56.1	11.5	52.3	10.6
	13.0	11.8	67.7	13.7	63.9	12.8	60.0	11.9	58.1	11.5	56.1	11.1	52.3	10.3
	15.0	13.7	67.7	13.2	63.9	12.4	60.0	11.6	58.1	11.2	56.1	10.8	52.3	10.0

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range shown by .
Note2: The above table shows the average value of conditions which may occur.

[50/60Hz]

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB 16.0 TC	16.0 PI	18.0 TC	18.0 PI	20.0 TC	20.0 PI	21.0 TC	21.0 PI	22.0 TC	22.0 PI	24.0 TC	24.0 PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70 (424)	-19.8	-20.0	47.3	18.5	47.2	18.9	47.1	19.4	47.1	19.6	47.0	19.8	45.8	19.5
	-18.8	-19.0	48.7	18.7	48.6	19.1	48.6	19.6	48.5	19.8	48.5	20.0	45.8	18.7
	-16.7	-17.0	51.6	19.2	51.5	19.6	51.4	20.0	50.8	19.8	49.1	19.0	45.8	17.5
	-13.7	-15.0	54.5	19.6	54.4	19.9	52.5	19.3	50.8	18.5	49.1	17.8	45.8	16.3
	-11.8	-13.0	57.4	19.9	55.9	19.5	52.5	18.1	50.8	17.4	49.1	16.7	45.8	15.3
	-9.8	-11.0	59.2	19.7	55.9	18.3	52.5	17.0	50.8	16.4	49.1	15.7	45.8	14.5
	-9.5	-10.0	59.2	19.1	55.9	17.8	52.5	16.5	50.8	15.9	49.1	15.3	45.8	14.1
	-8.5	-9.1	59.2	18.6	55.9	17.4	52.5	16.1	50.8	15.5	49.1	14.9	45.8	13.7
	-7.0	-7.6	59.2	17.9	55.9	16.7	52.5	15.5	50.8	14.9	49.1	14.3	45.8	13.2
	-5.0	-5.6	59.2	16.9	55.9	15.8	52.5	14.7	50.8	14.2	49.1	13.6	45.8	12.6
	-3.0	-3.7	59.2	16.2	55.9	15.1	52.5	14.0	50.8	13.5	49.1	13.0	45.8	12.0
	0.0	-0.7	59.2	15.1	55.9	14.1	52.5	13.1	50.8	12.6	49.1	12.2	45.8	11.3
	3.0	2.2	59.2	14.1	55.9	13.2	52.5	12.3	50.8	11.9	49.1	11.5	45.8	10.6
	5.0	4.1	59.2	13.6	55.9	12.7	52.5	11.9	50.8	11.5	49.1	11.0	45.8	10.2
	7.0	6.0	59.2	13.1	55.9	12.3	52.5	11.4	50.8	11.0	49.1	10.6	45.8	9.9
	9.0	7.9	59.2	12.6	55.9	11.8	52.5	11.0	50.8	10.7	49.1	10.3	45.8	9.5
	11.0	9.8	59.2	12.2	55.9	11.4	52.5	10.7	50.8	10.3	49.1	10.0	45.8	9.2
	13.0	11.8	59.2	11.8	55.9	11.0	52.5	10.3	50.8	10.0	49.1	9.6	45.8	8.9
	15.0	13.7	59.2	11.4	55.9	10.7	52.5	10.0	50.8	9.7	49.1	9.3	45.8	8.69
60 (363)	-19.8	-20.0	47.1	19.6	47.0	20.0	45.0	19.1	43.6	18.3	42.1	17.6	39.2	16.2
	-18.8	-19.0	48.5	19.8	47.9	19.8	45.0	18.4	43.6	17.7	42.1	17.0	39.2	15.6
	-16.7	-17.0	50.8	19.8	47.9	18.4	45.0	17.1	43.6	16.5	42.1	15.8	39.2	14.6
	-13.7	-15.0	50.8	18.5	47.9	17.2	45.0	16.0	43.6	15.4	42.1	14.8	39.2	13.7
	-11.8	-13.0	50.8	17.4	47.9	16.2	45.0	15.1	43.6	14.5	42.1	13.9	39.2	12.9
	-9.8	-11.0	50.8	16.4	47.9	15.3	45.0	14.2	43.6	13.7	42.1	13.2	39.2	12.2
	-9.5	-10.0	50.8	15.9	47.9	14.8	45.0	13.8	43.6	13.3	42.1	12.8	39.2	11.8
	-8.5	-9.1	50.8	15.5	47.9	14.5	45.0	13.5	43.6	13.0	42.1	12.5	39.2	11.6
	-7.0	-7.6	50.8	14.9	47.9	13.9	45.0	13.0	43.6	12.5	42.1	12.0	39.2	11.1
	-5.0	-5.6	50.8	14.2	47.9	13.2	45.0	12.3	43.6	11.9	42.1	11.5	39.2	10.6
	-3.0	-3.7	50.8	13.5	47.9	12.7	45.0	11.8	43.6	11.4	42.1	11.0	39.2	10.2
	0.0	-0.7	50.8	12.6	47.9	11.8	45.0	11.1	43.6	10.7	42.1	10.3	39.2	9.6
	3.0	2.2	50.8	11.9	47.9	11.1	45.0	10.4	43.6	10.1	42.1	9.7	39.2	9.0
	5.0	4.1	50.8	11.4	47.9	10.7	45.0	10.1	43.6	9.7	42.1	9.4	39.2	8.72
	7.0	6.0	50.8	11.0	47.9	10.4	45.0	9.7	43.6	9.4	42.1	9.1	39.2	8.43
	9.0	7.9	50.8	10.7	47.9	10.0	45.0	9.4	43.6	9.1	42.1	8.77	39.2	8.16
	11.0	9.8	50.8	10.3	47.9	9.7	45.0	9.1	43.6	8.79	42.1	8.49	39.2	7.91
	13.0	11.8	50.8	10.0	47.9	9.4	45.0	8.80	43.6	8.51	42.1	8.23	39.2	7.67
	15.0	13.7	50.8	9.7	47.9	9.1	45.0	8.54	43.6	8.26	42.1	7.99	39.2	7.45
50 (303)	-19.8	-20.0	42.3	17.7	39.9	16.5	37.5	15.34	36.3	14.8	35.1	14.2	32.7	13.1
	-18.8	-19.0	42.3	17.1	39.9	15.9	37.5	14.8	36.3	14.3	35.1	13.7	32.7	12.7
	-16.7	-17.0	42.3	15.9	39.9	14.9	37.5	13.8	36.3	13.3	35.1	12.8	32.7	11.9
	-13.7	-15.0	42.3	14.9	39.9	13.9	37.5	13.0	36.3	12.5	35.1	12.1	32.7	11.2
	-11.8	-13.0	42.3	14.0	39.9	13.1	37.5	12.2	36.3	11.8	35.1	11.4	32.7	10.5
	-9.8	-11.0	42.3	13.2	39.9	12.4	37.5	11.6	36.3	11.2	35.1	10.8	32.7	10.0
	-9.5	-10.0	42.3	12.9	39.9	12.1	37.5	11.3	36.3	10.9	35.1	10.5	32.7	9.7
	-8.5	-9.1	42.3	12.6	39.9	11.8	37.5	11.0	36.3	10.6	35.1	10.3	32.7	9.5
	-7.0	-7.6	42.3	12.1	39.9	11.4	37.5	10.6	36.3	10.3	35.1	9.9	32.7	9.2
	-5.0	-5.6	42.3	11.5	39.9	10.8	37.5	10.1	36.3	9.8	35.1	9.5	32.7	8.8
	-3.0	-3.7	42.3	11.0	39.9	10.4	37.5	9.7	36.3	9.4	35.1	9.1	32.7	8.43
	0.0	-0.7	42.3	10.4	39.9	9.7	37.5	9.1	36.3	8.8	35.1	8.53	32.7	7.94
	3.0	2.2	42.3	9.8	39.9	9.2	37.5	8.63	36.3	8.35	35.1	8.07	32.7	7.52
	5.0	4.1	42.3	9.4	39.9	8.9	37.5	8.33	36.3	8.06	35.1	7.80	32.7	7.28
	7.0	6.0	42.3	9.1	39.9	8.58	37.5	8.06	36.3	7.80	35.1	7.55	32.7	7.05
	9.0	7.9	42.3	8.81	39.9	8.30	37.5	7.81	36.3	7.56	35.1	7.32	32.7	6.84
	11.0	9.8	42.3	8.54	39.9	8.05	37.5	7.57	36.3	7.34	35.1	7.10	32.7	6.64
	13.0	11.8	42.3	8.27	39.9	7.80	37.5	7.34	36.3	7.12	35.1	6.89	32.7	6.45
	15.0	13.7	42.3	8.03	39.9	7.58	37.5	7.14	36.3	6.92	35.1	6.70	32.7	6.28

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: ■ is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range ■ shown by ■.
Note2: The above table shows the average value of conditions which may occur.

15

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB 16.0		18.0		20.0		21.0		22.0		24.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130 (845)	-19.8	-20.0	52.8	13.30	52.6	14.2	52.5	15.2	52.4	15.7	52.3	16.1	52.1	17.1
	-18.8	-19.0	54.1	13.7	54.0	14.7	53.8	15.6	53.7	16.0	53.6	16.5	53.4	17.4
	-16.7	-17.0	56.9	14.6	56.7	15.4	56.5	16.3	56.4	16.7	56.3	17.2	56.1	18.0
	-13.7	-15.0	59.7	15.3	59.5	16.2	59.3	17.0	59.2	17.4	59.1	17.8	58.9	18.6
	-11.8	-13.0	62.6	16.0	62.4	16.8	62.2	17.6	62.1	18.0	62.0	18.4	61.8	19.2
	-9.8	-11.0	65.5	16.7	65.4	17.5	65.2	18.2	65.1	18.6	65.0	19.0	64.8	19.7
	-9.5	-10.0	67.1	17.0	66.9	17.8	66.7	18.5	66.6	18.9	66.5	19.2	66.3	20.0
	-8.5	-9.1	68.5	17.3	68.3	18.0	68.1	18.7	68.0	19.1	67.9	19.5	67.7	20.2
	-7.0	-7.6	70.9	17.8	70.7	18.4	70.5	19.1	70.4	19.5	70.3	19.8	70.1	20.5
	-5.0	-5.6	74.1	18.3	73.9	19.0	73.7	19.6	73.6	20.0	73.6	20.3	73.4	21.0
	-3.0	-3.7	77.3	18.8	77.1	19.5	76.9	20.1	76.8	20.4	76.7	20.7	76.5	21.4
	0.0	-0.7	82.5	19.6	82.3	20.1	82.1	20.7	82.0	21.0	81.9	21.3	81.7	21.9
	3.0	2.2	87.7	20.2	87.5	20.8	87.3	21.3	87.2	21.6	87.2	21.9	87.0	22.4
	5.0	4.1	91.2	20.6	91.1	21.1	90.9	21.7	90.8	21.9	90.7	22.2	90.5	22.7
	7.0	6.0	94.9	21.0	94.7	21.5	94.5	22.0	94.4	22.3	94.3	22.5	92.3	22.3
	9.0	7.9	98.6	21.3	98.4	21.8	98.2	22.3	98.1	22.6	98.0	22.8	92.3	21.3
	11.0	9.8	102.4	21.7	102.2	22.1	102.0	22.6	101.9	22.9	99.1	22.1	92.3	20.3
	13.0	11.8	106.4	22.0	106.3	22.5	106.0	22.9	102.5	22.0	99.1	21.1	92.3	19.3
	15.0	13.7	110.4	22.3	110.2	22.7	106.0	21.8	102.5	21.0	99.1	20.1	92.3	18.5
120 (780)	-19.8	-20.0	52.6	14.6	52.4	15.5	52.2	16.3	52.1	16.8	52.1	17.2	51.9	18.1
	-18.8	-19.0	53.9	15.0	53.7	15.8	53.5	16.7	53.5	17.1	53.4	17.5	53.2	18.4
	-16.7	-17.0	56.6	15.7	56.4	16.5	56.3	17.3	56.2	17.7	56.1	18.2	55.9	19.0
	-13.7	-15.0	59.4	16.4	59.2	17.2	59.1	18.0	59.0	18.4	58.9	18.7	58.7	19.5
	-11.8	-13.0	62.3	17.1	62.1	17.8	62.0	18.6	61.9	18.9	61.8	19.3	61.6	20.0
	-9.8	-11.0	65.3	17.7	65.1	18.4	65.0	19.1	64.9	19.5	64.8	19.8	64.6	20.5
	-9.5	-10.0	66.8	18.0	66.7	18.7	66.5	19.4	66.4	19.7	66.3	20.1	66.1	20.7
	-8.5	-9.1	68.2	18.3	68.1	18.9	67.9	19.6	67.8	19.9	67.7	20.3	67.5	20.9
	-7.0	-7.6	70.6	18.7	70.4	19.3	70.3	20.0	70.2	20.3	70.1	20.6	69.9	21.2
	-5.0	-5.6	73.9	19.2	73.7	19.8	73.5	20.4	73.4	20.7	73.3	21.0	73.2	21.7
	-3.0	-3.7	77.0	19.7	76.9	20.3	76.7	20.8	76.6	21.1	76.5	21.4	76.4	22.0
	0.0	-0.7	82.2	20.4	82.1	20.9	81.9	21.4	81.8	21.7	81.7	22.0	81.5	22.5
	3.0	2.2	87.5	21.0	87.3	21.5	87.1	22.0	87.0	22.2	86.9	22.5	85.2	22.4
	5.0	4.1	91.0	21.3	90.8	21.8	90.6	22.3	90.6	22.6	90.5	22.8	85.2	21.3
	7.0	6.0	94.6	21.7	94.4	22.1	94.3	22.6	94.2	22.9	91.5	22.1	85.2	20.3
	9.0	7.9	98.3	22.0	98.1	22.5	97.8	22.8	94.7	21.9	91.5	21.1	85.2	19.3
	11.0	9.8	102.1	22.3	101.9	22.7	97.8	21.8	94.7	20.9	91.5	20.1	85.2	18.4
	13.0	11.8	106.2	22.6	104.1	22.4	97.8	20.7	94.7	19.9	91.5	19.1	85.2	17.6
	15.0	13.7	110.2	22.9	104.1	21.4	97.8	19.8	94.7	19.1	91.5	18.3	85.2	16.8
110 (715)	-19.8	-20.0	52.3	15.9	52.2	16.7	52.0	17.5	51.9	17.9	51.9	18.2	51.7	19.0
	-18.8	-19.0	53.6	16.2	53.5	17.0	53.3	17.8	53.2	18.2	53.2	18.6	53.0	19.3
	-16.7	-17.0	56.3	16.9	56.2	17.7	56.0	18.4	56.0	18.8	55.9	19.1	55.7	19.9
	-13.7	-15.0	59.2	17.6	59.0	18.3	58.8	19.0	58.8	19.3	58.7	19.7	58.5	20.4
	-11.8	-13.0	62.1	18.2	61.9	18.8	61.7	19.5	61.7	19.8	61.6	20.2	61.4	20.8
	-9.8	-11.0	65.0	18.7	64.9	19.4	64.7	20.0	64.7	20.3	64.6	20.6	64.4	21.3
	-9.5	-10.0	66.6	19.0	66.4	19.6	66.3	20.3	66.2	20.6	66.1	20.9	65.9	21.5
	-8.5	-9.1	68.0	19.2	67.8	19.9	67.7	20.5	67.6	20.8	67.5	21.1	67.3	21.7
	-7.0	-7.6	70.4	19.6	70.2	20.2	70.0	20.8	70.0	21.1	69.9	21.4	69.7	22.0
	-5.0	-5.6	73.6	20.1	73.4	20.7	73.3	21.2	73.2	21.5	73.1	21.8	73.0	22.3
	-3.0	-3.7	76.8	20.5	76.6	21.1	76.5	21.6	76.4	21.9	76.3	22.1	76.2	22.7
	0.0	-0.7	82.0	21.2	81.8	21.7	81.7	22.2	81.6	22.4	81.5	22.7	78.1	21.7
	3.0	2.2	87.2	21.7	87.1	22.2	86.9	22.6	86.8	22.9	83.9	21.9	78.1	20.1
	5.0	4.1	90.7	22.0	90.6	22.5	89.7	22.6	86.8	21.7	83.9	20.9	78.1	19.2
	7.0	6.0	94.4	22.4	94.2	22.8	89.7	21.5	86.8	20.7	83.9	19.9	78.1	18.3
	9.0	7.9	98.1	22.7	95.4	22.2	89.7	20.5	86.8	19.7	83.9	19.0	78.1	17.4
	11.0	9.8	101.2	22.7	95.4	21.1	89.7	19.6	86.8	18.8	83.9	18.1	78.1	16.7
	13.0	11.8	101.2	21.6	95.4	20.1	89.7	18.7	86.8	18.0	83.9	17.3	78.1	15.9
	15.0	13.7	101.2	20.6	95.4	19.2	89.7	17.9	86.8	17.2	83.9	16.5	78.1	15.2

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB 16.0		18.0		20.0		21.0		22.0		24.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100 (650)	-19.8	-20.0	52.1	17.1	51.9	17.9	51.8	18.6	51.7	18.9	51.6	19.3	51.5	20.0
	-18.8	-19.0	53.4	17.5	53.2	18.2	53.1	18.9	53.0	19.2	53.0	19.6	52.8	20.3
	-16.7	-17.0	56.1	18.1	56.0	18.8	55.8	19.4	55.7	19.8	55.7	20.1	55.5	20.8
	-13.7	-15.0	58.9	18.7	58.8	19.3	58.6	20.0	58.5	20.3	58.5	20.6	58.3	21.2
	-11.8	-13.0	61.8	19.2	61.7	19.8	61.5	20.5	61.4	20.8	61.4	21.1	61.2	21.7
	-9.8	-11.0	64.8	19.8	64.6	20.3	64.5	20.9	64.4	21.2	64.4	21.5	64.2	22.1
	-9.5	-10.0	66.3	20.0	66.2	20.6	66.0	21.1	66.0	21.4	65.9	21.7	65.8	22.3
	-8.5	-9.1	67.7	20.2	67.6	20.8	67.4	21.3	67.4	21.6	67.3	21.9	67.2	22.4
	-7.0	-7.6	70.1	20.6	70.0	21.1	69.8	21.6	69.7	21.9	69.7	22.2	69.5	22.7
	-5.0	-5.6	73.4	21.0	73.2	21.5	73.1	22.0	73.0	22.3	72.9	22.5	71.0	22.2
	-3.0	-3.7	76.5	21.4	76.4	21.9	76.2	22.4	76.2	22.6	76.1	22.8	71.0	21.0
	0.0	-0.7	81.7	22.0	81.6	22.4	81.4	22.9	78.9	22.0	76.3	21.1	71.0	19.4
	3.0	2.2	87.0	22.5	86.7	22.9	81.5	21.2	78.9	20.3	76.3	19.5	71.0	18.0
	5.0	4.1	90.5	22.8	86.7	21.7	81.5	20.1	78.9	19.4	76.3	18.6	71.0	17.1
	7.0	6.0	92.0	22.2	86.7	20.7	81.5	19.2	78.9	18.5	76.3	17.7	71.0	16.3
	9.0	7.9	92.0	21.2	86.7	19.7	81.5	18.3	78.9	17.6	76.3	16.9	71.0	15.6
	11.0	9.8	92.0	20.2	86.7	18.8	81.5	17.5	78.9	16.8	76.3	16.2	71.0	14.9
	13.0	11.8	92.0	19.3	86.7	18.0	81.5	16.7	78.9	16.1	76.3	15.5	71.0	14.3
	15.0	13.7	92.0	18.4	86.7	17.2	81.5	16.0	78.9	15.4	76.3	14.8	71.0	13.7
90 (585)	-19.8	-20.0	51.8	18.4	51.7	19.1	51.6	19.7	51.5	20.0	51.4	20.4	51.3	21.0
	-18.8	-19.0	53.1	18.7	53.0	19.3	52.9	20.0	52.8	20.3	52.8	20.6	52.6	21.2
	-16.7	-17.0	55.8	19.3	55.7	19.9	55.6	20.5	55.5	20.8	55.5	21.1	55.3	21.7
	-13.7	-15.0	58.6	19.8	58.5	20.4	58.4	21.0	58.3	21.2	58.3	21.5	58.1	22.1
	-11.8	-13.0	61.5	20.3	61.4	20.9	61.3	21.4	61.2	21.7	61.2	21.9	61.0	22.5
	-9.8	-11.0	64.5	20.8	64.4	21.3	64.3	21.8	64.2	22.1	64.2	22.3	63.9	22.8
	-9.5	-10.0	66.1	21.0	65.9	21.5	65.8	22.0	65.8	22.3	65.7	22.5	63.9	22.1
	-8.5	-9.1	67.5	21.2	67.3	21.7	67.2	22.2	67.2	22.4	67.1	22.7	63.9	21.5
	-7.0	-7.6	69.9	21.5	69.7	22.0	69.6	22.5	69.5	22.7	68.6	22.5	63.9	20.6
	-5.0	-5.6	73.1	21.9	73.0	22.3	72.8	22.8	71.0	22.1	68.6	21.2	63.9	19.5
	-3.0	-3.7	76.3	22.2	76.2	22.7	73.4	21.8	71.0	21.0	68.6	20.2	63.9	18.5
	0.0	-0.7	81.5	22.8	78.1	21.7	73.4	20.1	71.0	19.3	68.6	18.6	63.9	17.1
	3.0	2.2	82.8	21.6	78.1	20.1	73.4	18.6	71.0	17.9	68.6	17.2	63.9	15.9
	5.0	4.1	82.8	20.5	78.1	19.1	73.4	17.8	71.0	17.1	68.6	16.4	63.9	15.2
	7.0	6.0	82.8	19.6	78.1	18.2	73.4	17.0	71.0	16.3	68.6	15.7	63.9	14.5
	9.0	7.9	82.8	18.7	78.1	17.4	73.4	16.2	71.0	15.6	68.6	15.0	63.9	13.9
	11.0	9.8	82.8	17.8	78.1	16.6	73.4	15.5	71.0	14.9	68.6	14.4	63.9	13.3
	13.0	11.8	82.8	17.0	78.1	15.9	73.4	14.8	71.0	14.3	68.6	13.7	63.9	12.7
	15.0	13.7	82.8	16.3	78.1	15.2	73.4	14.2	71.0	13.7	68.6	13.2	63.9	12.2
80 (520)	-19.8	-20.0	51.6	19.7	51.5	20.3	51.3	20.8	51.3	21.1	51.2	21.4	51.1	22.0
	-18.8	-19.0	52.9	19.9	52.8	20.5	52.7	21.1	52.6	21.4	52.5	21.6	52.4	22.2
	-16.7	-17.0	55.6	20.5	55.5	21.0	55.4	21.5	55.3	21.8	55.2	22.1	55.1	22.6
	-13.7	-15.0	58.4	20.9	58.3	21.4	58.2	21.9	58.1	22.2	58.1	22.5	56.8	22.3
	-11.8	-13.0	61.3	21.4	61.2	21.9	61.1	22.3	61.0	22.6	61.0	22.8	56.8	21.0
	-9.8	-11.0	64.3	21.8	64.2	22.2	64.1	22.7	63.1	22.4	61.0	21.5	56.8	19.7
	-9.5	-10.0	65.8	22.0	65.7	22.4	65.2	22.7	63.1	21.8	61.0	20.9	56.8	19.2
	-8.5	-9.1	67.2	22.2	67.1	22.6	65.2	22.1	63.1	21.2	61.0	20.4	56.8	18.7
	-7.0	-7.6	69.6	22.4	69.4	22.8	65.2	21.1	63.1	20.3	61.0	19.5	56.8	17.9
	-5.0	-5.6	72.9	22.8	69.4	21.5	65.2	20.0	63.1	19.2	61.0	18.4	56.8	17.0
	-3.0	-3.7	73.6	21.9	69.4	20.4	65.2	18.9	63.1	18.2	61.0	17.5	56.8	16.1
	0.0	-0.7	73.6	20.2	69.4	18.8	65.2	17.5	63.1	16.8	61.0	16.2	56.8	14.9
	3.0	2.2	73.6	18.7	69.4	17.5	65.2	16.2	63.1	15.6	61.0	15.1	56.8	13.9
	5.0	4.1	73.6	17.8	69.4	16.7	65.2	15.5	63.1	14.9	61.0	14.4	56.8	13.3
	7.0	6.0	73.6	17.0	69.4	15.9	65.2	14.8	63.1	14.3	61.0	13.8	56.8	12.7
	9.0	7.9	73.6	16.3	69.4	15.2	65.2	14.2	63.1	13.7	61.0	13.2	56.8	12.2
	11.0	9.8	73.6	15.5	69.4	14.5	65.2	13.6	63.1	13.1	61.0	12.6	56.8	11.7
	13.0	11.8	73.6	14.9	69.4	13.9	65.2	13.0	63.1	12.5	61.0	12.1	56.8	11.2
	15.0	13.7	73.6	14.2	69.4	13.3	65.2	12.5	63.1	12.0	61.0	11.6	56.8	10.8

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range shown by .
Note2: The above table shows the average value of conditions which may occur.

[50/60Hz]

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB																	
			16.0			18.0			20.0			21.0			22.0			24.0		
			TC	PI		TC	PI		TC	PI		TC	PI		TC	PI		TC	PI	
	°CDB	°CWB	kW	kW		kW	kW		kW	kW		kW	kW		kW	kW		kW	kW	
70 (455)	-19.8	-20.0	51.3	21.0		51.2	21.5		51.1	22.0		51.1	22.2		51.0	22.5		49.7	22.1	
	-18.8	-19.0	52.6	21.2		52.5	21.7		52.4	22.2		52.4	22.4		52.3	22.7		49.7	21.4	
	-16.7	-17.0	55.3	21.6		55.2	22.1		55.1	22.6		55.1	22.8		53.4	22.0		49.7	20.1	
	-13.7	-15.0	58.1	22.0		58.0	22.5		57.1	22.4		55.2	21.5		53.4	20.6		49.7	18.9	
	-11.8	-13.0	61.0	22.4		60.7	22.7		57.1	21.1		55.2	20.2		53.4	19.4		49.7	17.9	
	-9.8	-11.0	64.0	22.8		60.7	21.4		57.1	19.8		55.2	19.1		53.4	18.3		49.7	16.9	
	-9.5	-10.0	64.4	22.3		60.7	20.8		57.1	19.3		55.2	18.5		53.4	17.8		49.7	16.4	
	-8.5	-9.1	64.4	21.7		60.7	20.2		57.1	18.8		55.2	18.1		53.4	17.4		49.7	16.0	
	-7.0	-7.6	64.4	20.8		60.7	19.4		57.1	18.0		55.2	17.3		53.4	16.7		49.7	15.4	
	-5.0	-5.6	64.4	19.7		60.7	18.3		57.1	17.0		55.2	16.4		53.4	15.8		49.7	14.6	
	-3.0	-3.7	64.4	18.7		60.7	17.4		57.1	16.2		55.2	15.6		53.4	15.0		49.7	13.9	
	0.0	-0.7	64.4	17.2		60.7	16.1		57.1	15.0		55.2	14.5		53.4	13.9		49.7	12.9	
	3.0	2.2	64.4	16.0		60.7	15.0		57.1	14.0		55.2	13.5		53.4	13.0		49.7	12.0	
	5.0	4.1	64.4	15.3		60.7	14.3		57.1	13.3		55.2	12.9		53.4	12.4		49.7	11.5	
	7.0	6.0	64.4	14.6		60.7	13.7		57.1	12.8		55.2	12.3		53.4	11.9		49.7	11.0	
	9.0	7.9	64.4	14.0		60.7	13.1		57.1	12.2		55.2	11.8		53.4	11.4		49.7	10.6	
	11.0	9.8	64.4	13.4		60.7	12.6		57.1	11.7		55.2	11.3		53.4	10.9		49.7	10.2	
	13.0	11.8	64.4	12.8		60.7	12.0		57.1	11.2		55.2	10.9		53.4	10.5		49.7	9.8	
	15.0	13.7	64.4	12.3		60.7	11.5		57.1	10.8		55.2	10.5		53.4	10.1		49.7	9.4	
60 (390)	-19.8	-20.0	51.1	22.2		51.0	22.7		48.9	21.7		47.3	20.8		45.8	20.0		42.6	18.4	
	-18.8	-19.0	52.4	22.4		52.0	22.7		48.9	21.0		47.3	20.2		45.8	19.4		42.6	17.8	
	-16.7	-17.0	55.1	22.8		52.0	21.3		48.9	19.7		47.3	19.0		45.8	18.2		42.6	16.8	
	-13.7	-15.0	55.2	21.5		52.0	20.0		48.9	18.6		47.3	17.9		45.8	17.2		42.6	15.8	
	-11.8	-13.0	55.2	20.2		52.0	18.8		48.9	17.5		47.3	16.9		45.8	16.2		42.6	14.9	
	-9.8	-11.0	55.2	19.1		52.0	17.8		48.9	16.5		47.3	15.9		45.8	15.3		42.6	14.1	
	-9.5	-10.0	55.2	18.5		52.0	17.3		48.9	16.1		47.3	15.5		45.8	14.9		42.6	13.8	
	-8.5	-9.1	55.2	18.1		52.0	16.9		48.9	15.7		47.3	15.1		45.8	14.5		42.6	13.4	
	-7.0	-7.6	55.2	17.3		52.0	16.2		48.9	15.1		47.3	14.5		45.8	14.0		42.6	12.9	
	-5.0	-5.6	55.2	16.4		52.0	15.3		48.9	14.3		47.3	13.8		45.8	13.3		42.6	12.3	
	-3.0	-3.7	55.2	15.6		52.0	14.6		48.9	13.6		47.3	13.1		45.8	12.7		42.6	11.7	
	0.0	-0.7	55.2	14.4		52.0	13.5		48.9	12.6		47.3	12.2		45.8	11.8		42.6	10.9	
	3.0	2.2	55.2	13.5		52.0	12.6		48.9	11.8		47.3	11.4		45.8	11.0		42.6	10.2	
	5.0	4.1	55.2	12.9		52.0	12.1		48.9	11.3		47.3	10.9		45.8	10.5		42.6	9.8	
	7.0	6.0	55.2	12.3		52.0	11.6		48.9	10.8		47.3	10.5		45.8	10.1		42.6	9.4	
	9.0	7.9	55.2	11.8		52.0	11.1		48.9	10.4		47.3	10.1		45.8	9.7		42.6	9.04	
	11.0	9.8	55.2	11.3		52.0	10.7		48.9	10.0		47.3	9.7		45.8	9.3		42.6	8.70	
	13.0	11.8	55.2	10.9		52.0	10.2		48.9	9.6		47.3	9.3		45.8	8.97		42.6	8.37	
	15.0	13.7	55.2	10.4		52.0	9.8		48.9	9.2		47.3	8.9		45.8	8.65		42.6	8.07	
50 (325)	-19.8	-20.0	46.0	20.1		43.4	18.8		40.8	17.4		39.4	16.8		38.1	16.1		35.5	14.9	
	-18.8	-19.0	46.0	19.5		43.4	18.2		40.8	16.9		39.4	16.3		38.1	15.7		35.5	14.4	
	-16.7	-17.0	46.0	18.3		43.4	17.1		40.8	15.9		39.4	15.3		38.1	14.8		35.5	13.6	
	-13.7	-15.0	46.0	17.3		43.4	16.1		40.8	15.0		39.4	14.5		38.1	14.0		35.5	12.9	
	-11.8	-13.0	46.0	16.3		43.4	15.2		40.8	14.2		39.4	13.7		38.1	13.2		35.5	12.2	
	-9.8	-11.0	46.0	15.4		43.4	14.4		40.8	13.5		39.4	13.0		38.1	12.5		35.5	11.6	
	-9.5	-10.0	46.0	15.0		43.4	14.0		40.8	13.1		39.4	12.6		38.1	12.2		35.5	11.3	
	-8.5	-9.1	46.0	14.6		43.4	13.7		40.8	12.8		39.4	12.3		38.1	11.9		35.5	11.0	
	-7.0	-7.6	46.0	14.1		43.4	13.2		40.8	12.3		39.4	11.9		38.1	11.5		35.5	10.6	
	-5.0	-5.6	46.0	13.3		43.4	12.5		40.8	11.7		39.4	11.3		38.1	10.9		35.5	10.1	
	-3.0	-3.7	46.0	12.7		43.4	11.9		40.8	11.2		39.4	10.8		38.1	10.4		35.5	9.7	
	0.0	-0.7	46.0	11.8		43.4	11.1		40.8	10.4		39.4	10.1		38.1	9.7		35.5	9.06	
	3.0	2.2	46.0	11.1		43.4	10.4		40.8	9.8		39.4	9.4		38.1	9.13		35.5	8.51	
	5.0	4.1	46.0	10.6		43.4	10.0		40.8	9.4		39.4	9.06		38.1	8.76		35.5	8.18	
	7.0	6.1	46.0	10.2		43.4	9.6		40.8	9.00		39.4	8.71		38.1	8.43		35.5	7.87	
	9.0	7.9	46.0	9.8		43.4	9.2		40.8	8.65		39.4	8.38		38.1	8.11		35.5	7.58	
	11.0	9.8	46.0	9.4		43.4	8.86		40.8	8.33		39.4	8.07		38.1	7.82		35.5	7.31	
	13.0	11.8	46.0	9.0		43.4	8.51		40.8	8.01		39.4	7.77		38.1	7.52		35.5	7.04	
	15.0	13.7	46.0	8.69		43.4	8.21		40.8	7.73		39.4	7.50		38.1	7.27		35.5	6.81	

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: ▒ is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range ▒ shown by ▒.
Note2: The above table shows the average value of conditions which may occur.

15

RXYQ28PAHY1, PAHYL, PHTL [50/60Hz]

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB											
			16.0		18.0		20.0		21.0		22.0		24.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130 (910)	-19.8	-20.0	56.2	13.8	56.0	14.8	55.8	15.8	55.7	16.3	55.6	16.8	55.4	17.8
	-18.8	-19.0	57.6	14.3	57.4	15.2	57.2	16.2	57.1	16.7	57.0	17.2	56.8	18.2
	-16.7	-17.0	60.4	15.1	60.2	16.1	60.0	17.0	59.9	17.5	59.8	17.9	59.6	18.9
	-13.7	-15.0	63.4	15.9	63.2	16.8	63.0	17.7	62.9	18.2	62.8	18.6	62.6	19.5
	-11.8	-13.0	66.4	16.7	66.2	17.6	66.0	18.4	65.9	18.8	65.8	19.2	65.6	20.1
	-9.8	-11.0	69.6	17.4	69.4	18.2	69.2	19.0	69.1	19.4	69.0	19.8	68.8	20.6
	-9.5	-10.0	71.2	17.8	71.0	18.5	70.8	19.3	70.7	19.7	70.6	20.1	70.4	20.9
	-8.5	-9.1	72.7	18.1	72.5	18.8	72.3	19.6	72.2	20.0	72.1	20.4	71.9	21.1
	-7.0	-7.6	75.2	18.5	75.0	19.3	74.8	20.0	74.7	20.4	74.6	20.8	74.4	21.5
	-5.0	-5.6	78.7	19.1	78.5	19.8	78.3	20.6	78.2	20.9	78.1	21.3	77.9	22.0
	-3.0	-3.7	82.1	19.7	81.9	20.4	81.7	21.0	81.6	21.4	81.5	21.7	81.3	22.4
	0.0	-0.7	87.6	20.5	87.4	21.1	87.2	21.7	87.1	22.0	87.0	22.4	86.8	23.0
	3.0	2.2	93.2	21.2	93.0	21.8	92.8	22.3	92.7	22.6	92.6	22.9	92.4	23.5
	5.0	4.1	96.9	21.6	96.7	22.2	96.5	22.7	96.4	23.0	96.3	23.3	96.1	23.9
	7.0	6.0	100.8	22.0	100.6	22.5	100.4	23.1	100.3	23.4	100.2	23.6	99.1	23.9
	9.0	7.9	104.7	22.4	104.5	22.9	104.3	23.4	104.2	23.7	104.1	23.9	99.1	22.7
	11.0	9.8	108.8	22.7	108.6	23.2	108.4	23.7	108.3	24.0	106.4	23.6	99.1	21.7
	13.0	11.8	113.1	23.1	112.9	23.6	112.7	24.1	110.1	23.4	106.4	22.5	99.1	20.6
	15.0	13.7	117	23.4	117	23.9	114	23.3	110	22.4	106	21.5	99.1	19.7
120 (840)	-19.8	-20.0	55.9	15.2	55.7	16.1	55.5	17.0	55.4	17.5	55.3	18.0	55.2	18.9
	-18.8	-19.0	57.3	15.6	57.1	16.5	56.9	17.4	56.8	17.9	56.7	18.3	56.6	19.2
	-16.7	-17.0	60.1	16.4	60.0	17.3	59.8	18.1	59.7	18.5	59.6	19.0	59.4	19.8
	-13.7	-15.0	63.1	17.1	62.9	18.0	62.7	18.8	62.6	19.2	62.6	19.6	62.4	20.4
	-11.8	-13.0	66.2	17.8	66.0	18.6	65.8	19.4	65.7	19.8	65.6	20.2	65.4	21.0
	-9.8	-11.0	69.3	18.5	69.2	19.2	69.0	20.0	68.9	20.4	68.8	20.7	68.6	21.5
	-9.5	-10.0	71.0	18.8	70.8	19.5	70.6	20.3	70.5	20.6	70.4	21.0	70.2	21.7
	-8.5	-9.1	72.5	19.1	72.3	19.8	72.1	20.5	72.0	20.9	71.9	21.2	71.7	21.9
	-7.0	-7.6	75.0	19.5	74.8	20.2	74.6	20.9	74.5	21.2	74.4	21.6	74.2	22.3
	-5.0	-5.6	78.4	20.1	78.2	20.7	78.1	21.4	78.0	21.7	77.9	22.0	77.7	22.7
	-3.0	-3.7	81.8	20.6	81.6	21.2	81.4	21.8	81.3	22.1	81.2	22.5	81.1	23.1
	0.0	-0.7	87.3	21.3	87.1	21.9	87.0	22.5	86.9	22.8	86.8	23.1	86.6	23.7
	3.0	2.2	92.9	22.0	92.7	22.5	92.5	23.1	92.4	23.3	92.3	23.6	91.5	23.9
	5.0	4.1	96.6	22.4	96.5	22.9	96.3	23.4	96.2	23.7	96.1	23.9	91.5	22.7
	7.0	6.0	100.5	22.7	100.3	23.2	100.1	23.7	100.0	24.0	98.3	23.6	91.5	21.6
	9.0	7.9	104.5	23.1	104.3	23.6	104.1	24.0	101.6	23.4	98.3	22.5	91.5	20.6
	11.0	9.8	108.5	23.4	108.3	23.9	105.0	23.2	101.6	22.3	98.3	21.4	91.5	19.7
	13.0	11.8	112.9	23.7	111.7	23.9	105.0	22.1	101.6	21.3	98.3	20.4	91.5	18.8
	15.0	13.7	117	24.0	112	22.8	105	21.1	102	20.3	98.3	19.5	91.5	18.0
110 (770)	-19.8	-20.0	55.6	16.5	55.5	17.4	55.3	18.2	55.2	18.7	55.1	19.1	55.0	19.9
	-18.8	-19.0	57.0	16.9	56.9	17.7	56.7	18.6	56.6	19.0	56.5	19.4	56.3	20.2
	-16.7	-17.0	59.9	17.7	59.7	18.4	59.5	19.2	59.5	19.6	59.4	20.0	59.2	20.8
	-13.7	-15.0	62.8	18.3	62.7	19.1	62.5	19.8	62.4	20.2	62.3	20.6	62.2	21.3
	-11.8	-13.0	65.9	19.0	65.7	19.7	65.6	20.4	65.5	20.8	65.4	21.1	65.2	21.8
	-9.8	-11.0	69.1	19.6	68.9	20.3	68.7	21.0	68.6	21.3	68.6	21.6	68.4	22.3
	-9.5	-10.0	70.7	19.9	70.5	20.5	70.4	21.2	70.3	21.5	70.2	21.9	70.0	22.5
	-8.5	-9.1	72.2	20.1	72.0	20.8	71.8	21.4	71.8	21.8	71.7	22.1	71.5	22.7
	-7.0	-7.6	74.7	20.5	74.5	21.2	74.4	21.8	74.3	22.1	74.2	22.4	74.0	23.0
	-5.0	-5.6	78.2	21.0	78.0	21.6	77.8	22.2	77.7	22.5	77.6	22.8	77.5	23.4
	-3.0	-3.7	81.5	21.5	81.4	22.1	81.2	22.6	81.1	22.9	81.0	23.2	80.9	23.8
	0.0	-0.7	87.1	22.2	86.9	22.7	86.7	23.2	86.6	23.5	86.5	23.8	83.9	23.2
	3.0	2.2	92.6	22.8	92.4	23.3	92.3	23.8	92.2	24.0	90.1	23.4	83.9	21.5
	5.0	4.1	96.4	23.1	96.2	23.6	96.0	24.1	93.2	23.2	90.1	22.3	83.9	20.5
	7.0	6.0	100.2	23.5	100.1	23.9	96.3	23.0	93.2	22.1	90.1	21.2	83.9	19.5
	9.0	7.9	104.2	23.8	102.4	23.6	96.3	21.9	93.2	21.1	90.1	20.2	83.9	18.6
	11.0	9.8	108.2	24.1	102.4	22.5	96.3	20.9	93.2	20.1	90.1	19.3	83.9	17.8
	13.0	11.8	108.6	23.1	102.4	21.5	96.3	19.9	93.2	19.2	90.1	18.4	83.9	17.0
	15.0	13.7	109	22.0	102	20.5	96.3	19.1	93.2	18.3	90.1	17.6	83.9	16.3

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB											
			16.0		18.0		20.0		21.0		22.0		24.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100 (700)	-19.8	-20.0	55.4	17.9	55.2	18.7	55.1	19.4	55.0	19.8	54.9	20.2	54.7	21.0
	-18.8	-19.0	56.8	18.2	56.6	19.0	56.4	19.7	56.4	20.1	56.3	20.5	56.1	21.3
	-16.7	-17.0	59.6	18.9	59.5	19.6	59.3	20.3	59.2	20.7	59.1	21.1	59.0	21.8
	-13.7	-15.0	62.6	19.5	62.4	20.2	62.3	20.9	62.2	21.2	62.1	21.6	62.0	22.3
	-11.8	-13.0	65.6	20.1	65.5	20.8	65.3	21.4	65.2	21.7	65.2	22.1	65.0	22.7
	-9.8	-11.0	68.8	20.7	68.6	21.3	68.5	21.9	68.4	22.2	68.3	22.5	68.2	23.1
	-9.5	-10.0	70.4	20.9	70.3	21.5	70.1	22.1	70.0	22.4	70.0	22.7	69.8	23.4
	-8.5	-9.1	71.9	21.2	71.8	21.8	71.6	22.3	71.5	22.6	71.4	22.9	71.3	23.5
	-7.0	-7.6	74.4	21.5	74.3	22.1	74.1	22.7	74.0	23.0	74.0	23.2	73.8	23.8
	-5.0	-5.6	77.9	22.0	77.7	22.5	77.6	23.1	77.5	23.4	77.4	23.6	76.3	23.7
	-3.0	-3.7	81.3	22.4	81.1	22.9	81.0	23.5	80.9	23.7	80.8	24.0	76.3	22.4
	0.0	-0.7	86.8	23.0	86.6	23.5	86.5	24.0	84.7	23.5	81.9	22.5	76.3	20.7
	3.0	2.2	92.3	23.6	92.2	24.0	87.5	22.6	84.7	21.7	81.9	20.9	76.3	19.2
	5.0	4.1	96.1	23.9	93.1	23.2	87.5	21.5	84.7	20.7	81.9	19.9	76.3	18.3
	7.0	6.0	98.7	23.7	93.1	22.1	87.5	20.5	84.7	19.7	81.9	18.9	76.3	17.4
	9.0	7.9	98.7	22.6	93.1	21.1	87.5	19.6	84.7	18.8	81.9	18.1	76.3	16.7
	11.0	9.8	98.7	21.6	93.1	20.1	87.5	18.7	84.7	18.0	81.9	17.3	76.3	15.9
	13.0	11.8	98.7	20.5	93.1	19.2	87.5	17.8	84.7	17.2	81.9	16.5	76.3	15.2
	15.0	13.7	98.7	19.6	93.1	18.3	87.5	17.1	84.7	16.4	81.9	15.8	76.3	14.6
90 (630)	-19.8	-20.0	55.1	19.2	55.0	19.9	54.8	20.6	54.7	21.0	54.7	21.3	54.5	22.0
	-18.8	-19.0	56.5	19.6	56.3	20.2	56.2	20.9	56.1	21.3	56.1	21.6	55.9	22.3
	-16.7	-17.0	59.3	20.2	59.2	20.8	59.1	21.5	59.0	21.8	58.9	22.1	58.8	22.7
	-13.7	-15.0	62.3	20.7	62.2	21.3	62.0	22.0	62.0	22.3	61.9	22.6	61.7	23.2
	-11.8	-13.0	65.4	21.3	65.2	21.8	65.1	22.4	65.0	22.7	64.9	23.0	64.8	23.6
	-9.8	-11.0	68.5	21.8	68.4	22.3	68.3	22.9	68.2	23.2	68.1	23.4	68.0	24.0
	-9.5	-10.0	70.2	22.0	70.0	22.5	69.9	23.1	69.8	23.4	69.7	23.6	68.6	23.6
	-8.5	-9.1	71.6	22.2	71.5	22.7	71.4	23.3	71.3	23.5	71.2	23.8	68.6	23.0
	-7.0	-7.6	74.2	22.5	74.0	23.0	73.9	23.6	73.8	23.8	73.7	24.0	68.6	22.0
	-5.0	-5.6	77.6	23.0	77.5	23.4	77.3	23.9	76.2	23.7	73.7	22.7	68.6	20.8
	-3.0	-3.7	81.0	23.3	80.8	23.8	78.8	23.3	76.2	22.4	73.7	21.5	68.6	19.8
	0.0	-0.7	86.5	23.9	83.8	23.2	78.8	21.5	76.2	20.7	73.7	19.9	68.6	18.3
	3.0	2.2	88.9	23.0	83.8	21.5	78.8	19.9	76.2	19.2	73.7	18.4	68.6	17.0
	5.0	4.1	88.9	21.9	83.8	20.4	78.8	19.0	76.2	18.3	73.7	17.6	68.6	16.2
	7.0	6.0	88.9	20.9	83.8	19.5	78.8	18.1	76.2	17.4	73.7	16.8	68.6	15.5
	9.0	7.9	88.9	19.9	83.8	18.6	78.8	17.3	76.2	16.7	73.7	16.0	68.6	14.8
	11.0	9.8	88.9	19.0	83.8	17.8	78.8	16.5	76.2	15.9	73.7	15.3	68.6	14.2
	13.0	11.8	88.9	18.1	83.8	17.0	78.8	15.8	76.2	15.2	73.7	14.7	68.6	13.6
	15.0	13.7	88.9	17.4	83.8	16.2	78.8	15.1	76.2	14.6	73.7	14.1	68.6	13.0
80 (560)	-19.8	-20.0	54.8	20.6	54.7	21.2	54.6	21.8	54.5	22.2	54.5	22.5	54.3	23.1
	-18.8	-19.0	56.2	20.9	56.1	21.5	56.0	22.1	55.9	22.4	55.8	22.7	55.7	23.3
	-16.7	-17.0	59.1	21.4	58.9	22.0	58.8	22.6	58.8	22.9	58.7	23.1	58.6	23.7
	-13.7	-15.0	62.0	21.9	61.9	22.5	61.8	23.0	61.7	23.3	61.7	23.6	61.0	23.8
	-11.8	-13.0	65.1	22.4	65.0	22.9	64.8	23.4	64.8	23.7	64.7	24.0	61.0	22.4
	-9.8	-11.0	68.3	22.8	68.1	23.3	68.0	23.8	67.8	24.0	65.5	23.0	61.0	21.1
	-9.5	-10.0	69.9	23.1	69.8	23.5	69.6	24.0	67.8	23.3	65.5	22.3	61.0	20.5
	-8.5	-9.1	71.4	23.2	71.2	23.7	70.0	23.6	67.8	22.7	65.5	21.7	61.0	20.0
	-7.0	-7.6	73.9	23.5	73.8	24.0	70.0	22.6	67.8	21.7	65.5	20.8	61.0	19.1
	-5.0	-5.6	77.3	23.9	74.5	23.0	70.0	21.3	67.8	20.5	65.5	19.7	61.0	18.1
	-3.0	-3.7	79.0	23.4	74.5	21.8	70.0	20.2	67.8	19.5	65.5	18.7	61.0	17.2
	0.0	-0.7	79.0	21.6	74.5	20.1	70.0	18.7	67.8	18.0	65.5	17.3	61.0	15.9
	3.0	2.2	79.0	20.0	74.5	18.7	70.0	17.4	67.8	16.7	65.5	16.1	61.0	14.8
	5.0	4.1	79.0	19.0	74.5	17.8	70.0	16.6	67.8	16.0	65.5	15.4	61.0	14.2
	7.0	6.0	79.0	18.2	74.5	17.0	70.0	15.8	67.8	15.2	65.5	14.7	61.0	13.6
	9.0	7.9	79.0	17.4	74.5	16.2	70.0	15.1	67.8	14.6	65.5	14.1	61.0	13.0
	11.0	9.8	79.0	16.6	74.5	15.5	70.0	14.5	67.8	14.0	65.5	13.5	61.0	12.5
	13.0	11.8	79.0	15.9	74.5	14.8	70.0	13.9	67.8	13.4	65.5	12.9	61.0	12.0
	15.0	13.7	79.0	15.2	74.5	14.2	70.0	13.3	67.8	12.8	65.5	12.4	61.0	11.5

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: ▒ is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range shown by ▒.
Note2: The above table shows the average value of conditions which may occur.

[50/60Hz]

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB 16.0 TC	16.0 PI	18.0 TC	18.0 PI	20.0 TC	20.0 PI	21.0 TC	21.0 PI	22.0 TC	22.0 PI	24.0 TC	24.0 PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70 (490)	-19.8	-20.0	54.6	22.0	54.4	22.5	54.3	23.1	54.3	23.3	54.2	23.6	53.4	23.6
	-18.8	-19.0	55.9	22.2	55.8	22.7	55.7	23.3	55.7	23.5	55.6	23.8	53.4	22.9
	-16.7	-17.0	58.8	22.7	58.7	23.2	58.6	23.7	58.5	23.9	57.3	23.4	53.4	21.5
	-13.7	-15.0	61.8	23.1	61.6	23.6	61.3	23.9	59.3	23.0	57.3	22.0	53.4	20.2
	-11.8	-13.0	64.8	23.5	64.7	24.0	61.3	22.5	59.3	21.6	57.3	20.8	53.4	19.1
	-9.8	-11.0	68.0	23.9	65.2	22.9	61.3	21.2	59.3	20.4	57.3	19.6	53.4	18.0
	-9.5	-10.0	69.1	23.8	65.2	22.2	61.3	20.6	59.3	19.8	57.3	19.0	53.4	17.5
	-8.5	-9.1	69.1	23.2	65.2	21.6	61.3	20.1	59.3	19.3	57.3	18.6	53.4	17.1
	-7.0	-7.6	69.1	22.2	65.2	20.7	61.3	19.2	59.3	18.5	57.3	17.8	53.4	16.4
	-5.0	-5.6	69.1	21.0	65.2	19.6	61.3	18.2	59.3	17.5	57.3	16.9	53.4	15.6
	-3.0	-3.7	69.1	19.9	65.2	18.6	61.3	17.3	59.3	16.7	57.3	16.0	53.4	14.8
	0.0	-0.7	69.1	18.4	65.2	17.2	61.3	16.0	59.3	15.4	57.3	14.9	53.4	13.7
	3.0	2.2	69.1	17.1	65.2	16.0	61.3	14.9	59.3	14.4	57.3	13.9	53.4	12.8
	5.0	4.1	69.1	16.3	65.2	15.3	61.3	14.3	59.3	13.8	57.3	13.3	53.4	12.3
	7.0	6.0	69.1	15.6	65.2	14.6	61.3	13.6	59.3	13.2	57.3	12.7	53.4	11.8
	9.0	7.9	69.1	14.9	65.2	14.0	61.3	13.1	59.3	12.6	57.3	12.2	53.4	11.3
	11.0	9.8	69.1	14.3	65.2	13.4	61.3	12.5	59.3	12.1	57.3	11.7	53.4	10.8
	13.0	11.8	69.1	13.7	65.2	12.8	61.3	12.0	59.3	11.6	57.3	11.2	53.4	10.4
	15.0	13.7	69.1	13.1	65.2	12.3	61.3	11.5	59.3	11.2	57.3	10.8	53.4	10.0
60 (420)	-19.8	-20.0	54.3	23.3	54.2	23.8	52.5	23.1	50.8	22.2	49.1	21.3	45.8	19.6
	-18.8	-19.0	55.7	23.5	55.6	24.0	52.5	22.4	50.8	21.5	49.1	20.7	45.8	19.0
	-16.7	-17.0	58.5	23.9	55.9	22.7	52.5	21.1	50.8	20.3	49.1	19.5	45.8	17.9
	-13.7	-15.0	59.2	22.9	55.9	21.4	52.5	19.8	50.8	19.1	49.1	18.3	45.8	16.9
	-11.8	-13.0	59.2	21.6	55.9	20.1	52.5	18.7	50.8	18.0	49.1	17.3	45.8	16.0
	-9.8	-11.0	59.2	20.4	55.9	19.0	52.5	17.7	50.8	17.0	49.1	16.4	45.8	15.1
	-9.5	-10.0	59.2	19.8	55.9	18.5	52.5	17.2	50.8	16.6	49.1	15.9	45.8	14.7
	-8.5	-9.1	59.2	19.3	55.9	18.0	52.5	16.8	50.8	16.1	49.1	15.5	45.8	14.4
	-7.0	-7.6	59.2	18.5	55.9	17.3	52.5	16.1	50.8	15.5	49.1	14.9	45.8	13.8
	-5.0	-5.6	59.2	17.5	55.9	16.4	52.5	15.3	50.8	14.7	49.1	14.2	45.8	13.1
	-3.0	-3.7	59.2	16.7	55.9	15.6	52.5	14.5	50.8	14.0	49.1	13.5	45.8	12.5
	0.0	-0.7	59.2	15.4	55.9	14.5	52.5	13.5	50.8	13.0	49.1	12.6	45.8	11.7
	3.0	2.2	59.2	14.4	55.9	13.5	52.5	12.6	50.8	12.2	49.1	11.7	45.8	10.9
	5.0	4.1	59.2	13.7	55.9	12.9	52.5	12.1	50.8	11.7	49.1	11.3	45.8	10.5
	7.0	6.0	59.2	13.2	55.9	12.4	52.5	11.6	50.8	11.2	49.1	10.8	45.8	10.0
	9.0	7.9	59.2	12.6	55.9	11.8	52.5	11.1	50.8	10.7	49.1	10.4	45.8	9.7
	11.0	9.8	59.2	12.1	55.9	11.4	52.5	10.7	50.8	10.3	49.1	10.0	45.8	9.3
	13.0	11.8	59.2	11.6	55.9	10.9	52.5	10.2	50.8	9.9	49.1	9.6	45.8	8.93
	15.0	13.7	59.2	11.1	55.9	10.5	52.5	9.9	50.8	9.5	49.1	9.2	45.8	8.61
50 (350)	-19.8	-20.0	49.4	21.5	46.6	20.0	43.8	18.6	42.3	17.9	40.9	17.2	38.1	15.9
	-18.8	-19.0	49.4	20.8	46.6	19.4	43.8	18.0	42.3	17.4	40.9	16.7	38.1	15.4
	-16.7	-17.0	49.4	19.6	46.6	18.3	43.8	17.0	42.3	16.4	40.9	15.8	38.1	14.6
	-13.7	-15.0	49.4	18.5	46.6	17.2	43.8	16.1	42.3	15.5	40.9	14.9	38.1	13.8
	-11.8	-13.0	49.4	17.4	46.6	16.3	43.8	15.2	42.3	14.6	40.9	14.1	38.1	13.0
	-9.8	-11.0	49.4	16.5	46.6	15.4	43.8	14.4	42.3	13.9	40.9	13.4	38.1	12.4
	-9.5	-10.0	49.4	16.0	46.6	15.0	43.8	14.0	42.3	13.5	40.9	13.0	38.1	12.1
	-8.5	-9.1	49.4	15.6	46.6	14.6	43.8	13.7	42.3	13.2	40.9	12.7	38.1	11.8
	-7.0	-7.6	49.4	15.0	46.6	14.1	43.8	13.2	42.3	12.7	40.9	12.2	38.1	11.4
	-5.0	-5.6	49.4	14.3	46.6	13.4	43.8	12.5	42.3	12.1	40.9	11.7	38.1	10.8
	-3.0	-3.7	49.4	13.6	46.6	12.8	43.8	11.9	42.3	11.5	40.9	11.1	38.1	10.4
	0.0	-0.7	49.4	12.6	46.6	11.9	43.8	11.1	42.3	10.8	40.9	10.4	38.1	9.7
	3.0	2.2	49.4	11.8	46.6	11.1	43.8	10.4	42.3	10.1	40.9	9.7	38.1	9.09
	5.0	4.1	49.4	11.3	46.6	10.7	43.8	10.0	42.3	9.7	40.9	9.4	38.1	8.73
	7.0	6.0	49.4	10.9	46.6	10.2	43.8	9.6	42.3	9.3	40.9	9.00	38.1	8.40
	9.0	7.9	49.4	10.4	46.6	9.8	43.8	9.2	42.3	8.95	40.9	8.66	38.1	8.09
	11.0	9.8	49.4	10.0	46.6	9.5	43.8	8.89	42.3	8.62	40.9	8.34	38.1	7.80
	13.0	11.8	49.4	9.6	46.6	9.1	43.8	8.55	42.3	8.29	40.9	8.03	38.1	7.52
	15.0	13.7	49.4	9.3	46.6	8.76	43.8	8.25	42.3	8.00	40.9	7.75	38.1	7.26

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: ■ is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range ■ shown by ■.
Note2: The above table shows the average value of conditions which may occur.

15

RXYQ30PAHY1, PAHYL, PHTL [50/60Hz]

Heating capacity

Combination ratio (%) (Capacity index)	Outdoor air temp.	Indoor air temp. °CDB																					
		16.0		18.0		20.0		21.0		22.0		24.0		16.0		18.0		20.0		21.0		22.0		24.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130 (981)	-19.8	-20.0	60.3	15.4	60.1	16.5	59.9	17.6	59.8	18.2	59.7	18.7	59.4	19.9	59.3	20.8	59.1	21.6	59.0	22.1	58.9	22.5	58.8	23.4
	-18.8	-19.0	61.6	15.8	61.4	16.9	61.1	18.0	61.0	18.6	60.9	19.1	60.7	20.3	60.5	21.1	60.4	21.9	60.3	22.4	60.2	22.8	60.0	23.6
	-16.7	-17.0	64.2	16.7	64.0	17.7	63.8	18.8	63.7	19.3	63.6	19.8	63.4	20.9	63.2	21.7	63.0	22.5	63.0	22.9	62.9	23.3	62.7	24.1
	-13.7	-15.0	67.1	17.5	66.9	18.5	66.7	19.5	66.6	20.0	66.5	20.5	66.3	21.5	66.1	22.3	65.9	23.1	65.8	23.5	65.7	23.9	65.6	24.6
	-11.8	-13.0	70.2	18.3	70.0	19.3	69.8	20.2	69.7	20.7	69.5	21.2	69.3	22.1	69.2	22.9	69.0	23.7	68.9	24.0	68.8	24.4	68.7	25.1
	-9.8	-11.0	73.5	19.1	73.3	20.0	73.0	20.9	72.9	21.4	72.8	21.8	72.6	22.8	72.4	23.5	72.3	24.2	72.2	24.5	72.1	24.9	71.9	25.6
	-9.5	-10.0	75.2	19.5	75.0	20.4	74.8	21.3	74.6	21.7	74.5	22.2	74.3	23.1	74.1	23.8	74.0	24.5	73.9	24.8	73.8	25.1	73.7	25.8
	-8.5	-9.1	76.8	19.8	76.6	20.7	76.3	21.6	76.2	22.0	76.1	22.4	75.9	23.4	75.7	24.0	75.6	24.7	75.5	25.0	75.4	25.4	75.2	26.0
	-7.0	-7.6	79.5	20.4	79.3	21.2	79.1	22.1	79.0	22.5	78.9	22.9	78.6	23.8	78.5	24.4	78.3	25.1	78.2	25.4	78.1	25.7	78.0	26.4
	-5.0	-5.6	83.3	21.1	83.1	21.9	82.9	22.7	82.8	23.1	82.7	23.5	82.5	24.3	82.3	25.0	82.1	25.6	82.0	25.9	82.0	26.2	81.8	26.8
	-3.0	-3.7	87.1	21.8	86.9	22.5	86.7	23.3	86.6	23.7	86.5	24.0	86.3	24.8	86.1	25.4	85.9	26.0	85.9	26.3	85.8	26.6	81.9	25.4
	0.0	-0.7	93.5	22.7	93.3	23.4	93.1	24.1	93.0	24.5	92.9	24.8	92.7	25.6	92.5	26.2	92.3	26.7	91.0	24.2	88.0	23.2	81.9	23.2
	3.0	2.2	100.2	23.6	99.9	24.2	99.7	24.9	99.6	25.2	99.5	25.5	99.3	26.2	99.1	26.7	94.0	25.1	91.0	24.2	88.0	23.2	81.9	21.3
	5.0	4.1	104.7	24.1	104.5	24.7	104.3	25.4	104.2	25.7	104.1	26.0	103.9	26.6	100.0	25.6	94.0	23.8	91.0	22.9	88.0	22.0	81.9	20.2
	7.0	6.0	109.5	24.6	109.3	25.2	109.0	25.8	108.9	26.1	108.8	26.4	106.5	26.2	106.1	24.3	94.0	22.5	91.0	21.6	88.0	20.8	81.9	19.1
	9.0	7.9	114	25.1	114	25.7	114	26.2	114	26.5	114	26.7	114	24.6	106	23.0	94.0	21.3	91.0	20.5	88.0	19.7	81.9	18.2
	11.0	9.8	120	25.5	119	26.1	119	26.6	118	26.7	114	25.6	106	23.3	100	21.8	94.0	20.2	91.0	19.5	88.0	18.7	81.9	17.3
	13.0	11.8	125	26.0	125	26.5	122	26.2	118	25.2	114	24.1	106	22.1	100	20.6	94.0	19.2	91.0	18.4	88.0	17.7	81.9	16.4
	15.0	13.7	131	26.4	130	26.8	122	24.8	118	23.8	114	22.9	106	20.9	100	19.6	94.0	18.2	91.0	17.5	88.0	16.9	81.9	15.6
120 (906)	-19.8	-20.0	60.0	16.9	59.8	17.9	59.6	19.0	59.5	19.5	59.4	20.0	59.2	21.0	59.1	21.4	59.0	22.2	58.8	23.0	58.8	23.4	58.7	23.8
	-18.8	-19.0	61.3	17.3	61.1	18.3	60.9	19.3	60.8	19.8	60.7	20.3	60.5	21.3	60.4	21.7	60.3	22.5	60.1	23.2	60.0	23.6	60.0	24.0
	-16.7	-17.0	63.9	18.1	63.8	19.1	63.6	20.0	63.5	20.5	63.4	21.0	63.2	21.9	63.1	22.3	62.9	23.1	62.8	23.8	62.7	24.1	62.6	24.5
	-13.7	-15.0	66.8	18.9	66.6	19.8	66.4	20.7	66.3	21.2	66.0	21.6	66.0	22.5	65.8	23.6	65.7	24.3	65.6	24.6	65.5	25.0	65.4	25.7
	-11.8	-13.0	69.9	19.6	69.7	20.5	69.5	21.4	69.4	21.8	69.3	22.3	69.1	23.1	68.9	24.1	68.7	24.8	68.7	25.1	68.6	25.5	68.4	26.1
	-9.8	-11.0	73.2	20.3	73.0	21.2	72.8	22.0	72.7	22.4	72.6	22.9	72.4	23.7	72.2	24.7	72.0	25.3	71.9	25.6	71.9	25.9	71.7	26.5
	-9.5	-10.0	74.9	20.7	74.7	21.5	74.5	22.3	74.4	22.7	74.3	23.2	74.1	24.0	73.9	24.9	73.7	25.5	73.6	25.8	73.6	26.1	73.4	26.8
	-8.5	-9.1	76.5	21.0	76.3	21.8	76.1	22.6	76.0	23.0	75.9	23.4	75.7	24.2	75.5	25.1	75.3	25.7	75.2	26.0	75.2	26.3	73.7	26.2
	-7.0	-7.6	79.2	21.5	79.0	22.3	78.8	23.1	78.7	23.5	78.6	23.8	78.2	24.9	78.2	25.5	78.0	26.1	78.0	26.4	77.9	26.7	73.7	25.1
	-5.0	-5.6	83.0	22.2	82.8	22.9	82.6	23.7	82.5	24.0	82.4	24.4	82.2	25.4	82.0	26.0	81.9	26.5	81.8	26.9	79.2	25.7	73.7	23.6
	-3.0	-3.7	86.9	22.8	86.7	23.5	86.5	24.2	86.4	24.5	86.3	24.9	86.1	25.9	86.0	26.4	85.8	26.9	84.6	26.4	81.9	25.3	73.7	22.3
	0.0	-0.7	93.3	23.7	93.1	24.3	92.9	25.0	92.8	25.3	92.5	25.6	92.5	26.5	90.0	26.0	90.0	26.0	84.6	24.1	81.9	23.2	79.2	20.5
	3.0	2.2	99.9	24.5	99.7	25.1	99.5	25.7	99.4	26.0	99.3	26.3	98.3	26.9	90.0	23.9	90.0	23.9	84.6	22.1	81.9	21.3	79.2	18.8
	5.0	4.1	104.4	25.0	104.2	25.5	104.0	26.1	103.9	26.4	103.8	26.7	98.3	22.6	90.0	22.6	84.6	21.0	81.9	20.2	79.2	19.4	73.7	17.9
	7.0	6.0	109.2	25.4	109.0	26.0	108.8	26.5	108.7	26.8	105.6	25.9	98.3	21.4	90.0	21.4	84.6	19.9	81.9	19.1	79.2	18.4	73.7	17.0
	9.0	7.9	114	25.9	114	26.4	113	26.6	109	25.5	106	24.5	98.3	21.7	90.0	20.3	84.6	18.9	81.9	18.2	79.2	17.5	73.7	16.1
	11.0	9.8	119	26.3	119	26.8	113	25.1	109	24.2	106	23.2	98.3	20.6	90.0	19.2	84.6	17.9	81.9	17.3	79.2	16.6	73.7	15.4
	13.0	11.8	125	26.7	120	25.6	113	23.8	109	22.8	106	21.9	98.3	19.5	90.0	18.2	84.6	17.0	81.9	16.4	79.2	15.8	73.7	14.6
	15.0	13.7	127	26.1	120	24.3	113	22.5	109	21.7	106	20.8	98.3	18.5	90.0	17.3	84.6	16.2	81.9	15.6	79.2	15.0	73.7	13.9
110 (831)	-19.8	-20.0	59.7	18.4	59.5	19.4	59.4	20.3	59.3	20.8	59.2	21.2	59.0	22.2	58.9	22.9	58.7	23.6	58.6	24.3	58.5	24.7	58.3	25.7
	-18.8	-19.0	61.0	18.8	60.8	19.7	60.6	20.6	60.5	21.1	60.4	21.6	60.3	22.5	60.1	23.2	60.0	23.9	59.8	24.6	59.8	24.9	59.7	25.2
	-16.7	-17.0	63.7	19.5	63.5	20.4	63.3	21.3	63.2	21.7	63.1	22.2	62.9	23.0	62.8	23.7	62.7	24.4	62.5	25.0	62.5	25.3	62.4	25.7
	-13.7	-15.0	66.5	20.2	66.4	21.1	66.2	21.9	66.1	22.3	66.0	22.7	65.8	23.6	65.7	24.3	65.5	24.9	65.4	25.5	65.3	25.8	65.3	26.1
	-11.8	-13.0	69.6	20.9	69.4	21.7	69.2	22.5	69.2	22.9	69.1	23.3	68.9	24.1	68.7	24.8	68.6	25.4	68.5	25.8	68.4	26.2	68.3	26.5
	-9.8	-11.0	72.9	21.6	72.7	22.3	72.5	23.1	72.4	23.5	72.3	23.9	72.2	24.6	71.9	25.3	71.8	25.8	71.7	26.4	71.7	26.7	70.4	26.2
	-9.5	-10.0	74.6	21.9	74.4	22.7	74.2	23.4	74.1	23.8	74.1	24.2	73.9	24.9	73.5	25.5	73.6	26.0	73.5	26.4	68.5	25.9	65.5	25.4
	-8.5	-9.1	76.2	22.2	76.0	22.9	75.8	23.7	75.7	24.0	75.6	24.4	75.5	25.1	75.7	25.7	75.2	26.2	75.1	26.8	72.8	26.5	70.4	24.8
	-7.0	-7.6	78.9	22.7	78.7	23.4	78.6	24.1	78.5	24.4	78.4	24.8	78.2	25.5	78.4	25.7	78.2	26.0	77.9	26.6	75.2	25.7	72.8	24.7
	-5.0	-5.6	82.7	23.3	82.6	23.9	82.4	24.6	82.3	24.9	82.2	25.3	82.0	26.0	82.4	26.2	82.0	26.5	80.0	26.1	75.2	24.2	72.8	23.7
	-3.0	-3.7	86.6	23.8	86.4	24.5	86.2	25.1	86.1	25.4	86.0	25.7	85.8	26.4	84.9	26.5	80.0	24.6	75.2	22.9	72.8	22.0	70.4	21.1
	0.0	-0.7	93.0	24.6	92.8	25.2	92.6	25.8	92.5	26.1	92.4	26.4	90.1	26.0	84.9	22.5	80.0	22.5	75.2	20.9	72.8	20.2	70.4	19.4
	3.0	2.2	99.6	25.4	99.4	25.9	99.2	26.5	99.1	26.7	96.8	26.0	90.1	22.6	84.9	22.2	80.0	20.7	75.2	19.3	72.8	18.6	70.4	17.9
	5.0	4.1	104.1	25.8	104.0	26.3	103.4	26.7	100.1	25.7	96.8	26.0	90.1	24.6	84.9	21.0	80.0	19.6	75.2	18.3	72.8	17.6	70.4	17.0
	7.0	6.0	108.9	26.2	108.7	26.7	103.4	25.2	100.1	24.3	96.8	26.0	90.1	24.3	84.9	19.9	80.0	18.6	75.2	17.4	72.8	16.7	70.4	16.1
	9.0	7.9	114	26.6	110	25.8	103	23.9	100	23.0	96.8	22.1	90.1	22.9	84.9	18.9	80.0	17.7	75.2	16.5	72.8	15.9	70.4	15.3
	11.0	9.8	117	26.2	110	24.4	103	22.6	100	21.8	96.8	20.9	90.1	19.8	84.9	16.8	80.0	16.8	75.2	15.7	72.8	15.1	70.4	14.6
	13.0	11.8	117	24.7	110	23.1	103	21.4	100	20.6	96.8	19.8	90.1	18.8	84.9	17.0	80.0	16.0	75.2	14.9	72.8	14.4	70.4	13.9
	15.0	13.7	117	23.5	110	21.9	103	20.3	100	19.6	96.8	18.8	90.1	17.4	84.9	16.2	80.0	15.2	75.2	14.2	72.8	13.7	70.4	13.2

Heating capacity

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: ▒ is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range ▒ shown by ▒.
Note2: The above table shows the average value of conditions which may occur.

[50/60Hz]

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB															
			16.0		18.0		20.0		21.0		22.0		24.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70 (529)	-19.8	-20.0	58.6	24.5	58.4	25.1	58.3	25.7	58.3	26.0	58.2	26.3	57.3	26.3
	-18.8	-19.0	59.8	24.7	59.7	25.3	59.6	25.9	59.5	26.2	59.5	26.5	57.3	25.6
	-16.7	-17.0	62.5	25.2	62.4	25.7	62.3	26.3	62.2	26.6	61.6	26.4	57.3	24.2
	-13.7	-15.0	65.4	25.6	65.3	26.1	65.1	26.7	63.7	26.0	61.6	25.0	57.3	22.9
	-11.8	-13.0	68.4	26.1	68.3	26.6	65.8	25.6	63.7	24.6	61.6	23.6	57.3	21.7
	-9.8	-11.0	71.7	26.5	70.0	26.0	65.8	24.1	63.7	23.2	61.6	22.3	57.3	20.5
	-9.5	-10.0	73.4	26.7	70.0	25.3	65.8	23.4	63.7	22.5	61.6	21.6	57.3	19.9
	-8.5	-9.1	74.3	26.4	70.0	24.6	65.8	22.8	63.7	22.0	61.6	21.1	57.3	19.4
	-7.0	-7.6	74.3	25.3	70.0	23.5	65.8	21.8	63.7	21.0	61.6	20.2	57.3	18.6
	-5.0	-5.6	74.3	23.8	70.0	22.2	65.8	20.6	63.7	19.8	61.6	19.1	57.3	17.6
	-3.0	-3.7	74.3	22.5	70.0	21.0	65.8	19.5	63.7	18.8	61.6	18.1	57.3	16.7
	0.0	-0.7	74.3	20.6	70.0	19.3	65.8	17.9	63.7	17.3	61.6	16.6	57.3	15.4
	3.0	2.2	74.3	19.0	70.0	17.8	65.8	16.6	63.7	16.0	61.6	15.4	57.3	14.2
	5.0	4.1	74.3	18.0	70.0	16.9	65.8	15.7	63.7	15.2	61.6	14.6	57.3	13.6
	7.0	6.0	74.3	17.1	70.0	16.0	65.8	15.0	63.7	14.4	61.6	13.9	57.3	12.9
	9.0	7.9	74.3	16.3	70.0	15.2	65.8	14.3	63.7	13.8	61.6	13.3	57.3	12.3
	11.0	9.8	74.3	15.5	70.0	14.5	65.8	13.6	63.7	13.1	61.6	12.7	57.3	11.8
	13.0	11.8	74.3	14.7	70.0	13.8	65.8	12.9	63.7	12.5	61.6	12.1	57.3	11.2
	15.0	13.7	74.3	14.0	70.0	13.2	65.8	12.3	63.7	11.9	61.6	11.5	57.3	10.7
60 (453)	-19.8	-20.0	58.3	26.0	58.2	26.5	56.4	25.8	54.6	24.8	52.8	23.8	49.2	21.8
	-18.8	-19.0	59.5	26.2	59.4	26.7	56.4	25.1	54.6	24.1	52.8	23.2	49.2	21.3
	-16.7	-17.0	62.2	26.6	60.0	25.6	56.4	23.8	54.6	22.8	52.8	21.9	49.2	20.2
	-13.7	-15.0	63.6	26.0	60.0	24.2	56.4	22.5	54.6	21.6	52.8	20.8	49.2	19.1
	-11.8	-13.0	63.6	24.6	60.0	22.9	56.4	21.2	54.6	20.4	52.8	19.7	49.2	18.1
	-9.8	-11.0	63.6	23.2	60.0	21.6	56.4	20.1	54.6	19.3	52.8	18.6	49.2	17.2
	-9.5	-10.0	63.6	22.5	60.0	21.0	56.4	19.5	54.6	18.8	52.8	18.1	49.2	16.7
	-8.5	-9.1	63.6	21.9	60.0	20.5	56.4	19.0	54.6	18.3	52.8	17.6	49.2	16.3
	-7.0	-7.6	63.6	21.0	60.0	19.6	56.4	18.3	54.6	17.6	52.8	16.9	49.2	15.6
	-5.0	-5.6	63.6	19.8	60.0	18.5	56.4	17.3	54.6	16.6	52.8	16.0	49.2	14.8
	-3.0	-3.7	63.6	18.8	60.0	17.6	56.4	16.4	54.6	15.8	52.8	15.2	49.2	14.1
	0.0	-0.7	63.6	17.3	60.0	16.2	56.4	15.1	54.6	14.6	52.8	14.1	49.2	13.0
	3.0	2.2	63.6	16.0	60.0	15.0	56.4	14.0	54.6	13.5	52.8	13.0	49.2	12.1
	5.0	4.1	63.6	15.2	60.0	14.2	56.4	13.3	54.6	12.9	52.8	12.4	49.2	11.5
	7.0	6.0	63.6	14.4	60.0	13.6	56.4	12.7	54.6	12.3	52.8	11.9	49.2	11.0
	9.0	7.9	63.6	13.8	60.0	12.9	56.4	12.1	54.6	11.7	52.8	11.3	49.2	10.5
	11.0	9.8	63.6	13.1	60.0	12.3	56.4	11.6	54.6	11.2	52.8	10.8	49.2	10.1
	13.0	11.8	63.6	12.5	60.0	11.7	56.4	11.0	54.6	10.7	52.8	10.3	49.2	9.6
	15.0	13.7	63.6	11.9	60.0	11.2	56.4	10.6	54.6	10.2	52.8	9.9	49.2	9.2
50 (378)	-19.8	-20.0	53.0	23.9	50.0	22.3	47.0	20.7	45.5	19.9	44.0	19.2	41.0	17.7
	-18.8	-19.0	53.0	23.3	50.0	21.7	47.0	20.2	45.5	19.4	44.0	18.7	41.0	17.2
	-16.7	-17.0	53.0	22.1	50.0	20.6	47.0	19.2	45.5	18.4	44.0	17.7	41.0	16.4
	-13.7	-15.0	53.0	20.9	50.0	19.5	47.0	18.2	45.5	17.5	44.0	16.8	41.0	15.6
	-11.8	-13.0	53.0	19.8	50.0	18.5	47.0	17.2	45.5	16.6	44.0	16.0	41.0	14.8
	-9.8	-11.0	53.0	18.7	50.0	17.5	47.0	16.3	45.5	15.7	44.0	15.2	41.0	14.0
	-9.5	-10.0	53.0	18.2	50.0	17.0	47.0	15.9	45.5	15.3	44.0	14.8	41.0	13.7
	-8.5	-9.1	53.0	17.7	50.0	16.6	47.0	15.5	45.5	15.0	44.0	14.4	41.0	13.4
	-7.0	-7.6	53.0	17.0	50.0	15.9	47.0	14.9	45.5	14.4	44.0	13.9	41.0	12.9
	-5.0	-5.6	53.0	16.1	50.0	15.1	47.0	14.1	45.5	13.6	44.0	13.2	41.0	12.2
	-3.0	-3.7	53.0	15.3	50.0	14.4	47.0	13.4	45.5	13.0	44.0	12.5	41.0	11.6
	0.0	-0.7	53.0	14.1	50.0	13.3	47.0	12.4	45.5	12.0	44.0	11.6	41.0	10.8
	3.0	2.2	53.0	13.1	50.0	12.3	47.0	11.6	45.5	11.2	44.0	10.8	41.0	10.1
	5.0	4.1	53.0	12.5	50.0	11.8	47.0	11.0	45.5	10.7	44.0	10.3	41.0	9.6
	7.0	6.0	53.0	11.9	50.0	11.2	47.0	10.5	45.5	10.2	44.0	9.8	41.0	9.2
	9.0	7.9	53.0	11.4	50.0	10.7	47.0	10.1	45.5	9.8	44.0	9.5	41.0	8.83
	11.0	9.8	53.0	10.9	50.0	10.3	47.0	9.6	45.5	9.4	44.0	9.1	41.0	8.47
	13.0	11.8	53.0	10.4	50.0	9.8	47.0	9.2	45.5	8.9	44.0	8.67	41.0	8.11
	15.0	13.7	53.0	9.9	50.0	9.4	47.0	8.8	45.5	8.58	44.0	8.32	41.0	7.80

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: ■ is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range ■ shown by ■.
Note2: The above table shows the average value of conditions which may occur.

15

RXYQ32PAHY1, PAHYL, PHTL [50/60Hz]

Heating capacity

Combination ratio (%) (Capacity index)	Outdoor air temp.	Indoor air temp. °CDB																					
		16.0		18.0		20.0		21.0		22.0		24.0											
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI										
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW									
130 (1040)	-19.8	-20.0	63.7	16.0	63.4	17.1	63.2	18.3	63.1	18.9	63.0	19.51	62.7	20.70									
	-18.8	-19.0	65.0	16.4	64.8	17.6	64.5	18.7	64.4	19.3	64.3	19.89	64.1	21.05									
	-16.7	-17.0	67.8	17.3	67.6	18.4	67.4	19.5	67.2	20.1	67.1	20.65	66.9	21.76									
	-13.7	-15.0	70.9	18.2	70.6	19.3	70.4	20.3	70.3	20.9	70.2	21.4	69.9	22.4									
	-11.8	-13.0	74.1	19.1	73.9	20.1	73.6	21.1	73.5	21.6	73.4	22.1	73.2	23.1									
	-9.8	-11.0	77.6	19.9	77.3	20.9	77.1	21.8	77.0	22.3	76.9	22.8	76.6	23.8									
	-9.5	-10.0	79.4	20.3	79.1	21.3	78.9	22.2	78.8	22.7	78.7	23.1	78.4	24.1									
	-8.5	-9.1	81.0	20.7	80.8	21.6	80.6	22.5	80.5	23.0	80.3	23.4	80.1	24.4									
	-7.0	-7.6	83.9	21.3	83.7	22.2	83.5	23.0	83.3	23.5	83.2	23.9	83.0	24.8									
	-5.0	-5.6	87.9	22.0	87.7	22.9	87.5	23.7	87.4	24.1	87.2	24.6	87.0	25.4									
	-3.0	-3.7	91.9	22.7	91.7	23.5	91.5	24.3	91.4	24.7	91.3	25.1	91.0	25.9									
	0.0	-0.7	98.7	23.7	98.4	24.5	98.2	25.2	98.1	25.6	98.0	26.0	97.8	26.7									
	3.0	2.2	105.6	24.6	105.4	25.3	105.2	26.0	105.0	26.4	104.9	26.7	104.7	27.4									
	5.0	4.1	110.4	25.2	110.2	25.9	109.9	26.5	109.8	26.9	109.7	27.2	109.5	27.9									
	7.0	6.0	115	25.7	115	26.4	115	27.0	115	27.3	115	27.6	113	27.8									
	9.0	7.9	121	26.2	120	26.8	120	27.4	120	27.7	120	28.0	113	28.3									
	11.0	9.8	126	26.7	126	27.3	125	27.9	125	28.2	122	27.2	113	24.9									
	13.0	11.8	132	27.2	132	27.7	130	27.8	126	26.7	122	25.7	113	23.6									
	15.0	13.7	137	27.6	137	28.1	130	26.4	126	25.4	122	24.3	113	22.4									
120 (960)	-19.8	-20.0	63.3	17.6	63.1	18.7	62.9	19.7	62.8	20.3	62.7	20.8	62.5	21.9									
	-18.8	-19.0	64.7	18.0	64.5	19.1	64.3	20.1	64.2	20.7	64.0	21.2	63.8	22.3									
	-16.7	-17.0	67.5	18.8	67.3	19.8	67.1	20.9	67.0	21.4	66.9	21.9	66.7	22.9									
	-13.7	-15.0	70.5	19.6	70.3	20.6	70.1	21.6	70.0	22.1	69.9	22.6	69.7	23.6									
	-11.8	-13.0	73.8	20.4	73.6	21.4	73.4	22.3	73.3	22.8	73.2	23.2	72.9	24.2									
	-9.8	-11.0	77.2	21.2	77.0	22.1	76.8	23.0	76.7	23.4	76.6	23.9	76.4	24.8									
	-9.5	-10.0	79.1	21.6	78.8	22.5	78.6	23.3	78.5	23.8	78.4	24.2	78.2	25.1									
	-8.5	-9.1	80.7	21.9	80.5	22.8	80.3	23.6	80.2	24.0	80.1	24.5	79.9	25.3									
	-7.0	-7.6	83.6	22.5	83.4	23.3	83.2	24.1	83.1	24.5	83.0	24.9	82.8	25.7									
	-5.0	-5.6	87.6	23.2	87.4	23.9	87.2	24.7	87.1	25.1	87.0	25.5	86.8	26.3									
	-3.0	-3.7	91.6	23.8	91.4	24.5	91.2	25.3	91.1	25.7	91.0	26.0	90.8	26.8									
	0.0	-0.7	98.4	24.7	98.1	25.4	97.9	26.1	97.8	26.5	97.7	26.8	97.5	27.5									
	3.0	2.2	105.3	25.6	105.1	26.2	104.9	26.9	104.8	27.2	104.7	27.5	104.5	28.1									
	5.0	4.1	110.1	26.1	109.9	26.7	109.7	27.3	109.6	27.6	109.5	27.9	104.6	26.7									
	7.0	6.0	115	26.6	115	27.2	115	27.8	115	28.0	112	26.9	105	25.2									
	9.0	7.9	120	27.0	120	27.6	120	28.2	116	27.1	112	26.0	105	23.9									
	11.0	9.8	126	27.5	125	28.0	120	28.7	116	25.7	112	24.7	105	22.7									
	13.0	11.8	131	27.9	128	27.2	120	25.2	116	24.3	112	23.3	105	21.4									
	15.0	13.7	135	27.7	128	25.8	120	24.0	116	23.0	112	22.1	105	20.4									
110 (880)	-19.8	-20.0	63.0	19.2	62.8	20.2	62.7	21.2	62.6	21.7	62.5	22.2	62.3	23.2									
	-18.8	-19.0	64.4	19.5	64.2	20.5	64.0	21.5	63.9	22.0	63.8	22.5	63.6	23.5									
	-16.7	-17.0	67.2	20.3	67.0	21.3	66.8	22.2	66.7	22.7	66.6	23.1	66.4	24.1									
	-13.7	-15.0	70.2	21.1	70.0	22.0	69.8	22.9	69.8	23.3	69.7	23.8	69.5	24.7									
	-11.8	-13.0	73.5	21.8	73.3	22.7	73.1	23.5	73.0	23.9	72.9	24.4	72.7	25.2									
	-9.8	-11.0	76.9	22.5	76.7	23.3	76.5	24.1	76.5	24.6	76.4	25.0	76.2	25.8									
	-8.5	-9.1	80.4	23.2	80.2	23.9	80.0	24.7	79.9	25.1	79.8	25.5	79.6	26.3									
	-7.0	-7.6	83.3	23.7	83.1	24.4	82.9	25.2	82.8	25.5	82.7	25.9	82.5	26.7									
	-5.0	-5.6	87.3	24.3	87.1	25.0	86.9	25.7	86.8	26.1	86.7	26.4	86.5	27.2									
	-3.0	-3.7	91.3	24.9	91.1	25.6	90.9	26.2	90.8	26.6	90.7	26.9	90.6	27.6									
	0.0	-0.7	98.0	25.7	97.9	26.4	97.7	27.0	97.6	27.3	97.5	27.6	95.9	27.6									
	3.0	2.2	105.0	26.5	104.8	27.1	104.6	27.7	104.5	28.0	102.9	27.7	95.9	25.4									
	5.0	4.1	109.8	27.0	109.6	27.6	108.4	28.1	106.5	27.2	102.9	26.1	95.9	24.0									
	7.0	6.0	115	27.4	115	28.0	110	26.8	106	25.8	103	24.7	95.9	22.7									
	9.0	7.9	120	27.9	117	27.4	110	25.4	106	24.4	103	23.4	95.9	21.6									
	11.0	9.8	124	27.9	117	25.9	110	24.1	106	23.1	103	22.2	95.9	20.5									
	13.0	11.8	124	26.3	117	24.5	110	22.8	106	21.9	103	21.1	95.9	19.4									
	15.0	13.7	124	24.9	117	23.3	110	21.6	106	20.8	103	20.0	95.9	18.5									

Heating capacity

Combination ratio (%) (Capacity index)	Outdoor air temp.	Indoor air temp. °CDB																					
		16.0		18.0		20.0		21.0		22.0		24.0											
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI										
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW									
100 (800)	-19.8	-20.0	62.7	20.8	62.6	21.7	62.4	22.6	62.3	23.0	62.2	23.5											
	-18.8	-19.0	64.1	21.1	63.9	22.0	63.7	22.9	63.6	23.3	63.5	23.8											
	-16.7	-17.0	66.9	21.8	66.7	22.7	66.5	23.5	66.5	23.9	66.4	24.4											
	-13.7	-15.0	69.9	22.5	69.8	23.3	69.6	24.1	69.5	24.5	69.4	24.9											
	-11.8	-13.0	73.2	23.2	73.0	23.9	72.8	24.7	72.7	25.1	72.6	25.5											
	-9.8	-11.0	76.6	23.8	76.5	24.6	76.3	25.3	76.2	25.7	76.1	26.0											
	-9.5	-10.0	78.4	24.1	78.3	24.9	78.1	25.6	78.0	25.9	77.9	26.3											
	-8.5	-9.1	80.1	24.4	79.9	25.1	79.8	25.8	79.7	26.2	79.6	26.5											
	-7.0	-7.6	83.0	24.9	82.8	25.5	82.6	26.2	82.5	26.6	82.5	26.9											
	-5.0	-5.6	87.0	25.4	86.8	26.1	86.7	26.7	86.6	27.1	86.5	27.4											
	-3.0	-3.7	91.0	26.0	90.8	26.6	90.7	27.2	90.6	27.5	90.6	27.8											
	0.0	-0.7	97.7	26.8	97.6	27.3	97.4	27.9	96.8	28.0	93.6	26.8											
	3.0	2.2	104.7	27.5	104.5	28.0	100.0	26.7	96.8	25.7	93.6	24.6											
	5.0	4.1	109.5	27.9	106.4	27.2	100.0	25.2	96.8	24.3	93.6	23.3											
	7.0	6.0	113	27.7	106	25.8	100	23.9	96.8	23.0	93.6	22.1											
	9.0	7.9	113	26.2	106	24.4	100	22.6	96.8	21.8	93.6	21.0											
	11.0	9.8	113	24.8	106	23.1	100	21.5	96.8	20.7	93.6	19.9											
	13.0	11.8	113	23.5	106	21.9	100	20.4	96.8	19.6	93.6	18.9											
	15.0	13.7	113	22.3	106	20.8	100	19.4	96.8	18.7	93.6	18.0											
90 (720)	-19.8	-20.0	62.4	22.4	62.3	23.2	62.1	24.0	62.0	24.4	61.9	24.8											
	-18.8	-19.0	63.8	22.7	63.6	23.5	63.4	24.3	63.4	24.7	63.3	25.1											
	-16.7	-17.0	66.6	23.3	66.4	24.1	66.3	24.9	66.2	25.2	66.1	25.6											
	-13.7	-15.0	69.6	23.9	69.5	24.7	69.3	25.4	69.2	25.8	69.1	26.1											
	-11.8	-13.0	72.9	24.5	72.7	25.2	72.5	25.9	72.5	26.3	72.4	26.6											
	-9.8	-11.0	76.3	25.1	76.2	25.8	76.0	26.5	75.9	26.8	75.8	27.1											
	-9.5	-10.0	78.1	25.4	78.0	26.1	77.8	26.7	77.7	27.0	77.6	27.4											
	-8.5	-9.1	79.8	25.7	79.6	26.3	79.5	26.9	79.4	27.2	79.3	27.6											
	-7.0	-7.6	82.7	26.1	82.5	26.7	82.4	27.3	82.3	27.6	82.2	27.9											
	-5.0	-5.6	86.7	26.6	86.5	27.2	86.4	27.8	86.3	28.0	84.2	27.3											
	-3.0	-3.7	90.7	27.1	90.5	27.6	90.0	28.0	87.1	26.9	84.2	25.8											
	0.0	-0.7	97.4	27.8	95.8	27.6	90.0	25.6	87.1	24.6	84.2	23.6											
	3.0	2.2	101.6	25.7	95.8	25.3	90.0	23.5	87.1	22.6	84.2	21.7											
	5.0	4.1	101.6	25.7	95.8	24.0	90.0	22.3	87.1	21.4	84.2	20.6											
	7.0	6.0	102	24.3	95.8	22.7	90.0	21.1	87.1	20.3	84.2	19.5											
	9.0	7.9	102	23.1	95.8	21.5	90.0	20.0	87.1	19.3	84.2	18.6											
	11.0	9.8	102	21.9	95.8	20.4	90.0	19.0	87.1	18.3	84.2	17.7											
	13.0	11.8	102	20.7	95.8	19.4	90.0	18.1	87.1	17.4	84.2	16.8											
	15.0	13.7	102	19.7	95.8	18.4	90.0	17.2	87.1	16.6	84.2	16.0											
80 (640)	-19.8	-20.0	62.1	24.0	62.0	24.7	61.8	25.4	61.8	25.8	61.7	26.2											
	-18.8	-19.0	63.4	24.3	63.2	25.0	63.1	25.7	63.1	26.0	63.0	26.4											
	-16.7	-17.0	66.3	24.8	66.1	25.5	66.0	26.2	65.9	26.5	65.9	26.9											
	-13.7	-15.0	69.3	25.4	69.2	26.0	69.0	26.7	69.0	27.0	68.9	27.3											
	-11.8	-13.0	72.6	25.9	72.4	26.5	72.3	27.1	72.2	27.5	72.1	27.8											
	-9.8	-11.0	76.0	26.4	75.9	27.0	75.7	27.6	75.7	27.9	74.9	27.8											
	-9.5	-10.0	77.8	26.7	77.7	27.3	77.5	27.8	77.4	28.1	74.9	27.9											
	-8.5	-9.1	79.5	26.9	79.3	27.5	79.2	28.0	77.4	27.4	74.9	26.2											
	-7.0	-7.6	82.4	27.3	82.2	27.8	80.0	27.2	77.4	26.2	74.9	25.1											
	-5.0	-5.6	86.4	27.7	85.1	27.8	80.0	25.6	77.4	24.7	74.9	23.7											
	-3.0	-3.7	90.3	28.1	85.1	26.1	80.0	24.2	77.4	23.3	74.9	22.4											
	0.0	-0.7	90.3	25.7	85.1	23.9	80.0	22.2	77.4	21.4	74.9	20.6											
	3.0	2.2	90.3	23.6	85.1	22.0	80.0	20.5	77.4	19.7	74.9	19.0											
	5.0	4.1	90.3	22.3	85.1	20.9	80.0	19.4	77.4	18.7	74.9	18.0											
	7.0	6.0	90.3	21.2	85.1	19.8	80.0	18.4	77.4	17.8	74.9	17.1											
	9.0	7.9	90.3	20.1	85.1	18.8	80.0	17.5	77.4	16.9	74.9	16.3											
	11.0	9.8	90.3	19.1	85.1	17.9	80.0	16.7	77.4	16.1	74.9	15.5											
	13.0	11.8	90.3	18.1	85.1	17.0	80.0	15.8	77.4	15.3	74.9	14.8											
	15.0	13.7	90.3	17.3	85.1	16.2	80.0	15.1	77.4	14.6	74.9	14.1											

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: ▒ is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range ▒ shown by ▒.
Note2: The above table shows the average value of conditions which may occur.

[50/60Hz]

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB 16.0 TC	16.0 PI	18.0 TC	18.0 PI	20.0 TC	20.0 PI	21.0 TC	21.0 PI	22.0 TC	22.0 PI	24.0 TC	24.0 PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70 (560)	-19.8	-20.0	61.8	25.6	61.7	26.2	61.6	26.8	61.5	27.2	61.4	27.5	61.0	27.9
	-18.8	-19.0	63.1	25.8	63.0	26.4	62.9	27.1	62.8	27.4	62.8	27.7	61.0	27.2
	-16.7	-17.0	66.0	26.3	65.8	26.9	65.7	27.5	65.7	27.8	65.5	28.0	61.0	25.7
	-13.7	-15.0	69.0	26.8	68.9	27.4	68.8	27.9	67.8	27.6	65.5	26.5	61.0	24.3
	-11.8	-13.0	72.2	27.3	72.1	27.8	70.0	27.1	67.8	26.1	65.5	25.0	61.0	23.0
	-9.8	-11.0	75.7	27.7	74.5	27.6	70.0	25.6	67.8	24.6	65.5	23.6	61.0	21.7
	-9.5	-10.0	77.5	27.9	74.5	26.8	70.0	24.8	67.8	23.9	65.5	23.0	61.0	21.1
	-8.5	-9.1	79.0	28.0	74.5	26.1	70.0	24.2	67.8	23.3	65.5	22.4	61.0	20.6
	-7.0	-7.6	79.0	26.8	74.5	25.0	70.0	23.2	67.8	22.3	65.5	21.4	61.0	19.7
	-5.0	-5.6	79.0	25.3	74.5	23.5	70.0	21.9	67.8	21.1	65.5	20.2	61.0	18.7
	-3.0	-3.7	79.0	23.9	74.5	22.3	70.0	20.7	67.8	20.0	65.5	19.2	61.0	17.7
	0.0	-0.7	79.0	21.9	74.5	20.5	70.0	19.0	67.8	18.4	65.5	17.7	61.0	16.3
	3.0	2.2	79.0	20.2	74.5	18.9	70.0	17.6	67.8	17.0	65.5	16.3	61.0	15.1
	5.0	4.1	79.0	19.1	74.5	17.9	70.0	16.7	67.8	16.1	65.5	15.5	61.0	14.4
	7.0	6.0	79.0	18.2	74.5	17.0	70.0	15.9	67.8	15.3	65.5	14.8	61.0	13.7
	9.0	7.9	79.0	17.3	74.5	16.2	70.0	15.1	67.8	14.6	65.5	14.1	61.0	13.1
	11.0	9.8	79.0	16.4	74.5	15.4	70.0	14.4	67.8	13.9	65.5	13.5	61.0	12.5
	13.0	11.8	79.0	15.6	74.5	14.7	70.0	13.7	67.8	13.3	65.5	12.8	61.0	11.9
	15.0	13.7	79.0	14.9	74.5	14.0	70.0	13.1	67.8	12.7	65.5	12.3	61.0	11.4
60 (480)	-19.8	-20.0	61.5	27.2	61.4	27.7	60.0	27.3	58.1	26.3	56.1	25.2	52.3	23.2
	-18.8	-19.0	62.8	27.4	62.7	27.9	60.0	26.6	58.1	25.6	56.1	24.6	52.3	22.6
	-16.7	-17.0	65.7	27.8	63.9	27.2	60.0	25.2	58.1	24.2	56.1	23.3	52.3	21.4
	-13.7	-15.0	67.7	27.6	63.9	25.7	60.0	23.8	58.1	22.9	56.1	22.0	52.3	20.3
	-11.8	-13.0	67.7	26.0	63.9	24.3	60.0	22.5	58.1	21.7	56.1	20.8	52.3	19.2
	-9.8	-11.0	67.7	24.6	63.9	22.9	60.0	21.3	58.1	20.5	56.1	19.7	52.3	18.2
	-9.5	-10.0	67.7	23.9	63.9	22.3	60.0	20.7	58.1	19.9	56.1	19.2	52.3	17.7
	-8.5	-9.1	67.7	23.3	63.9	21.7	60.0	20.2	58.1	19.4	56.1	18.7	52.3	17.3
	-7.0	-7.6	67.7	22.3	63.9	20.8	60.0	19.4	58.1	18.7	56.1	18.0	52.3	16.6
	-5.0	-5.6	67.7	21.0	63.9	19.7	60.0	18.3	58.1	17.7	56.1	17.0	52.3	15.7
	-3.0	-3.7	67.7	19.9	63.9	18.6	60.0	17.4	58.1	16.8	56.1	16.2	52.3	15.0
	0.0	-0.7	67.7	18.3	63.9	17.2	60.0	16.0	58.1	15.5	56.1	14.9	52.3	13.8
	3.0	2.2	67.7	16.9	63.9	15.9	60.0	14.9	58.1	14.3	56.1	13.8	52.3	12.9
	5.0	4.1	67.7	16.1	63.9	15.1	60.0	14.1	58.1	13.7	56.1	13.2	52.3	12.3
	7.0	6.0	67.7	15.3	63.9	14.4	60.0	13.5	58.1	13.0	56.1	12.6	52.3	11.7
	9.0	7.9	67.7	14.6	63.9	13.7	60.0	12.9	58.1	12.4	56.1	12.0	52.3	11.2
	11.0	9.8	67.7	13.9	63.9	13.1	60.0	12.3	58.1	11.9	56.1	11.5	52.3	10.7
	13.0	11.8	67.7	13.3	63.9	12.5	60.0	11.7	58.1	11.3	56.1	11.0	52.3	10.2
	15.0	13.7	67.7	12.7	63.9	11.9	60.0	11.2	58.1	10.9	56.1	10.5	52.3	9.8
50 (400)	-19.8	-20.0	56.4	25.4	53.2	23.6	50.0	22.0	48.4	21.1	46.8	20.3	43.6	18.7
	-18.8	-19.0	56.4	24.7	53.2	23.0	50.0	21.4	48.4	20.6	46.8	19.8	43.6	18.3
	-16.7	-17.0	56.4	23.4	53.2	21.8	50.0	20.3	48.4	19.6	46.8	18.8	43.6	17.4
	-13.7	-15.0	56.4	22.2	53.2	20.7	50.0	19.3	48.4	18.6	46.8	17.9	43.6	16.5
	-11.8	-13.0	56.4	21.0	53.2	19.6	50.0	18.3	48.4	17.6	46.8	16.9	43.6	15.7
	-9.8	-11.0	56.4	19.8	53.2	18.6	50.0	17.3	48.4	16.7	46.8	16.1	43.6	14.9
	-9.5	-10.0	56.4	19.3	53.2	18.1	50.0	16.8	48.4	16.2	46.8	15.7	43.6	14.5
	-8.5	-9.1	56.4	18.8	53.2	17.6	50.0	16.4	48.4	15.9	46.8	15.3	43.6	14.2
	-7.0	-7.6	56.4	18.1	53.2	16.9	50.0	15.8	48.4	15.2	46.8	14.7	43.6	13.6
	-5.0	-5.6	56.4	17.1	53.2	16.0	50.0	15.0	48.4	14.5	46.8	14.0	43.6	13.0
	-3.0	-3.7	56.4	16.2	53.2	15.2	50.0	14.3	48.4	13.8	46.8	13.3	43.6	12.4
	0.0	-0.7	56.4	15.0	53.2	14.1	50.0	13.2	48.4	12.8	46.8	12.3	43.6	11.5
	3.0	2.2	56.4	13.9	53.2	13.1	50.0	12.3	48.4	11.9	46.8	11.5	43.6	10.7
	5.0	4.1	56.4	13.3	53.2	12.5	50.0	11.7	48.4	11.3	46.8	11.0	43.6	10.2
	7.0	6.0	56.4	12.7	53.2	11.9	50.0	11.2	48.4	10.8	46.8	10.5	43.6	9.8
	9.0	7.9	56.4	12.1	53.2	11.4	50.0	10.7	48.4	10.4	46.8	10.0	43.6	9.4
	11.0	9.8	56.4	11.6	53.2	10.9	50.0	10.3	48.4	9.9	46.8	9.6	43.6	9.0
	13.0	11.8	56.4	11.0	53.2	10.4	50.0	9.8	48.4	9.5	46.8	9.2	43.6	8.62
	15.0	13.7	56.4	10.6	53.2	10.0	50.0	9.4	48.4	9.1	46.8	8.8	43.6	8.29

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: ▒ is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range ▒ shown by ▒.
Note2: The above table shows the average value of conditions which may occur.

15

RXYQ34PAHY1, PAHYL, PHTL [50/60Hz]

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB											
			16.0		18.0		20.0		21.0		22.0		24.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130 (1111)	-19.8	-20.0	67.8	17.5	67.5	18.8	67.3	20.1	67.2	20.7	67.1	21.3	66.8	22.6
	-18.8	-19.0	69.0	17.9	68.7	19.2	68.5	20.4	68.4	21.1	68.3	21.7	68.0	23.0
	-16.7	-17.0	71.6	18.8	71.4	20.0	71.1	21.2	71.0	21.8	70.9	22.4	70.7	23.6
	-13.7	-15.0	74.6	19.7	74.3	20.8	74.1	22.0	74.0	22.6	73.8	23.2	73.6	24.3
	-11.8	-13.0	77.8	20.6	77.6	21.7	77.3	22.8	77.2	23.4	77.1	23.9	76.9	25.1
	-9.8	-11.0	81.4	21.5	81.1	22.6	80.9	23.6	80.8	24.2	80.7	24.7	80.4	25.8
	-9.5	-10.0	83.3	21.9	83.0	23.0	82.8	24.0	82.7	24.6	82.6	25.1	82.3	26.1
	-8.5	-9.1	85.1	22.4	84.8	23.4	84.6	24.4	84.4	24.9	84.3	25.4	84.1	26.4
	-7.0	-7.6	88.1	23.0	87.9	24.0	87.7	25.0	87.5	25.5	87.4	26.0	87.2	26.9
	-5.0	-5.6	92.5	23.9	92.3	24.8	92.1	25.7	91.9	26.2	91.8	26.7	91.6	27.6
	-3.0	-3.7	97.0	24.7	96.8	25.6	96.5	26.4	96.4	26.9	96.3	27.3	96.0	28.2
	0.0	-0.7	105	25.9	104	26.7	104	27.5	104	27.9	104	28.3	104	29.1
	3.0	2.2	113	26.9	112	27.7	112	28.5	112	28.8	112	29.2	112	30.0
	5.0	4.1	118	27.6	118	28.3	118	29.0	118	29.4	117	29.8	117	30.5
	7.0	6.0	124	28.2	124	28.9	124	29.6	123	30.0	123	30.3	121	30.0
	9.0	7.9	130	28.8	130	29.5	130	30.1	130	30.5	129	30.8	121	28.2
	11.0	9.8	137	29.4	136	30.0	136	30.6	134	30.2	130	29.0	121	26.6
	13.0	11.8	144	30.0	143	30.5	138	29.5	134	28.4	130	27.2	121	25.0
	15.0	13.7	151	30.5	147	30.0	138	27.8	134	26.7	130	25.7	121	23.6
120 (1026)	-19.8	-20.0	67.5	19.2	67.2	20.4	67.0	21.6	66.9	22.2	66.8	22.8	66.6	24.0
	-18.8	-19.0	68.7	19.6	68.4	20.8	68.2	21.9	68.1	22.5	68.0	23.1	67.8	24.3
	-16.7	-17.0	71.3	20.4	71.1	21.5	70.8	22.7	70.7	23.2	70.6	23.8	70.4	24.9
	-13.7	-15.0	74.2	21.3	74.0	22.3	73.8	23.4	73.7	24.0	73.6	24.5	73.3	25.6
	-11.8	-13.0	77.5	22.1	77.3	23.1	77.0	24.2	76.9	24.7	76.8	25.2	76.6	26.2
	-9.8	-11.0	81.1	22.9	80.8	23.9	80.6	24.9	80.5	25.4	80.4	25.9	80.2	26.9
	-9.5	-10.0	83.0	23.4	82.7	24.3	82.5	25.3	82.4	25.8	82.3	26.2	82.1	27.2
	-8.5	-9.1	84.7	23.7	84.5	24.7	84.3	25.6	84.2	26.1	84.1	26.6	83.8	27.5
	-7.0	-7.6	87.8	24.3	87.6	25.2	87.4	26.2	87.3	26.6	87.1	27.1	86.9	28.0
	-5.0	-5.6	92.2	25.1	92.0	26.0	91.8	26.9	91.6	27.3	91.5	27.7	91.3	28.6
	-3.0	-3.7	96.7	25.9	96.4	26.7	96.2	27.5	96.1	27.9	96.0	28.3	95.8	29.2
	0.0	-0.7	104	27.0	104	27.7	104	28.5	104	28.9	104	29.2	103.4	30.0
	3.0	2.2	112	28.0	112	28.7	112	29.4	112	29.7	112	30.1	111	30.8
	5.0	4.1	118	28.6	118	29.2	117	29.9	117	30.2	117	30.6	111	28.9
	7.0	6.0	124	29.2	124	29.8	123	30.4	123	30.8	120	29.7	111	27.2
	9.0	7.9	130	29.7	130	30.3	128	30.3	124	29.1	120	27.9	111	25.6
	11.0	9.8	136	30.2	136	30.8	128	28.5	124	27.4	120	26.3	111	24.2
	13.0	11.8	143	30.8	136	28.9	128	26.8	124	25.7	120	24.7	111	22.8
	15.0	13.7	144	29.2	136	27.2	128	25.3	124	24.3	120	23.4	111	21.5
110 (941)	-19.8	-20.0	67.1	21.0	66.9	22.1	66.7	23.1	66.6	23.7	66.5	24.2	66.3	25.3
	-18.8	-19.0	68.3	21.3	68.1	22.4	67.9	23.5	67.8	24.0	67.7	24.5	67.5	25.6
	-16.7	-17.0	71.0	22.1	70.8	23.1	70.6	24.1	70.5	24.6	70.3	25.2	70.1	26.2
	-13.7	-15.0	73.9	22.8	73.7	23.8	73.5	24.8	73.4	25.3	73.3	25.8	73.1	26.8
	-11.8	-13.0	77.2	23.6	77.0	24.6	76.8	25.5	76.7	26.0	76.6	26.4	76.3	27.4
	-9.8	-11.0	80.7	24.4	80.5	25.3	80.3	26.2	80.2	26.6	80.1	27.1	79.9	28.0
	-9.5	-10.0	82.6	24.8	82.4	25.6	82.2	26.5	82.1	27.0	82.0	27.4	81.8	28.3
	-8.5	-9.1	84.4	25.1	84.2	26.0	84.0	26.8	83.9	27.3	83.8	27.7	83.6	28.6
	-7.0	-7.6	87.5	25.7	87.3	26.5	87.1	27.3	87.0	27.7	86.9	28.2	86.7	29.0
	-5.0	-5.6	91.9	26.4	91.7	27.2	91.5	28.0	91.4	28.4	91.3	28.8	91.1	29.6
	-3.0	-3.7	96.3	27.1	96.1	27.8	95.9	28.6	95.8	29.0	95.7	29.3	95.5	30.1
	0.0	-0.7	104	28.1	104	28.8	104	29.5	103	29.8	103.3	30.2	102.1	30.4
	3.0	2.2	112	29.0	112	29.6	112	30.3	111	30.6	110	30.2	102	27.7
	5.0	4.1	118	29.6	117	30.2	117	30.8	113	29.6	110	28.4	102	26.0
	7.0	6.0	123	30.1	123	30.7	117	28.9	113	27.8	110	26.7	102	24.5
	9.0	7.9	130	30.6	125	29.4	117	27.2	113	26.2	110	25.2	102	23.1
	11.0	9.8	132	29.7	125	27.7	117	25.7	113	24.7	110	23.7	102	21.8
	13.0	11.8	132	27.9	125	26.0	117	24.1	113	23.2	110	22.3	102	20.6
	15.0	13.7	132	26.3	125	24.5	117	22.8	113	22.0	110	21.1	102	19.5

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB											
			16.0		18.0		20.0		21.0		22.0		24.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100 (855)	-19.8	-20.0	66.8	22.7	66.6	23.7	66.4	24.7	66.3	25.2	66.2	25.7	66.0	26.7
	-18.8	-19.0	68.0	23.0	67.8	24.0	67.6	25.0	67.5	25.5	67.4	26.0	67.2	26.9
	-16.7	-17.0	70.6	23.7	70.5	24.7	70.3	25.6	70.2	26.1	70.1	26.5	69.9	27.5
	-13.7	-15.0	73.6	24.4	73.4	25.3	73.2	26.2	73.1	26.7	73.0	27.1	72.8	28.0
	-11.8	-13.0	76.8	25.1	76.7	26.0	76.5	26.8	76.4	27.3	76.3	27.7	76.1	28.6
	-9.8	-11.0	80.4	25.8	80.2	26.6	80.0	27.5	79.9	27.9	79.8	28.3	79.7	29.1
	-9.5	-10.0	82.3	26.2	82.1	27.0	81.9	27.8	81.8	28.2	81.7	28.6	81.5	29.4
	-8.5	-9.1	84.1	26.5	83.9	27.3	83.7	28.0	83.6	28.4	83.5	28.8	83.3	29.6
	-7.0	-7.6	87.2	27.0	87.0	27.7	86.8	28.5	86.7	28.9	86.6	29.3	86.4	30.0
	-5.0	-5.6	91.6	27.7	91.4	28.4	91.2	29.1	91.1	29.5	91.0	29.8	90.8	30.5
	-3.0	-3.7	96.0	28.3	95.8	29.0	95.6	29.6	95.5	30.0	95.4	30.3	92.8	29.8
	0.0	-0.7	104	29.2	103	29.8	103.2	30.5	103.1	30.7	99.7	29.5	92.8	27.0
	3.0	2.2	112	30.0	111	30.6	107	29.1	103	28.0	100	26.9	92.8	24.7
	5.0	4.1	117	30.5	113	29.6	107	27.4	103	26.3	100	25.3	92.8	23.3
	7.0	6.0	120	29.9	113	27.8	107	25.8	103	24.8	100	23.8	92.8	21.9
	9.0	7.9	120	28.1	113	26.2	107	24.3	103	23.4	100	22.5	92.8	20.7
	11.0	9.8	120	26.5	113	24.7	107	22.9	103	22.1	100	21.2	92.8	19.6
	13.0	11.8	120	24.9	113	23.2	107	21.6	103	20.8	100	20.0	92.8	18.5
	15.0	13.7	120	23.5	113	21.9	107	20.4	103	19.7	100	19.0	92.8	17.5
90 (770)	-19.8	-20.0	66.5	24.5	66.3	25.4	66.1	26.2	66.0	26.7	66.0	27.1	65.8	28.0
	-18.8	-19.0	67.7	24.8	67.5	25.6	67.3	26.5	67.2	27.0	67.2	27.4	67.0	28.3
	-16.7	-17.0	70.3	25.4	70.1	26.2	70.0	27.1	69.9	27.5	69.8	27.9	69.6	28.7
	-13.7	-15.0	73.3	26.0	73.1	26.8	72.9	27.6	72.8	28.0	72.8	28.4	72.6	29.2
	-11.8	-13.0	76.5	26.6	76.3	27.4	76.2	28.2	76.1	28.6	76.0	29.0	75.8	29.7
	-9.8	-11.0	80.1	27.3	79.9	28.0	79.7	28.7	79.7	29.1	79.6	29.5	79.4	30.2
	-9.5	-10.0	82.0	27.6	81.8	28.3	81.6	29.0	81.5	29.4	81.5	29.7	81.3	30.5
	-8.5	-9.1	83.7	27.9	83.6	28.6	83.4	29.3	83.3	29.6	83.2	30.0	83.1	30.7
	-7.0	-7.6	86.8	28.3	86.7	29.0	86.5	29.7	86.4	30.0	86.3	30.4	83.5	29.6
	-5.0	-5.6	91.2	28.9	91.1	29.6	90.9	30.2	90.8	30.5	89.7	30.3	83.5	27.8
	-3.0	-3.7	95.7	29.5	95.5	30.1	95.3	30.7	92.8	29.7	89.7	28.5	83.5	26.2
	0.0	-0.7	103.3	30.3	102.0	30.3	95.9	28.1	92.8	27.0	89.7	26.0	83.5	23.9
	3.0	2.2	108	29.7	102	27.6	95.9	25.6	92.8	24.7	89.7	23.7	83.5	21.8
	5.0	4.1	108	27.9	102	26.0	95.9	24.2	92.8	23.3	89.7	22.4	83.5	20.6
	7.0	6.0	108	26.3	102	24.5	95.9	22.8	92.8	21.9	89.7	21.1	83.5	19.5
	9.0	7.9	108	24.8	102	23.1	95.9	21.5	92.8	20.7	89.7	19.9	83.5	18.4
	11.0	9.8	108	23.4	102	21.8	95.9	20.3	92.8	19.6	89.7	18.9	83.5	17.4
	13.0	11.8	108	22.0	102	20.6	95.9	19.2	92.8	18.5	89.7	17.8	83.5	16.5
	15.0	13.7	108	20.8	102	19.5	95.9	18.2	92.8	17.5	89.7	16.9	83.5	15.6
80 (684)	-19.8	-20.0	66.1	26.2	66.0	27.0	65.8	27.8	65.8	28.2	65.7	28.6	65.5	29.4
	-18.8	-19.0	67.3	26.5	67.2	27.2	67.0	28.0	67.0	28.4	66.9	28.8	66.7	29.6
	-16.7	-17.0	70.0	27.0	69.8	27.8	69.7	28.5	69.6	28.9	69.5	29.3	69.4	30.0
	-13.7	-15.0	72.9	27.6	72.8	28.3	72.6	29.0	72.6	29.4	72.5	29.7	72.3	30.5
	-11.8	-13.0	76.2	28.1	76.0	28.8	75.9	29.5	75.8	29.9	75.7	30.2	74.3	30.0
	-9.8	-11.0	79.7	28.7	79.6	29.4	79.4	30.0	79.4	30.3	79.3	30.7	74.3	28.3
	-9.5	-10.0	81.6	29.0	81.5	29.6	81.3	30.3	81.3	30.6	79.7	30.0	74.3	27.5
	-8.5	-9.1	83.4	29.2	83.3	29.9	83.1	30.5	82.5	30.5	79.7	29.2	74.3	26.8
	-7.0	-7.6	86.5	29.6	86.4	30.2	85.2	30.3	82.5	29.1	79.7	27.9	74.3	25.6
	-5.0	-5.6	90.9	30.2	90.7	30.7	85.2	28.5	82.5	27.3	79.7	26.3	74.3	24.1
	-3.0	-3.7	95.4	30.7	90.7	28.9	85.2	26.8	82.5	25.8	79.7	24.8	74.3	22.8
	0.0	-0.7	96.1	28.2	90.7	26.3	85.2	24.4	82.5	23.5	79.7	22.6	74.3	20.8
	3.0	2.2	96.1	25.7	90.7	24.0	85.2	22.3	82.5	21.5	79.7	20.7	74.3	19.1
	5.0	4.1	96.1	24.2	90.7	22.6	85.2	21.1	82.5	20.3	79.7	19.5	74.3	18.1
	7.0	6.0	96.1	22.9	90.7	21.4	85.2	19.9	82.5	19.2	79.7	18.5	74.3	17.1
	9.0	7.9	96.1	21.6	90.7	20.2	85.2	18.8	82.5	18.2	79.7	17.5	74.3	16.2
	11.0	9.8	96.1	20.4	90.7	19.1	85.2	17.8	82.5	17.2	79.7	16.6	74.3	15.4
	13.0	11.8	96.1	19.2	90.7	18.0	85.2	16.8	82.5	16.3	79.7	15.7	74.3	14.5
	15.0	13.7	96.1	18.2	90.7	17.1	85.2	16.0	82.5	15.4	79.7	14.9	74.3	13.8

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range shown by .
Note2: The above table shows the average value of conditions which may occur.

[50/60Hz]

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB 16.0 TC	16.0 PI	18.0 TC	18.0 PI	20.0 TC	20.0 PI	21.0 TC	21.0 PI	22.0 TC	22.0 PI	24.0 TC	24.0 PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70 (599)	-19.8	-20.0	65.8	28.0	65.7	28.6	65.5	29.3	65.5	29.7	65.4	30.0	65.0	30.5
	-18.8	-19.0	67.0	28.2	66.9	28.9	66.7	29.6	66.7	29.9	66.6	30.2	65.0	29.8
	-16.7	-17.0	69.7	28.7	69.5	29.3	69.4	30.0	69.3	30.3	69.3	30.6	65.0	28.4
	-13.7	-15.0	72.6	29.2	72.5	29.8	72.3	30.4	72.2	30.6	69.8	29.4	65.0	27.0
	-11.8	-13.0	75.9	29.6	75.7	30.3	74.6	30.2	72.2	29.0	69.8	27.8	65.0	25.5
	-9.8	-11.0	79.4	30.1	79.3	30.7	74.6	28.5	72.2	27.4	69.8	26.3	65.0	24.2
	-9.5	-10.0	81.3	30.4	79.3	29.9	74.6	27.7	72.2	26.6	69.8	25.5	65.0	23.5
	-8.5	-9.1	83.1	30.6	79.3	29.1	74.6	26.9	72.2	25.9	69.8	24.9	65.0	22.9
	-7.0	-7.6	84.1	29.8	79.3	27.8	74.6	25.8	72.2	24.8	69.8	23.8	65.0	21.9
	-5.0	-5.6	84.1	28.0	79.3	26.1	74.6	24.2	72.2	23.3	69.8	22.4	65.0	20.7
	-3.0	-3.7	84.1	26.4	79.3	24.6	74.6	22.9	72.2	22.0	69.8	21.2	65.0	19.6
	0.0	-0.7	84.1	24.1	79.3	22.5	74.6	20.9	72.2	20.1	69.8	19.4	65.0	17.9
	3.0	2.2	84.1	22.1	79.3	20.6	74.6	19.2	72.2	18.5	69.8	17.8	65.0	16.5
	5.0	4.1	84.1	20.9	79.3	19.4	74.6	18.1	72.2	17.5	69.8	16.9	65.0	15.6
	7.0	6.0	84.1	19.6	79.3	18.4	74.6	17.2	72.2	16.6	69.8	16.0	65.0	14.8
	9.0	7.9	84.1	18.6	79.3	17.4	74.6	16.3	72.2	15.7	69.8	15.1	65.0	14.1
	11.0	9.8	84.1	17.6	79.3	16.5	74.6	15.4	72.2	14.9	69.8	14.4	65.0	13.4
	13.0	11.8	84.1	16.6	79.3	15.6	74.6	14.6	72.2	14.1	69.8	13.6	65.0	12.7
	15.0	13.7	84.1	15.8	79.3	14.8	74.6	13.9	72.2	13.4	69.8	13.0	65.0	12.1
60 (513)	-19.8	-20.0	65.5	29.7	65.4	30.3	63.9	29.9	61.8	28.7	59.8	27.6	55.7	25.3
	-18.8	-19.0	66.7	29.9	66.6	30.5	63.9	29.2	61.8	28.1	59.8	26.9	55.7	24.7
	-16.7	-17.0	69.3	30.3	68.0	30.0	63.9	27.8	61.8	26.7	59.8	25.7	55.7	23.6
	-13.7	-15.0	72.1	30.6	68.0	28.5	63.9	26.4	61.8	25.4	59.8	24.4	55.7	22.5
	-11.8	-13.0	72.1	29.0	68.0	27.0	63.9	25.0	61.8	24.1	59.8	23.2	55.7	21.3
	-9.8	-11.0	72.1	27.4	68.0	25.5	63.9	23.7	61.8	22.8	59.8	21.9	55.7	20.2
	-9.5	-10.0	72.1	26.6	68.0	24.8	63.9	23.0	61.8	22.2	59.8	21.3	55.7	19.7
	-8.5	-9.1	72.1	25.9	68.0	24.1	63.9	22.4	61.8	21.6	59.8	20.8	55.7	19.2
	-7.0	-7.6	72.1	24.8	68.0	23.1	63.9	21.5	61.8	20.7	59.8	19.9	55.7	18.4
	-5.0	-5.6	72.1	23.3	68.0	21.8	63.9	20.3	61.8	19.5	59.8	18.8	55.7	17.4
	-3.0	-3.7	72.1	22.0	68.0	20.6	63.9	19.2	61.8	18.5	59.8	17.8	55.7	16.5
	0.0	-0.7	72.1	20.1	68.0	18.8	63.9	17.6	61.8	17.0	59.8	16.4	55.7	15.2
	3.0	2.2	72.1	18.5	68.0	17.3	63.9	16.2	61.8	15.6	59.8	15.1	55.7	14.0
	5.0	4.1	72.1	17.5	68.0	16.4	63.9	15.3	61.8	14.8	59.8	14.3	55.7	13.3
	7.0	6.0	72.1	16.6	68.0	15.5	63.9	14.6	61.8	14.1	59.8	13.6	55.7	12.6
	9.0	7.9	72.1	15.7	68.0	14.7	63.9	13.8	61.8	13.4	59.8	12.9	55.7	12.0
	11.0	9.8	72.1	14.9	68.0	14.0	63.9	13.1	61.8	12.7	59.8	12.3	55.7	11.5
	13.0	11.8	72.1	14.1	68.0	13.3	63.9	12.5	61.8	12.1	59.8	11.7	55.7	10.9
	15.0	13.7	72.1	13.4	68.0	12.6	63.9	11.9	61.8	11.5	59.8	11.1	55.7	10.4
50 (428)	-19.8	-20.0	60.1	27.7	56.7	25.8	53.3	24.0	51.5	23.1	49.8	22.2	46.4	20.5
	-18.8	-19.0	60.1	27.1	56.7	25.3	53.3	23.5	51.5	22.6	49.8	21.7	46.4	20.0
	-16.7	-17.0	60.1	25.8	56.7	24.1	53.3	22.4	51.5	21.6	49.8	20.8	46.4	19.2
	-13.7	-15.0	60.1	24.6	56.7	22.9	53.3	21.3	51.5	20.6	49.8	19.8	46.4	18.3
	-11.8	-13.0	60.1	23.3	56.7	21.8	53.3	20.3	51.5	19.5	49.8	18.8	46.4	17.4
	-9.8	-11.0	60.1	22.1	56.7	20.6	53.3	19.2	51.5	18.5	49.8	17.8	46.4	16.5
	-9.5	-10.0	60.1	21.4	56.7	20.1	53.3	18.7	51.5	18.0	49.8	17.4	46.4	16.1
	-8.5	-9.1	60.1	20.9	56.7	19.6	53.3	18.3	51.5	17.6	49.8	17.0	46.4	15.7
	-7.0	-7.6	60.1	20.0	56.7	18.8	53.3	17.5	51.5	16.9	49.8	16.3	46.4	15.1
	-5.0	-5.6	60.1	18.9	56.7	17.7	53.3	16.6	51.5	16.0	49.8	15.4	46.4	14.3
	-3.0	-3.7	60.1	17.9	56.7	16.8	53.3	15.7	51.5	15.2	49.8	14.7	46.4	13.6
	0.0	-0.7	60.1	16.5	56.7	15.5	53.3	14.5	51.5	14.0	49.8	13.5	46.4	12.6
	3.0	2.2	60.1	15.2	56.7	14.3	53.3	13.4	51.5	12.9	49.8	12.5	46.4	11.7
	5.0	4.1	60.1	14.4	56.7	13.5	53.3	12.7	51.5	12.3	49.8	11.9	46.4	11.1
	7.0	6.0	60.1	13.7	56.7	12.9	53.3	12.1	51.5	11.7	49.8	11.3	46.4	10.6
	9.0	7.9	60.1	13.0	56.7	12.2	53.3	11.5	51.5	11.1	49.8	10.8	46.4	10.1
	11.0	9.8	60.1	12.4	56.7	11.7	53.3	11.0	51.5	10.6	49.8	10.3	46.4	9.6
	13.0	11.8	60.1	11.7	56.7	11.1	53.3	10.4	51.5	10.1	49.8	9.8	46.4	9.2
	15.0	13.7	60.1	11.2	56.7	10.6	53.3	10.0	51.5	9.7	49.8	9.4	46.4	8.79

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: ■ is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range ■ shown by ■.
Note2: The above table shows the average value of conditions which may occur.

15

RXYQ36PAHY1, PAHYL, PHTL [50/60Hz]

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB											
			16.0		18.0		20.0		21.0		22.0		24.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130 (1170)	-19.8	-20.0	71.1	18.0	70.9	19.4	70.6	20.7	70.5	21.4	70.4	22.1	70.1	23.5
	-18.8	-19.0	72.4	18.5	72.2	19.8	71.9	21.1	71.8	21.8	71.6	22.5	71.4	23.8
	-16.7	-17.0	75.2	19.4	75.0	20.7	74.7	22.0	74.6	22.6	74.4	23.3	74.2	24.5
	-13.7	-15.0	78.3	20.4	78.1	21.6	77.8	22.8	77.7	23.4	77.6	24.1	77.3	25.3
	-11.8	-13.0	81.7	21.3	81.5	22.5	81.2	23.7	81.1	24.3	81.0	24.9	80.7	26.0
	-9.8	-11.0	85.5	22.3	85.2	23.4	85.0	24.5	84.8	25.1	84.7	25.7	84.5	26.8
	-9.5	-10.0	87.5	22.8	87.2	23.9	87.0	25.0	86.8	25.5	86.7	26.0	86.4	27.1
	-8.5	-9.1	89.3	23.2	89.1	24.3	88.8	25.3	88.7	25.9	88.6	26.4	88.3	27.5
	-7.0	-7.6	92.6	23.9	92.3	24.9	92.1	25.9	91.9	26.5	91.8	27.0	91.5	28.0
	-5.0	-5.6	97.2	24.8	96.9	25.8	96.6	26.7	96.5	27.2	96.4	27.7	96.1	28.7
	-3.0	-3.7	101.8	25.6	101.6	26.6	101.3	27.5	101.2	28.0	101.0	28.4	100.8	29.4
	0.0	-0.7	110	26.9	109	27.7	109	28.6	109	29.0	109	29.5	109	30.3
	3.0	2.2	118	28.0	118	28.8	118	29.6	117	30.0	117	30.4	117	31.2
	5.0	4.1	124	28.7	124	29.4	123	30.2	123	30.6	123	31.0	123	31.7
	7.0	6.0	130	29.3	130	30.1	129	30.8	129	31.2	129	31.5	127	31.6
	9.0	7.9	136	30.0	136	30.7	136	31.3	136	31.7	136	32.0	127	29.8
	11.0	9.8	143	30.6	143	31.2	143	31.9	142	31.9	137	30.6	127	28.1
	13.0	11.8	150	31.1	150	31.8	146	31.2	142	29.9	137	28.7	127	26.4
	15.0	13.7	158	31.7	156	31.7	146	29.4	142	28.2	137	27.1	127	24.9
120 (1080)	-19.8	-20.0	70.8	19.9	70.6	21.1	70.3	22.4	70.2	23.0	70.1	23.6	69.8	24.9
	-18.8	-19.0	72.1	20.3	71.8	21.5	71.6	22.7	71.5	23.4	71.4	24.0	71.1	25.2
	-16.7	-17.0	74.9	21.1	74.6	22.3	74.4	23.5	74.3	24.1	74.2	24.7	73.9	25.9
	-13.7	-15.0	78.0	22.0	77.7	23.2	77.5	24.3	77.4	24.9	77.3	25.4	77.0	26.6
	-11.8	-13.0	81.4	22.9	81.2	24.0	80.9	25.1	80.8	25.6	80.7	26.2	80.5	27.3
	-9.8	-11.0	85.1	23.8	84.9	24.8	84.7	25.9	84.5	26.4	84.4	26.9	84.2	27.9
	-9.5	-10.0	87.1	24.2	86.9	25.3	86.7	26.3	86.5	26.8	86.4	27.3	86.2	28.3
	-8.5	-9.1	89.0	24.6	88.7	25.6	88.5	26.6	88.4	27.1	88.3	27.6	88.0	28.6
	-7.0	-7.6	92.2	25.3	92.0	26.2	91.7	27.2	91.6	27.7	91.5	28.1	91.3	29.1
	-5.0	-5.6	96.8	26.1	96.6	27.0	96.3	27.9	96.2	28.4	96.1	28.8	95.9	29.7
	-3.0	-3.7	101.5	26.9	101.2	27.7	101.0	28.6	100.9	29.0	100.8	29.5	100.5	30.3
	0.0	-0.7	109	28.0	109	28.8	109	29.6	109	30.0	109	30.4	108	31.2
	3.0	2.2	118	29.1	117	29.8	117	30.5	117	30.9	117	31.3	117	32.0
	5.0	4.1	124	29.7	123	30.4	123	31.1	123	31.5	123	31.8	118	30.5
	7.0	6.0	130	30.3	129	31.0	129	31.7	129	32.0	126	31.3	118	28.7
	9.0	7.9	136	30.9	136	31.5	135	32.0	131	30.7	126	29.5	118	27.0
	11.0	9.8	143	31.4	142	32.0	135	30.1	131	28.9	126	27.8	118	25.5
	13.0	11.8	150	32.0	144	30.5	135	28.3	131	27.2	126	26.1	118	24.0
	15.0	13.7	152	30.9	144	28.8	135	26.7	131	25.7	126	24.7	118	22.7
110 (990)	-19.8	-20.0	70.4	21.7	70.2	22.9	70.0	24.0	69.9	24.6	69.8	25.2	69.6	26.3
	-18.8	-19.0	71.7	22.1	71.5	23.2	71.3	24.3	71.2	24.9	71.1	25.5	70.9	26.6
	-16.7	-17.0	74.5	22.9	74.3	24.0	74.1	25.1	74.0	25.6	73.9	26.1	73.6	27.2
	-13.7	-15.0	77.6	23.7	77.4	24.7	77.2	25.8	77.1	26.3	77.0	26.8	76.8	27.9
	-11.8	-13.0	81.1	24.5	80.8	25.5	80.6	26.5	80.5	27.0	80.4	27.5	80.2	28.5
	-9.8	-11.0	84.8	25.3	84.6	26.3	84.4	27.2	84.2	27.7	84.1	28.2	83.9	29.1
	-9.5	-10.0	86.8	25.7	86.6	26.6	86.3	27.6	86.2	28.0	86.1	28.5	85.9	29.4
	-8.5	-9.1	88.6	26.1	88.4	27.0	88.2	27.9	88.1	28.3	88.0	28.8	87.8	29.7
	-7.0	-7.6	91.9	26.7	91.7	27.5	91.4	28.4	91.3	28.9	91.2	29.3	91.0	30.2
	-5.0	-5.6	96.5	27.4	96.2	28.3	96.0	29.1	95.9	29.5	95.8	29.9	95.6	30.8
	-3.0	-3.7	101.1	28.1	100.9	28.9	100.7	29.7	100.6	30.1	100.5	30.5	100.2	31.3
	0.0	-0.7	109	29.2	109	29.9	109	30.7	108	31.0	108	31.4	108	32.0
	3.0	2.2	117	30.2	117	30.8	117	31.5	117	31.8	116	31.8	108	29.1
	5.0	4.1	123	30.7	123	31.4	123	32.0	120	31.2	116	29.9	108	27.4
	7.0	6.0	129	31.3	129	31.9	124	30.5	120	29.3	116	28.2	108	25.9
	9.0	7.9	136	31.8	132	31.0	124	28.7	120	27.6	116	26.5	108	24.4
	11.0	9.8	140	31.4	132	29.2	124	27.1	120	26.1	116	25.0	108	23.1
	13.0	11.8	140	29.5	132	27.4	124	25.5	120	24.5	116	23.6	108	21.7
	15.0	13.7	140	27.8	132	25.9	124	24.1	120	23.2	116	22.3	108	20.6

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB											
			16.0		18.0		20.0		21.0		22.0		24.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100 (900)	-19.8	-20.0	70.1	23.5	69.9	24.6	69.7	25.6	69.6	26.2	69.5	26.7	69.3	27.7
	-18.8	-19.0	71.4	23.9	71.2	24.9	71.0	25.9	70.9	26.5	70.8	27.0	70.6	28.0
	-16.7	-17.0	74.2	24.6	74.0	25.6	73.8	26.6	73.7	27.1	73.6	27.6	73.4	28.6
	-13.7	-15.0	77.3	25.4	77.1	26.3	76.9	27.2	76.8	27.7	76.7	28.2	76.5	29.1
	-11.8	-13.0	80.7	26.1	80.5	27.0	80.3	27.9	80.2	28.4	80.1	28.8	79.9	29.7
	-9.8	-11.0	84.4	26.8	84.2	27.7	84.1	28.6	84.0	29.0	83.9	29.4	83.7	30.3
	-9.5	-10.0	86.4	27.2	86.2	28.0	86.0	28.9	85.9	29.3	85.8	29.7	85.6	30.6
	-8.5	-9.1	88.3	27.5	88.1	28.4	87.9	29.2	87.8	29.6	87.7	30.0	87.5	30.8
	-7.0	-7.6	91.5	28.1	91.3	28.9	91.1	29.7	91.0	30.1	90.9	30.4	90.7	31.2
	-5.0	-5.6	96.1	28.8	95.9	29.5	95.7	30.3	95.6	30.7	95.5	31.0	95.3	31.8
	-3.0	-3.7	100.8	29.4	100.6	30.1	100.4	30.8	100.3	31.2	100.2	31.6	98.0	31.3
	0.0	-0.7	109	30.4	108	31.0	108	31.7	108	32.0	105	31.0	98.0	28.5
	3.0	2.2	117	31.2	117	31.9	113	30.7	109	29.5	105	28.3	98.0	26.0
	5.0	4.1	123	31.8	120	31.1	113	28.9	109	27.8	105	26.7	98.0	24.5
	7.0	6.0	127	31.5	120	29.3	113	27.2	109	26.2	105	25.1	98.0	23.1
	9.0	7.9	127	29.6	120	27.6	113	25.6	109	24.7	105	23.7	98.0	21.9
	11.0	9.8	127	27.9	120	26.0	113	24.2	109	23.3	105	22.4	98.0	20.7
	13.0	11.8	127	26.3	120	24.5	113	22.8	109	22.0	105	21.1	98.0	19.5
	15.0	13.7	127	24.8	120	23.2	113	21.6	109	20.8	105	20.0	98.0	18.5
90 (810)	-19.8	-20.0	69.7	25.4	69.6	26.3	69.4	27.3	69.3	27.7	69.2	28.2	69.0	29.2
	-18.8	-19.0	71.0	25.7	70.9	26.6	70.7	27.5	70.6	28.0	70.5	28.5	70.3	29.4
	-16.7	-17.0	73.8	26.3	73.6	27.2	73.5	28.1	73.4	28.6	73.3	29.0	73.1	29.9
	-13.7	-15.0	76.9	27.0	76.8	27.9	76.6	28.7	76.5	29.1	76.4	29.6	76.2	30.4
	-11.8	-13.0	80.4	27.7	80.2	28.5	80.0	29.3	79.9	29.7	79.8	30.1	79.6	30.9
	-9.8	-11.0	84.1	28.4	83.9	29.1	83.7	29.9	83.7	30.3	83.6	30.7	83.4	31.5
	-9.5	-10.0	86.1	28.7	85.9	29.4	85.7	30.2	85.6	30.6	85.6	31.0	85.4	31.7
	-8.5	-9.1	87.9	29.0	87.8	29.7	87.6	30.5	87.5	30.8	87.4	31.2	87.2	31.9
	-7.0	-7.6	91.2	29.5	91.0	30.2	90.8	30.9	90.7	31.2	90.6	31.6	88.2	31.1
	-5.0	-5.6	95.8	30.1	95.6	30.8	95.4	31.4	95.3	31.8	94.7	31.9	88.2	29.2
	-3.0	-3.7	100.4	30.7	100.2	31.3	100.1	32.0	98.0	31.3	94.7	30.0	88.2	27.5
	0.0	-0.7	108	31.5	108	31.9	101	29.6	98.0	28.4	94.7	27.3	88.2	25.1
	3.0	2.2	114	31.3	108	29.1	101	27.0	98.0	26.0	94.7	25.0	88.2	23.0
	5.0	4.1	114	29.4	108	27.4	101	25.5	98.0	24.5	94.7	23.6	88.2	21.7
	7.0	6.0	114	27.7	108	25.8	101	24.0	98.0	23.1	94.7	22.2	88.2	20.5
	9.0	7.9	114	26.1	108	24.4	101	22.7	98.0	21.9	94.7	21.0	88.2	19.4
	11.0	9.8	114	24.7	108	23.0	101	21.4	98.0	20.7	94.7	19.9	88.2	18.4
	13.0	11.8	114	23.2	108	21.7	101	20.2	98.0	19.5	94.7	18.8	88.2	17.4
	15.0	13.7	114	22.0	108	20.6	101	19.2	98.0	18.5	94.7	17.8	88.2	16.5
80 (720)	-19.8	-20.0	69.4	27.2	69.2	28.1	69.1	28.9	69.0	29.3	68.9	29.7	68.8	30.6
	-18.8	-19.0	70.7	27.5	70.5	28.3	70.4	29.1	70.3	29.6	70.2	30.0	70.0	30.8
	-16.7	-17.0	73.5	28.1	73.3	28.9	73.2	29.7	73.1	30.1	73.0	30.5	72.8	31.2
	-13.7	-15.0	76.6	28.7	76.4	29.4	76.3	30.2	76.2	30.6	76.1	30.9	76.0	31.7
	-11.8	-13.0	80.0	29.3	79.9	30.0	79.7	30.7	79.6	31.1	79.5	31.4	78.4	31.6
	-9.8	-11.0	83.8	29.9	83.6	30.6	83.4	31.2	83.4	31.6	83.3	31.9	78.4	29.8
	-9.5	-10.0	85.7	30.2	85.6	30.8	85.4	31.5	85.3	31.8	84.2	31.6	78.4	28.9
	-8.5	-9.1	87.6	30.4	87.4	31.1	87.3	31.7	87.1	32.0	84.2	30.7	78.4	28.2
	-7.0	-7.6	90.8	30.9	90.7	31.5	90.0	31.8	87.1	30.6	84.2	29.3	78.4	26.9
	-5.0	-5.6	95.4	31.4	95.3	32.0	90.0	29.9	87.1	28.8	84.2	27.6	78.4	25.4
	-3.0	-3.7	100.1	31.9	95.8	30.4	90.0	28.2	87.1	27.1	84.2	26.1	78.4	24.0
	0.0	-0.7	102	29.7	95.8	27.7	90.0	25.7	87.1	24.7	84.2	23.8	78.4	21.9
	3.0	2.2	102	27.1	95.8	25.3	90.0	23.5	87.1	22.6	84.2	21.8	78.4	20.1
	5.0	4.1	102	25.6	95.8	23.9	90.0	22.2	87.1	21.4	84.2	20.6	78.4	19.0
	7.0	6.0	102	24.1	95.8	22.5	90.0	21.0	87.1	20.2	84.2	19.5	78.4	18.0
	9.0	7.9	102	22.8	95.8	21.3	90.0	19.9	87.1	19.1	84.2	18.4	78.4	17.1
	11.0	9.8	102	21.5	95.8	20.1	90.0	18.8	87.1	18.1	84.2	17.5	78.4	16.2
	13.0	11.8	102	20.3	95.8	19.0	90.0	17.8	87.1	17.2	84.2	16.5	78.4	15.4
	15.0	13.7	102	19.2	95.8	18.0	90.0	16.9	87.1	16.3	84.2	15.7	78.4	14.6

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: ▒ is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range shown by ▒.
Note2: The above table shows the average value of conditions which may occur.

[50/60Hz]

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB 16.0 TC	16.0 PI	18.0 TC	18.0 PI	20.0 TC	20.0 PI	21.0 TC	21.0 PI	22.0 TC	22.0 PI	24.0 TC	24.0 PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70 (630)	-19.8	-20.0	69.1	29.1	68.9	29.8	68.8	30.5	68.7	30.9	68.6	31.3	68.5	32.0
	-18.8	-19.0	70.3	29.3	70.2	30.0	70.1	30.8	70.0	31.1	69.9	31.5	68.6	31.4
	-16.7	-17.0	73.1	29.8	73.0	30.5	72.9	31.2	72.8	31.5	72.7	31.9	68.6	29.9
	-13.7	-15.0	76.2	30.3	76.1	31.0	76.0	31.7	75.9	32.0	73.7	30.9	68.6	28.3
	-11.8	-13.0	79.7	30.9	79.5	31.5	78.8	31.7	76.2	30.5	73.7	29.2	68.6	26.8
	-9.8	-11.0	83.4	31.4	83.3	32.0	78.8	29.9	76.2	28.8	73.7	27.6	68.6	25.4
	-9.5	-10.0	85.4	31.6	83.8	31.4	78.8	29.1	76.2	28.0	73.7	26.8	68.6	24.7
	-8.5	-9.1	87.2	31.9	83.8	30.5	78.8	28.3	76.2	27.2	73.7	26.1	68.6	24.1
	-7.0	-7.6	88.9	31.3	83.8	29.2	78.8	27.1	76.2	26.0	73.7	25.0	68.6	23.0
	-5.0	-5.6	88.9	29.5	83.8	27.5	78.8	25.5	76.2	24.5	73.7	23.6	68.6	21.7
	-3.0	-3.7	88.9	27.8	83.8	25.9	78.8	24.1	76.2	23.2	73.7	22.3	68.6	20.6
	0.0	-0.7	88.9	25.3	83.8	23.6	78.8	22.0	76.2	21.2	73.7	20.4	68.6	18.9
	3.0	2.2	88.9	23.2	83.8	21.7	78.8	20.2	76.2	19.5	73.7	18.8	68.6	17.4
	5.0	4.1	88.9	21.7	83.8	20.5	78.8	19.1	76.2	18.4	73.7	17.8	68.6	16.5
	7.0	6.0	88.9	20.7	83.8	19.4	78.8	18.1	76.2	17.5	73.7	16.8	68.6	15.6
	9.0	7.9	88.9	19.6	83.8	18.4	78.8	17.2	76.2	16.6	73.7	16.0	68.6	14.8
	11.0	9.8	88.9	18.5	83.8	17.4	78.8	16.3	76.2	15.7	73.7	15.2	68.6	14.1
	13.0	11.8	88.9	17.5	83.8	16.5	78.8	15.4	76.2	14.9	73.7	14.4	68.6	13.4
	15.0	13.7	88.9	16.6	83.8	15.6	78.8	14.7	76.2	14.2	73.7	13.7	68.6	12.8
60 (540)	-19.8	-20.0	68.7	30.9	68.6	31.5	67.5	31.4	65.3	30.2	63.2	29.0	58.8	26.6
	-18.8	-19.0	70.0	31.1	69.9	31.7	67.5	30.7	65.3	29.5	63.2	28.3	58.8	26.0
	-16.7	-17.0	72.8	31.6	71.8	31.6	67.5	29.3	65.3	28.1	63.2	27.0	58.8	24.8
	-13.7	-15.0	75.9	32.0	71.8	30.0	67.5	27.8	65.3	26.7	63.2	25.7	58.8	23.6
	-11.8	-13.0	76.2	30.5	71.8	28.4	67.5	26.3	65.3	25.3	63.2	24.3	58.8	22.4
	-9.8	-11.0	76.2	28.8	71.8	26.8	67.5	24.9	65.3	24.0	63.2	23.0	58.8	21.2
	-9.5	-10.0	76.2	27.9	71.8	26.0	67.5	24.2	65.3	23.3	63.2	22.4	58.8	20.7
	-8.5	-9.1	76.2	27.2	71.8	25.4	67.5	23.6	65.3	22.7	63.2	21.9	58.8	20.2
	-7.0	-7.6	76.2	26.0	71.8	24.3	67.5	22.6	65.3	21.8	63.2	21.0	58.8	19.3
	-5.0	-5.6	76.2	24.5	71.8	22.9	67.5	21.3	65.3	20.6	63.2	19.8	58.8	18.3
	-3.0	-3.7	76.2	23.2	71.8	21.7	67.5	20.2	65.3	19.5	63.2	18.8	58.8	17.4
	0.0	-0.7	76.2	21.2	71.8	19.8	67.5	18.5	65.3	17.9	63.2	17.2	58.8	16.0
	3.0	2.2	76.2	19.5	71.8	18.2	67.5	17.1	65.3	16.5	63.2	15.9	58.8	14.8
	5.0	4.1	76.2	18.4	71.8	17.3	67.5	16.2	65.3	15.6	63.2	15.1	58.8	14.0
	7.0	6.0	76.2	17.5	71.8	16.4	67.5	15.3	65.3	14.8	63.2	14.3	58.8	13.3
	9.0	7.9	76.2	16.6	71.8	15.6	67.5	14.6	65.3	14.1	63.2	13.6	58.8	12.7
	11.0	9.8	76.2	15.7	71.8	14.8	67.5	13.9	65.3	13.4	63.2	13.0	58.8	12.1
	13.0	11.8	76.2	14.9	71.8	14.0	67.5	13.2	65.3	12.7	63.2	12.3	58.8	11.5
	15.0	13.7	76.2	14.2	71.8	13.4	67.5	12.5	65.3	12.1	63.2	11.8	58.8	11.0
50 (450)	-19.8	-20.0	63.5	29.2	59.9	27.2	56.3	25.2	54.4	24.3	52.6	23.4	49.0	21.5
	-18.8	-19.0	63.5	28.5	59.9	26.6	56.3	24.7	54.4	23.8	52.6	22.9	49.0	21.1
	-16.7	-17.0	63.5	27.2	59.9	25.3	56.3	23.6	54.4	22.7	52.6	21.8	49.0	20.1
	-13.7	-15.0	63.5	25.8	59.9	24.1	56.3	22.4	54.4	21.6	52.6	20.8	49.0	19.2
	-11.8	-13.0	63.5	24.5	59.9	22.9	56.3	21.3	54.4	20.5	52.6	19.8	49.0	18.3
	-9.8	-11.0	63.5	23.2	59.9	21.7	56.3	20.2	54.4	19.5	52.6	18.8	49.0	17.4
	-9.5	-10.0	63.5	22.5	59.9	21.1	56.3	19.7	54.4	19.0	52.6	18.3	49.0	16.9
	-8.5	-9.1	63.5	22.0	59.9	20.6	56.3	19.2	54.4	18.5	52.6	17.8	49.0	16.5
	-7.0	-7.6	63.5	21.1	59.9	19.7	56.3	18.4	54.4	17.8	52.6	17.1	49.0	15.9
	-5.0	-5.6	63.5	19.9	59.9	18.7	56.3	17.4	54.4	16.8	52.6	16.2	49.0	15.1
	-3.0	-3.7	63.5	18.9	59.9	17.7	56.3	16.5	54.4	16.0	52.6	15.4	49.0	14.3
	0.0	-0.7	63.5	17.3	59.9	16.3	56.3	15.2	54.4	14.7	52.6	14.2	49.0	13.2
	3.0	2.2	63.5	16.0	59.9	15.0	56.3	14.1	54.4	13.6	52.6	13.2	49.0	12.3
	5.0	4.1	63.5	15.2	59.9	14.3	56.3	13.4	54.4	13.0	52.6	12.5	49.0	11.7
	7.0	6.0	63.5	14.4	59.9	13.6	56.3	12.7	54.4	12.3	52.6	11.9	49.0	11.1
	9.0	7.9	63.5	13.7	59.9	12.9	56.3	12.1	54.4	11.8	52.6	11.4	49.0	10.6
	11.0	9.8	63.5	13.0	59.9	12.3	56.3	11.6	54.4	11.2	52.6	10.9	49.0	10.2
	13.0	11.8	63.5	12.4	59.9	11.7	56.3	11.0	54.4	10.7	52.6	10.4	49.0	9.7
	15.0	13.7	63.5	11.8	59.9	11.2	56.3	10.5	54.4	10.2	52.6	9.9	49.0	9.3

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: ▒ is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range ▒ shown by ▒.
Note2: The above table shows the average value of conditions which may occur.

15

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB											
			16.0		18.0		20.0		21.0		22.0		24.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130 (1235)	-19.8	-20.0	75.6	19.2	75.3	20.7	75.0	22.2	74.9	22.9	74.7	23.7	74.5	25.1
	-18.8	-19.0	76.9	19.7	76.7	21.2	76.4	22.6	76.2	23.3	76.1	24.1	75.8	25.5
	-16.7	-17.0	79.9	20.7	79.6	22.1	79.4	23.5	79.2	24.2	79.1	24.9	78.8	26.3
	-13.7	-15.0	83.2	21.8	82.9	23.1	82.7	24.4	82.5	25.1	82.4	25.8	82.1	27.1
	-11.8	-13.0	86.8	22.8	86.6	24.1	86.3	25.4	86.2	26.0	86.0	26.6	85.7	27.9
	-9.8	-11.0	90.8	23.9	90.5	25.1	90.3	26.3	90.1	26.9	90.0	27.5	89.7	28.7
	-9.5	-10.0	92.9	24.4	92.6	25.6	92.4	26.7	92.2	27.3	92.1	27.9	91.8	29.1
	-8.5	-9.1	94.9	24.8	94.6	26.0	94.3	27.1	94.2	27.7	94.1	28.3	93.8	29.5
	-7.0	-7.6	98.3	25.6	98.1	26.7	97.8	27.8	97.6	28.4	97.5	28.9	97.2	30.0
	-5.0	-5.6	103.2	26.6	102.9	27.6	102.7	28.7	102.5	29.2	102.4	29.7	102.1	30.8
	-3.0	-3.7	108	27.5	108	28.5	108	29.5	107	30.0	107	30.5	107	31.5
	0.0	-0.7	117	28.8	116	29.7	116	30.7	116	31.1	116	31.6	115	32.5
	3.0	2.2	125	30.0	125	30.9	125	31.7	125	32.2	125	32.6	124	33.5
	5.0	4.1	132	30.8	131	31.6	131	32.4	131	32.8	131	33.2	130	34.1
	7.0	6.0	138	31.5	138	32.3	138	33.0	137	33.4	137	33.8	136	34.2
	9.0	7.9	145	32.2	145	32.9	144	33.6	144	34.0	144	34.4	136	32.2
	11.0	9.8	152	32.8	152	33.5	151	34.2	151	34.5	146	33.1	136	30.3
	13.0	11.8	160	33.4	159	34.1	156	33.7	151	32.4	146	31.1	136	28.5
	15.0	13.7	167	34.0	166	34.3	156	31.8	151	30.5	146	29.3	136	26.9
120 (1140)	-19.8	-20.0	75.2	21.2	74.9	22.6	74.7	24.0	74.6	24.6	74.4	25.3	74.2	26.7
	-18.8	-19.0	76.6	21.7	76.3	23.0	76.1	24.4	75.9	25.0	75.8	25.7	75.5	27.0
	-16.7	-17.0	79.5	22.6	79.3	23.9	79.0	25.2	78.9	25.8	78.8	26.5	78.5	27.7
	-13.7	-15.0	82.8	23.6	82.6	24.8	82.3	26.0	82.2	26.6	82.1	27.3	81.8	28.5
	-11.8	-13.0	86.5	24.5	86.2	25.7	86.0	26.9	85.8	27.5	85.7	28.1	85.5	29.2
	-9.8	-11.0	90.4	25.5	90.2	26.6	89.9	27.7	89.8	28.3	89.7	28.9	89.4	30.0
	-9.5	-10.0	92.6	26.0	92.3	27.1	92.0	28.2	91.9	28.7	91.8	29.2	91.5	30.3
	-8.5	-9.1	94.5	26.4	94.3	27.5	94.0	28.5	93.9	29.1	93.8	29.6	93.5	30.7
	-7.0	-7.6	98.0	27.1	97.7	28.1	97.5	29.1	97.3	29.7	97.2	30.2	96.9	31.2
	-5.0	-5.6	102.8	28.0	102.6	29.0	102.3	29.9	102.2	30.4	102.1	30.9	101.8	31.9
	-3.0	-3.7	108	28.8	108	29.8	107	30.7	107	31.2	107	31.6	107	32.5
	0.0	-0.7	116	30.1	116	30.9	116	31.8	116	32.2	115	32.7	115	33.5
	3.0	2.2	125	31.2	125	32.0	125	32.8	124	33.2	124	33.6	124	34.4
	5.0	4.1	131	31.9	131	32.6	131	33.4	131	33.8	130	34.2	125	33.0
	7.0	6.0	138	32.5	137	33.3	137	34.0	137	34.3	135	33.8	125	31.0
	9.0	7.9	144	33.2	144	33.8	144	34.5	139	33.2	135	31.8	125	29.2
	11.0	9.8	152	33.7	151	34.4	144	32.5	139	31.3	135	30.0	125	27.6
	13.0	11.8	159	34.3	153	33.0	144	30.6	139	29.4	135	28.2	125	26.0
	15.0	13.7	163	33.4	153	31.1	144	28.8	139	27.7	135	26.7	125	24.6
110 (1045)	-19.8	-20.0	74.8	23.2	74.6	24.5	74.4	25.7	74.2	26.3	74.1	27.0	73.9	28.2
	-18.8	-19.0	76.2	23.6	76.0	24.9	75.7	26.1	75.6	26.7	75.5	27.3	75.3	28.5
	-16.7	-17.0	79.2	24.5	78.9	25.7	78.7	26.8	78.6	27.4	78.5	28.0	78.2	29.2
	-13.7	-15.0	82.5	25.4	82.2	26.5	82.0	27.6	81.9	28.2	81.8	28.7	81.5	29.9
	-11.8	-13.0	86.1	26.3	85.9	27.3	85.6	28.4	85.5	28.9	85.4	29.5	85.2	30.6
	-9.8	-11.0	90.1	27.1	89.8	28.2	89.6	29.2	89.5	29.7	89.4	30.2	89.1	31.2
	-9.5	-10.0	92.2	27.6	91.9	28.6	91.7	29.6	91.6	30.1	91.5	30.6	91.3	31.6
	-8.5	-9.1	94.2	28.0	93.9	28.9	93.7	29.9	93.6	30.4	93.5	30.9	93.2	31.9
	-7.0	-7.6	97.6	28.6	97.4	29.5	97.1	30.5	97.0	31.0	96.9	31.4	96.7	32.4
	-5.0	-5.6	102.5	29.4	102.2	30.3	102.0	31.2	101.9	31.7	101.8	32.1	101.5	33.0
	-3.0	-3.7	107	30.2	107	31.0	107	31.9	107	32.3	107	32.7	106	33.6
	0.0	-0.7	116	31.3	116	32.1	115	32.9	115	33.3	115	33.7	115	34.5
	3.0	2.2	125	32.4	124	33.1	124	33.8	124	34.2	124	34.4	115	31.5
	5.0	4.1	131	33.0	131	33.7	130	34.4	128	33.7	124	32.3	115	29.7
	7.0	6.0	137	33.6	137	34.3	132	33.0	128	31.7	124	30.4	115	28.0
	9.0	7.9	144	34.2	140	33.5	132	31.1	128	29.9	124	28.7	115	26.4
	11.0	9.8	149	33.9	140	31.6	132	29.3	128	28.2	124	27.1	115	24.9
	13.0	11.8	149	31.8	140	29.7	132	27.6	128	26.5	124	25.5	115	23.5
	15.0	13.7	149	30.0	140	28.0	132	26.0	128	25.1	124	24.1	115	22.2

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB											
			16.0		18.0		20.0		21.0		22.0		24.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100 (950)	-19.8	-20.0	74.5	25.2	74.2	26.3	74.0	27.5	73.9	28.0	73.8	28.6	73.6	29.7
	-18.8	-19.0	75.8	25.6	75.6	26.7	75.4	27.8	75.3	28.4	75.2	28.9	75.0	30.0
	-16.7	-17.0	78.8	26.4	78.6	27.4	78.4	28.5	78.3	29.0	78.2	29.6	77.9	30.6
	-13.7	-15.0	82.1	27.2	81.9	28.2	81.7	29.2	81.6	29.7	81.5	30.2	81.2	31.3
	-11.8	-13.0	85.7	28.0	85.5	28.9	85.3	29.9	85.2	30.4	85.1	30.9	84.9	31.9
	-9.8	-11.0	89.7	28.8	89.5	29.7	89.3	30.6	89.2	31.1	89.1	31.6	88.9	32.5
	-9.5	-10.0	91.8	29.2	91.6	30.1	91.4	31.0	91.3	31.4	91.2	31.9	91.0	32.8
	-8.5	-9.1	93.8	29.5	93.6	30.4	93.4	31.3	93.3	31.7	93.1	32.2	92.9	33.1
	-7.0	-7.6	97.2	30.1	97.0	31.0	96.8	31.8	96.7	32.2	96.6	32.7	96.4	33.5
	-5.0	-5.6	102.1	30.9	101.9	31.7	101.7	32.5	101.6	32.9	101.5	33.3	101.2	34.1
	-3.0	-3.7	107	31.5	107	32.3	107	33.1	107	33.5	106	33.9	105	33.8
	0.0	-0.7	115	32.6	115	33.3	115	34.0	115	34.4	112	33.5	105	30.8
	3.0	2.2	124	33.5	124	34.2	120	33.2	116	31.9	112	30.6	105	28.1
	5.0	4.1	130	34.1	128	33.7	120	31.2	116	30.0	112	28.8	105	26.5
	7.0	6.0	135	34.0	128	31.7	120	29.4	116	28.3	112	27.2	105	25.0
	9.0	7.9	135	32.0	128	29.9	120	27.7	116	26.7	112	25.6	105	23.6
	11.0	9.8	135	30.2	128	28.2	120	26.2	116	25.2	112	24.2	105	22.4
	13.0	11.8	135	28.4	128	26.5	120	24.7	116	23.8	112	22.9	105	21.1
	15.0	13.7	135	26.8	128	25.1	120	23.3	116	22.5	112	21.6	105	20.0
90 (855)	-19.8	-20.0	74.1	27.2	73.9	28.2	73.7	29.2	73.6	29.8	73.5	30.3	73.3	31.3
	-18.8	-19.0	75.4	27.5	75.3	28.5	75.1	29.5	75.0	30.0	74.9	30.5	74.7	31.5
	-16.7	-17.0	78.4	28.2	78.2	29.2	78.0	30.2	77.9	30.6	77.8	31.1	77.7	32.1
	-13.7	-15.0	81.7	29.0	81.5	29.9	81.3	30.8	81.2	31.3	81.1	31.7	81.0	32.6
	-11.8	-13.0	85.4	29.7	85.2	30.6	85.0	31.4	84.9	31.9	84.8	32.3	84.6	33.2
	-9.8	-11.0	89.3	30.4	89.1	31.2	88.9	32.1	88.9	32.5	88.8	32.9	88.6	33.8
	-9.5	-10.0	91.4	30.8	91.3	31.6	91.1	32.4	91.0	32.8	90.9	33.2	90.7	34.0
	-8.5	-9.1	93.4	31.1	93.2	31.9	93.0	32.7	92.9	33.1	92.8	33.5	92.7	34.3
	-7.0	-7.6	96.8	31.6	96.7	32.4	96.5	33.2	96.4	33.5	96.3	33.9	94.1	33.6
	-5.0	-5.6	101.7	32.3	101.5	33.0	101.3	33.8	101.2	34.1	101.1	34.4	94.1	31.6
	-3.0	-3.7	107	32.9	106	33.6	106	34.3	105	33.8	101	32.4	94.1	29.8
	0.0	-0.7	115	33.9	115	34.5	108	32.0	105	30.7	101	29.5	94.1	27.1
	3.0	2.2	122	33.8	115	31.5	108	29.2	105	28.1	101	27.0	94.1	24.8
	5.0	4.1	122	31.8	115	29.6	108	27.5	105	26.5	101	25.5	94.1	23.5
	7.0	6.0	122	30.0	115	27.9	108	26.0	105	25.0	101	24.0	94.1	22.2
	9.0	7.9	122	28.2	115	26.4	108	24.5	105	23.6	101	22.7	94.1	21.0
	11.0	9.8	122	26.6	115	24.9	108	23.2	105	22.3	101	21.5	94.1	19.9
	13.0	11.8	122	25.1	115	23.5	108	21.9	105	21.1	101	20.3	94.1	18.8
	15.0	13.7	122	23.7	115	22.2	108	20.7	105	20.0	101	19.3	94.1	17.9
80 (760)	-19.8	-20.0	73.7	29.2	73.5	30.1	73.4	31.0	73.3	31.5	73.2	31.9	73.0	32.8
	-18.8	-19.0	75.1	29.5	74.9	30.4	74.7	31.3	74.7	31.7	74.6	32.2	74.4	33.1
	-16.7	-17.0	78.0	30.1	77.9	31.0	77.7	31.8	77.6	32.3	77.5	32.7	77.4	33.5
	-13.7	-15.0	81.3	30.8	81.2	31.6	81.0	32.4	80.9	32.8	80.8	33.2	80.7	34.0
	-11.8	-13.0	85.0	31.4	84.8	32.2	84.6	33.0	84.6	33.4	84.5	33.8	83.7	34.1
	-9.8	-11.0	89.0	32.0	88.8	32.8	88.6	33.5	88.5	33.9	88.5	34.3	83.7	32.2
	-9.5	-10.0	91.1	32.4	90.9	33.1	90.7	33.8	90.6	34.2	89.8	34.1	83.7	31.3
	-8.5	-9.1	93.0	32.7	92.9	33.4	92.7	34.1	92.6	34.4	89.8	33.2	83.7	30.5
	-7.0	-7.6	96.5	33.1	96.3	33.8	96.0	34.4	92.9	33.1	89.8	31.7	83.7	29.1
	-5.0	-5.6	101.4	33.7	101.2	34.4	96.0	32.3	92.9	31.1	89.8	29.8	83.7	27.4
	-3.0	-3.7	106	34.3	102	32.9	96.0	30.5	92.9	29.3	89.8	28.2	83.7	25.9
	0.0	-0.7	108	32.1	102	29.9	96.0	27.8	92.9	26.7	89.8	25.7	83.7	23.7
	3.0	2.2	108	29.3	102	27.3	96.0	25.4	92.9	24.5	89.8	23.5	83.7	21.7
	5.0	4.1	108	27.6	102	25.8	96.0	24.0	92.9	23.1	89.8	22.3	83.7	20.6
	7.0	6.0	108	26.1	102	24.3	96.0	22.7	92.9	21.9	89.8	21.1	83.7	19.5
	9.0	7.9	108	24.6	102	23.0	96.0	21.5	92.9	20.7	89.8	19.9	83.7	18.5
	11.0	9.8	108	23.3	102	21.8	96.0	20.3	92.9	19.6	89.8	18.9	83.7	17.5
	13.0	11.8	108	22.0	102	20.6	96.0	19.2	92.9	18.5	89.8	17.9	83.7	16.6
	15.0	13.7	108	20.8	102	19.5	96.0	18.2	92.9	17.6	89.8	17.0	83.7	15.8

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: ▒ is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range shown by ▒.
Note2: The above table shows the average value of conditions which may occur.

[50/60Hz]

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB 16.0 TC	16.0 PI	18.0 TC	18.0 PI	20.0 TC	20.0 PI	21.0 TC	21.0 PI	22.0 TC	22.0 PI	24.0 TC	24.0 PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70 (665)	-19.8	-20.0	73.3	31.2	73.2	32.0	73.1	32.8	73.0	33.2	72.9	33.6	72.8	34.4
	-18.8	-19.0	74.7	31.4	74.6	32.2	74.4	33.0	74.3	33.4	74.3	33.8	73.2	33.9
	-16.7	-17.0	77.7	32.0	77.5	32.7	77.4	33.5	77.3	33.9	77.2	34.2	73.2	32.3
	-13.7	-15.0	81.0	32.6	80.8	33.3	80.7	34.0	80.6	34.3	78.6	33.4	73.2	30.6
	-11.8	-13.0	84.6	33.1	84.5	33.8	84.0	34.3	81.3	32.9	78.6	31.6	73.2	29.0
	-9.8	-11.0	88.6	33.7	88.4	34.3	84.0	32.4	81.3	31.1	78.6	29.9	73.2	27.4
	-9.5	-10.0	90.7	34.0	89.4	33.9	84.0	31.4	81.3	30.2	78.6	29.0	73.2	26.7
	-8.5	-9.1	92.7	34.2	89.4	33.0	84.0	30.6	81.3	29.4	78.6	28.3	73.2	26.0
	-7.0	-7.6	94.8	33.9	89.4	31.5	84.0	29.3	81.3	28.1	78.6	27.0	73.2	24.9
	-5.0	-5.6	94.8	31.8	89.4	29.7	84.0	27.6	81.3	26.5	78.6	25.5	73.2	23.5
	-3.0	-3.7	94.8	30.0	89.4	28.0	84.0	26.0	81.3	25.1	78.6	24.1	73.2	22.2
	0.0	-0.7	94.8	27.4	89.4	25.6	84.0	23.8	81.3	22.9	78.6	22.1	73.2	20.4
	3.0	2.2	94.8	25.4	89.4	23.4	84.0	21.8	81.3	21.0	78.6	20.3	73.2	18.8
	5.0	4.1	94.8	23.7	89.4	22.1	84.0	20.7	81.3	19.9	78.6	19.2	73.2	17.8
	7.0	6.0	94.8	22.4	89.4	20.9	84.0	19.6	81.3	18.9	78.6	18.2	73.2	16.9
	9.0	7.9	94.8	21.2	89.4	19.8	84.0	18.5	81.3	17.9	78.6	17.3	73.2	16.0
	11.0	9.8	94.8	20.0	89.4	18.8	84.0	17.6	81.3	17.0	78.6	16.4	73.2	15.2
	13.0	11.8	94.8	19.0	89.4	17.8	84.0	16.7	81.3	16.1	78.6	15.6	73.2	14.5
	15.0	13.7	94.8	18.0	89.4	16.9	84.0	15.8	81.3	15.3	78.6	14.8	73.2	13.8
60 (570)	-19.8	-20.0	73.0	33.2	72.8	33.9	72.0	34.0	69.7	32.7	67.4	31.3	62.7	28.8
	-18.8	-19.0	74.3	33.4	74.2	34.1	72.0	33.2	69.7	31.9	67.4	30.6	62.7	28.1
	-16.7	-17.0	77.3	33.9	76.6	34.1	72.0	31.6	69.7	30.4	67.4	29.2	62.7	26.8
	-13.7	-15.0	80.6	34.4	76.6	32.4	72.0	30.0	69.7	28.9	67.4	27.7	62.7	25.5
	-11.8	-13.0	81.3	32.9	76.6	30.7	72.0	28.4	69.7	27.4	67.4	26.3	62.7	24.2
	-9.8	-11.0	81.3	31.1	76.6	29.0	72.0	26.9	69.7	25.9	67.4	24.9	62.7	23.0
	-9.5	-10.0	81.3	30.2	76.6	28.1	72.0	26.2	69.7	25.2	67.4	24.2	62.7	22.3
	-8.5	-9.1	81.3	29.4	76.6	27.4	72.0	25.5	69.7	24.6	67.4	23.6	62.7	21.8
	-7.0	-7.6	81.3	28.1	76.6	26.3	72.0	24.4	69.7	23.5	67.4	22.6	62.7	20.9
	-5.0	-5.6	81.3	26.5	76.6	24.8	72.0	23.1	69.7	22.2	67.4	21.4	62.7	19.8
	-3.0	-3.7	81.3	25.0	76.6	23.4	72.0	21.8	69.7	21.0	67.4	20.3	62.7	18.8
	0.0	-0.7	81.3	22.9	76.6	21.4	72.0	20.0	69.7	19.3	67.4	18.6	62.7	17.3
	3.0	2.2	81.3	21.0	76.6	19.7	72.0	18.4	69.7	17.8	67.4	17.2	62.7	15.9
	5.0	4.1	81.3	19.9	76.6	18.7	72.0	17.5	69.7	16.9	67.4	16.3	62.7	15.1
	7.0	6.0	81.3	18.9	76.6	17.7	72.0	16.6	69.7	16.0	67.4	15.5	62.7	14.4
	9.0	7.9	81.3	17.9	76.6	16.8	72.0	15.8	69.7	15.2	67.4	14.7	62.7	13.7
	11.0	9.8	81.3	17.0	76.6	16.0	72.0	15.0	69.7	14.5	67.4	14.0	62.7	13.1
	13.0	11.8	81.3	16.1	76.6	15.2	72.0	14.2	69.7	13.8	67.4	13.3	62.7	12.4
	15.0	13.7	81.3	15.3	76.6	14.4	72.0	13.6	69.7	13.1	67.4	12.7	62.7	11.9
50 (475)	-19.8	-20.0	67.7	31.5	63.9	29.4	60.0	27.3	58.1	26.3	56.1	25.3	52.3	23.3
	-18.8	-19.0	67.7	30.8	63.9	28.7	60.0	26.7	58.1	25.7	56.1	24.7	52.3	22.8
	-16.7	-17.0	67.7	29.4	63.9	27.4	60.0	25.5	58.1	24.5	56.1	23.6	52.3	21.8
	-13.7	-15.0	67.7	27.9	63.9	26.1	60.0	24.2	58.1	23.4	56.1	22.5	52.3	20.8
	-11.8	-13.0	67.7	26.5	63.9	24.7	60.0	23.0	58.1	22.2	56.1	21.4	52.3	19.8
	-9.8	-11.0	67.7	25.1	63.9	23.4	60.0	21.8	58.1	21.1	56.1	20.3	52.3	18.8
	-9.5	-10.0	67.7	24.4	63.9	22.8	60.0	21.3	58.1	20.5	56.1	19.8	52.3	18.3
	-8.5	-9.1	67.7	23.8	63.9	22.2	60.0	20.7	58.1	20.0	56.1	19.3	52.3	17.9
	-7.0	-7.6	67.7	22.8	63.9	21.3	60.0	19.9	58.1	19.2	56.1	18.5	52.3	17.2
	-5.0	-5.6	67.7	21.5	63.9	20.2	60.0	18.8	58.1	18.2	56.1	17.5	52.3	16.3
	-3.0	-3.7	67.7	20.4	63.9	19.1	60.0	17.9	58.1	17.3	56.1	16.7	52.3	15.5
	0.0	-0.7	67.7	18.7	63.9	17.6	60.0	16.5	58.1	15.9	56.1	15.4	52.3	14.3
	3.0	2.2	67.7	17.3	63.9	16.2	60.0	15.2	58.1	14.7	56.1	14.2	52.3	13.3
	5.0	4.1	67.7	16.4	63.9	15.4	60.0	14.5	58.1	14.0	56.1	13.5	52.3	12.6
	7.0	6.0	67.7	15.6	63.9	14.7	60.0	13.8	58.1	13.3	56.1	12.9	52.3	12.0
	9.0	7.9	67.7	14.8	63.9	14.0	60.0	13.1	58.1	12.7	56.1	12.3	52.3	11.5
	11.0	9.8	67.7	14.1	63.9	13.3	60.0	12.5	58.1	12.1	56.1	11.7	52.3	11.0
	13.0	11.8	67.7	13.4	63.9	12.6	60.0	11.9	58.1	11.5	56.1	11.2	52.3	10.5
	15.0	13.7	67.7	12.8	63.9	12.1	60.0	11.4	58.1	11.0	56.1	10.7	52.3	10.0

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: ▒ is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range ▒ shown by ▒.
Note2: The above table shows the average value of conditions which may occur.

15

RXYQ40PAHY1, PAHYL, PHTL [50/60Hz]

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB											
			16.0		18.0		20.0		21.0		22.0		24.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130 (1313)	-19.8	-20.0	78.1	19.8	77.8	21.4	77.5	22.9	77.4	23.7	77.2	24.5	77.0	26.0
	-18.8	-19.0	79.5	20.3	79.2	21.9	78.9	23.4	78.8	24.1	78.6	24.9	78.4	26.4
	-16.7	-17.0	82.6	21.4	82.3	22.9	82.0	24.3	81.9	25.1	81.7	25.8	81.4	27.3
	-13.7	-15.0	86.0	22.5	85.7	23.9	85.4	25.3	85.3	26.0	85.1	26.7	84.8	28.1
	-11.8	-13.0	89.7	23.6	89.4	24.9	89.2	26.3	89.0	26.9	88.9	27.6	88.6	28.9
	-9.8	-11.0	93.8	24.7	93.6	26.0	93.3	27.2	93.1	27.9	93.0	28.5	92.7	29.8
	-9.5	-10.0	96.0	25.2	95.7	26.5	95.4	27.7	95.3	28.3	95.2	29.0	94.9	30.2
	-8.5	-9.1	98.1	25.7	97.8	26.9	97.5	28.1	97.3	28.8	97.2	29.4	96.9	30.6
	-7.0	-7.6	101.6	26.5	101.3	27.7	101.0	28.9	100.9	29.4	100.7	30.0	100.5	31.2
	-5.0	-5.6	107	27.5	106	28.6	106	29.8	106	30.3	106	30.9	105	32.0
	-3.0	-3.7	112	28.5	111	29.5	111	30.6	111	31.1	111	31.7	111	32.7
	0.0	-0.7	120	29.9	120	30.9	120	31.9	120	32.4	120	32.8	119	33.8
	3.0	2.2	130	31.2	129	32.1	129	33.0	129	33.5	129	33.9	128	34.8
	5.0	4.1	136	32.0	136	32.8	135	33.7	135	34.1	135	34.6	135	35.4
	7.0	6.0	143	32.7	142	33.5	142	34.4	142	34.8	142	35.2	142	36.0
	9.0	7.9	150	33.4	149	34.2	149	35.0	149	35.4	149	35.8	142	33.9
	11.0	9.8	157	34.1	157	34.8	156	35.6	156	36.0	152	34.9	142	32.0
	13.0	11.8	165	34.8	165	35.5	163	35.5	157	34.1	152	32.8	142	30.1
	15.0	13.7	173	35.4	173	36.0	163	33.5	157	32.2	152	30.9	142	28.4
120 (1212)	-19.8	-20.0	77.7	21.9	77.4	23.4	77.2	24.8	77.1	25.5	76.9	26.2	76.7	27.7
	-18.8	-19.0	79.1	22.4	78.9	23.8	78.6	25.2	78.5	25.9	78.3	26.6	78.1	28.0
	-16.7	-17.0	82.2	23.4	81.9	24.7	81.7	26.1	81.5	26.8	81.4	27.4	81.1	28.8
	-13.7	-15.0	85.6	24.4	85.3	25.7	85.1	27.0	84.9	27.6	84.8	28.3	84.5	29.6
	-11.8	-13.0	89.3	25.4	89.1	26.6	88.8	27.9	88.7	28.5	88.6	29.1	88.3	30.3
	-9.8	-11.0	93.5	26.4	93.2	27.6	92.9	28.8	92.8	29.4	92.7	29.9	92.4	31.1
	-9.5	-10.0	95.6	26.9	95.4	28.1	95.1	29.2	95.0	29.8	94.8	30.4	94.6	31.5
	-8.5	-9.1	97.7	27.4	97.4	28.5	97.1	29.6	97.0	30.2	96.9	30.7	96.6	31.9
	-7.0	-7.6	101.2	28.1	101.0	29.2	100.7	30.3	100.6	30.8	100.4	31.3	100.2	32.4
	-5.0	-5.6	106	29.0	106	30.1	106	31.1	106	31.6	105	32.1	105	33.2
	-3.0	-3.7	111	29.9	111	30.9	111	31.9	111	32.4	111	32.9	110	33.8
	0.0	-0.7	120	31.2	120	32.1	120	33.0	119	33.5	119	34.0	119	34.9
	3.0	2.2	129	32.4	129	33.3	129	34.1	129	34.5	128	34.9	128	35.8
	5.0	4.1	136	33.1	135	33.9	135	34.7	135	35.1	135	35.5	131	34.7
	7.0	6.0	142	33.8	142	34.6	142	35.4	142	35.7	140	35.7	131	32.7
	9.0	7.9	149	34.5	149	35.2	149	35.9	145	35.0	140	33.6	131	30.8
	11.0	9.8	157	35.1	156	35.8	150	34.3	145	33.0	140	31.6	131	29.1
	13.0	11.8	165	35.7	160	34.8	150	32.2	145	31.0	140	29.8	131	27.4
	15.0	13.7	169	35.2	160	32.8	150	30.4	145	29.3	140	28.1	131	25.9
110 (1111)	-19.8	-20.0	77.3	24.0	77.1	25.3	76.8	26.6	76.7	27.3	76.6	28.0	76.4	29.3
	-18.8	-19.0	78.7	24.5	78.5	25.7	78.2	27.0	78.1	27.7	78.0	28.3	77.8	29.6
	-16.7	-17.0	81.8	25.4	81.6	26.6	81.3	27.8	81.2	28.5	81.1	29.1	80.8	30.3
	-13.7	-15.0	85.2	26.3	85.0	27.5	84.7	28.7	84.6	29.2	84.5	29.8	84.2	31.0
	-11.8	-13.0	89.0	27.2	88.7	28.3	88.5	29.5	88.4	30.0	88.2	30.6	88.0	31.7
	-9.8	-11.0	93.1	28.1	92.8	29.2	92.6	30.3	92.5	30.8	92.3	31.4	92.1	32.5
	-9.5	-10.0	95.2	28.6	95.0	29.7	94.8	30.7	94.6	31.2	94.5	31.8	94.3	32.8
	-8.5	-9.1	97.3	29.0	97.0	30.0	96.8	31.1	96.7	31.6	96.6	32.1	96.3	33.1
	-7.0	-7.6	100.8	29.7	100.6	30.7	100.3	31.7	100.2	32.2	100.1	32.7	99.9	33.7
	-5.0	-5.6	106	30.5	106	31.5	105	32.4	105	32.9	105	33.4	105	34.3
	-3.0	-3.7	111	31.4	111	32.3	110	33.2	110	33.6	110	34.1	110	35.0
	0.0	-0.7	120	32.6	119	33.4	119	34.2	119	34.6	119	35.1	119	35.9
	3.0	2.2	129	33.6	129	34.4	128	35.2	128	35.6	128	36.0	120	33.2
	5.0	4.1	135	34.3	135	35.0	135	35.8	133	35.5	129	34.1	120	31.3
	7.0	6.0	142	34.9	142	35.6	138	34.8	133	33.4	129	32.1	120	29.5
	9.0	7.9	149	35.6	146	35.3	138	32.8	133	31.5	129	30.2	120	27.8
	11.0	9.8	155	35.7	146	33.3	138	30.9	133	29.7	129	28.5	120	26.3
	13.0	11.8	155	33.6	146	31.3	138	29.1	133	28.0	129	26.9	120	24.8
	15.0	13.7	155	31.7	146	29.5	138	27.5	133	26.4	129	25.4	120	23.5

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB											
			16.0		18.0		20.0		21.0		22.0		24.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100 (1010)	-19.8	-20.0	76.9	26.1	76.7	27.3	76.5	28.5	76.4	29.1	76.3	29.7	76.1	30.9
	-18.8	-19.0	78.3	26.5	78.1	27.7	77.9	28.9	77.8	29.4	77.7	30.0	77.5	31.2
	-16.7	-17.0	81.4	27.3	81.2	28.5	81.0	29.6	80.9	30.1	80.7	30.7	80.5	31.8
	-13.7	-15.0	84.8	28.2	84.6	29.3	84.4	30.3	84.3	30.9	84.2	31.4	83.9	32.5
	-11.8	-13.0	88.6	29.0	88.4	30.1	88.1	31.1	88.0	31.6	87.9	32.1	87.7	33.1
	-9.8	-11.0	92.7	29.9	92.5	30.8	92.2	31.8	92.1	32.3	92.0	32.8	91.8	33.8
	-9.5	-10.0	94.9	30.3	94.6	31.2	94.4	32.2	94.3	32.7	94.2	33.2	94.0	34.1
	-8.5	-9.1	96.9	30.7	96.7	31.6	96.5	32.5	96.3	33.0	96.2	33.5	96.0	34.4
	-7.0	-7.6	100.4	31.3	100.2	32.2	100.0	33.1	99.9	33.5	99.8	34.0	99.6	34.9
	-5.0	-5.6	105	32.1	105	32.9	105	33.8	105	34.2	105	34.6	105	35.5
	-3.0	-3.7	111	32.8	110	33.6	110	34.4	110	34.8	110	35.2	109	35.7
	0.0	-0.7	119	33.9	119	34.6	119	35.4	119	35.8	117	35.4	109	32.4
	3.0	2.2	128	34.9	128	35.6	125	35.0	121	33.6	117	32.3	109	29.6
	5.0	4.1	135	35.5	133	35.5	125	32.9	121	31.6	117	30.4	109	27.9
	7.0	6.0	141	35.9	133	33.4	125	31.0	121	29.8	117	28.7	109	26.4
	9.0	7.9	141	33.8	133	31.5	125	29.2	121	28.1	117	27.0	109	24.9
	11.0	9.8	141	31.8	133	29.7	125	27.6	121	26.6	117	25.6	109	23.6
	13.0	11.8	141	29.9	133	27.9	125	26.0	121	25.0	117	24.1	109	22.3
	15.0	13.7	141	28.3	133	26.4	125	24.6	121	23.7	117	22.8	109	21.1
90 (909)	-19.8	-20.0	76.6	28.2	76.4	29.3	76.2	30.4	76.1	30.9	76.0	31.4	75.8	32.5
	-18.8	-19.0	78.0	28.6	77.8	29.6	77.6	30.7	77.5	31.2	77.4	31.7	77.2	32.8
	-16.7	-17.0	81.0	29.3	80.8	30.3	80.6	31.3	80.5	31.8	80.4	32.3	80.2	33.4
	-13.7	-15.0	84.4	30.1	84.2	31.0	84.0	32.0	83.9	32.5	83.8	33.0	83.6	33.9
	-11.8	-13.0	88.2	30.8	88.0	31.8	87.8	32.7	87.7	33.2	87.6	33.6	87.4	34.5
	-9.8	-11.0	92.3	31.6	92.1	32.5	91.9	33.4	91.8	33.8	91.7	34.2	91.5	35.1
	-9.5	-10.0	94.5	32.0	94.3	32.8	94.1	33.7	94.0	34.1	93.9	34.6	93.7	35.4
	-8.5	-9.1	96.5	32.3	96.3	33.1	96.1	34.0	96.0	34.4	95.9	34.8	95.7	35.7
	-7.0	-7.6	100.1	32.9	99.9	33.7	99.7	34.5	99.6	34.9	99.5	35.3	98.0	35.4
	-5.0	-5.6	105	33.6	105	34.3	105	35.1	105	35.5	104	35.9	98.0	33.3
	-3.0	-3.7	110	34.2	110	35.0	110	35.7	109	35.6	105	34.2	98.0	31.4
	0.0	-0.7	119	35.2	119	35.9	113	33.7	109	32.4	105	31.1	98.0	28.6
	3.0	2.2	127	35.6	120	33.2	113	30.8	109	29.6	105	28.5	98.0	26.2
	5.0	4.1	127	33.5	120	31.2	113	29.0	109	27.9	105	26.8	98.0	24.7
	7.0	6.0	127	31.6	120	29.5	113	27.4	109	26.4	105	25.4	98.0	23.4
	9.0	7.9	127	29.8	120	27.8	113	25.9	109	24.9	105	24.0	98.0	22.1
	11.0	9.8	127	28.1	120	26.2	113	24.4	109	23.6	105	22.7	98.0	21.0
	13.0	11.8	127	26.5	120	24.7	113	23.1	109	22.2	105	21.4	98.0	19.8
	15.0	13.7	127	25.0	120	23.4	113	21.9	109	21.1	105	20.3	98.0	18.8
80 (808)	-19.8	-20.0	76.2	30.3	76.0	31.3	75.8	32.2	75.7	32.7	75.6	33.2	75.5	34.1
	-18.8	-19.0	77.6	30.6	77.4	31.6	77.2	32.5	77.1	33.0	77.0	33.4	76.9	34.4
	-16.7	-17.0	80.6	31.3	80.5	32.2	80.3	33.1	80.2	33.5	80.1	34.0	79.9	34.9
	-13.7	-15.0	84.0	32.0	83.9	32.8	83.7	33.7	83.6	34.1	83.5	34.5	83.3	35.4
	-11.8	-13.0	87.8	32.6	87.6	33.5	87.5	34.3	87.4	34.7	87.3	35.1	87.1	35.9
	-9.8	-11.0	91.9	33.3	91.7	34.1	91.6	34.9	91.5	35.3	91.4	35.7	87.1	34.0
	-9.5	-10.0	94.1	33.7	93.9	34.4	93.7	35.2	93.6	35.6	93.6	36.0	87.1	33.0
	-8.5	-9.1	96.1	34.0	95.9	34.7	95.8	35.5	95.7	35.8	93.6	35.0	87.1	32.1
	-7.0	-7.6	99.7	34.4	99.5	35.2	99.3	35.9	96.8	34.9	93.6	33.4	87.1	30.7
	-5.0	-5.6	105	35.1	105	35.8	100	34.1	96.8	32.8	93.6	31.5	87.1	28.9
	-3.0	-3.7	110	35.7	106	34.7	100	32.1	96.8	30.9	93.6	29.7	87.1	27.3
	0.0	-0.7	113	33.9	106	31.5	100	29.3	96.8	28.2	93.6	27.1	87.1	25.0
	3.0	2.2	113	30.9	106	28.8	100	26.8	96.8	25.8	93.6	24.8	87.1	22.9
	5.0	4.1	113	29.1	106	27.2	100	25.3	96.8	24.4	93.6	23.5	87.1	21.7
	7.0	6.0	113	27.5	106	25.7	100	23.9	96.8	23.1	93.6	22.2	87.1	20.5
	9.0	7.9	113	25.9	106	24.3	100	22.6	96.8	21.8	93.6	21.0	87.1	19.5
	11.0	9.8	113	24.5	106	23.0	100	21.4	96.8	20.7	93.6	19.9	87.1	18.5
	13.0	11.8	113	23.1	106	21.7	100	20.3	96.8	19.6	93.6	18.9	87.1	17.5
	15.0	13.7	113	21.9	106	20.6	100	19.2	96.8	18.6	93.6	17.9	87.1	16.6

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: ▒ is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range shown by ▒.
Note2: The above table shows the average value of conditions which may occur.

