

# **Part 5 Outdoor Units High COP Type (Energy Saving Type)**

## **RXYQ-P(A)H**

**Heat Pump (50/60Hz)**

**High COP Type (Energy Saving Type) . . . . . 365**



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

1. Specifications .....	366
1.1 Heat Pump 50/60Hz High COP Type (Energy Saving Type) <RXYQ-P(A)H> .....	366
2. Dimensions .....	374
2.1 Combination Unit.....	374
3. Field Wiring .....	379
4. Electric Characteristics.....	383
4.1 50Hz 380-415V (RXYQ-PAHY1).....	383
4.2 60Hz 380V (RXYQ-PAHYL).....	386
4.3 60Hz 220V (RXYQ-PHTL).....	387
5. Capacity Tables (High COP Type).....	390
5.1 Cooling Capacity (RXYQ-P(A)H).....	390
5.2 Heating Capacity (RXYQ-P(A)H) .....	406
5.3 Capacity Correction Factor (RXYQ-P(A)H) .....	422
5.4 Notes for Heating Capacity Characteristics.....	427
6. Sound Levels .....	428
6.1 50Hz .....	428
6.2 60Hz .....	429
7. Accessories.....	430
7.1 Optional Accessories.....	430

# 1. Specifications

## 1.1 Heat Pump 50/60Hz High COP Type (Energy Saving Type) <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: (HxWxD)	mm			(1680x930x765)+(1680x930x765)	(1680x930x765)+(1680x930x765)
Heat Exchanger				Cross Fin Coil	Cross Fin Coil
Comp.	Type			Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type
	Displacement	m³/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/min	Y1(E)	(7980)+(7980)	(7980)+(6300, 2900)
			YL(E)	(7980)+(7980)	(7980)+(6300, 3450)
			TL(E)	(7980)+(7980)	(7980)+(6300, 3450)
Motor OutputxNumber of Units		kW	(4.5x1)+(4.5x1)	(4.5x1)+((1.4+4.5)x1)	
Starting Method			Soft start	Soft start	
Fan	Type			Propeller Fan	Propeller Fan
	Motor Output		kW	(0.75x1)+(0.75x1)	(0.75x1)+(0.75x1)
	Air Flow Rate		m³/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) (Compressor+Outdoor Fan Motor) : Refer to P.390~421.
- 5 The units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ16PAHY1E.

Conversion Formulae
kcal/h=kWx860
Btu/h=kWx3412
cfm=m³/minx35.3



Model Name (Combination Unit)			RXYQ24PAHY1(E)	RXYQ26PAHY1(E)	
Model Name (Independent Unit)	Y1(E)		RXYQ8PAY1(E)+RXYQ8PAY1(E)+RXYQ8PAY1(E)	RXYQ8PAY1(E)+RXYQ8PAY1(E)+RXYQ10PAY1(E)	
Model Name (Combination Unit)			RXYQ24PAHYL(E)	RXYQ26PAHYL(E)	
Model Name (Independent Unit)	YL(E)		RXYQ8PAYL(E)+RXYQ8PAYL(E)+RXYQ8PAYL(E)	RXYQ8PAYL(E)+RXYQ8PAYL(E)+RXYQ10PAYL(E)	
Model Name (Combination Unit)			RXYQ24PHTL(E)	RXYQ26PHTL(E)	
Model Name (Independent Unit)	TL(E)		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	
	kcal / h		64,500	70,100	
	Btu / h		260,000	278,000	
★3 Heating Capacity	kW		75.0	81.5	
	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		
Comp.	Type		Hermetically Sealed Scroll Type		
	Displacement	m <sup>3</sup> /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/min	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			
Fan	Type		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 <sup>3</sup> /min	180+180+180	180+180+185
	Drive		Direct Drive		
Connecting Pipes	Liquid Pipe	mm	φ15.9 (Brazeing Connection)	φ19.1 (Brazeing Connection)	
	Gas Pipe	mm	φ34.9 (Brazeing Connection)	φ34.9 (Brazeing 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		
Capacity Control		%	7~100	6~100	
Refrigerant	Refrigerant Name		R-410A		
	Charge	kg	7.2+7.2+7.2	7.2+7.2+7.9	
	Control		Electronic Expansion Valve		
Refrigerator Oil			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) (Compressor+Outdoor Fan Motor) : Refer to P.390~421.  
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<sup>3</sup>/min×35.3

Model Name (Combination Unit)		Y1(E)		RXYQ28PAHY1(E)	RXYQ30PAHY1(E)	
Model Name (Independent Unit)		YL(E)		RXYQ8PAY1(E)+RXYQ8PAY1(E)+RXYQ12PAY1(E)	RXYQ8PAY1(E)+RXYQ10PAY1(E)+RXYQ12PAY1(E)	
Model Name (Combination Unit)		TL(E)		RXYQ28PHTL(E)	RXYQ30PHTL(E)	
Model Name (Independent Unit)		mm		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	
	kcal / h		75,300		80,800	
★3 Heating Capacity	Btu / h		299,000		321,000	
	kW		87.5		94.0	
	Without(E)		Ivory White (5Y7.5/1)		Ivory White (5Y7.5/1)	
Casing Color		With(E)		Light Camel (2.5Y6.5/1.5)		
Dimensions: (HxWxD)		mm		(1680x930x765)+(1680x930x765)+(1680x1240x765)	(1680x930x765)+(1680x930x765)+(1680x1240x765)	
Heat Exchanger				Cross Fin Coil		
Comp.	Type		Hermetically Sealed Scroll Type		Hermetically Sealed Scroll Type	
	Displacement	m <sup>3</sup> /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/min	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 OutputxNumber of Units		kW	(4.5x1)+(4.5x1)+(2.5+4.5)x1		(4.5x1)+((1.4+4.5)x1)+(2.5+4.5)x1	
Starting Method		Soft start		Soft start		
Fan	Type		Propeller Fan		Propeller Fan	
	Motor Output		kW	(0.75x1)+(0.75x1)+(0.35x2)		(0.75x1)+(0.75x1)+(0.35x2)
	Air Flow Rate		m <sup>3</sup> /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) (Compressor+Outdoor Fan Motor) : Refer to P.390~421.
- 5 The units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ16PAHY1E.

Conversion Formulae
kcal/h=kWx860
Btu/h=kWx3412
cfm=m <sup>3</sup> /minx35.3

Model Name (Combination Unit)		Y1(E)		RXYQ32PAHY1(E)	RXYQ34PAHY1(E)
Model Name (Independent Unit)		YL(E)		RXYQ8PAY1(E)+RXYQ12PAY1(E)+RXYQ12PAY1(E)	RXYQ10PAY1(E)+RXYQ12PAY1(E)+RXYQ12PAY1(E)
Model Name (Combination Unit)		TL(E)		RXYQ32PAHYL(E)	RXYQ34PAHYL(E)
Model Name (Independent Unit)		TL(E)		RXYQ8PAYL(E)+RXYQ12PAYL(E)+RXYQ12PAYL(E)	RXYQ10PAYL(E)+RXYQ12PAYL(E)+RXYQ12PAYL(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: (HxWxD)		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
	Displacement	m <sup>3</sup> /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/min	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 <sup>3</sup> /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) (Compressor+Outdoor Fan Motor) : Refer to P.390~421.
- 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 <sup>3</sup> /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: (HxWxD)	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
	Displacement	m <sup>3</sup> /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)
			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/min	Y1(E)	(6300, 2900)+(6300, 2900)+(6300, 2900)	(6300, 2900)+(6300, 2900)+(6300, 2900)
			YL(E)	(6300, 3450)+(6300, 3450)+(6300, 3450)	(6300, 3450)+(6300, 3450)+(6060, 3450)
			TL(E)	(6300, 3450)+(6300, 3450)+(6300, 3450)	(6300, 3450)+(6300, 3450)+(6060, 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 <sup>3</sup> /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) (Compressor+Outdoor Fan Motor) : Refer to P.390~421.
- 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 <sup>3</sup> /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: (HxWxD)	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
	Displacement	m <sup>3</sup> /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/min	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	m <sup>3</sup> /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) (Compressor+Outdoor Fan Motor) : Refer to P.390~421.  
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 <sup>3</sup> /min×35.3

Model Name (Combination Unit)		Y1(E)		RXYQ44PAHY1(E)	RXYQ46PAHY1(E)
Model Name (Independent Unit)		YL(E)		RXYQ12PAY1(E)+RXYQ16PAY1(E)+RXYQ18PAY1(E)	RXYQ12PAY1(E)+RXYQ16PAY1(E)+RXYQ18PAY1(E)
Model Name (Combination Unit)		Y1(E)		RXYQ44PAHYL(E)	RXYQ46PAHYL(E)
Model Name (Independent Unit)		YL(E)		RXYQ12PAYL(E)+RXYQ16PAYL(E)+RXYQ18PAYL(E)	RXYQ12PAYL(E)+RXYQ16PAYL(E)+RXYQ18PAYL(E)
Model Name (Combination Unit)		TL(E)		RXYQ44PHTL(E)	RXYQ46PHTL(E)
Model Name (Independent Unit)		TL(E)		RXYQ12PTL(E)+RXYQ16PTL(E)+RXYQ18PTL(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
	kcal / h			119,000	124,000
★3 Heating Capacity	Btu / h			471,000	491,000
	kW			138	144
	kcal / h			119,000	124,000
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: (HxWxD)		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
	Displacement	m <sup>3</sup> /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/min	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		m <sup>3</sup> /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) (Compressor+Outdoor Fan Motor) : Refer to P.390~421.
- 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 <sup>3</sup> /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
	kcal / h			129,000	134,000
★3 Heating Capacity	Btu / h			512,000	532,000
	kW			150	156
	Without(E)			Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
Casing Color	With(E)			Light Camel (2.5Y6.5/1.5)	Light Camel (2.5Y6.5/1.5)
	Dimensions: (HxWxD)		mm	(1680x1240x765)+(1680x1240x765)+(1680x1240x765)	(1680x1240x765)+(1680x1240x765)+(1680x1240x765)
Heat Exchanger				Cross Fin Coil	Cross Fin Coil
Comp.	Type			Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type
	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/min	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 OutputxNumber 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) (Compressor+Outdoor Fan Motor) : Refer to P.390~421.
- 5 The units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ16PAHY1E.