[50/60Hz]

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB 16.0			18.0			20.0			21.0			22.0			24.0		
			TC	PI		TC	PI		TC	PI		TC	PI		TC	PI		TC	PI	
	°CDB	°CWB	kW	kW		kW	kW		kW	kW		kW	kW		kW	kW		kW	kW	
70 (707)	-19.8	-20.0	75.8	32.4		75.6	33.2		75.5	34.1		75.4	34.5		75.3	34.9		75.2	35.7	
	-18.8	-19.0	77.2	32.7		77.0	33.5		76.9	34.3		76.8	34.7		76.7	35.1		76.3	35.7	
	-16.7	-17.0	80.2	33.3		80.1	34.1		79.9	34.8		79.9	35.2		79.8	35.6		76.3	34.0	
	-13.7	-15.0	83.7	33.9		83.5	34.6		83.4	35.4		83.3	35.7		81.9	35.2		76.3	32.3	
	-11.8	-13.0	87.4	34.5		87.3	35.2		87.1	35.9		84.7	34.7		81.9	33.3		76.3	30.6	
	-9.8	-11.0	91.5	35.0		91.4	35.7		87.5	34.1		84.7	32.8		81.9	31.5		76.3	28.9	
	-9.5	-10.0	93.7	35.3		93.1	35.8		87.5	33.1		84.7	31.9		81.9	30.6		76.3	28.1	
	-8.5	-9.1	95.7	35.6		93.1	34.8		87.5	32.3		84.7	31.0		81.9	29.8		76.3	27.4	
	-7.0	-7.6	98.7	35.7		93.1	33.3		87.5	30.9		84.7	29.7		81.9	28.5		76.3	26.3	
	-5.0	-5.6	99	33.6		93.1	31.3		87.5	29.1		84.7	28.0		81.9	26.9		76.3	24.8	
	-3.0	-3.7	99	31.7		93.1	29.5		87.5	27.4		84.7	26.4		81.9	25.4		76.3	23.4	
	0.0	-0.7	99	28.9		93.1	26.9		87.5	25.1		84.7	24.2		81.9	23.3		76.3	21.5	
	3.0	2.2	99	26.4		93.1	24.7		87.5	23.0		84.7	22.2		81.9	21.4		76.3	19.8	
	5.0	4.1	99	24.9		93.1	23.3		87.5	21.8		84.7	21.0		81.9	20.3		76.3	18.8	
	7.0	6.0	99	23.6		93.1	22.1		87.5	20.6		84.7	19.9		81.9	19.2		76.3	17.8	
	9.0	7.9	99	22.3		93.1	20.9		87.5	19.5		84.7	18.9		81.9	18.2		76.3	16.9	
	11.0	9.8	99	21.1		93.1	19.8		87.5	18.5		84.7	17.9		81.9	17.3		76.3	16.1	
	13.0	11.8	99	20.0		93.1	18.8		87.5	17.6		84.7	17.0		81.9	16.4		76.3	15.3	
	15.0	13.7	99	19.0		93.1	17.8		87.5	16.7		84.7	16.2		81.9	15.6		76.3	14.5	
60 (606)	-19.8	-20.0	75.4	34.5		75.3	35.2		75.0	35.8		72.6	34.4		70.2	33.0		65.4	30.3	
	-18.8	-19.0	76.8	34.7		76.7	35.4		75.0	35.0		72.6	33.6		70.2	32.3		65.4	29.7	
	-16.7	-17.0	79.9	35.2		79.7	35.9		75.0	33.3		72.6	32.1		70.2	30.8		65.4	28.3	
	-13.7	-15.0	83.3	35.7		79.8	34.1		75.0	31.7		72.6	30.4		70.2	29.3		65.4	26.9	
	-11.8	-13.0	84.6	34.7		79.8	32.3		75.0	30.0		72.6	28.9		70.2	27.7		65.4	25.5	
	-9.8	-11.0	84.6	32.8		79.8	30.5		75.0	28.4		72.6	27.3		70.2	26.3		65.4	24.2	
	-9.5	-10.0	84.6	31.8		79.8	29.7		75.0	27.6		72.6	26.6		70.2	25.5		65.4	23.6	
	-8.5	-9.1	84.6	31.0		79.8	28.9		75.0	26.9		72.6	25.9		70.2	24.9		65.4	23.0	
	-7.0	-7.6	84.6	29.7		79.8	27.7		75.0	25.8		72.6	24.8		70.2	23.9		65.4	22.1	
	-5.0	-5.6	84.6	27.9		79.8	26.1		75.0	24.3		72.6	23.4		70.2	22.6		65.4	20.9	
	-3.0	-3.7	84.6	26.4		79.8	24.7		75.0	23.0		72.6	22.2		70.2	21.4		65.4	19.8	
	0.0	-0.7	84.6	24.1		79.8	22.6		75.0	21.1		72.6	20.4		70.2	19.6		65.4	18.2	
	3.0	2.2	84.6	22.2		79.8	20.8		75.0	19.4		72.6	18.8		70.2	18.1		65.4	16.8	
	5.0	4.1	84.6	21.0		79.8	19.7		75.0	18.4		72.6	17.8		70.2	17.2		65.4	16.0	
	7.0	6.0	84.6	19.9		79.8	18.7		75.0	17.5		72.6	16.9		70.2	16.3		65.4	15.2	
	9.0	7.9	84.6	18.9		79.8	17.7		75.0	16.6		72.6	16.1		70.2	15.5		65.4	14.5	
	11.0	9.8	84.6	17.9		79.8	16.8		75.0	15.8		72.6	15.3		70.2	14.8		65.4	13.8	
	13.0	11.8	84.6	17.0		79.8	16.0		75.0	15.0		72.6	14.5		70.2	14.0		65.4	13.1	
	15.0	13.7	84.6	16.1		79.8	15.2		75.0	14.3		72.6	13.8		70.2	13.4		65.4	12.5	
50 (505)	-19.8	-20.0	70.5	33.2		66.5	31.0		62.5	28.8		60.5	27.7		58.5	26.6		54.5	24.5	
	-18.8	-19.0	70.5	32.5		66.5	30.3		62.5	28.1		60.5	27.1		58.5	26.1		54.5	24.0	
	-16.7	-17.0	70.5	31.0		66.5	28.9		62.5	26.9		60.5	25.9		58.5	24.9		54.5	23.0	
	-13.7	-15.0	70.5	29.4		66.5	27.5		62.5	25.6		60.5	24.6		58.5	23.7		54.5	21.9	
	-11.8	-13.0	70.5	27.9		66.5	26.1		62.5	24.3		60.5	23.4		58.5	22.5		54.5	20.8	
	-9.8	-11.0	70.5	26.4		66.5	24.7		62.5	23.0		60.5	22.2		58.5	21.4		54.5	19.8	
	-9.5	-10.0	70.5	25.7		66.5	24.0		62.5	22.4		60.5	21.6		58.5	20.8		54.5	19.3	
	-8.5	-9.1	70.5	25.1		66.5	23.4		62.5	21.9		60.5	21.1		58.5	20.3		54.5	18.8	
	-7.0	-7.6	70.5	24.0		66.5	22.5		62.5	21.0		60.5	20.3		58.5	19.5		54.5	18.1	
	-5.0	-5.6	70.5	22.7		66.5	21.3		62.5	19.9		60.5	19.2		58.5	18.5		54.5	17.2	
	-3.0	-3.7	70.5	21.5		66.5	20.2		62.5	18.9		60.5	18.2		58.5	17.6		54.5	16.3	
	0.0	-0.7	70.5	19.7		66.5	18.5		62.5	17.4		60.5	16.8		58.5	16.2		54.5	15.1	
	3.0	2.2	70.5	18.2		66.5	17.1		62.5	16.1		60.5	15.6		58.5	15.0		54.5	14.0	
	5.0	4.1	70.5	17.3		66.5	16.3		62.5	15.3		60.5	14.8		58.5	14.3		54.5	13.3	
	7.0	6.0	70.5	16.4		66.5	15.5		62.5	14.5		60.5	14.1		58.5	13.6		54.5	12.7	
	9.0	7.9	70.5	15.6		66.5	14.7		62.5	13.8		60.5	13.4		58.5	13.0		54.5	12.1	
	11.0	9.8	70.5	14.9		66.5	14.0		62.5	13.2		60.5	12.8		58.5	12.4		54.5	11.6	
	13.0	11.8	70.5	14.1		66.5	13.3		62.5	12.6		60.5	12.2		58.5	11.8		54.5	11.0	
	15.0	13.7	70.5	13.5		66.5	12.7		62.5	12.0		60.5	11.6		58.5	11.3		54.5	10.6	

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: ■ is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range ■ shown by ■.
Note2: The above table shows the average value of conditions which may occur.

15

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB 16.0		18.0		20.0		21.0		22.0		24.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130 (1365)	-19.8	-20.0	78.9	18.8	78.6	20.5	78.3	22.2	78.1	23.0	78.0	23.8	77.7	25.52
	-18.8	-19.0	80.3	19.4	80.0	21.0	79.7	22.7	79.5	23.5	79.4	24.3	79.1	25.95
	-16.7	-17.0	83.4	20.5	83.1	22.1	82.8	23.7	82.6	24.5	82.5	25.3	82.2	26.84
	-13.7	-15.0	86.8	21.7	86.5	23.2	86.2	24.7	86.1	25.5	85.9	26.2	85.6	27.7
	-11.8	-13.0	90.6	22.9	90.3	24.3	90.0	25.8	89.8	26.5	89.7	27.2	89.4	28.7
	-9.8	-11.0	94.7	24.1	94.4	25.4	94.1	26.8	94.0	27.5	93.8	28.2	93.5	29.6
	-9.5	-10.0	96.9	24.6	96.6	26.0	96.3	27.3	96.2	28.0	96.0	28.7	95.7	30.0
	-8.5	-9.1	99.0	25.2	98.7	26.5	98.4	27.8	98.2	28.5	98.1	29.1	97.8	30.4
	-7.0	-7.6	103	26.0	102	27.3	102	28.6	102	29.2	102	29.8	101	31.1
	-5.0	-5.6	108	27.1	107	28.3	107	29.5	107	30.1	107	30.7	106	31.9
	-3.0	-3.7	113	28.1	112	29.3	112	30.4	112	31.0	112	31.6	112	32.7
	0.0	-0.7	122	29.7	121	30.7	121	31.8	121	32.3	121	32.9	120	33.9
	3.0	2.2	131	31.1	130	32.0	130	33.0	130	33.5	130	34.0	130	35.0
	5.0	4.1	137	31.9	137	32.8	137	33.8	136	34.2	136	34.7	136	35.6
	7.0	6.0	144	32.7	144	33.6	143	34.5	143	34.9	143	35.4	143	36.3
	9.0	7.9	151	33.5	151	34.3	150	35.2	150	35.6	150	36.0	149	36.6
	11.0	9.8	158	34.2	158	35.0	158	35.8	158	36.2	157	36.6	149	34.5
	13.0	11.8	166	34.9	166	35.7	166	36.5	165	36.8	160	35.3	149	32.4
	15.0	13.7	174	35.6	174	36.3	171	36.1	165	34.7	160	33.3	149	30.6
120 (1260)	-19.8	-20.0	78.5	21.1	78.2	22.6	77.9	24.2	77.8	24.9	77.6	25.7	77.4	27.3
	-18.8	-19.0	79.9	21.6	79.6	23.1	79.3	24.6	79.2	25.4	79.0	26.1	78.8	27.7
	-16.7	-17.0	83.0	22.7	82.7	24.1	82.4	25.6	82.3	26.3	82.1	27.0	81.9	28.5
	-13.7	-15.0	86.4	23.7	86.1	25.1	85.8	26.5	85.7	27.2	85.6	27.9	85.3	29.3
	-11.8	-13.0	90.2	24.8	89.9	26.2	89.6	27.5	89.5	28.2	89.4	28.8	89.1	30.2
	-9.8	-11.0	94.3	25.9	94.0	27.2	93.8	28.5	93.6	29.1	93.5	29.7	93.2	31.0
	-9.5	-10.0	96.5	26.5	96.2	27.7	96.0	28.9	95.8	29.6	95.7	30.2	95.4	31.4
	-8.5	-9.1	98.6	26.9	98.3	28.2	98.0	29.4	97.9	30.0	97.7	30.6	97.5	31.8
	-7.0	-7.6	102	27.7	102	28.9	102	30.1	101	30.7	101	31.2	101	32.4
	-5.0	-5.6	107	28.8	107	29.9	107	31.0	107	31.5	106	32.1	106	33.2
	-3.0	-3.7	112	29.7	112	30.8	112	31.8	112	32.3	112	32.9	111	33.9
	0.0	-0.7	121	31.1	121	32.1	121	33.1	120	33.6	120	34.0	120	35.0
	3.0	2.2	130	32.4	130	33.3	130	34.2	130	34.7	129	35.1	129	36.0
	5.0	4.1	137	33.2	136	34.0	136	34.9	136	35.3	136	35.8	136	36.6
	7.0	6.0	143	33.9	143	34.7	143	35.6	143	36.0	143	36.4	138	35.2
	9.0	7.9	151	34.6	150	35.4	150	36.2	150	36.6	148	36.2	138	33.2
	11.0	9.8	158	35.3	158	36.0	157	36.8	153	35.5	148	34.1	138	31.3
	13.0	11.8	166	36.0	166	36.7	158	34.7	153	33.4	148	32.1	138	29.5
	15.0	13.7	174	36.6	168	35.3	158	32.8	153	31.5	148	30.3	138	27.9
110 (1155)	-19.8	-20.0	78.1	23.3	77.8	24.8	77.6	26.2	77.4	26.9	77.3	27.6	77.0	29.0
	-18.8	-19.0	79.5	23.8	79.2	25.2	79.0	26.6	78.8	27.3	78.7	28.0	78.5	29.4
	-16.7	-17.0	82.6	24.8	82.3	26.1	82.1	27.5	81.9	28.1	81.8	28.8	81.5	30.1
	-13.7	-15.0	86.0	25.8	85.7	27.1	85.5	28.3	85.4	29.0	85.2	29.6	85.0	30.9
	-11.8	-13.0	89.8	26.8	89.5	28.0	89.3	29.2	89.1	29.8	89.0	30.4	88.8	31.7
	-9.8	-11.0	93.9	27.8	93.7	28.9	93.4	30.1	93.3	30.7	93.2	31.3	92.9	32.4
	-9.5	-10.0	96.1	28.3	95.9	29.4	95.6	30.6	95.5	31.1	95.3	31.7	95.1	32.8
	-8.5	-9.1	98.2	28.7	97.9	29.8	97.7	30.9	97.5	31.5	97.4	32.1	97.1	33.2
	-7.0	-7.6	102	29.4	101	30.5	101	31.6	101	32.1	101	32.7	101	33.7
	-5.0	-5.6	107	30.4	107	31.4	106	32.4	106	32.9	106	33.4	106	34.5
	-3.0	-3.7	112	31.2	112	32.2	111	33.2	111	33.7	111	34.2	111	35.1
	0.0	-0.7	121	32.5	120	33.4	120	34.3	120	34.8	120	35.2	120	36.1
	3.0	2.2	130	33.7	130	34.5	129	35.4	129	35.8	129	36.2	126	35.8
	5.0	4.1	136	34.4	136	35.2	136	36.0	136	36.4	135	36.7	126	33.7
	7.0	6.0	143	35.1	143	35.9	143	36.6	140	36.0	135	34.6	126	31.8
	9.0	7.9	150	35.8	150	36.5	145	35.3	140	33.9	135	32.6	126	30.0
	11.0	9.8	157	36.4	154	35.9	145	33.3	140	32.0	135	30.8	126	28.3
	13.0	11.8	163	36.2	154	33.7	145	31.3	140	30.1	135	29.0	126	26.7
	15.0	13.7	163	34.1	154	31.8	145	29.6	140	28.5	135	27.4	126	25.3

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB 16.0		18.0		20.0		21.0		22.0		24.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100 (1050)	-19.8	-20.0	77.7	25.6	77.4	26.9	77.2	28.2	77.1	28.8	77.0	29.5	76.7	30.8
	-18.8	-19.0	79.1	26.0	78.8	27.3	78.6	28.6	78.5	29.2	78.4	29.8	78.1	31.1
	-16.7	-17.0	82.2	26.9	81.9	28.1	81.7	29.3	81.6	30.0	81.5	30.6	81.2	31.8
	-13.7	-15.0	85.6	27.8	85.4	29.0	85.1	30.1	85.0	30.7	84.9	31.3	84.7	32.5
	-11.8	-13.0	89.4	28.7	89.1	29.8	88.9	31.0	88.8	31.5	88.7	32.1	88.5	33.2
	-9.8	-11.0	93.5	29.6	93.3	30.7	93.0	31.8	92.9	32.3	92.8	32.8	92.6	33.9
	-9.5	-10.0	95.7	30.1	95.5	31.1	95.2	32.2	95.1	32.7	95.0	33.2	94.8	34.2
	-8.5	-9.1	97.8	30.5	97.5	31.5	97.3	32.5	97.2	33.0	97.1	33.5	96.8	34.5
	-7.0	-7.6	101	31.2	101	32.1	101	33.1	101	33.6	100.6	34.1	100.4	35.1
	-5.0	-5.6	106	32.0	106	32.9	106	33.9	106	34.3	106	34.8	105	35.7
	-3.0	-3.7	112	32.8	111	33.7	111	34.6	111	35.0	111	35.4	111	36.3
	0.0	-0.7	120	34.0	120	34.8	120	35.6	120	36.0	120	36.4	115	34.9
	3.0	2.2	129	35.0	129	35.8	129	36.6	127	36.2	123	34.7	115	31.9
	5.0	4.1	136	35.7	136	36.4	132	35.5	127	34.1	123	32.7	115	30.1
	7.0	6.0	143	36.3	140	36.0	132	33.4	127	32.1	123	30.9	115	28.4
	9.0	7.9	148	36.4	140	33.9	132	31.5	127	30.3	123	29.1	115	26.8
	11.0	9.8	148	34.3	140	32.0	132	29.7	127	28.6	123	27.5	115	25.4
	13.0	11.8	148	32.3	140	30.1	132	28.0	127	27.0	123	26.0	115	24.0
	15.0	13.7	148	30.5	140	28.5	132	26.5	127	25.5	123	24.6	115	22.7
90 (945)	-19.8	-20.0	77.2	27.9	77.0	29.0	76.8	30.2	76.7	30.8	76.6	31.3	76.4	32.5
	-18.8	-19.0	78.7	28.3	78.5	29.4	78.2	30.5	78.1	31.1	78.0	31.7	77.8	32.8
	-16.7	-17.0	81.8	29.0	81.5	30.1	81.3	31.2	81.2	31.8	81.1	32.3	80.9	33.4
	-13.7	-15.0	85.2	29.9	85.0	30.9	84.8	32.0	84.7	32.5	84.6	33.0	84.4	34.0
	-11.8	-13.0	89.0	30.7	88.8	31.7	88.6	32.7	88.4	33.2	88.3	33.7	88.1	34.7
	-9.8	-11.0	93.1	31.5	92.9	32.5	92.7	33.4	92.6	33.9	92.5	34.4	92.3	35.3
	-9.5	-10.0	95.3	31.9	95.1	32.8	94.9	33.8	94.8	34.2	94.7	34.7	94.5	35.6
	-8.5	-9.1	97.3	32.3	97.1	33.2	96.9	34.1	96.8	34.5	96.7	35.0	96.5	35.9
	-7.0	-7.6	101	32.9	101	33.7	100.5	34.6	100.4	35.1	100.3	35.5	100.1	36.4
	-5.0	-5.6	106	33.6	106	34.5	106	35.3	105	35.7	105	36.1	103	35.9
	-3.0	-3.7	111	34.3	111	35.1	111	35.9	111	36.3	111	36.7	103	33.8
	0.0	-0.7	120	35.4	120	36.1	118	36.3	115	34.9	111	33.5	103	30.8
	3.0	2.2	129	36.4	126	35.7	118	33.2	115	31.9	111	30.7	103	28.2
	5.0	4.1	134	36.1	126	33.7	118	31.3	115	30.1	111	28.9	103	26.7
	7.0	6.0	134	34.0	126	31.7	118	29.5	115	28.4	111	27.3	103	25.2
	9.0	7.9	134	32.1	126	29.9	118	27.9	115	26.8	111	25.8	103	23.8
	11.0	9.8	134	30.3	126	28.3	118	26.3	115	25.4	111	24.4	103	22.6
	13.0	11.8	134	28.5	126	26.7	118	24.9	115	24.0	111	23.1	103	21.4
	15.0	13.7	134	27.0	126	25.2	118	23.6	115	22.7	111	21.9	103	20.3
80 (840)	-19.8	-20.0	76.8	30.1	76.7	31.2	76.5	32.2	76.4	32.7	76.3	33.2	76.1	34.2
	-18.8	-19.0	78.3	30.5	78.1	31.5	77.9	32.5	77.8	33.0	77.7	33.5	77.5	34.5
	-16.7	-17.0	81.3	31.2	81.2	32.1	81.0	33.1	80.9	33.6	80.8	34.1	80.6	35.1
	-13.7	-15.0	84.8	31.9	84.6	32.8	84.4	33.8	84.3	34.2	84.2	34.7	84.0	35.6
	-11.8	-13.0	88.6	32.6	88.4	33.5	88.2	34.4	88.1	34.9	88.0	35.3	87.8	36.2
	-9.8	-11.0	92.7	33.4	92.5	34.2	92.3	35.1	92.2	35.5	92.1	35.9	91.7	36.6
	-9.5	-10.0	94.9	33.7	94.7	34.6	94.5	35.4	94.4	35.8	94.3	36.2	91.7	35.5
	-8.5	-9.1	96.9	34.0	96.8	34.9	96.6	35.7	96.5	36.1	96.4	36.5	91.7	34.6
	-7.0	-7.6	100.5	34.6	100.3	35.4	100.1	36.1	100.1	36.5	98.4	36.0	91.7	33.1
	-5.0	-5.6	106	35.3	105	36.0	105	36.7	102	35.3	98.4	33.9	91.7	31.2
	-3.0	-3.7	111	35.9	111	36.6	105	34.6	102	33.3	98.4	32.0	91.7	29.4
	0.0	-0.7	119	36.5	112	34.0	105	31.6	102	30.4	98.4	29.2	91.7	26.9
	3.0	2.2	119	33.3	112	31.1	105	28.9	102	27.8	98.4	26.8	91.7	24.7
	5.0	4.1	119	31.4	112	29.3	105	27.3	102	26.3	98.4	25.3	91.7	23.4
	7.0	6.0	119	29.6	112	27.7	105	25.8	102	24.8	98.4	23.9	91.7	22.1
	9.0	7.9	119	28.0	112	26.1	105	24.4	102	23.5	98.4	22.7	91.7	21.0
	11.0	9.8	119	26.4	112	24.7	105	23.1	102	22.3	98.4	21.5	91.7	19.9
	13.0	11.8	119	24.9	112	23.4	105	21.8	102	21.1	98.4	20.3	91.7	18.9
	15.0	13.7	119	23.6	112	22.2	105	20.7	102	20.0	98.4	19.3	91.7	17.9

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: ▒ is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range shown by ▒.
Note2: The above table shows the average value of conditions which may occur.

[50/60Hz]

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB															
			16.0		18.0		20.0		21.0		22.0		24.0					
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI				
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW				
70 (735)	-19.8	-20.0	76.4	32.4	76.3	33.3	76.1	34.2	76.0	34.6	76.0	35.1	75.8	36.0				
	-18.8	-19.0	77.8	32.7	77.7	33.6	77.5	34.5	77.4	34.9	77.4	35.3	77.2	36.2				
	-16.7	-17.0	80.9	33.3	80.8	34.2	80.6	35.0	80.5	35.4	80.5	35.9	80.2	36.7				
	-13.7	-15.0	84.4	33.9	84.2	34.8	84.0	35.6	84.0	36.0	83.9	36.4	80.2	34.8				
	-11.8	-13.0	88.2	34.6	88.0	35.4	87.8	36.1	87.8	36.5	86.1	35.9	80.2	33.0				
	-9.8	-11.0	92.3	35.2	92.1	36.0	92.0	36.7	89.1	35.3	86.1	33.9	80.2	31.2				
	-9.5	-10.0	94.5	35.5	94.3	36.3	92.1	35.7	89.1	34.3	86.1	33.0	80.2	30.3				
	-8.5	-9.1	96.5	35.8	96.4	36.5	92.1	34.8	89.1	33.4	86.1	32.1	80.2	29.5				
	-7.0	-7.6	100.1	36.3	98.0	35.8	92.1	33.2	89.1	32.0	86.1	30.7	80.2	28.3				
	-5.0	-5.6	104	36.2	98.0	33.7	92.1	31.3	89.1	30.1	86.1	29.0	80.2	26.7				
	-3.0	-3.7	104	34.1	98.0	31.8	92.1	29.6	89.1	28.5	86.1	27.4	80.2	25.3				
	0.0	-0.7	104	31.1	98.0	29.0	92.1	27.0	89.1	26.0	86.1	25.1	80.2	23.2				
	3.0	2.2	104	28.5	98.0	26.6	92.1	24.8	89.1	23.9	86.1	23.0	80.2	21.3				
	5.0	4.1	104	26.9	98.0	25.1	92.1	23.5	89.1	22.6	86.1	21.8	80.2	20.2				
	7.0	6.0	104	25.4	98.0	23.8	92.1	22.2	89.1	21.4	86.1	20.7	80.2	19.2				
	9.0	7.9	104	24.0	98.0	22.5	92.1	21.1	89.1	20.3	86.1	19.6	80.2	18.2				
	11.0	9.8	104	22.8	98.0	21.4	92.1	20.0	89.1	19.3	86.1	18.6	80.2	17.3				
	13.0	11.8	104	21.5	98.0	20.2	92.1	18.9	89.1	18.3	86.1	17.7	80.2	16.4				
	15.0	13.7	104	20.4	98.0	19.2	92.1	18.0	89.1	17.4	86.1	16.8	80.2	15.7				
60 (630)	-19.8	-20.0	76.0	34.6	75.9	35.4	75.8	36.2	75.7	36.6	73.8	35.6	68.8	32.7				
	-18.8	-19.0	77.4	34.9	77.3	35.7	77.2	36.4	76.4	36.3	73.8	34.8	68.8	32.0				
	-16.7	-17.0	80.5	35.4	80.4	36.2	78.9	35.9	76.4	34.5	73.8	33.2	68.8	30.5				
	-13.7	-15.0	84.0	36.0	83.8	36.7	78.9	34.1	76.4	32.8	73.8	31.5	68.8	29.0				
	-11.8	-13.0	87.8	36.5	84.0	34.8	78.9	32.3	76.4	31.1	73.8	29.9	68.8	27.5				
	-9.8	-11.0	89.0	35.3	84.0	32.9	78.9	30.6	76.4	29.4	73.8	28.3	68.8	26.1				
	-9.5	-10.0	89.0	34.3	84.0	32.0	78.9	29.7	76.4	28.6	73.8	27.5	68.8	25.4				
	-8.5	-9.1	89.0	33.4	84.0	31.2	78.9	29.0	76.4	27.9	73.8	26.8	68.8	24.8				
	-7.0	-7.6	89.0	32.0	84.0	29.8	78.9	27.7	76.4	26.7	73.8	25.7	68.8	23.8				
	-5.0	-5.6	89.0	30.1	84.0	28.1	78.9	26.2	76.4	25.2	73.8	24.3	68.8	22.5				
	-3.0	-3.7	89.0	28.4	84.0	26.6	78.9	24.8	76.4	23.9	73.8	23.0	68.8	21.3				
	0.0	-0.7	89.0	26.0	84.0	24.4	78.9	22.7	76.4	21.9	73.8	21.2	68.8	19.6				
	3.0	2.2	89.0	23.9	84.0	22.4	78.9	20.9	76.4	20.2	73.8	19.5	68.8	18.1				
	5.0	4.1	89.0	22.6	84.0	21.2	78.9	19.9	76.4	19.2	73.8	18.5	68.8	17.2				
	7.0	6.0	89.0	21.4	84.0	20.1	78.9	18.8	76.4	18.2	73.8	17.6	68.8	16.4				
	9.0	7.9	89.0	20.3	84.0	19.1	78.9	17.9	76.4	17.3	73.8	16.7	68.8	15.6				
	11.0	9.8	89.0	19.3	84.0	18.1	78.9	17.0	76.4	16.5	73.8	15.9	68.8	14.8				
	13.0	11.8	89.0	18.3	84.0	17.2	78.9	16.2	76.4	15.6	73.8	15.1	68.8	14.1				
	15.0	13.7	89.0	17.4	84.0	16.4	78.9	15.4	76.4	14.9	73.8	14.4	68.8	13.5				
50 (525)	-19.8	-20.0	74.2	35.8	70.0	33.4	65.8	31.0	63.6	29.8	61.5	28.7	57.3	26.4				
	-18.8	-19.0	74.2	35.0	70.0	32.6	65.8	30.3	63.6	29.2	61.5	28.1	57.3	25.9				
	-16.7	-17.0	74.2	33.4	70.0	31.1	65.8	28.9	63.6	27.9	61.5	26.8	57.3	24.7				
	-13.7	-15.0	74.2	31.7	70.0	29.6	65.8	27.5	63.6	26.5	61.5	25.5	57.3	23.6				
	-11.8	-13.0	74.2	30.1	70.0	28.1	65.8	26.2	63.6	25.2	61.5	24.3	57.3	22.4				
	-9.8	-11.0	74.2	28.5	70.0	26.6	65.8	24.8	63.6	23.9	61.5	23.0	57.3	21.3				
	-9.5	-10.0	74.2	27.7	70.0	25.9	65.8	24.1	63.6	23.3	61.5	22.4	57.3	20.8				
	-8.5	-9.1	74.2	27.0	70.0	25.3	65.8	23.6	63.6	22.7	61.5	21.9	57.3	20.3				
	-7.0	-7.6	74.2	25.9	70.0	24.2	65.8	22.6	63.6	21.8	61.5	21.0	57.3	19.5				
	-5.0	-5.6	74.2	24.4	70.0	22.9	65.8	21.4	63.6	20.7	61.5	19.9	57.3	18.5				
	-3.0	-3.7	74.2	23.2	70.0	21.7	65.8	20.3	63.6	19.6	61.5	18.9	57.3	17.6				
	0.0	-0.7	74.2	21.3	70.0	20.0	65.8	18.7	63.6	18.1	61.5	17.5	57.3	16.2				
	3.0	2.2	74.2	19.6	70.0	18.4	65.8	17.3	63.6	16.7	61.5	16.2	57.3	15.1				
	5.0	4.1	74.2	18.6	70.0	17.5	65.8	16.4	63.6	15.9	61.5	15.4	57.3	14.4				
	7.0	6.0	74.2	17.7	70.0	16.7	65.8	15.6	63.6	15.2	61.5	14.7	57.3	13.7				
	9.0	7.9	74.2	16.8	70.0	15.9	65.8	14.9	63.6	14.4	61.5	14.0	57.3	13.1				
	11.0	9.8	74.2	16.0	70.0	15.1	65.8	14.2	63.6	13.8	61.5	13.3	57.3	12.5				
	13.0	11.8	74.2	15.2	70.0	14.4	65.8	13.5	63.6	13.1	61.5	12.7	57.3	11.9				
	15.0	13.7	74.2	14.5	70.0	13.7	65.8	12.9	63.6	12.5	61.5	12.2	57.3	11.4				

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: ▒ is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range ▒ shown by ▒.
Note2: The above table shows the average value of conditions which may occur.

15

RXYQ44PAHY1, PAHYL, PHTL [50/60Hz]

Heating capacity

Combination ratio (%) (Capacity index)	Outdoor air temp.	Indoor air temp. °CDB																					
		16.0		18.0		20.0		21.0		22.0		24.0											
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI										
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW									
130 (1430)	-19.8	-20.0	85.1	21.7	84.7	23.4	84.4	25.2	84.3	26.0	84.1	26.9	83.8	28.6									
	-18.8	-19.0	86.6	22.2	86.3	24.0	86.0	25.7	85.8	26.5	85.6	27.4	85.3	29.1									
	-16.7	-17.0	89.9	23.4	89.6	25.1	89.3	26.7	89.1	27.6	89.0	28.4	88.7	30.0									
	-13.7	-15.0	93.6	24.7	93.3	26.2	93.0	27.8	92.8	28.6	92.7	29.4	92.4	31.0									
	-11.8	-13.0	97.7	25.9	97.4	27.4	97.1	28.9	96.9	29.7	96.8	30.4	96.5	31.9									
	-9.8	-11.0	102.2	27.1	101.9	28.6	101.6	30.0	101.4	30.7	101.2	31.4	100.9	32.9									
	-9.5	-10.0	105	27.7	104	29.1	104	30.5	104	31.2	103.6	32.0	103.3	33.4									
	-8.5	-9.1	107	28.3	106	29.7	106	31.0	106	31.7	106	32.4	106	33.8									
	-7.0	-7.6	111	29.2	110	30.5	110	31.8	110	32.5	110	33.1	109	34.5									
	-5.0	-5.6	116	30.3	116	31.6	115	32.8	115	33.5	115	34.1	115	35.4									
	-3.0	-3.7	122	31.4	121	32.6	121	33.8	121	34.4	121	35.0	120	36.2									
	0.0	-0.7	131	33.0	131	34.1	131	35.2	130	35.8	130	36.3	130	37.4									
	3.0	2.2	141	34.4	141	35.5	140	36.5	140	37.0	140	37.5	140	38.5									
	5.0	4.1	148	35.3	148	36.3	147	37.3	147	37.8	147	38.3	147	39.2									
	7.0	6.0	155	36.2	155	37.1	155	38.0	155	38.5	154	39.0	154	39.9									
	9.0	7.9	163	37.0	163	37.9	162	38.7	162	39.2	162	39.6	156	38.2									
	11.0	9.8	171	37.7	171	38.6	170	39.4	170	39.8	167	39.3	156	36.0									
	13.0	11.8	180	38.5	179	39.3	179	40.0	173	38.4	167	36.9	156	33.9									
	15.0	13.7	188	39.2	188	39.9	179	37.7	173	36.2	167	34.8	156	32.0									
120 (1320)	-19.8	-20.0	84.6	24.0	84.3	25.6	84.0	27.2	83.9	28.0	83.8	28.9	83.5	30.5									
	-18.8	-19.0	86.2	24.6	85.9	26.1	85.6	27.7	85.4	28.5	85.3	29.3	85.0	30.9									
	-16.7	-17.0	89.5	25.7	89.2	27.2	88.9	28.7	88.8	29.5	88.6	30.2	88.3	31.7									
	-13.7	-15.0	93.2	26.8	92.9	28.2	92.6	29.7	92.5	30.4	92.3	31.2	92.0	32.6									
	-11.8	-13.0	97.3	27.9	97.0	29.3	96.7	30.7	96.6	31.4	96.4	32.1	96.1	33.5									
	-9.8	-11.0	101.8	29.1	101.5	30.4	101.2	31.7	101.0	32.4	100.9	33.1	100.6	34.4									
	-9.5	-10.0	104	29.6	104	30.9	103.6	32.2	103.4	32.9	103.3	33.5	103.0	34.8									
	-8.5	-9.1	106	30.1	106	31.4	106	32.7	106	33.3	105	33.9	105	35.2									
	-7.0	-7.6	110	31.0	110	32.2	110	33.4	109	34.0	109	34.6	109	35.8									
	-5.0	-5.6	116	32.0	115	33.2	115	34.4	115	34.9	115	35.5	115	36.7									
	-3.0	-3.7	121	33.0	121	34.1	121	35.2	121	35.8	120	36.3	120	37.4									
	0.0	-0.7	131	34.5	130	35.5	130	36.5	130	37.1	130	37.6	130	38.6									
	3.0	2.2	141	35.8	140	36.8	140	37.7	140	38.2	140	38.7	140	39.6									
	5.0	4.1	148	36.6	147	37.5	147	38.5	147	38.9	147	39.4	144	39.1									
	7.0	6.0	155	37.4	155	38.3	154	39.1	154	39.6	154	40.0	144	36.8									
	9.0	7.9	163	38.2	162	39.0	162	39.8	160	39.4	154	37.8	144	34.7									
	11.0	9.8	170	38.9	170	39.6	165	38.6	160	37.1	154	35.6	144	32.7									
	13.0	11.8	179	39.6	176	39.1	165	36.3	160	34.9	154	33.5	144	30.8									
	15.0	13.7	186	39.6	176	36.9	165	34.2	160	32.9	154	31.7	144	29.2									
110 (1210)	-19.8	-20.0	84.2	28.4	83.9	27.9	83.7	29.3	83.5	30.1	83.4	30.8	83.1	32.3									
	-18.8	-19.0	85.7	26.9	85.5	28.3	85.2	29.8	85.1	30.5	84.9	31.2	84.7	32.7									
	-16.7	-17.0	89.1	27.9	88.8	29.3	88.5	30.7	88.4	31.4	88.3	32.1	88.0	33.5									
	-13.7	-15.0	92.8	28.9	92.5	30.3	92.3	31.6	92.1	32.3	92.0	32.9	91.7	34.3									
	-11.8	-13.0	96.9	30.0	96.6	31.2	96.3	32.5	96.2	33.2	95.8	33.8	95.4	35.1									
	-9.8	-11.0	101.3	31.0	101.1	32.2	100.8	33.5	100.7	34.1	100.5	34.7	100.3	35.9									
	-8.5	-9.1	106	32.0	106	33.2	105	34.3	105	34.9	105	35.5	105	36.6									
	-7.0	-7.6	110	32.7	110	33.9	109	35.0	109	35.6	109	36.1	109	37.2									
	-5.0	-5.6	115	33.7	115	34.8	115	35.9	115	36.4	114	36.9	114	38.0									
	0.0	-0.7	130	36.0	130	36.9	130	37.9	130	38.3	129	39.8	129	39.7									
	3.0	2.2	140	37.2	140	38.1	140	39.0	140	39.4	139	39.8	132	37.4									
	5.0	4.1	147	38.0	147	38.8	147	39.6	146	40.0	142	39.8	132	35.2									
	7.0	6.0	154	38.7	154	39.5	151	39.2	146	37.6	142	36.1	132	33.2									
	9.0	7.9	162	39.4	161	39.8	151	36.9	146	35.5	142	34.1	132	31.3									
	11.0	9.8	170	40.0	161	37.5	151	34.8	146	33.4	142	32.1	132	29.6									
	13.0	11.8	171	37.8	161	35.2	151	32.7	146	31.5	142	30.3	132	27.9									
	15.0	13.7	171	35.7	161	33.2	151	30.9	146	29.8	142	28.6	132	26.4									

Heating capacity

Combination ratio (%) (Capacity index)	Outdoor air temp.	Indoor air temp. °CDB																					
		16.0		18.0		20.0		21.0		22.0		24.0											
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI										
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW									
100 (1100)	-19.8	-20.0	83.4	31.1	83.1	28.7	82.9	33.5	82.8	32.1	82.7	34.7	82.5	35.9									
	-18.8	-19.0	84.9	31.5	84.7	29.2	84.4	33.8	84.3	32.5	84.2	35.1	87.6	36.3									
	-16.7	-17.0	88.2	32.3	88.0	29.7	87.8	34.6	87.7	33.5	87.6	35.8	87.3	36.9									
	-13.7	-15.0	91.7	34.3	91.5	33.2	91.4	35.4	91.4	35.9	91.3	36.5	91.1	37.6									
	-11.8	-13.0	95.8	35.1	95.6	34.0	95.4	36.1	95.5	36.7	95.4	37.2	95.2	38.2									
	-9.8	-11.0	100.3	35.9	100.1	34.9	99.9	36.9	99.9	37.4	99.8	37.9	99.6	38.9									
	-9.5	-10.0	102.4	35.3	102.6	36.3	102.3	37.3	102.3	37.8	102.2	38.2	102.0	39.2									
	-8.5	-9.1	105	36.7	105	37.2	105	38.2	105	38.1	104	38.6	104	39.5									
	-7.0	-7.6	109	37.2	109	38.3	108	38.2	108	38.6	108	39.1	108	39.9									
	-5.0	-5.6	114	38.0	114	38.9	114	38.9	114	39.3	114	39.7	114	40.6									
	-3.0	-3.7	120	38.7	120	39.5	119	39.5	119	39.9	116	39.5	116	41.2									
	0.0	-0.7	129	39.8	124	38.0	120	36.5	116	35.0	116	36.5	116	38.5									
	3.0	2.2	140	37.3	124	34.7	120	33.3	116	32.0	116	33.5	116	35.3									
	5.0	4.1	140	35.6	124	32.7	120	31.4	116	30.2	116	31.6	116	32.8									
	7.0	6.0	140	33.5	124	30.8	120	29.6	116	28.5	116	29.8	116	31.0									
	9.0	7.9	140	31.6	124	29.1	120	27.9	116	26.9	116	28.0	116	29.1									
	11.0	9.8	140	29.8	124	27.5	120	26.4	116	25.5	116	24.1	108	22.3									
	13.0	11.8	140	28.2	124	26.0	120	24.6	116	23.7	116	22.9	108	21.2									
90 (990)	-19.8	-20.0	82.9	33.5	82.7	34.5	82.5	35.6	82.4	36.7	82.2	37.8											
	-18.8	-19.0	84.5	33.8	84.3	34.9	84.1	35.9	84.0	36.5	83.9	37.0											
	-16.7	-17.0	87.8	34.6	87.6	35.6	87.4	36.6	87.3	37.1	87.2	37.6											
	-13.7	-15.0	91.5	35.3	91.3	36.3	91.1	37.3	91.0	37.7	90.9	38.2											
	-11.8	-13.0	95.6	36.1	95.4	37.0	95.2	37.9	95.1	38.4	94.8	38.9											
	-9.8	-11.0	100.1	36.8	99.9	37.7	99.7	38.6	99.6	39.1	99.5	39.5											
	-9.5	-10.0	102.4	37.2	102.2	38.1	102.0	39.0	102.0	39.4	101.9	39.8											
	-8.5	-9.1	105	37.6	104	38.4	104	39.3	104	39.7	103	39.4											
	-7.0	-7.6	109	38.1	108	38.9	108	39.7	106	39.2	103	37.7											
	-5.0	-5.6	114	38.8	114	39.6	110	39.4	106	36.9	103	35.4											
	-3.0	-3.7	120	39.5	117	39.0	110	36.2	106	34.8	103	33.4											
	0.0	-0.7	124	38.1	117	35.5	110	33.0	106	31.7	103	30.5											
	5.0	4.1	124	32.8	117	30.6	110	28.5	106	27.4	103	26.4											
	7.0	6.0	124	30.9	117	28.9	110	26.9	106	26.0	103	25.0											
	9.0	7.9	124	29.2	117	27.3	110	25.5	106	24.6	103	23.7											
	11.0	9.8	124	27.6	117	25.8	110	24.1	106	23.3	103	22.4											
	13.0	11.8	124	26.1	117	24.4	110	22.8	106	22.0	103	21.2											
	15.0	13.7	124	24.7	117	23.2	110	21.6	106	20.9	103	20.2											

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: ▒ is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range ▒ shown by ▒.
Note2: The above table shows the average value of conditions which may occur.

[50/60Hz]

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB 16.0 TC	16.0 PI	18.0 TC	18.0 PI	20.0 TC	20.0 PI	21.0 TC	21.0 PI	22.0 TC	22.0 PI	24.0 TC	24.0 PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70 (770)	-19.8	-20.0	82.5	35.8	82.3	36.8	82.2	37.7	82.1	38.2	82.0	38.6	81.8	39.6
	-18.8	-19.0	84.0	36.1	83.9	37.1	83.7	38.0	83.6	38.4	83.5	38.9	83.4	39.8
	-16.7	-17.0	87.4	36.8	87.2	37.7	87.0	38.6	86.9	39.0	86.9	39.4	83.9	38.3
	-13.7	-15.0	91.1	37.5	90.9	38.3	90.7	39.2	90.7	39.6	90.1	39.6	83.9	36.4
	-11.8	-13.0	95.2	38.1	95.0	38.9	94.8	39.8	93.2	39.1	90.1	37.5	83.9	34.4
	-9.8	-11.0	99.6	38.8	99.5	39.6	96.3	38.4	93.2	36.9	90.1	35.5	83.9	32.6
	-9.5	-10.0	102.0	39.1	101.8	39.9	96.3	37.3	93.2	35.9	90.1	34.4	83.9	31.7
	-8.5	-9.1	104	39.4	102	39.2	96.3	36.3	93.2	34.9	90.1	33.6	83.9	30.9
	-7.0	-7.6	108	39.9	102	37.4	96.3	34.7	93.2	33.4	90.1	32.1	83.9	29.6
	-5.0	-5.6	109	37.8	102	35.2	96.3	32.7	93.2	31.5	90.1	30.3	83.9	27.9
	-3.0	-3.7	109	35.6	102	33.2	96.3	30.9	93.2	29.7	90.1	28.6	83.9	26.4
	0.0	-0.7	109	32.5	102	30.3	96.3	28.2	93.2	27.2	90.1	26.2	83.9	24.2
	3.0	2.2	109	29.7	102	27.8	96.3	25.9	93.2	25.0	90.1	24.1	83.9	22.3
	5.0	4.1	109	28.1	102	26.3	96.3	24.5	93.2	23.7	90.1	22.8	83.9	21.1
	7.0	6.0	109	26.5	102	24.9	96.3	23.2	93.2	22.4	90.1	21.6	83.9	20.0
	9.0	7.9	109	25.1	102	23.5	96.3	22.0	93.2	21.3	90.1	20.5	83.9	19.0
	11.0	9.8	109	23.8	102	22.3	96.3	20.9	93.2	20.2	90.1	19.5	83.9	18.1
	13.0	11.8	109	22.5	102	21.1	96.3	19.8	93.2	19.1	90.1	18.5	83.9	17.2
	15.0	13.7	109	21.4	102	20.1	96.3	18.8	93.2	18.2	90.1	17.6	83.9	16.4
60 (660)	-19.8	-20.0	82.1	38.2	81.9	39.0	81.8	39.8	79.8	38.8	77.2	37.2	71.9	34.2
	-18.8	-19.0	83.6	38.5	83.5	39.2	82.5	39.4	79.8	37.9	77.2	36.4	71.9	33.4
	-16.7	-17.0	86.9	39.0	86.8	39.8	82.5	37.5	79.8	36.1	77.2	34.7	71.9	31.9
	-13.7	-15.0	90.7	39.6	87.8	38.4	82.5	35.6	79.8	34.3	77.2	32.9	71.9	30.3
	-11.8	-13.0	93.1	39.1	87.8	36.4	82.5	33.8	79.8	32.5	77.2	31.2	71.9	28.8
	-9.8	-11.0	93.1	36.9	87.8	34.4	82.5	31.9	79.8	30.8	77.2	29.6	71.9	27.3
	-9.5	-10.0	93.1	35.8	87.8	33.4	82.5	31.1	79.8	29.9	77.2	28.8	71.9	26.5
	-8.5	-9.1	93.1	34.9	87.8	32.6	82.5	30.3	79.8	29.2	77.2	28.0	71.9	25.9
	-7.0	-7.6	93.1	33.4	87.8	31.2	82.5	29.0	79.8	27.9	77.2	26.9	71.9	24.8
	-5.0	-5.6	93.1	31.5	87.8	29.4	82.5	27.4	79.8	26.4	77.2	25.4	71.9	23.5
	-3.0	-3.7	93.1	29.7	87.8	27.8	82.5	25.9	79.8	25.0	77.2	24.1	71.9	22.3
	0.0	-0.7	93.1	27.2	87.8	25.5	82.5	23.8	79.8	22.9	77.2	22.1	71.9	20.5
	3.0	2.2	93.1	25.0	87.8	23.4	82.5	21.9	79.8	21.1	77.2	20.4	71.9	18.9
	5.0	4.1	93.1	23.6	87.8	22.2	82.5	20.7	79.8	20.0	77.2	19.4	71.9	18.0
	7.0	6.0	93.1	22.4	87.8	21.0	82.5	19.7	79.8	19.0	77.2	18.4	71.9	17.1
	9.0	7.9	93.1	21.2	87.8	20.0	82.5	18.7	79.8	18.1	77.2	17.5	71.9	16.3
	11.0	9.8	93.1	20.2	87.8	19.0	82.5	17.8	79.8	17.2	77.2	16.6	71.9	15.5
	13.0	11.8	93.1	19.1	87.8	18.0	82.5	16.9	79.8	16.3	77.2	15.8	71.9	14.8
	15.0	13.7	93.1	18.2	87.8	17.1	82.5	16.1	79.8	15.6	77.2	15.1	71.9	14.1
50 (550)	-19.8	-20.0	77.6	37.4	73.2	34.9	68.8	32.4	66.5	31.2	64.3	30.0	59.9	27.6
	-18.8	-19.0	77.6	36.6	73.2	34.1	68.8	31.7	66.5	30.5	64.3	29.3	59.9	27.0
	-16.7	-17.0	77.6	34.9	73.2	32.5	68.8	30.2	66.5	29.1	64.3	28.0	59.9	25.8
	-13.7	-15.0	77.6	33.1	73.2	30.9	68.8	28.8	66.5	27.7	64.3	26.7	59.9	24.6
	-11.8	-13.0	77.6	31.4	73.2	29.3	68.8	27.3	66.5	26.3	64.3	25.4	59.9	23.4
	-9.8	-11.0	77.6	29.7	73.2	27.8	68.8	25.9	66.5	25.0	64.3	24.1	59.9	22.3
	-9.5	-10.0	77.6	28.9	73.2	27.1	68.8	25.2	66.5	24.3	64.3	23.4	59.9	21.7
	-8.5	-9.1	77.6	28.2	73.2	26.4	68.8	24.6	66.5	23.8	64.3	22.9	59.9	21.2
	-7.0	-7.6	77.6	27.0	73.2	25.3	68.8	23.6	66.5	22.8	64.3	22.0	59.9	20.4
	-5.0	-5.6	77.6	25.5	73.2	23.9	68.8	22.4	66.5	21.6	64.3	20.8	59.9	19.3
	-3.0	-3.7	77.6	24.2	73.2	22.7	68.8	21.2	66.5	20.5	64.3	19.8	59.9	18.4
	0.0	-0.7	77.6	22.2	73.2	20.9	68.8	19.5	66.5	18.9	64.3	18.2	59.9	17.0
	3.0	2.2	77.6	20.5	73.2	19.3	68.8	18.1	66.5	17.5	64.3	16.9	59.9	15.7
	5.0	4.1	77.6	19.5	73.2	18.3	68.8	17.2	66.5	16.6	64.3	16.1	59.9	15.0
	7.0	6.0	77.6	18.5	73.2	17.4	68.8	16.4	66.5	15.8	64.3	15.3	59.9	14.3
	9.0	7.9	77.6	17.6	73.2	16.6	68.8	15.6	66.5	15.1	64.3	14.6	59.9	13.6
	11.0	9.8	77.6	16.7	73.2	15.8	68.8	14.8	66.5	14.4	64.3	13.9	59.9	13.0
	13.0	11.8	77.6	15.9	73.2	15.0	68.8	14.1	66.5	13.7	64.3	13.3	59.9	12.4
	15.0	13.7	77.6	15.2	73.2	14.3	68.8	13.5	66.5	13.1	64.3	12.7	59.9	11.9

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: ■ is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range ■ shown by ■.
Note2: The above table shows the average value of conditions which may occur.

15

RXYQ46PAHY1, PAHYL, PHTL [50/60Hz]

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB											
			16.0		18.0		20.0		21.0		22.0		24.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130 (1508)	-19.8	-20.0	85.8	20.6	85.5	22.5	85.2	24.3	85.0	25.3	84.8	26.2	84.5	28.1
	-18.8	-19.0	87.4	21.2	87.0	23.1	86.7	24.9	86.5	25.8	86.4	26.7	86.1	28.6
	-16.7	-17.0	90.7	22.5	90.4	24.3	90.1	26.0	89.9	26.9	89.7	27.8	89.4	29.5
	-13.7	-15.0	94.5	23.8	94.1	25.5	93.8	27.2	93.6	28.0	93.5	28.9	93.1	30.6
	-11.8	-13.0	98.6	25.1	98.3	26.7	97.9	28.4	97.8	29.2	97.6	30.0	97.3	31.6
	-9.8	-11.0	103	26.4	103	28.0	102	29.5	102	30.3	102	31.1	102	32.6
	-9.5	-10.0	105	27.1	105	28.6	105	30.1	105	30.9	104	31.6	104	33.1
	-8.5	-9.1	108	27.7	107	29.1	107	30.6	107	31.4	107	32.1	106	33.6
	-7.0	-7.6	112	28.6	111	30.0	111	31.5	111	32.2	111	32.9	110	34.3
	-5.0	-5.6	117	29.9	117	31.2	116	32.6	116	33.2	116	33.9	116	35.3
	-3.0	-3.7	123	31.0	122	32.3	122	33.6	122	34.2	122	34.9	121	36.1
	0.0	-0.7	132	32.7	132	33.9	132	35.1	131	35.7	131	36.3	131	37.5
	3.0	2.2	142	34.3	142	35.4	142	36.5	141	37.0	141	37.6	141	38.7
	5.0	4.1	149	35.2	149	36.3	149	37.3	148	37.8	148	38.3	148	39.4
	7.0	6.0	157	36.1	156	37.1	156	38.1	156	38.6	156	39.1	155	40.1
	9.0	7.9	164	37.0	164	37.9	164	38.9	163	39.3	163	39.8	163	40.7
	11.0	9.8	172	37.8	172	38.7	172	39.6	171	40.0	171	40.5	163	38.5
	13.0	11.8	181	38.6	181	39.4	180	40.3	180	40.7	175	39.4	163	36.2
	15.0	13.7	190	39.3	189	40.1	187	40.3	181	38.7	175	37.2	163	34.2
120 (1392)	-19.8	-20.0	85.4	23.1	85.1	24.9	84.8	26.6	84.6	27.4	84.5	28.3	84.2	30.0
	-18.8	-19.0	86.9	23.7	86.6	25.4	86.3	27.1	86.2	27.9	86.0	28.8	85.7	30.5
	-16.7	-17.0	90.3	24.9	90.0	26.5	89.7	28.1	89.5	28.9	89.4	29.8	89.1	31.4
	-13.7	-15.0	94.0	26.1	93.7	27.7	93.4	29.2	93.3	30.0	93.1	30.8	92.8	32.3
	-11.8	-13.0	98.1	27.3	97.8	28.8	97.5	30.3	97.4	31.0	97.2	31.8	96.9	33.3
	-9.8	-11.0	103	28.5	102	29.9	102	31.4	102	32.1	102	32.8	101	34.2
	-9.5	-10.0	105	29.1	105	30.5	104	31.9	104	32.6	104	33.3	104	34.7
	-8.5	-9.1	107	29.7	107	31.0	107	32.4	106	33.1	106	33.7	106	35.1
	-7.0	-7.6	111	30.5	111	31.9	111	33.2	110	33.8	110	34.5	110	35.8
	-5.0	-5.6	117	31.7	116	32.9	116	34.2	116	34.8	116	35.4	115	36.7
	-3.0	-3.7	122	32.7	122	33.9	122	35.1	121	35.7	121	36.3	121	37.5
	0.0	-0.7	132	34.3	131	35.4	131	36.5	131	37.1	131	37.6	131	38.7
	3.0	2.2	142	35.7	141	36.8	141	37.8	141	38.3	141	38.8	141	39.8
	5.0	4.1	149	36.6	148	37.6	148	38.5	148	39.0	148	39.5	148	40.5
	7.0	6.0	156	37.5	156	38.4	155	39.3	155	39.7	155	40.2	151	39.4
	9.0	7.9	164	38.2	163	39.1	163	40.0	163	40.4	162	40.4	151	37.1
	11.0	9.8	172	39.0	171	39.8	171	40.7	167	39.7	162	38.1	151	35.0
	13.0	11.8	181	39.7	180	40.5	173	38.8	167	37.3	162	35.8	151	32.9
	15.0	13.7	189	40.4	184	39.4	173	36.6	167	35.2	162	33.8	151	31.2
110 (1276)	-19.8	-20.0	84.9	25.7	84.7	27.2	84.4	28.8	84.2	29.6	84.1	30.4	83.8	32.0
	-18.8	-19.0	86.5	26.2	86.2	27.7	85.9	29.3	85.8	30.1	85.6	30.8	85.4	32.4
	-16.7	-17.0	89.8	27.3	89.6	28.8	89.3	30.2	89.1	31.0	89.0	31.7	88.7	33.2
	-13.7	-15.0	93.6	28.4	93.3	29.8	93.0	31.2	92.9	31.9	92.7	32.7	92.5	34.1
	-11.8	-13.0	97.7	29.5	97.4	30.9	97.1	32.2	97.0	32.9	96.9	33.6	96.6	34.9
	-9.8	-11.0	102	30.6	102	31.9	102	33.2	101	33.9	101	34.5	101	35.8
	-9.5	-10.0	105	31.2	104	32.4	104	33.7	104	34.3	104	35.0	103	36.2
	-8.5	-9.1	107	31.6	107	32.9	106	34.1	106	34.8	106	35.4	106	36.6
	-7.0	-7.6	111	32.5	110	33.7	110	34.9	110	35.5	110	36.1	110	37.2
	-5.0	-5.6	116	33.5	116	34.6	116	35.8	116	36.4	115	36.9	115	38.1
	-3.0	-3.7	122	34.5	122	35.6	121	36.6	121	37.2	121	37.7	121	38.8
	0.0	-0.7	131	35.9	131	36.9	131	37.9	131	38.4	130	38.9	130	39.9
	3.0	2.2	141	37.2	141	38.2	141	39.1	141	39.6	140	40.0	138	40.0
	5.0	4.1	148	38.0	148	38.9	148	39.8	148	40.2	147	40.7	138	37.6
	7.0	6.0	156	38.8	155	39.6	155	40.5	153	40.2	148	38.6	138	35.5
	9.0	7.9	163	39.5	163	40.3	158	39.4	153	37.9	148	36.4	138	33.5
	11.0	9.8	171	40.2	169	40.0	158	37.2	153	35.7	148	34.3	138	31.6
	13.0	11.8	179	40.4	169	37.6	158	35.0	153	33.6	148	32.3	138	29.8
	15.0	13.7	179	38.1	169	35.5	158	33.0	153	31.8	148	30.6	138	28.2

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB											
			16.0		18.0		20.0		21.0		22.0		24.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100 (1160)	-19.8	-20.0	84.5	28.2	84.2	29.6	84.0	31.0	83.9	31.8	83.7	32.5	83.5	33.9
	-18.8	-19.0	86.0	28.7	85.8	30.1	85.5	31.5	85.4	32.2	85.3	32.9	85.0	34.3
	-16.7	-17.0	89.4	29.6	89.1	31.0	88.9	32.4	88.8	33.0	88.6	33.7	88.4	35.1
	-13.7	-15.0	93.1	30.7	92.9	31.9	92.6	33.2	92.5	33.9	92.4	34.5	92.1	35.8
	-11.8	-13.0	97.2	31.7	97.0	32.9	96.7	34.2	96.6	34.8	96.5	35.4	96.2	36.6
	-9.8	-11.0	102	32.7	101	33.9	101	35.1	101	35.6	101	36.2	101	37.4
	-9.5	-10.0	104	33.2	104	34.3	104	35.5	103	36.1	103	36.7	103	37.8
	-8.5	-9.1	106	33.6	106	34.8	106	35.9	106	36.5	106	37.0	105	38.2
	-7.0	-7.6	110	34.4	110	35.5	110	36.5	110	37.1	109	37.6	109	38.7
	-5.0	-5.6	116	35.3	116	36.4	115	37.4	115	37.9	115	38.4	115	39.5
	-3.0	-3.7	121	36.2	121	37.2	121	38.2	121	38.7	121	39.2	120	40.1
	0.0	-0.7	131	37.5	131	38.4	130	39.3	130	39.8	130	40.3	125	39.0
	3.0	2.2	141	38.7	141	39.6	140	40.4	139	40.4	135	38.8	125	35.6
	5.0	4.1	148	39.4	148	40.2	144	39.6	139	38.1	135	36.6	125	33.6
	7.0	6.0	155	40.1	153	40.2	144	37.3	139	35.9	135	34.5	125	31.7
	9.0	7.9	163	40.7	153	37.9	144	35.2	139	33.8	135	32.5	125	30.0
	11.0	9.8	163	38.3	153	35.7	144	33.2	139	32.0	135	30.7	125	28.4
	13.0	11.8	163	36.0	153	33.6	144	31.3	139	30.1	135	29.0	125	26.8
	15.0	13.7	163	34.0	153	31.8	144	29.6	139	28.5	135	27.5	125	25.4
90 (1044)	-19.8	-20.0	84.1	30.7	83.8	32.0	83.6	33.3	83.5	33.9	83.4	34.6	83.1	35.9
	-18.8	-19.0	85.6	31.1	85.4	32.4	85.1	33.7	85.0	34.3	84.9	34.9	84.7	36.2
	-16.7	-17.0	88.9	32.0	88.7	33.2	88.5	34.5	88.4	35.1	88.3	35.7	88.0	36.9
	-13.7	-15.0	92.7	32.9	92.5	34.1	92.2	35.3	92.1	35.9	92.0	36.4	91.8	37.6
	-11.8	-13.0	96.8	33.8	96.6	35.0	96.3	36.1	96.2	36.6	96.1	37.2	95.9	38.3
	-9.8	-11.0	101	34.8	101	35.8	101	36.9	101	37.4	101	38.0	100	39.0
	-9.5	-10.0	104	35.2	103	36.3	103	37.3	103	37.8	103	38.3	103	39.4
	-8.5	-9.1	106	35.6	106	36.6	105	37.7	105	38.2	105	38.7	105	39.7
	-7.0	-7.6	110	36.3	110	37.3	109	38.2	109	38.7	109	39.2	109	40.2
	-5.0	-5.6	115	37.1	115	38.1	115	39.0	115	39.5	115	39.9	113	40.1
	-3.0	-3.7	121	37.9	121	38.8	120	39.7	120	40.2	120	40.6	113	37.8
	0.0	-0.7	130	39.1	130	39.9	130	40.6	125	39.0	121	37.5	113	34.4
	3.0	2.2	140	40.2	138	39.9	130	37.0	125	35.6	121	34.2	113	31.5
	5.0	4.1	146	40.3	138	37.6	130	34.9	125	33.6	121	32.3	113	29.8
	7.0	6.0	146	38.0	138	35.4	130	32.9	125	31.7	121	30.5	113	28.1
	9.0	7.9	146	35.8	138	33.4	130	31.1	125	30.0	121	28.8	113	26.6
	11.0	9.8	146	33.8	138	31.6	130	29.4	125	28.3	121	27.3	113	25.2
	13.0	11.8	146	31.8	138	29.8	130	27.8	125	26.8	121	25.8	113	23.9
	15.0	13.7	146	30.1	138	28.2	130	26.3	125	25.4	121	24.5	113	22.7
80 (928)	-19.8	-20.0	83.6	33.2	83.4	34.4	83.2	35.5	83.1	36.1	83.0	36.7	82.8	37.8
	-18.8	-19.0	85.1	33.6	84.9	34.7	84.7	35.9	84.6	36.4	84.5	37.0	84.3	38.1
	-16.7	-17.0	88.5	34.4	88.3	35.5	88.1	36.6	88.0	37.1	87.9	37.6	87.7	38.7
	-13.7	-15.0	92.2	35.2	92.0	36.2	91.8	37.3	91.7	37.8	91.6	38.3	91.4	39.4
	-11.8	-13.0	96.4	36.0	96.2	37.0	96.0	38.0	95.8	38.5	95.7	39.0	95.5	40.0
	-9.8	-11.0	101	36.8	101	37.8	100	38.7	100	39.2	100	39.7	100	40.6
	-9.5	-10.0	103	37.2	103	38.2	103	39.1	103	39.6	103	40.0	100	39.7
	-8.5	-9.1	105	37.6	105	38.5	105	39.4	105	39.9	105	40.3	100	38.6
	-7.0	-7.6	109	38.2	109	39.1	109	39.9	109	40.4	108	40.2	100	36.9
	-5.0	-5.6	115	39.0	115	39.8	114	40.6	111	39.4	108	37.9	100	34.8
	-3.0	-3.7	120	39.7	120	40.5	115	38.7	111	37.2	108	35.7	100	32.9
	0.0	-0.7	130	40.7	123	38.0	115	35.2	111	33.9	108	32.6	100	30.0
	3.0	2.2	130	37.2	123	34.7	115	32.2	111	31.1	108	29.9	100	27.6
	5.0	4.1	130	35.0	123	32.7	115	30.4	111	29.3	108	28.2	100	26.1
	7.0	6.0	130	33.1	123	30.9	115	28.8	111	27.7	108	26.7	100	24.7
	9.0	7.9	130	31.2	123	29.2	115	27.2	111	26.3	108	25.3	100	23.4
	11.0	9.8	130	29.5	123	27.6	115	25.8	111	24.9	108	24.0	100	22.2
	13.0	11.8	130	27.9	123	26.1	115	24.4	111	23.5	108	22.7	100	21.1
	15.0	13.7	130	26.4	123	24.7	115	23.1	111	22.3	108	21.6	100	20.0

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: ▒ is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range shown by ▒.
Note2: The above table shows the average value of conditions which may occur.

[50/60Hz]

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp. °CDB	Outdoor air temp. °CWB	Indoor air temp. °CDB 16.0 TC kW	16.0 PI kW	18.0 TC kW	18.0 PI kW	20.0 TC kW	20.0 PI kW	21.0 TC kW	21.0 PI kW	22.0 TC kW	22.0 PI kW	24.0 TC kW	24.0 PI kW
70 (812)	-19.8	-20.0	83.2	35.7	83.0	36.8	82.8	37.8	82.7	38.3	82.6	38.8	82.5	39.8
	-18.8	-19.0	84.7	36.1	84.5	37.1	84.3	38.1	84.3	38.6	84.2	39.0	84.0	40.0
	-16.7	-17.0	88.1	36.8	87.9	37.7	87.7	38.7	87.6	39.1	87.5	39.6	87.3	40.6
	-13.7	-15.0	91.8	37.5	91.6	38.4	91.4	39.3	91.4	39.8	91.3	40.2	87.8	38.9
	-11.8	-13.0	95.9	38.2	95.7	39.1	95.6	39.9	95.5	40.4	94.3	40.1	87.8	36.8
	-9.8	-11.0	100	38.9	100	39.7	100	40.6	97.6	39.5	94.3	37.9	87.8	34.8
	-9.5	-10.0	103	39.3	103	40.1	101	39.9	97.6	38.3	94.3	36.8	87.8	33.8
	-8.5	-9.1	105	39.6	105	40.4	101	38.8	97.6	37.3	94.3	35.9	87.8	33.0
	-7.0	-7.6	109	40.1	107	40.0	101	37.1	97.6	35.7	94.3	34.3	87.8	31.6
	-5.0	-5.6	114	40.4	107	37.6	101	35.0	97.6	33.6	94.3	32.3	87.8	29.8
	-3.0	-3.7	114	38.1	107	35.5	101	33.0	97.6	31.8	94.3	30.6	87.8	28.2
	0.0	-0.7	114	34.7	107	32.4	101	30.2	97.6	29.1	94.3	28.0	87.8	25.9
	3.0	2.2	114	31.8	107	29.7	101	27.7	97.6	26.7	94.3	25.7	87.8	23.8
	5.0	4.1	114	30.0	107	28.1	101	26.2	97.6	25.3	94.3	24.4	87.8	22.6
	7.0	6.0	114	28.4	107	26.6	101	24.8	97.6	23.9	94.3	23.1	87.8	21.4
	9.0	7.9	114	26.8	107	25.2	101	23.5	97.6	22.7	94.3	21.9	87.8	20.3
	11.0	9.8	114	25.4	107	23.9	101	22.3	97.6	21.6	94.3	20.8	87.8	19.3
	13.0	11.8	114	24.0	107	22.6	101	21.1	97.6	20.4	94.3	19.7	87.8	18.4
	15.0	13.7	114	22.8	107	21.5	101	20.1	97.6	19.4	94.3	18.8	87.8	17.5
60 (696)	-19.8	-20.0	82.7	38.3	82.6	39.1	82.4	40.0	82.3	40.4	80.8	39.8	75.3	36.5
	-18.8	-19.0	84.3	38.6	84.1	39.4	84.0	40.3	83.6	40.5	80.8	38.9	75.3	35.7
	-16.7	-17.0	87.6	39.2	87.5	40.0	86.4	40.1	83.6	38.6	80.8	37.0	75.3	34.0
	-13.7	-15.0	91.4	39.8	91.2	40.5	86.4	38.1	83.6	36.6	80.8	35.2	75.3	32.4
	-11.8	-13.0	95.5	40.4	92.0	38.9	86.4	36.1	83.6	34.7	80.8	33.4	75.3	30.7
	-9.8	-11.0	97.5	39.4	92.0	36.8	86.4	34.1	83.6	32.9	80.8	31.6	75.3	29.1
	-9.5	-10.0	97.5	38.3	92.0	35.7	86.4	33.2	83.6	32.0	80.8	30.7	75.3	28.4
	-8.5	-9.1	97.5	37.3	92.0	34.8	86.4	32.4	83.6	31.2	80.8	30.0	75.3	27.7
	-7.0	-7.6	97.5	35.7	92.0	33.3	86.4	31.0	83.6	29.9	80.8	28.7	75.3	26.5
	-5.0	-5.6	97.5	33.6	92.0	31.4	86.4	29.3	83.6	28.2	80.8	27.1	75.3	25.1
	-3.0	-3.7	97.5	31.8	92.0	29.7	86.4	27.7	83.6	26.7	80.8	25.7	75.3	23.8
	0.0	-0.7	97.5	29.1	92.0	27.2	86.4	25.4	83.6	24.5	80.8	23.6	75.3	21.9
	3.0	2.2	97.5	26.7	92.0	25.0	86.4	23.4	83.6	22.6	80.8	21.8	75.3	20.2
	5.0	4.1	97.5	25.3	92.0	23.7	86.4	22.2	83.6	21.4	80.8	20.7	75.3	19.2
	7.0	6.0	97.5	23.9	92.0	22.5	86.4	21.0	83.6	20.3	80.8	19.6	75.3	18.3
	9.0	7.9	97.5	22.7	92.0	21.3	86.4	20.0	83.6	19.3	80.8	18.7	75.3	17.4
	11.0	9.8	97.5	21.5	92.0	20.3	86.4	19.0	83.6	18.4	80.8	17.8	75.3	16.6
	13.0	11.8	97.5	20.4	92.0	19.2	86.4	18.1	83.6	17.5	80.8	16.9	75.3	15.8
	15.0	13.7	97.5	19.4	92.0	18.3	86.4	17.2	83.6	16.7	80.8	16.1	75.3	15.1
50 (580)	-19.8	-20.0	81.3	40.0	76.6	37.3	72.0	34.6	69.7	33.3	67.4	32.0	62.7	29.5
	-18.8	-19.0	81.3	39.1	76.6	36.4	72.0	33.9	69.7	32.6	67.4	31.3	62.7	28.9
	-16.7	-17.0	81.3	37.3	76.6	34.8	72.0	32.3	69.7	31.1	67.4	29.9	62.7	27.6
	-13.7	-15.0	81.3	35.4	76.6	33.1	72.0	30.8	69.7	29.6	67.4	28.5	62.7	26.3
	-11.8	-13.0	81.3	33.6	76.6	31.4	72.0	29.2	69.7	28.2	67.4	27.1	62.7	25.1
	-9.8	-11.0	81.3	31.8	76.6	29.7	72.0	27.7	69.7	26.7	67.4	25.7	62.7	23.8
	-9.5	-10.0	81.3	30.9	76.6	28.9	72.0	27.0	69.7	26.0	67.4	25.1	62.7	23.2
	-8.5	-9.1	81.3	30.1	76.6	28.2	72.0	26.3	69.7	25.4	67.4	24.5	62.7	22.7
	-7.0	-7.6	81.3	28.9	76.6	27.1	72.0	25.3	69.7	24.4	67.4	23.5	62.7	21.8
	-5.0	-5.6	81.3	27.3	76.6	25.6	72.0	23.9	69.7	23.1	67.4	22.3	62.7	20.7
	-3.0	-3.7	81.3	25.9	76.6	24.3	72.0	22.7	69.7	21.9	67.4	21.1	62.7	19.6
	0.0	-0.7	81.3	23.8	76.6	22.3	72.0	20.9	69.7	20.2	67.4	19.5	62.7	18.1
	3.0	2.2	81.3	21.9	76.6	20.6	72.0	19.3	69.7	18.7	67.4	18.1	62.7	16.8
	5.0	4.1	81.3	20.8	76.6	19.6	72.0	18.4	69.7	17.8	67.4	17.2	62.7	16.0
	7.0	6.0	81.3	19.7	76.6	18.6	72.0	17.5	69.7	16.9	67.4	16.4	62.7	15.3
	9.0	7.9	81.3	18.8	76.6	17.7	72.0	16.6	69.7	16.1	67.4	15.6	62.7	14.6
	11.0	9.8	81.3	17.9	76.6	16.9	72.0	15.9	69.7	15.4	67.4	14.9	62.7	13.9
	13.0	11.8	81.3	17.0	76.6	16.0	72.0	15.1	69.7	14.7	67.4	14.2	62.7	13.3
	15.0	13.7	81.3	16.2	76.6	15.3	72.0	14.4	69.7	14.0	67.4	13.6	62.7	12.7

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: ■ is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range ■ shown by ■.
Note2: The above table shows the average value of conditions which may occur.

15

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB											
			16.0		18.0		20.0		21.0		22.0		24.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130 (1560)	-19.8	-20.0	92.0	23.4	91.7	25.3	91.3	27.3	91.2	28.3	91.0	29.2	90.6	31.2
	-18.8	-19.0	93.7	24.1	93.3	26.0	93.0	27.9	92.8	28.8	92.6	29.8	92.3	31.7
	-16.7	-17.0	97.3	25.4	96.9	27.2	96.6	29.0	96.4	29.9	96.2	30.9	95.9	32.7
	-13.7	-15.0	101.3	26.7	100.9	28.5	100.6	30.2	100.4	31.1	100.3	32.0	99.9	33.7
	-11.8	-13.0	105.7	28.1	105.4	29.8	105.0	31.5	104.8	32.3	104.7	33.1	104.3	34.8
	-9.8	-11.0	111	29.5	110	31.1	110	32.7	110	33.5	110	34.3	109	35.9
	-9.5	-10.0	113	30.1	113	31.7	112	33.3	112	34.0	112	34.8	112	36.4
	-8.5	-9.1	115	30.7	115	32.3	115	33.8	115	34.6	114	35.3	114	36.8
	-7.0	-7.6	120	31.7	119	33.2	119	34.7	119	35.4	119	36.1	118	37.6
	-5.0	-5.6	126	33.0	125	34.4	125	35.8	125	36.5	125	37.2	124	38.6
	-3.0	-3.7	132	34.2	131	35.5	131	36.9	131	37.5	131	38.2	130	39.5
	0.0	-0.7	142	36.0	141	37.2	141	38.4	141	39.1	141	39.7	140	40.9
	3.0	2.2	153	37.6	152	38.7	152	39.9	152	40.4	152	41.0	151	42.1
	5.0	4.1	160	38.6	160	39.6	159	40.7	159	41.3	159	41.8	159	42.9
	7.0	6.0	168	39.5	168	40.5	167	41.6	167	42.1	167	42.6	167	43.6
	9.0	7.9	176	40.4	176	41.4	176	42.3	175	42.8	175	43.3	170	42.4
	11.0	9.8	185	41.2	184	42.2	184	43.1	184	43.6	182	43.5	170	39.9
	13.0	11.8	194	42.1	194	42.9	194	43.8	189	42.6	182	40.9	170	37.6
	15.0	13.7	204	42.8	203	43.7	195	41.8	189	40.2	182	38.6	170	35.5
120 (1440)	-19.8	-20.0	91.5	26.0	91.2	27.8	90.9	29.6	90.8	30.5	90.6	31.4	90.3	33.2
	-18.8	-19.0	93.2	26.6	92.9	28.4	92.6	30.1	92.4	31.0	92.2	31.9	91.9	33.6
	-16.7	-17.0	96.8	27.8	96.5	29.5	96.2	31.2	96.0	32.1	95.9	32.9	95.5	34.6
	-13.7	-15.0	100.8	29.1	100.5	30.7	100.2	32.3	100.0	33.1	99.9	33.9	99.6	35.6
	-11.8	-13.0	105.2	30.4	104.9	31.9	104.6	33.5	104.5	34.2	104.3	35.0	104.0	36.5
	-9.8	-11.0	110	31.6	110	33.1	109	34.6	109	35.3	109	36.0	109	37.5
	-9.5	-10.0	113	32.3	112	33.7	112	35.1	112	35.8	112	36.6	111	38.0
	-8.5	-9.1	115	32.8	115	34.2	114	35.6	114	36.3	114	37.0	114	38.4
	-7.0	-7.6	119	33.7	119	35.1	119	36.4	118	37.1	118	37.8	118	39.1
	-5.0	-5.6	125	34.9	125	36.2	124	37.5	124	38.1	124	38.8	124	40.1
	-3.0	-3.7	131	36.0	131	37.2	131	38.5	130	39.1	130	39.7	130	40.9
	0.0	-0.7	141	37.6	141	38.8	141	39.9	141	40.5	140	41.0	140	42.2
	3.0	2.2	152	39.1	152	40.2	151	41.2	151	41.7	151	42.3	151	43.3
	5.0	4.1	160	40.0	159	41.0	159	42.0	159	42.5	159	43.0	157	43.4
	7.0	6.0	168	40.9	167	41.8	167	42.8	167	43.3	167	43.7	157	40.8
	9.0	7.9	176	41.7	175	42.6	175	43.5	174	43.7	168	41.9	157	38.5
	11.0	9.8	184	42.5	184	43.4	180	42.8	174	41.1	168	39.5	157	36.3
	13.0	11.8	194	43.3	192	43.4	180	40.2	174	38.7	168	37.2	157	34.2
	15.0	13.7	203	43.9	192	40.9	180	38.0	174	36.5	168	35.1	157	32.3
110 (1320)	-19.8	-20.0	91.1	28.6	90.8	30.3	90.5	31.9	90.4	32.7	90.2	33.6	89.9	35.2
	-18.8	-19.0	92.7	29.2	92.4	30.8	92.2	32.4	92.0	33.2	91.9	34.0	91.6	35.6
	-16.7	-17.0	96.3	30.3	96.1	31.9	95.8	33.4	95.6	34.2	95.5	35.0	95.2	36.5
	-13.7	-15.0	100.4	31.5	100.1	32.9	99.8	34.4	99.6	35.2	99.5	35.9	99.2	37.4
	-11.8	-13.0	104.8	32.6	104.5	34.0	104.2	35.5	104.1	36.2	103.9	36.9	103.6	38.3
	-9.8	-11.0	110	33.8	109	35.1	109	36.5	109	37.2	109	37.8	108	39.2
	-9.5	-10.0	112	34.4	112	35.7	112	37.0	111	37.7	111	38.3	111	39.6
	-8.5	-9.1	115	34.9	114	36.2	114	37.4	114	38.1	114	38.7	113	40.0
	-7.0	-7.6	119	35.7	118	36.9	118	38.2	118	38.8	118	39.4	118	40.7
	-5.0	-5.6	125	36.8	124	38.0	124	39.2	124	39.7	124	40.3	124	41.5
	-3.0	-3.7	131	37.8	130	38.9	130	40.0	130	40.6	130	41.2	130	42.3
	0.0	-0.7	141	39.3	141	40.3	140	41.4	140	41.9	140	42.4	140	43.5
	3.0	2.2	152	40.7	151	41.6	151	42.6	151	43.1	151	43.5	144	41.5
	5.0	4.1	159	41.5	159	42.4	159	43.3	158	43.8	154	42.5	144	39.0
	7.0	6.0	167	42.3	167	43.2	165	43.4	160	41.7	154	40.1	144	36.8
	9.0	7.9	175	43.0	175	43.9	165	40.9	160	39.3	154	37.8	144	34.7
	11.0	9.8	184	43.8	176	41.5	165	38.5	160	37.1	154	35.6	144	32.8
	13.0	11.8	186	41.9	176	39.1	165	36.3	160	34.9	154	33.6	144	30.9
	15.0	13.7	186	39.5	176	36.9	165	34.3	160	33.0	154	31.7	144	29.3

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB											
			16.0		18.0		20.0		21.0		22.0		24.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100 (1200)	-19.8	-20.0	90.6	31.3	90.4	32.8	90.1	34.2	90.0	35.0	89.8	35.7	89.6	37.2
	-18.8	-19.0	92.3	31.8	92.0	33.2	91.7	34.7	91.6	35.4	91.5	36.1	91.2	37.6
	-16.7	-17.0	95.9	32.8	95.6	34.2	95.4	35.6	95.2	36.3	95.1	37.0	94.8	38.4
	-13.7	-15.0	99.9	33.8	99.6	35.2	99.4	36.5	99.2	37.2	99.1	37.9	98.8	39.2
	-11.8	-13.0	104.3	34.9	104.1	36.2	103.8	37.5	103.7	38.1	103.5	38.7	103.3	40.0
	-9.8	-11.0	109	35.9	109	37.2	109	38.4	108	39.0	108	39.6	108	40.9
	-9.5	-10.0	112	36.5	111	37.7	111	38.9	111	39.5	111	40.1	111	41.3
	-8.5	-9.1	114	36.9	114	38.1	114	39.3	113	39.9	113	40.4	113	41.6
	-7.0	-7.6	118	37.7	118	38.8	118	39.9	118	40.5	117	41.1	117	42.2
	-5.0	-5.6	124	38.7	124	39.8	124	40.8	124	41.4	123	41.9	123	43.0
	-3.0	-3.7	130	39.6	130	40.6	130	41.6	130	42.2	129	42.7	129	43.7
	0.0	-0.7	140	41.0	140	41.9	140	42.9	140	43.3	140	43.8	131	40.5
	3.0	2.2	151	42.2	151	43.1	150	43.6	145	41.9	140	40.3	131	37.0
	5.0	4.1	159	43.0	158	43.8	150	41.1	145	39.5	140	37.9	131	34.9
	7.0	6.0	167	43.7	160	41.7	150	38.7	145	37.2	140	35.8	131	32.9
	9.0	7.9	169	42.2	160	39.3	150	36.5	145	35.1	140	33.8	131	31.1
	11.0	9.8	169	39.7	160	37.1	150	34.4	145	33.2	140	31.9	131	29.4
	13.0	11.8	169	37.4	160	34.9	150	32.5	145	31.3	140	30.1	131	27.8
	15.0	13.7	169	35.3	160	33.0	150	30.7	145	29.6	140	28.5	131	26.3
90 (1080)	-19.8	-20.0	90.2	33.9	89.9	35.2	89.7	36.6	89.6	37.2	89.4	37.9	89.2	39.2
	-18.8	-19.0	91.8	34.3	91.6	35.6	91.3	37.0	91.2	37.6	91.1	38.3	90.9	39.6
	-16.7	-17.0	95.4	35.2	95.2	36.5	94.9	37.8	94.8	38.4	94.7	39.0	94.5	40.3
	-13.7	-15.0	99.4	36.2	99.2	37.4	99.0	38.6	98.8	39.2	98.7	39.8	98.5	41.0
	-11.8	-13.0	103.9	37.1	103.6	38.3	103.4	39.5	103.3	40.0	103.1	40.6	102.9	41.8
	-9.8	-11.0	109	38.1	108	39.2	108	40.3	108	40.9	108	41.4	108	42.5
	-9.5	-10.0	111	38.6	111	39.6	111	40.7	111	41.3	111	41.8	110	42.9
	-8.5	-9.1	114	39.0	113	40.0	113	41.1	113	41.6	113	42.2	113	43.2
	-7.0	-7.6	118	39.7	118	40.7	117	41.7	117	42.2	117	42.7	117	43.7
	-5.0	-5.6	124	40.6	124	41.5	123	42.5	123	43.0	123	43.5	118	41.6
	-3.0	-3.7	130	41.4	130	42.3	129	43.2	129	43.7	126	42.7	118	39.2
	0.0	-0.7	140	42.6	140	43.5	135	42.1	131	40.5	126	38.9	118	35.7
	3.0	2.2	151	43.7	144	41.4	135	38.4	131	37.0	126	35.5	118	32.7
	5.0	4.1	152	41.9	144	39.0	135	36.2	131	34.9	126	33.5	118	30.9
	7.0	6.0	152	39.4	144	36.8	135	34.2	131	32.9	126	31.7	118	29.2
	9.0	7.9	152	37.2	144	34.7	135	32.3	131	31.1	126	29.9	118	27.6
	11.0	9.8	152	35.1	144	32.8	135	30.5	131	29.4	126	28.3	118	26.2
	13.0	11.8	152	33.0	144	30.9	135	28.8	131	27.8	126	26.8	118	24.8
	15.0	13.7	152	31.3	144	29.3	135	27.3	131	26.3	126	25.4	118	23.5
80 (960)	-19.8	-20.0	89.7	36.5	89.5	37.7	89.3	38.9	89.2	39.5	89.1	40.1	88.8	41.3
	-18.8	-19.0	91.3	36.9	91.1	38.1	90.9	39.2	90.8	39.8	90.7	40.4	90.5	41.6
	-16.7	-17.0	95.0	37.7	94.7	38.8	94.5	40.0	94.4	40.5	94.3	41.1	94.1	42.2
	-13.7	-15.0	99.0	38.6	98.8	39.6	98.5	40.7	98.4	41.3	98.3	41.8	98.1	42.9
	-11.8	-13.0	103.4	39.4	103.2	40.4	103.0	41.5	102.9	42.0	102.8	42.5	102.5	43.5
	-9.8	-11.0	108	40.3	108	41.2	108	42.2	108	42.7	108	43.2	105	42.4
	-9.5	-10.0	111	40.7	111	41.6	110	42.6	110	43.1	110	43.5	105	41.2
	-8.5	-9.1	113	41.0	113	42.0	113	42.9	113	43.4	112	43.7	105	40.1
	-7.0	-7.6	117	41.7	117	42.6	117	43.5	116	43.5	112	41.8	105	38.3
	-5.0	-5.6	123	42.5	123	43.3	120	42.6	116	40.9	112	39.3	105	36.1
	-3.0	-3.7	129	43.2	128	43.3	120	40.1	116	38.6	112	37.1	105	34.1
	0.0	-0.7	135	42.3	128	39.4	120	36.6	116	35.2	112	33.8	105	31.2
	3.0	2.2	135	38.6	128	36.0	120	33.5	116	32.2	112	31.0	105	28.6
	5.0	4.1	135	36.4	128	33.9	120	31.6	116	30.4	112	29.3	105	27.1
	7.0	6.0	135	34.3	128	32.1	120	29.9	116	28.8	112	27.7	105	25.6
	9.0	7.9	135	32.4	128	30.3	120	28.2	116	27.2	112	26.2	105	24.3
	11.0	9.8	135	30.6	128	28.7	120	26.8	116	25.8	112	24.9	105	23.1
	13.0	11.8	135	28.9	128	27.1	120	25.3	116	24.4	112	23.5	105	21.8
	15.0	13.7	135	27.4	128	25.7	120	24.0	116	23.2	112	22.4	105	20.8

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range shown by .
Note2: The above table shows the average value of conditions which may occur.

[50/60Hz]

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB 16.0 TC	16.0 PI	18.0 TC	18.0 PI	20.0 TC	20.0 PI	21.0 TC	21.0 PI	22.0 TC	22.0 PI	24.0 TC	24.0 PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70 (840)	-19.8	-20.0	89.2	39.1	89.0	40.2	88.9	41.2	88.8	41.7	88.7	42.2	88.5	43.3
	-18.8	-19.0	90.9	39.5	90.7	40.5	90.5	41.5	90.4	42.0	90.3	42.5	90.1	43.6
	-16.7	-17.0	94.5	40.2	94.3	41.2	94.1	42.2	94.0	42.6	93.9	43.1	91.5	42.5
	-13.7	-15.0	98.5	40.9	98.3	41.9	98.1	42.8	98.0	43.3	98.0	43.8	91.5	40.3
	-11.8	-13.0	102.9	41.7	102.7	42.6	102.6	43.5	101.6	43.4	98.3	41.6	91.5	38.2
	-9.8	-11.0	108	42.4	108	43.3	105	42.6	102	40.9	98.3	39.3	91.5	36.1
	-9.5	-10.0	110	42.8	110	43.6	105	41.4	102	39.8	98.3	38.2	91.5	35.1
	-8.5	-9.1	113	43.1	112	43.4	105	40.3	102	38.7	98.3	37.2	91.5	34.2
	-7.0	-7.6	117	43.6	112	41.5	105	38.5	102	37.0	98.3	35.6	91.5	32.8
	-5.0	-5.6	118	41.9	112	39.1	105	36.3	102	34.9	98.3	33.6	91.5	30.9
	-3.0	-3.7	118	39.5	112	36.9	105	34.3	102	33.0	98.3	31.7	91.5	29.3
	0.0	-0.7	118	36.0	112	33.6	105	31.3	102	30.2	98.3	29.0	91.5	26.8
	3.0	2.2	118	33.0	112	30.8	105	28.7	102	27.7	98.3	26.7	91.5	24.7
	5.0	4.1	118	31.1	112	29.1	105	27.2	102	26.2	98.3	25.3	91.5	23.4
	7.0	6.0	118	29.4	112	27.6	105	25.7	102	24.8	98.3	24.0	91.5	22.2
	9.0	7.9	118	27.9	112	26.1	105	24.4	102	23.6	98.3	22.7	91.5	21.1
	11.0	9.8	118	26.4	112	24.8	105	23.2	102	22.4	98.3	21.6	91.5	20.1
	13.0	11.8	118	24.9	112	23.4	105	21.9	102	21.2	98.3	20.5	91.5	19.0
	15.0	13.7	118	23.7	112	22.3	105	20.9	102	20.2	98.3	19.5	91.5	18.1
60 (720)	-19.8	-20.0	88.8	41.7	88.6	42.6	88.5	43.5	87.1	43.0	84.2	41.3	78.4	37.9
	-18.8	-19.0	90.4	42.0	90.3	42.9	90.0	43.7	87.1	42.0	84.2	40.3	78.4	37.0
	-16.7	-17.0	94.0	42.7	93.9	43.5	90.0	41.6	87.1	40.0	84.2	38.4	78.4	35.3
	-13.7	-15.0	98.0	43.3	95.8	42.6	90.0	39.5	87.1	38.0	84.2	36.5	78.4	33.6
	-11.8	-13.0	101.6	43.3	95.8	40.3	90.0	37.4	87.1	36.0	84.2	34.6	78.4	31.9
	-9.8	-11.0	102	40.9	95.8	38.1	90.0	35.4	87.1	34.1	84.2	32.8	78.4	30.2
	-9.5	-10.0	102	39.7	95.8	37.1	90.0	34.4	87.1	33.2	84.2	31.9	78.4	29.4
	-8.5	-9.1	102	38.7	95.8	36.1	90.0	33.6	87.1	32.3	84.2	31.1	78.4	28.7
	-7.0	-7.6	102	37.0	95.8	34.6	90.0	32.2	87.1	31.0	84.2	29.8	78.4	27.5
	-5.0	-5.6	102	34.9	95.8	32.6	90.0	30.3	87.1	29.2	84.2	28.2	78.4	26.0
	-3.0	-3.7	102	33.0	95.8	30.8	90.0	28.7	87.1	27.7	84.2	26.7	78.4	24.7
	0.0	-0.7	102	30.1	95.8	28.2	90.0	26.3	87.1	25.4	84.2	24.5	78.4	22.7
	3.0	2.2	102	27.7	95.8	26.0	90.0	24.3	87.1	23.4	84.2	22.6	78.4	21.0
	5.0	4.1	102	26.2	95.8	24.6	90.0	23.0	87.1	22.2	84.2	21.5	78.4	19.9
	7.0	6.0	102	24.8	95.8	23.3	90.0	21.8	87.1	21.1	84.2	20.4	78.4	19.0
	9.0	7.9	102	23.5	95.8	22.1	90.0	20.7	87.1	20.1	84.2	19.4	78.4	18.0
	11.0	9.8	102	22.4	95.8	21.0	90.0	19.7	87.1	19.1	84.2	18.4	78.4	17.2
	13.0	11.8	102	21.2	95.8	19.9	90.0	18.7	87.1	18.1	84.2	17.5	78.4	16.4
	15.0	13.7	102	20.2	95.8	19.0	90.0	17.9	87.1	17.3	84.2	16.7	78.4	15.6
50 (600)	-19.8	-20.0	84.6	41.5	79.8	38.7	75.0	35.9	72.6	34.6	70.2	33.2	65.4	30.6
	-18.8	-19.0	84.6	40.6	79.8	37.8	75.0	35.1	72.6	33.8	70.2	32.5	65.4	30.0
	-16.7	-17.0	84.6	38.7	79.8	36.1	75.0	33.5	72.6	32.3	70.2	31.1	65.4	28.7
	-13.7	-15.0	84.6	36.7	79.8	34.3	75.0	31.9	72.6	30.7	70.2	29.6	65.4	27.3
	-11.8	-13.0	84.6	34.8	79.8	32.5	75.0	30.3	72.6	29.2	70.2	28.1	65.4	26.0
	-9.8	-11.0	84.6	33.0	79.8	30.8	75.0	28.7	72.6	27.7	70.2	26.7	65.4	24.7
	-9.5	-10.0	84.6	32.1	79.8	30.0	75.0	28.0	72.6	27.0	70.2	26.0	65.4	24.1
	-8.5	-9.1	84.6	31.3	79.8	29.3	75.0	27.3	72.6	26.3	70.2	25.4	65.4	23.5
	-7.0	-7.6	84.6	30.0	79.8	28.1	75.0	26.2	72.6	25.3	70.2	24.4	65.4	22.6
	-5.0	-5.6	84.6	28.3	79.8	26.5	75.0	24.8	72.6	23.9	70.2	23.1	65.4	21.4
	-3.0	-3.7	84.6	26.8	79.8	25.2	75.0	23.5	72.6	22.7	70.2	21.9	65.4	20.4
	0.0	-0.7	84.6	24.6	79.8	23.1	75.0	21.7	72.6	21.0	70.2	20.2	65.4	18.8
	3.0	2.2	84.6	22.7	79.8	21.4	75.0	20.0	72.6	19.4	70.2	18.7	65.4	17.5
	5.0	4.1	84.6	21.6	79.8	20.3	75.0	19.1	72.6	18.4	70.2	17.8	65.4	16.6
	7.0	6.0	84.6	20.5	79.8	19.3	75.0	18.1	72.6	17.6	70.2	17.0	65.4	15.9
	9.0	7.9	84.6	19.5	79.8	18.4	75.0	17.3	72.6	16.7	70.2	16.2	65.4	15.1
	11.0	9.8	84.6	18.5	79.8	17.5	75.0	16.5	72.6	16.0	70.2	15.5	65.4	14.5
	13.0	11.8	84.6	17.6	79.8	16.6	75.0	15.7	72.6	15.2	70.2	14.7	65.4	13.8
	15.0	13.7	84.6	16.8	79.8	15.9	75.0	15.0	72.6	14.5	70.2	14.1	65.4	13.2

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: ▒ is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range shown by ▒.
Note2: The above table shows the average value of conditions which may occur.

15

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB											
			16.0		18.0		20.0		21.0		22.0		24.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130 (1625)	-19.8	-20.0	92.8	22.5	92.4	24.6	92.1	26.7	91.9	27.7	91.7	28.7	91.3	30.8
	-18.8	-19.0	94.4	23.2	94.1	25.2	93.7	27.3	93.5	28.3	93.4	29.3	93.0	31.3
	-16.7	-17.0	98.1	24.6	97.7	26.6	97.3	28.5	97.2	29.5	97.0	30.4	96.6	32.4
	-13.7	-15.0	102.1	26.1	101.7	27.9	101.4	29.8	101.2	30.7	101.0	31.6	100.7	33.5
	-11.8	-13.0	106.5	27.5	106.2	29.3	105.8	31.1	105.7	32.0	105.5	32.9	105.1	34.6
	-9.8	-11.0	111	29.0	111	30.7	111	32.4	111	33.2	110	34.1	110	35.8
	-9.5	-10.0	114	29.7	114	31.3	113	33.0	113	33.8	113	34.7	113	36.3
	-8.5	-9.1	116	30.3	116	31.9	116	33.6	116	34.4	115	35.2	115	36.8
	-7.0	-7.6	121	31.4	120	32.9	120	34.5	120	35.3	120	36.1	119	37.6
	-5.0	-5.6	127	32.7	126	34.2	126	35.7	126	36.5	125	37.2	125	38.7
	-3.0	-3.7	133	34.0	132	35.4	132	36.8	132	37.5	132	38.2	131	39.6
	0.0	-0.7	143	35.9	143	37.2	142	38.5	142	39.1	142	39.8	141	41.1
	3.0	2.2	154	37.6	153	38.8	153	40.0	153	40.6	153	41.2	152	42.4
	5.0	4.1	161	38.6	161	39.8	161	40.9	160	41.5	160	42.1	160	43.2
	7.0	6.0	169	39.6	169	40.7	168	41.8	168	42.4	168	42.9	168	44.0
	9.0	7.9	177	40.6	177	41.6	177	42.6	177	43.2	176	43.7	176	44.7
	11.0	9.8	186	41.4	186	42.4	185	43.4	185	43.9	185	44.4	177	42.4
	13.0	11.8	196	42.3	195	43.3	195	44.2	195	44.7	190	43.4	177	39.9
	15.0	13.7	205	43.1	205	44.0	203	44.4	196	42.7	190	41.0	177	37.7
120 (1500)	-19.8	-20.0	92.3	25.3	92.0	27.2	91.6	29.1	91.5	30.1	91.3	31.0	91.0	32.9
	-18.8	-19.0	93.9	25.9	93.6	27.8	93.3	29.7	93.1	30.6	93.0	31.5	92.6	33.4
	-16.7	-17.0	97.6	27.2	97.2	29.0	96.9	30.8	96.8	31.7	96.6	32.6	96.3	34.4
	-13.7	-15.0	101.6	28.6	101.3	30.3	101.0	32.0	100.8	32.9	100.6	33.7	100.3	35.4
	-11.8	-13.0	106.1	29.9	105.7	31.6	105.4	33.2	105.2	34.0	105.1	34.8	104.7	36.5
	-9.8	-11.0	111	31.3	111	32.8	110	34.4	110	35.2	110	36.0	110	37.5
	-9.5	-10.0	114	31.9	113	33.5	113	35.0	113	35.7	113	36.5	112	38.0
	-8.5	-9.1	116	32.5	116	34.0	115	35.5	115	36.3	115	37.0	115	38.5
	-7.0	-7.6	120	33.5	120	34.9	119	36.4	119	37.1	119	37.8	119	39.2
	-5.0	-5.6	126	34.7	126	36.1	125	37.5	125	38.2	125	38.9	125	40.2
	-3.0	-3.7	132	35.9	132	37.2	131	38.5	131	39.2	131	39.8	131	41.1
	0.0	-0.7	142	37.6	142	38.8	142	40.1	142	40.7	141	41.3	141	42.5
	3.0	2.2	153	39.2	153	40.3	153	41.4	152	42.0	152	42.6	152	43.7
	5.0	4.1	161	40.2	160	41.2	160	42.3	160	42.8	160	43.4	159	44.4
	7.0	6.0	169	41.1	168	42.1	168	43.1	168	43.6	168	44.1	163	43.4
	9.0	7.9	177	42.0	177	42.9	176	43.9	176	44.4	175	44.5	163	40.9
	11.0	9.8	186	42.8	185	43.7	185	44.6	181	43.7	175	42.0	163	38.6
	13.0	11.8	195	43.6	195	44.5	187	42.7	181	41.1	175	39.5	163	36.3
	15.0	13.7	205	44.3	199	43.4	187	40.3	181	38.8	175	37.3	163	34.3
110 (1375)	-19.8	-20.0	91.8	28.1	91.5	29.8	91.2	31.6	91.1	32.4	90.9	33.3	90.6	35.1
	-18.8	-19.0	93.5	28.7	93.2	30.4	92.9	32.1	92.7	32.9	92.6	33.8	92.3	35.5
	-16.7	-17.0	97.1	29.9	96.8	31.5	96.5	33.2	96.3	34.0	96.2	34.8	95.9	36.4
	-13.7	-15.0	101.1	31.1	100.8	32.7	100.5	34.2	100.4	35.0	100.2	35.8	99.9	37.4
	-11.8	-13.0	105.6	32.3	105.3	33.8	105.0	35.3	104.8	36.1	104.7	36.8	104.4	38.3
	-9.8	-11.0	110	33.6	110	35.0	110	36.4	110	37.1	110	37.9	109	39.3
	-9.5	-10.0	113	34.2	113	35.6	112	37.0	112	37.7	112	38.4	112	39.8
	-8.5	-9.1	115	34.7	115	36.1	115	37.4	115	38.1	115	38.8	114	40.2
	-7.0	-7.6	120	35.6	119	36.9	119	38.2	119	38.9	119	39.6	118	40.9
	-5.0	-5.6	126	36.8	125	38.0	125	39.3	125	39.9	125	40.5	124	41.8
	-3.0	-3.7	132	37.8	131	39.0	131	40.2	131	40.8	131	41.4	130	42.6
	0.0	-0.7	142	39.4	142	40.5	141	41.6	141	42.2	141	42.7	141	43.8
	3.0	2.2	153	40.8	152	41.9	152	42.9	152	43.4	152	43.9	150	44.0
	5.0	4.1	160	41.7	160	42.7	160	43.7	160	44.2	159	44.7	150	41.5
	7.0	6.0	168	42.6	168	43.5	168	44.4	166	44.3	161	42.5	150	39.1
	9.0	7.9	177	43.4	176	44.3	172	43.4	166	41.8	161	40.1	150	36.9
	11.0	9.8	185	44.1	183	44.1	172	40.9	166	39.4	161	37.8	150	34.8
	13.0	11.8	194	44.5	183	41.5	172	38.5	166	37.1	161	35.6	150	32.8
	15.0	13.7	194	42.0	183	39.2	172	36.4	166	35.0	161	33.7	150	31.1

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB											
			16.0		18.0		20.0		21.0		22.0		24.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100 (1250)	-19.8	-20.0	91.3	30.9	91.0	32.5	90.8	34.0	90.6	34.8	90.5	35.6	90.2	37.2
	-18.8	-19.0	93.0	31.4	92.7	33.0	92.4	34.5	92.3	35.3	92.2	36.1	91.9	37.6
	-16.7	-17.0	96.6	32.5	96.3	34.0	96.1	35.5	95.9	36.2	95.8	37.0	95.5	38.5
	-13.7	-15.0	100.7	33.6	100.4	35.0	100.1	36.5	100.0	37.2	99.8	37.9	99.6	39.3
	-11.8	-13.0	105.1	34.7	104.8	36.1	104.6	37.5	104.4	38.1	104.3	38.8	104.0	40.2
	-9.8	-11.0	110	35.8	110	37.1	109	38.5	109	39.1	109	39.8	109	41.1
	-9.5	-10.0	113	36.4	112	37.7	112	38.9	112	39.6	112	40.2	111	41.5
	-8.5	-9.1	115	36.9	115	38.1	114	39.4	114	40.0	114	40.6	114	41.9
	-7.0	-7.6	119	37.7	119	38.9	119	40.1	118	40.7	118	41.3	118	42.5
	-5.0	-5.6	125	38.8	125	39.9	125	41.0	124	41.6	124	42.2	124	43.3
	-3.0	-3.7	131	39.7	131	40.8	131	41.9	130	42.4	130	43.0	130	44.1
	0.0	-0.7	141	41.2	141	42.2	141	43.2	141	43.7	141	44.2	136	43.0
	3.0	2.2	152	42.5	152	43.4	152	44.3	151	44.5	146	42.8	136	39.3
	5.0	4.1	160	43.3	160	44.2	156	43.6	151	41.9	146	40.3	136	37.0
	7.0	6.0	168	44.1	166	44.3	156	41.1	151	39.5	146	38.0	136	35.0
	9.0	7.9	176	44.8	166	41.7	156	38.8	151	37.3	146	35.9	136	33.0
	11.0	9.8	176	42.2	166	39.4	156	36.6	151	35.2	146	33.9	136	31.2
	13.0	11.8	176	39.7	166	37.1	156	34.5	151	33.2	146	32.0	136	29.5
	15.0	13.7	176	37.5	166	35.0	156	32.6	151	31.4	146	30.3	136	28.0
90 (1125)	-19.8	-20.0	90.8	33.7	90.6	35.1	90.3	36.5	90.2	37.2	90.1	37.9	89.9	39.4
	-18.8	-19.0	92.5	34.1	92.3	35.5	92.0	36.9	91.9	37.6	91.8	38.3	91.5	39.7
	-16.7	-17.0	96.1	35.1	95.9	36.5	95.6	37.8	95.5	38.5	95.4	39.1	95.1	40.5
	-13.7	-15.0	100.2	36.1	99.9	37.4	99.7	38.7	99.6	39.3	99.4	40.0	99.2	41.3
	-11.8	-13.0	104.6	37.1	104.4	38.4	104.1	39.6	104.0	40.2	103.9	40.8	103.6	42.0
	-9.8	-11.0	109	38.1	109	39.3	109	40.5	109	41.1	109	41.7	108	42.8
	-9.5	-10.0	112	38.6	112	39.8	112	40.9	111	41.5	111	42.1	111	43.2
	-8.5	-9.1	114	39.1	114	40.2	114	41.3	114	41.9	114	42.4	113	43.6
	-7.0	-7.6	119	39.8	118	40.9	118	42.0	118	42.5	118	43.0	118	44.1
	-5.0	-5.6	125	40.8	124	41.8	124	42.8	124	43.3	124	43.8	122	44.1
	-3.0	-3.7	131	41.6	130	42.6	130	43.6	130	44.1	130	44.6	122	41.6
	0.0	-0.7	141	42.9	141	43.8	140	44.7	136	43.0	131	41.3	122	37.9
	3.0	2.2	152	44.1	149	44.0	140	40.8	136	39.3	131	37.7	122	34.7
	5.0	4.1	158	44.5	149	41.4	140	38.5	136	37.0	131	35.6	122	32.8
	7.0	6.0	158	41.9	149	39.0	140	36.3	136	34.9	131	33.6	122	31.0
	9.0	7.9	158	39.5	149	36.8	140	34.3	136	33.0	131	31.8	122	29.3
	11.0	9.8	158	37.3	149	34.8	140	32.4	136	31.2	131	30.1	122	27.8
	13.0	11.8	158	35.1	149	32.8	140	30.6	136	29.5	131	28.4	122	26.3
	15.0	13.7	158	33.2	149	31.1	140	29.0	136	28.0	131	26.9	122	25.0
80 (1000)	-19.8	-20.0	90.4	36.4	90.1	37.7	89.9	39.0	89.8	39.6	89.7	40.2	89.5	41.5
	-18.8	-19.0	92.0	36.9	91.8	38.1	91.6	39.3	91.5	40.0	91.4	40.6	91.1	41.8
	-16.7	-17.0	95.7	37.7	95.4	38.9	95.2	40.1	95.1	40.7	95.0	41.3	94.8	42.5
	-13.7	-15.0	99.7	38.6	99.5	39.8	99.2	40.9	99.1	41.5	99.0	42.1	98.8	43.2
	-11.8	-13.0	104.1	39.5	103.9	40.6	103.7	41.7	103.6	42.3	103.5	42.8	103.3	43.9
	-9.8	-11.0	109	40.4	109	41.5	109	42.5	108	43.0	108	43.6	108	44.6
	-9.5	-10.0	112	40.9	111	41.9	111	42.9	111	43.4	111	43.9	109	43.7
	-8.5	-9.1	114	41.3	114	42.3	114	43.3	113	43.8	113	44.3	109	42.6
	-7.0	-7.6	118	41.9	118	42.9	118	43.8	118	44.3	117	44.3	109	40.7
	-5.0	-5.6	124	42.8	124	43.7	124	44.6	121	43.5	117	41.7	109	38.3
	-3.0	-3.7	130	43.5	130	44.4	125	42.6	121	41.0	117	39.4	109	36.2
	0.0	-0.7	140	44.7	133	41.8	125	38.8	121	37.4	117	35.9	109	33.1
	3.0	2.2	141	41.0	133	38.2	125	35.5	121	34.2	117	32.9	109	30.4
	5.0	4.1	141	38.6	133	36.0	125	33.6	121	32.3	117	31.1	109	28.7
	7.0	6.0	141	36.4	133	34.0	125	31.7	121	30.6	117	29.4	109	27.2
	9.0	7.9	141	34.4	133	32.2	125	30.0	121	28.9	117	27.9	109	25.8
	11.0	9.8	141	32.5	133	30.4	125	28.4	121	27.4	117	26.4	109	24.5
	13.0	11.8	141	30.7	133	28.8	125	26.9	121	25.9	117	25.0	109	23.2
	15.0	13.7	141	29.1	133	27.3	125	25.5	121	24.6	117	23.8	109	22.1

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

Note1: ▒ is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range shown by ▒.
Note2: The above table shows the average value of conditions which may occur.

[50/60Hz]

Heating capacity

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. °CDB 16.0 TC	16.0 PI	18.0 TC	18.0 PI	20.0 TC	20.0 PI	21.0 TC	21.0 PI	22.0 TC	22.0 PI	24.0 TC	24.0 PI
	°CDB	°CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70 (875)	-19.8	-20.0	89.9	39.2	89.7	40.3	89.5	41.4	89.4	42.0	89.3	42.5	89.1	43.7
	-18.8	-19.0	91.5	39.6	91.3	40.7	91.2	41.8	91.1	42.3	91.0	42.9	90.8	43.9
	-16.7	-17.0	95.2	40.4	95.0	41.4	94.8	42.4	94.7	43.0	94.6	43.5	94.4	44.5
	-13.7	-15.0	99.2	41.1	99.0	42.1	98.8	43.1	98.7	43.6	98.6	44.1	95.2	42.8
	-11.8	-13.0	103.7	41.9	103.5	42.9	103.3	43.8	103.2	44.3	102.2	44.2	95.2	40.6
	-9.8	-11.0	109	42.7	108	43.6	108	44.5	106	43.5	102.2	41.7	95.2	38.4
	-9.5	-10.0	111	43.1	111	44.0	109	43.9	106	42.2	102.2	40.6	95.2	37.3
	-8.5	-9.1	114	43.5	113	44.3	109	42.8	106	41.1	102.2	39.5	95.2	36.3
	-7.0	-7.6	118	44.0	116	44.1	109	40.9	106	39.3	102.2	37.8	95.2	34.8
	-5.0	-5.6	123	44.5	116	41.5	109	38.5	106	37.1	102.2	35.6	95.2	32.8
	-3.0	-3.7	123	42.0	116	39.1	109	36.4	106	35.0	102.2	33.7	95.2	31.1
	0.0	-0.7	123	38.3	116	35.7	109	33.3	106	32.0	102.2	30.8	95.2	28.5
	3.0	2.2	123	35.0	116	32.7	109	30.5	106	29.4	102.2	28.3	95.2	26.2
	5.0	4.1	123	33.1	116	30.9	109	28.9	106	27.9	102.2	26.8	95.2	24.9
	7.0	6.0	123	31.3	116	29.3	109	27.3	106	26.4	102.2	25.4	95.2	23.6
	9.0	7.9	123	29.6	116	27.7	109	25.9	106	25.0	102.2	24.1	95.2	22.4
	11.0	9.8	123	28.0	116	26.3	109	24.6	106	23.8	102.2	22.9	95.2	21.3
	13.0	11.8	123	26.5	116	24.9	109	23.3	106	22.5	102.2	21.7	95.2	20.2
	15.0	13.7	123	25.2	116	23.6	109	22.2	106	21.4	102.2	20.7	95.2	19.3
60 (750)	-19.8	-20.0	89.4	42.0	89.2	42.9	89.1	43.9	89.0	44.4	87.6	43.8	81.6	40.2
	-18.8	-19.0	91.1	42.3	90.9	43.2	90.7	44.2	90.6	44.6	87.6	42.8	81.6	39.3
	-16.7	-17.0	94.7	43.0	94.5	43.9	93.6	44.2	90.6	42.5	87.6	40.8	81.6	37.5
	-13.7	-15.0	98.7	43.6	98.6	44.5	93.6	42.0	90.6	40.4	87.6	38.8	81.6	35.7
	-11.8	-13.0	103.2	44.3	99.6	42.8	93.6	39.8	90.6	38.3	87.6	36.8	81.6	33.9
	-9.8	-11.0	106	43.5	99.6	40.5	93.6	37.6	90.6	36.2	87.6	34.8	81.6	32.1
	-9.5	-10.0	106	42.2	99.6	39.4	93.6	36.6	90.6	35.2	87.6	33.9	81.6	31.2
	-8.5	-9.1	106	41.1	99.6	38.3	93.6	35.6	90.6	34.3	87.6	33.0	81.6	30.5
	-7.0	-7.6	106	39.3	99.6	36.7	93.6	34.1	90.6	32.9	87.6	31.7	81.6	29.2
	-5.0	-5.6	106	37.0	99.6	34.6	93.6	32.2	90.6	31.1	87.6	29.9	81.6	27.7
	-3.0	-3.7	106	35.0	99.6	32.7	93.6	30.5	90.6	29.4	87.6	28.3	81.6	26.2
	0.0	-0.7	106	32.0	99.6	30.0	93.6	28.0	90.6	27.0	87.6	26.0	81.6	24.1
	3.0	2.2	106	29.4	99.6	27.6	93.6	25.8	90.6	24.9	87.6	24.0	81.6	22.3
	5.0	4.1	106	27.8	99.6	26.1	93.6	24.4	90.6	23.6	87.6	22.8	81.6	21.2
	7.0	6.0	106	26.4	99.6	24.8	93.6	23.2	90.6	22.4	87.6	21.6	81.6	20.1
	9.0	7.9	106	25.0	99.6	23.5	93.6	22.0	90.6	21.3	87.6	20.6	81.6	19.2
	11.0	9.8	106	23.7	99.6	22.3	93.6	20.9	90.6	20.3	87.6	19.6	81.6	18.3
	13.0	11.8	106	22.5	99.6	21.2	93.6	19.9	90.6	19.3	87.6	18.6	81.6	17.4
	15.0	13.7	106	21.4	99.6	20.2	93.6	19.0	90.6	18.4	87.6	17.8	81.6	16.6
50 (625)	-19.8	-20.0	88.0	44.1	83.0	41.1	78.0	38.1	75.5	36.7	73.0	35.3	68.0	32.5
	-18.8	-19.0	88.0	43.1	83.0	40.2	78.0	37.3	75.5	35.9	73.0	34.5	68.0	31.8
	-16.7	-17.0	88.0	41.1	83.0	38.3	78.0	35.6	75.5	34.3	73.0	33.0	68.0	30.4
	-13.7	-15.0	88.0	39.0	83.0	36.4	78.0	33.9	75.5	32.6	73.0	31.4	68.0	29.0
	-11.8	-13.0	88.0	37.0	83.0	34.6	78.0	32.2	75.5	31.0	73.0	29.9	68.0	27.6
	-9.8	-11.0	88.0	35.0	83.0	32.7	78.0	30.5	75.5	29.4	73.0	28.4	68.0	26.2
	-9.5	-10.0	88.0	34.1	83.0	31.9	78.0	29.7	75.5	28.7	73.0	27.6	68.0	25.6
	-8.5	-9.1	88.0	33.2	83.0	31.1	78.0	29.0	75.5	28.0	73.0	27.0	68.0	25.0
	-7.0	-7.6	88.0	31.8	83.0	29.8	78.0	27.8	75.5	26.9	73.0	25.9	68.0	24.0
	-5.0	-5.6	88.0	30.1	83.0	28.2	78.0	26.3	75.5	25.4	73.0	24.5	68.0	22.8
	-3.0	-3.7	88.0	28.5	83.0	26.7	78.0	25.0	75.5	24.1	73.0	23.3	68.0	21.6
	0.0	-0.7	88.0	26.2	83.0	24.6	78.0	23.0	75.5	22.3	73.0	21.5	68.0	20.0
	3.0	2.2	88.0	24.1	83.0	22.7	78.0	21.3	75.5	20.6	73.0	19.9	68.0	18.5
	5.0	4.1	88.0	22.9	83.0	21.6	78.0	20.2	75.5	19.6	73.0	18.9	68.0	17.7
	7.0	6.0	88.0	21.8	83.0	20.5	78.0	19.3	75.5	18.6	73.0	18.0	68.0	16.8
	9.0	7.9	88.0	20.7	83.0	19.5	78.0	18.3	75.5	17.8	73.0	17.2	68.0	16.1
	11.0	9.8	88.0	19.7	83.0	18.6	78.0	17.5	75.5	16.9	73.0	16.4	68.0	15.4
	13.0	11.8	88.0	18.7	83.0	17.7	78.0	16.6	75.5	16.1	73.0	15.6	68.0	14.7
	15.0	13.7	88.0	17.9	83.0	16.9	78.0	15.9	75.5	15.4	73.0	15.0	68.0	14.0

TC Total capacity ; kW
PI Power Input ; kW(Comp.+Outdoor fan motor)

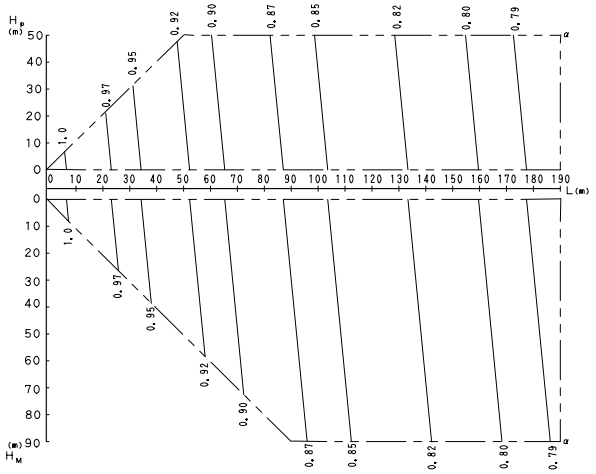
Note1: ■ is shown as reference.
When selecting the unit models, avoid the Outdoor air temperature range shown by ■.
Note2: The above table shows the average value of conditions which may occur.

15

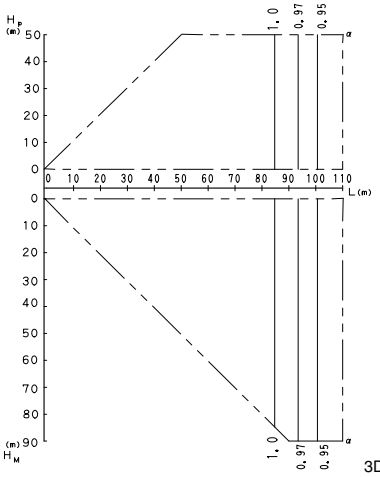
5.3 Capacity Correction Factor (RXYQ-P(A)H)

RXYQ16PAHY1, PAHYL, PHTL

1. Rate of change in cooling capacity



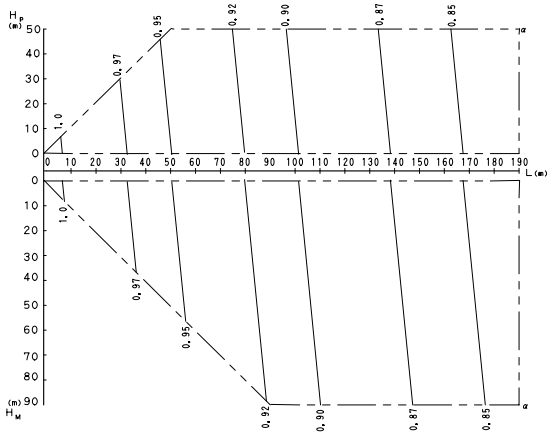
2. Rate of change in heating capacity



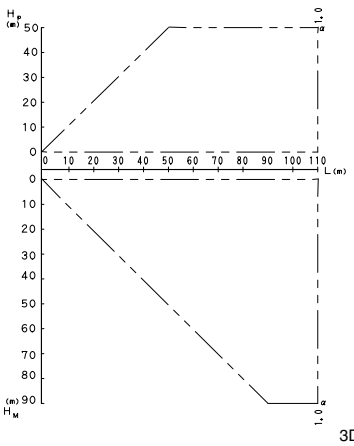
3D053167F

RXYQ24PAHY1, PAHYL, PHTL / RXYQ36PAHY1, PAHYL, PHTL

1. Rate of change in cooling capacity



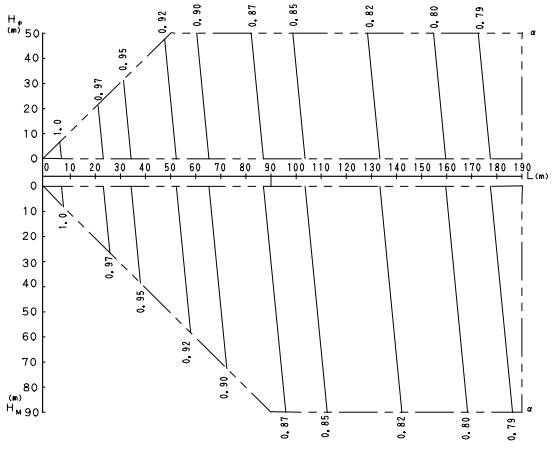
2. Rate of change in heating capacity



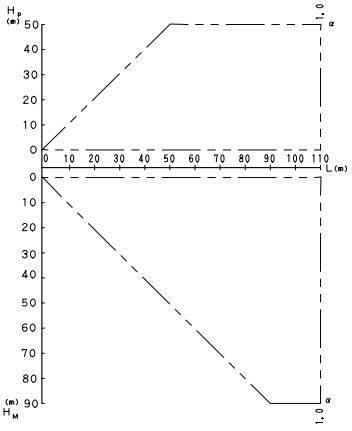
3D053166E

RXYQ18PAHY1, PAHYL, PHTL / RXYQ26PAHY1, PAHYL, PHTL / RXYQ28PAHY1, PAHYL, PHTL / RXYQ30PAHY1, PAHYL, PHTL / RXYQ38PAHY1, PAHYL, PHTL / RXYQ40PAHY1, PAHYL, PHTL / RXYQ42PAHY1, PAHYL, PHTL / RXYQ44PAHY1, PAHYL, PHTL

1. Rate of change in cooling capacity



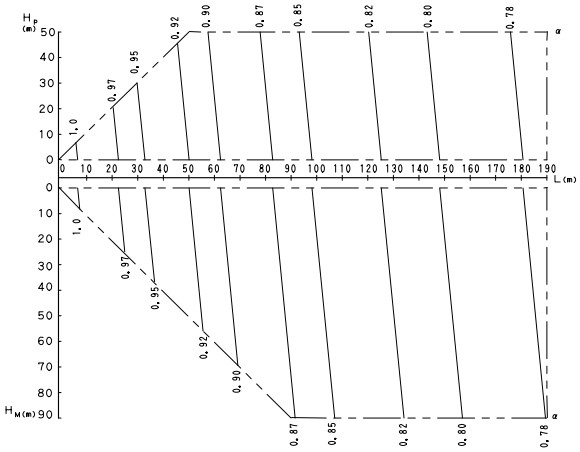
2. Rate of change in heating capacity



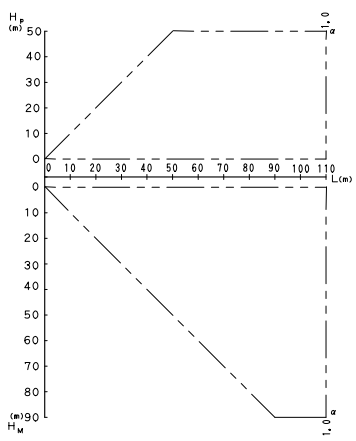
3D053168D

RXYQ32PAHY1, PAHYL, PHTL / RXYQ34PAHY1, PAHYL, PHTL

1. Rate of change in cooling capacity



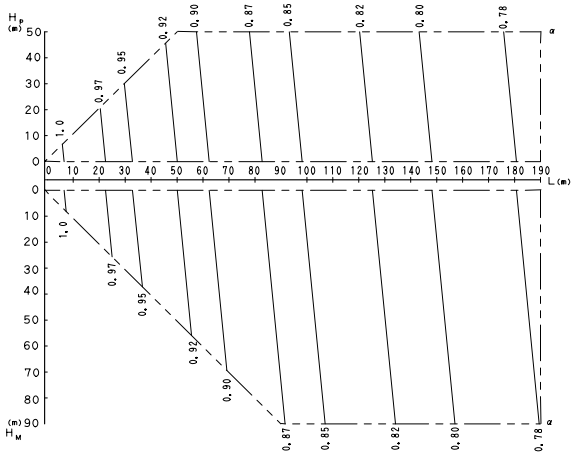
2. Rate of change in heating capacity



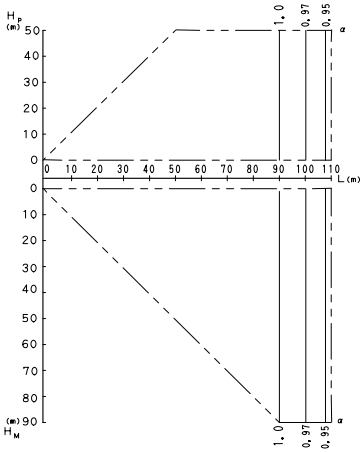
3D053170D

RXYQ46PAHY1, PAHYL, PHTL

1. Rate of change in cooling capacity



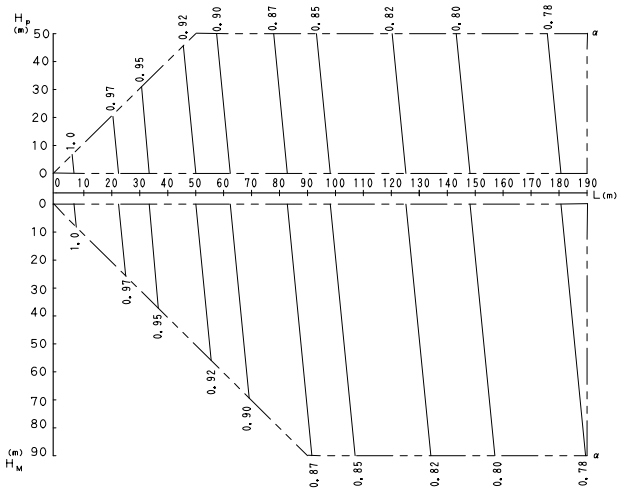
2. Rate of change in heating capacity



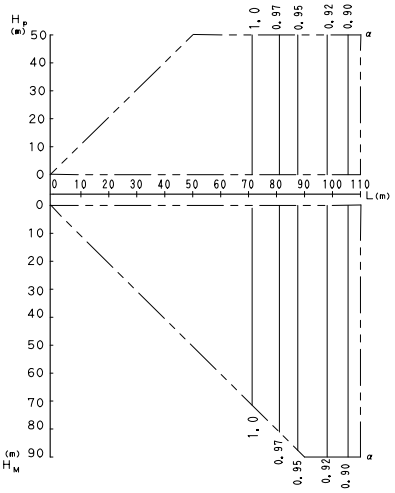
3D053171D

RXYQ48PAHY1, PAHYL, PHTL

1. Rate of change in cooling capacity



2. Rate of change in heating capacity

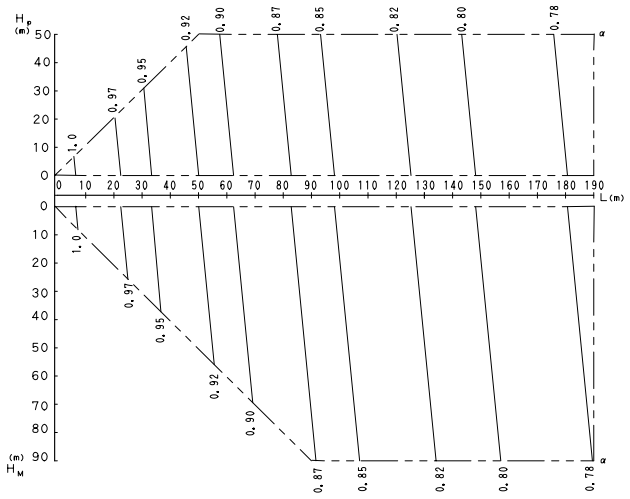


3D053172D

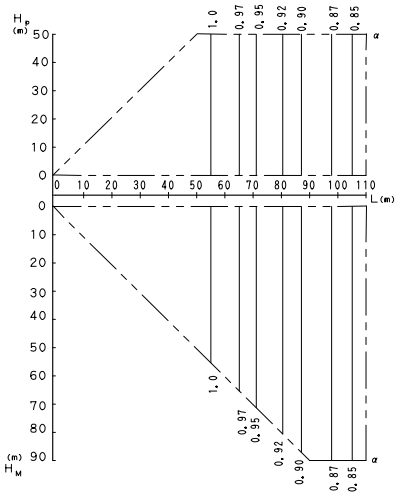
15

RXYQ50PAHY1, PAHYL, PHTL

1. Rate of change in cooling capacity



2. Rate of change in heating capacity



3D053173D

[Explanation of symbols]

H_P : Level difference (m) between indoor and outdoor units where indoor unit in inferior position

H_M : Level difference (m) between indoor and outdoor units where indoor unit in superior position

L : Equivalent pipe length (m)

α : Rate of change in cooling/heating capacity

[Diameters of pipes (Standard size)]

Model	Gas	Liquid
RXYQ16PAHY1, PAHYL, PHTL	φ28.6	φ12.7
RXYQ18PAHY1, PAHYL, PHTL	φ28.6	φ15.9
RXYQ24PAHY1, PAHYL, PHTL	φ34.9	φ15.9
RXYQ26PAHY1, PAHYL, PHTL	φ34.9	φ19.1
RXYQ28PAHY1, PAHYL, PHTL	φ34.9	φ19.1

Model	Gas	Liquid
RXYQ30PAHY1, PAHYL, PHTL	φ34.9	φ19.1
RXYQ32PAHY1, PAHYL, PHTL	φ34.9	φ19.1
RXYQ34PAHY1, PAHYL, PHTL	φ34.9	φ19.1
RXYQ36PAHY1, PAHYL, PHTL	φ41.3	φ19.1
RXYQ38PAHY1, PAHYL, PHTL	φ41.3	φ19.1

Model	Gas	Liquid
RXYQ40PAHY1, PAHYL, PHTL	φ41.3	φ19.1
RXYQ42PAHY1, PAHYL, PHTL	φ41.3	φ19.1
RXYQ44PAHY1, PAHYL, PHTL	φ41.3	φ19.1
RXYQ46PAHY1, PAHYL, PHTL	φ41.3	φ19.1
RXYQ48PAHY1, PAHYL, PHTL	φ41.3	φ19.1
RXYQ50PAHY1, PAHYL, PHTL	φ41.3	φ19.1

[Notes]

1. These figures illustrate the rate of change in capacity of a standard indoor unit system at maximum load (with the thermostat set to maximum)under standard conditions.
   Moreover, under partial load conditions there is only a minor deviation from the rate of change in capacity shown in the above figures.
2. With this outdoor unit, evaporating pressure constant control when cooling, and condensing pressure constant control when heating is carried out.
3. Method of calculating A/C (cooling/heating) capacity:
   The maximum A/C capacity of the system will be either the total A/C capacity of the indoor units obtained from capacity characteristic table or the maximum A/C capacity of outdoor units as mentioned bellow, whichever smaller.

   Calculating A/C capacity of outdoor units

   • Condition: Indoor unit combination ratio does not exceed 100%.

   Maximum A/C capacity of outdoor units = A/C capacity of outdoor units obtained from capacity characteristic table at the 100% combination
   X Capacity change rate due to piping length to the farthest indoor unit

   • Condition: Indoor unit combination ratio exceeds 100%.

   Maximum A/C capacity of outdoor units = A/C capacity of outdoor units obtained from capacity characteristic table at the combination
   X Capacity change rate due to piping length to the farthest indoor unit

4. When overall equivalent pipe length is 90m or more, the diameter of the main gas and liquid pipes (outdoor unit-branch sections) must be increased.
   When level difference is 50m or more, the diameter of the main liquid pipe (outdoor unit-branch sections) must be increased.

■ Diameter of above case

Model	Gas	Liquid
RXYQ16PAHY1, PAHYL, PHTL	ϕ38.1	ϕ15.9
RXYQ18PAHY1, PAHYL, PHTL	ϕ38.1	ϕ19.1
RXYQ24PAHY1, PAHYL, PHTL	Not Increased	ϕ19.1
RXYQ26PAHY1, PAHYL, PHTL	ϕ38.1*	ϕ22.2
RXYQ28PAHY1, PAHYL, PHTL	ϕ38.1*	ϕ22.2

Model	Gas	Liquid
RXYQ30PAHY1, PAHYL, PHTL	ϕ38.1*	ϕ22.2
RXYQ32PAHY1, PAHYL, PHTL	ϕ38.1*	ϕ22.2
RXYQ34PAHY1, PAHYL, PHTL	ϕ38.1*	ϕ22.2
RXYQ36PAHY1, PAHYL, PHTL	Not Increased	ϕ22.2
RXYQ38PAHY1, PAHYL, PHTL	Not Increased	ϕ22.2

Model	Gas	Liquid
RXYQ40PAHY1, PAHYL, PHTL	Not Increased	ϕ22.2
RXYQ42PAHY1, PAHYL, PHTL	Not Increased	ϕ22.2
RXYQ44PAHY1, PAHYL, PHTL	Not Increased	ϕ22.2
RXYQ46PAHY1, PAHYL, PHTL	Not Increased	ϕ22.2
RXYQ48PAHY1, PAHYL, PHTL	Not Increased	ϕ22.2

Model	Gas	Liquid
RXYQ50PAHY1, PAHYL, PHTL	Not Increased	ϕ22.2

*If available on the site, use this size. Otherwise it can not be increased.

(Unit: mm)

Temper grade	O Type				1/2 Type							
Outer diameter	ϕ6.4	ϕ9.5	ϕ12.7	ϕ15.9	ϕ19.1	ϕ22.2	ϕ25.4	ϕ28.6	ϕ31.8	ϕ34.9	ϕ38.1	ϕ41.3
Minimum Wall Thickness	0.80	0.80	0.80	0.99	0.80	0.80	0.88	0.99	1.10	1.21	1.32	1.43

5. Read cooling / heating capacity rate of change in the above figures based on the following equivalent length.

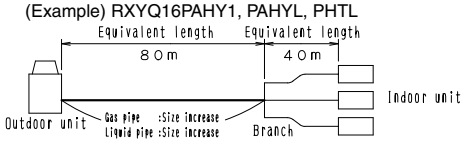
Overall equivalent length=
(Equivalent length to main pipe)×Correction factor+(Equivalent length after branching)

Choose a correction factor from the following table.

- When cooling capacity is calculated : gas pipe size
- When heating capacity is calculated : liquid pipe size

Rate of change (object piping)	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5
Heating (liquid pipe)	1.0	0.3

(Example) RXYQ16PAHY1, PAHYL, PHTL

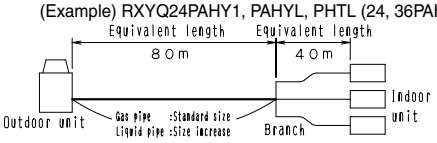


In the above case
(Cooling) Overall equivalent length=80m×0.5+40m=80m
(Heating) Overall equivalent length=80m×0.3+40m=64m

The rete of change in
cooling capacity when Hp=0m is thus approximately 0.88
heating capacity when Hp=0m is thus approximately 1.0

Rate of change (object piping)	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	
Heating (liquid pipe)	1.0	0.4

(Example) RXYQ24PAHY1, PAHYL, PHTL (24, 36PAHY1, PAHYL, PHTL)

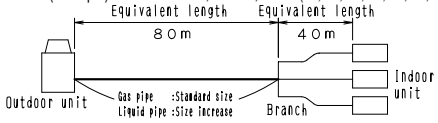


In the above case
(Cooling) Overall equivalent length=80m×1.0+40m=120m
(Heating) Overall equivalent length=80m×0.4+40m= 72m

The rete of change in
cooling capacity when Hp=0m is thus approximately 0.88
heating capacity when Hp=0m is thus approximately 1.0

Rate of change (object piping)	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5
Heating (liquid pipe)	1.0	0.4

(Example) RXYQ38PAHY1, PAHYL, PHTL (18, 26, 28, 30, 38, 40, 42, 44PAHY1, PAHYL, PHTL)

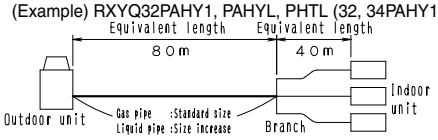


In the above case
(Cooling) Overall equivalent length=80m×1.0+40m=120m
(Heating) Overall equivalent length=80m×0.4+40m= 72m

The rete of change in
cooling capacity when Hp=0m is thus approximately 0.83
heating capacity when Hp=0m is thus approximately 1.0

Rate of change (object piping)	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5
Heating (liquid pipe)	1.0	0.4

(Example) RXYQ32PAHY1, PAHYL, PHTL (32, 34PAHY1, PAHYL, PHTL)



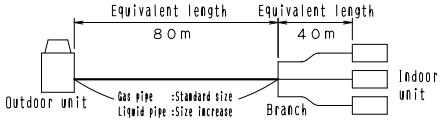
In the above case
(Cooling) Overall equivalent length=80m×1.0+40m=120m
(Heating) Overall equivalent length=80m×0.4+40m= 72m

The rete of change in
cooling capacity when Hp=0m is thus approximately 0.82
heating capacity when Hp=0m is thus approximately 1.0

15

Rate of change (object piping)	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	
Heating (liquid pipe)	1.0	0.4

(Example) RXYQ46PAHY1, PAHYL, PHTL

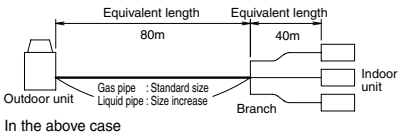


In the above case
(Cooling) Overall equivalent length=80m×1.0+40m=120m
(Heating) Overall equivalent length=80m×0.4+40m= 72m

The rete of change in
cooling capacity when Hp=0m is thus approximately 0.82
heating capacity when Hp=0m is thus approximately 1.0

Rate of change (object piping)	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	
Heating (liquid pipe)	1.0	0.4

(Example) RXYQ48PAHY1, PAHYL, PHTL

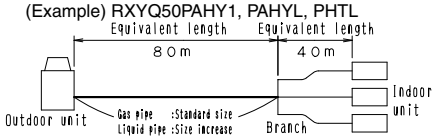


In the above case
(Cooling) Overall equivalent length=80m×1.0+40m=120m
(Heating) Overall equivalent length=80m×0.4+40m=72m

The rate of change in
cooling capacity when Hp=0m is thus approximately 0.82
heating capacity when Hp=0m is thus approximately 0.99

Rate of change (object piping)	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	
Heating (liquid pipe)	1.0	0.4

(Example) RXYQ50PAHY1, PAHYL, PHTL



In the above case
(Cooling) Overall equivalent length=80m×1.0+40m=120m
(Heating) Overall equivalent length=80m×0.4+40m= 72m

The rete of change in
cooling capacity when Hp=0m is thus approximately 0.82
heating capacity when Hp=0m is thus approximately 0.95

6. If heat insulation of piping is insufficient, heat loss will become larger and capacity will decrease.

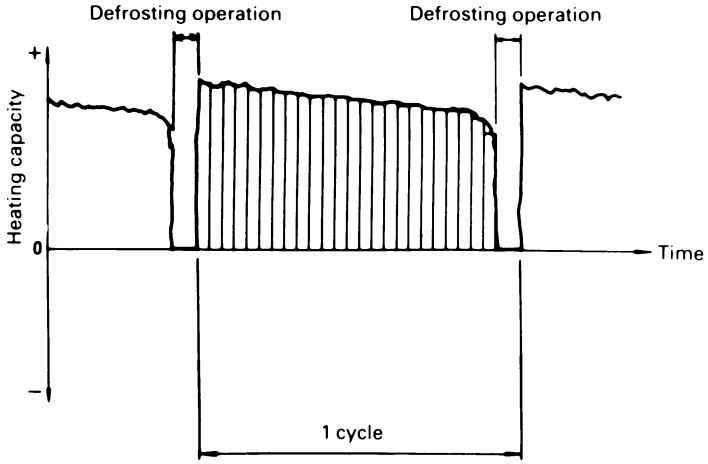
5.4 Notes for Heating Capacity Characteristics

■ The tables do not take account of the reduction in capacity when frost has accumulated or while the defrosting operation is in progress.
The capacity values which take these factors into account, in other words the integrated heating capacity values, can be calculated as follows:

Formula
Integrated heating capacity = A
Value given in table of capacity characteristics = B
Integrating correction factor for frost accumulation = C
A=B×C

■ Correction factor for finding integrated heating capacity

Inlet Port Temperature of Heat Exchanger (°C / RH 85%)	-7	-5	-3	0	3	5	7
Integrating Correction Factor for Frost Accumulation	0.95	0.93	0.88	0.84	0.85	0.90	1.00



Note:
It will be seen from the figure above that the integrated heating capacity expresses the integrated heating capacity for a single cycle (from defrost operation to defrost operation) in terms of time.

■ Please take note that when there is an accumulation of snow against the outside surface of the outdoor unit heat exchanger there will always be a temporary reduction in capacity although this will, of course, vary in degree in accordance with a number of other factors such as the outdoor temperature (°CDB), relative humidity (RH) and the amount of frosting which occurs.

15

6. Sound Levels

6.1 50Hz

Overall

dBA

Model \ Power Supply	Y1: 50Hz/380-415V
RXYQ16PAHY1	60
RXYQ18PAHY1	61
RXYQ24PAHY1	62
RXYQ26PAHY1	62
RXYQ28PAHY1	63
RXYQ30PAHY1	63

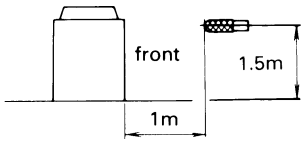
dBA

Model \ Power Supply	Y1: 50Hz/380-415V
RXYQ32PAHY1	64
RXYQ34PAHY1	64
RXYQ36PAHY1	65
RXYQ38PAHY1	65
RXYQ40PAHY1	65

dBA

Model \ Power Supply	Y1: 50Hz/380-415V
RXYQ42PAHY1	66
RXYQ44PAHY1	65
RXYQ46PAHY1	66
RXYQ48PAHY1	65
RXYQ50PAHY1	66

(Note)
Sound level:
Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5m.
During actual operation, these values are normally somewhat higher as a result of ambient conditions.



Please refer to page 607 concerning about the Band level of each module.

6.2 60Hz

Overall

dBA

Model \ Power Supply	YL: 60Hz/380V TL: 60Hz/220V
RXYQ16PAHYL, PHTL	60
RXYQ18PAHYL, PHTL	61
RXYQ24PAHYL, PHTL	62
RXYQ26PAHYL, PHTL	62
RXYQ28PAHYL, PHTL	63
RXYQ30PAHYL, PHTL	63

dBA

Model \ Power Supply	YL: 60Hz/380V TL: 60Hz/220V
RXYQ32PAHYL, PHTL	64
RXYQ34PAHYL, PHTL	64
RXYQ36PAHYL, PHTL	65
RXYQ38PAHYL, PHTL	65
RXYQ40PAHYL, PHTL	65

dBA

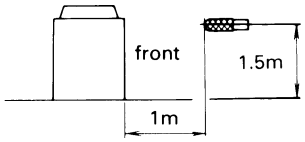
Model \ Power Supply	YL: 60Hz/380V TL: 60Hz/220V
RXYQ42PAHYL, PHTL	66
RXYQ44PAHYL, PHTL	65
RXYQ46PAHYL, PHTL	66
RXYQ48PAHYL, PHTL	65
RXYQ50PAHYL, PHTL	66

(Note)

Sound level:

Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5m.

During actual operation, these values are normally somewhat higher as a result of ambient conditions.

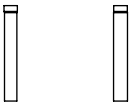
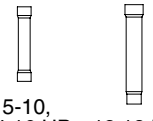


Please refer to page 608 concerning about the Band level of each module.

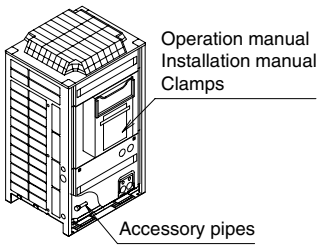
7. Accessories

7.1 Standard Accessories

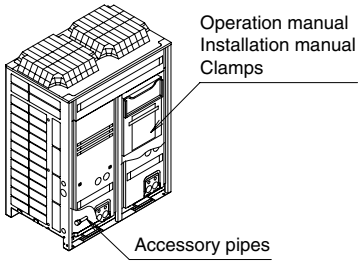
Q5~Q18 type				
Name	Clamp (1)	Clamp (2)	Clamp (3)	Gas side accessory pipe (1)
Quantity	9 pcs.	2 pcs.	1 pc.	1 pc.
Shape	 Small		 Large	

Q5~Q18 type				
Name	Gas side accessory pipe (2)	Liquid side accessory pipe (1)	Liquid side accessory pipe (2)	Others
Quantity	1 pc.	1 pc.	1 pc.	• Operation manual • Installation manual • Declaration of conformity (PED) (RXYQ~PAY1 only) • "REQUEST FOR THE INDICATION" label (Installation records)
Shape	 5-10 HP type 12-18 HP type		 5-10, 14,16 HP type 12,18 HP type	

[RXYQ5 · 8 · 10 type]



[RXYQ12 · 14 · 16 · 18 type]



3P226891-2D

7.2 Optional Accessories

RXYQ16 ~ 18PAHY1, PAHYL, PHTL

Optional accessories		RXYQ16PAHY1, PAHYL, PHTL RXYQ18PAHY1, PAHYL, PHTL	RXYQ16PAHY1E, PAHYLE, PHTLE RXYQ18PAHY1E, PAHYLE, PHTLE
Cool/Heat Selector		KRC19-26A	
Cool/Heat Selector	Fixing box	KJB111A	
Distributive Piping	Refnet header	KHRP26M22H, KHRP26M33H, (Max. 4 branch) (Max. 8 branch) KHRP26M72H (Max. 8 branch)	
Distributive Piping	Refnet joint	KHRP26A22T, KHRP26A33T, KHRP26A72T	
Outdoor unit multi connection piping kit		BHFP22P100	
Central drain pan kit		KWC26C280×2	★KWC26C280E×2
Digital Pressure Gauge Kit		BHGP26A1(E)	

C : 3D053053B

RXYQ24 ~ 30PAHY1, PAHYL, PHTL

Optional accessories		RXYQ24PAHY1, PAHYL, PHTL RXYQ26PAHY1, PAHYL, PHTL	RXYQ24PAHY1E, PAHYLE, PHTLE RXYQ26PAHY1E, PAHYLE, PHTLE	RXYQ28PAHY1, PAHYL, PHTL RXYQ30PAHY1, PAHYL, PHTL	RXYQ28PAHY1E, PAHYLE, PHTLE RXYQ30PAHY1E, PAHYLE, PHTLE
Cool/Heat Selector		KRC19-26A			
Cool/Heat Selector	Fixing box	KJB111A			
Distributive Piping	Refnet header	KHRP26M22H, KHRP26M33H, KHRP26M72H, KHRP26M73H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch) (Max. 8 branch)			
Distributive Piping	Refnet joint	KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T			
Outdoor unit multi connection piping kit		BHFP22P151			
Pipe size reducer		KHRP26M73TP, KHRP26M73HP			
Central drain pan kit		KWC26C280×3	★KWC26C280E×3	KWC26C280×2 KWC26C450	★KWC26C280E×2 ★KWC26C450E
Digital Pressure Gauge Kit		BHGP26A1(E)			

C : 3D053053B

RXYQ32 ~ 50PAHY1, PAHYL, PHTL

Optional accessories		RXYQ32PAHY1, PAHYL, PHTL RXYQ34PAHY1, PAHYL, PHTL	RXYQ32PAHY1E, PAHYLE, PHTLE RXYQ34PAHY1E, PAHYLE, PHTLE	RXYQ36PAHY1, PAHYL, PHTL RXYQ44PAHY1, PAHYL, PHTL RXYQ38PAHY1, PAHYL, PHTL RXYQ46PAHY1, PAHYL, PHTL RXYQ40PAHY1, PAHYL, PHTL RXYQ48PAHY1, PAHYL, PHTL RXYQ42PAHY1, PAHYL, PHTL RXYQ50PAHY1, PAHYL, PHTL	RXYQ36PAHY1E, PAHYLE, PHTLE RXYQ44PAHY1E, PAHYLE, PHTLE RXYQ38PAHY1E, PAHYLE, PHTLE RXYQ46PAHY1E, PAHYLE, PHTLE RXYQ40PAHY1E, PAHYLE, PHTLE RXYQ48PAHY1E, PAHYLE, PHTLE RXYQ42PAHY1E, PAHYLE, PHTLE RXYQ50PAHY1E, PAHYLE, PHTLE
Cool/Heat Selector		KRC19-26A			
Cool/Heat Selector	Fixing box	KJB111A			
Distributive Piping	Refnet header	KHRP26M22H, KHRP26M33H, KHRP26M72H, KHRP26M73H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch) (Max. 8 branch)			
Distributive Piping	Refnet joint	KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T			
Outdoor unit multi connection piping kit		BHFP22P151			
Pipe size reducer		KHRP26M73TP, KHRP26M73HP			
Central drain pan kit		KWC26C280 KWC26C450×2	★KWC26C280E ★KWC26C450E×2	KWC26C450×3	★KWC26C450E×3
Digital Pressure Gauge Kit		BHGP26A1(E)			

C : 3D053053B

Note:
★: Made-to-order products

15

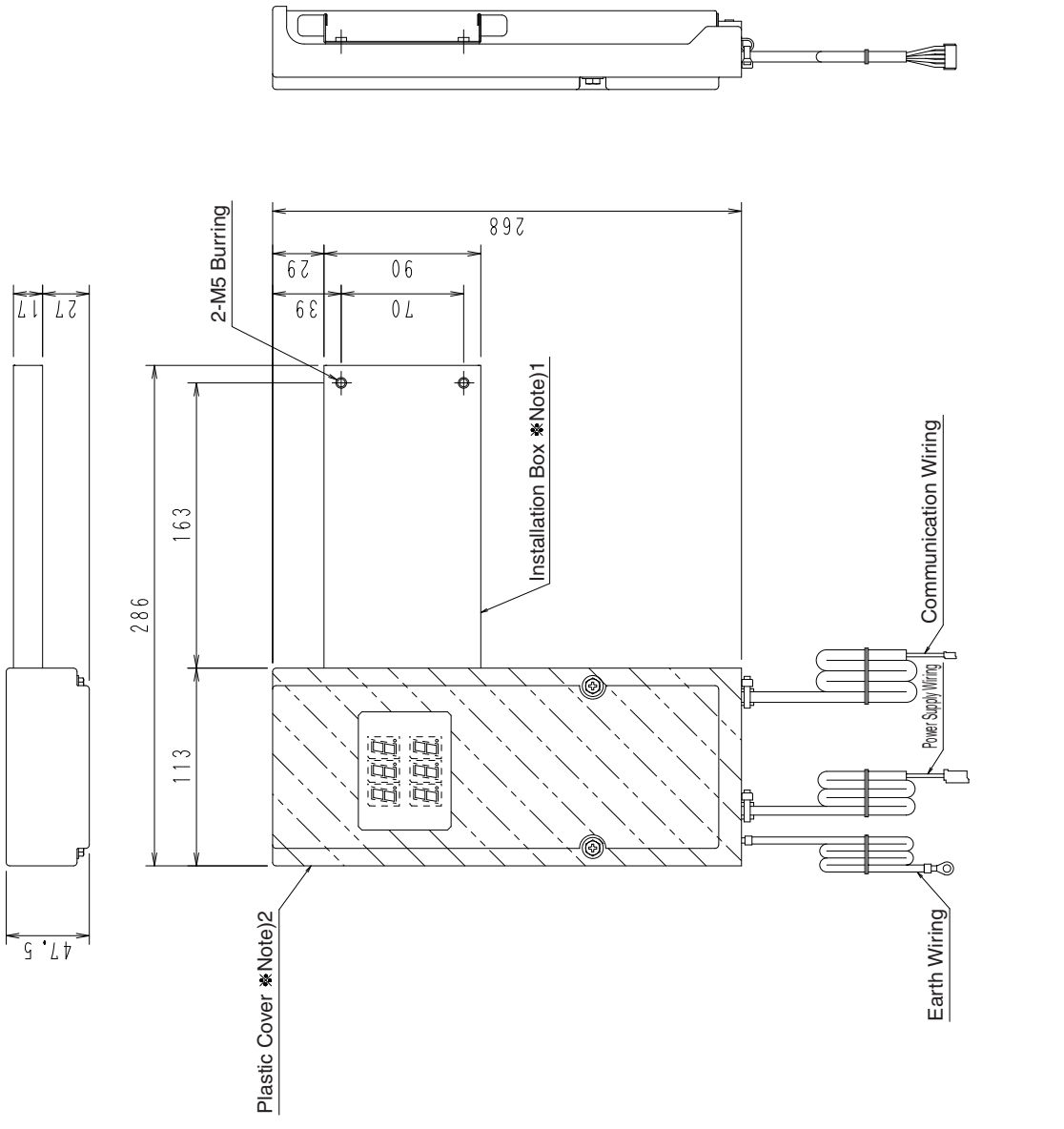
7.3 Digital Pressure Gauge Kit BHGP26A1(E)

Dimensions

	Model Name
Standard Type	BHGP26A1
Anti-Corrosion Type	BHGP26A1E

Note) 1. Installation Box
[Materials] : SGCC-Z22 (Standard)
SGCC-F08 (Anti-Corrosion • Heavy Anti-Corrosion)
light Camel (Anti-Corrosion)
gray (Heavy Anti-Corrosion)
2. Plastic Cover
[Materials] : Methacrylate Resin
[Finish of Surface] : ▨ flat finish
3. Standard Accessory : Set of Fixing Screw
Clamp Material
Gauge Window Name Plate
Plastic bush
Fixing manual
4. This kit is assembled on site

C : 3D055954



Part 6 Installation of Outdoor Units

1. Precaution on Installation 701
2. Installation of Outdoor Units 704
3. Installation Manual 710
   3.1 RXYQ-PAY1(E) 710
   3.2 RXYQ-PAYL(E), PTL(E) 731
4. REFNET Pipe System 752
   4.1 Layout Example 752
   4.2 Max. Refrigerant Piping Length 753
   4.3 Field Refrigerant Piping 754
   4.4 REFNET Joints and Headers 755
5. REFNET Joint and Header 757
   5.1 REFNET Joint (Branch Kit) 757
   5.2 REFNET Header (Branch Kit) 758
   5.3 Reducer 759
   5.4 Outdoor Unit Multi Connection Piping Kit 760
6. Piping Installation Point 764
   6.1 Piping Installation Point 764
   6.2 The Example of A Wrong Pattern 765
7. Refrigerant Piping 766
   7.1 Selection of Piping Material and Refrigerant Branching Kit 766
   7.2 Protection Against Contamination when Installing Pipes 766
   7.3 Pipe Connection 766
   7.4 Connecting the Refrigerant Piping 767
   7.5 Example of Connection 771
8. Field Wiring 773
   8.1 Power Circuit, Safety Device, and Cable Requirements 773
   8.2 Wiring Connection Example for Whole System 777
   8.3 Leading Wire Procedure 778
   8.4 Transmission Wiring Connection Procedure 779
   8.5 Power Wiring Connection Procedure 781
   8.6 Procedure for Wiring Inside Units 782
9. Air Tight Test and Vacuum Drying 783
   9.1 Preparations 783
   9.2 Air Tight Test and Vacuum Drying Method 784
10. Pipe Insulation 785
11. Checking of Device and Installation Conditions 785
12. Additional Refrigerant Charge and Check Operation 786
   12.1 Before Working 786
   12.2 Procedure of Adding Refrigerant Charging and Check Operation 788
13. Onsite Settings 792
   13.1 Onsite Settings With the Power Off 792
   13.2 Onsite Settings With the Power On 792

16

14. Test Run 793
14.1 Before Test Run 793
14.2 Test Run 793
14.3 Checks After Test Run 793
15. Caution for Refrigerant Leaks 794
16. External Static Pressure Setting 796

1. Precaution on Installation

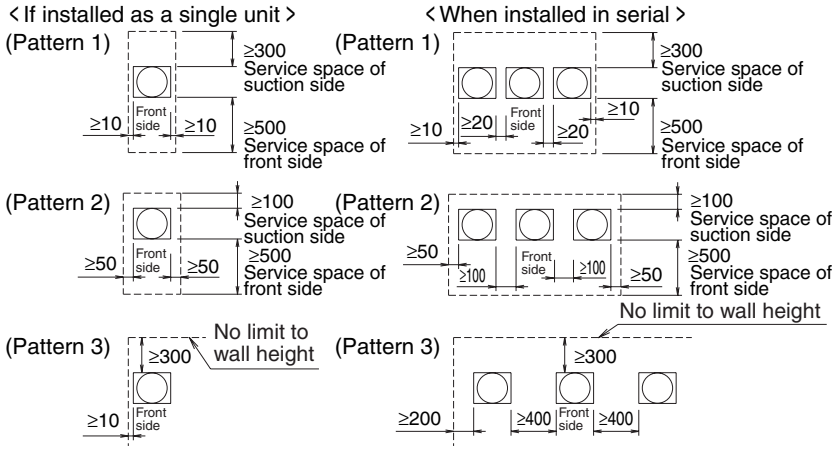
Determination of the Installation Location

SELECTION OF LOCATION

This unit, both indoor and outdoor, is suitable for installation in a commercial and light industrial environment. If installed as a household appliance it could cause electromagnetic interference.

The VRV outdoor units should be installed in a location that meets the following requirements:

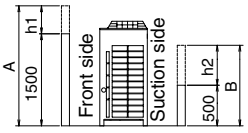
1. The foundation is strong enough to support the weight of the unit and the floor is flat to prevent vibration and noise generation.
2. The space around the unit is adequate for servicing and the minimum space for air inlet and air outlet is available. (Refer to below figure and choose one of both possibilities.)
3. There is no danger of fire due to leakage of inflammable gas.
4. Ensure that water cannot cause any damage to the location in case it drips out the unit (e.g. in case of a blocked drain pipe).
5. The piping length between the outdoor unit and the indoor unit may not exceed the allowable piping length. (See “Example of connection”.)
6. Select the location of the unit in such a way that neither the discharged air nor the sound generated by the unit disturb anyone.
7. Make sure that the air inlet and outlet of the unit are not positioned towards the main wind direction. Frontal wind will disturb the operation of the unit. If necessary, use a windscreen to block the wind.



For Patterns 1 and 2 in figure :

- Wall height for front side no higher than 1500 mm.
- Wall height on the suction side no higher than 500 mm.
- Wall height for sides – no limit.

If this height is exceeded, calculate h1 and h2 shown in the figure below, and add the service space for the front and suction sides to h1/2 and h2/2.

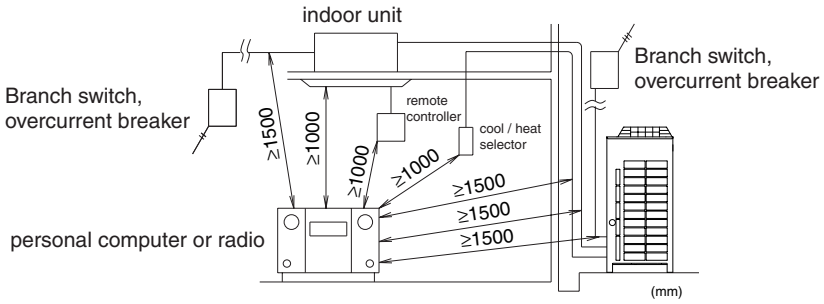


h1 = A (Actual height) – 1500
h2 = B (Actual height) – 500

16

Note

1. An inverter air conditioner may cause electronic noise generated from AM broadcasting. Examine where to install the main air conditioner and electric wires, keeping proper distances away from stereo equipment, personal computers, etc.
   Particularly for locations with weak reception, ensure there is a distance of at least 3 meters for indoor remote controllers, place power wiring and transmission wiring in conduits, and ground the conduits.

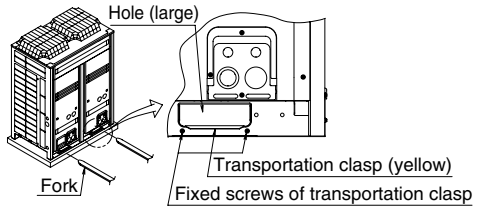


2. When installing in a locations where there is heavy snowfall, implement the following snow measures.
   - Ensure the base is high enough that intakes are not clogged by snow.
   - Attach a snow hood (sold separately).
   - Remove the rear intake grille to prevent snow from accumulating on the fins.
3. If condensate may drip on downstairs (walkway) depending on the floor condition, take a measure such as the installation of central drain pan kit (sold separately).
4. The refrigerant R-410A itself is nontoxic, nonflammable and is safe. If the refrigerant should leak however, its concentration may exceed the allowable limit depending on room size. Due to this it could be necessary to take measures against leakage. See **"15. Caution for Refrigerant Leaks"** for details.

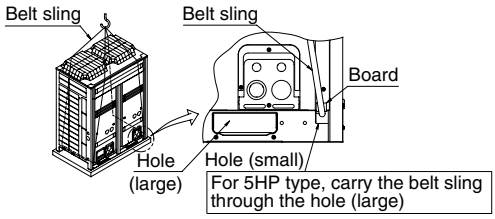
Suspension Method

- At delivery, the package should be checked and any damage should be reported immediately to the carrier claims agent.
- When handling the unit, take into account the following:

1. Fragile, handle the unit with care.
   Keep the unit upright in order to avoid compressor damage.
2. Decide on the transportation route.
3. If a forklift is to be used, pass the forklift arms through the large openings on the bottom of the unit.



4. If hanging the unit, use a cloth sling to prevent damaging the unit when hanging it. Keeping the following points in mind, hang the unit following the procedure shown in figure 6.
   - Use a sling sufficiently strong to hold the mass of the unit.
   - Use 2 belts of at least 8m long.
   - Place extra cloth or boards in the locations where the casing comes in contact with the sling to prevent damage.
   - Hoist the unit making sure it is being lifted at its center of gravity.
5. After installation, remove the transportation clasp attached to the large openings.



Note

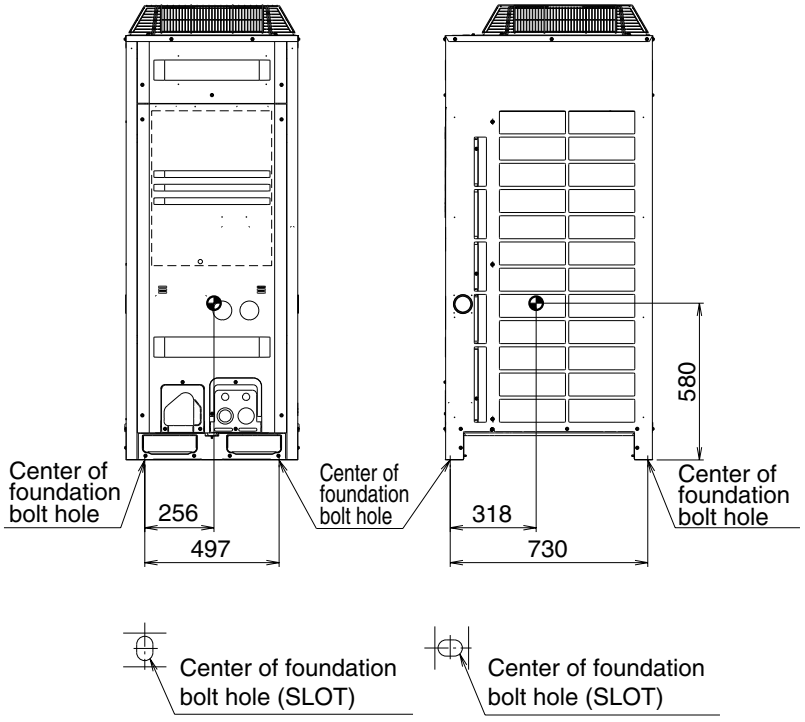
- Use belt sling of 20mm width or less which adequately bears the weight of the product.
- Apply a filler cloth on a fork to prevent coating of the bottom frame from coming off and rust from occurring when bringing in the unit with anti-corrosion treatment type using a forklift.

16

2. Installation of Outdoor Units

Center of Gravity : ⊕
RXYQ5P(A)

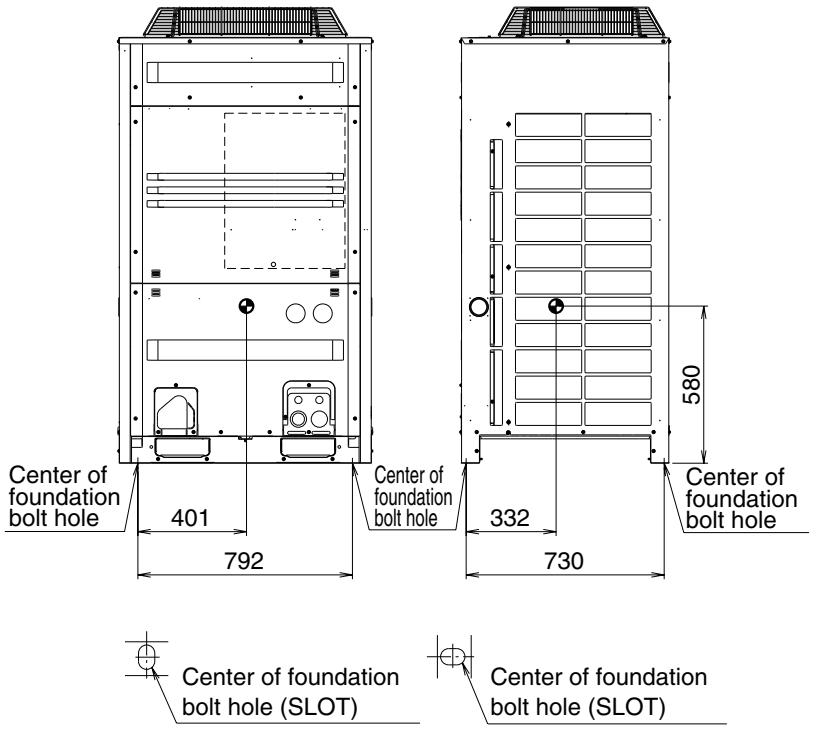
Unit (mm)



4D052145D

RXYQ8P(A)

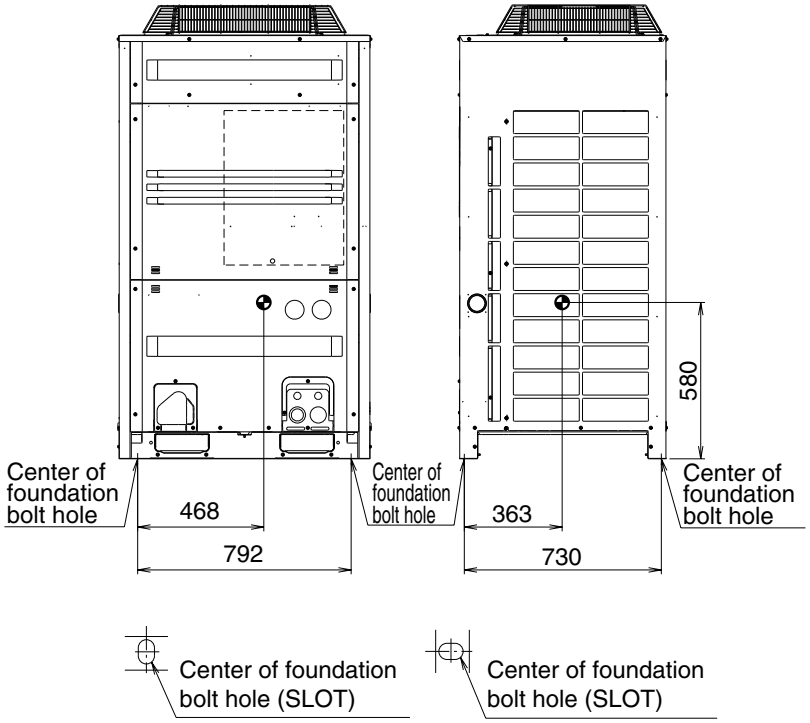
Unit (mm)



4D052146J

RXYQ10P(A)

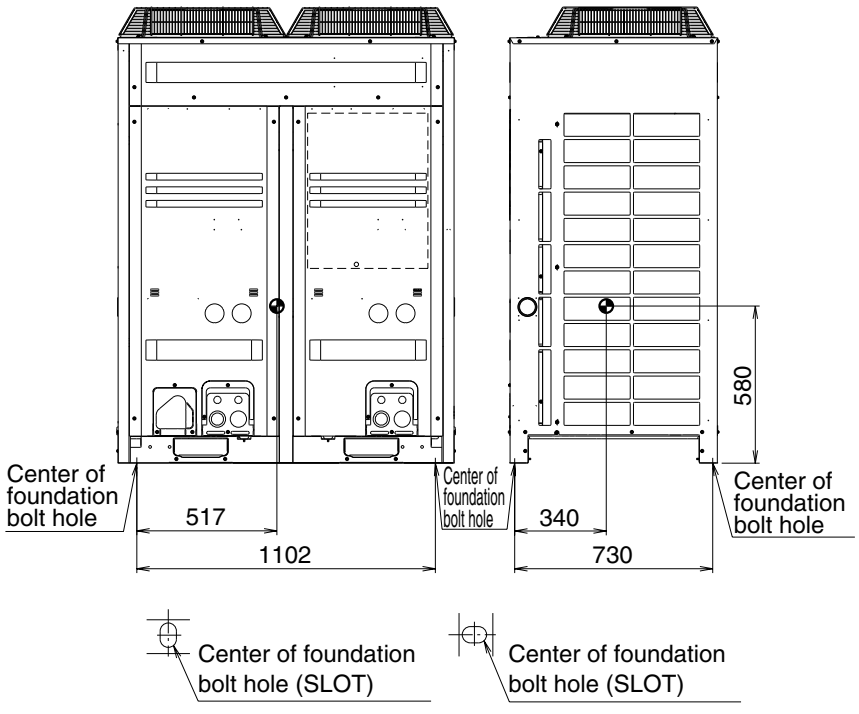
Unit (mm)



4D052147H

RXYQ12P(A)

Unit (mm)

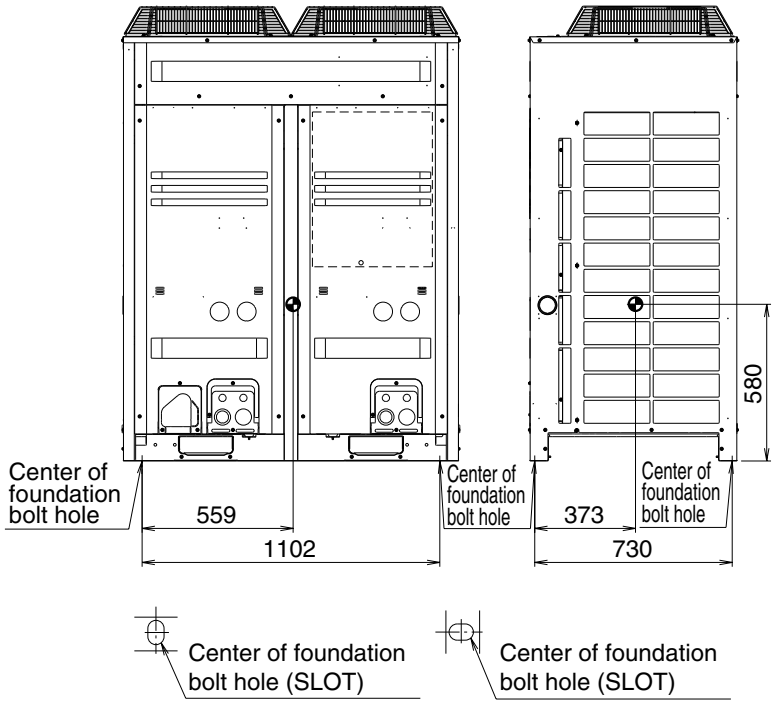


4D052148J

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RXYQ14, 16, 18P(A)

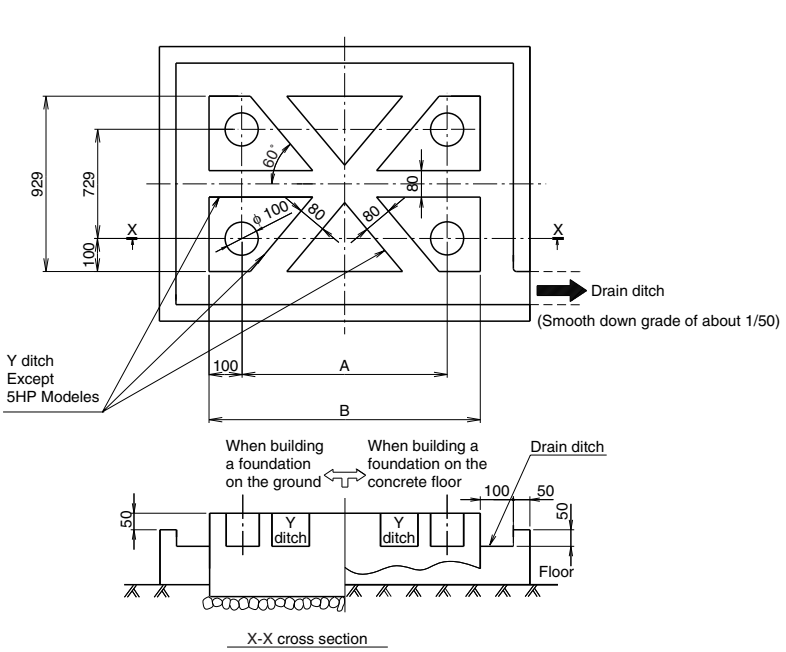
Unit (mm)

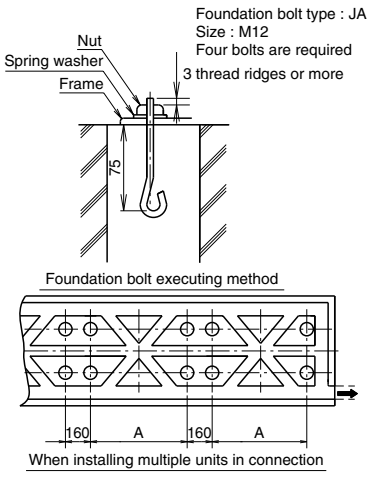


4D052572H

Foundation of Units

Unit (mm)





(Notes)
1. The proportions of cement : sand : gravel for the concrete shall be 1 : 2 : 4, and the reinforcement bars that their diameter are 10mm, (approx. 300mm intervals) shall be placed.
2. The surface shall be finished with mortar. The corner edges shall be chamfered.
3. When the foundation is built on a concrete floor, rubble is not necessary. However, the surface of the section on which the foundation is built shall have rough finish.
4. A drain ditch shall be made around the foundation to thoroughly drain water from the equipment installation area.
5. When installing the equipment on a roof, the floor strength shall be checked, and water-proofing measures shall be taken.
6. Y ditch is not necessary for 5HP Modeles.

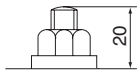
Model		A	B
5HP	RXYQ5PAY1, PAYL, PTL	497	697
8·10HP	RXYQ8·10PAY1, PAYL, PTL	792	992
12·14·16·18HP	RXYQ12·14·16·18PAY1, PAYL, PTL	1102	1302

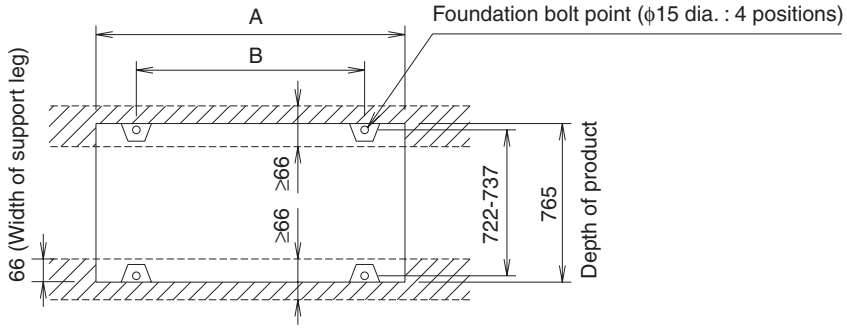
C:3D040102Y

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Bolt Pitch

- Make sure the unit is installed level on a sufficiently strong base to prevent vibration and noise.
- Secure the unit to its base using foundation bolts. (Use four commercially available M12-type foundation bolts, nuts, and washers.)
- The foundation bolts should be inserted 20 mm.
- Make sure the base under the unit extended more than 765mm behind the unit.
- The height of the base should be at least 150mm from the floor.
- The unit must be installed on a solid longitudinal foundation (steelbeam frame or concrete) as indicated in figure.



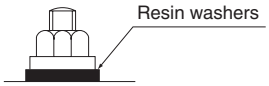


Shape of outdoor unit's support leg and foundation bolt positions

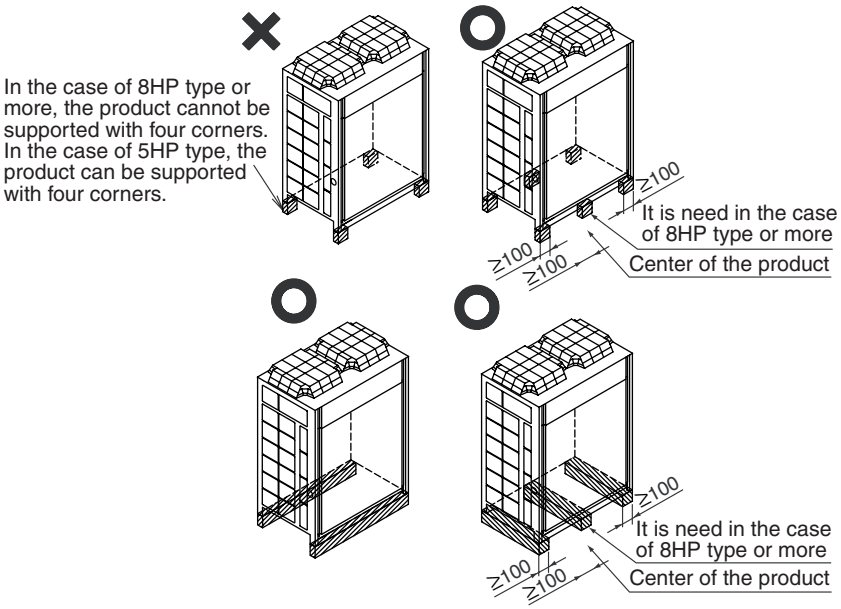
Model		A	B
5HP	RXYQ5PAY1, PAYL, PTL	635	497
8·10HP	RXYQ8·10PAY1, PAYL, PTL	930	792
12·14·16HP	RXYQ12·14·16PAY1, PAYL, PTL	1240	1102

Note

- When installing on a roof, make sure the roof floor is strong enough and be sure to water-proof all work.
- Make sure the area around the machine drains properly by setting up drainage grooves around the foundation. Drain water is sometimes discharged from the outdoor unit when it is running.
- For anti-corrosion type use nuts with resin washers. If the paint on nut connections comes off, the anti-corrosion effect may decrease.