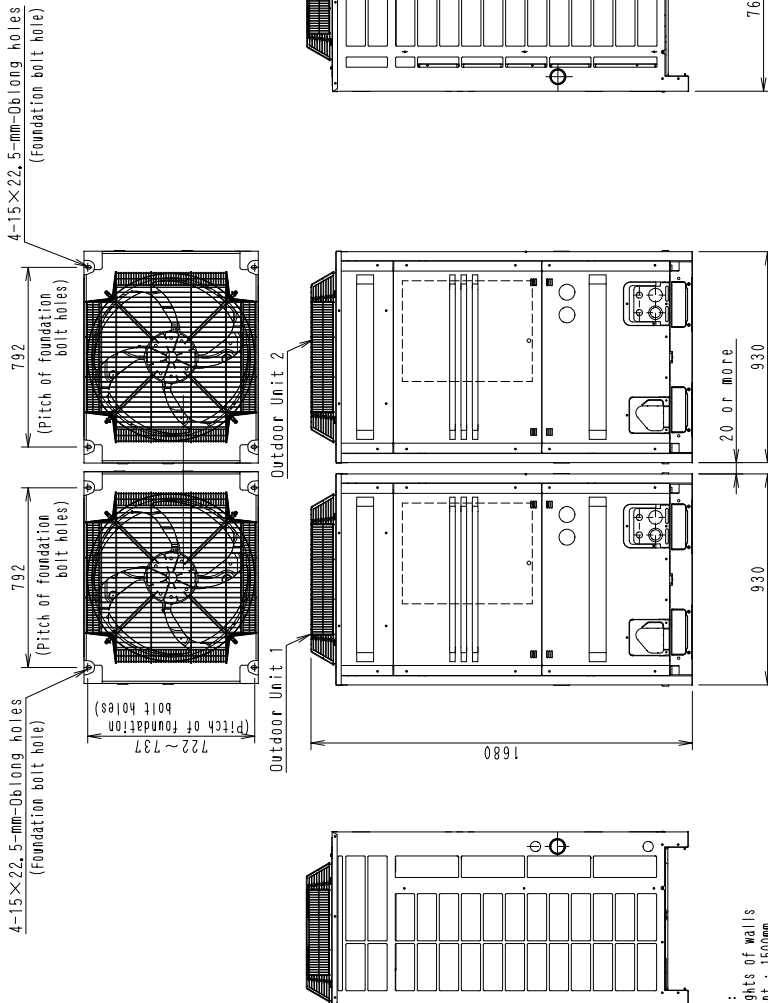
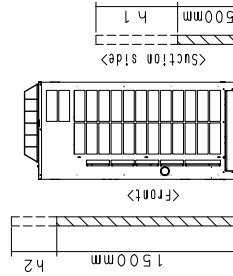
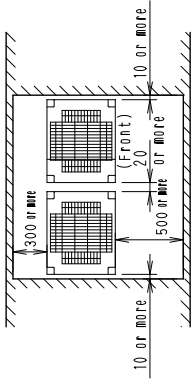
Conversion Formulae
kcal/h=kWx860
Btu/h=kWx3412
cfm=m³/minx35.3

## 2. Dimensions

### 2.1 Combination Unit

RXYQ16/18PAHY1  
 RXYQ16/18PAHYL  
 RXYQ16/18PHTL

Unit (mm)



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 h/2 and h/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.

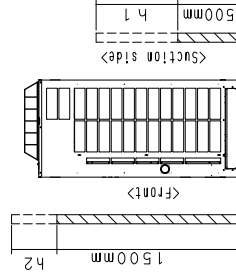
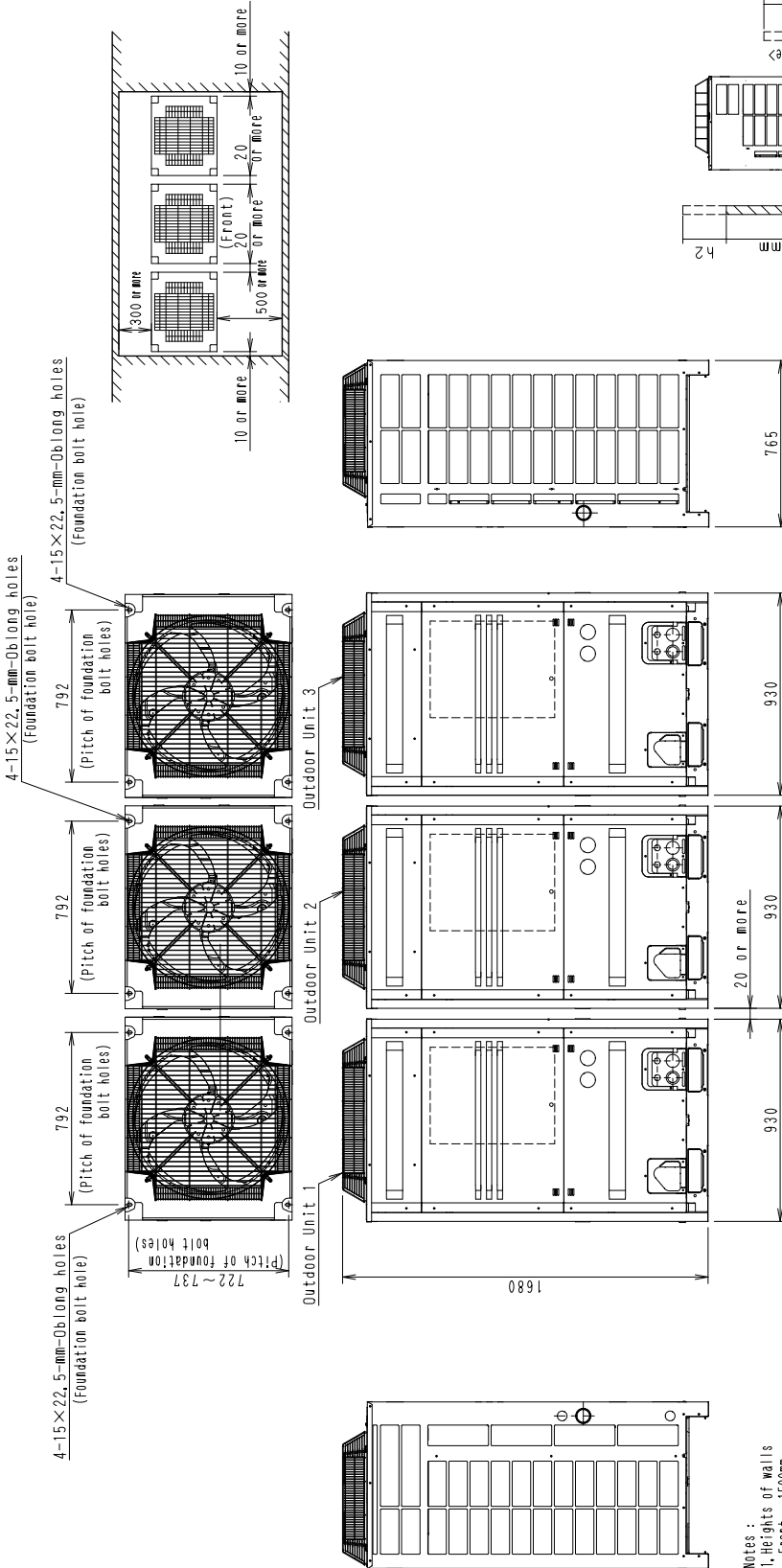
Model Name	Outdoor Unit 1	Outdoor Unit 2	Drawing No.
RXYQ16P(A)H	RXYQ8P(A)	RXYQ8P(A)	3D051449L
RXYQ18P(A)H	RXYQ10P(A)	RXYQ8P(A)	3D051449L

C: 3D053034



RXYQ24/26PAHY1  
RXYQ24/26PAHYL  
RXYQ24/26PHTL

Unit (mm)



- Notes :
1. Heights of walls  
Front : 1500mm  
Suction side : 500mm  
Side : Height unrestricted
  2. 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)
  3. 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.  
 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.

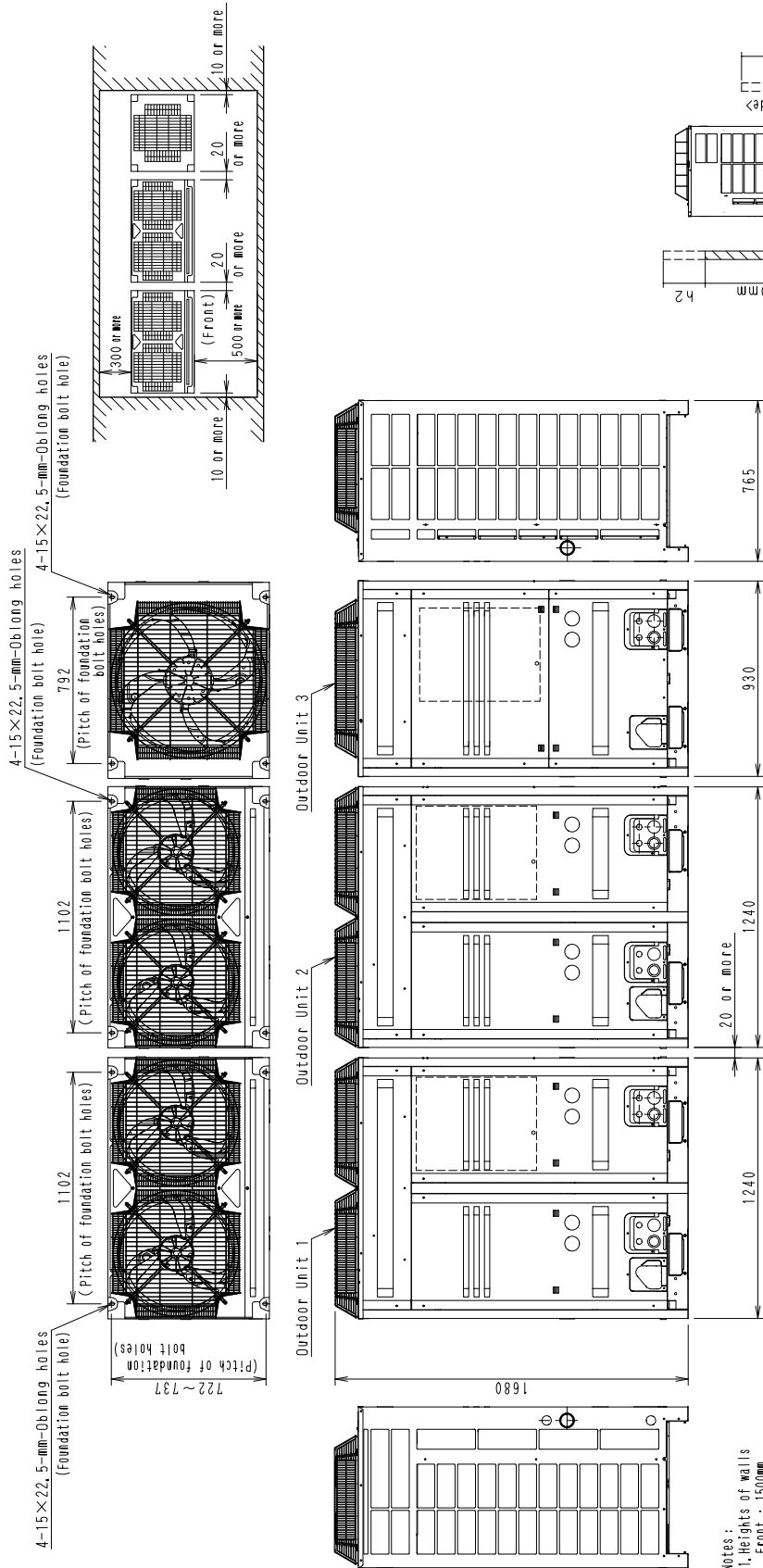
Model Name	Outdoor Unit 1	Outdoor Unit 2	Outdoor Unit 3	Drawing No.	Drawing No.
RXYQ24P(A)H	RXYQ8P(A)	RXYQ8P(A)	RXYQ8P(A)	3D051449L	3D051449L
RXYQ26P(A)H	RXYQ10P(A)	RXYQ8P(A)	RXYQ8P(A)	3D051449L	3D051449L

C: 3D053035



RXYQ32/34PAHY1  
 RXYQ32/34PAHYL  
 RXYQ32/34PHTL

Unit (mm)



- Notes :
1. Heights of walls  
 Front : 1500mm  
 Suction side : 500mm
  2. 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)
  3. 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.  
 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.