Do not Use Stands to Support The Corners



16

3. Installation Manual

3.1 RXYQ-PAY1(E)

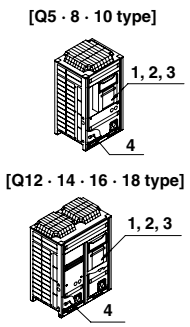


figure 1

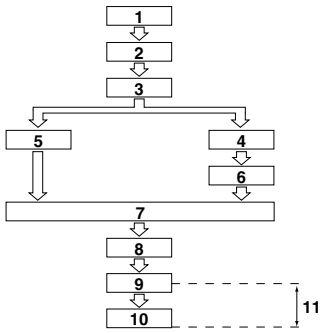


figure 2

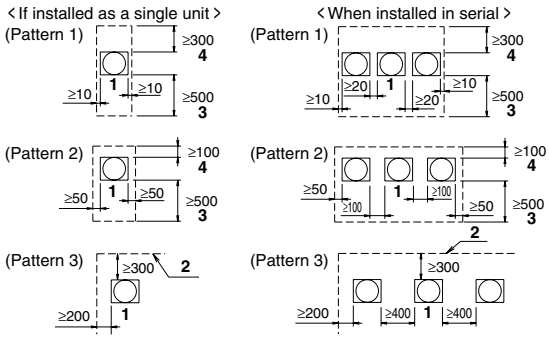


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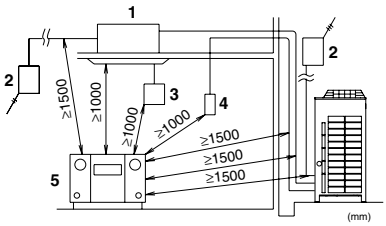


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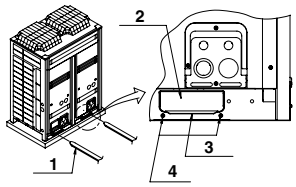


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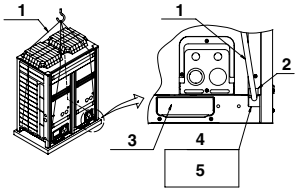


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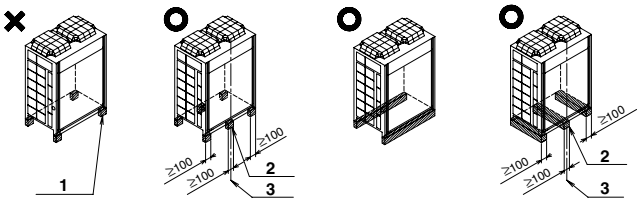


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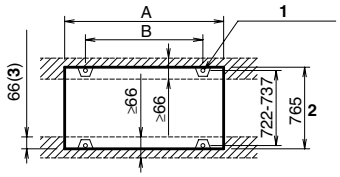


figure 8

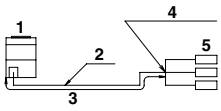


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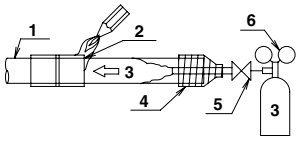


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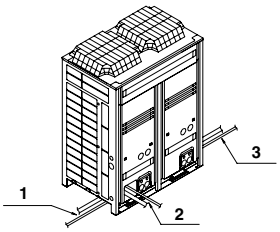


figure 11

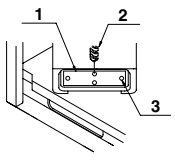


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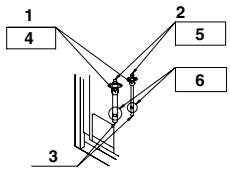


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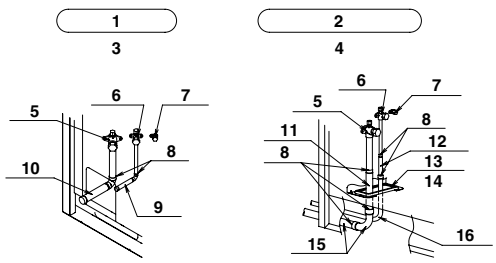


figure 14

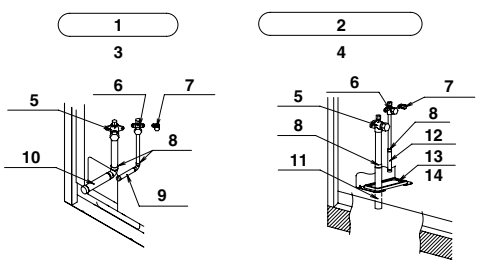


figure 15

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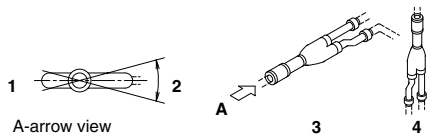
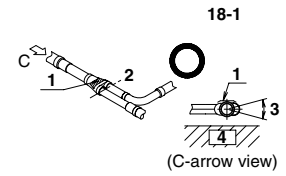


figure 16



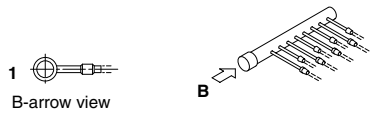


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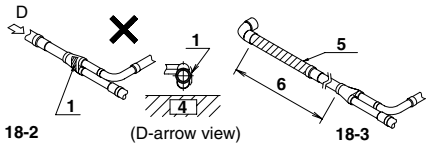


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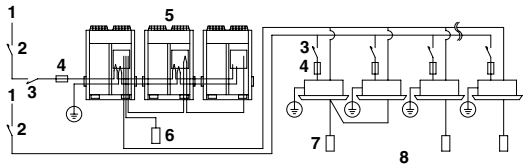


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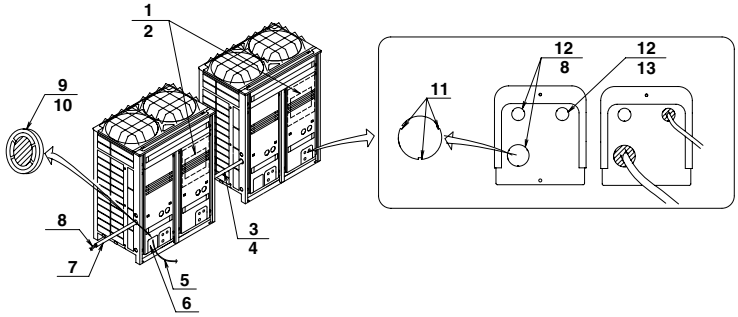


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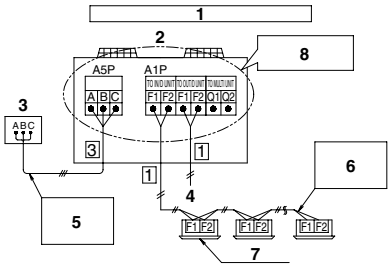


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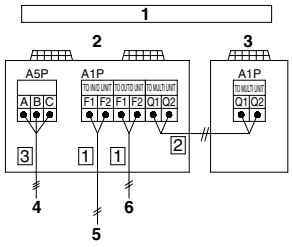
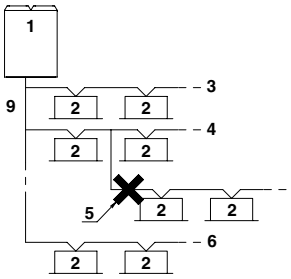


figure 22



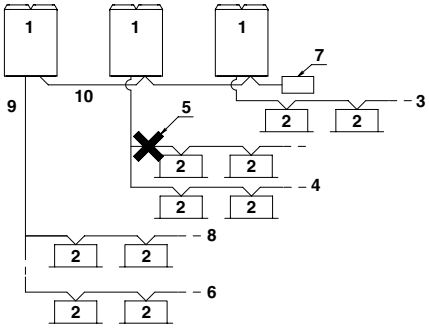


figure 23

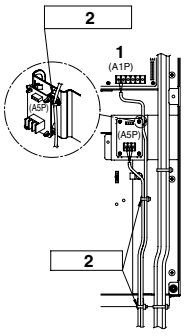


figure 24

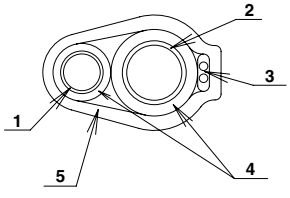


figure 25

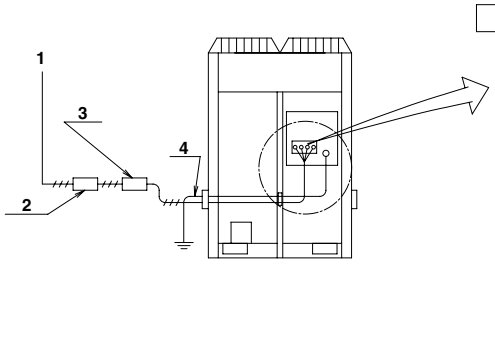


figure 26

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16

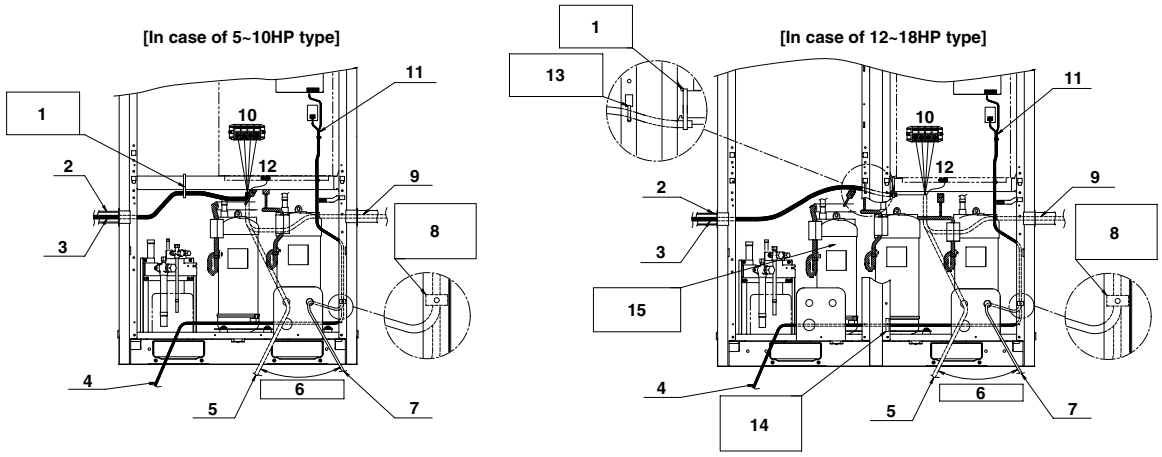


figure 27

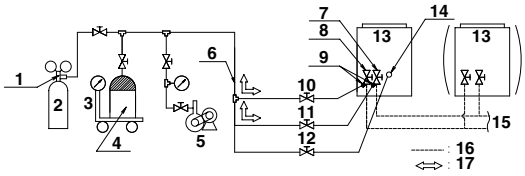


figure 28

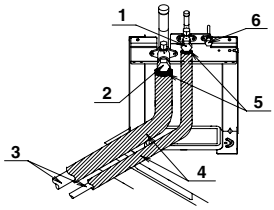


figure 29

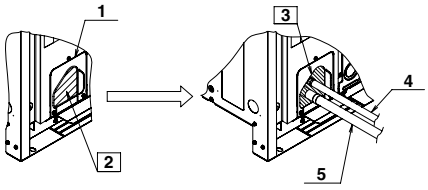


figure 30

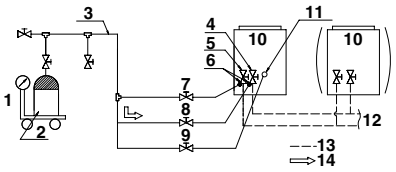


figure 31

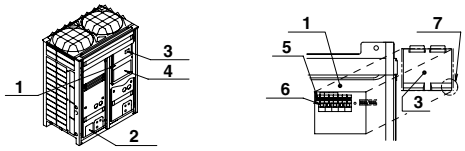


figure 32

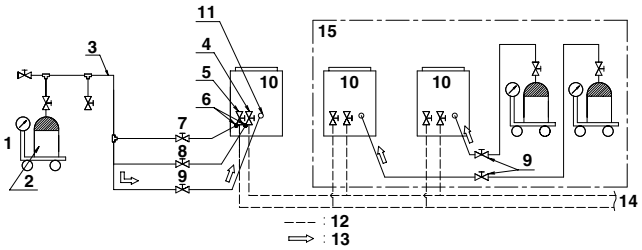


figure 33

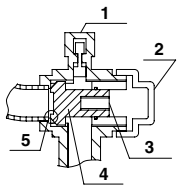


figure 34

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DAIKIN

RXYQ5PAY1(E) · PAY6(E)	RXYQ16PAY1(E) · PAY6(E)	RXYQ26PAY1(E) · PAY6(E)	RXYQ36PAY1(E) · PAY6(E)	RXYQ46PAY1(E) · PAY6(E)
RXYQ8PAY1(E) · PAY6(E)	RXYQ18PAY1(E) · PAY6(E)	RXYQ28PAY1(E) · PAY6(E)	RXYQ38PAY1(E) · PAY6(E)	RXYQ48PAY1(E) · PAY6(E)
RXYQ10PAY1(E) · PAY6(E)	RXYQ20PAY1(E) · PAY6(E)	RXYQ30PAY1(E) · PAY6(E)	RXYQ40PAY1(E) · PAY6(E)	RXYQ50PAY1(E) · PAY6(E)
RXYQ12PAY1(E) · PAY6(E)	RXYQ22PAY1(E) · PAY6(E)	RXYQ32PAY1(E) · PAY6(E)	RXYQ42PAY1(E) · PAY6(E)	RXYQ52PAY1(E) · PAY6(E)
RXYQ14PAY1(E) · PAY6(E)	RXYQ24PAY1(E) · PAY6(E)	RXYQ34PAY1(E) · PAY6(E)	RXYQ44PAY1(E) · PAY6(E)	RXYQ54PAY1(E) · PAY6(E)

VRVIII System air conditioner

Installation manual

CONTENTS

1. FIRST OF ALL 1
   1-1. Safety precautions 1
   1-2. Special notice of product 2
   1-3. Disposal requirements 2
2. INTRODUCTION 2
   2-1. Combination 2
   2-2. Standard supplied accessories 3
   2-3. Option accessory 3
   2-4. Technical and Electrical specifications 3
   2-5. Main components 3
   2-6. Installation Process 3
3. SELECTION OF LOCATION 3
4. INSPECTING AND HANDLING THE UNIT 4
5. PLACING THE UNIT 4
6. REFRIGERANT PIPING 4
   6-1. Selection of piping material and Refrigerant branching kit 5
   6-2. Protection against contamination when installing pipes 5
   6-3. Pipe connection 5
   6-4. Connecting the refrigerant piping 5
   6-5. Example of connection 8
7. FIELD WIRING 10
   7-1. Power circuit, safety device, and cable requirements 10
   7-2. Wiring Connection Example for Whole System 10
   7-3. Leading wire Procedure 11
   7-4. Transmission Wiring Connection Procedure 11
   7-5. Power Wiring Connection Procedure 11
   7-6. Procedure for Wiring Inside Units 12
8. AIR TIGHT TEST AND VACUUM DRYING 12
   8-1. Preparations 12
   8-2. Air tight test and vacuum drying method 13
9. PIPE INSULATION 13
10. CHECKING OF DEVICE AND INSTALLATION CONDITIONS 13
11. ADDITIONAL REFRIGERANT CHARGE AND CHECK OPERATION 13
   11-1. Before working 13
   11-2. Procedure of Adding Refrigerant charging and check operation 15
12. ONSITE SETTINGS 17
   12-1. Onsite Settings With the Power Off 17
   12-2. Onsite Settings With the Power On 17
13. TEST RUN 17
   13-1. Before test run 17
   13-2. Test Run 17
   13-3. Checks After Test Run 17
14. CAUTION FOR REFRIGERANT LEAKS 17

1. FIRST OF ALL

- This document is an installation manual for the Daikin RXYQ-P Series VRV Inverter. Before installing the unit, read this manual thoroughly, and following the instructions contained in it. After installation, do a test run to make sure the unit runs properly, and then explain how to operate and take care of the unit to the customer, using the operation manual.
- Lastly, make sure the customer keeps this manual, along with the operation manual, in a safe place.
- This manual does not describe how to install the indoor unit. Refer to the installation manual included with the indoor unit for that.

1-1 Safety precautions

Please read these “Safety precautions” carefully before installing air conditioning unit and be sure to install it correctly.
After completing installation, conduct a trial operation to check for faults and explain to the customer how to operate the air conditioner and take care of it with the aid of the operation manual.
Ask the customer to store the installation manual along with the operation manual for future reference.

Meaning of WARNING and CAUTION notices

Warning .....Failure to follow these instructions properly may result in personal injury or loss of life.

Caution .....Failure to observe these instructions properly may result in property damage or personal injury, which may be serious depending on the circumstances.

Warning

- Ask your dealer or qualified personnel to carry out installation work.
  Do not attempt to install the air conditioner yourself. Improper installation may result in water leakage, electric shocks or fire.
- Install the air conditioner in accordance with the instructions in this installation manual.
  Improper installation may result in water leakage, electric shocks or fire.
- When installing the unit in a small room, take measures against to keep refrigerant concentration from exceeding allowable safety limits in the event of refrigerant leakage.
  Contact the place of purchase for more information. Excessive refrigerant in a closed ambient can lead to oxygen deficiency.
- Be sure to use only the specified accessories and parts for installation work.
  Failure to use the specified parts may result in the unit falling, water leakage, electric shocks or fire.
- Install the air conditioner on a foundation strong enough to withstand the weight of the unit.
  A foundation of insufficient strength may result in the equipment falling and causing injury.
- Carry out the specified installation work after taking into account strong winds, typhoons or earthquakes.
  Failure to do so during installation work may result in the unit falling and causing accidents.
- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local laws and regulations and this installation manual.
  An insufficient power supply capacity or improper electrical construction may lead to electric shocks or fire.
- Make sure that all wiring is secured, the specified wires are used, and that there is no strain on the terminal connections or wires.
  Improper connections or securing of wires may result in abnormal heat build-up or fire.
- When wiring the power supply and connecting the remote controller wiring and transmission wiring, position the wires so that the EL.COMPO.BOX lid can be securely fastened.
  Improper positioning of the EL.COMPO.BOX lid may result in electric shocks, fire or the terminals overheating.
- If refrigerant gas leaks during installation, ventilate the area immediately.
  Toxic gas may be produced if the refrigerant comes into contact with fire.
- After completing installation, check for refrigerant gas leakage.
  Toxic gas may be produced if the refrigerant gas leaks into the room and comes into contact with a source of fire, such as a fan heater, stove or cooker.
- Do not directly touch refrigerant that has leaked from refrigerant pipes or other areas, as there is a danger of frostbite.
- Be sure to switch off the unit before touching any electrical parts.
- Do not allow children to climb on the outdoor unit and avoid placing objects on the unit.
  Injury may result if the unit becomes loose and falls.
- Be sure to earth the air conditioner.
  Do not earth the unit to a utility pipe, lightning conductor or telephone earth lead.
  Imperfect earthing may result in electric shocks or fire.
  A high surge current from lightning or other sources may cause damage to the air conditioner.
- Be sure to install an earth leakage breaker.
  Failure to install an earth leakage breaker may result in electric shocks or fire.

Caution

- While following the instructions in this installation manual, install drain piping to ensure proper drainage and insulate piping to prevent condensation.
  Improper drain piping may result in indoor water leakage and property damage.

16

- Install the indoor and outdoor units, power cord and connecting wires at least 1 meter away from televisions or radios to prevent picture interference and noise.
  (Depending on the incoming signal strength, a distance of 1 meter may not be sufficient to eliminate noise.)
- Remote controller (wireless kit) transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types).
  Install the indoor unit as far away from fluorescent lamps as possible.
- Make sure to provide for adequate measures in order to prevent that the outdoor unit be used as a shelter by small animals.
  Small animals making contact with electrical parts can cause malfunctions, smoke or fire. Please instruct the customer to keep the area around the unit clean.
- Do not install the air conditioner in the following locations:
  1. Where there is a high concentration of mineral oil spray or vapour (e.g. a kitchen).
     Plastic parts will deteriorate, parts may fall off and water leakage could result.
  2. Where corrosive gas, such as sulphurous acid gas, is produced.
     Corroding of copper pipes or soldered parts may result in refrigerant leakage.
  3. Near machinery emitting electromagnetic radiation.
     Electromagnetic radiation may disturb the operation of the control system and result in a malfunction of the unit.
  4. Where flammable gas may leak, where there is carbon fibre or ignitable dust suspensions in the air, or where volatile flammables such as paint thinner or gasoline are handled.
     Operating the unit in such conditions may result in fire.

1-2 Special notice of product

[CLASSIFICATION]
This air conditioner comes under the term “appliances not accessible to the general public”.
[EMC CHARACTERISTICS]
VRVIII System is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.
[REFRIGERANT]
VRVIII System use R410A refrigerant.

- The refrigerant R410A requires that strict precautions be observed for keeping the system clean, dry and tightly sealed. Read the chapter “REFRIGERANT PIPING” carefully and follow these procedures correctly.
  A.Clean and dry
  Strict measures must be taken to keep impurities (including SUNISO oil and other mineral oils as well as moisture) out of the system.
  B.Tight sealed
  Take care to keep the system tight when installing.
  R410A contains no chlorine, does not destroy the ozone layer and so does not reduce the earth’s protection against harmful ultraviolet radiation.
  R410A will contribute only slightly to the greenhouse effect if released into the atmosphere.
- Since R410A is a mixed refrigerant, the required additional refrigerant must be charged in its liquid state. (If the system is charged with refrigerant in its gaseous state, due to composition change, the system will not function normally.)

Limit by the total maximum refrigerant charge
The total maximum refrigerant charge of a VRVIII system must be below 100kg, this to be in accordance with CE requirement (EN60335-2-40 standard).
This means that in case the total maximum refrigerant charge of the system (factory and additional charge) is equal to or more than 100kg you must divide your multiple outdoor system into smaller independent systems, each containing less than 100kg refrigerant charge.
For factory charge, refer to the unit name plate.
[DESIGN PRESSURE]
Since design pressure is 4.0MPa or 40bar (for R407C units: 3.3MPa or 33bar),the wall thickness of pipes should be more carefully selected in accordance with the relevant local and national regulations.

1-3 Disposal requirements

Dismantling of the unit, treatment of the refrigerant, of oil and of other parts must be done in accordance with relevant local and national legislation.

2. INTRODUCTION

- RXYQ-P series are designed for outdoor installation and used for cooling and heatpump applications. Outdoor units come in three standard sizes, and with a single system through a multi system combining up to three outdoor units, rated cooling capacity from 14.0 kW to 147 kW and rated heating capacity from 16.0 kW to 170 kW can be achieved.
- The RXYQ-P units can be combined with Daikin VRV series indoor units for air conditioning purposes. Always use appropriate indoor units compatible with R410A. To lean which models of indoor units are compatible with R410A, refer to the product catalogs.
  To combine with other refrigerant indoor unit will cause malfunction.

2-1 Combination

The indoor units can be installed in the following range.

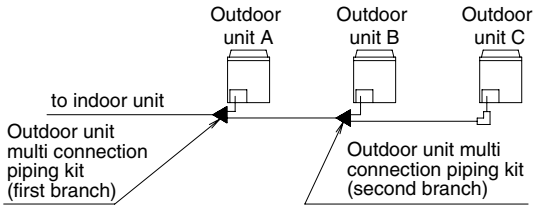
〈Outdoor unit〉	〈Total capacity of indoor units〉	〈Total quantity of indoor units〉
RXYQ5PAY1(E) · PAY6(E)	62.5 ~ 250	12 units
RXYQ8PAY1(E) · PAY6(E)	100 ~400	20 units
RXYQ10PAY1(E) · PAY6(E)	125 ~500	25 units
RXYQ12PAY1(E) · PAY6(E)	150 ~600	30 units
RXYQ14PAY1(E) · PAY6(E)	175 ~700	35 units
RXYQ16PAY1(E) · PAY6(E)	200 ~800	40 units
RXYQ18PAY1(E) · PAY6(E)	225 ~900	45 units
RXYQ20PAY1(E) · PAY6(E)	250 ~ 800	40 units
RXYQ22PAY1(E) · PAY6(E)	275 ~880	44 units
RXYQ24PAY1(E) · PAY6(E)	300 ~ 960	48 units
RXYQ26PAY1(E) · PAY6(E)	325 ~ 1040	52 units
RXYQ28PAY1(E) · PAY6(E)	350 ~ 1120	56 units
RXYQ30PAY1(E) · PAY6(E)	375 ~1200	60 units
RXYQ32PAY1(E) · PAY6(E)	400 ~1280	64 units
RXYQ34PAY1(E) · PAY6(E)	425 ~1360	64 units
RXYQ36PAY1(E) · PAY6(E)	450 ~1440	64 units
RXYQ38PAY1(E) · PAY6(E)	475 ~1235	61 units
RXYQ40PAY1(E) · PAY6(E)	500 ~1300	64 units
RXYQ42PAY1(E) · PAY6(E)	525 ~1365	64 units
RXYQ44PAY1(E) · PAY6(E)	550 ~1430	64 units
RXYQ46PAY1(E) · PAY6(E)	575 ~1495	64 units
RXYQ48PAY1(E) · PAY6(E)	600 ~1560	64 units
RXYQ50PAY1(E) · PAY6(E)	625 ~1625	64 units
RXYQ52PAY1(E) · PAY6(E)	650 ~1690	64 units
RXYQ54PAY1(E) · PAY6(E)	675 ~1755	64 units

Note

- Be sure to connect an R410A indoor unit.
  See the catalog for indoor unit models which can be connected.
- At above is the total capacity and total number of units of the indoor units when configured in a standard combination. See the technical reference for details on total capacity and total number of indoor units when using a configuration other than the standard combination. The standard combination are as follows.

<Combination unit>	<Independent unit>
RXYQ5PAY1(E) · PAY6(E)	RXYQ5PAY1(E) · PAY6(E)
RXYQ8PAY1(E) · PAY6(E)	RXYQ8PAY1(E) · PAY6(E)
RXYQ10PAY1(E) · PAY6(E)	RXYQ10PAY1(E) · PAY6(E)
RXYQ12PAY1(E) · PAY6(E)	RXYQ12PAY1(E) · PAY6(E)
RXYQ14PAY1(E) · PAY6(E)	RXYQ14PAY1(E) · PAY6(E)
RXYQ16PAY1(E) · PAY6(E)	RXYQ16PAY1(E) · PAY6(E)
RXYQ18PAY1(E) · PAY6(E)	RXYQ18PAY1(E) · PAY6(E)
RXYQ20PAY1(E) · PAY6(E)	RXYQ8PAY1(E) · PAY6(E)+ RXYQ12PAY1(E) · PAY6(E)
RXYQ22PAY1(E) · PAY6(E)	RXYQ10PAY1(E) · PAY6(E)+ RXYQ12PAY1(E) · PAY6(E)
RXYQ24PAY1(E) · PAY6(E)	RXYQ8PAY1(E) · PAY6(E)+ RXYQ16PAY1(E) · PAY6(E)
RXYQ26PAY1(E) · PAY6(E)	RXYQ8PAY1(E) · PAY6(E)+ RXYQ18PAY1(E) · PAY6(E)
RXYQ28PAY1(E) · PAY6(E)	RXYQ10PAY1(E) · PAY6(E)+ RXYQ18PAY1(E) · PAY6(E)
RXYQ30PAY1(E) · PAY6(E)	RXYQ12PAY1(E) · PAY6(E)+ RXYQ18PAY1(E) · PAY6(E)
RXYQ32PAY1(E) · PAY6(E)	RXYQ16PAY1(E) · PAY6(E)+ RXYQ16PAY1(E) · PAY6(E)
RXYQ34PAY1(E) · PAY6(E)	RXYQ16PAY1(E) · PAY6(E)+ RXYQ18PAY1(E) · PAY6(E)
RXYQ36PAY1(E) · PAY6(E)	RXYQ18PAY1(E) · PAY6(E)+ RXYQ18PAY1(E) · PAY6(E)
RXYQ38PAY1(E) · PAY6(E)	RXYQ8PAY1(E) · PAY6(E)+ RXYQ12PAY1(E) · PAY6(E) + RXYQ18PAY1(E) · PAY6(E)
RXYQ40PAY1(E) · PAY6(E)	RXYQ8PAY1(E) · PAY6(E)+ RXYQ16PAY1(E) · PAY6(E) + RXYQ16PAY1(E) · PAY6(E)
RXYQ42PAY1(E) · PAY6(E)	RXYQ8PAY1(E) · PAY6(E)+ RXYQ16PAY1(E) · PAY6(E) + RXYQ18PAY1(E) · PAY6(E)
RXYQ44PAY1(E) · PAY6(E)	RXYQ8PAY1(E) · PAY6(E)+ RXYQ18PAY1(E) · PAY6(E) + RXYQ18PAY1(E) · PAY6(E)
RXYQ46PAY1(E) · PAY6(E)	RXYQ10PAY1(E) · PAY6(E)+ RXYQ18PAY1(E) · PAY6(E) + RXYQ18PAY1(E) · PAY6(E)
RXYQ48PAY1(E) · PAY6(E)	RXYQ12PAY1(E) · PAY6(E)+ RXYQ18PAY1(E) · PAY6(E) + RXYQ18PAY1(E) · PAY6(E)
RXYQ50PAY1(E) · PAY6(E)	RXYQ14PAY1(E) · PAY6(E)+ RXYQ18PAY1(E) · PAY6(E) + RXYQ18PAY1(E) · PAY6(E)
RXYQ52PAY1(E) · PAY6(E)	RXYQ16PAY1(E) · PAY6(E)+ RXYQ18PAY1(E) · PAY6(E) + RXYQ18PAY1(E) · PAY6(E)
RXYQ54PAY1(E) · PAY6(E)	RXYQ18PAY1(E) · PAY6(E)+ RXYQ18PAY1(E) · PAY6(E) + RXYQ18PAY1(E) · PAY6(E)

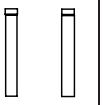
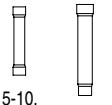
- If the total capacity of the connected indoor units exceeds the capacity of the outdoor unit, cooling and heating performance may drop when running the indoor units. See the capacity table in the Engineering Data Book for details.
- There are restrictions on the refrigerant pipe connecting order between outdoor unit in the case of the multi system.
  Install so that the following restrictions are satisfied.
  <Restrictions>
  The capacities of outdoor units A, B and C must fulfill the following conditions.
  A ≥ B ≥ C



2-2 Standard supplied accessories

The following accessories are included. The storage location of the accessories is shown in figure 1.

Q5~Q18 type				
Name	Clamp (1)	Clamp (2)	Clamp (3)	Gas side accessory pipe (1)
Quantity	9 pcs.	2 pcs.	1 pc.	1 pc.
Shape	 Small		 Large	

Q5~Q18 type				
Name	Gas side accessory pipe (2)	Liquid side accessory pipe (1)	Liquid side accessory pipe (2)	Others
Quantity	1 pc.	1 pc.	1 pc.	• Operation manual • Installation manual • Declaration of conformity (PED) (RXYQ~PAY1 only) • "REQUEST FOR THE INDICATION" label (Installation records)
Shape	 5-10 HP type 12-18 HP type		 5-10, 14,16 HP type 12,18 HP type	

(Refer to figure 1)

1. Operation manual
2. Installation manual
3. Clamps
4. Accessory pipes

Note

Do not throw away any of the accessories until installation is complete.

2-3 Option accessory

To install the outdoor units, the following optional parts are also required. To select an optimum kit, refer to "**6. REFRIGERANT PIPING**".

- **Refrigerant branching kit**

REFNET header	KHRP26M22H	KHRP26M33H	KHRP26M72H	KHRP26M73H
REFNET joint	KHRP26A22T	KHRP26A33T	KHRP26A72T	KHRP26A73T

- **Outdoor unit multi connection piping kit**

Number of outdoor units connected	2 units	3 units
Kit name	BHFP22P100	BHFP22P151

- **Pipe size reducer**

Kit name	KHRP26M73TP	KHRP26M73HP

Note

Make sure that any separately purchased accessories are designed for use with R410A.

2-4 Technical and Electrical specifications

Refer to the Engineering Data Book for the complete list of specifications.

2-5 Main components

For main components and function of the main components, refer to the Engineering Data Book.

2-6 Installation Process

Figure 2 shows the installation process. Install in the order of the steps shown.

(Refer to figure 2)

1. "3. SELECTION OF LOCATION"
2. "4. INSPECTING AND HANDLING THE UNIT"
3. "5. PLACING THE UNIT"
4. "6. REFRIGERANT PIPING"
5. "7. FIELD WIRING"
6. "8. AIR TIGHT TEST AND VACUUM DRYING"
7. "9. PIPE INSULATION"
8. "10. CHECKING OF DEVICE AND INSTALLATION CONDITIONS"
9. "11. ADDITIONAL REFRIGERANT CHARGE AND CHECK OPERATION"
10. "13. TEST RUN"
11. Operations which require the power to be turned on.

3. SELECTION OF LOCATION

Select a location for installation that meets the following conditions. Get the customer's permission.

1. There is no danger of fire due to leakage of inflammable gas.
2. Select the location of the unit in such a way that neither the discharged air nor the sound generated by the unit disturb anyone.
3. The foundation is strong enough to support the weight of the unit and the floor is flat to prevent vibration and noise generation.
4. The piping length between the outdoor unit and the indoor unit may not exceed the allowable piping length. (Refer to **"6. REFRIGERANT PIPING"**)
5. Locations where the unit's suction vent and outlet vent do not generally face the wind.
   Wind blowing directly into the suction or outlet vents will interfere with the unit's operation.
   If necessary, install some kind of obstruction to block the wind.
6. The space around the unit is adequate for servicing and the minimum space for air inlet and air outlet is available.
   (See the "Installation Space Examples" for the minimum space requirements.)

Installation Space Examples

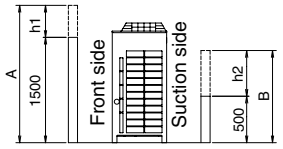
- The installation space requirement shown in figure 3 is a reference for cooling operation when the outdoor temperature is 35˚C. If the design outdoor temperature exceeds 35˚C or the heat load exceeds maximum capacity in all the outdoor unit, take an even large space on the intake shown in figure 3.
- During installation, install the units using the most appropriate of the patterns shown in figure 3 for the location in question, taking into consideration human traffic and wind.
- If the number of units installed is more than that shown in the pattern in figure 3, install the units so there are no short circuits.
- As regards space in front of the unit, consider the space needed for the local refrigerant piping when installing the units.
- If the work conditions in figure 3 do not apply, contact your dealer or Daikin directly.

(Refer to figure 3)

1. Front side
2. No limit to wall height
3. Service space of front side
4. Service space of suction side

For Patterns 1 and 2 in figure 3:

- Wall height for front side no higher than 1500 mm.
- Wall height on the suction side no higher than 500 mm.
- Wall height for sides – no limit.
- If the height is exceeded the above, calculate h1 and h2 shown in the figure below, and add h1/2 to the service space of front side and h2/2 to the service space of suction side.



h1 = A (Actual height) – 1500
h2 = B (Actual height) – 500

Note

1. An inverter air conditioner may cause electronic noise generated from AM broadcasting. Examine where to install the main air conditioner and electric wires, keeping proper distances away from stereo equipment, personal computers, etc. Particularly for locations with weak reception, ensure there is a distance of at least 3 meters for indoor remote controllers, place power wiring and transmission wiring in conduits, and ground the conduits.

   (Refer to figure 4)
   1. Indoor unit
   2. Branch switch, overcurrent breaker
   3. Remote controller
   4. COOL/HEAT selector
   5. Personal computer or radio
2. When installing in a locations where there is heavy snowfall, implement the following snow measures.
   - Ensure the base is high enough that intakes are not clogged by snow.
   - Remove the rear intake grille to prevent snow from accumulating on the fins.
3. If condensate may drip on downstairs (or walkway) depending on the floor condition, take a measure such as the installation of central drain pan kit (sold separately).
4. The refrigerant R410A itself is nontoxic, nonflammable and is safe. If the refrigerant should leak however, its concentration may exceed the allowable limit depending on room size. Due to this it could be necessary to take measures against leakage. See “14. CAUTION FOR REFRIGERANT LEAKS” for details.

4. INSPECTING AND HANDLING THE UNIT

- At delivery, the package should be checked and any damage should be reported immediately to the carrier claims agent.
- When handling the unit, take into account the following:

1. Fragile, handle the unit with care.
   Keep the unit upright in order to avoid compressor damage.
2. Decide on the transportation route.
3. If a forklift is to be used, pass the forklift arms through the large openings on the bottom of the unit. **(Refer to figure 5)**
4. If hanging the unit, use a cloth sling to prevent damaging the unit. Keeping the following points in mind, hang the unit following the procedure shown in figure 6.
   - Use a sling sufficiently strong to hold the mass of the unit.
   - Use 2 belts of at least 8m long.
   - Place extra cloth or boards in the locations where the casing comes in contact with the sling to prevent damage.
   - Hoist the unit making sure it is being lifted at its center of gravity.
5. After installation, remove the transportation clasp attached to the large openings. **(Refer to figure 6)**

   (Refer to figure 5)
   1. Fork
   2. Hole (large)
   3. Transportation clasp (yellow)
   4. Fixed screws of transportation clasp

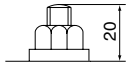
(Refer to figure 6)
1. Belt sling
2. Board
3. Hole (large)
4. Hole (small)
5. For 5 HP type, carry the belt sling through the hole (large)

Note

Apply a filler cloth on a fork to prevent coating of the bottom frame from coming off and rust from occurring when bringing in the unit with anti-corrosion treatment type using a forklift.

5. PLACING THE UNIT

- Make sure the unit is installed level on a sufficiently strong base to prevent vibration and noise. **(Refer to figure 7)**
- The base should be bigger around than the width of the unit’s legs (66 mm), and should support the unit. **(Refer to figure 8)**
  If protective rubber is to be attached, attach it to the whole face of the base.
- The height of the base should be at least 150mm from the floor.
- Secure the unit to its base using foundation bolts. (Use four commercially available M12-type foundation bolts, nuts, and washers.)
- The foundation bolts should be inserted 20 mm.



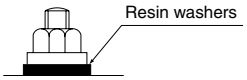
(Refer to figure 7)
1. In the case of 8HP type or more, the product cannot be supported with four corners.
   In the case of 5HP type, the product can be supported with four corners.
2. It is need in the case of 8HP type or more
3. Center of the product

(Refer to figure 8)
1. Foundation bolt point (ϕ15 dia. : 4 positions)
2. Depth of product
3. Width of support leg

Model	A	B
5HP type	635	497
8 · 10HP type	930	792
12 · 14 · 16 · 18HP type	1240	1102

Note

- There are restrictions on the refrigerant pipe connecting order between outdoor unit in the case of the multi system.
  See the Note in “2-1 Combination” for detail.
- When installing on a roof, make sure the roof floor is strong enough and be sure to water-proof all work.
- Make sure the area around the machine drains properly by setting up drainage grooves around the foundation.
  Drain water is sometimes discharged from the outdoor unit when it is running.
- For anti-corrosion type use nuts with resin washers. If the paint on nut connections comes off, the anti-corrosion effect may decrease.



6. REFRIGERANT PIPING

Note

- All field piping must be installed by a licensed refrigeration technician and must comply with relevant local and national regulations.
- After piping work is complete, do not under any circumstances open the shutoff valve until “7. FIELD WIRING” and “10. CHECKING OF DEVICE AND INSTALLATION CONDITIONS” are complete.
- Do not use flux when brazing the refrigerant piping. Use the phosphor copper brazing filler metal (BCuP-2: JIS Z 3264/B-Cu93P-710/795: ISO 3677) which does not require flux.
  (Flux has extremely harmful influence on refrigerant piping systems. For instance, if the chlorine based flux is used, it will cause pipe corrosion or, in particular, if the flux contains fluorine, it will damage the refrigerant oil.)

6-1 Selection of piping material and Refrigerant branching kit

- Use only pipes which are clean inside and outside and which do not accumulate harmful sulfur, oxidants, dirt, cutting oils, moisture, or other contamination. (Foreign materials inside pipes including oils for fabrication must be 30mg/10m or less.)
- Use the following items for the refrigerant piping.
  Material: Jointless phosphor-deoxidized copper pipe
  Size: See "6-5 Example of connection" to determine the correct size.
  Thickness: Select a thickness for the refrigerant piping which complies with national and local laws.
  For R410A, the design pressure is 4.0 MPa (40-bar).
  The minimum thickness of piping according to Japan's High-Pressure Gas Safety Law (as of January 2003) is shown below.
  Temper grade (O type, 1/2H type) in the table indicate the material types specified in JIS H 3300.

(unit: mm)

Temper grade	O type			
outer diameter	ϕ6.4	ϕ9.5	ϕ12.7	15.9
smallest thickness	0.80	0.80	0.80	0.99

(unit: mm)

Temper grade	1/2H type							
outer diameter	ϕ19.1	ϕ22.2	ϕ25.4	ϕ28.6	ϕ31.8	ϕ34.9	ϕ38.1	ϕ41.3
smallest thickness	0.80	0.80	0.88	0.99	1.10	1.21	1.32	1.43

- For piping work, follow the maximum tolerated length, difference in height, and length after a branch indicated in the "**6-5 Example of connection**".
- A refrigerant branching kit (sold separately) is needed for piping branches and connection of piping between outdoor unit (in case of multi system).
  Use only separately sold items selected specifically according to the refrigerant branch kit selection in the "**6-5 Example of connection**".

6-2 Protection against contamination when installing pipes

Protect the piping to prevent moisture, dirt, dust, etc. from entering the piping.

Place	Installation period	Protection method
Outdoor	More than a month	Pinch the pipe
	Less than a month	Pinch or tape the pipe
Indoor	Regardless of the period	

Note
Exercise special caution to prevent dirt or dust when passing piping through holes in walls and when passing pipe edges to the exterior.

6-3 Pipe connection

- Be sure to perform nitrogen permutation or nitrogen blow when brazing. **(Refer to figure 10)**
  Brazing without performing nitrogen permutation or nitrogen blow into the piping will create large quantities of oxidized film on the inside of the pipes, adversely affecting valves and compressors in the refrigerating system and preventing normal operation.
  (Refer to figure 10)
  1. Refrigerant pipe
  2. Location to be brazed
  3. Nitrogen
  4. Taping
  5. Handy valve
  6. Regulator
- The pressure regulator for the nitrogen released when doing the brazing should be set to 0.02 MPa (about 0.2kg/cm^2:Enough to feel a slight breeze on your cheek).

Note
Do not use anti-oxidants when brazing the pipe joints.
Residue can clog pipes and break equipment.

6-4 Connecting the refrigerant piping

1. Derection to bring out the pipes
The local interunit piping can be connected either forward or to the sides (taken out through the bottom) as shown in the figure 11. (When passing out through the bottom, use the knock hole in the bottom frame.)
(Refer to figure 11)
1. Left-side connection
2. Front connection
3. Right-side connection

Precautions when knocking out knock holes

- Open knock hole in the base frame by drilling the 4 concave around it with a 6mm bit. **(Refer to figure 12)**
  (Refer to figure 12)
  1. Knock hole
  2. Drill
  3. Concave section
- Be sure to avoid damaging the casing
- After knocking out the holes, we recommend you remove any burrs and paint them using the repair paint to prevent rusting.
- When passing electrical wiring through the knock holes, protect the wiring with a conduit or bushings, making sure not to damage the wiring.

2. Removing Pinch Piping
- When connecting refrigerant piping to an outdoor unit, remove the pinch piping. **(Refer to figure 13)**
- Pinch piping should be removed using the procedure in the figure 13.
  (Refer to figure 13)
  1. Shutoff valve (liquid side · gas side)
  2. Service port
  3. Pinch piping
  4. Procedure 1:
  Confirm the shutoff valve is closed.
  5. Procedure 2:
  Connect a charge hose to the service port of the liquid side and gas side shutoff valves and remove the gas from the pinch piping.
  6. Procedure 3:
  After removing the gas from the pinch piping, dissolve the brazing using a burner and remove the pinch piping.

⚠ Caution

After removing the gass, remove the pinch piping.
Any gas remaining inside may blow off the pinch piping when you dissolve the brazing, causing damage.

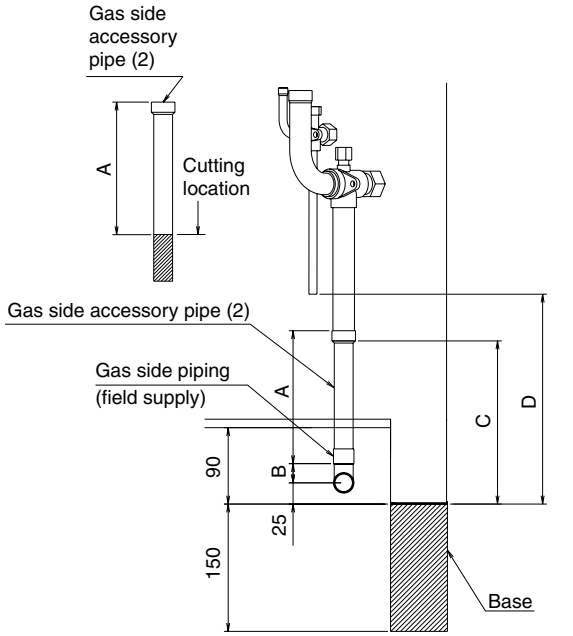
3. Connecting refrigerant piping to outdoor units

<In case of single system: 5-18HP type>
(Refer to figure 14)
1. If connected to the front
2. When connected at lateral side (bottom)
3. Remove the shutoff valve cover to connect.
4. Remove the knock hole on the bottom frame and route the piping under the bottom frame.
5. Gas side shutoff valve
6. Liquid side shutoff valve
7. Refrigerant charge port
8. Brazing
9. Liquid side accessory pipe (1)
10. Gas side accessory pipe (1)
11. Gas side accessory pipe (2)
12. Liquid side accessory pipe (2)
13. Knockout hole
14. Punch the knock hole.
15. Gas side piping (field supply)
16. Liquid side piping (field supply)

16

Processing the Gas side accessory pipe (2)

Only in case of connecting at lateral side, cut the Gas side accessory pipe (2) referring the figure below.



(mm)

Model	A	B	C	D
5HP type	166	16	199	246
8HP type	156	17	188	247
10HP type	156	23	192	247
12HP type	150	29	192	247
14·16·18HP type	150	29	192	251

<In case of multi system: RXYQ20-54P(E)>
(Refer to figure 15)

1. If connected to the front
2. When connected at lateral side (bottom)
3. Remove the shutoff valve cover to connect.
4. Remove the knock hole on the bottom frame and route the piping under the bottom frame.
5. Gas side shutoff valve
6. Liquid side shutoff valve
7. Refrigerant charge port
8. Brazing
9. Liquid side accessory pipe (1)
10. Gas side accessory pipe (1)
11. Gas side accessory pipe (2)
12. Liquid side accessory pipe (2)
13. Knockout hole
14. Punch the knock hole.

Note

<Connecting Refrigerant Piping>

- When connecting the piping on site, be sure to use the accessory piping.
- Make sure the onsite piping does not come into contact with other piping or the bottom frame or side panels of the unit.

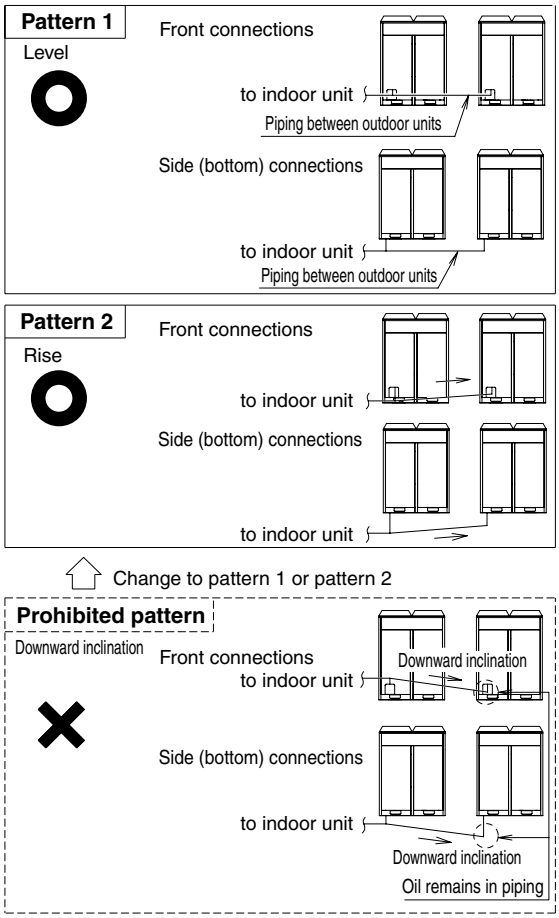
<Multi Systems>

- The 5HP type cannot be used as an independent unit in a multi system.
- The Outdoor unit multi connection piping kit (sold separately) is needed when connecting piping between outdoor units. Refer to the installation manual that comes with the kit when doing this piping work.

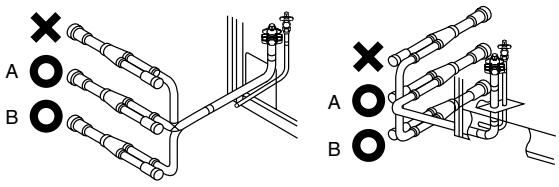
4. Precautions when connecting piping betweemn outdoor units (In case of multi system)

The Outdoor unit multi connection piping kit (sold separately) is needed to connect piping between outdoor units in multi system. Only proceed with piping work after considering the limitations on installation listed here and in “5. Branching the refrigerant piping”, always referring to the kit’s installation manual.

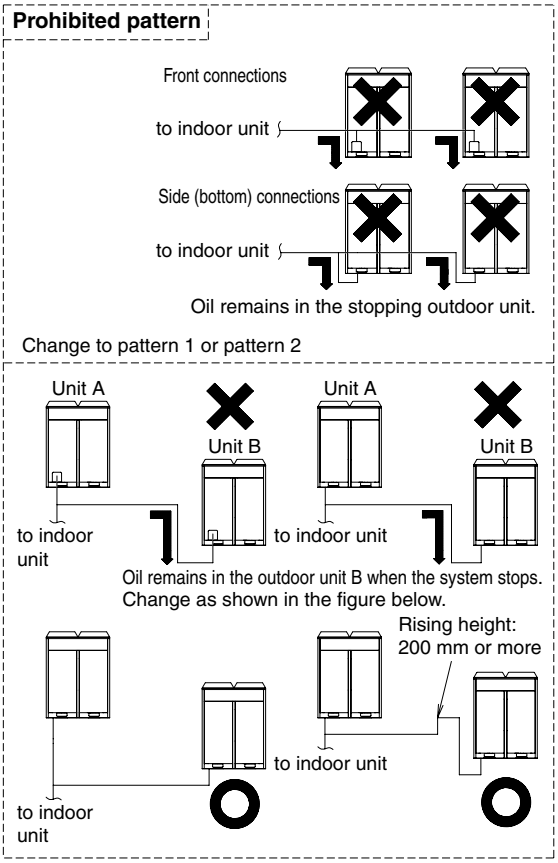
(1) The piping between outdoor units must be installed level (Pattern 1) or with a rise (Pattern 2). Otherwise oil may pool in the pipes.



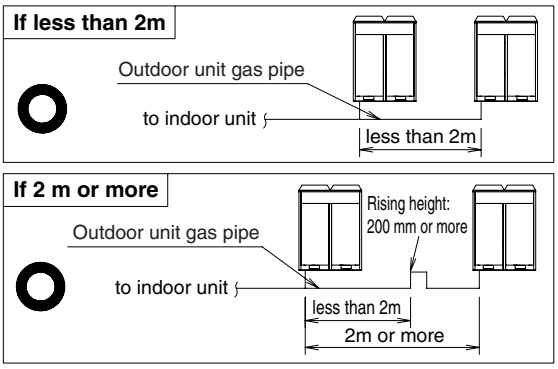
(2) To avoid the risk of oil detention in the stopping unit, always connect the shutoff valve and the piping between outdoor units as shown in the figure A or figure B.



Front connections Side (bottom) connections



(3) If the piping length between the outdoor units exceeds 2 m, create a rise of 200 mm or more in the gas line under a length of 2 m from the outdoor unit multi connection piping kit.



5. Branching the refrigerant piping
Heed the restrictions below when installing the refrigerant branching kit and read the installation instruction manual with the kit. (Improper installation could lead to malfunctioning or breakdown of the outdoor unit.)

<REFNET joint>
Install the REFNET joint so it splits horizontally or vertically.
(Refer to figure 16)
1. Horizontal surface
2. ±30˚ or less
3. Horizontal
4. Vertical

<REFNET header>
Install the REFNET header so it splits horizontally.
(Refer to figure 17)
1. Horizontal surface

<Outdoor unit multi connection piping kit>
- Install the joint horizontally so that the attached warning label faces strait up, and the tilt is within ±15˚. **(Refer to figure 18-1)** Do not install vertically. **(Refer to figure 18-2)**
- Maintain a straight portion of 500 mm or more until the split of the joint without wrapping any onsite piping around this area. Over 500 mm of straight area can be maintained by connecting at least 120 mm of onsite pipe (straight) to the joint. **(Refer to figure 18-3)**

(Refer to figure 18)
1. Warning label
2. Horizontal surface
3. ±15˚ or less
4. Ground
5. Onsite pipe (120mm length or more)
6. Straight part of 500mm or more

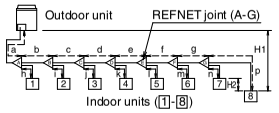
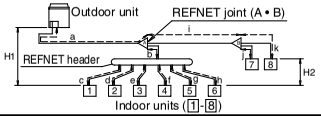
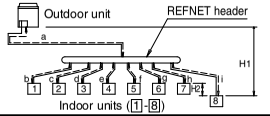
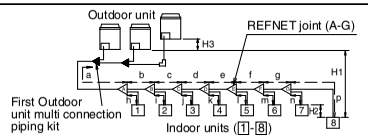
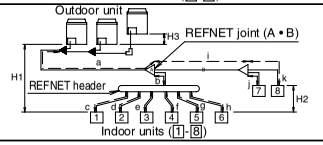
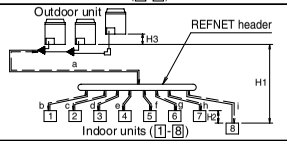
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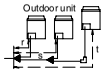
Example of connection

(Connection of 8 indoor units)

(*1) " ◄— " indicate the Outdoor unit multi connection piping kit

(*2) In case of multi outdoor system, re-read to the first Outdoor unit multi connection piping kit as seen from the indoor unit.

		Example refrigerant branch using REFNET joint	Example refrigerant branch using REFNET joint and REFNET header	Example refrigerant branch using REFNET header
Single outdoor system				
Multi outdoor system				
Maximum allowable length	Between outdoor (≤2) and indoor units	Actual pipe length	Pipe length between outdoor (≤2) and indoor units ≤ 165m		
			Example unit 8 : a + b + c + d + e + f + g + p ≤ 165m	Example unit 6 : a + b + h ≤ 165m, unit 8 : a + i + k ≤ 165m	Example unit 8 : a + i ≤ 165m
		Equivalent length	Equivalent pipe length between outdoor (≤2) and indoor units ≤ 190m (assume equivalent pipe length of REFNET joint to be 0.5m, that of REFNET header to be 1m, calculation purposes) (See Note 1 - Next page)		
		Total extension length	Total pipe length from outdoor unit (≤2) to all indoor units ≤ 1000m		
	Between outdoor unit and Outdoor unit multi connection piping kit (Only for multi system)	Actual pipe length Equivalent length	Pipe length between outdoor unit and Outdoor unit multi connection piping kit ≤ 10m, Equivalent length between outdoor unit and Outdoor unit multi connection piping kit ≤ 13m		
Allowable height length	Between outdoor and indoor units	Difference in height	Difference in height between outdoor and indoor units (H1) ≤ 50m (≤ 90m if the outdoor unit is below)		
	Between indoor and indoor units	Difference in height	Difference in height between indoor units (H2) ≤ 15m		
	Between outdoor and outdoor units	Difference in height	Difference in height between outdoor unit (H3) ≤ 5m		
Allowable length after the branch		Actual pipe length	Pipe length from first refrigerant branch kit (either REFNET joint or REFNET header) to indoor unit ≤ 40m (See Note 2 - Next page)		
			Example unit 8 : b + c + d + e + f + g + p ≤ 40m	Example unit 6 : b + h ≤ 40m, unit 8 :i + k ≤ 40m	Example unit 8 : i ≤ 40m



r ≤ 10m (Equivalent length: ≤ 13m)
s ≤ 10m (Equivalent length: ≤ 13m)
t ≤ 10m (Equivalent length: ≤ 13m)

Refrigerant branch kit selection

Refrigerant branch kits can only be used with R410A.

⚠ • When multi outdoor system are installed, be sure to use the special separately sold Outdoor unit multi connection piping kit.
The table at right shows how to select the proper kit.

How to select the REFNET joint

• When using REFNET joint at the first branch counted from the outdoor unit side.
Choose from the following table in accordance with the outdoor unit capacity type.
(Example: REFNET joint A)

Outdoor unit capacity type	Refrigerant branch kit name
5HP type	KHRP26A22T
8, 10HP type	KHRP26A33T
12~22HP type	KHRP26A72T
24HP type~	KHRP26A73T + KHRP26M73TP

• Choose the REFNET joints other than that for the first branch from the following table in accordance with the total capacity index of all the indoor units connected below the REFNET joint.

Indoor unit total capacity index	Refrigerant branch kit name
< 200	KHRP26A22T
200 ≤ x< 290	KHRP26A33T
290 ≤ x< 640	KHRP26A72T
640 ≤	KHRP26A73T + KHRP26M73TP

How to select the REFNET header

• Choose from the following table in accordance with the total capacity index of all the indoor units connected below the REFNET header.
• Note: 250 type indoor unit cannot be connected below the REFNET header.

Indoor unit total capacity index	Refrigerant branch kit name
< 200	KHRP26M22H (Max. 4 branch)
200 ≤ x< 290	KHRP26M33H (Max. 8 branch)
290 ≤ x< 640	KHRP26M72H (Max. 8 branch) (See Note 3 - Next page)
640 ≤	KHRP26M73H (Max. 8 branch) + KHRP26M73HP

How to select the Outdoor unit multi connection piping kit (This is required when the system is multi outdoor unit system.)

• Choose from the following table in accordance with the number of outdoor units.

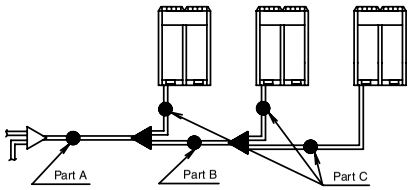
Number of outdoor units	Connection piping kit name
2 units	BHFP22P100
3 units	BHFP22P151

Example for indoor units connected downstream	Example REFNET joint C: indoor units 3+4+5+6+7+8	Example REFNET joint B: indoor units 7+8 Example REFNET header: indoor units 1+2+3+4+5+6	Example REFNET header: indoor units 1+2+3+4+5+6+7+8

Pipe size selection

⚠ **Caution**
The thickness of the pipes in the table shows the requirements of Japanese High Pressure Gas Control low. (As of Jan. 2003)
The thickness and material shall be selected in accordance with local code.

For the multi outdoor unit system, select in accordance with the following figure.



Temper grade and wall thickness for pipes.
(Temper grade, O type and 1/2H type indicate the material types specified in JIS H 3300.)

(Unit:mm)

Copper tube O.D.	Copper tube W.T. (Minimum requirement)	Temper grade
ϕ6.4	0.80	O type
ϕ9.5	0.80	
ϕ12.7	0.80	
ϕ15.9	0.99	
ϕ19.1	0.80	1/2H type
ϕ22.2	0.80	
ϕ25.4	0.88	
ϕ28.6	0.99	
ϕ31.8	1.10	
ϕ34.9	1.21	
ϕ38.1	1.32	
ϕ41.3	1.43	

Piping between Outdoor unit and first refrigerant branch kit.
Piping between first Outdoor unit multi connection piping kit and first refrigerant branch kit. (Part A)

• Choose from the following table in accordance with the outdoor unit capacity type.

Piping between Outdoor unit multi connection piping kits. (Part B)
Piping between outdoor unit and Outdoor unit multi connection piping kit. (Part C)

• Choose from the following table in accordance with the total capacity type of all the outdoor units connected above Outdoor unit multi connection piping kit.

(Unit:mm)

Outdoor unit capacity type	Piping size (O.D.)	
	Gas pipe	Liquid pipe
5HP type	ϕ15.9	ϕ9.5
8HP type	ϕ19.1	
10HP type	ϕ22.2	
12~16HP type	ϕ28.6	ϕ12.7
18~22HP type		ϕ15.9
24HP type	ϕ34.9	
26~34HP type		ϕ19.1
36~54HP type	ϕ41.3	

(See Note 1 - Next page)

Piping between refrigerant branch kits

• Choose from the following table in accordance with the total capacity index of all the indoor units connected below this.
• Do not let the connection piping exceed the main refrigerant piping size. (Unit:mm)

Indoor unit total capacity index	Piping size (O.D.)	
	Gas pipe	Liquid pipe
< 150	ϕ15.9	ϕ9.5
150 ≤ x< 200	ϕ19.1	
200 ≤ x< 290	ϕ22.2	
290 ≤ x< 420	ϕ28.6	ϕ12.7
420 ≤ x< 640		ϕ15.9
640 ≤ x< 920	ϕ34.9	ϕ19.1
920 ≤	ϕ41.3	

Piping between refrigerant branch kit and indoor unit

• Match to the size of the connection piping on the indoor unit. (Unit:mm)

Indoor unit capacity type	Piping size (O.D.)	
	Gas pipe	Liquid pipe
20 · 25 · 32 · 40 · 50 type	ϕ12.7	ϕ6.4
63 · 80 · 100 · 125 type	ϕ15.9	ϕ9.5
200 type	ϕ19.1	
250 type	ϕ22.2	

How to calculate the additional refrigerant to be charged

Additional refrigerant to be charged : R (kg)
(R should be rounded off in units of 0.1 kg.)

$$R = \left(\begin{array}{l} (\text{Total length(m) of liquid piping size at } \phi 22.2) \times 0.37 + (\text{Total length(m) of liquid piping size at } \phi 19.1) \times 0.26 \\ + (\text{Total length(m) of liquid piping size at } \phi 15.9) \times 0.18 + (\text{Total length(m) of liquid piping size at } \phi 12.7) \times 0.12 \\ + (\text{Total length(m) of liquid piping size at } \phi 9.5) \times 0.059 + (\text{Total length(m) of liquid piping size at } \phi 6.4) \times 0.022 \end{array} \right) + \boxed{\begin{array}{c}\text{REFRIGERANT AMOUNT FOR HEAT PUMP SYSTEM}\\ \text{TABLE A}\end{array}} + \boxed{\begin{array}{c}\text{REFRIGERANT AMOUNT FOR EXCEEDING CONNECTION CAPACITY OF INDOOR UNIT}\\ \text{TABLE B}\end{array}}$$

TABLE A

MODEL NAME	THE AMOUNT OF REFRIGERANT
RX(Y)Q5P	0kg
RX(Y)Q8 ~ 12P	0.5kg
RX(Y)Q14 ~ 22P	1.0kg
RX(Y)Q24 ~ 30P	1.5kg
RX(Y)Q32 ~ 38P	2.0kg
RX(Y)Q40 ~ 48P	2.5kg
RX(Y)Q50 ~ 54P	3.0kg

TABLE B

INDOOR CONNECTION CAPACITY [X]	MODEL NAME [RX(Y)Q ~ P]														
	5P~8P	10P	12P~14P	16P	18P~22P	24P~28P	30P~32P	34P	36P	38P	40P	42P~44P	46P~48P	50P	52P~54P
X ≤ 100%	0kg														
100% < X ≤ 120%	0.5kg														
120% < X ≤ 130%	0.5kg							1.0kg							
130% < X ≤ 140%	0.5kg				1.0kg						1.5kg				
140% < X ≤150%	0.5kg				1.0kg				1.5kg					2.0kg	
150% < X ≤ 160%	0.5kg		1.0kg				1.5kg				2.0kg				2.5kg
160% < X ≤ 170%	0.5kg	1.0kg			1.5kg						2.0kg				2.5kg
170% < X ≤ 180%	0.5kg	1.0kg		1.5kg		2.0kg					2.5kg				3.0kg
180% < X ≤ 190%	0.5kg	1.0kg		1.5kg		2.0kg				2.5kg		3.0kg			3.5kg
190% < X ≤ 200%	0.5kg	1.0kg		1.5kg		2.0kg		2.5kg			3.0kg			3.5kg	4.0kg

Example for refrigerant branch using REFNET joint and REFNET header for the systems and each pipe length as shown below.

Outdoor system : RXYQ34P~
Total capacity of indoor unit : 116%

a : ϕ19.1 × 30m	d : ϕ9.5 × 10m	g : ϕ6.4 × 10m	j : ϕ6.4 × 10m
b : ϕ15.9 × 10m	e : ϕ9.5 × 10m	h : ϕ6.4 × 20m	k : ϕ6.4 × 9m
c : ϕ9.5 × 10m	f : ϕ9.5 × 10m	i : ϕ12.7 × 10m	

$$R = (\boxed{30 \times 0.26} + \boxed{10 \times 0.18} + \boxed{10 \times 0.12} + \boxed{40 \times 0.059} + \boxed{49 \times 0.022}) + \boxed{2.0} + \boxed{0.5}$$

a, b, i, c+d+e+f, g+h+i+j+k, RXYQ34P~, 116%

$= 16.738 \Rightarrow \boxed{16.7kg}$

Round off units of 0.1 kg.

*Note 1

When the equivalent pipe length between outdoor and indoor units is 90m or more, the size of main pipes (both gas-side and liquid-side) must be increased.
Depending on the length of the piping, the capacity may drop, but even in such case it is able to increase the size of main pipes.

(Refer to figure 9)
1. Outdoor unit
2. Main pipes
3. Increase
4. The first refrigerant branch kit
5. Indoor unit

■ Diameter of above case

Model	Gas	Liquid
RXYQ5 Type	ϕ19.1	Not Increased
RXYQ8 Type	ϕ22.2	ϕ12.7
RXYQ10 Type	ϕ25.4*	ϕ12.7
RXYQ12 Type	Not Increased	ϕ15.9
RXYQ14 Type	Not Increased	ϕ15.9
RXYQ16 Type	ϕ31.8*	ϕ15.9
RXYQ18 Type	ϕ31.8*	ϕ19.1

Model	Gas	Liquid
RXYQ20 Type	ϕ31.8*	ϕ19.1
RXYQ22 Type	ϕ31.8*	ϕ19.1
RXYQ24 Type	Not Increased	ϕ19.1
RXYQ26 Type	ϕ38.1*	ϕ22.2
RXYQ28 Type	ϕ38.1*	ϕ22.2
RXYQ30 Type	ϕ38.1*	ϕ22.2
RXYQ32 Type	ϕ38.1*	ϕ22.2

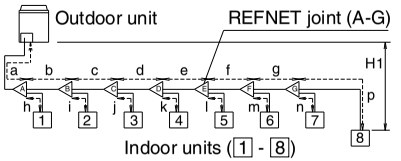
Model	Gas	Liquid
RXYQ34 Type	ϕ38.1*	ϕ22.2
RXYQ36 Type	Not Increased	ϕ22.2
RXYQ38 Type	Not Increased	ϕ22.2
RXYQ40 Type	Not Increased	ϕ22.2
RXYQ42 Type	Not Increased	ϕ22.2
RXYQ44 Type	Not Increased	ϕ22.2
RXYQ46 Type	Not Increased	ϕ22.2

Model	Gas	Liquid
RXYQ48 Type	Not Increased	ϕ22.2
RXYQ50 Type	Not Increased	ϕ22.2
RXYQ52 Type	Not Increased	ϕ22.2
RXYQ54 Type	Not Increased	ϕ22.2

*If available on the site, use this size.
Otherwise, it can not be increased.

*Note 2

Allowable length after the first refrigerant branch kit to indoor units is 40 m or less, however it can be extended up to **90** m if all the following conditions are satisfied. (In case of " **Branch with REFNET joint** ")

Required Conditions	Example Drawings	
1. It is necessary to increase the pipe size between the first branch kit and the final branch kit. (Reducers must be procured on site) However, the pipes that are same pipe size with main pipe must not be increased.	[8] b+c+d+e+f+g+p≤ 90 m increase the pipe size of b, c, d, e, f, g	Increase the pipe size as follows ϕ 9.5 → ϕ12.7 ϕ15.9 → ϕ19.1 ϕ22.2 → ϕ25.4* ϕ34.9 → ϕ38.1* ϕ12.7 → ϕ15.9 ϕ19.1 → ϕ22.2 ϕ28.6 → ϕ31.8*
2. For calculation of Total extension length, the actual length of above pipes must be doubled. (except main pipe and the pipes that are not increased)	a+b×2+c×2+d×2+e×2+f×2+g×2 +h+i+j+k+l+m+n+p≤ 1000 m	
3. Indoor unit to the nearest branch kit ≤ 40 m	h, i, j..... p≤ 40 m	
4. The difference between [Outdoor unit to the farthest indoor unit] and [Outdoor unit to the nearest indoor unit] ≤ 40 m	The farthest indoor unit [8] The nearest indoor unit [1] (a+b+c+d+e+f+g+p)-(a+h)≤ 40 m	

* If available on the site, use this size.
Otherwise it can not be increased.

*Note 3

If the pipe size above the REFNET header is ϕ34.9 or more, KHRP26M73HP is required.

7. FIELD WIRING

Caution

- All field wiring and components must be installed by a licensed electrician and must comply with relevant local and national regulations.
- Be sure to use a dedicated power circuit. Never use a power supply shared by another appliance.
- Never install a phase advancing capacitor. As this unit is equipped with an inverter, installing a phase advancing capacitor will not only deteriorate power factor improvement effect, but also may cause capacitor abnormal heating accident due to high-frequency waves.
- Only proceed with wiring work after blocking off all power.
- Always ground wires in accordance with relevant local and national regulations.
- This machine includes an inverter device. Connect earth and leave charge to eliminate the impact on other devices by reducing noise generated from the inverter device and to prevent leaked current from being charged in the outer hull of the product.
- Do not connect the ground wire to gas pipes, sewage pipes, lightning rods, or telephone ground wires.
  Gas pipes: can explode or catch fire if there is a gas leak.
  Sewage pipes: no grounding effect is possible if hard plastic piping is used.
  Telephone ground wires and lightning rods: dangerous when struck by lightning due to abnormal rise in electrical potential in the grounding.
- Be sure to install an earth leakage circuit breaker.
  This unit uses an inverter, so install the earth leakage circuit breaker that be capable of handling high harmonics in order to prevent malfunctioning of the earth leakage circuit breaker itself.
- Earth leakage circuit breaker which are especially for protecting ground-faults should be used in conjunction with main switch or fuse for use with wiring.

Note

- Electrical wiring must be done in accordance with the wiring diagrams and the description herein.
- Do not operate until refrigerant piping work is completed.
  (If operated before complete the piping work, the compressor may be broken down.)
- Never remove thermistor, sensor or etc. when connecting power wiring and transmission wiring.
  (If operated with thermistor, sensor or etc. removed, the compressor may be broken down.)
- This product have reversed phase protection detector that only works when the power is turned on. If there exists black out or the power goes on and off which the product is operating, attach a reversed phase protection circuit locally. Running the product in reversed phase may break the compressor and other parts.
- Attach the power wire securely. Introducing power with a missing N-phase or with a mistaken N-phase will break the unit.
- Never connect the power supply in reversed phase.
  The unit can not operate normally in reversed phase.
  If you connect in reversed phase, replace two of the three phases.
- Make sure the electrical unbalance ratio is no greater than 2%. If it is larger than this, the unit's lifespan will be reduced.
  If the ratio exceeds 4%, the unit will shut down and an malfunction code will be displayed on the indoor remote controller.
- Connect the wire securely using designated wire and fix it with attached clamp without applying external pressure on the terminal parts (terminal for power wiring, terminal for transmission wiring and earth terminal).

7-1 Power circuit, safety device, and cable requirements

- A power circuit (see the following table) must be provided for connection of the unit. This circuit must be protected with the required safety devices, i.e. a main switch, a slow blow fuse on each phase and an earth leakage circuit breaker.
- When using residual current operated circuit breakers, be sure to use a high-speed type (1 second or less) 200mA rated residual operating current.
- Use copper conductors only.
- Use insulated wire for the power cord.
- Select the power supply cable type and size in accordance with relevant local and national regulations.
- Specifications for local wiring are in compliance with IEC60245.
- Use wire type H05VV when protected pipes are used.
  Use wire type H07RN-F when protected pipes are not used.

	Phase and frequency	Voltage	Minimum circuit amp.	Recommended fuses
RXYQ5PAY1(E) · PAY6(E)	ϕ 3, 50Hz	380-415V	11.9A	15A
RXYQ8PAY1(E) · PAY6(E)	ϕ 3, 50Hz	380-415V	18.5A	25A
RXYQ10PAY1(E) · PAY6(E)	ϕ 3, 50Hz	380-415V	21.6A	25A
RXYQ12PAY1(E) · PAY6(E)	ϕ 3, 50Hz	380-415V	22.7A	25A
RXYQ14PAY1(E) · PAY6(E)	ϕ 3, 50Hz	380-415V	31.5A	35A
RXYQ16PAY1(E) · PAY6(E)	ϕ 3, 50Hz	380-415V	31.5A	35A
RXYQ18PAY1(E) · PAY6(E)	ϕ 3, 50Hz	380-415V	32.5A	40A
RXYQ20PAY1(E) · PAY6(E)	ϕ 3, 50Hz	380-415V	41.2A	50A
RXYQ22PAY1(E) · PAY6(E)	ϕ 3, 50Hz	380-415V	44.3A	50A
RXYQ24PAY1(E) · PAY6(E)	ϕ 3, 50Hz	380-415V	50.0A	60A
RXYQ26PAY1(E) · PAY6(E)	ϕ 3, 50Hz	380-415V	51.0A	60A
RXYQ28PAY1(E) · PAY6(E)	ϕ 3, 50Hz	380-415V	54.1A	60A
RXYQ30PAY1(E) · PAY6(E)	ϕ 3, 50Hz	380-415V	55.2A	70A
RXYQ32PAY1(E) · PAY6(E)	ϕ 3, 50Hz	380-415V	63.0A	70A
RXYQ34PAY1(E) · PAY6(E)	ϕ 3, 50Hz	380-415V	64.0A	80A
RXYQ36PAY1(E) · PAY6(E)	ϕ 3, 50Hz	380-415V	65.0A	80A
RXYQ38PAY1(E) · PAY6(E)	ϕ 3, 50Hz	380-415V	73.7A	90A
RXYQ40PAY1(E) · PAY6(E)	ϕ 3, 50Hz	380-415V	81.5A	90A
RXYQ42PAY1(E) · PAY6(E)	ϕ 3, 50Hz	380-415V	82.5A	100A
RXYQ44PAY1(E) · PAY6(E)	ϕ 3, 50Hz	380-415V	83.5A	100A
RXYQ46PAY1(E) · PAY6(E)	ϕ 3, 50Hz	380-415V	86.6A	100A
RXYQ48PAY1(E) · PAY6(E)	ϕ 3, 50Hz	380-415V	87.7A	100A
RXYQ50PAY1(E) · PAY6(E)	ϕ 3, 50Hz	380-415V	96.5A	110A
RXYQ52PAY1(E) · PAY6(E)	ϕ 3, 50Hz	380-415V	96.5A	110A
RXYQ54PAY1(E) · PAY6(E)	ϕ 3, 50Hz	380-415V	97.5A	110A

Note

The above table indicates power specifications for standard combinations (see 2. INTRODUCTION).
If using anything other than the above combinations in a multi system, calculate using the following procedure.

Minimum circuit amp value: add the minimum circuit amp values for each independent unit
Recommended fuse capacity: select the fuse capacity with the next higher value of the calculated minimum circuit amp. multiplied by 1.1.
Ex: Combining the RXYQ30PAY1(E) using RXYQ8PAY1(E), RXYQ10PAY1(E), and RXYQ12PAY1(E).
Minimum circuit amp. of the RXYQ8PAY1(E) in table above = 18.5 A
Minimum circuit amp. of RXYQ10PAY1(E) in table above = 21.6 A
Minimum circuit amp. of RXYQ12PAY1(E) in table above = 22.7 A
Accordingly, the minimum circuit amp. of the RXYQ30PAY1(E) = 18.5 + 21.6 + 22.7= 62.8 A
Multiplying the result above by 1.1 (62.8 × 1.1) = 69.1 A, so the recommended fuse capacity would be 70 A.

7-2 Wiring Connection Example for Whole System

(Refer to figure 19)

1. Power supply
2. Main switch
3. Earth leakage circuit breaker
4. Fuse
5. Outdoor unit
6. COOL/HEAT selector
7. Remote controller
8. Indoor unit

Note

- Make sure the weak electric wiring (i.e. for the remote controller, between units, etc.) and the power wiring do not pass near each other, keeping them at least 50 mm apart.
  Proximity may cause electrical interference, malfunctions, and breakage.
- Be sure to connect the power wiring to the power wiring terminal block and secure it as described in "**7-5 Power Wiring Connection Procedure**".
- Transmission wiring should be secured as described in "**7-4 Transmission Wiring Connection Procedure**".
- Secure wiring with clamp such as insulation lock ties to avoid contact with piping.
- Shape the wires to prevent the structure such as the EL. COMPO. BOX lid deforming. And close the cover firmly.
- 5HP type can not compose multi system.

7-3 Leading wire Procedure

- The power wiring and ground wiring are passed out from the power wiring hole on the sides, the front (knock hole) or the bottom frame (knock hole) .
- The transmission wiring is passed out from the wiring hole (knock hole) on the front of the unit or from a piping hole.

(Refer to figure 20)

1. Electrical wiring diagram
2. On the back of the EL .COMPO. BOX lid.
3. Power wiring, ground wiring (inside conduit)
4. (When the wiring is routed out through the side panel.)
5. Transmission wiring
6. Pipe opening
7. Conduit
8. For power wiring and ground wiring
9. Through cover
10. Cut off the shaded zones before use.
11. Burr
12. Knockout hole
13. For transmission wiring

Note

- Open the knock holes with a hammer or the like.
- After knocking out the holes, we recommend you remove any burrs and paint them using the repair paint to prevent rusting.
- When passing wiring through the knock holes, remove burrs around the knock holes and protect the wiring with protective tape. **(Refer to figure 20)**
- If small animals might enter the unit, block off any gaps (hatching parts in figure 20) with material (field supply).

7-4 Transmission Wiring Connection Procedure

- Referring to figure 21, 22 connect the transmission wiring between outdoor unit and indoor unit, outdoor unit and outdoor unit of other system, outdoor unit and outdoor unit of same system (only multi system) or to COOL/HEAT selector.

(Refer to figure 21)

1. Connection example for single system
2. Outdoor unit
3. COOL/HEAT selector
4. To outdoor unit of other system
5. Match up terminal symbols. (Has polarity)
6. Use duplex wires
7. Indoor unit
8. Never connect the power wire

(Refer to figure 22)

1. Connection example for multi system
2. Outdoor unit A (Master unit)
3. Outdoor unit B (Sub unit)
4. COOL/HEAT selector
5. To indoor unit
6. To outdoor unit of other system

- All transmission wiring is to be procured on site. All wiring should use sheathed vinyl cord 0.75-1.25 mm^2 or cable (duplex). (Triplex only for the COOL/HEAT selector.)
- Transmission wiring (About the symbol [1] ~ [3], see figure 21, 22) should be done within the following limitations.
  If they are exceeded, transmission problems may occur.

[1] Between outdoor unit and indoor unit
Between outdoor unit and outdoor unit of other systems

Max. wiring length	: 1,000 m
Max. total wiring length	: 2,000 m
Max. no. of branches	: 16 [Note] No branch is allowed after branch (See figure 23)
Max. no. of outdoor units of other system that can be connected	: 10

(Refer to figure 23)

1. Outdoor unit
2. Indoor unit
3. Branch line 1
4. Branch line 2
5. No branch is allowed after branch
6. Main line
7. Central remote controller, etc.
8. Branch line 3
9. Transmission wiring between outdoor unit and indoor unit
10. Transmission wiring between outdoor unit and outdoor unit

[2] Between outdoor unit and outdoor unit of same system (Only for multi system)
Max. wiring length : 30 m

[3] Transmission wiring to COOL/HEAT selector
Max. wiring length : 500 m

- The transmission wiring inside the EL.COMPO.BOX should be secured using the clamp (1) as shown in figure 24.

(Refer to figure 24)

1. In the EL.COMPO.BOX
2. Retain to the EL.COMPO.BOX with the accessory clamp (1).

- Outside the units, the transmission wiring must be finished simultaneously with the local refrigerant piping, and wound with tape (field supply) as shown in figure 25.

(Refer to figure 25)

1. Liquid pipe
2. Gas pipe
3. Transmission wiring
4. Insulation material
5. Finishing tape

- For multi system:
  1. Transmission wiring between outdoor units in the same piping system must be connected to terminals Q1 and Q2 (TO MULTI UNIT).
     Connecting the wires to the F1, F2 (TO OUT/D UNIT) terminals results in system malfunction.
  2. Wiring to other systems should be connected to terminals F1 and F2 (TO OUT/D UNIT) on the PC-board of the master unit. The outdoor unit that connected transmission wiring to indoor unit is the master unit. The others are sub unit.

⚠ Caution

- Do not connect the power wiring to terminals for the transmission wiring. Doing so would destroy the entire system.
- When connecting wires to the terminal block on the PC-board, too much heat or tightening could damage the PC-board. Attach with care.
  See the table below for the tightening torque of the transmission wiring terminals.

Screw size	Tightening torque (N · m)
M3 (A5P)	0.53 - 0.63
M3.5 (A1P)	0.80 - 0.96

7-5 Power Wiring Connection Procedure

Be sure to connect the power supply wiring to the power supply terminal block and hold it in place using the included clamp as shown in the figure 26.

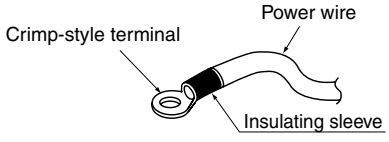
(Refer to figure 26)

1. Power supply (3N~50Hz 380-415V)
2. Earth leakage circuit breaker
3. Branch switch, Overcurrent breaker
4. Ground wire
5. Attach insulation sleeves
6. Power supply terminal block
7. Ground terminal
8. Clamp (1) (accessory)

- The L1, L2, L3 and N phases of the power wiring should be secured separately to the hook using the included clamp (1).
- The ground wiring should be bound to the power wiring using the included clamp (1) to prevent outside force from being applied to the terminal area.
- Wire so that the ground wiring does not come into contact with the compressor lead wiring. If they touch, this may have an adverse effect on other devices.

⚠ Caution

- Be sure to use crimp-style terminal with insulating sleeves for connections. (See the figure below.)

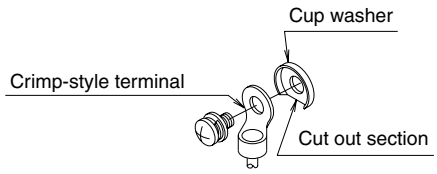


16

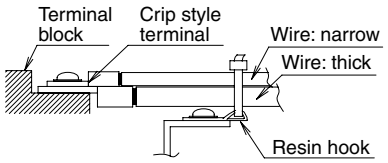
- For wiring, use the designated power wire and connect firmly, then secure to prevent outside pressure being exerted on the terminal board.
- Use an appropriate screwdriver for tightening the terminal screws. A screwdriver with a small head will strip the head and make proper tightening impossible.
- Over-tightening the terminal screws may break them. See the following table for the tightening torque of the terminal screws.

Screw size	Tightening torque (N·m)
M8 Power terminal, ground terminal	5.5 ~7.3

- When pulling the ground wire out, wire it so that it comes through the cut out section of the cup washer. (See the figure below.) An improper ground connection may prevent a good ground from being achieved.



- When two wires are connected to a single terminal, connect them so that the rear sides of the crimp contacts face each other. Also, make sure the thinner wire is on top, securing the two wires simultaneously to the resin hook using the included clamp (1).



7-6 Procedure for Wiring Inside Units

- Referring to figure 27, secure and wire the power and transmission wiring using the included clamp (1), (2), and (3).

(Refer to figure 27)

1. Retain with accessory clamp (3).
2. Electric conduit
3. When routing out the power/ground wires from the left side.
4. When routing out the transmission wiring from the opening for piping.
5. When routing out the power/ground wires from the front.
6. Clear over 50 mm.
7. When routing out the transmission wiring from the knockout hole.
8. Retain to the back of the column support with the accessory clamp (2).
9. When routing out the power/ground wires from the right side.
10. Power wiring
11. Transmission wiring
12. Ground wire
13. Secure to the back side of the support beam using the accessory clamp (1).
14. Retain to the back of the column support with the accessory clamp (2).
15. When wiring, exercise sufficient caution not to detach the acoustic insulators from the compressor.

⚠ Caution

- The transmission wiring must be at least 50 mm away from the power wiring.
- Make sure all wiring do not contact to the pipes (hatching parts in the figure 27).
- After wiring work is completed, check to make sure there are no loose connections among the electrical parts in the EL.COMPO.BOX.

8. AIR TIGHT TEST AND VACUUM DRYING

Note

- Always use nitrogen gas for the airtightness test.
- Absolutely do not open the shutoff valve until the main power ciruit insulation measurement has been completed. (measuring after the shutoff valve is opened will cause the insulation value to drop.)

8-1 Preparations

<Needed tools>

Gauge manifold Charge hose valve	• To prevent entry of any impurities and insure sufficient pressure resistance, always use the special tools dedicated for R410A. • Use charge hose that have pushing stick for connecting to service port of shutoff valves or refrigerant charge port.
Vacuum pump	• The vacuum pump for vacuum drying should be able to lower the pressure to –100.7kPa (5 Torr –755mm Hg). • Take care the pump oil never flow backward into the refrigerant pipe during the pump stops.

<The system for air tight test and vacuum drying>

- Referring to figure 28, connect an nitrogen tank, refrigerant tank, and a vacuum pump to the outdoor unit.
  The refrigerant tank and the charge hose connection to refrigerant charge port or the valve A, C in figure 28 are needed in “11. ADDITIONAL REFRIGERANT CHARGE AND CHECK OPERATION”.
- The shutoff valve and valve A~C in figure 28 should be open or closed as shown in the table below.

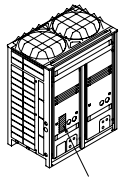
(Refer to figure 28)

1. Gauge manifold
2. Nitrogen
3. Measuring device
4. R410A tank (with siphon)
5. Vacuum pump
6. Charge hose
7. Liquid side shutoff valve
8. Gas side shutoff valve
9. Shutoff valve service port
10. Valve B
11. Valve C
12. Valve A
13. Outdoor unit
14. Refrigerant charge port
15. To indoor unit
16. Interunit pipings
17. Refrigerant flow

State of valve A, B and C and shutoff valves	Valve			shutoff valve	
	A	B	C	Liquid side	Gas side
Air tight test, Vacuum drying (Close valve A and shutoff valves certainly. Otherwise the refrigerant in the unit are released.)	Close	Open	Open	Close	Close

Note

- The airtightness test and vacuum drying should be done using the liquid side and gas side shutoff valve service ports.
  See the [R410A] Label attached to the front plate of the outdoor unit for details on the location of the service port (see figure at right).
- See **[Shutoff valve operation procedure]** in “11-1 Before working” for details on handling the shutoff valve.
- The refrigerant charge port is connected to unit pipe.
  When shipped, the unit contains the refrigerant, so use caution when attaching the charge hose.


[R410A] Label

8-2 Air tight test and vacuum drying method

After finished piping work, carry out air tight test and vacuum drying.

<Air tight test>

Pressurize the liquid and gas pipes to 4.0MPa (40bar) (do not pressurize more than 4.0MPa (40bar)). If the pressure does not drop within 24 hours, the system passes the test.
If there is a pressure drop, check for leaks, make repairs and perform the airtight test again.

<Vacuum drying>

Evacuate the system from the liquid and gas pipes by using a vacuum pump for more than 2 hours and bring the system to –100.7kPa or less. After keeping the system under that condition for more than 1 hour, check if the vacuum gauge rises or not. If it rises, the system may either contain moisture inside or have leaks.

Note

If moisture might enter the piping, follow belows.
(I.e., if doing work during the rainy season, if the actual work takes long enough that condensation may form on the inside of the pipes, if rain might enter the pipes during work, etc.)

(1) After performing the vacuum drying for two hours, pressurize to 0.05 MPa (i.e., vacuum breakdown) with nitrogen gas, then depressurize down to –100.7 kPa for an hour using the vacuum pump (vacuum drying).
(2) If the pressure does not reach –100.7 kPa even after depressurizing for at least two hours, repeat the vacuum breakdown - vacuum drying process.

After vacuum drying, maintain the vacuum for an hour and make sure the pressure does not rise by monitoring with a vacuum gauge.

9. PIPE INSULATION

- Insulation of pipes should be done after performing "**8. AIR TIGHT TEST AND VACUUM DRYING**".
- Always insulate the liquid side piping and gas side piping in the interunit piping and refrigerant branching kit. Failing to insulate the pipes could cause leaking or burns. (The gas side piping can reach temperatures of 120˚C. Be sure the insulation used can withstand such temperatures.)
- Reinforce the insulation on the refrigerant piping according to the installation environment. Condensation might form on the surface of the insulation.
  - Ambient temperature: 30˚C, humidity: 75% to 80% RH: min. thickness: 15 mm.
  - If the ambient temperature exceeds 30˚C and the humidity 80% RH, then the min. thickness is 20 mm.
- If there is a possibility that condensation on the shutoff valve might drip down into the indoor unit through gaps in the insulation and piping because the outdoor unit is located higher than the indoor unit, etc., this must be prevented by caulking the connections, etc. **(Refer to figure 29)**
- The piping lead-out hole lid should be attached after opening a knock hole. **(Refer to figure 30)**
- If small animals and the like might enter the unit through the piping lead-out hole, close the hole with blocking material (procured on site) after completion of "**11. ADDITIONAL REFRIGERANT CHARGE AND CHECK OPERATION**". **(Refer to figure 30)**

(Refer to figure 29)

1. Liquid side shutoff valve
2. Gas side shutoff valve
3. Indoor interunit piping
4. Insulation material
5. Coking, etc.
6. Refrigerant charge port

(Refer to figure 30)

1. Piping lead-out hole lid
2. Open a knock hole at "▨".
3. Block "▨".
4. Liquid side piping
5. Gas side piping

Note

- After knocking out the holes, we recommend you remove burrs in the knock holes (see figure 30) and paint the edges and areas around the edges using the repair paint.

10. CHECKING OF DEVICE AND INSTALLATION CONDITIONS

Be sure to check the followings.

For those doing electrical work

1. Make sure there is no faulty transmission wiring or loosing of a nut.
   See "**7-4 Transmission Wiring Connection Procedure**".
2. Make sure there is no faulty power wiring or loosing of a nut.
   See "**7-5 Power Wiring Connection Procedure**".
3. Has the insulation of the main power circuit deteriorated?
   Measure the insulation and check the insulation is above regular value in accordance with relevant local and national regulations.

For those doing pipe work

1. Make sure piping size is correct.
   See "**6-1 Selection of piping material and Refrigerant branching kit**".
2. Make sure insulation work is done.
   See "**9. PIPE INSULATION**".
3. Make sure there is no faulty refrigerant piping.
   See "**6. REFRIGERANT PIPING**".

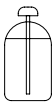
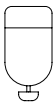
11. ADDITIONAL REFRIGERANT CHARGE AND CHECK OPERATION

The outdoor unit is charged with refrigerant when shipped from the factory, but depending on the size and length of the piping when installed, it may require additional charging.
For charging the additional refrigerant, follow the procedure in this chapter.
And then carry out the check operation.

11-1 Before working

[About the refrigerant tank]

Check whether the tank has a siphon pipe before charging and place the tank so that the refrigerant is charged in liquid form. (See the figure below.)

With siphon pipe	
	Stand the tank upright and charge. (The siphon pipe goes all the way inside, so the tank does not need be put upside-down charge in liquid form.)
Other tanks	
	Stand the tank upside-down and charge.

⚠ Caution

- Always use the proper refrigerant (R410A). If charged with the refrigerant containing an improper material, it may cause an explosion or accident.
- R410A is a mixed refrigerant, so charging it as a gas will cause the refrigerant composition to change, which may prevent normal operation.

[Shutoff valve operation procedure]

When operating the shutoff valve, follow the procedure instructed below.

Note

- Do not open the shutoff valve until "10. CHECKING OF DEVICE AND INSTALLATION CONDITIONS" are completed. If the shutoff valve is left open without turning on the power, it may cause refrigerant to buildup in the compressor, leading insulation degradation.
- Be sure to use the correct tools.
  The shutoff valve is not a back-seat type. If forced it to open, it might break the valve body.
- When using a service port, use the charge hose.
- After tightening the cap, make sure no refrigerant gas is leaking.

16

[Tightening torque]
The sizes of the shutoff valves on each model and the tightening torque for each size are listed in the table below.

<Size of Shutoff Valve>

	5HP type	8HP type	10HP type	12HP type	14HP type	16HP type	18HP type
Liquid side shut-off valve	ϕ 9.5 The 12HP type corresponds to the 12.7-diameter onsite piping using the included piping.				ϕ 12.7 The 18HP type corresponds to the 15.9-diameter onsite piping using the accessory pipe.		
Gas side shutoff valve	ϕ 15.9	ϕ 19.1	ϕ 25.4 The 10HP type corresponds to the 22.2-diameter onsite piping using the accessory pipe. The 12 ~ 18HP type corresponds to the 28.6-diameter onsite piping using the accessory pipe.				

<Tightening torque>

Shutoff valve size	Tightening torque N·m (Turn clockwise to close)			
	Shaft (valve body)		Cap (valve lid)	Service port
ϕ 9.5	5.4 - 6.6	Hexagonal wrench 4 mm	13.5 - 16.5	11.5 - 13.9
ϕ 12.7	8.1 - 9.9		18.0 - 22.0	
ϕ 15.9	13.5 - 16.5	Hexagonal wrench 6 mm	22.5 - 27.5	
ϕ 19.1	27.0 - 33.0	Hexagonal wrench 8 mm		
ϕ 25.4				

(Refer to figure 34)
1. Service port
2. Cap
3. Hex holes
4. Shaft (valve body)
5. Seal section

[To open]
1. Remove the cap and turn the shaft counterclockwise with the hexagon wrench (JISB4648).
2. Turn it until the shaft stops.
3. Make sure to tighten the cap securely.
   (For the tightening torque, refer to the item <Tightening Torque>.)

[To close]
1. Remove the cap and turn the shaft clockwise with the hexagon wrench (JISB4648).
2. Securely tighten the valve until the shaft contacts the main body seal.
3. Make sure to tighten the cap securely.
   (For the tightening torque, refer to the item <Tightening Torque>.)

[How to Check How Many Units are Connected]
It is possible to find out how many indoor or outdoor unit in the system are turned on by operating the push button on the PC-board (A1P) of outdoor unit (In case of multi system master unit).
Follow the procedure below to check how many indoor or outdoor units are turned on.

(LED display: ● ...OFF ☼ ...ON ◑ ...Blinking ＊...Uncertain)		LED display						
		H1P	H2P	H3P	H4P	H5P	H6P	H7P
(1) Press the MODE button (BS1) once, and set the MONITOR MODE (H1P: Blinking).		◑	●	●	●	●	●	●
(2) Press the SET button (BS2) the number of times until the LED display matches that at right.	For checking the number of outdoor units: eight times	◑	●	●	☼	●	●	●
	For checking the number of indoor units: five times	◑	●	●	●	☼	●	☼
(3) Press the RETURN button (BS3) and read the number of units from the display of H2P through H7P. [Reading Method] The display of H2P through H7P should be read as a binary number, with ◑ standing for "1" and ● standing for "0".		◑	＊	＊	＊	＊	＊	＊
Ex: For the LED display at right, this would be "0 1 0 1 1 0 ", which would mean 22 units are connected. 32 × **0** + 16 × **1** + 8 × **0** + 4 × **1** + 2 × **1** + 1 × **0** = 22 units Note: "000000" indicates 64 units.		◑	●	◑	●	◑	◑	●
(4) Press the MODE button (BS1) once. This returns to **Setting Mode 1** (default).		●	●	☼	●	●	●	●

Note
Press the "MODE button" (BS1) if you get confused while operating.
This returns to **Setting Mode 1** (default).

11-2 Procedure of Adding Refrigerant charging and check operation

Warning **Electric Shock Warning**

- Make sure to close the EL. COMPO. BOX lid before turning on the power when performing the refrigerant charging operation.
- Perform the setting on the PC-board (A1P) of the outdoor unit and check the LED display after the power is on via the inspection door which is in the EL. COMPO. BOX lid.
- Use an insulated rod to operate the push buttons via the EL. COMPO. BOX's inspection door.
  There is a risk of electric shock if you touch any live parts, since this operation must be performed with the power on.

Caution

- Make sure to use the protect tool (protective groves and goggles) when charging the refrigerant.
- Due to a danger of liquid hammer, the refrigerant must not be charged over the allowable maximum amount when charging the refrigerant.
- Do not perform the refrigerant charging operation under working for the indoor unit.
- When opening the front panel, make sure to take caution to the fan rotation during the working.
  After the outdoor unit stops operating, the fan may keep rotation for a while.

Note

- If operation is performed within 12 minutes after the indoor and outdoor units are turned on, H2P will be lit on and the compressor will not operate.
- In order to ensure uniform refrigerant distribution, it may take up to around 10 minutes for the compressor to start up after the unit starting operating. This is not a malfunction.

<About refrigerant charging>

- The refrigerant charge port is connected to the piping inside the unit.
  When the unit is shipped from the factory, the unit's internal piping is already charged with refrigerant, so be careful when connecting the charge hose.
- After adding the refrigerant, make sure to close the lid of the refrigerant charging port.
  The tightening torque for the lid is 11.5 to 13.9 Nm.
- See [Shutoff valve operation procedure] in chapter 11-1 for details on how to handle shutoff valves.
- When done or when pausing the refrigerant charging operation, close the valve of the refrigerant tank immediately. If the tank is left with the valve open, the amount of refrigerant which is properly charged may be off the point. More refrigerant may be charged by any remaining pressure after the machine is stopped.

<About check operation>

- Make sure to perform the check operation after installation. Otherwise, the malfunction code "U3" will be displayed and normal operation cannot be performed.
  And the failure of "Check of miswiring" may also cause abnormal operation. Performance may drop due to the failure of "Judgment of piping length".
- Check operation must be performed for each refrigerant piping system.
  Checking is impossible if plural systems are being done at once.
- The individual problems of indoor units can not be checked.
  About these problems check by test run after the check operation is completed. (See chapter 13)
- The check operation cannot be performed in recovery or other service modes.

1. Make sure the following works are complete in accordance with the installation manual.
   - Piping work
   - Wiring work
   - Air tight test
   - Vacuum drying
   - Installation work for indoor unit
2. Calculate the "additional charging amount" using "How to calculate the additional refrigerant to be charged" in "6-5 Example of connection".
3. Open the valve C (See the figure 31. The valve A, B and the liquid and gas side shutout valve must be left closed), and charge the refrigerant of the "additional charging amount" from the liquid side shutout valve service port.
   If the "additional charging amount" was charged fully, close the valve C and go to step 5.
   If the "additional charging amount" was not charged fully, go to step 4.

   (Refer to figure 31)
   1. Measuring device
   2. R410A tank (with siphon)
   3. Charge hose
   4. Liquid side shutoff valve
   5. Gas side shutoff valve
   6. Shutoff valve service port
   7. Valve B
   8. Valve C
   9. Valve A
   10. Outdoor unit
   11. Refrigerant charge port
   12. To indoor unit
   13. Field pipings
   14. Refrigerant flow
4. Perform the refrigerant charging operation following [Refrigerant charging operation procedure] as shown below, and charge the remaining refrigerant of the "additional charging amount". For performing the refrigerant charging operation the push button on the PC-board (A1P) of outdoor unit (Incase of multi system master unit) are use. (See the figure 32) In addition, the refrigerant are charged from the refrigerant charge port via the valve A. (See the figure 33)
   For operating the push button and opening and closing the valve, follow the work procedure.

Note

The refrigerant will be charged about 22kg in one hour at outdoor temp. 30˚C DB (6kg at 0˚C DB).
If you need to speedup in case of multi system, connect the refrigerant tanks to each outdoor unit as shown in the figure 33.

(Refer to figure 32)
1. EL.COMPO.BOX lid
2. Pipe intake
3. Inspection door
4. Label "Service Precaution"
5. LED (H1~8P)
6. Push button (BS1-5)
7. Lift the protruding part to open the cover

(Refer to figure 33)
1. Measuring device
2. R410A tank (with siphon)
3. Charge hose
4. Liquid side shutoff valve
5. Gas side shutoff valve
6. Shutoff valve service port
7. Valve B
8. Valve C
9. Valve A
10. Outdoor unit
11. Refrigerant charge port
12. Field piping
13. Refrigerant flow
14. To indoor unit
15. In case of multi system if you need to speedup.

16

[Refrigerant Charging Operation Procedure]

(1) Open the liquid and gas side shutoff valves (The valve A~C must be closed. The valve A~C means the valves in the figure 33.)

[Display of normal system]

LED display (Default status of shipped)		SERV. MONI-TOR	MODE	TEST/ HWL	C/H SELECTOR			L.N.O.P	DEMA-ND	MULTI
					IND	MASTER	SLAVE			
		HAP	H1P	H2P	H3P	H4P	H5P	H6P	H7P	H8P
Single system		◑	●	●	☼	●	●	●	●	●
Multi system (*)	Master unit	◑	●	●	☼	●	●	●	●	☼
	Sub unit 1	◑	●	●	●	●	●	●	●	◑
	Sub unit 2	◑	●	●	●	●	●	●	●	●

LED display: ●...OFF, ☼...ON, ◑...Blinking

(*)How to distinguish the master unit, sub unit 1, and sub unit 2 in the multi system.

Method 1: By the H8P (MULTI) LED display

☼ (ON): Master unit	◑ (Blinking): Sub unit 1	● (OFF): Sub unit 2

Method 2: By the transmission wiring to indoor unit

Transmission wiring is connected: Master unit
Transmission wiring is not connected : Sub unit 1 or Sub unit 2

(2) If necessary, set the field setting by using the dip switch on the outdoor unit PC-board (A1P).
(For how to set, see "12-1 Onsite Settings With the Power Off")

(3) • Close the EL. COMPO. BOX lid and all front panel except on the side of the EL. COMPO. BOX (*1) and turn the power to the outdoor unit and all connected indoor units. (*2)
• After H2P stop blinking (about 12 minutes after turning on the power), check LED displays as shown in the table [Display of normal system] and the system is normal state.
If H2P is blinking, check the malfunction code in the remote controller, and correct the malfunction in accordance with [Remote controller display malfunction code] in step 5.

(*1) Lead the refrigerant charge hose etc from the pipe intake. All front panels must be closed at the procedure (9).

(*2) • If you perform the refrigerant charging operation within the refrigerant system that have the power off unit, the operation cannot finish properly.
For confirming the number of the outdoor and indoor units with the power on, see [How to check how many units are connected] in chapter 11-1. In case of a multi system, turn on the power to all outdoor units in the refrigerant system.
• To energize the crankcase heater, make sure to turn on for 6 hours before starting operation.

(4) Start the additional refrigerant charge operation.
(About the system settings for additional refrigerant charge operation, refer to the [Service Precaution] label attached on the EL. COMPO. BOX lid in the outdoor unit.)
Open valve A immediately after starting the compressor.

(5) Close the valve A if the "additional charging amount" of refrigerant was charged, and push the RETURN button (BS3) once.

(6) Record the charging amount on the accessory "REQUEST FOR THE INDICATION" label and attach it to the back side of the front panel.

5. After completing the additional refrigerant charging perform the check operation following below.

Note

- For check operation, the following work will be performed.
  - Check of shutoff valve opening
  - Check of miswiring
  - Judgment of piping length
  - Check of refrigerant overcharge
- It takes about 40 minutes to complete the check operation.

[Check Operation Procedure]

(1) Make the onsite setting as needed using the dip switches on the outdoor unit PC-board (A1P) with the power off (See "12-1 Onsite Settings With the Power Off")

(2) Close the EL. COMPO. BOX lid and all front panels except as the side of the EL. COMPO. BOX and turn on the power to the outdoor unit and all connected indoor units. (Be sure to turn the power on at least 6 hours before operation in order to have power running to the crank case heater.)

(3) Check the LED display on the outdoor unit PC-board (A1P) is as shown in the table below and transmission is normal.

LED display (Default status of shipped)		SERV. MONI-TOR	MODE	TEST/ HWL	C/H SELECTOR			L.N.O.P	DEMA-ND	MULTI
					IND	MASTER	SLAVE			
		HAP	H1P	H2P	H3P	H4P	H5P	H6P	H7P	H8P
Single system		◑	●	●	☼	●	●	●	●	●
Multi system (*)	Master unit	◑	●	●	☼	●	●	●	●	☼
	Sub unit 1	◑	●	●	●	●	●	●	●	◑
	Sub unit 2	◑	●	●	●	●	●	●	●	●

LED display: ●...OFF, ☼...ON, ◑...Blinking

(*)How to distinguish the master unit, sub unit 1, and sub unit 2 in the multi system.

Method 1: By the H8P (MULTI) LED display

☼ (ON): Master unit	◑ (Blinking): Sub unit 1	● (OFF): Sub unit 2

Method 2: By the transmission wiring to indoor unit

Transmission wiring is connected: Master unit
Transmission wiring is not connected : Sub unit 1 or Sub unit 2

(4) Make the onsite settings as needed using the push button (BS1-BS5) on the outdoor unit PC-board (A1P) with the power on. (See "12-2 Onsite Settings With the Power On")

(5) Perform the check operation following the Check Operation Method of the [Service Precautions] label on the EL. COMPO. BOX lid. The system operation for about 40 minutes and automatically stops the check operation.
If the malfunction code is not displayed in the remote controller after the system stop, check operation is completed. Normal operation will be possible after 5 minutes. If the malfunction code is displayed in the remote controller, correct the malfunction following [Remote controller displays malfunction code] and perform the check operation again.

[Remote controller displays malfunction code]

Malfunction code	Installation error	Remedial action
E3, E4 F3, F6 UF	The shutoff valve of the outdoor unit is left closed.	Open the shutoff valve.
U1	The phases of the power to the outdoor unit is reversed.	Exchange two of the three phases (L1, L2, L3) to make a proper connection.
U1 U4 LC	No power is supplied to an outdoor or indoor unit (including phase interruption).	Make sure the power source wire is properly connected to the outdoor unit and revise if necessary.
UF	There is conflict on the connection of transmission wiring in the system.	Check if the refrigerant piping line and the transmission wiring are consistent with each other.
E3 F6 UF	Refrigerant overcharge.	Recalculate the additional amount refrigerant from the piping length and correct the refrigerant charge level by recovering any excessive refrigerant with a refrigerant recovery machine.
E4 F3	Insufficient refrigerant.	• Check if the additional refrigerant charge has been finished correctly. • Recalculate the additional amount refrigerant from the piping length and add the adequate amount.
U7, U4 UF, UH	If the outdoor unit terminal is connected when there is one outdoor unit installed.	Remove the line from the outdoor multi terminals (Q1 and Q2).

If any malfunction codes other than the above are displayed, check the service manual for how to respond.

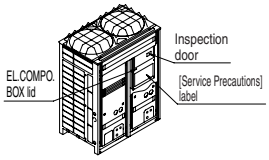
12. ONSITE SETTINGS

Note

In the case of a multi system, all onsite settings should be made on the master unit. Settings made on sub units are invalid.
The outdoor unit to which the indoor unit transmission wire are connected is the master unit, and all other units are sub units.

12-1 Onsite Settings With the Power Off

If the COOL/HEAT selector was connected to the outdoor unit in "7. FIELD WIRING", set the dip switch (DS1) on the outdoor unit PC-board (A1P) to "ON" (it is set to "OFF" when shipped from the factory).
For the position of the dip switch (DS1), see the "Service Precautions" label (see at right) which is attached to the EL. COMPO. BOX lid.



Warning **Electric Shock Warning**

Never perform with the power on.
There is a serious risk of electric shock if any live part is touched.

12-2 Onsite Settings With the Power On

Use the push button switches (BS1 through BS5) on the outdoor unit PC-board (A1P) to make the necessary onsite settings.
See the "Service Precautions" label on the EL. CONPO. BOX lid for details on the positions and operating method of the push button switches and on the onsite setting.
Make sure to record the setting on the accessory "REQUEST FOR THE INDICATION" label.

Warning **Electric Shock Warning**

Use an insulated rod to operate the push buttons via the inspection door of EL. COMPO. BOX lid.
There is a risk of electric shock if you touch any live parts, since this operation must be performed with the power on.

13. TEST RUN

13-1 Before test run

- Make sure the following works are completed in accordance with the installation manual.
  - Piping work
  - Wiring work
  - Air tight test
  - Vacuum drying
  - Additional refrigerant charge
- Check that all work for the indoor unit are finished and there are no danger to operate.

13-2 Test Run

After check operation is completed, operate the unit normally and check the following.

(1) Make sure the indoor and outdoor units are operating normally.

(2) Operate each indoor unit one by one and make sure the corresponding outdoor unit is also operating.

(3) Check to see if cold (or hot) air is coming out from the indoor unit.

(4) Push the fan direction and strength buttons on the remote controller to see if they operate properly.

Note

- Heating is not possible if the outdoor temperature is 24˚C or higher. Refer to the Operation manual.
- If a knocking sound can be heard in the liquid compression of the compressor, stop the unit immediately and then energize the crank case heater for a sufficient length of time before restarting the operation.
- Once stopping, the compressor will not restart in about 5 minutes even if the On/Off button of the remote controller is pushed.
- When the system operation is stopped by the remote controller, the outdoor units may continue operating for further 5 minutes at maximum.
- The outdoor unit fan may rotate at low speeds if the Night-time low noise setting or the External low noise level setting is made, but this is not a malfunction.

13-3 Checks After Test Run

Perform the following checks after the test run is complete.

- Record the contents of field setting.
  → Record them on the accessory "REQUEST FOR THE INDICATION" label.
  And attach the label on the back side of the front panel.
- Record the installation date.
  → Record the installation date on the accessory "REQUEST FOR THE INDICATION" label in accordance with the IEC60335-2-40.
  And attach the label on the back side of the front panel.

Note

After the test run, when handing the unit over to the customer, make sure the EL.COMPO.BOX lid, the inspection door, and the unit casing are all attached.

14. CAUTION FOR REFRIGERANT LEAKS

(Points to note in connection with refrigerant leaks)

Introduction

The installer and system specialist shall secure safety against leakage according to local regulations or standards. The following standards may be applicable if local regulations are not available.

The VRV System, like other air conditioning systems, uses R410A as refrigerant. R410A itself is an entirely safe non-toxic, non-combustible refrigerant. Nevertheless care must be taken to ensure that air conditioning facilities are installed in a room which is sufficiently large. This assures that the maximum concentration level of refrigerant gas is not exceeded, in the unlikely event of major leak in the system and this in accordance to the local applicable regulations and standards.

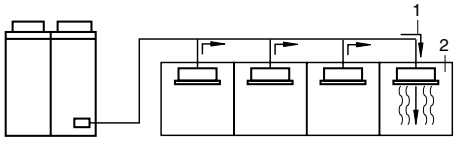
Maximum concentration level

The maximum charge of refrigerant and the calculation of the maximum concentration of refrigerant is directly related to the humanly occupied space in to which it could leak.

The unit of measurement of the concentration is kg/m^3 (the weight in kg of the refrigerant gas in 1m^3 volume of the occupied space).

Compliance to the local applicable regulations and standards for the maximum allowable concentration level is required.

In Australia the maximum allowed concentration level of refrigerant to a humanly space is limited to 0.35kg/m^3 for R407C and 0.44kg/m^3 for R410A.



1. direction of the refrigerant flow
2. room where refrigerant leak has occurred (outflow of all the refrigerant from the system)

Pay a special attention to the place, such as a basement, etc. where refrigerant can stay, since refrigerant is heavier than air.

Procedure for checking maximum concentration

Check the maximum concentration level in accordance with steps 1 to 4 below and take whatever action is necessary to comply.

1. Calculate the amount of refrigerant (kg) charged to each system separately.

amount of refrigerant in a single unit system (amount of refrigerant with which the system is charged before leaving the factory)	+	additional charging amount (amount of refrigerant added locally in accordance with the length or diameter of the refrigerant piping)	=	total amount of refrigerant (kg) in the system

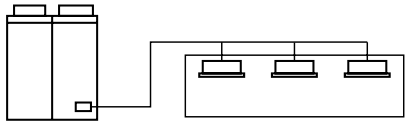
Note

- Where a single refrigerant facility is divided into 2 entirely independent refrigerant systems then use the amount of refrigerant with which each separate system is charged.

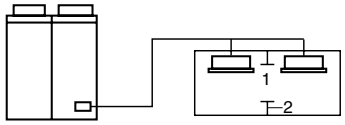
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2. Calculate the smallest room volume (m^3)
Incase like the following, calculate the volume of (A), (B) as a single room or as the smallest room.

A. Where there are no smaller room divisions



B. Where there is a room division but there is an opening between the rooms sufficiently large to permit a free flow of air back and forth.



1. opening between rooms
2. partition

(Where there is an opening without a door or where there are openings above and below the door which are each equivalent in size to 0.15% or more of the floor area.)

3. Calculating the refrigerant density using the results of the calculations in steps 1 and 2 above.

$$\frac{\text{total volume of refrigerant in the refrigerant system}}{\text{size } (m^3) \text{ of smallest room in which there is an indoor unit installed}} \leq \text{maximum concentration level } (kg/m^3)$$

If the result of the above calculation exceeds the maximum concentration level then make similar calculations for the second then third smallest room and so until the result falls short of the maximum concentration.

4. Dealing with the situations where the result exceeds the maximum concentration level.
Where the installation of a facility results in a concentration in excess of the maximum concentration level then it will be necessary to revise the system. Please consult your Daikin supplier.

3.2 RXYQ-PAYL(E), PTL(E)

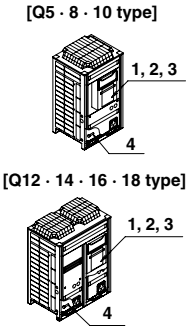


figure 1

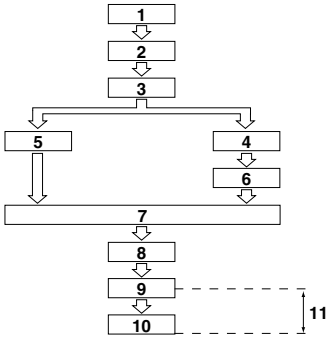


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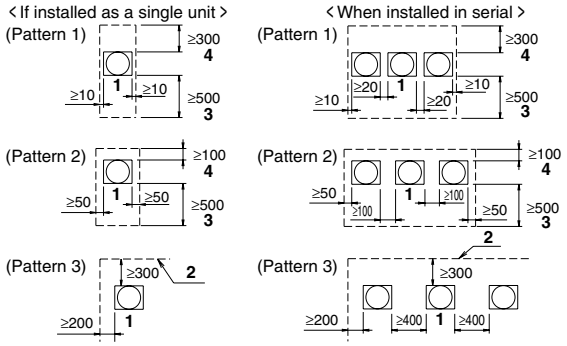


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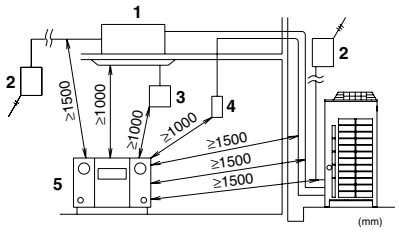


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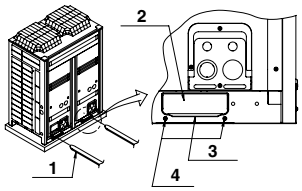


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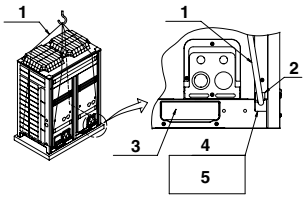


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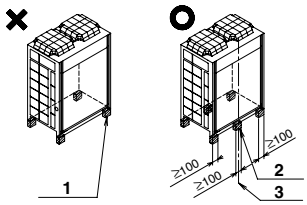


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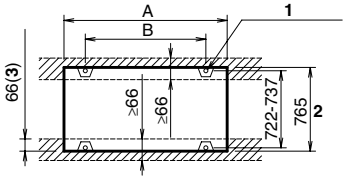


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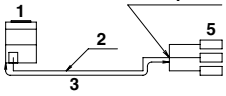


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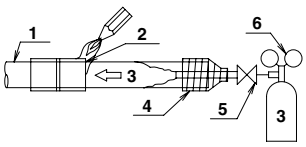


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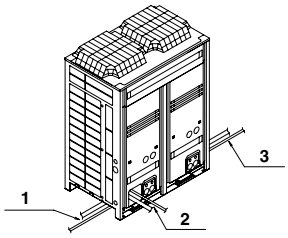


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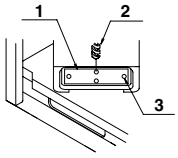


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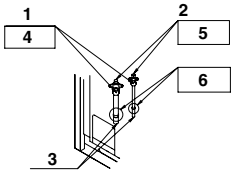


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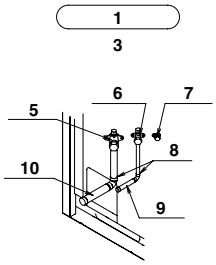


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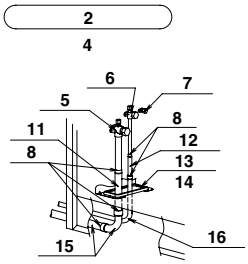


figure 15

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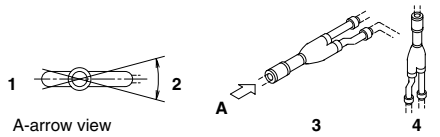
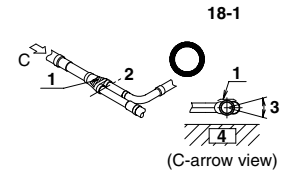


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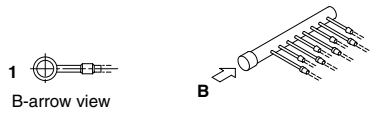


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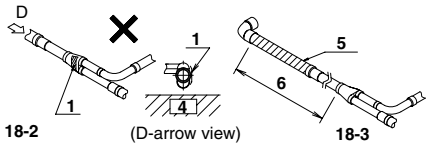


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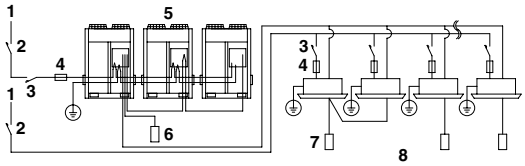


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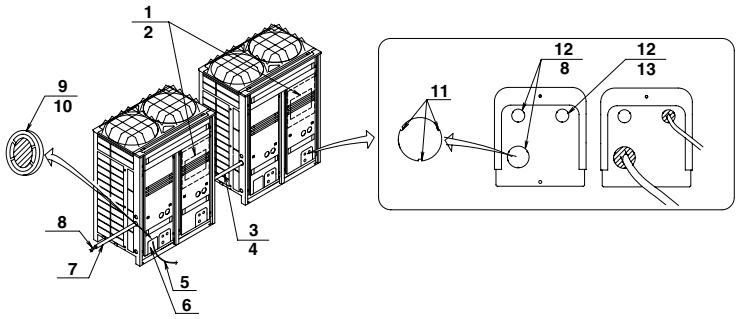


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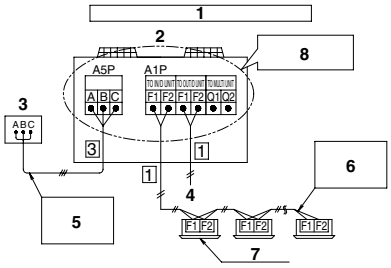


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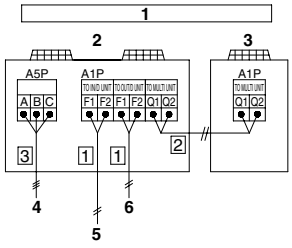


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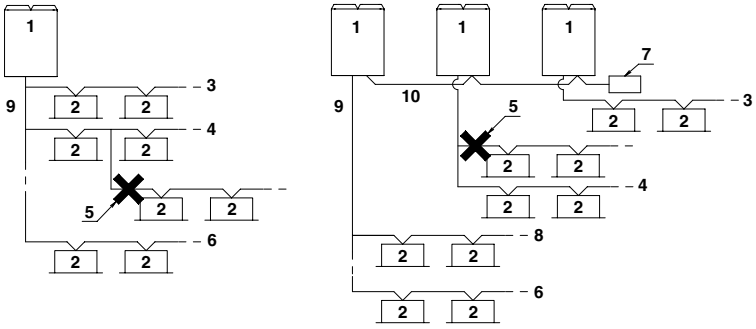


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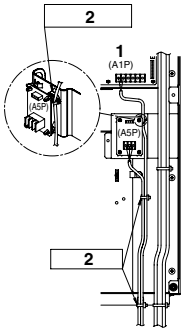


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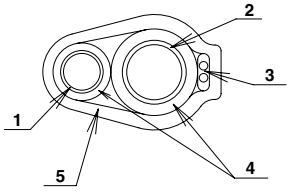


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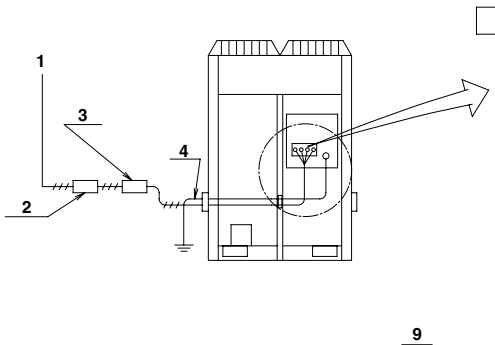


figure 26-1

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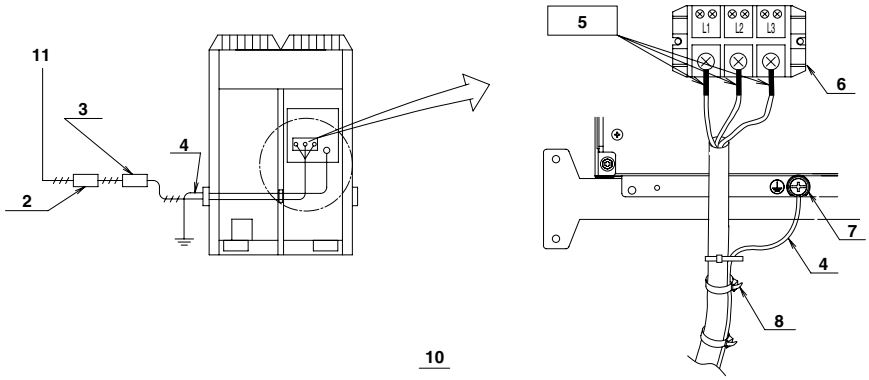


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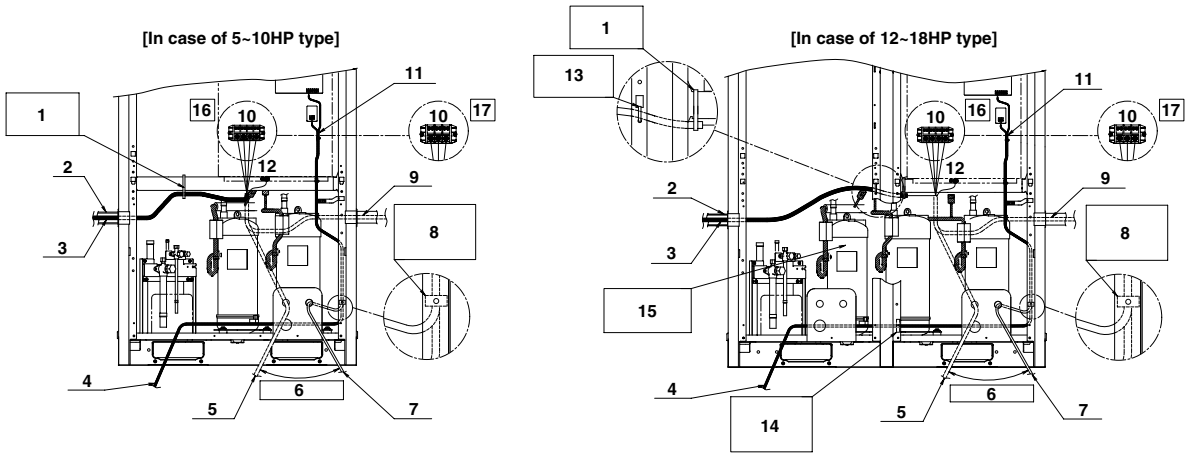


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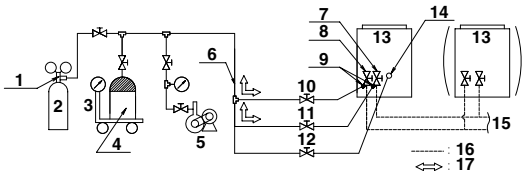


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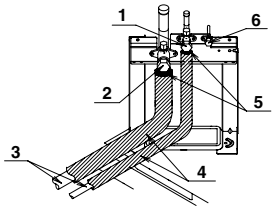


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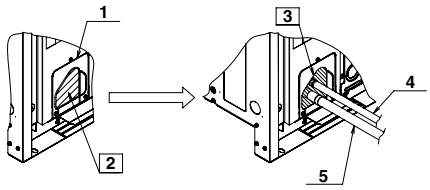


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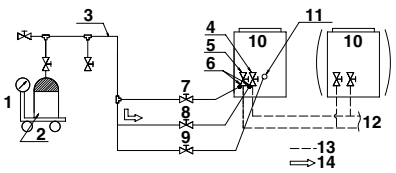


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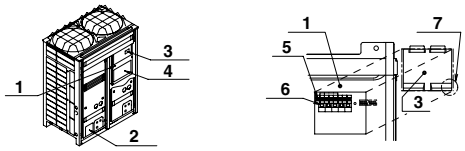


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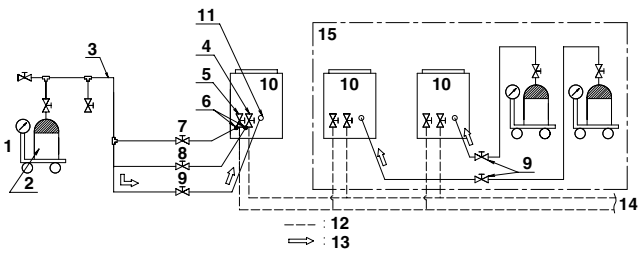


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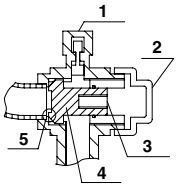


figure 34

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DAIKIN

RXYQ5PAYL(E) · PTL(E)	RXYQ16PAYL(E) · PTL(E)	RXYQ26PAYL(E) · PTL(E)	RXYQ36PAYL(E) · PTL(E)	RXYQ46PAYL(E) · PTL(E)
RXYQ8PAYL(E) · PTL(E)	RXYQ18PAYL(E) · PTL(E)	RXYQ28PAYL(E) · PTL(E)	RXYQ38PAYL(E) · PTL(E)	RXYQ48PAYL(E) · PTL(E)
RXYQ10PAYL(E) · PTL(E)	RXYQ20PAYL(E) · PTL(E)	RXYQ30PAYL(E) · PTL(E)	RXYQ40PAYL(E) · PTL(E)	RXYQ50PAYL(E) · PTL(E)
RXYQ12PAYL(E) · PTL(E)	RXYQ22PAYL(E) · PTL(E)	RXYQ32PAYL(E) · PTL(E)	RXYQ42PAYL(E) · PTL(E)	RXYQ52PAYL(E) · PTL(E)
RXYQ14PAYL(E) · PTL(E)	RXYQ24PAYL(E) · PTL(E)	RXYQ34PAYL(E) · PTL(E)	RXYQ44PAYL(E) · PTL(E)	RXYQ54PAYL(E) · PTL(E)

VRVIII System air conditioner

Installation manual

CONTENTS

1. FIRST OF ALL 1
   1-1. Safety precautions 1
   1-2. Special notice of product 2
   1-3. Disposal requirements 2
2. INTRODUCTION 2
   2-1. Combination 2
   2-2. Standard supplied accessories 3
   2-3. Option accessory 3
   2-4. Technical and Electrical specifications 3
   2-5. Main components 3
   2-6. Installation Process 3
3. SELECTION OF LOCATION 3
4. INSPECTING AND HANDLING THE UNIT 4
5. PLACING THE UNIT 4
6. REFRIGERANT PIPING 4
   6-1. Selection of piping material and Refrigerant branching kit 5
   6-2. Protection against contamination when installing pipes 5
   6-3. Pipe connection 5
   6-4. Connecting the refrigerant piping 5
   6-5. Example of connection 8
7. FIELD WIRING 10
   7-1. Power circuit, safety device, and cable requirements 10
   7-2. Wiring Connection Example for Whole System 11
   7-3. Leading wire Procedure 11
   7-4. Transmission Wiring Connection Procedure 11
   7-5. Power Wiring Connection Procedure 12
   7-6. Procedure for Wiring Inside Units 12
8. AIR TIGHT TEST AND VACUUM DRYING 12
   8-1. Preparations 12
   8-2. Air tight test and vacuum drying method 13
9. PIPE INSULATION 13
10. CHECKING OF DEVICE AND INSTALLATION CONDITIONS 13
11. ADDITIONAL REFRIGERANT CHARGE AND CHECK OPERATION 13
   11-1.Before working 14
   11-2.Procedure of Adding Refrigerant charging and check operation 15
12. ONSITE SETTINGS 17
   12-1.Onsite Settings With the Power Off 17
   12-2.Onsite Settings With the Power On 17
13. TEST RUN 17
   13-1.Before test run 17
   13-2.Test Run 17
   13-3.Checks After Test Run 17
14. CAUTION FOR REFRIGERANT LEAKS 17

1. FIRST OF ALL

- This document is an installation manual for the Daikin RXYQ-P Series VRV Inverter. Before installing the unit, read this manual thoroughly, and following the instructions contained in it. After installation, do a test run to make sure the unit runs properly, and then explain how to operate and take care of the unit to the customer, using the operation manual.
- Lastly, make sure the customer keeps this manual, along with the operation manual, in a safe place.
- This manual does not describe how to install the indoor unit. Refer to the installation manual included with the indoor unit for that.

1-1 Safety precautions

Please read these “Safety precautions” carefully before installing air conditioning unit and be sure to install it correctly.
After completing installation, conduct a trial operation to check for faults and explain to the customer how to operate the air conditioner and take care of it with the aid of the operation manual.
Ask the customer to store the installation manual along with the operation manual for future reference.

Meaning of WARNING and CAUTION notices

Warning .....Failure to follow these instructions properly may result in personal injury or loss of life.

Caution .....Failure to observe these instructions properly may result in property damage or personal injury, which may be serious depending on the circumstances.

Warning

- Ask your dealer or qualified personnel to carry out installation work.
  Do not attempt to install the air conditioner yourself. Improper installation may result in water leakage, electric shocks or fire.
- Install the air conditioner in accordance with the instructions in this installation manual.
  Improper installation may result in water leakage, electric shocks or fire.
- When installing the unit in a small room, take measures against to keep refrigerant concentration from exceeding allowable safety limits in the event of refrigerant leakage.
  Contact the place of purchase for more information. Excessive refrigerant in a closed ambient can lead to oxygen deficiency.
- Be sure to use only the specified accessories and parts for installation work.
  Failure to use the specified parts may result in the unit falling, water leakage, electric shocks or fire.
- Install the air conditioner on a foundation strong enough to withstand the weight of the unit.
  A foundation of insufficient strength may result in the equipment falling and causing injury.
- Carry out the specified installation work after taking into account strong winds, typhoons or earthquakes.
  Failure to do so during installation work may result in the unit falling and causing accidents.
- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local laws and regulations and this installation manual.
  An insufficient power supply capacity or improper electrical construction may lead to electric shocks or fire.
- Make sure that all wiring is secured, the specified wires are used, and that there is no strain on the terminal connections or wires.
  Improper connections or securing of wires may result in abnormal heat build-up or fire.
- When wiring the power supply and connecting the remote controller wiring and transmission wiring, position the wires so that the EL.COMPO.BOX lid can be securely fastened.
  Improper positioning of the EL.COMPO.BOX lid may result in electric shocks, fire or the terminals overheating.
- If refrigerant gas leaks during installation, ventilate the area immediately.
  Toxic gas may be produced if the refrigerant comes into contact with fire.
- After completing installation, check for refrigerant gas leakage.
  Toxic gas may be produced if the refrigerant gas leaks into the room and comes into contact with a source of fire, such as a fan heater, stove or cooker.
- Do not directly touch refrigerant that has leaked from refrigerant pipes or other areas, as there is a danger of frostbite.
- Be sure to switch off the unit before touching any electrical parts.
- Do not allow children to climb on the outdoor unit and avoid placing objects on the unit. Injury may result if the unit becomes loose and falls.
- Be sure to earth the air conditioner.
  Do not earth the unit to a utility pipe, lightning conductor or telephone earth lead.
  Imperfect earthing may result in electric shocks or fire.
  A high surge current from lightning or other sources may cause damage to the air conditioner.
- Be sure to install an earth leakage breaker.
  Failure to install an earth leakage breaker may result in electric shocks or fire.

Caution

- While following the instructions in this installation manual, install drain piping to ensure proper drainage and insulate piping to prevent condensation.
  Improper drain piping may result in indoor water leakage and property damage.

- Install the indoor and outdoor units, power cord and connecting wires at least 1 meter away from televisions or radios to prevent picture interference and noise.
  (Depending on the incoming signal strength, a distance of 1 meter may not be sufficient to eliminate noise.)
- Remote controller (wireless kit) transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types).
  Install the indoor unit as far away from fluorescent lamps as possible.
- Make sure to provide for adequate measures in order to prevent that the outdoor unit be used as a shelter by small animals.
  Small animals making contact with electrical parts can cause malfunctions, smoke or fire. Please instruct the customer to keep the area around the unit clean.
- Do not install the air conditioner in the following locations:
  1. Where there is a high concentration of mineral oil spray or vapour (e.g. a kitchen).
     Plastic parts will deteriorate, parts may fall off and water leakage could result.
  2. Where corrosive gas, such as sulphurous acid gas, is produced.
     Corroding of copper pipes or soldered parts may result in refrigerant leakage.
  3. Near machinery emitting electromagnetic radiation.
     Electromagnetic radiation may disturb the operation of the control system and result in a malfunction of the unit.
  4. Where flammable gas may leak, where there is carbon fibre or ignitable dust suspensions in the air, or where volatile flammables such as paint thinner or gasoline are handled.
     Operating the unit in such conditions may result in fire.

1-2 Special notice of product

[CLASSIFICATION]
This air conditioner comes under the term “appliances not accessible to the general public”.
[EMC CHARACTERISTICS]
VRVIII System is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.
[REFRIGERANT]
VRVIII System use R410A refrigerant.

- The refrigerant R410A requires that strict precautions be observed for keeping the system clean, dry and tightly sealed. Read the chapter “REFRIGERANT PIPING” carefully and follow these procedures correctly.
  A.Clean and dry
  Strict measures must be taken to keep impurities (including SUNISO oil and other mineral oils as well as moisture) out of the system.
  B.Tight
  Take care to keep the system tight when installing.
  R410A contains no chlorine, does not destroy the ozone layer and so does not reduce the earth’s protection against harmful ultraviolet radiation.
  R410A will contribute only slightly to the greenhouse effect if released into the atmosphere.
- Since R410A is a mixed refrigerant, the required additional refrigerant must be charged in its liquid state. (If the system is charged with refrigerant in its gaseous state, due to composition change, the system will not function normally).

Limit by the total maximum refrigerant charge
The total maximum refrigerant charge of a VRVIII system must be below 100kg, this to be in accordance with CE requirement (EN60335-2-40 standard).
This means that in case the total maximum refrigerant charge of the system (factory and additional charge) is equal to or more than 100kg you must divide your multiple outdoor system into smaller independent systems, each containing less than 100kg refrigerant charge.
For factory charge, refer to the unit name plate.
[DESIGN PRESSURE]
Since design pressure is 4.0MPa or 40bar, the wall thickness of pipes should be more carefully selected in accordance with the relevant local and national regulations.

1-3 Disposal requirements

Dismantling of the unit, treatment of the refrigerant, of oil and of other parts must be done in accordance with relevant local and national legislation.

2. INTRODUCTION

- RXYQ-P series are designed for outdoor installation and used for cooling and heatpump applications. Outdoor units come in three standard sizes, and with a single system through a multi system combining up to three outdoor units, rated cooling capacity from 14.0 kW to 147 kW and rated heating capacity from 16.0 kW to 170 kW can be achieved.
- The RXYQ-P units can be combined with Daikin VRV series indoor units for air conditioning purposes. Always use appropriate indoor units compatible with R410A. To lean which models of indoor units are compatible with R410A, refer to the product catalogs.
  To combine with other refrigerant indoor unit will cause malfunction.

2-1 Combination

The indoor units can be installed in the following range.

〈Outdoor unit〉	〈Total capacity of indoor units〉	〈Total quantity of indoor units〉
RXYQ5PAYL(E) · PTL(E)	62.5 ~ 250	12 units
RXYQ8PAYL(E) · PTL(E)	100 ~ 400	20 units
RXYQ10PAYL(E) · PTL(E)	125 ~ 500	25 units
RXYQ12PAYL(E) · PTL(E)	150 ~ 600	30 units
RXYQ14PAYL(E) · PTL(E)	175 ~ 700	35 units
RXYQ16PAYL(E) · PTL(E)	200 ~ 800	40 units
RXYQ18PAYL(E) · PTL(E)	225 ~ 900	45 units
RXYQ20PAYL(E) · PTL(E)	250 ~ 800	40 units
RXYQ22PAYL(E) · PTL(E)	275 ~ 880	44 units
RXYQ24PAYL(E) · PTL(E)	300 ~ 960	48 units
RXYQ26PAYL(E) · PTL(E)	325 ~ 1040	52 units
RXYQ28PAYL(E) · PTL(E)	350 ~ 1120	56 units
RXYQ30PAYL(E) · PTL(E)	375 ~ 1200	60 units
RXYQ32PAYL(E) · PTL(E)	400 ~ 1280	64 units
RXYQ34PAYL(E) · PTL(E)	425 ~ 1360	64 units
RXYQ36PAYL(E) · PTL(E)	450 ~ 1440	64 units
RXYQ38PAYL(E) · PTL(E)	475 ~ 1235	61 units
RXYQ40PAYL(E) · PTL(E)	500 ~ 1300	64 units
RXYQ42PAYL(E) · PTL(E)	525 ~ 1365	64 units
RXYQ44PAYL(E) · PTL(E)	550 ~ 1430	64 units
RXYQ46PAYL(E) · PTL(E)	575 ~ 1495	64 units
RXYQ48PAYL(E) · PTL(E)	600 ~ 1560	64 units
RXYQ50PAYL(E) · PTL(E)	625 ~ 1625	64 units
RXYQ52PAYL(E) · PTL(E)	650 ~ 1690	64 units
RXYQ54PAYL(E) · PTL(E)	675 ~ 1755	64 units

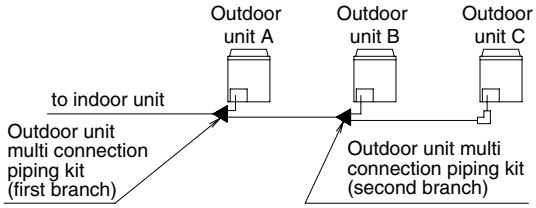
Note

- Be sure to connect an R410A indoor unit.
  See the catalog for indoor unit models which can be connected.
- At above is the total capacity and total number of units of the indoor units when configured in a standard combination. See the technical reference for details on total capacity and total number of indoor units when using a configuration other than the standard combination. The standard combination are as follows.

<Combination unit>	<Independent unit>
RXYQ5PAYL(E) · PTL(E)	RXYQ5PAYL(E) · PTL(E)
RXYQ8PAYL(E) · PTL(E)	RXYQ8PAYL(E) · PTL(E)
RXYQ10PAYL(E) · PTL(E)	RXYQ10PAYL(E) · PTL(E)
RXYQ12PAYL(E) · PTL(E)	RXYQ12PAYL(E) · PTL(E)
RXYQ14PAYL(E) · PTL(E)	RXYQ14PAYL(E) · PTL(E)
RXYQ16PAYL(E) · PTL(E)	RXYQ16PAYL(E) · PTL(E)
RXYQ18PAYL(E) · PTL(E)	RXYQ18PAYL(E) · PTL(E)
RXYQ20PAYL(E) · PTL(E)	RXYQ8PAYL(E) · PTL(E) + RXYQ12PAYL(E) · PTL(E)
RXYQ22PAYL(E) · PTL(E)	RXYQ10PAYL(E) · PTL(E) + RXYQ12PAYL(E) · PTL(E)
RXYQ24PAYL(E) · PTL(E)	RXYQ8PAYL(E) · PTL(E) + RXYQ16PAYL(E) · PTL(E)
RXYQ26PAYL(E) · PTL(E)	RXYQ8PAYL(E) · PTL(E) + RXYQ18PAYL(E) · PTL(E)
RXYQ28PAYL(E) · PTL(E)	RXYQ10PAYL(E) · PTL(E) + RXYQ18PAYL(E) · PTL(E)
RXYQ30PAYL(E) · PTL(E)	RXYQ12PAYL(E) · PTL(E) + RXYQ18PAYL(E) · PTL(E)
RXYQ32PAYL(E) · PTL(E)	RXYQ16PAYL(E) · PTL(E) + RXYQ16PAYL(E) · PTL(E)
RXYQ34PAYL(E) · PTL(E)	RXYQ16PAYL(E) · PTL(E) + RXYQ18PAYL(E) · PTL(E)
RXYQ36PAYL(E) · PTL(E)	RXYQ18PAYL(E) · PTL(E) + RXYQ18PAYL(E) · PTL(E)
RXYQ38PAYL(E) · PTL(E)	RXYQ8PAYL(E) · PTL(E) + RXYQ12PAYL(E) · PTL(E) + RXYQ18PAYL(E) · PTL(E)
RXYQ40PAYL(E) · PTL(E)	RXYQ8PAYL(E) · PTL(E) + RXYQ16PAYL(E) · PTL(E) + RXYQ16PAYL(E) · PTL(E)
RXYQ42PAYL(E) · PTL(E)	RXYQ8PAYL(E) · PTL(E) + RXYQ16PAYL(E) · PTL(E) + RXYQ18PAYL(E) · PTL(E)
RXYQ44PAYL(E) · PTL(E)	RXYQ8PAYL(E) · PTL(E) + RXYQ18PAYL(E) · PTL(E) + RXYQ18PAYL(E) · PTL(E)
RXYQ46PAYL(E) · PTL(E)	RXYQ10PAYL(E) · PTL(E) + RXYQ18PAYL(E) · PTL(E) + RXYQ18PAYL(E) · PTL(E)
RXYQ48PAYL(E) · PTL(E)	RXYQ12PAYL(E) · PTL(E) + RXYQ18PAYL(E) · PTL(E) + RXYQ18PAYL(E) · PTL(E)
RXYQ50PAYL(E) · PTL(E)	RXYQ14PAYL(E) · PTL(E) + RXYQ18PAYL(E) · PTL(E) + RXYQ18PAYL(E) · PTL(E)
RXYQ52PAYL(E) · PTL(E)	RXYQ16PAYL(E) · PTL(E) + RXYQ18PAYL(E) · PTL(E) + RXYQ18PAYL(E) · PTL(E)
RXYQ54PAYL(E) · PTL(E)	RXYQ18PAYL(E) · PTL(E) + RXYQ18PAYL(E) · PTL(E) + RXYQ18PAYL(E) · PTL(E)

16

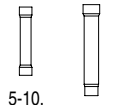
- If the total capacity of the connected indoor units exceeds the capacity of the outdoor unit, cooling and heating performance may drop when running the indoor units. See the capacity table in the Engineering Data Book for details.
- There are restrictions on the refrigerant pipe connecting order between outdoor unit in the case of the multi system.
  Install so that the following restrictions are satisfied.
  <Restrictions>
  The capacities of outdoor units A, B and C must fulfill the following conditions.
  A ≥ B ≥ C



2-2 Standard supplied accessories

The following accessories are included. The storage location of the accessories is shown in figure 1.

Q5~Q18 type				
Name	Clamp (1)	Clamp (2)	Clamp (3)	Gas side accessory pipe (1)
Quantity	9 pcs.	2 pcs.	1 pc.	1 pc.
Shape	 Small		 Large	

Q5~Q18 type				
Name	Gas side accessory pipe (2)	Liquid side accessory pipe (1)	Liquid side accessory pipe (2)	Others
Quantity	1 pc.	1 pc.	1 pc.	• Operation manual • Installation manual • "REQUEST FOR THE INDICATION" label (Installation records)
Shape	 5-10 HP type 12-18 HP type		 5-10, 14,16 HP type 12,18 HP type	

(Refer to figure 1)

1. Operation manual
2. Installation manual
3. Clamps
4. Accessory pipes

Note
Do not throw away any of the accessories until installation is complete.

2-3 Option accessory

To install the outdoor units, the following optional parts are also required. To select an optimum kit, refer to **"6. REFRIGERANT PIPING"**.

- **Refrigerant branching kit**

REFNET header	KHRP26M22H	KHRP26M33H	KHRP26M72H	KHRP26M73H
REFNET joint	KHRP26A22T	KHRP26A33T	KHRP26A72T	KHRP26A73T

- **Outdoor unit multi connection piping kit**

Number of outdoor units connected	2 units	3 units
Kit name	BHFP22P100	BHFP22P151

- **Pipe size reducer**

Kit name	KHRP26M73TP	KHRP26M73HP

Note
Make sure that any separately purchased accessories are designed for use with R410A.

2-4 Technical and Electrical specifications

Refer to the Engineering Data Book for the complete list of specifications.

2-5 Main components

For main components and function of the main components, refer to the Engineering Data Book.

2-6 Installation Process

Figure 2 shows the installation process. Install in the order of the steps shown.

(Refer to figure 2)

1. "3. SELECTION OF LOCATION"
2. "4. INSPECTING AND HANDLING THE UNIT"
3. "5. PLACING THE UNIT"
4. "6. REFRIGERANT PIPING"
5. "7. FIELD WIRING"
6. "8. AIR TIGHT TEST AND VACUUM DRYING"
7. "9. PIPE INSULATION"
8. "10. CHECKING OF DEVICE AND INSTALLATION CONDITIONS"
9. "11. ADDITIONAL REFRIGERANT CHARGE AND CHECK OPERATION"
10. "13. TEST RUN"
11. Operations which require the power to be turned on.

3. SELECTION OF LOCATION

Select a location for installation that meets the following conditions. Get the customer's permission.

1. There is no danger of fire due to leakage of inflammable gas.
2. Select the location of the unit in such a way that neither the discharged air nor the sound generated by the unit disturb anyone.
3. The foundation is strong enough to support the weight of the unit and the floor is flat to prevent vibration and noise generation.
4. The piping length between the outdoor unit and the indoor unit may not exceed the allowable piping length. (Refer to **"6. REFRIGERANT PIPING"**)
5. Locations where the unit's suction vent and outlet vent do not generally face the wind.
   Wind blowing directly into the suction or outlet vents will interfere with the unit's operation.
   If necessary, install some kind of obstruction to block the wind.
6. The space around the unit is adequate for servicing and the minimum space for air inlet and air outlet is available.
   (See the "Installation Space Examples" for the minimum space requirements.)

Installation Space Examples

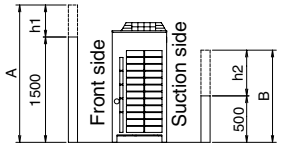
- The installation space requirement shown in figure 3 is a reference for cooling operation when the outdoor temperature is 35˚C. If the design outdoor temperature exceeds 35˚C or the heat load exceeds maximum capacity in all the outdoor unit, take an even large space on the intake shown in figure 3.
- During installation, install the units using the most appropriate of the patterns shown in figure 3 for the location in question, taking into consideration human traffic and wind.
- If the number of units installed is more than that shown in the pattern in figure 3, install the units so there are no short circuits.
- As regards space in front of the unit, consider the space needed for the local refrigerant piping when installing the units.
- If the work conditions in figure 3 do not apply, contact your dealer or Daikin directly.

(Refer to figure 3)

1. Front side
2. No limit to wall height
3. Service space of front side
4. Service space of suction side

For Patterns 1 and 2 in figure 3:

- Wall height for front side no higher than 1500 mm.
- Wall height on the suction side no higher than 500 mm.
- Wall height for sides – no limit.
- If the height is exceeded the above, calculate h1 and h2 shown in the figure below, and add h1/2 to the service space of front side and h2/2 to the service space of suction side.



h1 = A (Actual height) – 1500
h2 = B (Actual height) – 500

Note

1. An inverter air conditioner may cause electronic noise generated from AM broadcasting. Examine where to install the main air conditioner and electric wires, keeping proper distances away from stereo equipment, personal computers, etc. Particularly for locations with weak reception, ensure there is a distance of at least 3 meters for indoor remote controllers, place power wiring and transmission wiring in conduits, and ground the conduits.

   (Refer to figure 4)
   1. Indoor unit
   2. Branch switch, overcurrent breaker
   3. Remote controller
   4. COOL/HEAT selector
   5. Personal computer or radio
2. When installing in a locations where there is heavy snowfall, implement the following snow measures.
   - Ensure the base is high enough that intakes are not clogged by snow.
   - Remove the rear intake grille to prevent snow from accumulating on the fins.
3. If condensate may drip on downstairs (or walkway) depending on the floor condition, take a measure such as the installation of central drain pan kit (sold separately).
4. The refrigerant R410A itself is nontoxic, nonflammable and is safe. If the refrigerant should leak however, its concentration may exceed the allowable limit depending on room size. Due to this it could be necessary to take measures against leakage. See “14. CAUTION FOR REFRIGERANT LEAKS” for details.

4. INSPECTING AND HANDLING THE UNIT

- At delivery, the package should be checked and any damage should be reported immediately to the carrier claims agent.
- When handling the unit, take into account the following:

1. Fragile, handle the unit with care.
   Keep the unit upright in order to avoid compressor damage.
2. Decide on the transportation route.
3. If a forklift is to be used, pass the forklift arms through the large openings on the bottom of the unit. **(Refer to figure 5)**
4. If hanging the unit, use a cloth sling to prevent damaging the unit. Keeping the following points in mind, hang the unit following the procedure shown in figure 6.
   - Use a sling sufficiently strong to hold the mass of the unit.
   - Use 2 belts of at least 8m long.
   - Place extra cloth or boards in the locations where the casing comes in contact with the sling to prevent damage.
   - Hoist the unit making sure it is being lifted at its center of gravity.
5. After installation, remove the transportation clasp attached to the large openings. **(Refer to figure 6)**

   (Refer to figure 5)
   1. Fork
   2. Hole (large)
   3. Transportation clasp (yellow)
   4. Fixed screws of transportation clasp

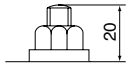
(Refer to figure 6)
1. Belt sling
2. Board
3. Hole (large)
4. Hole (small)
5. For 5 HP type, carry the belt sling through the hole (large)

Note

Apply a filler cloth on a fork to prevent coating of the bottom frame from coming off and rust from occurring when bringing in the unit with anti-corrosion treatment type using a forklift.

5. PLACING THE UNIT

- Make sure the unit is installed level on a sufficiently strong base to prevent vibration and noise. **(Refer to figure 7)**
- The base should be bigger around than the width of the unit’s legs (66 mm), and should support the unit. **(Refer to figure 8)**
  If protective rubber is to be attached, attach it to the whole face of the base.
- The height of the base should be at least 150mm from the floor.
- Secure the unit to its base using foundation bolts. (Use four commercially available M12-type foundation bolts, nuts, and washers.)
- The foundation bolts should be inserted 20 mm.



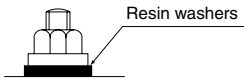
(Refer to figure 7)
1. In the case of 8HP type or more, the product cannot be supported with four corners.
   In the case of 5HP type, the product can be supported with four corners.
2. It is need in the case of 8HP type or more
3. Center of the product

(Refer to figure 8)
1. Foundation bolt point (ϕ15 dia. : 4 positions)
2. Depth of product
3. Width of support leg

Model	A	B
5HP type	635	497
8 · 10HP type	930	792
12 · 14 · 16 · 18HP type	1240	1102

Note

- There are restrictions on the refrigerant pipe connecting order between outdoor unit in the case of the multi system.
  See the Note in “2-1 Combination” for detail.
- When installing on a roof, make sure the roof floor is strong enough and be sure to water-proof all work.
- Make sure the area around the machine drains properly by setting up drainage grooves around the foundation.
  Drain water is sometimes discharged from the outdoor unit when it is running.
- For anti-corrosion type use nuts with resin washers. If the paint on nut connections comes off, the anti-corrosion effect may decrease.



6. REFRIGERANT PIPING

Note

- All field piping must be installed by a licensed refrigeration technician and must comply with relevant local and national regulations.
- After piping work is complete, do not under any circumstances open the shutoff valve until “7. FIELD WIRING” and “10. CHECKING OF DEVICE AND INSTALLATION CONDITIONS” are complete.
- Do not use flux when brazing the refrigerant piping. Use the phosphor copper brazing filler metal (BCuP-2: JIS Z 3264/B-Cu93P-710/795: ISO 3677) which does not require flux.
  (Flux has extremely harmful influence on refrigerant piping systems. For instance, if the chlorine based flux is used, it will cause pipe corrosion or, in particular, if the flux contains fluorine, it will damage the refrigerant oil.)

16

6-1 Selection of piping material and Refrigerant branching kit

- Use only pipes which are clean inside and outside and which do not accumulate harmful sulfur, oxidants, dirt, cutting oils, moisture, or other contamination. (Foreign materials inside pipes including oils for fabrication must be 30mg/10m or less.)
- Use the following items for the refrigerant piping.
  Material: Jointless phosphor-deoxidized copper pipe
  Size: See "6-5 Example of connection" to determine the correct size.
  Thickness: Select a thickness for the refrigerant piping which complies with national and local laws.
  For R410A, the design pressure is 4.0 MPa (40-bar).
  The minimum thickness of piping according to Japan's High-Pressure Gas Safety Law (as of January 2003) is shown below.
  Temper grade (O type, 1/2H type) in the table indicate the material types specified in JIS H 3300.

(unit: mm)

Temper grade	O type			
outer diameter	ϕ6.4	ϕ9.5	ϕ12.7	ϕ15.9
smallest thickness	0.80	0.80	0.80	0.99

(unit: mm)

Temper grade	1/2H type							
outer diameter	ϕ19.1	ϕ22.2	ϕ25.4	ϕ28.6	ϕ31.8	ϕ34.9	ϕ38.1	ϕ41.3
smallest thickness	0.80	0.80	0.88	0.99	1.10	1.21	1.32	1.43

- For piping work, follow the maximum tolerated length, difference in height, and length after a branch indicated in the "**6-5 Example of connection**".
- A refrigerant branching kit (sold separately) is needed for piping branches and connection of piping between outdoor unit (in case of multi system).
  Use only separately sold items selected specifically according to the refrigerant branch kit selection in the "**6-5 Example of connection**".

6-2 Protection against contamination when installing pipes

Protect the piping to prevent moisture, dirt, dust, etc. from entering the piping.

Place	Installation period	Protection method
Outdoor	More than a month	Pinch the pipe
	Less than a month	Pinch or tape the pipe
Indoor	Regardless of the period	

Note
Exercise special caution to prevent dirt or dust when passing piping through holes in walls and when passing pipe edges to the exterior.

6-3 Pipe connection

- Be sure to perform nitrogen permutation or nitrogen blow when brazing. **(Refer to figure 10)**
  Brazing without performing nitrogen permutation or nitrogen blow into the piping will create large quantities of oxidized film on the inside of the pipes, adversely affecting valves and compressors in the refrigerating system and preventing normal operation.
  (Refer to figure 10)
  1. Refrigerant pipe
  2. Location to be brazed
  3. Nitrogen
  4. Taping
  5. Handy valve
  6. Regulator
- The pressure regulator for the nitrogen released when doing the brazing should be set to 0.02 MPa (about 0.2kg/cm^2:Enough to feel a slight breeze on your cheek).

Note
Do not use anti-oxidants when brazing the pipe joints.
Residue can clog pipes and break equipment.

6-4 Connecting the refrigerant piping

1. Derection to bring out the pipes
The local interunit piping can be connected either forward or to the sides (taken out through the bottom) as shown in the figure 11. (When passing out through the bottom, use the knock hole in the bottom frame.)
(Refer to figure 11)
1. Left-side connection
2. Front connection
3. Right-side connection

Precautions when knocking out knock holes

- Open knock hole in the base frame by drilling the 4 concave around it with a 6mm bit. **(Refer to figure 12)**
  (Refer to figure 12)
  1. Knock hole
  2. Drill
  3. Concave section
- Be sure to avoid damaging the casing
- After knocking out the holes, we recommend you remove any burrs and paint them using the repair paint to prevent rusting.
- When passing electrical wiring through the knock holes, protect the wiring with a conduit or bushings, making sure not to damage the wiring.

2. Removing Pinch Piping
- When connecting refrigerant piping to an outdoor unit, remove the pinch piping. **(Refer to figure 13)**
- Pinch piping should be removed using the procedure in the figure 13.
  (Refer to figure 13)
  1. Shutoff valve (liquid side · gas side)
  2. Service port
  3. Pinch piping
  4. Procedure 1:
  Confirm the shutoff valve is closed.
  5. Procedure 2:
  Connect a charge hose to the service port of the liquid side and gas side shutoff valves and remove the gas from the pinch piping.
  6. Procedure 3:
  After removing the gas from the pinch piping, dissolve the brazing using a burner and remove the pinch piping.

⚠ Caution

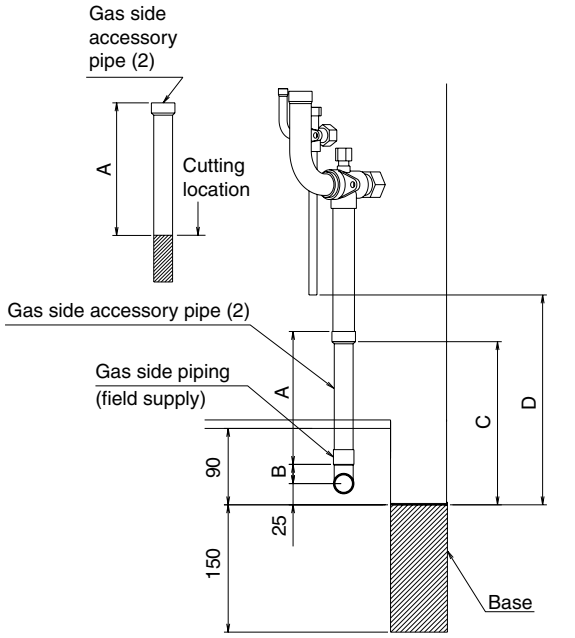
After removing the gass, remove the pinch piping.
Any gas remaining inside may blow off the pinch piping when you dissolve the brazing, causing damage.

3. Connecting refrigerant piping to outdoor units

<In case of single system: 5-18HP type>
(Refer to figure 14)
1. If connected to the front
2. When connected at lateral side (bottom)
3. Remove the shutoff valve cover to connect.
4. Remove the knock hole on the bottom frame and route the piping under the bottom frame.
5. Gas side shutoff valve
6. Liquid side shutoff valve
7. Refrigerant charge port
8. Brazing
9. Liquid side accessory pipe (1)
10. Gas side accessory pipe (1)
11. Gas side accessory pipe (2)
12. Liquid side accessory pipe (2)
13. Knockout hole
14. Punch the knock hole.
15. Gas side piping (field supply)
16. Liquid side piping (field supply)

Processing the Gas side accessory pipe (2)

Only in case of connecting at lateral side, cut the Gas side accessory pipe (2) referring the figure below.



(mm)

Model	A	B	C	D
5HP type	166	16	199	246
8HP type	156	17	188	247
10HP type	156	23	192	247
12HP type	150	29	192	247
14·16·18HP type	150	29	192	251

<In case of multi system: RXYQ20-54P(E)>
(Refer to figure 15)

1. If connected to the front
2. When connected at lateral side (bottom)
3. Remove the shutoff valve cover to connect.
4. Remove the knock hole on the bottom frame and route the piping under the bottom frame.
5. Gas side shutoff valve
6. Liquid side shutoff valve
7. Refrigerant charge port
8. Brazing
9. Liquid side accessory pipe (1)
10. Gas side accessory pipe (1)
11. Gas side accessory pipe (2)
12. Liquid side accessory pipe (2)
13. Knockout hole
14. Punch the knock hole.

Note

<Connecting Refrigerant Piping>

- When connecting the piping on site, be sure to use the accessory piping.
- Make sure the onsite piping does not come into contact with other piping or the bottom frame or side panels of the unit.

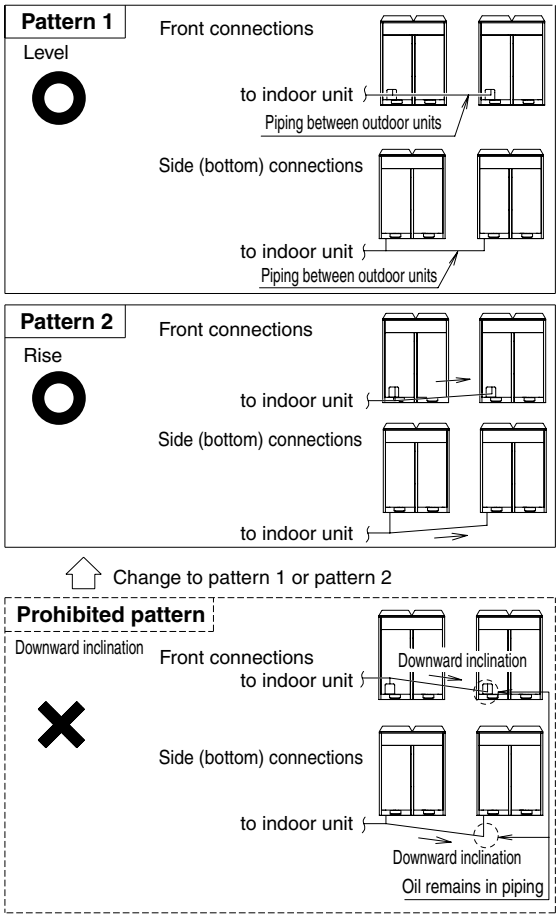
<Multi Systems>

- The 5HP type cannot be used as an independent unit in a multi system.
- The Outdoor unit multi connection piping kit (sold separately) is needed when connecting piping between outdoor units. Refer to the installation manual that comes with the kit when doing this piping work.

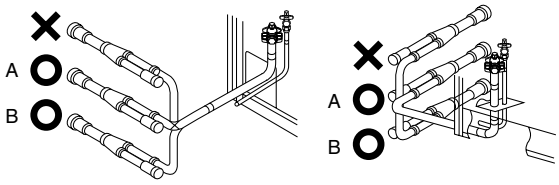
4. Precautions when connecting piping betweemn outdoor units (In case of multi system)

The Outdoor unit multi connection piping kit (sold separately) is needed to connect piping between outdoor units in multi system. Only proceed with piping work after considering the limitations on installation listed here and in “5. Branching the refrigerant piping”, always referring to the kit’s installation manual.

(1) The piping between outdoor units must be installed level (Pattern 1) or with a rise (Pattern 2). Otherwise oil may pool in the pipes.

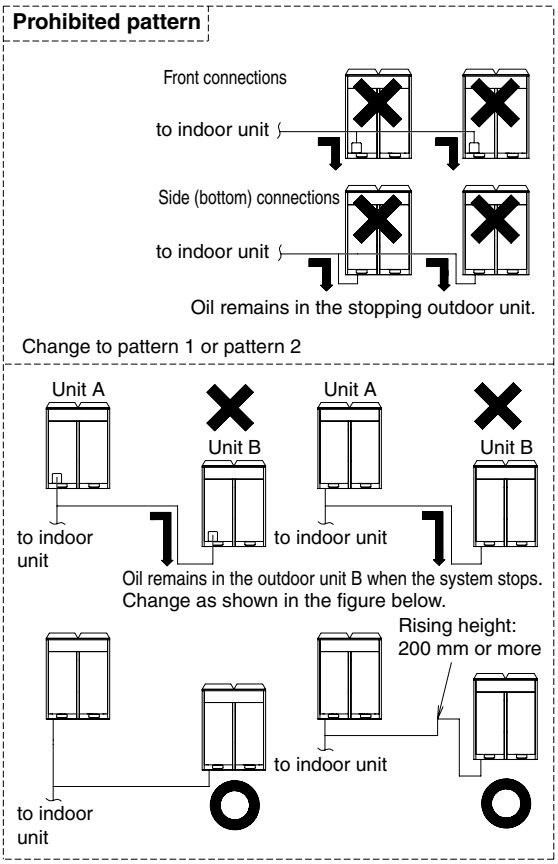


(2) To avoid the risk of oil detention in the stopping unit, always connect the shutoff valve and the piping between outdoor units as shown in the figure A or figure B.

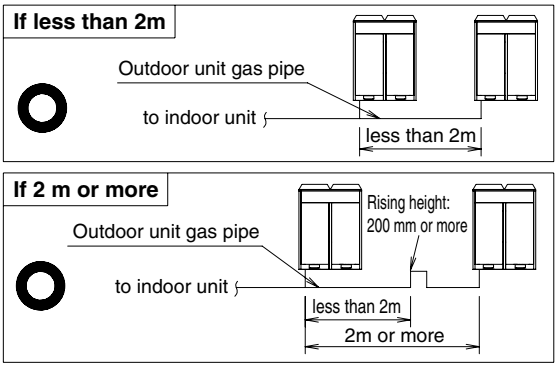


Front connections Side (bottom) connections

16



(3) If the piping length between the outdoor units exceeds 2 m, create a rise of 200 mm or more in the gas line under a length of 2 m from the outdoor unit multi connection piping kit.



5. Branching the refrigerant piping
Heed the restrictions below when installing the refrigerant branching kit and read the installation instruction manual with the kit. (Improper installation could lead to malfunctioning or breakdown of the outdoor unit.)

<REFNET joint>
Install the REFNET joint so it splits horizontally or vertically.
(Refer to figure 16)
1. Horizontal surface
2. ±30˚ or less
3. Horizontal
4. Vertical

<REFNET header>
Install the REFNET header so it splits horizontally.
(Refer to figure 17)
1. Horizontal surface

<Outdoor unit multi connection piping kit>
- Install the joint horizontally so that the attached warning label faces strait up, and the tilt is within ±15˚. **(Refer to figure 18-1)** Do not install vertically. **(Refer to figure 18-2)**
- Maintain a straight portion of 500 mm or more until the split of the joint without wrapping any onsite piping around this area. Over 500 mm of straight area can be maintained by connecting at least 120 mm of onsite pipe (straight) to the joint. **(Refer to figure 18-3)**

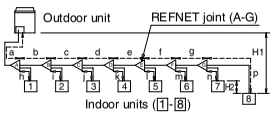
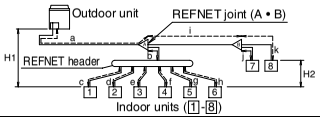
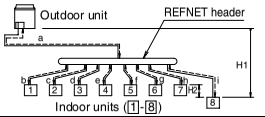
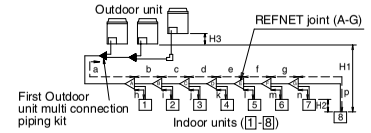
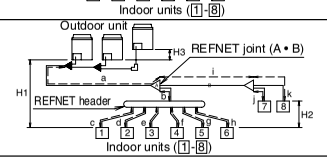
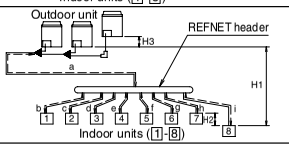
(Refer to figure 18)
1. Warning label
2. Horizontal surface
3. ±15˚ or less
4. Ground
5. Onsite pipe (120mm length or more)
6. Straight part of 500mm or more

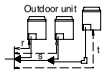
Example of connection

(Connection of 8 indoor units)

(*1) " ⊣◄ " indicate the Outdoor unit multi connection piping kit

(*2) In case of multi outdoor system, re-read to the first Outdoor unit multi connection piping kit as seen from the indoor unit.

		Example refrigerant branch using REFNET joint	Example refrigerant branch using REFNET joint and REFNET header	Example refrigerant branch using REFNET header
Single outdoor system				
Multi outdoor system				
Maximum allowable length	Between outdoor (*2) and indoor units	Actual pipe length	Pipe length between outdoor (*2) and indoor units ≤ 165m		
			Example unit 8 : a + b + c + d + e + f + g + p ≤ 165m	Example unit 6 : a + b + h ≤ 165m, unit 8 : a + i + k ≤ 165m	Example unit 8 : a + i ≤ 165m
		Equivalent length	Equivalent pipe length between outdoor (*2) and indoor units ≤ 190m (assume equivalent pipe length of REFNET joint to be 0.5m, that of REFNET header to be 1m, calculation purposes) (See Note 1 - Next page)		
		Total extension length	Total pipe length from outdoor unit (*2) to all indoor units ≤ 1000m		
	Between outdoor unit and Outdoor unit multi connection piping kit (Only for multi system)	Actual pipe length Equivalent length	Pipe length between outdoor unit and Outdoor unit multi connection piping kit ≤ 10m, Equivalent length between outdoor unit and Outdoor unit multi connection piping kit ≤ 13m		
Allowable height length	Between outdoor and indoor units	Difference in height	Difference in height between outdoor and indoor units (H1) ≤ 50m (≤ 90m if the outdoor unit is below)		
	Between indoor and indoor units	Difference in height	Difference in height between indoor units (H2) ≤ 15m		
	Between outdoor and outdoor units	Difference in height	Difference in height between outdoor unit (H3) ≤ 5m		
Allowable length after the branch		Actual pipe length	Pipe length from first refrigerant branch kit (either REFNET joint or REFNET header) to indoor unit ≤ 40m (See Note 2 - Next page)		
			Example unit 8 : b + c + d + e + f + g + p ≤ 40m	Example unit 6 : b + h ≤ 40m, unit 8 :i + k ≤ 40m	Example unit 8 : i ≤ 40m



r ≤ 10m (Equivalent length: ≤ 13m)
s ≤ 10m (Equivalent length: ≤ 13m)
t ≤ 10m (Equivalent length: ≤ 13m)

Refrigerant branch kit selection

Refrigerant branch kits can only be used with R410A.

⚠ • When multi outdoor system are installed, be sure to use the special separately sold Outdoor unit multi connection piping kit.
The table at right shows how to select the proper kit.

How to select the REFNET joint
- When using REFNET joint at the first branch counted from the outdoor unit side. Choose from the following table in accordance with the outdoor unit capacity type. (Example: REFNET joint A)

Outdoor unit capacity type	Refrigerant branch kit name
5HP type	KHRP26A22T
8, 10HP type	KHRP26A33T
12~22HP type	KHRP26A72T
24HP type~	KHRP26A73T + KHRP26M73TP

- Choose the REFNET joints other than that for the first branch from the following table in accordance with the total capacity index of all the indoor units connected below the REFNET joint.

Indoor unit total capacity index	Refrigerant branch kit name
< 200	KHRP26A22T
200 ≤ x< 290	KHRP26A33T
290 ≤ x< 640	KHRP26A72T
640 ≤	KHRP26A73T + KHRP26M73TP

How to select the REFNET header
- Choose from the following table in accordance with the total capacity index of all the indoor units connected below the REFNET header.
- Note: 250 type indoor unit cannot be connected below the REFNET header.

Indoor unit total capacity index	Refrigerant branch kit name
< 200	KHRP26M22H (Max. 4 branch)
200 ≤ x< 290	KHRP26M33H (Max. 8 branch)
290 ≤ x< 640	KHRP26M72H (Max. 8 branch) (See Note 3 - Next page)
640 ≤	KHRP26M73H (Max. 8 branch) + KHRP26M73HP

How to select the Outdoor unit multi connection piping kit (This is required when the system is multi outdoor unit system.)
- Choose from the following table in accordance with the number of outdoor units.

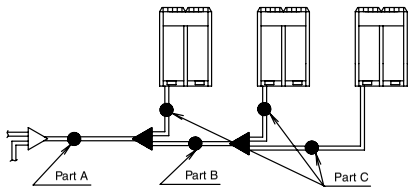
Number of outdoor units	Connection piping kit name
2 units	BHFP22P100
3 units	BHFP22P151

Example for indoor units connected downstream	Example REFNET joint C: indoor units 3+4+5+6+7+8	Example REFNET joint B: indoor units 7+8 Example REFNET header: indoor units 1+2+3+4+5+6	Example REFNET header: indoor units 1+2+3+4+5+6+7+8

Pipe size selection

⚠ **Caution**
The thickness of the pipes in the table shows the requirements of Japanese High Pressure Gas Control low. (As of Jan. 2003)
The thickness and material shall be selected in accordance with local code.

For the multi outdoor unit system, select in accordance with the following figure.



Temper grade and wall thickness for pipes.
(Temper grade, O type and 1/2H type indicate the material types specified in JIS H 3300.)

(Unit:mm)

Copper tube O.D.	Copper tube W.T. (Minimum requirement)	Temper grade
ϕ6.4	0.80	O type
ϕ9.5	0.80	
ϕ12.7	0.80	
ϕ15.9	0.99	
ϕ19.1	0.80	1/2H type
ϕ22.2	0.80	
ϕ25.4	0.88	
ϕ28.6	0.99	
ϕ31.8	1.10	
ϕ34.9	1.21	
ϕ38.1	1.32	
ϕ41.3	1.43	

Piping between Outdoor unit and first refrigerant branch kit.
Piping between first Outdoor unit multi connection piping kit and first refrigerant branch kit. (Part A)
- Choose from the following table in accordance with the outdoor unit capacity type.

Piping between Outdoor unit multi connection piping kits. (Part B)
Piping between outdoor unit and Outdoor unit multi connection piping kit. (Part C)
- Choose from the following table in accordance with the total capacity type of all the outdoor units connected above Outdoor unit multi connection piping kit.

(Unit:mm)

Outdoor unit capacity type	Piping size (O.D.)	
	Gas pipe	Liquid pipe
5HP type	ϕ15.9	ϕ9.5
8HP type	ϕ19.1	
10HP type	ϕ22.2	
12~16HP type	ϕ28.6	ϕ12.7
18~22HP type		ϕ15.9
24HP type	ϕ34.9	
26~34HP type		ϕ19.1
36~54HP type	ϕ41.3	

(See Note 1 - Next page)

Piping between refrigerant branch kits
- Choose from the following table in accordance with the total capacity index of all the indoor units connected below this.
- Do not let the connection piping exceed the main refrigerant piping size. (Unit:mm)

Indoor unit total capacity index	Piping size (O.D.)	
	Gas pipe	Liquid pipe
< 150	ϕ15.9	ϕ9.5
150 ≤ x< 200	ϕ19.1	
200 ≤ x< 290	ϕ22.2	
290 ≤ x< 420	ϕ28.6	ϕ12.7
420 ≤ x< 640		ϕ15.9
640 ≤ x< 920	ϕ34.9	ϕ19.1
920 ≤	ϕ41.3	

Piping between refrigerant branch kit and indoor unit
- Match to the size of the connection piping on the indoor unit. (Unit:mm)

Indoor unit capacity type	Piping size (O.D.)	
	Gas pipe	Liquid pipe
20 · 25 · 32 · 40 · 50 type	ϕ12.7	ϕ6.4
63 · 80 · 100 · 125 type	ϕ15.9	ϕ9.5
200 type	ϕ19.1	
250 type	ϕ22.2	

How to calculate the additional refrigerant to be charged

Additional refrigerant to be charged : R (kg)
(R should be rounded off in units of 0.1 kg.)

$$R = \left(\begin{array}{l} (\text{Total length(m) of liquid piping size at } \phi 22.2) \times 0.37 + (\text{Total length(m) of liquid piping size at } \phi 19.1) \times 0.26 \\ + (\text{Total length(m) of liquid piping size at } \phi 15.9) \times 0.18 + (\text{Total length(m) of liquid piping size at } \phi 12.7) \times 0.12 \\ + (\text{Total length(m) of liquid piping size at } \phi 9.5) \times 0.059 + (\text{Total length(m) of liquid piping size at } \phi 6.4) \times 0.022 \end{array} \right) + \boxed{\begin{array}{c}\text{REFRIGERANT AMOUNT FOR HEAT PUMP SYSTEM} \\ \text{TABLE A}\end{array}} + \boxed{\begin{array}{c}\text{REFRIGERANT AMOUNT FOR EXCEEDING CONNECTION CAPACITY OF INDOOR UNIT} \\ \text{TABLE B}\end{array}}$$

TABLE A

MODEL NAME	THE AMOUNT OF REFRIGERANT
RX(Y)Q5P	0kg
RX(Y)Q8 ~ 12P	0.5kg
RX(Y)Q14 ~ 22P	1.0kg
RX(Y)Q24 ~ 30P	1.5kg
RX(Y)Q32 ~ 38P	2.0kg
RX(Y)Q40 ~ 48P	2.5kg
RX(Y)Q50 ~ 54P	3.0kg

TABLE B

INDOOR CONNECTION CAPACITY [X]	MODEL NAME [RX(Y)Q ~ P]														
	5P~8P	10P	12P~14P	16P	18P~22P	24P~28P	30P~32P	34P	36P	38P	40P	42P~44P	46P~48P	50P	52P~54P
X ≤ 100%	0kg														
100% < X ≤ 120%	0.5kg														
120% < X ≤ 130%	0.5kg							1.0kg							
130% < X ≤ 140%	0.5kg				1.0kg						1.5kg				
140% < X ≤ 150%	0.5kg				1.0kg				1.5kg					2.0kg	
150% < X ≤ 160%	0.5kg		1.0kg				1.5kg				2.0kg				2.5kg
160% < X ≤ 170%	0.5kg	1.0kg				1.5kg					2.0kg				2.5kg
170% < X ≤ 180%	0.5kg	1.0kg			1.5kg			2.0kg			2.5kg				3.0kg
180% < X ≤ 190%	0.5kg	1.0kg			1.5kg			2.0kg			2.5kg		3.0kg		3.5kg
190% < X ≤ 200%	0.5kg	1.0kg			1.5kg		2.0kg			2.5kg			3.0kg		3.5kg

Example for refrigerant branch using REFNET joint and REFNET header for the systems and each pipe length as shown below.

Outdoor system : RXYQ34P~
Total capacity of indoor unit : 116%

a : ϕ19.1 × 30m	d : ϕ9.5 × 10m	g : ϕ6.4 × 10m	j : ϕ6.4 × 10m
b : ϕ15.9 × 10m	e : ϕ9.5 × 10m	h : ϕ6.4 × 20m	k : ϕ6.4 × 9m
c : ϕ9.5 × 10m	f : ϕ9.5 × 10m	i : ϕ12.7 × 10m	

R = (30 × 0.26 + 10 × 0.18 + 10 × 0.12 + 40 × 0.059 + 49 × 0.022) + 2.0 + 0.5
(a: 30 × 0.26; b: 10 × 0.18; i: 10 × 0.12; c+d+e+f: 40 × 0.059; g+h+i+j+k: 49 × 0.022; RXYQ34P~: 2.0; 116%: 0.5)
= 16.738 ⟹ 16.7kg
Round off units of 0.1 kg.

*Note 1

When the equivalent pipe length between outdoor and indoor units is 90m or more, the size of main pipes (both gas-side and liquid-side) must be increased.
Depending on the length of the piping, the capacity may drop, but even in such case it is able to increase the size of main pipes.

(Refer to figure 9)
1. Outdoor unit
2. Main pipes
3. Increase
4. The first refrigerant branch kit
5. Indoor unit

■ Diameter of above case

Model	Gas	Liquid
RXYQ5 Type	ϕ19.1	Not Increased
RXYQ8 Type	ϕ22.2	ϕ12.7
RXYQ10 Type	ϕ25.4*	ϕ12.7
RXYQ12 Type	Not Increased	ϕ15.9
RXYQ14 Type	Not Increased	ϕ15.9
RXYQ16 Type	ϕ31.8*	ϕ15.9
RXYQ18 Type	ϕ31.8*	ϕ19.1

Model	Gas	Liquid
RXYQ20 Type	ϕ31.8*	ϕ19.1
RXYQ22 Type	ϕ31.8*	ϕ19.1
RXYQ24 Type	Not Increased	ϕ19.1
RXYQ26 Type	ϕ38.1*	ϕ22.2
RXYQ28 Type	ϕ38.1*	ϕ22.2
RXYQ30 Type	ϕ38.1*	ϕ22.2
RXYQ32 Type	ϕ38.1*	ϕ22.2

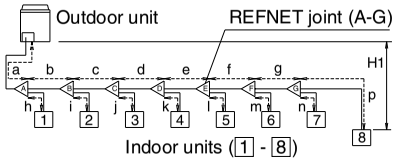
Model	Gas	Liquid
RXYQ34 Type	ϕ38.1*	ϕ22.2
RXYQ36 Type	Not Increased	ϕ22.2
RXYQ38 Type	Not Increased	ϕ22.2
RXYQ40 Type	Not Increased	ϕ22.2
RXYQ42 Type	Not Increased	ϕ22.2
RXYQ44 Type	Not Increased	ϕ22.2
RXYQ46 Type	Not Increased	ϕ22.2

Model	Gas	Liquid
RXYQ48 Type	Not Increased	ϕ22.2
RXYQ50 Type	Not Increased	ϕ22.2
RXYQ52 Type	Not Increased	ϕ22.2
RXYQ54 Type	Not Increased	ϕ22.2

*If available on the site, use this size. Otherwise, it can not be increased.

*Note 2

Allowable length after the first refrigerant branch kit to indoor units is 40 m or less, however it can be extended up to **90** m if all the following conditions are satisfied. (In case of **" Branch with REFNET joint "**)

Required Conditions	Example Drawings	
1. It is necessary to increase the pipe size between the first branch kit and the final branch kit. (Reducers must be procured on site) However, the pipes that are same pipe size with main pipe must not be increased.	8 b+c+d+e+f+g+p≤ 90 m increase the pipe size of b, c, d, e, f, g	Increase the pipe size as follows ϕ 9.5→ ϕ 12.7 ϕ15.9→ ϕ 19.1 ϕ22.2→ ϕ 25.4* ϕ34.9→ ϕ 38.1* ϕ12.7→ ϕ 15.9 ϕ19.1→ ϕ 22.2 ϕ28.6→ ϕ 31.8*
2. For calculation of Total extension length, the actual length of above pipes must be doubled. (except main pipe and the pipes that are not increased)	a+b×2+c×2+d×2+e×2+f×2+g×2 +h+i+j+k+l+m+n+p≤ 1000 m	
3. Indoor unit to the nearest branch kit ≤ 40 m	h, i, j..... p≤ 40 m	
4. The difference between [Outdoor unit to the farthest indoor unit] and [Outdoor unit to the nearest indoor unit] ≤ 40 m	The farthest indoor unit 8 The nearest indoor unit 1 (a+b+c+d+e+f+g+p)-(a+h)≤ 40 m	

*If available on the site, use this size. Otherwise it can not be increased.

*Note 3

If the pipe size above the REFNET header is ϕ34.9 or more, KHRP26M73HP is required.

7. FIELD WIRING

Caution

- All field wiring and components must be installed by a licensed electrician and must comply with relevant local and national regulations.
- Be sure to use a dedicated power circuit. Never use a power supply shared by another appliance.
- Never install a phase advancing capacitor. As this unit is equipped with an inverter, installing a phase advancing capacitor will not only deteriorate power factor improvement effect, but also may cause capacitor abnormal heating accident due to high-frequency waves.
- Only proceed with wiring work after blocking off all power.
- Always ground wires in accordance with relevant local and national regulations.
- This machine includes an inverter device. Connect earth and leave charge to eliminate the impact on other devices by reducing noise generated from the inverter device and to prevent leaked current from being charged in the outer hull of the product.
- Do not connect the ground wire to gas pipes, sewage pipes, lightning rods, or telephone ground wires.
  Gas pipes: can explode or catch fire if there is a gas leak.
  Sewage pipes: no grounding effect is possible if hard plastic piping is used.
  Telephone ground wires and lightning rods: dangerous when struck by lightning due to abnormal rise in electrical potential in the grounding.
- Be sure to install an earth leakage circuit breaker.
  This unit uses an inverter, so install the earth leakage circuit breaker that be capable of handling high harmonics in order to prevent malfunctioning of the earth leakage circuit breaker itself.
- Earth leakage circuit breaker which are especially for protecting ground-faults should be used in conjunction with main switch or fuse for use with wiring.

Note

- Electrical wiring must be done in accordance with the wiring diagrams and the description herein.
- Do not operate until refrigerant piping work is completed.
  (If operated before complete the piping work, the compressor may be broken down.)
- Never remove thermistor, sensor or etc. when connecting power wiring and transmission wiring.
  (If operated with thermistor, sensor or etc. removed, the compressor may be broken down.)
- This product have reversed phase protection detector that only works when the power is turned on. If there exists black out or the power goes on and off which the product is operating, attach a reversed phase protection circuit locally. Running the product in reversed phase may break the compressor and other parts.
- Attach the power wire securely. Introducing power with a missing N-phase or with a mistaken N-phase will break the unit.
- Never connect the power supply in reversed phase.
  The unit can not operate normally in reversed phase.
  If you connect in reversed phase, replace two of the three phases.
- Make sure the electrical unbalance ratio is no greater than 2%. If it is larger than this, the unit's lifespan will be reduced.
  If the ratio exceeds 4%, the unit will shut down and an malfunction code will be displayed on the indoor remote controller.
- Connect the wire securely using designated wire and fix it with attached clamp without applying external pressure on the terminal parts (terminal for power wiring, terminal for transmission wiring and earth terminal).

7-1 Power circuit, safety device, and cable requirements

- A power circuit (see the following table) must be provided for connection of the unit. This circuit must be protected with the required safety devices, i.e. a main switch, a slow blow fuse on each phase and an earth leakage circuit breaker.
- When using residual current operated circuit breakers, be sure to use a high-speed type (1 second or less) 200mA rated residual operating current.
- Use copper conductors only.
- Use insulated wire for the power cord.
- Select the power supply cable type and size in accordance with relevant local and national regulations.
- Specifications for local wiring are in compliance with IEC60245.
- Use wire type H05VV when protected pipes are used.
  Use wire type H07RN-F when protected pipes are not used.

	Phase and frequency	Voltage	Minimum circuit amp.	Recommended fuses
RXYQ5PAYL	ϕ 3, 60Hz	380V	11.9A	15A
RXYQ8PAYL	ϕ 3, 60Hz	380V	18.5A	25A
RXYQ10PAYL	ϕ 3, 60Hz	380V	22.8A	30A
RXYQ12PAYL	ϕ 3, 60Hz	380V	23.9A	30A
RXYQ14PAYL	ϕ 3, 60Hz	380V	33.9A	40A
RXYQ16PAYL	ϕ 3, 60Hz	380V	33.9A	40A
RXYQ18PAYL	ϕ 3, 60Hz	380V	34.9A	40A
RXYQ20PAYL	ϕ 3, 60Hz	380V	42.4A	50A
RXYQ22PAYL	ϕ 3, 60Hz	380V	46.7A	60A
RXYQ24PAYL	ϕ 3, 60Hz	380V	52.4A	60A
RXYQ26PAYL	ϕ 3, 60Hz	380V	53.4A	60A
RXYQ28PAYL	ϕ 3, 60Hz	380V	57.7A	70A
RXYQ30PAYL	ϕ 3, 60Hz	380V	58.8A	70A
RXYQ32PAYL	ϕ 3, 60Hz	380V	67.8A	80A
RXYQ34PAYL	ϕ 3, 60Hz	380V	68.8A	80A
RXYQ36PAYL	ϕ 3, 60Hz	380V	69.8A	80A
RXYQ38PAYL	ϕ 3, 60Hz	380V	77.3A	90A
RXYQ40PAYL	ϕ 3, 60Hz	380V	86.3A	100A
RXYQ42PAYL	ϕ 3, 60Hz	380V	87.3A	100A
RXYQ44PAYL	ϕ 3, 60Hz	380V	88.3A	100A
RXYQ46PAYL	ϕ 3, 60Hz	380V	92.6A	110A
RXYQ48PAYL	ϕ 3, 60Hz	380V	93.7A	110A
RXYQ50PAYL	ϕ 3, 60Hz	380V	103.7A	120A
RXYQ52PAYL	ϕ 3, 60Hz	380V	103.7A	120A
RXYQ54PAYL	ϕ 3, 60Hz	380V	104.7A	120A

	Phase and frequency	Voltage	Minimum circuit amp.	Recommended fuses
RXYQ5PTL	ϕ 3, 60Hz	220V	20.6A	25A
RXYQ8PTL	ϕ 3, 60Hz	220V	32.0A	40A
RXYQ10PTL	ϕ 3, 60Hz	220V	39.4A	45A
RXYQ12PTL	ϕ 3, 60Hz	220V	41.3A	50A
RXYQ14PTL	ϕ 3, 60Hz	220V	58.6A	65A
RXYQ16PTL	ϕ 3, 60Hz	220V	58.6A	65A
RXYQ18PTL	ϕ 3, 60Hz	220V	60.3A	70A
RXYQ20PTL	ϕ 3, 60Hz	220V	73.3A	90A
RXYQ22PTL	ϕ 3, 60Hz	220V	80.7A	90A
RXYQ24PTL	ϕ 3, 60Hz	220V	90.6A	100A
RXYQ26PTL	ϕ 3, 60Hz	220V	92.3A	110A
RXYQ28PTL	ϕ 3, 60Hz	220V	99.7A	110A
RXYQ30PTL	ϕ 3, 60Hz	220V	102A	125A
RXYQ32PTL	ϕ 3, 60Hz	220V	117A	150A
RXYQ34PTL	ϕ 3, 60Hz	220V	119A	150A
RXYQ36PTL	ϕ 3, 60Hz	220V	121A	150A
RXYQ38PTL	ϕ 3, 60Hz	220V	134A	150A
RXYQ40PTL	ϕ 3, 60Hz	220V	149A	175A
RXYQ42PTL	ϕ 3, 60Hz	220V	151A	175A
RXYQ44PTL	ϕ 3, 60Hz	220V	153A	175A
RXYQ46PTL	ϕ 3, 60Hz	220V	160A	200A
RXYQ48PTL	ϕ 3, 60Hz	220V	162A	200A
RXYQ50PTL	ϕ 3, 60Hz	220V	179A	200A
RXYQ52PTL	ϕ 3, 60Hz	220V	179A	200A
RXYQ54PTL	ϕ 3, 60Hz	220V	181A	200A

Note

The above table indicates power specifications for standard combinations (see 2. INTRODUCTION).
If using anything other than the above combinations in a multi system, calculate using the following procedure.

Minimum circuit amp value: add the minimum circuit amp values for each independent unit
Recommended fuse capacity: select the fuse capacity with the next higher value of the calculated minimum circuit amp. multiplied by 1.1.
Ex: Combining the RXYQ30PAYL using RXYQ8PAYL, RXYQ10PAYL, and RXYQ12PAYL.
Minimum circuit amp. of the RXYQ8PAYL in table above = 18.5 A
Minimum circuit amp. of RXYQ10PAYL in table above = 22.8 A

16

Minimum circuit amp. of RXYQ12PAYL in table above = 23.9 A
Accordingly, the minimum circuit amp. of the RXYQ30PAYL = 18.5 + 22.8 + 23.9 = 65.2A
Multiplying the result above by 1.1 (65.2 × 1.1) = 71.7 A, so the recommended fuse capacity would be 80 A.

7-2 Wiring Connection Example for Whole System

(Refer to figure 19)

1. Power supply
2. Main switch
3. Earth leakage circuit breaker
4. Fuse
5. Outdoor unit
6. COOL/HEAT selector
7. Remote controller
8. Indoor unit

Caution

In case of RXYQ40~54PTL(E), the Power source supply to each outdoor unit individually.

Note

- Make sure the weak electric wiring (i.e. for the remote controller, between units, etc.) and the power wiring do not pass near each other, keeping them at least 50 mm apart.
  Proximity may cause electrical interference, malfunctions, and breakage.
- Be sure to connect the power wiring to the power wiring terminal block and secure it as described in "**7-5 Power Wiring Connection Procedure**".
- Transmission wiring should be secured as described in "**7-4 Transmission Wiring Connection Procedure**".
- Secure wiring with clamp such as insulation lock ties to avoid contact with piping.
- Shape the wires to prevent the structure such as the EL. COMPO. BOX lid deforming. And close the cover firmly.
- 5HP type can not compose multi system.

7-3 Leading wire Procedure

- The power wiring and ground wiring are passed out from the power wiring hole on the sides, the front (knock hole) or the bottom frame (knock hole).
- The transmission wiring is passed out from the wiring hole (knock hole) on the front of the unit or from a piping hole.

  (Refer to figure 20)

  1. Electrical wiring diagram
  2. On the back of the EL .COMPO. BOX lid.
  3. Power wiring, ground wiring (inside conduit)
  4. (When the wiring is routed out through the side panel.)
  5. Transmission wiring
  6. Pipe opening
  7. Conduit
  8. For power wiring and ground wiring
  9. Through cover
  10. Cut off the shaded zones before use.
  11. Burr
  12. Knockout hole
  13. For transmission wiring

Note

- Open the knock holes with a hammer or the like.
- After knocking out the holes, we recommend you remove any burrs and paint them using the repair paint to prevent rusting.
- When passing wiring through the knock holes, remove burrs around the knock holes and protect the wiring with protective tape. **(Refer to figure 20)**
- If small animals might enter the unit, block off any gaps (hatching parts in figure 20) with material (field supply).

7-4 Transmission Wiring Connection Procedure

- Referring to figure 21, 22 connect the transmission wiring between outdoor unit and indoor unit, outdoor unit and outdoor unit of other system, outdoor unit and outdoor unit of same system (only multi system) or to COOL/HEAT selector.

  (Refer to figure 21)

  1. Connection example for single system
  2. Outdoor unit
  3. COOL/HEAT selector
  4. To outdoor unit of other system
  5. Match up terminal symbols. (Has polarity)
  6. Use duplex wires
  7. Indoor unit
  8. Never connect the power wire

  (Refer to figure 22)

  1. Connection example for multi system
  2. Outdoor unit A (Master unit)
  3. Outdoor unit B (Sub unit)
  4. COOL/HEAT selector
  5. To indoor unit
  6. To outdoor unit of other system

- All transmission wiring is to be procured on site. All wiring should use sheathed vinyl cord 0.75-1.25 mm^2 or cable (duplex). (Triplex only for the COOL/HEAT selector.)
- Transmission wiring (About the symbol [1] ~ [3], see figure 21, 22) should be done within the following limitations.
  If they are exceeded, transmission problems may occur.

  [1] Between outdoor unit and indoor unit
  Between outdoor unit and outdoor unit of other systems
  Max. wiring length : 1,000 m
  Max. total wiring length : 2,000 m
  Max. no. of branches : 16
  [Note]
  No branch is allowed after branch
  (See figure 23)
  Max. no. of outdoor units of other system that can be connected : 10

  (Refer to figure 23)

  1. Outdoor unit
  2. Indoor unit
  3. Branch line 1
  4. Branch line 2
  5. No branch is allowed after branch
  6. Main line
  7. Central remote controller, etc.
  8. Branch line 3
  9. Transmission wiring between outdoor unit and indoor unit
  10. Transmission wiring between outdoor unit and outdoor unit

  [2] Between outdoor unit and outdoor unit of same system (Only for multi system)
  Max. wiring length : 30 m

  [3] Transmission wiring to COOL/HEAT selector
  Max. wiring length : 500 m

- The transmission wiring inside the EL.COMPO.BOX should be secured using the clamp (1) as shown in figure 24.

  (Refer to figure 24)

  1. In the EL.COMPO.BOX
  2. Retain to the EL.COMPO.BOX with the accessory clamp (1).

- Outside the units, the transmission wiring must be finished simultaneously with the local refrigerant piping, and wound with tape (field supply) as shown in figure 25.

  (Refer to figure 25)

  1. Liquid pipe
  2. Gas pipe
  3. Transmission wiring
  4. Insulation material
  5. Finishing tape

- For multi system:
  1. Transmission wiring between outdoor units in the same piping system must be connected to terminals Q1 and Q2 (TO MULTI UNIT). Connecting the wires to the F1, F2 (TO OUT/D UNIT) terminals results in system malfunction.
  2. Wiring to other systems should be connected to terminals F1 and F2 (TO OUT/D UNIT) on the PC-board of the master unit. The outdoor unit that connected transmission wiring to indoor unit is the master unit. The others are sub unit.

Caution

- Do not connect the power wiring to terminals for the transmission wiring. Doing so would destroy the entire system.
- When connecting wires to the terminal block on the PC-board, too much heat or tightening could damage the PC-board. Attach with care. See the table below for the tightening torque of the transmission wiring terminals.

Screw size	Tightening torque (N · m)
M3 (A5P)	0.53 - 0.63
M3.5 (A1P)	0.80 - 0.96

7-5 Power Wiring Connection Procedure

Be sure to connect the power supply wiring to the power supply terminal block and hold it in place using the included clamp as shown in the figure 26.

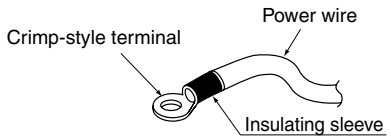
(Refer to figure 26-1, 26-2)

1. Power supply (3N~60Hz 380V)
2. Earth leakage circuit breaker
3. Branch switch, Overcurrent breaker
4. Ground wire
5. Attach insulation sleeves
6. Power supply terminal block
7. Ground terminal
8. Clamp (1) (accessory)
9. Installation for RXYQ~PAYL(E)
10. Installation for RXYQ~PTL(E)
11. Power supply (3~60Hz 220V)

- The L1, L2, L3 and N phases of the power wiring should be secured separately to the hook using the included clamp (1).
- The ground wiring should be bound to the power wiring using the included clamp (1) to prevent outside force from being applied to the terminal area.
- Wire so that the ground wiring does not come into contact with the compressor lead wiring. If they touch, this may have an adverse effect on other devices.

Caution

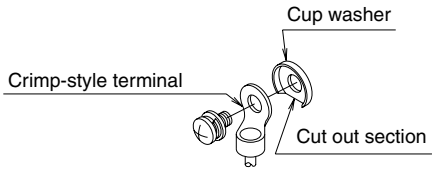
- Be sure to use crimp-style terminal with insulating sleeves for connections. (See the figure below.)



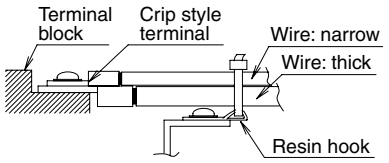
- For wiring, use the designated power wire and connect firmly, then secure to prevent outside pressure being exerted on the terminal board.
- Use an appropriate screwdriver for tightening the terminal screws. A screwdriver with a small head will strip the head and make proper tightening impossible.
- Over-tightening the terminal screws may break them. See the following table for the tightening torque of the terminal screws.

Screw size	Tightening torque (N·m)
M8 Power terminal, ground terminal	5.5 ~7.3

- When pulling the ground wire out, wire it so that it comes through the cut out section of the cup washer. (See the figure below.) An improper ground connection may prevent a good ground from being achieved.



- When two wires are connected to a single terminal, connect them so that the rear sides of the crimp contacts face each other. Also, make sure the thinner wire is on top, securing the two wires simultaneously to the resin hook using the included clamp (1).



7-6 Procedure for Wiring Inside Units

- Referring to figure 27, secure and wire the power and transmission wiring using the included clamp (1), (2), and (3).

(Refer to figure 27)

1. Retain with accessory clamp (3).
2. Electric conduit
3. When routing out the power/ground wires from the left side.
4. When routing out the transmission wiring from the opening for piping.
5. When routing out the power/ground wires from the front.
6. Clear over 50 mm.
7. When routing out the transmission wiring from the knockout hole.
8. Retain to the back of the column support with the accessory clamp (2).
9. When routing out the power/ground wires from the right side.
10. Power wiring
11. Transmission wiring
12. Ground wire
13. Secure to the back side of the support beam using the accessory clamp (1).
14. Retain to the back of the column support with the accessory clamp (2).
15. When wiring, exercise sufficient caution not to detach the acoustic insulators from the compressor.
16. Installation for RXYQ~PAYL(E)
17. Installation for RXYQ~PTL(E)

Caution

- The transmission wiring must be at least 50 mm away from the power wiring.
- Make sure all wiring do not contact to the pipes (hatching parts in the figure 27).
- After wiring work is completed, check to make sure there are no loose connections among the electrical parts in the EL.COMPO.BOX.

8. AIR TIGHT TEST AND VACUUM DRYING

Note

- Always use nitrogen gas for the airtightness test.
- Absolutely do not open the shutoff valve until the main power ciruit insulation measurement has been completed. (measuring after the shutoff valve is opened will cause the insulation value to drop.)

8-1 Preparations

<Needed tools>

Gauge manifold Charge hose valve	• To prevent entry of any impurities and insure sufficient pressure resistance, always use the special tools dedicated for R410A. • Use charge hose that have pushing stick for connecting to service port of shutoff valves or refrigerant charge port.
Vacuum pump	• The vacuum pump for vacuum drying should be able to lower the pressure to –100.7kPa (5 Torr –755mm Hg). • Take care the pump oil never flow backward into the refrigerant pipe during the pump stops.

<The system for air tight test and vacuum drying>

- Referring to figure 28, connect an nitrogen tank, refrigerant tank, and a vacuum pump to the outdoor unit.
  The refrigerant tank and the charge hose connection to refrigerant charge port or the valve A, C in figure 28 are needed in “11. ADDITIONAL REFRIGERANT CHARGE AND CHECK OPERATION”.
- The shutoff valve and valve A~C in figure 28 should be open or closed as shown in the table below.

(Refer to figure 28)

1. Gauge manifold
2. Nitrogen
3. Measuring device
4. R410A tank (with siphon)
5. Vacuum pump
6. Charge hose

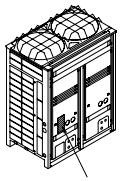
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7. Liquid side shutoff valve
8. Gas side shutoff valve
9. Shutoff valve service port
10. Valve B
11. Valve C
12. Valve A
13. Outdoor unit
14. Refrigerant charge port
15. To indoor unit
16. Interunit pipings
17. Refrigerant flow

State of valve A, B and C and shutoff valves	Valve			shutoff valve	
	A	B	C	Liquid side	Gas side
Air tight test, Vacuum drying (Close valve A and shutoff valves certainly. Otherwise the refrigerant in the unit are released.)	Close	Open	Open	Close	Close

Note

- The airtightness test and vacuum drying should be done using the liquid side and gas side shutoff valve service ports.
  See the [R410A] Label attached to the front plate of the outdoor unit for details on the location of the service port (see figure at right).
- See **[Shutoff valve operation procedure]** in "11-1 Before working" for details on handling the shutoff valve.
- The refrigerant charge port is connected to unit pipe.
  When shipped, the unit contains the refrigerant, so use caution when attaching the charge hose.



[R410A] Label

8-2 Air tight test and vacuum drying method

After finished piping work, carry out air tight test and vacuum drying.

<Air tight test>

Pressurize the liquid and gas pipes to 4.0MPa (40bar) (do not pressurize more than 4.0MPa (40bar)). If the pressure does not drop within 24 hours, the system passes the test.
If there is a pressure drop, check for leaks, make repairs and perform the airtight test again.

<Vacuum drying>

Evacuate the system from the liquid and gas pipes by using a vacuum pump for more than 2 hours and bring the system to –100.7kPa or less. After keeping the system under that condition for more than 1 hour, check if the vacuum gauge rises or not. If it rises, the system may either contain moisture inside or have leaks.

Note

If moisture might enter the piping, follow belows.
(I.e., if doing work during the rainy season, if the actual work takes long enough that condensation may form on the inside of the pipes, if rain might enter the pipes during work, etc.)

(1) After performing the vacuum drying for two hours, pressurize to 0.05 MPa (i.e., vacuum breakdown) with nitrogen gas, then depressurize down to –100.7 kPa for an hour using the vacuum pump (vacuum drying).
(2) If the pressure does not reach –100.7 kPa even after depressurizing for at least two hours, repeat the vacuum breakdown - vacuum drying process.

After vacuum drying, maintain the vacuum for an hour and make sure the pressure does not rise by monitoring with a vacuum gauge.

9. PIPE INSULATION

- Insulation of pipes should be done after performing "**8. AIR TIGHT TEST AND VACUUM DRYING**".
- Always insulate the liquid side piping and gas side piping in the interunit piping and refrigerant branching kit. Failing to insulate the pipes could cause leaking or burns. (The gas side piping can reach temperatures of 120˚C. Be sure the insulation used can withstand such temperatures.)
- Reinforce the insulation on the refrigerant piping according to the installation environment. Condensation might form on the surface of the insulation.
  - Ambient temperature: 30˚C, humidity: 75% to 80% RH: min. thickness: 15 mm.
  - If the ambient temperature exceeds 30˚C and the humidity 80% RH, then the min. thickness is 20 mm.
- If there is a possibility that condensation on the shutoff valve might drip down into the indoor unit through gaps in the insulation and piping because the outdoor unit is located higher than the indoor unit, etc., this must be prevented by caulking the connections, etc. **(Refer to figure 29)**
- The piping lead-out hole lid should be attached after opening a knock hole. **(Refer to figure 30)**
- If small animals and the like might enter the unit through the piping lead-out hole, close the hole with blocking material (procured on site) after completion of "**11. ADDITIONAL REFRIGERANT CHARGE AND CHECK OPERATION**". **(Refer to figure 30)**

(Refer to figure 29)

1. Liquid side shutoff valve
2. Gas side shutoff valve
3. Indoor interunit piping
4. Insulation material
5. Coking, etc.
6. Refrigerant charge port

(Refer to figure 30)

1. Piping lead-out hole lid
2. Open a knock hole at "▨".
3. Block "▨".
4. Liquid side piping
5. Gas side piping

Note

- After knocking out the holes, we recommend you remove burrs in the knock holes (see figure 30) and paint the edges and areas around the edges using the repair paint.

10. CHECKING OF DEVICE AND INSTALLATION CONDITIONS

Be sure to check the followings.

For those doing electrical work

1. Make sure there is no faulty transmission wiring or loosing of a nut.
   See "**7-4 Transmission Wiring Connection Procedure**".
2. Make sure there is no faulty power wiring or loosing of a nut.
   See "**7-5 Power Wiring Connection Procedure**".
3. Has the insulation of the main power circuit deteriorated?
   Measure the insulation and check the insulation is above regular value in accordance with relevant local and national regulations.

For those doing pipe work

1. Make sure piping size is correct.
   See "**6-1 Selection of piping material and Refrigerant branching kit**".
2. Make sure insulation work is done.
   See "**9. PIPE INSULATION**".
3. Make sure there is no faulty refrigerant piping.
   See "**6. REFRIGERANT PIPING**".

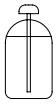
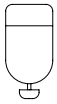
11. ADDITIONAL REFRIGERANT CHARGE AND CHECK OPERATION

The outdoor unit is charged with refrigerant when shipped from the factory, but depending on the size and length of the piping when installed, it may require additional charging.
For charging the additional refrigerant, follow the procedure in this chapter.
And then carry out the check operation.

11-1 Before working

[About the refrigerant tank]

Check whether the tank has a siphon pipe before charging and place the tank so that the refrigerant is charged in liquid form. (See the figure below.)

With siphon pipe
 Stand the tank upright and charge. (The siphon pipe goes all the way inside, so the tank does not need be put upside-down charge in liquid form.)
Other tanks
 Stand the tank upside-down and charge.

Caution

- Always use the proper refrigerant (R410A). If charged with the refrigerant containing an improper material, it may cause an explosion or accident.
- R410A is a mixed refrigerant, so charging it as a gas will cause the refrigerant composition to change, which may prevent normal operation.

[Shutoff valve operation procedure]

When operating the shutoff valve, follow the procedure instructed below.

Note

- Do not open the shutoff valve until “10. CHECKING OF DEVICE AND INSTALLATION CONDITIONS” are completed. If the shutoff valve is left open without turning on the power, it may cause refrigerant to buildup in the compressor, leading insulation degradation.
- Be sure to use the correct tools.
  The shutoff valve is not a back-seat type. If forced it to open, it might break the valve body.
- When using a service port, use the charge hose.
- After tightening the cap, make sure no refrigerant gas is leaking.

[Tightening torque]

The sizes of the shutoff valves on each model and the tightening torque for each size are listed in the table below.

<Size of Shutoff Valve>

	5HP type	8HP type	10HP type	12HP type	14HP type	16HP type	18HP type
Liquid side shut-off valve	ϕ 9.5 The 12HP type corresponds to the 12.7-diameter onsite piping using the included piping.				ϕ 12.7 The 18HP type corresponds to the 15.9-diameter onsite piping using the accessory pipe.		
Gas side shutoff valve	ϕ 15.9	ϕ 19.1	ϕ 25.4 The 10HP type corresponds to the 22.2-diameter onsite piping using the accessory pipe. The 12 ~ 18HP type corresponds to the 28.6-diameter onsite piping using the accessory pipe.				

<Tightening torque>

Shutoff valve size	Tightening torque N·m (Turn clockwise to close)			
	Shaft (valve body)		Cap (valve lid)	Service port
ϕ 9.5	5.4 - 6.6	Hexagonal wrench 4 mm	13.5 - 16.5	11.5 - 13.9
ϕ 12.7	8.1 - 9.9		18.0 - 22.0	
ϕ 15.9	13.5 - 16.5	Hexagonal wrench 6 mm	22.5 - 27.5	
ϕ 19.1	27.0 - 33.0	Hexagonal wrench 8 mm		
ϕ 25.4				

(Refer to figure 34)

1. Service port
2. Cap
3. Hex holes
4. Shaft (valve body)
5. Seal section

[To open]

1. Remove the cap and turn the shaft counterclockwise with the hexagon wrench (JISB4648).
2. Turn it until the shaft stops.
3. Make sure to tighten the cap securely.
   (For the tightening torque, refer to the item <Tightening Torque>.)

[To close]

1. Remove the cap and turn the shaft clockwise with the hexagon wrench (JISB4648).
2. Securely tighten the valve until the shaft contacts the main body seal.
3. Make sure to tighten the cap securely.
   (For the tightening torque, refer to the item <Tightening Torque>.)

16

[How to Check How Many Units are Connected]
It is possible to find out how many indoor or outdoor unit in the system are turned on by operating the push button on the PC-board (A1P) of outdoor unit (In case of multi system master unit).
Follow the procedure below to check how many indoor or outdoor units are turned on.

(LED display: ● ...OFF ☼ ...ON ◑ ...Blinking ＊...Uncertain)		LED display						
		H1P	H2P	H3P	H4P	H5P	H6P	H7P
(1) Press the MODE button (BS1) once, and set the MONITOR MODE (H1P: Blinking).		◑	●	●	●	●	●	●
(2) Press the SET button (BS2) the number of times until the LED display matches that at right.	For checking the number of outdoor units: eight times	◑	●	●	☼	●	●	●
	For checking the number of indoor units: five times	◑	●	●	●	☼	●	☼
(3) Press the RETURN button (BS3) and read the number of units from the display of H2P through H7P. [Reading Method] The display of H2P through H7P should be read as a binary number, with ◑ standing for "1" and ● standing for "0".		◑	＊	＊	＊	＊	＊	＊
Ex: For the LED display at right, this would be "0 1 0 1 1 0", which would mean 22 units are connected. 32 × **0** + 16 × **1** + 8 × **0** + 4 × **1** + 2 × **1** + 1 × **0** = 22 units Note: "000000" indicates 64 units.		◑	●	◑	●	◑	◑	●
(4) Press the MODE button (BS1) once. This returns to **Setting Mode 1** (default).		●	●	☼	●	●	●	●

Note
Press the "MODE button" (BS1) if you get confused while operating.
This returns to **Setting Mode 1** (default).

11-2 Procedure of Adding Refrigerant charging and check operation

Warning **Electric Shock Warning**

- Make sure to close the EL. COMPO. BOX lid before turning on the power when performing the refrigerant charging operation.
- Perform the setting on the PC-board (A1P) of the outdoor unit and check the LED display after the power is on via the inspection door which is in the EL. COMPO. BOX lid.
- Use an insulated rod to operate the push buttons via the EL. COMPO. BOX's inspection door.
  There is a risk of electric shock if you touch any live parts, since this operation must be performed with the power on.

Caution

- Make sure to use the protect tool (protective groves and goggles) when charging the refrigerant.
- Due to a danger of liquid hammer, the refrigerant must not be charged over the allowable maximum amount when charging the refrigerant.
- Do not perform the refrigerant charging operation under working for the indoor unit.
- When opening the front panel, make sure to take caution to the fan rotation during the working.
  After the outdoor unit stops operating, the fan may keep rotation for a while.

Note
- If operation is performed within 12 minutes after the indoor and outdoor units are turned on, H2P will be lit on and the compressor will not operate.
- In order to ensure uniform refrigerant distribution, it may take up to around 10 minutes for the compressor to start up after the unit starting operating. This is not a malfunction.

<About refrigerant charging>
- The refrigerant charge port is connected to the piping inside the unit.
  When the unit is shipped from the factory, the unit's internal piping is already charged with refrigerant, so be careful when connecting the charge hose.
- After adding the refrigerant, make sure to close the lid of the refrigerant charging port.
  The tightening torque for the lid is 11.5 to 13.9 Nm.
- See [Shutoff valve operation procedure] in chapter 11-1 for details on how to handle shutoff valves.
- When done or when pausing the refrigerant charging operation, close the valve of the refrigerant tank immediately. If the tank is left with the valve open, the amount of refrigerant which is properly charged may be off the point. More refrigerant may be charged by any remaining pressure after the machine is stopped.

<About check operation>
- Make sure to perform the check operation after installation. Otherwise, the malfunction code "U3" will be displayed and normal operation cannot be performed.
  And the failure of "Check of miswiring" may also cause abnormal operation. Performance may drop due to the failure of "Judgment of piping length".
- Check operation must be performed for each refrigerant piping system.
  Checking is impossible if plural systems are being done at once.
- The individual problems of indoor units can not be checked.
  About these problems check by test run after the check operation is completed. (See chapter 13)
- The check operation cannot be performed in recovery or other service modes.

1. Make sure the following works are complete in accordance with the installation manual.
   - Piping work
   - Wiring work
   - Air tight test
   - Vacuum drying
   - Installation work for indoor unit
2. Calculate the "additional charging amount" using "How to calculate the additional refrigerant to be charged" in "6-5 Example of connection".
3. Open the valve C (See the figure 31. The valve A, B and the liquid and gas side shutout valve must be left closed), and charge the refrigerant of the "additional charging amount" from the liquid side shutout valve service port.
   If the "additional charging amount" was charged fully, close the valve C and go to step 5.
   If the "additional charging amount" was not charged fully, go to step 4.
   (Refer to figure 31)
   1. Measuring device
   2. R410A tank (with siphon)
   3. Charge hose

4. Liquid side shutoff valve
5. Gas side shutoff valve
6. Shutoff valve service port
7. Valve B
8. Valve C
9. Valve A
10. Outdoor unit
11. Refrigerant charge port
12. To indoor unit
13. Field pipings
14. Refrigerant flow

4. Perform the refrigerant charging operation following [Refrigerant charging operation procedure] as shown below, and charge the remaining refrigerant of the "additional charging amount". For performing the refrigerant charging operation the push button on the PC-board (A1P) of outdoor unit (Incase of multi system master unit) are use. (See the figure 32) In addition, the refrigerant are charged from the refrigerant charge port via the valve A. (See the figure 33)
For operating the push button and opening and closing the valve, follow the work procedure.

Note

The refrigerant will be charged about 22kg in one hour at outdoor temp. 30˚C DB (6kg at 0˚C DB).
If you need to speedup in case of multi system, connect the refrigerant tanks to each outdoor unit as shown in the figure 33.

(Refer to figure 32)

1. EL.COMPO.BOX lid
2. Pipe intake
3. Inspection door
4. Label "Service Precaution"
5. LED (H1~8P)
6. Push button (BS1-5)
7. Lift the protruding part to open the cover

(Refer to figure 33)

1. Measuring device
2. R410A tank (with siphon)
3. Charge hose
4. Liquid side shutoff valve
5. Gas side shutoff valve
6. Shutoff valve service port
7. Valve B
8. Valve C
9. Valve A
10. Outdoor unit
11. Refrigerant charge port
12. Field piping
13. Refrigerant flow
14. To indoor unit
15. In case of multi system if you need to speedup.

[Refrigerant Charging Operation Procedure]

(1) Open the liquid and gas side shutoff valves (The valve A~C must be closed. The valve A~C means the valves in the figure 33.)

[Display of normal system]

LED display (Default status of shipped)		SERV. MONITOR	MODE	TEST/ HWL	C/H SELECTOR			L.N.O.P	DEMAND	MULTI
					IND	MASTER	SLAVE			
		HAP	H1P	H2P	H3P	H4P	H5P	H6P	H7P	H8P
Single system		◑	●	●	☼	●	●	●	●	●
Multi system (*)	Master unit	◑	●	●	☼	●	●	●	●	☼
	Sub unit 1	◑	●	●	●	●	●	●	●	◑
	Sub unit 2	◑	●	●	●	●	●	●	●	●

LED display: ●...OFF, ☼...ON, ◑...Blinking

(*)How to distinguish the master unit, sub unit 1, and sub unit 2 in the multi system.

Method 1: By the H8P (MULTI) LED display

☼ (ON): Master unit	◑ (Blinking): Sub unit 1	● (OFF): Sub unit 2

Method 2: By the transmission wiring to indoor unit

Transmission wiring is connected: Master unit
Transmission wiring is not connected : Sub unit 1 or Sub unit 2

(2) If necessary, set the field setting by using the dip switch on the outdoor unit PC-board (A1P).
(For how to set, see "12-1 Onsite Settings With the Power Off")

(3) • Close the EL. COMPO. BOX lid and all front panel except on the side of the EL. COMPO. BOX (*1) and turn the power to the outdoor unit and all connected indoor units. (*2)
• After H2P stop blinking (about 12 minutes after turning on the power), check LED displays as shown in the table [Display of normal system] and the system is normal state.
If H2P is blinking, check the malfunction code in the remote controller, and correct the malfunction in accordance with [Remote controller display malfunction code] in step 5.

(*1) Lead the refrigerant charge hose etc from the pipe intake. All front panels must be closed at the procedure (9).

(*2) • If you perform the refrigerant charging operation within the refrigerant system that have the power off unit, the operation cannot finish properly.
For confirming the number of the outdoor and indoor units with the power on, see [How to check how many units are connected] in chapter 11-1. In case of a multi system, turn on the power to all outdoor units in the refrigerant system.
• To energize the crankcase heater, make sure to turn on for 6 hours before starting operation.

(4) Start the additional refrigerant charge operation.
(About the system settings for additional refrigerant charge operation, refer to the [Service Precaution] label attached on the EL. COMPO. BOX lid in the outdoor unit.)
Open valve A immediately after starting the compressor.

(5) Close the valve A if the "additional charging amount" of refrigerant was charged, and push the RETURN button (BS3) once.

(6) Record the charging amount on the accessory "REQUEST FOR THE INDICATION" label and attach it to the back side of the front panel.

5. After completing the additional refrigerant charging perform the check operation following below.

Note

- For check operation, the following work will be performed.
  - ■ Check of shutoff valve opening
  - ■ Check of miswiring
  - ■ Judgment of piping length
  - ■ Check of refrigerant overcharge
- It takes about 40 minutes to complete the check operation.

[Check Operation Procedure]

(1) Make the onsite setting as needed using the dip switches on the outdoor unit PC-board (A1P) with the power off (See "12-1 Onsite Settings With the Power Off")

(2) Close the EL. COMPO. BOX lid and all front panels except as the side of the EL. COMPO. BOX and turn on the power to the outdoor unit and all connected indoor units. (Be sure to turn the power on at least 6 hours before operation in order to have power running to the crank case heater.)

(3) Check the LED display on the outdoor unit PC-board (A1P) is as shown in the table below and transmission is normal.

LED display (Default status of shipped)		SERV. MONITOR	MODE	TEST/ HWL	C/H SELECTOR			L.N.O.P	DEMAND	MULTI
					IND	MASTER	SLAVE			
		HAP	H1P	H2P	H3P	H4P	H5P	H6P	H7P	H8P
Single system		◑	●	●	☼	●	●	●	●	●
Multi system (*)	Master unit	◑	●	●	☼	●	●	●	●	☼
	Sub unit 1	◑	●	●	●	●	●	●	●	◑
	Sub unit 2	◑	●	●	●	●	●	●	●	●

LED display: ●...OFF, ☼...ON, ◑...Blinking

(*)How to distinguish the master unit, sub unit 1, and sub unit 2 in the multi system.

Method 1: By the H8P (MULTI) LED display

☼ (ON): Master unit	◑ (Blinking): Sub unit 1	● (OFF): Sub unit 2

Method 2: By the transmission wiring to indoor unit

Transmission wiring is connected: Master unit
Transmission wiring is not connected : Sub unit 1 or Sub unit 2

16

(4) Make the onsite settings as needed using the push button (BS1-BS5) on the outdoor unit PC-board (A1P) with the power on. (See "12-2 Onsite Settings With the Power On")

(5) Perform the check operation following the Check Operation Method of the [Service Precautions] label on the EL. COMPO. BOX lid. The system operation for about 40 minutes and automatically stops the check operation.
If the malfunction code is not displayed in the remote controller after the system stop, check operation is completed. Normal operation will be possible after 5 minutes. If the malfunction code is displayed in the remote controller, correct the malfunction following [Remote controller displays malfunction code] and perform the check operation again.

[Remote controller displays malfunction code]

Malfunction code	Installation error	Remedial action
E3, E4 F3, F6 UF	The shutoff valve of the outdoor unit is left closed.	Open the shutoff valve.
U1	The phases of the power to the outdoor unit is reversed.	Exchange two of the three phases (L1, L2, L3) to make a proper connection.
U1 U4 LC	No power is supplied to an outdoor or indoor unit (including phase interruption).	Make sure the power source wire is properly connected to the outdoor unit and revise if necessary.
UF	There is conflict on the connection of transmission wiring in the system.	Check if the refrigerant piping line and the transmission wiring are consistent with each other.
E3 F6 UF	Refrigerant overcharge.	Recalculate the additional amount refrigerant from the piping length and correct the refrigerant charge level by recovering any excessive refrigerant with a refrigerant recovery machine.
E4 F3	Insufficient refrigerant.	• Check if the additional refrigerant charge has been finished correctly. • Recalculate the additional amount refrigerant from the piping length and add the adequate amount.
U7, U4 UF, UH	If the outdoor unit terminal is connected when there is one outdoor unit installed.	Remove the line from the outdoor multi terminals (Q1 and Q2).

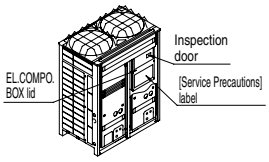
If any malfunction codes other than the above are displayed, check the service manual for how to respond.

12. ONSITE SETTINGS

Note
In the case of a multi system, all onsite settings should be made on the master unit. Settings made on sub units are invalid.
The outdoor unit to which the indoor unit transmission wire are connected is the master unit, and all other units are sub units.

12-1 Onsite Settings With the Power Off

If the COOL/HEAT selector was connected to the outdoor unit in "7. FIELD WIRING", set the dip switch (DS1) on the outdoor unit PC-board (A1P) to "ON" (it is set to "OFF" when shipped from the factory).
For the position of the dip switch (DS1), see the "Service Precautions" label (see at right) which is attached to the EL. COMPO. BOX lid.



Warning **Electric Shock Warning**

Never perform with the power on.
There is a serious risk of electric shock if any live part is touched.

12-2 Onsite Settings With the Power On

Use the push button switches (BS1 through BS5) on the outdoor unit PC-board (A1P) to make the necessary onsite settings.
See the "Service Precautions" label on the EL. CONPO. BOX lid for details on the positions and operating method of the push button switches and on the onsite setting.
Make sure to record the setting on the accessory "REQUEST FOR THE INDICATION" label.

Warning **Electric Shock Warning**

Use an insulated rod to operate the push buttons via the inspection door of EL. COMPO. BOX lid.
There is a risk of electric shock if you touch any live parts, since this operation must be performed with the power on.

13. TEST RUN

13-1 Before test run

- Make sure the following works are completed in accordance with the installation manual.
  - Piping work
  - Wiring work
  - Air tight test
  - Vacuum drying
  - Additional refrigerant charge
- Check that all work for the indoor unit are finished and there are no danger to operate.

13-2 Test Run

After check operation is completed, operate the unit normally and check the following.

(1) Make sure the indoor and outdoor units are operating normally.

(2) Operate each indoor unit one by one and make sure the corresponding outdoor unit is also operating.

(3) Check to see if cold (or hot) air is coming out from the indoor unit.

(4) Push the fan direction and strength buttons on the remote controller to see if they operate properly.

Note
- Heating is not possible if the outdoor temperature is 24˚C or higher. Refer to the Operation manual.
- If a knocking sound can be heard in the liquid compression of the compressor, stop the unit immediately and then energize the crank case heater for a sufficient length of time before restarting the operation.
- Once stopping, the compressor will not restart in about 5 minutes even if the On/Off button of the remote controller is pushed.
- When the system operation is stopped by the remote controller, the outdoor units may continue operating for further 5 minutes at maximum.
- The outdoor unit fan may rotate at low speeds if the Night-time low noise setting or the External low noise level setting is made, but this is not a malfunction.

13-3 Checks After Test Run

Perform the following checks after the test run is complete.
- Record the contents of field setting.
  → Record them on the accessory "REQUEST FOR THE INDICATION" label.
  And attach the label on the back side of the front panel.
- Record the installation date.
  → Record the installation date on the accessory "REQUEST FOR THE INDICATION" label in accordance with the IEC60335-2-40.
  And attach the label on the back side of the front panel.

Note
After the test run, when handing the unit over to the customer, make sure the EL.COMPO.BOX lid, the inspection door, and the unit casing are all attached.

14. CAUTION FOR REFRIGERANT LEAKS

(Points to note in connection with refrigerant leaks)
Introduction
The installer and system specialist shall secure safety against leakage according to local regulations or standards. The following standards may be applicable if local regulations are not available.
The VRV System, like other air conditioning systems, uses R410A as refrigerant. R410A itself is an entirely safe non-toxic, non-combustible refrigerant. Nevertheless care must be taken to ensure that air conditioning facilities are installed in a room which is sufficiently large. This assures that the maximum concentration level of refrigerant gas is not exceeded, in the unlikely event of major leak in the system and this in accordance to the local applicable regulations and standards.

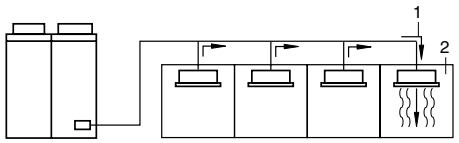
Maximum concentration level

The maximum charge of refrigerant and the calculation of the maximum concentration of refrigerant is directly related to the humanly occupied space in to which it could leak.

The unit of measurement of the concentration is kg/m^3 (the weight in kg of the refrigerant gas in 1m^3 volume of the occupied space).

Compliance to the local applicable regulations and standards for the maximum allowable concentration level is required.

In Australia the maximum allowed concentration level of refrigerant to a humanly space is limited to 0.35kg/m^3 for R407C and 0.44kg/m^3 for R410A.



1. direction of the refrigerant flow
2. room where refrigerant leak has occurred (outflow of all the refrigerant from the system)

Pay a special attention to the place, such as a basement, etc. where refrigerant can stay, since refrigerant is heavier than air.

Procedure for checking maximum concentration

Check the maximum concentration level in accordance with steps 1 to 4 below and take whatever action is necessary to comply.

1. Calculate the amount of refrigerant (kg) charged to each system separately.

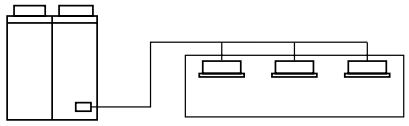
amount of refrigerant in a single unit system (amount of refrigerant with which the system is charged before leaving the factory)	+	additional charging amount (amount of refrigerant added locally in accordance with the length or diameter of the refrigerant piping)	=	total amount of refrigerant (kg) in the system

Note

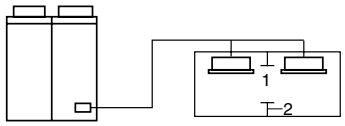
- Where a single refrigerant facility is divided into 2 entirely independent refrigerant systems then use the amount of refrigerant with which each separate system is charged.

2. Calculate the smallest room volume (m^3)
   Incase like the following, calculate the volume of (A), (B) as a single room or as the smallest room.

   A. Where there are no smaller room divisions



   B. Where there is a room division but there is an opening between the rooms sufficiently large to permit a free flow of air back and forth.



   1. opening between rooms
   2. partition

   (Where there is an opening without a door or where there are openings above and below the door which are each equivalent in size to 0.15% or more of the floor area.)

3. Calculating the refrigerant density using the results of the calculations in steps 1 and 2 above.

$$\frac{\text{total volume of refrigerant in the refrigerant system}}{\text{size (m}^3\text{) of smallest room in which there is an indoor unit installed}} \leq \text{maximum concentration level (kg/m}^3\text{)}$$

   If the result of the above calculation exceeds the maximum concentration level then make similar calculations for the second then third smallest room and so until the result falls short of the maximum concentration.

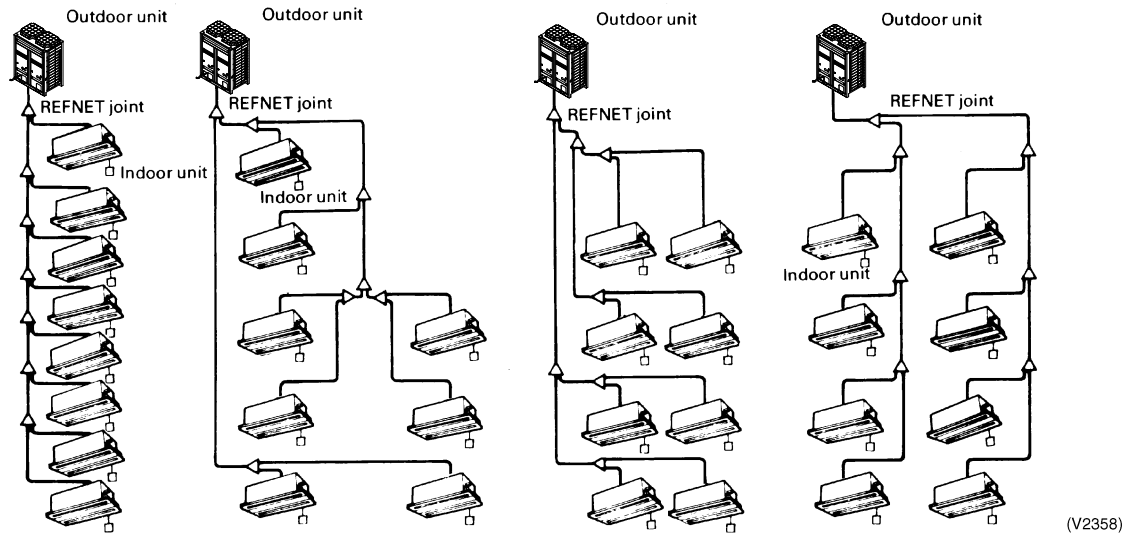
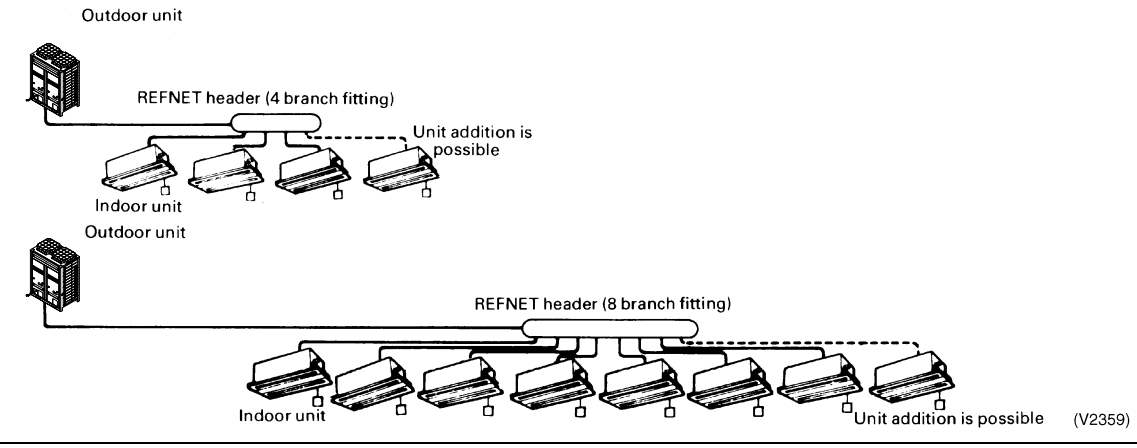
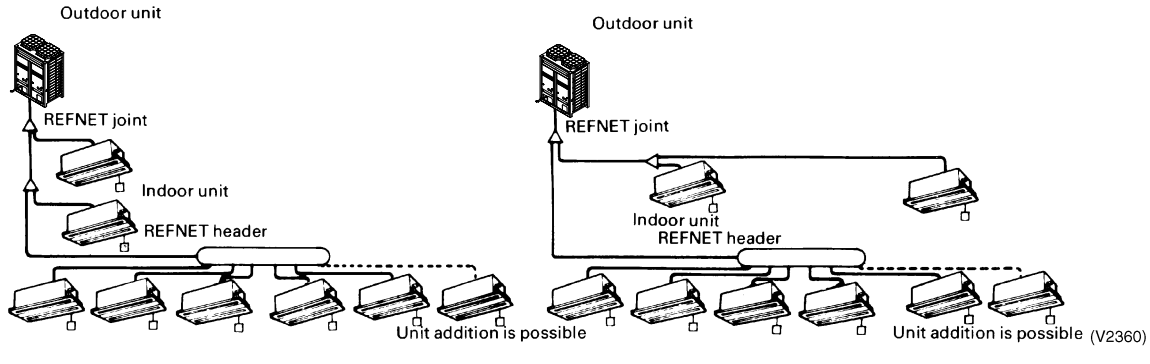
4. Dealing with the situations where the result exceeds the maximum concentration level.
   Where the installation of a facility results in a concentration in excess of the maximum concentration level then it will be necessary to revise the system. Please consult your Daikin supplier.

16

4. REFNET Pipe System

4.1 Layout Example

Use of the particular branch fitting appropriate to each individual unit type not only permits the pipes to be laid with ease but also increases the reliability of the system as a whole.

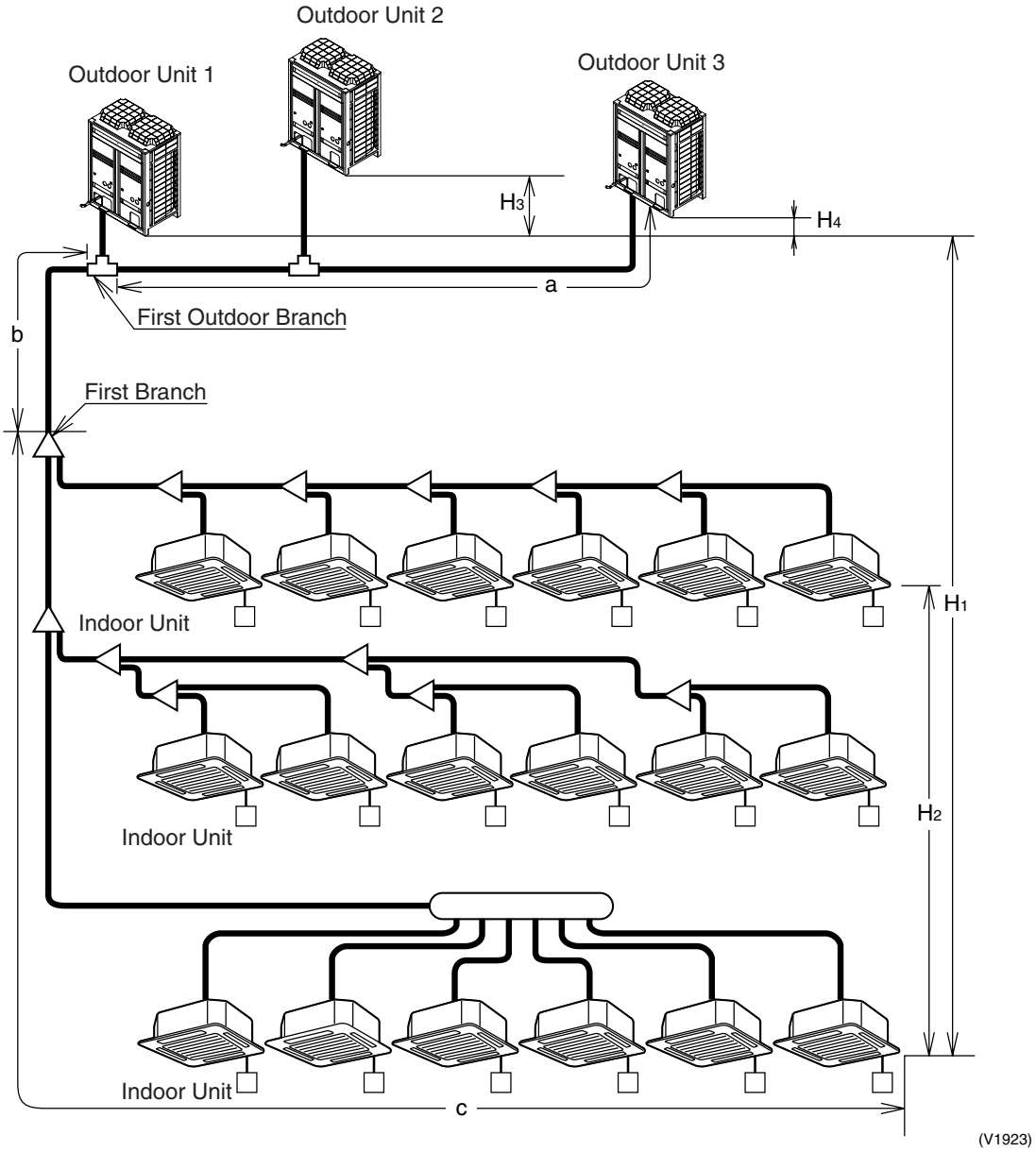
Type of fitting	Sample systems
Line branch fitting (Pipes containing REFNET joints only)	
Header branch fitting (Piping consists of REFNET headers only)	
Mixed branch fittings (Piping including both headers and joints)	

Units can be added by connecting them directly to the REFNET header or REFNET joint. Further branches cannot be included in the system below the REFNET header branch.

Notes:

1. When the capacity ratio of the indoor system to the outdoor unit is more than 100% and when all the indoor units are in operation at the same time then the rated capacity of each unit will be somewhat reduced.
2. Special purpose REFNET pipe components must be used for all the pipe work. For further details concerning choice of components, types of components, etc.

4.2 Max. Refrigerant Piping Length



■ **Max. Refrigerant Piping Length (Actual Piping Length)**

	First outdoor Branch ~ Outdoor units [a]	First Branch ~ Indoor Units [c]	Outdoor Units ~ Indoor Units [b+c]
Max. Refrigerant Piping Length (m)	10m or less than 10m	40m or less than 40m (Refer to Page 771, 772 Note 2 in case of up to 90m)	165m or less than 165m

■ **Total Extension length**

Total Piping length from outdoor unit to all indoor units ≤ 1000m

■ **Max. Level Difference**

	Outdoor Units ~ Indoor Units [H_1]	Between the Indoor Units [H_2]	Between the Outdoor Units [H_3 , H_4]
Max. Level Difference (m)	50m or less than 50m (Note 3) 90m or less than 90m (Note 4)	15m or less than 15m	5m or less than 5m

Notes:

1. Be sure to use a REFNET Piping Kit for the branch of piping.
2. A Branch Part can not be installed to the down flow of the REFNET Header.
3. If the outdoor unit is located under the indoor unit, the level difference is a maximum of 40m in case of RXYQ5P(A).
4. Available on request if the outdoor unit is above.

16

4.3 Field Refrigerant Piping

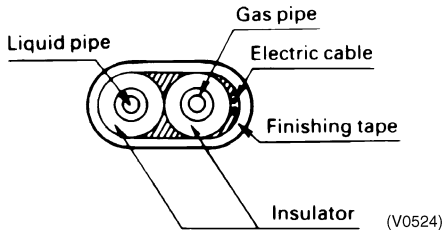
1. The following materials should be used for all refrigerant piping.

- Materials: Deoxidized phosphorous seamless copper pipe (for external diameters of 25.4mm or more, C1220T-0 for the rest) or equivalent

2. The tips for insulation

- Gas piping must be insulated.
- Be sure to insulate the liquid-side and gas-side piping for the inter-unit piping and the refrigerant branch kits and always use 18-type or better insulation for the oil pressure equalizer.
- Materials: Glass fiber or heat resistant polyethylene foam.
  Thickness: 10mm or more
  Heat resistance: Gas pipe : 120°C or more / Liquid pipe : 70°C or more
- If you think the humidity around the cooling piping might exceed 30°C and RH80%, reinforce the insulation on the cooling piping (at least 20mm thick). Condensation might form on the surface of the insulation.

- Insulation of both liquid and gas pipe

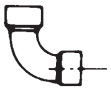
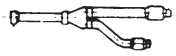


CAUTION

Be sure to size up the main gas line in the connecting piping of the suction gas piping if the equivalent length of the piping between the indoor and outdoor units exceeds 90m. In order to minimize the reduction of capacity caused by the pressure drop, the refrigerant pipe size may be sized up.

3. Equivalent Piping Length of Joints and Header (Reference)

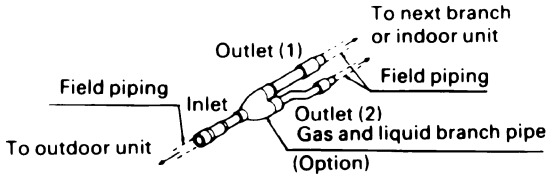
(Unit: mm)

Pipe Size	ϕ6.4	ϕ9.5	ϕ12.7	ϕ15.9	ϕ19.1	ϕ22.2	ϕ25.4	ϕ31.8	ϕ34.9	ϕ38.1	ϕ41.3
L Joints 	0.16	0.18	0.20	0.25	0.35	0.40	0.45	0.55	0.60	0.65	0.75
REFNET Joint 	0.5										
REFNET Header 	1.0										

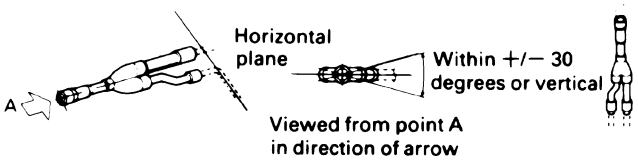
4.4 REFNET Joints and Headers

4.4.1 REFNET Joints

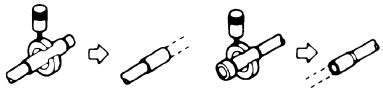
For gas and liquid branch pipes



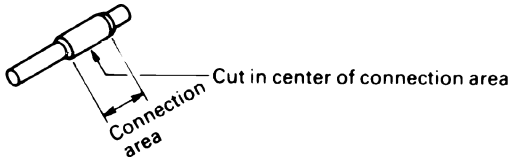
- Make sure that all branch pipes are fitted such that they branch either horizontally or vertically.



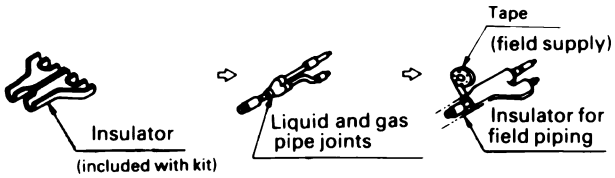
- When the size of the selected field piping is different from that of branch pipe then the connecting section should be cut with a pipe cutter as shown in the figure below.



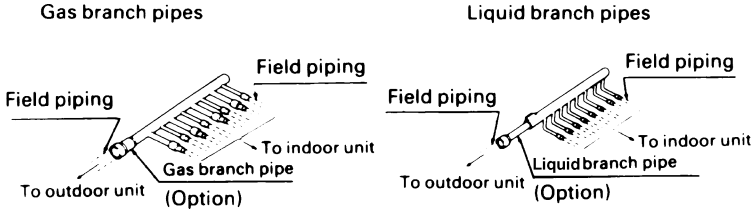
- When you are cutting an inlet or outlet pipe with a pipe cutter make sure that you make the cut in the center of the connection area.



- Branch pipes must be insulated in accordance with the handbook which comes with each kit.

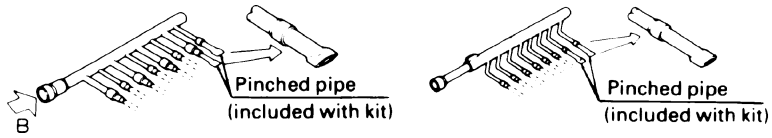


4.4.2 REFNET Header

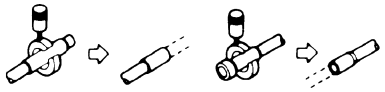


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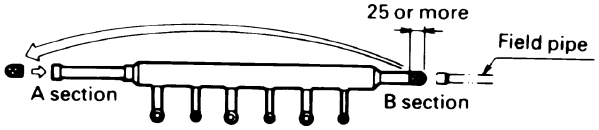
- When the number of indoor units to be connected to the branch pipes is less than the number of branch pipes available for connection then cap pipes should be fitted to the surplus branches.



- When the size of the selected field piping is different from that of branch pipe then the connecting section should be cut with a pipe cutter as shown in the figure below.



- When field piping is connected to the B section of the inlet/outlet pipe on the outdoor unit side of the liquid pipe header.
- Cut the B section with a pipe cutter as shown below and connect it to the A section.
- Connect the flared section of the field pipe to the B section.

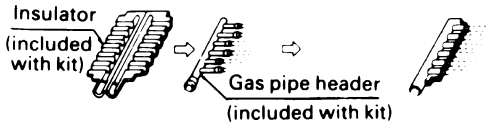


- Fit the branch pipe so that the branch lies in a horizontal plane.

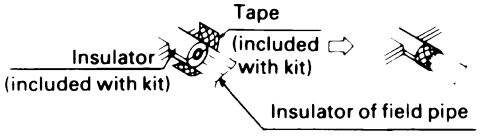


- The branch pipe must be insulated in accordance with the instruction manual which comes with each kit.

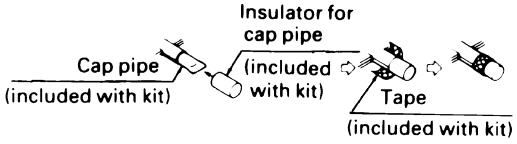
1. Use the insulator included in the kit to insulate the header.



2. Joints between insulators included in the kit and those already applied to the field piping should be sealed with the tape which is also included in each kit.



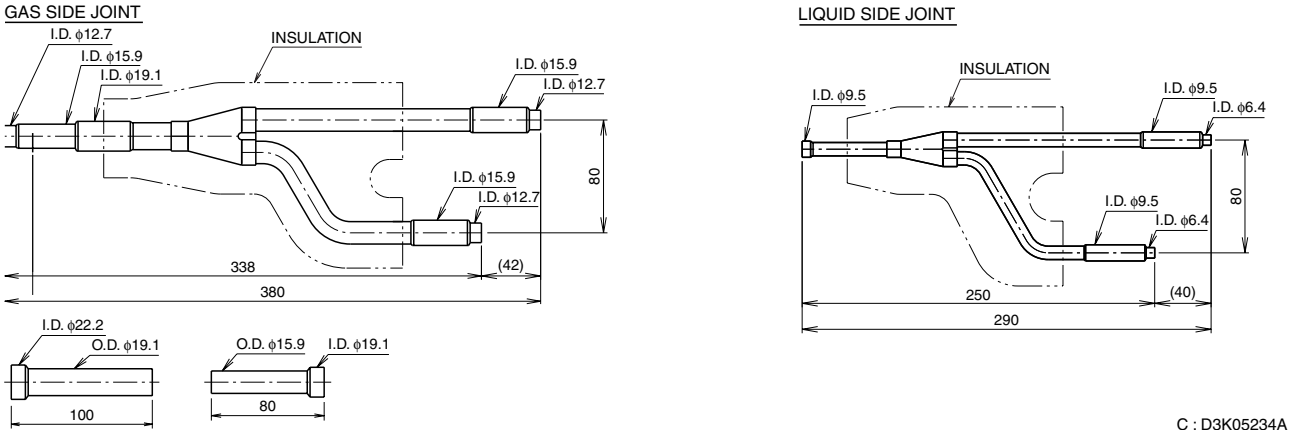
3. Any cap pipes should also be insulated using the insulator provided with each kit and then taped as described above.



5. REFNET Joint and Header

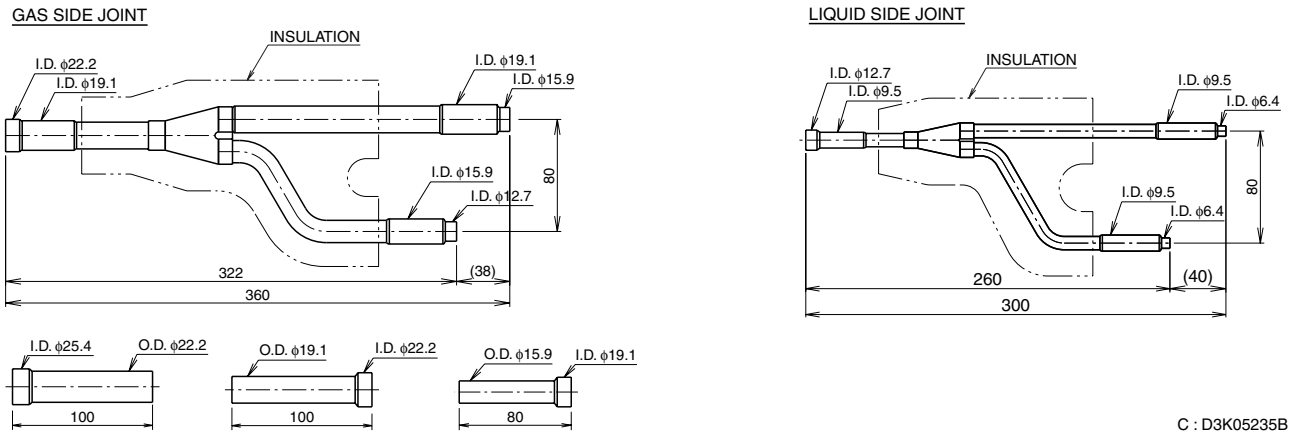
5.1 REFNET Joint (Branch Kit)

KHRP26A22T



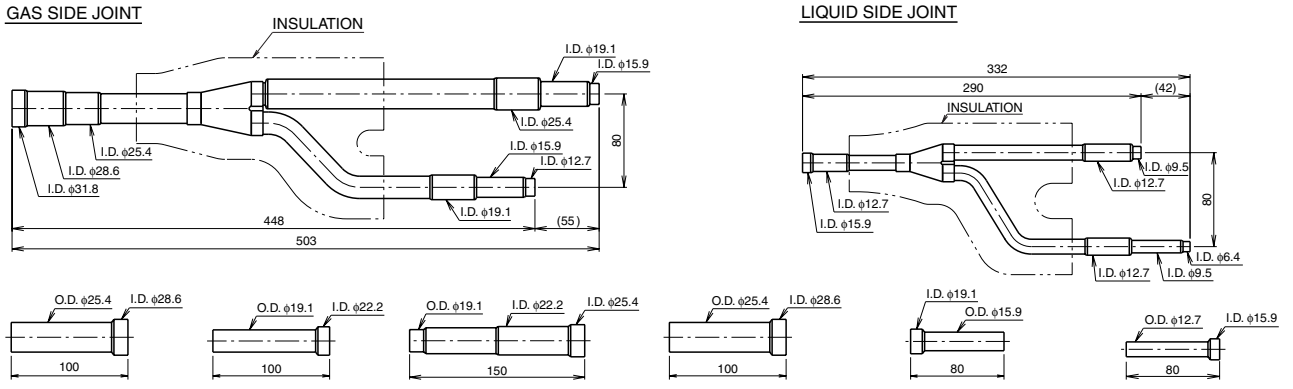
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KHRP26A33T



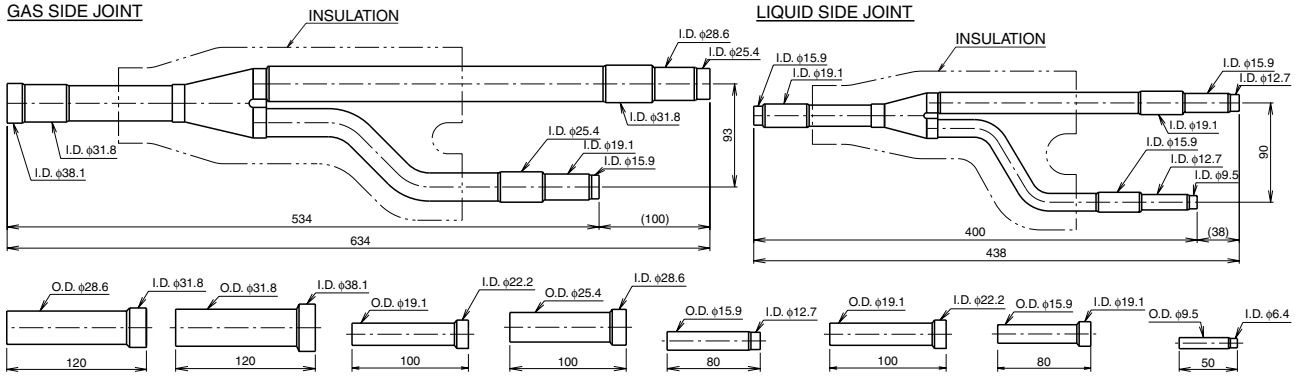
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KHRP26A72T



C : D3K05236A

KHRP26A73T

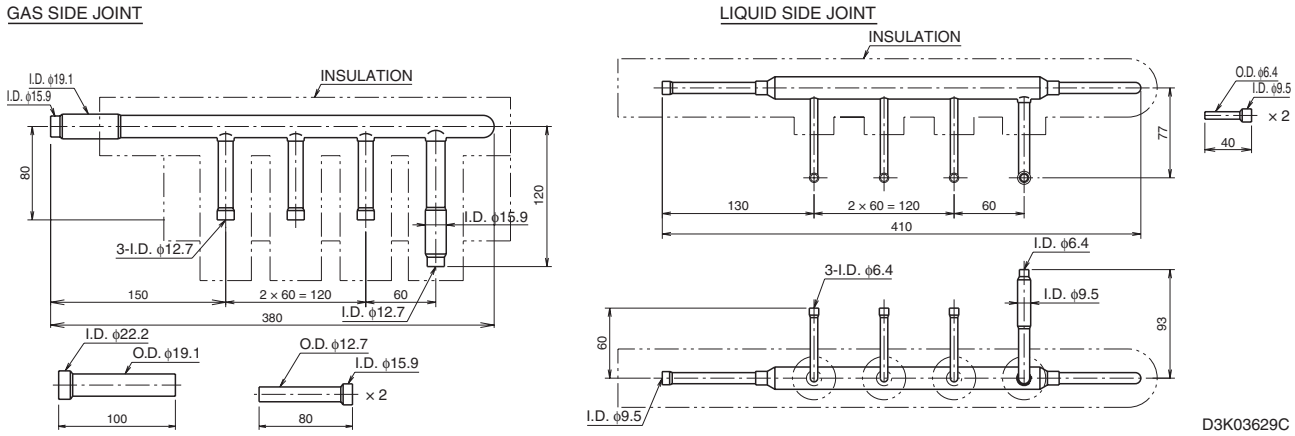


C : D3K05237A

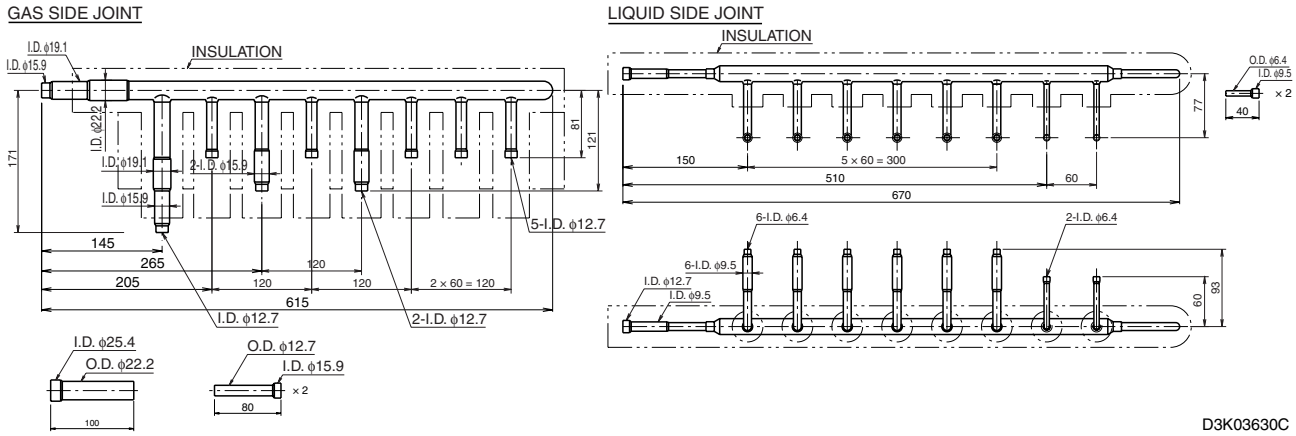
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5.2 REFNET Header (Branch Kit)

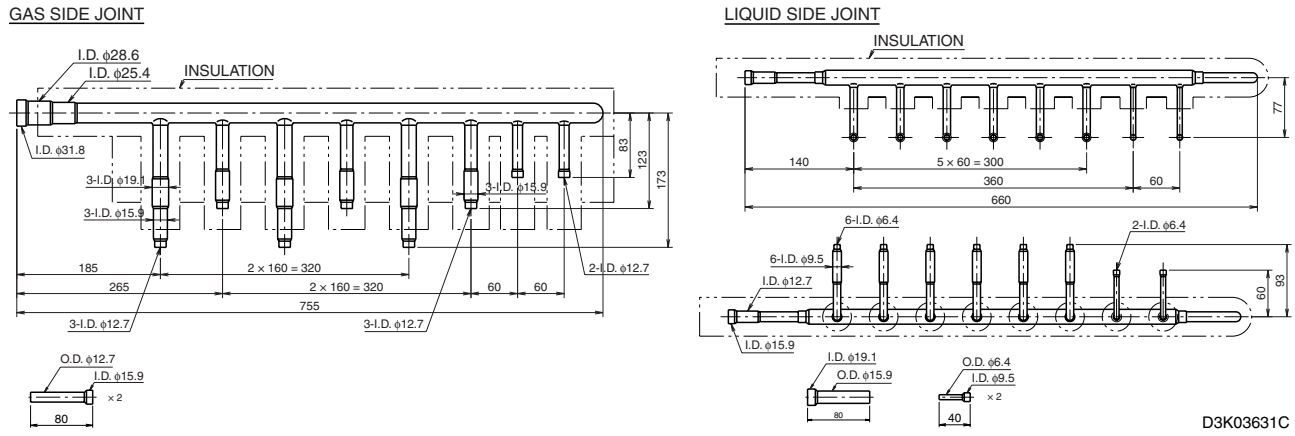
KHRP26M22H



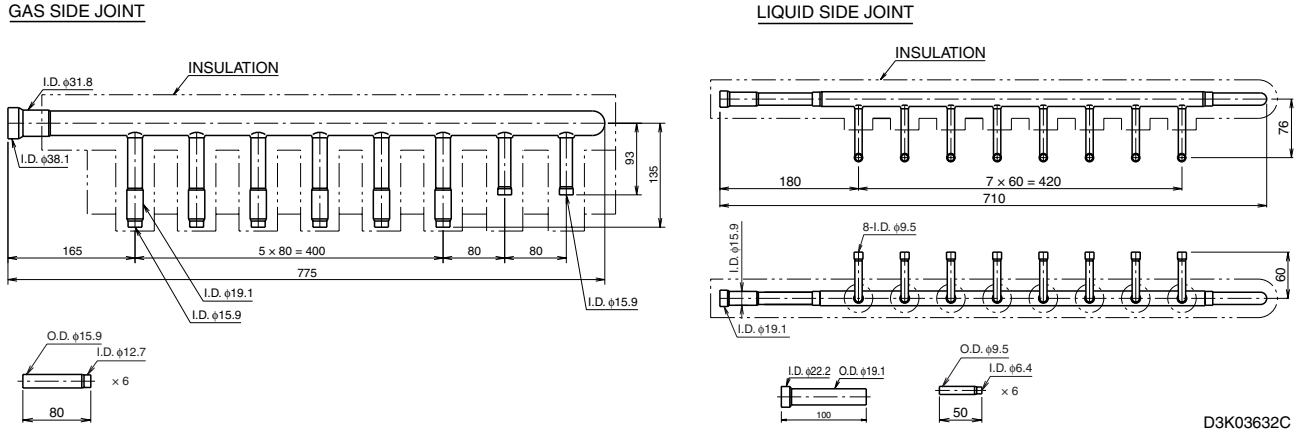
KHRP26M33H



KHRP26M72H



KHRP26M73H

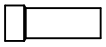
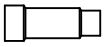
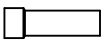
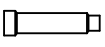
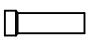


5.3 Reducer

PIPE SIZE REDUCER (For R410A)

KHRP26M73TP • 73HP
KHRP25M72TP • 73TP • 72HP

■ THIS KIT INCLUDES THE FOLLOWING PARTS.

		PIPE SIZE REDUCER①	PIPE SIZE REDUCER②	PIPE SIZE REDUCER③	PIPE SIZE REDUCER④	PIPE SIZE REDUCER⑤
	SHAPE					
QUANTITY	KHRP26M73TP	1 pc.	1 pc.	2 pc.	———	———
	KHRP26M73HP	1 pc.	———	1 pc.	———	———
	KHRP25M72TP	———	———	———	1 pc.	1 pc.
	KHRP25M72HP	———	———	1 pc.	———	1 pc.
	KHRP25M73TP	1 pc.	1 pc.	3 pc.	1 pc.	———

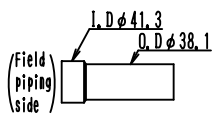
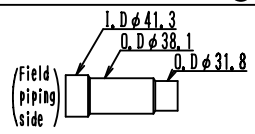
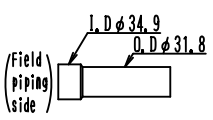
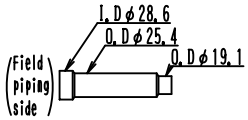
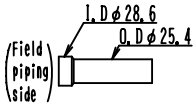
■ THIS KIT IS THE REDUCER OF THE BRANCH PIPING KIT(REFNET JOINT • HEADER). CHECK THE PROPER MODEL OF THE BRANCH PIPING KIT.

KIT NAME	BRANCH PIPING KIT
KHRP26M73TP	KHRP26M73T(GAS SIDE)
KHRP26M73HP	KHRP26M73H(GAS SIDE) • KHRP25M73H(SUCTION GAS SIDE)
KHRP25M72TP	KHRP25M72T(DISCHARGE GAS SIDE)
KHRP25M72HP	KHRP25M72T(DISCHARGE GAS SIDE) • KHRP25M72H(SUCTION, DISCHARGE, HP/LP GAS SIDE)
KHRP25M73TP	KHRP25M73T(SUCTION, DISCHARGE GAS SIDE)

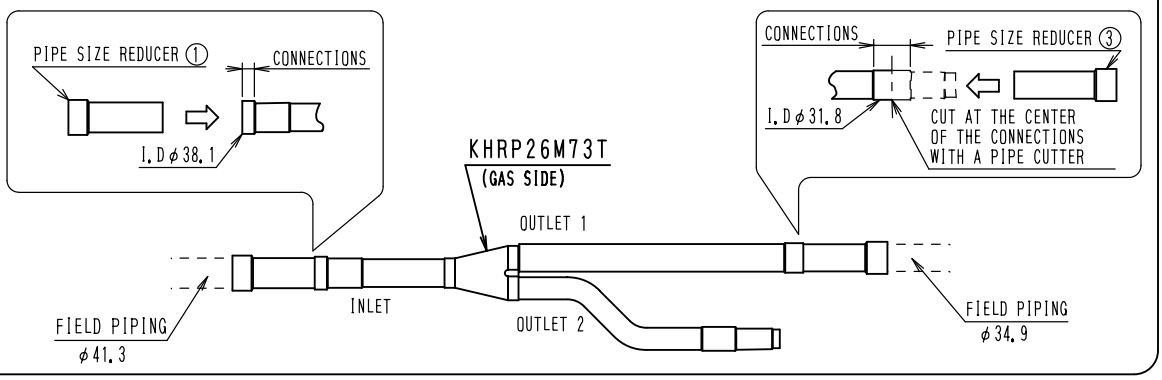
INSTALLATION PROCEDURE

REFER TO THE INSTALATION MANUAL OF THE BRANCH PIPING KIT.

■ JOINT SIZE ARE AS FOLLOWS.

PIPE SIZE REDUCER①	PIPE SIZE REDUCER②	PIPE SIZE REDUCER③
		
PIPE SIZE REDUCER④	**PIPE SIZE REDUCER⑤**	
		

(1)Select the field piping size according to the installation manual of the outdoor unit.
(2)Connect the PIPE SIZE REDUCER suitable for the field piping size to the branch piping kit.
ex.)Connect the reducers to the branch piping kit, KHRP26M73T.
• For inlet piping size is φ41.3 and outlet 1 piping size is φ34.9.



3P113129B

16

5.4 Outdoor Unit Multi Connection Piping Kit

BHFP22P100·151

VRV III Series

Please be sure to read before installation and follow the instructions carefully when performing installation work.

1P173261-1A

Outdoor unit Multi Connection Piping Kit Installation Manual

BHFP22P100 • BHFP22P151

Component parts

■This kit contains the following parts. <Do not throw away any of the accessories until installation is complete.>

Kit name	Gas-side joint	Liquid-side joint	Gas-side reduser	Liquid-side reduser	Insulation tube for gas pipe	Insulation tube for liquid pipe
BHFP 22 P100	1pc	1pc	(1) 1pc (2) 1pc (3) 1pc (7) 1pc (9) 1pc	(1) 1pc (3) 1pc (5) 1pc	Big 1pc	Small 1pc
BHFP 22 P151	(1) 1pc	(1) 1pc	(1) 2pc (2) 1pc (3) 1pc (4) 1pc (5) 1pc (6) 1pc (7) 2pc (8) 1pc (9) 2pc (10) 1pc	(1) 2pc (2) 1pc (3) 2pc (4) 1pc (5) 1pc	Big 2pc	Small 2pc

Caution
- Please be sure to read this manual before installation and follow the instruction carefully when performing installation work.
- See the outdoor unit's installation manual for outdoor unit installation.
- Installation of interconnecting piping between the outdoor and indoor units, REFNET joint or REFNET header will be needed separately.

Selection Procedure

Number of outdoor units connected	2 units	3 units
Outdoor unit Multi Connection Piping Kit	BHFP22P100	BHFP22P151

- 2 or 3 outdoor units can be connected.
- There are restrictions on the combination and the installation order of outdoor units, so please refer to "the Engineering Data of VRV III" and "the installation manual" (attached sheet of outdoor unit) for details.

Field supply parts

■The following parts are needed to connect this kit and are not included.

Field supply parts		
Name	Q'ty	Selection Procedure
Insulation for piping	1set	See the "Connecting Pipe Sizes and location of cutting the joint" for details on the necessary size.
Connection piping		
Elbow	1pc	Prepare a gas pipe diameter for the upper outdoor unit as listed in "Connecting Pipe Sizes and location of cutting the joint."
Tape	1set	For insulation materials

Caution
- Quantity and selection procedure of elbow only applies to a front or bottom connection.
- For a lower front connection, the quantity and selection procedure are different, so please refer to the instructions for a lower front connection.
- A joint for the same diameter pipes is needed only for a bottom connection. See the instructions for the bottom connection for details on quantity and specifications.
- The min. thickness of the pipes in this manual shows the requirements of Japanese High Pressure Gas Control law. (As of Jan. 2003) And the temper grade (O, 1/2H) shows the material type of JIS H 3300. The thickness and material shall be selected in accordance with local code for the design pressure 4.0MPa(40bar).

(Unit: mm)

Temper grade	O Type					1/2H Type					
Copper tube O.D.	φ6.4	φ9.5	φ12.7	φ15.9	φ19.1	φ22.2	φ25.4	φ28.6	φ31.8	φ34.9	φ38.1	φ41.3
Copper tube R.T. (Minimum requirement)	0.80	0.80	0.80	0.99	0.80	0.80	0.88	0.99	1.10	1.21	1.32	1.43

To the piping installer

When installing this kit, please apply the following restrictions.

Restrictions on Installing Multi Connection Piping Kit

- Install the joint horizontally so that the caution label attached to joint comes to the top. Do not tilt the joint more than ±15°. (See Fig. 1) In addition, do not install the joint vertically. (See Fig. 2)
- Make sure the piping up to the joint is straight for more than 500mm. Do not bend the field piping within this range. If a straight field piping more than 120mm is connected, more than 500mm of straight section can be ensured. (See Fig. 3)
- Improper installation may lead to malfunction of the outdoor unit.

Fig1

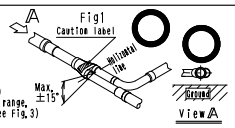


Fig2

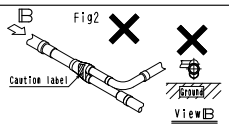
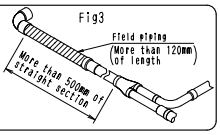
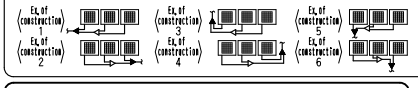


Fig3

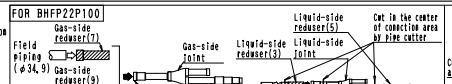


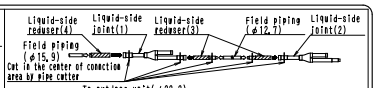
Installation examples

- The figure at the lower shows a typical front connection. Make sure to follow the installation restrictions and carry out installation taking the field requirements into consideration.
- This manual explains the front connection <Ex. of construction 1>.
- For 3-unit installation on Ex. of construction 5 and 6, in some cases the reducers (5), (6) or (10) for gas piping and the reducers (2) and (3) for liquid piping may be used on the 1st joint (section shown with ◀). See the figure at the right for details of connection.
- When the size of the Gas-side pipe between the Gas-side joint (1) and Gas-side joint (2) on the 3-units system or the size of the main pipe is φ41.3 or φ34.9, Gas-side reducer (7), (8) and (9) will be used. See the figure at the right for details of connection.
- When the size of the Liquid-side pipe between the Liquid-side joint (1) and Liquid-side joint (2) on the 3-units system is φ12.7, Liquid-side reducer (3) will be used. And when the side of main pipes φ15.9, Liquid-side reducer (4) will be used. See the figure at the right for details of connection.

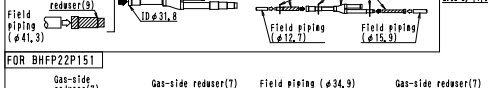


FOR BHFP22P100





FOR BHFP22P151



BHFP22P100 Installation Instructions

Caution There are some restrictions on the interconnecting piping between the outdoor units. See the installation manual attached to the outdoor units and make sure to carry out proper piping. If the piping restrictions are not observed, it may result in malfunction of the unit.

Connecting pipe sizes and location of cutting the joint

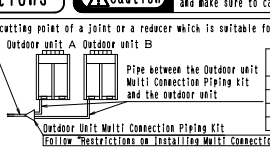
Select cutting point of a joint or a reducer which is suitable for the size of the interconnecting pipes determined according to the table below and cut it with a pipe cutter.

Main Pipe

● Select the pipe size according to the total capacity of outdoor unit.

(units: mm)

Outdoor unit total capacity type	Pipe size (O.D. x min. thickness [temper grade])	
	Gas pipe	Liquid pipe
16HP	φ28.6X0.99[1/2H]	φ12.7X0.80[O]
18~22HP		φ15.9X0.99[O]
24HP	φ34.9X1.21[1/2H]	
26~34HP		φ19.1X0.80[1/2H]
36HP	φ41.3X1.43[1/2H]	



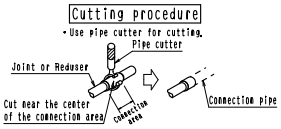
(units: mm)

Outdoor unit capacity type	Pipe size (O.D. x min. thickness [temper grade])	
	Gas pipe	Liquid pipe
8HP	φ19.1X0.80[1/2H]	φ 9.5X0.80[O]
10HP	φ22.2X0.80[1/2H]	
12~16HP	φ28.6X0.99[1/2H]	φ12.7X0.80[O]
18HP		φ15.9X0.99[O]

- When upsizing the main pipe, use the gas side reducer (2).
- If the pipe size of φ19.1 or largers is used, the O material may be insufficient to withstand the specified pressure. Therefore, make sure to use the 1/2H material with thickness of 1.0mm or more. When using the O material for the pipe size of φ19.1, a thickness of 1.2 or more is required. In this case, the connection must be brazed.

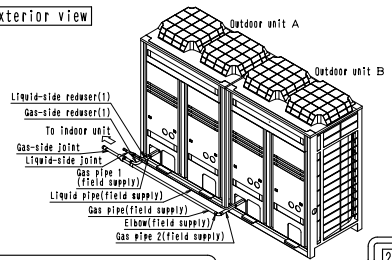
Cutting procedure

- Use pipe cutter for cutting.

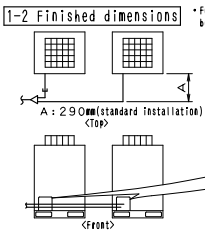


❶ Installation examples — Procedure for Front Connection

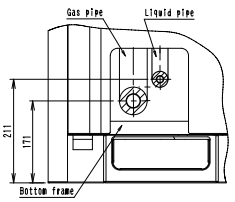
1-1 Exterior view



1-2 Finished dimensions



- For installations where the A dimensions exceed 290mm, extend the field supply interconnecting pipe between the joint and the outdoor unit.



❷ Connection of gas and liquid pipes

2-1 Cutting the field supply gas pipes

- Cut the pipes according to Table 1.

Caution
- This table shows the case when the A dimensions shown in 1-2 Finished dimensions is 290mm. If the A dimensions exceed 290mm, see Table 1 and adjust the dimensions of the gas pipe 1 and 2.
- The L dimensions of the gas pipe 2 in Table 1 show those when the field supply elbows have B dimension in Table 2. If the B dimension is not same with Table 2, see Table 1 and 2, and adjust them accordingly.

■ Table 1

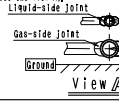
Model type	Gas pipe 1 (field supply) L (mm)	Gas pipe 2 (field supply) L (mm)
8HP	75	287
10HP	81	257
12~18HP	125	223

■ Table 2

Model type	Elbow(field supply) B (mm)
8HP	17
10HP	23
12~18HP	29

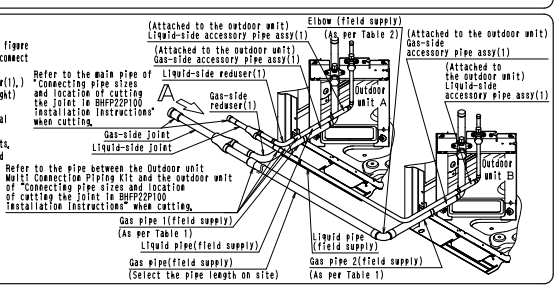
2-2 Connection of pipes

- Connect the gas and liquid pipes as shown in the figure at the right. (When connecting the pipes, first connect the gas-side joint and the gas-side reducer(1), the liquid-side joint and the liquid side reducer(1).)
- See 1-2 Finished dimensions for the location(height) of the joint.
- See the caution section in the installation manual attached to the outdoor unit for brazing pipes and connecting pipes with flare nuts.
- Install the joint in such a way that the attached face of the caution label becomes horizontal (See the View A).



Refer to the main pipe of "Connecting pipe sizes and location of cutting the joint in BHFP22P100 Installation Instructions" when cutting.

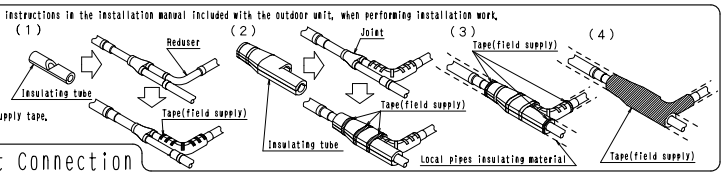
Refer to the pipe between the Outdoor unit Multi Connection Piping Kit and the outdoor unit of "Connecting pipe sizes and location of cutting the joint in BHFP22P100 Installation Instructions" when cutting.



❸ The work after the kit is connected

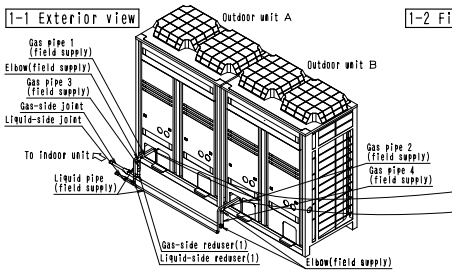
Connection of piping between the outdoor unit and the indoor unit
Air tight test
Insulation of joints
(1) Fit the insulation to the reducer and temporarily keep it in place with tape.
(2) Fit the insulation to the joint and temporarily keep it in place with tape without leaving a gap between the insulation mating faces. (See the figure at the right.)
(3) Seal the seam between the insulation and the field supply piping insulation with the field supply tape.
(4) Wrap the tape around the insulation attached to the joint without leaving a gap. (▨ section shown in the figure at the right.)

Follow the instructions in the installation manual included with the outdoor unit, when performing installation work.



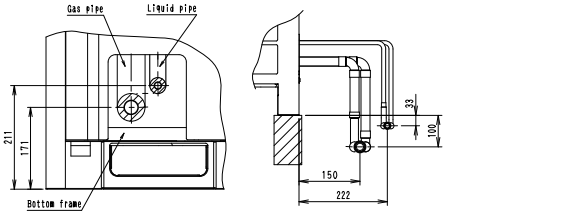
❶ Installation examples — Procedure for Lower Front Connection

1-1 Exterior view



1-2 Finished dimensions

• A standard installation has the following dimensions.
• When the dimensions exceed the standard installation, extend the pipes between the outdoor unit and the joint(field supply).



❷ Connection of gas and liquid pipes

2-1 Cutting the field supply gas pipe 1 to 4

• Cut the pipes according to Table 3

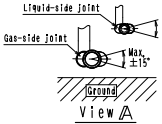
Caution • The L dimensions of the gas pipe 1 to 4 in Table 3 show those when the field supply elbows have B dimension in Table 2 shown in Procedure for Front Connection, 2 Connection of gas and liquid pipes. If the B dimensions are not same with Table 2, see Table 2 and 3, and adjust them accordingly.

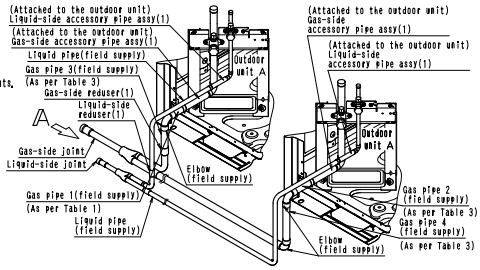
■ Table 3

Model type	Gas pipe 1(field supply) L(mm)	Gas pipe 2(field supply) L(mm)	Gas pipe 3(field supply) L(mm)	Gas pipe 4(field supply) L(mm)
8HP	130	165	59	237
10HP	100	135	83	225
12~18HP	66	101	149	213

2-2 Connection of pipes

• Connect the gas and liquid pipes as shown in the figure at the right. (When connecting the pipes, first connect the gas-side joint and the gas-side reducer (1), the liquid-side joint and the liquid-side reducer (1).)
• See the caution section in the installation manual attached to the outdoor unit for brazing pipes and connecting pipes with flare nuts.
• Install the joint in such a way that the attached face of the caution label becomes horizontal(See the View A).

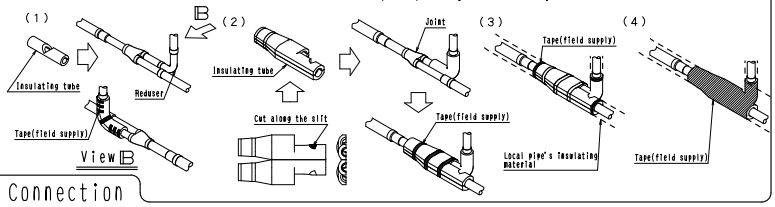




❸ The work after the kit is connected

Connection of piping between the outdoor unit and the indoor unit
Air tight test
Insulation of joints
(1) Fit the insulation to the reducer and temporarily keep it in place with tape.
(2) Cut insulating tube along the slit. (See the figure at the right.) Fit the insulation to the joint and temporarily keep it in place with tape without leaving a gap between the insulation mating faces.
(3) Seal the seam between the insulation and the field supply piping insulation with the field supply tape.
(4) Wrap the tape around the insulation attached to the joint without leaving a gap. (▨ section shown in the figure at the right.)

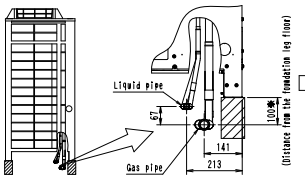
Follow the instructions in the installation manual included with the outdoor unit, when performing installation work.



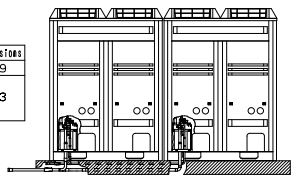
❶ Installation examples — Procedure for Bottom Connection

Caution This installation is only possible if there is enough space to perform brazing and racking underneath the outdoor unit. If a centralized drain pan kit and/or vibration proof base are used, the dimensions marked with "✱" in the figure below will vary, so see the table below and determine the length of the field pipes.

1-1 Exterior view



Separately-sold item also used	✱dimensions
Central drain pan kit	139
Vibration absorption stand	233
Vibration absorption stand+ central drain pan kit	



❷ Connection of gas and liquid pipes

2-1 Cutting the field supply gas pipe 1 and 2, and the Gas-side accessory pipe(3) attached to the outdoor unit

• Cut the pipes according to Table 4 or 5.

Caution • The "L" dimensions of the gas pipe 1 in Table 4 and the gas pipe 2 in Table 5 are identical to the "B" dimensions in table 2, those of "field supply elbows" shown in the procedure of front connection, which are equivalent to "straight size joint" without stopper. If the "B" dimentions are not identical to table 2 or "straight size joint" is with sttoper, adjust them as table 2, 4 and 5 show.

■ Table 4 (For Outdoor unit A Side)

Model type	Gas-side accessory pipe(3) B(mm) ✱dimensions For 100	For 139	For 233	Cutting position	Gas pipe 1(field supply) L(mm) ✱dimensions For 100	For 139	For 233
8HP	102	63	48	B	unnecesary		79
10HP	72	33	25	B	unnecesary		86
12HP ~ 18HP	0 (no cutting)	53	0 (no cutting)	B	unnecesary	92	133

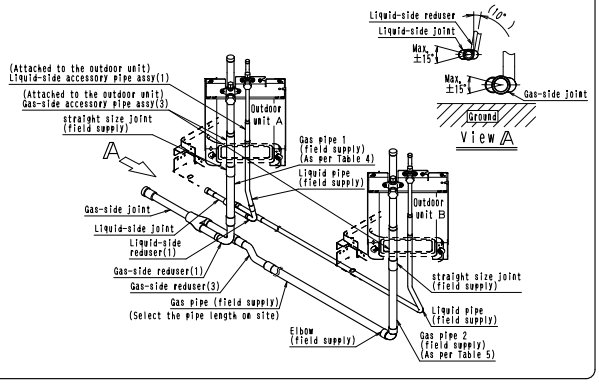
■ Table 5 (For Outdoor unit B Side)

Model type	Gas-side accessory pipe(3) B(mm) ✱dimensions For 100	For 139	For 233	Cutting position	Gas pipe 2(field supply) L(mm) ✱dimensions For 100	For 139	For 233
8HP	0 (no cutting)	0 (no cutting)	0 (no cutting)	B	76	115	209
10HP	18	0 (no cutting)	0 (no cutting)	B	88	109	203
12HP ~ 18HP	32	0 (no cutting)	0 (no cutting)	B	96	103	197

2-2 Connection of pipes

• Remove the knockout plate on the bottom frame. (See the installation manual attached to the outdoor unit)
• Connect the gas and liquid pipe as shown in the figure below. (When connecting the pipes, first connect the gas-side joint and the gas-side reducer(1), the liquid-side joint and the liquid-side reducer (1))
• See the caution section in the installation manual attached to the outdoor unit for brazing pipes and connecting pipes with flare nuts.
• Install the joint in such a way that the attached face of the caution label becomes horizontal. (See the view A)
• Connect the liquid side reducer(1) tilting approx. 10° and bend the field supplied liquid pipe up to the stop valve as shown in the figure below. (See the view A)

Caution • If the liquid side reducer is connected vertically without bending the liquid pipes, the insulation will not fit.



continue to reverse side

16

1P173261A

❸ The work after the kit is connected

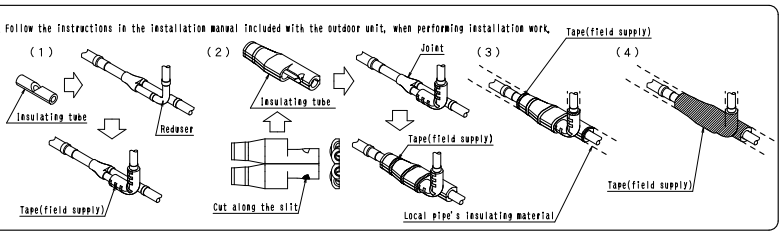
Connection of piping between the outdoor unit and the indoor unit

Air tight test

Follow the instructions in the installation manual included with the outdoor unit, when performing installation work.

Insulation of joints

(1) Fit the insulation to the reducer and temporarily keep it in place with tape.
(2) Cut insulating tube along the slit. (See the figure at the right.)
Fit the insulation to the joint and temporarily keep it in place with tape without leaving a gap between the insulation mating faces.
(3) Seal the seam between the insulation and the field supply piping insulation with the field supply tape.
(4) Wrap the tape around the insulation attached to the joint without leaving a gap. (▨ section shown in the figure at the right.)



BHFP22P151 Installation Instructions

Caution There are some restrictions on the interconnecting piping between the outdoor units. See the installation manual attached to the outdoor units and make sure to carry out proper piping. If the piping restrictions are not observed, it may result in malfunction of the unit.

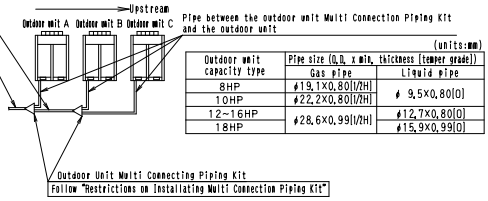
Connecting Pipe Sizes and location of cutting the joint

Select cutting point of a joint or a reducer which is suitable for the size of the interconnecting pipes determined according to the table below and cut it with a pipe cutter.

Pipe between outdoor unit Multi Connection Piping Kit
●Select the pipe size according to the total capacity of the outdoor unit (unit B, C).
Main pipe
●Select the pipe size according to the total capacity of the outdoor unit to be connected upstream (unit A, B, C).

(units : mm)

Outdoor unit total capacity (unit A, B, C) or the total capacity of the outdoor unit to be connected upstream (unit B, C)	Pipe size (O.D. x min. thickness [temper grade])	
	Gas pipe	Liquid pipe
16HP	ϕ28.6X0.99[1/2H]	ϕ12.7X0.80[0]
18~22HP		ϕ15.9X0.99[0]
24HP	ϕ34.9X1.21[1/2H]	
26~34HP		ϕ19.1X0.80[1/2H]
36HP~	ϕ41.3X1.43[1/2H]	

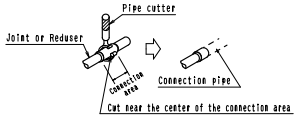


(units:mm)

Outdoor unit capacity type	Pipe size (O.D. x min. thickness [temper grade])	
	Gas pipe	Liquid pipe
8HP	ϕ19.1X0.80[1/2H]	ϕ 9.5X0.80[0]
10HP	ϕ22.2X0.80[1/2H]	
12~16HP	ϕ28.6X0.99[1/2H]	ϕ12.7X0.80[0]
18HP		ϕ15.9X0.99[0]

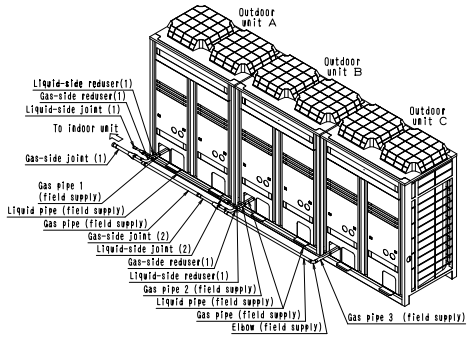
Cutting procedure

・Use pipe cutter for cutting.



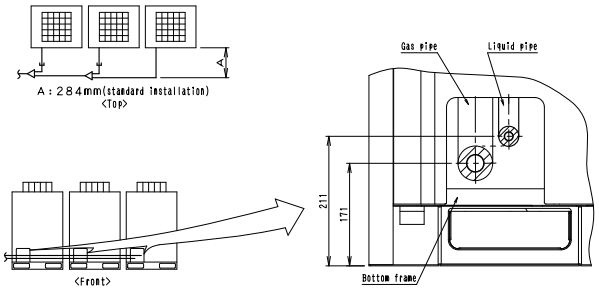
❶ Installation examples — Procedure for Front Connection

1-1 Exterior view



1-2 Finished dimensions

・For installations where the A dimensions exceed 284 mm, extend the field supply interconnecting pipe between the joint and the outdoor unit.



❷ Connection of gas and liquid pipes

2-1 Cutting the field supply gas pipes

・Cut the pipes according to Table 6.

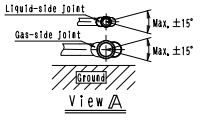
Caution
・This Table shows the case when the A dimensions shown in "1-2 Finished dimensions" is 284mm. If the A dimensions exceed 284mm, see Table 6 and adjust the dimensions of the gas pipe 1 and 2 and 3.
・The L dimensions of the gas pipe 3 in Table 6 show those when the field supply elbows have B dimension in Table 2 shown in BHFP22P151 Installation Instruction, 2 connection of gas and liquid pipes.
If the B dimensions are not same with Table 2, see Table 2 and 6, and adjust them accordingly.

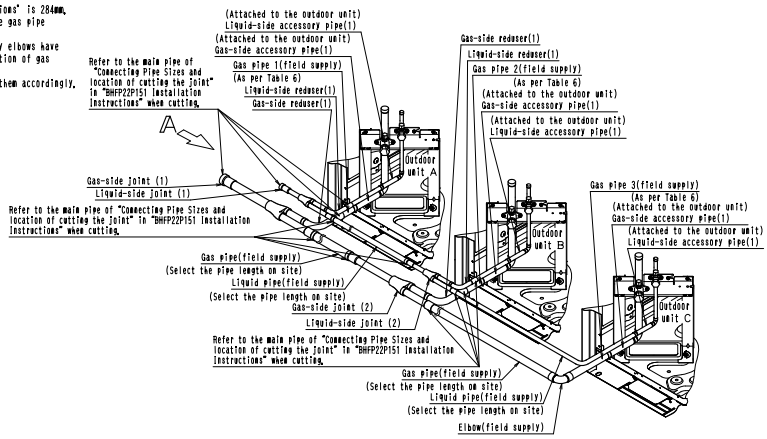
■ Table 6

Model type	Gas pipe 1 (field supply) L (mm)	Gas pipe 2 (field supply) L (mm)	Gas pipe 3 (field supply) L (mm)
8HP	51	69	282
10HP	57	75	252
12~18HP	101	119	218

2-2 Connection of pipes

・Connect the gas and liquid pipes as shown in the figure at the right. When connecting the pipes, first connect the gas-side joint and the gas-side reducer(1), the liquid-side joint and the liquid side reducer(1).
・See "1-2 Finished dimensions" for the location(height) of the joint.
・See the caution section in the installation manual attached to the outdoor unit for brazing pipes and connecting pipes with flare nuts.
・Install the joint in such a way that the attached face of the caution label becomes horizontal (See the View A).





❸ The work after the kit is connected

Connection of piping between the outdoor unit and the indoor unit

Air tight test

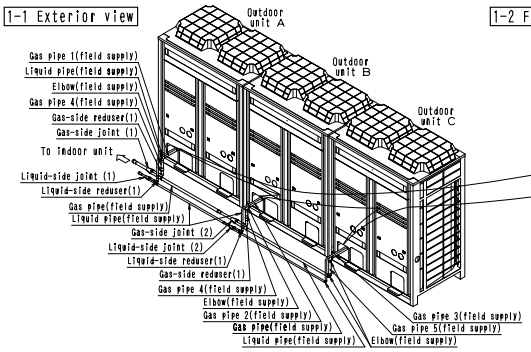
Follow the instructions in the installation manual included with the outdoor unit, when performing installation work.

Insulation of joints

・See "The work after the kit is connected" for a front connection in "BHFP22P151 Installation Instructions."

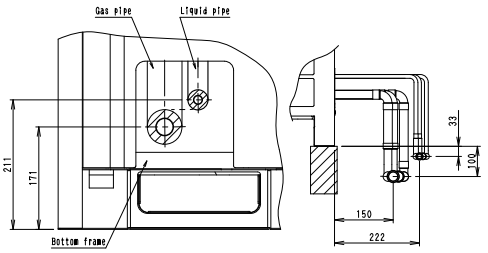
❶ Installation examples — Procedure for Lower Front Connection

1-1 Exterior view



1-2 Finished dimensions

- A standard installation has the following dimensions.
- When the dimensions exceed the standard installation, extend the pipes between the outdoor unit and the joint. (field supply)



❷ Connection of gas and liquid pipes

2-1 Cutting the field supply gas pipes

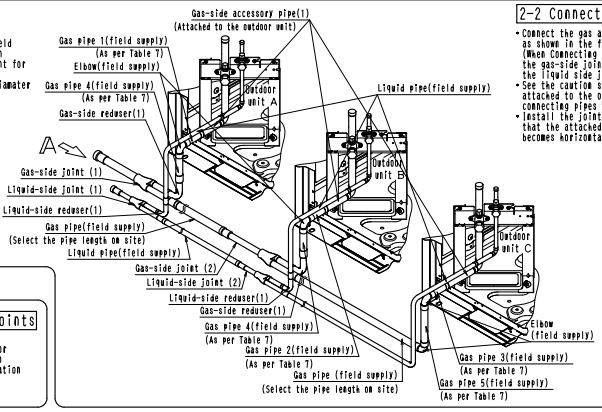
- Cut the pipes according to Table 7.

Caution
- The L dimensions of the gas pipe 1 to 5 in Table 7 show those when the field supply elbows have B dimension in Table 2 shown in BHFP22P100 Installation Instruction, 2 Connection of gas and liquid pipes and the field supply joint for the same diameter pipes are without stopper.
If the B dimensions are not same with Table 2 or the joint for the same diameter pipes have stopper, see Table 2 and 7, and adjust them accordingly.

■ Table7

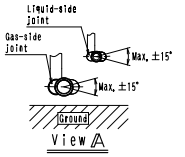
Model type	Gas pipe 1(field supply) L (mm)	Gas pipe 2(field supply) L (mm)	Gas pipe 3(field supply) L (mm)
8HP	130	147	182
10HP	100	117	152
12~18HP	66	83	118

Model type	Gas pipe 4(field supply) L (mm)	Gas pipe 5(field supply) L (mm)
8HP	59	237
10HP	83	225
12~18HP	149	213



2-2 Connection of pipes

- Connect the gas and liquid pipes as shown in the figure at the left. (When connecting the pipes, first connect the gas-side reducer (1), the liquid side joint and the liquid-side reducer (1).)
- See the caution section in the installation manual attached to the outdoor unit for brazing pipes and connecting pipes with flare nuts.
- Install the joint in such a way that the attached face of the caution label becomes horizontal. (See the View A).



❸ The work after the kit is connected

Connection of piping between the outdoor unit and the indoor unit

Air tight test

Follow the instructions in the installation manual included with the outdoor unit, when performing installation work.

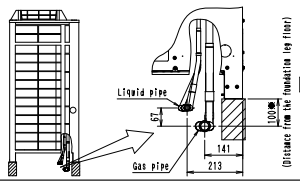
Insulation of joints

- See "The work after the kit is connected" for a lower front connection of "BHFP22P100 Installation Instructions."

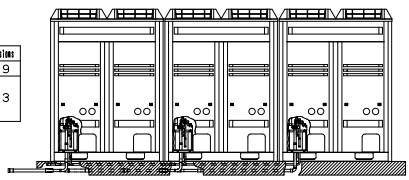
❶ Installation examples — Procedure for Bottom Connection

Caution This installation is only possible if there is enough space to perform brazing and racking underneath the outdoor unit. If a centralized drain pan kit and/or vibration proof base are used, the dimensions marked with "✽" in the figure below will vary, so see the table below and determine the length of the field pipes.

1-1 Exterior view



Separately-sold item also used	Dimensions
Central drain pan Kit	139
Vibration absorption stand	233
Vibration absorption stand+ central drain pan Kit	



❷ Connection of gas and liquid pipes

2-1 Cutting the field supply gas pipe 1 and 2, and the Gas-side accessory pipe(3) attached to the outdoor unit

- Cut the pipes according to Table 8 or 9.

Caution
- The "L" dimensions of the gas pipe 1 in Table 8 and the gas pipe 2 in Table 9 are identical to the "B" dimensions in table 2, those of "field supply elbows" shown in the procedure of front connection, which are equivalent to "straight size joint" without stopper. If the "B" dimentions are not identical to table 2 or "straight size joint" is with sttopper, adjust them as table 2, 8 and 9 show.

■ Table 8 (For Outdoor unit A, B Side)

Model type	Gas-side accessory pipe(3) B (mm) ✽dimensions For 100	For 139	For 233	Cutting position	Gas pipe 1(field supply) L (mm) ✽dimensions For 100	For 139	For 233
8HP	102	63	48	B	unnecesary		79
10HP	72	33	25				86
12HP ⌐ 18HP	0 (no cutting)	53	0 (no cutting)			92	133

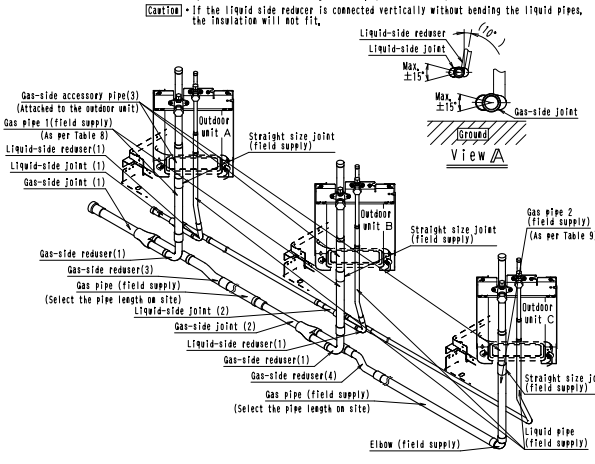
■ Table 9 (For Outdoor unit C Side)

Model type	Gas-side accessory pipe(3) B (mm) ✽dimensions For 100	For 139	For 233	Cutting position	Gas pipe 2(field supply) L (mm) ✽dimensions For 100	For 139	For 233
8HP	0 (no cutting)	0 (no cutting)	0 (no cutting)	B	76	115	209
10HP	18	0 (no cutting)	0 (no cutting)		88	109	203
12HP ⌐ 18HP	32	0 (no cutting)	0 (no cutting)		96	103	197

2-2 Connection of pipes

- Remove the knockout plate on the bottom frame. (See the Installation manual attached to the outdoor unit)
- Connect the gas and liquid pipe as shown in the figure below. (When connecting the pipes, first connect the gas-side joint and the gas-side reducer(1), the liquid-side joint and the liquid-side reducer (1))
- See the caution section in the installation manual attached to the outdoor unit for brazing pipes and connecting pipes with flare nuts.
- Install the joint in such a way that the attached face of the caution label becomes horizontal. (See the view A)
- Connect the liquid side reducer(1) tilting approx. 10° and bend the field supplied liquid pipe up to the stop valve as shown in the figure below. (See the view A)

Caution
- If the liquid side reducer is connected vertically without bending the liquid pipes, the insulation will not fit.



❸ The work after the kit is connected

Connection of piping between the outdoor unit and the indoor unit

Air tight test

Follow the instructions in the installation manual included with the outdoor unit, when performing installation work.

Insulation of joints

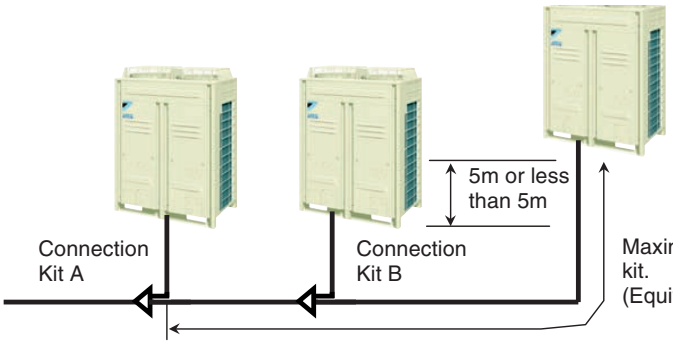
- See "The work after the kit is connected" for a front connection in "BHFP22P100 Installation Instructions."

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16

6. Piping Installation Point

6.1 Piping Installation Point



Since there is a possibility that oil may be collected on a stop machine side, install piping between outdoor units to go to level or go up to an outdoor unit, and to make a slope.

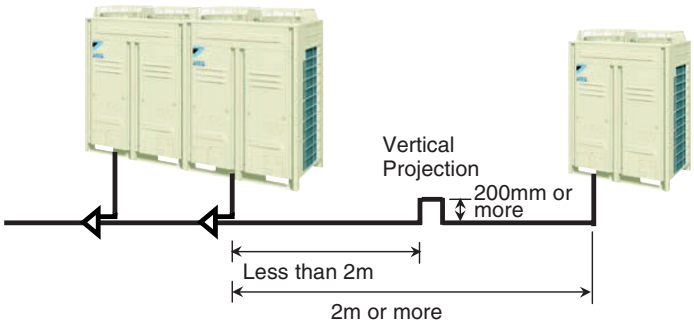
The projection part between multi connection piping kits

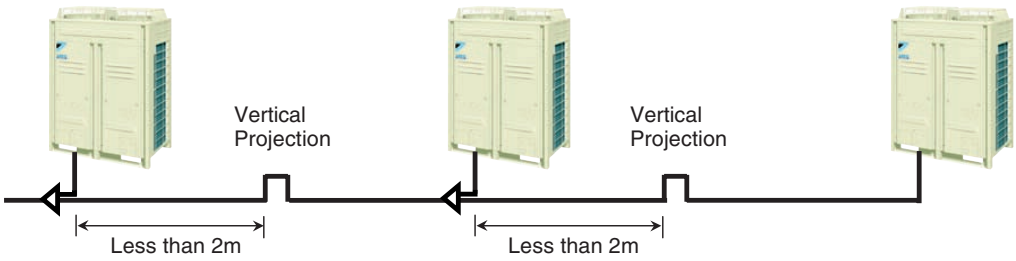
When the piping length between the multi connection kits or between multi connection kit and outdoor unit is 2m or more, prepare a vertical projection part (200mm or more as shown below) only on the gas pipe line location less than 2m from multi connection kit.

In the case of 2m or less

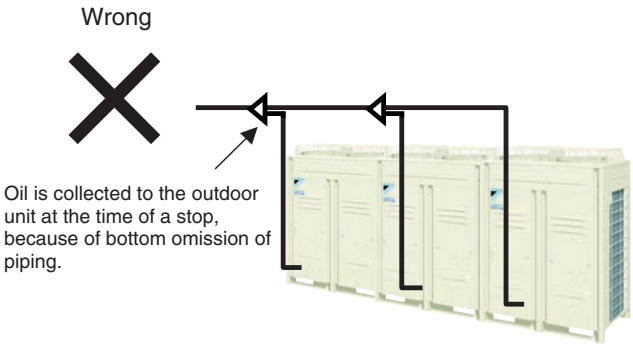


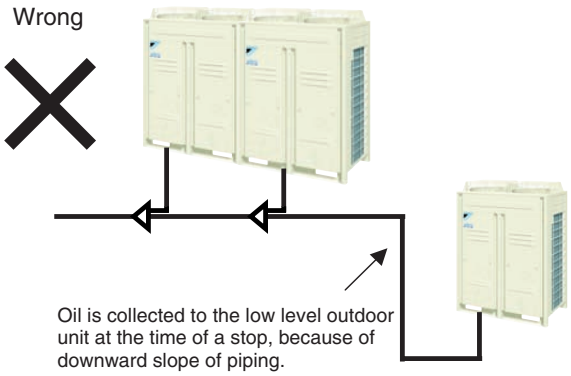
In the case of 2m or more



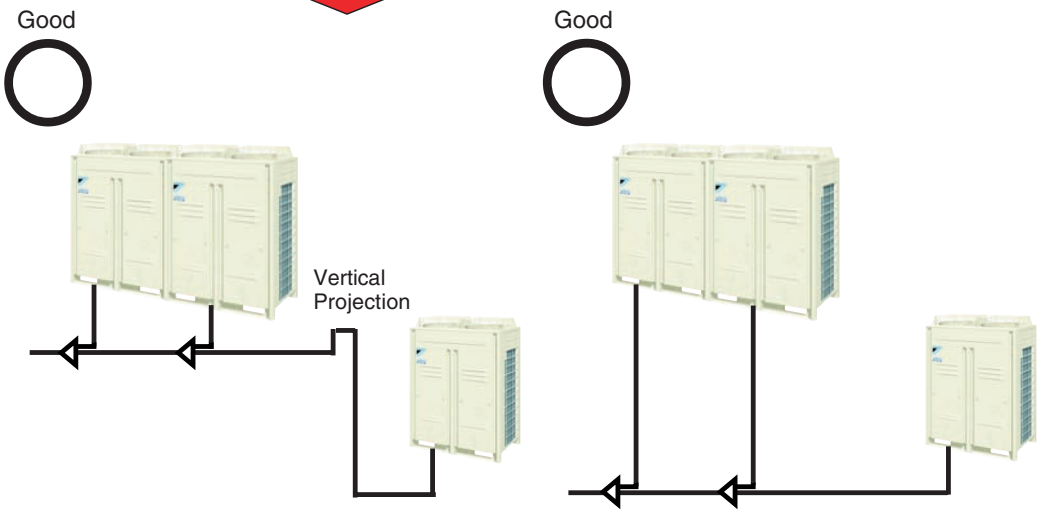


6.2 The Example of A Wrong Pattern





The example of installation on which oil is not collected.



Max.allowable Piping Length	Outdoor Unit - Multi Connection Piping Kit	Actual piping length 10m or less, equivalent length 13m or less
	Multi Connection Piping Kit - Indoor Unit	Actual piping length 165m or less, equivalent length 190m or less, the total extension 1000m or less
	REFNET Joint - Indoor Unit	Actual piping length 40m or less (Refer to Page 771, 772 Note 2 in case of up to 90m)
Allowable Level Difference	Outdoor Unit - Outdoor Unit	5m or less
	Outdoor Unit - Indoor Unit	50m or less ★ 90m or less (when an outdoor unit is lower than indoor units: 40m or less in case of RXYQ5P(A))
	Indoor Unit - Indoor Unit	15m or less

Note: ★ Available on request if the outdoor unit is above.

16

7. Refrigerant Piping

Note

- All field piping must be installed by a licensed refrigeration technician and must comply with relevant local and national regulations.
- After piping work is complete, do not under any circumstances open the shutoff valve until **"8. Field Wiring"** and **"11. Checking of Device and Installation Conditions"** are complete.
- Do not use flux when brazing the refrigerant piping. Use the phosphor copper brazing filler metal (BCuP-2: JIS Z 3264/B-Cu93P-710/795: ISO 3677) which does not require flux.
  (Flux has extremely harmful influence on refrigerant piping systems. For instance, if the chlorine based flux is used, it will cause pipe corrosion or, in particular, if the flux contains fluorine, it will damage the refrigerant oil.)

7.1 Selection of Piping Material and Refrigerant Branching Kit

- Use only pipes which are clean inside and outside and which do not accumulate harmful sulfur, oxidants, dirt, cutting oils, moisture, or other contamination. (Foreign materials inside pipes including oils for fabrication must be 30mg/10m or less.)
- Use the following items for the refrigerant piping.
  Material: Jointless phosphor-deoxidized copper pipe
  Size: See "7-5 Example of Connection" to determine the correct size.
  Thickness: Select a thickness for the refrigerant piping which complies with national and local laws.
  For R-410A, the design pressure is 4.0 MPa (40-bar).
  The minimum thickness of piping according to Japan's High-Pressure Gas Safety Law (as of January 2003) is shown below.
  Types (O type, 1/2H type) in the table indicate the material types specified in JIS H 3300.

(unit: mm)

Temper grade	O type			
outer diameter	ϕ6.4	ϕ9.5	ϕ12.7	ϕ15.9
smallest thickness	0.80	0.80	0.80	0.99

(unit: mm)

Temper grade	1/2H type							
outer diameter	ϕ19.1	ϕ22.2	ϕ25.4	ϕ28.6	ϕ31.8	ϕ34.9	ϕ38.1	ϕ41.3
smallest thickness	0.80	0.80	0.88	0.99	1.10	1.21	1.32	1.43

- For piping work, follow the maximum tolerated length, difference in height, and length after a branch indicated in the **"7-5 Example of connection"**.
- A refrigerant branching kit (sold separately) is needed for piping branches and connection of piping between outdoor unit (in case of multi system).
  Use only separately sold items selected specifically according to the refrigerant branch kit selection in the **"7-5 Example of connection"**.

7.2 Protection Against Contamination when Installing Pipes

Protect the piping to prevent moisture, dirt, dust, etc. from entering the piping.

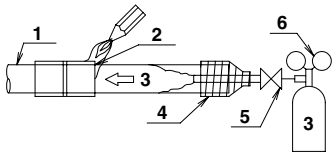
Place	Installation period	Protection method
Outdoor	More than a month	Pinch the pipe
	Less than a month	Pinch or tape the pipe
Indoor	Regardless of the period	

Note

Exercise special caution to prevent dirt or dust when passing piping through holes in walls and when passing pipe edges to the exterior.

7.3 Pipe Connection

- Be sure to perform nitrogen permutation or nitrogen blow when brazing. **(Refer to next figure)**
  Brazing without performing nitrogen permutation or nitrogen blow into the piping will create large quantities of oxidized film on the inside of the pipes, adversely affecting valves and compressors in the refrigerating system and preventing normal operation.



1. Refrigerant pipe
2. Location to be brazed
3. Nitrogen
4. Taping
5. Handy valve
6. Regulator

1. The pressure regulator for the nitrogen released when doing the brazing should be set to 0.02 MPa (about 0.2kg/cm^2:Enough to feel a slight breeze on your cheek).

Note

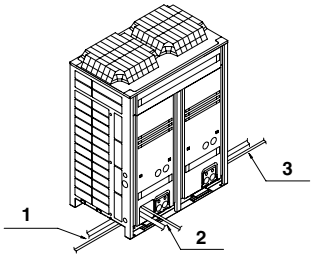
Do not use anti-oxidants when brazing the pipe joints.
Residue can clog pipes and break equipment.

7.4 Connecting the Refrigerant Piping

(1) Direction to bring out the pipes

The local interunit piping can be connected either forward or to the sides (taken out through the bottom) as shown in next figure.

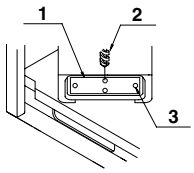
(When passing out through the bottom, use the knock hole in the bottom frame.)



1. Left-side connection
2. Front connection
3. Right-side connection

Precautions when knocking out knock holes

- Open knock hole in the base frame by drilling the 4 concave around it with a 6mm bit. (Refer to next figure)

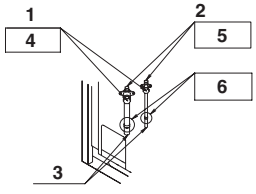


1. Knock hole
2. Drill
3. Concave section

- Be sure to avoid damaging the casing
- After knocking out the holes, we recommend you paint the edges and areas around the edges using the repair paint to prevent rusting.
- When passing electrical wiring through the knock holes, remove any burrs and protect the wiring with a conduit or bushings, making sure not to damage the wiring.

(2) Removing Pinch Piping

- When connecting refrigerant piping to an outdoor unit, remove the pinch piping. (Refer to next figure)
- Pinch piping should be removed using the procedure in next figure.



1. Shutoff valve (liquid side · gas side)
2. Service port
3. Pinch piping
4. Procedure 1:
   Confirm the shutoff valve is closed.
5. Procedure 2:
   Connect a charge hose to the service port of the liquid side and gas side shutoff valves and remove the gas from the pinch piping.
6. Procedure 3:
   After removing the gas from the pinch piping, dissolve the brazing using a burner and remove the pinch piping.

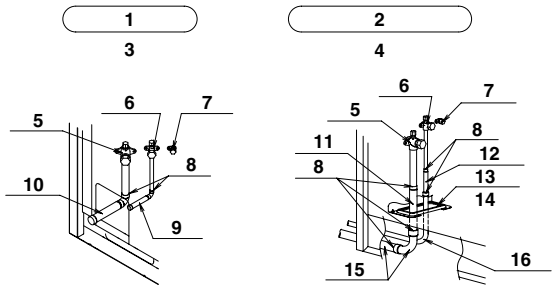
16

Caution

After removing the gas, remove the pinch piping.
Any gas remaining inside may blow off the pinch piping when you dissolve the brazing, causing damage.

(3) Connecting refrigerant piping to outdoor units

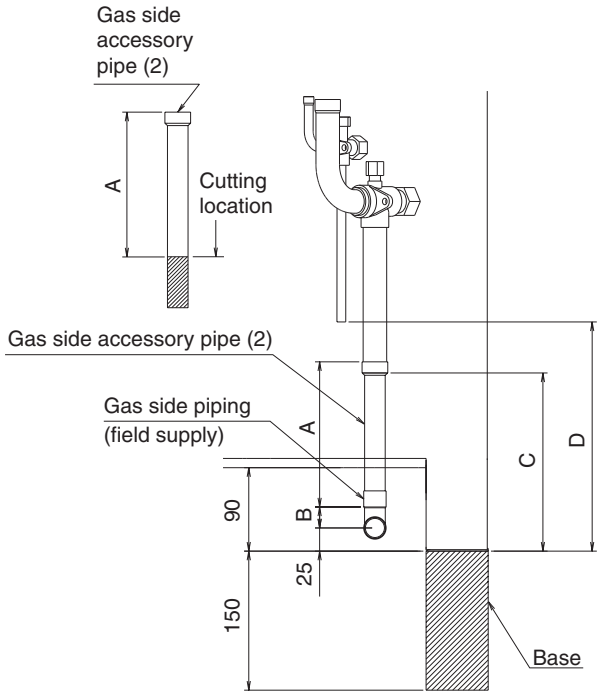
<In case of single system: 5-18HP type>



1. If connected to the front
2. When connected at lateral side (bottom)
3. Remove the shutoff valve cover to connect.
4. Remove the knock hole on the bottom frame and route the piping under the bottom frame.
5. Gas side shutoff valve
6. Liquid side shutoff valve
7. Refrigerant charge port
8. Brazing
9. Liquid side accessory pipe (1)
10. Gas side accessory pipe (1)
11. Gas side accessory pipe (2)
12. Liquid side accessory pipe (2)
13. Knockout hole
14. Punch the knock hole.
15. Gas side piping (field supply)
16. Liquid side piping (field supply)

Processing the Gas side accessory pipe (2)

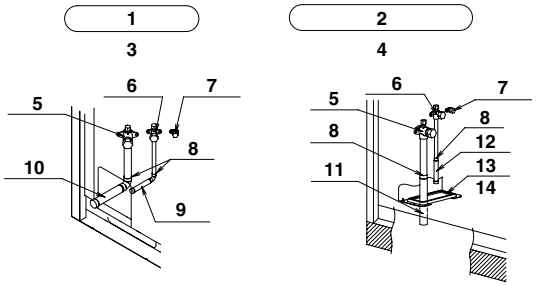
Only in case of connecting at lateral side, cut the Gas side accessory pipe (2) referring the figure below.



(mm)

Model	A	B	C	D
5HP type	166	16	199	246
8HP type	156	17	188	247
10HP type	156	23	192	247
12HP type	150	29	192	247
14·16·18HP type	150	29	192	251

<In case of multi system: 20-54HP type>



1. If connected to the front
2. When connected at lateral side (bottom)
3. Remove the shutoff valve cover to connect.
4. Remove the knock hole on the bottom frame and route the piping under the bottom frame.
5. Gas side shutoff valve
6. Liquid side shutoff valve
7. Refrigerant charge port
8. Brazing
9. Liquid side accessory pipe (1)
10. Gas side accessory pipe (1)
11. Gas side accessory pipe (2)
12. Liquid side accessory pipe (2)
13. Knockout hole
14. Punch the knock hole.

Note

<Connecting Refrigerant Piping>

- When connecting the piping on site, be sure to use the accessory piping.
- Make sure the onsite piping does not come into contact with other piping or the bottom frame or side panels of the unit.

<Multi Systems>

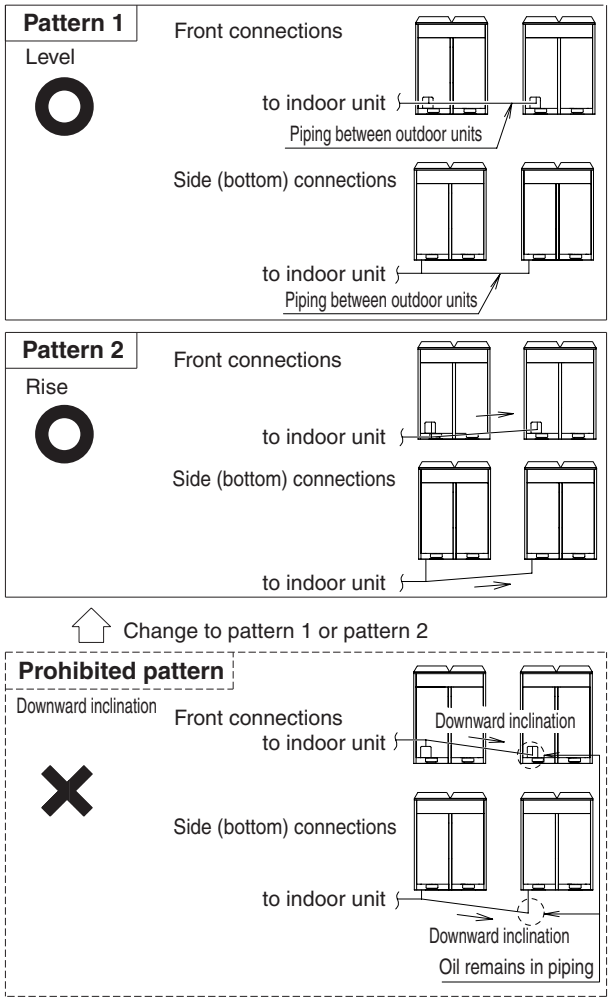
- The 5HP type cannot be used as an independent unit in a multi system.
- The Outdoor unit multi connection piping kit (sold separately) is needed when connecting piping between outdoor units.
  Refer to the installation manual that comes with the kit when doing this piping work.

16

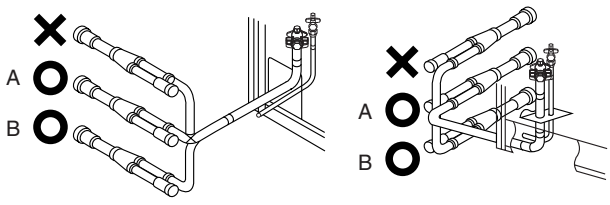
(4) Precautions when connecting piping between outdoor units (In case of multi system)

The Outdoor unit multi connection piping kit (sold separately) is needed to connect piping between outdoor units in multi system. Only proceed with piping work after considering the limitations on installation listed here, always referring to the kit's installation manual.

1. The piping between outdoor units must be installed level (Pattern 1) or with a rise (Pattern 2). Otherwise oil may pool in the pipes.



2. To avoid the risk of oil detention in the stopping unit, always connect the shutoff valve and the piping between outdoor units as shown in the figure A or figure B.



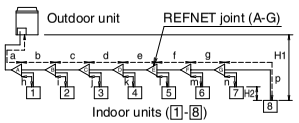
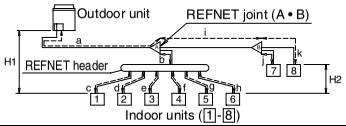
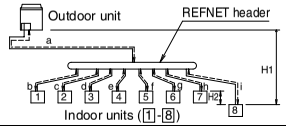
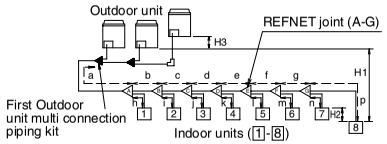
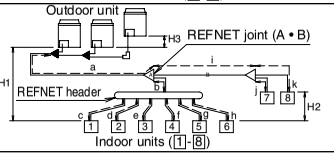
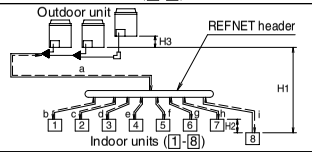
Front connections Side (bottom) connections

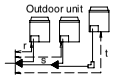
Example of connection

(Connection of 8 indoor units)

(∗1) " ◄— " indicate the Outdoor unit multi connection piping kit

(∗2) In case of multi outdoor system, re-read to the first Outdoor unit multi connection piping kit as seen from the indoor unit.

			Example refrigerant branch using REFNET joint	Example refrigerant branch using REFNET joint and REFNET header	Example refrigerant branch using REFNET header
		Single outdoor system			
		Multi outdoor system			
Maximum allowable length	Between outdoor (∗2) and indoor units	Actual pipe length	Pipe length between outdoor (∗2) and indoor units ≤ 165m		
			Example unit 8 : a + b + c + d + e + f + g + p ≤ 165m	Example unit 6 : a + b + h ≤ 165m, unit 8 : a + i + k ≤ 165m	Example unit 8 : a + i ≤ 165m
		Equivalent length	Equivalent pipe length between outdoor (∗2) and indoor units ≤ 190m (assume equivalent pipe length of REFNET joint to be 0.5m, that of REFNET header to be 1m, calculation purposes) (See Note 1 - Next page)		
		Total extension length	Total pipe length from outdoor unit (∗2) to all indoor units ≤ 1000m		
	Between outdoor unit and Outdoor unit multi connection piping kit (Only for multi system)	Actual pipe length Equivalent length	Pipe length between outdoor unit and Outdoor unit multi connection piping kit ≤ 10m, Equivalent length between outdoor unit and Outdoor unit multi connection piping kit ≤ 13m		
Allowable height length	Between outdoor and indoor units	Difference in height	Difference in height between outdoor and indoor units (H1) ≤ 50m (≤ 90m if the outdoor unit is below)		
	Between indoor and indoor units	Difference in height	Difference in height between indoor units (H2) ≤ 15m		
	Between outdoor and outdoor units	Difference in height	Difference in height between outdoor unit (H3) ≤ 5m		
Allowable length after the branch		Actual pipe length	Pipe length from first refrigerant branch kit (either REFNET joint or REFNET header) to indoor unit ≤ 40m (See Note 2 - Next page)		
			Example unit 8 : b + c + d + e + f + g + p ≤ 40m	Example unit 6 : b + h ≤ 40m, unit 8 :i + k ≤ 40m	Example unit 8 : i ≤ 40m



r ≤ 10m (Equivalent length: ≤ 13m)
s ≤ 10m (Equivalent length: ≤ 13m)
t ≤ 10m (Equivalent length: ≤ 13m)

Refrigerant branch kit selection

Refrigerant branch kits can only be used with R410A.

⚠ • When multi outdoor system are installed, be sure to use the special separately sold Outdoor unit multi connection piping kit.
The table at right shows how to select the proper kit.

How to select the REFNET joint

- When using REFNET joint at the first branch counted from the outdoor unit side. Choose from the following table in accordance with the outdoor unit capacity type. (Example: REFNET joint A)

Outdoor unit capacity type	Refrigerant branch kit name
5HP type	KHRP26A22T
8, 10HP type	KHRP26A33T
12~22HP type	KHRP26A72T
24HP type~	KHRP26A73T + KHRP26M73TP

- Choose the REFNET joints other than that for the first branch from the following table in accordance with the total capacity index of all the indoor units connected below the REFNET joint.

Indoor unit total capacity index	Refrigerant branch kit name
< 200	KHRP26A22T
200 ≤ x< 290	KHRP26A33T
290 ≤ x< 640	KHRP26A72T
640 ≤	KHRP26A73T + KHRP26M73TP

How to select the REFNET header

- Choose from the following table in accordance with the total capacity index of all the indoor units connected below the REFNET header.
- Note: 250 type indoor unit cannot be connected below the REFNET header.

Indoor unit total capacity index	Refrigerant branch kit name
< 200	KHRP26M22H (Max. 4 branch)
200 ≤ x< 290	KHRP26M33H (Max. 8 branch)
290 ≤ x< 640	KHRP26M72H (Max. 8 branch) (See Note 3 - Next page)
640 ≤	KHRP26M73H (Max. 8 branch) + KHRP26M73HP

How to select the Outdoor unit multi connection piping kit (This is required when the system is multi outdoor unit system.)

- Choose from the following table in accordance with the number of outdoor units.

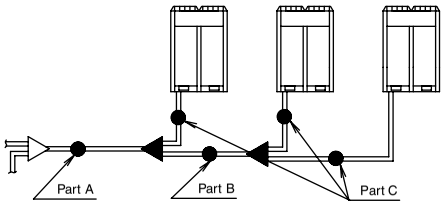
Number of outdoor units	Connection piping kit name
2 units	BHFP22P100
3 units	BHFP22P151

Example for indoor units connected downstream	Example REFNET joint C: indoor units 3+4+5+6+7+8	Example REFNET joint B: indoor units 7+8 Example REFNET header: indoor units 1+2+3+4+5+6	Example REFNET header: indoor units 1+2+3+4+5+6+7+8

Pipe size selection

⚠ **Caution**
The thickness of the pipes in the table shows the requirements of Japanese High Pressure Gas Control low. (As of Jan. 2003)
The thickness and material shall be selected in accordance with local code.

For the multi outdoor unit system, select in accordance with the following figure.



Temper grade and wall thickness for pipes.
(Temper grade, O type and 1/2H type indicate the material types specified in JIS H 3300.)

(Unit:mm)

Copper tube O.D.	Copper tube W.T. (Minimum requirement)	Temper grade
ϕ6.4	0.80	O type
ϕ9.5	0.80	
ϕ12.7	0.80	
ϕ15.9	0.99	
ϕ19.1	0.80	1/2H type
ϕ22.2	0.80	
ϕ25.4	0.88	
ϕ28.6	0.99	
ϕ31.8	1.10	
ϕ34.9	1.21	
ϕ38.1	1.32	
ϕ41.3	1.43	

Piping between Outdoor unit and first refrigerant branch kit.
Piping between first Outdoor unit multi connection piping kit and first refrigerant branch kit. (Part A)

- Choose from the following table in accordance with the outdoor unit capacity type.

Piping between Outdoor unit multi connection piping kits. (Part B)
Piping between outdoor unit and Outdoor unit multi connection piping kit. (Part C)

- Choose from the following table in accordance with the total capacity type of all the outdoor units connected above Outdoor unit multi connection piping kit.

(Unit:mm)

Outdoor unit capacity type	Piping size (O.D.)	
	Gas pipe	Liquid pipe
5HP type	ϕ15.9	ϕ9.5
8HP type	ϕ19.1	
10HP type	ϕ22.2	
12~16HP type	ϕ28.6	ϕ12.7
18~22HP type		ϕ15.9
24HP type	ϕ34.9	
26~34HP type		ϕ19.1
36~54HP type	ϕ41.3	

(See Note 1 - Next page)

Piping between refrigerant branch kits

- Choose from the following table in accordance with the total capacity index of all the indoor units connected below this.
- Do not let the connection piping exceed the main refrigerant piping size. (Unit:mm)

Indoor unit total capacity index	Piping size (O.D.)	
	Gas pipe	Liquid pipe
< 150	ϕ15.9	ϕ9.5
150 ≤ x< 200	ϕ19.1	
200 ≤ x< 290	ϕ22.2	
290 ≤ x< 420	ϕ28.6	ϕ12.7
420 ≤ x< 640		ϕ15.9
640 ≤ x< 920	ϕ34.9	ϕ19.1
920 ≤	ϕ41.3	

Piping between refrigerant branch kit and indoor unit

- Match to the size of the connection piping on the indoor unit. (Unit:mm)

Indoor unit capacity type	Piping size (O.D.)	
	Gas pipe	Liquid pipe
20 · 25 · 32 · 40 · 50 type	ϕ12.7	ϕ6.4
63 · 80 · 100 · 125 type	ϕ15.9	ϕ9.5
200 type	ϕ19.1	
250 type	ϕ22.2	

How to calculate the additional refrigerant to be charged

Additional refrigerant to be charged : R (kg)
(R should be rounded off in units of 0.1 kg.)

$$R = \left(\begin{array}{l} (\text{Total length(m) of liquid piping size at } \phi 22.2) \times 0.37 + (\text{Total length(m) of liquid piping size at } \phi 19.1) \times 0.26 \\ + (\text{Total length(m) of liquid piping size at } \phi 15.9) \times 0.18 + (\text{Total length(m) of liquid piping size at } \phi 12.7) \times 0.12 \\ + (\text{Total length(m) of liquid piping size at } \phi 9.5) \times 0.059 + (\text{Total length(m) of liquid piping size at } \phi 6.4) \times 0.022 \end{array} \right) + \boxed{\begin{array}{c}\text{REFRIGERANT AMOUNT FOR HEAT PUMP SYSTEM} \\ \text{TABLE A}\end{array}} + \boxed{\begin{array}{c}\text{REFRIGERANT AMOUNT FOR EXCEEDING CONNECTION CAPACITY OF INDOOR UNIT} \\ \text{TABLE B}\end{array}}$$

TABLE A

MODEL NAME	THE AMOUNT OF REFRIGERANT
RX(Y)Q5P	0kg
RX(Y)Q8 ~ 12P	0.5kg
RX(Y)Q14 ~ 22P	1.0kg
RX(Y)Q24 ~ 30P	1.5kg
RX(Y)Q32 ~ 38P	2.0kg
RX(Y)Q40 ~ 48P	2.5kg
RX(Y)Q50 ~ 54P	3.0kg

TABLE B

INDOOR CONNECTION CAPACITY [X]	MODEL NAME [RX(Y)Q ~ P]														
	5P~8P	10P	12P~14P	16P	18P~22P	24P~28P	30P~32P	34P	36P	38P	40P	42P~44P	46P~48P	50P	52P~54P
X ≤ 100%	0kg														
100% < X ≤ 120%	0.5kg														
120% < X ≤ 130%	0.5kg							1.0kg							
130% < X ≤ 140%	0.5kg				1.0kg						1.5kg				
140% < X ≤ 150%	0.5kg				1.0kg				1.5kg					2.0kg	
150% < X ≤ 160%	0.5kg		1.0kg			1.5kg				2.0kg					2.5kg
160% < X ≤ 170%	0.5kg	1.0kg			1.5kg				2.0kg					2.5kg	
170% < X ≤ 180%	0.5kg	1.0kg		1.5kg		2.0kg			2.5kg					3.0kg	
180% < X ≤ 190%	0.5kg	1.0kg		1.5kg		2.0kg			2.5kg		3.0kg			3.5kg	
190% < X ≤ 200%	0.5kg	1.0kg		1.5kg		2.0kg		2.5kg			3.0kg		3.5kg		4.0kg

Example for refrigerant branch using REFNET joint and REFNET header for the systems and each pipe length as shown below.

Outdoor system : RXYQ34P~
Total capacity of indoor unit : 116%

a : ϕ19.1 × 30m	d : ϕ9.5 × 10m	g : ϕ6.4 × 10m	j : ϕ6.4 × 10m
b : ϕ15.9 × 10m	e : ϕ9.5 × 10m	h : ϕ6.4 × 20m	k : ϕ6.4 × 9m
c : ϕ9.5 × 10m	f : ϕ9.5 × 10m	i : ϕ12.7 × 10m	

$R = (\boxed{30 \times 0.26} + \boxed{10 \times 0.18} + \boxed{10 \times 0.12} + \boxed{40 \times 0.059} + \boxed{49 \times 0.022}) + \boxed{2.0} + \boxed{0.5}$

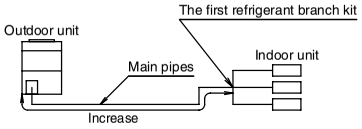
a b i c+d+e+f g+h+i+j+k RXYQ34P~ 116%

$= 16.738 \Rightarrow \boxed{16.7kg}$

Round off units of 0.1 kg.

*Note 1

When the equivalent pipe length between outdoor and indoor units is 90m or more, the size of main pipes (both gas-side and liquid-side) must be increased.
Depending on the length of the piping, the capacity may drop, but even in such case it is able to increase the size of main pipes.



■ Diameter of above case

Model	Gas	Liquid
RXYQ5 Type	ϕ19.1	Not Increased
RXYQ8 Type	ϕ22.2	ϕ12.7
RXYQ10 Type	ϕ25.4*	ϕ12.7
RXYQ12 Type	Not Increased	ϕ15.9
RXYQ14 Type	Not Increased	ϕ15.9
RXYQ16 Type	ϕ31.8*	ϕ15.9
RXYQ18 Type	ϕ31.8*	ϕ19.1

Model	Gas	Liquid
RXYQ20 Type	ϕ31.8*	ϕ19.1
RXYQ22 Type	ϕ31.8*	ϕ19.1
RXYQ24 Type	Not Increased	ϕ19.1
RXYQ26 Type	ϕ38.1*	ϕ22.2
RXYQ28 Type	ϕ38.1*	ϕ22.2
RXYQ30 Type	ϕ38.1*	ϕ22.2
RXYQ32 Type	ϕ38.1*	ϕ22.2

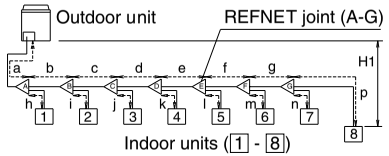
Model	Gas	Liquid
RXYQ34 Type	ϕ38.1*	ϕ22.2
RXYQ36 Type	Not Increased	ϕ22.2
RXYQ38 Type	Not Increased	ϕ22.2
RXYQ40 Type	Not Increased	ϕ22.2
RXYQ42 Type	Not Increased	ϕ22.2
RXYQ44 Type	Not Increased	ϕ22.2
RXYQ46 Type	Not Increased	ϕ22.2

Model	Gas	Liquid
RXYQ48 Type	Not Increased	ϕ22.2
RXYQ50 Type	Not Increased	ϕ22.2
RXYQ52 Type	Not Increased	ϕ22.2
RXYQ54 Type	Not Increased	ϕ22.2

*If available on the site, use this size.
Otherwise, it can not be increased.

*Note 2

Allowable length after the first refrigerant branch kit to indoor units is 40 m or less, however it can be extended up to **90** m if all the following conditions are satisfied. (In case of " **Branch with REFNET joint** ")

Required Conditions	Example Drawings	
1. It is necessary to increase the pipe size between the first branch kit and the final branch kit. (Reducers must be procured on site) However, the pipes that are same pipe size with main pipe must not be increased.	8 b+c+d+e+f+g+p ≤ 90 m increase the pipe size of b, c, d, e, f, g	Increase the pipe size as follows ϕ 9.5→ϕ 12.7 ϕ15.9→ϕ 19.1 ϕ22.2→ϕ 25.4* ϕ34.9→ϕ 38.1* ϕ12.7→ϕ 15.9 ϕ19.1→ϕ 22.2 ϕ28.6→ϕ 31.8*
2. For calculation of Total extension length, the actual length of above pipes must be doubled. (except main pipe and the pipes that are not increased)	a+b×2+c×2+d×2+e×2+f×2+g×2 +h+i+j+k+l+m+n+p ≤ 1000 m	
3. Indoor unit to the nearest branch kit ≤ 40 m	h, i, j..... p ≤ 40 m	
4. The difference between [Outdoor unit to the farthest indoor unit] and [Outdoor unit to the nearest indoor unit] ≤ 40 m	The farthest indoor unit 8 The nearest indoor unit 1 (a+b+c+d+e+f+g+p)-(a+h) ≤ 40 m	

*If available on the site, use this size.
Otherwise it can not be increased.

*Note 3

If the pipe size above the REFNET header is ϕ34.9 or more, KHRP26M73HP is required.

8. Field Wiring

Caution

- All field wiring and components must be installed by a licensed electrician and must comply with relevant local and national regulations.
- Be sure to use a dedicated power circuit. Never use a power supply shared by another appliance.
- Never install a phase advancing capacitor. As this unit is equipped with an inverter, installing a phase advancing capacitor will not only deteriorate power factor improvement effect, but also may cause capacitor abnormal heating accident due to high-frequency waves.
- Only proceed with wiring work after blocking off all power.
- Always ground wires in accordance with relevant local and national regulations.
- This machine includes an inverter device. Connect earth and leave charge to eliminate the impact on other devices by reducing noise generated from the inverter device and to prevent leaked current from being charged in the outer hull of the product.
- Do not connect the ground wire to gas pipes, sewage pipes, lightning rods, or telephone ground wires.
  Gas pipes: can explode or catch fire if there is a gas leak.
  Sewage pipes: no grounding effect is possible if hard plastic piping is used.
  Telephone ground wires and lightning rods: dangerous when struck by lightning due to abnormal rise in electrical potential in the grounding.
- Be sure to install an earth leakage circuit breaker.
  This unit uses an inverter, so install the earth leakage circuit breaker that be capable of handling high harmonics in order to prevent malfunctioning of the earth leakage circuit breaker itself.
- Earth leakage circuit breaker which are especially for protecting ground-faults should be used in conjunction with main switch or fuse for use with wiring.

Note

- Electrical wiring must be done in accordance with the wiring diagrams and the description herein.
- Do not operate until refrigerant piping work is completed.
  (If operated before complete the piping work, the compressor may be broken down.)
- Never remove thermistor, sensor or etc. when connecting power wiring and transmission wiring.
  (If operated with thermistor, sensor or etc. removed, the compressor may be broken down.)
- This product have reversed phase protection detector that only works when the power is turned on. If there exists black out or the power goes on and off which the product is operating, attach a reversed phase protection circuit locally. Running the product in reversed phase may break the compressor and other parts.
- Attach the power wire securely. Introducing power with a missing N-phase or with a mistaken N-phase will break the unit.
- Never connect the power supply in reversed phase.
  The unit can not operate normally in reversed phase.
  If you connect in reversed phase, replace two of the three phases.
- Make sure the electrical unbalance ratio is no greater than 2%. If it is larger than this, the unit's lifespan will be reduced.
  If the ratio exceeds 4%, the unit will shut down and an malfunction code will be displayed on the indoor remote controller.
- Connect the wire securely using designated wire and fix it with attached clamp without applying external pressure on the terminal parts (terminal for power wiring, terminal for transmission wiring and earth terminal).

8.1 Power Circuit, Safety Device, and Cable Requirements

- A power circuit (see the following table) must be provided for connection of the unit. This circuit must be protected with the required safety devices, i.e. a main switch, a slow blow fuse on each phase and an earth leakage circuit breaker.
- When using residual current operated circuit breakers, be sure to use a high-speed type (1 second or less) 200mA rated residual operating current.
- Use copper conductors only.
- Use insulated wire for the power cord.
- Select the power supply cable type and size in accordance with relevant local and national regulations.
- Specifications for local wiring are in compliance with IEC60245.
- Use wire type H05VV when protected pipes are used.
  Use wire type H07RN-F when protected pipes are not used.

50Hz ( ): High COP Series

Model Name		Phase and frequency	Voltage	Minimum circuit amp.		Recommended fuses	
Normal	High COP			Normal	High COP	Normal	High COP
RXYQ5PAY1(E)		ϕ 3, 50Hz	380-415V	11.9A		15A	
RXYQ8PAY1(E)		ϕ 3, 50Hz	380-415V	18.5A		25A	
RXYQ10PAY1(E)		ϕ 3, 50Hz	380-415V	21.6A		25A	
RXYQ12PAY1(E)		ϕ 3, 50Hz	380-415V	22.7A		25A	
RXYQ14PAY1(E)		ϕ 3, 50Hz	380-415V	31.5A		35A	
RXYQ16PAY1(E)	(RXYQ16PAHY1)	ϕ 3, 50Hz	380-415V	31.5A	(37.0A)	35A	(50A)
RXYQ18PAY1(E)	(RXYQ18PAHY1)	ϕ 3, 50Hz	380-415V	32.5A	(40.1A)	40A	(50A)
RXYQ20PAY1(E)		ϕ 3, 50Hz	380-415V	41.2A		50A	
RXYQ22PAY1(E)		ϕ 3, 50Hz	380-415V	44.3A		50A	
RXYQ24PAY1(E)	(RXYQ24PAHY1)	ϕ 3, 50Hz	380-415V	50.0A	(55.5A)	60A	(70A)
RXYQ26PAY1(E)	(RXYQ26PAHY1)	ϕ 3, 50Hz	380-415V	51.0A	(58.6A)	60A	(70A)
RXYQ28PAY1(E)	(RXYQ28PAHY1)	ϕ 3, 50Hz	380-415V	54.1A	(59.7A)	60A	(70A)
RXYQ30PAY1(E)	(RXYQ30PAHY1)	ϕ 3, 50Hz	380-415V	55.2A	(62.8A)	70A	(70A)
RXYQ32PAY1(E)	(RXYQ32PAHY1)	ϕ 3, 50Hz	380-415V	63.0A	(63.9A)	70A	(80A)
RXYQ34PAY1(E)	(RXYQ34PAHY1)	ϕ 3, 50Hz	380-415V	64.0A	(67.0A)	80A	(80A)
RXYQ36PAY1(E)	(RXYQ36PAHY1)	ϕ 3, 50Hz	380-415V	65.0A	(68.1A)	80A	(80A)
RXYQ38PAY1(E)	(RXYQ38PAHY1)	ϕ 3, 50Hz	380-415V	73.7A	(76.9A)	90A	(90A)
RXYQ40PAY1(E)	(RXYQ40PAHY1)	ϕ 3, 50Hz	380-415V	81.5A	(76.9A)	90A	(90A)
RXYQ42PAY1(E)	(RXYQ42PAHY1)	ϕ 3, 50Hz	380-415V	82.5A	(77.9A)	100A	(90A)
RXYQ44PAY1(E)	(RXYQ44PAHY1)	ϕ 3, 50Hz	380-415V	83.5A	(85.7A)	100A	(100A)
RXYQ46PAY1(E)	(RXYQ46PAHY1)	ϕ 3, 50Hz	380-415V	86.6A	(86.7A)	100A	(100A)
RXYQ48PAY1(E)	(RXYQ48PAHY1)	ϕ 3, 50Hz	380-415V	87.7A	(94.5A)	100A	(110A)
RXYQ50PAY1(E)	(RXYQ50PAHY1)	ϕ 3, 50Hz	380-415V	96.5A	(95.5A)	110A	(110A)
RXYQ52PAY1(E)		ϕ 3, 50Hz	380-415V	96.5A		110A	
RXYQ54PAY1(E)		ϕ 3, 50Hz	380-415V	97.5A		110A	

Note

The above table indicates power specifications for standard combinations (see 2. INTRODUCTION).

If using anything other than the above combinations like P(A)H Series in a multi system, calculate using the following procedure.

Minimum circuit amp value: add the minimum circuit amp values for each independent unit

Recommended fuse capacity: select the fuse capacity with the next higher value of the calculated minimum circuit amp. multiplied by 1.1.

Ex: Combining the RXYQ30PAHY1 using RXYQ8PAY1, RXYQ10PAY1, and RXYQ12PAY1.

Minimum circuit amp. of the RXYQ8PAY1 in table above = 18.5 A

Minimum circuit amp. of RXYQ10PAY1 in table above = 21.6 A

Minimum circuit amp. of RXYQ12PAY1 in table above = 22.7 A

Accordingly, the minimum circuit amp. of the RXYQ30PAHY1 = 18.5 + 21.6 + 22.7= 62.8 A

Multiplying the result above by 1.1 (62.8 × 1.1) = 69.1 A, so the recommended fuse capacity would be 70 A.

60Hz ( ): High COP Series

Model Name		Phase and frequency	Voltage	Minimum circuit amp.		Recommended fuses	
Normal	High COP			Normal	High COP	Normal	High COP
RXYQ5PAYL		ϕ 3, 60Hz	380V	11.9A		15A	
RXYQ8PAYL		ϕ 3, 60Hz	380V	18.5A		25A	
RXYQ10PAYL		ϕ 3, 60Hz	380V	22.8A		30A	
RXYQ12PAYL		ϕ 3, 60Hz	380V	23.9A		30A	
RXYQ14PAYL		ϕ 3, 60Hz	380V	33.9A		40A	
RXYQ16PAYL	(RXYQ16PAHYL)	ϕ 3, 60Hz	380V	33.9A	(37.0A)	40A	(50A)
RXYQ18PAYL	(RXYQ18PAHYL)	ϕ 3, 60Hz	380V	34.9A	(41.3A)	40A	(50A)
RXYQ20PAYL		ϕ 3, 60Hz	380V	42.4A		50A	
RXYQ22PAYL		ϕ 3, 60Hz	380V	46.7A		60A	
RXYQ24PAYL	(RXYQ24PAHYL)	ϕ 3, 60Hz	380V	52.4A	(55.5A)	60A	(70A)
RXYQ26PAYL	(RXYQ26PAHYL)	ϕ 3, 60Hz	380V	53.4A	(59.8A)	60A	(70A)
RXYQ28PAYL	(RXYQ28PAHYL)	ϕ 3, 60Hz	380V	57.7A	(60.9A)	70A	(70A)
RXYQ30PAYL	(RXYQ30PAHYL)	ϕ 3, 60Hz	380V	58.8A	(65.2A)	70A	(80A)
RXYQ32PAYL	(RXYQ32PAHYL)	ϕ 3, 60Hz	380V	67.8A	(66.3A)	80A	(80A)
RXYQ34PAYL	(RXYQ34PAHYL)	ϕ 3, 60Hz	380V	68.8A	(70.6A)	80A	(80A)
RXYQ36PAYL	(RXYQ36PAHYL)	ϕ 3, 60Hz	380V	69.8A	(71.7A)	80A	(80A)
RXYQ38PAYL	(RXYQ38PAHYL)	ϕ 3, 60Hz	380V	77.3A	(81.7A)	90A	(90A)
RXYQ40PAYL	(RXYQ40PAHYL)	ϕ 3, 60Hz	380V	86.3A	(81.7A)	100A	(90A)
RXYQ42PAYL	(RXYQ42PAHYL)	ϕ 3, 60Hz	380V	87.3A	(82.7A)	100A	(100A)
RXYQ44PAYL	(RXYQ44PAHYL)	ϕ 3, 60Hz	380V	88.3A	(91.7A)	100A	(110A)
RXYQ46PAYL	(RXYQ46PAHYL)	ϕ 3, 60Hz	380V	92.6A	(92.7A)	110A	(110A)
RXYQ48PAYL	(RXYQ48PAHYL)	ϕ 3, 60Hz	380V	93.7A	(101.7A)	110A	(120A)
RXYQ50PAYL	(RXYQ50PAHYL)	ϕ 3, 60Hz	380V	103.7A	(102.7A)	120A	(120A)
RXYQ52PAYL		ϕ 3, 60Hz	380V	103.7A		120A	
RXYQ54PAYL		ϕ 3, 60Hz	380V	104.7A		120A	

Note

The above table indicates power specifications for standard combinations (see 2. INTRODUCTION).

If using anything other than the above combinations in a multi system, calculate using the following procedure.

Minimum circuit amp value: add the minimum circuit amp values for each independent unit

Recommended fuse capacity: select the fuse capacity with the next higher value of the calculated minimum circuit amp. multiplied by 1.1.

Ex: Combining the RXYQ30PAHYL using RXYQ8PAYL, RXYQ10PAYL, and RXYQ12PAYL.

Minimum circuit amp. of the RXYQ8PAYL in table above = 18.5 A

Minimum circuit amp. of RXYQ10PAYL in table above = 22.8 A

Minimum circuit amp. of RXYQ12PAYL in table above = 23.9 A

Accordingly, the minimum circuit amp. of the RXYQ30PAHYL = 18.5 + 22.8 + 23.9 = 65.2A

Multiplying the result above by 1.1 (65.2 × 1.1) = 71.7 A, so the recommended fuse capacity would be 80 A.

60Hz ( ): High COP Series

Model Name		Phase and frequency	Voltage	Minimum circuit amp.		Recommended fuses	
Normal	High COP			Normal	High COP	Normal	High COP
RXYQ5PTL		ϕ 3, 60Hz	220V	20.6A		25A	
RXYQ8PTL		ϕ 3, 60Hz	220V	32.0A		40A	
RXYQ10PTL		ϕ 3, 60Hz	220V	39.4A		45A	
RXYQ12PTL		ϕ 3, 60Hz	220V	41.3A		50A	
RXYQ14PTL		ϕ 3, 60Hz	220V	58.6A		65A	
RXYQ16PTL	(RXYQ16PHTL)	ϕ 3, 60Hz	220V	58.6A	(64.0A)	65A	(70A)
RXYQ18PTL	(RXYQ18PHTL)	ϕ 3, 60Hz	220V	60.3A	(71.4A)	70A	(90A)
RXYQ20PTL		ϕ 3, 60Hz	220V	73.3A		90A	
RXYQ22PTL		ϕ 3, 60Hz	220V	80.7A		90A	
RXYQ24PTL	(RXYQ24PHTL)	ϕ 3, 60Hz	220V	90.6A	(96.0A)	100A	(110A)
RXYQ26PTL	(RXYQ26PHTL)	ϕ 3, 60Hz	220V	92.3A	(103.9A)	110A	(125A)
RXYQ28PTL	(RXYQ28PHTL)	ϕ 3, 60Hz	220V	99.7A	(105.3A)	110A	(125A)
RXYQ30PTL	(RXYQ30PHTL)	ϕ 3, 60Hz	220V	102A	(112.7A)	125A	(150A)
RXYQ32PTL	(RXYQ32PHTL)	ϕ 3, 60Hz	220V	117A	(114.6A)	150A	(150A)
RXYQ34PTL	(RXYQ34PHTL)	ϕ 3, 60Hz	220V	119A	(122.0A)	150A	(150A)
RXYQ36PTL	(RXYQ36PHTL)	ϕ 3, 60Hz	220V	121A	(123.9A)	150A	(150A)
RXYQ38PTL	(RXYQ38PHTL)	ϕ 3, 60Hz	220V	134A	(141.2A)	150A	(175A)
RXYQ40PTL	(RXYQ40PHTL)	ϕ 3, 60Hz	220V	149A	(141.2A)	175A	(175A)
RXYQ42PTL	(RXYQ42PHTL)	ϕ 3, 60Hz	220V	151A	(142.9A)	175A	(175A)
RXYQ44PTL	(RXYQ44PHTL)	ϕ 3, 60Hz	220V	153A	(158.5A)	175A	(200A)
RXYQ46PTL	(RXYQ46PHTL)	ϕ 3, 60Hz	220V	160A	(160.2A)	200A	(200A)
RXYQ48PTL	(RXYQ48PHTL)	ϕ 3, 60Hz	220V	162A	(175.8A)	200A	(200A)
RXYQ50PTL	(RXYQ50PHTL)	ϕ 3, 60Hz	220V	179A	(177.5A)	200A	(200A)
RXYQ52PTL		ϕ 3, 60Hz	220V	179A		200A	
RXYQ54PTL		ϕ 3, 60Hz	220V	181A		200A	

Note

The above table indicates power specifications for standard combinations (see 2. INTRODUCTION).

If using anything other than the above combinations in a multi system, calculate using the following procedure.

Minimum circuit amp value: add the minimum circuit amp values for each independent unit

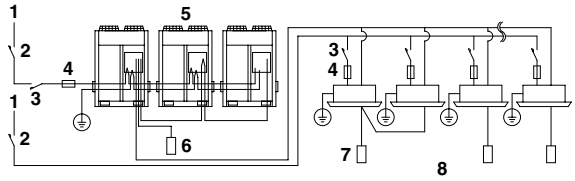
Recommended fuse capacity: select the fuse capacity with the next higher value of the calculated minimum circuit amp. multiplied by 1.1.

Ex: Combining the RXYQ30PTL using RXYQ8PTL, RXYQ10PTL, and RXYQ12PTL.

Minimum circuit amp. of the RXYQ8PTL in table above = 18.5A

Minimum circuit amp. of RXYQ10PTL in table above = 22.8A

8.2 Wiring Connection Example for Whole System



1. Power supply
2. Main switch
3. Earth leakage circuit breaker
4. Fuse
5. Outdoor unit
6. COOL/HEAT selector
7. Remote controller
8. Indoor unit

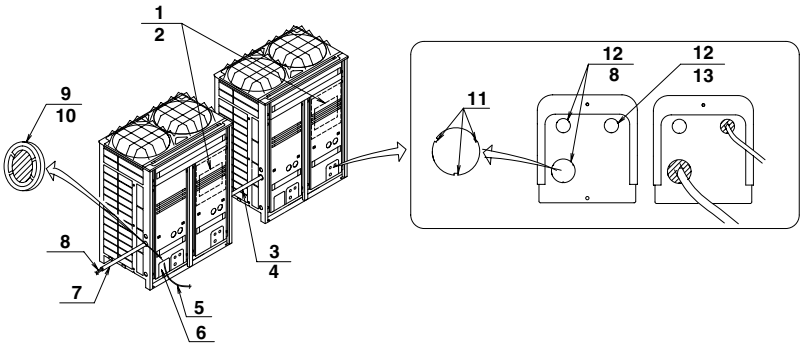
Note

- Make sure the weak electric wiring (i.e. for the remote controller, between units, etc.) and the power wiring do not pass near each other, keeping them at least 50 mm apart.
  Proximity may cause electrical interference, malfunctions, and breakage.
- Be sure to connect the power wiring to the power wiring terminal block and secure it as described in **"8-5 Power Wiring Connection Procedure"**.
- Transmission wiring should be secured as described in **"8-4 Transmission Wiring Connection Procedure"**.
- Secure wiring with clamp such as insulation lock ties to avoid contact with piping.
- Shape the wires to prevent the structure such as the EL. COMPO. BOX lid deforming. And close the cover firmly.
- 5HP type can not compose multi system.

16

8.3 Leading Wire Procedure

- The power wiring and ground wiring are passed out from the power wiring hole on the sides, the front (knock hole) or the bottom frame (knock hole).
- The transmission wiring is passed out from the wiring hole (knock hole) on the front of the unit or from a piping hole.



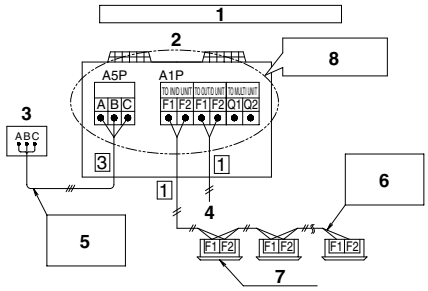
1. Electrical wiring diagram
2. On the back of the EL.COMPO. BOX lid.
3. Power wiring, ground wiring (inside conduit)
4. (When the wiring is routed out through the side panel.)
5. Transmission wiring
6. Pipe opening
7. Conduit
8. For power wiring and ground wiring
9. Through cover
10. Cut off the shaded zones before use.
11. Burr
12. Knockout hole
13. For transmission wiring

Note

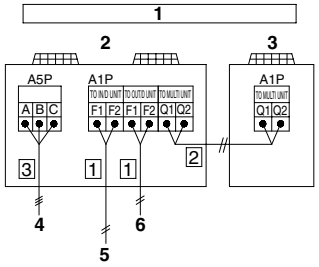
- Open the knock holes with a hammer or the like.
- After knocking out the holes, we recommend you paint the edges and areas around the edges using the repair paint to prevent rusting.
- When passing wiring through the knock holes, remove burrs around the knock holes and protect the wiring with protective tape. **(Refer to figure *)**
- If small animals might enter the unit, block off any gaps (hatching parts in figure 20) with material (field supply).

8.4 Transmission Wiring Connection Procedure

- Referring to next two figures connect the transmission wiring between outdoor unit and indoor unit, outdoor unit and outdoor unit of other system, outdoor unit and outdoor unit of same system (only multi system) or to COOL/HEAT selector.

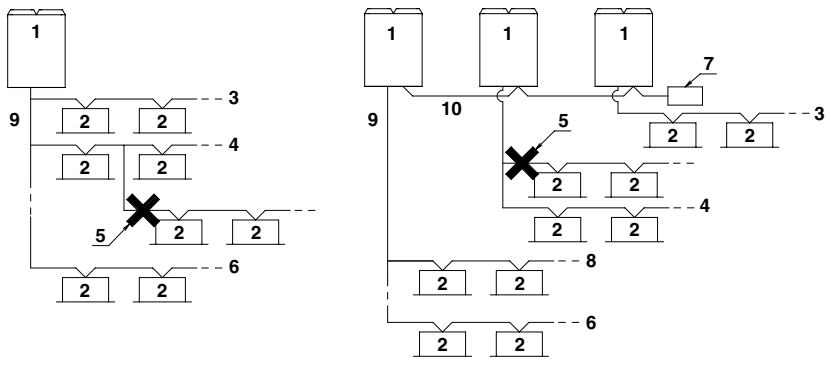


1. Connection example for single system
2. Outdoor unit
3. COOL/HEAT selector
4. To outdoor unit of other system
5. Match up terminal symbols. (Has polarity)
6. Use duplex wires
7. Indoor unit
8. Never connect the power wire



1. Connection example for multi system
2. Outdoor unit A (Master unit)
3. Outdoor unit B (Sub unit)
4. COOL/HEAT selector
5. To indoor unit
6. To outdoor unit of other system

- All transmission wiring is to be procured on site. All wiring should use sheathed vinyl cord 0.75-1.25 mm^2 or cable (duplex). (Triplex only for the COOL/HEAT selector.)
- Transmission wiring should be done within the following limitations.
  If they are exceeded, transmission problems may occur. (About the symbol 1 ~3 , see previous two figures.)
  1 Between outdoor unit and indoor unit
  Between outdoor unit and outdoor unit of other systems
  Max. wiring length : 1,000 m
  Max. total wiring length : 2,000 m
  Max. no. of branches : 16
  [Note]
  No branch is allowed after branch
  (See next figure)
  Max. no. of outdoor units of other system that can be connected
  : 10

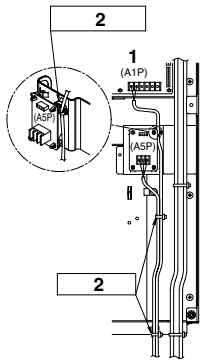


1. Outdoor unit
2. Indoor unit
3. Branch line 1
4. Branch line 2
5. No branch is allowed after branch
6. Main line
7. Central remote controller, etc.
8. Branch line 3
9. Transmission wiring between outdoor unit and indoor unit
10. Transmission wiring between outdoor unit and outdoor unit

16

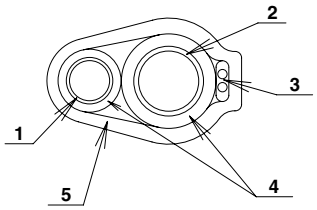
2 Between outdoor unit and outdoor unit of same system
(Only for multi system)
Max. wiring length : 30 m
3 Transmission wiring to COOL/HEAT selector
Max. wiring length : 500 m

- The transmission wiring inside the EL.COMPO.BOX should be secured using the clamp (1) as shown in next figure.



1. In the EL.COMPO.BOX
2. Retain to the EL.COMPO.BOX with the accessory clamp (1).

- Outside the units, the transmission wiring must be finished simultaneously with the local refrigerant piping, and wound with tape (field supply) as shown in next figure.



1. Liquid pipe
2. Gas pipe
3. Transmission wiring
4. Insulation material
5. Finishing tape

- For multi system:
  1. Transmission wiring between outdoor units in the same piping system must be connected to terminals Q1 and Q2 (TO MULTI UNIT).
     Connecting the wires to the F1, F2 (TO OUT/D UNIT) terminals results in system malfunction.
  2. Wiring to other systems should be connected to terminals F1 and F2 (TO OUT/D UNIT) on the PC-board of the master unit. The outdoor unit that connected transmission wiring to indoor unit is the master unit. The others are sub unit.

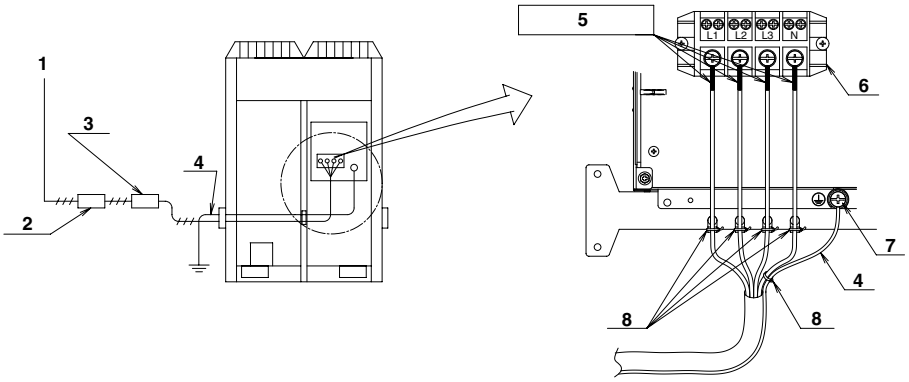
Caution

- Do not connect the power wiring to terminals for the transmission wiring. Doing so would destroy the entire system.
- When connecting wires to the terminal block on the PC-board, too much heat or tightening could damage the PC-board. Attach with care.
  See the table below for the tightening torque of the transmission wiring terminals.

Screw size	Tightening torque (N · m)
M3 (A5P)	0.53 - 0.63
M3.5 (A1P)	0.80 - 0.96

8.5 Power Wiring Connection Procedure

Be sure to connect the power supply wiring to the power supply terminal block and hold it in place using the included clamp as shown in the next figure.

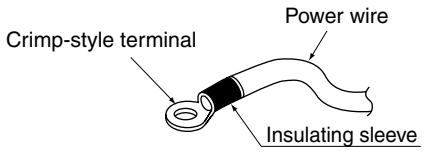


1. Power supply (3N~50Hz 380-415V)
2. Earth leakage circuit breaker
3. Branch switch, Overcurrent breaker
4. Ground wire
5. Attach insulation sleeves
6. Power supply terminal block
7. Ground terminal
8. Clamp (1) (accessory)

- The L1, L2, L3 and N phases of the power wiring should be secured separately to the hook using the included clamp (1).
- The ground wiring should be bound to the power wiring using the included clamp (1) to prevent outside force from being applied to the terminal area.
- Wire so that the ground wiring does not come into contact with the compressor lead wiring. If they touch, this may have an adverse effect on other devices.

Caution

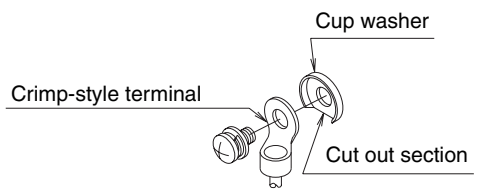
- Be sure to use crimp-style terminal with insulating sleeves for connections. (See the figure below.)



- For wiring, use the designated power wire and connect firmly, then secure to prevent outside pressure being exerted on the terminal board.
- Use an appropriate screwdriver for tightening the terminal screws. A screwdriver with a small head will strip the head and make proper tightening impossible.
- Over-tightening the terminal screws may break them.
  See the following table for the tightening torque of the terminal screws.

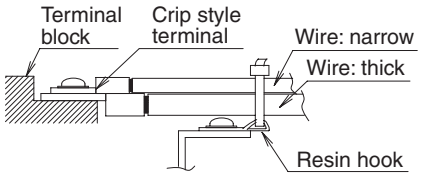
Screw size	Tightening torque (N · m)
M8 Power terminal, ground terminal	5.5~7.3

- When pulling the ground wire out, wire it so that it comes through the cut out section of the cup washer. (See the figure below.) An improper ground connection may prevent a good ground from being achieved.



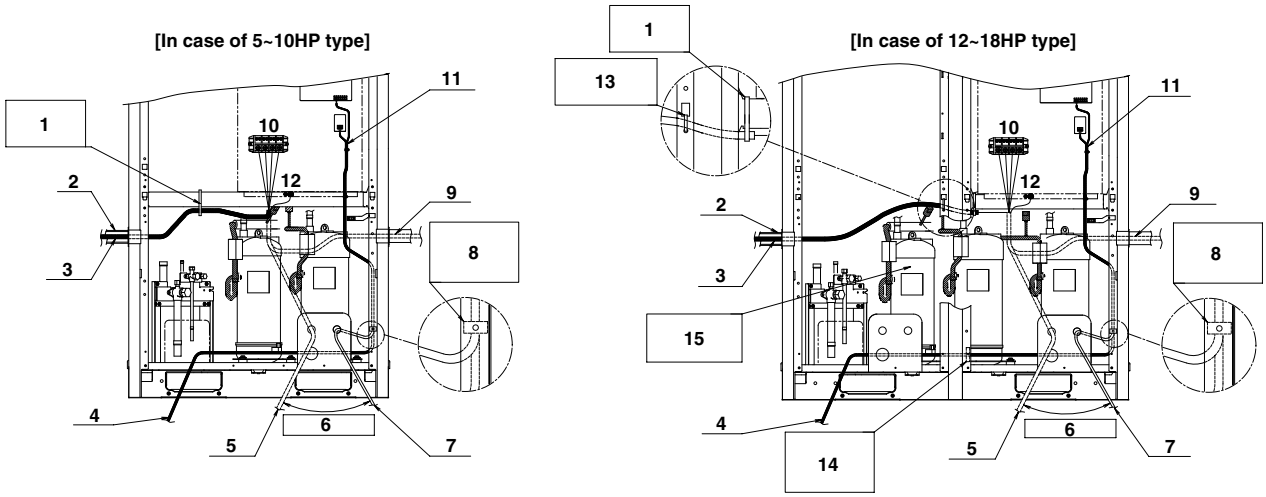
16

- When two wires are connected to a single terminal, connect them so that the rear sides of the crimp contacts face each other. Also, make sure the thinner wire is on top, securing the two wires simultaneously to the resin hook using the included clamp (1).



8.6 Procedure for Wiring Inside Units

- Referring to next figure, secure and wire the power and transmission wiring using the included clamp (1), (2), and (3).



1. Retain with accessory clamp (3).
2. Electric conduit
3. When routing out the power/ground wires from the left side.
4. When routing out the transmission wiring from the opening for piping.
5. When routing out the power/ground wires from the front.
6. Clear over 50 mm.
7. When routing out the transmission wiring from the knockout hole.
8. Retain to the back of the column support with the accessory clamp (2).
9. When routing out the power/ground wires from the right side.
10. Power wiring
11. Transmission wiring
12. Ground wire
13. Secure to the back side of the support beam using the accessory clamp (1).
14. Retain to the back of the column support with the accessory clamp (2).
15. When wiring, exercise sufficient caution not to detach the acoustic insulators from the compressor.

Caution

- The transmission wiring must be at least 50 mm away from the power wiring.
- Make sure all wiring do not contact to the pipes (hatching parts in the previous figure).
- After wiring work is completed, check to make sure there are no loose connections among the electrical parts in the EL.COMPO.BOX.

9. Air Tight Test and Vacuum Drying

Note

- Always use nitrogen gas for the airtightness test.
- Absolutely do not open the shutoff valve until the main power circuit insulation measurement has been completed. (measuring after the shutoff valve is opened will cause the insulation value to drop.)

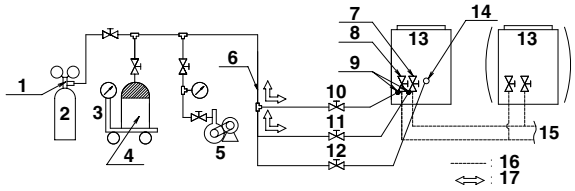
9.1 Preparations

<Needed tools>

Gauge manifold Charge hose valve	• To prevent entry of any impurities and insure sufficient pressure resistance, always use the special tools dedicated for R410A. • Use charge hose that have pushing stick for connecting to service port of shutoff valves or refrigerant charge port.
Vacuum pump	• The vacuum pump for vacuum drying should be able to lower the pressure to –100.7kPa (5 Torr –755mm Hg). • Take care the pump oil never flow backward into the refrigerant pipe during the pump stops.

<The system for air tight test and vacuum drying>

- Referring to figure 28, connect an nitrogen tank, refrigerant tank, and a vacuum pump to the outdoor unit. The refrigerant tank and the charge hose connection to refrigerant charge port or the valve A, C in figure 28 are needed in **"12. Additional Refrigerant Charge and Check Operation"**.
- The shutoff valve and valve A~C in next figure should be open or closed as shown in the table below.