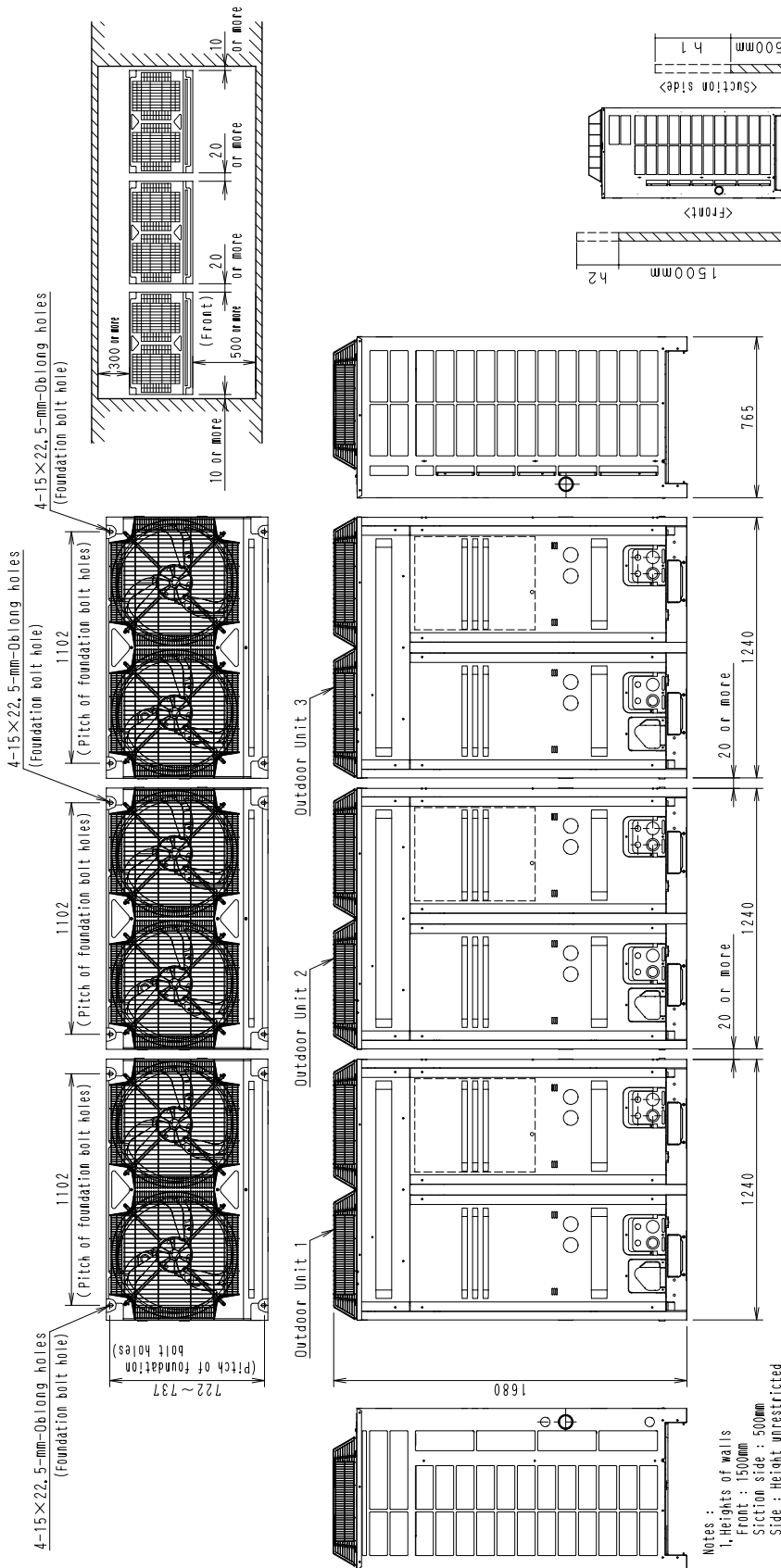
Model Name	Outdoor Unit 1	Outdoor Unit 2	Outdoor Unit 3	Drawing No.	Outdoor Unit 1	Outdoor Unit 2	Outdoor Unit 3	Drawing No.
RXYQ32P(A)H	RXYQ12P(A)	3D051450M	RXYQ12P(A)	3D051450M	RXYQ12P(A)	3D051450M	RXYQ12P(A)	3D051449L
RXYQ34P(A)H	RXYQ12P(A)	3D051450M	RXYQ12P(A)	3D051450M	RXYQ12P(A)	3D051450M	RXYQ10P(A)	3D051449L

C: 3D053037

RXYQ36/38/40/42/44/46/48/50PAHY1  
 RXYQ36/38/40/42/44/46/48/50PAHYL  
 RXYQ36/38/40/42/44/46/48/50PHTL

Unit (mm)

C: 3D053038



Model Name	Outdoor Unit 1	Outdoor Unit 2	Outdoor Unit 3	Drawing No.	Drawing No.	Drawing No.
RXYQ36P(A)H	RXYQ12P(A)	RXYQ12P(A)	RXYQ12P(A)	3D051450M	3D051450M	3D051450M
RXYQ38P(A)H	RXYQ14P(A)	RXYQ12P(A)	RXYQ12P(A)	3D051450M	3D051450M	3D051450M
RXYQ40P(A)H	RXYQ16P(A)	RXYQ12P(A)	RXYQ12P(A)	3D051450M	3D051450M	3D051450M
RXYQ42P(A)H	RXYQ18P(A)	RXYQ12P(A)	RXYQ12P(A)	3D051450M	3D051450M	3D051450M
RXYQ44P(A)H	RXYQ16P(A)	RXYQ16P(A)	RXYQ12P(A)	3D051450M	3D051450M	3D051450M
RXYQ46P(A)H	RXYQ18P(A)	RXYQ16P(A)	RXYQ12P(A)	3D051450M	3D051450M	3D051450M
RXYQ48P(A)H	RXYQ16P(A)	RXYQ16P(A)	RXYQ16P(A)	3D051450M	3D051450M	3D051450M
RXYQ50P(A)H	RXYQ18P(A)	RXYQ16P(A)	RXYQ16P(A)	3D051450M	3D051450M	3D051450M

Notes :

1. Heights of walls  
 Front : 1500mm  
 Suction side : 500mm  
 Side : Height unrestricted
2. 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)
3. 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.
4. 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.)
5. 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

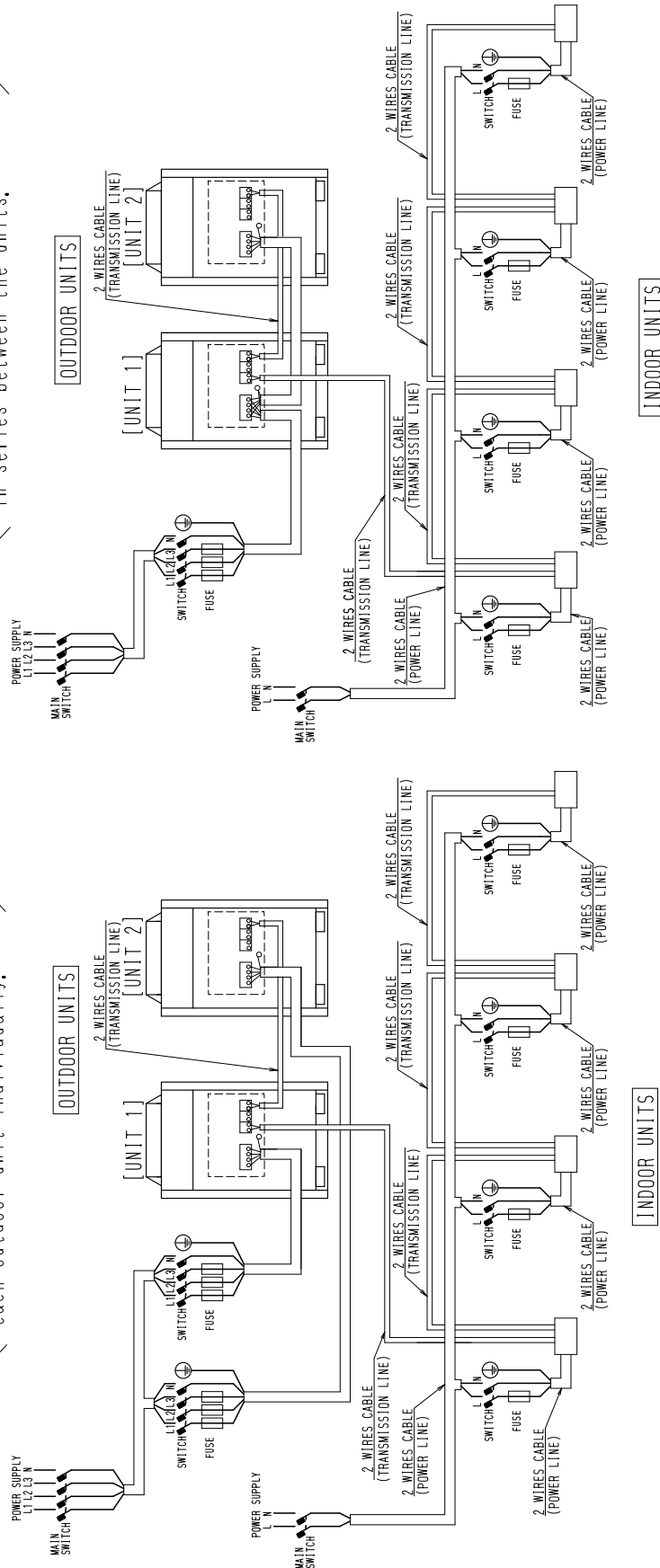
RXYQ16/18PAHY1  
RXYQ16/18PAHYL

- 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.
- 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.
- 12) Must install earth leakage circuit breaker.

- 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.