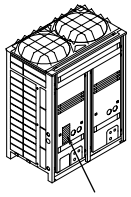


1. Gauge manifold
2. Nitrogen
3. Measuring device
4. R-410A tank (with siphon)
5. Vacuum pump
6. Charge hose
7. Liquid side shutoff valve
8. Gas side shutoff valve
9. Shutoff valve service port
10. Valve B
11. Valve C
12. Valve A
13. Outdoor unit
14. Refrigerant charge port
15. To indoor unit
16. Interunit pipings
17. Refrigerant flow

State of valve A, B and C and shutoff valves	Valve			shutoff valve	
	A	B	C	Liquid side	Gas side
Air tight test, Vacuum drying (Close valve A and shutoff valves certainly. Otherwise the refrigerant in the unit are released.)	Close	Open	Open	Close	Close

Note

- The airtightness test and vacuum drying should be done using the liquid side and gas side shutoff valve service ports.
  See the [R-410A] Label attached to the front plate of the outdoor unit for details on the location of the service port (see figure at right).
- See **[Shutoff valve operation procedure]** in **"12-1 Before Working"** for details on handling the shutoff valve.
- The refrigerant charge port is connected to unit pipe.
  When shipped, the unit contains the refrigerant, so use caution when attaching the charge hose.


[R-410A] Label

16

9.2 Air Tight Test and Vacuum Drying Method

After finished piping work, carry out air tight test and vacuum drying.

<Air tight test>

Pressurize the liquid and gas pipes to 4.0MPa (40bar) (do not pressurize more than 4.0MPa (40bar)). If the pressure does not drop within 24 hours, the system passes the test.

If there is a pressure drop, check for leaks, make repairs, and perform the airtight test again.

<Vacuum drying>

Evacuate the system from the liquid and gas pipes by using a vacuum pump for more than 2 hours and bring the system to –100.7kPa or less. After keeping the system under that condition for more than 1 hour, check if the vacuum gauge rises or not. If it rises, the system may either contain moisture inside or have leaks.

Note

If moisture might enter the piping, follow below.

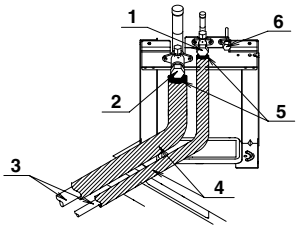
(I.e., if doing work during the rainy season, if the actual work takes long enough that condensation may form on the inside of the pipes, if rain might enter the pipes during work, etc.)

1. After performing the vacuum drying for two hours, pressurize to 0.05 MPa (i.e., vacuum breakdown) with nitrogen gas, then depressurize down to –100.7 kPa for an hour using the vacuum pump (vacuum drying).
2. If the pressure does not reach –100.7 kPa even after depressurizing for at least two hours, repeat the vacuum breakdown - vacuum drying process.

After vacuum drying, maintain the vacuum for an hour and make sure the pressure does not rise by monitoring with a vacuum gauge.

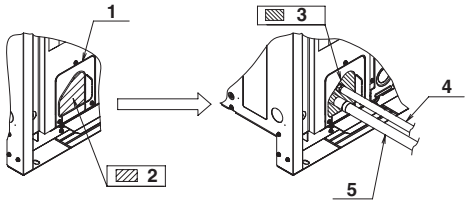
10. Pipe Insulation

- Insulation of pipes should be done after performing **"9. Air Tight Test and Vacuum Drying"**.
- Always insulate the liquid side piping and gas side piping in the interunit piping and refrigerant branching kit. Failing to insulate the pipes could cause leaking or burns. (The gas side piping can reach temperatures of 120°C. Be sure the insulation used can withstand such temperatures.)
- Reinforce the insulation on the refrigerant piping according to the installation environment. Condensation might form on the surface of the insulation.
  - Ambient temperature: 30°C, humidity: 75% to 80% RH: min. thickness: 15 mm.
  - If the ambient temperature exceeds 30°C and the humidity 80% RH, then the min. thickness is 20 mm.
- If there is a possibility that condensation on the shutoff valve might drip down into the indoor unit through gaps in the insulation and piping because the outdoor unit is located higher than the indoor unit, etc., this must be prevented by caulking the connections, etc.



1.Liquid side shutoff valve
2.Gas side shutoff valve
3.Indoor interunit piping
4.Insulation material
5.Coking, etc.
6.Refrigerant charge port

- The piping lead-out hole lid should be attached after opening a knock hole.
- If small animals and the like might enter the unit through the piping lead-out hole, close the hole with blocking material (procured on site) after completion of **"12. Additional Refrigerant Charge and Check Operation".**



1.Piping lead-out hole lid
2.Open a knock hole at " ▨ ".
3.Block " ▨ ".
4.Liquid side piping
5.Gas side piping

Note

- After knocking out the holes, we recommend you remove burrs in the knock holes (see previous figure) and paint the edges and areas around the edges using the repair paint.

11. Checking of Device and Installation Conditions

Be sure to check the followings.

For those doing electrical work

1. Make sure there is no faulty transmission wiring or loosing of a nut.
   See **"8-4 Transmission Wiring Connection Procedure".**
2. Make sure there is no faulty power wiring or loosing of a nut.
   See **"8-5 Power Wiring Connection Procedure".**
3. Has the insulation of the main power circuit deteriorated?
   - Measure the insulation and check the insulation is above regular value in accordance with relevant local and national regulations.

For those doing pipe work

1. Make sure piping size is correct.
   See **"7-1 Selection of Piping Material and Refrigerant Branching Kit"**.
2. Make sure insulation work is done.
   See **"10. Pipe Insulation"**.
3. Make sure there is no faulty refrigerant piping.
   See **"7. Refrigerant Piping".**

16

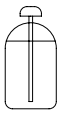
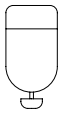
12. Additional Refrigerant Charge and Check Operation

The outdoor unit is charged with refrigerant when shipped from the factory, but depending on the size and length of the piping when installed, it may require additional charging.
For charging the additional refrigerant, follow the procedure in this chapter.
And then carry out the check operation.

Note: Total amount of refrigerant should be 100 kg or less

12.1 Before Working

[About the refrigerant tank]
Check whether the tank has a siphon pipe before charging and place the tank so that the refrigerant is charged in liquid form. (See the figure below.)

With siphon pipe
 Stand the tank upright and charge. (The siphon pipe goes all the way inside, so the tank does not need be put upside-down charge in liquid form.)
Other tanks
 Stand the tank upside-down and charge.

Caution

- Always use the proper refrigerant (R-410A). If charged with the refrigerant containing an improper material, it may cause an explosion or accident.
- R-410A is a mixed refrigerant, so charging it as a gas will cause the refrigerant composition to change, which may prevent normal operation.

[Shutoff valve operation procedure]
When operating the shutoff valve, follow the procedure instructed below.

- Do not open the shutoff valve until **"11. Checking of Device and Installation Conditions"** are completed. If the shutoff valve is left open without turning on the power, it may cause refrigerant to buildup in the compressor, leading insulation degradation.
- Be sure to use the correct tools.
  The shutoff valve is not a back-seat type. If forced it to open, it might break the valve body.
- When using a service port, use the charge hose.
- After tightening the cap, make sure no refrigerant gas is leaking.

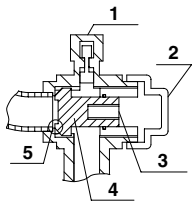
[Tightening torque]
The sizes of the shutoff valves on each model and the tightening torque for each size are listed in the table below.

<Size of Shutoff Valve>

	5HP type	8HP type	10HP type	12HP type	14HP type	16HP type	18HP type
Liquid side shutoff valve	ϕ 9.5 The 12HP type corresponds to the 12.7-diameter onsite piping using the included piping.				ϕ 12.7 The 18HP type corresponds to the 15.9-diameter onsite piping using the accessory pipe.		
Gas side shutoff valve	ϕ 15.9	ϕ 19.1	ϕ 25.4 The 10HP type corresponds to the 22.2-diameter onsite piping using the accessory pipe. The 12 ~ 18HP type corresponds to the 28.6-diameter onsite piping using the accessory pipe.				

<Tightening torque>

Shutoff valve size	Tightening torque N·m (Turn clockwise to close)			
	Shaft (valve body)		Cap (valve lid)	Service port
ϕ 9.5	5.4 - 6.6	Hexagonal wrench 4 mm	13.5 - 16.5	11.5 - 13.9
ϕ 12.7	8.1 - 9.9		18.0 - 22.0	
ϕ 15.9	13.5 - 16.5	Hexagonal wrench 6 mm	22.5 - 27.5	
ϕ 19.1	27.0 - 33.0	Hexagonal wrench 8 mm		
ϕ 25.4				



1.Service port
2.Cap
3.Hex holes
4.Shaft (valve body)
5.Seal section

[To open]

1. Remove the cap and turn the shaft counterclockwise with the hexagon wrench (JISB4648).
2. Turn it until the shaft stops.
3. Make sure to tighten the cap securely.
   (For the tightening torque, refer to the item <Tightening Torque>.)

[To close]

1. Remove the cap and turn the shaft clockwise with the hexagon wrench (JISB4648).
2. Securely tighten the valve until the shaft contacts the main body seal.
3. Make sure to tighten the cap securely.
   (For the tightening torque, refer to the item <Tightening Torque>.)

[How to Check How Many Units are Connected]

It is possible to find out how many indoor or outdoor unit in the system are turned on by operating the push button on the PC-board (A1P) of outdoor unit (In case of multi system master unit).
Follow the procedure below to check how many indoor or outdoor units are turned on.

(LED display: ● ...OFF ☼...ON ◑ ...Blinking ＊ ...Uncertain)		LED display						
		H1P	H2P	H3P	H4P	H5P	H6P	H7P
(1) Press the MODE button (BS1) once, and set the MONITOR MODE (H1P: Blinking).		◑	●	●	●	●	●	●
(2) Press the SET button (BS2) the number of times until the LED display matches that at right.	For checking the number of outdoor units: eight times	◑	●	●	☼	●	●	●
	For checking the number of indoor units: five times	◑	●	●	●	☼	●	☼
(3) Press the RETURN button (BS3) and read the number of units from the display of H2P through H7P. [Reading Method] The display of H2P through H7P should be read as a binary number, with ◑ standing for "1" and ● standing for "0".		◑	＊	＊	＊	＊	＊	＊
Ex: For the LED display at right, this would be "0 1 0 1 1 0 ", which would mean 22 units are connected. $32 \times \mathbf{0} + 16 \times \mathbf{1} + 8 \times \mathbf{0} + 4 \times \mathbf{1} + 2 \times \mathbf{1} + 1 \times \mathbf{0} = 22$ units Note: "000000" indicates 64 units.		◑	●	◑	●	◑	◑	●
(4) Press the MODE button (BS1) once. This returns to **Setting Mode 1** (default).		●	●	☼	●	●	●	●

Note

Press the "MODE button" (BS1) if you get confused while operating.
This returns to **Setting Mode 1** (default).

16

12.2 Procedure of Adding Refrigerant Charging and Check Operation

Warning **Electric Shock Warning**

- Make sure to close the EL. COMPO. BOX lid before turning on the power when performing the refrigerant charging operation.
- Perform the setting on the PC-board (A1P) of the outdoor unit and check the LED display after the power is on via the inspection door which is in the EL. COMPO. BOX lid.
- Use an insulated rod to operate the push buttons via the EL. COMPO. BOX's inspection door.
  There is a risk of electric shock if you touch any live parts, since this operation must be performed with the power on.

Caution

- Make sure to use the protect tool (protective groves and goggles) when charging the refrigerant.
- Due to a danger of liquid hammer, the refrigerant must not be charged over the allowable maximum amount when charging the refrigerant.
- Do not perform the refrigerant charging operation under working for the indoor unit.
- When opening the front panel, make sure to take caution to the fan rotation during the working.
  After the outdoor unit stops operating, the fan may keep rotation for a while.

Note

- If operation is performed within 12 minutes after the indoor and outdoor units are turned on, H2P will be lit on and the compressor will not operate.
- In order to ensure uniform refrigerant distribution, it may take up to around 10 minutes for the compressor to start up after the unit starting operating. This is not a malfunction.

<About refrigerant charging>

- The refrigerant charge port is connected to the piping inside the unit.
  When the unit is shipped from the factory, the unit's internal piping is already charged with refrigerant, so be careful when connecting the charge hose.
- After adding the refrigerant, make sure to close the lid of the refrigerant charging port.
  The tightening torque for the lid is 11.5 to 13.9 Nm.
- See [Shutoff valve operation procedure] in chapter 12-1 for details on how to handle shutoff valves.
- When done or when pausing the refrigerant charging operation, close the valve of the refrigerant tank immediately. If the tank is left with the valve open, the amount of refrigerant which is properly charged may be off the point. More refrigerant may be charged by any remaining pressure after the machine is stopped.

<About check operation>

- Make sure to perform the check operation after installation. Otherwise, the malfunction code "U3" will be displayed and normal operation cannot be performed.
  And the failure of "Check of miswiring" may also cause abnormal operation. Performance may drop due to the failure of "Judgment of piping length".
- Check operation must be performed for each refrigerant piping system.
  Checking is impossible if plural systems are being done at once.
- The individual problems of indoor units can not be checked.
  About these problems check by test run after the check operation is completed. (See chapter 14)
- The check operation cannot be performed in recovery or other service modes.

1. Make sure the following works are complete in accordance with the installation manual.
   - Piping work
   - Wiring work
   - Air tight test
   - Vacuum drying
   - Installation work for indoor unit
2. Calculate the "additional charging amount" using "How to calculate the additional refrigerant to be charged" in **"7-5 Example of Connection"**.

3. Open the valve C (See the figure 31. The valve A, B and the liquid and gas side shutout valve must be left closed), and charge the refrigerant of the “additional charging amount” from the liquid side shutout valve service port.
   If the “additional charging amount” was charged fully, close the valve C and go to step 5.
   If the “additional charging amount” was not charged fully, go to step 4.

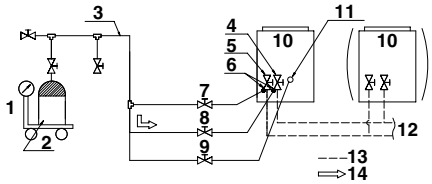


fig. 31

1. Measuring device
2. R-410A tank (with siphon)
3. Charge hose
4. Liquid side shutoff valve
5. Gas side shutoff valve
6. Shutoff valve service port
7. Valve B
8. Valve C
9. Valve A
10. Outdoor unit
11. Refrigerant charge port
12. To indoor unit
13. Field pipings
14. Refrigerant flow

4. Perform the refrigerant charging operation following [Refrigerant charging operation procedure] as shown below, and charge the remaining refrigerant of the “additional charging amount”. For performing the refrigerant charging operation the push button on the PC-board (A1P) of outdoor unit (Incase of multi system master unit) are use. (See the figure 32) In addition, the refrigerant are charged from the refrigerant charge port via the valve A. (See the figure 33)
   For operating the push button and opening and closing the valve, follow the work procedure.

Note

The refrigerant will be charged about 22kg in one hour at outdoor temp. 30°C DB (6kg at 0°C DB).
If you need to speedup in case of multi system, connect the refrigerant tanks to each outdoor unit as shown in the figure 33.

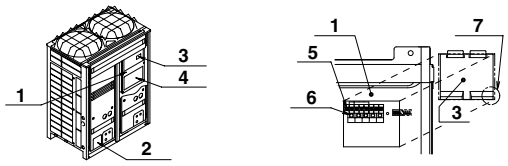


fig. 32

1. EL.COMPO.BOX lid
2. Pipe intake
3. Inspection door
4. Label “Service Precaution”
5. LED (H1~8P)
6. Push button (BS1-5)
7. Lift the protruding part to open the cover

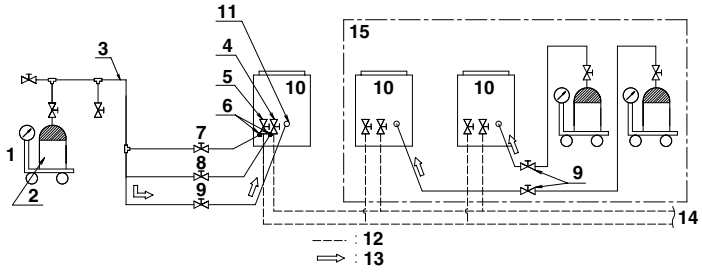


fig. 33

1. Measuring device
2. R-410A tank (with siphon)
3. Charge hose
4. Liquid side shutoff valve
5. Gas side shutoff valve
6. Shutoff valve service port
7. Valve B
8. Valve C
9. Valve A
10. Outdoor unit
11. Refrigerant charge port
12. Field piping
13. Refrigerant flow
14. To indoor unit
15. In case of multi system if you need to speedup.

16

[Refrigerant Charging Operation Procedure]

(1) Open the liquid and gas side shutoff valves (The valve A~C must be closed. The valve A~C means the valves in the figure 33.)

[Display of normal system]

LED display (Default status of shipped)		SERV. MONI-TOR	MODE	TEST/ HWL	C/H SELECTOR			L.N.O.P	DEMA-ND	MULTI
					IND	MASTER	SLAVE			
		HAP	H1P	H2P	H3P	H4P	H5P	H6P	H7P	H8P
Single system		◑	●	●	☼	●	●	●	●	●
Multi system(*)	Master unit	◑	●	●	☼	●	●	●	●	☼
	Sub unit 1	◑	●	●	●	●	●	●	●	◑
	Sub unit 2	◑	●	●	●	●	●	●	●	●

LED display: ● ...OFF, ☼...ON, ◑ ...Blinking

(*)How to distinguish the master unit, sub unit 1, and sub unit 2 in the multi system.

Method 1: By the H8P (MULTI) LED display

☼ (ON): Master unit	◑ (Blinking): Sub unit 1	● (OFF): Sub unit 2

Method 2: By the transmission wiring to indoor unit

Transmission wiring is connected: Master unit
Transmission wiring is not connected : Sub unit 1 or Sub unit 2

(2) If necessary, set the field setting by using the dip switch on the outdoor unit PC-board (A1P).
(For how to set, see “13-1 Onsite Settings With the Power Off”)

(3) • Close the EL. COMPO. BOX lid and all front panel except on the side of the EL. COMPO. BOX (*1) and turn the power to the outdoor unit and all connected indoor units. (*2)
• After H2P stop blinking (about 12 minutes after turning on the power), check LED displays as shown in the table [Display of normal system] and the system is normal state.
If H2P is blinking, check the malfunction code in the remote controller, and correct the malfunction in accordance with [Remote controller display malfunction code] in step 5.

(*1)Lead the refrigerant charge hose etc. from the pipe intake. All front panels must be closed at the procedure (9).

(*2)• If you perform the refrigerant charging operation within the refrigerant system that have the power off unit, the operation cannot finish properly.
For confirming the number of the outdoor and indoor units with the power on, see [How to check how many units are connected] in chapter 12-1. In case of a multi system, turn on the power to all outdoor units in the refrigerant system.
• To energize the crankcase heater, make sure to turn on for 6 hours before starting operation.

(4) Start the additional refrigerant charge operation.
(About the system settings for additional refrigerant charge operation, refer to the [Service Precaution] label attached on the EL. COMPO. BOX lid in the outdoor unit.)
Open valve A immediately after starting the compressor.

(5) Close the valve A if the “additional charging amount” of refrigerant was charged, and push the RETURN button (BS3) once.

(6) Record the charging amount on the accessory “REQUEST FOR THE INDICATION” label and attach it to the back side of the front panel.

5. After completing the additional refrigerant charging perform the check operation following below.

Note

- For check operation, the following work will be performed.
  - ■ Check of shutoff valve opening
  - ■ Check of miswiring
  - ■ Judgment of piping length
  - ■ Check of refrigerant overcharge
- It takes about 40 minutes to complete the check operation.

[Check Operation Procedure]

(1) Make the onsite setting as needed using the dip switches on the outdoor unit PC-board (A1P) with the power off (See "13-1 Onsite Settings With the Power Off")

(2) Close the EL. COMPO. BOX lid and all front panels except as the side of the EL. COMPO. BOX and turn on the power to the outdoor unit and all connected indoor units. (Be sure to turn the power on at least 6 hours before operation in order to have power running to the crank case heater.)

(3) Check the LED display on the outdoor unit PC-board (A1P) is as shown in the table below and transmission is normal.

LED display (Default status of shipped)		SERV. MONI-TOR	MODE	TEST/ HWL	C/H SELECTOR			L.N.O.P	DEMA-ND	MULTI
					IND	MASTER	SLAVE			
		HAP	H1P	H2P	H3P	H4P	H5P	H6P	H7P	H8P
Single system		◑	●	●	☼	●	●	●	●	●
Multi system(*)	Master unit	◑	●	●	☼	●	●	●	●	☼
	Sub unit 1	◑	●	●	●	●	●	●	●	◑
	Sub unit 2	◑	●	●	●	●	●	●	●	●

LED display: ● ...OFF, ☼ ...ON, ◑ ...Blinking

(*)How to distinguish the master unit, sub unit 1, and sub unit 2 in the multi system.

Method 1: By the H8P (MULTI) LED display

☼ (ON): Master unit	◑ (Blinking): Sub unit 1	● (OFF): Sub unit 2

Method 2: By the transmission wiring to indoor unit

Transmission wiring is connected: Master unit
Transmission wiring is not connected : Sub unit 1 or Sub unit 2

(4) Make the onsite settings as needed using the push button (BS1-BS5) on the outdoor unit PC-board (A1P) with the power on. (See **"13-2 Onsite Settings With the Power On"**)

(5) Perform the check operation following the Check Operation Method of the [Service Precautions] label on the EL. COMPO. BOX lid. The system operation for about 40 minutes and automatically stops the check operation. If the malfunction code is not displayed in the remote controller after the system stop, check operation is completed. Normal operation will be possible after 5 minutes. If the malfunction code is displayed in the remote controller, correct the malfunction following [Remote controller displays malfunction code] and perform the check operation again.

[Remote controller displays malfunction code]

Malfunction code	Installation error	Remedial action
E3, E4 F3, F6 UF	The shutoff valve of the outdoor unit is left closed.	Open the shutoff valve.
U1	The phases of the power to the outdoor unit is reversed.	Exchange two of the three phases (L1, L2, L3) to make a proper connection.
U1 U4 LC	No power is supplied to an outdoor or indoor unit (including phase interruption).	Make sure the power source wire is properly connected to the outdoor unit and revise if necessary.
UF	There is conflict on the connection of transmission wiring in the system.	Check if the refrigerant piping line and the transmission wiring are consistent with each other.
E3 F6 UF	Refrigerant overcharge.	Recalculate the additional amount refrigerant from the piping length and correct the refrigerant charge level by recovering any excessive refrigerant with a refrigerant recovery machine.
E4 F3	Insufficient refrigerant.	• Check if the additional refrigerant charge has been finished correctly. • Recalculate the additional amount refrigerant from the piping length and add the adequate amount.
U7, U4 UF, UH	If the outdoor unit terminal is connected when there is one outdoor unit installed.	Remove the line from the outdoor multi terminals (Q1 and Q2).

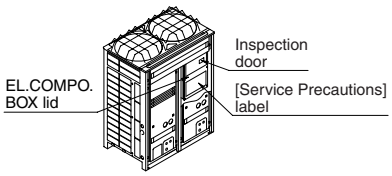
If any malfunction codes other than the above are displayed, check the service manual for how to respond.

13. Onsite Settings

Note

In the case of a multi system, all onsite settings should be made on the master unit. Settings made on sub units are invalid.
The outdoor unit to which the indoor unit transmission wire are connected is the master unit, and all other units are sub units.

13.1 Onsite Settings With the Power Off



If the COOL/HEAT selector was connected to the outdoor unit in "8. FIELD WIRING", set the dip switch (DS1) on the outdoor unit PC-board (A1P) to "ON" (it is set to "OFF" when shipped from the factory).
For the position of the dip switch (DS1), see the "Service Precautions" label (see at right) which is attached to the EL. COMPO. BOX lid.

Warning **Electric Shock Warning**

Never perform with the power on.
There is a serious risk of electric shock if any live part is touched.

13.2 Onsite Settings With the Power On

Use the push button switches (BS1 through BS5) on the outdoor unit PC-board (A1P) to make the necessary onsite settings.
See the "Service Precautions" label on the EL. CONPO. BOX lid for details on the positions and operating method of the push button switches and on the onsite setting.
Make sure to record the setting on the accessory "REQUEST FOR THE INDICATION" label.

Warning **Electric Shock Warning**

Use an insulated rod to operate the push buttons via the inspection door of EL. COMPO. BOX lid.
There is a risk of electric shock if you touch any live parts, since this operation must be performed with the power on.

14. Test Run

14.1 Before Test Run

- Make sure the following works are completed in accordance with the installation manual.
  - Piping work
  - Wiring work
  - Air tight test
  - Vacuum drying
  - Additional refrigerant charge
- Check that all work for the indoor unit are finished and there are no danger to operate.

14.2 Test Run

After check operation is completed, operate the unit normally and check the following.
(1) Make sure the indoor and outdoor units are operating normally.
(2) Operate each indoor unit one by one and make sure the corresponding outdoor unit is also operating.
(3) Check to see if cold (or hot) air is coming out from the indoor unit.
(4) Push the fan direction and strength buttons on the remote controller to see if they operate properly.

Note

- Heating is not possible if the outdoor temperature is 24°C or higher. Refer to the Operation manual.
- If a knocking sound can be heard in the liquid compression of the compressor, stop the unit immediately and then energize the crank case heater for a sufficient length of time before restarting the operation.
- Once stopping, the compressor will not restart in about 5 minutes even if the On/Off button of the remote controller is pushed.
- When the system operation is stopped by the remote controller, the outdoor units may continue operating for further 5 minutes at maximum.
- The outdoor unit fan may rotate at low speeds if the Night-time low noise setting or the External low noise level setting is made, but this is not a malfunction.

14.3 Checks After Test Run

Perform the following checks after the test run is complete.

- Record the contents of field setting.
  → Record them on the accessory “REQUEST FOR THE INDICATION” label.
  And attach the label on the back side of the front panel.
- Record the installation date.
  → Record the installation date on the accessory “REQUEST FOR THE INDICATION” label in accordance with the IEC60335-2-40.
  And attach the label on the back side of the front panel.

Note

After the test run, when handing the unit over to the customer, make sure the EL.COMPO.BOX lid, the inspection door, and the unit casing are all attached.

16

15. Caution for Refrigerant Leaks

(Points to note in connection with refrigerant leaks)

Introduction

The installer and system specialist shall secure safety against leakage according to local regulations or standards. The following standards may be applicable if local regulations are not available.

The VRV System, like other air conditioning systems, uses R-410A as refrigerant. R-410A itself is an entirely safe non-toxic, non-combustible refrigerant. Nevertheless care must be taken to ensure that air conditioning facilities are installed in a room which is sufficiently large. This assures that the maximum concentration level of refrigerant gas is not exceeded, in the unlikely event of major leak in the system and this in accordance to the local applicable regulations and standards.

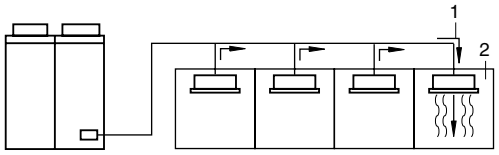
Maximum concentration level

The maximum charge of refrigerant and the calculation of the maximum concentration of refrigerant is directly related to the humanly occupied space in to which it could leak.

The unit of measurement of the concentration is kg/m^3 (the weight in kg of the refrigerant gas in 1m^3 volume of the occupied space).

Compliance to the local applicable regulations and standards for the maximum allowable concentration level is required.

In Australia the maximum allowed concentration level of refrigerant to a humanly space is limited to 0.35kg/m^3 for R-407C and 0.44kg/m^3 for R-410A.



1. direction of the refrigerant flow

2. room where refrigerant leak has occurred (outflow of all the refrigerant from the system)

Pay a special attention to the place, such as a basement, etc. where refrigerant can stay, since refrigerant is heavier than air.

Procedure for checking maximum concentration

Check the maximum concentration level in accordance with steps 1 to 4 below and take whatever action is necessary to comply.

1. Calculate the amount of refrigerant (kg) charged to each system separately.

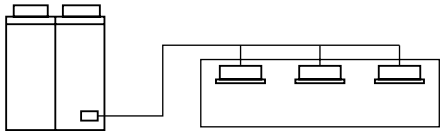
amount of refrigerant in a single unit system (amount of refrigerant with which the system is charged before leaving the factory)	+	additional charging amount (amount of refrigerant added locally in accordance with the length or diameter of the refrigerant piping)	=	total amount of refrigerant (kg) in the system

Note

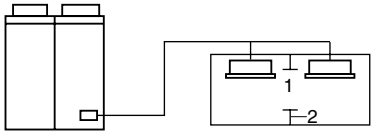
- Where a single refrigerant facility is divided into 2 entirely independent refrigerant systems then use the amount of refrigerant with which each separate system is charged.

2. Calculate the smallest room volume (m^3)
   Incase like the following, calculate the volume of (A), (B) as a single room or as the smallest room.

A. Where there are no smaller room divisions



B. Where there is a room division but there is an opening between the rooms sufficiently large to permit a free flow of air back and forth.



1. opening between rooms

2. partition

(Where there is an opening without a door or where there are openings above and below the door which are each equivalent in size to 0.15% or more of the floor area.)

3. Calculating the refrigerant density using the results of the calculations in steps 1 and 2 above.

$$\frac{\text{total volume of refrigerant in the refrigerant system}}{\text{size } (m^3) \text{ of smallest room in which there is an indoor unit installed}} \leq \text{maximum concentration level } (kg/m^3)$$

If the result of the above calculation exceeds the maximum concentration level then make similar calculations for the second then third smallest room and so until the result falls short of the maximum concentration.

4. Dealing with the situations where the result exceeds the maximum concentration level.
Where the installation of a facility results in a concentration in excess of the maximum concentration level then it will be necessary to revise the system. Please consult your Daikin supplier.

16

16. External Static Pressure Setting

How to set the unit to high ESP.

(1) Standard external static pressure for VRVIII is 3mm H_2O (29.4Pa).

(2) High external static pressure of 8mm H_2O (78.4Pa) is available by field setting as shown below.

In this case a kind of sound proof device should be considered because of increasing the operation sound.

Set the unit along the operation name plate attached to the face of the switch box.

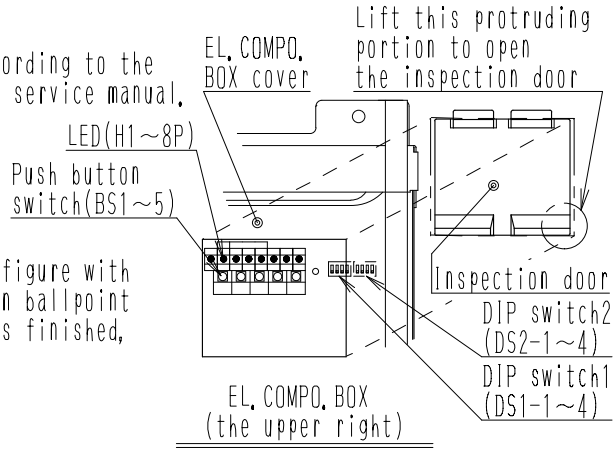
Service Precautions (Touch the noncoating metal part (Ex. standard type: the EL. COMPO. BOX cover, anti-corrosion treatment types: the fixing bolt of EL. COMPO. BOX) to eliminate static electricity before performing service.

Field setting

If required, carry out the field setting according to the following instructions. For details, see the service manual.

1. How to operate

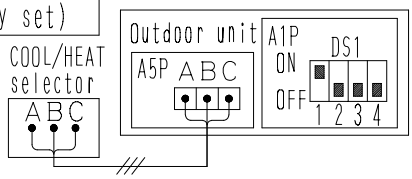
- The DIP switch must be operated before shutting the EL. COMPO. BOX cover, which the power supply must be shut off.
- For operating the push button switch, open the inspection door as shown in the right figure with the power supply turned on, and use a resin ballpoint or non-conducting object. After the work is finished, make sure to shut the inspection door.



2. Setting by the DIP switch

Setting item

No.	Setting content	Set point
DS1-1	Setting of COOL/HEAT changeover.	ON OFF(Factory set)
DS1-2~4	These are not used.	
DS2-1~4	Do not change the factory setting(OFF).	



Function and method of COOL/HEAT changeover

〖Function〗

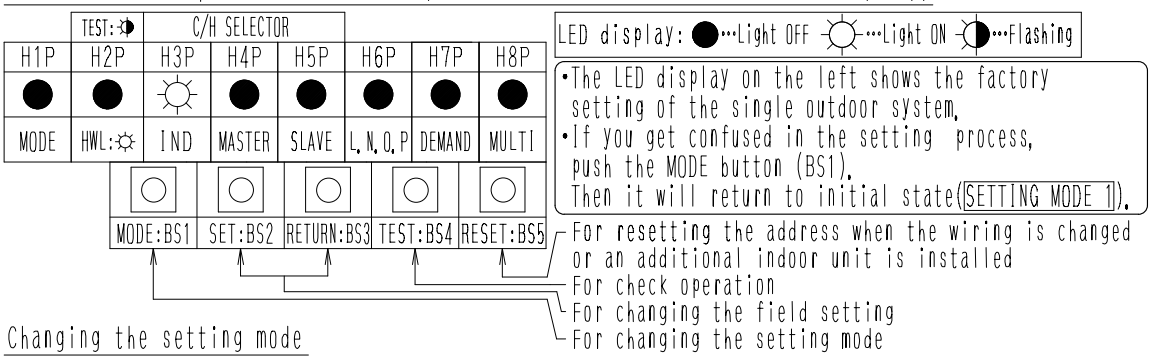
This setting should be carried out only when the changeover of operation mode(COOL/HEAT) is set by the COOL/HEAT selector (optional accessory) installed in the outdoor unit.

〖Method〗

Connect the COOL/HEAT selector to the terminal A, B, C on the PC board (A5P) of the outdoor unit. (connect the terminals with polarity and match the same symbol.) and change the DS1-1 to ON.

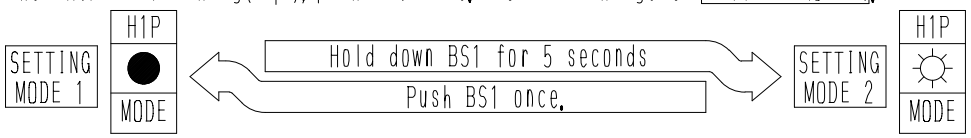
3. Setting by the push button switch (BS1-5)

Function of the push button switch (on the PC board of the outdoor unit (A1P))



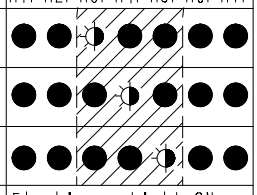
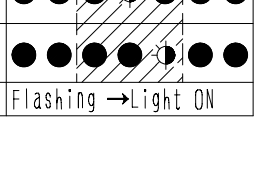
Changing the setting mode

The setting mode can be changed by the MODE button (BS1) according to the following procedure.
When H1P is flashing(◑), push BS1 once. It will change to SETTING MODE 1.



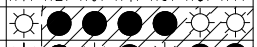
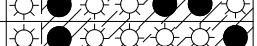
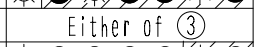
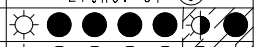
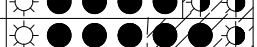
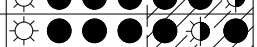
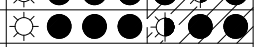
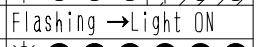
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SETTING MODE 1(H1P is light OFF): Cool/Heat selection setting

Setting procedure	Details of setting	LED display and its points H1P H2P H3P H4P H5P H6P H7P
Push the SET button (BS2) and adjust the LED display to either of those shown on the right.	When setting Cool/Heat selection for each outdoor system individually. (Factory setting)	
	For the master unit, when setting Cool/Heat selection for multiple system together(※1)	
	For the slave unit, when setting Cool/Heat selection for multiple system together(※1)	
Push the RETURN button (BS3). (The setting is defined.)		Flashing →Light ON

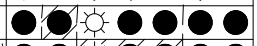
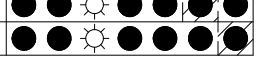
SETTING MODE 2 (H1P is light ON)

Setting of the following items Ⓐ to Ⓗ can be carried out.
(See the service manual for setting other than the below.)

Setting procedure	Details of setting・set point		LED display and its points H1P H2P H3P H4P H5P H6P H7P
①Push the SET button (BS2) and adjust the LED display to the example shown on the right according to the required mode(Ⓐ ~ Ⓗ).	Ⓐ Check operation (Without initial refrigerant decision)		
	Ⓑ Additional refrigerant charging operation setting		
	Ⓒ Refrigerant recovery operation/Evacuation mode setting		
	Ⓓ Night-time low noise setting		
	Ⓔ External low noise level setting(※1)		
	Ⓕ Demand level setting(※1)		
	Ⓖ External low noise demand setting(※1)		
	Ⓗ High static pressure setting		
② Push the RETURN button (BS3). (The present setting will be indicated.)			Either of ③
③Push the SET button (BS2) and adjust the LED display to the example shown on the right according to the required mode. ※2 For Ⓓ and Ⓔ, lower noise operation can carried out by "level 2" than by "level 1", and by "level 3" than by "level 2". For Ⓕ, more power consumption can be saved by "level 2" than by "level 3", and by "level 1" than by "level 2". For details, see the service manual.	For Ⓐ, Ⓑ, Ⓒ, Ⓖ, Ⓗ	ON	
		OFF(Factory set)	
	For Ⓓ (※2)	OFF(Factory set)	
		Level 1	
		Level 2	
		Level 3	
	For Ⓔ and Ⓕ (※2)	Level 1	
		Level 2(Factory set)	
		Level 3	
④ Push the RETURN button (BS3) (The setting in ③ is defined.)			Flashing →Light ON
⑤ Push the RETURN button (BS3) again.(The system start the operation according to the setting.)			

〈CAUTION〉
※1 For selecting low noise operation by an outside order, demand operation, and operation mode setting with a COOL/HEAT central remote controller, external control adapter for outdoor unit (optional accessory) is required. For details, see the instruction attached to the adapter.

Confirmation of setting The following items can be confirmed by the SETTING MODE 1

Confirming items	Details for LED display	LED display and its points H1P H2P H3P H4P H5P H6P H7P
The present operating state	●:Normal ◑:Malfunction ☼:Under preparation or under check operation	
Cool/Heat selection setting	When setting Cool/Heat selection for each outdoor system individually. (Factory setting)	
	For the master unit, when setting Cool/Heat selection for multiple system together.	
	For the slave unit, when setting Cool/Heat selection for multiple system together.	
Low noise level setting state	●:Under normal operation (Factory setting) ☼:Under low noise operation	
Demand setting state	●:Under normal operation (Factory setting) ☼:Under demand operation	

2P175033F

16

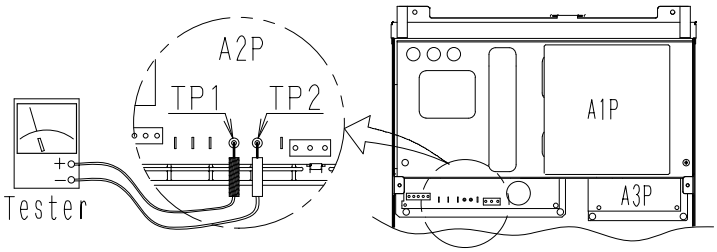
Caution for the inspection door

Shut the inspection door after service is finished.
(Otherwise, it may cause malfunction by such as intrusion of water or foreign materials.)

Caution when performing service inside the EL. COMPO. BOX

⚠ WARNING | ⚠ Caution to ELECTRIC SHOCK

1. Do not open the EL. COMPO. BOX cover for 10 minutes after the power supply is turned off.
2. Measure the voltage between terminals on the terminal block for power supply with a tester and confirm that the power supply is shut off.
   In addition, measure the points shown below with a tester and confirm that the voltage of the capacitor in the main circuit is less than DC50V.
3. To prevent a damage of the PC board, touch the noncoating metal part and make sure to eliminate static electricity before pulling out or plugging in the connector.
4. The Work must be started after pulling out the junction connecter X1A, X2A, X3A, X4A(X3A and X4A is for Q12~18type only) for the fan motor in the outdoor unit and be careful not to touch the live parts.
   (If the fan rotates by strong wind, it may cause storage of electricity in the capacitor in the main circuit and electric shock.)
5. After the service is finished, plug in the junction connecter.
   (Otherwise, Error code [E7] will be displayed in the remote controller, and normal operation will not be performed.
   (For details, see the "Wiring Diagram" labeled on the back of the EL. COMPO. BOX. lid.))



Caution for Multi connecting system (Except RZYQ, RQ type)

All the settings must be made by the master unit. Setting by the slave unit is not effective.

【How to identify master or slave】

- The master unit is the outdoor unit connected to the transmission wiring to the indoor units, and the others are the slave units.
- The system status can be checked on LED display on the PC board (A1P) of the outdoor unit as shown on the right table.

	LED display and its points H1P H2P H3P H4P H5P H6P H7P H8P
Master	● ● ☼ ● ● ● ● ☼
Slave 1	● ● ● ● ● ● ● ◑
Slave 2	● ● ● ● ● ● ● ◕

Caution for piping work and additional refrigerant charge

This unit uses R410A as a refrigerant, so keep the following points.

- Use the charging hose and gauge manifold designed exclusive use R410A in order to withstand the pressure and prevent impurities(such as SUNISO oil) from mixing into.
- Carry out a nitrogen blow when brazing.
- Perform the air tightness and the vacuum drying certainly. (The air tightness test pressure:4.0 MPa)
- Charge the additional refrigerat in liquid state.

2P175033F

Service mode operation method

[Note] • After turning on the power supply, the unit can not start until the LED H2P goes off (for maximum 12 minutes).
• Do not shut off the power and do not reset the SETTING MODE 2 when evacuating or recovering the refrigerant.
(The expantion valves will close and the system can not be evacuated or recovered the refrigerant.)

[Evacuation method] (At the first installation this evacuation is not required. It is only required for service.)

① When the unit is at standstill and under the SETTING MODE 2, set the Ⓒ Refrigerant recovery /Evacuation mode to ON. The expansion valves in the indoor and outdoor units will be opened completely, H1P will light up, and "Test operation" and "Under centralized control" will be displayed in the remote controller. The operation will be rejected.
② Evacuate the system with a vaccum pump.
③ After completed, push the MODE button (BS1) and reset the SETTING MODE 2.

16

2P175034G

[Refrigerant recovery operation method] (Make sure to use a refrigerant reclaimer).

① When the unit is at standstill and under the [SETTING MODE 2], set the Ⓒ Refrigerant recovery /Evacuation mode to ON. The expansion valves in the indoor and outdoor units will be opened completely. H1P will light up and "Test operation" and "Under centralized control" will be displayed in the remote controller. The operation will be rejected.
② Recover the refrigerant by a refrigerant reclaimer.
③ After completed, push the MODE button (BS1) and reset the [SETTING MODE 2].

Additional refrigerant charging method

[Note] When the outdoor unit is stopped and the entire quantity of refrigerant can not be charged from the stop valve on the liquid side , make sure to charge the remaining quantity of refrigerant using this procedure. If the refrigerant quantity is insufficient , the unit may malfunction.

[Operation procedure]

① Turn ON the power of the indoor unit and the outdoor unit.
② Make sure to completely open the shutoff valve on the gas side and the shutoff valve on the liquid side.
③ Connect the refrigerant charge hose to the refrigerant charging port (for additionally charging the refrigerant).
④ In the stopped status , set to the Ⓑ additional refrigerant charging operation setting in [SETTING MODE 2] (H1P : Turn on).
⑤ The operation is automatically started.
(The LED indicator H2P flickers , and " Test operation " and " Under centralized control " are displayed in the remote controller.)
⑥ After charging the specified quantity of refrigerant , press the RETURN button (BS3) to stop the operation.
(The operation is automatically stopped within 30 minutes.
If charging is not completed within 30 minutes , set and perform the Ⓑ additional refrigerant charging operation again.
If the additional refrigerant charging operation is stopped soon , the refrigerant may be overcharged.
Never charge extra refrigerant.)
⑦ Disconnect the refrigerant charge hose.

2P175034G

Check operation method

- Make sure to open the gas side and liquid side shutoff valve before starting operation.
- The checked items or needed time in this operation branches as table below due to the additional refrigerant charging method.
  Confirm the additional refrigerant charging method that was done in advance.

Additional refrigerant charging method	The checked items	The needed time
The additional refrigerant charging was completed by the cooling charging operation in the refrigerant charging operation procedure mentioned in the installation manual	• Check of miswiring • Check of the shutoff valve opening • Automatic judgment of piping length • Check of refrigerant initial state(✱)	about 3 or 4 hours
The additional refrigerant charging was completed by the other method.(RZYQ,RQ type match with only this case.)	• Check of miswiring • Check of the shutoff valve opening • Automatic judgment of piping length • Check of refrigerant overcharge	about 40 minutes

(✱) Under the following conditions, the system can not perform the "Check of refrigerant initial state".
In this case, normal operation is possible after performing the check operation, although abnormal code "U3" is displayed in the indoor remote controller.
However, the refrigerant leakage detecting function cannot be operated. If it is required, perform the check operation again, and finish the initial refrigerant amount judgment.
■Out of the operation range(Outdoor :less than 0℃DB, more than 43℃DB/Indoor :less than 20℃DB , more than 32℃DB)
■Forced OFF during check operation

- Make sure to carry out the check operation after the first installation.
  Otherwise, the malfunction code "U3" will be displayed in the remote controller and normal operation cannot be carried out.
  When the check operation is finished normally, normal operation can be carried out after 5 minutes.
- For Multi system, check the setting and result on the master unit. (See Caution for Multi connecting system. Except for RZYQ type.)
- The abnormality of each indoor unit can not be checked. After the check operation is finished, check the indoor units individually by normal operation using the remote controller.

[Operation procedure]

① To protect the compressor, make sure to turn on the power supply for 6 hours before stating operation.
(After turning on the power supply, the unit can not start the operation until the H2P LED goes off. (maximum 12 minutes))
② Set to the SETTING MODE 1 (H1P: light OFF)
③ Push the TEST button(BS4) for 5 seconds or more. Then the unit will start the check operation.
- The check operation is automatically carried out in a cooling mode. H2P will flash up and "Test operation" and "Under centralized control" will be displayed in the remote controller.
- It may take 10 minutes to bring the state of refrigerant uniform before the compressor starts.
- During the check operation, the refrigerant running sound or the magnetic sound of a solenoid valve may become loud during operation. And the LED display may change, but these are not malfunctions.
- During the check operation, it is impossible to stop the unit from the remote controller. When discontinue the operation, push the RETURN button (BS3). The system will stop after behind operation for 30 seconds.

④ Close the front panel. (Otherwise, it may cause a misjudgment.)
⑤ When the checks are completed , the system will stop automatically. After the system stopes the operation , check the operation results by the outdoor unit LED display. (See the table shown right.)

STATE	H1P	H2P	H3P	H4P	H5P	H6P	H7P
Normal	●	●	☼	●	●	●	●
Abnormal	●	☼	☼	●	●	●	●

[Measure for abnormal finish]

① Confirm the malfunction code by the remote controller, and correct the abnormality.(For how to correct the abnormality, see the installation manual.)
② After correcting the abnormality, push the RETURN button (BS3) and reset the malfunction code.
③ Carry out the check operation again and confirm that the abnormality is properly corrected.

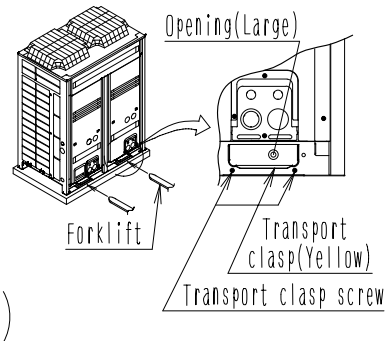
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2P175034G

To Installers

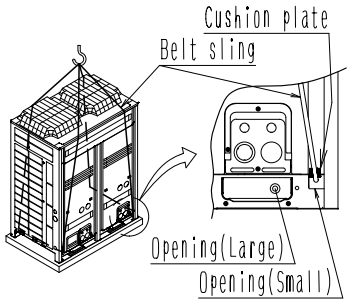
1. When carrying the unit

- If a forklift is used for carrying the unit, put the forklift arms into the large openings on the bottom of the unit.
  - ※In order not to damage the coating of the bottom frame, put rags on the forklift arms. (Otherwise rustproofing effect will be lost.)
- After installation, remove the transport clasps attached to the large openings.



2. When lifting the unit

- Put the belt slings into the small openings. (For 5HP unit, into the large openings)
- Lift the unit with 2 belts of the at least 8m long.
- Put cushioning plates or rags where the slings contact the casing.



3. Electrical work

- To prevent electric shock and fire accident, be sure to perform grounding and install an earth leak breaker.
- Electrical work must be carried out by a licensed electrician in accordance with local and national regulations.

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To Service Person

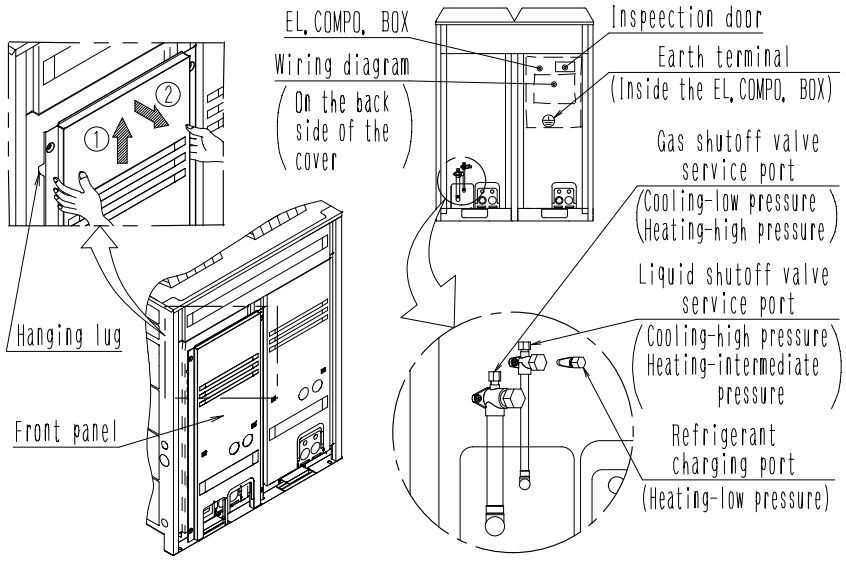
⚠WARNING ⚠Caution to electric shock

- Beware the fan running when inspect.
- Do not touch the charged parts when inspect.

Check the system status on LED(H2P) on the PC board(A1P) from inspection door on the EL. COMPO. BOX cover.
LED display shows;
TURNING OFF···Normal TURNING ON···Abnormal FLASHING···Under preparation
(For multi system, check the PC board of the master unit.
The master unit is the outdoor unit connected to the transmission wiring to the indoor units.)

To All handlers

- For removing the front panel, lift the panel a little(①), and pull the panel towards you(②).
- For the location of the EL. COMPO. BOX and the service port, see as shown below on the right.



3P170269B

16

Part 7
Control

1. Option List of Controllers....807
2. DAIKIN Building Air conditioning Control System (D-BACS)....808
   - 2.1 System Configuration (Central Remote Controller)....808
   - 2.2 System Configuration (intelligent Touch Controller)....809
   - 2.3 System Configuration....810
   - 2.4 Various PC Boards....812
3. Control System....814
   - 3.1 Various Control by Liquid Crystal Remote Controller....814
   - 3.2 Building Control System Introduction....820
   - 3.3 Specifications of the Control Wiring....826
   - 3.4 Wiring Example....827
   - 3.5 Length of Transmission Wiring....829
   - 3.6 Branch Wiring....830
4. Control Devices....836
   - 4.1 <BRC1C62> Wired Remote Controller....836
   - 4.2 Wireless Remote Controller / Receiver....840
   - 4.3 <DCS303A51> Residential Central Remote Controller....844
   - 4.4 <DCS302CA61> Central Remote Controller....849
   - 4.5 <DCS301BA61> Unified ON/OFF Controller....876
   - 4.6 <DST301BA61> Schedule Timer....884
   - 4.7 <DCS302CA61 / DCS301BA61 / DST301BA61> Combinations of Optional Controllers for Centralized Control....892
   - 4.8 <DCS601C51> intelligent Touch Controller....895
   - 4.9 <BRC1D61> Wired Remote Controller with Weekly Schedule Timer....909
   - 4.10 <DAM602B51 / DAM602B52> intelligent Manager III....918
5. Adaptor....929
   - 5.1 <DCS302A52> Unification Adaptor for Computerized Control....929
   - 5.2 <KRP2A61 / KRP2A62 / KRP2A53> Wiring Adaptor for Electrical Appendices (1)....933
   - 5.3 <KRP4AA51 / KRP4AA52 / KRP4AA53 / KRP4A54> Wiring Adaptor for Electrical Appendices (2)....940
   - 5.4 <DTA102A52> Interface Adaptor for SkyAir Series....946
   - 5.5 <DTA107A55> Central Control Adaptor Kit....949
   - 5.6 <DEC101A51> Di Unit....953
   - 5.7 <DEC102A51> Dio Unit....956
   - 5.8 <DAM101A51> Ai Unit....959
   - 5.9 <DTA103A51> Wiring Adaptor for Other Air Conditioners....961
   - 5.10 <DTA104A61 / DTA104A62 / DTA104A53> External Control Adaptor for Outdoor Unit (Must be Installed on Indoor Units)....965
   - 5.11 <KRP1B61 / KRP1B56> Adaptor for Wiring....973
   - 5.12 <KRP1C3> Adaptor for Wiring....977
   - 5.13 <KRP1C63>....978
   - 5.14 <KRCS01-1B> Remote Sensor....980

5.15 <DTA109A51> DIII-NET Expander Adaptor....984
5.16 <KRP4A96> Mounting Plate for Adaptor PCB....987
6. Control Functions....989
6.1 <BRC1C62> Wired Remote Controller....989
6.2 <BRC4C, 7C, 7E> Wireless Remote Controller....997
6.3 <BRC2C51 (BRC2A51)> Simplified Remote Controller....1000
6.4 <BRC3A61> Remote Controller for Hotel Use....1002
6.5 <KRC19-26A> Cool / Heat Selector for Outdoor Units....1003

1. Option List of Controllers

Operation Control System Optional Accessories

No.	Item / Type			FXFQ-P	FXCQ-M	FXKQ-MA	FXDQ-PB FXDQ-NB	FXSQ-M	FXMQ-P	FXMQ-MA	FXHQ-MA	FXAQ-MA	FXLQ-MA FXNQ-MA	FXUQ-MA
1	Remote controller	Wireless	H/P	BRC7F634F	BRC7C62	BRC4C61	BRC4C65	BRC4C62	BRC4C65	BRC4C62	BRC7E63W	BRC7E618	BRC4C62	BRC7C528W
		Wired		BRC1C62										
2	Wired remote controller with weekly schedule timer			BRC1D61										
3	Simplified remote controller			—			Note 7 BRC2C51				—		Note 7 BRC2C51	—
4	Remote controller for hotel use			—			BRC3A61				—		BRC3A61	—
5	Adaptor for wiring			∗ KRP1C63	∗ KRP1B61	KRP1B61	∗ KRP1B56	KRP1B61	∗ KRP1C64	KRP1B61	KRP1C3	—	KRP1B61	—
6-1	Wiring adaptor for electrical appendices (1)			∗ KRP2A62	∗ KRP2A61	KRP2A61	∗ KRP2A53	∗ KRP2A61			∗ KRP2A62	∗ KRP2A61	KRP2A61	∗ KRP2A62
6-2	Wiring adaptor for electrical appendices (2)			∗ KRP4AA53	∗ KRP4AA51	KRP4AA51	∗ KRP4A54	∗ KRP4AA51			∗ KRP4AA52	∗ KRP4AA51	KRP4AA51	∗ KRP4AA53
7	Remote sensor			KRCS01-4B	KRCS01-1B				KRCS01-4B	KRCS01-1B	KRCS01-1B			
8	Installation box for adaptor PC board			Note2, 3 KRP1H98	Note 2, 3 KRP1B96	—	Note 4, 6 KRP1B101	Note 5 KRP4A91	Note 2, 3 KRP4A96	—	Note 3 KRP1C93	Note 2, 3 KRP4A93	—	KRP1B97
9	Central remote controller			DCS302CA61										
9-1	Electrical box with earth terminal (3 blocks)			KJB311AA										
10	Unified ON/OFF controller			DCS301BA61										
10-1	Electrical box with earth terminal (2 blocks)			KJB212AA										
10-2	Noise filter (for electromagnetic interface use only)			KEK26-1A										
11	Schedule timer			DST301BA61										
12	External control adaptor for outdoor unit (Must be installed on indoor units)			∗ DTA104A62	∗ DTA104A61	DTA104A61	∗ DTA104A53	DTA104A61	∗ DTA104A61	DTA104A61	∗ DTA104A62	∗ DTA104A61	DTA104A61	—

Note:

1. Installation box (No.8) is necessary for each adaptor marked ∗.
2. Up to 2 adaptors can be fixed for each installation box.
3. Only one installation box can be installed for each indoor unit.
4. Up to 2 installation boxes can be installed for each indoor unit.
5. Installation box (No. 8) is necessary for second adaptor.
6. Installation box (No. 8) is necessary for each adaptor.
7. BRC2A51 is also available.

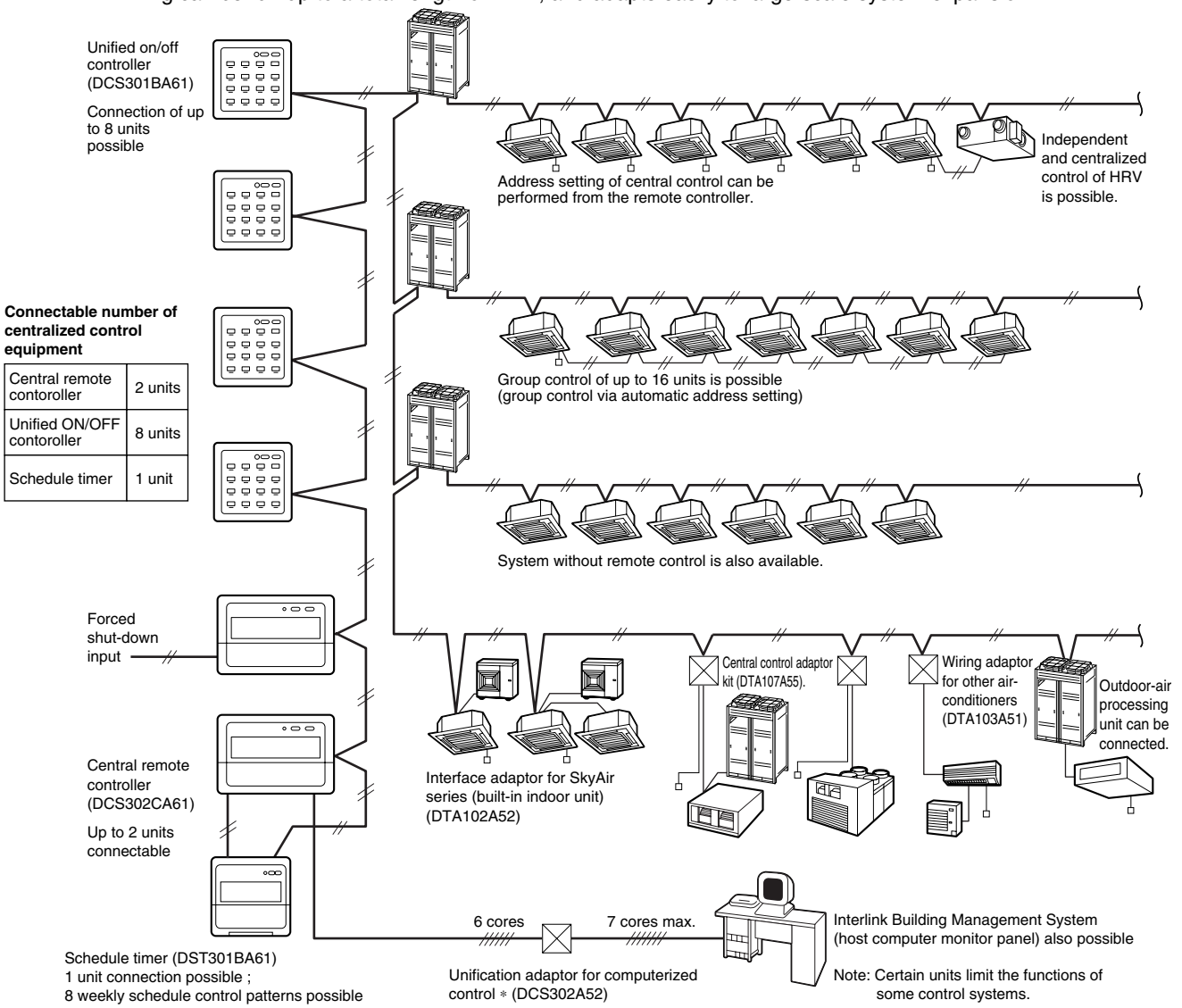
Various PC Boards

No.	Part name	Model No.	Function
1	Adaptor for wiring	KRP1B56 KRP1B57 KRP1B59 KRP1B61 KRP1C3	■ PC board when equipped with auxiliary electric heater in the indoor unit.
2	DIII-NET Expander Adaptor	DTA109A51	■ Up to 1,024 units can be centrally controlled in 64 different groups. ■ Wiring restrictions (max. length: 1,000 m, total wiring length: 2,000 m, max. number of branches: 16) apply to each adaptor.

2. DAIKIN Building Air conditioning Control System (D-BACS)

2.1 System Configuration (Central Remote Controller)

- Up to 64 groups of indoor units (128 units) can be centrally controlled.
- Optional controllers for centralized control can be combined freely, and system can be designed in accordance with building scale and purpose.
- System integration with various air-conditioning peripheral equipment such as HRV (Heat Reclaim Ventilation) is easy.
- Wiring can be run up to a total length of 2 km, and adapts easily to large-scale system expansion.



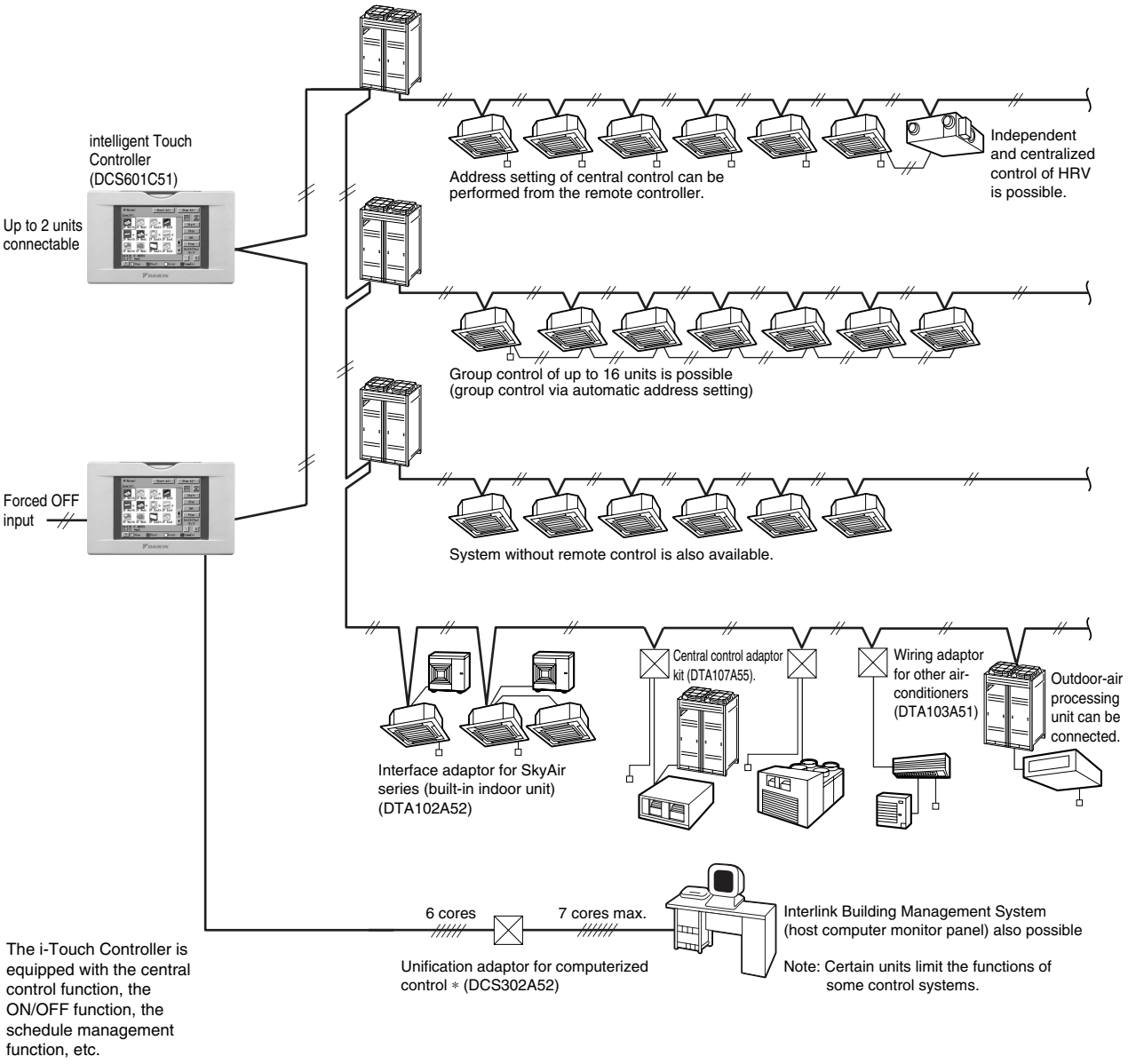
No.	Part Name	Model No.	Function
1	Residential central remode controller	Note2 DCS303A51	Up to 16 groups of indoor units (128 units) can be easily controlled using the large LCD panel. ON/OFF, temperature setting and scheduling can be controlled individually for indoor units.
2	Central Remote Controller	DCS302CA61	Up to 64 groups of indoor units (128 units) can be connected, and on/off, temperature setting and monitoring can be accomplished individually or simultaneously. Connectable up to 2 sets into one system.
3	Unified ON/OFF Controller	DCS301BA61	Up to 16 groups of indoor units (128 units) can be turned, on/off individually or simultaneously, and operation and malfunction can be displayed. Can be used in combination with up to 8 controllers.
4	Schedule Timer	DST301BA61	Programmed time weekly schedule can be controlled by unified control for up to 64 groups of indoor units (128 units). Can turn units on/off twice per day.
5	Unification Adaptor for Computerized Control	∗ DCS302A52	Used to combine host computer monitor panel and central remote controller (on/off, display).
6	Interface Adaptor for SkyAir Series	∗ DTA102A52	Used to connect SkyAir series with optional controllers for centralized control.
7	Wiring Adaptor for Other Air-Conditioner	∗ DTA103A51	Used to connect with other air-conditioners other than VRV system or SkyAir series with optional controllers for centralized control.

Notes:

1. Installation box for ∗ adaptor must be procured on site.
2. For residential use only. Cannot be used with other centralized control equipment.

2.2 System Configuration (intelligent Touch Controller)

■ This controller is a central remote controller offering higher functions than those of the previous central remote controller DCS302CA61, and easier operation.
Up to 64 groups of indoor units may be connected to 1 unit of this controller.

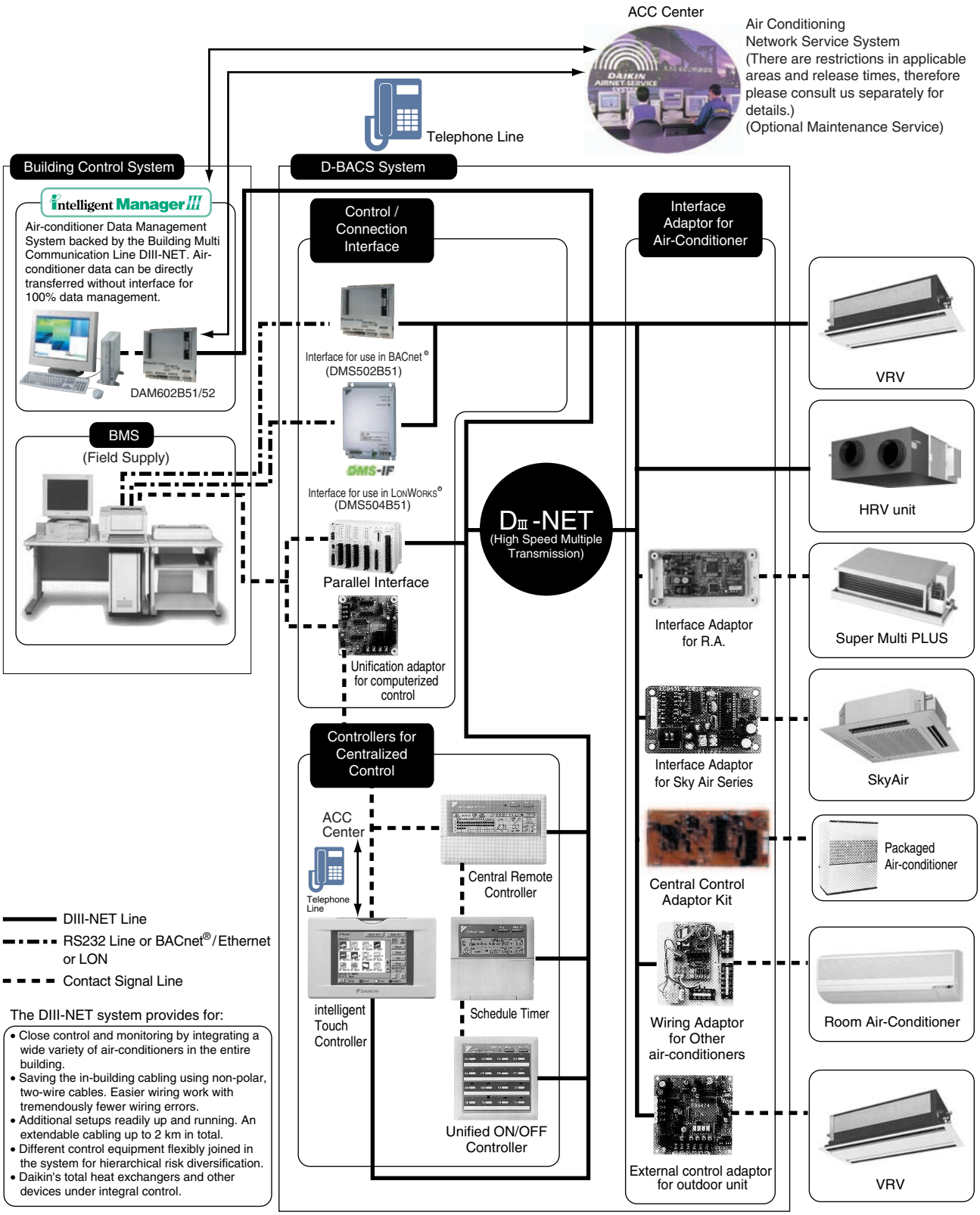


No.	Part Name	Model No.	Function
1	intelligent Touch Controller	DCS601C51	Up to 64 groups of indoor units (128 units) can be connected, and on/off, temperature setting and monitoring can be accomplished individually or simultaneously. Connectable up to 2 sets into one system.

17

2.3 System Configuration

By combining the various control equipment flexibly, you can construct the sophisticated central control system to meet any size and design of the building.



Caution

Control functions may be different from model to model.

For trouble-free control systems, it is advisable to discuss your projects at hand. Please contact us at your planning stage.

System Configuration

No.	Item		Model No.	Function
1	Residential central remote controller		Note 3 DCS303A51	■ Up to 16 groups of indoor units (128 units) can be easily controlled using the large LCD panel. ON/OFF, temperature settings and scheduling can be controlled individually for indoor units.
2	Central remote controller		Note 2 DCS302CA61	■ Up to 64 groups of indoor units(128 units) can be connected, and ON/OFF, temperature setting and monitoring can be accomplished individually or simultaneously. Connectable up to 2 controllers in one system.
2-1	Electrical box with earth terminal (3 blocks)		KJB311AA	
3	Unified ON/OFF controller		Note 2 DCS301BA61	■ Up to 16 groups of indoor units(128 units) can be turned, ON/OFF individually or simultaneously, and operation and malfunction can be displayed. Can be used in combination with up to 8 controllers.
3-1	Electrical box with earth terminal (2 blocks)		KJB212AA	
3-2	Noise filter (for electromagnetic interface use only)		KEK26-1A	
4	Schedule timer		Note 2 DST301BA61	■ Programmed time weekly schedule can be controlled by unified control for up to 64 groups of indoor units (128 units). Can turn units ON/OFF twice per day.
5	Interface adaptor for SkyAir-series	For SkyAir, FD(Y)M-FA, FDY-KA FDYB-KA, FVY(P)J-A, FXUQ-MA	*DTA102A52	■ Adaptors required to connect products other than those of the VRV System to the high-speed DIII-NET communication system adopted for the VRV System. * To use any of the above optional controllers, an appropriate adaptor must be installed on the product unit to be controlled.
6	Central control adaptor kit	For UAT(Y)-K(A),FD-K	*DTA107A55	
7	Wiring adaptor for other air-conditioner		*DTA103A51	
8	DIII-NET Expander Adaptor		DTA109A51	■ Up to 1024 units can be centrally controlled in 64 different groups. ■ Wiring restrictions (max. lengh : 1,000m, total wiring lengh : 2,000m, max. number of branches : 16) apply to each adaptor.
8-1	Mounting plate		KRP4A92	■ Fixing plate for DTA109A51

Note:

1. Installation box for * adaptor must be procured on site.
2. For FXUQ-MAV1, an interface adaptor (DTA102A52) for the SkyAir series is necessary.
3. For residential use only. Cannot be used with other centralized control equipment.

Building Management System

No.	Part name					Model No.	Function
1	intelligent Touch Controller	Basic	Hardware	intelligent Touch Controller		DCS601C51	■ Air-Conditioning management system that can be controlled by a compact all-in-one unit.
1-1		Option	Hardware	DIII-NET plus adaptor		DCS601A52	■ Additional 64 groups (10 outdoor units) is possible.
1-2			Software	P.P.D.		DCS002C51	■ P. P. D.: Power Proportional Distribution function
1-3				Web		DCS004A51	■ Monitors and controls the air conditioning system using the Internet and a Web browser application on a PC.
1-4	Electrical box with earth terminal (4 blocks)					KJB411A	■ Wall embedded switch box.
2	intelligent Manager III	Basic	Hardware	Number of units to be connected	128 units	DAM602B52	■ Air conditioner management system that can be controlled by personal computers.
					256 units	DAM602B51	
					512 units	DAM602B51x2	
					768 units	DAM602B51x3	
					1024 units	DAM602B51x4	
2-1		Option	Software		P.P.D.	DAM002A51	■ Power Proportional Distribution function
2-2					Web	DAM004A51	■ Monitors and controls the air conditioning system using the Internet and a Web browser application on a PC.
2-3					ECONO	DAM003A51	■ ECONO (Energy saving functions.)
2-4	Optional DIII Ai unit					DAM101A51	■ External temperature sensor for intelligent Manager III.
2-5	Di unit					DEC101A51	■ 8 pairs based on a pair of On/Off input and abnormality input.
2-6	Dio unit					DEC102A51	■ 4 pairs based on a pair of On/Off input and abnormality input.
3	Communication line	*1 Interface for use in BACnet®				DMS502B51	■ Interface unit to allow communications between VRV and BMS. Operation and monitoring of air-conditioning systems through BACnet® communication.
3-1		Optional DIII board				DAM411B51	■ Expansion kit, installed on DMS502B51, to provide 2 more DIII-NET communication ports. Not usable independently.
3-2		Optional Di board				DAM412B51	■ Expansion kit, installed on DMS502B51, to provide 16 more wattmeter pulse input points. Not usable independently.
4		*2 Interface for use in LONWORKS®				DMS504B51	■ Interface unit to allow communications between VRV and BMS. Operation and monitoring of air-conditioning systems through LONWORKS® communication.
5	Contact/analog signal	Parallel interface ┌ Basic unit				DPF201A51	■ Enables ON/OFF command, operation and display of malfunction; can be used in combination with up to 4 units.
6		│ Temperature measurement units				DPF201A52	■ Enables temperature measurement output for 4 groups; 0-5VDC.
7		└ Temperature setting units				DPF201A53	■ Enables temperature setting input for 16 groups; 0-5VDC.
8		Unification adaptor for computerized control				* DCS302A52	■ Interface between the central monitoring board and central control units.

Note:

*1. BACnet® is a registered trademark of American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).

*2. LONWORKS® is a registered trade mark of Echelon Corporation.

*3. Installation box for * adaptor must be procured on site.

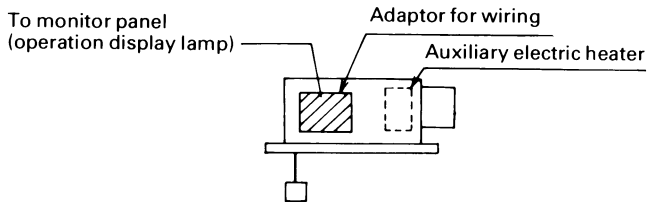
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2.4 Various PC Boards

Besides the central control system and building control system of the previous page, you can enhance control function by mounting various PC boards on indoor and outdoor units.

■ Adaptor for Wiring

The model of adaptor for wiring depends on the type of indoor unit.



Part Name	Model No.	Function
Adaptor for Wiring	KRP1B56, 57, 59, 61 KRP1C3	PC board when equipped with auxiliary electric heater or humidifier in the indoor unit.

3. Control System

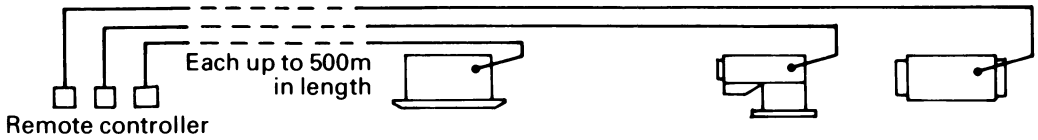
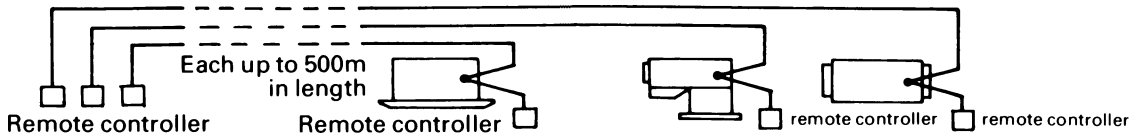
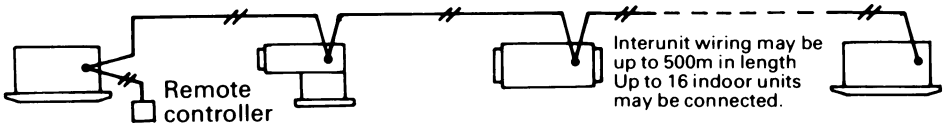
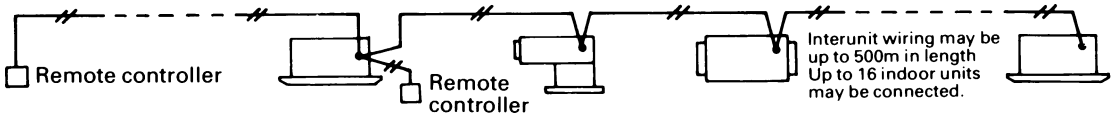
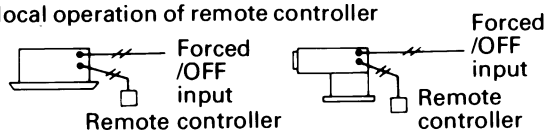
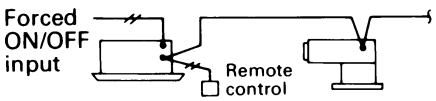
3.1 Various Control by Liquid Crystal Remote Controller

For more effective localized environmental control Daikin offers various control systems such as single or double remote control or centralized control. This enables the construction of a variety of operational control systems which can be adapted for various uses from remote control to building automation.

Control Method		Objective / Use	Unit Name and Model	Function	Standard Number of Units	
Control by Remote Controller	Local operation of remote controller	Example of typical use	**BRC1C62**  ∗2 **BRC2C51**  Connected to indoor units ■ For group control it is connected to 1 unit out of the group ■ In the case of control by 2 remote controllers both controllers are connected to the indoor unit	**Operational functions** ■ Start/Stop (ON/OFF) ■ Operation Mode Selection ■ Temperature setting ■ Timer setting (Settings in units of 1 hour up to a maximum of 72 hours) ■ Air flow setting ■ Air flow direction adjustment (Swing flap) ■ Ventilation Mode Selection ■ Ventilation Air flow Selection **Indication function** ■ Operating display ■ Program dry function display ■ Defrost/Hot start display ■ Filter sign ■ Temperature setting display ■ Timer display ■ Air flow display ■ Abnormal operation display ∗ In case of group control all the indoor units in the system are set to the same value and each unit is controlled individually by its internal thermostat. (Not by the thermostat equipped in remote controller) In commond case of double remote control the last command priority. (Selection between main and sub controller is essential)	1 remote controller controls 1 indoor unit	
	Remote operation of remote controller	For control from distant place				
	2 remote control	For control from 2 places (distant or local)			2 remote controllers control 1 indoor unit	
	Group control ∗1	For the control of plural indoor units on a floor at the same time			1 remote controller controls up to 16 indoor units simultaneously	
	∗1 Group control by 2 remote controllers	For above control from distant place.			2 remote controllers control up to 16 indoor units from 2 different places simultaneously	
	Forced OFF command from outside	Forced OFF for forgetting to turn equipment off, or in times of an emergency.		■ Forcibly stops indoor unit operation by command from outside. ■ During remote controller group control, input a command from outside to any one of the indoor units.	Same as the number of units controlled by remote controller	
	Combining control by remote controller	Operation of other equipment combined with the operation of indoor unit		■ Operates HRV in accordance with indoor unit operation. ■ In case of group control the thermostat equipped in remote controller is not available.	Same as the number of units controlled by remote controller	

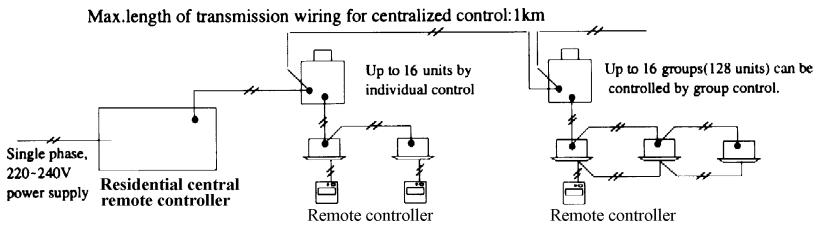
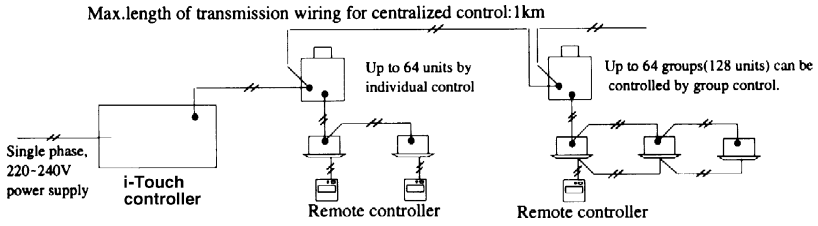
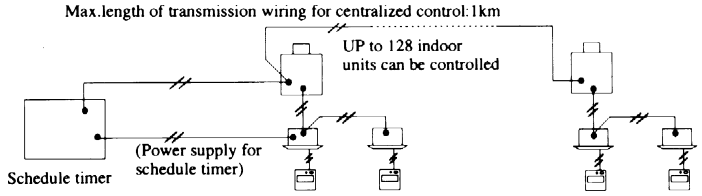
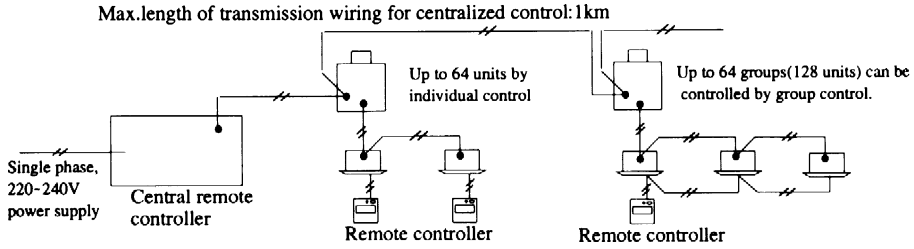
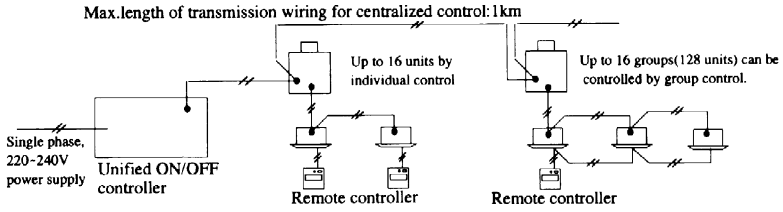
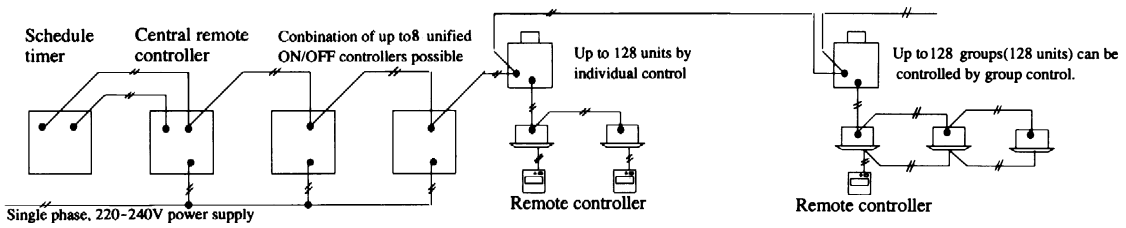
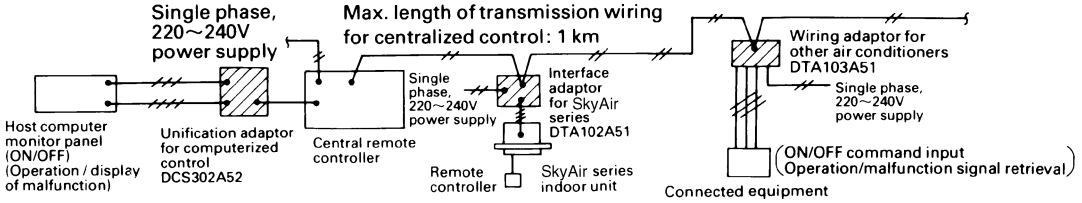
∗1 In case of group control, the remote controller used as master control must be selected with auto-swing function (BRC1A61). When the group has cassette (FXC (Q)), FXF (Q)) or ceiling suspended (FXH (Q)) or cassette corner (FXK (Q)) or wall mounted (FXA (Q)) models.

∗2 In case of using BRC2A51 (Simplified Remote Controller) to Heat Recovery Series, be sure not to use this independently. Use with other remote controllers (BRC1A51 · 52, BRC1C62 or KRC19-26A or DCS302A51).

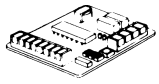
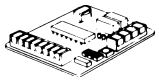
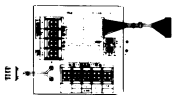
	Outline of System	Relevant Page Number
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	● For local operation of remote controller  ● For group control 	837
	● For HRV system 	837

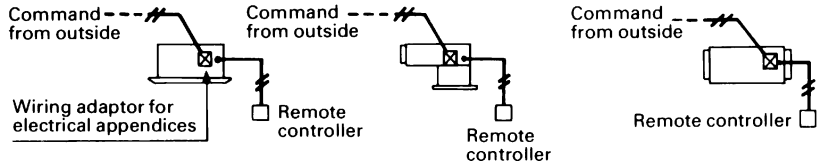
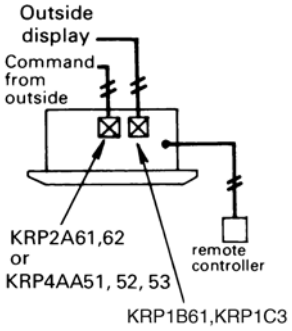
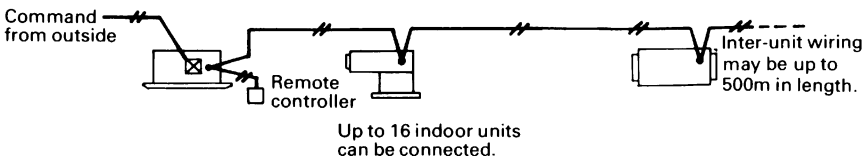
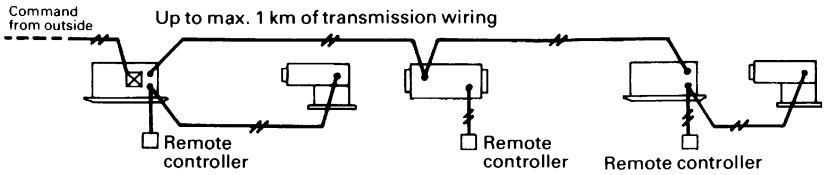
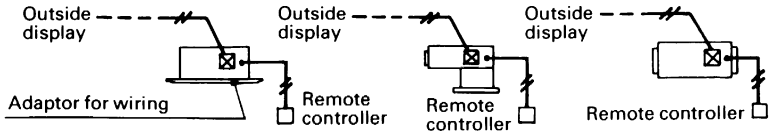
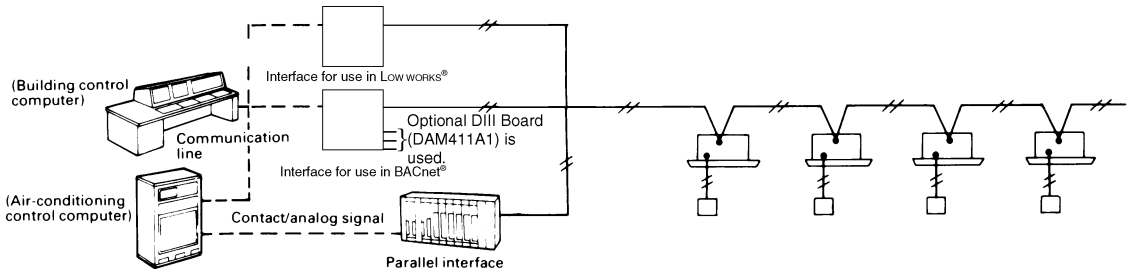
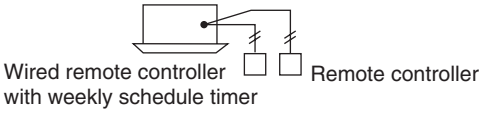
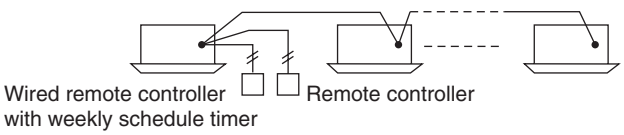
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	Control Method	Objective / Use	Unit Name and Model	Function	Standard Number of Units
Central Control	Residential central remote controller	For control all indoor units just like remote controller	**DCS303A51** 	■ Max. 16 groups (128 indoor units) controllable ■ Large backlit LCD panel for easy readability ■ ON/OFF, temperature settings and scheduling can be controlled individually for indoor units. ■ All indoor units can be turned on or off at once with “ALL” button. ■ Each group has a dedicated button for convenience. ■ Outside temperature display * For residential use only. Cannot be used with other centralized control equipment.	Max. 16 groups of indoor units can be easily controlled with the large LCD panel.
	intelligent Touch Controller	For control all indoor units just like remote controller	**DCS601C51** 	■ Adds various functions other than the functions of existing central remote controller. ■ Scheduled operation and function to distribute electricity proportionally. ■ Simple handling through a large sized liquid crystal display. ■ Adopts a touch-panel ■ Twin centralized control function ■ AIR-NET Service (optional-failure prediction) ■ Auto Heat/Cool Change Over ■ Temperature Limitation	Controls up to 64 groups (Max. 128 indoor units) with one i-touch Controller.
	Schedule timer	For carrying out weekly schedule operation by 1-minute units	**DST301BA61** 	■ ON/OFF time can be set by units of day, hour and minute; ON/OFF pattern can be set by time zone of twice per day in accordance with application.	Simultaneously controls 64 groups with one schedule timer. Max. 128 units
	Central remote controller	For control all indoor units just like remote controller	**DCS302CA61** 	64 groups (zones) of indoor units can be controlled individually same as LCD Remote controller. ■ Max.64 groups (128 indoor units controllable) ■ Max. 128 groups (128 indoor units) are controllable by using 2 central remote controllers, which can control from 2 different places. ■ Zone control ■ Malfunction code display ■ Max. wiring length 1,000 m (Total : 2,000 m) ■ Combination with Unified ON/OFF controller, schedule timer and BMS system ■ Airflow volume and direction can be controlled individually for indoor units in each group operation. ■ Ventilation volume and mode can be controlled for Heat Reclaim Ventilation (HRV). ■ Up to 4 Operation/Stop pairs can be set per day by connecting a schedule timer.	Controls up to 64 groups of indoor units with one central remote controller. Max. 128 units
	Unified ON/OFF controller	For ON/OFF operate all indoor units just like remote controller	**DCS301BA61** 	■ Double central control function ■ Indoor unit ON/OFF control ■ Individual/unified operation ■ Remote controller operation rejected command (Central remote controller given priority when used in combination with central remote controller.) ■ Sequential start function	Controls up to 16 groups of indoor units with one unified ON/OFF controller. Max. 128 units
	■ Schedule timer ■ Central remote controller ■ Unified ON/OFF controller	For controlling all indoor units from one place	**DST301BA61**  **DCS302CA61**  **DCS301BA61** 	■ Respective functions of schedule timer, central remote controller and unified ON/OFF controller are possible. (Control mode of central remote controller is given priority for operation of remote controller for indoor unit.) ■ Sequential start function	Controls up to 128 groups (Max. 128 indoor units) with one schedule timer, two central remote controller and eight unified ON/OFF controllers.
	Adaptor for connection with optional controllers for centralized control		■ Unification adaptor for computerized control **DCS302A52** ■ Interface adaptor for SkyAir series **DTA102A52** ■ Wiring adaptor for other air conditioners **DTA103A51**	■ Unification adaptor for computerized control allows you to simultaneously turn indoor units connected to the central remote controller on or off or display at the central monitor panel, etc. ■ Interface adaptor for SkyAir series, wiring adaptor for other air conditioners and wiring adaptor for ‘H’ indoor unit are for connection of optional controllers for centralized control.	■ Simultaneously controls by one unification adaptor for computerized control, all indoor units connected to a central remote controller. ■ Controls one indoor unit by one interface adaptor for SkyAir series, wiring adaptor for other air conditioners, and wiring adaptor for ‘G(J)’ indoor unit.

	Outline of System	Relevant Page Number
		844
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Control Method		Objective / Use	Unit Name and Model	Function	Standard Number of Controllers	
Remote Control	Wiring adaptor for electrical appendices (2)	For control by operation command from building control room	■ With remote temperature setting  **KRP4AA51** **KRP4AA52** **KRP4AA53** **KRP4A54** Built into indoor unit	■ Normally open or momentary open type contactor ■ 12~24 VDC or no-voltage ■ Various control methods available by mode select switch ■ Voltage, no-voltage selector switch ■ Alarm and operation display signal (no-voltage) ■ Selector switch of zone/individual of alarm display ■ Remote temperature setting (resistance input of 0~135Ω) ■ Selector switch for remote controller temperature setting enable/inhibit * For group unified control, the setting becomes the same for all connected indoor units, and each indoor unit is controlled individually by built-in thermostat. * In case of using wiring adaptor for Electrical Appendices (2), the control by 2 remote controller is not available.	1 PC board controls 1 indoor unit. 1 PC board simultaneously controls 1 group of indoor units (max. 16 units).	
	Wiring adaptor for electrical appendices (1)		■ With remote temperature setting  **KRP2A53** **KRP2A61** **KRP2A62** Built into indoor unit		1 PC board simultaneously controls 64 groups (total of 128 units).	
Wiring Modification	Adaptor for wiring	When controlling operation with optional accessories added inside indoor units, the status is displayed outside.	 Built into indoor unit **KRP1B56, 57, 59, 61** **KRP1C3**	■ Required when electric heater optional accessory has been added. ■ Operation display signal and compressor operation signal are supplied.	1 adaptor controls the electric heater.	
Building Control System		Building control computer, air-conditioning control computer and control system for air-conditioning are carried out by communication and contact signal.	■ Interface for use in BACnet® **DMS502B51** ■ Optional DIII board **DAM411B51** ■ Optional Di Board **DAM412B51** ■ Parallel interface **DPF201A51, 52, 53** ■ Interface for use in LON WORKS® **DMS504B51**	■ Interface for use in BACnet® Interface unit to allow communications between VRV and BMS. ■ Parallel interface Carries out operation and monitoring function of each indoor unit by contact and analog signal. ■ Interface for use in LON WORKS® The LON Gateway functions as the interface for a building monitoring system and cannot be w-installed on the DIII-NET along with following equipment / devices that have similar functions.	Interface for use in BACnet®: Up to 256 indoor units (256groups) When the option DIII board is used Parallel Interface, Interface for use in LON WORKS® Up to 64 indoor units (64 groups)	
Scheduled Control	Wired remote controller with weekly schedule timer	Desired Weekly Scheduled Operation of ON/OFF and Temperature's Set-back	**BRC1D61** 	■ Includes ventilation mode and airflow rate switching, the main functions of HRV series. ■ 24-hour clock function (1-hour backup for power failures) ■ Programming function for each day of week. ■ Scheduling possible of start/stop and temperature limit (5 settings/day) ■ Programming can be enabled or disabled. ■ Copy function for programmed schedules.	One indoor unit control by one wired remote controller with weekly schedule timer Max. 16 groups under simultaneous control by one wired remote controller with weekly schedule timer	

Outline of System		Relevant Page Number
■ Individual Control (Controls Indoor Units Individually.) ● Individual control (Controls indoor units individually.) 	■ KRP1B61, KRP1C3, KRP2A61,62 and KRP4AA51,52,53 can be built-in together into the indoor units 	940
■ Group Unified Control (Controls group controlled indoor units all at once and simultaneously.) ● Group unified control (Controls group controlled indoor units all at once and simultaneously.) 		
■ Zone Unified Control (Unified, simultaneous control of up to 64 groups of group controlled indoor units consisting of up to 16 units each.) ● Zone unified control (Unified, simultaneous control of up to 64 groups of group controlled indoor units consisting of up to 16 units each.) 	Combined use of wiring adaptor for Electrical Appendices (1) and (2) is not available.	933
		973 977
		820 825
		909
	* Be sure to provide a master remote controller. This scheduled operation cannot be used in both cases at control by two remote controllers and at the connection of a group remote control adaptor.	

17

3.2 Building Control System Introduction

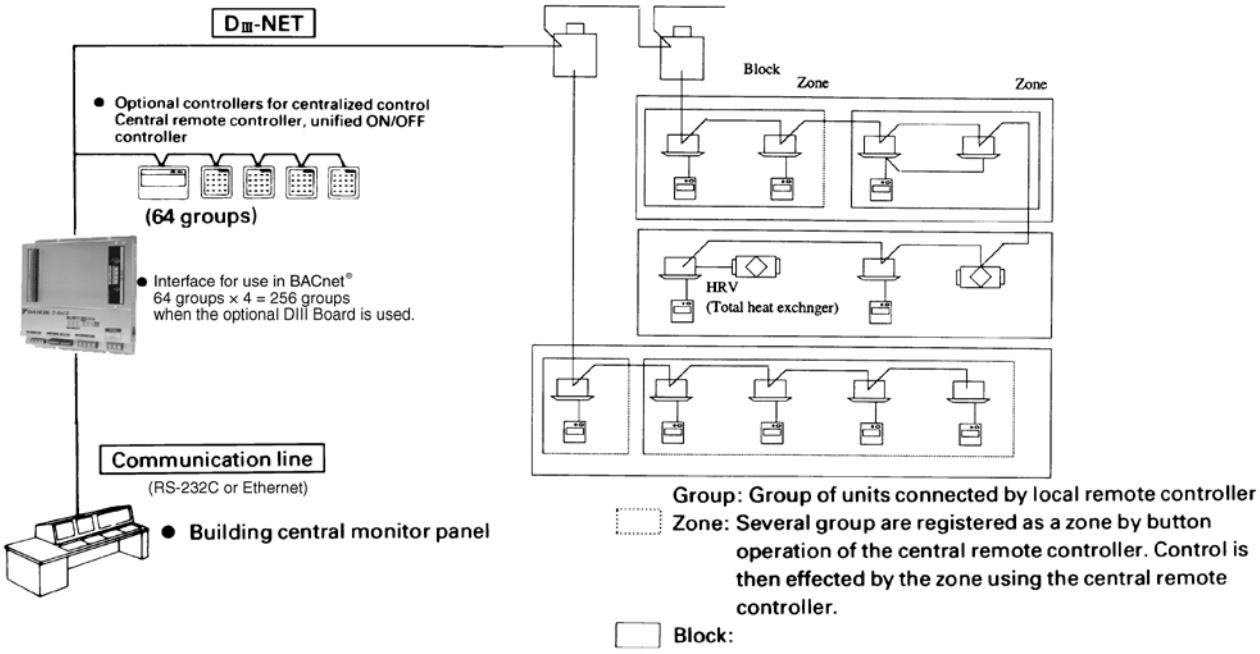
High-speed transmission type air-conditioning control system D-BACS (DAIKIN Building Air-conditioning Control System) networks up to 64 groups of indoor units (128 units). There is a complete line up of variegated control equipment for D-BACS, such as parallel interface, or a master station that can directly access a building control computer via a communication line. Changing control function to a component configuration makes D-BACS a central control system that can be flexibly combined with other equipment, which can respond to various air-conditioning control needs such as application, conditions and scale.

3.2.1 Interface for use in BACnet®

This system sets the control configuration and controls air-conditioning equipment, monitors system status and possesses a system backup function.

■ **Control configuration setting function for air-conditioning equipment**

System Outline



Name	Functions
Interface for use in BACnet® (DMS502B51)	Interface unit to allow communications between VRV and BMS. Operation and monitoring of air-conditioning systems through BACnet® communications.
Optional DIII board (DAM411B51)	Expansion kit, installed on the DMS502B51, to provide 3 more DIII-NET communication ports. Not usable independently.
Optional Di Board (DAM412B51)	Expansion kit, installed on the DMS502B51, to provide 16 more wattmeter pulse input points. Not usable independently.
Central Remote Controller (DCS302CA61)	Functions as a backup if the building control systems fails.
Unified ON / OFF Controller (DCS301BA61)	Central control panel for simple operation by ON/OFF switch and LED display. Also functions as a backup just as with the central remote controller.
Local Remote Controller (BRC1C62)	Provided in each room. Used for operating, setting and monitoring air-conditioning equipment.

Note:

1. A group consists of several indoor units that can be started or stopped simultaneously. As shown in the figure above, a group consists of several indoor units wired to the same remote controller. For units without a remote controller, each unit is treated as a group.
2. Several groups are registered as a zone with the central remote controller. By pushing 1 button of the central remote controller, all groups within the same zone can be turned on or off simultaneously.

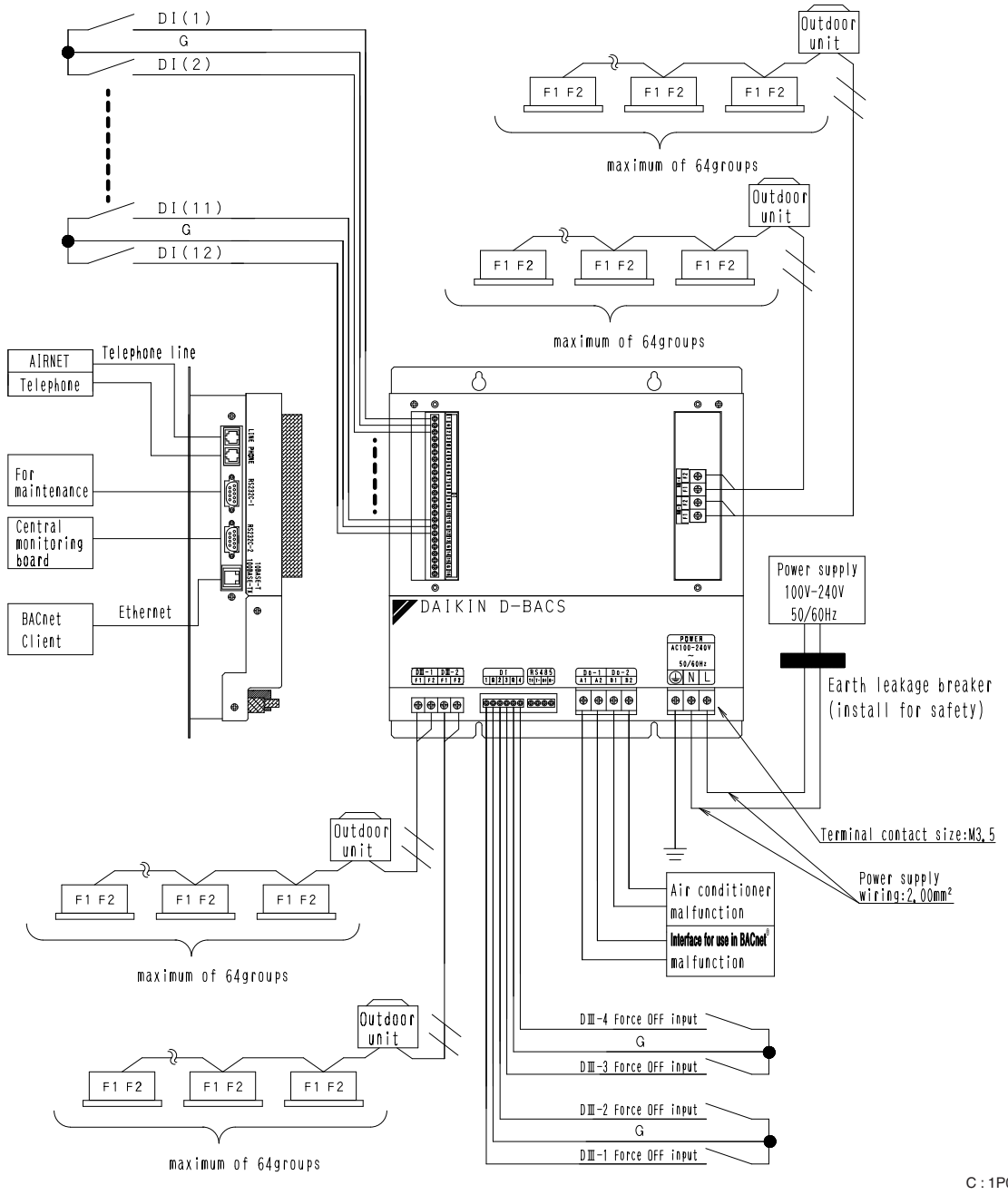
Building management 1 system controls and monitors air-conditioning equipment by the block. A block consists of 1 or more groups (max. 16), and can be set without regard for the zones mentioned above. You must, however, take the following things into consideration.

(1) If the air-conditioning mode is switched, as a premise, permission for cool/heat selection for indoor units (by remote controller or central remote controller) must be designated within the program.

(2) Program status is basically monitored by observing the data of a representative unit. The contents which can be monitored are therefore restricted if the representative unit is designated as an adaptor, etc.

Block registration is accomplished through signal transmission from the building control system to the cooler-conditioning system. Because configuration can be changed while receiving power even after operating, maintenance from the maker of the air-conditioning equipment is not required when changing the configuration.

3.2.2 Wiring Diagram



3.2.3 Air-Conditioning Equipment and Possible Functions

Function	Air-conditioner devices				Remarks
	VRV Inverter Series	Interface Adaptor for SkyAir Series (SA Heat Pump)	HRV	Wiring Adaptor for Other Air-Conditioners	
Start/Stop Control and Monitoring	○	○	○	○	
Air-Conditioner Error Notification	○	○	○	○	
Indoor Air Temperature Monitoring	○	○	×	×	
Temperature Setting and Monitoring	○	○	×	×	
Air-Conditioning Mode Setting and Monitoring	○	○	×	×	Air-conditioning mode switching is effective only for indoor units for which cool/heat selection is permitted.
∗1 Remote Controller Mode Setting and Monitoring	○	○	○	×	
Filter Sign Monitoring and Reset	○	○	○	×	
Cumulative Power Value Monitoring	○	×	×	○	
Thermostat Status Monitoring	○	○	×	×	
Compressor Operation Status Monitoring	○	○	×	×	
Indoor Fan Operation Status Monitoring	○	○	×	×	
Heater Operation Status Monitoring	○	○	×	×	
Air Direction Setting and Monitoring	○	○	×	×	
Air Flow Rate Setting and Monitoring	○	○	×	×	
Ventilation Mode Selection	×	×	○	×	
Ventilation Air Flow Selection	×	×	○	×	
Forced Thermostat Off Setting and Monitoring	○ ∗2	○	×	×	
Forced Thermostat On Setting and Monitoring	○ ∗2	○ ∗2	×	×	
Energy Efficiency Command (Setting Temperature Shift)	○	×	×	×	

Note:

∗1. Remote controller mode is for acceptance or rejection of on/off operation, temperature setting and air-conditioning mode setting by remote controller.

∗2. If set locally, the host is not notified. Thus, monitoring cannot be accomplished from the host.

3. The meaning of ○, × are as follows
   ○ : Possible Functions
   × : Impossible Functions

3.2.4 Central Control Equipment Combinations

The table below shows which combinations of central control equipment are possible and which are not.

	Central Remote Controller	Unified ON / OFF Controller	Schedule Timer	Wiring Adaptor for Electrical Appendices	Parallel Interface	Interface for use in BACnet®	intelligent Manager
Central Remote Controller	— ∗4	○	○	×	○	○	○
Unified ON/OFF Controller	○	— ∗3	○	×	○	○	○
Schedule Timer ∗1	○	○	—	×	×	×	×
Wiring Adaptor for Electrical Appendices	×	×	×	—	×	×	×
Parallel Interface	○	○	×	×	— ∗2	×	×
Interface for use in BACnet®	○	○	×	×	×	—	×
intelligent Manager	○	○	×	×	×	×	—

∗1 The schedule timer cannot be used by itself. Use in combination with the central remote controller or unified ON / OFF controller.

∗2 May be used in combination if control range differs (up to 4 units).

∗3 May be used in combination if control range differs (up to 8 units: Up to 16 units in the double central control mode).

∗4 May be used in combination if control range differs (up to 2 units: Up to 4 units in the double central control mode).

5 The meaning of ○, ×, — are as follows
○: Possible Functions
×: Impossible Functions
—: No Functions

- If using in combination with central control equipment, the relation between them is last command priority.
- If using in combination with central control equipment, the remote control mode is decided by the setting of the highest priority item in the priority rank shown in the table below.

Priority Ranking of Remote Control Mode Settings

	Interface for use in BACnet®	Parallel Interface	Central Remote Controller	intelligent Touch Controller	Unified ON/OFF Controller	Schedule Timer
Priority Ranking	1	1	2	2	3	4

3.2.5 Intelligent Touch Controller and Central Control Equipments Combinations

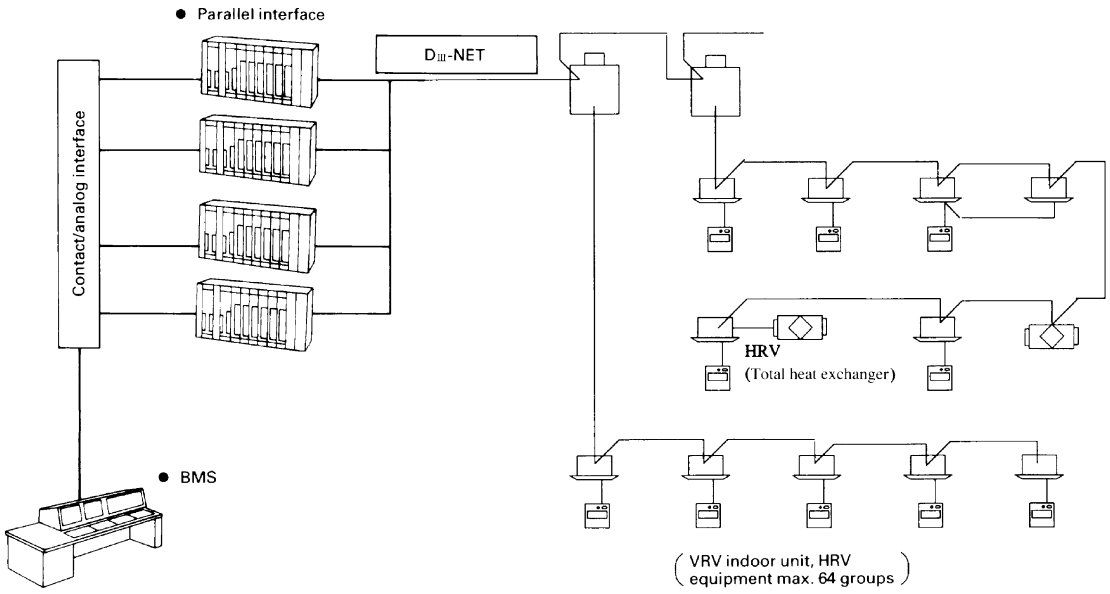


Combination	#1		#2		#3		#4	
	1-00~4-15	Main/ Sub	5-00~5-15	Main/ Sub	1-00~4-15	Main/ Sub	5-00~5-15	Main/ Sub
Impossible	intelligent Touch Controller	Main	intelligent Touch Controller	Main	intelligent Touch Controller	Sub	intelligent Touch Controller	Sub
Impossible	intelligent Touch Controller	Main	intelligent Touch Controller	Main	intelligent Touch Controller	Sub	Central Remote Controller	Sub
Impossible	intelligent Touch Controller	Main	intelligent Touch Controller	Main	Central Remote Controller	Sub	intelligent Touch Controller	Sub
Impossible	intelligent Touch Controller	Main	intelligent Touch Controller	Main	Central Remote Controller	Sub	Central Remote Controller	Sub
Impossible	intelligent Touch Controller	Main	Central Remote Controller	Main	intelligent Touch Controller	Sub	intelligent Touch Controller	Sub
Impossible	intelligent Touch Controller	Main	Central Remote Controller	Main	intelligent Touch Controller	Sub	Central Remote Controller	Sub
Impossible	intelligent Touch Controller	Main	Central Remote Controller	Main	Central Remote Controller	Sub	intelligent Touch Controller	Sub
Impossible	intelligent Touch Controller	Main	Central Remote Controller	Main	Central Remote Controller	Sub	Central Remote Controller	Sub
Impossible	Central Remote Controller	Main	intelligent Touch Controller	Main	intelligent Touch Controller	Sub	intelligent Touch Controller	Sub
Impossible	Central Remote Controller	Main	intelligent Touch Controller	Main	intelligent Touch Controller	Sub	Central Remote Controller	Sub
Impossible	Central Remote Controller	Main	intelligent Touch Controller	Main	Central Remote Controller	Sub	intelligent Touch Controller	Sub
Impossible	Central Remote Controller	Main	intelligent Touch Controller	Main	Central Remote Controller	Sub	Central Remote Controller	Sub
Impossible	Central Remote Controller	Main	Central Remote Controller	Main	intelligent Touch Controller	Sub	intelligent Touch Controller	Sub
Impossible	Central Remote Controller	Main	Central Remote Controller	Main	intelligent Touch Controller	Sub	Central Remote Controller	Sub
Impossible	Central Remote Controller	Main	Central Remote Controller	Main	Central Remote Controller	Sub	intelligent Touch Controller	Sub
Possible	Central Remote Controller	Main	Central Remote Controller	Main	Central Remote Controller	Sub	Central Remote Controller	Sub
Possible	Central Remote Controller	Main	—	—	Central Remote Controller	Sub	—	—
Possible	intelligent Touch Controller	Main	—	—	intelligent Touch Controller	Sub	—	—
Possible	Central Remote Controller	Main	—	—	intelligent Touch Controller	Sub	—	—
Possible	intelligent Touch Controller	Main	—	—	Central Remote Controller	Sub	—	—
Possible	Central Remote Controller	Main	—	—	—	—	—	—
Possible	intelligent Touch Controller	Main	—	—	—	—	—	—

3.2.6 Parallel Interface

You can easily connect host systems such as a building management system, various control systems, tenant management system, etc. to VRV system.

System Outline



Parallel Interface Outline

- On/off command, status monitoring (contact signal) and room temperature setting, indoor unit suction temperature measurement (analog signal), filter sign monitoring and Unified operation (off) can be carried out by host system.
- You can designate whether operation by local remote controller will be accepted or rejected for each parallel interface.
  (You may select from among central priority, last command priority and remote controller operation rejection.)
- On/off command, status monitoring and room temperature setting can be set for 16 groups individually.
- Suction temperature measurement only is selected for any 4 of 16 groups.
- Units can be increased by units of 16 groups each within the same central control system, and 64 groups can be controlled when a maximum of 4 units are connected.

Connection Functions with Host System

The functions when connected with a host system via parallel interface are given below.

- Functions

Function	Host System	Data Direction	Parallel Interface Processing
Operation/ Setting	On/Off Operation	→	On/off command is detected and sent to applicable group of indoor units.
	Forced Off Operation	→	Off command is detected and all indoor units on the same line are turned off.
	Temperature Setting Control	→	Alteration of the temperature setting is detected, and if within the range of 1.6 to 3.2V, the command is sent to applicable group of indoor units. Setting by local remote controller or central remote controller is impossible when in this range only. (“Central Control” is displayed on the local remote controller.)
Monitoring	On/Off Status (Note 1)	←	Present status is output when change in group status is detected.
	Normal/Error Status (Note 1)	←	Present status is output when change in group status is detected.
	Filter Sign	←	Present status is output when at least 1 group among the control target groups is lit.
	Indoor Unit Suction Temperature	←	Measurement value of suction air temperature is constantly output. If there is a sub unit, the measurement value for the main unit is output.

Note:

1. The various output conditions are as follows.

On: At least 1 air-conditioner in the group is operating.
Off: All air-conditioners in the group are turned off.

Error: An error has occurred for at least 1 air-conditioner in the group.
Normal: All air-conditioners in the group are operating normally.

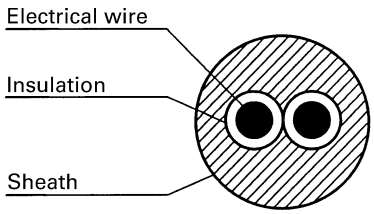
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3.3 Specifications of the Control Wiring

Be sure to use either 2-core sheathed vinyl cord or cable as mentioned below.
(Example : In case of Japanese JIS)

■ Vinyl cab tire round cord	VCTF	JISC3306
■ Vinyl insulated, vinyl sheathed cable for control	CVV	JISC3401
■ Round vinyl sheathed cable for control	CVS	JISC3401
■ Round vinyl insulated, vinyl sheathed cable	VVR	JISC3342
■ 600V vinyl cab tire cable	VCT	JISC3312
■ Polyethylene insulated vinyl sheathed cable	CPEV(∗)	
■ Mesh insulated cable	MVVS(∗)	

<Example>Section of cord



∗ When the shield wire is used, be sure to ground the one side of the shield wire.

∗ Do not use the shield wire with other type of wire in the same system.

<Cautions>

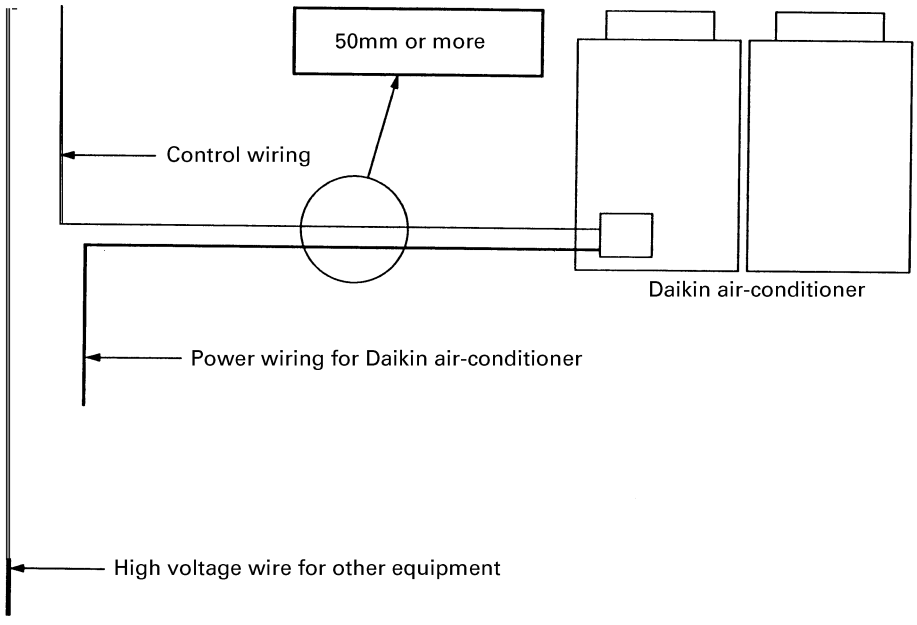
1. **Never use a 3 or more core of cord or cable.**
2. **The size of wire should be 0.75~1.25mm².**
3. **Never bundle the cable or cord of transmission line.**
4. **Be sure to keep the transmission wiring distant from power wiring as shown below to prevent electrical noise.**

Capacity of power wiring		Distance between Power wiring and control wiring	
		Daikin air-conditioner (∗1)	Other air-conditioners
220V or less	10A or less	50mm or more (∗2)	300mm or more
	50A or less		500mm or more
	100A or less		1000mm or more
	100A or more		1500mm or more

Note:

1. ∗1 .....VRV system, SkyAir series and other air-conditioner.
2. ∗2 .....VRV system or other Daikin air-conditioner produces less electrical noise, so that the distance of 50mm or more is sufficient.
3. For control wiring, never use the shield wire together with other sheathed vinyl cord in the same system, which may cause the malfunction in transmission.

[Example]



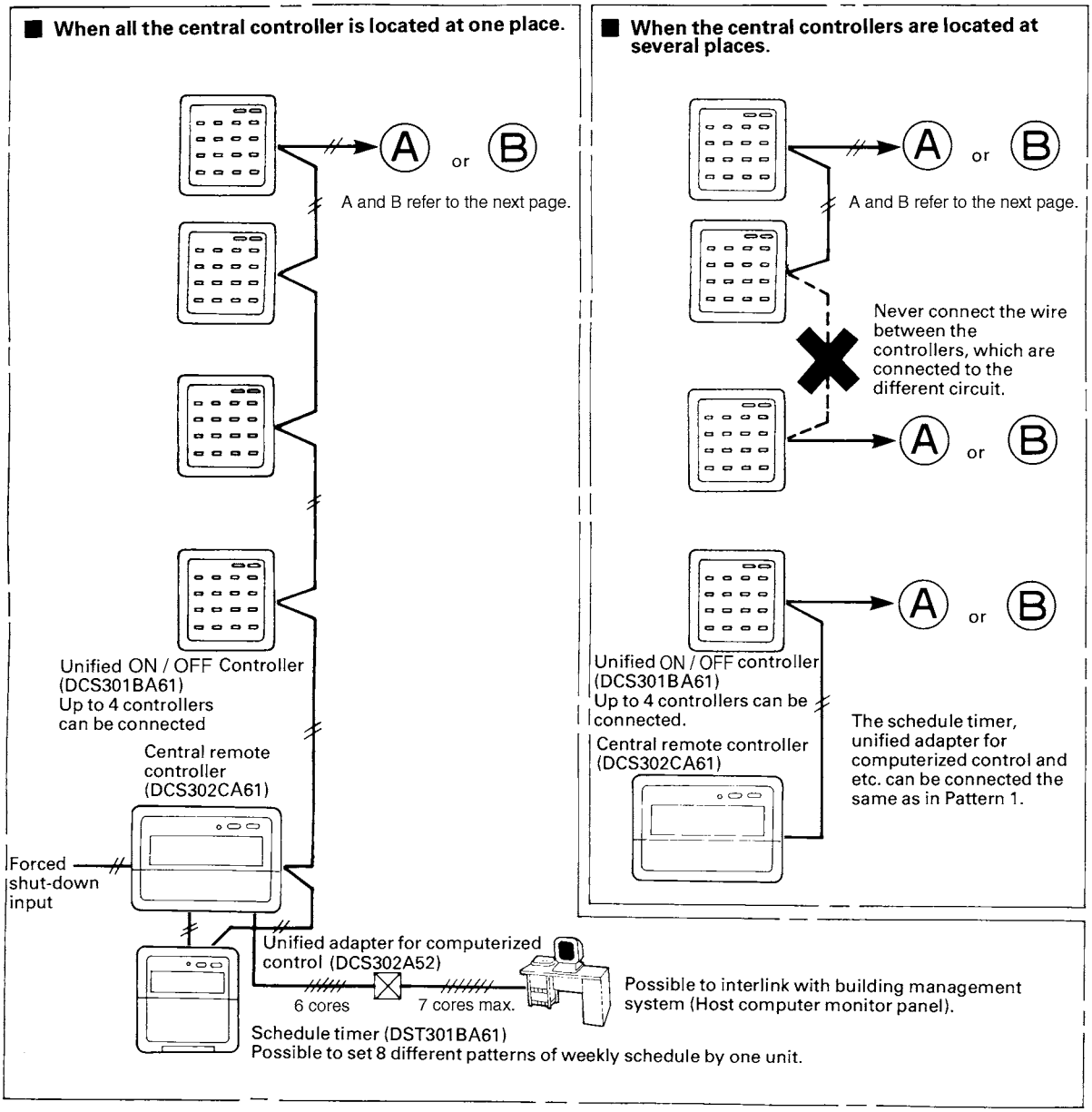
3.4 Wiring Example

Example of Control Wiring

- Be sure to connect the wiring of the central controller to A or B. (Connect to B, if it is possible.)
- Be sure to limit the number of indoor units within the limitation for each system.
- Never connect the wire between the controllers, which are connected to the different circuit. (Be careful)
- In order to prevent the connection of three wires on the same terminal, connect to the terminal unit of A or B, or use the relay terminal (local supply).

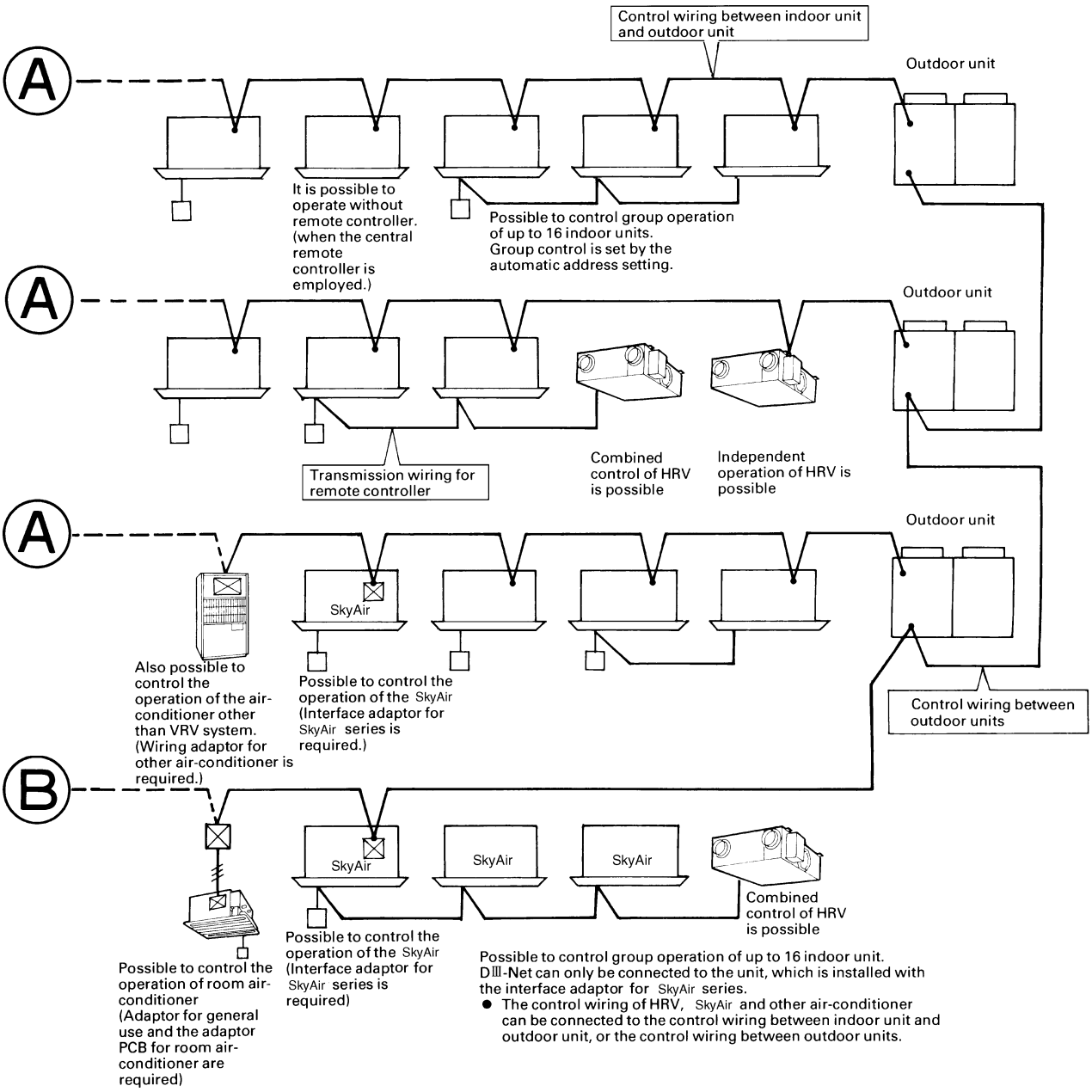
<Pattern 1> A and B refer to the next page.

<Pattern 2> A and B refer to the next page.



17

- The longest extension of the wiring should not exceed 1000m.
  (Total length of the wiring should not exceed 2000m, excluding the wiring to the remote controller.)
- Up to 128 indoor units can be controlled.
- The total wiring length is 1500m when shielded wire use.



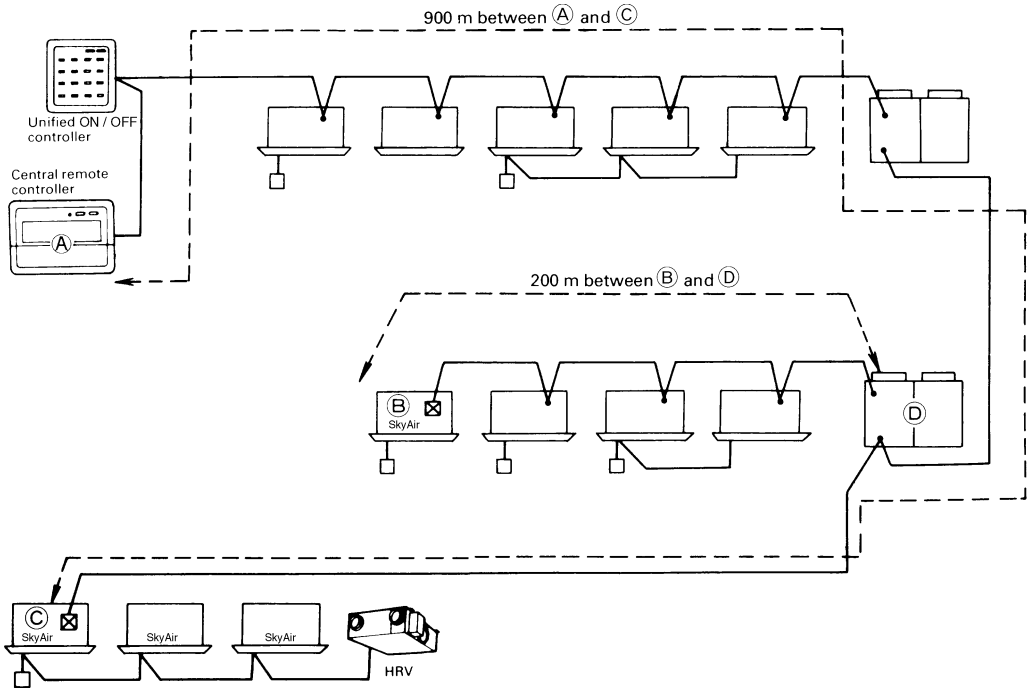
The advantages when the central controller are connected to B.

- If the central controllers are connected to B, it is still possible to have a central control, even if the power supply of other circuit connected to the central controller is shut-off. (even if the power is shut off due to long vacation etc.)

3.5 Length of Transmission Wiring

The super wiring system, which integrates the control wiring between indoor unit and outdoor unit and the transmission wiring to the central controllers into one common wiring, should satisfy the following limitation.
The longest extension of wiring: Not exceeding 1000m
Total length of wiring: Not exceeding 2000m

3.5.1 Example of Wiring



- In the above system, the longest extension of wiring is 900m between (A) and (C), which satisfies the limit of 1000m. And the total length is 1100m, that is the total of 900m between (A) and (C) and 200m between (B) and (C), which also satisfies the limit of 2000m. The central controller functions properly, only when both the longest extension and the total length of wiring satisfies the limitation, as shown above.

Caution

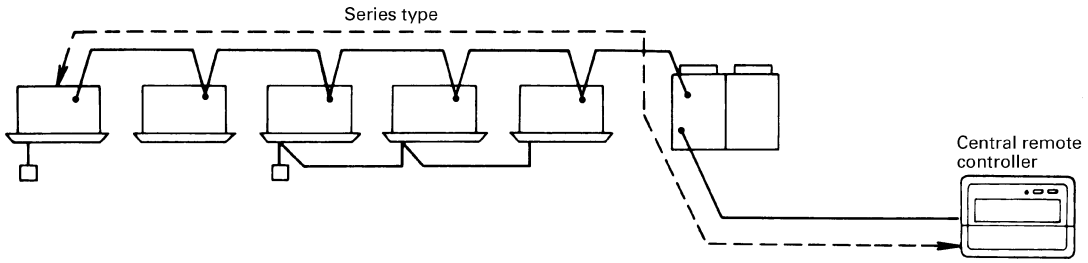
When designing the system, be sure to check both the longest extension and the total length of wiring. If it exceeds the limitation, there is no other way but to split into several systems.

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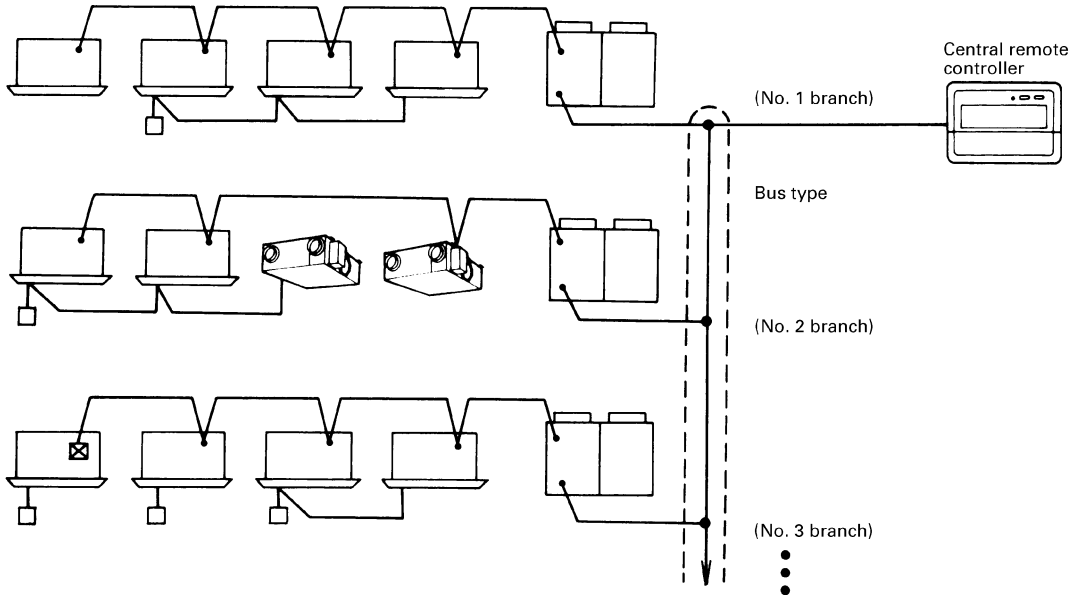
3.6 Branch Wiring

Wiring methods (You can select from the following 3 types of wiring.)

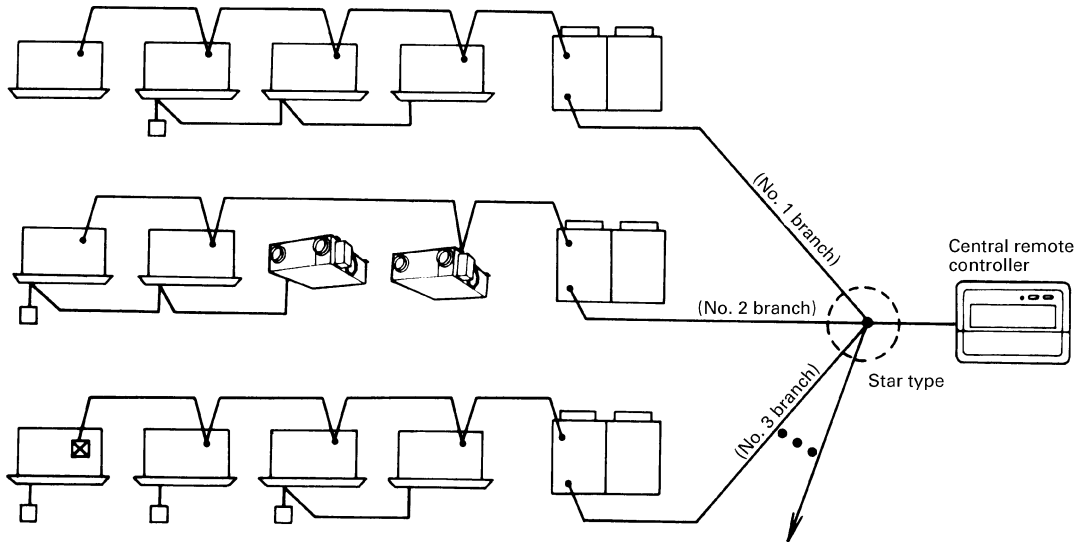
3.6.1 Series Method



3.6.2 Bus Method (Up to 16 branches is possible. Never diverge the sub-branch from the branch line.)



3.6.3 Star Method (Up to 16 branches is possible. Never diverge the sub-branch from the branch line.)

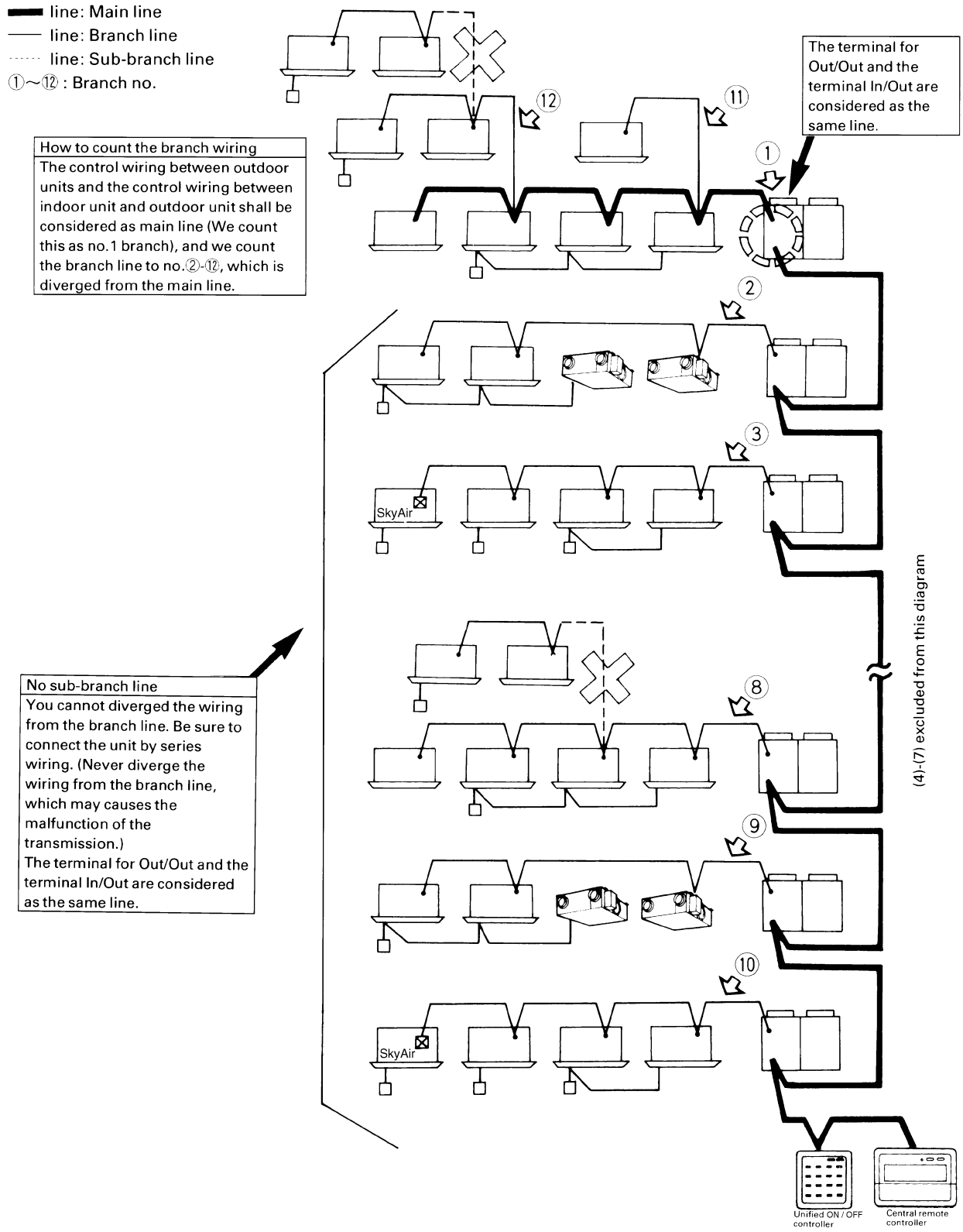


Note:
Though a previous figure shows a case in use of a central remote controller, the wiring form which even other central remote controllers are the same as can be done.

3.6.4 Example of the System (1)

■ Here we define as branch line, which is diverged from the main line and also define as sub-branch line, which is diverged from the branch line.

● When the central remote controller are connected to the control wiring between the outdoor units.



Caution

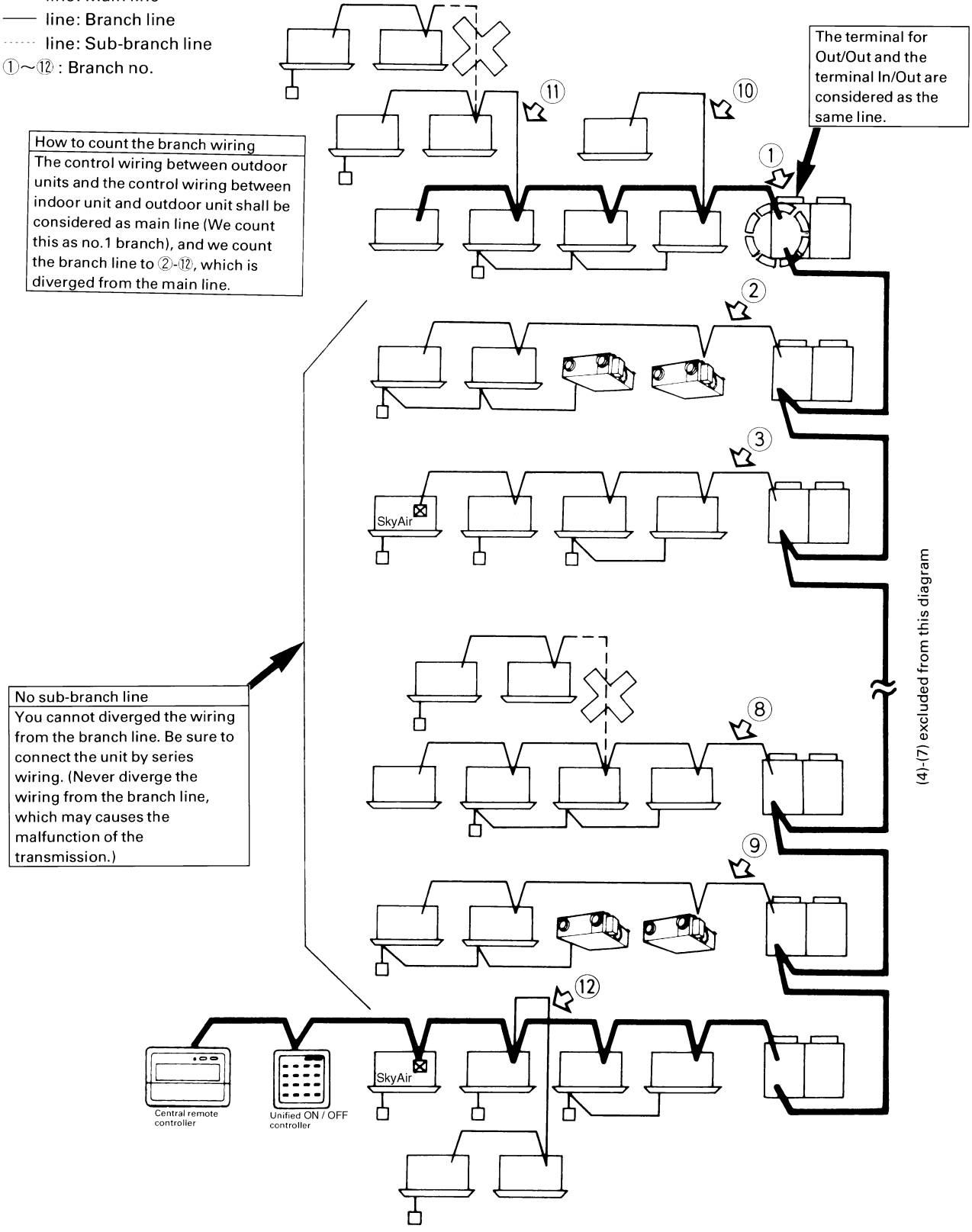
As shown above, the central remote controllers should be connected to the wiring between the outdoor units, wherever possible. (If connected to the control wiring between indoor unit and the outdoor unit, it may not be able to control the units even on the normal circuit if the circuit connected to the central controller is out of order.)

3.6.5 Example of the System (2)

■ Here we define as branch line, which is diverged from the main line and also call it sub-branch line, which is diverged from the branch line.

● When the central remote controllers are connected to the control wiring between the outdoor unit and indoor unit.

▬ line: Main line
── line: Branch line
┈┈ line: Sub-branch line
①～⑫ : Branch no.



Caution

As shown above, if the central remote controllers are connected to the control wiring between indoor unit and outdoor unit, it may not be able to control the units even on the normal circuit, if the circuit connected to the central controller is out of order. Be sure to connect the central controllers to the control wiring between the outdoor units.

3.6.6 Number of Connectable Units

	Central Control Equipment	Indoor Unit	Outdoor Unit	Other Adaptors
Target Controller (Max. Number)	■ Central remote controller (2 units) (Note 1) ■ intelligent Touch Controller (2 units) (Note 1) ■ Unified ON/OFF controller (8 units) (Note 1) ■ Schedule timer (1 unit) ■ Interface for use in BACnet® (1 unit) ■ Parallel interface (4 units) ■ Intelligent Manager II (1 unit) ■ Interface for use in LON WORKS® (1 unit)	■ VRV system ■ SkyAir series (Interface adaptor for SkyAir is required.) ■ HRV unit ■ Packaged air-conditioner (FD, UAT, etc.) (Wiring adaptor for other air-conditioner is required.) ■ Room air-conditioner (Wiring adaptor for other air-conditioner is required.) ■ BS unit (Note 3) ■ Wiring adaptor	Outdoor unit for VRV system	■ External control adaptor for outdoor unit ■ Wiring adaptor for electrical appendices (1)
Number of Units	(Note 2)	Up to 128 units (Note 5)	Up to 10 units (Note 4)	Up to 10 units

Note:

1. When you have a 2 central control system (to control one system from 2 central locations), 2 intelligent Touch Controllers, 4 central remote controllers and 16 unified ON/OFF controllers can be connected. However, a maximum of 128 units can only be controlled.
2. When you connect 8 or more central control equipment, it is required to satisfy the following conditions. (The following conditions are not required to be considered when the number of controller is 7 or less.)

■ **Central control equipment + Indoor units + Outdoor units + other adaptors ≤ 160 units**

■ **Central Conversion number of central control equipment (∗) + Indoor units + Outdoor units + other adaptors ≤ 200 units**

(Note: (∗) is converted one central control equipment except unified ON/OFF controller as 10 units.)

3. When BS unit is installed, BS unit is not counted in the number. However, the indoor units after BS unit should be counted.
4. The outdoor unit is limited up to a maximum of 10 units and the total rated capacity should be 280kW (100HP) or less, and also the number of function units is also limited up to 5. However, if the sequential start setting is possible, up to 10 function units can be connected.
5. When the parallel interface is connected, the number of indoor units are limited up to 64 groups (128 units). When you judge whether the number of the connectable units is possible, refer to the flow chart on the next page.

3.6.7 Flow Chart to Determined the Number of Units to Connected

CHECK SHEET FOR NUMBER OF UNIT IN ONE SYSTEM

Centralized controller	Qty	Y/N				
Central remote controller (Note 1)			≦2		× 10	=
intelligent Touch Controller (Note1)			≦2		× 10	=
Unified ON/OFF controller			≦8		× 1 (A)	=
Schedule timer			≦1		× 10	=
Interface for use in BACnet® (Note 3)			≦1		× 10	=
Parallel interface			≦4		× 10	=
Total			≦7			
			≧8			

	+		+		+		=	≦ 200

Indoor unit	Qty	Y/N	
VRV			
SkyAir with adaptor			
HRV(VAM)			
Wiring adaptor for other air conditioner			
BS unit (Note 2)			
			≦128
Total			

Outdoor unit	Qty	Y/N	
RXYQ-P (A)			
Total			≦10 (B)

Other adaptors	Qty	Y/N	
External control adaptor for outdoor unit			
Wiring adaptor for electrical appendices			
Total			≦10

Note:

Condition

(A) means;

- Central control equipment + Indoor units + Outdoor units + other adaptors ≤ 160 units
- Conversion number of central control equipment + Indoor units + Outdoor units + other adaptors ≤ 200 units

(B) means;

In case of connecting to DIII-NET

- Outdoor units must be counted to one system even in case of including 3 units. (Master + Master + Master = One system)
- The outdoor units connected by terminal Ex. Q1, Q2 (excepting terminal F_1, F_2) are regarded as one system.

Control wiring		Y/N	
Maximum extension	M		< 1000
Total wiring length	M		≦ 2000
Wiring Branch			≦ 16

Note:

1. When one system is to be controlled from two locations, up to two intelligent Touch Controller (In case of combining the intelligent Touch Controller and Central Remote Controller, it is restricted to combine two Controllers in total), four Central Remote Controller and 16 unified ON/OFF Controller can be connected. However, the maximum number of units that can be controlled is 128.
2. When a BS unit is used, the indoor units used in its downstream are not counted.
3. One port of one Interface for use in BACnet® can have up to 64 groups (64 master indoor units with address). In case of adopting group controlling, the circuit covered by the data station can have up to 128 indoor units including main and sub units.

4. Control Devices

4.1 <BRC1C62> Wired Remote Controller

You can construct a versatile control system that can respond to various applications by taking advantage of the optional accessory liquid crystal remote controller for indoor units.
Remote controller wiring for transmission for a simplified remote controller (BRC2C51 (BRC2A51), BRC3A61) is the same as that of a standard remote controller (BRC1C62). Because the functions of the simplified remote controller are limited, we recommend using in combination with a central remote controller.

4.1.1 Appearance and Functions

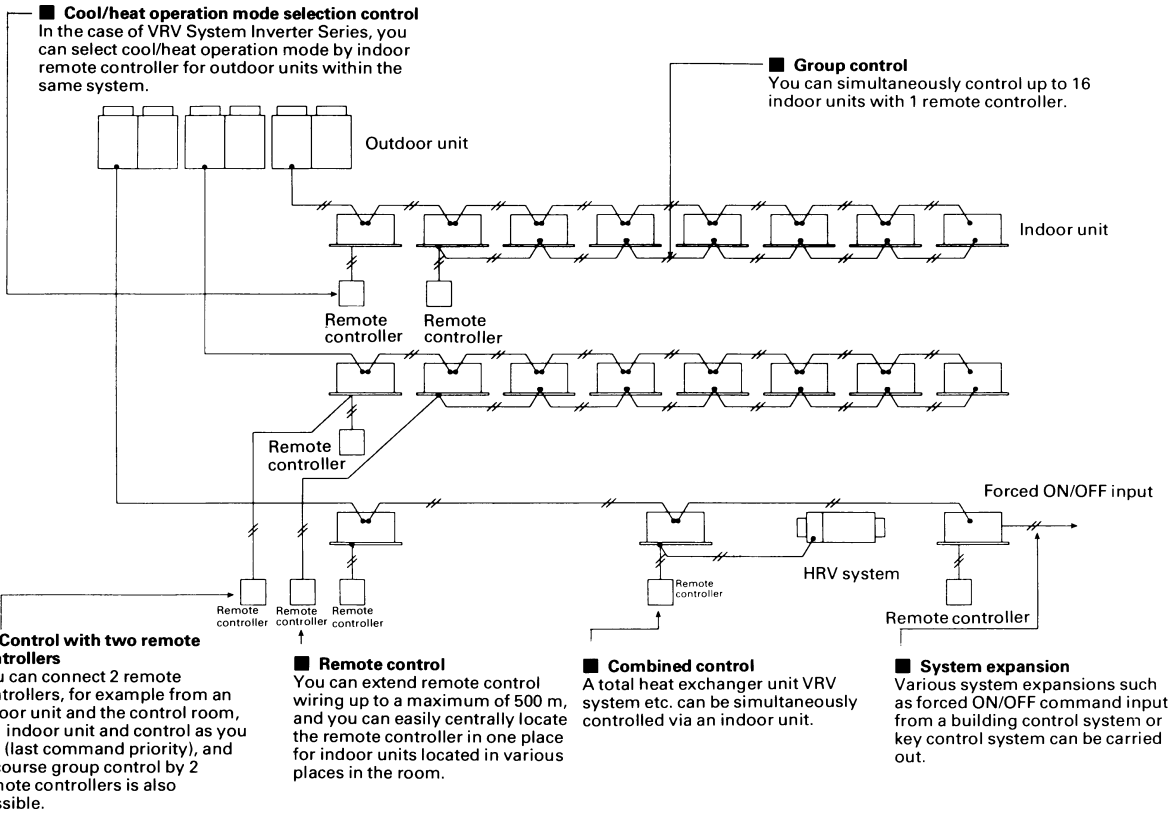


- Large liquid crystal screen displays complete operating status.
- Digital display lets you set temperature in 1°C units.
- Lets you individually program by timer the respective times for operation start and stop within a maximum of 72 hours.
- Equipped with a thermostat sensor in the remote controller that makes possible more comfortable room temperature control.
- Monitors room temperature and preset temperature by microcomputer, and can select cool/heat operation mode automatically. (VRV System Heat Recovery Series only)
- Enables you to select cool / heat / fan operation mode with the indoor remote controller of your choice without using the cool / heat selector. (VRV System Inverter series, Heat Recovery series, Plus series)
- Constantly monitors malfunctions in the system for 40 items, and is equipped with a “self-diagnosis function” that lets you know by message immediately when a malfunction occurs.
- Lets you carry out various field settings by remote controller.
- Ventilation mode change over and ventilation air flow switch for HRV.

Note: For connection unit series

* If indoor units from the Connection unit series are connected within a single refrigerant system to indoor units from any other series, cooling/heating switchover will not be possible using the remote contoroller of the Connection unit series indoor units, However, if the remote controller of an indoor unit from the other series is set as a master remote controller, cooling/heating switchover will be possible.
* If all indoor units are from the Connection unit series, an outdoor unit Cool/Heat selector will be needed to enable cooling/heating switchover.
* In case of Heat Recovery System
  Cooling/Heating changeover is possible when connecting with BS unit.

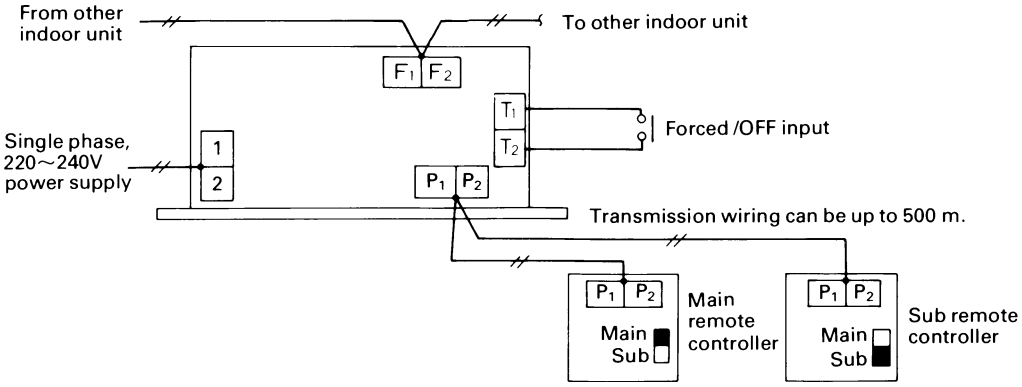
4.1.2 Example of Control by Remote Controller



4.1.3 2 Remote Controllers

1 indoor unit is controlled by 2 remote controllers from 2 separate locations

This is a convenient system for when you want to operate an indoor unit in the reception room from the office, for example, or finely operate an indoor unit from a local or remote location. (The same applies to other types of indoor units.)



- Operation control mode of the indoor unit is last command priority.
- Remove the front panel of the remote controller and set the main/sub changeover switch on the PC board to “main” for the main remote controller, and to “sub” for the sub remote controller.

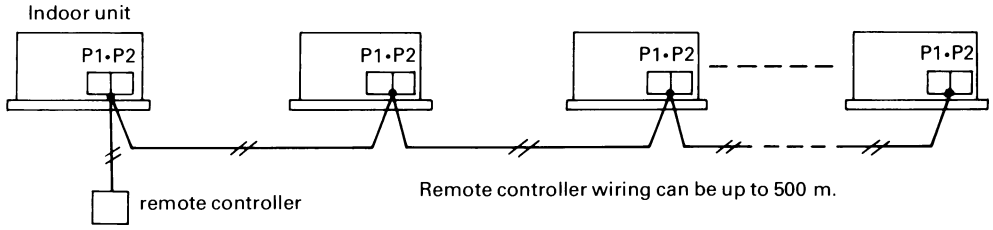
Note:

The remote controller is equipped with a thermostat sensor. If the main and sub remote controllers are mounted in separate rooms, set the main remote controller so that the thermostat sensor in the remote controller is not used.

4.1.4 Group Control

Simultaneous control of up to 16 units with a single remote controller

This is a convenient system for when you want to simultaneously control several indoor units with the same settings for air conditioning a wide, single floor.



- Wiring for remote controller group control has no polarity, P_1 and P_2 can be switched.
- All indoor units within the group have the same setting, and each indoor unit is controlled individually by its own built-in thermostat.
- Because automatic address is used, address does not have to be set by remote controller for group control.

Note:

- Only remote controller wiring is shown.
- For Connection unit series
  Although group control in Connection unit series is possible, however, group control with other series is impossible.

4.1.5 Remote Control

Enables forced OFF or ON/OFF control of indoor unit by input from outside.

Indoor units can be started or stopped by building control or key control system.

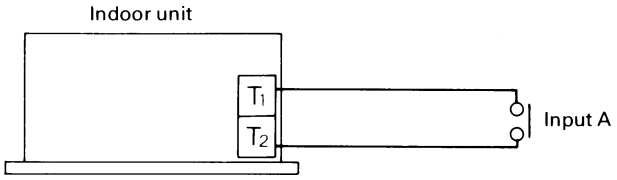
Notes

· FXUQ-M(A) : Optional Accessory (Remote ON/OFF, forced OFF <EKRORO> is required.)

17

1. Wiring method and specifications

- Remote control can be carried out by connecting input from outside to terminals T_1 and T_2 of the terminal block (for remote controller transmission wiring).



2. Contents of operation

- Operation is as given in the table on the right for input A of forced OFF and ON/OFF control.

3. How to select forced OFF and ON/OFF control

- Select input by remote controller after turning on the power supply.
- Set to the field set mode by remote controller.
- After entering the field set mode, select mode No. 12, set the first code No. to “1,” and set the second code No. to “01” for forced OFF, or to “02” for ON/OFF control.
  (Factory setting is set to forced OFF.)

Wiring specifications	Sheathed vinyl cord or cable (2 wire)
Wiring thickness	0.75~1.25 mm²
Wiring length	Max. 100 m
Outside contact specifications	Contact that guarantees minimum applicable capacity of 15 VDC, 10mA

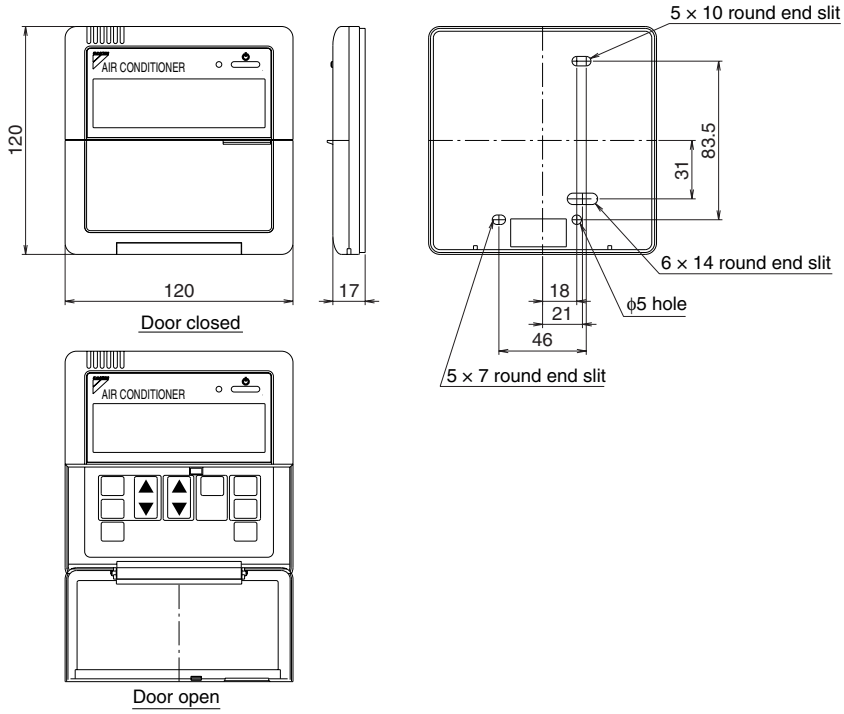
For forced OFF	For ON/OFF control
Forced OFF (remote controller rejection) by input A “ON”	Operate by switching input A from “OFF” to “ON”
Remote controller acceptance by input A “OFF”	Operate by switching input A from “ON” to “OFF”

4.1.6 Dimensions

BRC1C62

For FXCQ, FXFQ, FXKQ, FXDQ, FXSQ, FXMQ, FXHQ, FXAQ, FXLQ, FXUQ

Unit (mm)



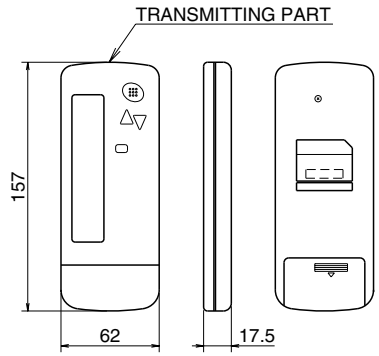
DU820-226

4.2 Wireless Remote Controller / Receiver

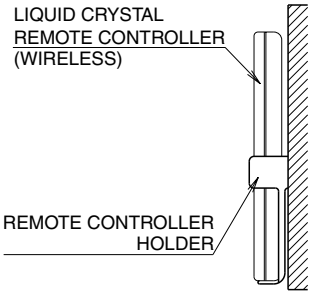
FXFQ

BRC7F634F ... For Heat Pump

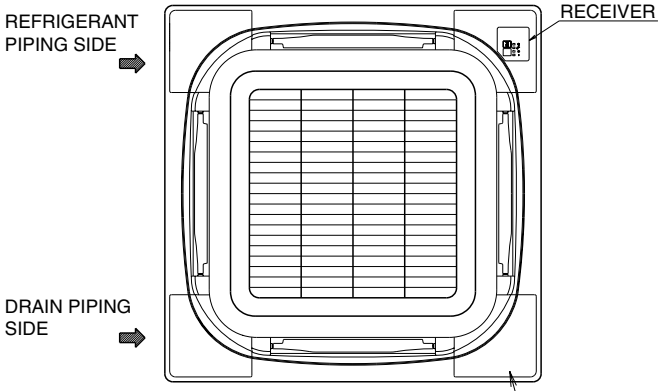
• REMOTE CONTROLLER DIMENSIONS



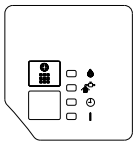
• REMOTE CONTROLLER HOLDER INSTALLATION PROCEDURE
<INSTALLATION TO WALL SURFACE>



• RECEIVER INSTALLATION PROCEDURE



• RECEIVER DETAIL



• WIRELESS REMOTE CONTROLLER KIT FOR EACH DECORATION PANEL

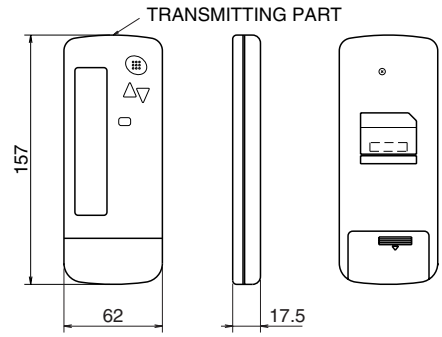
WIRELESS REMOTE CONTROLLER KIT	DECORATION PANEL
BRC7F632F BRC7F634F BRC7F635F	BYCP125K-W1

3D052918B

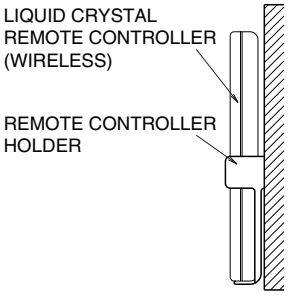
FXCQ

BRC7C62 ... For Heat Pump

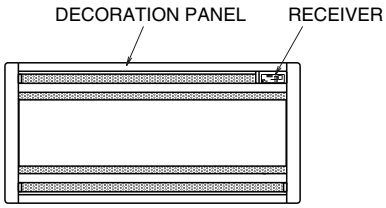
• REMOTE CONTROLLER DIMENSIONS



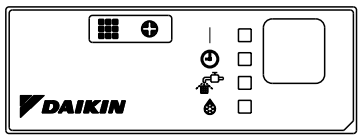
• REMOTE CONTROLLER HOLDER INSTALLATION PROCEDURE
<INSTALLATION TO WALL SURFACE>



• RECEIVER INSTALLATION PROCEDURE



• RECEIVER DETAIL

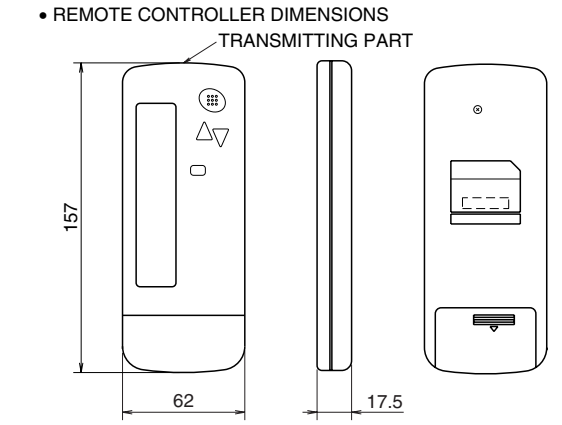


• WIRELESS REMOTE CONTROLLER KIT FOR EACH DECORATION PANEL

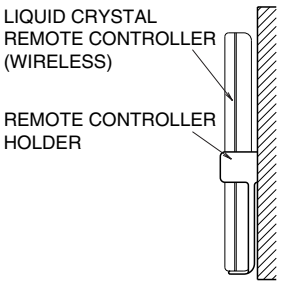
WIRELESS REMOTE CONTOROLLER KIT	DECORATON PANEL	
BRC7C62 BRC7C67	BYBC32GJW1	BYBC32G-W1
	BYBC50GJW1	BYBC50G-W1
	BYBC63GJW1	BYBC63G-W1
	BYBC125GJW1	BYBC125G-W1

3D007588A

FXSQ, FXMQ-MA, FXLQ, FXNQ
BRC4C62 ... For Heat Pump

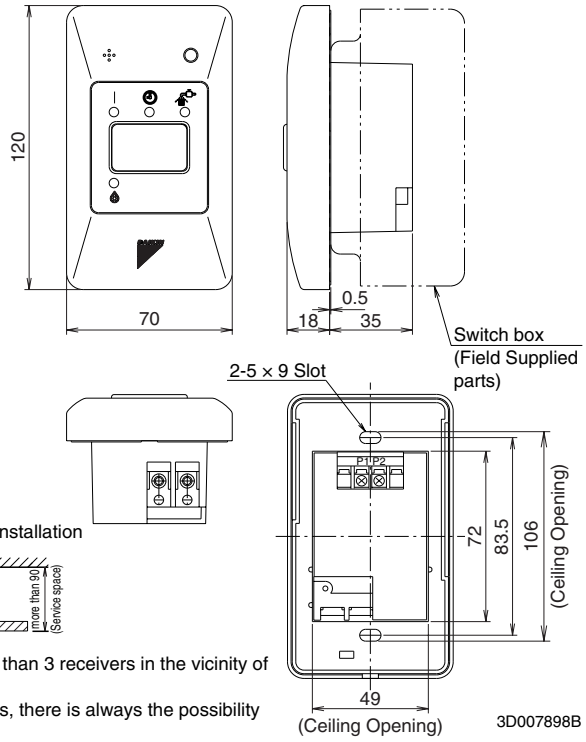


• REMOTE CONTROLLER HOLDER INSTALLATION PROCEDURE
<INSTALLATION TO WALL SURFACE>

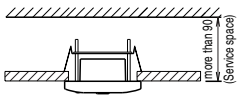


FXKQ
BRC4C61 ... For Heat Pump

• RECEIVER DETAIL



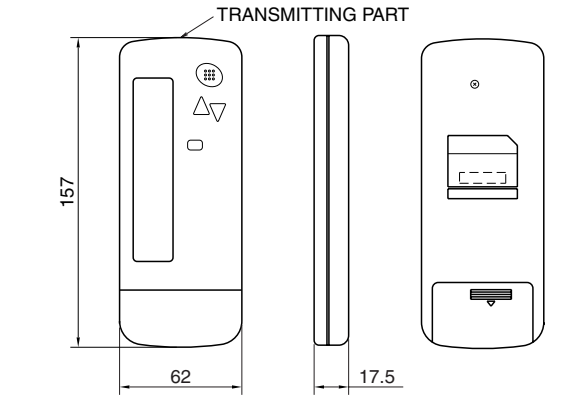
• Service space for ceiling installation



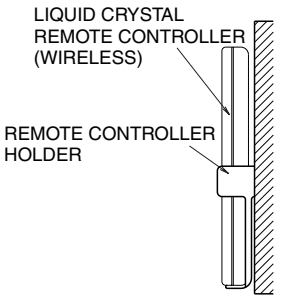
NOTE Do not install more than 3 receivers in the vicinity of one another.
With 4 or more units, there is always the possibility of malfunction.

FXDQ-PB, FXDQ-NB, FXMQ-P
BRC4C65 ..... For Heat Pump

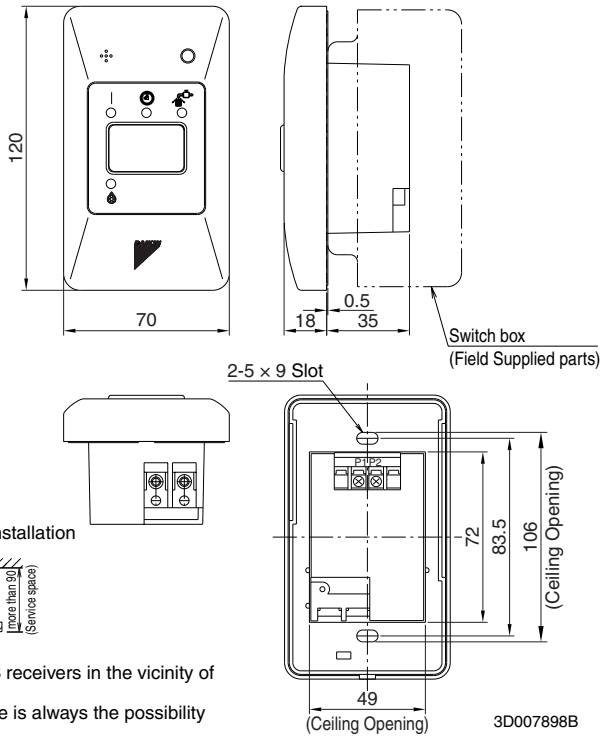
• REMOTE CONTROLLER DIMENSIONS



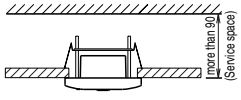
• REMOTE CONTROLLER HOLDER INSTALLATION PROCEDURE
< INSTALLATION TO WALL SURFACE >



• RECEIVER DETAIL



• Service space for ceiling installation



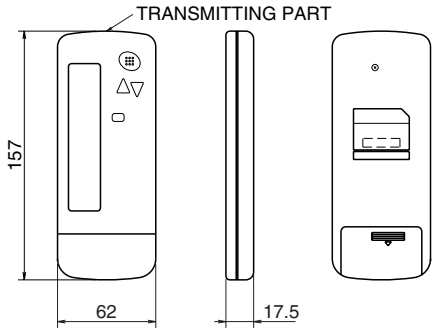
NOTE Do not install more than 3 receivers in the vicinity of one another.
With 4 or more units, there is always the possibility of malfunction.

17

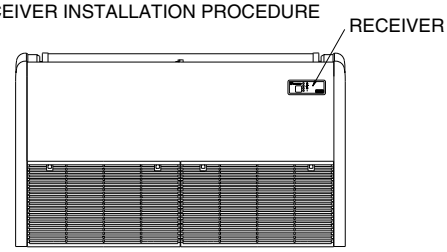
FXHQ

BRC7E63W... For Heat Pump

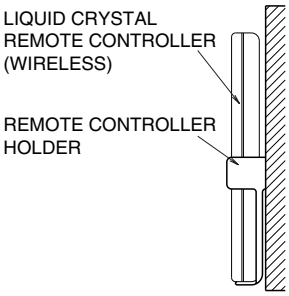
• REMOTE CONTROLLER DIMENSIONS



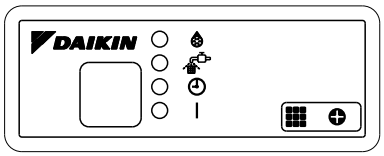
• RECEIVER INSTALLATION PROCEDURE



• REMOTE CONTROLLER HOLDER INSTALLATION PROCEDURE
<INSTALLATION TO WALL SURFACE>



• RECEIVER DETAIL

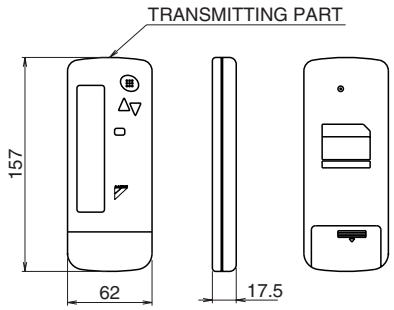


3D028963B

FXAQ

BRC7E618 ... For Heat Pump

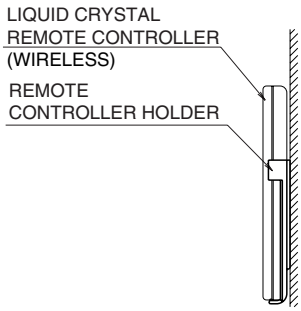
• REMOTE CONTROLLER DIMENSIONS



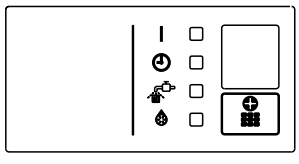
• RECEIVER INSTALLATION PROCEDURE



• REMOTE CONTROLLER HOLDER INSTALLATION PROCEDURE
<INSTALLATION TO WALL SURFACE>



• RECEIVER DETAIL



• WIRELESS REMOTE CONTROLLER KIT

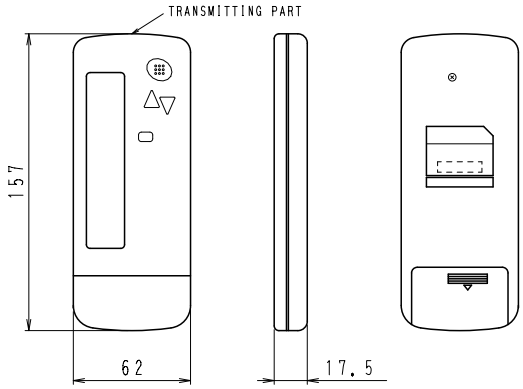
WIRELESS REMOTE CONTROLLER KIT	INDOOR UNIT
BRC7E618 BRC7EA618 (For H/P)	FXA ~ LVE(C)
BRC7E619 BRC7EA619 (For C/O)	

3D034905B

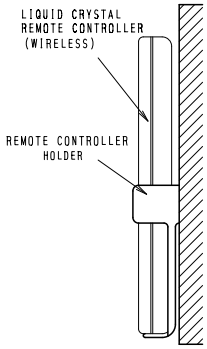
FXUQ

BRC7C528W.. For Heat Pump

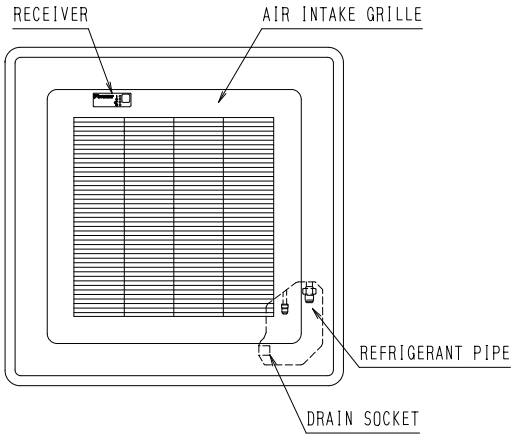
• REMOTE CONTROLLER DIMENSIONS



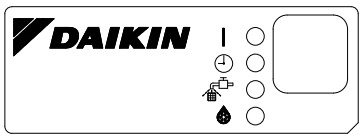
• REMOTE CONTROLLER HOLDER INSTALLATION PROCEDURE
<INSTALLATION TO WALL SURFACE>



• RECEIVER INSTALLATION PROCEDURE Unit (mm)



• RECEIVER DETAIL



• WIRELESS REMOTE CONTROLLER KIT FOR EACH INDOOR UNIT

INDOOR UNIT	WIRELESS REMOTE CONTROLLER KIT	
	HEAT PUMP SYSTEM	COOLING ONLY SYSTEM
FUY71 • 100 • 125FJV1	BRC7C528W BRC7CA528W	BRC7C529W BRC7CA529W

3D014035A

17

4.3 <DCS303A51> Residential Central Remote Controller



- Large, easy-to-read Liquid Crystal Display.
- Dot Matrix area shows which button to press next.
- Backlight equipped for easy operation.
- Each unit is identified for easier operation by individual group selection buttons.
- Frequently used functions are easily operated without opening the lid.

* Limit connection to the VRV system to household use.

4.3.1 Function

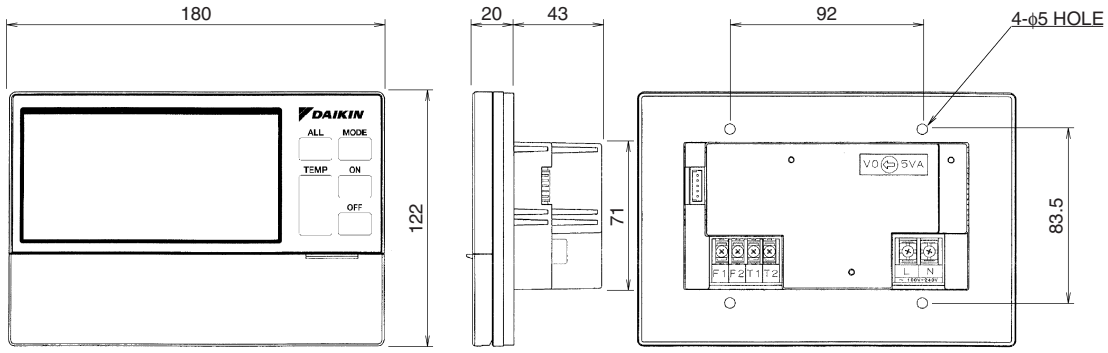
			Residential Central Remote Controller	Schedule Timer	Central Remote Controller
			DCS303A51	DST301BA61	DCS302CA61
Number of Management Groups			16	128	64
Monitoring	Command, State Monitoring	Start/Stop	○	Δ	○
		Operation Mode	○	×	○
		Set Temperature	○	×	○
		Inhibition / Permission by Remote Controller	○	×	○
		Room Temp. (Suction Temp.)	○	×	×
		Outside Temp.	○	×	×
		Malfunction Monitoring	○	Δ	○
		Air Filter, Element Monitoring	○	×	○
Setting and Control	Individual Control	Start/Stop	○	×	○
		Operation Mode	○	×	○
		Set Temperature	○	×	○
		Inhibition / Permission by Remote Controller	○	×	○
	All Start/Stop		○	○	○
	Schedule Control	Weekly schedule	○	○	×
	Emergency stop in case of fire		○	×	○

○: OK
Δ : There are some restrictions about each function.
× : NG

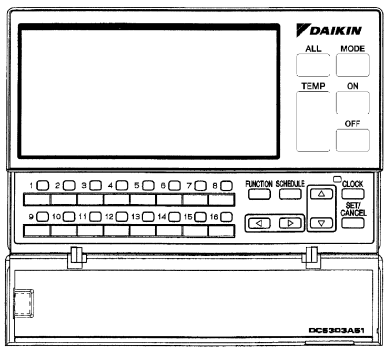
4.3.2 Specifications

Model		DCS303A51
Power Supply		Externally supplied 200~240V AC, 60Hz
Installation Method		Japanese Industrial Standard triple plug socket switchbox embedded in indoor wall
Conditions for use	Ambient temperature/ Humidity	0- 40°C, less than 85% RH
Dimensions	Panel Size	180 mm (W) x 122 mm (H) x 20 mm (D)
Overseas Compatibility Certification	Safety	EN60335-2-40
	EMC(EMI, EMS)	EN50022 (CISPR22 Class-B) EN50024 (CISPR24)
LCD Panel	Size/Backlight color	120.4 mm (W) x 60.5 mm (H)/White light
Input	Buttons	6 buttons on the front panel and 24 buttons in the lid
Communication Line	DIII-NET	1 line of A/C equipment DIII-NET for communication use
Input terminals	Contact	Forced Shutdown input
Clock Accuracy		Within +/- 30 sec./month
Power consumption		Max. 3 W

4.3.3 Dimensions



DOOR CLOSED



DOOR OPEN

3D059845

17

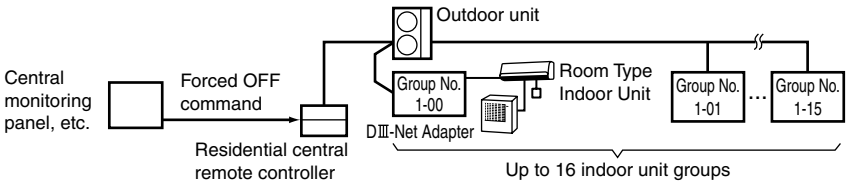
4.3.4 System Overview

This central remote controller can monitor and control up to 16 “indoor unit groups”.
By using eight units of this central remote controller, maximum of 128 “indoor unit groups” can be monitored and controlled.

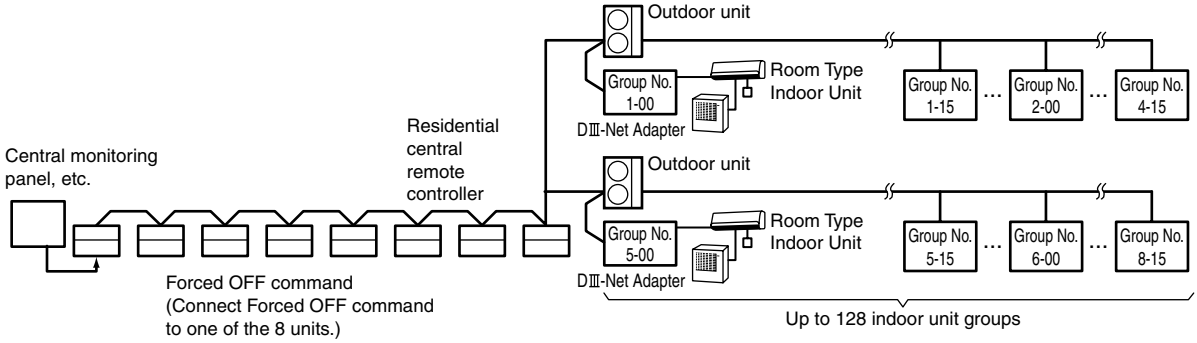
Main Functions

1. Simultaneous ON/OFF control of all indoor units connected to the central remote controller.
2. Setting of operating conditions (such as ON/OFF and set temperature) of indoor units individually by “group”.
3. Monitoring of operating conditions such as operation mode and set temperature.
4. Connection of an external key system, central monitoring panel, etc. via Forced OFF input (T1, T2).

■ When using one central remote controller unit



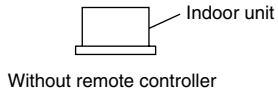
■ When using eight central remote controller units



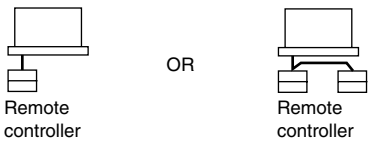
(The central remote controller cannot be used together with the optional remote control adaptor PCB or group remote control adaptor.)

* An “indoor unit group” refers to one of the following:

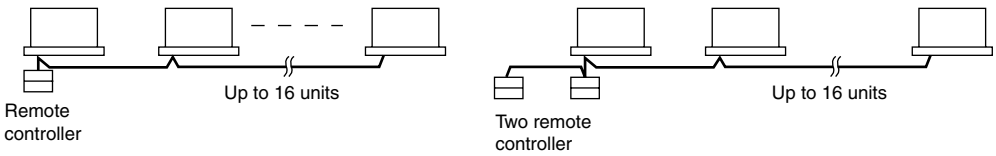
1. One indoor unit without remote controller



2. One indoor unit controlled by one or two remote controllers



3. Up to 16 indoor units group-controlled by one or two remote controllers

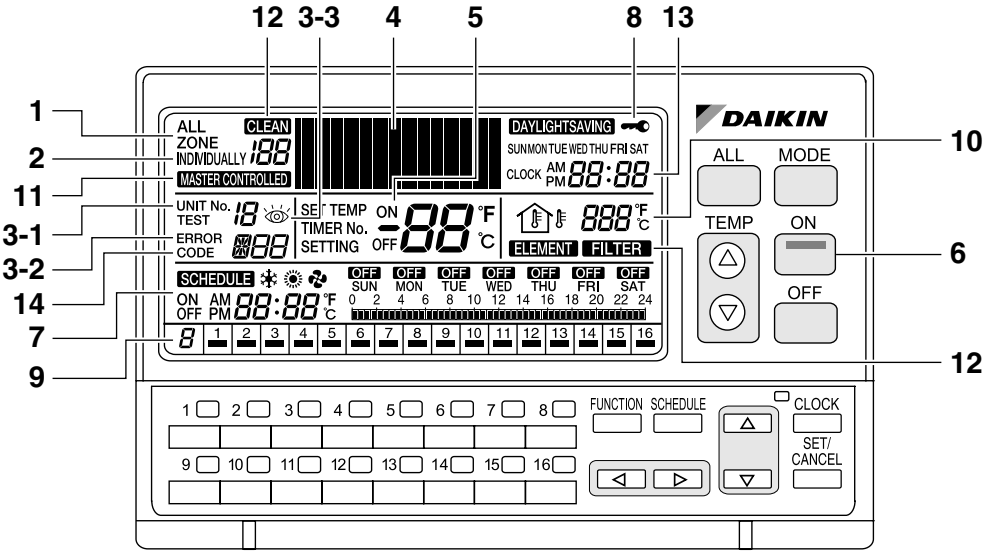


* “Group control” is a setting which enables simultaneous control of multiple indoor units from a single remote controller.

4.3.5 Names and Functions of the Operating Section

■ **External View**

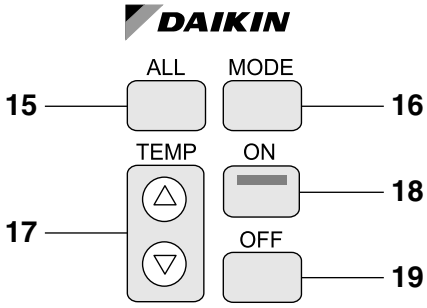
(All indications are displayed in the following diagram of screen for the explanation purpose. Actual indications displayed during operation will vary.)



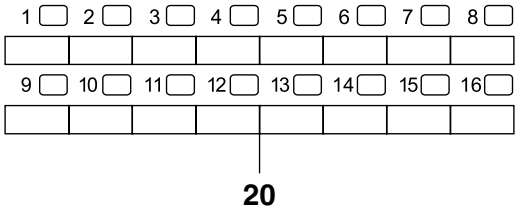
1	**ALL**
	This indicates that the display shows the ALL screen.
2	**INDIVIDUALLY**
	This indicates that the display shows the INDIVIDUALLY screen for the currently selected air conditioner No.
3	**ERROR CODE DISPLAY**
	When an equipment malfunction occurs, the malfunction UNIT No. (**3-1**), ERROR CODE (**3-2**) and (**3-3**) indications blink.
4	**OPERATION MODE DISPLAY (Dot Matrix)**
	This section displays the operation status.
5	**SET TEMP DISPLAY**
	This section displays the set temperature.
6	**ON LAMP**
	This lamp lights when one or more indoor units under control are operating.
7	**SCHEDULE SETTING DISPLAY**
	This section displays the programmed operation details.
8	**KEY LOCK DISPLAY**
	This symbol appears when the key lock has been activated.
9	**OPERATION MONITOR**
	Each box shows the No. of connected air conditioner (group) and its operation status.
10	**OUTDOOR TEMP DISPLAY**
	In the ALL screen, this displays the outside temperature detected by the outdoor unit connected to the air conditioner (group) with a cooling/heating selection privilege(*) that has the smallest unit No. In the INDIVIDUALLY screen, this displays the outside temperature detected by the outdoor unit connected to the selected air conditioner (group). If Total Heat Exchanger is selected, outdoor temperature is not displayed. (*An air conditioner (group) with a cooling/heating selection privilege is a unit which allows switching of the operation mode between cooling and heating.)
11	**MASTER-CONTROLLED DISPLAY**
	This indication appears when the selected air conditioner (group) does not have a cooling/heating selection privilege.
12	**CLEAN SIGN**
	The FILTER and ELEMENT indications appear when the filter and element need to be cleaned.
13	**CLOCK DISPLAY**
	This shows the current time.
14	**OPERATION CODE DISPLAY**
	This displays the operation code (prohibit remote controller, central control priority, last button priority, etc.) during the setting of operation details.

4.3.6 Names and Functions of the Operating Section

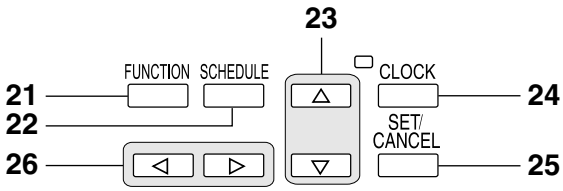
■ **Names of Operation Buttons**



15	**ALL BUTTON**
	Changes the display to the ALL screen.
16	**MODE BUTTON**
	Used to select the operation mode.
17	**TEMP BUTTONS**
	Used to set the temperature.
18	**ON BUTTON**
	Turns on all indoor units or individual unit (group).
19	**OFF BUTTON**
	Stops all indoor units or individual unit (group).



20	**INDIVIDUAL UNIT (GROUP) SELECTION BUTTONS**
	Changes the display to the INDIVIDUALLY screen for monitoring or setting the air conditioner (group) of the indicated No.



21	**FUNCTION BUTTON**
	Changes the display to the Function Menu setting screen.
22	**SCHEDULE BUTTON**
	Changes the display to the SCHEDULE setting screen.
23	△▽ **BUTTONS**
	Used to select a menu.
24	**CLOCK BUTTON**
	Changes the display to the current time setting screen.
25	**SET/CANCEL BUTTON**
	Enters or cancels settings.
26	◁▷ **BUTTONS**
	Used to set an operation schedule or current time.

4.4 <DCS302CA61> Central Remote Controller



64 groups (zones) of indoor units can be controlled individually same as LCD Remote controller.

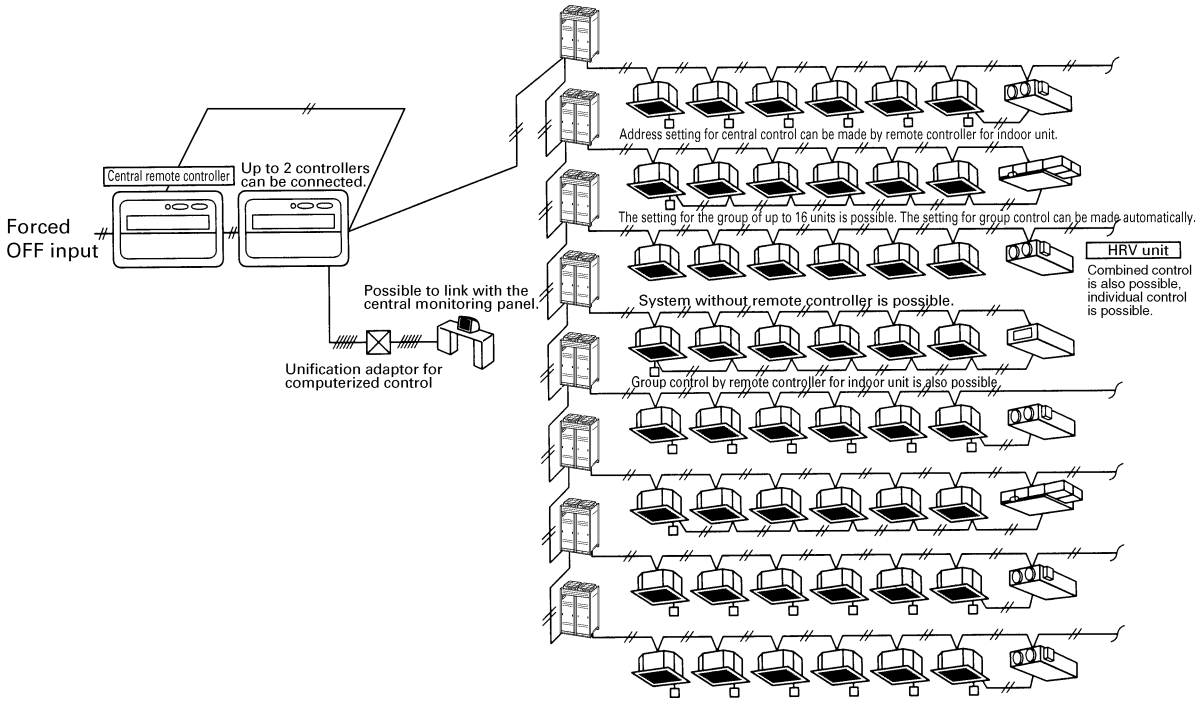
- Max.64 groups (128 indoor units controllable)
- Max. 128 groups (128 indoor units) are controllable by using 2 central remote controllers, which can control from 2 different places.
- Zone control
- Malfunction code display
- Max. wiring length 1,000 m (Total : 2,000 m)
- Combination with Unified ON/OFF controller, schedule timer and BMS system
- Airflow volume and direction can be controlled individually for indoor units in each group operation.
- Ventilation volume and mode can be controlled for Heat Reclaim Ventilation (HRV).
- Up to 4 Operation/Stop pairs can be set per day by connecting a schedule timer.

4.4.1 Applied Model

Applied model		Remark
VRV system	VRV III series, VRV II series, VRV III-S series, VRV II-S series	
	VRV PLUS series	
	VRV Inverter “K” series	
	VRV Heat recovery system	
	VRV-W II	Water Cooled VRV
	SkyAir series	Interface adaptor for SkyAir series is required for each indoor unit.
	Room air-conditioner	Wiring adaptor for other air-conditioning is required for each indoor unit.
	Other air-conditioner	Wiring adaptor for other air-conditioning is required for each indoor unit.
	HRV unit	

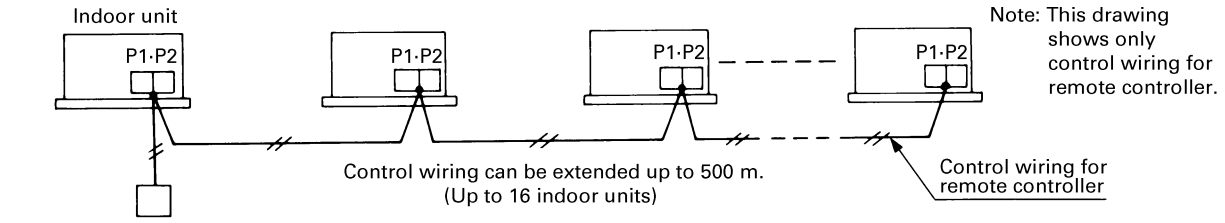
4.4.2 System Configuration

System Outline



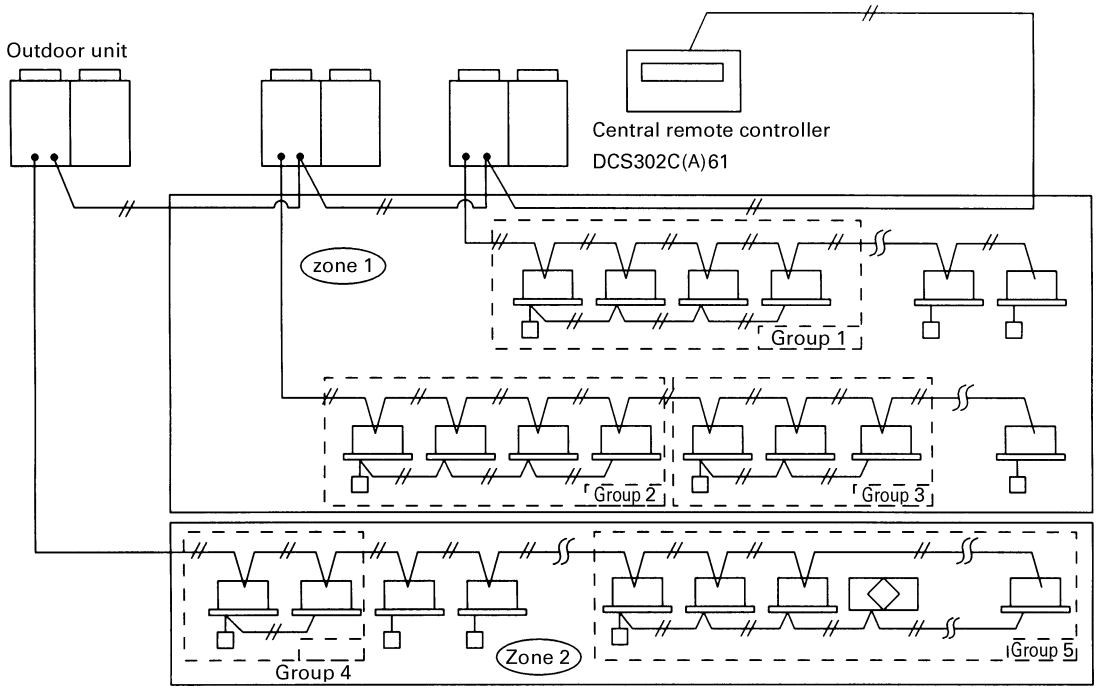
System Configuration (Group / Zone Control)

■ Group control



- The group means the indoor units connected by the same control wiring for remote controller (connected to terminal P1 and P2) and all the unit in group have “the same setting” and “the same operation”.
- The indoor units in the group are controlled by the remote controller for indoor unit.
- The number of indoor units in one group is up to 16 units.

■ Zone control



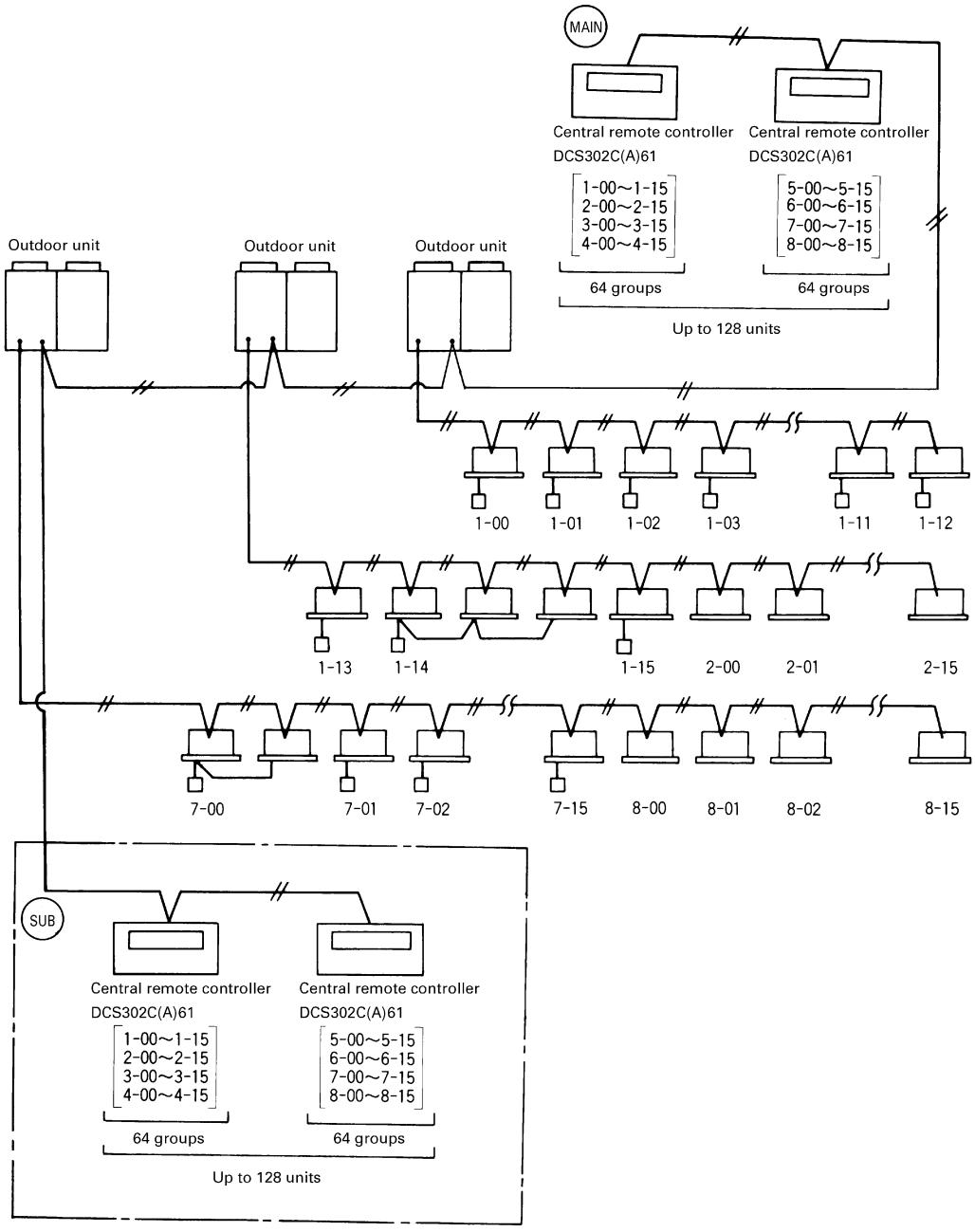
- The zone means the indoor units connected by the same control wiring for central remote controller (connected to terminal F1 and F2) and all the unit in zone have “the same setting”.
- The zone control of the indoor unit is operated by the central remote controller.
- From 1 up to 64 zones can be controlled by the central remote controller.
- The number of groups you can set in one zone is from 1 up to 64 groups.
- Up to 16 units can be set in one group, and up to 64 groups (up to 128 units) can be connected.

System Configuration (Control by 2 central remote controllers)

- Up to 128 indoor units can be connected in one system.
- 2 or 4 central remote controllers are required. It is possible to control the same unit from 2 locations.
- Up to 16 unified ON/OFF controllers can be connected. (8 controllers × 2 locations)
- One schedule timer can be connected.

Note:

1. Electrical power should be supplied to each central remote controller. (Single phase 100~240V)
2. When you control by 2 central remote controllers, be sure to set SS3 by the initial setting.



Note:

The following setting cannot be made by the sub side. Be sure to set by the main side.

- Operation code setting
- Combined operation between indoor unit and HRV unit.

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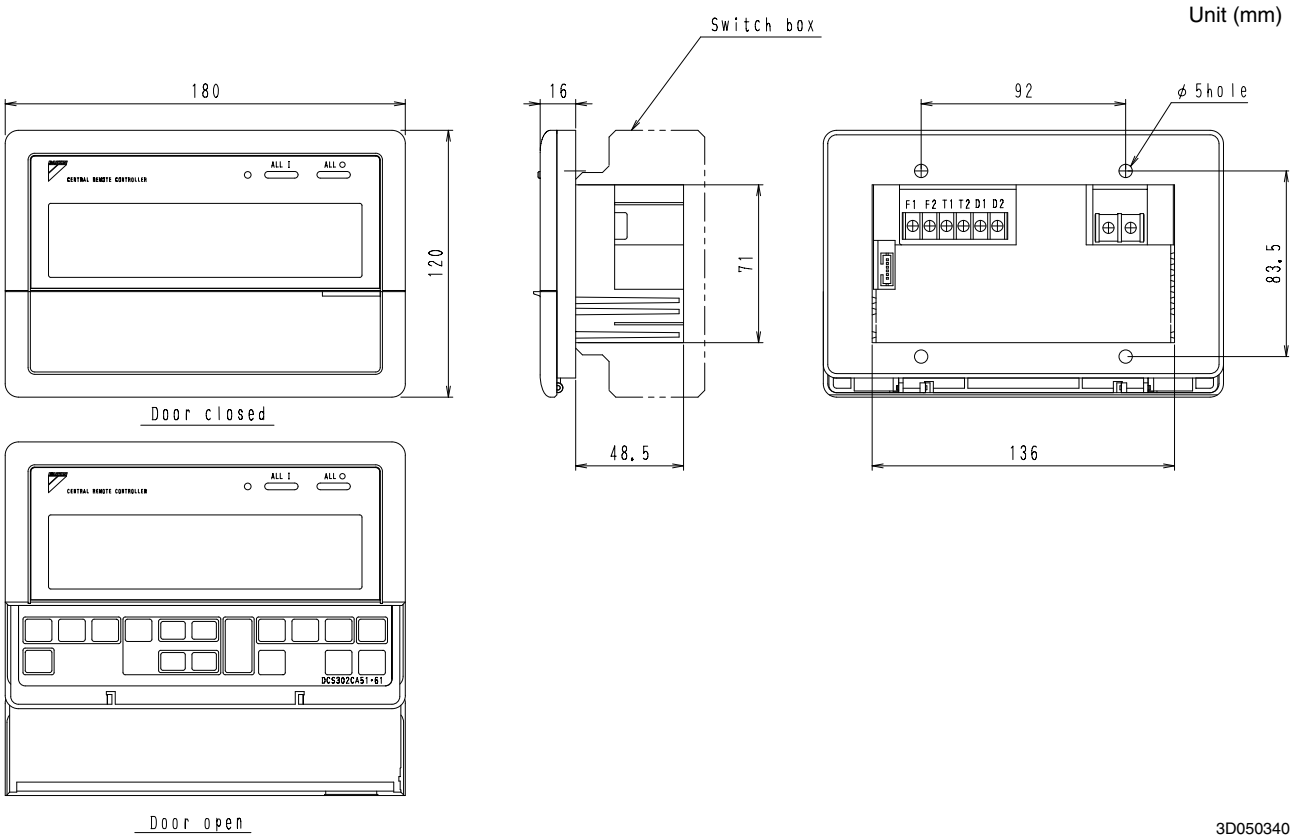
4.4.3 Specifications / Dimensions

Specifications

	DCS302CA61
Power supply voltage / frequency	AC100~240V ±10% 50/60Hz
Power consumption	Max. 8W
Setting data backup	Non-volatile memory (Data preserved semi-permanently)
Effects of instantaneous power failure	No effect for 20 mili-sec. or less
Forced OFF input Operation on the local side cannot be carried out during forced OFF input.	■ No-voltage normal open contact ■ Micro-current contact capable of handling 16VDC and approx. 10mA. ■ Max. 150 m cable length
Power supply for schedule timer	Power can be supplied to schedule timer. (Max. 1 unit)
Operating ambient temperature /humidity condition	-5~40 °C, 95% RH or less (no condensation)
Size (width × height × depth)	180×120×64.5 mm exposed portion of front panel : 16 mm
Weight (Mass)	Approx. 420 g

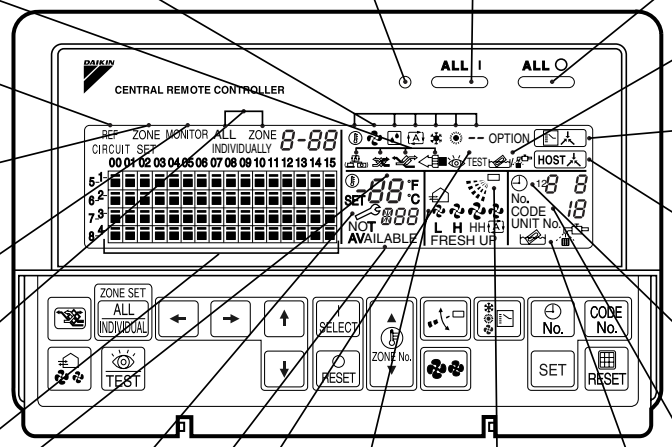
Dimensions

DCS302CA61



4.4.4 Names and Functions of Operating Part

■ Display part DISPLAY (OPERATION MODE) Displays operating state.



"[icons]" DISPLAY (VENTILATION CLEANING DISPLAY)
This is displayed when a Ventiair total enthalpy heat exchanger unit or other such unit is connected.

"[icons]" DISPLAY (OPERATION MODE)
Displays operating state.

OPERATION LAMP (RED)
Lit white any of the indoor units under control is in operation.

UNIFIED OPERATION BUTTON
Press to operate all indoor units.

UNIFIED STOP BUTTON
Press to stop all indoor units.

"[icons]" DISPLAY (TIME TO CLEAN)
It lights up when any individual unit (group) has reached the time for the filter or element to be cleaned.

" REF CIRCUIT " DISPLAY (REFRIGERANT SYSTEM DISPLAY)
This indication in the square is lit while the refrigerant system is being displayed.

" [icon] " DISPLAY (COOLING/HEATING SELECTION PRIVILEGE NOT SHOWN)
For zones or individual units (groups) for which this is displayed, cooling and heating cannot be selected.

" ZONE SET " DISPLAY (ZONE SETTING)
The lamp is lit while setting zones.

" HOST " DISPLAY (UNDER HOST COMPUTER INTEGRATED CONTROL)
While this display is lit up, no settings can be made. It lights up when the upper central machines are present on the same air conditioning network.

" MONITOR " DISPLAY (OPERATION MONITOR)
The lamp is lit while operation is being monitored.

" No. " DISPLAY (TIME NO.)
Displays the operation timer No. when used in conjunction with the schedule timer.

" ALL " " ZONE " " INDIVIDUALLY " DISPLAY
The status displays indicates either batch functions or which zone or individual unit (or group) are being used.

" CODE UNIT No. 18 " DISPLAY (OPERATION CODE AND UNIT NUMBER DISPLAY)
The method of operation (remote controller prohibited, central operation priority after-press operation priority, etc.) is displayed by the corresponding code.This displays the numbers of any indoor units which have stopped due to an error.

OPERATION MONITOR
Each square displays the state corresponding to each group.

" [icon] " DISPLAY (PRESET TEMPERATURE)
Displays the preset temperature.

" [icon] " DISPLAY (VENTILATION STRENGTH/SET FAN STRENGTH DISPLAY)
This displays the set fan strength.

" [icon] " DISPLAY (MALFUNCTION CODE)
This displays (flashes) the content of errors when an error failure has occurred.In maintenance mode, it displays the latest error content.

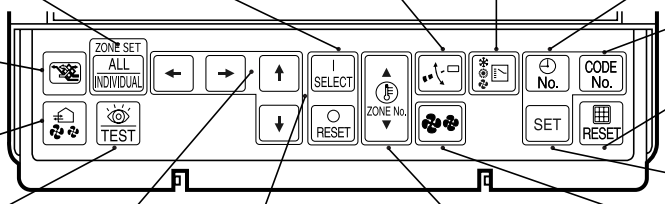
" [icon] " DISPLAY (FAN DIRECTION SWING DISPLAY)
This displays whether the fan direction is fixed or set to swing.

" [icon] " " [icon] " DISPLAY (TIME TO CLEAN AIR CLEANER ELEMENT/ TIME TO CLEAN AIR FILTER)
Displayed to notify the user it is time to clean the air filter or air cleaner element of the group displayed.

"NOT AVAILABLE" DISPLAY(NO FUNCTION DISPLAY)
If a function is not available in the indoor unit even if the button is pressed, "NOT AVAILABLE" is may be displayed for a few seconds.

" TEST " DISPLAY (INSPECTION/TEST)
Pressing the maintenance/test run button(for service) displays this. This button should not normally be used.

■ Control Section



ALL/INDIVIDUAL BUTTON
Pressing this button scrolls through the "all screen", "zone screen", and "individual screen".

ON/OFF BUTTON
Starts and stops ALL, ZONE, and INDIVIDUAL units.

FAN DIRECTION ADJUSTMENT BUTTON
This button is pressed when setting the fan direction to "fixed" or "swing".

OPERATION MODE SELECTOR BUTTON
This sets the operation mode. The dry setting cannot be done.

TIME NO. BUTTON
Selects time No. (Use in conjunction with the schedule timer only).

VENTILATION MODE BUTTON
This is pressed to switch the ventilation mode of the total enthalpy heat exchanger.

CONTROL MODE BUTTON
Selects control mode.

VENTILATION STRENGTH ADJUSTMENT BUTTON
This button is pressed to switch the ventilation strength ("fresh up") of the total enthalpy heat exchanger.

FILTER SIGN RESET BUTTON
This button is pressed to erase the "clean filter" display after cleaning or replacement.

INSPECTION/TEST RUN BUTTON (FOR SERVICE)
Pressing this button scrolls through "inspection", "test run", and "system display". This button is not normally used.

SET BUTTON
Sets control mode and time No.

FAN STRENGTH ADJUSTMENT BUTTON
Pressing this button scrolls through "weak", "strong", and "fast".

ARROW KEY BUTTON
This button is pressed when calling an individual indoor unit or a zone.

ZONE SETTING BUTTON
Zone registration mode can be turned on and off by pressing the start and stop buttons simultaneously for at least four seconds.

TEMPERATURE ADJUSTMENT BUTTON (ZONE NUMBER BUTTON)
This button is pressed when setting the temperature. Select the zone number if any zones have been registered.

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17

4.4.5 Description of Functions

Individual Screen, all Screen, Zone Screen

This controller can perform operations in the individual screen, all screen, or zone screen.

- Individual screen
  The individual screen is used when performing group operations.
- All screen
  The all screen is used when performing operations for all units at once.
- Zone screen
  The zone screen is used when performing zone operations.

Basic functions

	Descriptions of outline
Individual/Zone control	Up to 64 groups (Max. 128 units and max. 16 units per group) of indoor units and HRV units can be controlled by individually or by zone.
Unified ON/OFF	ON/OFF can be set for each zone, and can be controlled simultaneously for entire system by push button or by contact signal from outside.
Malfunction code display	The status of each group is always displayed, such as ON/OFF, error, etc. If the error occurs, it displays the contents of error by malfunction code through the self-diagnosis function.
Connection of unification adaptor for computerized control	By connecting the unification adaptor for computerized control (option), it can be linked with the central monitoring panel and etc. by contact signal, which enables you to operate ON/OFF simultaneously or monitor the operating status.
Remote control acceptance/rejection	It is possible to restrict the function of local remote controller. (Only ON operation rejection, or ON/OFF operation rejection)
2 central controllers	By connecting two central remote controllers, the same air-conditioner can be controlled from 2 locations (By tenant or administration office.)

Zone control functions

	Descriptions of outline
Zone control	The zone function is a function to control one or more group of air-conditioner, and the operation setting such as ON/OFF etc. can be made by zone.
Up to 64 zones	Up to 64 zones (64 groups for each zone) can be set. However, the group setting spreading over the plural zone cannot be set.
Zone register	When the power is supplied first time, each group is registered in each respective zone. If you can simply register the several groups in the same zone by switch, so that you can have simultaneous operation of the units in that zone immediately. (The operation of temperature setting and etc. is also controlled by zone simultaneously.)
Zone setting	By adding the zone setting function (Zone “0”) from the central remote controller, you can set the same setting for all the zone registered by single operation.
ON/OFF control of zone	For example, if there are three groups in one room and if you register these three groups as one zone, you can operate these three groups simultaneously by single operation (ON/OFF, temperature setting etc.). You still can operate each group individually by local remote controller.
Maintaining zone setting	Even if the power is turned off, the zone configurations set are maintained semi-permanently. (saved in non-volatile memory)
Cool/Heat changeover by zone	The cool/heat changeover can be made by zone. However, it is required to have a master group for Cool/Heat changeover in that zone.
Batch operation	The same setup is possible at one operation to all the groups registered on the "All" screen.
No local remote controller	Even if there is no local remote controller, you can still perform the same operation. There is no problem even if no remote controller is connected. (However, in this case, each one air-conditioner consists of one group.)
Combination with other controllers	You can also combine with a unified ON/OFF controller and a schedule timer. (Refer to the system configuration for details.)
Connection to central monitoring panel	You can also combine with an Interface for use in BAC net® and a data station in order to connect to the central monitoring panel. A parallel interface can also be connected.

Cool/Heat changeover and eligibility setting

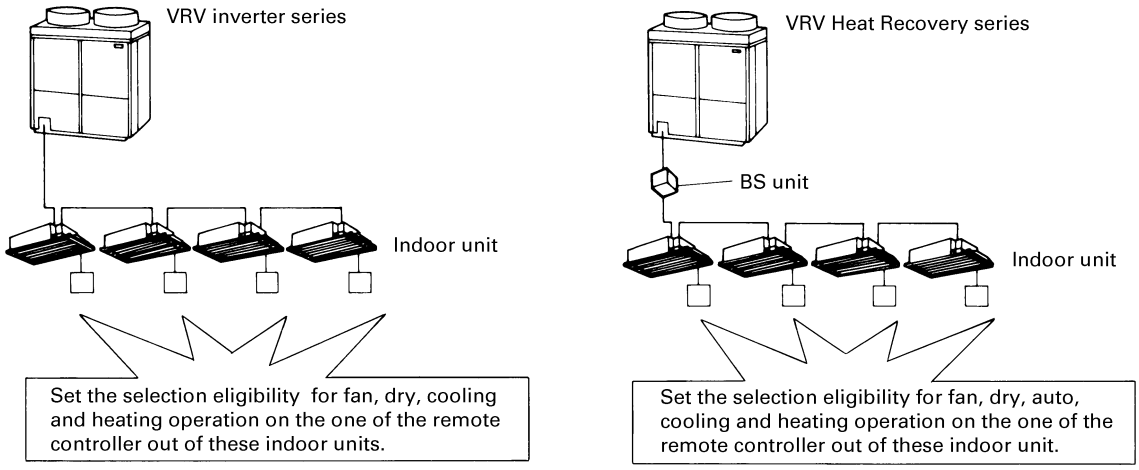
	Descriptions of outline
Possible control	The operation mode of the outdoor unit can be changed by the local remote controller or by the central remote controller. (For test operation, change setting of cool/heat selector switch of the outdoor unit.)
Remote controller acceptance/rejection	You can set the remote controller acceptance/rejection on the central remote controller by the local remote controller.
"NOT AVAILABLE" DISPLAY (NO FUNCTION DISPLAY)	If a function is not available in the indoor unit even if the button is pressed, "NOT AVAILABLE" is may be displayed for a few seconds.

Note:

Refer to the next page for the selection of cool/heat mode (eligibility for cool/heat changeover).

■ **Cool/heat Selection Eligibility Setting by Remote Controller for Indoor Unit**

The outdoor unit of VRVII, VRV inverter series, Heat Recovery series and VRV Plus series can freely be selected the operation mode (fan, dry, auto[Heat Recovery only], cooling or heating) by the remote controller for indoor unit. However, as shown below as example, for VRV inverter series, you have to set the selection eligibility for fan, dry, cooling and heating operation on the one of the remote controller out of the indoor units connected to the outdoor unit. For Heat Recovery series and the function unit (for heat recovery), if 2 or more indoor units are connected to one BS unit, you have set the selection eligibility for fan, dry, auto, cooling and heating operation on the one of the remote controller out of the indoor units connected to the BS unit.
(Only remote controller having the selection eligibility can change the operation mode.)

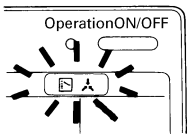


■ **Setting method of the selection eligibility for cool/heat**

1. Preparation

■ When turning on the power first time, "CHANGEOVER UNDER CONTROL" sign blinks.

When you set;

1	Continue to push Operation switch for about 4 seconds. sign blinks on all the indoor units connected to the outdoor unit or BS unit. 

2. Selection Eligibility Setting

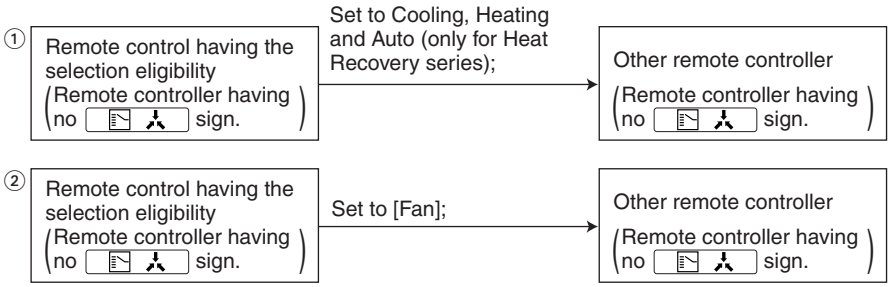
2	Push Operation switch of the remote controller, which you want to set the selection eligibility. This completes the setting procedure. Cool/heat selection eligibility is set for that remote controller, and sign goes off. still blinks on all other remote controllers.

3. Operation mode changeover

3	Push Operation switch of remote controller having the selection eligibility (The remote controller not displaying sign) several times to select the desired operation mode. [Fan], [Dry], [Auto](only for Heat Recovery series),[Cooling] and[Heating] mode are selected each time you push the [Operation switch]. Operation mode of other remote controllers, which has no selection eligibility, is also switched automatically.

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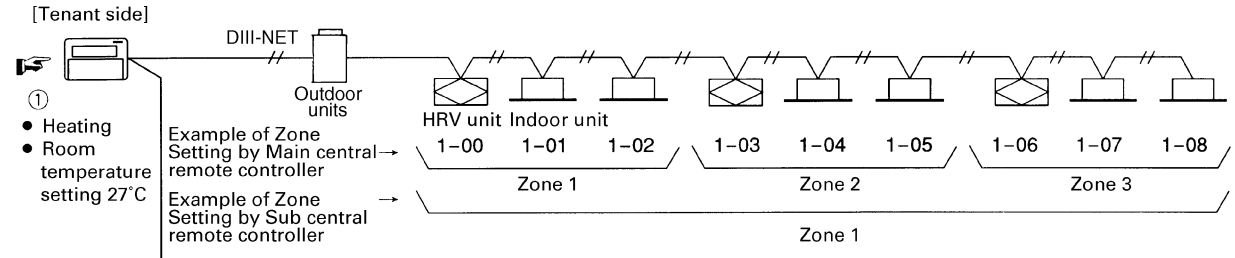
■ **Description of operation and its function**



∗ It is also possible to set the selection eligibility on the wireless remote controller.
It does not possible to set the "Dry" by the Central Remote Controller.

Control with Two Central Remote Controllers

The central remote control equipment is newly designed to "B" type, which has been added with a new control function for 2 central remote controllers. However, be sure that the relation between Main/Sub of the central remote controller is different from those of local remote controllers.



<Main central remote controller>
[Functions]
- Zone registration
- ON/OFF by zone simultaneously (Refer to "Cautions")
- Operation control code (Last command priority, Central priority, etc.)
- Room temperature setting
- Operation mode
- Filter sign monitoring and reset
- Timer No. registration for each zone (When schedule timer is used.)
- Operating status monitoring by group
- Refrigeration circuit display
- Test operation
- Individual setting (When local remote controller is not used.)
- Combined zone operation with HRV units (Refer to "Cautions")

<Sub central remote controller>
[Functions]
- Zone registration
- ON/OFF by zone simultaneously (Refer to "Cautions")
- Room temperature setting
- Operation mode
- Filter sign monitoring and reset
- Time No. setting for each zone (When schedule timer is used.)(Note 1)
- Operating status monitoring by group
- Refrigeration circuit display
- Test operation
- Individual setting (When local remote controller is not used.)

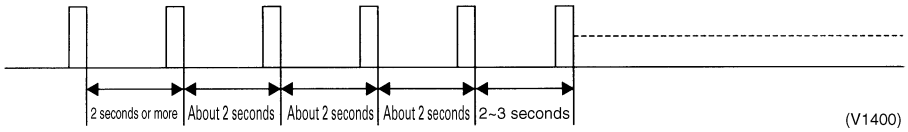
Note:
Be sure that if timer No. is registered by the sub central remote controller, [Timer mode acceptance for local remote controller (mode no. 8,9,18, and 19)] for the same units set by the Main remote controller becomes meaningless (operates when time comes.).

<Explanation of the above figure>
If you operate the central remote controller in the sequence of ① and ②, the indoor unit is set for cooling / temperature setting 24°C.
However, the display of zone setting of the master remote controller remains at heating / temperature setting at 27°C.

<Cautions>
- ■ Operation code cannot be set by the sub central remote controller.
- ■ Combined zone operation can only be set by zone registration of the main central remote controller.
- ■ Both main and sub central remote controller are operated by a Last priority command for the functions other than the above.
  However, the display on the central remote controller cannot be changed by each other. (On the display for the group, you can monitor the present operation status.)

Sequential Start

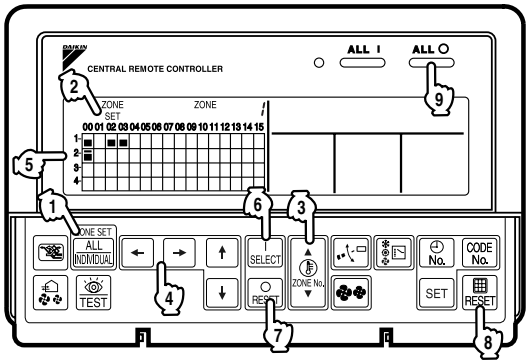
<Operation command from central control equipment>



Each unit operates in sequence. For example, if you set the simultaneous operation by the central remote controller, which controls 1-00 ~ 4-15 and 5-00 ~ 8-15 groups, two outdoor units start simultaneously.

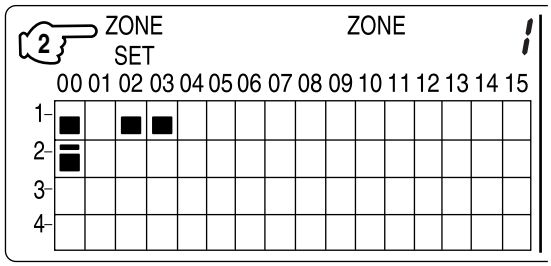
Registering Zone

It is possible to set multiple groups as one zone and control each zone separately.
No zones are registered when the unit is shipped from the factory.
Zone registration can be done in the individual screen, all screen, or zone screen.



Registration

1. **Pressing the "ALL/INDIVIDUAL" button for four seconds. Displays ZONE SET.**
   Zone Number 1 will be displayed, and if there are any groups already registered in the displayed zone, a " ■ " will light up on the operation monitor.
2. **Select the Zone Number to be registered using the "ZONE NUMBER" button.**
   Keeping the button pressed down will move it rapidly.
3. **" ▬ "to the group you wish to register using the arrow keys.**
   Keeping the button pressed down will move it rapidly.
4. **Press the "SELECT" button to register that group to the zone.**
   The " ■ " display lights up on all the selected units.
   Pressing the "RESET" button removes the group from that zone, and " ■ " goes off.
   Repeat steps 3 and 4 until all the units you wish to register to the zone have been added.



   In this example, a screen is shown with units 1-00, 1-02, 1-03, and 2-00 registered to Zone Number 1.
5. **Repeat steps 2 to 4 to register to the next zone.**
6. **Once zone registration is complete, press the "ALL/INDIVIDUAL" button to turn off "ZONE SET" display and return to the individual screen.**
   The display returns to the normal screen if nothing is done for one minute when in zone registration mode.

(NOTE)

- It is impossible to register one group to several different zones.
  If this is done, the last zone registered to will be valid.

3P124623-3A

17

Batch deletion of zone registration

1. ☞9 Pressing the "ALL ◯ " for at least four seconds while ☞8 pressing the "FILTER SIGN RESET" button when ☞2 "ZONE SET" is displayed will delete all zone registrations.

The zone registrations for all units will be lost.

3P124623-3A

Zone setting

Set the screen of [Zone 0] on the display, and if you set the following mode, you can set to the all zone registered on the central remote controller by one operation.

- Operation mode
- Control mode
- Room temperature setting
- Time NO.

Display of "NOT AVAILABLE"

If indoor units are not available for functions subject to control even when attempting to operate these functions from DCS302C(A)61, the system will display this "NOT AVAILABLE" message.
This message is displayed for a period of approximately two seconds. However, if any button corresponding to functions not available while the "NOT AVAILABLE" is displayed, it will be displayed for a period of another approximately two seconds.
The following section shows the conditions for this display.

On the Individual screen,
When the indoor unit is chosen, "NOT AVAILABLE" will be displayed if the "VENTILATION MODE ", "VENTILATION STRENGTH" button is pushed.
When the HRV unit is chosen, "NOT AVAILABLE" will be displayed if the "OPERATION MODE SELECTOR", "FAN DIRECTIOIN ADJUSTMENT" "FAN STRENGTH ADJUSTMENT" "TEMPERATURE ADJUSTMENT (ZONE NUMBER)" button is pushed.

When an indoor without FAN DIRECTION, FAN STRENGTH is chosen, "NOT AVAILABLE" will be displayed if "FAN DIRECTION", "FAN STRENGTH" button is pushed.
When a HRV without VENTILATION MODE, VENTILATION STRENGTH is chosen, "NOT AVAILABLE" will be displayed if "VENTILATION MODE ", "VENTILATION STRENGTH" button is pushed.

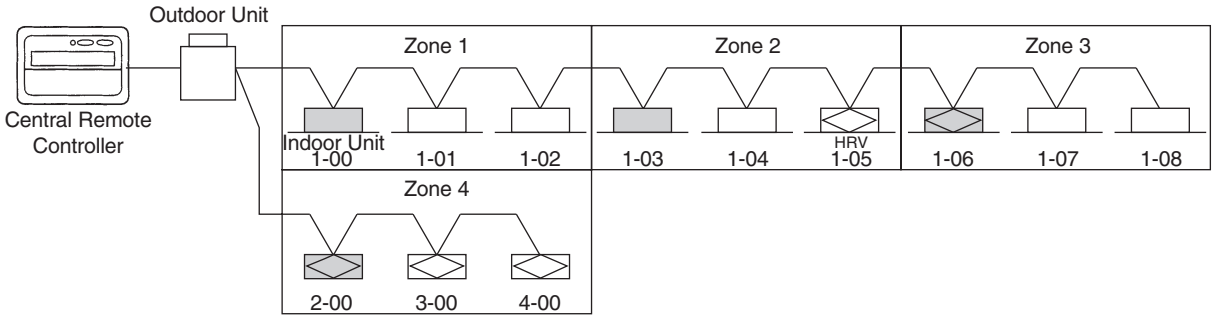
On the Zone screen and All screen, the FAN DIRECTION ADJUSTMENT, FAN STRENGTH ADJUSTMENT, VENTILATION MODE, and VENTILATION STRENGTH buttons are disabled.
Pressing any of these buttons will display the "NOT AVAILABLE" message on the screen.

With the Schedule Timer not connected, even if the "Timer No." button is pressed, the "NOT AVAILABLE" message will not be displayed.
While in double central control function, even if the OPERATION CODE button is pressed, the "NOT AVAILABLE" message will not be displayed.

Monitor in zone unit

Operating and monitoring the system even in group or zone unit has become enabled from the DCS302C(A)61. Monitoring in zone unit is conducted taking an indoor unit with a lower address within the zone as the Main Indoor Unit.

For monitoring the zone settings: The following screens are displayed.



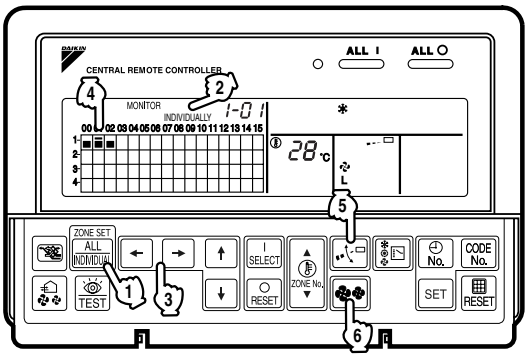
	Main Indoor Unit	Operation Code Timer No.	Temp. Display	Operation Mode	Ventilation Mode
Zone 1	1-00	1-00	1-00	1-00	N/A
Zone 2	1-03	1-03	1-03	1-03	1-05
Zone 3	1-06	1-06	1-07	1-07	1-06
Zone 4	2-00	2-00	N/A	N/A	2-00

If the system is operated on the Zone screen, one and the same setting will be made on all indoor units registered with the zone.
On the Zone screen, ventilation mode is only monitored. In order to change ventilation mode, be sure to use the Individual screen.

On the Batch screen, operating and monitoring is also enabled, thus monitoring an indoor unit with a lower address within the scope of control.

Changing the Fan Direction and Fan Strength

This changes the fan direction and strength settings in the air conditioner.
Changing the fan direction and strength is done in the individual screen.



[Registration]

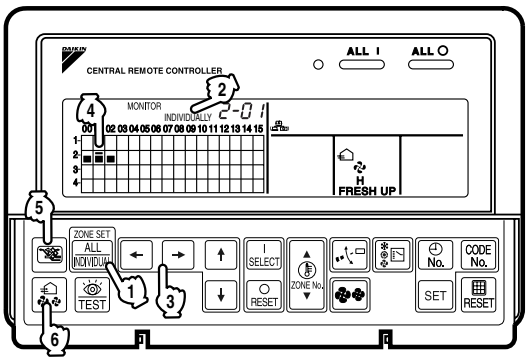
1. **Press the "ALL/INDIVIDUAL button" to enter the individual screen.**
   The unit will enter the individual screen automatically if nothing is done for one minute.
2. **Using the arrow keys, move the " " to select the units to fan direction adjustment or fan strength adjustment.**
   Keeping the button pressed down will move it rapidly.
3. **Press the "FAN DIRECTION ADJUSTMENT" button.**
   This sets "fixed" or "swing" for the fan direction.
   Press the "FAN STRENGTH ADJUSTMENT" button.
   Pressing this button scrolls through " L ", " H " and " HH ".
   Depending on the indoor unit, only " L " and " H " may be available.

The functions included in the indoor units may vary.Pressing a button for a function which is not available will cause "NOT AVAILABLE" to be displayed.

3P124623-3A

Changing the Ventilation Mode and Ventilation Strength

This changes the ventilation mode and strength settings in the total enthalpy heat exchanger.
Changing the ventilation mode and strength is done in the individual screen.



[Registration]

1. **Press the "ALL/INDIVIDUAL button" to enter the individual screen.**
   The unit will enter the individual screen automatically if nothing is done for one minute.
2. **Using the arrow keys, move the " " to select the units to ventilation mode or ventilation strength adjustment.**
   Keeping the button pressed down will move it rapidly.
3. **Press the "VENTILATION MODE" button.**
   It will scroll through " " → " " → " " → " " .

⑥ **Press the "VENTILATION STRENGTH ADJUSTMENT" button.**

It will scroll through " L " → " H " → " L FRESH UP " → " H FRESH UP " → " L ".

The fresh up function may not be available depending on the connected unit model.
The functions included in the indoor units may vary.Pressing a button for a function which is not available will cause "NOT AVAILABLE" to be displayed.

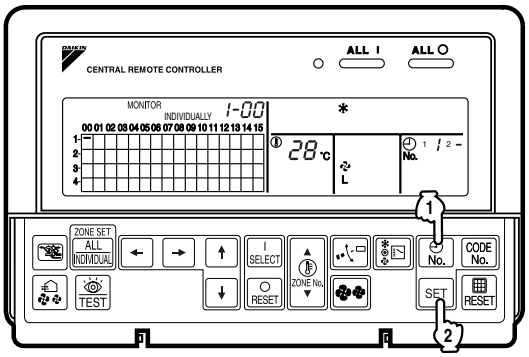
■ **Ventilation Mode and Amount**
If these are changed using the remote controller depending on the unit model, they cannot be displayed on the central remote controller.
To monitor the ventilation mode and amount, check the values on the remote controller.

3P124623-3A

Timer Number Setting

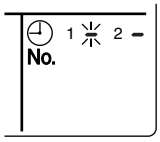
(Only when used with the schedule timer)

Using this together with the schedule timer makes it possible to set on and off times four times a day.
4 times of ON/OFF time can be set up per day. Because, two settings of ON/OFF time are possible to one Schedule Timer and two Schedule Timers can be registered into a Central Remote Controller.

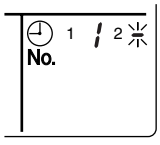


[Registration]

1. ① **Pressing the "TIMER NO." button causes the number set for timer number 1 to blink.**
   If no timer setting has been made " – " will be displayed.Select the desired timer number by pressing the ① "TIMER NO." button.

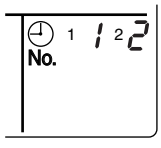


2. ② **Once the desired timer number is displayed, press the "SET" button.**
   Press the ② "SET" button within 10 seconds after the timer number is displayed.
   The display will return to how it was after 10 seconds.
   The display for timer number 1 will stop blinking and then timer number 2 will start blinking.



3. ① **Select the desired timer number by pressing the "TIMER NO." button.**
   Once the desired timer number is displayed, ② press the "SET" button.
   The display for timer number 2 will stop blinking.
   The " No. " display will disappear after 3 seconds.

   Select " – " in the timer number when you do not wish to set a timer number.
   It is possible to set only one timer number.
   (The times for turning the unit(s) on and off twice a day can be set with a single timer number.)



17

- **Timer Number Setting**
  Group control: select the unit in the individual screen and set the timer number.
  Batch control: set the timer numbers for all connected units.
  Zone control: set the timer numbers for all zone-registered units.
  Call up the zones which you wish to set in the zone screen and set the timer numbers.
- **Since the timer number will be set to after-press priority, the timer number in the last screen set will be valid for the connected units.**
  Example 1
  Setting timer number 1 for unit 1-00 to "1" and timer number 2 to "2" in the individual screen and then setting timer number 1 to "3" and timer number 2 to "4" in the batch screen causes the timer numbers for all units to be set, so timer number 1 for unit 1-00 will be "3" and timer number 2 will be "4".
  Example 2
  To prevent leaving units on, timer number 1 is set to "5" in the batch screen.
  Setting timer number 1 in zone number 1 to "–" in the zone screen after that will change the timer number for zone number 1, so the setting to prevent leaving the units on will be lost for zone number 1 only.
  If a timer number is set incorrectly by accident, redo the setting in the desired screen.
- **What happens when the timer number on time and off time are set to the same time**
  When the on time and off time are set to the same time for the same timer number, operation does not change.
  When the on time and off time are set to the same time for different timer numbers, the off time is given priority.
  When using timer operation, make sure the times do not overlap when setting the program of the schedule timer.

3P124623-3A

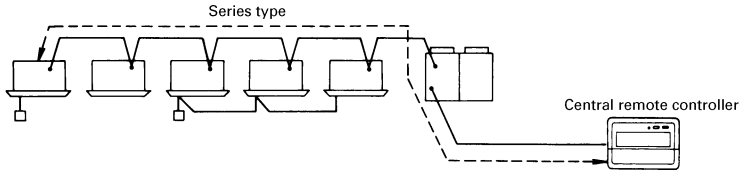
4.4.6 Wiring Instructions

Wiring instructions

For control wiring of DIII-NET, you can select from the following 3 types of wiring methods.

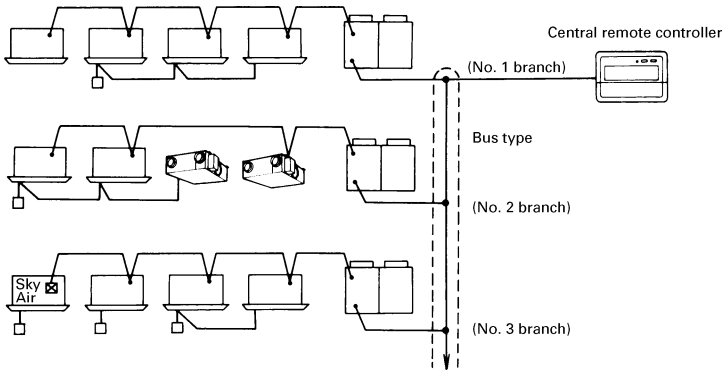
1. Series method :

Wiring is connected by a single line from the central controller.



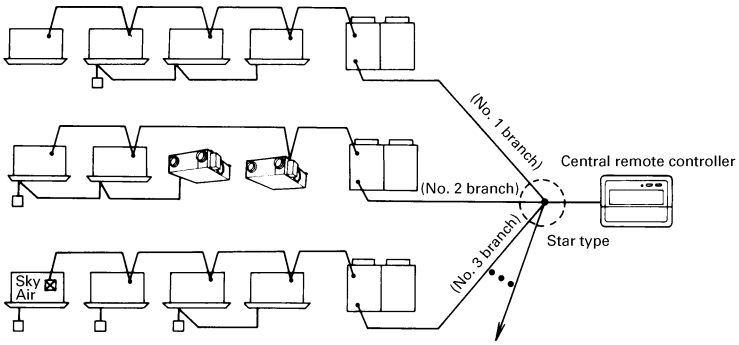
2. Bus method :

Up to 16 branches is possible. Never diverge the sub-branches from the branch line.



3. Star method :

Up to 16 branches is possible. Never diverge the sub-branches from the branch line.



Specifications of transmission wiring

Be sure to use either 2-core sheathed vinyl cord or cable as mentioned below. The size of wire should be selected in the range of 0.75~1.25 mm².

■ Vinyl cab tire round cord	VCTF	JISC 3306
■ Vinyl insulated, vinyl sheathed cable for control	CVV	JISC 3401
■ Round vinyl sheathed cable for control	CVS	JISC 3401
■ 600V vinyl cab tire cable	VCT	JISC 3312
■ Polyethylene insulated vinyl sheathed cable (∗)	CPEV	
■ Mesh insulated cable (∗)	MVVS	

∗ When the shield wire is used, be sure to ground the one side of the shield wire.

<Length of control wiring>

Between central remote controller and air-conditioner

Maximum extension : 1,000 m, Total length : 2,000 m (∗)

∗ When you have branches, be sure to make a total length of all the branch.

17

4.4.7 Instructions for Initial Setting

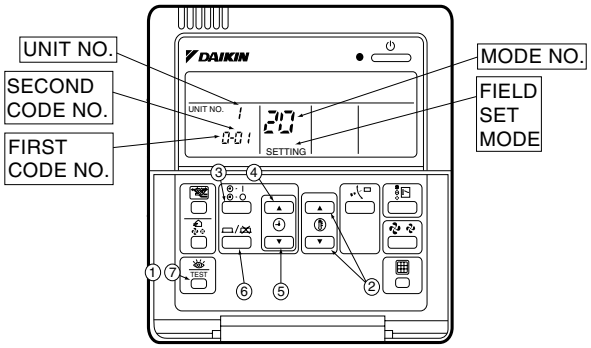
Group No. Setting for Central Control Equipment

Group No. should be set for each group by the remote controller for indoor unit, when you operate the system with central remote controller and unified ON/OFF controller. (For the same control group, set only one of the unit.)

■ **Remote controller for indoor unit**

■ Procedure to set the group No. for central control by remote controller for indoor unit.

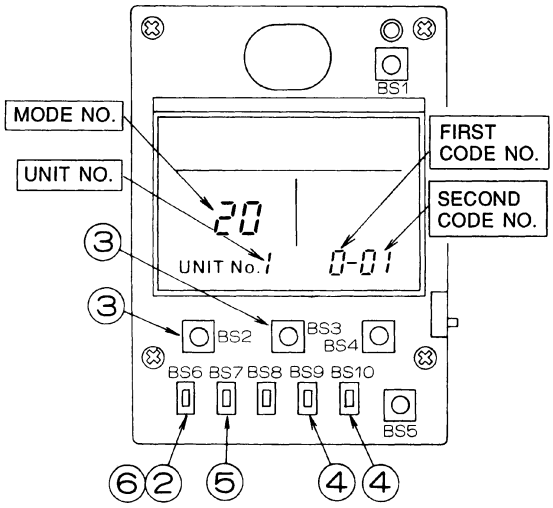
1. When in the normal mode, press the " TEST " button for a minimum of four seconds, and the FIELD SET MODE is entered.
2. Select the desired MODE NO. with the " ▲▼ " button (②).
3. During group control, when setting by each indoor unit (mode No. 20, 22 and 23 have been selected), push the " ⊙-I ⊙-O " button (③) and select the INDOOR UNIT NO to be set. (This operation is unnecessary when setting by group.)
4. Push the " ▲ " upper button (④) and select FIRST CODE NO.
5. Push the " ▼ " lower button (⑤) and select the SECOND CODE NO.
6. Push the " ▭/▭ " button (⑥) once and the present settings are SET.
7. Push the " TEST " button (⑦) to return to the NORMAL MODE.



■ **Simplified remote controller**

■ Group No. setting by simplified remote controller.

1. Remove the cover of remote controller.
2. While in normal mode, press the [BS6] BUTTON (field set) to enter the FIELD SET MODE.
3. Select the mode No. [00] with [BS2] BUTTON (temperature setting ▲) and [BS3] BUTTON (temperature setting ▼).
4. Select the group No. with [BS9] BUTTON (set A) and [BS10] BUTTON (set B). (Group Nos. increase in the order of 1-00, 1-01.....1-15, 2-00,.....4-15. However, the unified ON/OFF controller displays only group No. set within the range of control.)
5. Press [BS7] BUTTON (set/cancel) to set group No.
6. Press [BS6] BUTTON (field set) to return to the NORMAL MODE.

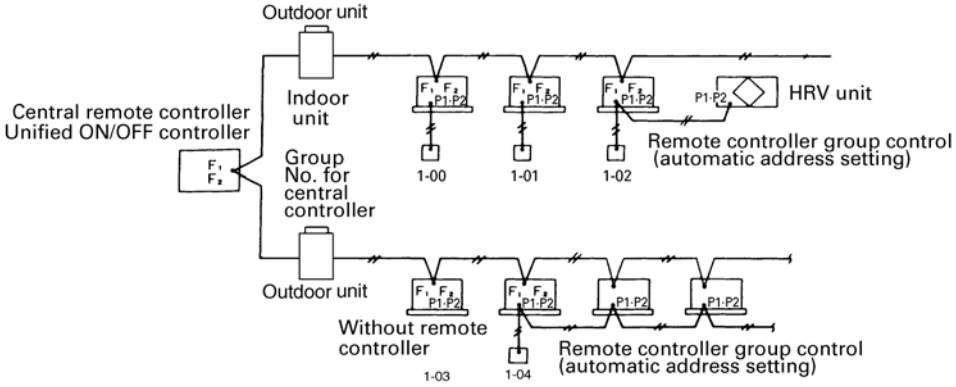


<Cautions>

■ Even in the system without remote control, connect the remote controller once to set group No. for central control equipment and remove the remote controller after setting.

■ When you set the group No., be sure to supply the power to the central remote controller, the unified ON/OFF controller and the indoor unit.

<Example of group setting>



Cautions

When the power is supplied, all the display appears once on the remote controller and then the display changes to

[88] for about one minute and during that time the remote controller does not function. However, this is not a malfunction of remote controller.

Control Mode Setting by Remote Controller (Field Setting)

The control mode defines the function of local remote controllers to handle various types of control and applications. Function can be defined by conditions and combinations of local remote control operations such as ON/OFF etc. (See table below.)
Operation can always carried out from the central remote controller.(Except when connected to the central monitoring panel.)

■ Description of Control Mode

The following 5 operation control modes and 20 modes combined with temperature and operation mode setting by the remote controller are set and display by the control mode of 0 through 19.

Remote Control Rejection
For when you want to turn on/off using central remote controller only.
(On/off cannot be carried out by remote controller.)

Remote controller Off Only Accepted
For when you want to turn on only by the central remote controller, and turn off only by local remote controller.

Central Priority
For when you want to turn on only by the central remote controller, and during the set time, turn on/off freely by local remote controller.

Individual Priority (Last Command Priority)
For when you want to turn on/off by both central remote controller and local remote controller.

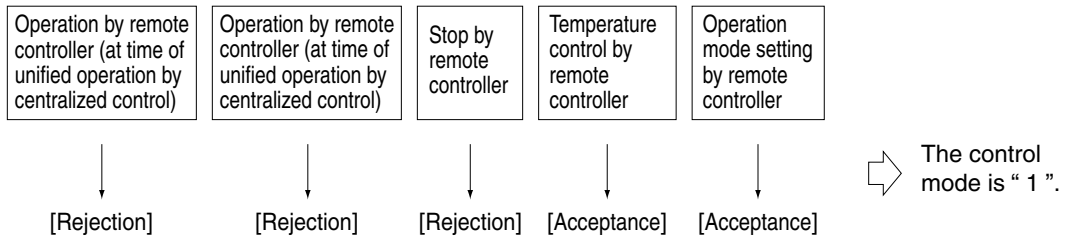
Remote Controller Permission Timer
For when you want to turn on/off by local remote controller during set time, but you do not want to start operation from the central remote controller at the programmed time of system start.

Note:
The control mode consists of numbers 0 through 19, but only 0 through 9 are usually set.

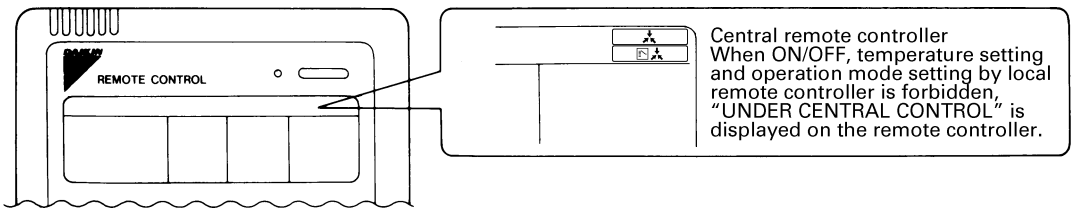
4.4.8 Selection of Control Mode No.

Select whether to accept or to reject the operation from the remote controller regarding the operation, stop, temperature setting and operation mode setting, respectively, and determine the particular control mode from the right most column of the table below.

(Example)



Operation mode	Control by remote controller					Control mode
	Operation		Stop	Temperature control	Operation mode setting	
	Unified operation, individual operation by central remote controller, or operation controlled by timer	Unified stop, individual stop by central remote controller, or timer stop				
ON/OFF control impossible by remote controller	Rejection (Example)	Rejection (Example)	Rejection (Example)	Rejection	Acceptance	0
					Rejection	10
				Acceptance (Example)	Acceptance (Example)	1 (Example)
					Rejection	11
Only OFF control possible by remote controller			Acceptance	Rejection	Acceptance	2
					Rejection	12
				Acceptance	Acceptance	3
					Rejection	13
Centralized	Acceptance			Rejection	Acceptance	4
					Rejection	14
				Acceptance	Acceptance	5
					Rejection	15
Individual		Acceptance		Rejection	Acceptance	6
					Rejection	16
				Acceptance	Acceptance	7
					Rejection	17
Timer operation possible by remote controller	Acceptance (During timer at ON position only)	Rejection (During timer at OFF position)		Rejection	Acceptance	8
					Rejection	18
				Acceptance	Acceptance	9
					Rejection	19

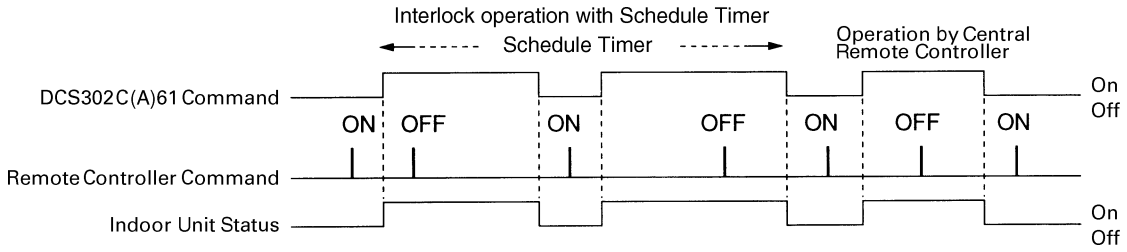


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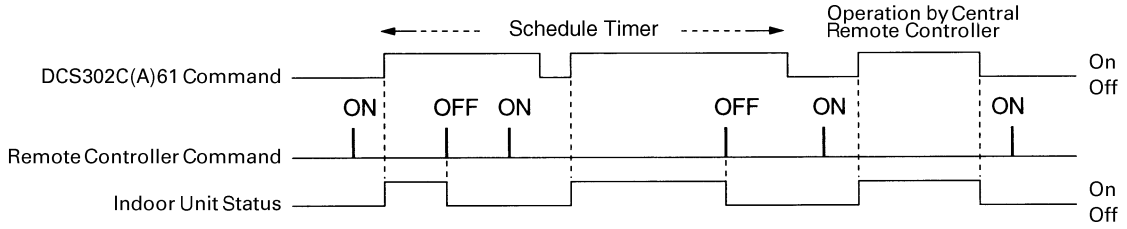
■ **Timing Chart for Each Control Mode No. (VRV system)**

Timing charts for scheduled operation and remote controller control for each control mode No. as follows.

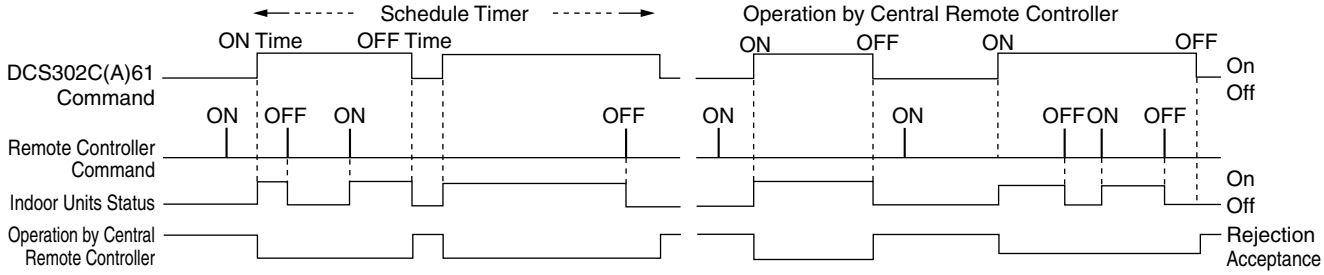
1. Remote controller rejection (Code No. 0, 1, 10, 11)



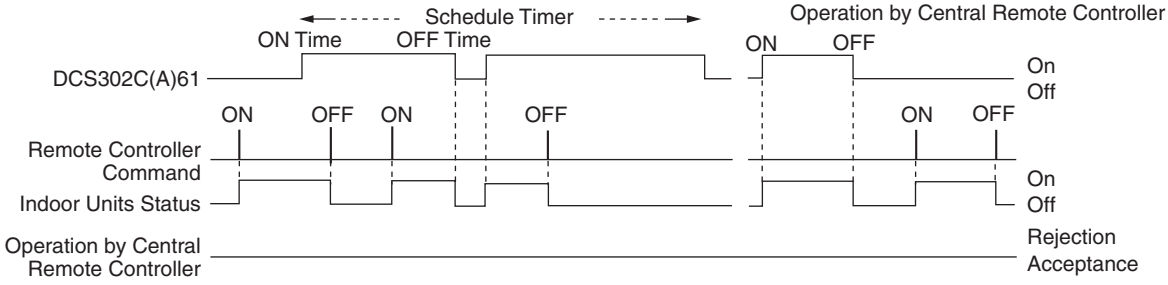
2. Remote controller off only accepted (Code No. 2, 3, 12, 13)



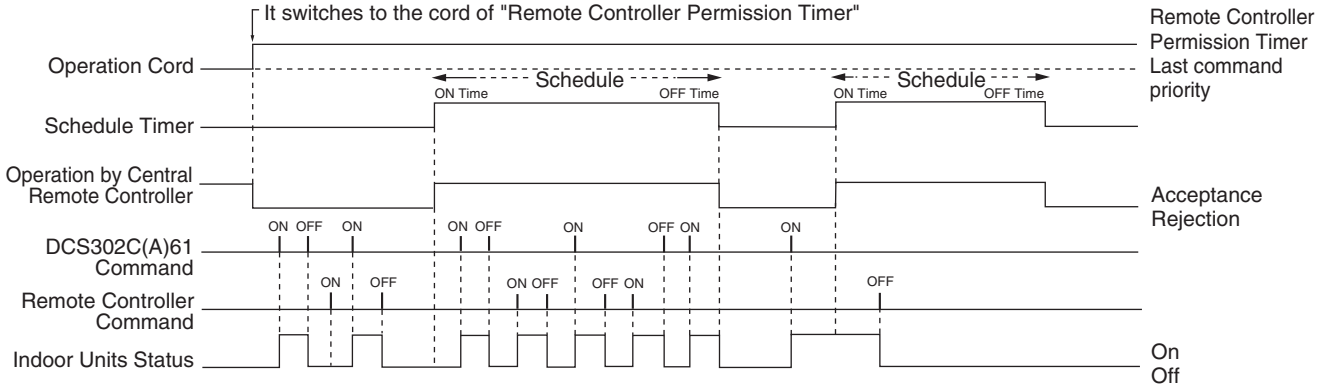
3. Central priority (Code No. 4, 5, 14, 15)



4. Individual priority (Last command priority) (Code No. 6, 7, 16, 17)



5. Remote controller permission timer (Code No. 8, 9, 18, 19)



∗ Operation by remote controller is the same as central priority.

17

4.4.9 Initial Setting

Setting (1) through (3) are initialized when power is turned ON, therefore complete settings BEFORE activating the power.
(The positions of connectors and switches used for settings in this section are shown in Fig. 1.)

(1) Connector for setting master controller (X1A) (Provided with connector at factory set)

- When using only 1 central remote controller, do not disconnect the connector for setting master controller. (Use the unit with the connector in the state in which it was delivered.)
- When using multiple central remote controllers, or using the central remote controller in conjunction with the optional controllers for centralized control, makes settings as indicated in the below table.

Pattern of Connection of Optional Controllers for Centralized Control			Connector for Setting Master Controller (X 1A) Setting		
Central Remote Controller	Unified ON/OFF Controller	Schedule Timer	Central Remote Controller	Unified ON/OFF Controller	Schedule Timer
1 to 4	—	—	Set one to “Used” and all the rest to “Not used”.	—	—
	1 to 16	—		Set all to “Not used”.	—
		1			“Not used”
	—	1		—	“Not used”

(Remove this connector when using this controller in conjunction with power consumption counting unit, parallel interface, and data station.)

(2) Address setting

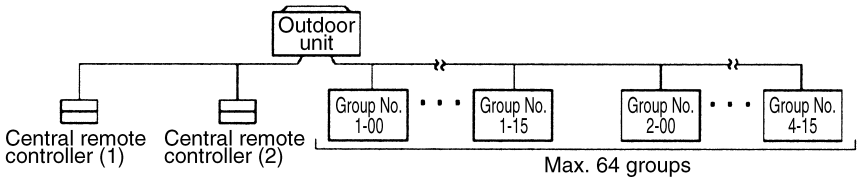
Two central remote controllers can be used as shown in “**SYSTEM CONFIGURATION**” to control anywhere up to a max. 128 groups of indoor units. In this case, group address must be set. This is done with the switch for setting each address (SS3).

Setting of SS3 switch	Control range of indoor units
Control range setting: 5-00 ~8-15 / 1-00 ~4-15 (▨)	When controlling indoor units of Group No. 1-00~4-15

Setting of SS3 switch	Control range of indoor units
Control range setting: 5-00 ~8-15 (▨) / 1-00 ~4-15	When controlling indoor units of Group No. 5-00~8-15

(3) MAIN/SUB changeover switch setting

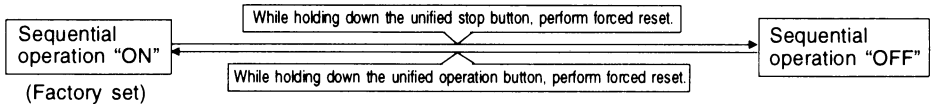
With two central remote controllers, centralized control (indoor units) is possible from different locations. In this kind of set-up, it is necessary to set the MAIN/SUB changeover switch.



One of the two central remote controllers (1) · (2) is set to “MAIN” while the other is set to “SUB”

(4) Setting of the sequential operation function

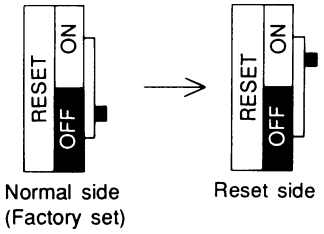
The central remote controller is equipped with a sequential operation function that sequentially turns indoor units on in 2-second intervals during unified operation. (Sequential operation is factory set to “ON.”) To switch sequential operation ON or OFF, set as follows.



Note:
The sequential operation function is designed to reduce the load on the power supply equipment, but does not guarantee that compressors will not be started simultaneously. You cannot therefore count on a capacity reduction effect by power supply equipment breaker selection.

(5) Forced reset switch

When changing the setting of the connector for setting master controller, etc., you can reset simply by setting it to the reset side once and returning to the normal side, without turning the power OFF.
(For normal operation, set the switch to the normal side.)



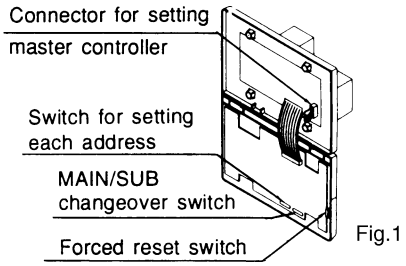
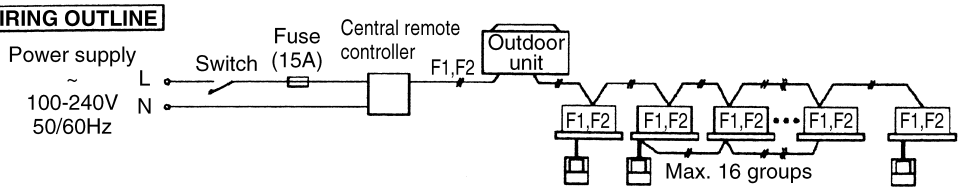


Fig.1

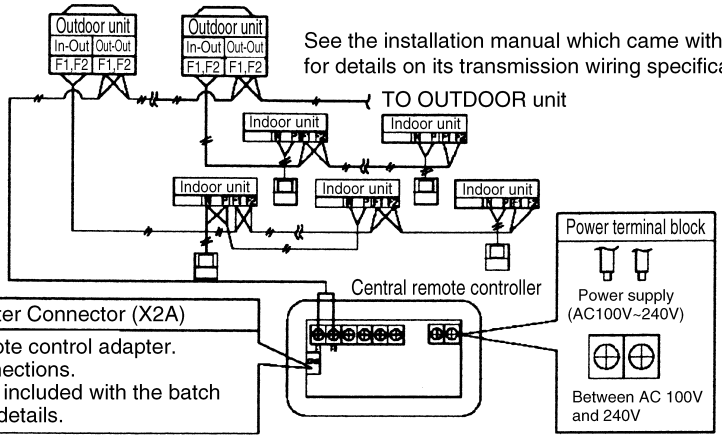
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4.4.10 Electric Wiring

WIRING OUTLINE



WIRING TO THE INDOOR UNIT AND OUTDOOR UNIT



See the installation manual which came with the air conditioner for details on its transmission wiring specifications.

Batch remote control adapter Connector (X2A)
Separately sold batch remote control adapter. Used for DCS302A52 connections. See the instruction manual included with the batch remote control adapter for details.

Wiring specifications

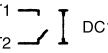
Power supply wiring	2mm^2
Transmission wiring for control	0.75-1.25 mm^2 sheathed vinyl cord or cable (balanced type) - maximum length 1000 m (total overall wiring length 2000 m)

Wire the indoor units to the outdoor units and between all power, indoor units, and remote controllers. See the instruction manual included with the indoor and outdoor units for details.

CONTROL TERMINAL STRIP

*1 For connecting indoor unit (F1, F2)

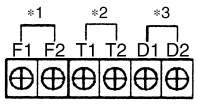
*2 Forced OFF input (T1, T2)
None of the indoor units connected to the forced OFF input contact (non-voltage contact with minimal current) will operate when it is shut off.
Use only contactors which guarantee the minimum applicable load DC 16V, 10mA.



NOTE) Use instantaneous contactor of over 200m sec. energizing time, when necessary.

*3 For schedule timer (D1, D2)
Power can be supplied to the schedule timer (DST301BA51·61) separately sold. For details, refer to the installation manual of the schedule timer.

Wire *2 and *3 only when necessary.



Note:

Do not connect the power supply wiring (100 to 240V) to the control terminal strip. If connected by mistake, it may damage or burn electrical parts of optional controllers for centralized control and indoor unit. It may result in serious danger. Be sure to check wirings before turning the power ON.

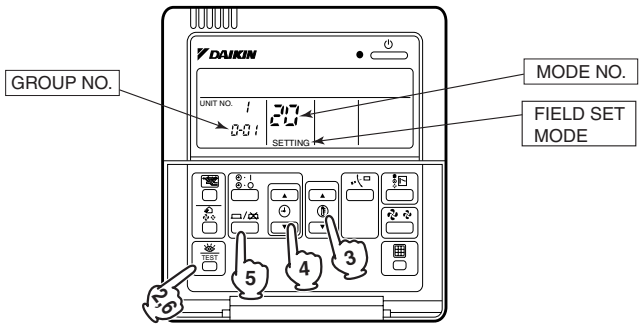
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17

4.4.11 Setting Group No. for Centralized Control

Set the group number of each group of the indoor unit from the remote controller. (In case of no remote controller, also connect the remote controller and set the group No. Then, remove the remote controller.)

1. Turn ON the power of the indoor unit and unified ON/OFF controller. (Unless the power is ON, no setting can be made.)
   Check that the installation and electrical wiring are correct before turning the power supply ON.
   When the power supply is turned ON, all LCD appear once and the unit may not accept the operation for about one minute with the display of " HOST " flashing (an interval of ON, ON, and OFF).
2. While in the normal mode, hold down the " TEST " button for a minimum of 4 seconds.
   The remote controller will enter the FIELD SET MODE.
3. Select the MODE No. " 00 " with the " ▲▼ " button.
4. Use the " ▲▼ " button to select the group No. for each group.
   (Group numbers increase in the order of 1-00, 1-01, ...1-15, 2-00, ... 8-15.)
5. Press " ▭ " to set the selected group No.
6. Press " TEST " to return to the NORMAL MODE.



Note:

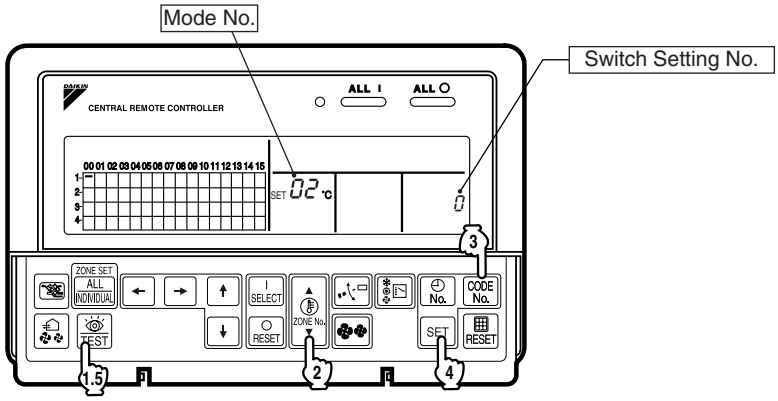
- For simplified remote controller, see the installation table.
- For setting group No. of HRV and wiring adaptor for other air conditioners, etc., refer to the instruction manual attached.

NOTICE

Enter the group No. and installation place of the indoor unit into the attached installation table. Be sure to keep the installation table with the operation manual for maintenance.

4.4.12 Special Function Settings

Special functions on the central control system can be changed while in FIELD SETTING mode.



Setting Procedure

1. Press and hold the INSPECTION/TEST RUN button for a period of four seconds or more to set the system to FIELD SETTING mode.
2. Use the TEMPERATURE ADJUSTMENT button to select a desired Mode No.
   ▲: Press to increase the Mode No. ▼: Press to decrease the Mode No.
3. Press the CONTROL MODE (CODE No.) button to select a "Switch Setting No.".
4. Press the SET button to determine the content of the setting changed.
   Upon determination, the blinking the "Switch Setting No." will turn ON.
5. Press the INSPECTION/TEST RUN button to return the system to NORMAL mode.
   In this case, power supply is not needed to turn ON again.

Example: In case of no restriction items from the sub central remote controller while in double central control, make setting of the Mode No. to "02" and the Switch Setting No. to "0".

Setting Contents and Setting No.

Mode No.	Setting contents	No. of setting switch									
		0				1		2			
00	Setting of sequential operation function	NO				YES		–			
01	Setting of refresh function	NO				YES		–			
02	Setting of restriction items from sub central remote controller while in double central control function	Disabled				Enabled		–			
03	Setting of area designation for forced OFF (Operation with T1 and T2 entered)	Forced OFF all within the scope of control				Forced OFF only within the scope of control		Forced thermostat OFF with the scope of control			
04	LED contrast tuning	1	2	3	4	5	6	7	8	9	10
		← Low				Factory default		→ High			

Items indicated by boldface represent the factory set for the No. of Switch Setting.
Do not make setting of any items not listed in the table above.

■ **Refresh function**

This function is used to automatically send "OPERATION MODE" and "TEMPERATURE SETTING" from the central control system while in operation. In order to disable the refresh function, set the "No. of Switch Setting" to "0".

■ **Restriction items from sub central remote controller while in double central control function**

While in double central control function, no settings of zone interlock and operation code can be made from the sub central remote controller. In order to disable the refresh function from the sub central remote controller, set the "No. of Switch Setting" to "0".

■ **Setting of area designation for forced OFF**

- In order to stop all indoor units within the scope of control as a single unit using the entry of T1 and T2, set the "No. of Switch Setting" to "1".
- In order to stop all indoor units within the scope of control with forced thermostat OFF using the entry of T1 and T2, set the "No. of Switch Setting" to "2". With this parameter set to "2", no forced stop can be made on any indoor unit.

4.4.13 Refreshed Operation

Refreshed operation is the function to transmit setting of "Temperature control", "Temperature setting" automatically from DCS302CA61.

"Refreshed operation" is "ON" when shipped from the factory.

Factory Setting

Outdoor Units Systems	Indoor Units Mode
Cooling Mode	Cooling 28 °C
Heating Mode	Heating 22 °C
Fan Mode	Fan Operation

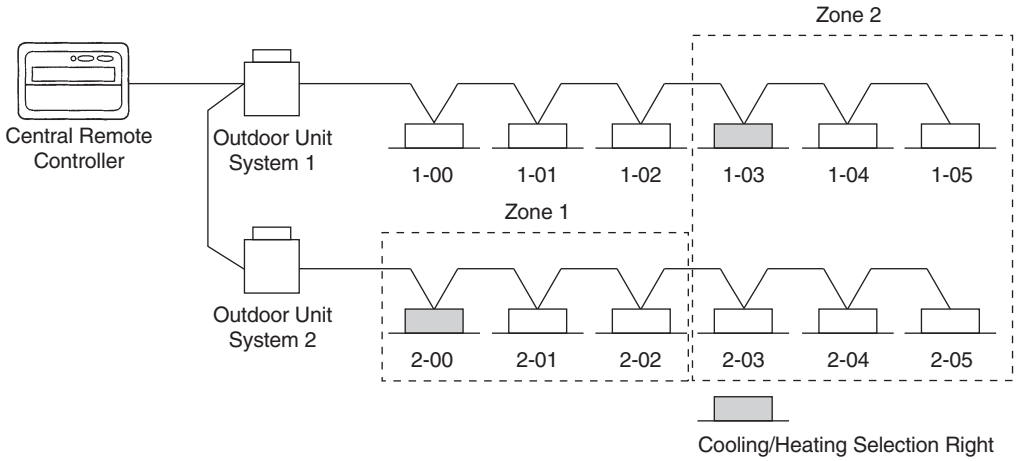
It depends on the setting of outdoor systems that an indoor unit setting is "Temperature control" or "Temperature setting"

■ **In case of Refreshed operation is "ON"**

- When setting is changed by DCS302CA61, it operates by this setting from the next operation.
  If it sets up with 26 °C in cooling by DCS302CA61, "in the case of the equipment which has not carried out zone setting by a central remote controller, it operates from next with the mode of operation and preset temperature which were set up on the individual screen."
  In the case of the equipment which carried out zone setting, it operates from next with the mode of operation and preset temperature which were set up on the zone screen.
  (Priority is given over the mode of operation and preset temperature which were set up on the zone setting screen).
  When it sets up all at once, it operates from next with the mode of operation and preset temperature which were set up last time on the individual screen (Equipment which has not carried out zone registration), or the zone screen.
  If a setting change is made with 26 °C of cooling by a central remote controller on an individual screen (Equipment which has not carried out zone setting)" next operation will also be operated at 26 °C in cooling. (Even if it has changed into heating operation, fan only operation with wired or wireless remote control, it operates at 26 °C in cooling.)

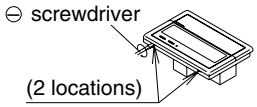
• When zone registration is carried out by Central Remote Controller.
It operates from next time with the value set up in the zone.
When a zone 1 is set up with 20 °C of heating. (Refer to the system of the following figure.)
When controlled by Central Remote Controller, 3 indoor units registered into the zone 1 are operated by 20 °C of heating. Because priority is given to zone setting, even if it sets up 2-02 with 25 °C of heating on an individual screen from Central Remote Controller, 2-02 is operated at 20 °C.

• When there are two or more indoor units in a zone.
Because an operating mode depends on the outdoor unit, the operating mode of each indoor unit does not become the same setting.
When the outdoor unit system 1 is cooling, the outdoor unit system 2 is heating and it operates by the system of the following figure. Setting of a zone 2 is operated in heating mode, because 2-03, 2-04, and 2-05 do not have a cooling/heating selection right as for 26 °C of cooling, but temperature setting becomes 26 °C.
When you unify the operating mode of an indoor unit in the same zone, please set up a zone in the indoor unit of the same outdoor unit system.



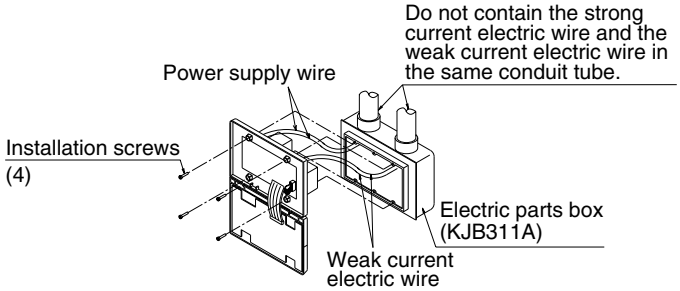
Installation

(1) Open the upper part of remote controller.
Insert a ⊖ screwdriver (2 locations) into the recess between the upper part and the lower part of remote controller and twist the screwdriver lightly.

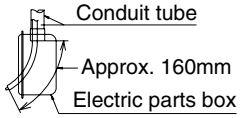


PC board is attached with both the upper and lower part of remote controller. Do not damage the board with the screwdriver.

(2) Open the upper part of remote controller and install the Electric parts box with the attached installation screws (M4 × 16).



NOTE) Suitable length of the electric wire is about 160mm. (from electric parts box) If it is difficult to contain a long wiring, strip the sheathed part of the wiring.

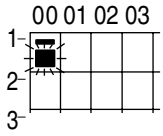


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4.4.14 Error diagnosing function

This central remote controller is provided with a diagnosing function, for when an indoor unit stops due to malfunction. In case of actuation of a safety device, disconnection in transmission wiring for control or failure of some parts, the operation lamp, inspection display and unit No. start to flash; then, the malfunction code is displayed. Check the contents of the display, and contact your DAIKIN dealer because the above signs can give you the idea on the trouble area.

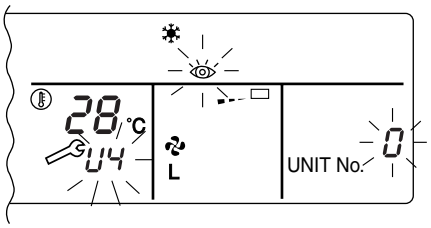
The display "▬" flashes under the group No. where the indoor unit that has stopped due to malfunction.



[Registration]

1. ☞① **Press the ARROW KEY BUTTON to call up the group that has stopped due to malfunction.**

   ☞② The unit No. ☞③ the malfunction code is flashing because of an error failure.



Operation lamp	Maintenance display	Unit No.	Malfunction code	Error content
☼	●	◑	**64**	Indoor air thermistor error
☼	●	◑	**65**	Outdoor air thermistor error
☼	●	◑	**68**	HVU error (Ventiair dust-collecting unit)
☼	●	◑	**6A**	Dumper system error
◑	◑	◑	6A	Dumper system error + Thermistor error
☼	●	◑	**6F**	Simple remote controller error
☼	●	◑	**6H**	Door switch (Ventiair dust-collecting unit), relay harness fault (Ventiair dust-collecting/humidifier unit)
◑	◑	◑	94	Ventiair internal transmission error (between total enthalpy – fan unit)
◑	◑	◑	A0	Indoor unit · external safety device error
◑	◑	◑	A1	Indoor unit · BEV unit (Sky-Air connection unit) PC board assembly fault
☼	●	◑	**A1**	Indoor unit · PC board assembly fault
◑	◑	◑	A3	Indoor unit · Drain level error (33H)
◑	◑	◑	A6	Indoor unit · Fan motor (51F) lock, overload
☼	●	◑	**A7**	Indoor unit · Fan direction adjustment motor (MA) error
◑	◑	◑	A9	Indoor unit · BEV unit, electric expansion valve motor (20E) error
☼	●	◑	**AF**	Indoor unit · Malfunctioning drain
☼	●	◑	**AH**	Indoor unit · Dust-collector error
◑	◑	◑	AJ	Indoor unit · Insufficient capacity setting, address setting fault

3P124623-3A

Operation lamp	Maintenance display	Unit No.	Malfunction code	Error content
◑	◑	◑	C4	Indoor unit · Liquid piping thermistor (Th2) Error (faulty connection, cut wire, short circuit, fault)
◑	◑	◑	C5	Indoor unit · BEV unit, gas piping thermistor (Th3) Error (faulty connection, cut wire, short circuit, fault)
◑	◑	◑	C9	Indoor unit · Intake air thermistor (Th1) Error (faulty connection, cut wire, short circuit, fault)
◑	◑	◑	CA	Indoor unit · Outlet air thermistor (Th4) Error (faulty connection, cut wire, short circuit, fault)
☼	●	☼	**CJ**	Indoor unit · remote controller sensor error
◑	◑	◑	E0	Outdoor unit · Safety device operation
◑	◑	◑	E1	Outdoor unit · PC board assembly fault
☼	●	◑	**E1**	Outdoor unit · PC board assembly fault
◑	◑	◑	E3	Outdoor unit · High-pressure switch fault
◑	◑	◑	E4	Outdoor unit · Low-pressure switch fault
◑	◑	◑	E9	Outdoor unit · Electric expansion valve motor (20E) error
☼	●	◑	**EC**	Heat source unit · Intake water temperature inter-lock operation (fan operation)
◑	◑	◑	EF	Outdoor unit · Ice thermal storage unit error
◑	◑	◑	F3	Outdoor unit · Discharge piping temperature error
☼	●	◑	**H3**	Outdoor unit · High-pressure switch operation
◑	◑	◑	H4	Outdoor unit · Low-pressure switch operation
◑	◑	◑	H9	Outdoor unit · Outdoor air thermistor (Th1) Error (faulty connection, cut wire, short circuit, fault)
☼	●	◑	**H9**	Outdoor unit · Outdoor air thermistor (Th1) Error (faulty connection, cut wire, short circuit, fault)
☼	●	◑	**HC**	Outdoor unit · Water temperature sensor system error
☼	●	◑	**HF**	Ice thermal storage unit error, ice thermal storage controller error, error in outdoor unit during ice thermal storage operation
◑	◑	◑	HJ	Outdoor unit · water system fault
◑	◑	◑	J1	Outdoor unit · pressure sensor error
◑	◑	◑	J3	Outdoor unit · Discharge piping thermistor (Th3) Error (faulty connection, cut wire, short circuit, fault)
☼	●	◑	**J3**	Outdoor unit · Discharge piping thermistor (Th3) Error (faulty connection, cut wire, short circuit, fault)
◑	◑	◑	J5	Outdoor unit · Intake piping thermistor (Th4) Error (faulty connection, cut wire, short circuit, fault)
◑	◑	◑	J6	Outdoor unit · Heat exchange thermistor (Th2) error
☼	●	◑	**J6**	Outdoor unit · Heat exchange thermistor (Th2) error Error (faulty connection, cut wire, short circuit, fault)
◑	◑	◑	J7	Outdoor unit · Header thermistor (Th6) error
◑	◑	◑	JA	Outdoor unit · Discharge piping pressure sensor error
◑	◑	◑	JC	Outdoor unit · Intake piping pressure sensor error
◑	◑	◑	JF	Outdoor unit · Oil temperature sensor (Th5) system error
☼	●	◑	**JH**	Outdoor unit · Oil temperature sensor (Th5) system error
◑	◑	◑	L0	Outdoor unit · Inverter system fault
◑	◑	◑	L4	Outdoor unit · Inverter cooler fault
◑	◑	◑	L5	Outdoor unit · Ground circuit for compressor motor, short circuit, or power unit short circuit

3P124623-3A

Operation lamp	Maintenance display	Unit No.	Malfunction code	Error content
◑	◑	◑	L6	Outdoor unit · Ground circuit for compressor motor, short circuit
☼	◑	◑	L8	Outdoor unit · Compressor overload, compressor motor wire disconnection
◑	◑	◑	L9	Outdoor unit · Compressor lock
◑	◑	◑	LA	Outdoor unit · Power unit error
◑	◑	◑	LC	Outdoor unit · Transmission error between inverter and outdoor control unit
☼ or ●	◑	◑	M1	Central controller: PC board fault
☼ or ●	◑	◑	M8	Transmission error between central controllers
☼ or ●	◑	◑	MA	Central controller: Incorrect combination
☼ or ●	◑	◑	MC	Central controller: Address setting fault
◑	●	◑	**P0**	Insufficient gas (thermal storage)
◑	◑	◑	P1	Outdoor unit · Power voltage imbalance, phase loss
◑	◑	◑	P4	Outdoor unit · Power unit temperature sensor error
☼	●	◑	**U0**	Pressure drop due to insufficient refrigerant, electric expansion valve fault, etc.
◑	◑	◑	U1	Reversed or lost phase
◑	◑	◑	U2	Power voltage error, momentary electrical stoppage
◑	◑	◑	U4	Transmission error between indoor unit/BEV unit and outdoor/BS unit, Transmission error between outdoor unit and BS unit
◑	◑	◑	U5	Transmission error between remote controller and indoor control unit
●	☼	●	U5	Remote controller board fault or remote controller setting fault
◑	◑	◑	U6	Transmission error between indoor units
◑	◑	◑	U7	Transmission error between outdoor units Transmission error between outdoor unit and ice thermal storage unit
☼	●	◑	**U7**	Transmission error between outdoor units (cooling/heating batch, low-noise operation)
◑	◑	●	U8	Transmission error between master remote controller and slave remote controller (slave remote controller error) Incorrect combination of indoor unit and remote controller within a single system (model)
◑	◑	◑	U9	Transmission error between indoor unit/BEV unit and outdoor unit within a single system Transmission error between BS unit and indoor unit/BEV unit and outdoor unit within a single system
◑	◑	◑	UA	Incorrect combination of indoor, BS, and outdoor units within a single system (model, number of units, etc.) Incorrect combination of indoor unit and remote controller (remote controller in question) BS unit connection position fault
☼	●	☼	**UC**	Central control group numbers overlap
◑	◑	◑	UE	Transmission error between indoor unit and central controller
◑	◑	◑	UF	Unset system, incorrect settings between BEV unit and indoor unit
◑	◑	◑	UH	System fault

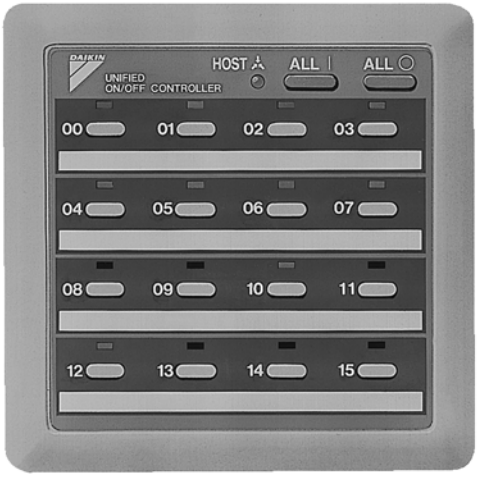
▬ error codes (in outline font) do not display “maintenance” and the system will run, but please check the content of the display and contact your dealer.

3P124623-3A

17

4.5 <DCS301BA61> Unified ON/OFF Controller

Turns up to 16 groups of indoor units (max. 128 units) on/off (operation/stop) by individual group or all at once, and lets you check display of operation/malfunction at the same time.

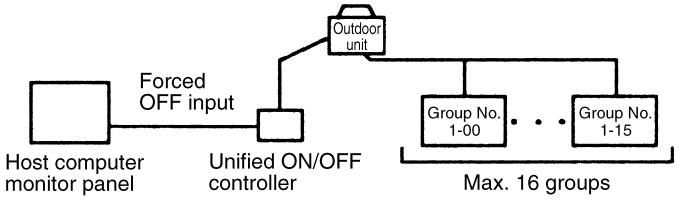


- For a maximum of 16 groups of indoor units (max. 128 units), unified operation/stop or individual operation/stop can be performed with this optional accessory. Also allows you check operation/error display at a glance.
- By combining with a central remote controller and schedule timer, you can construct a system that matches the size and use of the building.
- Up to 8 units connectable within 1 system.
  Up to 16 units in the double central control mode.
- Features thin design of a mere 16mm in thickness. (Uses JIS recessed box for 2.)
- Wiring can be up to 1km in length. Applicable wiring methods include bus and star in addition to crossover type.
- Can be used in combination with other D-BACS equipment.

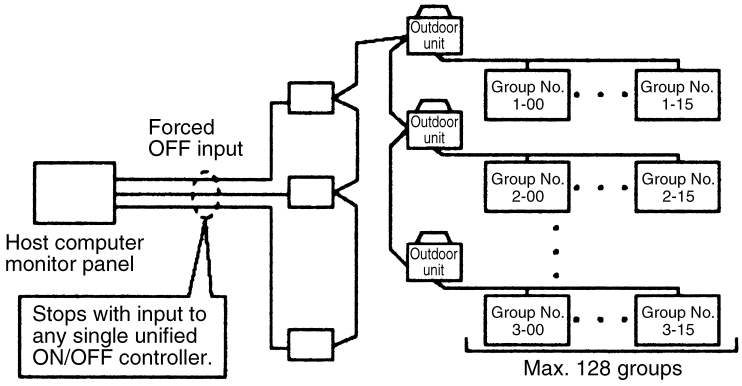
4.5.1 System Configuration

This unified ON/OFF controller enables individual and unified operation/stop for a maximum of 16 groups of indoor units. With 2 to 8 unified ON/OFF controllers, individual and unified control is possible with up to a maximum 128 groups of indoor units.

- When using 1 unified ON/OFF controller



- When using 2 to 8 unified ON/OFF controllers



(This optional accessory can not be used in conjunction with wiring adaptor for electrical appendices (optional accessory).)

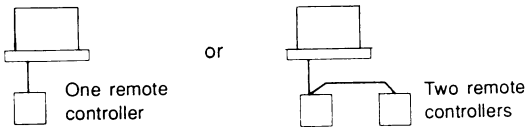
The groups of indoor units are as follows:

1. One indoor unit without remote controller

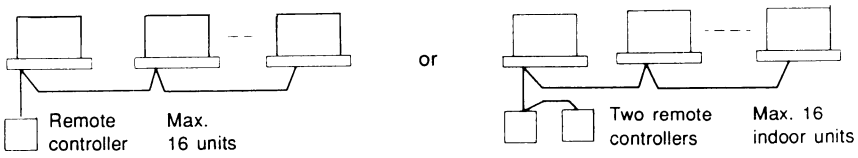


Without remote controller

2. One indoor unit controlled by one or two remote controllers



3. A maximum of 16 indoor units controlled in groups by one or two remote controllers



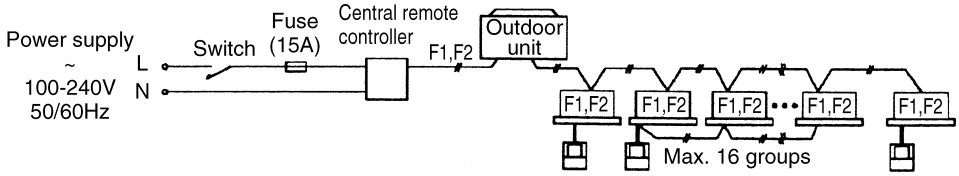
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4.5.2 Electric Wiring

General Instructions

- All wiring, components and materials to be procured on the site must comply with the applicable local and national codes.
- Use copper conductors only.
- All field wiring and components must be provided by licensed electrician.
- Unit shall be grounded in compliance with the applicable local and national codes.
- Fit the power supply wiring with a fuse and a switch.
- After wiring work, check power to the equipment shuts OFF when switch is shut OFF.

Wiring Outline



Wiring Specification

	Type	Size
Power Supply Wiring	H05VV-U3G	(Note 1)
Transmission Wiring	Sheathed Wire (2 wire) (Note 2)	0.75-1.25mm^2

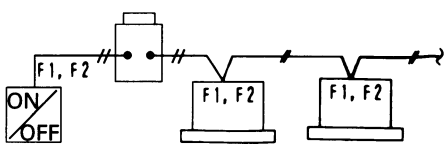
Notes:

1. The size of power supply wiring must comply with the applicable national and local codes.
2. Allowable length of transmission wiring is as follows.
   Max. 1000m (Total wiring length: 2000m)

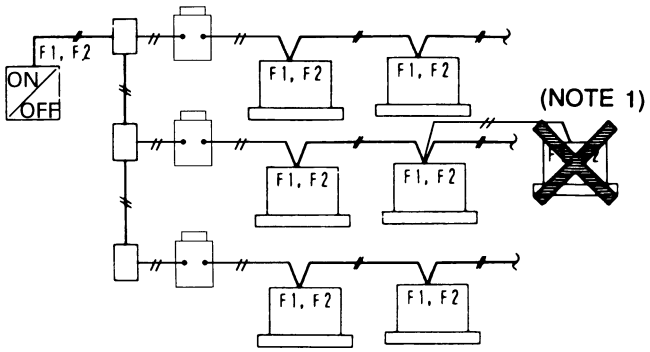
Connect the wiring between indoor and outdoor units, indoor/outdoor units and power supply, and indoor units and remote controllers.
For details, refer to the installation manuals of indoor and outdoor units.

Examples of Wiring for Transmission

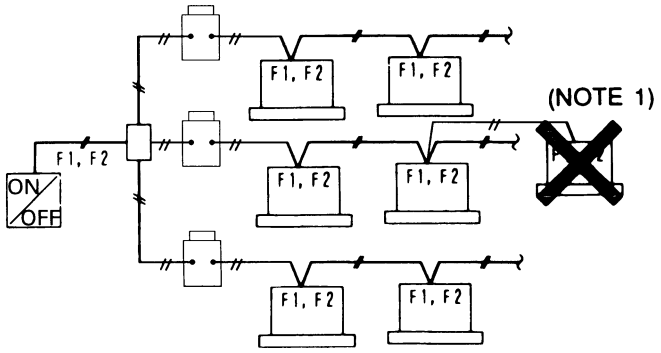
1. Series Wiring

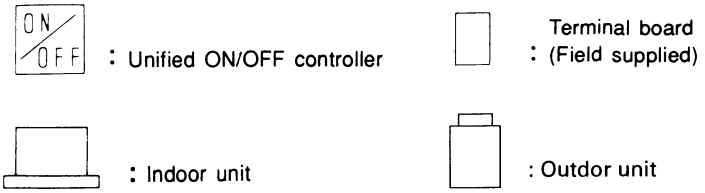


2. **Bus Type Wiring** (Can be branched up to 16 branches)
   Example of 3 branches



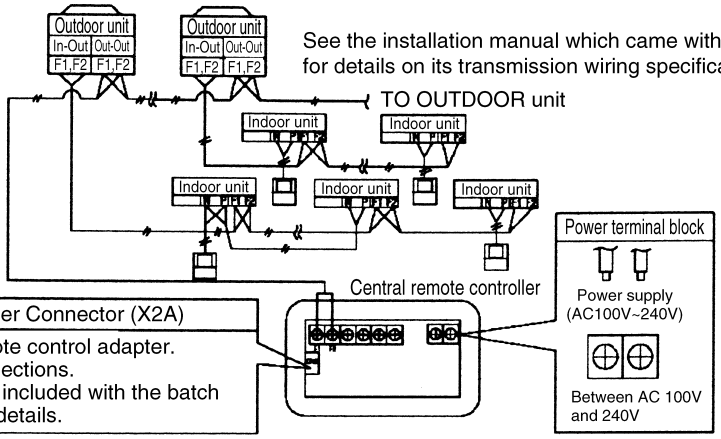
3. **Star Type Wiring** (Can be branched up to 16 branches)
   Example of 3 branches





Note:
1. No branching is allowed after branching.
2. Use a relay terminal board (field supplied) to branch more than 3 control wires from the same terminal board.

Wiring to the Indoor Unit and Outdoor Unit



See the installation manual which came with the air conditioner for details on its transmission wiring specifications.

Batch remote control adapter Connector (X2A)

Separately sold batch remote control adapter.
Used for DCS302A52 connections.
See the instruction manual included with the batch remote control adapter for details.

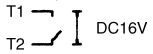
Wiring specifications

Power supply wiring	2mm^2
Transmission wiring for control	0.75-1.25 mm^2 sheathed vinyl cord or cable (balanced type) - maximum length 1000 m (total overall wiring length 2000 m)

Wire the indoor units to the outdoor units and between all power, indoor units, and remote controllers. See the instruction manual included with the indoor and outdoor units for details.

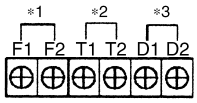
CONTROL TERMINAL STRIP

*1 For connecting indoor unit (F1, F2)
*2 Forced OFF input (T1, T2)
None of the indoor units connected to the forced OFF input contact (non-voltage contact with minimal current) will operate when it is shut off.
Use only contactors which guarantee the minimum applicable load DC 16V, 10mA.



NOTE) Use instantaneous contactor of over 200m sec. energizing time, when necessary.

*3 For schedule timer (D1, D2)
Power can be supplied to the schedule timer (DST301BA51·61) separately sold. For details, refer to the installation manual of the schedule timer.
Wire *2 and *3 only when necessary.



Note:
Do not connect the power supply wiring (100 to 240V) to the control terminal strip. If connected by mistake, it may damage or burn electrical parts of optional controllers for centralized control and indoor unit. It may result in serious danger. Be sure to check wirings before turning the power ON.

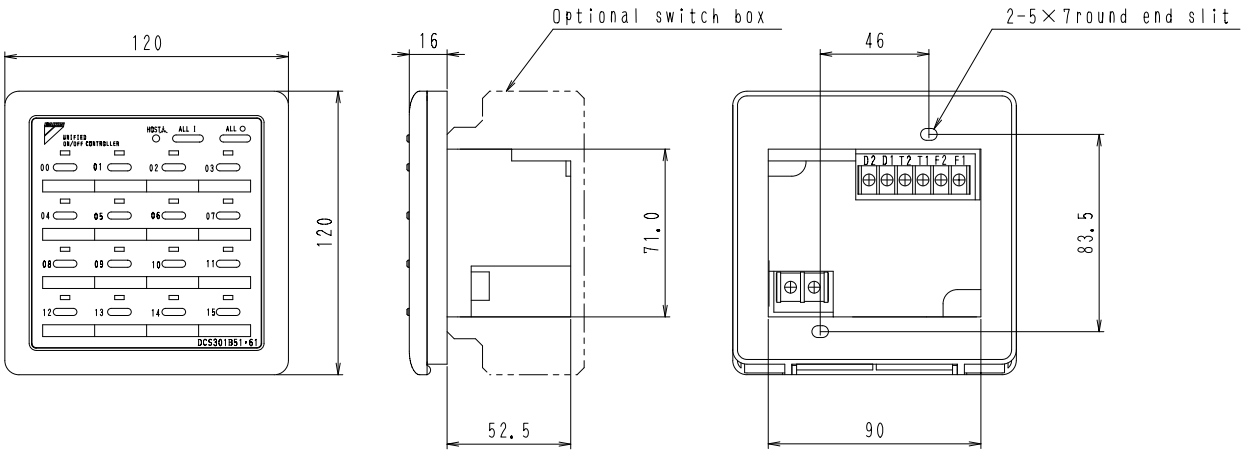
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4.5.3 Dimension

Unified ON/OFF Controller

■ **DCS301B(A)61**

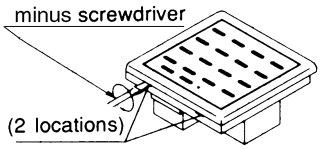
Unit (mm)



3D050339

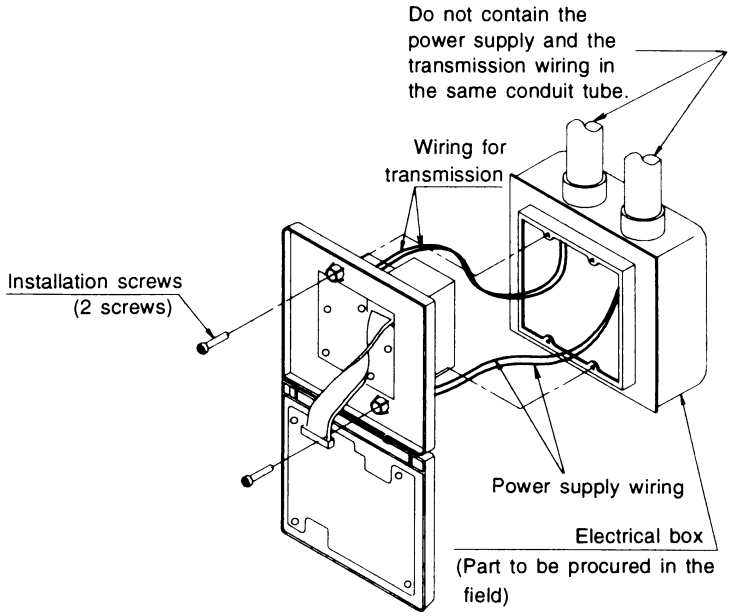
4.5.4 Installation

1. Open the upper part of remote controller.
   Insert a minus screwdriver (2 locations) into the recess between the upper part and the lower part of remote controller and twist the screwdriver lightly.

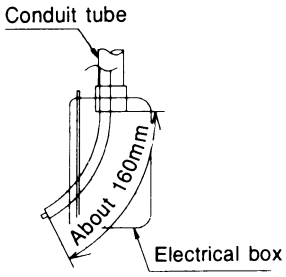


PC board is attached with both the upper and lower part of remote controller. Do not damage the board with the screwdriver.

2. Open the upper part of remote controller and install the electrical box (part to be procured in the field) with the attached installation screws (M4×16).



Note:
Suitable length of the electric wire is about 160mm from the inlet of the electrical box. If it is difficult to contain a long wiring, strip the sheathed part of the wiring.



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4.5.5 Initial Setting

Setting 1. through 3. are initialized when power is turned ON, therefore complete settings before activating the power.

1. Connector for setting master controller (X1A) (Provided with connector at factory set)

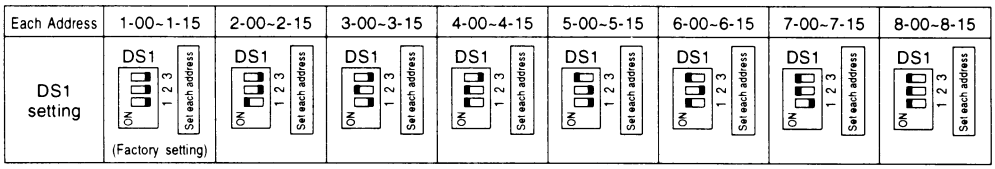
- When using 1 unified ON/OFF controller, do not disconnect the connector for setting master controller. (Use the unit with the connector in the state in which it was delivered.)
- When using multiple unified ON/OFF controllers, or using the unified ON/OFF controller in conjunction with other optional controllers for centralized control, makes settings as indicated in the right table.

Pattern of connection of optional controllers for centralized control			Connector for setting master controller (X1A) Settings		
Unified ON/OFF Controller	Central Remote Controller	Schedule Timer	Unified ON/OFF Controller	Central Remote Controller	Schedule Timer
1 to 16	—	—	Set one to “Used” and all the rest to “Not used”.	—	—
	1 to 4	—	Set all to “Not used”.	(Note)	—
	—	1	Set one to “Used” and all the rest to “Not used”.	—	“Not used”
	1 to 4	1	Set all to “Not used”.	(Note)	“Not used”

Note:
For instructions on how to set the connector for setting master controller on the central remote controller, see the installation manual provided with the central remote controller.

2. Switch for Setting Each Address (DS1)

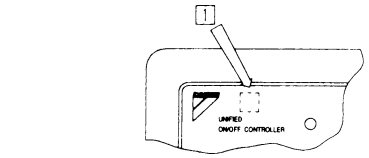
These switches are used to set group control address.
Groups Nos. 1-00 through 1-15 are grouped in the same control group when the unit is shipped from the factory.

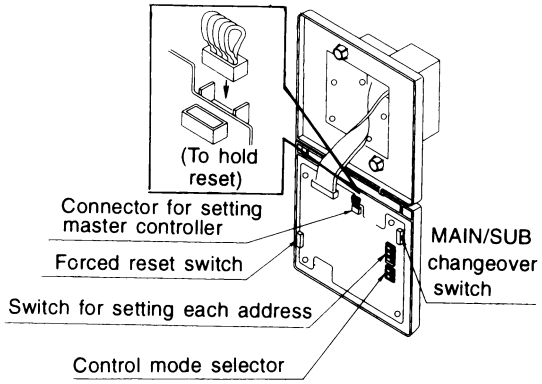


(V0170)

After setting, attach the number seal applicable to respective control range of the attached switch display sticker, as shown in the diagram below.

(Example)
In The Case of 1-00 to 1-15, Attach 1.

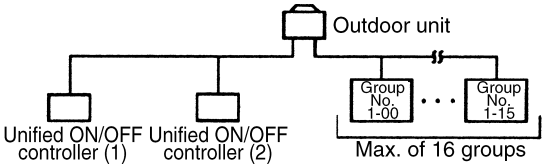




17

3. MAIN/SUB Changeover Switch Setting

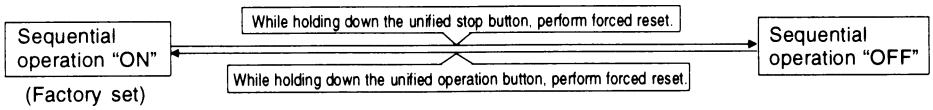
With two unified ON/OFF controllers, centralized control (indoor units) is possible from different locations. In this kind of set-up, it is necessary to set the MAIN/SUB changeover switch.



One of the two unified ON/OFF controllers (1) · (2) is set to “MAIN” while the other is set to “SUB”.

4. Setting of the Sequential Operation Function

The unified ON/OFF controller is equipped with a sequential operation function that sequentially turns indoor units on in 2-second intervals during unified operation. (Sequential operation is factory set to “ON.”) To switch sequential operation ON or OFF, set as follows.

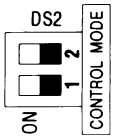
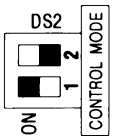
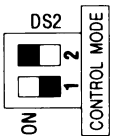
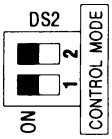


Note:

The sequential operation function is designed to reduce the load on the power supply equipment, but does not guarantee that compressors will not be started simultaneously. You cannot therefore count on a capacity reduction effect by power supply equipment breaker selection.

5. Control Mode Selector (DS2)

The following four patterns of control mode can be set.

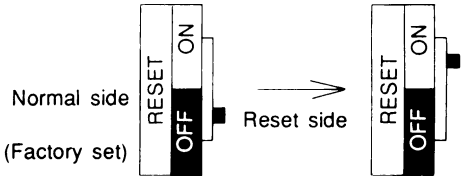
Control Mode	Individual	Centralized	Timer Operation Possible by Remote Controller	ON/OFF Control Impossible by Remote Controller
Content	Operation/stop is controlled by both unified ON/OFF controller and remote controller.	After operated by unified ON/OFF controller, operation/stop is freely controlled by remote controller until stopped by unified ON/OFF controller.	When used in conjunction with schedule timer, operation/stop is controlled freely by remote controller during the set time but operation is not available when schedule timer is ON.	Operation/stop is controlled by unified ON/OFF controller only. (This unit can not be operated/stopped by remote controller.)
DS2 Setting	 (Factory set)			

Note:

- “■” Indicates the position of switches.
- Set control mode before turning power supply ON.
- When used in conjunction with central remote controller, the control modes of the central remote controller has the priority.

6. Forced Reset Switch (SS1)

When changing the setting of the connector for setting master controller, etc., you can reset simply by setting it to the reset side once and returning to the normal side, without turning the power OFF.
(For normal operation, set the switch to the normal side.)

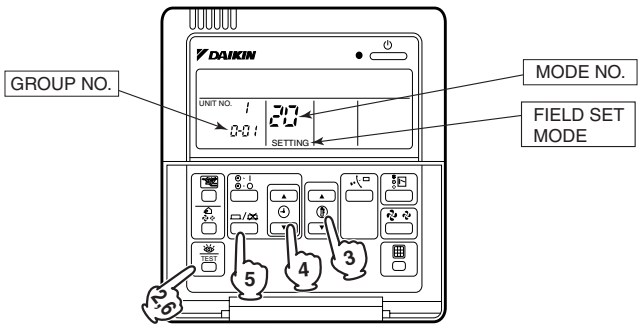


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4.5.6 Setting Group No. for Centralized Control

In order to conduct the central remote control using the central remote controller and the unified ON/OFF controller, Group No. settings should be made by group using the operating remote controller.
Make Group No. settings for central remote control using the operating remote controller.

1. While in normal mode, press and hold the TEST switch for a period of four seconds or more to set the system to "Field Setting Mode"."
2. Select the MODE No. "00" with the " ▲▼ " button.
3. Use the " ▲▼ " button to select the group No. for each group.
   (Group numbers increase in the order of 1-00, 1-01, ... 1-15, 2-00, ... 4-15.)
4. Press " ▭ " to set the selected group No.
5. Press " TEST " to return to the NORMAL MODE.



Note:

- For simplified remote controller, see the installation table.
- For setting group No. of HRV and wiring adaptor for other air conditioners, etc., refer to the instruction manual attached.

NOTICE

Enter the group No. and installation place of the indoor unit into the attached installation table. Be sure to keep the installation table with the operation manual for maintenance.

4.5.7 Confirming Operation

Before starting test operation, supply power to the indoor units, outdoor units, and unified ON/OFF controller and press the ON/OFF button. If the operation lamp flashes, it indicates a malfunction in the indoor unit of the applicable group.
If the display of "HOST" flashes, it indicates a malfunction in the optional controllers for centralized control. Check for such malfunctions.

Notes:

- For test operation of indoor and outdoor units, refer to the installation manual attached with the outdoor unit.
- After turning the power supply ON, if the unit does not accept operation for two minutes or more with the display of "HOST" flashing, check the following points.
- Check that setting of the connector for setting master controller is correct.
- Check that the group No. for centralized control has been set.

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17

4.6 <DST301BA61> Schedule Timer

Enables you to connect and control weekly schedule for up to 128 indoor units all together.

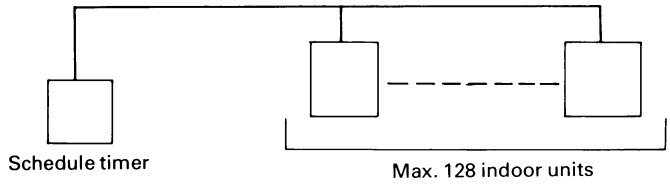


- Simultaneous control of up to 128 indoor units is managed by a week schedule.
- The start and stop time for twice a day can be set for the week in increments of 1 minute.
- By combining with a central remote controller and schedule timer, you can construct a system that matches the size and use of the building.
- If used together with a central remote controller, you can set up to 8 schedule patterns which can be distributed among zones as desired using the central remote controller.
- Is equipped with a compensation function for power failure up to 48 hours.
- Features thin design of a mere 16 mm in thickness. (Uses JIS recessed box for 2.)
- Wiring can be up to 1 km in length. Applicable wiring methods include bus and star in addition to crossover type.
- Can be used in combination with other D-BACS equipment.

4.6.1 System Configuration and Electric Wiring

With a schedule timer, you can set on/off time twice a day by units of 1 week for up to 128 indoor units.

■ System Configuration



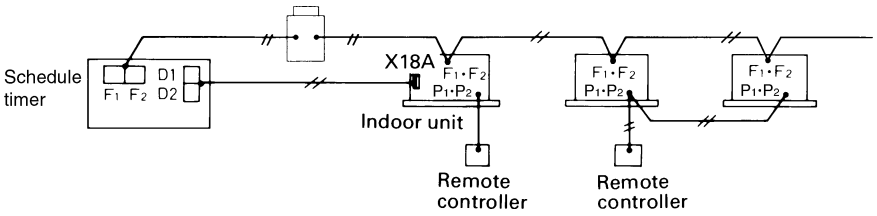
If using the schedule timer alone, you don't have to set the centralized control group No. for group control.

■ **Transmission Wiring**

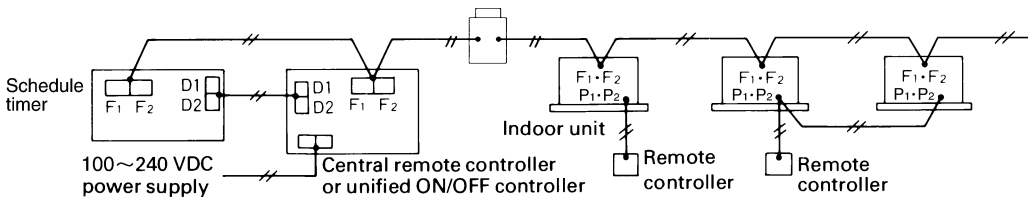
<Indoor Unit Wiring>

1. If using the schedule timer alone:

■ For the schedule timer's power supply, connect the schedule timer (D1, D2) with the connector (X18A) on the indoor unit PC board by crimped style terminal with the attached electric wire.



2. If using in combination with other optional controllers for centralized control:



Transmission wiring for control: 0.75~1.25 mm^2 sheathed vinyl cord or cable (2 wire) ..... Max. 1,000 m (Total Max. 2,000 m)

<Transmission Wiring Connection Example>

1 series wiring, 2 bus wiring, and 3 star wiring are the same as with the central remote controller.

4.6.2 Names and Functions (DST301BA61)

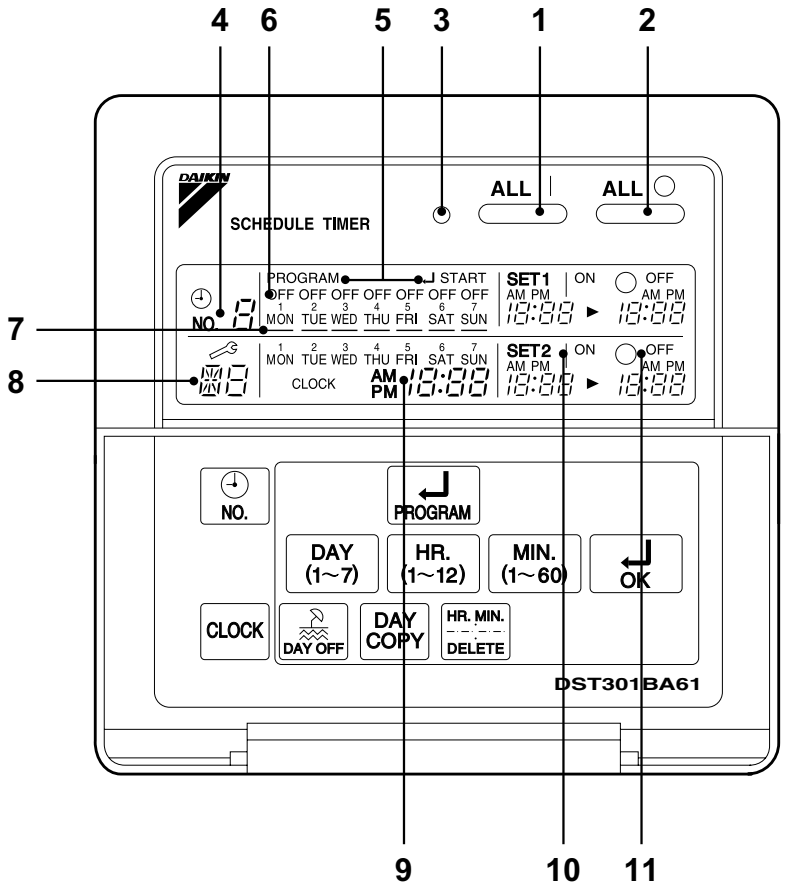


Fig. 1

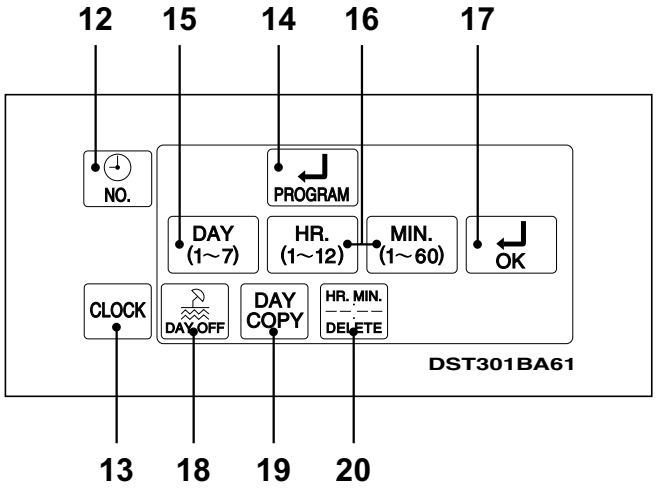


Fig. 2

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17

4.6.3 Names and Functions of Operating Section (Fig. 1, 2)

1	**UNIFIED OPERATION BUTTON “ ALL ”**
	Press this button to perform the unified operation regardless of the No. of programmed time.
2	**UNIFIED STOP BUTTON “ ALL ○ ”**
	Press this button to perform the unified stop regardless of the No. of programmed time.
3	**OPERATION LAMP (RED)**
	The light turns on during the operation of the indoor unit.
4	**DISPLAY “ NO. 8 ” (TIME NO.)**
	Displays the time No. only when used in conjunction with the central remote controller.
5	**DISPLAY “PROGRAM ↵START.” (PROGRAMMING START)**
	The light turns on when the timer is programmed.
6	**DISPLAY “ OFF ” (HOLIDAY SETTING)**
	Lights above the day of the week set as holiday. The operation controlled by timer is not available on that day.
7	**DISPLAY “ — ” (SETTING OF DAYS OF A WEEK)**
	Flashes below the day of the week programmed.
8	**DISPLAY “ 80 ” (MALFUNCTION CODE)**
	Displays the contents of malfunction during the stop due to malfunction.
9	**DISPLAY “ 1 MON 2 TUE 3 WED 4 THU 5 FRI 6 SAT 7 SUN CLOCK AM PM 10:00 ” (PRESENT TIME)**
	Displays the present day of the week and time.
10	**DISPLAY “ AM PM ON 10:00 ” (PROGRAMMED TIME OF SYSTEM START)**
	Displays the time programmed to start.
11	**DISPLAY “ ○ OFF AM PM 10:00 ” (PROGRAMMED TIME OF SYSTEM OFF)**
	Displays the time programmed to stop.
12	**TIME NO. BUTTON “ NO. ”**
	Press this button to select time No..
13	**CLOCK ADJUSTING BUTTON “ CLOCK ”**
	Press this button to set the present time.
14	**PROGRAMMING START BUTTON “ ↵ PROGRAM ”**
	Press this button to set or check the No. of programmed time. Press it again after you are through with the program.
15	**BUTTON FOR SELECTING DAYS OF A WEEK “ DAY (1~7) ”**
	Press this button to select the day of the week.
16	**HOUR/MINUTE BUTTON “ HR. (1~12) MIN. (1~60) ”**
	Press this button to adjust the present time and the programmed time.
17	**TIMER ON BUTTON “ ↵ OK ”**
	Press this button to set the present time and the programmed time.
18	**HOLIDAY SETTING BUTTON “ DAY OFF ”**
	Press this button to set holidays.
19	**BUTTON FOR COPYING PROGRAM OF PREVIOUS DAY “ DAY COPY ”**
	Use this button to set the No. of programmed time same as that of the previous day.
20	**PROGRAM CANCELING BUTTON “ HR. MIN. DELETE ”**
	Use this button to set the programmed time to cancel. The display shows “ – ; – – ”.

(Note)
1. Please note that all the displays in the figure appear for explanation purpose or when the cover is open.

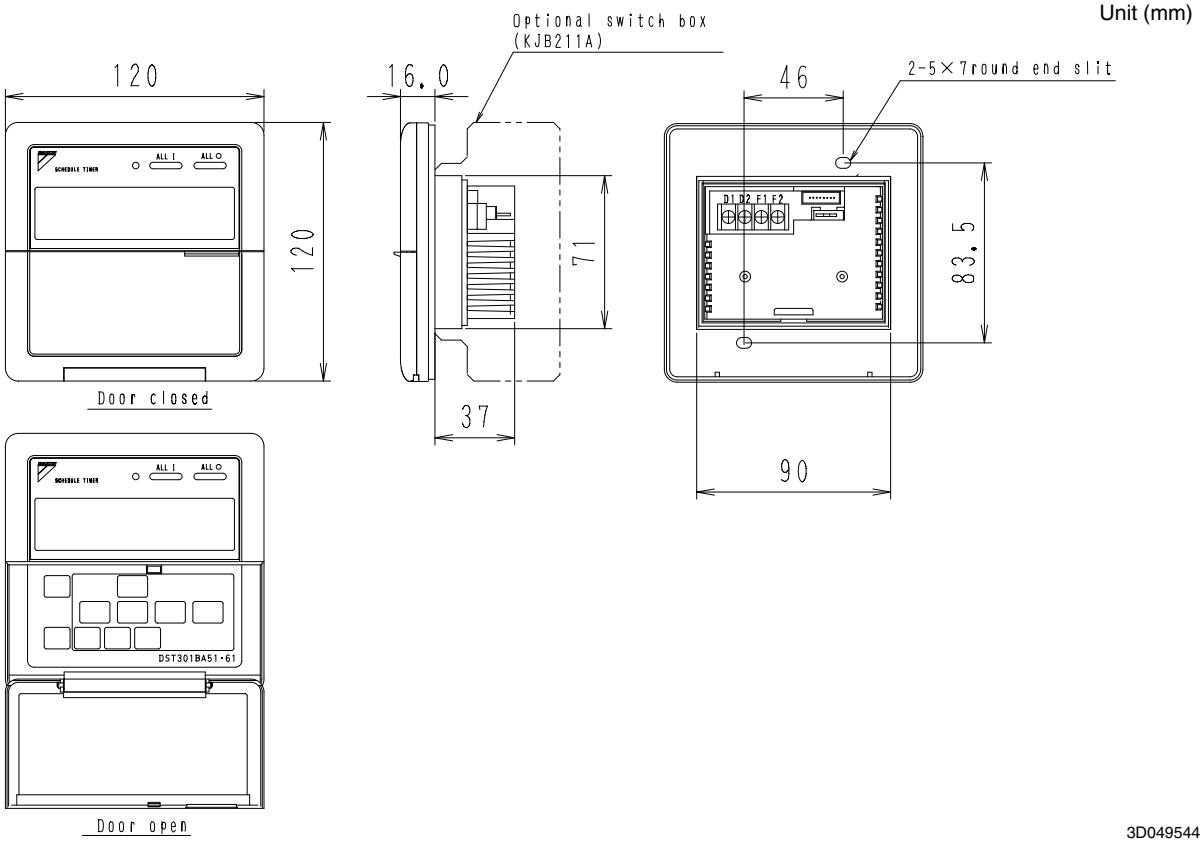
3P124623-5C

4.6.4 Dimension

Schedule Timer

DST301BA61

Unit (mm)

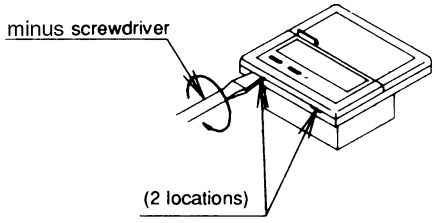


3D049544

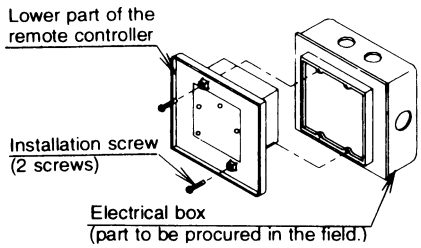
4.6.5 Installation and Initial Setting

1. Remove the upper part of the remote controller.

- Insert a minus screwdriver (2 locations) into the recess between the upper part and the lower part of the remote controller and twist the screwdriver lightly.
  (The PC board is attached with the upper part of the remote controller. Do not damage electric parts with a screwdriver, etc.)



- Attach the lower part to the electrical box (part to be procured in the field) with the provided installation screws. (Select a flat face as an installation place. Do not tighten the installation screws excessively not to damage the lower part of the remote controller.)



For part to be procured in the field electrical box, use KJB211A (optional accessory).

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17

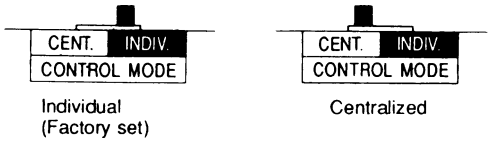
2. Initial Setting

1. Setting connector for individual use (X1A) (Factory set : OFF) (Set for individual use only)

- **For individual use of schedule timer**
  Insert the connector attached with the body case on the PC board.
- **For combined use with other optional controllers for centralized control**
  Do not change the factory setting.

2. Control mode selector (SS2) (Set for individual use only)

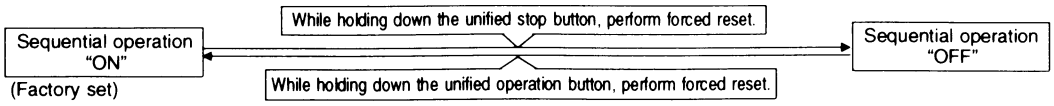
By changing the switch, setting mode of individual and centralized operation is available.



Note:
When used with other optional controllers, control mode of central remote controller and unified ON/OFF controller have the priority.

3. Setting of the sequential operation function

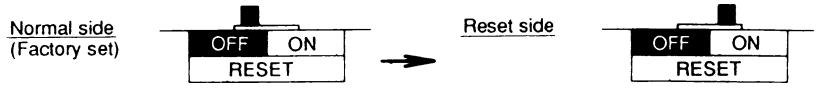
The schedule timer is equipped with a sequential operation function that sequentially turns indoor units on in 2-second intervals during unified operation.
(Sequential operation is factory set to “ON.”)
To switch sequential operation ON or OFF, set as follows.

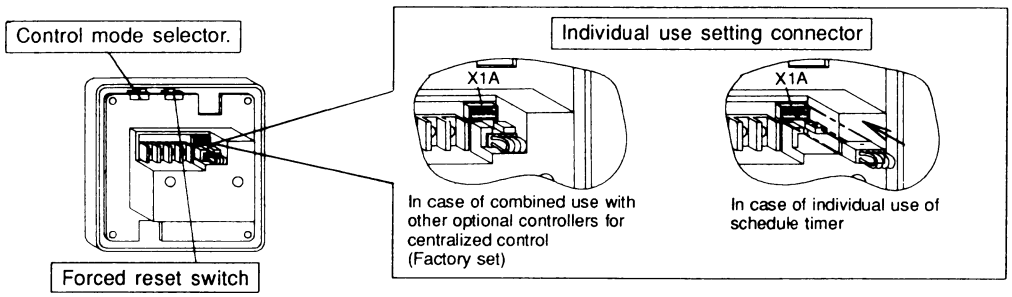


Note:
The sequential operation function is designed to reduce the load on the power supply equipment, but does not guarantee that compressors will not be started simultaneously. You cannot therefore count on a capacity reduction effect by power supply equipment breaker selection.

4. Forced Reset Switch (SS1)

When changing the setting of the connector for individual use, etc., the switch can be reset simply by setting it to the reset side once and returning to the normal side. This procedure enables to reset without turning off the power. (Set the normal side at normal operation.)



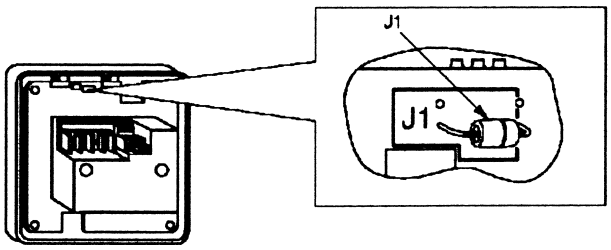


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5. Setting for special function

When you want to have a programmed operation of a part of indoor units by using only schedule timer, cut off J1 and supply the power again.

You can have a programmed operation of the indoor units set the address for central control by local remote controller.



3. Transmission Wiring

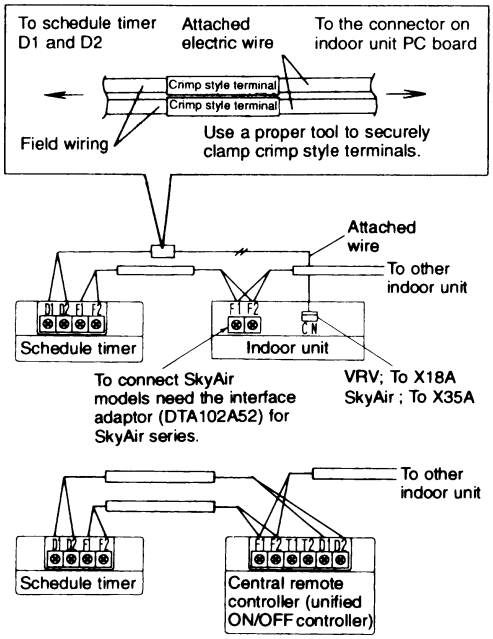
■ **In case of individual use of schedule timer**

Connect terminals of the schedule timer (F1, F2) with terminals of the indoor unit (F1, F2). Connect terminals of the schedule timer (D1, D2) and the connector on the indoor unit PC board, using the attached electric wire and crimp style terminals.

Prevent the connection part of crimp style terminal from getting out of the electric parts box of indoor unit.

■ **In case of combined use with other optional controllers for centralized control**

Connect terminals of the schedule timer (F1, F2, D1, D2) and the terminals of the central remote controller (or unified ON/OFF controller).



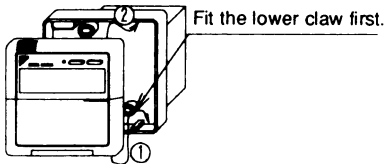
Wiring Specifications

	F1, F2	D1, D2
Wiring	Sheathed Wire (2 wire)	Sheathed Wire (2 wire)
Gauge	0.75-1.25mm^2	0.75-1.25mm^2
Length	Max. 1000m	Max. 150m

NOTES:

1. Electrical box and transmission wiring are not attached.
2. Do not touch the PC board with your hand.
3. Keep transmission wiring at least 50 mm away from power supply wiring to avoid malfunctions.

4. Install the Upper Part of the Remote Controller as before.

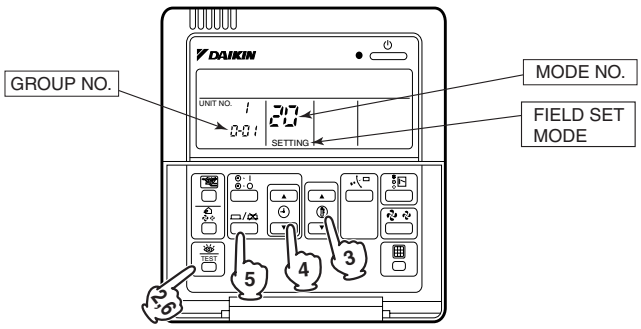


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4.6.6 Setting Group No. for Centralized Control

In order to conduct the central remote control using the central remote controller and the unified ON/OFF controller, Group No. settings should be made by group using the operating remote controller.
Make Group No. settings for central remote control using the operating remote controller.

1. While in normal mode, press and hold the TEST switch for a period of four seconds or more to set the system to "Field Setting Mode".
2. Select the MODE No. "*00*" with the " " button.
3. Use the " " button to select the group No. for each group.
   (Group numbers increase in the order of 1-00, 1-01, ... 1-15, 2-00, ... 4-15.)
4. Press " " to set the selected group No.
5. Press " TEST " to return to the NORMAL MODE.



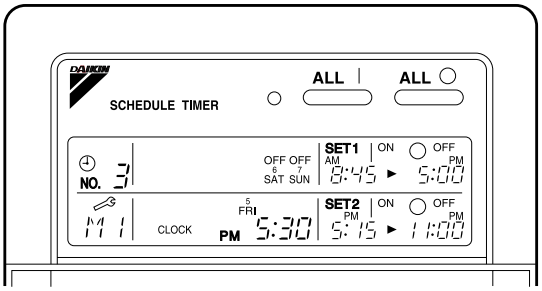
Note:

- For simplified remote controller, see the installation table.
- For setting group No. of HRV and wiring adaptor for other air conditioners, etc., refer to the instruction manual attached.

NOTICE

Enter the group No. and installation place of the indoor unit into the attached installation table. Be sure to keep the installation table with the operation manual for maintenance.

4.6.7 Error Diagnosing Function



This schedule timer is provided with the malfunction diagnosing function. The malfunction code flashes if there occurs any malfunction in communication, etc. between and among the optional controllers for centralized control. In addition, the operation lamp also flashes if there occurs any malfunction in communication with the indoor unit. Check the contents of the display and contact your DAIKIN dealer because the signals give you the idea of the trouble area.

Operation lamp	Malfunction code	Contents of malfunction
Turn off	M1	Failure of PC board of schedule timer. **Fixes** The following causes are possible. Check each one. 1. PC board problems
Turn on or off	M8	Malfunction of transmission between each optional controllers for centralized control. **Fixes** Check all central devices which are connected (e.g., power supply, transmission wiring, etc.).
Turn on or off	MA	Improper combination of optional controllers for centralized control. **Fixes** The following causes are possible. Check each one. 1. Are all central devices combined correctly? 2. Is the master central connector attached to two or more central devices? 3. Are there 128 or more indoor units connected?
Turn on or off	MC	Address failure of schedule timer. **Fixes** The following causes are possible. Check each one. 1. Do the control range addresses in the central remote controller overlap? 2. Do the control range addresses in the on/off controller overlap? 3. Are there 2 or more schedule timers connected?
Flash	UE	Malfunction of transmission between indoor unit and optional controllers for centralized control. **Fixes** Inspect all indoor units which are displaying an error (e.g., power supply, transmission wiring, etc.).
Flash	—	Malfunction in indoor unit (Refer to the malfunction codes of the indoor remote controller, while also read the “ CAUTION FOR SERVICING ” attached to the indoor unit.)

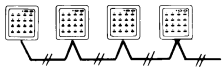
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4.7 <DCS302CA61 / DCS301BA61 / DST301BA61> Combinations of Optional Controllers for Centralized Control

Besides using the various optional controllers for centralized control by themselves, a schedule timer or unified ON/OFF controller can be combined with and connected to the central remote controller. By devising a component system such as this, you can freely construct the ideal central control system according to use and scale.

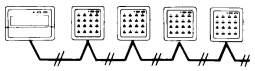
4.7.1 System Example

■ Unified ON/OFF controller



Connect a unified ON/OFF controller according to the number of indoor units. A network consisting of up to 16 groups×8 units=128 groups can be constructed using a single line.

■ Central remote controller + unified ON/OFF controller



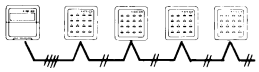
Combines the high functionality of a central remote controller and the easy operation of a unified ON/OFF controller. Centrally controls up to 128 groups of indoor units.

■ Schedule timer + central remote controller

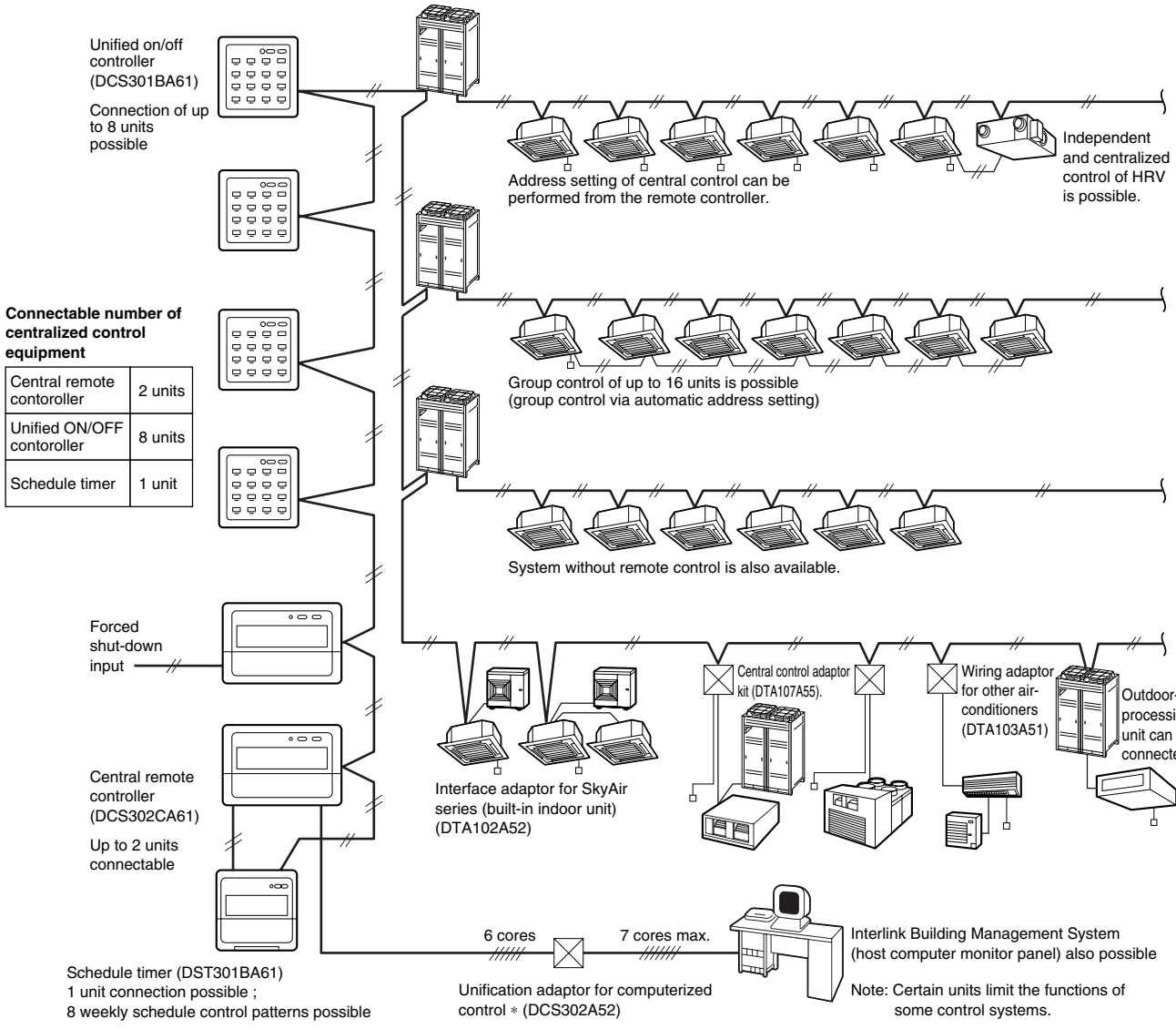


Lets you set up to 8 patterns of weekly schedule for turning air-conditioning equipment ON/OFF twice a day. Operates up to 128 groups of indoor units individually or by zone according to a programmed schedule.

■ Schedule timer + unified ON/OFF controller



Lets you set ON/OFF for twice a day.
Operates up to 128 groups of indoor units all together according to a programmed schedule.



You can freely combine the central controllers within the limitation of the following number of each controller; 1~4 units of central remote controllers, one unit of schedule timer and 1~16 units of unified ON/OFF controllers. However, the maximum number of the indoor units to be controlled is 128 units for one system in any combination of the central controllers.

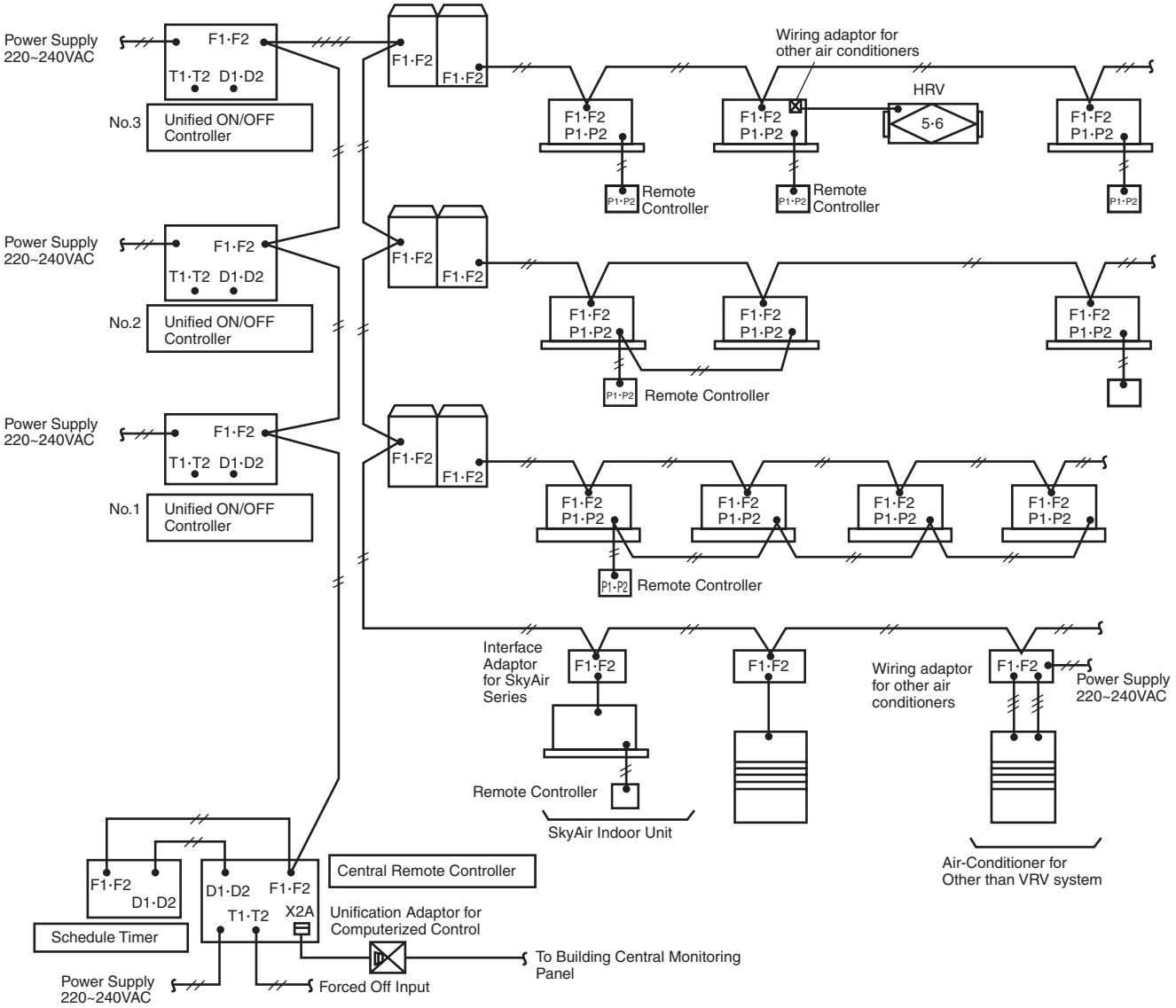
■ **Connection Pattern for Optional Controller for Centralized Control**

Central Remote Controller DCS302CA61	Unified ON/OFF Controllers DCS301BA61	Schedule Timer DST301BA61
1~4	1~16	—
		1
	—	1

The maximum number of indoor units is based on one unit in each zone and is also under the double central control system.

4.7.2 Electric Wiring

Combination of 1 Central Remote Controller, 1 Schedule Timer, 3 Unified ON/OFF Controllers



Note) Diagram with an outdoor unit omitted for air-conditioners for Sky Air installation.

17

4.7.3 Initial Settings for Central Control Equipment

1. Central Remote Controller

- Leave the master control connector (X1A) connected.
  (Connected when shipped from the factory)
  The connector is to be connected to only 1 central line.
- Operation control setting
  Sets the priority ranking of control for the central remote controller and remote controller for indoor units.
- Zone setting
  Sets the zones when several groups are controlled as one group.

2. Unified ON/OFF Controller (No.s 1, 2, and 3 in the figure above)

- Remove the master control connector (X1A).
- Control range setting switch (DS1)
  Sets the range of group No.s for each group of indoor units to be controlled by unified ON/OFF controllers no.1,2 and 3. 16 units (16 groups) can be set by 1 unified ON/OFF controller.
- Control mode switch (DS2)
  Sets priority ranking of control for unified ON/OFF controllers and remote controllers for indoor units. If using in combination with a central remote controller, the central remote controllers control mode is given priority.

3. Schedule Timer

- Leave the setting connector for individual use (X1A) disconnected. (Disconnected when shipped from the factory)
- Control mode switch (SS2)
  Sets the priority ranking of control for the schedule timer and remote controllers for indoor units. If using in combination with a central remote controller, the central remote controllers control mode is given priority.

4.7.4 Group No. Setting for Central Control

1. Setting by Remote Controller for Indoor Units

- Sets group No.s in local setting mode by remote controller. (Group No.s are 1-00~1-15, 2-00~2-15 up to 8-00~8-15)

2. Adaptor PC Board Setting

Sets group No. setting switches RS1 and RS2 for central control on PC board when using an interface adaptor for SkyAir series, or wiring adaptor for other air-conditioners.
RS1 (Upper): 1~4 (1~8 in case of interface adaptor for SkyAir Series)
RS2 (Lower): 0~F

4.8 <DCS601C51> intelligent Touch Controller

4.8.1 Feature

This controller is a central remote controller offering higher functions than those of the previous controller DCS302CA61, and easier operation.
Up to 64 groups of indoor units may be connected to 1 unit of this controller.



This controller aims to be a product positioned between the current central controlling device (central remote controller DCS302CA61) and intelligent manager for large scale buildings (in both the viewpoints of application area and functional grade), and is a central controller most suitable for middle and small size buildings.

< Products Features >

1. High Level Functions
   - Annual schedule control
   - Electricity proportional distribution function (option)
   - Air net function (DCS601C51 only)
2. Easy Operation
   - Color liquid crystal
   - Icon display
   - Touch panel application
   - Air conditioner name and zone name input available
3. D-III NET × 1 line (64 units)
4. Saving expenses
   - Controlling personnel not required (saving control expenses)
   - Energy saving schedule
   - Functions equal to those of a compact monitor panel

■ **Operation Menu**
intelligent Touch Controller is capable of starting/stopping of the operation by the group or zone. Collective starting/stopping is also available.

■ **Air Conditioner Detail Setup**
Temperature setting, switching between temperature control modes, switching of speed and direction of wind and remote control mode setting are available by the group, by the zone or collectively.

■ **Monitoring of Various Information on Indoor Units**
Information on operation such as the operation mode and temperature setting of the indoor units, maintenance information including the filter or element cleaning sign, troubleshooting information such as error codes can be displayed by the group or the zone.

■ **Diversified Operation Modes**
Operation can be controlled both with the main unit and the remote control to provide diversified operation management. Setting with the main unit allows the following remote control settings by the group, by the zone or collectively:

1. Start/Stop	2. Operation Mode	3.Temperature Setting
:(Remote control) Inhibited	:(Remote control) Inhibited	:(Remote control) Inhibited
:(Remote control) Permitted	:(Remote control) Permitted	:(Remote control) Permitted
:Priority		

■ **Zone Control Simplifying Complicated Setting Operations**
Up to 64 groups can be controlled with the intelligent Touch Controller.
More than one group can be consolidated into a zone, which can be registered, to allow the following settings by the zone. This eliminates the need for repeating the same setting operation for each group. Function to allow collective setting for all groups is also available.
· Start/stop · Temperature setting · Switching between operation modes
· Setting of direction and fan speed · Disabling/enabling the remote control

■ **Detailed Scheduled Operation Control**
The intelligent Touch Controller allows detailed scheduled operation by the group, by the zone or collectively. Up to 8 options for annual schedule can be set. Each schedule can include four types of plans : for Monday, Tuesday... Sunday, Special day 1~10, Special days 1 and Special days 2. Each of the plans allows setting of up to 16 operations.

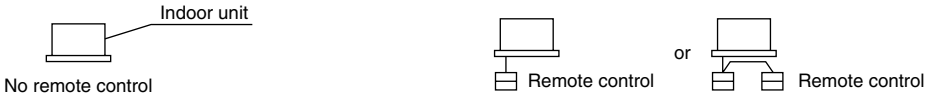
■ **Handy Automated Control**
The intelligent Touch Controller can do the following.
· Change Over Settings : automatically switches between cooling and heating according to the room temperature.
· Temperature Limit Setting : prevents the temperature from rising too high or too low in unmanned rooms.
· Heating Optimization Settings : stops uncomfortable hot air from blowing when the heating the thermo is off.

4.8.2 System Overview

This intelligent Touch Controller is capable of controlling/monitoring up to 64 groups of indoor units (hereafter “groups”).

The main functions of the intelligent Touch Controller include:
1. Collective starting/stopping of operation of the indoor units connected to the intelligent Touch Controller.
2. Starting/stopping of operation, temperature setting, switching between temperature control modes and enabling/disabling of operation with the hand-held remote control by zone or group.
3. Scheduling by zone or group.
4. Monitoring of the operation status by zone or group.
5. Display of the air conditioner operation history.
6. Compulsory contact stop input from the central monitoring panel (non-voltage, normally-open contact).
7. Power distribution of the air conditioners. (With the optional DCS002C51)
8. Control and Monitoring of air conditioner with personal computer by the Controller (with the optional DCS004A51).

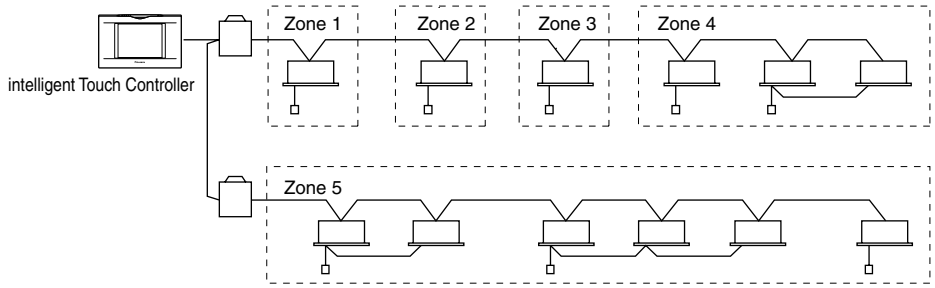
* A group of indoor units include:
① One indoor unit without a remote control. ② One indoor unit controlled with one or two remote controls.



③ Up to 16 indoor units controlled with one or two remote controls.



* Zone control with the intelligent Touch Controller
* Zone control, which allows collective settings for more than one group, is available with the intelligent Touch Controller, which facilitates the setting operations.

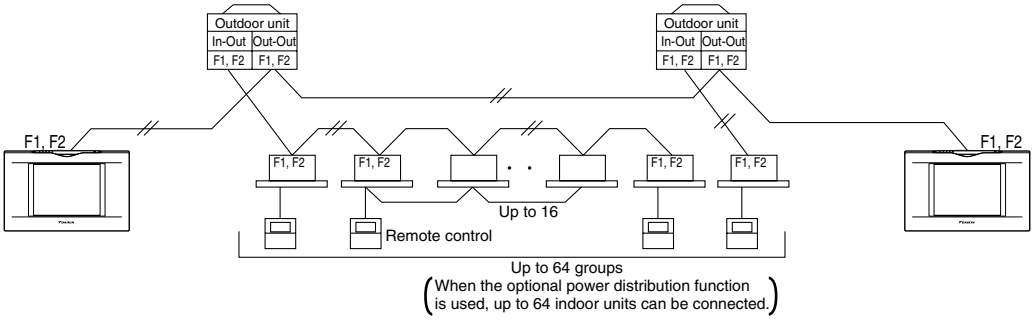


- One setting makes the same setting for all of the units in one zone.
- Up to 128 zones can be set with one intelligent Touch Controller. (The maximum number of groups in one zone is 64.)
- Groups can be zoned at will with the intelligent Touch Controller.
- Units in one group can be divided into more than one zone.

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4.8.3 Double intelligent Touch Controllers

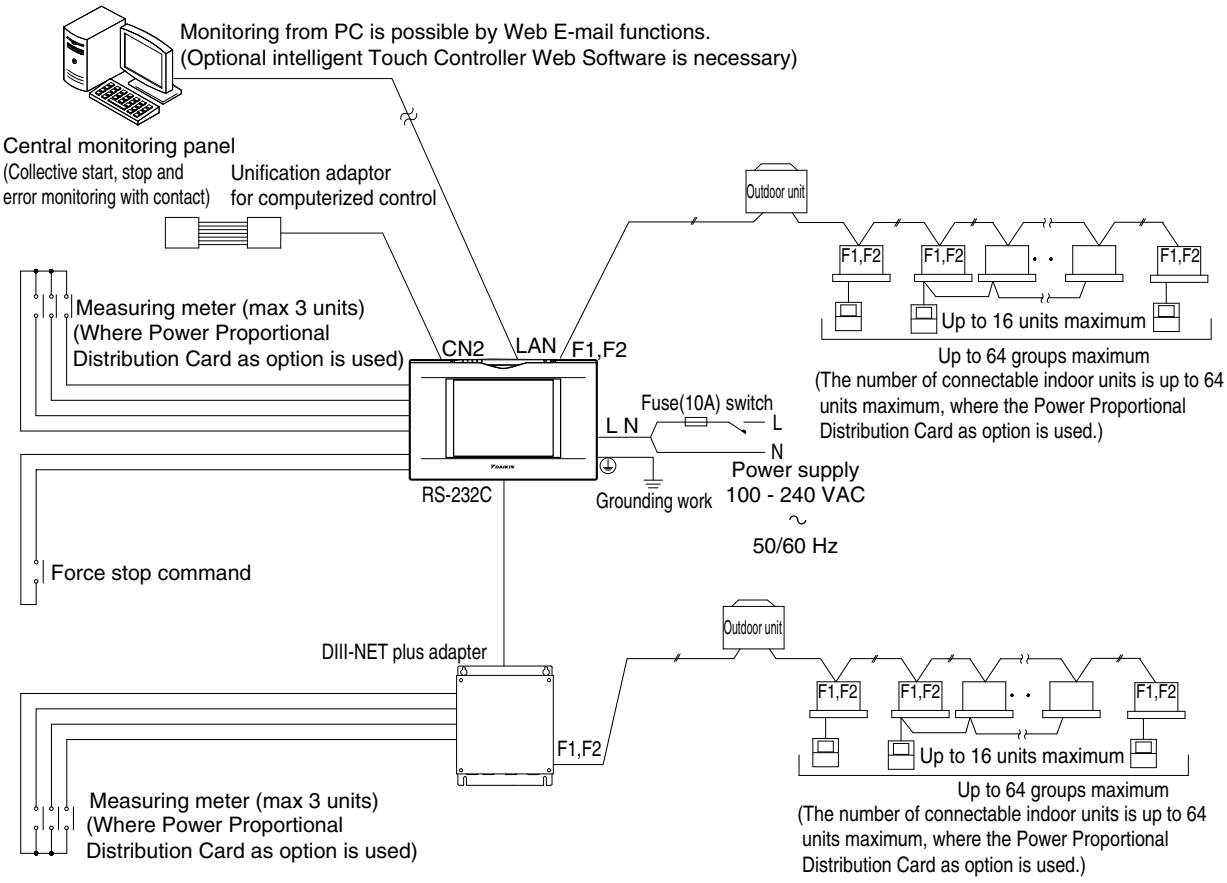
Using two intelligent Touch Controllers allows central control of indoor units from different places.



Note
- For combination and settings for double intelligent Touch controllers, be sure to consult the vendor.

4.8.4 Options

Connecting Unification adaptor allows using the contact for normal and abnormal operation signal and collective start/stop with a contact. For details, contact the vendor you purchased the product from.
Also, by connecting DIII-NET plus adapter, it is possible to operate and monitor the indoor units of 64 groups (intelligent Touch Controller plus DIII-NET plus adapter-128 groups in total) additionally.



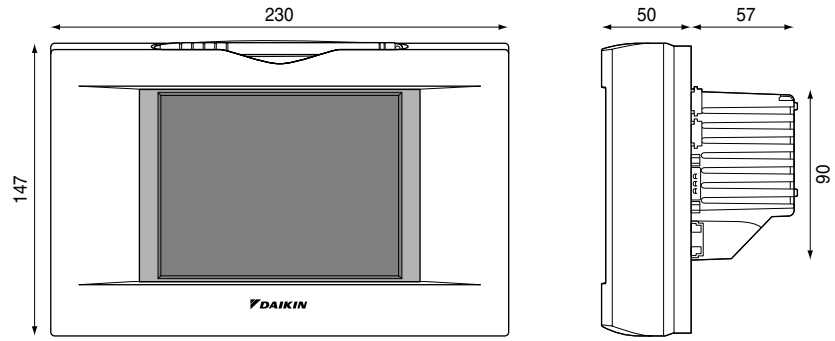
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4.8.5 Specification

Specification

Power		AC100 - 240V 50/60Hz
Power consumption		10 W maximum
Force stop input		Normally-open contact Contact current approximately 10 mA
Operating temperature range	Ambient temperature	0°C~40°C
	Ambient humidity	85%RH (Non condensing)
Storage temperature range	Ambient temperature	-10°C~50°C
	Ambient humidity	85%RH (Non condensing)
Size		230×147×107 (W×H×D)
Weight (Mass)		1.2kg

Dimension



The specification and appearance of the product may be modified for improvement without prior notice.

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17

4.8.6 Part Names and Functions

Front and Side View



PCMCIA Card Slot

Used when using the optional Power Proportional Distribution (DCS002C51) or updating the intelligent Touch Controller software to a newer version.

Color LCD with Touch Panel

Provides a display for monitoring and operation.
Be sure to use the touch pen provided for operation.

Touch Pen

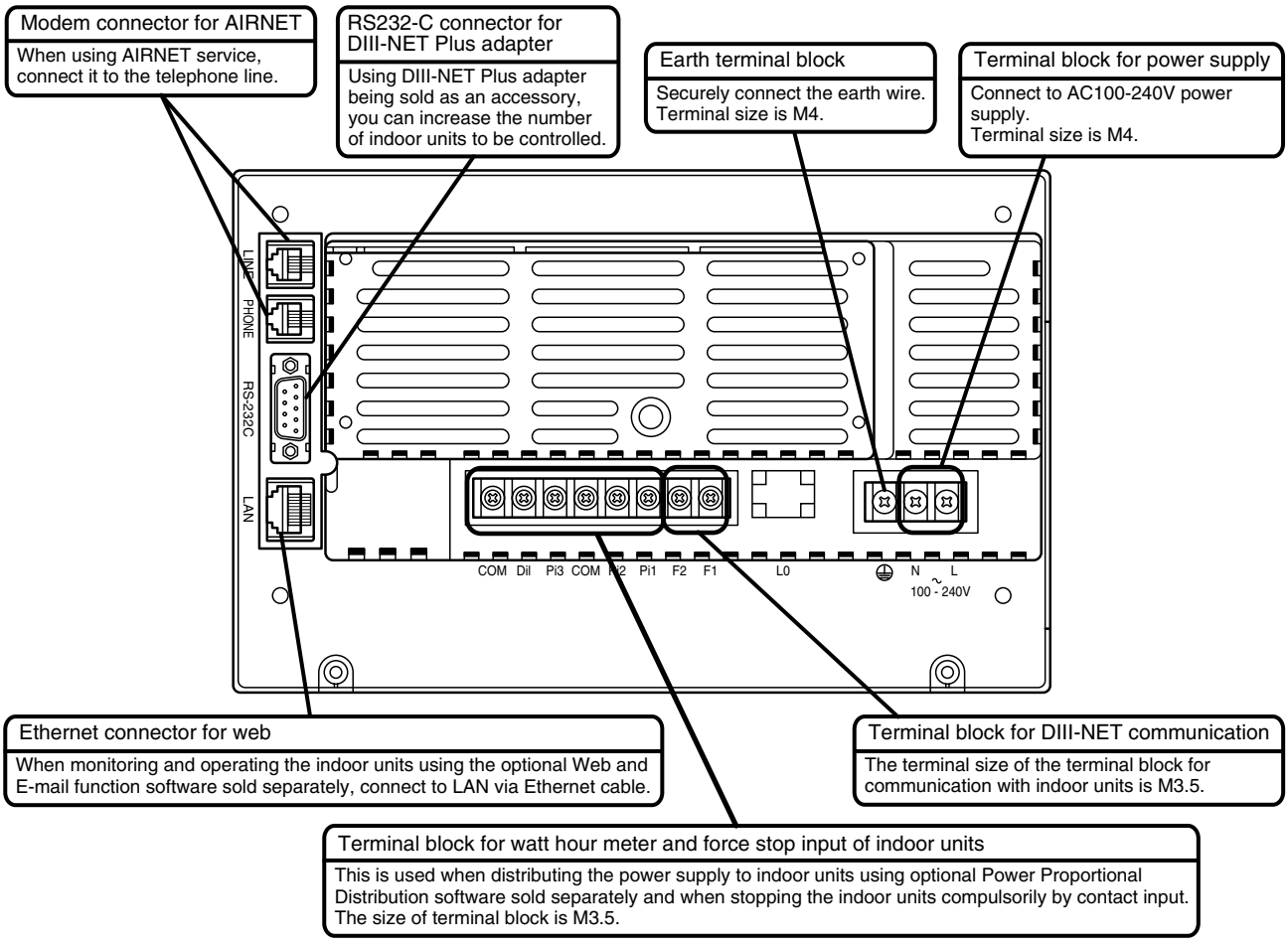
Use the touch pen for operation.
Be sure to use the touch pen for operation.
Use caution not to lose the touch pen.
(When the pen is lost, contact the dealer you purchased the product from.)

NOTE

- Be sure to use the touch pen for operation of the touch panel of the intelligent Touch Controller. Operating with an object other than the touch pen provided may cause damage and failure.