When the power source is connected in series between the units,

When the power source is supplied to each outdoor unit individually,

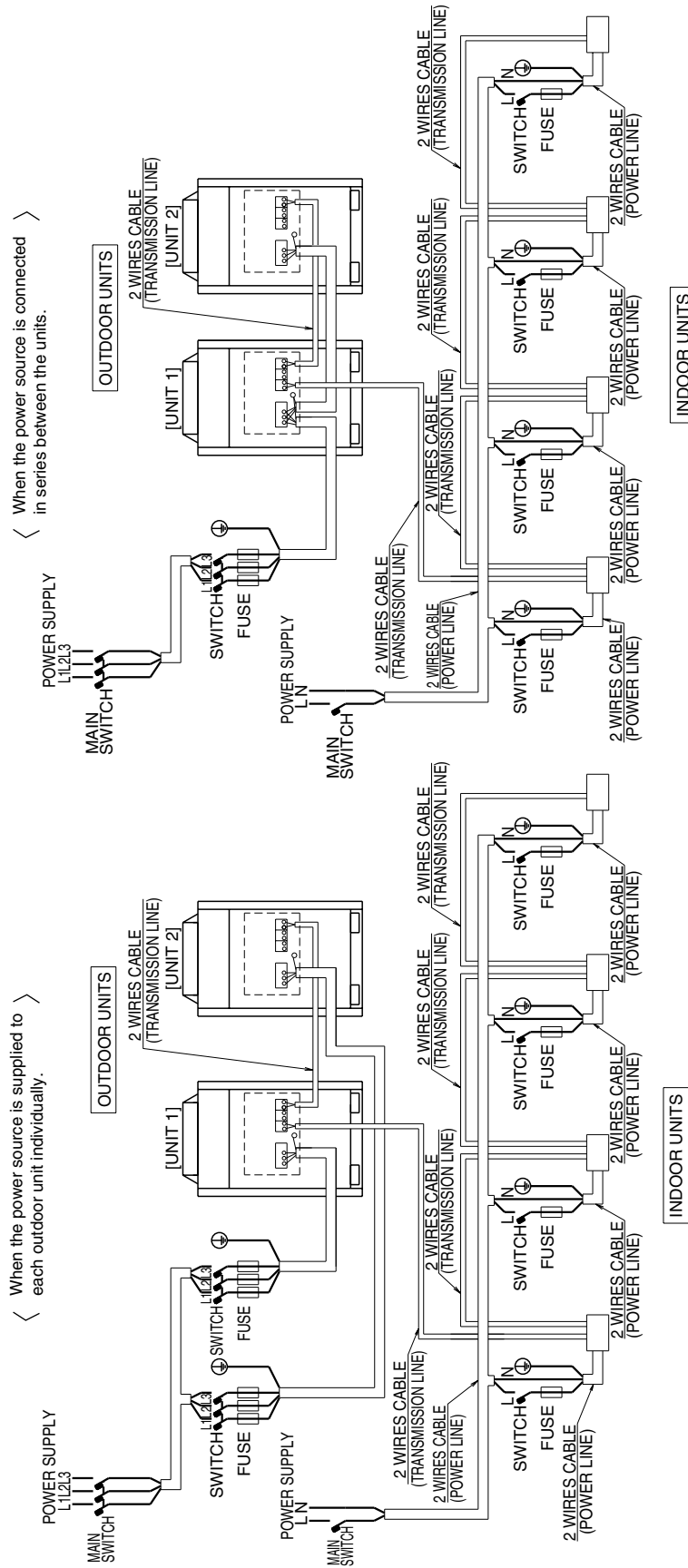


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RXYQ16/18PHTL

- 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
  - 11) 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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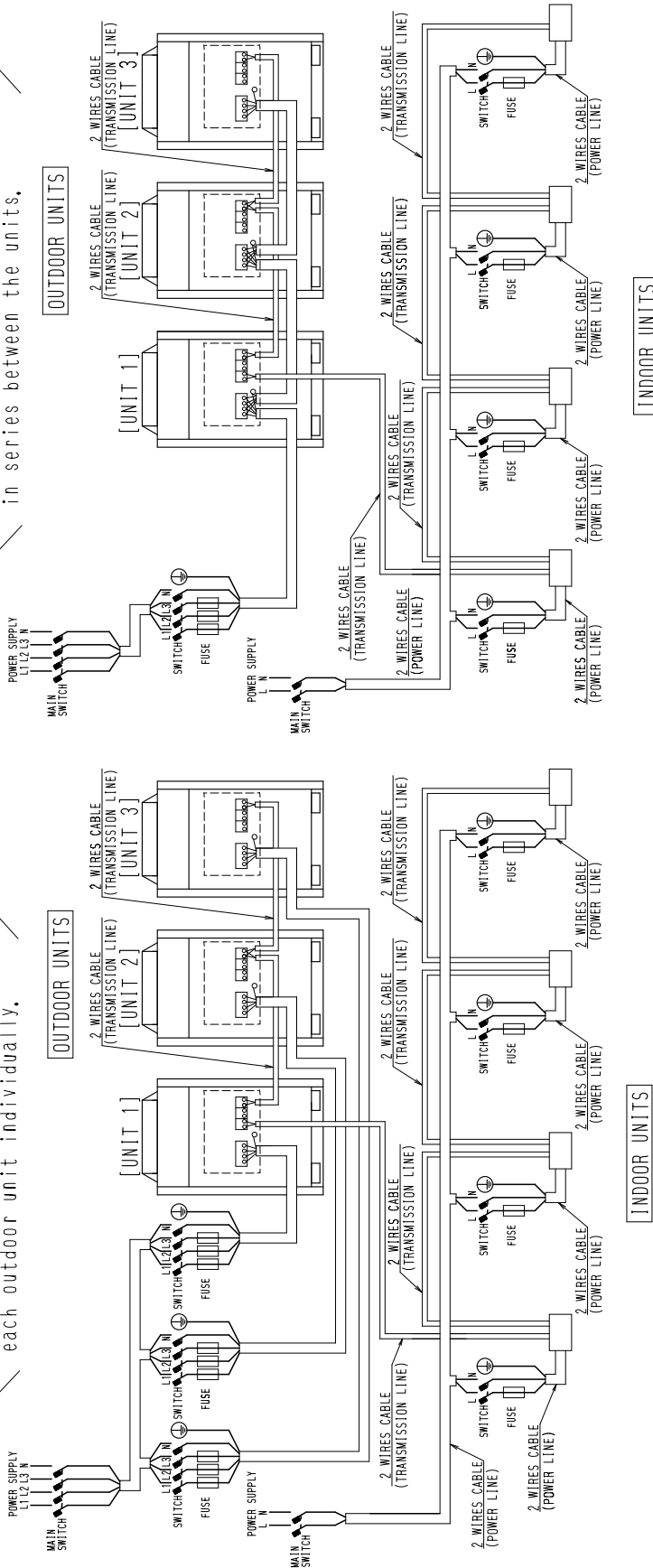
**RXYQ24/26/28/30/32/34/36/38/40/42/44/46/48/50PAHY1**  
**RXYQ24/26/28/30/32/34/36/38/40/42/44/46/48/50PAHYL**

- 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
  - 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.
  - 12) Must install earth leakage circuit breaker.
- Running the product in reversed phase may break the compressor and other parts.

When the power source is supplied to each outdoor unit individually.

When the power source is connected in series between the units.

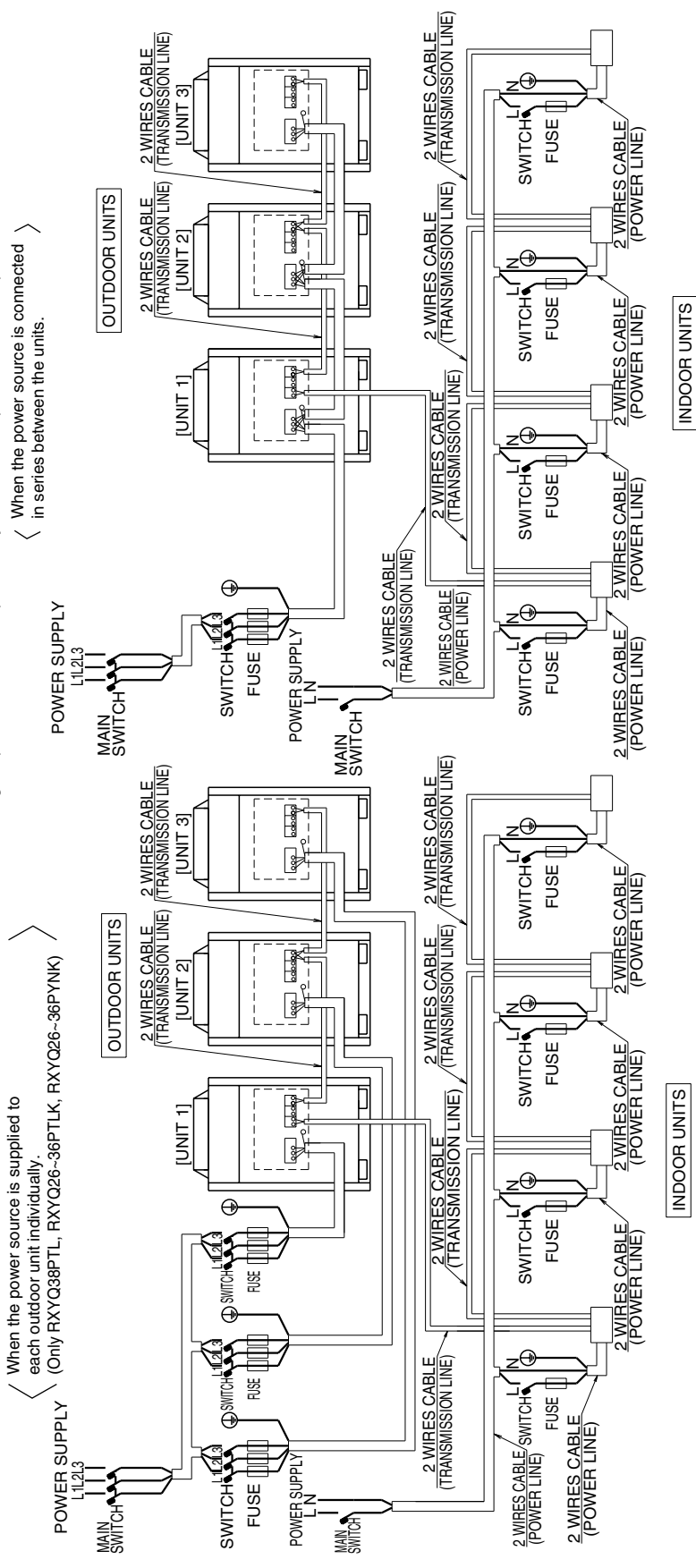


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RXYQ24/26/28/30/32/34/36/38/40/42/44/46/48/50PHTL

- 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
  - 11) If the power source is connected in series between the units, when 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.

- 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.



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# 4. Electric Characteristics

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

### RXYQ16/18/24/26/28/30/32PAHY1

Combination Unit	Model Name		Hz	Units		Power supply			Comp.			OFM	
	Independent	Unit		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)X2	(0.75)X2	(0.7)X2
				400	342	456							
				415	342	456							
RXYQ18PHY1 RXYQ18PAHY1 RXYQ18PAHY6	RXYQ10PY1 RXYQ10PAY1 RXYQ10PAY6	/	50	380	342	456	40.1	48.0	45	82	8.6+4.7+7.2	(0.75)X2	0.7 +0.9
				400	342	456							
				415	342	456							
RXYQ24PHY1 RXYQ24PAHY1 RXYQ24PAHY6	RXYQ8PY1 RXYQ8PAY1 RXYQ8PAY6	RXYQ8PY1 RXYQ8PAY1 RXYQ8PAY6	50	380	342	456	55.5	49.6	70	—	(8.6)X3	(0.75)X3	(0.7)X3
				400	342	456							
				415	342	456							
RXYQ26PHY1 RXYQ26PAHY1 RXYQ26PAHY6	RXYQ8PY1 RXYQ8PAY1 RXYQ8PAY6	RXYQ10PY1 RXYQ10PAY1 RXYQ10PAY6	50	380	342	456	58.6	64.6	70	86	(8.6)X2+4.7+7.2	(0.75)X2	(0.7)X2 +0.9
				400	342	456							
				415	342	456							
RXYQ28PHY1 RXYQ28PAHY1 RXYQ28PAHY6	RXYQ8PY1 RXYQ8PAY1 RXYQ8PAY6	RXYQ12PY1 RXYQ12PAY1 RXYQ12PAY6	50	380	342	456	59.7	64.6	70	82	(8.2)X2+6.2+6.7	(0.75)X2	(0.7)X2 +0.6X2
				400	342	456							
				415	342	456							
RXYQ30PHY1 RXYQ30PAHY1 RXYQ30PAHY6	RXYQ10PY1 RXYQ10PAY1 RXYQ10PAY6	RXYQ12PY1 RXYQ12PAY1 RXYQ12PAY6	50	380	342	456	62.8	79.5	70	96	8.6+4.7+7.2+6.5+7.0	(0.75)X2	0.7 +0.9 +0.6X2
				400	342	456							
				415	342	456							
RXYQ32PHY1 RXYQ32PAHY1 RXYQ32PAHY6	RXYQ12PY1 RXYQ12PAY1 RXYQ12PAY6	RXYQ12PY1 RXYQ12PAY1 RXYQ12PAY6	50	380	342	456	63.9	79.5	80	92	8.2+(6.2+6.7)X2	0.75 +0.35X2	0.7 +0.6X2
				400	342	456							
				415	342	456							

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

**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.

**(Inverter comp. + Non-inverter comp.)**

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).

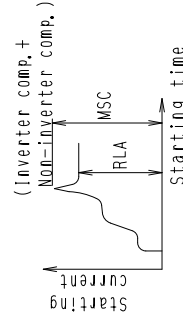
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RXYQ34/36/38/40/42/44/46PAHY1

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

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, starting of compressor.
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).



The relationship between the starting time and the starting current.

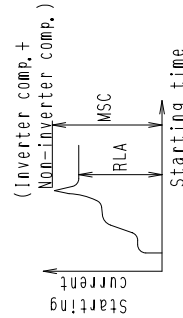
Symbols:

- 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)

RXYQ48/50PAHY1

Combination Unit	Model Name		Hz	Units		Power supply			Comp.		OFM	
	Independent	Unit		Volts	Min.	Max.	MCA	TOCA	MFA	MSC	RLA	KW
RXYQ48PHY1 RXYQ48PAHY1 RXYQ48PAHY6	RXYQ16PY1	RXYQ16PY1	50	380	456	94.5	139.3	110	141	(6.4+8.0x2)x3	(0.35x2)x3	(0.6x2)x3
	RXYQ16PAY1	RXYQ16PAY1										
	RXYQ16PAY6	RXYQ16PAY6										
RXYQ50PHY1 RXYQ50PAHY1 RXYQ50PAHY6	RXYQ18PY1	RXYQ18PY1	50	380	456	95.5	141.1	110	141	(6.4+8.0x2)x2+9.4+8.3x2	(0.35x2)x2	(0.6x2)x2
	RXYQ18PAY1	RXYQ18PAY1										
	RXYQ18PAY6	RXYQ18PAY6										

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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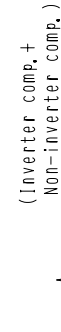
## 4.2 60Hz 380V (RXYQ-PAHYL)

### RXYQ16/18/24/26/28/30/32/34/36/38/40/42/44/46/48/50PAHYL

Combination Unit	Model Name		Units		Power supply				Comp.			OFM	
	Independent unit		Hz	Volts	Max,	MCA	TOCA	MFA	MSC	RLA	KW		FLA
RXY016PHYL(E) RXY016PAHYL(E) RXY016PAHYLD9	RXY08PYL(E) RXY08PAYL(E) RXY08PAYLD9		60	380	418	37.0	33.0	45	-	(8.6)×2	(0.75)×2		(0.7)×2
RXY018PHYL(E) RXY018PAHYL(E)	RXY010PYL(E) RXY010PAYL(E)		60	380	418	41.3	48.0	50	82	8.6+3.6+8.3	(0.75)×2		0.7+0.9
RXY024PHYL(E) RXY024PAHYL(E) RXY024PAHYLD9	RXY08PYL(E) RXY08PAYL(E) RXY08PAYLD9	RXY08PYL(E) RXY08PAYL(E) RXY08PAYLD9	60	380	418	55.5	49.5	70	-	(8.6)×3	(0.75)×3		(0.7)×3
RXY026PHYL(E) RXY026PAHYL(E)	RXY08PYL(E) RXY08PAYL(E)	RXY010PYL(E) RXY010PAYL(E)	60	380	418	59.8	64.5	70	86	(8.6)×2+3.6+8.3	(0.75)×2+0.75		(0.7)×2+0.9
RXY028PHYL(E) RXY028PAHYL(E)	RXY08PYL(E) RXY08PAYL(E)	RXY012PYL(E) RXY012PAYL(E)	60	380	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
RXY030PHYL(E) RXY030PAHYL(E)	RXY08PYL(E) RXY08PAYL(E)	RXY010PYL(E) RXY010PAYL(E)	60	380	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
RXY032PHYL(E) RXY032PAHYL(E)	RXY08PYL(E) RXY08PAYL(E)	RXY012PYL(E) RXY012PAYL(E)	60	380	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
RXY034PHYL(E) RXY034PAHYL(E)	RXY010PYL(E) RXY010PAYL(E)	RXY012PYL(E) RXY012PAYL(E)	60	380	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
RXY036PHYL(E) RXY036PAHYL(E)	RXY012PYL(E) RXY012PAYL(E)	RXY012PYL(E) RXY012PAYL(E)	60	380	418	71.7	94.5	80	107	(5.4+8.9)×3	(0.35×2)×3		(0.6×2)×3
RXY038PHYL(E) RXY038PAHYL(E)	RXY012PYL(E) RXY012PAYL(E)	RXY014PAYL(E) RXY014PAYL(E)	60	380	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
RXY040PHYL(E) RXY040PAHYL(E)	RXY012PYL(E) RXY012PAYL(E)	RXY016PAYL(E) RXY016PAYL(E)	60	380	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
RXY042PHYL(E) RXY042PAHYL(E)	RXY012PYL(E) RXY012PAYL(E)	RXY018PAYL(E) RXY018PAYL(E)	60	380	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
RXY044PHYL(E) RXY044PAHYL(E)	RXY012PYL(E) RXY012PAYL(E)	RXY016PAYL(E) RXY016PAYL(E)	60	380	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
RXY046PHYL(E) RXY046PAHYL(E)	RXY012PYL(E) RXY012PAYL(E)	RXY018PAYL(E) RXY018PAYL(E)	60	380	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
RXY048PHYL(E) RXY048PAHYL(E)	RXY016PYL(E) RXY016PAYL(E)	RXY016PYL(E) RXY016PAYL(E)	60	380	418	101.7	139.2	120	141	(4.4+9.0×2)×3	(0.35×2)×3		(0.6×2)×3
RXY050PHYL(E) RXY050PAHYL(E)	RXY016PYL(E) RXY016PAYL(E)	RXY018PAYL(E) RXY018PAYL(E)	60	380	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

Notes:

1. RLA is based on the following conditions,  
Indoor temp. 27°C DB/19.0°C WB
2. TOCA means the total value of each DC set, starting of compressor.
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 value of MCA.
7. MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker).



The relationship between the starting time and the starting current.

- 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)

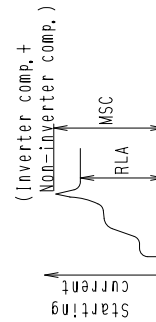
### 4.3 60Hz 220V (RXYQ-PHTL)

#### RXYQ16/18/24/26/28/30/32PHTL

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)	60	220	198	242	63.9	59	80	143	14.9×2
RXYQ18PHTL(E)	RXYQ10PTL(E)	60	220	198	242	71.3	84	80	159	14.9+6.2+14.3	0.75×2	1.2 +1.6
RXYQ24PHTL(E)	RXYQ8PTL(E)	60	220	198	242	95.9	89	110	161	14.9×3	0.75×3	1.2 +1.2 +1.2
RXYQ26PHTL(E)	RXYQ8PTL(E)	60	220	198	242	103	114	125	161	14.9×2+6.3+14.3	0.75×3	1.2 +1.2 +1.6
RXYQ28PHTL(E)	RXYQ8PTL(E)	60	220	198	242	105	114	125	178	14.9×2+9.3+15.4	0.75×2 +0.35×2	1.2 +1.2 +1.0×2
RXYQ30PHTL(E)	RXYQ10PTL(E)	60	220	198	242	113	139	125	179	14.9+6.2+14.3+9.3+15.4	0.75×2 +0.35×2	1.2 +1.6 +1.0×2
RXYQ32PHTL(E)	RXYQ12PTL(E)	60	220	198	242	115	139	150	199	14.9+(9.3+15.4)×2	0.75 +(0.35×2)×2	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°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).