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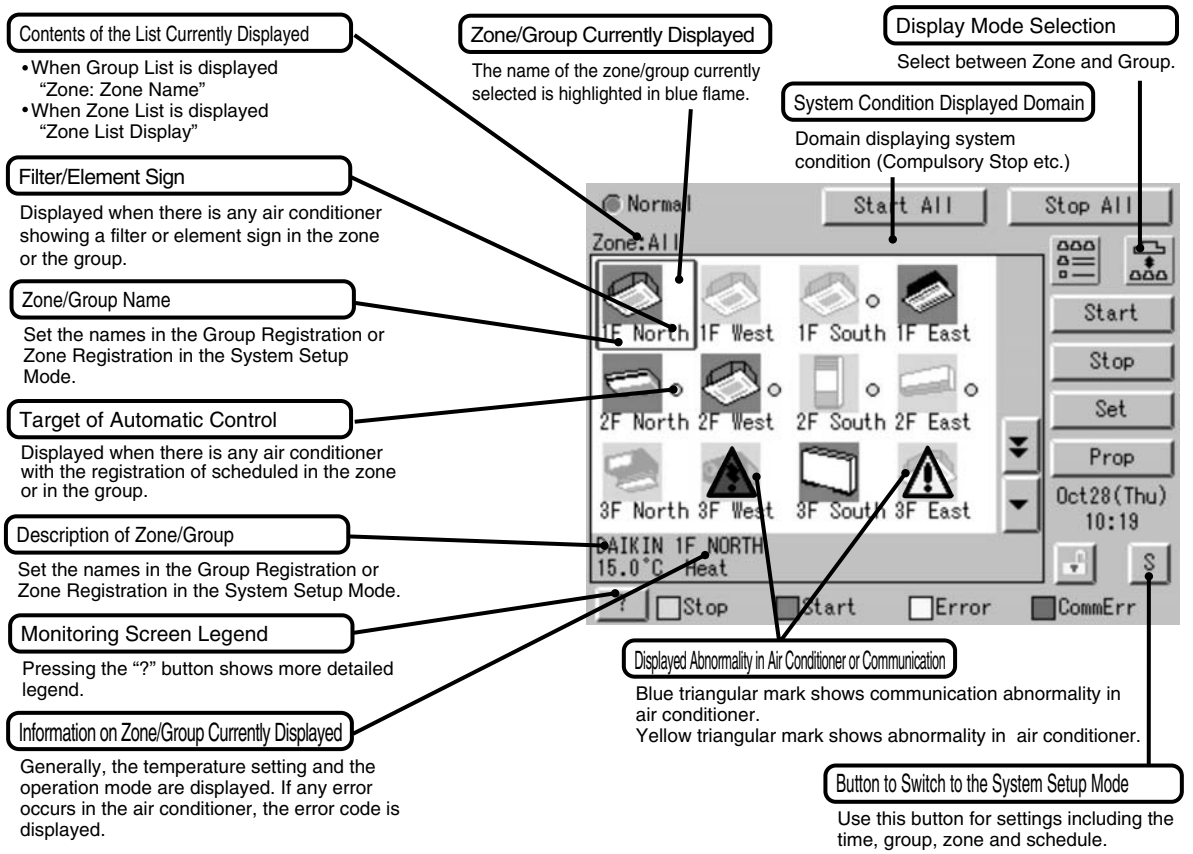
4.8.7 Terminals on the Back of intelligent Touch Controller

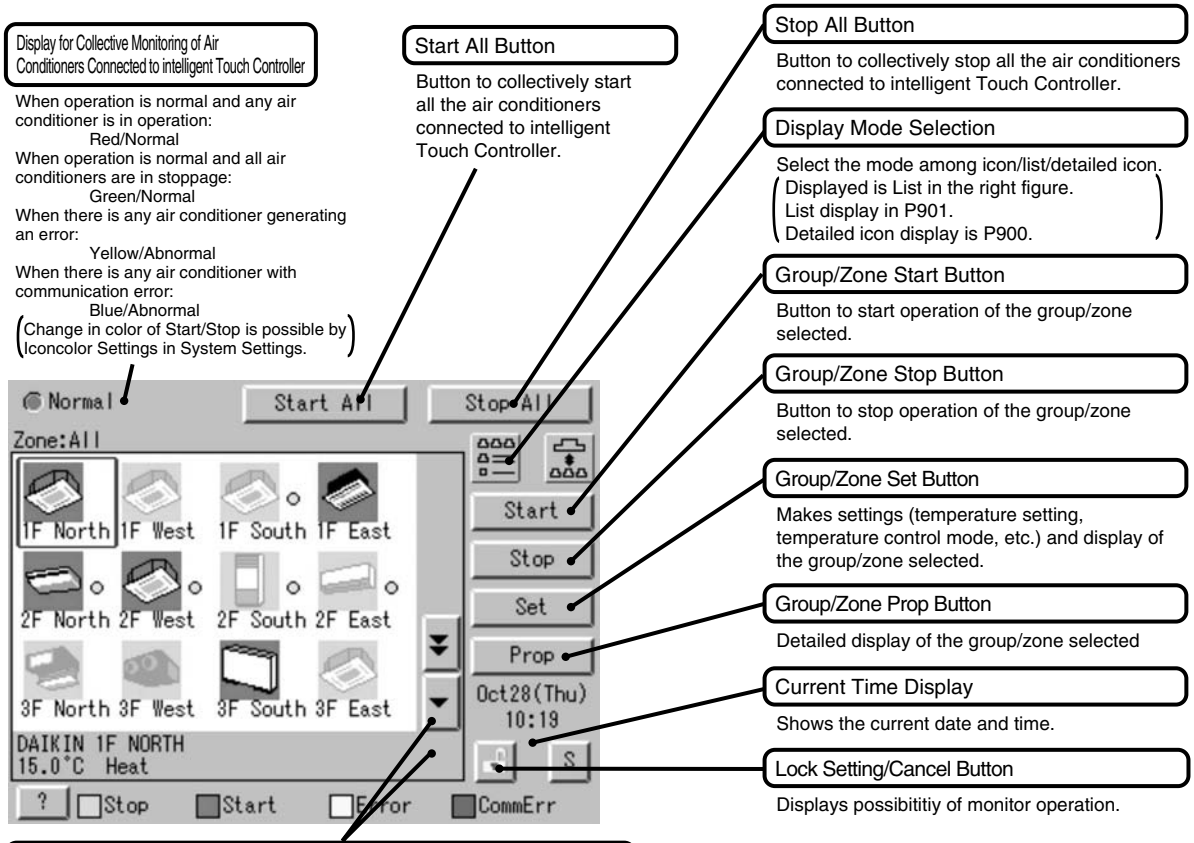


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4.8.8 Part Names on the Monitoring Screen and the Functions

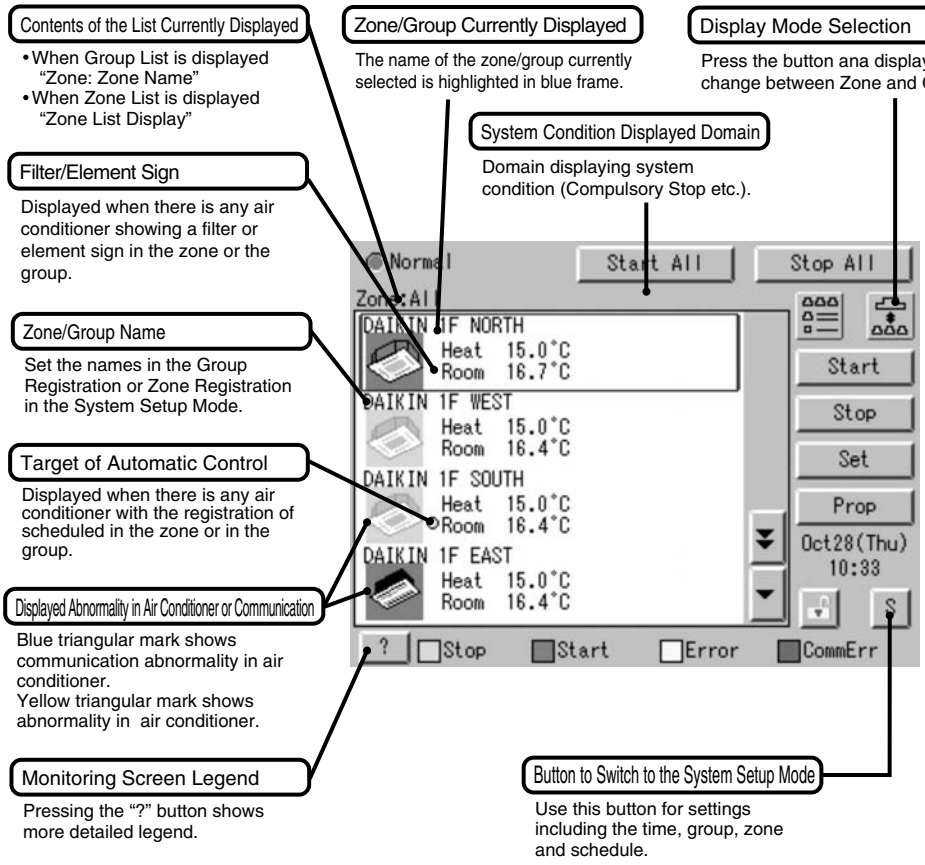
Icon

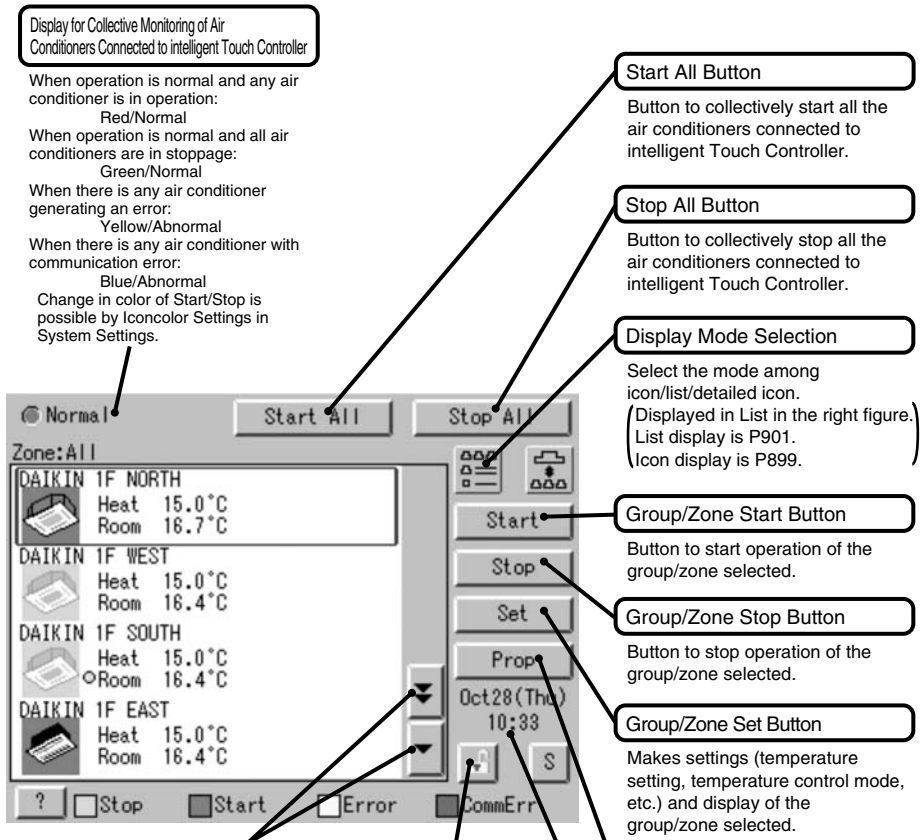




EM04A055A

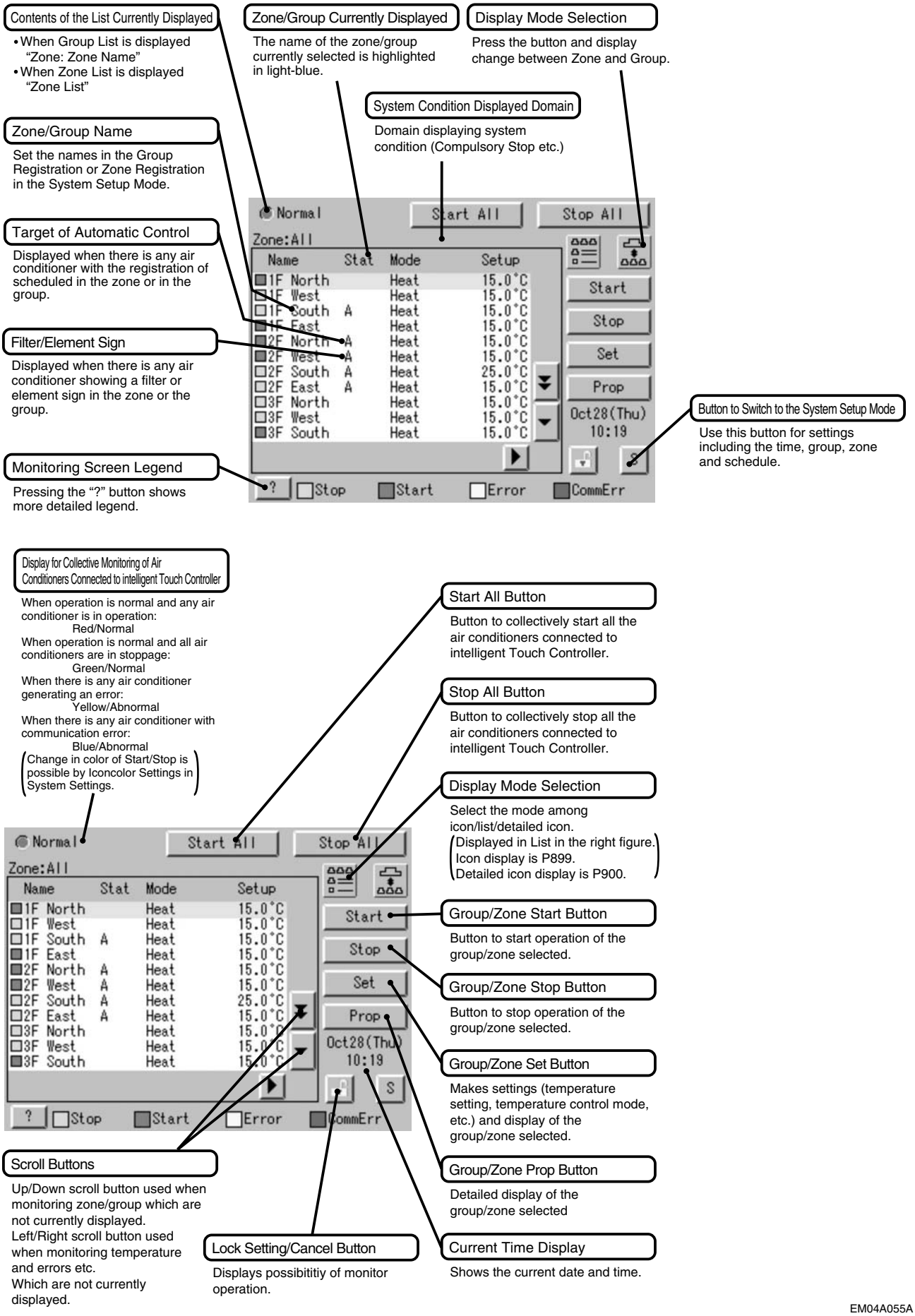
17


Contents of the List Currently Displayed
• When Group List is displayed "Zone: Zone Name"
• When Zone List is displayed "Zone List Display"
Zone/Group Currently Displayed
The name of the zone/group currently selected is highlighted in blue frame.
Display Mode Selection
Press the button ana display change between Zone and Group.
System Condition Displayed Domain
Domain displaying system condition (Compulsory Stop etc.).
Filter/Element Sign
Displayed when there is any air conditioner showing a filter or element sign in the zone or the group.
Zone/Group Name
Set the names in the Group Registration or Zone Registration in the System Setup Mode.
Target of Automatic Control
Displayed when there is any air conditioner with the registration of scheduled in the zone or in the group.
Displayed Abnormality in Air Conditioner or Communication
Blue triangular mark shows communication abnormality in air conditioner.
Yellow triangular mark shows abnormality in air conditioner.
Monitoring Screen Legend
Pressing the "?" button shows more detailed legend.
Button to Switch to the System Setup Mode
Use this button for settings including the time, group, zone and schedule.
Normal
Start All
Stop All
Zone:All
DAIKIN 1F NORTH
Heat 15.0°C
Room 16.7°C
DAIKIN 1F WEST
Heat 15.0°C
Room 16.4°C
DAIKIN 1F SOUTH
Heat 15.0°C
Room 16.4°C
DAIKIN 1F EAST
Heat 15.0°C
Room 16.4°C
Start
Stop
Set
Prop
Oct28(Thu)
10:33
S
?
Stop
Start
Error
CommErr


Display for Collective Monitoring of Air Conditioners Connected to intelligent Touch Controller
When operation is normal and any air conditioner is in operation:
Red/Normal
When operation is normal and all air conditioners are in stoppage:
Green/Normal
When there is any air conditioner generating an error:
Yellow/Abnormal
When there is any air conditioner with communication error:
Blue/Abnormal
Change in color of Start/Stop is possible by Iconcolor Settings in System Settings.
Start All Button
Button to collectively start all the air conditioners connected to intelligent Touch Controller.
Stop All Button
Button to collectively stop all the air conditioners connected to intelligent Touch Controller.
Display Mode Selection
Select the mode among icon/list/detailed icon.
(Displayed in List in the right figure.
List display is P901.
Icon display is P899.)
Group/Zone Start Button
Button to start operation of the group/zone selected.
Group/Zone Stop Button
Button to stop operation of the group/zone selected.
Group/Zone Set Button
Makes settings (temperature setting, temperature control mode, etc.) and display of the group/zone selected.
Group/Zone Prop Button
Detailed display of the group/zone selected
Current Time Display
Shows the current date and time.
Scroll Buttons
Up/Down scroll button used when monitoring zone/group which are not currently displayed.
Left/Right scroll button used when monitoring temperature and errors etc.
Which are not currently displayed.
Lock Setting/Cancel Button
Displays possibititiy of monitor operation.
Normal
Start All
Stop All
Zone:All
DAIKIN 1F NORTH
Heat 15.0°C
Room 16.7°C
DAIKIN 1F WEST
Heat 15.0°C
Room 16.4°C
DAIKIN 1F SOUTH
Heat 15.0°C
Room 16.4°C
DAIKIN 1F EAST
Heat 15.0°C
Room 16.4°C
Start
Stop
Set
Prop
Oct28(Thu)
10:33
S
?
Stop
Start
Error
CommErr

EM04A055A

List



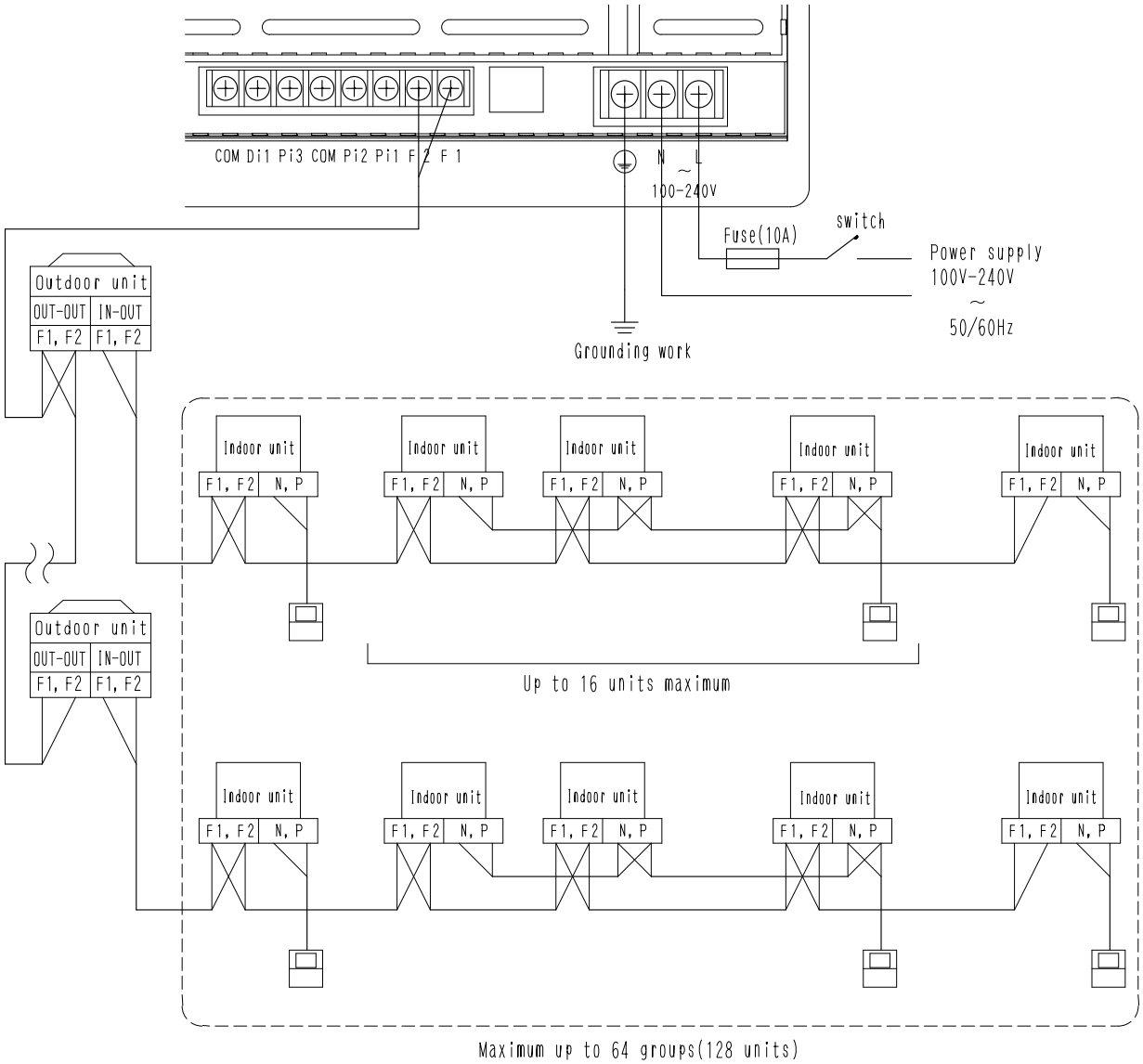
EM04A055A

4.8.9 System Wiring

When wiring, cut off the power supply (using a local switch) and do not apply power until all work has been finished.

Wiring for power supply and Connecting wiring for DⅢ-NET communication of indoor units

In order to perform centralized control of indoor units using this controller, connect the power wiring to terminals L and N, earth wire to earth terminal ⏚ and connecting wiring for DⅢ-NET communication of air-conditioner (indoor unit and outdoor unit) to terminals F1 and F2 respectively as shown in the sketch below.



Power cable wiring	1.25mm²
Fuse	10A
Connecting wiring for DⅢ- NET communication of indoor and outdoor units	0.75 - 1.25 mm² vinyl cord or cable with sheath (2 wire) ---Up to 1000 m maximum (wiring length -- up to 2000 m maximum) (When shield cable is used, the wiring length is available up to 1500m.) For the type of electric wire, refer to the design guide.

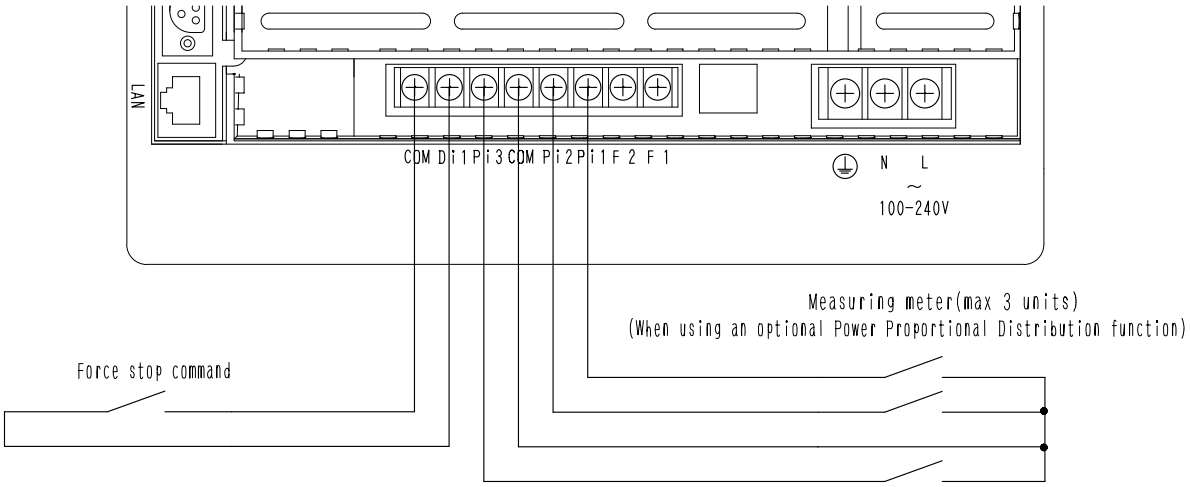
≪ CAUTION ≫

- Don't fail to perform installation of Grounding work. Don't connect the grounding wire to any of gas pipe, city water pipe, lightning rod, and telephone grounding wire.
- Don't turn ON the power supply (front switch) until all the works are complete.
- The connecting wiring for communication of indoor and outdoor units is a connecting wiring for the control. Don't clamp these cables together with high voltage cables. Failure to observe this instruction would cause control error.
- Don't connect the power cable to F1, F2 terminal blocks. Wrong connection to these terminal blocks could result in damage and burning of the centralized control devices and of the electric parts of the indoor and outdoor units. This is very hazardous. Check each wired cable once more before turning ON the power switch.

1P153198D

Wiring for force stop input and for electric power distribution

In order to stop the air-conditioner through force stop input, connect the wiring for force stop input to the terminals Di1 and COM as shown in the sketch below.
In addition, in order to calculate the electric energy using optional Power Proportional Distribution software, connect the wiring for electric energy to the terminals Pi and COM as shown in the sketch below.



Wiring for force stop input	• 0.75 - 1.25 mm^2 vinyl cord or cable with sheath (2 wire) -- up to 150m maximum • When FORCE-STOP INPUT is kept ON, the indoor units connected thereto are unable to be operated because they are force-stopped. • Use a contact which can guarantee minimum application load DC16V and 10mA. • Use an instantaneous contact of 200msec or more in current feed time, where required.
Meter wiring for power distribution(option)	• 0.75 - 1.25 mm^2 vinyl cord or cable with sheath (2 wire) -- up to 150m maximum • The number of connectable indoor units is up to 64 units maximum, where the Power Proportional Distribution Card as option is used. • The measuring meters to be connected must meet the requirements specified below. • To be a measuring meter with pulse oscillator. (pulse/kwh) • Pulse band of 100msec or mores • Measuring meter which uses semiconductor relay for pulse output and outputs pulses from non-voltage contact

≪CAUTION≫

- Don't clamp these cables together with high voltage cables. Failure to observe this instruction would cause control error.
- Terminals COM are inter-connected. Connecting to either one is allowed, but the number of cables connectable to one terminal is limited to 2 pieces.
- Don't connect the power cable to Pi, Di, COM terminal blocks. Wrong connection to these terminal blocks could result in damage and burning of the centralized control devices and of the electric parts of the indoor and outdoor units. This is very hazardous. Check each wired cable once more before turning ON the power switch.

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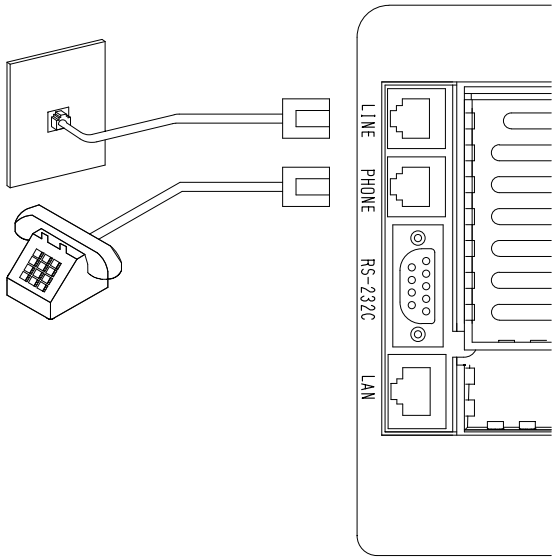
1P153198D

Connection to public telephone line

Connect to the telephone line in order to monitor the air-conditioner via AIRNET service.
Connect to modular cable from the public telephone line to the upper connector with a stamping of LINE, and connect the modular cable of the telephone to the lower connector with a stamping of PHONE, as shown in the sketch below.

≪ CAUTION ≫

- Don't clamp these cables together with high voltage cables. Failure to observe this instruction would cause control error.
- When using AIRNET service, it is necessary to use a separate modem specified by us and enter into Maintenance Agreement with charge.

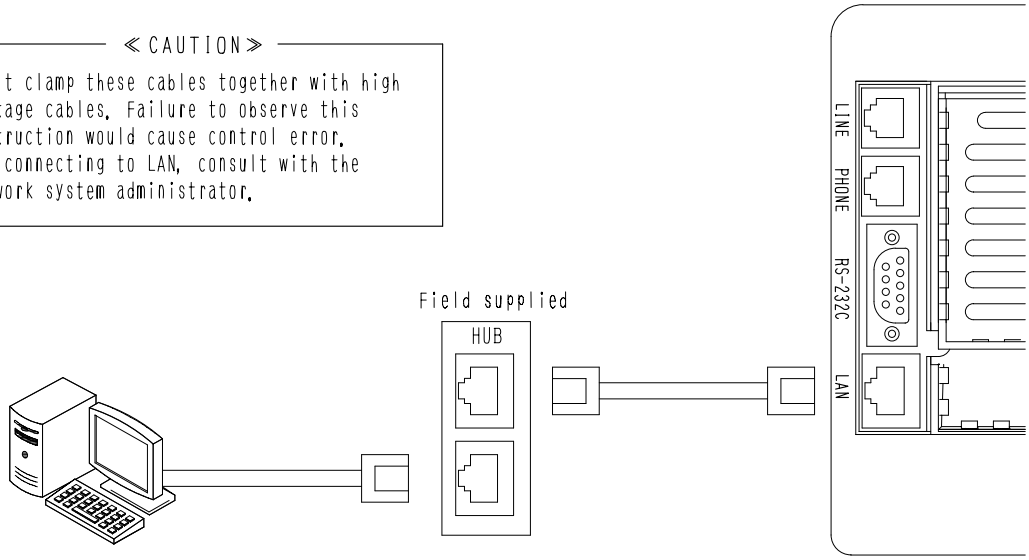


Connection to LAN

In order to monitor/control the air-conditioner using optional Web and E-mail function software sold separately, use a UTP cable to connect to LAN.
Connect the UTP cable to the Ethernet connector with a stamping of LAN.

≪ CAUTION ≫

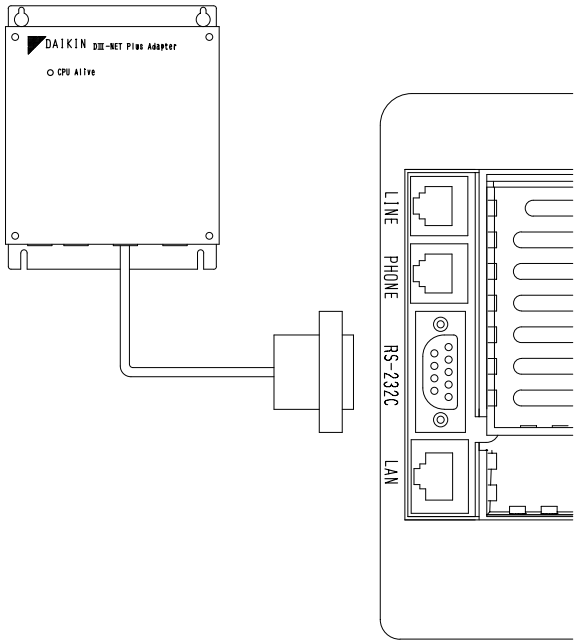
- Don't clamp these cables together with high voltage cables. Failure to observe this instruction would cause control error.
- For connecting to LAN, consult with the network system administrator.



1P153198D

DⅢ-NET Plus adaptor connection

In order to increase the number of indoor units to be controlled, connect DⅢ- NET Plus adaptor using RS232-C cable attached to the adaptor.
For details, refer to the installation manual of DⅢ- NET Plus adaptor.

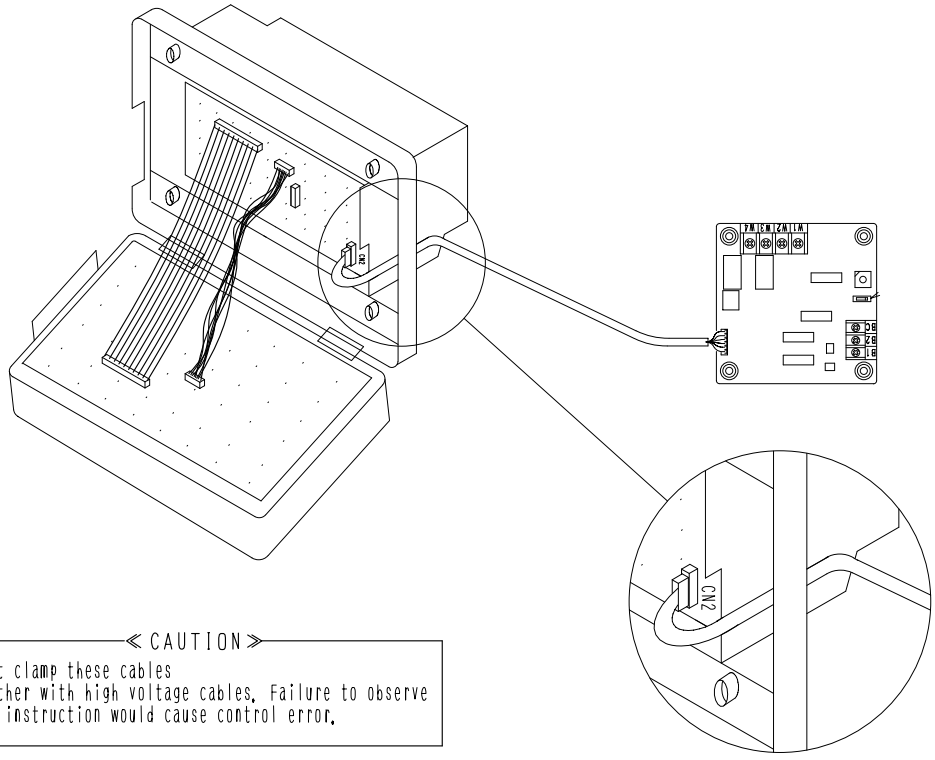


≪CAUTION≫

- Don't clamp these cables together with high voltage cables. Failure to observe this instruction would cause control error.

Connection for Unification Adaptor

In order to perform total start and stop/situation monitoring from central supervisory board, etc.,
connect a Unification Adaptor sold separately.
As shown in the sketch below, open the controller and connect the cable from the Unification Adaptor to CN2 connector located on the printed board on the lower case.
If you route the cable in the cable guide groove on the lower case, you can make a smart connection without any slack of the cable.



≪CAUTION≫

- Don't clamp these cables together with high voltage cables. Failure to observe this instruction would cause control error.

1P153198D

17

4.8.10 <DCS002C51> Power Proportional Distribution Card

Function and Outline

Power Proportional Distribution Card, in combination with an existing intelligent Touch Controller, enables to proportionally calculate and display electricity amount used by air conditioner per indoor unit.

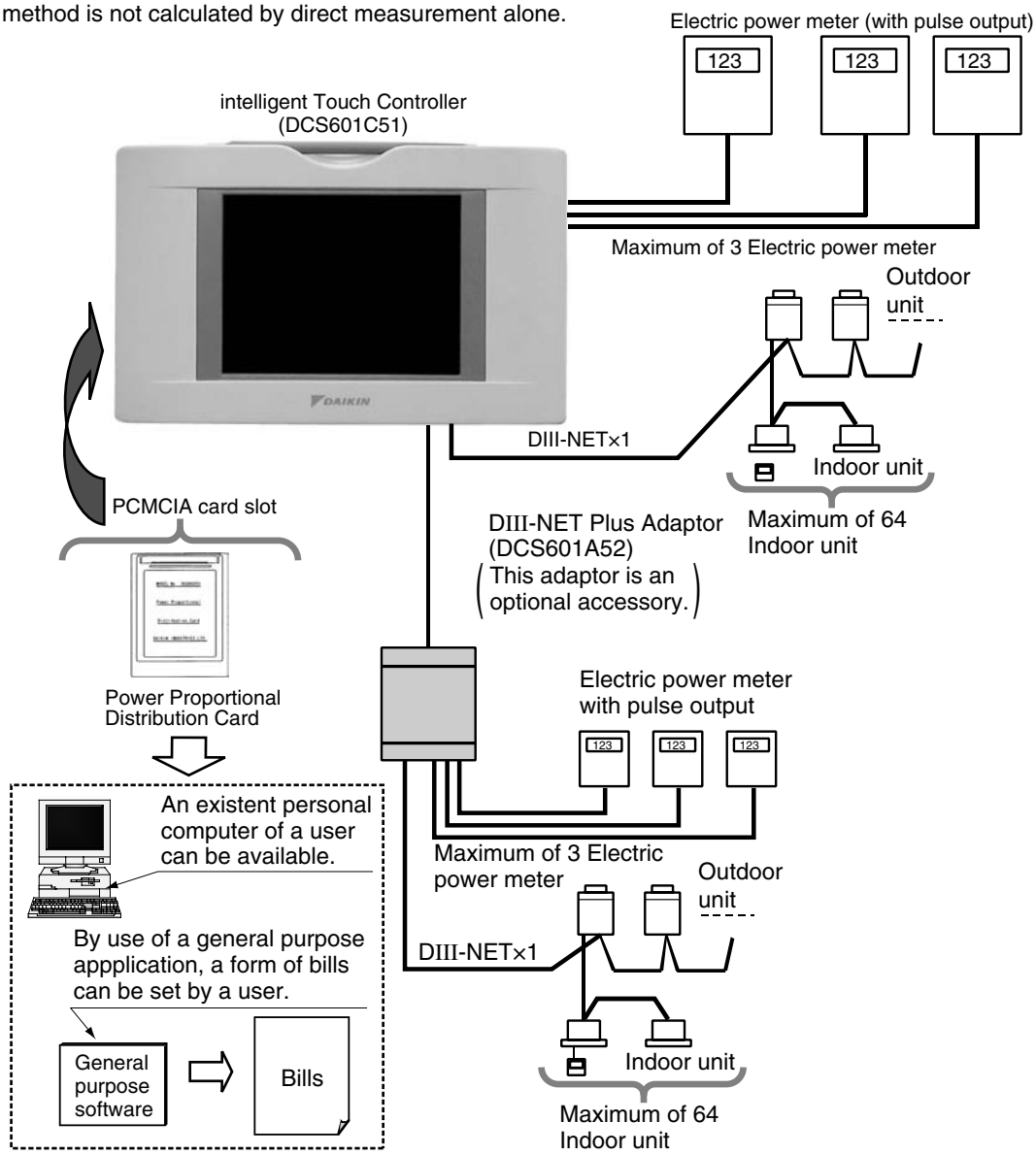
Main Functions

Power proportional distribution results data can be saved for 12 months. (max. 12 months and 30 days)

- Per intelligent Touch Controller, power proportional distribution can be calculated for 64 indoor units at maximum.
- When DIII-NET Plus Adaptor is connected, power proportional distribution can be calculated for more 64 indoor units at maximum (a total of 128).
- 3 Electric power meters at maximum can be connected to an intelligent Touch Controller.
- When DIII-NET Plus Adaptor is connected, more 3 Electric power meters at maximum (a total of 6) can be connected.
- Power proportion distribution results data can be saved into a PCMCIA card.
  Data is saved CSV format generally applied to personal computers, so bills can be issued by use of a general purpose table calculation software package in easy manners.
  (A personal computer and a general purpose table calculation software package can be available separately.)

Precautions

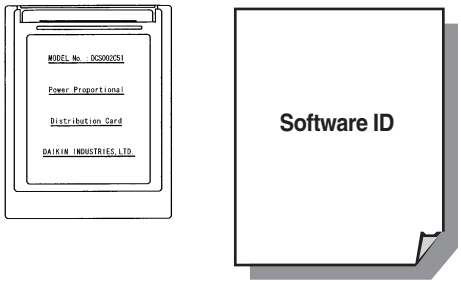
This system calculates electricity consumptions by size of indoor units, run time, expansion valves open gap, suction rate and the number of pulses from the power meters installed at the Outdoor Units.
This method is not calculated by direct measurement alone.



EM04A056

Checking Attachments

Power Proportional Distribution Card includes the following attachments.



EM04A056

How to Connect

To activate the power proportional distribution function, it is necessary to set the program by use of the attached PCMCIA card and carry out a trial operation.
Before use, consult your supplier.

EM04A056

4.8.11 <DCS004A51> Web Software

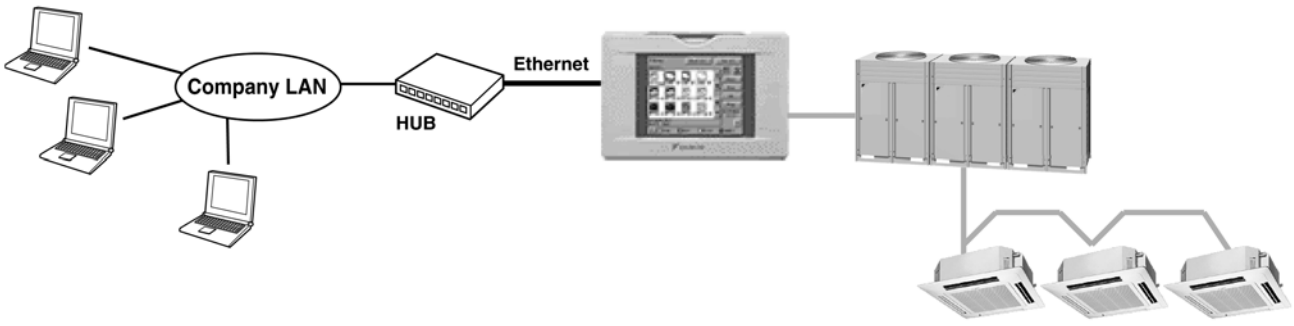
Functions and Outline

Using this software enables you to operate and monitor air conditioners linked to the intelligent Touch Controller on the Windows PC, which is connected with the intelligent Touch Controller and the Ethernet communication (LAN).

* The intelligent Touch Controller functions as a Web server to visit the Website of the intelligent Touch Controller through the Internet Explorer, which is incorporated in the PC like as its standard software, thus making it possible to operate and monitor the air conditioners.

Furthermore, through the use of a mail server, if a malfunction occurs in any of the air conditioners which are linked to the intelligent Touch Controller, it will be able to transmit mails to a pre-assigned address to alert you to the malfunction.

For further information, contact our sales representatives.



17

Web Interface of the intelligent Touch Controller

Permissions: Privileges Given to Each Login Name

There are two categories of login users: General User who can perform basic operations via the web interface and Administrator who can setup the system and change system settings.

Two Display Modes

You can select the display mode from two modes during login process: the Basic mode which provides a simple and easy-to-use interface and the Advanced mode which allows you to use advanced setting options.

Start/Stop Operation

You can start or stop all the devices in a group, a zone, or multiple zones at a time.

Advanced Settings for Air Conditioners

You can set temperature, operation modes, direction of air flow, air volume, and remote controller mode of all devices in a group, a zone, or multiple zones.

Various Operation Modes

You can operate devices from a web interface, the intelligent Touch Controller console, or a local remote controller. Also the Administrator can permit or prohibit remote controller operations of devices in a specified group or zone using the web interface.

User Administration

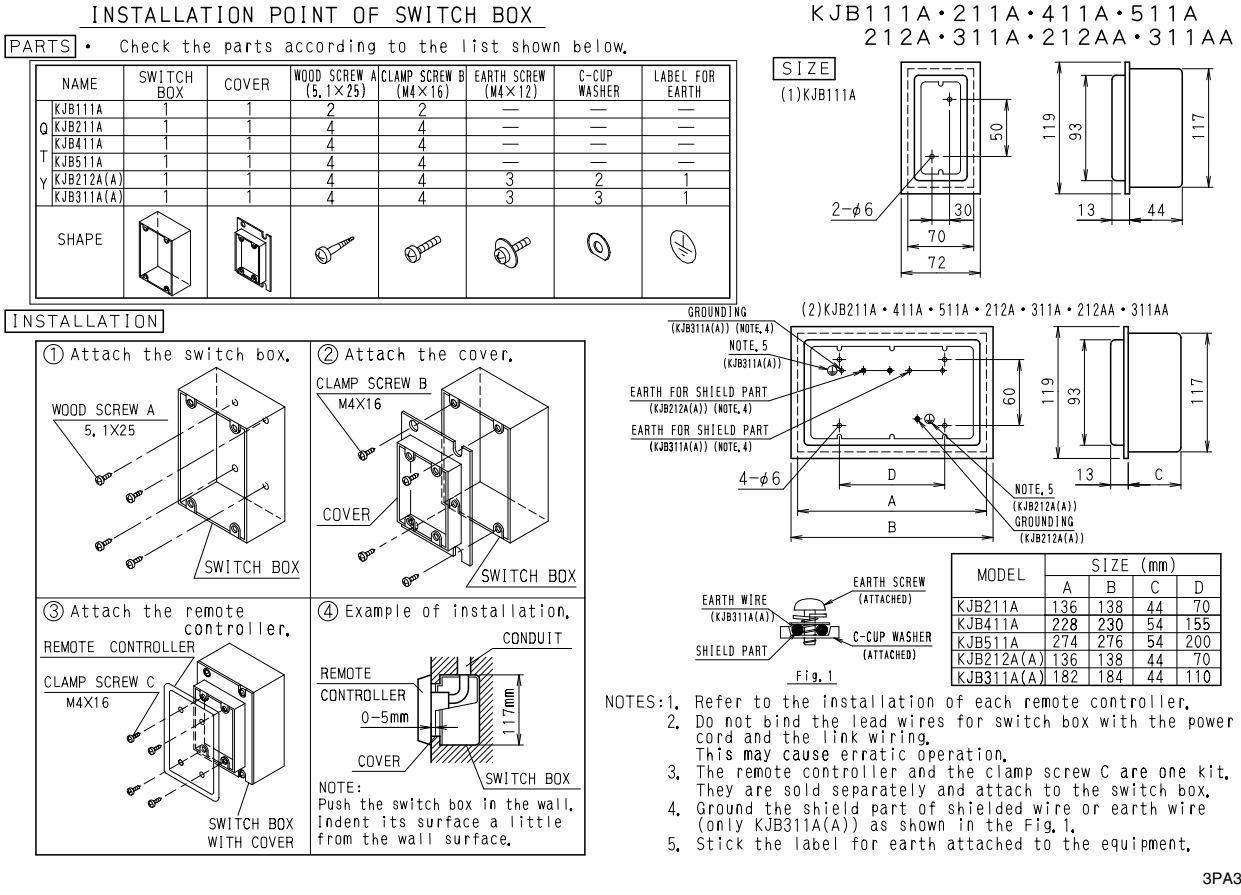
The Administrator can register or delete General Users, who can operate air conditioners via the web interface, and set/change his/her own password and General Users' password.

Scheduling Function

The Administrator can precisely schedule operations for a specific group or zone of devices. Weekly schedule and 10 extra schedules can be created.

EM04A057

4.8.12 <KJB411A> Optional Switch Box



3PA34878C

4.9 <BRC1D61> Wired Remote Controller with Weekly Schedule Timer

Adds new, advanced functions to those of the wired remote controller..



BRC1D61

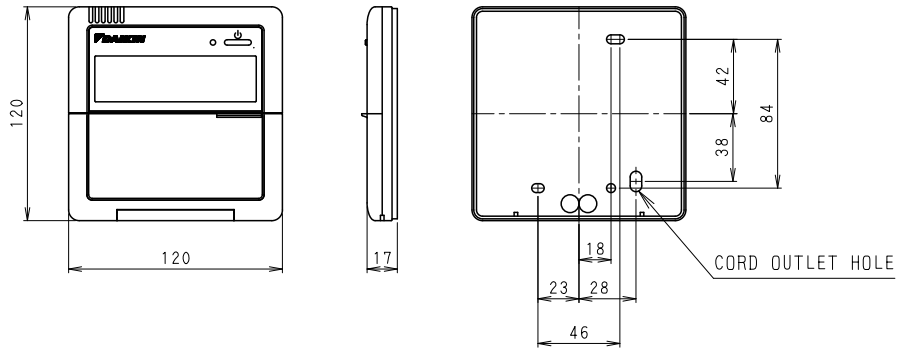
- Includes ventilation mode and airflow rate switching, the main functions of HRV series.
- 24-hour clock function (1-hour backup for power failures).
- Programming function for each day of week.
- Scheduling possible of start/stop and temperature limit (5 settings/day).
- Programming can be enabled or disabled.
- Copy function for programmed schedules.

4.9.1 Dimension

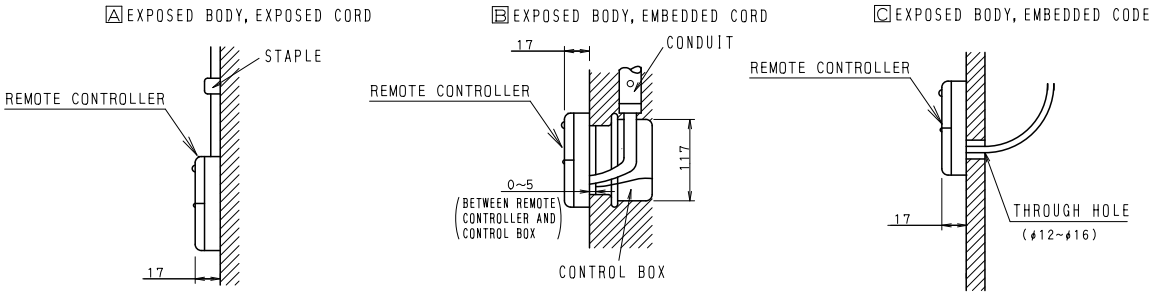
Wired Remote Controller with Weekly Schedule Timer BRC1D61(9)

Unit (mm)

• REMOTE CONTROLLER DIMENSIONS



• INSTALLATION METHOD



NOTE)1. REMOTE CONTROLLER CORD AND STAPLE ARE NOT ATTACHED. THEY ARE FIELD SUPPLIED PARTS.

• SPECIFICATIONS OF CORD

	FOR AUSTRALIA	FOR OTHER COUNTRIES
TYPE	SHIELD WIRE (INSULATED THICKNESS:1mm OR MORE)	VINYL CORD WITH SHEATH OR CABLE (INSULATED THICKNESS:1mm OR MORE)
SIZE	0.75~1.25mm²	
TOTAL LENGTH	500m	

3D048117

4.9.2 Features and Functions

The BRC1D61 is a state of the art remote controller that offers full control over your installation.

1 BASIC REMOTE CONTROLLER

The basic remote controller functions are:
- ON/OFF,
- operation mode change-over,
- temperature adjustment,
- air volume adjustment
- air flow direction adjustment.

2 CLOCK FUNCTION

The clock functions are:
- 24 hours real time clock,
- day of the week indicator.

3 SCHEDULE TIMER FUNCTION

The schedule timer functions are:
- a maximum of 5 actions can be programmed for each day of the week (totalling 35 actions),
- schedule timer can be enabled/disabled at any time,
- linked to a set temperature or a LIMIT operation or an OFF operation,
- "last command" overrules previous command until next scheduled command.

4 LIMIT OPERATION

Limit operation provides thermostat control within the range of the set minimum and maximum temperature.
The minimum temperature setting will trigger heating, the maximum temperature setting will trigger cooling.

5 LEAVE HOME

The leave home function prevents the room temperature from dropping when the occupants are out for a longer period. If the room temperature drops below 10°C, heating is started automatically. As soon as 15°C is reached, the controller returns to its original status.

6 BUTTON PERMISSION LEVEL

Three hierarchical permission levels can be set to limit the user action.

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4.9.3 Names and Functions

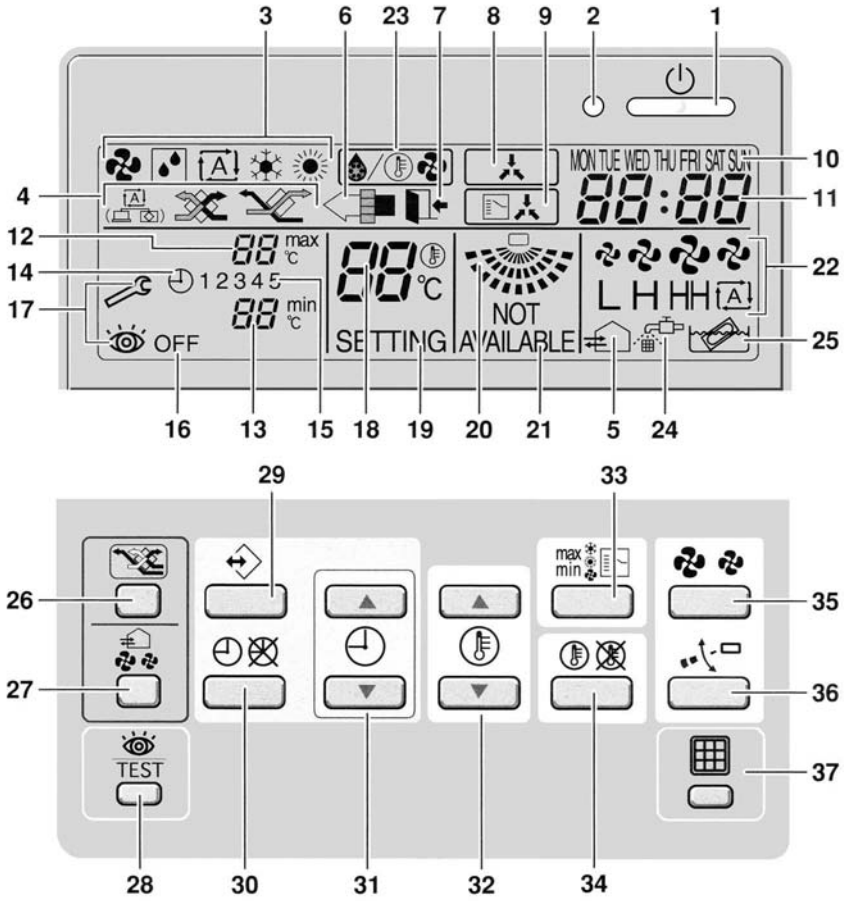


Figure 1

3P107422-3D

4.9.4 Name and Function of Switches and Icons (Refer to figure 1)

1 ON/OFF BUTTON

Press the ON/OFF button to start or stop the system.

2 OPERATION LAMP

The operation lamp lights up during operation or blinks if a malfunction occurs.

3 OPERATION MODE ICON

These icons indicate the current operation mode (FAN, DRY, AUTOMATIC, COOLING, HEATING).

4 VENTILATION MODE ICON

These icons indicate the current ventilation mode (HRV only) (AUTOMATIC, HEAT EXCHANGE, BYPASS).

5 VENTILATION ICON

The ventilation icon appears when the ventilation is adjusted with the ventilation amount button (HRV only). Simultaneously, the ventilation amount is indicated by the fan speed icon (see 22).

6 AIR CLEANING ICON

This icon indicates that the air cleaning unit (option) is operational.

7 LEAVE HOME ICON

The leave home icon shows the status of the leave home function.

ON	Leave home is enabled
FLASHING	Leave home is active
OFF	Leave home is disabled

8 EXTERNAL CONTROL ICON

This icon indicates that another controller with higher priority is controlling or disabling your installation.

9 CHANGE-OVER UNDER CENTRALISED CONTROL ICON

This icon indicates that the change-over of the installation is under centralised control assigned to another indoor unit or optional cool/heat selector connected to the outdoor unit (= master remote controller).

10 DAY OF THE WEEK INDICATOR

MON TUE WED THU FRI SAT SUN

The day of the week indicator shows the current week day (or the set day when reading or programming the schedule timer).

11 CLOCK DISPLAY 88:88

The clock display indicates the current time (or the action time when reading or programming the schedule timer).

12 MAXIMUM SET TEMPERATURE 88 max °C

The maximum set temperature indicates the maximum set temperature when in limit operation.

13 MINIMUM SET TEMPERATURE 88 min °C

The minimum set temperature indicates the minimum set temperature when in limit operation.

14 SCHEDULE TIMER ICON

This icon indicates that the schedule timer is enabled.

15 ACTION ICONS 1 2 3 4 5

These icons indicate the actions for each day of the schedule timer.

16 OFF ICON OFF

This icon indicates that the OFF action is selected when programming the schedule timer.

17 INSPECTION REQUIRED and

These icons indicate that inspection is required. Consult your installer.

18 SET TEMPERATURE DISPLAY 88 °C

This indicates the current set temperature of the installation (not shown in LIMIT operation or in FAN or DRY mode).

19 SETTING SETTING

Not used, for service purposes only.

20 AIR FLOW DIRECTION ICON

This icon indicates the air flow direction (only for installations with motorised air flow flaps).

21 NOT AVAILABLE NOT AVAILABLE

NOT AVAILABLE is displayed whenever a non-installed option is addressed or a function is not available.

22 FAN SPEED ICON L H HH A

This icon indicates the set fan speed.

23 DEFROST/HOTSTART MODE ICON

This icon indicates that the defrost/hotstart mode is active.

24 AIR FILTER CLEANING TIME ICON

This icon indicates the air filter must be cleaned. Refer to the manual of the indoor unit.

25 ELEMENT CLEANING TIME ICON

This icon indicates the element must be cleaned (HRV only).

26 VENTILATION MODE BUTTON

The ventilation mode button operates the HRV ; refer to the HRV manual for more details.

3P107422-3D

27 VENTILATION AMOUNT BUTTON

This button sets the ventilation amount; refer to the HRV manual for more details.

28 INSPECTION/TEST OPERATION BUTTON TEST

Not used, for service purposes only.

29 PROGRAMMING BUTTON

This button is a multi-purpose button.

Depending on the previous manipulations of the user, the programming button can have various functions.

30 SCHEDULE TIMER BUTTON

This button enables or disables the schedule timer.

31 TIME ADJUST BUTTON

These buttons are used to adjust the clock or, when in programming mode, to adjust the programmed action time. Both buttons have an auto-repeat function.

32 TEMPERATURE ADJUST BUTTONS

These buttons are used to adjust the current setpoint or, when in programming mode, to adjust the programmed setpoint temperature (step = 1°C). Both buttons are also used to adjust the day of the week.

33 OPERATION CHANGE/MIN-MAX BUTTON

max min

This button is a multi-purpose button. Depending on the previous manipulations of the user, it can have following functions:

1 select the operation mode of the installation (FAN, DRY, AUTOMATIC, COOLING, HEATING)

2 toggle between minimum temperature and maximum temperature when in limit operation

34 SETPOINT/LIMIT BUTTON

This button toggles between setpoint, limit operation or OFF (programming mode only).

35 FAN SPEED BUTTON

This button toggles between L (Low), H (High), HH (very High), A (Automatic).

36 AIR FLOW DIRECTION ADJUST BUTTON

This button enables to adjust the air flow direction.

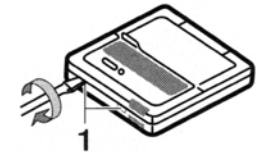
37 AIR FILTER CLEANING TIME ICON RESET BUTTON

This button is used to reset the air filter cleaning time icon.

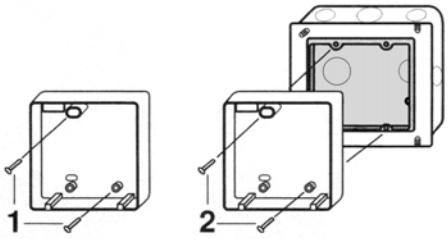
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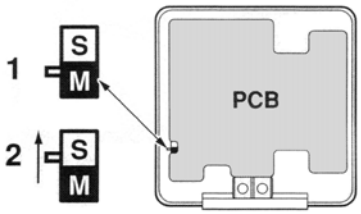
4.9.5 Installation



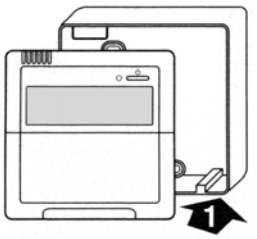
1



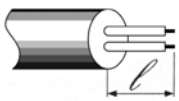
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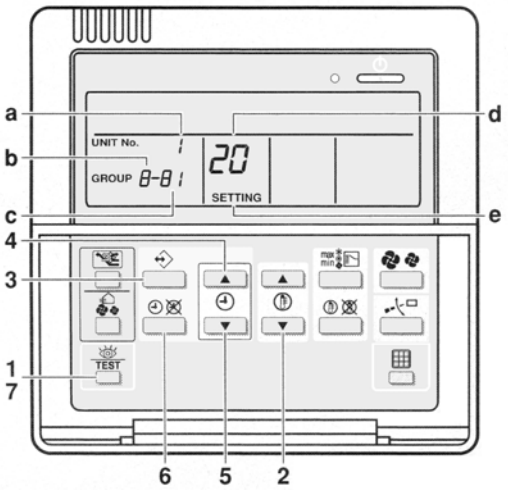
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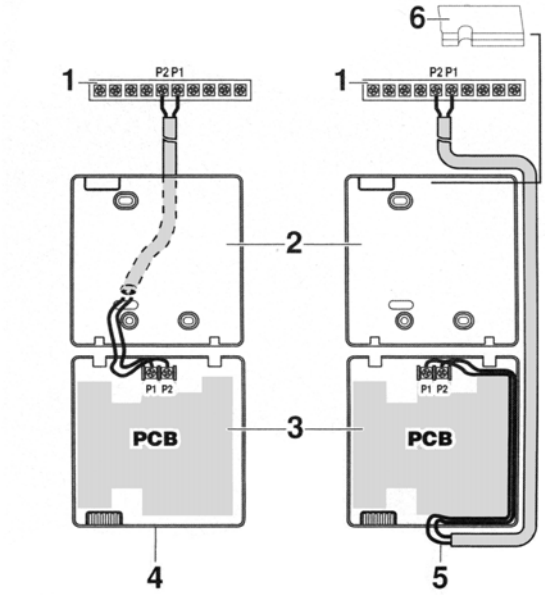
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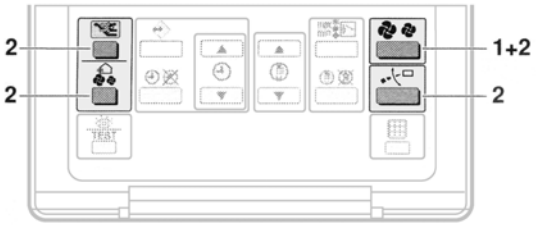
5



7



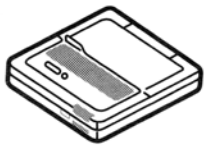
6



8

3P107422-4D

The kit includes the following parts:

Remote controller	Wood screws
	

Wall plugs	Machine screws
	

1. Remove the upper part of remote controller (Refer to figure 1)

Insert a minus screwdriver into the slots (1) in the lower part of the remote controller (2 places), and remove the upper part of the remote controller.

The PC board is mounted in the upper part of the remote controller. Be careful not to damage the board with the minus screwdriver.

2. Fasten the remote controller (Refer to figure 2)

1 for exposed mounting, fasten with the two included wood screws (Ø4x30) and plugs.

2 for flush-mounting, fasten with the two included machine screws (M4x16).

For the field supplied switch box, use optional accessory KJB111A or KJB211A.

NOTE Choose the flattest place possible for the mounting surface. Be careful not to distort the shape of the lower part of the remote controller by overtightening the mounting screws.

3. Wire the indoor unit (Refer to figure 6)

1 indoor unit

2 lower part of the remote controller

3 upper part of the remote controller

4 wired from the rear

5 wired from the top

6 notch the part for the wiring to pass through with nippers, etc.

Connect the terminals on top of the upper part of the remote controller (P1, P2), and the terminals of the indoor unit (P1, P2). (P1 and P2 do not have polarity.)

NOTE When wiring, run the wiring away from the power supply wiring in order to avoid receiving electric noise (external noise).

Wiring specifications

Wiring type	Size
2 wire	0.75–1.25 mm^2

NOTE Peel the shield for the part that has to pass through the inside of the remote controller case (✓). Refer to figure 5.

4. Reattach the upper part of the remote controller

Be careful not to pinch the wiring when attaching.

Refer to figure 4:

First begin fitting from the clips at the bottom.

NOTE
1. The switch box and wiring for connection are not included.
2. Do not directly touch the PC board with your hand.

If controlling one indoor unit or one group of indoor units with two remote controllers

Change the MAIN/SUB changeover switch setting as described below (Refer to figure 3).

1 Main remote controller (factory set)

2 Sub remote controller

Set one remote controller to “main”, and the other to “sub”.

NOTE
1. If controlling with one remote controller, be sure to set it to “main”.
2. Set the remote controller before turning the power supply on.

“88” is displayed for about one minute when the power supply is turned on. During this time the remote controller can not be operated.

3P107422-4D

5. Permission level function

■ If required, you can limit the user action by restricting the number of operable buttons. Refer to the chapter "Field settings".

Level	Operable buttons
1	All
2	• on/off button • schedule timer button • temperature adjust button • operation change/MIN-MAX button • fan speed button • air flow direction adjust button
3	• on/off button • temperature adjust button • fan speed button

■ For switching between level 1 permission and the selected level in service, proceed as follows:

1 Keep the fan speed button " " pressed,

2 and press the 3 other indicated keys simultaneously while keeping the fan speed button " " pressed.

Refer to figure 8.

■ If you want to limit the user action on the remote controller to be defined as "sub", start with only connecting this controller to the unit. Make sure that this controller is set to "main" (factory set) first, change the permission level to the setting you prefer and only then set the remote controller to "sub".
You can now proceed with connecting the remote controller to be defined as "main".

6. Field settings

If optional accessories are mounted on the indoor unit, the indoor unit setting may have to be changed. Refer to the instruction manual for each optional accessory.

Refer to figure 7.

a Unit NO
b First Code NO
c Second Code NO
d Mode NO
e Field set mode

Procedure (Refer to figure 7)

1 When in the normal mode, press the " TEST " button for a minimum of four seconds, and the FIELD SET MODE is entered.

2 Select the desired MODE NO. with the " " button.

3 During group control, when setting by each indoor unit (mode No. 20, 21, 22 and 23 have been selected), push the " " button and select the INDOOR UNIT NO. to be set. (This operation is unnecessary when setting by group.)

4 Push the " " upper button and select FIRST CODE NO.

5 Push the " " lower button and select the SECOND CODE NO.

6 Push the " " button once and the present settings are SET.

7 Push the " TEST " button to return to the NORMAL MODE.

Example

If during group setting and the time to clean the air filter is set to FILTER CONTAMINATION - HEAVY, SET MODE NO. to "10", FIRST CODE NO. to "0", and SECOND CODE NO. to "02".

NOTE

1. Setting is carried out in the group mode, however, if the mode number inside the parentheses is selected, indoor units can also be set individually.
2. The SECOND CODE number is set to "01" when shipped from the factory.
3. Do not make any settings not given in the table.
4. Not displayed if the indoor unit is not equipped with that function.
5. When returning to the normal mode, "88" may be displayed in the LCD in order for the remote controller to initialize itself.
6. It is not possible to change field settings on the remote controller that is set to "sub".

3P107422-4D

Mode No. Note 1	FIRST CODE NO.	Description of setting		SECOND CODE NO. Note 2			
				01	02	03	04
10(20)	0	Filter Contamination - Heavy/Light (Setting for spacing time of display time to clean air filter) (Setting for when filter contamination is heavy, and spacing time of display time to clean air filter is to be halved)	Ultra long life filter	Light: Approx. 10.000 hrs.	Heavy: Approx. 5.000 hrs.	—	—
			Long life filter	Light: Approx. 2.500 hrs.	Heavy: Approx. 1.250 hrs.		
			Standard filter	Light: Approx. 200 hrs.	Heavy: Approx. 100 hrs.		
	1	Long-life filter type (setting of filter sign indication time). (Change setting when ultra-long filter is installed)		Long-life filter	Ultra-long life filter	—	—
	2	Thermostat sensor in remote controller		Use	Not use	—	—
	3	Spacing time of display time to clean air filter count (setting for when the filter sign is not to be displayed)		Display	Do not display	—	—
11(21)	0	Setting number of connected Sky Air simultaneous operation system indoor units (setting for simultaneous operations system)		Pair	Twin	Triple	Double twin
12(22)	1	ON/OFF input from outside (setting for when forced ON/OFF is to be operated from outside).		Forced OFF	ON/OFF operation	—	—
	2	Thermostat differential changeover (setting for when using remote sensor).		1°C	0.5°C	—	—
13(23)	0	High air outlet velocity (for high ceiling applications).		≤2.7 m	>2.7≤3.0 m	>3.0≤3.5 m	—
	1	Selection of air flow direction (setting for when a blocking pad kit has been installed).		4-way flow	3-way flow	2-way flow	—
	3	Selection of air flow function (setting for when using a decoration panel for outlet).		Equipped	Not equipped	—	—
	4	Air flow direction range setting.		Upper	Normal	Lower	—
	6	Setting the external static pressure (setting according to the connected duct resistance) (for FHYK, follow the high ceiling setting)		Normal (Normal)	High static pressure (High ceiling)	Low static pressure —	—
15(25)	3	Drain pump operation with humidifying.		Equipped	Not equipped	—	—
1b	0	Permission level setting		Level 2	Level 3	—	—
	1	Leave home function		Not permitted	Permitted	—	—
	2	Thermostat sensor in remote controller (for limit operation and leave home function only)		Use	Not use	—	—

3P107422-4D

17

4.10 <DAM602B51 / DAM602B52> intelligent Manager III

Even if an air conditioning system possesses an excellent energy efficient profile, this is meaningless unless its operation is appropriately managed. Precise operation management is the key to getting the most out of an energy efficient system. The intelligent Manager II is Daikin's energy-efficient air conditioning management system. It maximizes the performance and characteristics of air conditioning systems and further improves upon existing energy efficiency. What we have prepared for you is a highly sophisticated that only Daikin, the air conditioning specialist, could have made possible.

Functions and System



Monitoring
- Operation / Stopped
- Operation mode, filter sign, Set point, Fan speed, etc
- Abnormality
  Malfunction / Communication Error /etc.
- Air-Conditioning Network Service System (Optional Maintenance Service)

Operation (individual / group)
- Start / Stop
- Setting
  (Operation mode / Fan speed / Remote Ctrl mode / Maintenance mode / Filter sign clear / Fan direction)
- Set Point etc.

Start
Stop

Indication
- Manage group (Cell display)
- Control group (Cell display)
- **Visual Navigation (Graphical display)**
- Table

Measurement
- Accurate operate time
- Number of switching times
- Consumption power
- Room temperature
- Outdoor temperature

Temp. 28.0 °C
Setup 27 °C

Data indication
- Table (Op.time, sw. times)
- **Graph (temperature)**

Printing
- History
- Statistics
- Setting info.
  (Schedule / Interlocking / User Info / Status table, etc)

Automatic Controls
- Schedulel
- Interlocking
  (standard / Emergency stopr)
- **Eco Mode**
- **Power Limit Control**
- **Auto change over**
- **Sliding temperature (External kit required)**
- **Temperature limit**
- Power Failure control

System Setting
- Basic Setup
  (Management Gr. Editing / Control Gr. Editing / User / History, Buzzer / Daylight saving time / Clock)

Remote Access
- **Remote connection**
- **WatchDOG**

Multiple Language
- English
- Italian
- Spanish
- French
- German
- Chinese

other
- Security (30 users Max / Flexible access Authority)
- History(realtime data / saved data)
- Set point limitation
- **Multiple PC (accessible from different PC's)**
- OnLine Help
- Compatibility with Windows 2000

Controlling Other Equipment

Effective control over Daikin central A/C system equipment.

A wide range of centralised control functions are supported for secondary air conditioning equipment compatible with D Ⅲ-net, including operation start/stop, airflow volume, and humidifier operation. With D Ⅲ-net compatible heat source equipment, full control over all functions, such as the energy conservation/power demand, is supported.


Central A/C System Control Screen

Effective control over peripheral equipment, such as pumps.

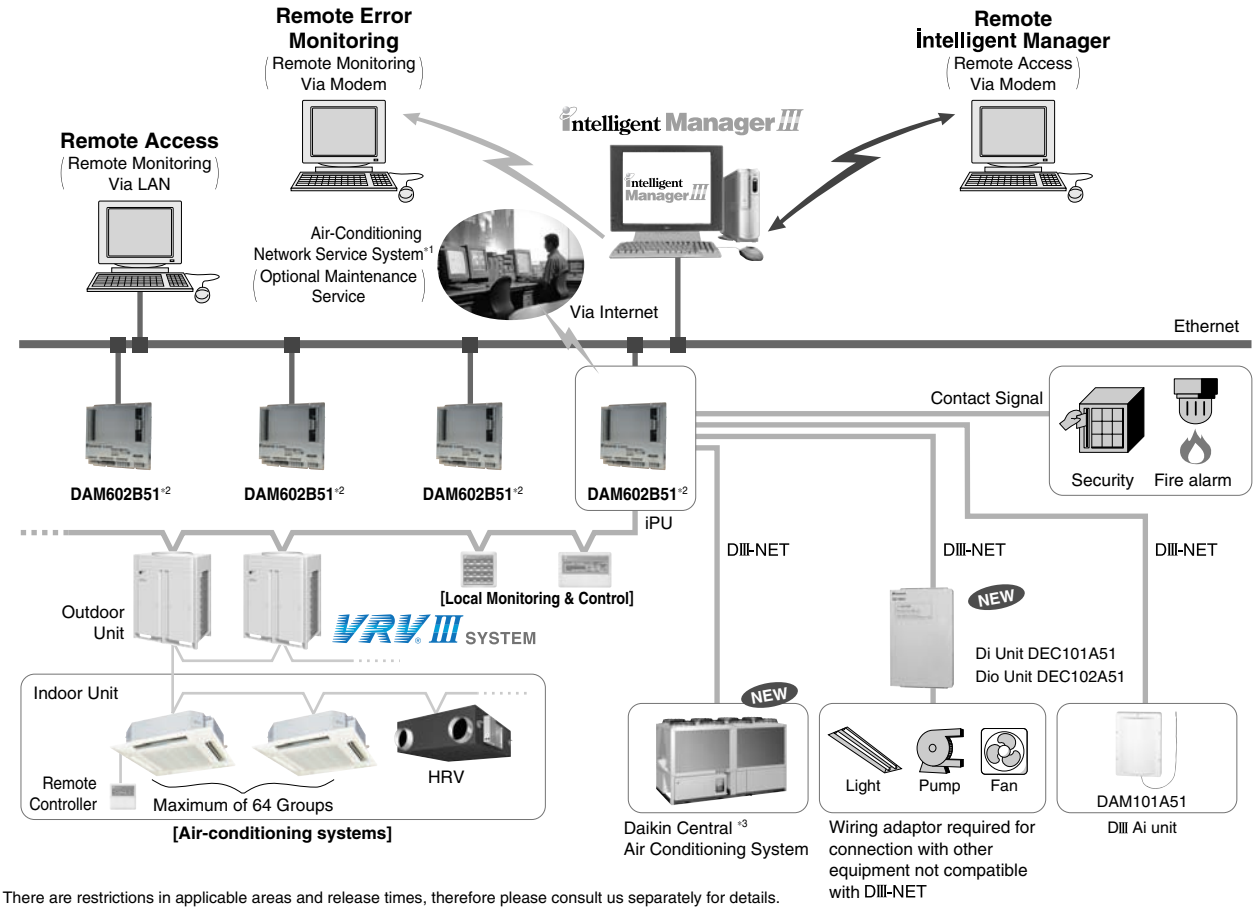
Using the optional Dio unit to make connections, it is possible to extend control to central A/C system equipment not compatible with D Ⅲ-net, as well as peripheral equipment such as water pumps and fans. This allows precise operation control using a single system.


Dio Unit


Heat Source System Control Screen

4.10.1 System Image

■ **An Overview of the intelligent Manager III System**



*1 There are restrictions in applicable areas and release times, therefore please consult us separately for details.
*2 Model no varies upon the system size.
*3 Interfacing requirements vary depending on model, and some systems may not be suitable. Please contact your distributor for details.

4.10.2 Series and Components

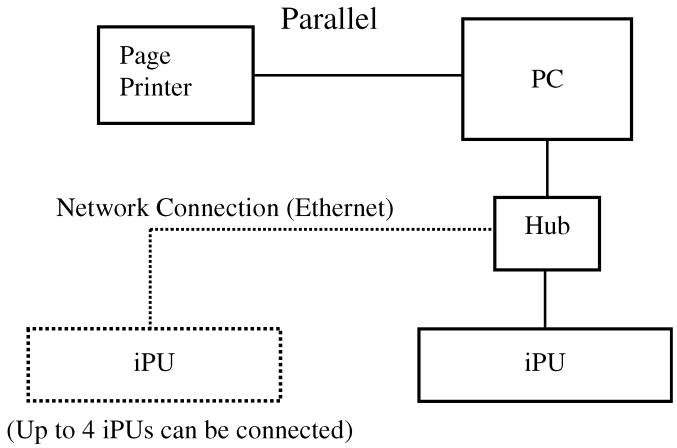
■ **The intelligent Manager III Series and its Components**

Products name ∗1	IM-128	IM-256	IM-512	IM-768	IM-1024
Max number indoor units	128	256	512	768	1024
Max number outdoor units	20	40	80	120	160
PC, UPS, etc.	Local Procurement				
Hardware model name ∗2	DAM602B52	DAM602B51×1	DAM602B51×2	DAM602B51×3	DAM602B51×4
PPD (Power Proportional Distribution) ∗3	Yes ∗2				

∗1 Products name is recognized as an order number. This includes hardware, software and field engineering work as a package.
∗2 kWh meters to be locally supplied.
∗3 With the PPD system, data is transferred from the indoor units and compared with reference data on the standard power consumption of air conditioning equipment under normal conditions.
The results are used to estimate the power consumption of each indoor unit. Note, however, that this measurement method is exclusive to Daikin and has no legal basis.

17

4.10.3 Wiring Image



<Use of Printers>

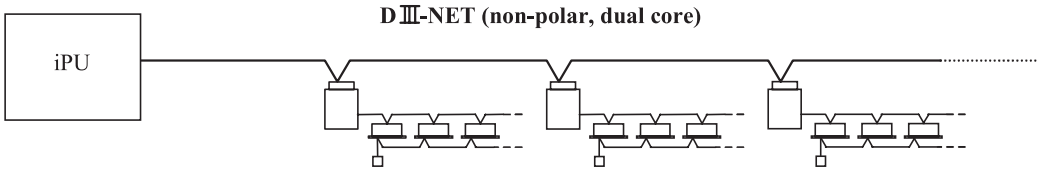
1. Standard Setting: With only the page printer: Parallel port connection
   - Printing of daily, monthly, annual reports and cost calculations: Automatically prints at the set time
   - Display of errors and changes of states etc.: Printer at error or at determined build up of data, or freely.

2. 2 Units of Page Printer and Line Printer (Optional)
   * Page printer: Network connection
   - Daily, monthly, annual reports: Automatically prints at the set time
   - Cost calculation

Connecting to iPU

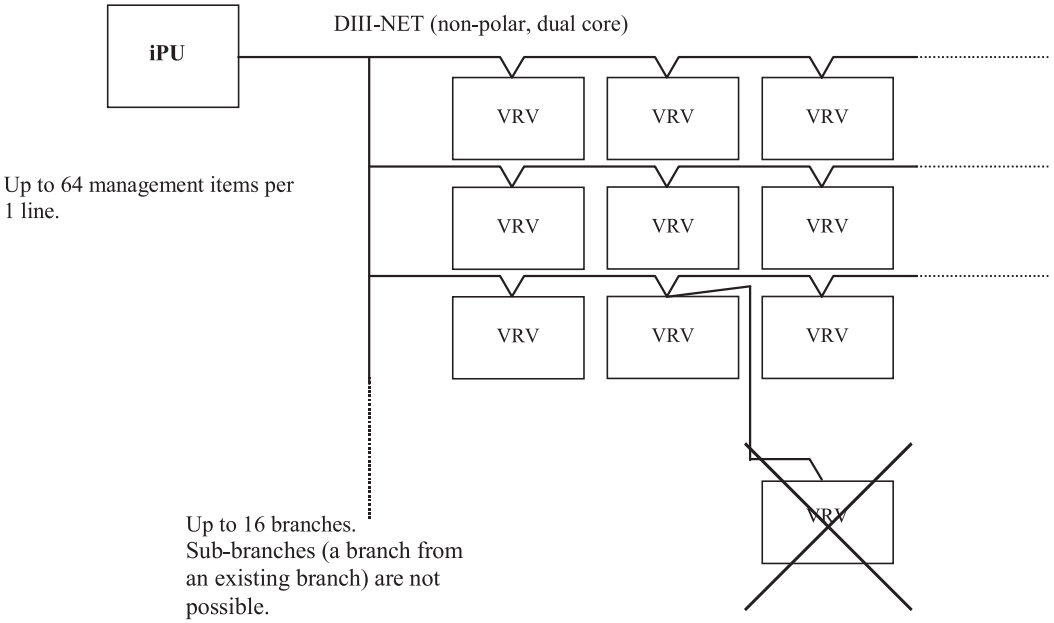
Wiring varies according to the equipment to be connected, as shown below.

* DIII-NET Compatible Air Conditioners

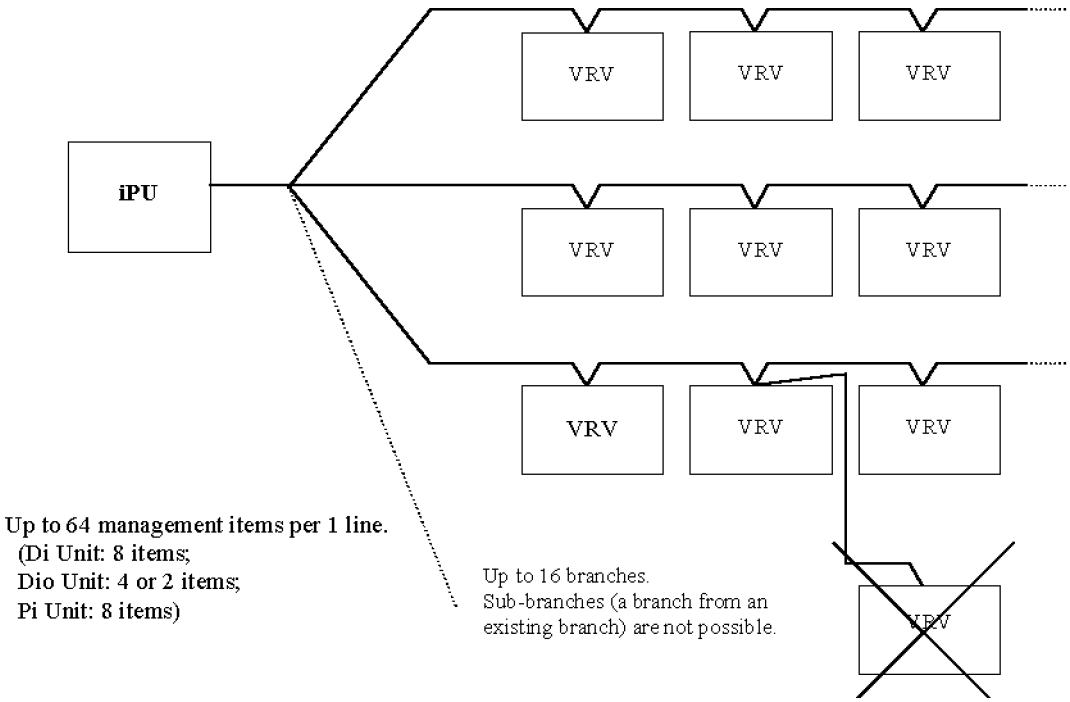


Per 1 DⅢ-NET line:
Up to 10 outdoor units
Up to 64 indoor units

(1) Bus Method

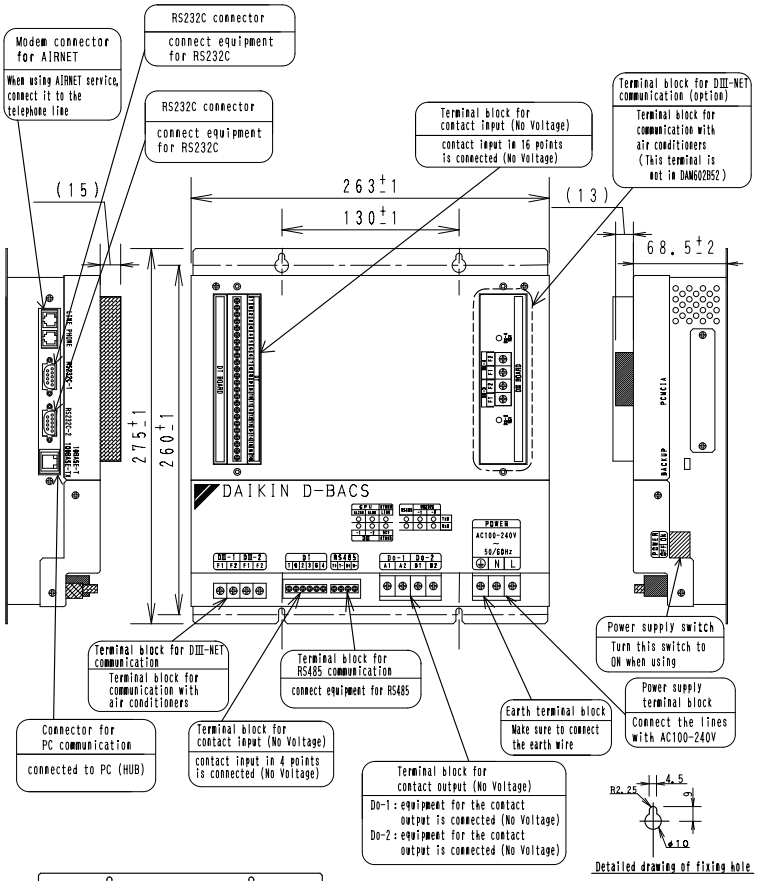


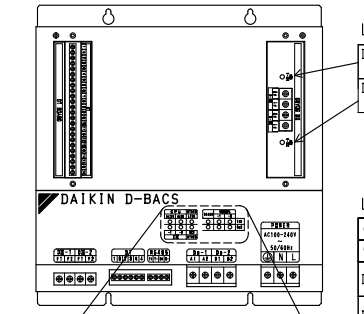
(2) Star Method



17

4.10.4 Wiring Diagram

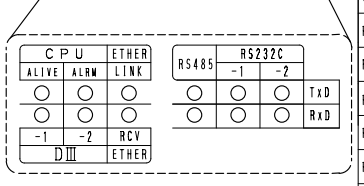




LED display

DIII−4 RCV	It flashes when it receives/transmits data from/to the equipment connected with DIII-4 such as air conditioners
DIII−3 RCV	It flashes when it receives/transmits data from/to the equipment connected with DIII-3 such as air conditioners

CAUTION
There are neither DIII-NET3, 4 in DAM602B52

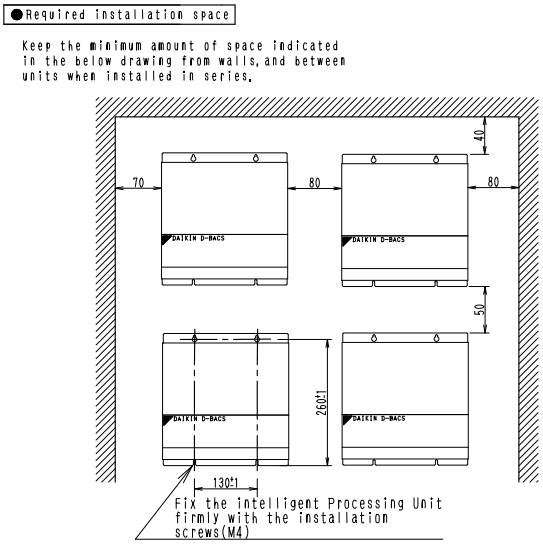


LED display

CPU ALIVE	It flashes when the unit is normal operation.
CPU ALRM	It flashes when the unit is abnormal operation.
DIII−1	It flashes when it receives/transmits data from/to the equipment connected with DIII-1 such as air conditioners
DIII−2	It flashes when it receives/transmits data from/to the equipment connected with DIII-2 such as air conditioners
Ether RCV	It flashes when it receives data to PC
Ether Link	It lights when the 10BASE-T cable or 100BASE-TX cable is connected
RS485(TxD)	It flashes when it transmits data to Corresponding equipment
RS485(RxD)	It flashes when it receives data to Corresponding equipment
RS232C-1(TxD)	It flashes when it transmits data to Corresponding equipment
RS232C-1(RxD)	It flashes when it receives data to Corresponding equipment
RS232C-2(TxD)	It flashes when it transmits data to Corresponding equipment
RS232C-2(RxD)	It flashes when it receives data to Corresponding equipment

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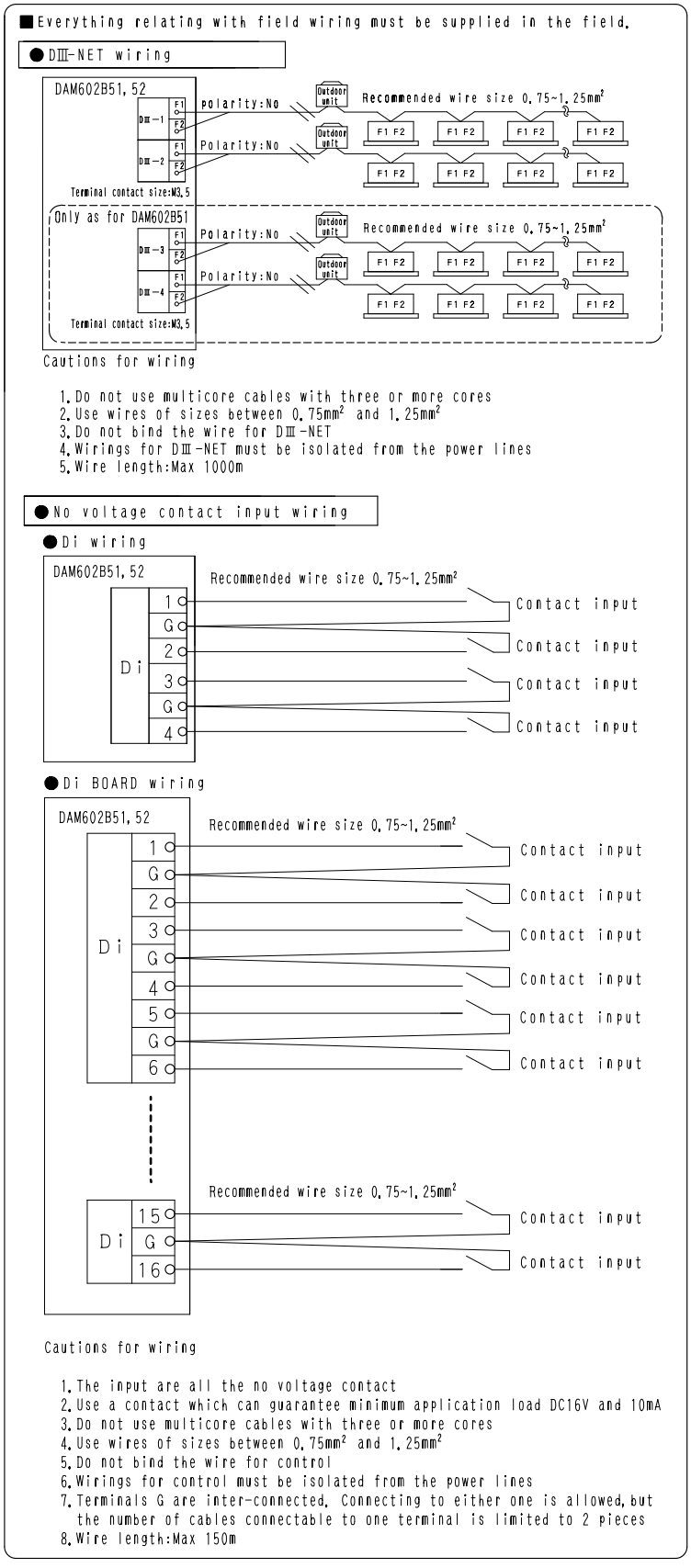
Required Installation Space



1P177851C

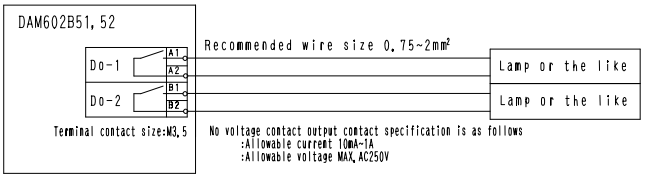
4.10.5 Electric Wiring Connection

Don't fail to turn OFF the indoor unit power switch before installing Intelligent Processing Unit.
Failure to observe this instruction could result in electric shock.



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● No voltage contact output wiring

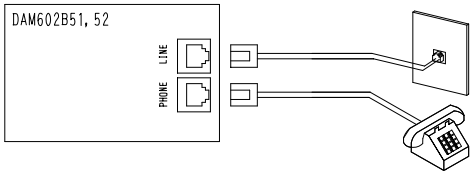


Cautions for wiring

1. Do not use multicore cables with three or more cores
2. Use wires of sizes between 0.75mm² and 2mm²
3. Do not bind the wire for control
4. Wirings for control must be isolated from the power lines
5. Wire length:Max 150m

● Connection to public telephone line

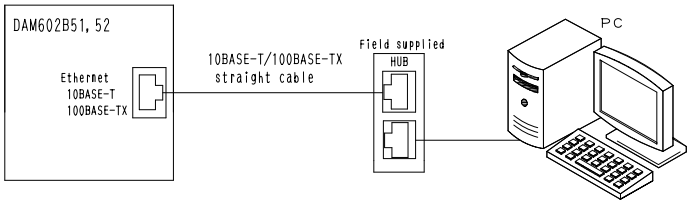
Connect to the telephone line in order to monitor the air-conditioner via AIRNET service.
Connect to modular cable from the public telephone line to the upper connector with a stamping of LINE, and connect the modular cable of the telephone to the lower connector with a stamping of PHONE, as shown in the sketch below.



Cautions for wiring

1. Don't clamp these cables together with high voltage cables. Failure to observe this instruction would cause control error.
2. When using AIRNET service, it is necessary to use a separate modem specified by us and enter into Maintenance Agreement with charge.

● Ethernet communication wiring



Cautions for wiring

Don't clamp these cables together with high voltage cables. Failure to observe this instruction would cause control error.

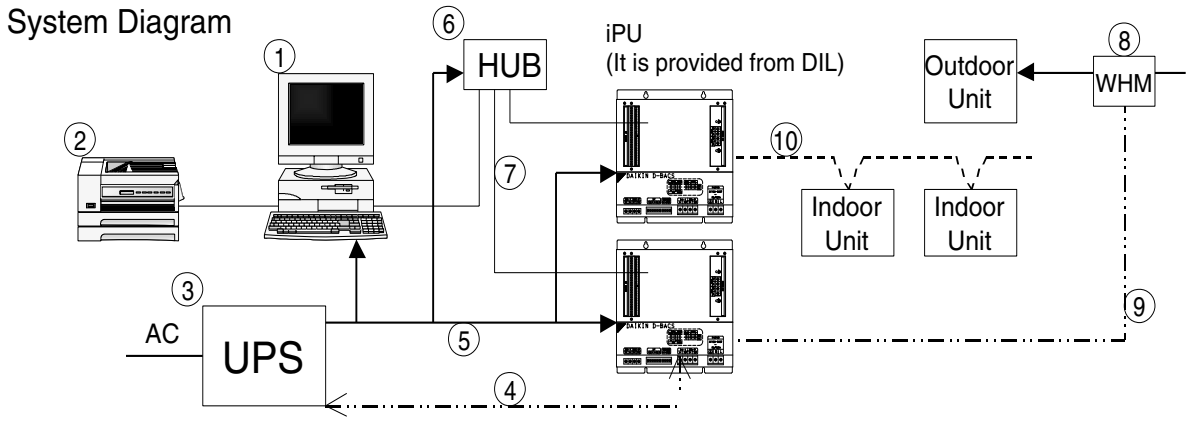
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17

4.10.6 System Architecture

■ **Requirement Spec and the Recommendation of Other Equipment**

System Diagram



	Requirement Specifications	Recommendations	Remarks
PC ① ②	[Hardware] CPU : Pentium 300MHz minimum, 500MHz or above recommended Memory : 64MB or above HDD : 4GB minimum, 8GB or above Keybord/Mouse Network : 10Base/T SVGA (800×600) Monitor (15',17') Sound & Speaker [Software] Windows NT 4.0 (SP4) Windows 2000 Windows XP [Other equip.] LBP (not indispensable.) - It must be supported by WindowsNT. - Require A4 size paper	We recommend makers such as IBM, Compaq or Dell, etc. We recommend makers such as HP, Canon, etc.	In the case of an alternative maker, correct operation should be checked before shipment.
UPS ③ ④ ⑤	Capacity : 200-250W / 20min Voltage : as required on the field Control Signals - Power failure signal (from UPS) - UPS shutdown signal (to UPS) AC power lines	APC SU700, SU1000 Series + Relay I/O module(AP9610)	
Network Equip. ⑥ ⑦	Multi-port HUB (4 or more ports) 10Base/T cables (category 5) A required distance and a number	We recommend makers such as 3com, etc. The cable for networks is required.	Hub should be used even when one iPU is connected to PC.
WHM ⑧ ⑨	1pulse / 1kWh output is required. WHM - iPU connection cable	As specified in the D-BACS system design guide. • 1 pulse to 1kW or 10kW pulse width must be within 40-400m/sec. • Output relay must be mercury or electronic type only. • No voltage output.	Required for power-proportional-division.
other ⑩	D3network cables	As specified in the D-BACS system design guide.	

4.10.7 Functions

■ **Local Functions**

Item	Description
Monitoring	Operation status monitoring for a maximum of 1,024 indoor units(160 outdoor units), when 4 iPUs are connected;∗ Air Conditioning Network Service System: Air conditioner failure prediction (optional); Continuous operation time monitoring (per management point); Power failure monitoring
Control, Operation, and Settings	Login setting; Individual control; group switching/ setting of control group (200 groups); Schedule control (200 programs); Fire emergency stop control (32 programs); Power failure/ release control (selected from 5 power restoration modes); Air conditioner centralized control
Display	Management point name/icon/list display; Control group list display; Screen scroll function; Operation time display; Integrated switching number display; History display (malfunctions, alarms, control)
Measurements	Operation time integration; Switching number integration; Meter reading (through Pi port on iPU); Power proportional reading
Management	Operational history management; Generation of daily, monthly and yearly reports; VRV power proportional distribution
Data Storage/ Report	Print output; Data storage
Warning	Emergency signal input

∗If exceeding the stated number of outdoor units, DIII-NET Expander Adapter <DTA109A51> allows easy system connection as long as restrictions are observed.

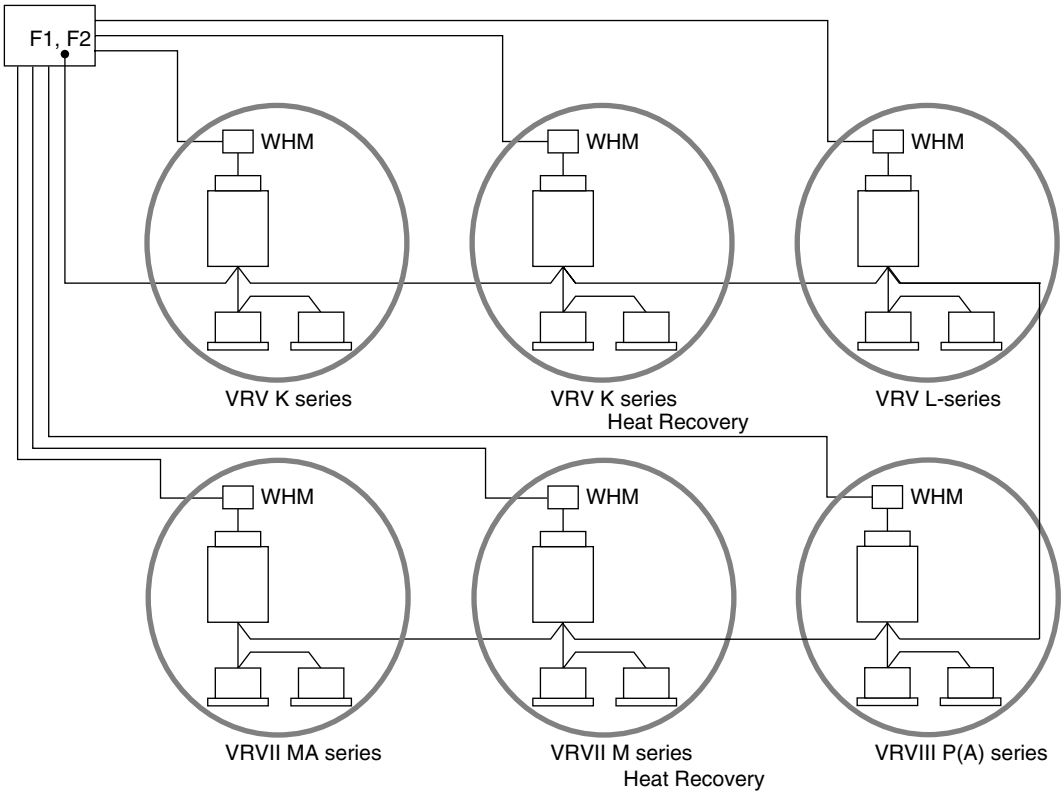
4.10.8 Power Proportional Distribution

■ **Points to be noted for Power Proportional Distribution (PPD)**

When implementing PPD using i-touch-Controller and i-Manager, or in case of any mixture of heat recovery or energy saving type, please install a watt hour meter (WHM) in a separate system.

In addition, please calculate the proportional distribution for each VRV-series by setting power group during a test run.

i-Manager, i-touch-Controller (Max 3 WHM)



■ **Subject Model**

DCS601C51	intelligent touch Controller
DCS002C51	P.P.D. Card
DAM602B51, 52	intelligent Manager
DAM002A51	P.P.D Software for intelligent Manager

■ **Reason**

Such equipments as i-touch-Controller implementing PPD cannot distinguish heat recovery type from energy saving type to which they are connected. Therefore, if the capacity of each indoor unit is the same, the result of proportional distribution becomes the same as that of other VRV.

(No effect of energy saving is reflected on the calculation result.)

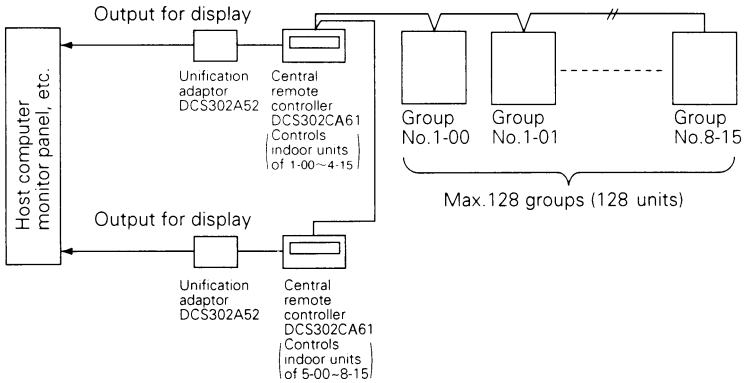
5. Adaptor

5.1 <DCS302A52> Unification Adaptor for Computerized Control

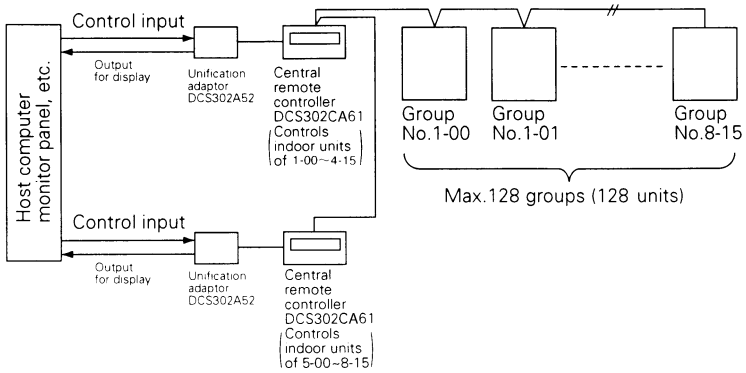
5.1.1 Function

When connected to the central remote controller, this kit enables unified display (operation/malfunction) and unified control (operation/stop).

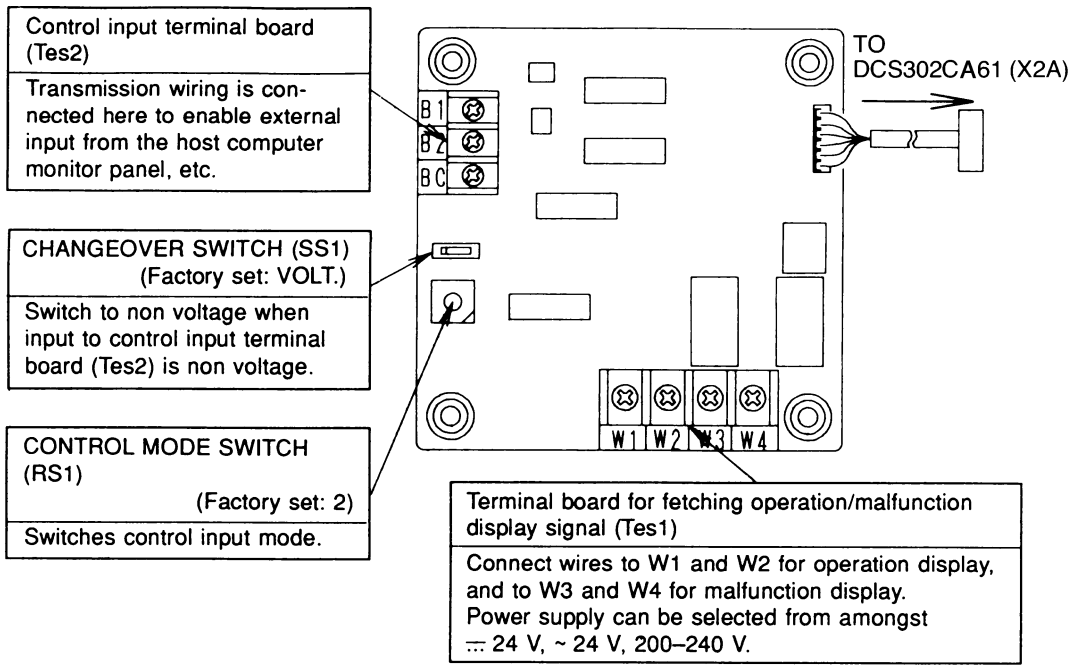
1. Unified Display



2. Unified Control



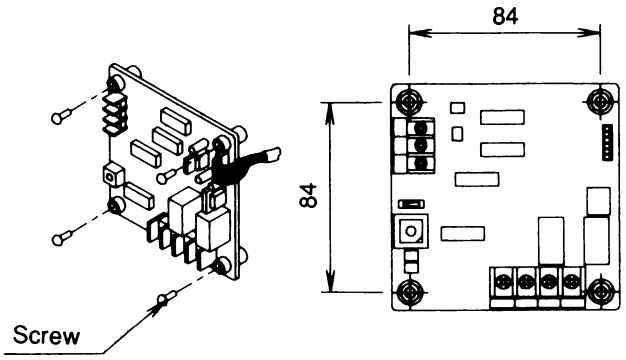
5.1.2 Names of Parts and Function



C : 2PA53489

5.1.3 Installation

- Securely install the adaptor inside the electric panel box (field supplied) with the 4 attached screws.
- Install the adaptor in a place within 5 m from the central remote controller to enable cable connection.



Note

1. Do not damage the PC board with your screwdriver, etc.
2. Install the adaptor inside an electric panel box to protect from electromagnetic waves and dust.

5.1.4 Electric Wiring Work and Initial Setting

First, wire between the indoor and outdoor units, and between each unit and the power supply source. Then, wire between the indoor unit and remote controller. Finally, check operation is normal.

For details, refer to the installation manuals for the indoor and outdoor units.

Next, wire between the indoor unit and the central remote controller. Then, wire the central remote controller to the power supply source and make the necessary settings. Finally, check operation is normal.

For details, refer to the installation manuals for the central remote controller.

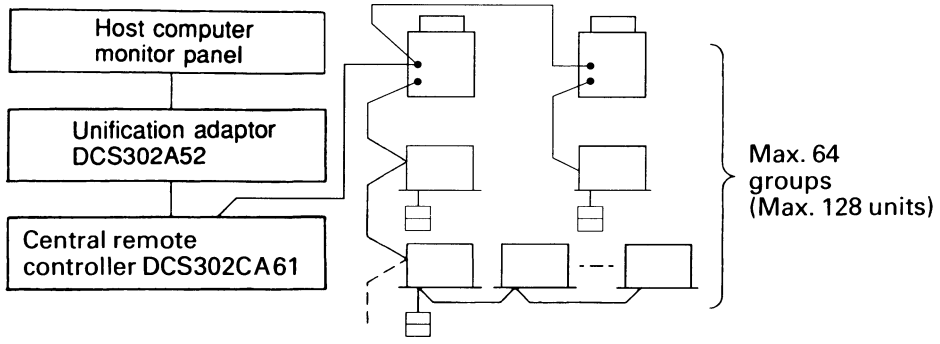
Wire between the unification adaptor for computerized control and the central remote controller.

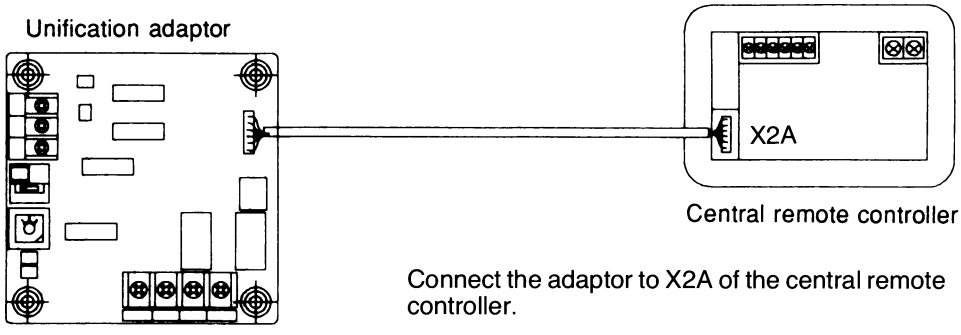
Refer to WIRING TO THE CENTRAL REMOTE CONTORLLER

Set the CHANGE OVER SWITCH and CONTROL MODE SWITCH. And, wire to the host computer monitor panel or other external input device.

Refer to WIRING TO EXTERNAL INPUT DEVICES

<Wiring to The Central Remote Controller>





Connect the adaptor to X2A of the central remote controller.

C : 2PA53489

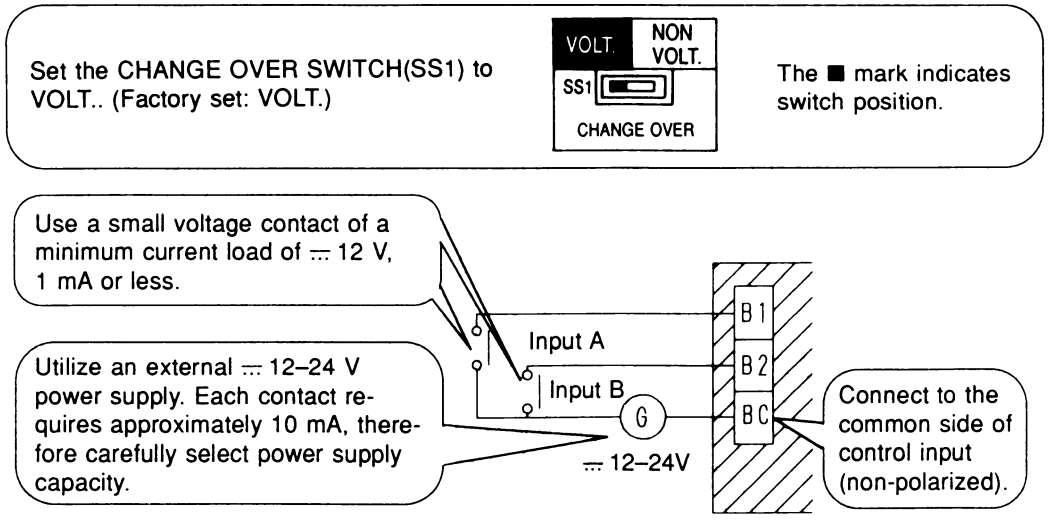
<Wiring to External Input Devices>

(Wire specifications)
0.75-1.25 mm^2 gauge sheathed vinyl cord or cable (2-wire)
Max. length: 150 m

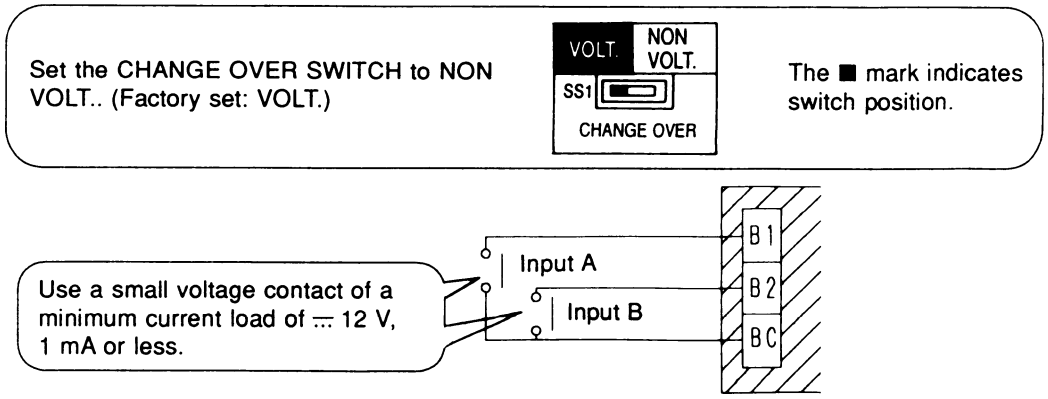
1. Control Input (Unified Operation/Stop)

Wire as explained here following, depending on whether input carries a voltage (VOLT.) or not (NON VOLT.).

(1) Input with Voltage



(2) Input with Non Voltage

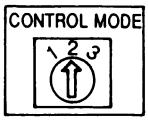


2PA53489

17

2. Control Mode Switch (RS1) Setting

Control mode can be selected from input A and B at this switch on the PC board adaptor.
(Factory set: 2)



(1) For Normal Operation by Input A

Position	Input A
2	OFF → ON: Unified Operation
	ON → OFF: Unified Stop

■ Input B can be disregarded.

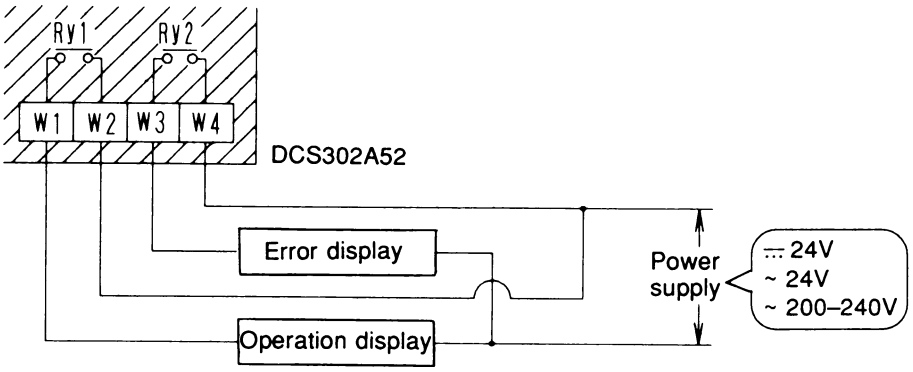
(2) For Instantaneous Operation by Input A and B
(Use an instantaneous input of 400 milli-sec. or more at ON time.)

Position	Input A	Input B
3	On: Unified Operation	ON: Unified Stop

(3) Do not set the switch to position 1. This switch can be set at any time.

3. Fetching the Display Signal

Terminals W1 - W4 are non voltage contacts used in normal operation to output operation display (W1 and W2) and malfunction display (W3 and W4) signals.
(The allowable current per contact is 10 mA - 3A.)



Note:
When using a 200-240 V power supply, keep power supply wiring away from wiring of input side.

Output conditions are indicated as below.

When Ry1 and Ry2 are OFF	When only Ry1 is ON	When only Ry2 is ON
All indoor units are stopped.	No error has occurred with the indoor units, and at least 1 unit is operating.	At least 1 unit has stopped operating due to malfunction, or a communications error has occurred between the central remote controller and the indoor unit.

2PA53489

5.2 <KRP2A61 / KRP2A62 / KRP2A53> Wiring Adaptor for Electrical Appendices (1)

5.2.1 System Configuration

The KRP2A61·62·51·52·53 enables operation by remote control (ON/OFF control, temperature setting, operation display, error display). With it, the following system can be built. Note however that the adaptor cannot be used with other optional controllers for centralized control.

1. Zone Control
   (Unified control of a max. 64 groups of a max. 16 indoor units each. But, the max. of indoor units is 128.)

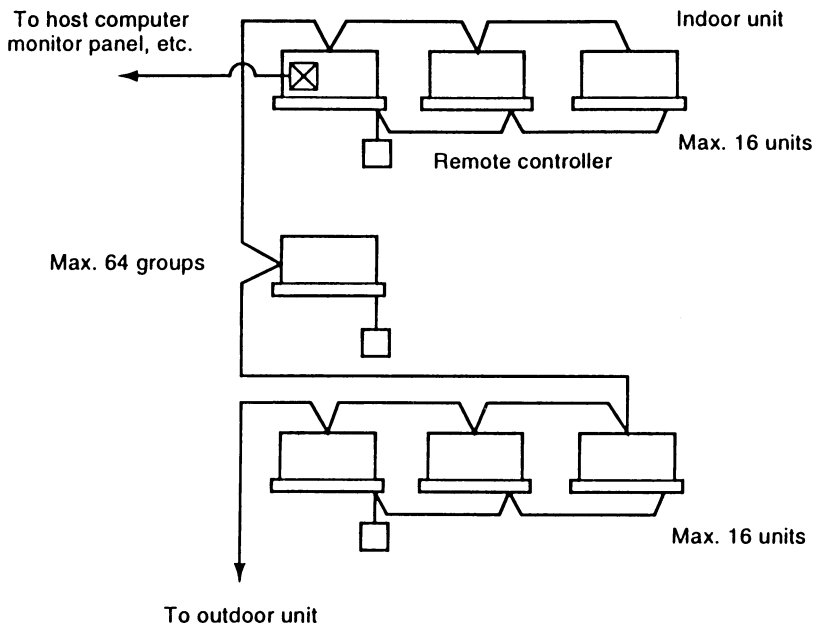
This system requires the following parts.

- Wiring Adaptor for Electrical Appendices (1)
  ... KRP2A61 (62) or KRP2A51 (52) (53)
- Remote controller switches (For control)

...BRC1C62
BRC2A51
BRC3A61
} Per group

(Ex.) Zone control for 8 FXYC63KVE units (control groups of 4, 3 and 1)

KRP2A51×1 kit
BRC1A51×3 kits
} 1 set required for each group.



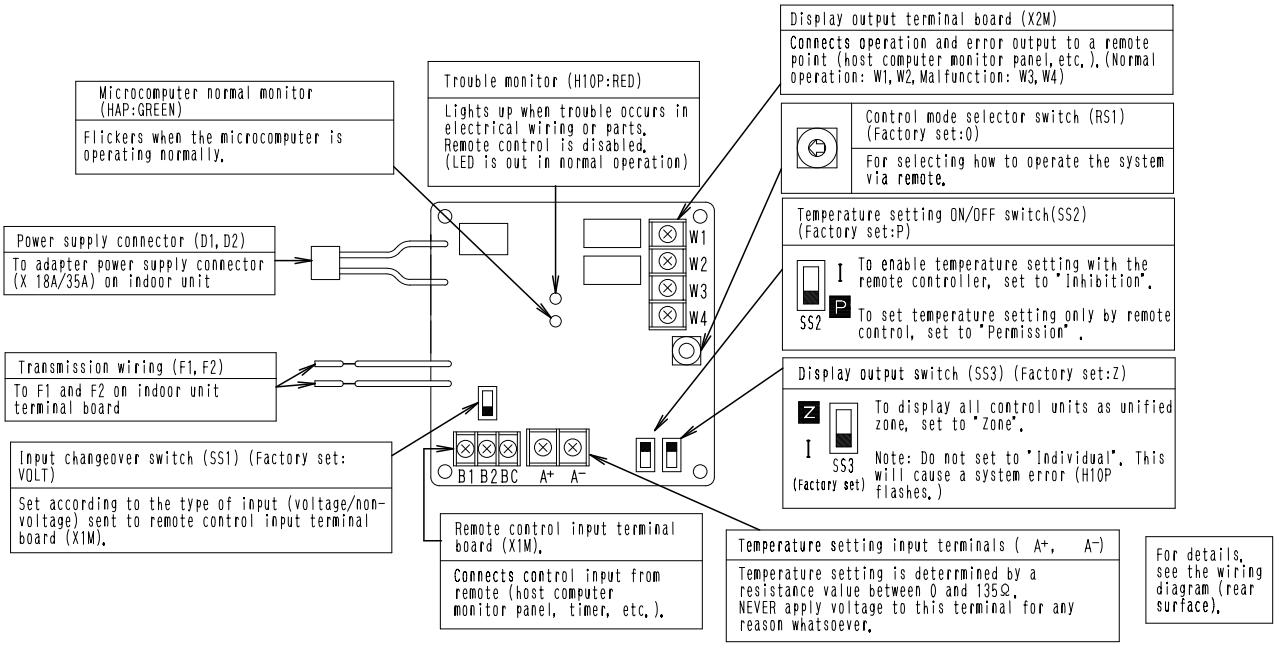
Note:

1. Individual indoor units connected to the centralized line cannot be displayed individually.
2. For wiring adaptor for electrical appendices (2) <**KRP4AA51, 52, 53, KRP4A54**>, refer to page 940.

C : 1PA63641J

17

5.2.2 Names of Parts and Functions

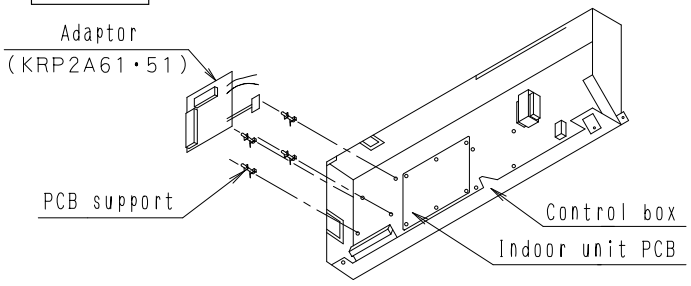


1PA63641J

5.2.3 Installation

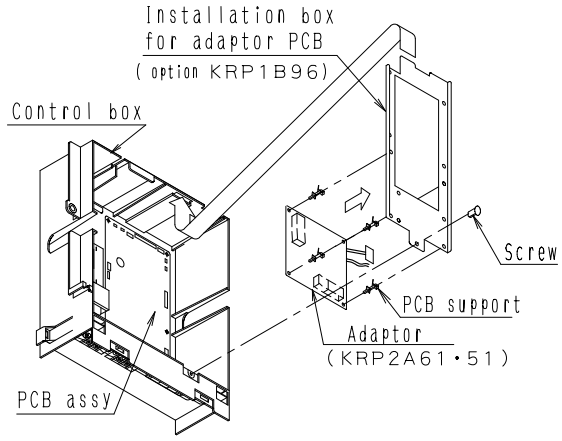
《 Ceiling-mounted cassette type 》

FXYK (Corner model)
FXK(Q)



《 Ceiling mounted cassette type 》

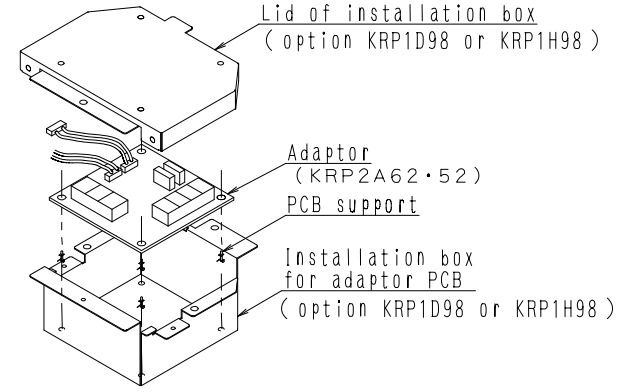
FXYC (Double-flow model)
FXC(Q)



NOTE : Installation box for adaptor PCB is required to install the adaptor.

《 Ceilling-mounted cassette type 》

FXF(Q)
(Multiflow model)

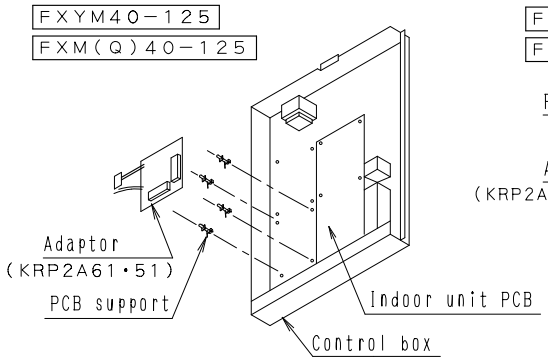


NOTE) Installation box for adaptor PCB is required to install the adaptor.

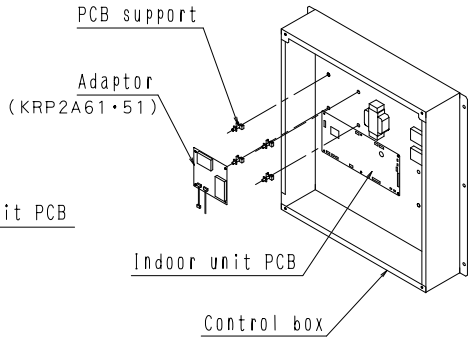
C : 1PA63641J

《 Ceilling - mounted Duct type 》

FXYM40−125
FXM(Q)40−125

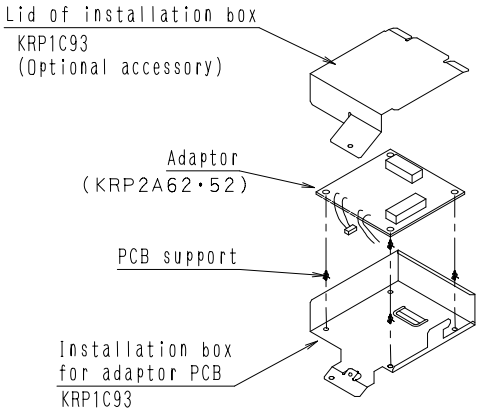


FXYM200・250KJ
FXM(Q)200・250



《 Ceilling Suspended type 》

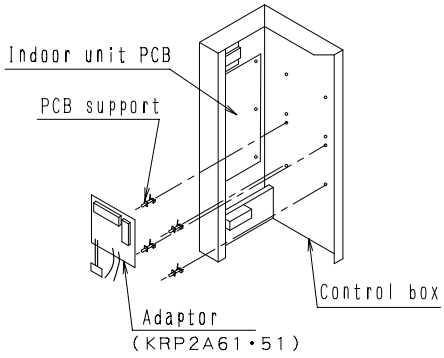
FXYH
FXH(Q)



NOTE :Installation box for adaptor PCB is required to install the adaptor.

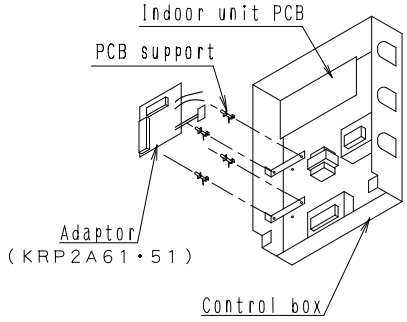
《 Floor-standing type 》

FXYL(M)
FXL(Q)
FXN(Q)



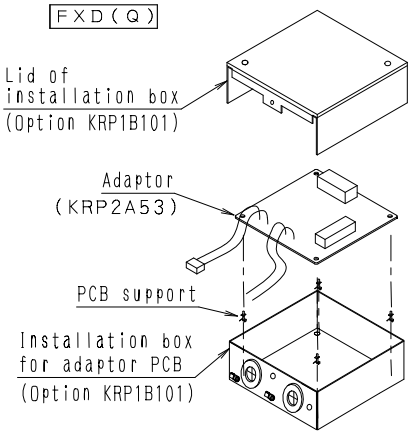
《 Ceiling mounted Built-in type 》

FXYS
FXS(Q)



《 Ceilling-mounted duct type 》

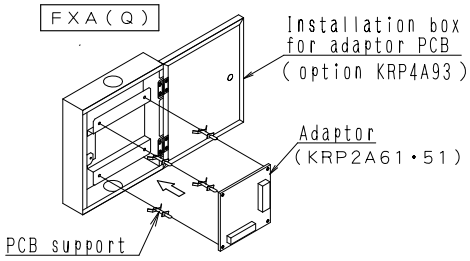
FXD(Q)



NOTE :Installation box for adaptor PCB is required to install the adaptor.

《 Wall mounted type 》

FXA(Q)



C : 1PA63641J

17

5.2.4 Electric Wiring Work

1. First, wire between the indoor and outdoor units, then to the separate power sources, and between the indoor units and the remote controllers. Then, check wiring is correct. (If wanting group control by remote controller, check transmission wiring.) For details, see the installation manual of the indoor and outdoor units.

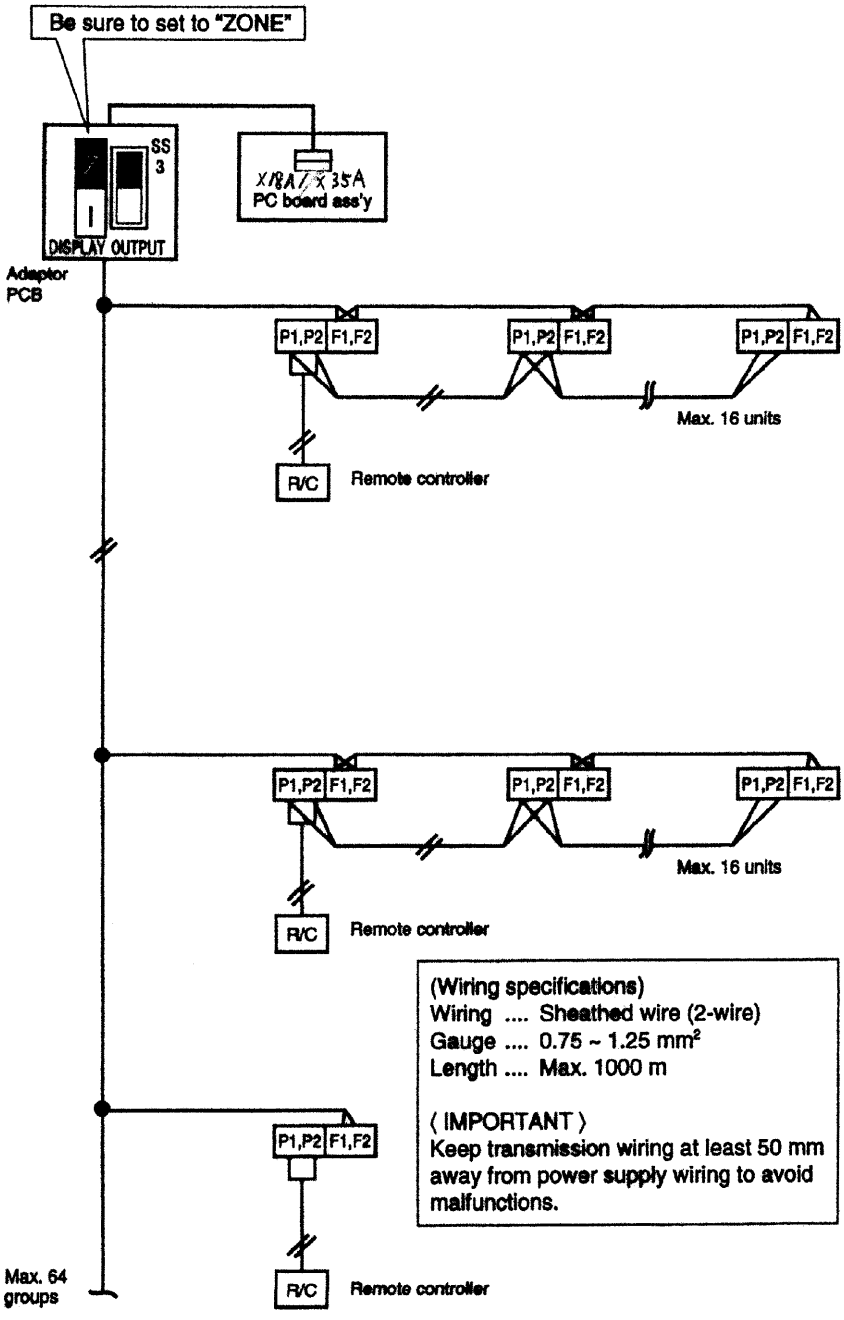
2. Next, wire between the wiring adaptor for electrical appendices (1) and the indoor units. For details, see **Wiring to indoor units**.

3. Finally, wire between external units such as the host computer monitor panel, and make the necessary settings. For details, see **Wiring to external units (host computer monitor panel)**.

Note:
It is not necessary to set address No. for centralized control.
(Setting is automatic.)

Wiring to Indoor Units

1. For Zone Control



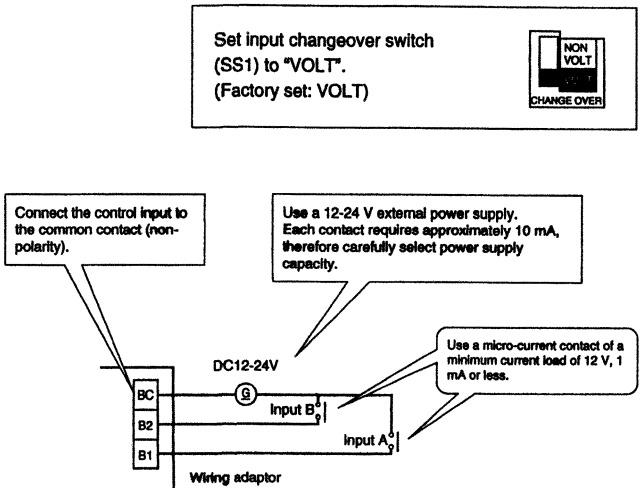
1PA63642C

5.2.5 Wiring to External Units (Host Computer Monitor Panel)

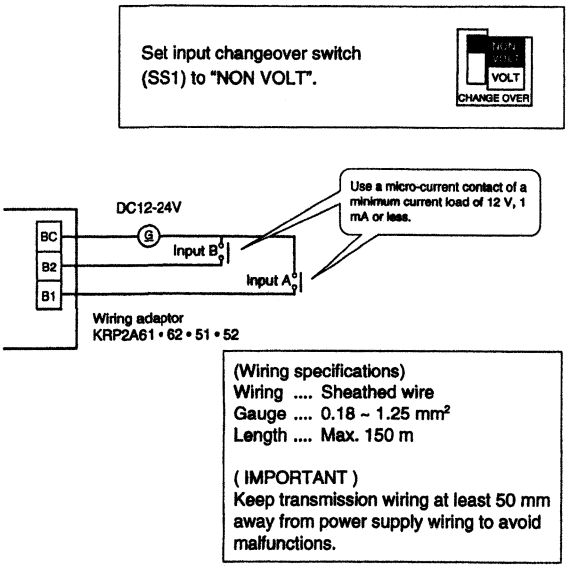
1. Remote Control Input (Operation Control)

Wire as described below. Wiring differs depending on whether using a voltage or non-voltage input.

■ For voltage input

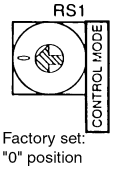


■ For non-voltage input



2. Setting Control Mode Selector Switch (RS1)

Using control mode selector switch (RS1), select the control mode as described below.



Factory set:
"0" position

(1) When operating with only individual display function

Position	Function
0	Individual Display (Input Ignored)

(2) When operating with constant input from A

Position	Function	Contents when input A is ON	Contents when input A is OFF
1	Remote controller rejection	Operation (remote controller is normally rejected)	Stop + remote controller rejection
2	Central priority	Operation + remote controller accepted	
3	Stop by remote controller acceptable	Operation + stop by remote controller acceptable (No operation by the remote controller)	
4	Remote controller acceptance/ rejection	Remote controller acceptance only (No operation by the remote location)	

Note:

■ Input B is for forced-OFF. When ON, stop + remote controller is rejected, and input A is ignored. When OFF, even if A is ON, the contents of when input A is ON, are not achieved. Input A must therefore be re-input.

C : 1PA63642C

17

(3) When operating with momentary input from A
(Use a momentary input of ON time 200 milli-sec. or longer.)

Position	Function	Contents of Input A	Function of Input B
5	Remote Controller Rejected	Stop for ON while operating, Operate for ON while stopping	Input B will be forced stop function (When ON, stop + remote controller is rejected, input A is ignored.)
6	Last Command Priority	Stop for ON while operating, Operate for ON while stopping (Remote controller is normally accepted.)	

■ For demand control from input B

Position	Function when input A is ON	Function when input B is ON
C	Remote controller rejected (Same as position"5")	Forced thermostat OFF command
D		Forced temperature shift command
E	Last command priority (Same as position "6")	Forced thermostat OFF command
F		Forced temperature shift command

■ Forced thermostat OFF command
Forces indoor unit to operate the fan only.
■ Forced temperature shift command
The indoor unit operates at 2°C higher (cooling) or 2°C lower (heating) than the set temperature.

Note:
■ In zone control, operation is displayed as long as one indoor unit is running. When in the last command priority mode, some units are not operating while ON.
■ In such case, even if input A is ON, the unit and all other units in the same zone will stop.

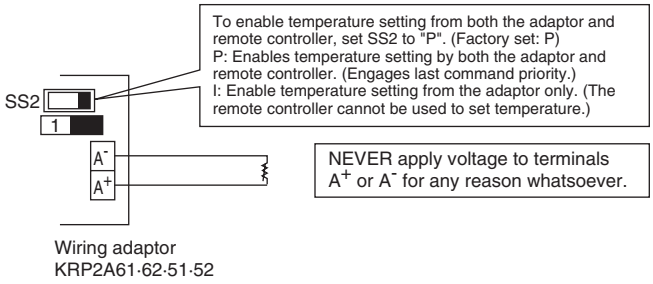
(4) When operating with dual momentary inputs from A and B (Use a momentary input of 200 milli-sec. or longer.)

Position	Function	Contents when Input A is ON	Contents when Input A is OFF
7	Remote Controller Rejection	Operation (remote controller is normally rejected)	Stop + remote controller rejection
8	Central Priority	Operation + remote controller accepted	
9	Stop by Remote Controller Acceptable	Operation + stop by remote controller acceptable (No operation by the remote controller)	
A	Remote Controller Acceptance/Rejection	Remote controller acceptance only (No operation by the remote location)	
B	Last Command Priority	Operation (remote controller is normally accepted)	Stop (remote controller normally accepted)

Note:
■ Doing constant input A with position 7-A, it will be forced OFF function (input A is ignored).
■ Constant input cannot use for input B with position B.

1PA63642C

3. Temperature Setting Input



Temperature setting corresponds to resistance values in the range of 0 to 135Ω. Their relationship is as shown below.

Temperature Setting (°C)	16	17	18	19	20	21	22	23	24
Resistance (Ω)	0.0~3.4	5.0~11.6	13.8~20.0	22.4~28.4	31.0~36.4	39.4~44.8	48.2~52.8	56.6~61.2	65.2~69.4

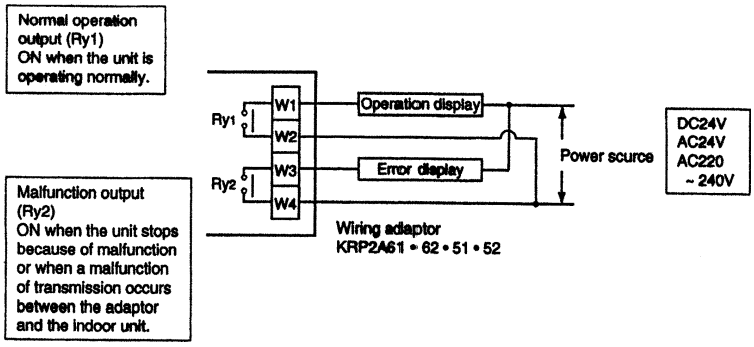
Temperature Setting (°C)	25	26	27	28	29	30	31	32
Resistance (Ω)	73.8~77.8	82.4~85.8	91.0~94.0	99.4~102.2	108.6~110.4	117.2~119.2	125.8~127.4	134.2~140.0

Note:
Wiring resistance included in above figures.

(Wiring specifications)
Wiring ... Sheathed wire
Gauge ... 1.25~2.00 mm²
Length ... Max. 70 m
(IMPORTANT)
Keep transmission wiring at least 50 mm away from power supply wiring to avoid malfunctions.

4. Canceling Display Signals

Operation output terminals (W1 and W2) and malfunction output terminals (W3 and W4) are non-voltage constant contact output.
(Allowed electric current per contact is between 10 mA and 3 A.)



Note:
If using a 220~240V power supply, keep transmission wiring at least 50 mm away from incoming power supply wiring.

Output / System	Both Ry1 and Ry2 OFF	Ry1 only ON	Ry2 only ON
Zone control	All zones OFF	At least one unit running normally, no malfunction	Even 1 unit stopped due to malfunction or malfunction of transmission between adaptor and indoor unit

Display output is described by system in the below table.

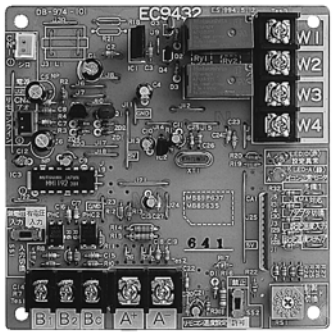
Note:
If rewiring F1 and F2 after running the system, turn ON power for 5 minutes, then turn it OFF and ON again. Changes to wiring can sometimes disable control from the wiring adaptor.

C : 1PA63642C

5.3 <KRP4AA51 / KRP4AA52 / KRP4AA53 / KRP4A54> Wiring Adaptor for Electrical Appendices (2)

5.3.1 Outline / Features

This adaptor is an interface required to connect the indoor unit with the central monitoring panel. And by installing this adaptor in the indoor unit, it enables you to have various remote controls (ON/OFF, temperature setting, operation status display and malfunction display). One adaptor can control simultaneously the group of units (Max. 16 units) connected to the remote control wiring line (P1, P2).



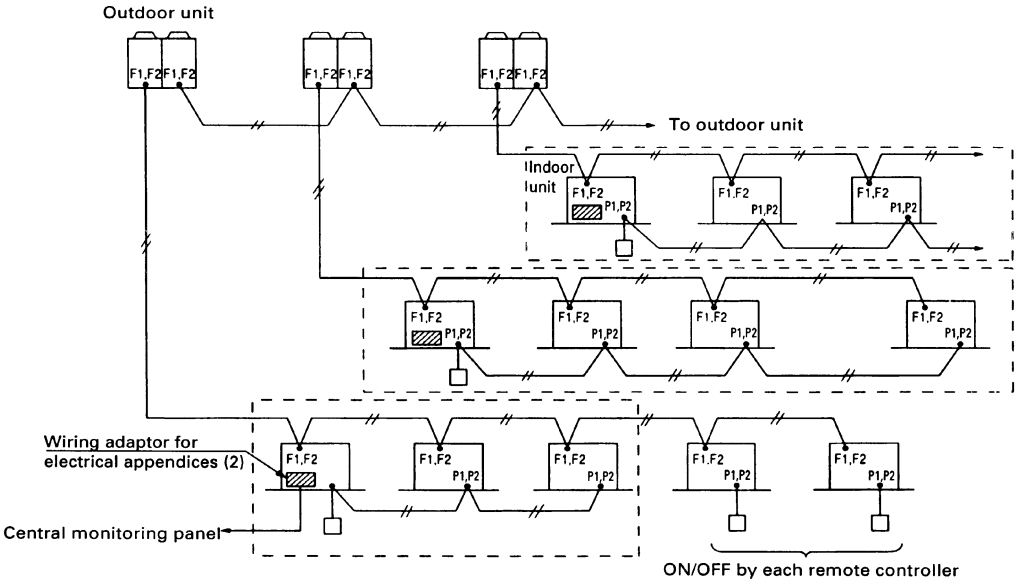
Note:

1. This adaptor cannot be used together with central control equipment and data station.
2. The model of adaptor differs according to the type of indoor unit to be installed.

5.3.2 Applied Model

Applied Model		Remark	Applied Model	Remark	Note
VRV Systems	VRV Plus Series	○	SkyAir Series	○	
	VRV Inverter “K(A)” “K(U)” Series	○	Room Air-Conditioner	×	
	VRV Heat Recovery Series	○	Other Air-Conditioner	×	
	VRV II, III Series	○	HRV Unit	○	BRC1B61, 62 etc. are required.

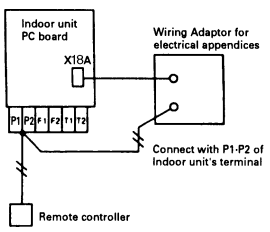
5.3.3 System Configuration



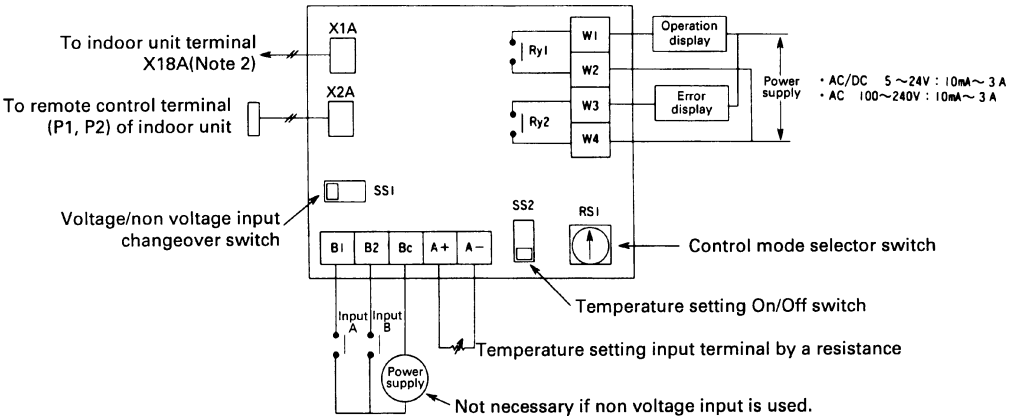
Note:

1. Marked ▨ shows wiring adaptor for electrical appendices.
2. Marked ⬚ indicates the same control range.
3. The wiring adaptor for electrical appendices (2) can control simultaneously the group of the units (Max. 16 units) connected to the remote control wiring line (P1, P2). In another words, all the units connected between P1 and P2 terminal have the same control.

■ **Point of wiring**



5.3.4 Names and Functions of Operating Part



Note:

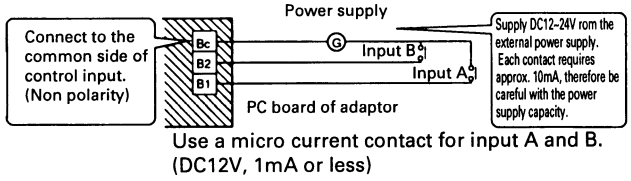
1. This is valid only for the indoor unit, which has a temperature setting function.
2. Terminal No. X18A is for the indoor unit of VRV system. For SkyAir series and other air-conditioner, connect to the relevant terminal for each units.

5.3.5 Input/Output for External Control

1. Depending on whether [voltage input] or [non voltage input], connect the wiring as shown below.

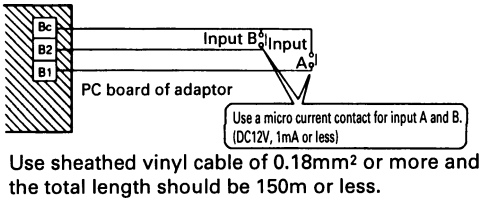
■ **Input with Voltage.**

Set the Voltage/Non voltage changeover switch (SS1) to VOLT.



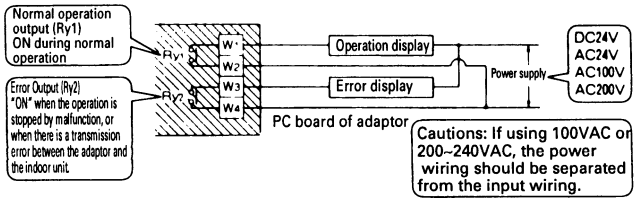
■ **Input with No Voltage.**

Set the Voltage/Non voltage changeover switch (SS1) to NON VOLT.



2. Display Signal Retrieval (Output)

The normal operation output terminals (W1, W2) and error output terminals (W3, W4) are non-voltage output contacts. (Permissive current is 10mA~3A per contact.)

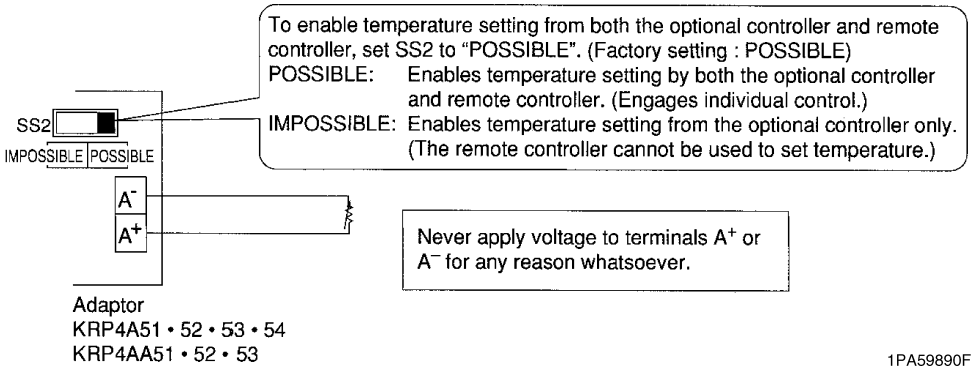


Output is as given below.

Output / System	Both Ry1 and Ry2 is OFF.	Only Ry1 is ON.	Only Ry2 is ON.
Group control	OFF	All normal operation	At least one unit is stopped due to error or transmission error between the adaptor and the indoor unit.

17

3. Temperature Setting Input



Temperature setting corresponds to resistance values in the range of 0 to 135Ω.
Their relationship is as shown below.

Relation between the setting temperature and the resistance are as follows.

Setting temperature (°C)	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Resistance (Ω)	0.0 ~ 3.4	5.0 ~ 11.6	13.8 ~ 20.0	22.4 ~ 28.4	31.0 ~ 36.4	39.4 ~ 44.8	48.2 ~ 52.8	56.6 ~ 61.2	65.2 ~ 69.4	73.8 ~ 77.8	82.4 ~ 85.8	91.0 ~ 94.0	99.4 ~ 102.2	108.6 ~ 110.4	117.2 ~ 119.2	125.8 ~ 127.4	134.2 ~ 140.0

Note:

- The value of resistance includes the resistance of wiring.
- The setting temperature is limited within the setting range of indoor unit. If you set the temperature outside of the range by the adaptor, it controls at the nearest setting range.

Setting of Control Mode Selector Switch (RS1)

Position	Functions	Description of Operation by Input Mode A and B	
		Input A (Between B1~Bc)	Input B (Between B2~Bc)
0	Input Ignored	—	—
1	Remote Control Rejection	Start at ON, and stop at OFF	Stop at ON (remote control rejection), Input A acceptance at OFF
2	Central Priority	Start at ON (remote control acceptance), stop at OFF (remote control rejection)	
3	Remote Control Acceptance/ Rejection	The same as position 1 (Only stop is accepted by remote controller)	
4	Remote Control Acceptance/ Rejection, OFF	Start at ON (remote control acceptance), stop at OFF (remote control rejection)	
5	Remote Control Rejection	Start/Stop (Repeats)	
6	Last Command Priority	The same as position 5 (remote control acceptance all the time)	Stop at ON remote control acceptance), start at OFF (remote control rejection)
7	Remote Control Rejection	Start at ON	Stop at ON.
8	Last Command Priority	Start at ON (remote control acceptance)	Stop at ON (remote control rejection)
9	Remote Control OFF Acceptance	The same as position 7 (Only stop is accepted by remote controller)	The same as position 7
A	Remote Control Acceptance/ Rejection, OFF	Start at ON (remote control acceptance)	Stop at ON (remote control rejection)
B	Last Command Priority	The same as position 7 (remote control acceptance all the time)	The same as position 7
C	Position 5 + Energy Saving Control	The same as position 5	Forced thermostat OFF at ON
D	Position 5 + Temperature Set-Back		Setting temperature shift command at ON
E	Position 6 + Energy Saving Control	The same as position 6	Forced thermostat OFF at ON
F	Position 6 + Temperature Set-Back		Setting temperature shift command at ON

Note:

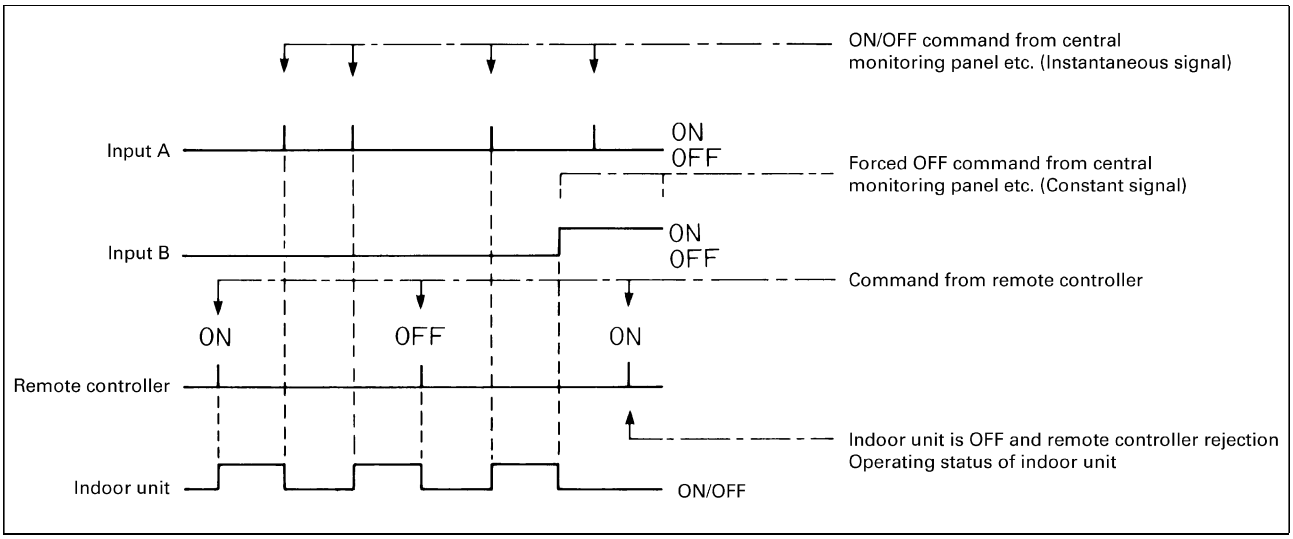
1. When constant input is used for input B at position 7~A, the system is shut-down forcibly (Ignored input A). Constant input cannot be used for input B at position B.
2. Refer to the followings for the outline of above functions.

■ Description of Functions (Outline)

1. Remote Control Rejection.....	For when you want to turn ON/OFF only by central remote controller. (ON/OFF cannot be controlled by remote controller for indoor unit.)
2. Remote controller OFF Only Accepted	For when you want to turn ON only by the central remote controller, and turn OFF only by remote controller for indoor unit.
3. Central Priority	For when you want to turn ON only by the central remote controller, and during the set time, turn ON/OFF freely by remote controller for indoor unit.
4. Individual Priority (Last command priority)	For when you want to turn ON/OFF by both central remote controller and remote controller for indoor unit.
5. Remote Controller Permission Timer	For when you want to turn ON/OFF by remote controller for indoor unit during set time, and you want to start the operation by remote controller for indoor unit at the programmed time of system start.

<Example when the control mode selector switch is set at position 6>

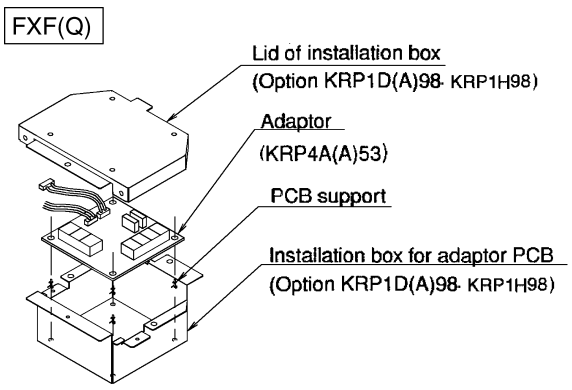
The following is the time chart for the command by remote controller and the indoor unit against input signal.



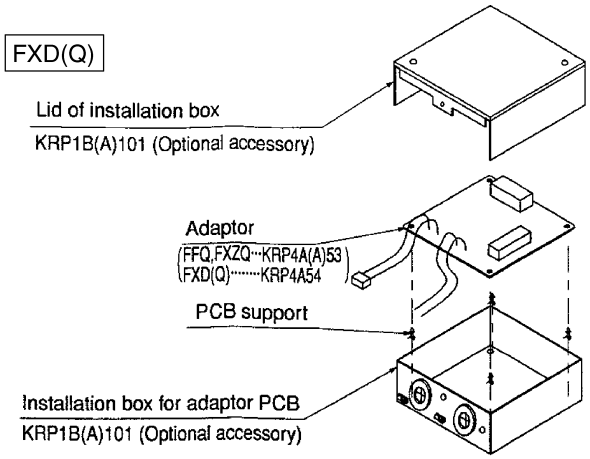
17

5.3.6 Instruction for Installation

Ceiling Mounted Cassette Type

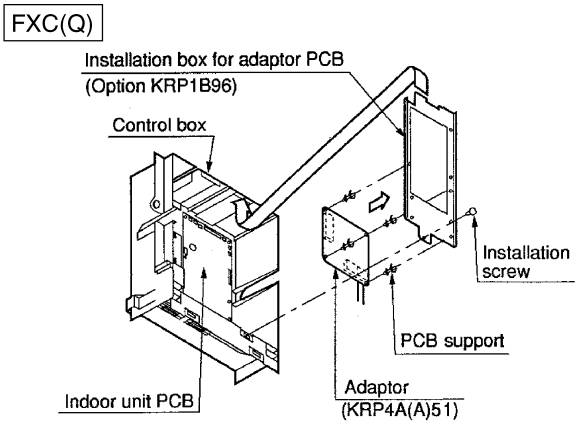


Slim Ceiling Mounted Duct Type
Ceiling Mounted Cassette Type (Multi-Flow) 600×600



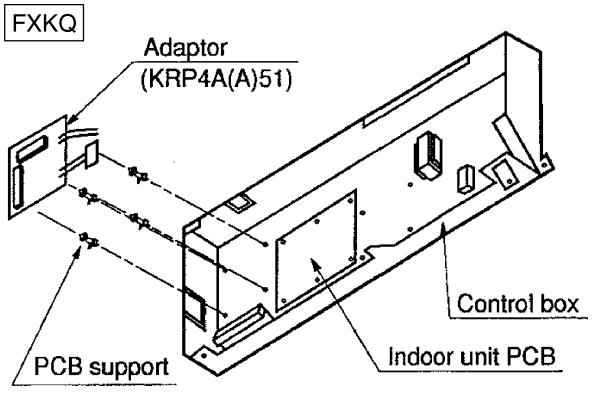
NOTE : Installation box for adaptor PCB is required to install the adaptor.

Ceiling Mounted Cassette Type (Double-Flow)

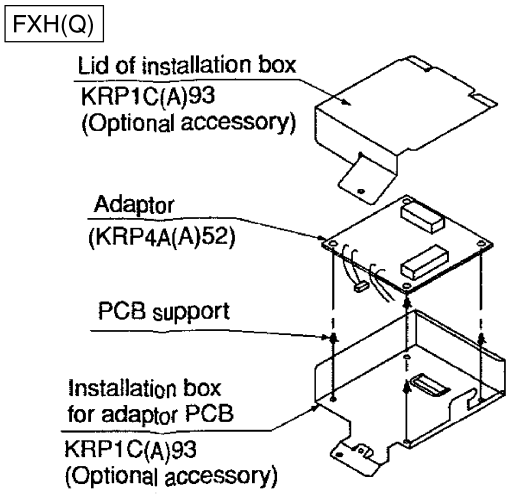


NOTE) A separate plate is needed to install the adaptor PCB.

Ceiling Mounted Cassette Corner Type

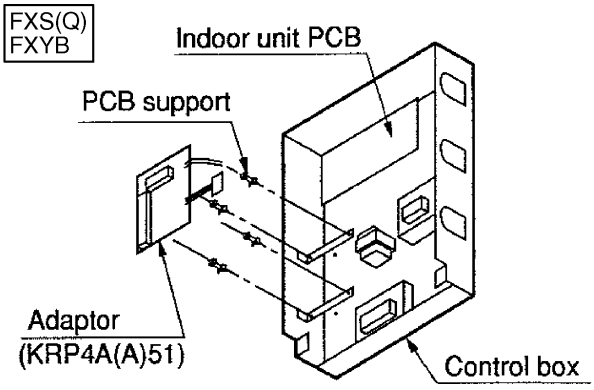


Ceiling Suspended Type



NOTE : Installation box for adaptor PCB is required to install the adaptor.

Ceiling Mounted Built-In Type



Note :
Installation box is necessary for second adaptor (FXS) .

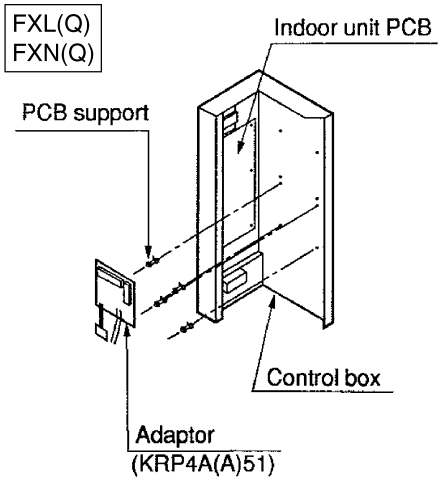
Note:
The above shows the installation for VRV indoor unit. For the SkyAir series and other air-conditioner, it may be different from the ones showed above and refer to its engineering data for the details.

C: 1PA59889K

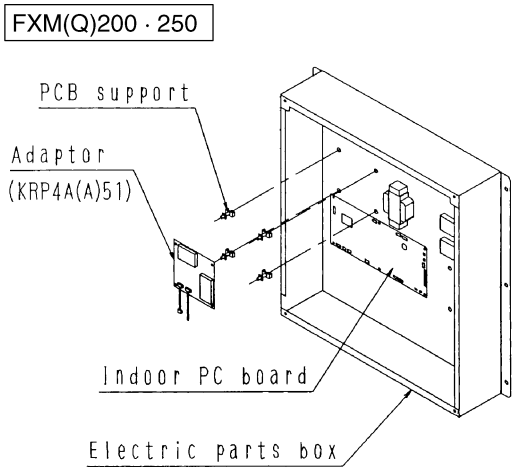
Ceiling Mounted Duct Type

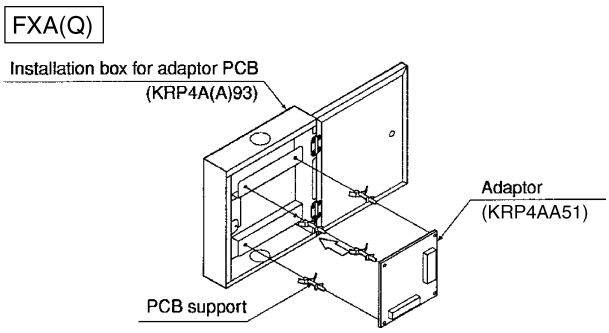
Refer to 5.16 <KRP4A96> Mounting Plate for Adaptor PCB.

Floor Standing Type



Wall Mounted Type





Note:

The above shows the installation for VRV indoor unit. For the SkyAir series and other air-conditioner, it may be different from the ones showed above and refer to its engineering data for the details.

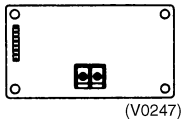
C: 1PA59889K

17

5.4 <DTA102A52> Interface Adaptor for SkyAir Series

5.4.1 Accessories

Check if the following accessories are included in the kit.

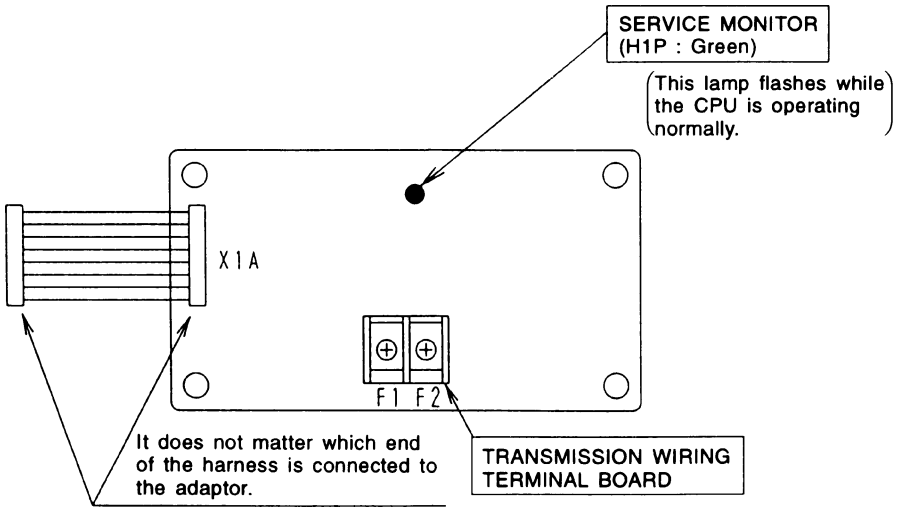
Adaptor	Relay Harness
x 1  (V0247)	x 1  (V0248)

PC Board Support	x 4
Tie Wrap	x 2
Installation Manual	x 1

5.4.2 System Outline

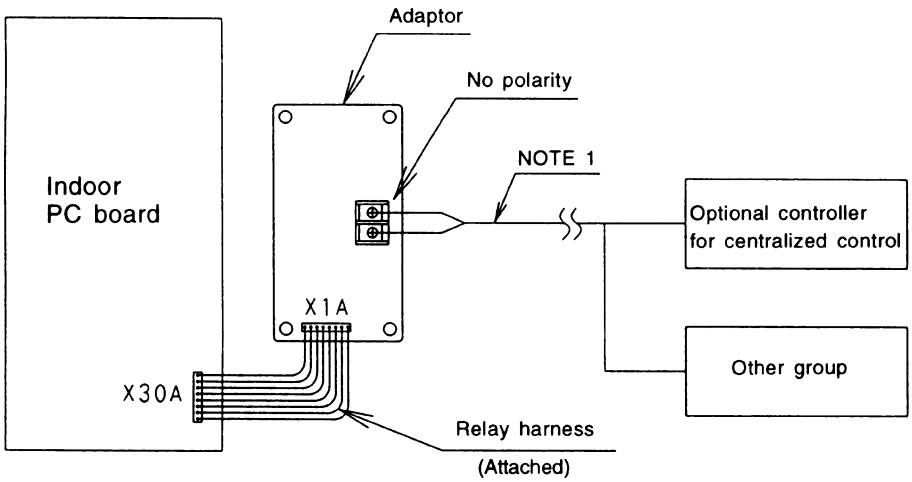
- By connecting this kit to an optional controller for centralized control, all units of the SkyAir Series in the system can be controlled as a group from the optional controller.
- One kit must be installed onto the master unit of each group.

5.4.3 Names of Parts and Function



5.4.4 Electric Wiring

- Wire this kit as described below.
- Make sure wires to units do not pass over the PC board when wiring.



Note:

1. Wiring specifications ... Use a 0.75 - 1.25 mm² sheathed vinyl cord or cable (2 wire).
2. For details on compatible systems and how to connect to optional controllers, see the instruction manual of the optional controller and technical reference materials.

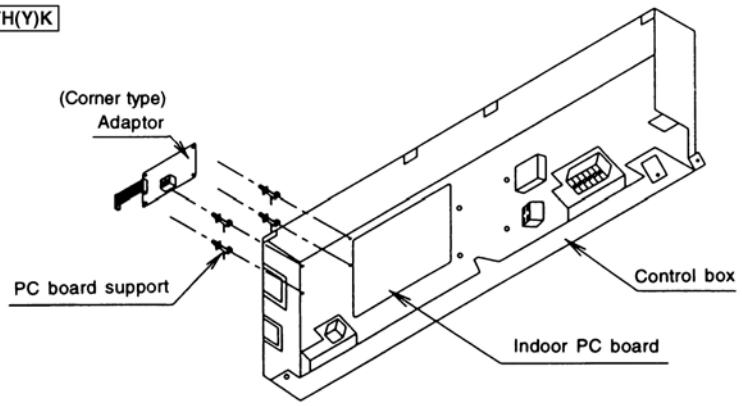
1PA59896

5.4.5 Installation

- Installation differs according to models as shown below.
- Do not bundle low and high voltage wires together.
- Bundle any excess wires with the attached tie wraps so as to keep loose wirings off the indoor unit PC board.

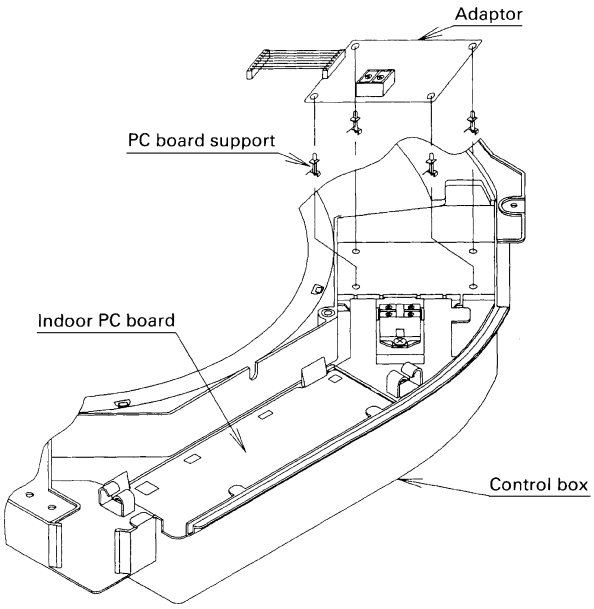
Ceiling Mounted Cassette Corner Type

FH(Y)K



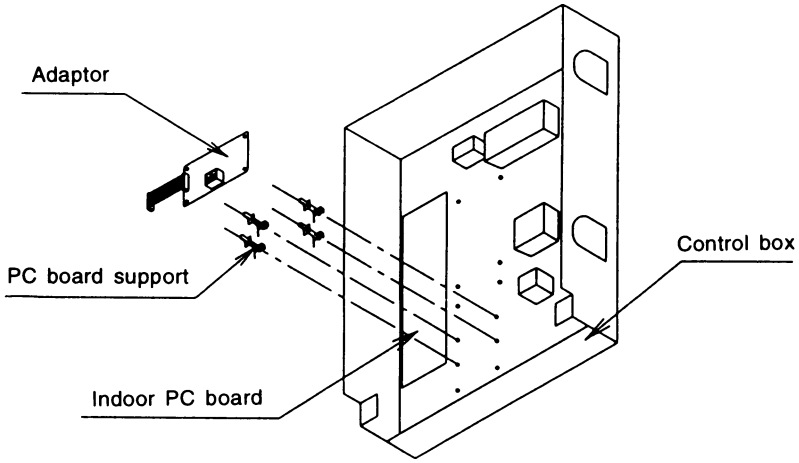
Ceiling Mounted Cassette Type (Multi-Flow)

FH(Y)C~K



Ceiling Mounted Built-In Type

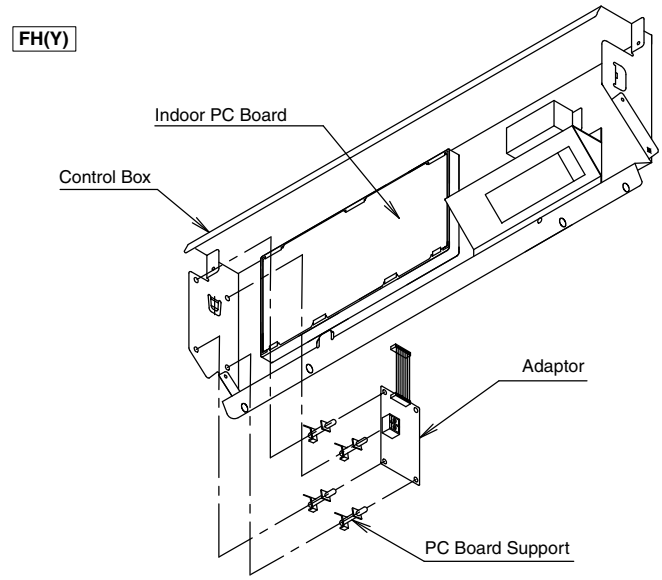
FH(Y)B



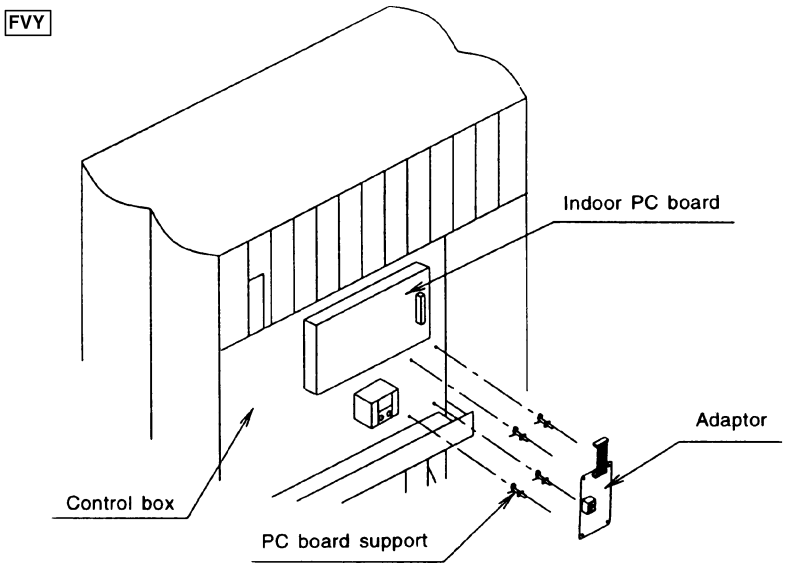
C : 1PA59896

17

Ceiling Suspended Type



Floor Standing Type



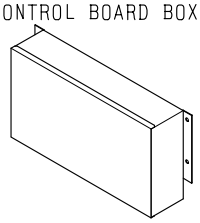
C : 1PA59896

5.5 <DTA107A55> Central Control Adaptor Kit

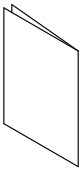
COMPONENTS

Check the following components are included in this optional accessory before installation.

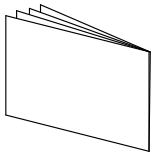
CONTROL BOARD BOX



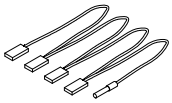
OPERATION MANUAL



INSTALLATION MANUAL



WIRE HARNESS



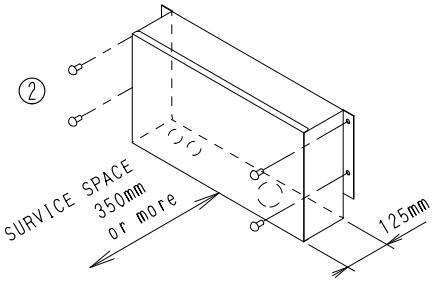
Give to the customer this OPERATION MANUAL certainly.

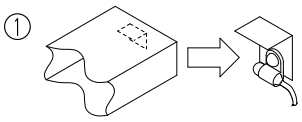
INSTALLATION

Deside the situation of Control Board Box.
It is affected the situations of the thermistor.
The length of lead wire - Thermistor:2.5m

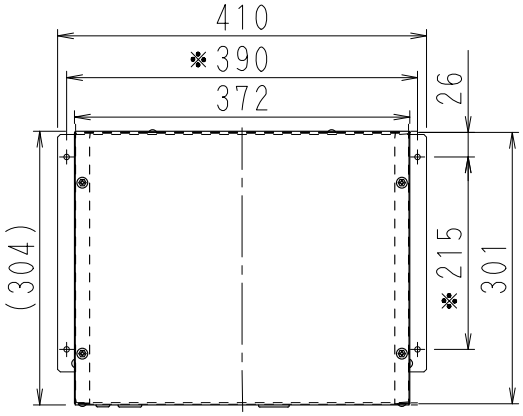
① Install the thermistor (in the control board box) at the inlet duct or the suction grille.
Use the kit:remote sensor(KRCS01-1), if you need the longer length than it.(Can use it untill 12m.)

② Install the control board box on the wall or the pillar.
Make sure the wire inlet is at the bottom of the box.
Use 4 bolts(M5) for fixing the box.
Install the box in the indoor side.
(Example:Set it in the ceiling or in the room.)
Do not install the box in the air conditioner.
Fixing situation : See right Fig. (Height:125mm)
(※ shows the fixing pich.)





Example:Set the thermistor into the inlet duct and clamped by resin clamp and fix plate.



2P042157

17

ELECTRIC WIRING

GENERAL INSTRUCTIONS

- All wiring, components and materials to be procured on site must comply with the applicable local and national codes.
- Use copper conductors only.
- All field wiring and components must be provided by licensed electrician.
- Unit shall be grounded in compliance with the applicable local and national codes.
- After wiring work, check power to the equipment shuts OFF when swich is shut OFF.

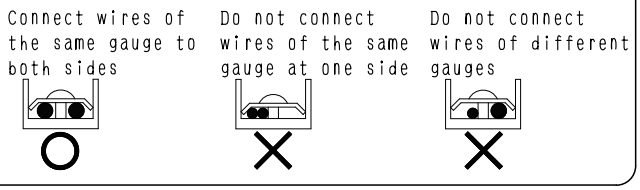
⚠ WARNING

Use ring type crimp style terminal for connection to power supply terminal block.



If is not used, satisfy the following conditions:

- Do not connect wires of different gauge to the same power supply terminal. (Looseness in the connection may cause overheating.)
- When connecting wires of the same gauge, connect them according to the righthand figure.



Wiring specification

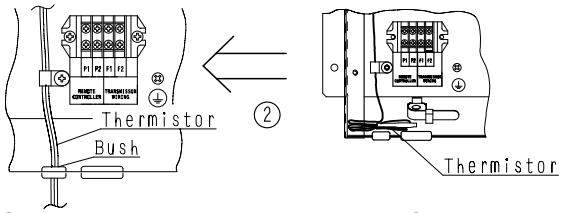
Use the wire shown right for between the unit and the control board box.

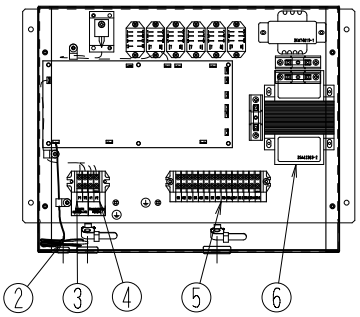
Type	Size
UL1015 AWG18 equivalent	0.75mm² each

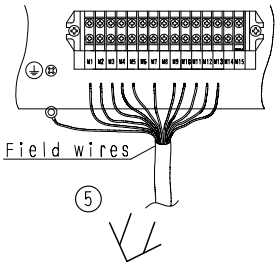
Connect the wiring between indoor and outdoor units, central controllers and remote controller. For details, refer to the installation manual of them.

① Remove the cover of the control board box, after setting it. (Parts situation is shown right Fig.)

② Install the thermistor throgh the bush. (It is in the control board box. See below Fig.)

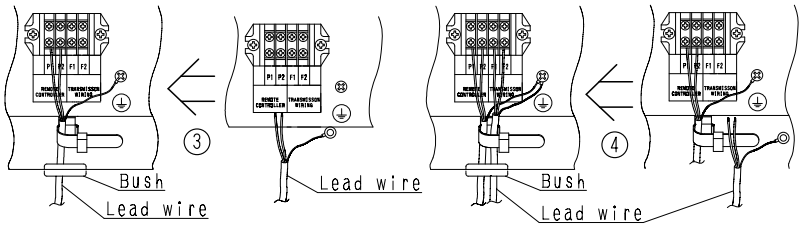


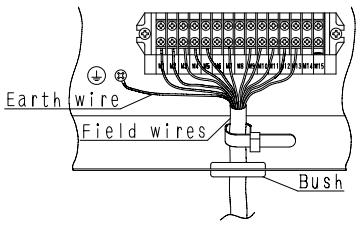




③ Connect the read wires of Remote Controller. (See the below Fig.) Ground the sheild of the cords to the control board box.

④ Connect the read wires of Central Control Unit. (See the below Fig.) Ground the sheild of the cords to the control board box.





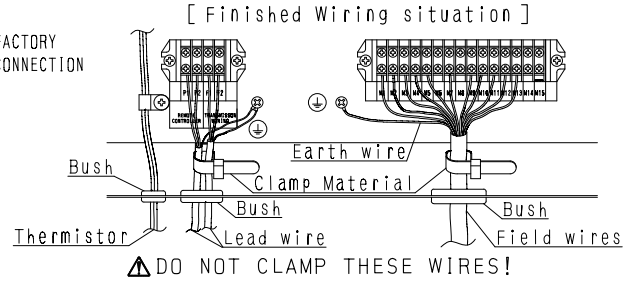
⑤ Connect the field wires to the Air Conditioner. (Details : See the back side.) Ground the control board box.

⑥ Changel the connection of transformer according to the right table. (Especially for Y1 Model.)

VOLTAGE		TERMINAL
PRIMARY	SECONDARY	
220V	200V	✻U-V1
230V	200V	U-V2
240V	200V	U-V3

✻ FACTORY CONNECTION

[Finished Wiring situation]



⚠ DO NOT CLAMP THESE WIRES!

Clamp these wires by clamp materials certainly. (Clamp the earth wire.) (See right Fig.)
Do not clamp the high voltage wires (Field wires) and the low voltage wiers (Lead wire and Thermistor) both inside and outside of the control boad box.

NOTE

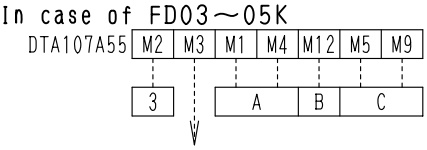
- Prepare the remote controller (BRC1A62). [BRC1A52 is also OK.]
  REASON:The remote controller is needed per each kit for setting the address.

2P042157

CONNECTION OF THE TERMINAL

Connect between the air conditioner and DTA107A55 shown below.

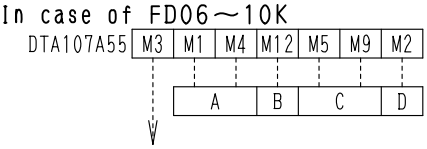
In case of FD03～05K



Connect the wiring between the box of this kit and the EL. COMPO. BOX ASSY of the indoor unit. 〔Refer to the wiring diagram of the indoor unit.〕

See below for connecting the terminal "M3". (The Output of alarm signal)
About these models, we can only output the alarm signal of indoor fan motor.
Connect the wiring between the terminal "M3" and the terminal "96" of magnetic contactor of indoor fan motor(K1M).

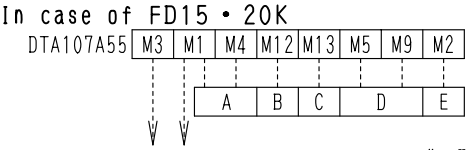
In case of FD06～10K



Connect the wiring between the box of this kit and the EL. COMPO. BOX ASSY of the indoor unit. 〔Refer to the wiring diagram of the indoor unit.〕

See below for connecting the terminal "M3". (The Output of alarm signal)
Use the attached wire harness and change from the wire to it. The wire is connected between K1R(5), K1R(7), K2R(7), and K3R(5). 〔( ) is shown the terminal.〕
Connect the wiring between the terminal "M3" and the solderless splices butt "M3" of the wire assy.

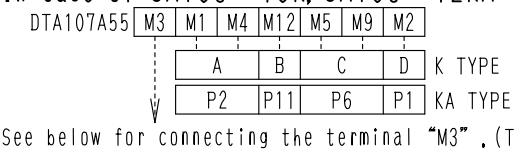
In case of FD15・20K



Connect the wiring between the box of this kit and the EL. COMPO. BOX ASSY of the indoor unit. 〔Refer to the wiring diagram of the indoor unit.〕

See below for connecting the terminal "M3". (The Output of alarm signal)
Connect the wiring between the terminal "M1" and the terminal "6" of K4R(magnetic relay).
Connect the wiring between the terminal "M3" and the terminal "4" of K4R(magnetic relay).

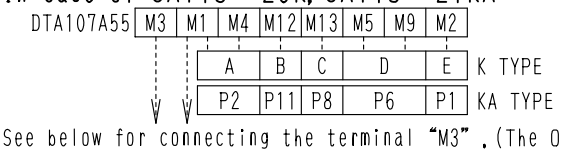
In case of UAT06～10K, UAT06～12KA



Connect the wiring between the box of this kit and the EL. COMPO. BOX ASSY of the air conditioner. 〔Refer to the wiring diagram of the air conditioner.〕

See below for connecting the terminal "M3". (The Output of alarm signal)
Use the attached wire harness and change from the wire to it. The wire is connected between K1R(5), K1R(7), K2R(7), and K3R(6). 〔( ) is shown the terminal.〕
Connect the wiring between the terminal "M3" and the solderless splices butt "M3" of the wire assy.

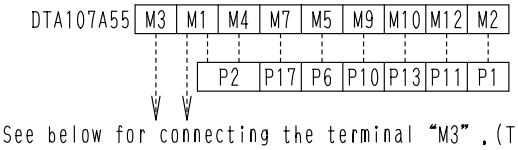
In case of UAT15・20K, UAT15～21KA



Connect the wiring between the box of this kit and the EL. COMPO. BOX ASSY of the air conditioner. 〔Refer to the wiring diagram of the air conditioner.〕

See below for connecting the terminal "M3". (The Output of alarm signal)
Connect the wiring between the terminal "M1" and the terminal "6" of K3R(magnetic relay).
Connect the wiring between the terminal "M3" and the terminal "4" of K3R(magnetic relay).

In case of UATY06K



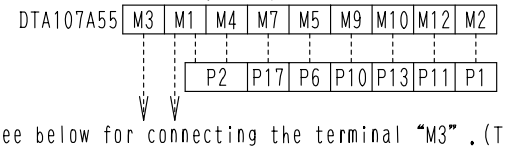
Connect the wiring between the box of this kit and the EL. COMPO. BOX ASSY of the air conditioner. 〔Refer to the wiring diagram of the air conditioner.〕

See below for connecting the terminal "M3". (The Output of alarm signal)
In case of Y1, connect the wiring between the terminal "M1" and the terminal "5" of K2R(magnetic relay).
Connect the wiring between the terminal "M3" and the terminal "3" of K2R(magnetic relay).
In case of Y19, connect the wiring between the terminal "M3" and the terminal "8" of K4R(magnetic relay).
In case of TAL and YAL, use the attached wire harness and change from the wire to it.
The wire is connected between K1R(6), K1R(7), K2R(7), and K3R(6). 〔( ) is shown the terminal.〕
Connect the wiring between the terminal "M3" and the solderless splices butt "M3" of the wire assy.

2P042158A

17

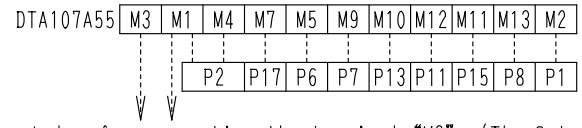
In case of UATY08～12K



Connect the wiring between the box of this kit and the EL. COMPO. BOX ASSY of the air conditioner. (Refer to the wiring diagram of the air conditioner.)

See below for connecting the terminal "M3". (The Output of alarm signal)
In case of Y1, connect the wiring between the terminal "M1" and the terminal "5" of K2R(magnetic relay).
Connect the wiring between the terminal "M3" and the terminal "3" of K2R(magnetic relay).
In case of Y19, connect the wiring between the terminal "M3" and the terminal "8" of K4R(magnetic relay).
In case of TAL and YAL, use the attached wire harness and change from the wire to it.
The wire is connected between K1R(5), K1R(7), K2R(7), and K3R(5). ( ) is shown the terminal.
Connect the wiring between the terminal "M3" and the solderless splices butt "M3" of the wire assy.

In case of UATY15～21K



Connect the wiring between the box of this kit and the EL. COMPO. BOX ASSY of the air conditioner. (Refer to the wiring diagram of the air conditioner.)

See below for connecting the terminal "M3". (The Output of alarm signal)
In case of Y1, connect the wiring between the terminal "M1" and the terminal "6" of K2R(magnetic relay).
Connect the wiring between the terminal "M3" and the terminal "4" of K2R(magnetic relay).
In case of Y19, connect the wiring between the terminal "M3" and the terminal "8" of K4R(magnetic relay).
In case of TAL and YAL, connect the wiring between the terminal "M1" and the terminal "6" of K14R(magnetic relay).
Connect the wiring between the terminal "M3" and the terminal "4" of K14R(magnetic relay).

2P042158A

FIELD SETTING

(If optional accessories are mounted on the indoor unit, the indoor unit setting may have to be changed. Refer to the instruction manual for each optional accessory.)

Procedure

①When in the normal mode, press the "TEST" button for a minimum of four seconds, and the FIELD SET MODE is entered.

②Select the desired MODE NO. with the "▲▼" button.

③During group control, when setting by each indoor unit (mode No. 20, 21 and 23 have been selected), push the "I/O" button and select the INDOOR UNIT NO to be set. (This operation is unnecessary when setting by group.)

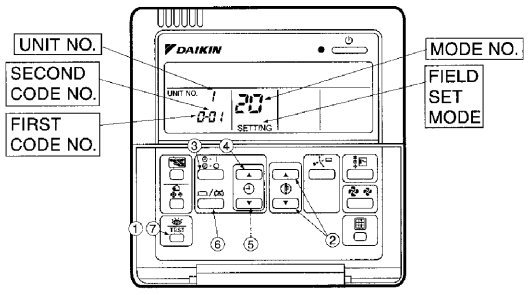
④Push the "▲" upper button and select FIRST CODE NO.

⑤Push the "▼" lower button and select the SECOND CODE NO.

⑥Push the "SET" button once and the present settings are SET.

⑦Push the "TEST" button for about one second to return to the NORMAL MODE.

(Example) If during group setting and the time to clean air filter is set to FILTER CONTAMINATION - HEAVY, SET MODE NO. to "10," FIRST CODE NO. to "0," and SECOND CODE NO. to "02."



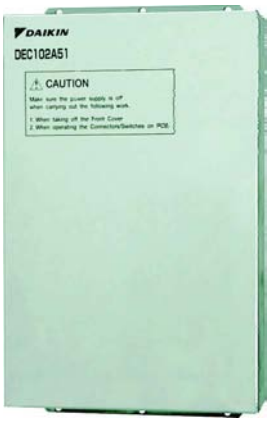
Mode No. Note) 1	FIRST CODE NO.	Description of Setting		SECOND CODE No. Note) 2						
				01			02		03	
10(20)	0	Filter Contamination - Heavy/Light (Setting for spacing time of display time to clean air filter) (Setting for when filter contamination is heavy, and spacing time to clean air filter is to be halved)	Ultra-long-life type	Light	Approx. 10,000 hours		Heavy	Approx. 5,000 hours	—	
			Long-life type		Approx. 2,500 hours			Approx. 1,250 hours		
			Standard type		Approx. 200 hours			Approx. 100hours		
	1	Long-life filter type (Setting of filter sign indication time) (Change setting when Ultra-long-life filter is installed)		Long-life filter			Ultra-long-life filter (1)		—	
	3	Spacing Time of Display Time to Clean Air Filter Count (Setting for when the filter sign is not to be displayed)		Display			Do Not Display		—	
11(21)	0	Setting Number of Connected Skyair Simultaneous Operation System Indoor Units (Setting for Simultaneous Operation System)		Pair			Twin		—	
13(23)	0	High Ceiling Setting (Setting for when installed in a Ceiling higher than 2.7m)		Normal			High Ceiling 1		High Ceiling 2	
	1	Selection of Air Flow Direction (Setting for when a blocking pad kit has been installed)		F			T		W	
	3	Air Flow Direction Adjust Function (To be set when decoration panel for air outlet is installed)		Equippeed			No Equippeed		—	
	4	Air Flow Direction Range Setting		Upper			Normal		Lower	
	6	Setting the External Static Pressure (Setting according to the connected duct resistance) (For FHYK, follow the High Ceiling Setting)		Normal (Normal)			High Static Pressure (High Ceiling)		Low Static Pressure —	

NOTES) 1. Setting is carried out in the group mode, however, set the mode number inside the ( ) for individual setting of the each indoor unit or confirmation after setting.
2. The SECOND CODE number. is set to "01" when shipped from the factory.
However for the following cases it is set to "02"
• Air flow direction range setting.
3. Do not make any settings not given in the table on the left.
4. Not displayed if the indoor unit is not equipped with that function.
5. When returning to the normal mode, "88" may be displayed in the LCD in order for the remote controller to initialize itself.