RXYQ34/36/38/40/42/44/46PHTL

9D060897

Combination Unit	Model Name		Units			Power supply				Comp.		OFM	
	Independent	Unit	Hz	Volts	Min. Max.	MCA	TOCA	MFA	MSC	RLA	KW	FLA	
RXYQ34PHTL(E)	RXYQ10PTL(E)	RXYQ12PTL(E)	60	220	198 242	122	164	150	199	6, 2H14, 3H(9, 3H15, 4)X2	0, 75 +0, 35x2)x2	1, 6 +1, 0x2 +1, 0x2	
RXYQ36PHTL(E)	RXYQ12PTL(E)	RXYQ12PTL(E)	60	220	198 242	124	164	150	199	(9, 3H15, 4)X3	(0, 35x2)x3	1, 0x2 +1, 0x2 +1, 0x2	
RXYQ38PHTL(E)	RXYQ12PTL(E)	RXYQ14PTL(E)	60	220	198 242	141	188	175	185	(9, 3H15, 4)X2+2, 8H15, 4X2	(0, 35x2)x3	1, 0x2 +1, 0x2 +1, 0x2	
RXYQ40PHTL(E)	RXYQ12PTL(E)	RXYQ16PTL(E)	60	220	198 242	141	188	175	205	(9, 3H15, 4)X2+7, 6H15, 5X2	(0, 35x2)x3	1, 0x2 +1, 0x2 +1, 0x2	
RXYQ42PHTL(E)	RXYQ12PTL(E)	RXYQ18PTL(E)	60	220	198 242	143	189	175	205	(9, 3H15, 4)X2+12, 6H16, 1X2	(0, 35x2)x2 +1, 0x2 +0, 75x2	1, 0x2 +1, 0x2 +1, 2x2	
RXYQ44PHTL(E)	RXYQ12PTL(E)	RXYQ16PTL(E)	60	220	198 242	158	213	175	205	9, 3H15, 4+(7, 6H15, 5X2)X2	(0, 35x2)x3	1, 0x2 +1, 0x2 +1, 0x2	
RXYQ46PHTL(E)	RXYQ12PTL(E)	RXYQ18PTL(E)	60	220	198 242	160	214	200	222	9, 3H15, 4+7, 6H15, 5X2+2, 8H16, 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)

**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.

(Inverter comp. +  
MOD-Inverter comp.)

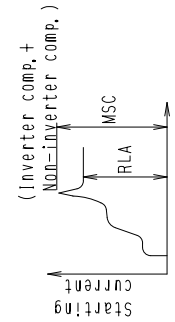
The relationship between the starting time and the starting current,

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).

RXYQ48/50PHTL

Combination Unit	Model Name		Units			Power supply				Comp.		OFM	
	Independent Unit	Hz	Volts	Min.	Max.	MCA	TOCA	MFA	MSC	RLA	KW	FLA	
RXYQ48PHTL(E)	RXYQ16PTL(E)RXYQ16PTL(E)	60	220	198	242	176	238	200	223	(7.6H15.5X2)X3	(0.35x2)x3	1.0x2 +1.0x2 +1.0x2	
RXYQ50PHTL(E)	RXYQ16PTL(E)RXYQ18PTL(E)	60	220	198	242	177	239	200	243	(7.6H15.5X2)X2H12.8H16.1X2	(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).

# 5. Capacity Tables (High COP Type)

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

### RXYQ16PAHY1, PAHYL, PHTL [50/60Hz] Cooling capacity

Combination (%) (Capacity index)	Outdoor air temp.	Indoor air temp. (°CWB)																Combination (%) (Capacity index)	Outdoor air temp.	Indoor air temp. (°CWB)															
		14.0		16.0		18.0		19.0		20.0		22.0		24.0		14.0				16.0		18.0		19.0		20.0		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	TC	PI	TC	PI						
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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	39	27.2	5.86	32.5	7.4	37.7	9.3	40.3	10.2	42.9	11.2	44.0	11.3	45.0	11.4					
	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																				
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.																						



**RXYQ18PAHY1, PAHYL, PHTL [50/60Hz] Cooling capacity**

Combination (%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. (°CWB)																Combination (%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. (°CWB)																										
		14.0		16.0		18.0		19.0		20.0		22.0		24.0		14.0				16.0		18.0		19.0		20.0		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	TC	PI	TC	PI	TC	PI															
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	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	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	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	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		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	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	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		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	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	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		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	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	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		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	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	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		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	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	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		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	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	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		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	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	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		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	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	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		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	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	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		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	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	31	30.6	5.75	36.5	7.26	42.4	8.9	45.4	9.9	48.3	10.8	52.2	12.2	53.9	12.3		31	30.6	5.75	36.5	7.26	42.4	8.9	45.4	9.9	48.3	10.8	52.2	12.2	53.9	12.3
	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	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		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	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	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	13.7		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	13.7
	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	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	13.3		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	13.3
	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	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		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
	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	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	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		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		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	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		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	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		40.8	5.94	48.7	7.27	56.5	8.6	59.3	9.4	60.0	9.4	61.5	9.5	62.9	9.6	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		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	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		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	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		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	23		27.2	4.01	32.5	4.83	37.7	5.66	40.3	6.42	42.9	7.01	48.2	8.26	53.4	9.6															
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	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		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	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		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	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		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	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		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	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		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	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		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	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		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	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															
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		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	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			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	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	14	23.8		3.25	28.4	3.87	33.0	4.52	35.3	4.86																					