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5.6 <DEC101A51> Di Unit

Appearance



Di Unit
DEC101A51

DⅢ-NET Address No. setting switch (RS1/DS1)
Set DⅢ-NET Address No.

Terminal block for transmission (F1/F2) (Terminal size: M3)
Connect this unit to the terminals F1, F2 of the centralized control equipment.

Power supply terminal block (L, N)
For the power supply, use 1～ 200 - 240V.

Transformer connecting connector (CN1/CN2)
The power transformer connector is connected.

Abnormal input detecting switch (DS2/DS3)
Whether the connected equipment "error" is detected with contact input "Open" or "Closed" can be selected.

Transmission error monitor (LED10: Red)
When the transmission is abnormal, the lamp lights up, disabling remote control. (The lamp goes out in the normal condition.)

Switch for selecting the number of facility equipment connected (DS4/DS5)
Set the switch according to the number of facility equipment connections.

Microcomputer OK monitor (LED-A: Green)
When the microcomputer is in normal operation, the lamp flickers.

Start error mask switch (DS6-1)
It is possible to select whether the error at startup is masked for 10 or 30 seconds.

Quantity change shortcircuit pin (TP1)
Shortcircuit during control quantity setting

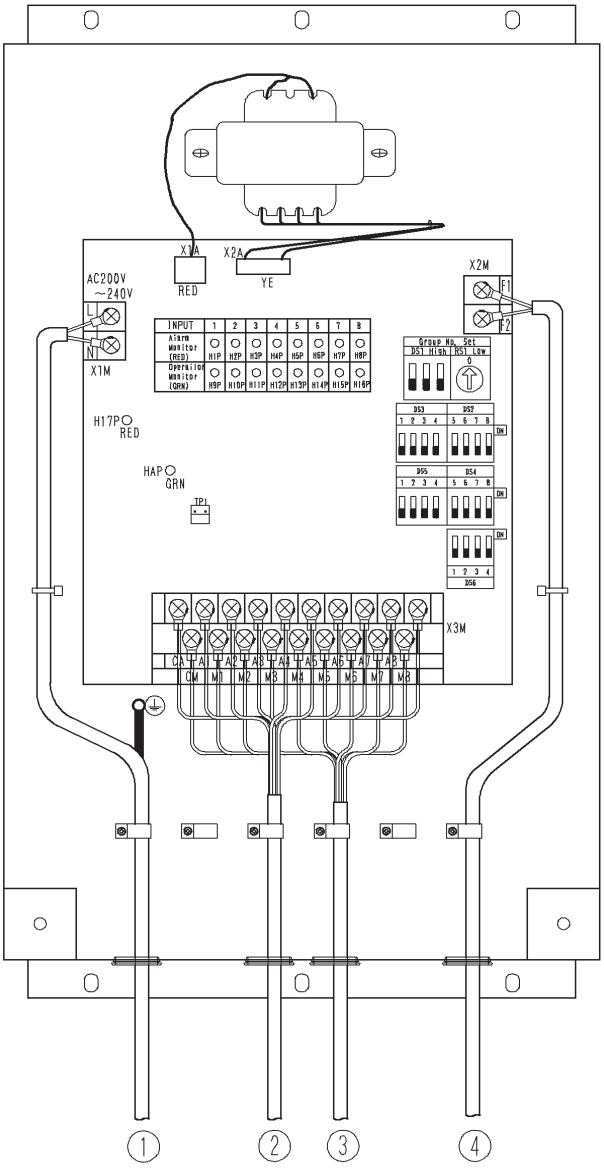
Error detecting switch (DS6-2)
It is possible to select whether the equipment connection error is a non-latch or latch error.

Terminal block for monitor input (Terminal size:M3.5)
The facility equipment status is monitored.

Monitor input switch (DS6-3)
Whether or not the abnormal condition of facility equipment during stop is recognized can be selected.

Wiring Lead-In

For wiring connection, remove the front panel (secured with 2 screws) of this equipment. Upon completion of operation given in this paragraph and "⑥ Initial Setting" below, close the front panel with the screws described above.



① To 1 ~ 200 - 240 V and earth

② To facility equipment

③ To facility equipment

④ To terminals F1, F2 of the centralized control equipment or terminals F1, F2 of other equipment (outdoor unit, DEC101A51, 102A51)

(1)Wire connections and wire clamping should be as shown in the figure above.
(2)No simultaneous clamping is allowed for high-voltage wiring (power supply wiring (L/N) & earth wiring), low-voltage wiring <Communication wiring (F1/F2), operation input wiring (CM, M1 to 8) and abnormal input wiring (CA, A1 to 8)> since malfunctioning may result. Also, in case where the wirings described above are routed in parallel, be sure to connect the wirings at least 50 mm apart from the other.

Specifications

		Di board
Input contacts		16 points. 8 pairs based on a pair of On/Off input and abnormality input
		* Contact information(On/Off, Abnormality) is transmitted to intelligent Touch Controller / intelligent Manager III through DIII-Net communication.
Installation method		Indoor installation
Power supply		To be supplied from outside
Rating		AC200-240V, 50/60Hz
Applied Standard		Safety standard: IEC730, EMC standard: CISPR22-A (EMI), CISPR24 (EMS)
Environment for use	Ambient temperature	–15 to 60 °C
	Ambient humidity	95%RH or less (no condensation)
Environment for storage	Ambient temperature	–20 to 60 °C
	Ambient humidity	95%RH or less (no condensation)

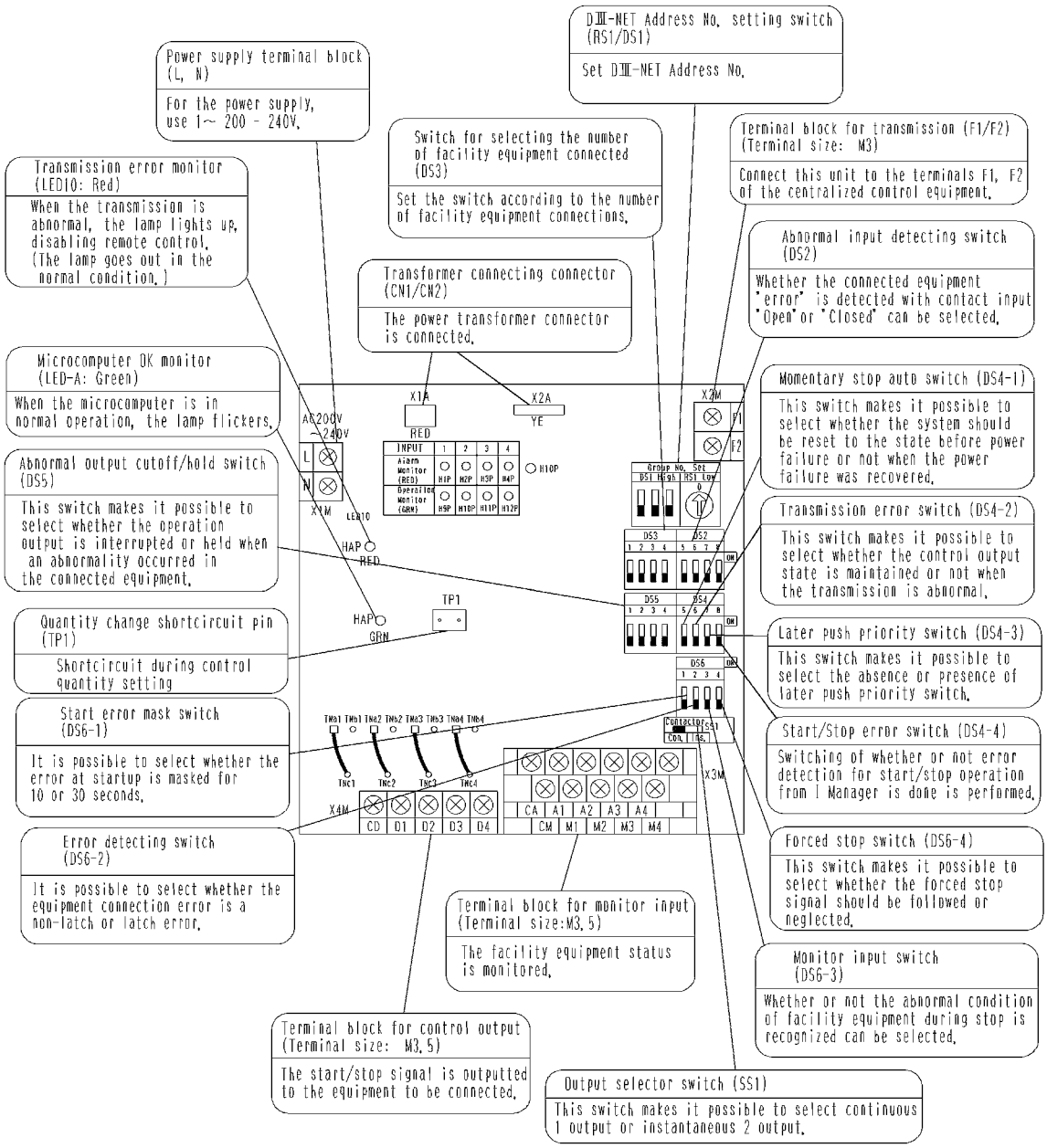
5.7 <DEC102A51> Dio Unit

Appearance

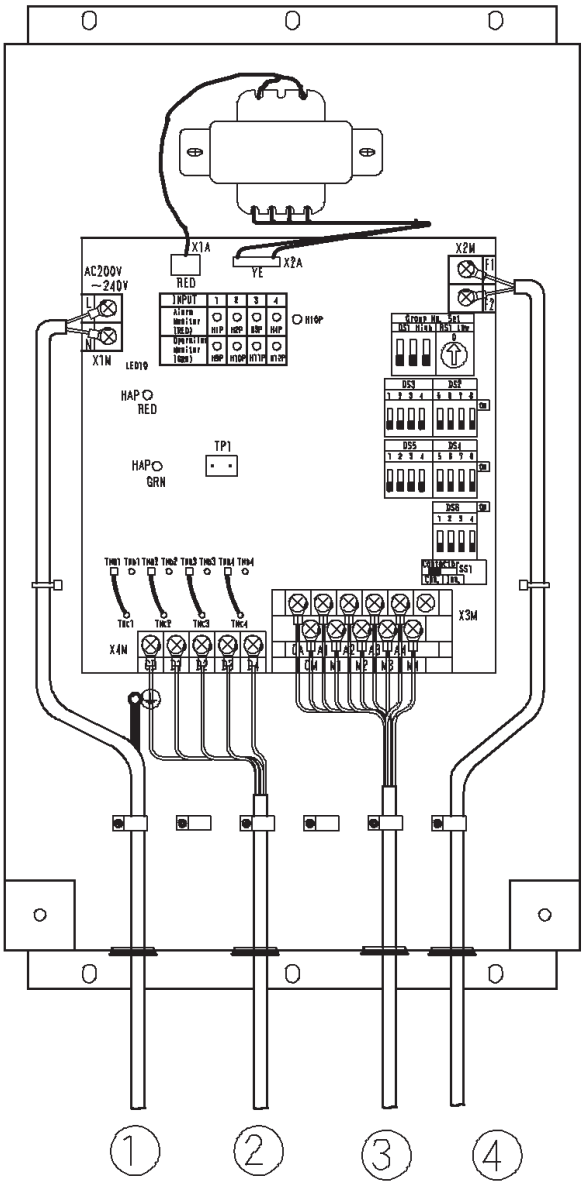


Dio Unit
DEC102A51

The figure below shows the printed circuit board built in this equipment.



Wiring Lead-In



No simultaneous clamping is allowed for high-voltage wiring <power supply wiring (L/N), earth wiring, relay output wiring (CD, D1 to 4)>, low-voltage wiring <communication wiring (F1/F2), operation input wiring (CM, M1 to 4) and abnormal input wiring (CA, A1 to 4)> since malfunctioning may result.
Also, in case where the wirings described above are routed in parallel, be sure to connect the wirings at least 50 mm apart from the other.

① To 1 ϕ 200 - 240 V and earth
② To facility equipment
③ To facility equipment
④ To terminals F1, F2 of the centralized control equipment or terminals F1, F2 of other equipment
(outdoor unit, DEC101A51, 102A51)

17

Specifications

		Dio board
Input contacts		8 points. 4 pairs based on a pair of On/Off input and abnormality input
		* Contact information(On/Off, Abnormality) is transmitted to intelligent Manager III through DIII-Net communication.
Output contacts		4 points. In case of normally output, 4 units are controllable. In case of instantaneous output, 2 units are controllable.
		* From intelligent Touch Controller / intelligent Manager III, On/Off and control of the equipment with the external contacts are possible through DIII-NET communication.
Installation method		Indoor installation
Power supply		To be supplied from outside
Rating		AC200-240V, 50/60Hz
Applied Standard		Safety standard: IEC730, EMC standard: CISPR22-A (EMI), CISPR24 (EMS)
Environment for use	Ambient temperature	–15 to 60 °C
	Ambient humidity	95%RH or less (no condensation)
Environment for storage	Ambient temperature	–20 to 60 °C
	Ambient humidity	95%RH or less (no condensation)

Output specs: Voltage free 'a' contact

Voltage specs	Maximum current	Minimum current
AC200–240V	1.5 A (resistance load)	10mA
DC5–24V	2.0 A (resistance load)	10mA

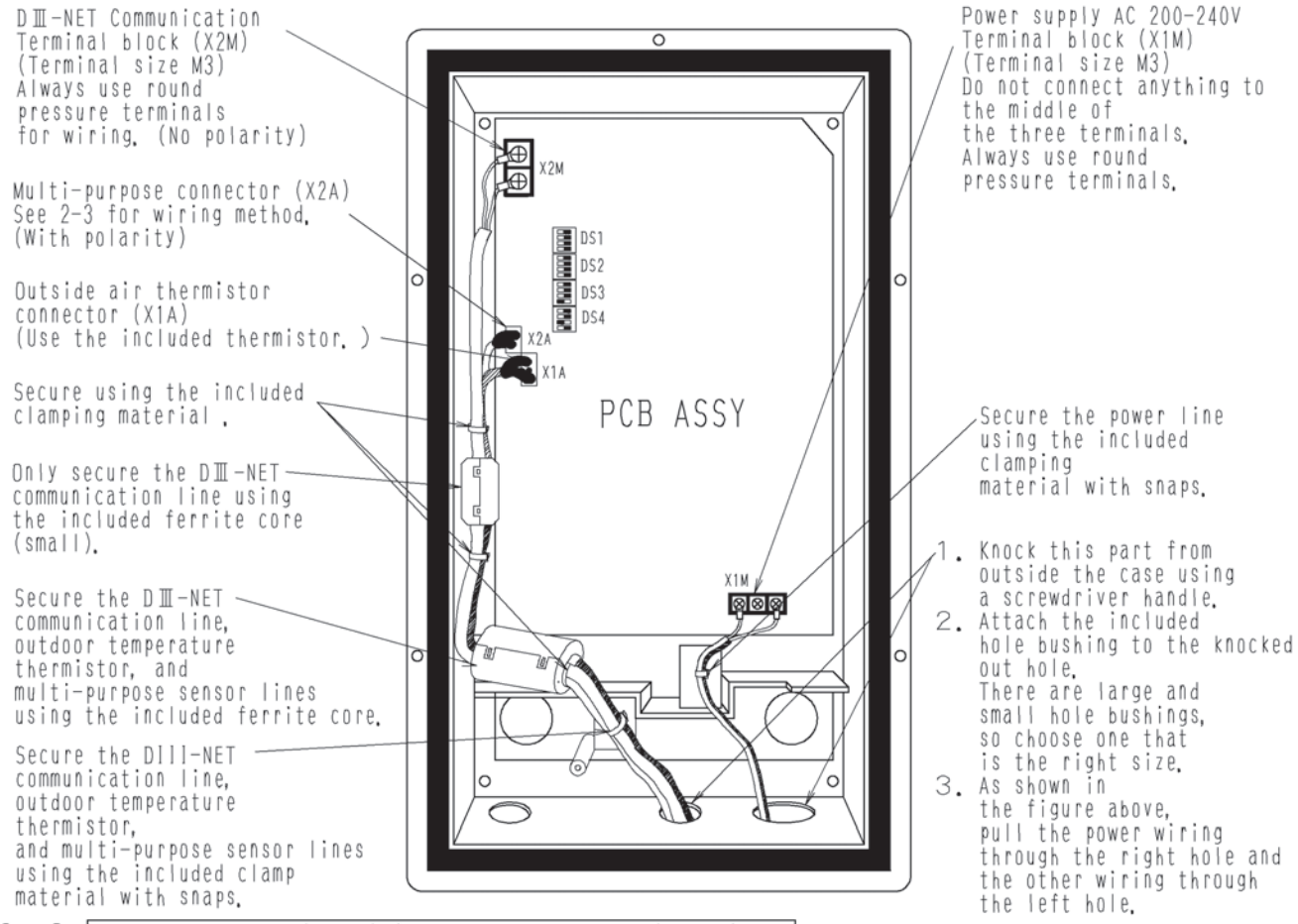
Input specs: Voltage free 'a' contact
Micro current load contact input (DC12V, 1 mA or less)
Wiring length: 150 m

5.8 <DAM101A51> Ai Unit

Descriptions

Connecting and clamping the wiring (Be sure not to force screws. This may break them.)

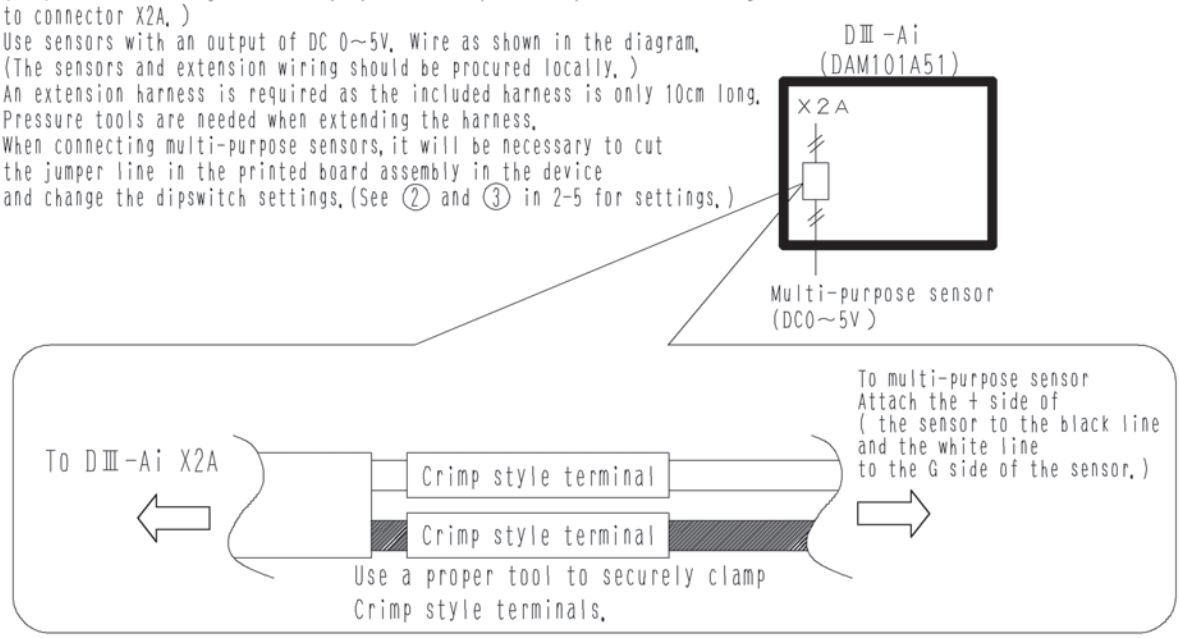
Names and functions of each part



2-3. How to connect the multi-purpose sensors and settings

Other than the supplied outdoor temperature sensor, it is also possible to connect other brand multi-purpose sensors to the device.

This section describes the wiring when connecting the multi-purpose sensors. (If you are not using the multi-purpose sensors, do not perform the wiring connection to connector X2A.)
Use sensors with an output of DC 0~5V. Wire as shown in the diagram. (The sensors and extension wiring should be procured locally.)
An extension harness is required as the included harness is only 10cm long. Pressure tools are needed when extending the harness.
When connecting multi-purpose sensors, it will be necessary to cut the jumper line in the printed board assembly in the device and change the dipswitch settings. (See ② and ③ in 2-5 for settings.)

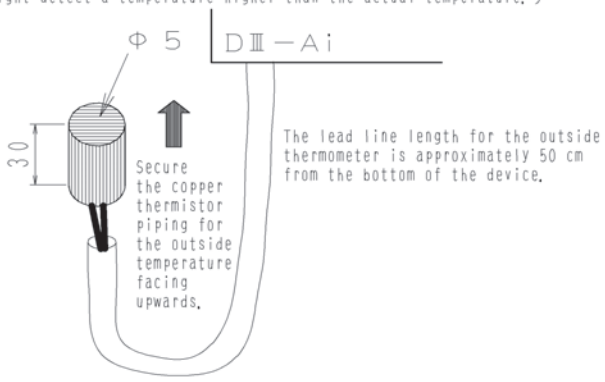


17

2－4. Attaching the outside temperature sensor

Securing the sensor

Always secure the sensor downwards as shown in the diagram. Install in a well-ventilated location where the unit will not be subject to direct rain or sunlight. (If the unit receives direct sunlight, it might detect a temperature higher than the actual temperature.)

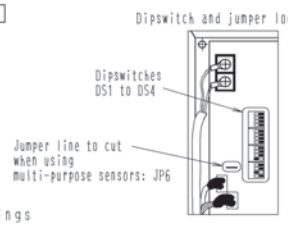


2－5. Setting the dipswitches and cutting the jumper line

Meaning of each dipswitch and jumper line

Number	Meaning
DS1	DⅢ-NET Communication address last digit
DS2	DⅢ-NET Communication address first digit
DS3	Enabling and disabling the sensor
DS4	Switching sensor uses
JP6	When using multi-purpose sensors, cut the main jumper line.

Dipswitch and jumper location



① DS1 and DS2 (DⅢ-NET communication address) settings

Setting DS1 and DS2* sets the DⅢ-NET communication address.
Set the DⅢ-NET communication address between 1-00 and 4-15.
Normally only one address is used per unit. The factory default is 1-00.
However, when using the settings below in ② to use multi-purpose sensors, two addresses are used per unit. (For example, if the address is set to 2-10 using the DS1 and DS2 settings, 2-10 and 2-11 are thereby used and cannot be set on other AC units.
If the setting is for using the multi-purpose sensors, do not set DS1 and DS2 to 4-15. The multi-purpose sensor detection data cannot be properly monitored by I-Manager.)

Dipswitch settings for each address

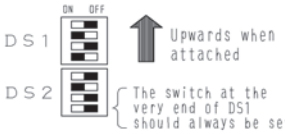


DⅢ－NET Address ※1 － ※2

Ex: 3－10

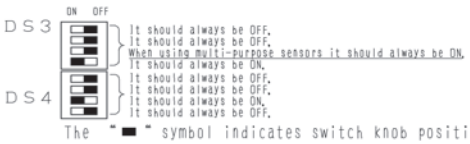


The "■" symbol indicates switch knob position.



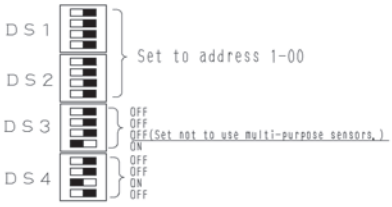
② DS3 and DS4 (sensor-related) settings

DS3 should only have its setting changed if locally-procured sensors are being used.
When using locally procured sensors, set the third switch from the front on.
(The factory default settings are for not using multi-purpose sensors.)
NB: When using multi-purpose sensors, cut the jumper line ③ at the same time as the settings are being done.
There is no need to change the factory default setting for DS4.



The "■" symbol indicates switch knob position.

The following settings should be done for the factory default DS1 to DS4 settings.



The "■" symbol indicates switch knob position.

③ Cutting JP6

When using multi-purpose sensors, cut jumper JP6 on the printed board using nippers, etc.
※: When using multi-purpose sensors, set DS3 at the same time as these settings are being done.
※: Be sure to get rid of line cuttings when cutting the jumper. Failing to remove them may cause the printed board to malfunction.

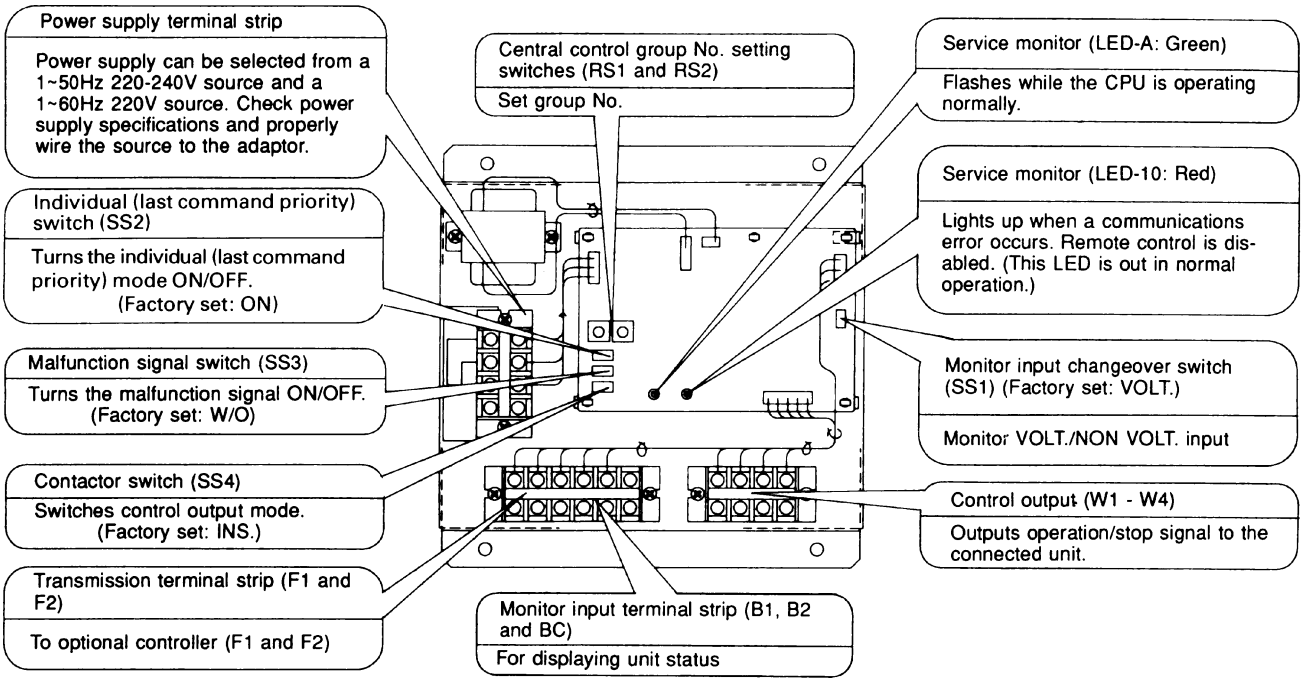
2－6. Once all settings are complete, Replace the removed cover in 2-1 using the screws.

5.9 <DTA103A51> Wiring Adaptor for Other Air Conditioners

5.9.1 Function

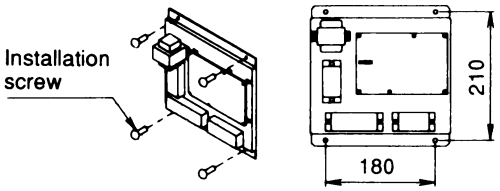
This kit contains an I/O interface adaptor for optional controller for centralized control, used when there is a non-connectable air conditioner. When connected to the central control line, this adaptor enables operation/stop and display of operation/error monitors from the optional controller.

5.9.2 Names of Parts and Function



5.9.3 Installation

Securely install the adaptor with the attached installation screw.



Note:

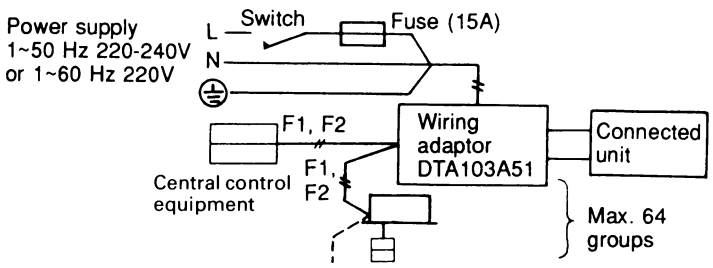
Install the adaptor inside a control box of outer dimensions: 230W × 230D × 60H.

Supply a control box at site with outer dimensions equal to or larger than those shown below. 230W × 230D × 60H.

5.9.4 Electric Wiring Work

<Wiring Requirements>

1. Wire between the adaptor and central control equipment (F1, F2)
2. Wire to the connected units and set all switches. ... For details, refer to WIRING TO CONNECTED UNITS.
3. Wire to the power supply. ... For details, refer to POWER SUPPLY WIRING.



C : 2PA53853

17

<General Instructions>

- All wiring, components and materials to be procured on the site must comply with the applicable local and national codes.
- Use copper conductors only.
- All field wiring and components must be provided by licensed electrician.
- Unit shall be grounded in compliance with the applicable local and national codes.
- Fit the power supply wiring with a fuse and a switch.
- After wiring work, check power to the equipment shuts OFF when the switch is shut OFF.

<Wiring Specification>

	Type	Size
Power Supply Wiring	H05VV-U3G	(Note 1)
Transmission Wiring	(Note 2)	0.75 - 1.25 mm²

Note:

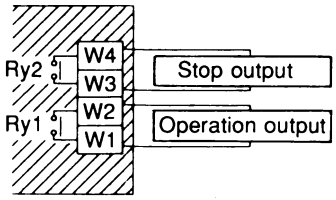
1. Select the size in electric wire in accordance with the local and national standards.
2. You can use the shielded wire, sheathed vinyl cord or cable (2 conductors). See the installation manual of the optional controllers for centralized control to be connected for further details.

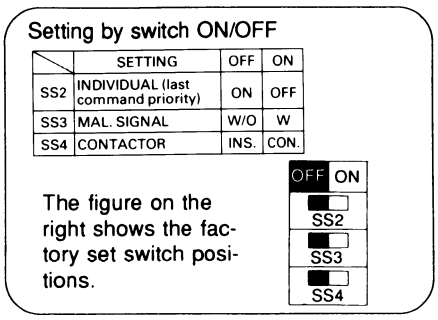
<Wiring to Connected Units>

Control Output

Terminals W1 - W4 are non voltage contacts used in normal operation to output operation display (W1 and W2) and error display (W3 and W4) signals.

Ry1 and Ry2 Contact Specifications		
Voltage	Max. current	Min. Current
1~50Hz 220-240V 1~60Hz 220V	2A	1mA
⎓ 5-24V	3A	1mA



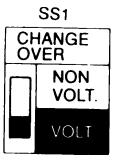


Output modes include instantaneous output and constant output. Mode is changed at the contactor switch (SS4). (Factory set: INS)

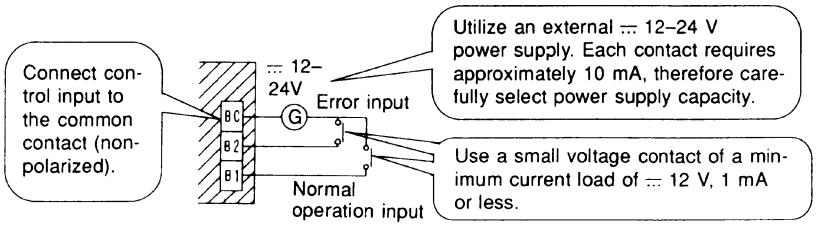
C : 2PA53853

Monitor Input

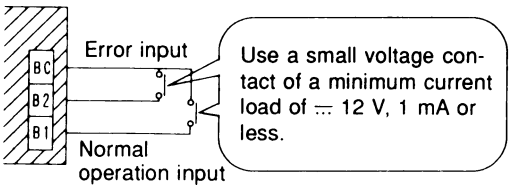
Wire as explained here following, depending on whether input carries a voltage (VOLT.) or not (NON VOLT.). Make the VOLT/NON VOLT. setting at the monitor input changeover switch (SS1).



(For Voltage Charged Input)
Set the monitor input changeover switch to VOLT. (Factory set: VOLT.)



(For Non Voltage Input)
Set the monitor input changeover switch to NON VOLT. (Factory set: VOLT.)



① Switch the malfunction signal switch (SS3) according to needs (Factory set: W/O [OFF]). Set the switch to W (ON) to display errors even if no operation feedback from the indoor unit is available, for example, when power to the indoor unit is OFF. Together, set the individual switch (SS2) to OFF (ON).

Note:
- This switch is ineffective when SS2 is set to ON (OFF).
- The optional controller display will change, as shown on the right, depending on the monitor input state and the malfunction signal switch (SS3) setting.
- After switching the optional controller from stop to operation, it will take from 10 to 30 seconds before the optional controller display will indicate an error.

(SS3) Malfunction Signal	Optional Controller Display at Command Output		
	Monitor Input State		
	Operation Input ON	Operation Input OFF	Error Input ON
W	Operation Display	Error (A1 Display)	Error (A1 Display)
W/O		Operation Display	

2PA53853

17

② Set the group No. at the central control group No. setting switches (RS1 and RS2). Refer to the below table to set group No. Group No. increases in the order of 1-00, 1-01 ... 1-15, 2-00, ... 4-15. Refer to the installation manual of the optional controller.

RS1 Switch Setting and Upper Group No. Position

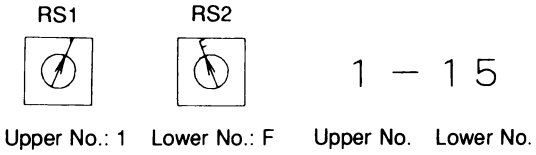
Position	0	1	2	3	4	5	6	7	8	9
Group No.	—	1	2	3	4	—	—	—	—	—

RS2 Switch Setting and Lower Group No. Position

Position	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
Group No.	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15

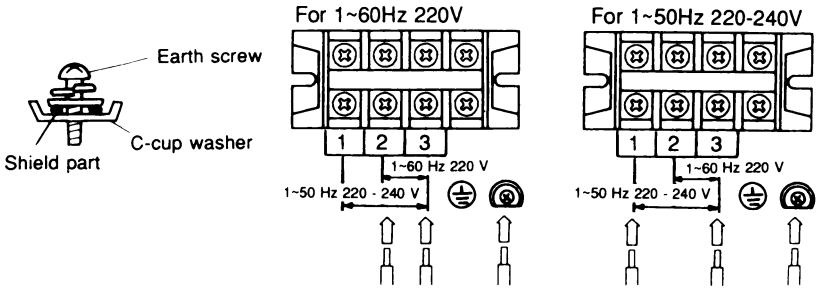
Make Settings before Turning ON The Power.

Note:
Group number need not be set on this adaptor during individual use with either a wiring adaptor for electrical appendices or a schedule timer. Setting is automatic.
Ex. Setting group No. 1-15
First and second group No.s are indicated as below.



Power Supply Wiring

Power supply can be selected from a 1~50 Hz 220-240V source and a 1~60 Hz 220V source. Check power supply specifications and properly wire the source to the adaptor.



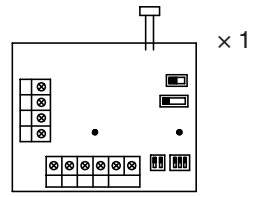
Note:
- Ground wires as shown in the figure on the right.
- The adaptor may malfunction or be damaged if improperly wired.
- The fuse is designed for short-circuit protection (Overcurrent protection). Therefore, it may not offer sufficient protection against improper voltage.

2PA53853

5.10 <DTA104A61 / DTA104A62 / DTA104A53> External Control Adaptor for Outdoor Unit (Must be Installed on Indoor Units)

Accessories Check the following accessories are included in the kit before the installation.

External control adaptor for outdoor unit



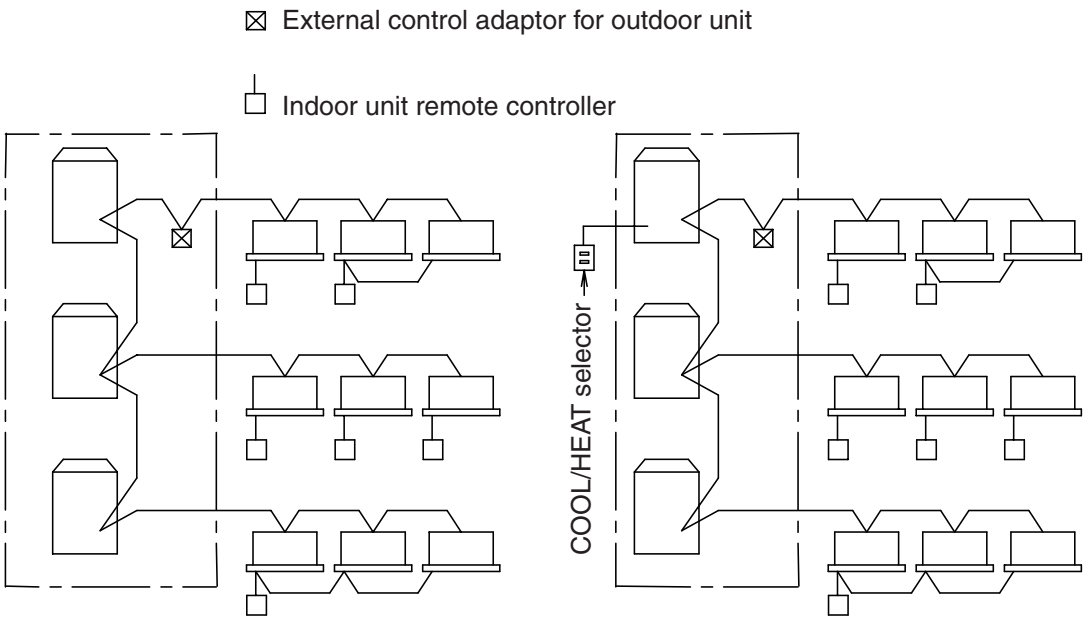
PCB support	× 4
Clamp	× 3
Installation manual	× 8

NOTES
- The kit type (DTA104A61·51 type, DTA104A62·52 type, DTA104A53 type) varies according to air conditioner model.
- The installation box for adaptor PCB are required with the following air conditioner models.

FXF, FXFQ-M.....KRP1D98
FXYH • FXH(Q).....KRP1C93
FXYC • FXC(Q).....KRP1B96
FXZQ • FXD(Q).....KRP1B101
FXFQ ~ PVE(D).....KRP1H98
FXS(Q).....KRP4A91
FXMQ-P.....KRP4A96
FXUQ.....KRP1B97
FXA(Q).....KRP4A93

1 General description of system

With the external control adaptor, outdoor units are controlled as follows.
1. Operation mode (COOL/HEAT/FAN) is switched simultaneously for more than one outdoor unit.
   - If switching operation mode by indoor unit remote controller or COOL/HEAT selector.
   - Except RSEY-K



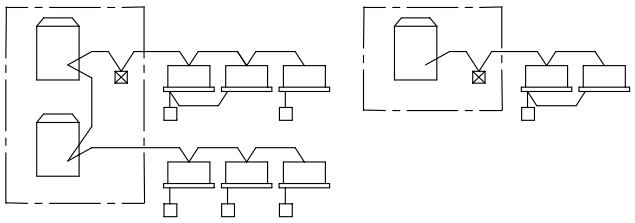
You can simultaneously switch operation mode for outdoor units in [ ].

C : 1PA63164E

17

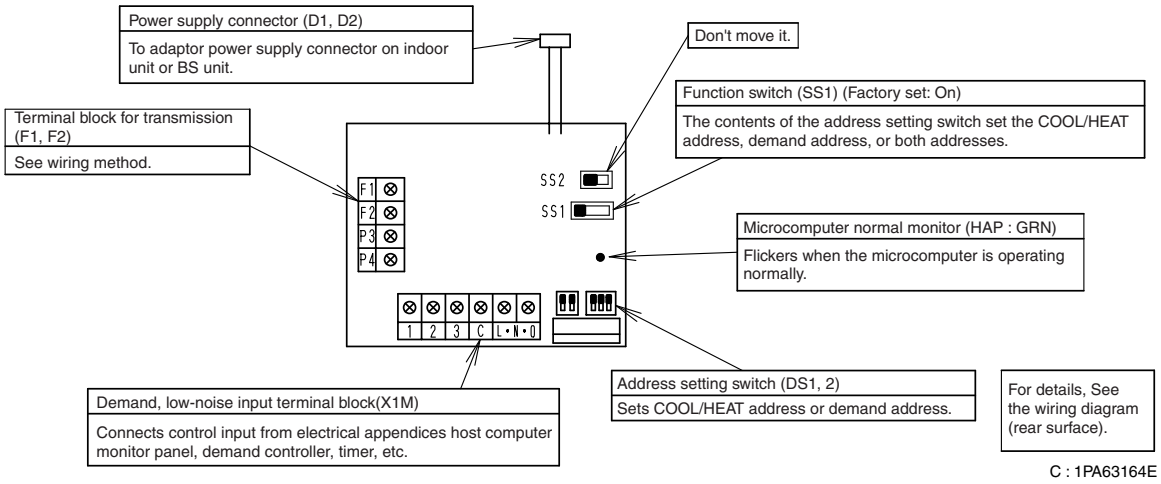
2. Demand control and low-nolse control are executed simultaneously for more than outdoor unit.

• Ecxept RSEY-K



Demand control and low-noise control are executed simultaneously for outdoor unit in [ ].

❷ Names of parts and functions



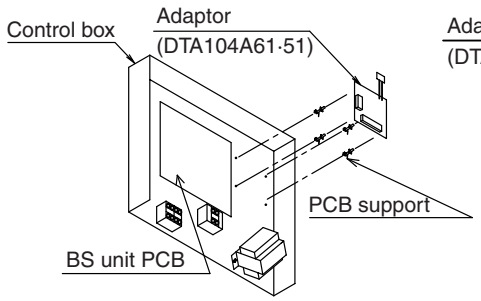
C : 1PA63164E

❸ Installation

- Install the adaptor inside the control box of indoor unit of same refrigerant circuit.
- If installing on a BS unit, install the adaptor inside the control box of the BS unit.

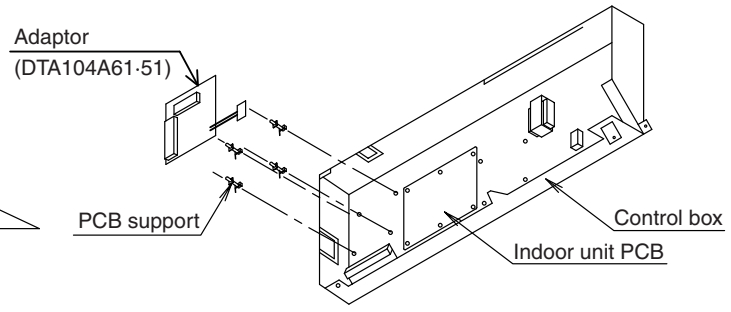
BS Unit

BSV(Q)



Ceiling Mounted Cassette Corner Type

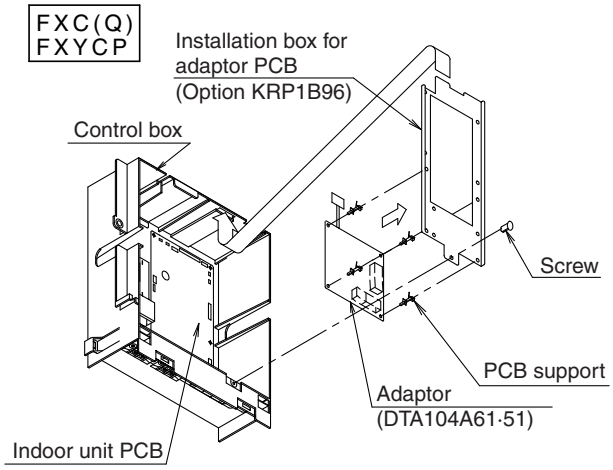
FXK(Q)
FXYKP



1PA63164E

Ceiling Mounted Cassette Type (Double-Flow)

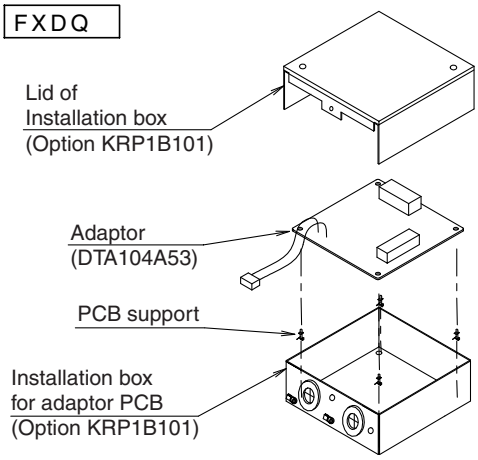
FXC(Q)
FXYCP



Note:
Installation box for adaptor PC board is required to install the adaptor.

Slim Ceiling Mounted Duct Type

FXDQ

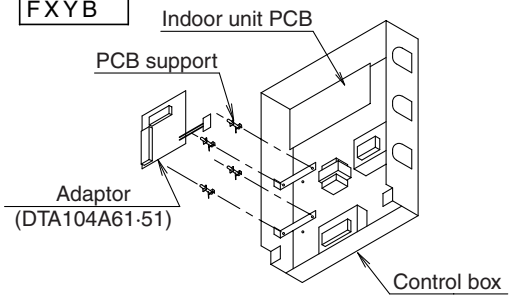


Note:
Installation box for adaptor PC board is required to install the adaptor.

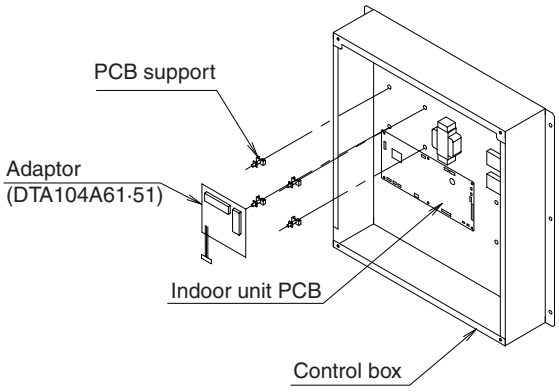
Ceiling Mounted Duct Type
Refer to 5.16 <KRP4A96> Mounting Plate for Adaptor PCB.

Ceiling Mounted Built-In Type

FXSQ
FXYSP
FXYB



FXMQ200·250
FXYMP200·250

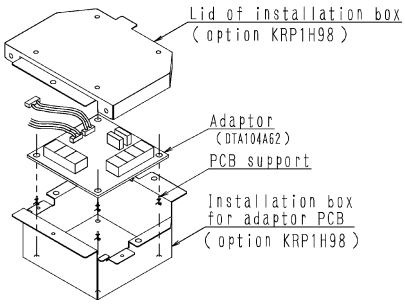


C : 1PA63164E

17

Ceiling Mounted Cassette Type (Round-Flow)

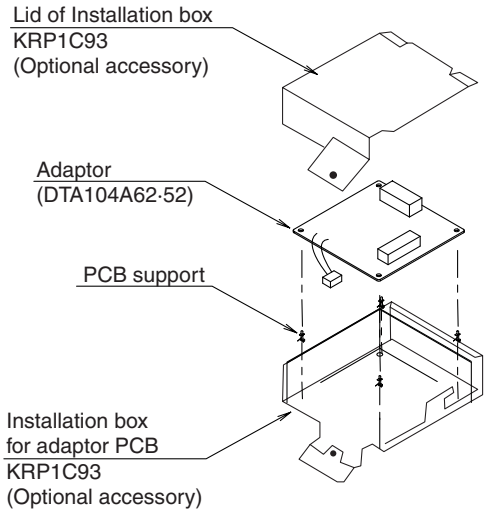
FXFQ



Note:
Installation box for adaptor PC board is required to install the adaptor.

Ceiling Suspended Type

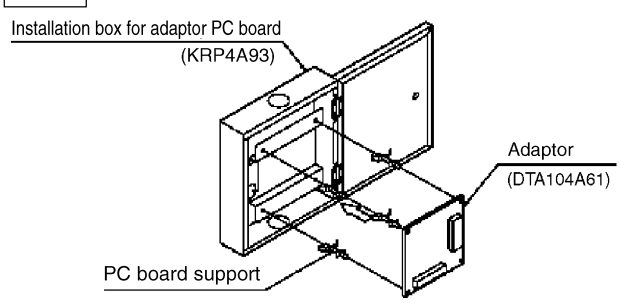
FXHQ
FXYHP



NOTE : Installation box for adaptor PC board is required to install the adaptor.

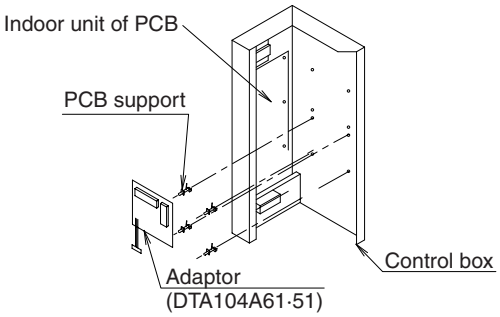
Wall Mounted Type

FXAQ



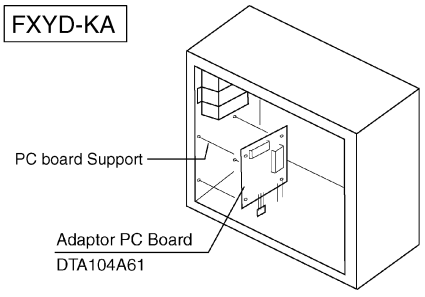
Floor Standing Type

FXLQ, FXYLP
FXNQ, FXYLMP



Ceiling Mounted Duct Type

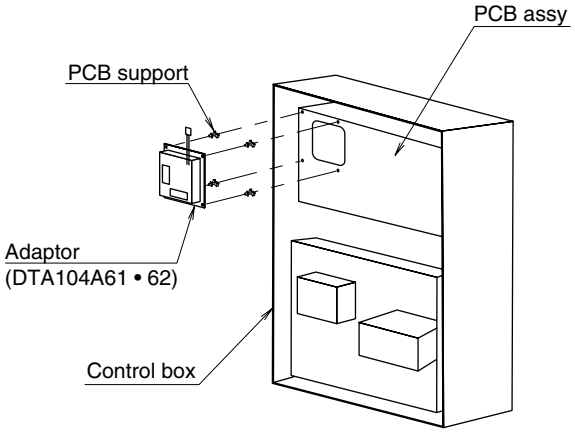
FXYD-KA



C : 1PA63164D

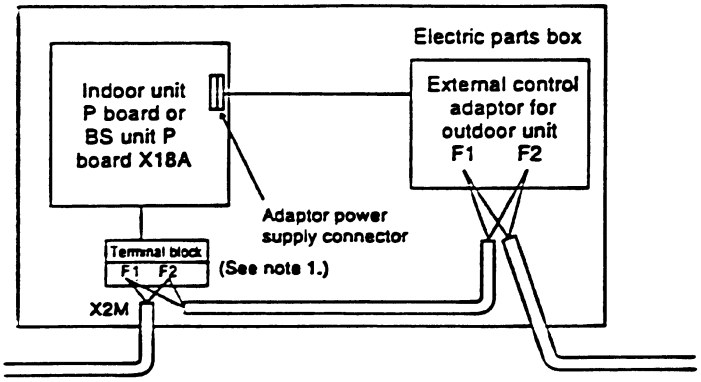
Outdoor Unit

RXYQ5~54



④ Electrical wiring

① Connect the power supply wiring from the adaptor to the adaptor power supply connector on the PCB of the Indoor unit or BS unit.
② Connect the transmission wiring to the various terminal blocks, and to the F1 and F2 terminals on the PCB. (Use double-core wiring with no polarity.)
③ Using the attached wiring ties, clamp the transmission wiring to weak field wiring, etc.



Note 1: If mounting on a BS unit, connect the BS unit's terminal block (F1 and F2, indoor unit side) with F1 and F2 of the adaptor.

NOTES

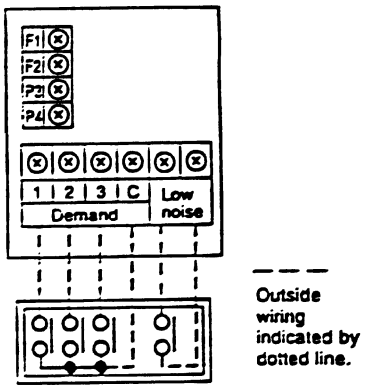
- (Transmission wiring specifications)

Sheathed wire
(2 wire)
0.75 – 1.25 mm²

- (Transmission wiring length)

Malfunction of transmission may occur if the following limits are exceeded.
(Total wiring length: Max. 1000 m
No. of branches: Max. 16)

④ If carrying out demand or low-noise input, connect the adaptor's terminals as shown below.



Host computer monitor panel or demand controller

17

[Input signal]
Constant a contact
Input current is approx. 10 mA per contact.
For the relay contact, use a weak current contact.

[Outside wiring specifications]
Recommended wiring: 0.75-2 mm^2 sheathed wire
Wiring length: Within 150 m
Keep a minimum 50 mm from power supply wiring to prevent malfunction.

Demand input terminal
Short circuit between (Demand 1) - (C)...As a guideline, demand should be about 70%.
Short circuit between (Demand 2) - (C)...As a guideline, demand should be about 40%.
Short circuit between (Demand 3) - (C)...Forced thermo OFF

Low-noise input terminal
When terminals are short-circuited during cooling, capacity save (outdoor unit fan low-speed turn, compressor frequency control) is carried out.
use only at night when load is slight.

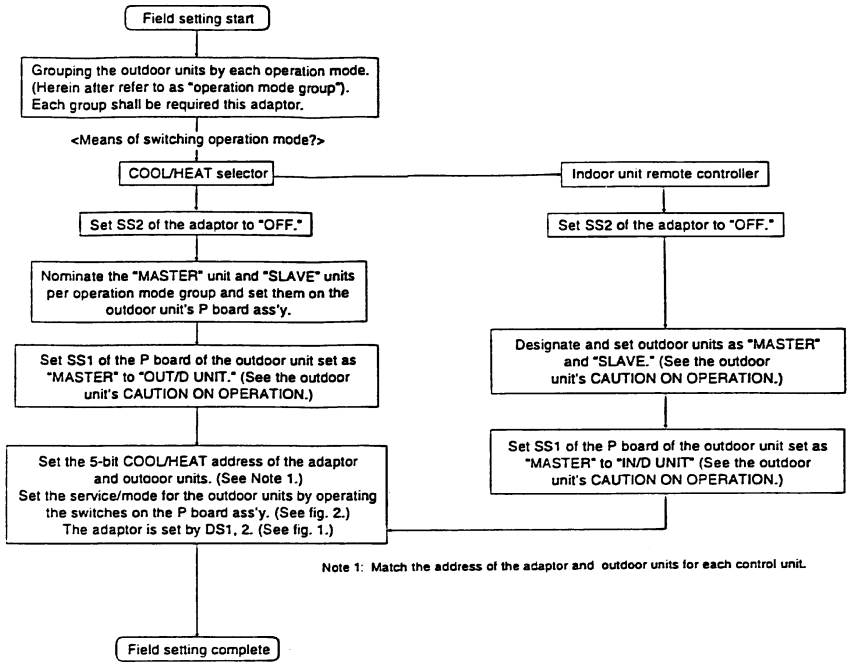
How to set demand control in the field
1. Outdoor unit field setting
- Setting mode 1...Turn ON low noise control as explained in the outdoor unit's service manual.
- Setting mode 2...Match low noise and demand addresses to the external control adaptor address.

2. External control adaptor settings
- Function switch (SS1)
  Set SS1 to either "BOTH" or "DE".
- Address setting switch (DS1,DS2)
  Match DS1 and DS2 to the low noise and demand addresses of the outdoor unit.

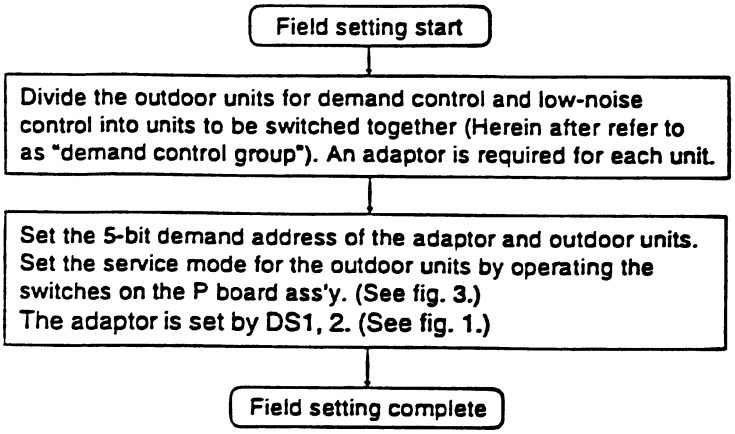
5 Field settings

1. The contents of the various settings for unified switching of the operation mode (cool, heat, fan) are as follows.

Setting switches cannot be switched unless the power is turned on. Be sure, therefore, to turn the power off after switching the switches.

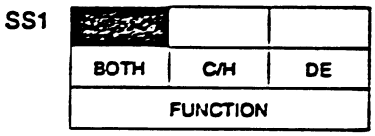


2. The contents of the various settings for unified switching of demand and low noise operation are as follows.



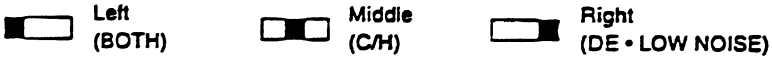
3. To carry out operation mode switching and demand control simultaneously

You can carry out operation mode switching and demand control simultaneously by setting function switch SS1 on the adaptor to "BOTH." Only one address, however, can be set on the adaptor, so the "operation mode switch unit" and "demand control unit" are the same.



Factory set to "BOTH."

Set the COOL/HEAT address, demand address and low noise address, or both as needed.

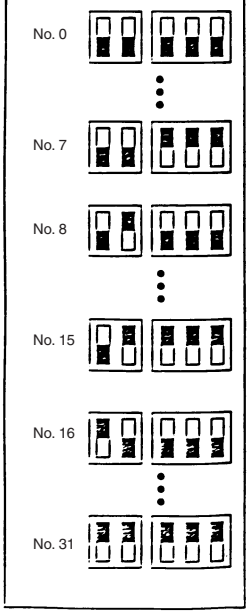


Note 2: The outdoor unit can have an independent "COOL/HEAT address" and "demand address". You can therefore set the "operation mode group" and "demand control group" to different ranges.

17

Fig. 1 Setting of 5-bit cool/heat address by DS1,2

Designate and set cool/heat addresses 0-31 for each operation mode switch unit.



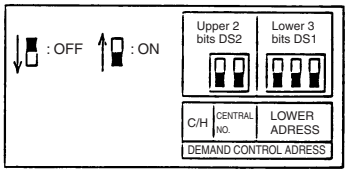


Fig. 2 (Ex.) To set the outdoor unit's cool/heat address to No. 15 :

●—Off ○—On ◑—Flicker

Procedure	Setting contents	MODE	TEST	5-bit				
				C/H SELECT			L.N.O.P.	SEQ. START
				IND	MASTER	SLAVE		
When power turned on	Setting mode (factory set)	● LED20	● LED21	○ LED22	● LED23	● LED24	● LED25	○ LED25
Hold down next page button for 5 sec.	Enters address setting.	○ LED20	● LED21	● LED22	● LED23	● LED24	● LED25	● LED25
Push operation button one time.	Enters cool/heat address setting.	○ LED20	● LED21	● LED22	● LED23	● LED24	● LED25	○ LED25
Push confirmation button one time.	Make sure cool/heat address has been entered.	○ LED20	● LED21	● LED22	● LED23	● LED24	● LED25	● LED25
Push operation button 15 times. (Address No. = Times pushed)	Sets cool/heat address.	○ LED20	● LED21	● LED22	◑ LED23	◑ LED24	◑ LED25	◑ LED25
Push confirmation button two times.	Check cool/heat address.	○ LED20	● LED21	● LED22	● LED23	● LED24	● LED25	● LED25
Push next page button one time.	Returns to set mode.	● LED20	● LED21	○ LED22	● LED23	● LED24	● LED25	○ LED25

Fig. 3 (Ex.) To set the outdoor unit's demand address to No. 7 :

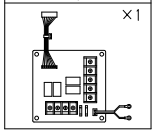
●—Off ○—On ◑—Flicker

Procedure	Setting contents	MODE	TEST	5-bit				
				C/H SELECT			L.N.O.P.	SEQ. START
				IND	MASTER	SLAVE		
When power turned on	Setting mode (factory set)	● LED20	● LED21	○ LED22	● LED23	● LED24	● LED25	○ LED25
Hold down next page button for 5 sec.	Enters address setting.	○ LED20	● LED21	● LED22	● LED23	● LED24	● LED25	● LED25
Push operation button two times.	Enters demand address setting.	○ LED20	● LED21	● LED22	● LED23	● LED24	○ LED25	● LED25
Push confirmation button one time.	Make sure demand address has been entered.	○ LED20	● LED21	● LED22	● LED23	● LED24	● LED25	● LED25
Push operation button 7 times. (Address No. = Times pushed)	Sets demand address.	○ LED20	● LED21	● LED22	● LED23	◑ LED24	◑ LED25	◑ LED25
Push confirmation button two times.	Check demand address.	○ LED20	● LED21	● LED22	● LED23	● LED24	● LED25	● LED25
Push next page button one time.	Returns to set mode.	● LED20	● LED21	○ LED22	● LED23	● LED24	● LED25	○ LED25

5.11 <KRP1B61 / KRP1B56> Adaptor for Wiring

Accessories Check if the following accessories are included in the kit.

Adaptor ×1

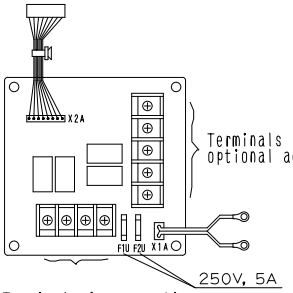


PC board support	×4
Clamp	×3
Installation manual	×1

Notes
- Kits vary according to applicable models.
- A special adaptor fixing plate and box are required for the following models.

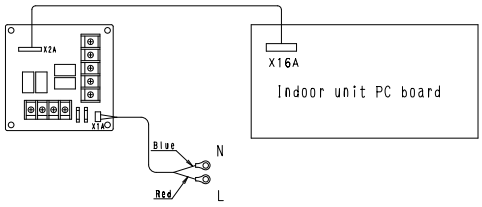
FXYC, FXCQ・・・・・・・・・・KRP1B96
FXD(Installing two adaptors)・・・KRP4A91

1 NAMES OF PARTS



2 ELECTRIC WIRING

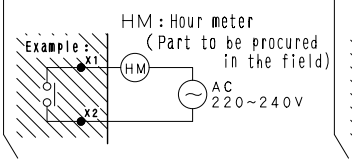
- Refer to the WIRING DIAGRAM attached to the indoor unit before attempting to wire.
  〔Make sure wires to units do not pass over the PC board when wiring.〕
- Wire the adaptor to the indoor unit as shown below.



① Fetching the operation display signal

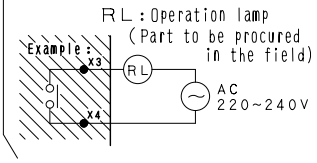
- Attaching an hour meter

Output is generated at the contact while the compressor is running.



- Fan ON display

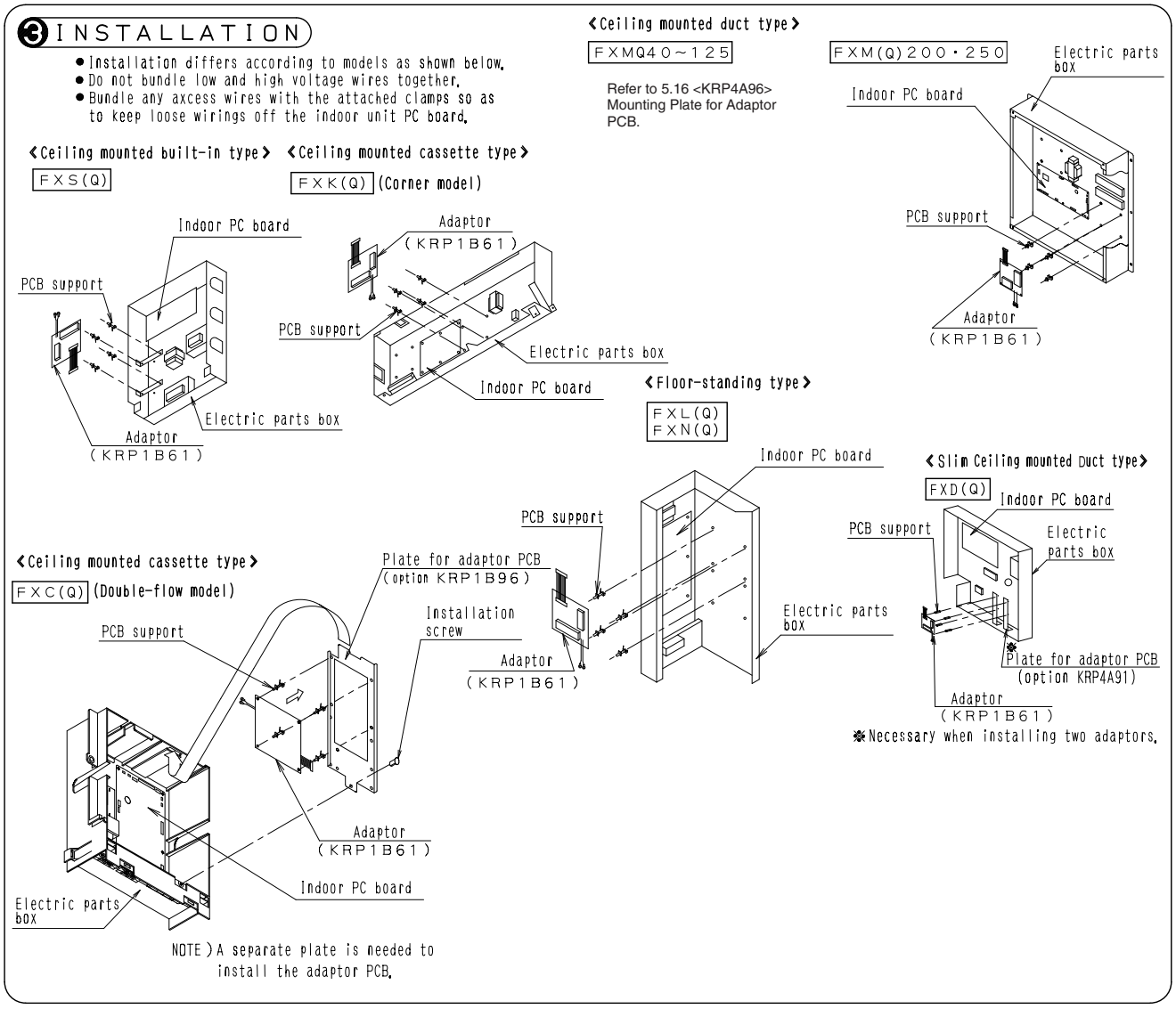
Output is generated at the contact while the fan is running.



② If optional accessories are installed(auxiliary electric heater, humidifier)

- Wire correctly in accordance with the attached installation manual.
- Refer to the wiring diagram applied to the indoor unit when running electric wiring.

17

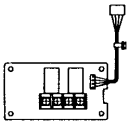

3 INSTALLATION
● Installation differs according to models as shown below.
● Do not bundle low and high voltage wires together.
● Bundle any axcess wires with the attached clamps so as to keep loose wirings off the indoor unit PC board.
《Ceiling mounted built-in type》
FXS(Q)
Indoor PC board
PCB support
Electric parts box
Adaptor (KRP1B61)
《Ceiling mounted cassette type》
FXK(Q) (Corner model)
Adaptor (KRP1B61)
PCB support
Electric parts box
Indoor PC board
《Ceiling mounted duct type》
FXMQ40~125
Refer to 5.16 <KRP4A96> Mounting Plate for Adaptor PCB.
FXM(Q)200・250
Electric parts box
Indoor PC board
PCB support
Adaptor (KRP1B61)
《Floor-standing type》
FXL(Q)
FXN(Q)
Indoor PC board
PCB support
Electric parts box
Adaptor (KRP1B61)
《Slim Ceiling mounted Duct type》
FXD(Q)
Indoor PC board
PCB support
Electric parts box
Plate for adaptor PCB (option KRP4A91)
Adaptor (KRP1B61)
※Necessary when installing two adaptors.
《Ceiling mounted cassette type》
FXC(Q) (Double-flow model)
Plate for adaptor PCB (option KRP1B96)
Installation screw
PCB support
Adaptor (KRP1B61)
Indoor PC board
Electric parts box
NOTE) A separate plate is needed to install the adaptor PCB.

C : 2PA61563C

Adaptor for wiring installation manual

KRP1B51·54·56·57 KRP1BA54·57

Accessories Check if the following accessories are included in the kit.

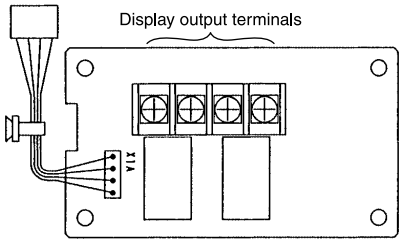
Adaptor	
×1	

PCB support	×4
Clamp	×3
Installation manual	×1

NOTE
- Kits vary according to applicable models.
- A special adaptor fixing plate and box are required for the following models.

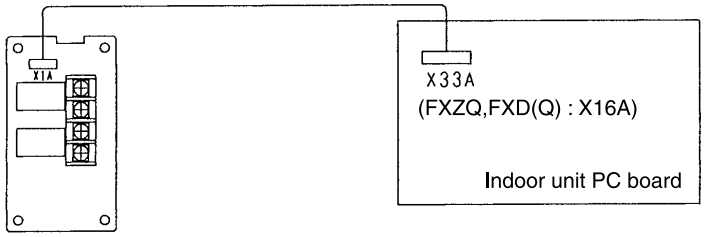
FHYCP-D, FXFQ-MA, FXF-L ····· KRP1D98
FXFQ-P ····· KRP1H98
FH(Y)C(P)–B ····· KRP1C98
FH(Y)C–K ····· KRP1B98
FH(Y)(P), FHQ, FXHQ ····· KRP1C93
FV(Y) ····· KRP4A95
FFQ, FXZQ, FXD(Q) ····· KRP1B101

1 NAMES OF PARTS



2 ELECTRIC WIRING

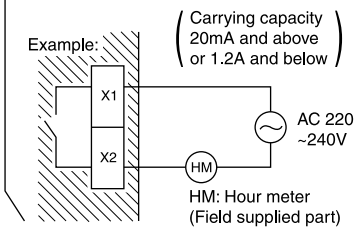
- Refer to the WIRING DIAGRAM attached to the indoor unit before attempting to wire.
  [Make sure wires to units do not pass over the PC board when wiring]
- Wire the adaptor to the indoor unit as described below.



○ Fetching the operation display signal

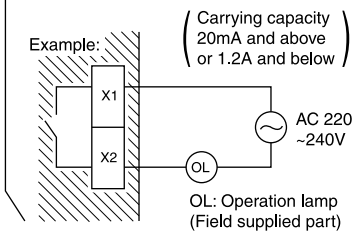
• Attaching an hour meter

Output is generated at the contact while the compressor is running.



• Fan ON display

Output is generated at the contact while the fan is running.



1PA60037E

17

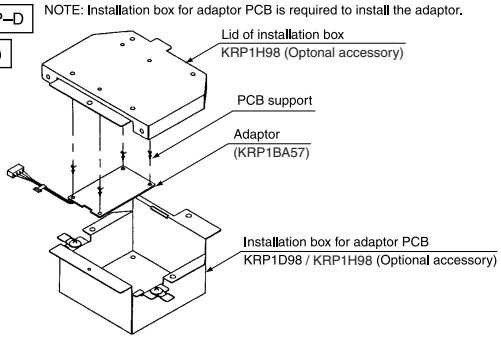
3 INSTALLATION

- Installation differs according to models as shown below. Do not bundle low and high voltage wires together.
- Bundle any excess wires with the attached tie wraps so as to keep loose wirings off the indoor unit PC board.

≪Ceiling-mounted cassette type≫

FHYCP–D
FXF(Q)

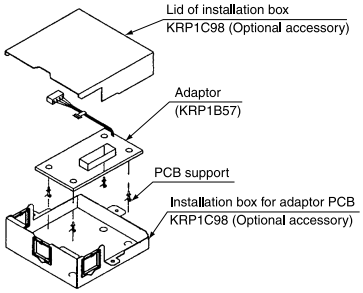
NOTE: Installation box for adaptor PCB is required to install the adaptor.



≪Ceiling-mounted cassette type≫

FH(Y)C(P)–B
FCQ
(Multiflow type)

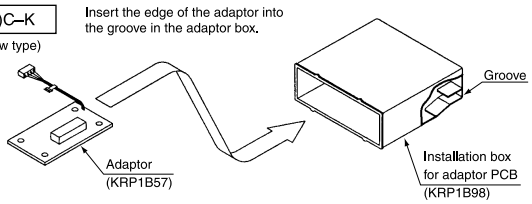
NOTE: Installation box for adaptor PCB is required to install the adaptor.



≪Ceiling-mounted cassette type≫

FH(Y)C–K
(Multiflow type)

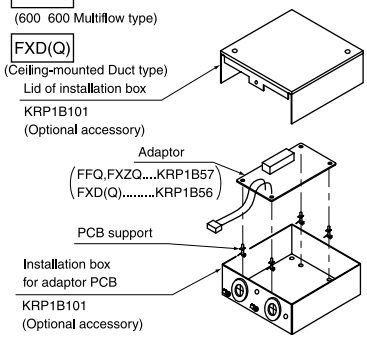
Insert the edge of the adaptor into the groove in the adaptor box.



≪Ceiling-mounted cassette type≫
≪Ceiling-mounted Duct type≫

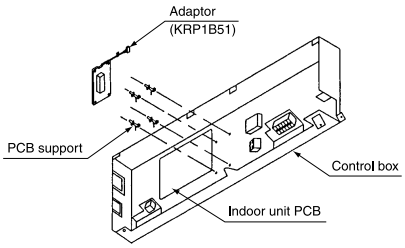
FFQ
FXZQ
(600 600 Multiflow type)
FXD(Q)
(Ceiling-mounted Duct type)

NOTE: Installation box for adaptor PCB is required to install the adaptor.



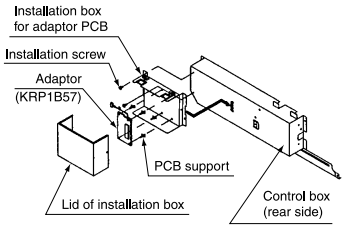
≪Ceiling-mounted cassette type≫

FH(Y)K(P) (Corner type)



≪Floor-standing type≫

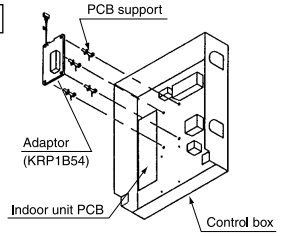
FV(Y)



NOTE: Installation box for adaptor PCB is required to install the adaptor.

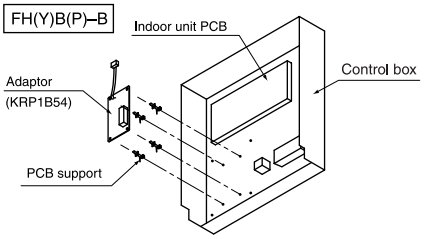
≪Ceiling-mounted built-in type≫ ≪Duct type≫

FH(Y)B(P)
FD(Y)M



≪Ceiling-mounted built-in type≫

FBQ
FH(Y)B(P)–B



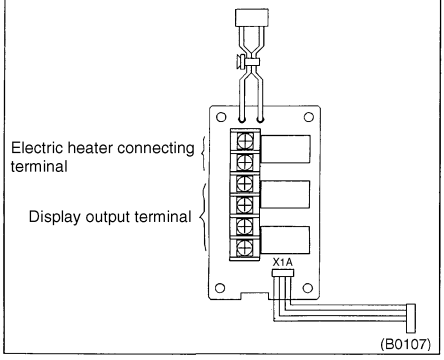
C: 1PA60037E

5.12 <KRP1C3> Adaptor for Wiring

1. Contents of kit

Prior to installation check whether you have the complete kit of parts as shown below including the installation manual.

Names of parts

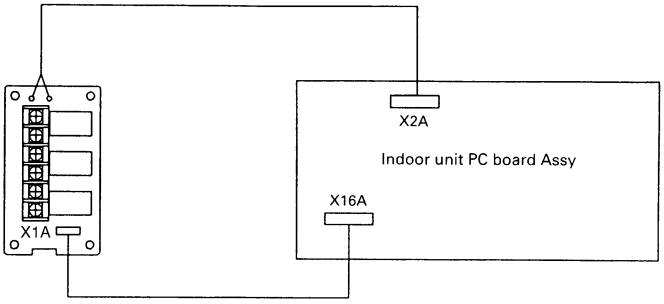


Plastic strap	3 pieces
Installation manual	1 piece
PCB Support *	4 piece

* for Ceiling Suspended Type

2. Electrical wiring

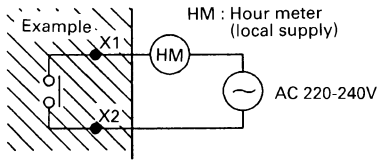
- Refer to the wiring diagram of the indoor unit for its wiring connection. (Make sure all the wiring to the unit should not go over the PC board.)
- Connect the wiring to the indoor unit as shown below.



①To detect the operation display signal

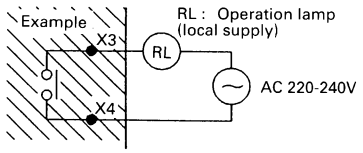
- Installation of the watt-hour meter

Output signal to detect the operation of the compressor



- The fan display signal

Output signal to detect the operation of the fan



②In case the electric heater is installed

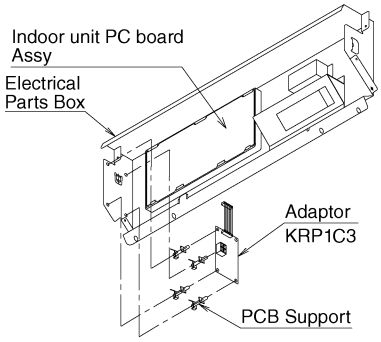
- Connect the wiring properly according to the installation manual included in the kit.
- Refer to the wiring diagram of the indoor unit for its wiring connection.

3. Installation

- Never bundle high and low voltage wiring together.
- Be sure to bundle the excess wring with the attached plastic strap so as to keep the loose wiring off the indoor unit PC board.

< Ceiling Suspended Type >

FXHQ



17

JC : 2PA58148A

5.13 <KRP1C63>

Accessories Check if the following accssories are included in the kit.

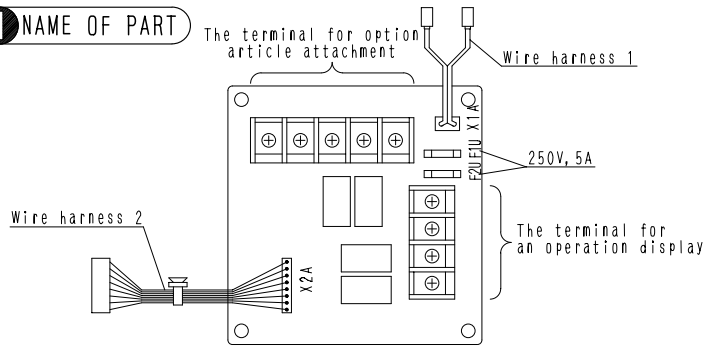
Adapter	Wire harness 1	Wire harness 2	PCB support	Clamp	Installation manual
					
×1	×1	×1	×4	×3	×1

Note

- Keep in mind that a kit changes with application models.
- An adapter attachment box is required for the following model separately.

FCQ~KVLT・FCQ(N)~KVEA
FXFQ~PVE(D) ・・・・・・・・KRP1H98

1 NAME OF PART

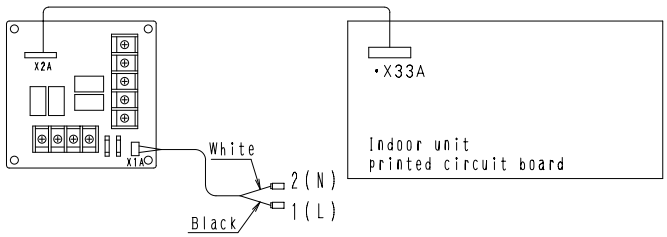


2 ELECTRIC WIRING

- Please be sure for electric wiring to do the upper work of reference of the electric wiring figure of pasting on an indoor unit.

[Be careful for wiring to apparatus not to pass along a substrate top at the time of wiring.]

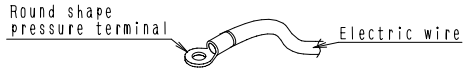
- Please wire an indoor unit main part in the following way.



The connection with the terminal base for wiring between units should use a round shape pressure connection terminal.
When you cannot use it unavoidably, Please be sure to keep the following matter.

2P178844-1B

≪Attention at the time of power-source wiring≫

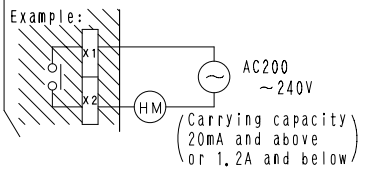


- Please do not connect two diameter electric wires of different to the terminal base for wiring between units. (There is fear of unusual generation of heat according to looseness of an electric wire etc.)
- It connects certainly using a predetermined electric wire, and external force wiring in a terminal part. Please fix not to be added.
- Please use a proper driver for bolting of a terminal screw thread. The driver of small size damages a screw-head part, and cannot perform proper bolting.
- A screw thread may be damaged if a terminal screw thread is bolted too much.
- Refer to the right table for the torque with a bunble of a terminal screw thread.

Torque with a bunble (N・m)	
The terminal base for wiring between units	1.18～1.44

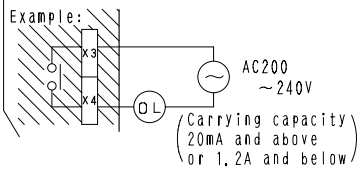
○Fetching the operation display signal.
●Attaching the operation display signal ●Fan ON display

Output is generated at the contact while the compressor is running.



HM:Hour meter
(Field supplied part)

Output is generated at the contact while the fan is running.

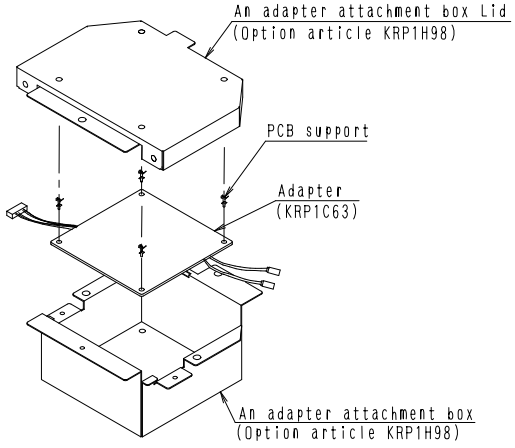


OL:Operation lamp
(Field supplied part)

③INSTALLATION

- Means of attachment are shown below. However, a strong electric wire and a weak-electric-current line should not band together simultaneously.
- Please remain so that wiring does not wire on the indoor PCB, and bundle wiring of a part by attached Thailand Rapp.

FCQ～KVLT
FCQ(N)～KVEA
FXFQ～PVE(D)



NOTE) An adapter attachment box is required for attachment separately.
・Please use substrate support of attachment by an adapter and attach in the adapter attachment box cover side.

2P178844-1B

17

5.14 <KRCS01-1B> Remote Sensor

The built-in temperature control thermistor of the indoor unit is mounted in the intake port of the main body. Some difference can occur between the temperature setting of the built-in thermistor and the actual indoor temperature. In such case, remove the thermistor from the indoor unit and remount it near the living area so that the remote sensor can sense the temperature of the living area.

KRCS01-1B — Remote sensor (for indoor temperature)



- Recommended for ceiling suspension and ceiling-embedded types which often result in a difference between set temperature and actual temperature.
- The sensor for detecting the temperature can be placed away from the indoor air conditioner. (Branch wiring is included in the kit.)

Item \ Model		KRCS01-1B	KRCS01-4B
Length of branch wiring	m	12	
Appearance		Light ivory (with the Daikin logo)	
Box material		ABS resin	
Mass (weight)	kg	0.3	
Dimensions	mm	W50 × H60 × D15	
Component parts		Remote sensor. Extension cord (12m). Screws. Clamps. Installation manual.	

Caution

- Select a location for the sensor where it can detect the average temperature. Avoid the following locations.

1. Locations in direct sunlight.
2. Locations where the outlet air from the air conditioner is directed.
3. Locations close to other heat sources.
4. Locations near doors which might be affected by air coming in.

Installation

Remote sensor INSTALLATION MANUAL

KRCS01-1B
KRCS01-4B

Be sure to read this manual before installation and follow the instruction.

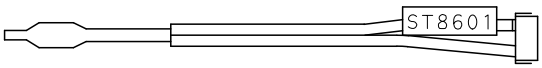
3K019189-1A

Note

● The kit modeles vary according to the model of air conditioners as follows:

KRCS01-1B	Skyair, VRV, Other air-cooled package air conditioners, High efficiency year round cooling only air conditioners, Round-flow type is excluded. Note 1)
KRCS01-4B	Skyair Round-flow type Note 2)
	VRV Round-flow type
	Duct type, FBQ~DVET、FXMQ~PVE

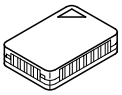
Note 1) If you are unsure if this kit can be used for your indoor unit, check if the type of the thermistor (for detection of inlet air temperature) is as same as the type in this kit (ST8601).
The shape of the thermistor for detection of the indoor unit inlet air temperature is shown below.



Note 2) When installed on these models, the dehumidification by detection of humidity does not operate.

Components

Check the following components.

Designation	Remote sensor (sensor box)	Extension cable (2-core, 12m)	Clamps	Installation manual (this drawing)	Sensor box mounting screws (M4X16)
shape					
Pieces	1 Piece	1 Piece	2 Pieces	1 sheet	2 Pieces

1 Mounting

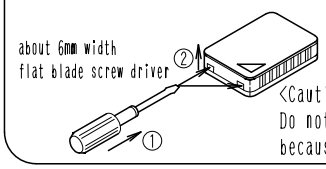
1)Selecting the mounting location

The thermistor for temperature detection is incorporated into the remote sensor. Select the mounting location taking the following cautions into account.

① where the average temperature of an air conditioned room can be detected.
② where it is not exposed to the direct sunlight.
③ where it is not influenced by other heat sources.
④ where it is not exposed to the direct discharge air from the air conditioner.
⑤ whera it is not exposed to the outdoor air infiltrated into the room by opening the door.

2)Mounting

●Remove the cover of the sensor box.

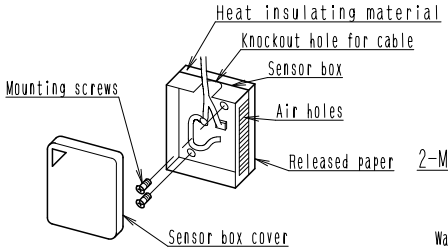


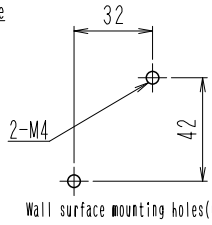
Insert a flat blade screw driver into the sensor box concave part (2 locations)and remove the cover pushig up the nail to the cover of the sensor box.

<Cautions>
Do not push the nail powerfully with a narrow flat blade screw driver, because you may break off the nail.

3K019189A

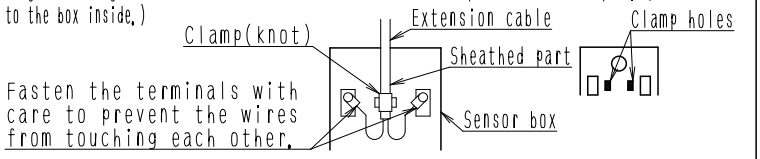
①When mounting on the wall





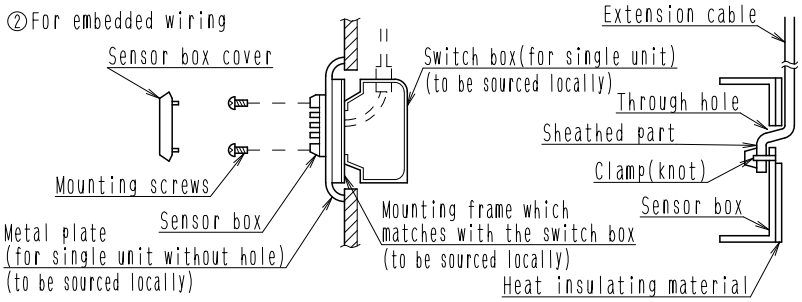
Wall surface mounting holes(unit : mm)

- Break open the knockout hole in the sensor box with a nipper or a similar tool. Pass the extension wires through the hole and fasten the wires to the terminals with screws.
- To avoid tensile force on the terminals, pass the attached clamp through the holes shown in the below right figure and tighten the extension cable with the attached clamp at the sheathed part. (The knot must come to the box inside.)

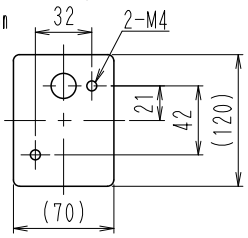


- Screw the sensor box securely to the wall surface with screws M4X16(2 places). If the sensor box cannot be screwed to wall surface, tear off the released paper and mount it on the wall surface

②For embedded wiring



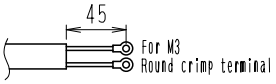
- Pass the extension cable through the switch box cable hole and carry out the wiring.
- Pass the attached clamp though the clamp holes and tighten the extension cable at the sheathed part as shown in the upper right drawing.
- Tap M4 screw holes in the metal plate (to be sourced locally) as shown in the right drawing and mount the switch box on the metal plate.



Holes to be tapped in the metal plate on site (unit: mm)

<Cautions>

- Give caution when wiring so that the air holes will not be blocked.
- When the extension cable is longer than necessary, cut it to the apporopriate length, peel the insulation, attach the round crimp terminal for M3 (to be sourced locally) and carry out the wiring. The length of insulation to be peeled off is as shown.
(Work carefully so that the connector side may not be cut.)



3K019189A

❷ Wiring method

Connect the extension cable connector side to the indoor unit PCB (printed circuit board)
For connection to the indoor unit, follow the procedure shown below.

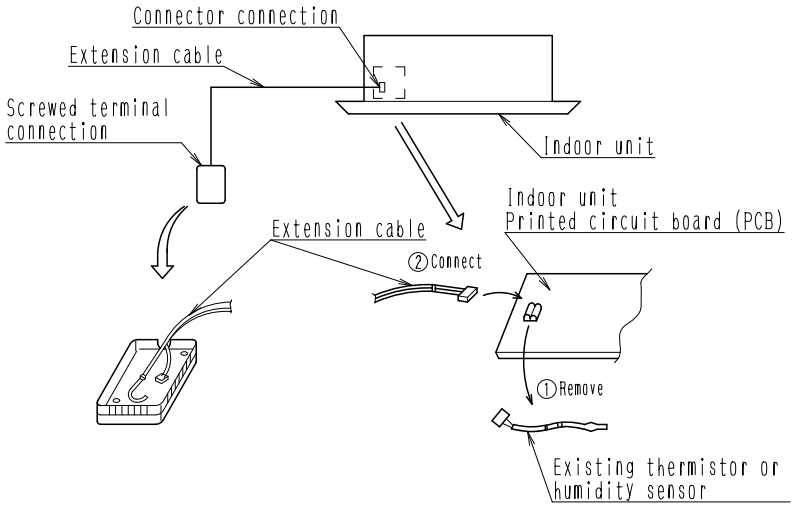
⚠ Caution

1) Make sure to turn off the power supply before starting the wiring work and do not turn on until all the work is completed.
Read also the wiring diagram of the indoor unit when carrying out the work.
2) When wiring the extension cable, do not pass where the extension cable may be affected by the power line or noise.
3) Make sure to securely connect the connectors.
Defective connection may result in incorrect detection of room temperature or malfunction.
4) Do not splice wires.
5) Since the connector marking of the thermistor for detection of inlet air temperature differ depending on the indoor unit type, make sure to check the indoor unit wiring diagram and follow it correctly.

<Procedure>

1. When wiring to the indoor unit PCB, remove the existing thermistor (for detection of inlet air temperature) and then connect the extension cable.

<For Skyair and VRV>



2. Lay and clamp the extension cable inside the indoor unit switch box just like the existing thermistor.
Provide protection of the existing cable for thermistor without affecting other components.
3. Fit the sensor box cover into the sensor box.

❸ Operation test after mounting the sensor

Conduct cooling and heating operation test after the sensor is mounted and the wiring is completed.

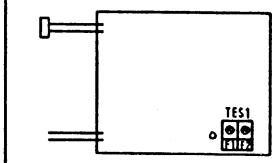
3K019189A

5.15 <DTA109A51> DIII-NET Expander Adaptor

Accessories Check the following accessories are included in the kit before the installation

Adaptor

×1



PCB support	×4
Clamp	×3
Installation Manual	×1

NOTE This adaptor does not apply to salt damage resistsnce.

1 General description of system

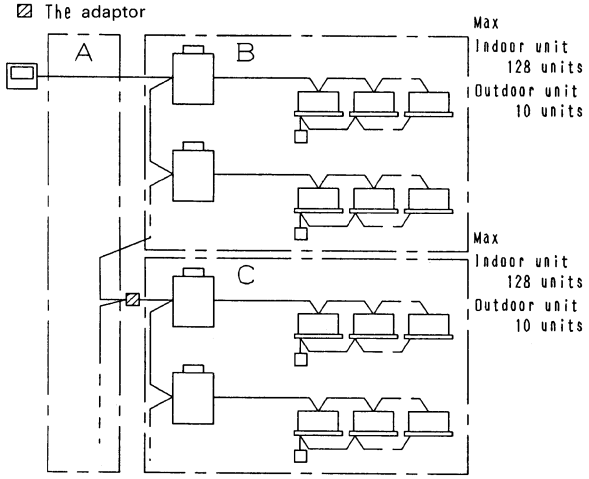
The adaptor allows easy system expansion as long as restrictions are observed.

1. The below systems can be controlled on the Super Wiring System when using the adaptor.

(1) Up to 1024 units can be centrally controlled in 64 different groups. (With 2 central remote controllers, up to 1024 units can be controlled in 128 groups.)

Restrictions on the number of units that can be connected to the Super Wiring System apply to each adaptor.

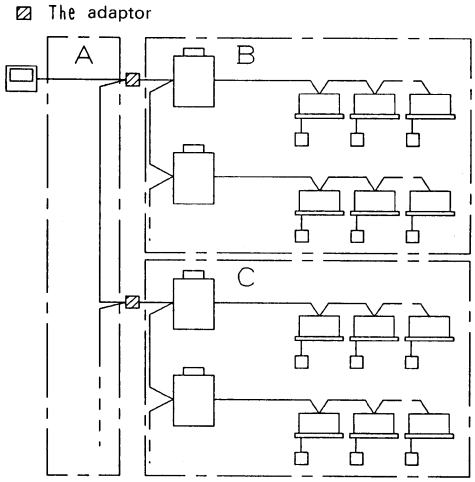
▨ The adaptor



A maximum of 128 indoor units and 10 outdoor units can be connected in each group B and C.

(2) Wiring restrictions (max. length : 1000m, total wiring length : 2000m, max. number of branches : 16) apply to each adaptor.

▨ The adaptor

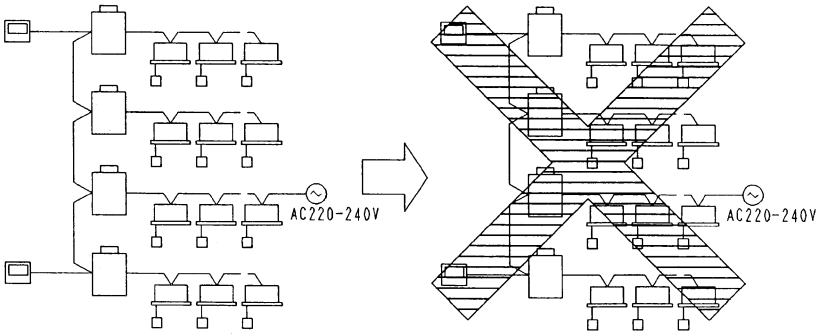


Each group A, B and C can have a maximum wiring length of 1000m, total wiring length of 2000m and a maximum 16 branches.

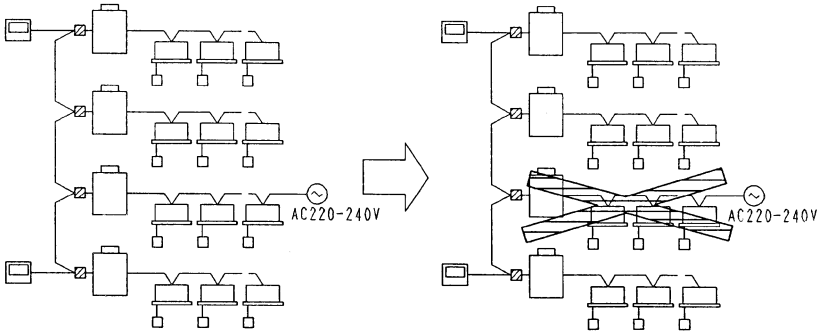
1P013360

(3)Setups risky for centralized control systems are possible.

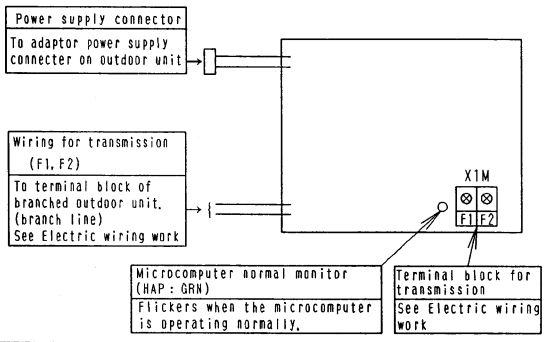
Conventional System Misswiring such as apply 220-240V to circuits could possibly shut down the entire system.



With the adaptor Should trouble occur, only units below the adaptor are shut down. Thus, it is possible to avoid a total system shutdown.



② Names of parts and functions

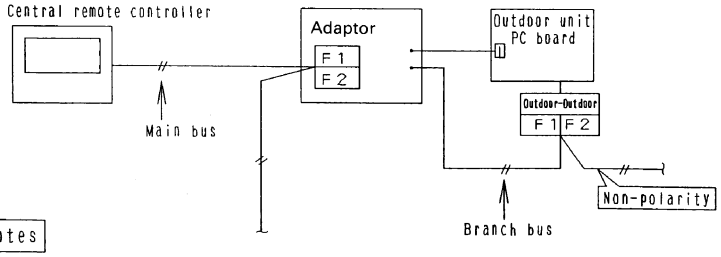


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17

❸Electric wiring work

(1)Connect the wire from the adaptor to the adaptor power connector on the outdoor unit's PC board.
(For connector No.s, see the electric wiring diagrams for the indoor and function units.)
(2)Connect transmission wires between outdoor units (Outdoor-Outdoor terminal board).
(3)Wire transmission wires to terminal boards as shown below.



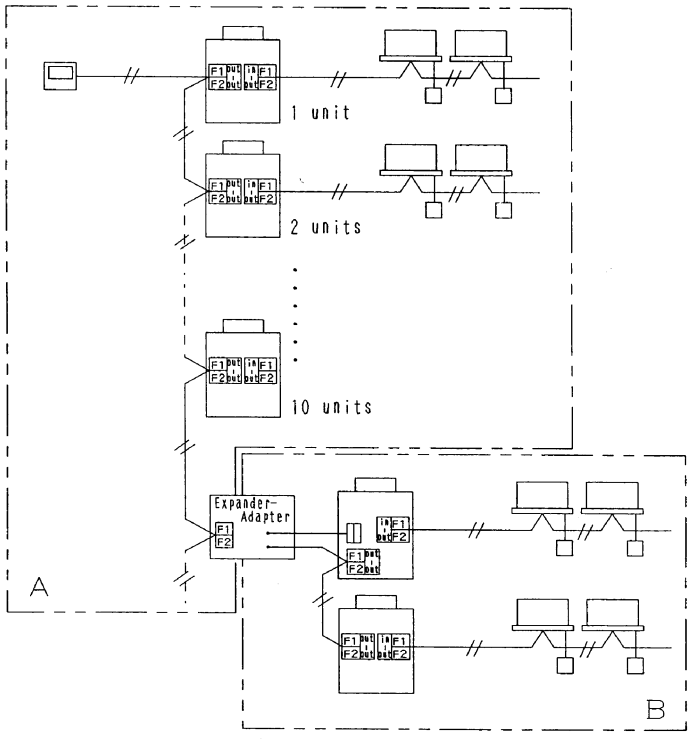
Notes

(Transmission wiring specifications)
- 0.75～1.25mm² sheathed wire (2 wire).

(Transmission wiring length)
- Observe the following limits on transmission wires. The limits apply to each adaptor. If you exceed the limits, it may cause malfunction.
  (Total length : 2000m
  Max. length···1000m
  Max. number of branches : 16)
- At least one outdoor unit and one optional controller for centralized control are required for every main bus and branch bus.
- Up to 8 adaptors can be connected in one system.
- Do not locate adaptors downstream of other adaptors(i.e. : on a branch bus).
- If not used with a central control device, the expander adaptor cannot be used with the wiring adaptor for electrical appendices(KRP2A) or the schedule timer(DST301B51).
- The external control adaptor for outdoor units controls group cooling and demand for each adaptor. (Anything beyond the expansion control falls outside the control domain.)
- Do not turn the system ON/OFF rapidly from the optional controller for centralized control. This can cause temporary erroneous displays.
- Sequential starts is controlled by each expander adaptor.

❹Wiring example

System with more than 10 outdoor units.



Note Wiring restrictions (see"Electric wiring work") apply to each group A and B.

C : 1P013360

5.16 <KRP4A96> Mounting Plate for Adaptor PCB

Caution

- This plate is mountable on the ceiling mounted duct type unit. After confirming the indoor unit model name, mount this plate on the unit listed in the table shown bottom.
- When mounting the plate, see also the indoor unit installation manual and the adaptor PCB (Printed Circuit Board) mounting instruction.
- Fixing method is not on the installation manual attached to the adapter PCB. Please follow directions on this sheet.

Kit name	Indoor unit model that party crowded is possible		
KRP4A96	Ceiling mounted duct type unit	SPLIT	FHMP～ FBQ～
		VRV	FXYMP～ FXMQ～

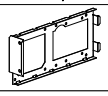
*See the DAIKIN catalog for the details

Accessories

- Check if the following accessories are included with your kit.

<Precaution>

The accessories are required for the installation of the air conditioner. Be sure to keep them until the installation work is completed.

Name	Adaptor plate	Screw	Sealing material	Clamp	Installation manual
Quantity	1PC.	2PCS.	2PC.	8PCS.	1PC.
Shape		 M4×8			

<Caution>

- All field supplied parts and materials and electric works must conform to local codes.
- Use copper wire only.
- For electric wiring work, refer to also "Wiring diagram" attached to the control box lid.
- All wiring must be performed by an authorized electrician.
- A circuit breaker capable of shutting down power supply to the entire system must be installed.

❶ Mounting the adaptor plate

《Wiring to the indoor unit》

① Remove the control box lid. [Fig.1]

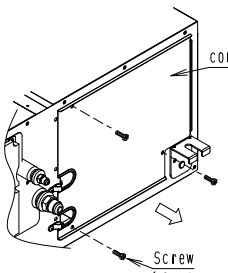
② Connect the wiring to the indoor unit. (The work is easier if the wiring is connected first.)

- See the instruction attached to the adaptor PCB for the place where to connect the wires on the indoor unit.
- Please see the connector location on (figure 1) on the ❷ How to mount the adaptor PCB and handle the wiring.

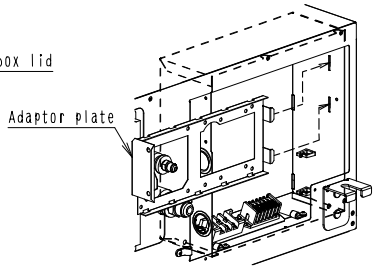
《Mounting the adaptor plate》

① Putting the claw of the adaptor plate into the hole of the box. [Fig.2]

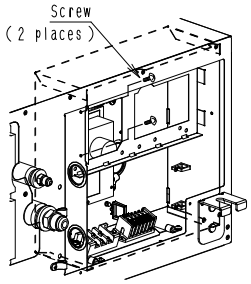
② Fix the box with the attached fixing screws at two places. [Fig.3]



[Fig.1]



[Fig.2]

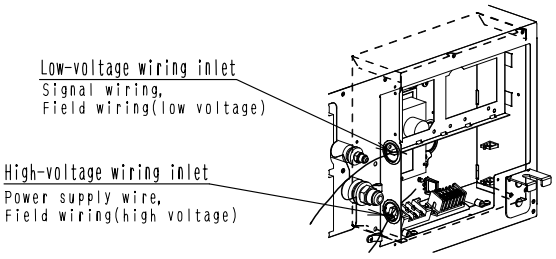


[Fig.3]

❷ How to mount the adaptor PCB and handle the wiring

《How To Lead-in External Wires 》

Lay the wires in the control box through the wire inlet on the side of the control box.



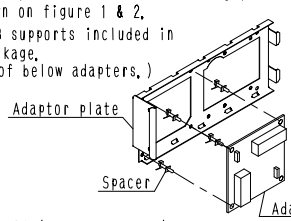
2P226887-1

17

《How to mount the adaptor PCB》

① Connect the wiring to the adaptor PCB.
(The work is easier if the wiring is connected to the PCB first.)
● See the instruction attached to the adaptor PCB for where to connect the wiring.

② Mount adapter PCB onto the mounting plate (in the direction) as shown on figure 1 & 2.
● Use PCB supports included in the package.
(for any of below adapters.)

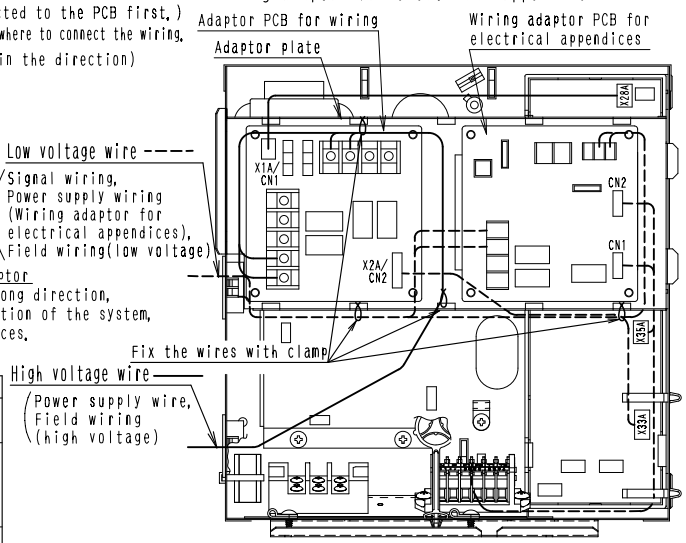


《Caution》If (adapter PCB is) mounted in a wrong direction, electric noise may cause malfunction of the system, or may influence upon other devices.

Adaptor PCB		Place where to mount
Adaptor for wiring	KRP1C13 KRP1C64	(Fig. 1)
Wiring adaptor for electrical appendices (※1)	KRP4A1 KRP4AA51 KRP2A1 KRP2A61	(Fig. 1)
External control adaptor for outdoor unit (※1)	DTA104A1 DTA104A61	(Fig. 2)

(※1) adapter cannot be mounted 2 or more together.

〈Adaptor for wiring, Wiring adaptor for electrical appendices〉



(Fig. 1)

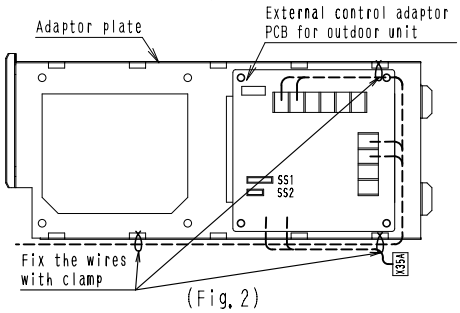
《How to handle the wiring》

《Caution》Do not make high-voltage and low-voltage wires run in parallel. Electric noise may cause malfunction of the system, or may influence upon other devices.

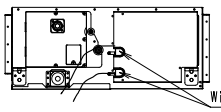
① Fix the internal wirings.
Bind the wiring from the adaptor plate to the indoor unit control box according to the drawing shown on the right with the attached clamp.
(Put the clamping materials through the corner holes to fix wires.)
● Bind the the surplus wires and the other wiring together with the clamp.

② Put the control box lid, and wrap the wire sealing material around the wires so as to block the wire through holes.
● Take precautions to prevent the wires from getting caught.
● After all the wiring connections are done, fill in any gaps in the through holes with putty or insulation (procured locally) to prevent small animals and insects from entering the unit from outside.
(If any do get in, they could cause short circuits in the control box.)

〈External control adaptor for outdoor unit〉

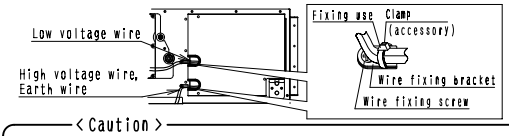


(Fig. 2)

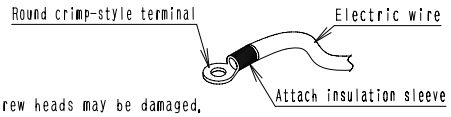


⚠Warning
Trim and lay the wiring neatly and attach the control box lid securely.
An electric shock or fire may result if the control box lid catches any wiring or the wires push up the lid.

③ Connect round crimp-style terminals provided with insulation sleeves to the terminal block for power supply.
● See the instruction attached to the indoor unit.



〈Caution〉
● Connect proper wires securely and fix the wires so that external force will not be imposed on the terminals.
● Use an appropriate screwdriver to tighten the terminal screws. The screw heads may be damaged if the screwdriver is too small and the terminal screws will not be tightened properly.
● Do not tighten the terminal screws excessively, or otherwise the screw heads may be damaged.
● Refer to the table below for the required tightening torque values of the terminal screws.



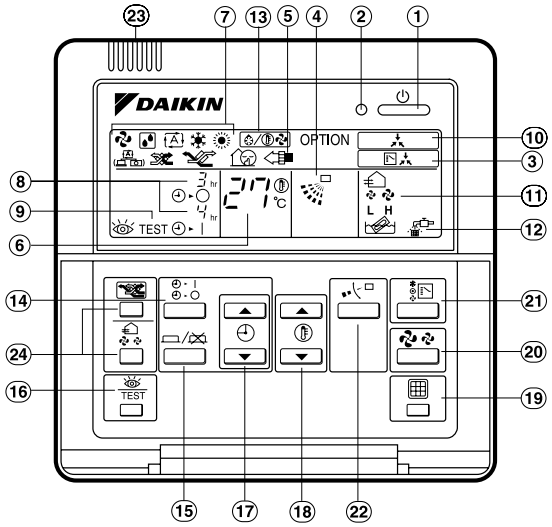
	Tightening torque (N・m)
Terminal block for remote controller and transmission wires	1.18 – 1.44
Terminal block for power supply, and wiring the units	1.18 – 1.44

2P226887-1

6. Control Functions

6.1 <BRC1C62> Wired Remote Controller

6.1.1 Name and Function



C : 3P171361-1

1. **On/off button**
   Press the button and the system will start. Press the button again and the system will stop.
2. **Operation lamp (red)**
   The lamp lights up during operation.
3. **Display " " (changeover under control)**
   It is impossible to changeover heat/cool with the remote controller which display this icon.
4. **Display " " (air flow flap)**
5. **Display " OPTION " (ventilation/air cleaning)**
   This display shows that the ventilation unit are in operation. (these are optional accessories)
6. **Display " " (set temperature)**
   This display shows the temperature you have set.
7. **Display " " " " " " " " " " (operation mode)**
   This display shows the current operation mode.
8. **Display " " (programmed time)**
   This display shows the programmed time of the system start or stop.
9. **Display " TEST " (inspection/test operation)**
   When the inspection/test operation button is pressed, the display shows the mode in which the system actually is.
10. **Display " " (under centralized control)**
    When this display shows, the system is under centralized control. (This is not a standard specification.)
11. **Display " " (fan speed)**
    This display shows the fan speed you have selected.
12. **Display " " (time to clean air filter)**
13. **Display " " (defrost/hot start)**
14. **Timer mode start/stop button**
15. **Timer on/off button**
16. **Inspection/test operation button**
    This button is only used by qualified service persons for maintenance purposes.
17. **Programming time button**
    Use this button for setting the programming start and/or stop time.
18. **Temperature setting button**
    Use this button for setting the desired temperature.
19. **Filter sign reset button**
    Refer to the operation manual of indoor unit.
20. **Fan speed control button**
    Press this button to select the fan speed of your preference.
21. **Operation mode selector button**
    Press this button to select the operation mode of your preference.
22. **Air flow direction adjust button**
23. **Thermistor**
    It sense the room temperature around the remote controller.
24. **These button are used when the ventilation unit are installed (These are optional accessories)**
    Refer to the operation manual of the ventilation unit.

- In contradistinction to actual operating situations, the display on figure 1 shows all possible indications.
- Above figure shows the remote controller which is opened the cover.
- If that particular function is not available, pressing the button may display the words "NOT AVAILABLE" for a few seconds.
  When running multiple units simultaneously the "NOT AVAILABLE" message will only be appear if none of the indoor units is equipped with the function. If even one unit is equipped with the function, the display will not appear.

C : 3P171361-1

17

Wired Remote Controller	Type	Model
		R-410A
BRC1C62	Ceiling Mounted Cassette Type (Round Flow)	FXFQ
	Ceiling Mounted Cassette Type (Double Flow)	FXCQ
	Ceiling Mounted Cassette Corner Type	FXKQ
	Slim Ceiling Mounted Duct Type	FXDQ
	Ceiling Mounted Duct Type (Low Silhouette Type)	—
	Ceiling Mounted Built-In Type	FXSQ
	Ceiling Mounted Built-In Type (Rear Suction)	—
	Ceiling Mounted Duct Type	FXMQ
	Ceiling Suspended Type	FXHQ
	Wall Mounted Type	FXAQ
	Ceiling Suspended Cassette Type	FXUQ
	Floor Standing Type	FXLQ
	Concealed Floor Standing Type	FXNQ
	Ceiling Suspended Cassette Type	FXUQ

Notes
1 : BRC1C62...Kits for General Market

6.1.2 Field Setting

FIELD SETTING (If optional accessories are mounted on the indoor unit, the indoor unit setting may have to be changed. Refer to the instruction manual for each optional accessory.)

Procedure

①When in the normal mode, press the "TEST" button for a minimum of four seconds, and the FIELD SET MODE is entered.

②Select the desired MODE NO. with the "▲▼" button.

③During group control, when setting by each indoor unit (mode No. 20, 21 and 23 have been selected), push the "▣" button and select the INDOOR UNIT NO to be set. (This operation is unnecessary when setting by group.)

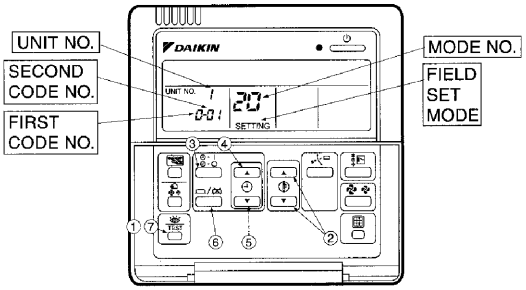
④Push the "▲" upper button and select FIRST CODE NO.

⑤Push the "▼" lower button and select the SECOND CODE NO.

⑥Push the "▭" button once and the present settings are SET.

⑦Push the "TEST" button for about one second to return to the NORMAL MODE.

(Example) If during group setting and the time to clean air filter is set to FILTER CONTAMINATION - HEAVY, SET MODE NO. to "10," FIRST CODE NO. to "0," and SECOND CODE NO. to "02."



Mode No. Note) 1	FIRST CODE NO.	Description of Setting		SECOND CODE No. Note) 2 01	SECOND CODE No. Note) 2 02	SECOND CODE No. Note) 2 03
10(20)	0	Filter Contamination - Heavy/Light (Setting for spacing time of display time to clean air filter) (Setting for when filter contamination is heavy, and spacing time to clean air filter is to be halved)	Ultra-long-life type	Light: Approx. 10,000 hours	Heavy: Approx. 5,000 hours	—
			Long-life type	Light: Approx. 2,500 hours	Heavy: Approx. 1,250 hours	
			Standard type	Light: Approx. 200 hours	Heavy: Approx. 100hours	
	1	Long-life filter type (Setting of filter sign indication time) (Change setting when Ultra-long-life filter is installed)		Long-life filter	Ultra-long-life filter (1)	—
	3	Spacing Time of Display Time to Clean Air Filter Count (Setting for when the filter sign is not to be displayed)		Display	Do Not Display	—
11(21)	0	Setting Number of Connected Skyair Simultaneous Operation System Indoor Units (Setting for Simultaneous Operation System)		Pair	Twin	—
13(23)	0	High Ceiling Setting (Setting for when installed in a Ceiling higher than 2.7m)		Normal	High Ceiling 1	High Ceiling 2
	1	Selection of Air Flow Direction (Setting for when a blocking pad kit has been installed)		F	T	W
	3	Air Flow Direction Adjust Function (To be set when decoration panel for air outlet is installed)		Equippeed	No Equippeed	—
	4	Air Flow Direction Range Setting		Upper	Normal	Lower
	6	Setting the External Static Pressure (Setting according to the connected duct resistance) (For FHYK, follow the High Ceiling Setting)		Normal (Normal)	High Static Pressure (High Ceiling)	Low Static Pressure —

NOTES)
1. Setting is carried out in the group mode, however, set the mode number inside the ( ) for individual setting of the each indoor unit or confirmation after setting.
2. The SECOND CODE number. is set to "01" when shipped from the factory. However for the following cases it is set to "02"
   • Air flow direction range setting.
3. Do not make any settings not given in the table on the left.
4. Not displayed if the indoor unit is not equipped with that function.
5. When returning to the normal mode, "88" may be displayed in the LCD in order for the remote controller to initialize itself.

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17

Notes:

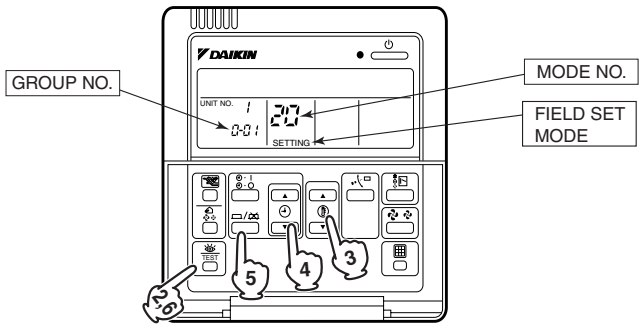
1. Setting is carried out in the group mode. however, if the mode number inside the parentheses is selected, indoor units can also be set individually.
2. The SECOND CODE number is set to " ▭ " when shipped from the factory.
3. Not displayed if the indoor unit is not equipped with that function.
4. When returning to the normal mode. "*88*" may be displayed in the LCD in order for the remote controller to initialize itself.
5. ∗ : Setting the static pressure selection for FXD (Q)

	SECOND CODE NO.	
	01 (Factory Setting)	02 (High Static Pressure Setting)
FXD	20 Pa	49 Pa
FXDQ	15 Pa	44 Pa

6.1.3 Setting Group No. for Centralized Control

In order to conduct the central remote control using the central remote controller and the unified ON/OFF controller, Group No. settings should be made by group using the operating remote controller.
Make Group No. settings for central remote control using the operating remote controller.

1. While in normal mode, press and hold the TEST switch for a period of four seconds or more to set the system to "Field Setting Mode".
2. Select the MODE No. "*00*" with the " ▲▼ " button.
3. Use the " ▲▼ " button to select the group No. for each group.
   (Group numbers increase in the order of 1-00, 1-01, ... 1-15, 2-00, ... 4-15.)
4. Press " ▭/▭ " to set the selected group No.
5. Press " TEST " to return to the NORMAL MODE.



Note:

- For simplified remote controller, see the following.
- For setting group No. of HRV and wiring adaptor for other air conditioners, etc., refer to the instruction manual attached.

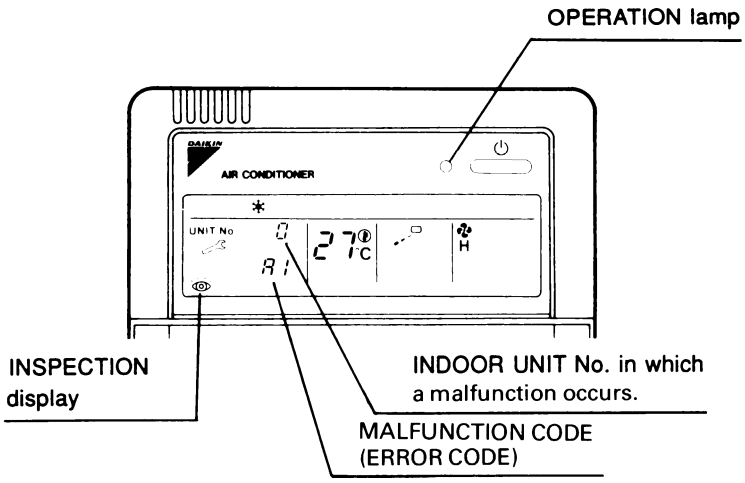
NOTICE

Enter the group No. and installation place of the indoor unit into the attached installation table. Be sure to keep the installation table with the operation manual for maintenance.

6.1.4 Trouble Shooting

1. If one of the following malfunctions occurs, take the measures shown below and contact your Daikin dealer. The system must be repaired by a qualified service person.

- If a safety device such as a fuse, a breaker, or an earth leakage breaker frequently actuates, or ON/OFF switch does not properly work.
  Measure: Stop the system.
- If water leaks from unit.
  Measure: Stop the system.
- If the display " " (INSPECTION), "UNIT No.", and the OPERATION lamp flash and the "MALFUNCTION CODE (ERROR CODE)" appears.



Measure: Notify your Daikin dealer and inform him/her of the display.

2. If the system does not properly operate except for the above mentioned case, and none of the above mentioned malfunctions is evident, investigate the system according to the following procedures.

1. **If the system does not operate at all.**
   - Check if there is a power failure.
     If power failure occurs during operation, the system automatically restarts immediately after the power supply recovers.
2. **The system goes into FAN OPERATION, but as soon as it goes into HEATING or COOLING OPERATION, the system stops**
   - Check if the air inlet or outlet of outdoor or indoor unit is blocked by obstacles.
   - Check if the remote controller display shows " " (TIME TO CLEAN AIR FILTER). Ask a qualified service person to clean the air filters.
3. **The system operates but it does not sufficiently cool or heat.**
   Check the below matters.
   - If the thermostat setting is too high or too low.
   - If the air inlet or outlet of the indoor or the outdoor unit is blocked with obstacles.
   - If the doors or the windows are open.
   - If the FAN SPEED button is set to LOW SPEED " ".
   - If there are too many occupants in the room during cooling operation.
   - If the heat source of the room is excessive.
   - If direct sunlight enters the room.

6.1.5 Display of Malfunction (Error) Codes

1. Diagnosis by liquid crystal display of remote contrroller

When the operation is stopped due to trouble, " 👁 " and error code are displayed. In such a case, diagnosis the fault contents by using the table below, the unit No. is displayed at group controlling, which makes it possible to know the indoor unit No. which is in trouble.

2. Diagnosis by monitor of micro computer [LED-A (GREEN)]

LED: Flickering — Normal LED: ON or OFF — Error

3. Diagnosis by monitor of connection between indoor and outdoor/BS unit (LED 10 (Red) on indoor printed circuit board)

LED: OFF — Normal LED: ON — Error (connecting wiring failure)

LIST OF MALFUNCTION (ERROR) CODES

Div.	Error codes	Error contents
Indoor unit error	A0	Operation of protective unit
	A1	Printed circuit board error
	A1	Printed circuit board error
	A3	Drain level (33H) error
	A6	Fan motor locking, overload
	A7	Swing flap motor (M1S) error
	A9	Electronic expansion valve drive unit (Y1E) error
	AF	Drain level (33H) error (Indoor unit is stopping)
	AJ	Capacity setting error
	C4	Liquid pipe thermistor (R2T) error
	C5	Gas pipe thermistor (R3T) error
	C9	Suction air thermistor (R1T) error
	CJ	Remote controller thermistor error
Outdoor unit error	E0	Operation of protective unit
	E1	Printed circuit board error
	E1	Printed circuit board error
	E3	Operation of high pressureswitch
	E4	Operation of low pressureswitch
	E9	Electronic expansion valve drive unit (Y1E) error
	F3	Discharge pipe temperature error
	H3	High pressure switch error
	H4	Operation of low pressureswitch
	H9	Outdoor air thermistor (R1T) error
	H9	Outdoor air thermistor (R1T) error
	J1	Pressure sensor error
	J3	Discharge pipe thermistor (R3T) error
	J3	Discharge pipe thermistor (R3T) error
	J5	Suction pipe thermistor (R4T) error
	J6	Heat exchanger' s thermistor (R2T) error
	J6	Heat exchanger' s thermistor (R2T) error
	JA	Discharge pipe pressure sensor error
	JC	Suction pipe pressure sensor error
	JH	Oil thermistor error

Div.	Error codes	Error contents
Outdoor unit error	L0	Inverter error
	L4	Inverter cooling error
	L5	Short-circuit in compressor motor, short-circuit in power unit
	L6	Short-circuit in compressor motor, short-circuit
	L8	Over load in compressor, disconnection compressor motor
	L9	Locking in compressor
	LA	Power unit error
	LC	Transmission error between inverter and outdooor unit
	P1	Voltage unbalance, open phase
	P4	Power unit temperature sensor error
System error	**U0**	Pressure drop due to insufficient refrigerant electoronic expansion valve
	U1	Peverse phase, open phase
	U2	Voltage error, instantaneous power interruption
	U4	Transmission error between indoor unit and outdoor/BS unit Transmission error between outdoor unit and BS unit
	U5	Transmission error between remote controller and indoor unit
	U5	Printed circuit board error or setting error of remote controller
	U7	Transmission error between outdoor units
	U7	Transmission error between outdoor units(unified cooling/heating, low noise operation)
	U8	Transmission error between main remote controller and sub remote controller
	U9	Transmission error between another indoor unit and outdoor unit within same system
	UA	Conbination error of indoor unit/BS unit/outdoor unit (model No. etc) Conbination error of indoor unit/remote controller Connected location error of BS unit
	UC	Address duplication of central remote controller
	UE	Transmission error between indoor unit and central remote controller
	UF	Wiring circuit does not corespond to refrigerant circuit
	UH	Miss wiring

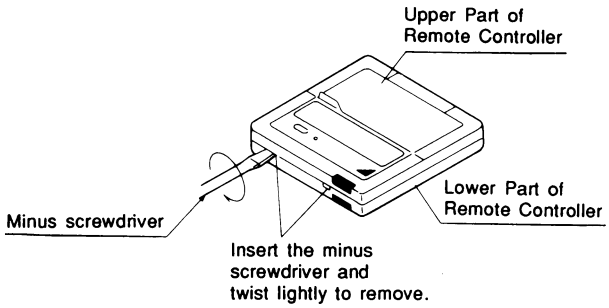
As for error codes blanked with white, be sure to check and repair, though system may be operated without displaying " 👁 "

6.1.6 Remote Controller Mounting Instructions

1. Remove the Upper Part of Remote Controller

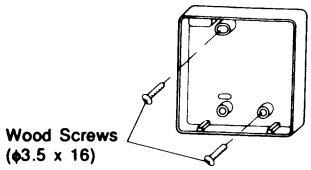
Insert minus screwdriver into the slots in the lower part of remote controller (2 places), and remove the upper part of remote controller.

The PC board is mounted in the upper part of remote controller. Be careful not to damage the board with the minus screwdriver.

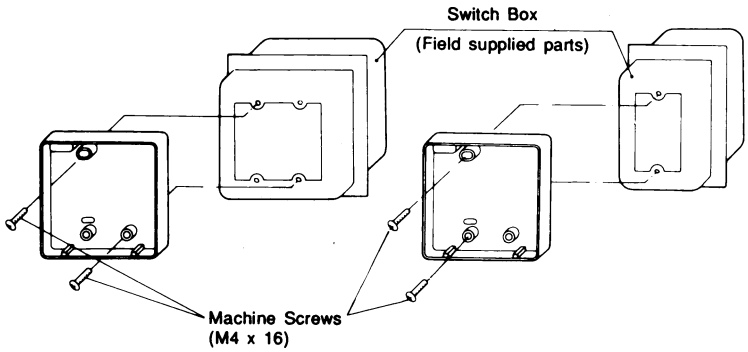


2. Fasten the Remote Controller

1. **For exposed mounting,** fasten with the included wood screws (2).



2. **For flush-mounting,** fasten with the included machine screws (2).



For the field supplied switch box, use optional accessories KJB111A or KJB211A.

Note:

Choose the flattest place possible for the mounting surface. Be careful not to distort the shape of the lower part of remote controller by over-tightening the mounting screws.

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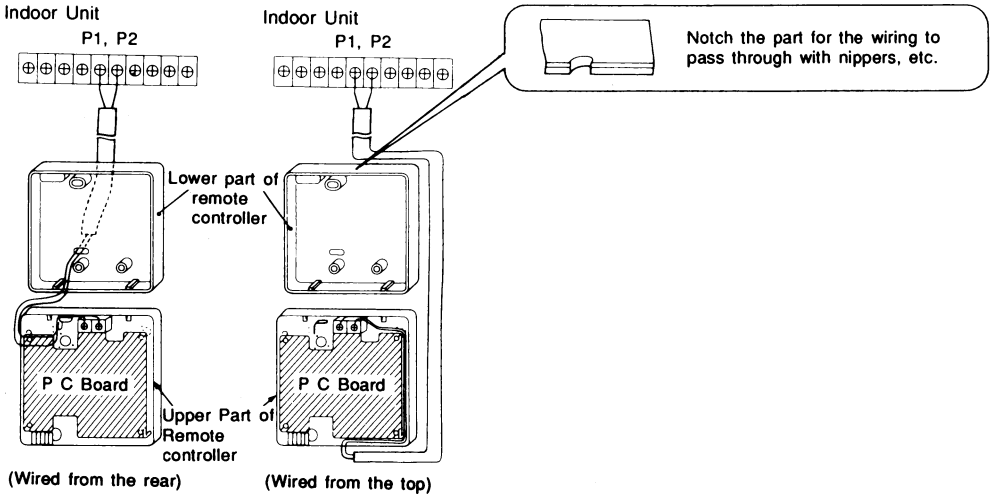
17

3. Wire the Indoor Unit

Connect the terminals on top of the upper part of remote controller (P1, P2), and the terminals of the indoor unit (P1, P2). (P1 and P2 do not have polarity.)

Note:

When wiring, run the wiring away the power supply wiring in order to avoid receiving electric noise (external noise).

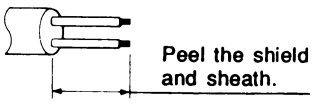


Wiring Specifications

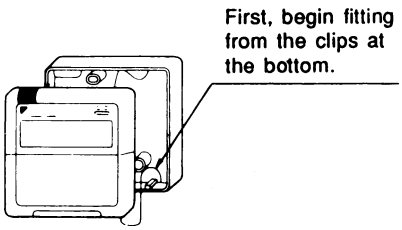
Wiring Type	Sheathed Wire (2 wire)
Size	0.75 - 1.25 mm²

Note:

1. Peel the shield and sheath for the part that is to pass through the inside of the remote controller case, as shown in the figure below.



2. Treat the terminal for the wire to be connected to the remote controller so the shielded part doesn't touch any other part.



4. Reattach the Upper Part of Remote Controller

Be careful not to pinch the wiring when attaching.

Note:

1. The switch box and wiring for connection are not included.
2. Do not directly touch the PC board with your hand.

C : 2PA52602C

6.2 <BRC4C, 7C, 7E> Wireless Remote Controller

6.2.1 Applied Model

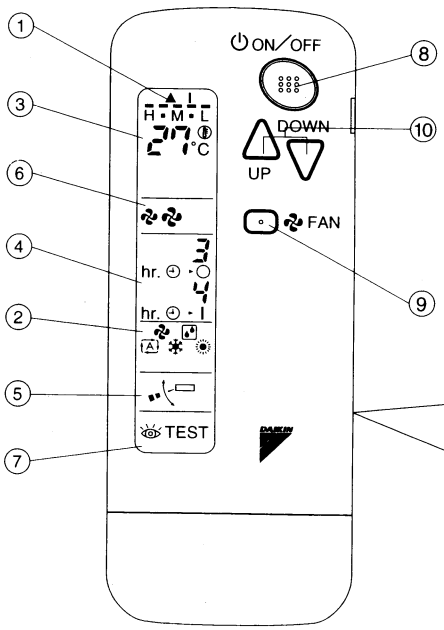
	Model Name	Applied Model		Model Name	Applied Model
Signal receiver of indoor units	BRC7F634F	Ceiling Mounted Cassette Type (Round Flow)	Signal receiver of indoor units	BRC4C62	Ceiling Mounted Built-In Type Ceiling Mounted Duct Type (200MA, 250MA) Floor Standing Type Concealed Floor Standing Type
	BRC7C62	Ceiling Mounted Cassette Type (Double-Flow)		BRC4C61	Ceiling Mounted Cassette Corner Type
	BRC4C65	Slim Ceiling Mounted Duct Type Ceiling Mounted Duct Type (Middle and high static pressure)		BRC7C528W	Ceiling Suspended Cassette Type
	BRC7E63W	Ceiling Suspended Type			
	BRC7E618	Wall Mounted Type			

6.2.2 Part Names and Functions

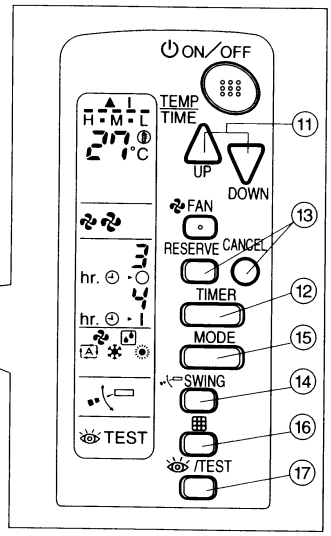
Remote Controller Combination Kit Name (Main Unit + Signal Receiver)	Remote Controller Kit Name (Main Unit)
BRC7F634F	BRC4C160
BRC7C62 BRC7E618 BRC7E63W BRC4C61	BRC4C151
BRC4C62	BRC4C152
BRC4C65	BRC4C158

1

1-1

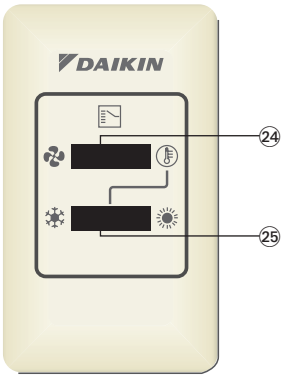


1-2

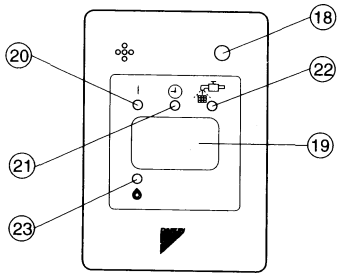


1-3

COOL/HEAT CHANGEOVER REMOTE CONTROL SWITCH



2



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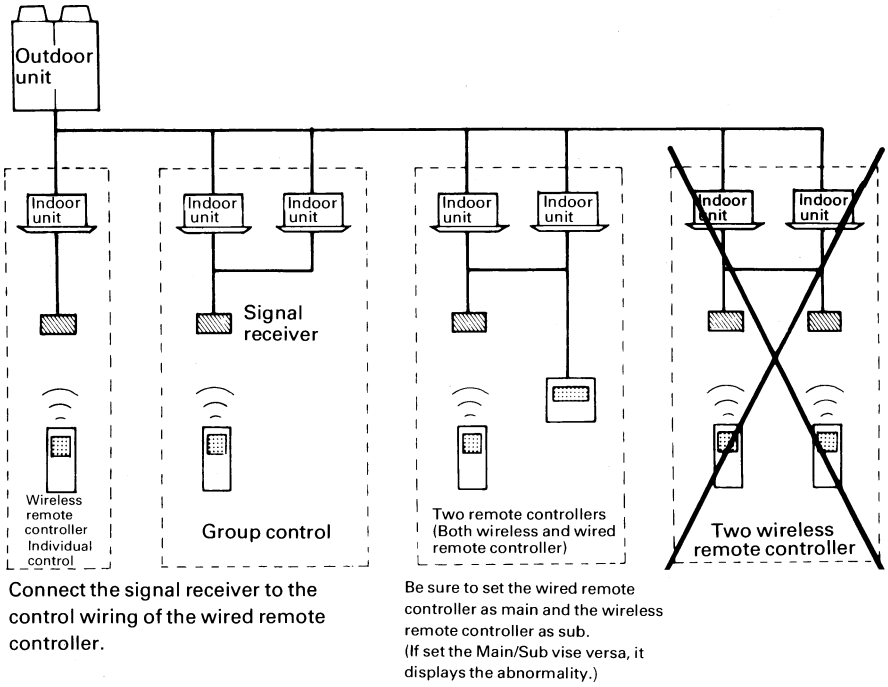
NAMES AND FUNCTIONS OF THE OPERATING SECTION

①	**DISPLAY " ▲ " (SIGNAL TRANSMISSION)** This lights up when a signal is being transmitted.
②	**DISPLAY " " " " " " " " " " (OPERATION MODE)** This display shows the current OPERATION MODE. For straight cooling type, " " (Auto) and " " (Heating) are not installed.
③	**DISPLAY " " (SET TEMPERATURE)** This display shows the set temperature.
④	**DISPLAY " " (PROGRAMMED TIME)** This display shows PROGRAMMED TIME of the system start or stop.
⑤	**DISPLAY " " (AIR FLOW FLAP)**
⑥	**DISPLAY " " " " (FAN SPEED)** The display shows the set fan speed.
⑦	**DISPLAY " /TEST" (INSPECTION/ TEST OPERATION)** When the INSPECTION/TEST OPERATION BUTTON is pressed, the display shows the system mode is in.
⑧	**ON/OFF BUTTON** Press the button and the system will start. Press the button again and the system will stop.
⑨	**FAN SPEED CONTROL BUTTON** Press this button to select the fan speed, HIGH or LOW, of your choice.
⑩	**TEMPERATURE SETTING BUTTON** Use this button for SETTING TEMPERATURE (Operates with the front cover of the remote controller closed.)
⑪	**PROGRAMMING TIMER BUTTON** Use this button for programming "START and/or STOP" time. (Operates with the front cover of the remote controller opened.)
⑫	**TIMER MODE START/STOP BUTTON**
⑬	**TIMER RESERVE/CANCEL BUTTON**
⑭	**AIR FLOW DIRECTION ADJUST BUTTON**
⑮	**OPERATION MODE SELECTOR BUTTON** Press this button to select OPERATION MODE.
⑯	**FILTER SIGN RESET BUTTON** Refer to the section of MAINTENANCE in the operation manual attached to the indoor unit.
⑰	**INSPECTION/TEST OPERATION BUTTON** This button is used only by qualified service persons for maintenance purposes.
⑱	**EMERGENCY OPERATION SWITCH** This switch is readily used if the remote controller does not work.
⑲	**RECEIVER** This receives the signals from the remote controller.
⑳	**OPERATING INDICATOR LAMP (Red)** This lamp stays lit while the air conditioner runs. It flashes when the unit is in trouble.
㉑	**TIMER INDICATOR LAMP (Green)** This lamp stays lit while the timer is set.
㉒	**AIR FILTER CLEANING TIME INDICATOR LAMP (Red)** Lights up when it is time to clean the air filter.
㉓	**DEFROST LAMP (Orange)** Lights up when the defrosting operation has started.
㉔	**FAN/AIR CONDITIONING SELECTOR SWITCH** Set the switch to " " (FAN) for FAN and " " (A/C) for HEAT or COOL.
㉕	**COOL/HEAT CHANGEOVER SWITCH** Set the switch to " " (COOL) for COOL and " " (HEAT) for HEAT.

(NOTE)
- For the sake of explanation, all indications are shown on the display in Figure 1 contrary to actual running situations.
- Fig. 1-2 shows the remote controller with the front cover opened.
- Fig. 1-3 shows this remote controller can be used in conjunction with the one provided with the VRV system.
- If the air filter cleaning time indicator lamp lights up, clean the air filter as explained in the operation manual provided with the indoor unit. After cleaning and reinstalling the air filter, press the filter sign reset button on the remote controller. The air filter cleaning time indicator lamp on the receiver will go out.

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6.2.3 Example of the System by Wireless Remote Controller



When you use two remote controllers, be sure to set the wired remote controller of indoor unit as Main.
It is not possible to use two wireless remote controller.
The wiring between the separate type signal receiver and the indoor unit should not exceed 200 m.

6.2.4 Functional Comparison between Wired and the Wireless Remote Controller

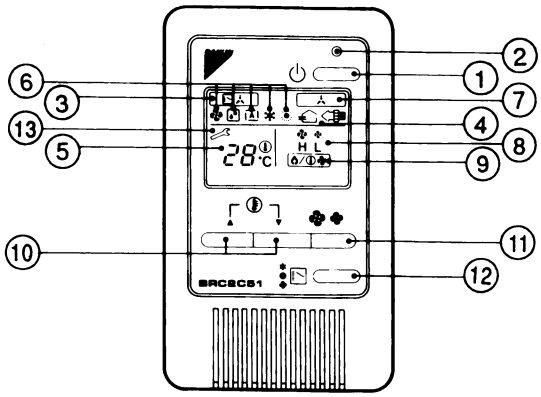
Function/Display	Wired Remote Controller	Wireless Remote Controller
Operation Lamp	LED on The Remote Controller	LED on The Signal Receiver
ON/OFF BUTTON	"On" and "Off" is repeated each time you press the button.	
OPERATION MODE SELECTOR BUTTON	Operation mode can be changed by this button. However, if the unit is under the control of central remote controller, the operation mode cannot be changed.	Operation mode can be changed by this button. However, if the unit is under the control of the central controller, the operation mode cannot be changed, though the display on the remote control is changed.
AIR FLOW DIRECTION ADJUST BUTTON	The position of the flaps can be set by this button by looking at the display on the LCD.	The position of the flaps can be set by this button by looking at the position of the flaps of the unit.
Filter Sign Reset Button	Filter sign can be reset by this button after cleaning the air filter.	Filter sign can be reset by this button after cleaning the air filter. It is displayed on the LCD of the signal receiver.

■ The operation and the setting by other operational button (Temperature setting, fan speed control, timer, inspection/test operation, and group No. setting) are the same for both wireless and wired remote controller.

Function/Display	Wired Remote Controller	Wireless Remote Controller
■ Display of "TIME TO CLEAN AIR FILTER"	Displayed on the LCD of remote controller	Displayed on the LED of the signal receiver
Display of "VENTILATION"	This display is shown when HRV is in operation.	—
Display of "DEFROST/ HOT START"	This display is shown when the unit is in defrost/hot start operation	Displayed on the LED of the receiver.
Display of "UNDER CENTRALIZED CONTROL"	This display is shown when the system is under centralized control.	There is no display, but it notifies by the buzzer.
Display of "CHANGEOVER UNDER CENTRALIZED CONTROL"	This display is shown when the remote controller cannot changeover heat/cool.	No display (It alerts by the buzzer that the operation mode cannot be changed.)
Thermostat on the Remote Controller	Yes	No
Ventilation Mode	Yes	No

6.3 <BRC2C51 (BRC2A51)> Simplified Remote Controller

6.3.1 Name and Function



REMOTE CONTROLLER: NAME AND FUNCTION OF EACH SWITCH AND DISPLAY	
①	**ON/OFF BUTTON** Press the button and the system will start. Press the button again and the system will stop.
②	**OPERATION LAMP (RED)** The lamp lights up during operation. Blinks in case of stop due to malfunction.
③	**DISPLAY " [ ] " (CHANGEOVER UNDER CONTROL)** It is impossible to changeover heat/cool with the remote controller when it shows this display. (As for details, see " SETTING OF MASTER REMOTE CONTROLLER" in the operation manual attached to the indoor unit.)
④	**DISPLAY " OPTION " (VENTILATION)** This display shows that the total heat exchanger (HRV) are in operation.
⑤	**DISPLAY "28 °C "(SET TEMPERATURE)** This display shows the set temperature. Only given during a cooling or heating operation.
⑥	**DISPLAY " " " " " " " " " " (OPERATION MODE)** This display shows current OPERATION MODE. " " is not available with outdoor units specially designed for cooling only. " " is reserved only for outdoor units capable of heat recovery.
⑦	**DISPLAY " " (UNDER CENTRALIZED CONTROL)** When this display shows, the system is UNDER CENTRALIZED CONTROL. (This is not a standard specification)
⑧	**DISPLAY " H L " (FAN SPEED).** The display shows the fan speed: "HIGH" or "LOW".
⑨	**DISPLAY " " (DEFROST/ HOT START)** Indicates that defrost or hot start (during which the fan is stopped till the temperature of air supply rises enough at the start of a heating run) is progress.
⑩	**TEMPERATURE SETTING BUTTON** Use this button for SETTING TEMPERATURE of the thermostat. ▲ ; Each press raises the set temperature by 1°C. ▼ ; Each press lowers the set temperature by 1°C. The variable temperature range is 16°C to 32°C.
⑪	**FAN SPEED CONTROL BUTTON** Press this button to select the fan speed, HIGH or LOW, of your choice.
⑫	**OPERATION MODE SELECTOR BUTTON** Press this button to select OPERATION MODE.
⑬	**DISPLAY " " (MALFUNCTION)** Indicates malfunction and blinks if the unit stops operating due to malfunction. (As for details, see "TROUBLE SHOOTING" in the operation manual attached to the indoor unit.)
For the sake of explanation, all indications are shown in the figure above contrary to actual running situations.	

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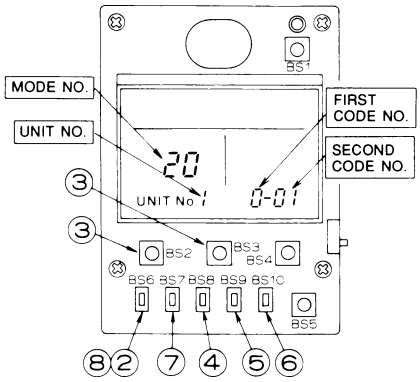
Note:

1. Following functions are not including in this controller.
   - Auto swing function.
   - Timer setting function.
   - Display of time to clean air filter.
2. For setting, refer to page 1001.
3. For BRC2C51
   - Equipped with a thermostat sensor in the remote controller that makes possible more comfortable room temperature control.
   - Complied with the RoHS directive.

6.3.2 Setting Procedure

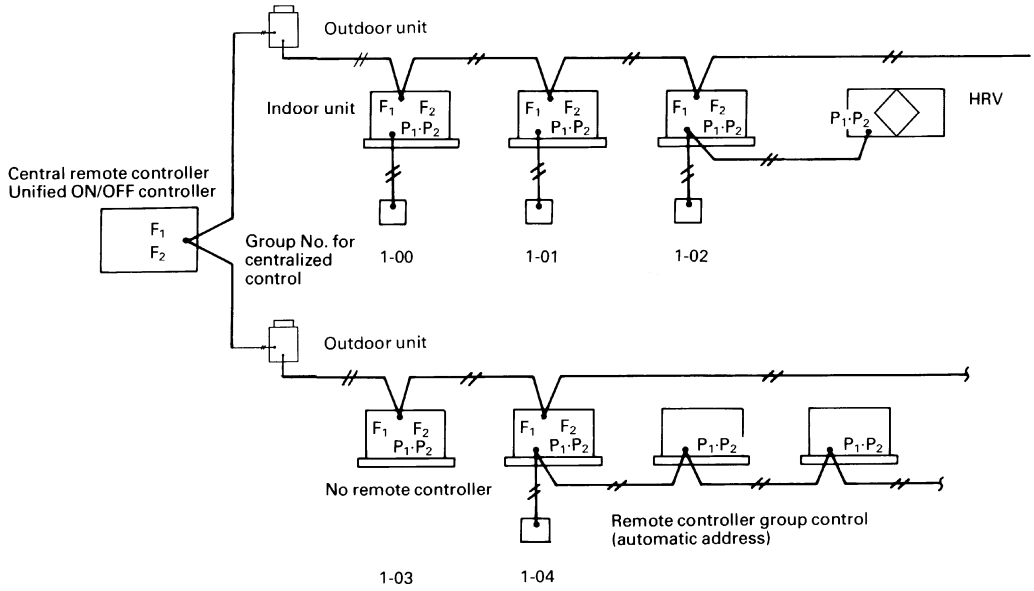
1. Remove the upper part of remote controller.
2. When in the normal mode, press the [BS6] BUTTON (②) (field set), and the FIELD SET MODE is entered.
3. Select the desired MODE No. with the [BS2] BUTTON (③) (temperature setting ▲) and the [BS3] BUTTON (③) (temperature setting ▼).
4. During group control, when setting by each indoor unit (mode No. 20, 22, and 23 have been selected), push the [BS8] (④) BUTTON (unit No.) and select the INDOOR UNIT NO. to be set. (This operation is unnecessary when setting by group.)
5. Push the [BS9] BUTTON (⑤) (set A) and select FIRST CODE NO.
6. Push the [BS10] BUTTON (⑥) (set B) and select SECOND CODE NO.
7. Push the [BS7] BUTTON (⑦) (set/cancel) once and the present settings are SET.
8. Push the [BS6] BUTTON (⑧) (field set) to return to the NORMAL MODE.

(Example) If during group setting and the time to clean air filter is set to FILTER CONTAMINATION - HEAVY, SET MODE NO. to “10”, FIRST CODE NO. to “0”, and SECOND CODE NO. to “02”.



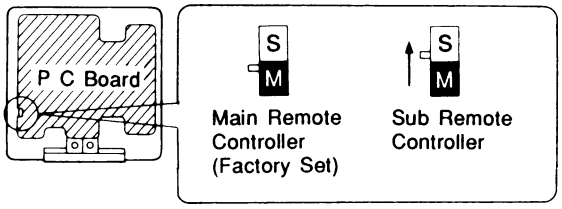
3PA52946A

- If not using any remote controllers, connect a remote controller for group No. setting, set the group No. for centralized control, and then disconnect the remote controller after setting.
- Group No. setting example



<If controlling one indoor unit with two remote controllers>

Change the MAIN/SUB changeover switch setting as described below.



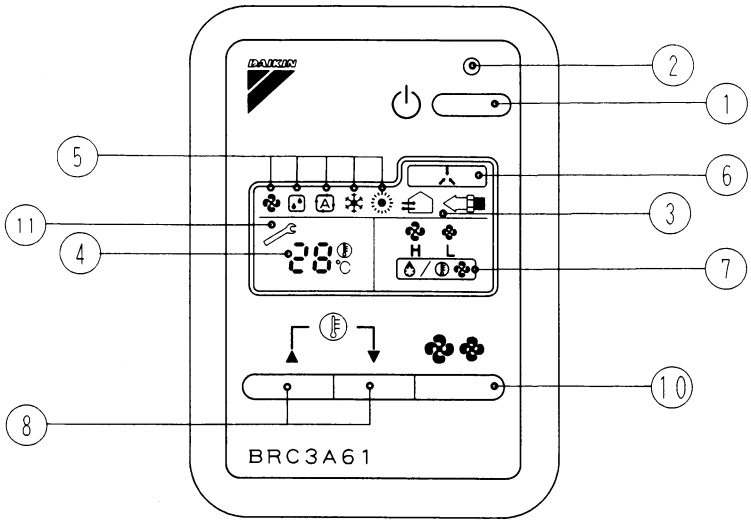
Set one remote controller to “main”, and the other to “sub”.

Note:

- If controlling with one remote controller, be sure to set it to “main”.
- Set the remote controller before turning power supply on.

17

6.4 <BRC3A61> Remote Controller for Hotel Use



REMOTE CONTROLLER: NAME AND FUNCTION OF EACH SWITCH AND DISPLAY

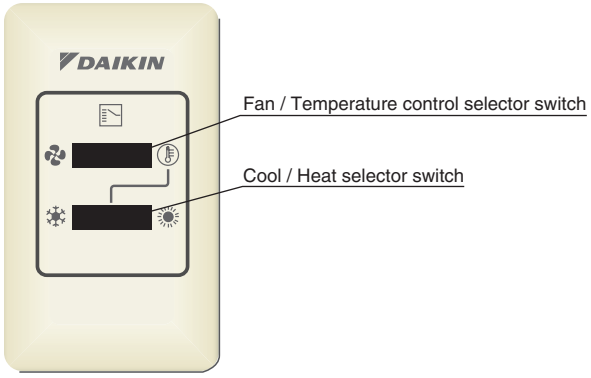
①	ON/OFF BUTTON Press the button and the system will start. Press the button again and the system will stop.	⑦	DISPLAY' H L '(FAN SPEED) The display shows the fan speed: 'HIGH' or 'LOW'.
②	OPERATION LAMP(RED) The lamp lights up during operation. Blinks in case of stop due to malfunction.	⑧	DISPLAY'/ '(DEFROST/HOT START) Indicates that defrost or hot start (during which the fan is stopped till the temperature of air supply rises enough at the start of a heating run)is progress.
③	DISPLAY' OPTION' (VENTILATION/AIR CLEANING) This display shows that the total heat exchange are in operation. (This is optional accessory)	⑨	TEMPERATURE SETTING BUTTON Use this button for SETTING TEMPERATURE of the thermostat. ▲:Each press raises the set temperature by 1℃ ▼:Each press lowers the set temperature by 1℃ The variable temperature range is 16℃ to 32℃.
④	DISPLAY' 28 ' (SET TEMPERATURE) This display shows the set temperature. Only given during a cooling or heating operation.	⑩	FAN SPEED CONTROL BUTTON Press this button to select the fan speed, HIGHT or LOW, of your choice.
⑤	DISPLAY' '' '' '' '' ' (OPERATION MODE) This display shows current OPERATION MODE. ' ' is not available with outdoor units specially designed for cooling only. ' ' is reserved only for outdoor units capable of heat recovery.	⑪	DISPLAY' ' (MALFUNCTION) Indicates malfunction and blinks if the unit stops operating due to malfunction. (As for details, see 'TROUBLE SHOOTING' in the operation manual attached to the indoor unit or the outdoor unit.)
⑥	DISPLAY' ' (UNDER CENTRALIZED CONTROL) When this display shows, the system is UNDER CENTRALIZED CONTROL (This is not a standard specification)		

(NOTE)
- For the sake of explanation, all indications are shown in the figure above contrary to actual running situations.
- This remote controller does not have "AIR FLOW DIRECTION ADJUST BUTTON." Don't operate the flap adjusting air flow direction by your hand. (FXF, FXC, FXH, FXA, FXK)

C : 3PA61137

6.5 <KRC19-26A> Cool / Heat Selector for Outdoor Units

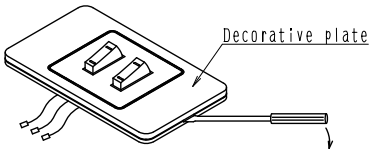
This remote controller has a switch to enable selection of a heating or cooling operation for each outdoor unit or system. The controller can also be used to switch to the fan operation mode, for example, during moderate weather season.



- Basically, this remote controller is not necessary for the Cooling/Heating VRV System and the Cooling Only VRV System.
- When the BS unit that automatically selects either cooling or heating operation mode is used in the manual mode, this remote controller can be connected to the BS unit.

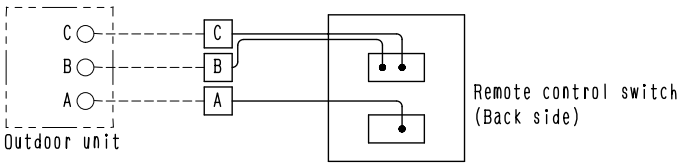
Installation Point

1. Remove the decorative plate.
   - Insert a (-) screwdriver in the gap between the concaved part of the decorative plate and the remote control switch to open it.

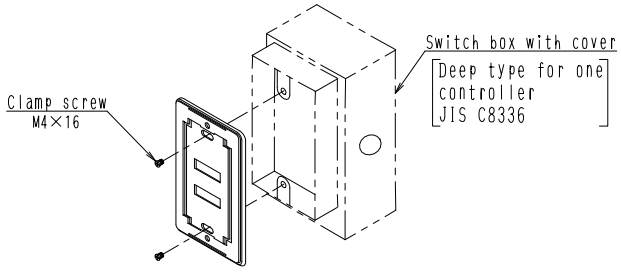


2. Provide the wiring between the remote control switch and the outdoor unit.
   - Connect terminals (A, B, C) on the back side of the remote control switch to terminals (A, B, C) on the outdoor unit.
   - ---shows field wiring.
   - Use the wires shown below ror the wiring.

Kind of wires	Polyvinyl chloride insulated and sheathed cords or cables.
Size of wires	0.75～1.25mm²



3. Attach the remote control switch to the switch box (To be obtained locally) as shown below.



4. Attach the decorative plate.

Note; The switch box and connecting wires are not attached.

3P077945A

17

Part 8
Guide Specifications

1. Guide Specifications 1006
   1.1 Guide Specifications.....1006
2. Caution for Refrigerant Leaks 1008
   2.1 Introduction.....1008
   2.2 Procedure for Checking Dangerous Concentration.....1009
3. Safety Devices Setting 1011
   3.1 Indoor Units 1011
   3.2 Outdoor Units 1012
4. Anti-Corrosion Treatment.....1013
   4.1 Anti-Corrosion Treatment 1013

1. Guide Specifications

1.1 Guide Specifications

General

Unit shall be air cooled, split type multi-system air conditioner consisting of one outdoor unit and plural indoor units, each having capability to cool or heat independently for the requirements of the rooms.
Up to 11 different type and 0.8-10HP capacity indoor units can be connected to one refrigerant circuit and controlled individually.
Compressor shall be equipped with inverter controller, and capable of changing the rotating speed to follow variations in cooling and heating load.
Outdoor unit shall be suitable for mix-match connection of following models.

- Ceiling Mounted Cassette Type (Round Flow)
- Ceiling Mounted Cassette Type (Double Flow)
- Ceiling Mounted Cassette Corner Type
- Slim Ceiling Mounted Duct Type
- Ceiling Mounted Built-In Type
- Ceiling Mounted Duct Type
- Ceiling Suspended Type
- Wall Mounted Type
- Floor Standing Type
- Concealed Floor Standing Type
- Ceiling Suspended Cassette Type (Connection Unit Series)

- Refrigerant : R-410A

1.1.1 P(A) Series Outdoor Unit

The refrigerant piping shall be extended up to 165m with 90m (★1) level difference without any oil traps.

- Air conditioner shall operate continuously at the ambient temperature of -5°C in cooling -15°C in heating (Operative Range: -20°C).
  Both indoor unit outdoor unit are assembled, tested, and charged with refrigerant at the factory.
  ★1: The value is based on the case where the outdoor unit is located under the indoor unit, except for RXYQ5P(A).

Outdoor Unit

The outdoor unit shall be a factory assembled unit housed in a sturdy weatherproof casing constructed form rust-proofed mild steel panels coated with a baked enamel finish.

- The outdoor unit shall have two (three) scroll compressors and be able to operate even in case that one of compressors is out of order.
  The Outdoor unit of 5HP·8HP shall have one scroll compressor.
- The connectable range of indoor units shall be from 0.8 to 10HP with all outdoor units.
- The noise level shall not be more than 54 dB(A) (in case of 5HP) at normal operation measured horizontally 1m away and 1.5m above ground.
  The outdoor unit shall be modular in design and should be allowed for side by side installation.

Compressor

The compressor shall be of highly efficient hermetic scroll type and equipped with inverter control capable of changing the speed in accordance to the cooling or heating load requirement.

- The outdoor unit shall have the multi-step of capacity control to meet load fluctuation and indoor unit individual control.

Heat Exchanger

The heat exchanger shall be constructed with copper tubes mechanically bonded to aluminium fins to form a cross fin coil.

- The aluminium fins shall be covered by anti-corrosion resin film.

Refrigerant Circuit

The refrigerant circuit shall include liquid and gas shut off valves and a solenoid valves.
All necessary safety devices shall be provided to ensure the safety operation of the system.

Safety Devices
The following safety devices shall be part of the outdoor unit.
High Pressure Switch, Fan Driver Overload Protector, Inverter Overload Protector, Over Current Relay.

Oil Recovery System
Unit shall be equipped with an oil recovery system to ensure stable operation with long refrigerant piping.

1.1.2 Indoor Units

Each indoor unit shall be of the Ceiling Mounted Cassette Type (Round Flow), or Ceiling Mounted Cassette Type (Double Flow), or Ceiling Mounted Cassette Corner Type, or Slim Ceiling Mounted Duct Type, or Ceiling Mounted Built-In Type, or Ceiling Mounted Duct Type, or Ceiling Suspended Type, or Wall Mounted Type, or Floor Standing Type, or Concealed Floor Standing Type, or Ceiling Suspended Cassette Type (Connection Unit Series). It shall have electronic control valve which control refrigerant flow rate in respond to load variations of the room. The fan shall be of the dual suction multi blade type and statically and dynamically balanced to ensure low noise and vibration free operation.

- The address of the indoor unit shall be set automatically in case of individual and group control.
- In case of centralized control, it shall be set by liquid crystal remote controller.

Control
Computerized PID control shall be used to maintain a correct room temperature.
Unit shall be equipped with a self-diagnosis for easy and quick maintenance and service.
The LCD (Liquid Crystal Display) remote controller shall memorize the latest malfunction code for easy maintenance.

- It shall be able to control up to 16 indoor units and change fan speed and angle of swing flap individually in the group.

Central Remote Controller (Option)
A multi-functional centralized controller (central remote controller) shall be supplied as optional accessory.

- It shall be able to control up to 64 zones of 64 groups (each group consists of Max. 16 units) or 128 No.s of indoor units with the following functions.
  a) Temperature setting for each zone, or group, or indoor unit.
  b) On / off as a zone or individual unit.
  c) Indication of operating condition.
  d) Select one of 10 operation modes for each zone.
- The controller shall have wide screen liquid crystal display and can be wired by a non-polar 2-wire transmission cable to a distance of 1 km away from the indoor unit.

Unified ON / OFF Controller (Option)
Unified ON / OFF controller shall be supplied as optional accessory.
It shall be able to control up to 16 groups (each group consists of Max. 16 indoor units) or 128 No.s of indoor units with the following functions.
a) On/off as a zone or individual unit.
b) Indication of operation condition of each group.
c) Select one of 4 operation modes.

It shall be wired by a non-polar 2-wire transmission cable to a distance of 1 km away from indoor unit.

Schedule Timer (Option)
A schedule timer shall be supplied as optional accessory.

- It shall be able to set operation schedule of up to 128 No.s of indoor units.
  The operation schedule shall include twice on/off a day and holiday.
- It shall be able to set 8 pattern of schedule combined with centralized controller.

intelligent Touch Controller (Option)
Air-Conditioning management system that can be controlled by a compact all-in-one unit.

intelligent Manager (Option)
Air conditioner management system (featuring minimized engineering) that can be controlled by personal computers.

2. Caution for Refrigerant Leaks

2.1 Introduction

Points to note in connection with refrigerant leaks

The installer and system specialist shall secure safety against leakage according to local regulations or standards. The following standards may be applicable if local regulations are not available.

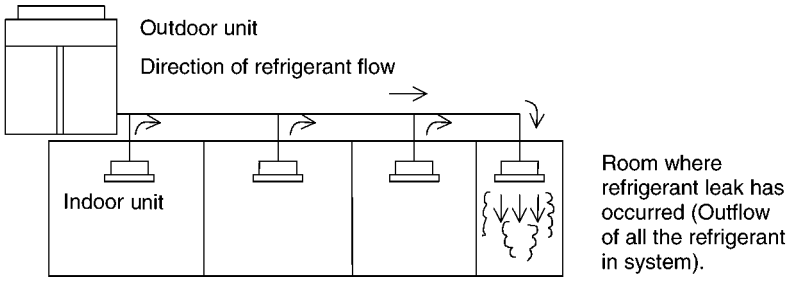
Maximum Concentration Level

The maximum charge of refrigerant and the calculation of the maximum concentration of refrigerant is directly related to the humanly occupied space in to which it could leak.

The unit of measurement of the concentration is kg/m³ (the weight in kg of the refrigerant gas in 1m³ volume of the occupied space).

Compliance to the local applicable regulations and standards for the maximum allowable concentration level is required.

In Australia the maximum allowed concentration level of refrigerant to a humanly space is limited to 0.35 kg/m³ for R-407C, and 0.44 kg/m³ for R-410A.

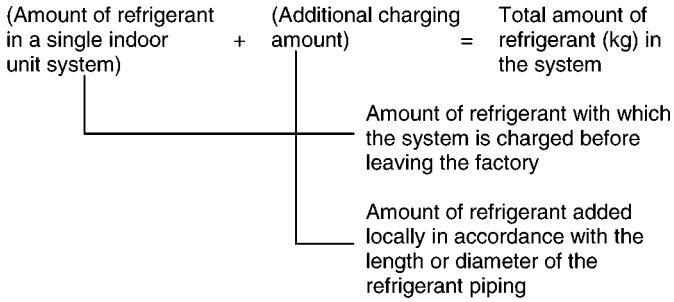


Pay special attention to the place, such as a basement, etc., where refrigerant can stay, since refrigerant is heavier than air.

2.2 Procedure for Checking Dangerous Concentration

Check the Dangerous concentration in accordance with steps (1)-(4) below and take whatever action is necessary.

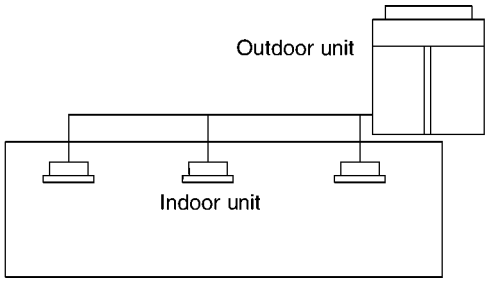
Step1: Calculate the amount of refrigerant (kg) charged to each system separately.



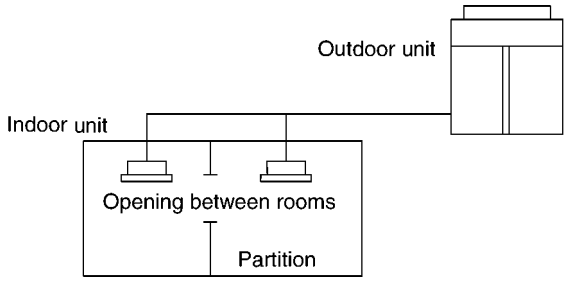
Note:
Where a single refrigerant facility is divided onto 2 entirely independent refrigerant systems then use the amounts of refrigerant with which each separate system of charged.

Step 2: Calculate the smallest room volume (m^3)

In a case like the following calculate the volume of (a), (b) as a single room or as the smallest room.
(a) Where there are no smaller room divisions.

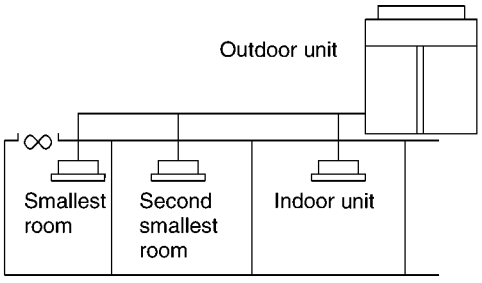


(b) Where there is a room division but there is an opening between the rooms sufficiently large to permit a free flow of air back and forth.



(Where there is an opening without a door or where there are openings above and below the door which are each equivalent in size to 0.15% or more of the floor area.)

(c) Where there is a gas leak detection alarm device linked to a mechanical ventilator in the smallest room then the next smallest room will become the measurement target.



Step 3: Calculate the refrigerant density using the results of the calculations in Step (1) and (2) above.

$$\frac{\text{Total volume of refrigerant in the refrigerant system}}{\text{Size } (m^3) \text{ of the smallest room in which there is an indoor unit installed}} <= \text{Dangerous concentration } (kg/m^3)$$

in the case of: R-407C = 0.35kg/m³, R-410A = 0.44kg/m³

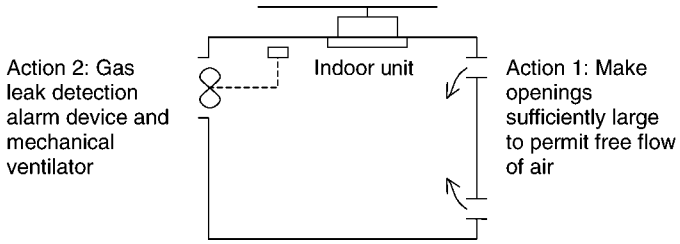
If the result of the above calculation exceeds the dangerous concentration level then make similar calculations for the second then third smallest room and so on until the result falls short of the concentration level.

Step 4: Dealing with situations where the result exceeds the dangerous concentration level.

Where the installation of a facility results in a concentration in excess of the dangerous concentration level then it may be necessary to revise the system design to dome extent or else take one of the following courses of action.

Action 1: Making openings which will allow the air to flow freely into the room.Make openings above and below the door which are each equivalent in size to 0.15% or more of the floor area or make a doorless opening.

Action 2: Fit a mechanical ventilator linked to a gas leak detection alarm device.



Note: **This precaution shows the requirement of EN.**
The precaution should be followed in accordance of local code.

3. Safety Devices Setting

3.1 Indoor Units

	Safety devices		20	25	32	40	50	63	80(71)	100	125 (160)	200	250
FXFQ~PVE	PC board fuse		—	250V 5A	250V 5A	250V 5A	250V 5A	250V 5A	250V 5A	250V 5A	250V 5A	—	—
	Fan motor thermal fuse	°C	—	—	—	—	—	—	—	—	—	—	—
	Fan motor thermal protector	°C	—	—	—	—	—	—	—	—	—	—	—
FXCQ~MVE	PC board fuse		250V 5A	250V 5A	250V 5A	250V 5A	250V 5A	250V 5A	250V 5A	—	250V 5A	—	—
	Fan motor thermal fuse	°C	—	—	—	—	—	—	—	—	—	—	—
	Fan motor thermal protector	°C	OFF:135±5 (ON:86±15)	OFF:135±5 (ON:86±15)	OFF:135±5 (ON:86±15)	OFF:135±5 (ON:86±15)	OFF:135±5 (ON:86±15)	OFF:145±5 (ON:94±15)	OFF:145±5 (ON:94±15)	—	OFF:145±5 (ON:94±15)	—	—
	Drain pump thermal fuse	°C	169	169	169	169	169	169	169	—	169	—	—
FXKQ~MAVE	PC board fuse		—	250V 5A	250V 5A	250V 5A	—	250V 5A	—	—	—	—	—
	Fan motor thermal fuse	°C	—	146±3	146±3	—	—	—	—	—	—	—	—
	Fan motor thermal protector	°C	—	—	—	OFF:120±5 ON:105 or less	—	OFF:120±5 ON:105 or less	—	—	—	—	—
	Drain pump thermal fuse	°C	—	145	145	145	—	145	—	—	—	—	—
FXDQ~PBVE(T) FXDQ~NBVE(T)	PC board fuse		250V 5A	250V 5A	250V 5A	250V 5A	250V 5A	250V 5A	—	—	—	—	—
	Fan motor thermal protector	°C	OFF:130±5 (ON:83±15)	OFF:130±5 (ON:83±15)	OFF:130±5 (ON:83±15)	OFF:130±5 (ON:83±15)	OFF:130±5 (ON:83±15)	OFF:130±5 (ON:83±15)	—	—	—	—	—
FXSQ~MVE	PC board fuse		250V 10A	250V 10A	250V 10A	250V 10A	250V 10A	250V 10A	250V 10A	250V 10A	250V 10A	—	—
	Fan motor thermal fuse	°C	—	—	—	—	—	—	—	—	—	—	—
	Fan motor thermal protector	°C	OFF:135±5 (ON:86±15)	OFF:135±5 (ON:86±15)	OFF:135±5 (ON:86±15)	OFF:135±5 (ON:86±15)	OFF:135±5 (ON:86±15)	OFF:135±5 (ON:86±15)	OFF:145±5 (ON:94±15)	OFF:145±5 (ON:94±15)	OFF:145±5 (ON:94±15)	—	—
	Drain pump thermal fuse	°C	169	169	169	169	169	169	169	169	169	—	—
FXMQ~PVE	PC board fuse		250V 3.15A	250V 3.15A	250V 3.15A	250V 3.15A	250V 3.15A	250V 3.15A	250V 3.15A	250V 3.15A	250V 3.15A	—	—
	PC board fuse (Fan driver)		250V 5A	250V 5A	250V 5A	250V 5A	250V 6.3A	250V 6.3A	250V 6.3A	250V 6.3A	250V 6.3A	—	—
	Drain pump thermal fuse	°C	145	145	145	145	145	145	145	145	145	—	—
FXMQ~MAVE	PC board fuse		—	—	—	—	—	—	—	—	—	250V 10A	250V 10A
	Fan motor thermal fuse	°C	—	—	—	—	—	—	—	—	—	—	—
	Fan motor thermal protector	°C	—	—	—	—	—	—	—	—	—	OFF:135±8 (ON:87±15)	OFF:135±8 (ON:87±15)
FXHQ~MAVE	PC board fuse		—	—	250V 5A	—	—	250V 5A	—	250V 5A	—	—	—
	Fan motor thermal fuse	°C	—	—	—	—	—	—	—	—	—	—	—
	Fan motor thermal protector	°C	—	—	OFF:130±5 ON:80±20	—	—	OFF:130±5 ON:80±20	—	OFF:130±5 ON:80±20	—	—	—
FXAQ~MAVE	PC board fuse		250V 3A	250V 3A	250V 3A	250V 3A	250V 3A	250V 3A	—	—	—	—	—
	Fan motor thermal fuse	°C	—	—	—	—	—	—	—	—	—	—	—
	Fan motor thermal protector	°C	—	—	—	—	—	—	—	—	—	—	—
FXLQ~MAVE	PC board fuse		250V 10A	250V 10A	250V 10A	250V 10A	250V 10A	250V 10A	—	—	—	—	—
	Fan motor thermal protector	°C	OFF:135±10 ON:120 or less	OFF:135±10 ON:120 or less	OFF:135±10 ON:120 or less	OFF:135±10 ON:120 or less	OFF:135±10 ON:120 or less	OFF:135±10 ON:120 or less	—	—	—	—	—
FXNQ~MAVE	PC board fuse		250V 10A	250V 10A	250V 10A	250V 10A	250V 10A	250V 10A	—	—	—	—	—
	Fan motor thermal protector	°C	OFF:135±10 ON:120 or less	OFF:135±10 ON:120 or less	OFF:135±10 ON:120 or less	OFF:135±10 ON:120 or less	OFF:135±10 ON:120 or less	OFF:135±10 ON:120 or less	—	—	—	—	—
FXUQ~MAV1	PC board fuse		—	—	—	—	—	—	—	—	—	—	—
	Fan motor thermal protector	°C	—	—	—	—	—	—	OFF:130±5	OFF:130±5	OFF:130±5	—	—

3.2 Outdoor Units

Safety Devices		RXYQ5PAY1, PAYL	RXYQ8PAY1, PAYL	RXYQ10PAY1, PAYL	RXYQ12PAY1, PAYL	RXYQ14PAY1, PAYL	RXYQ16PAY1, PAYL	RXYQ18PAY1, PAYL
PC board fuse	A1P	250V, 15A						
	A2P	250V, 3A						
High pressure switch		OFF 4.0 $^{+0}_{-0.12}$MPa ON 3.0±0.15MPa						
Over current relay (Comp)	M2C	—		15.0A				
	M3C	—				15.0A		
Overload Protector	M1C	14.7A						
	M1F	1.15A	3.0A		1.15A			3.0A
	M2F	—			1.15A			3.0A

Safety Devices		RXYQ5PTL	RXYQ8PTL	RXYQ10PTL	RXYQ12PTL	RXYQ14PTL	RXYQ16PPTL	RXYQ18PTL
PC board fuse	A1P	250V, 15A						
	A2P	250V, 15A						
High pressure switch		OFF 4.0 $^{+0}_{-0.12}$MPa ON 3.0±0.15MPa						
Over current relay (Comp)	M2C	—		25.0A				
	M3C	—				25.0A		
Overload Protector	M1C	26.5A						
	M1F	2.3A	5.5A		2.3A			5.5A
	M2F	—			2.3A			5.5A

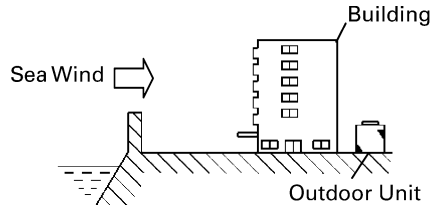
4. Anti-Corrosion Treatment

4.1 Anti-Corrosion Treatment

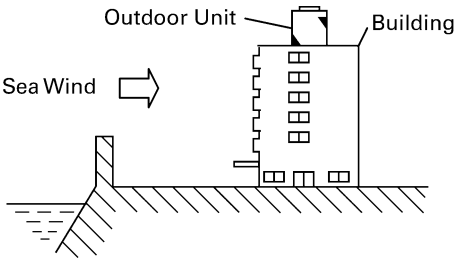
4.1.1 Installation Atmosphere

Outdoor units with anti-corrosion specifications are designed specifically for use in areas which are subject to salt damage and atmospheric pollution. The following anti-corrosion specifications are available.
This specification is recommended by Daikin and shall be used as a reference.

< Anti-Corrosion type>

Symbol	Type	Installation example	Conditions of Installation location
E	Anti-corrosion type		Where the distance between the outdoor unit and the sea shore is more than 300m and less than 1km.
Remark: 1. The Anti-Corrosion specification means the specification which allows the unit to be installed in the atmosphere of sea wind but not at the location where the sea wind directly blows on the unit. 2. The units with this specification are manufactured by customer's request on mass production base.			

< Heavy Anti-Corrosion type>

Symbol	Type	Installation example	Conditions of Installation location
—	Heavy Anti-corrosion type		Where the distance between the outdoor unit and the sea shore is less than 300m.
Remark: 1. The Heavy Anti-Corrosion specification means the specification which allows the unit to be installed in the atmosphere of sea wind where the sea wind directly blows on the unit. 2. The units with this specification are manufactured by the customer's request.			

4.1.2 Standard Specification

	Portions	Applicable model	Standard specification
Portions directly exposed to corrosive atmosphere	Ceiling Panel Side panel Outer panel	All models	Alloyed hot-dip zinc coated steel plate + powder polyester resin coating on both inner and outer surfaces in thickness of 32μ or more
	Bottom frame	All models	Galbarium steel plate (alloyed hot-dip aluminium, Zinc, and silicone coated steel plate)
	Finned coil protective net Fan protective net	All models	Resin coating
Portions directly exposed to corrosive air	Heat exchanger	All models	Copper pipe-aluminium fin (Special acrylic resin coated)
	Fan	All models	Styrene-acrylonitrile resin (Glass fiber filled)
	Fan motor	All models	Motor manufacturer's standard specification
	Support and Frame	All models	Alloyed hot-dip zinc coated steel plate
	Control box	All models	Alloyed hot-dip zinc coated steel plate
	Pressure vessel	All models	Hot-rolled steel plate + Normal dry painting (two coats)
Others	Screws, bolts	All models	Zinc-nickel alloy plating

4.1.3 Anti-Corrosion Specification

	Portions	Anti-Corrosion specification (E)	Heavy Anti-Corrosion specification (—)
Portions directly exposed to corrosive atmosphere	Ceiling panel Side panel Outer panel Bottom frame	Alloyed hot-dip zinc coated steel plate + corrosion protection powder polyester resin coating on both inner and outer surfaces in thickness of 64μ or more	Alloyed hot-dip zinc coated steel plate + powdered polyester resin + fluoroplastic internal and external surfaces 48μ or more
	Finned coil protective net Fan protective net	Resin coating containing Ultraviolet ray absorbent	
Portions directly exposed to corrosive air	Heat exchanger	Copper pipe-aluminium fin (special acrylic resin coated)	
	Fan	Styrene-acrylonitrile resin (Glass fiber filled)	
	Fan motor	Motor manufacture's standard specification	
	Support and Frame	Hot-dip zinc coated steel plate + rust preventive powder resin coating on both inner and outer surfaces in thickness of 64μ or more.	Hot-dip zinc coated steel plate + thick film epoxy 120μ or more.
	Control box	Hot-dip zinc coated steel plate + rust preventive powder resin coating on both inner and outer surfaces in thickness of 64μ or more.	Hot-dip zinc coated steel plate + thick film epoxy 120μ or more.
	Pressure vessel	Hot-rolled steel plate + Rust preventive treatment: Rust inhibitor coating	Hot-rolled steel plate + thick film modified epoxy 120μ or more
Others	Screws, bolts	SUS410 + Zinc-nickel alloy plating + Zinc chrome acid film treatment + Rust inhibitor coating	

Notes:

- Applicable Models as follows
  RXYQ5~54P(A) : Standard

The units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5~54PAY1E.

It is advisable to follow the installation and maintenance precautions below.

- Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced.
- If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided and choose an outdoor unit with anti-corrosion treatment.
- Install the machine to the leeward of the building.
- Even if it is unavoidable to install the machine on the seaside, set up a windbreak not to get it exposed to the sea breeze.
- Be careful not to confuse the setup direction. (Corrosion depends on whether the unit is placed parallel with or at right angles to the sea.)
- Select a well-drained spot.
- When installing the machine on the seashore or in such an ambient condition, contact your DAIKIN dealer.
- Models for Heavy Anti-Corrosion Specification Manufactured by Customer's Request.

MEMO

MEMO

Warning

- Daikin Industries, Ltd.'s products are manufactured for export to numerous countries throughout the world. Daikin Industries, Ltd. does not have control over which products are exported to and used in a particular country. Prior to purchase, please therefore confirm with your local authorised importer, distributor and/or retailer whether this product conforms to the applicable standards, and is suitable for use, in the region where the product will be used. This statement does not purport to exclude, restrict or modify the application of any local legislation.
- Ask a qualified installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Use only those parts and accessories supplied or specified by Daikin. Ask a qualified installer or contractor to install those parts and accessories. Use of unauthorised parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Read the User's Manual carefully before using this product. The User's Manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

If you have any enquiries, please contact your local importer, distributor and/or retailer.

Cautions on product corrosion

1. Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced.
2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided. If you need to install the outdoor unit close to the sea shore, contact your local distributor.

JMI-0107

JQA-1452

About ISO 9001

ISO 9001 is a plant certification system defined by the International Organization for Standardization (ISO) relating to quality assurance. ISO 9001 certification covers quality assurance aspects related to the "design, development, manufacture, installation, and supplementary service" of products manufactured at the plant.

EC99J2044

About ISO 14001

ISO 14001 is the standard defined by the International Organization for Standardization (ISO) relating to environmental management systems. Our group has been acknowledged by an internationally accredited compliance organisation as having an appropriate programme of environmental protection procedures and activities to meet the requirements of ISO 14001.

Dealer

DAIKIN INDUSTRIES, LTD.
Head Office:
Umeda Center Bldg., 2-4-12, Nakazaki-Nishi,
Kita-ku, Osaka, 530-8323 Japan

Tokyo Office:
JR Shinagawa East Bldg., 2-18-1, Konan,
Minato-ku, Tokyo, 108-0075 Japan

http://www.daikin.com/global_ac/

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