**RXYQ24PAHY1, PAHYL, PHTL [50/60Hz] Cooling capacity**

Combination (%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. (°CWB)																Combination (%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. (°CWB)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
		14.0		16.0		18.0		19.0		20.0		22.0		24.0		14.0				16.0		18.0		19.0		20.0		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	TC	PI	TC	PI																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	20	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	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	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	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	21	59.0	8.4	70.3	10.7	76.5	12.6	77.5	12.7	78.6	12.7	80.7	12.8	82.8	13.0	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	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	23	36.3	4.80	43.3	5.79	50.3	6.82	53.8	7.37	57.3	8.4	64.2	9.9	71.2	11.5	23	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	23	36.3	4.80	43.3	5.79	50.3	6.82	53.8	7.37	57.3	8.4	64.2	9.9	71.2	11.5	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	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	25	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	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	59.0	12.9	70.3	13.7	74.3	13.7	75.3	13.8	76.4	13.8	78.5	14.0	80.7	14.1	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	27	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	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	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	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	29	59.0	11.4	70.3	14.6	72.1	14.8	73.2	14.9	74.2	15.0	76.3	15.1	78.5	15.3	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	59.0	11.4	70.3	14.6	72.1	14.8	73.2	14.9	74.2	15.0	76.3	15.1	78.5	15.3	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	31	59.0	12.1	68.9	15.2	71.0	15.4	72.1	15.5	73.1	15.7	75.3	15.7	77.4	15.9	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	59.0	12.1	68.9	15.2	71.0	15.4	72.1	15.5	73.1	15.7	75.3	15.7	77.4	15.9	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	33	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	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	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	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	35	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	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	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	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	37	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	18	31.7	4.02	37.9	4.80	44.0	5.62	47.0	6.05	50.1	6.48	56.2	7.4	62.3	8.3	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	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	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	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	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	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	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	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	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	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	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	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
	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	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		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		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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	20	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	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	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	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	21	59.0	8.4	70.3	10.7	76.5	12.6	77.5	12.7	78.6	12.7	80.7	12.8	82.8	13.0	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	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	23	36.3	4.80	43.3	5.79	50.3	6.82	53.8	7.37	57.3	8.4	64.2	9.9	71.2	11.5	23	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	23	36.3	4.80	43.3	5.79	50.3	6.82	53.8	7.37	57.3	8.4	64.2	9.9	71.2	11.5	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	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	25	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	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	59.0	12.9	70.3	13.7	74.3	13.7	75.3	13.8	76.4	13.8	78.5	14.0	80.7	14.1	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	27	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	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	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	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	29	59.0	11.4	70.3	14.6	72.1	14.8	73.2	14.9	74.2	15.0	76.3	15.1	78.5	15.3	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	59.0	11.4	70.3	14.6	72.1	14.8	73.2	14.9	74.2	15.0	76.3	15.1	78.5	15.3	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	31	59.0	12.1	68.9	15.2	71.0	15.4	72.1	15.5	73.1	15.7	75.3	15.7	77.4	15.9	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	59.0	12.1	68.9	15.2	71.0	15.4	72.1	15.5	73.1	15.7	75.3	15.7	77.4	15.9	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	33	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	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	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	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	35	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	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	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	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	37	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	18	31.7	4.02	37.9	4.80	44.0	5.62	47.0	6.05	50.1	6.48	56.2	7.4	62.3	8.3	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	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	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	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	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	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	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	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	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	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	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	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																																																																									
	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	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		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		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	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	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	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	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	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	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	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	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	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	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	20	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	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	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	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	21	59.0	8.4	70.3	10.7	76.5	12.6	77.5	12.7	78.6	12.7	80.7	12.8	82.8	13.0	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	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	23	36.3	4.80	43.3	5.79	50.3	6.82	53.8	7.37	57.3	8.4	64.2	9.9	71.2	11.5	23	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	23	36.3	4.80	43.3	5.79	50.3	6.82	53.8	7.37	57.3	8.4	64.2	9.9	71.2	11.5	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	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	25	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	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	59.0	12.9	70.3	13.7	74.3	13.7	75.3	13.8	76.4	13.8	78.5	14.0	80.7	14.1	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	27	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	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	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	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	29	59.0	11.4	70.3	14.6	72.1	14.8	73.2	14.9	74.2	15.0	76.3	15.1	78.5	15.3	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	59.0	11.4	70.3	14.6	72.1	14.8	73.2	14.9	74.2	15.0	76.3	15.1	78.5	15.3	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	31	59.0	12.1	68.9	15.2	71.0	15.4	72.1	15.5	73.1	15.7	75.3	15.7	77.4	15.9	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	59.0	12.1	68.9	15.2	71.0	15.4	72.1	15.5	73.1	15.7	75.3	15.7	77.4	15.9	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	33	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	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	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	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	35	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	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	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	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	37	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	18	31.7	4.02	37.9	4.80	44.0	5.62	47.0	6.05	50.1	6.48		56.2	7.4	62.3	8.3	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	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	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	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	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	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	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	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	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	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	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	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																																																																																																																																			
	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	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		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		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	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	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	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	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	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	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	20	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	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	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	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	21	59.0	8.4	70.3	10.7	76.5	12.6	77.5	12.7	78.6	12.7	80.7	12.8	82.8	13.0	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	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	23	36.3	4.80	43.3	5.79	50.3	6.82	53.8	7.37	57.3	8.4	64.2	9.9	71.2	11.5	23	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	23	36.3	4.80	43.3	5.79	50.3	6.82	53.8	7.37	57.3	8.4	64.2	9.9	71.2	11.5	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	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	25	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	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	59.0	12.9	70.3	13.7	74.3	13.7	75.3	13.8	76.4	13.8	78.5	14.0	80.7	14.1	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	27	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	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	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	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	29	59.0	11.4	70.3	14.6	72.1	14.8	73.2	14.9	74.2	15.0	76.3	15.1	78.5	15.3	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	59.0	11.4	70.3	14.6	72.1	14.8	73.2	14.9	74.2	15.0	76.3	15.1	78.5	15.3	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	31	59.0	12.1	68.9	15.2	71.0	15.4	72.1	15.5	73.1	15.7	75.3	15.7	77.4	15.9	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	59.0	12.1	68.9	15.2	71.0	15.4	72.1	15.5	73.1	15.7	75.3	15.7	77.4	15.9	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	33	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	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	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	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	35	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	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	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	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	37	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	18	31.7	4.02	37.9	4.80	44.0	5.62	47.0	6.05	50.1	6.48	56.2	7.4	62.3	8.3	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	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	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	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	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	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	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	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	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	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	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	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																																																																																																																																																																																													
	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	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		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		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	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	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	20	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	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	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	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	21	59.0	8.4	70.3	10.7	76.5	12.6	77.5	12.7	78.6	12.7	80.7	12.8	82.8	13.0	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	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	23	36.3	4.80	43.3	5.79	50.3	6.82	53.8	7.37	57.3	8.4	64.2	9.9	71.2	11.5	23	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	23	36.3	4.80	43.3	5.79	50.3	6.82	53.8	7.37	57.3	8.4	64.2	9.9	71.2	11.5	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	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	25	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	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	59.0	12.9	70.3	13.7	74.3	13.7	75.3	13.8	76.4	13.8	78.5	14.0	80.7	14.1	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	27	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	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	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	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	29	59.0	11.4	70.3	14.6	72.1	14.8	73.2	14.9	74.2	15.0	76.3	15.1	78.5	15.3	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	59.0	11.4	70.3	14.6	72.1	14.8	73.2	14.9	74.2	15.0	76.3	15.1	78.5	15.3	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	31	59.0	12.1	68.9	15.2	71.0	15.4	72.1	15.5	73.1	15.7	75.3	15.7	77.4	15.9	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	59.0	12.1	68.9	15.2	71.0	15.4	72.1	15.5	73.1	15.7	75.3	15.7	77.4	15.9	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	33	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	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	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	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	35	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	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	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	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	37	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	18	31.7	4.02	37.9	4.80	44.0	5.62	47.0	6.05	50.1	6.48	56.2	7.4	62.3	8.3	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	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	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	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	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	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	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	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	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	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	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	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																																																																																																																																																																																																																																																							
	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	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		20	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		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	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	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	21	59.0	8.4	70.3	10.7	76.5	12.6	77.5	12.7	78.6	12.7	80.7	12.8	82.8	13.0	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	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	23	36.3	4.80	43.3	5.79	50.3	6.82	53.8	7.37	57.3	8.4	64.2	9.9	71.2	11.5	23	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	23	36.3	4.80	43.3	5.79	50.3	6.82	53.8	7.37	57.3	8.4	64.2	9.9	71.2	11.5	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	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	25	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	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	59.0	12.9	70.3	13.7	74.3	13.7	75.3	13.8	76.4	13.8	78.5	14.0	80.7	14.1	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	27	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	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	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	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	29	59.0	11.4	70.3	14.6	72.1	14.8	73.2	14.9	74.2	15.0	76.3	15.1	78.5	15.3	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	59.0	11.4	70.3	14.6	72.1	14.8	73.2	14.9	74.2	15.0	76.3	15.1	78.5	15.3	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	31	59.0	12.1	68.9	15.2	71.0	15.4	72.1	15.5	73.1	15.7	75.3	15.7	77.4	15.9	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	59.0	12.1	68.9	15.2	71.0	15.4	72.1	15.5	73.1	15.7	75.3	15.7	77.4	15.9	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	33	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	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	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	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	35	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	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	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	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	37	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	18	31.7	4.02	37.9	4.80	44.0	5.62	47.0	6.05	50.1	6.48	56.2	7.4	62.3	8.3	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	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	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	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	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	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	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	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	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	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	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	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																																																																																																																																																																																																																																																																																																																	
	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	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		21	59.0	8.4	70.3	10.7	76.5	12.6	77.5	12.7	78.6	12.7	80.7	12.8	82.8	13.0		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	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	23	36.3	4.80	43.3	5.79	50.3	6.82	53.8	7.37	57.3	8.4	64.2	9.9	71.2	11.5	23	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	23	36.3	4.80	43.3	5.79	50.3	6.82	53.8	7.37	57.3	8.4	64.2	9.9	71.2	11.5	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	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	25	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	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	59.0	12.9	70.3	13.7	74.3	13.7	75.3	13.8	76.4	13.8	78.5	14.0	80.7	14.1	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	27	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	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	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	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	29	59.0	11.4	70.3	14.6	72.1	14.8	73.2	14.9	74.2	15.0	76.3	15.1	78.5	15.3	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	59.0	11.4	70.3	14.6	72.1	14.8	73.2	14.9	74.2	15.0	76.3	15.1	78.5	15.3	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	31	59.0	12.1	68.9	15.2	71.0	15.4	72.1	15.5	73.1	15.7	75.3	15.7	77.4	15.9	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	59.0	12.1	68.9	15.2	71.0	15.4	72.1	15.5	73.1	15.7	75.3	15.7	77.4	15.9	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	33	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	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	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	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	35	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	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	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	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	37	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	18	31.7	4.02	37.9	4.80	44.0	5.62	47.0	6.05	50.1	6.48	56.2	7.4	62.3	8.3	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	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	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	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	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	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	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	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	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	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	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	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																																																																																																																																																																																																																																																																																																																																																																													
	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	23	36.3	4.80	43.3	5.79	50.3	6.82	53.8	7.37	57.3	8.4	64.2	9.9	71.2	11.5		23	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		23	36.3	4.80	43.3	5.79	50.3	6.82	53.8	7.37	57.3	8.4	64.2	9.9	71.2	11.5		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	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	25	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	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	59.0	12.9	70.3	13.7	74.3	13.7	75.3	13.8	76.4	13.8	78.5	14.0	80.7	14.1	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	27	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	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	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	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	29	59.0	11.4	70.3	14.6	72.1	14.8	73.2	14.9	74.2	15.0	76.3	15.1	78.5	15.3	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	59.0	11.4	70.3	14.6	72.1	14.8	73.2	14.9	74.2	15.0	76.3	15.1	78.5	15.3	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	31	59.0	12.1	68.9	15.2	71.0	15.4	72.1	15.5	73.1	15.7	75.3	15.7	77.4	15.9	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	59.0	12.1	68.9	15.2	71.0	15.4	72.1	15.5	73.1	15.7	75.3	15.7	77.4	15.9	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	33	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	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	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	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	35	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	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	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	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	37	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	18	31.7	4.02	37.9	4.80	44.0	5.62	47.0	6.05	50.1	6.48	56.2	7.4	62.3	8.3	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	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	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	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	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	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	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	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	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	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	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	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																																																																																																																																																																																																																																																																																																																																																																																																																																									
	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	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		25	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		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	59.0	12.9	70.3	13.7	74.3	13.7	75.3	13.8	76.4	13.8	78.5	14.0	80.7	14.1	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	27	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	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	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	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	29	59.0	11.4	70.3	14.6	72.1	14.8	73.2	14.9	74.2	15.0	76.3	15.1	78.5	15.3	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	59.0	11.4	70.3	14.6	72.1	14.8	73.2	14.9	74.2	15.0	76.3	15.1	78.5	15.3	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	31	59.0	12.1	68.9	15.2	71.0	15.4	72.1	15.5	73.1	15.7	75.3	15.7	77.4	15.9	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	59.0	12.1	68.9	15.2	71.0	15.4	72.1	15.5	73.1	15.7	75.3	15.7	77.4	15.9	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	33	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	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	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	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	35	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	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	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	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	37	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	18	31.7	4.02	37.9	4.80	44.0	5.62	47.0	6.05	50.1	6.48	56.2	7.4	62.3	8.3	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	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	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	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	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	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	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	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	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	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	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	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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
	27	59.0	12.9	70.3	13.7	74.3	13.7	75.3	13.8	76.4	13.8	78.5	14.0	80.7	14.1	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		27	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		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	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	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	29	59.0	11.4	70.3	14.6	72.1	14.8	73.2	14.9	74.2	15.0	76.3	15.1	78.5	15.3	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	59.0	11.4	70.3	14.6	72.1	14.8	73.2	14.9	74.2	15.0	76.3	15.1	78.5	15.3	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	31	59.0	12.1	68.9	15.2	71.0	15.4	72.1	15.5	73.1	15.7	75.3	15.7	77.4	15.9	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	59.0	12.1	68.9	15.2	71.0	15.4	72.1	15.5	73.1	15.7	75.3	15.7	77.4	15.9	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	33	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	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	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	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	35	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	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	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	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	37	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	18	31.7	4.02	37.9	4.80	44.0	5.62	47.0	6.05	50.1	6.48	56.2	7.4	62.3	8.3	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	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	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	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	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	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	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	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	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	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	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	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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
	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	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		29	59.0	11.4	70.3	14.6	72.1	14.8	73.2	14.9	74.2	15.0	76.3	15.1	78.5	15.3		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	59.0	11.4	70.3	14.6	72.1	14.8	73.2	14.9	74.2	15.0	76.3	15.1	78.5	15.3	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	31	59.0	12.1	68.9	15.2	71.0	15.4	72.1	15.5	73.1	15.7	75.3	15.7	77.4	15.9	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	59.0	12.1	68.9	15.2	71.0	15.4	72.1	15.5	73.1	15.7	75.3	15.7	77.4	15.9	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	33	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	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	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	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	35	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	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	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	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	37	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	18	31.7	4.02	37.9	4.80	44.0	5.62	47.0	6.05	50.1	6.48	56.2	7.4	62.3	8.3	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	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	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	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	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	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	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	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	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	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	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	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	59.0	11.4	70.3	14.6	72.1	14.8	73.2	14.9	74.2	15.0	76.3	15.1	78.5	15.3	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		31	59.0	12.1	68.9	15.2	71.0	15.4	72.1	15.5	73.1	15.7	75.3	15.7	77.4	15.9		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	59.0	12.1	68.9	15.2	71.0	15.4	72.1	15.5	73.1	15.7	75.3	15.7	77.4	15.9	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	33	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	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	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	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	35	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	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	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	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	37	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	18	31.7	4.02	37.9	4.80	44.0	5.62	47.0	6.05	50.1	6.48	56.2	7.4	62.3	8.3	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	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	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	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	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	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	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	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	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	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	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	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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	33	59.0	12.1	68.9	15.2	71.0	15.4	72.1	15.5	73.1	15.7	75.3	15.7	77.4	15.9	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		33	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		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	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	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	35	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	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	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	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	37	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	18	31.7	4.02	37.9	4.80	44.0	5.62	47.0	6.05	50.1	6.48	56.2	7.4	62.3	8.3	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	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	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	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	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	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	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	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	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	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	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	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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
	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	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		35	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		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	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	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	37	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	18	31.7	4.02	37.9	4.80	44.0	5.62	47.0	6.05	50.1	6.48	56.2	7.4	62.3	8.3	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	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	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	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	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	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	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	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	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	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	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	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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
	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	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		37	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		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	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	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	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	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	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	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	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	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	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	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	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	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	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	18	31.7	4.02	37.9	4.80	44.0	5.62	47.0	6.05	50.1	6.48	56.2	7.4	62.3	8.3	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	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	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	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	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	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	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	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	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	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	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	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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
	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	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		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		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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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	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	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	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	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	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	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	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	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	18	31.7		4.02	37.9	4.80	44.0	5.62	47.0	6.05	50.1	6.48	56.2	7.4	62.3	8.3	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	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	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		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	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	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	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	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	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	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	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	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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	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		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	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	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	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	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	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	18	31.7	4.02	37.9	4.80	44.0	5.62	47.0	6.05	50.1	6.48	56.2	7.4	62.3	8.3	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	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	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	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	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		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	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	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	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	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	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	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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
	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		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	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	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	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	18	31.7	4.02	37.9	4.80	44.0	5.62	47.0	6.05	50.1	6.48	56.2	7.4	62.3	8.3	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	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	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	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	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	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	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		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	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	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	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	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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	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		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	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	18	31.7	4.02	37.9	4.80	44.0	5.62	47.0	6.05	50.1	6.48	56.2	7.4	62.3	8.3	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	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	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	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	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	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	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	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	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		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	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	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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
	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		18	31.7	4.02	37.9	4.80	44.0	5.62	47.0	6.05	50.1	6.48	56.2	7.4	62.3	8.3	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	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	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	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	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	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	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	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	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	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	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		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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	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		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	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	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	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	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	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	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	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	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	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	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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	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		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	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	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	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	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	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	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	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	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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
	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		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	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	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	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	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	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	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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
	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		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	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	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	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	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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	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		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	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	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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
	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		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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															

**RXYQ26PAHY1, PAHYL, PHTL [50/60Hz] Cooling capacity**

Combination (%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. (°CWB)																Combination (%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. (°CWB)																																																		
		14.0		16.0		18.0		19.0		20.0		22.0		24.0		14.0				16.0		18.0		19.0		20.0		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	TC	PI	TC	PI																																									
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													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	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														80% (520)	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	10.5																										
	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																70% (455)	14	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																								
	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																	60% (390)	16	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																							
	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																		50% (325)	18	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																						
	20	63.9	9.3	76.2	11.4	84.6	13.8	85.8	13.9	86.9	13.9	89.2	14.1	91.5	14.2																			100% (650)	20	20.6	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																					
	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																				100% (650)	21	19.1	3.25	29.3	4.13	34.0	4.75	36.4	5.07	38.8	5.40	43.5	6.09	48.2	6.80																				
	22	63.9	10.0	76.2	13.2	82.8	14.8	84.0	14.8	85.1	14.9	87.4	15.1	89.7	15.2																					100% (650)	22	17.6	3.08	29.3	4.23	34.0	4.87	36.4	5.21	38.8	5.55	43.5	6.26	48.2	7.02																			
	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																						100% (650)	23	16.1	2.87	29.3	4.30	34.0	4.96	36.4	5.32	38.8	5.72	43.5	6.57	48.2	7.49																		
	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																							100% (650)	25	14.2	2.62	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	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																								100% (650)	27	12.6	2.37	29.3	4.30	34.0	4.96	36.4	5.32	38.8	5.72	43.5	6.57	48.2	7.49																
	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																									100% (650)	29	11.1	2.17	29.3	4.30	34.0	4.96	36.4	5.32	38.8	5.72	43.5	6.57	48.2	7.49															
	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																										100% (650)	31	9.9	1.99	29.3	4.30	34.0	4.96	36.4	5.32	38.8	5.72	43.5	6.57	48.2	7.49														
	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																											100% (650)	33	9.1	1.91	29.3	4.30	34.0	4.96	36.4	5.32	38.8	5.72	43.5	6.57	48.2	7.49													
	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																												100% (650)	35	8.2	1.82	29.3	4.30	34.0	4.96	36.4	5.32	38.8	5.72	43.5	6.57	48.2	7.49												
	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																													100% (650)	37	7.7	1.77	29.3	4.30	34.0	4.96	36.4	5.32	38.8	5.72	43.5	6.57	48.2	7.49											
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														100% (650)		39															7.0	1.70	29.3	4.30	34.0	4.96	36.4	5.32	38.8	5.72	43.5	6.57	48.2	7.49												

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.

TC: Total capacity: kW  
 PI: Power input: kW (Compressor+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. (°CWB)																Combination (%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. (°CWB)															
		14.0		16.0		18.0		19.0		20.0		22.0		24.0		14.0				16.0		18.0		19.0		20.0		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	TC	PI	TC	PI						
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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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					
120% (840)	10	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	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	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	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	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	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	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	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	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	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	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	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	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	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	68.7	19.0	75.6	21.4	87.7	15.5	88.9	15.5	90.0	15.6	92.3	15.8	94.6	15.9	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	68.7	20.3	75.6	22.1	86.3	16.1	87.6	16.2	88.7	16.3	91.0	16.5	93.3	16.6	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	68.7	21.0	75.6	22.8	85.3	16.9	86.3	16.9	87.5	17.0	89.8	17.2	92.0	17.3	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					
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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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					
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	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	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	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	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	14	31.7	4.18	37.8	4.92	43.9	5.70	47.0	6.11	50.0	6.52	56.1	7.39	62.3	8.3					
	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	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	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	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	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	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	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	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	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	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	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	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	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	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					
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	10	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					
	12	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	12	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					
	14	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	14	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.						

**RXYQ30PAHY1, PAHYL, PHTL [50/60Hz] Cooling capacity**

Combination (%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. (°CWB)																Combination (%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. (°CWB)															
		14.0		16.0		18.0		19.0		20.0		22.0		24.0		14.0				16.0		18.0		19.0		20.0		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	TC	PI	TC	PI						
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	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	73.6	10.4	87.8	12.7	102	15.1	104	15.1	106	14.7	108	14.1	111	13.9	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	73.6	10.6	87.8	12.9	102	15.3	103	15.0	104	14.7	107	14.5	110	14.7	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	73.6	10.8	87.8	13.2	100	15.2	102	15.1	103	15.2	106	15.3	108	15.5	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	73.6	11.0	87.8	13.4	99	15.8	100	15.9	102	16.0	104	16.1	107	16.3	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	73.6	11.2	87.8	14.3	97.5	16.6	99	16.6	100	16.7	103	16.9	105	17.1	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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					
	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	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	67.9	9.5	81.0	11.6	94.1	13.8	101	14.9	104	15.1	106	14.6	109	14.0	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	67.9	9.6	81.0	11.8	94.1	14.0	101	15.2	103	15.1	105	14.5	107	14.6	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		67.9	9.8	81.0	12.0	94.1	14.3	100	15.3	101	15.1	104	15.2	106	15.4	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		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	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		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	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		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	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		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	23	45.3	6.76	54.0	8.2	62.8	9.6	67.1	10.8	71.5	11.8	80.2	13.9	88.9	16.2					
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	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		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	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		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	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		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	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		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	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		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	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		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	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		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	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					
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	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	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	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	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	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	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	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	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	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	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	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	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	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	12.3					
	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	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	13.5					
	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	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	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	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	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	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	62.3	12.7	74.3	16.2	86.3																													

**RXYQ32PAHY1, PAHYL, PHTL [50/60Hz] Cooling capacity**

Combination (%) (Capacity index)	Outdoor air temp.	Indoor air temp. (°CWB)																Combination (%) (Capacity index)	Outdoor air temp.	Indoor air temp. (°CWB)															
		14.0		16.0		18.0		19.0		20.0		22.0		24.0		14.0				16.0		18.0		19.0		20.0		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	TC	PI	TC	PI	TC	PI				
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	10	54.3	7.13	64.8	8.6	75.2	10.1	80.5	10.9	85.7	11.8	96.2	13.4	107	15.2					
	12	78.4	10.8	93.5	13.3	109	15.8	111	15.7	113	15.4	115	14.7	118	14.5	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	78.4	11.0	93.5	13.5	108	16.0	110	15.6	111	15.3	114	15.2	117	15.3	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	78.4	11.2	93.5	13.8	107	15.9	108	15.8	110	15.9	112	16.0	115	16.2	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	78.4	11.5	93.5	14.1	105	16.5	107	16.6	108	16.7	111	16.8	114	17.0	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	78.4	11.7	93.5	15.0	104	17.3	105	17.4	107	17.5	110	17.7	112	17.8	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	78.4	12.0	93.5	15.5	103	17.7	105	17.8	106	17.9	109	18.1	112	18.3	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	78.4	12.9	93.5	16.6	102	18.5	103	18.6	105	18.7	107	18.9	110	19.1	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	78.4	13.8	93.5	17.8	100	19.3	102	19.4	103	19.5	106	19.7	109	19.9	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	78.4	14.7	93.5	19.0	98.8	20.1	100	20.3	102	20.4	104	20.6	107	20.8	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	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	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	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	31	54.3	10.1	64.8	12.8	75.2	15.8	80.5	17.4	85.7	19.3	93.6	21.6	95.5	21.8					
	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	33	54.3	10.8	64.8	13.6	75.2	16.8	80.5	18.5	85.7	20.1	92.1	22.4	94.1	22.6					
	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	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	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	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	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	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					
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	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	72.4	9.9	86.4	12.1	100	14.4	107	15.5	111	15.8	113	15.2	116	14.6	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	72.4	10.1	86.4	12.3	100	14.7	107	15.8	109	15.7	112	15.1	115	15.2	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	72.4	10.3	86.4	12.6	100	14.9	107	16.0	108	15.8	110	15.9	113	16.0	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	72.4	10.5	86.4	12.8	100	15.5	105	16.5	106	16.6	109	16.7	112	16.9	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	72.4	10.7	86.4	13.3	100	16.6	104	17.3	105	17.4	108	17.5	110	17.7	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	72.4	10.8	86.4	13.8	100	17.2	103	17.7	104	17.8	107	17.9	109	18.1	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	72.4	11.5	86.4	14.8	100	18.4	101	18.5	103	18.6	105	18.8	108	18.9	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	72.4	12.3	86.4	15.8	98.7	19.2	100	19.3	101	19.4	104	19.6	107	19.8	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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					
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	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	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	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	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	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	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	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	66.4	9.5	79.2	11.6	91.9	13.8	98.3	15.0	105	16.0	107	16.6	109	16.7	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	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	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	66.4	9.8	79.2	12.1	91.9	15.1	98.3	16.7	102	17.7	105	17.8	107	18.0	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	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	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	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	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	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	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	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	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	66.4	13.2	79.2	17.0	91.9	21.2	94.0	2																										

**RXYQ34PAHY1, PAHYL, PHTL [50/60Hz] Cooling capacity**

Combination (%) (Capacity index)	Outdoor air temp.	Indoor air temp. (°CWB)																Combination (%) (Capacity index)	Outdoor air temp.	Indoor air temp. (°CWB)															
		14.0		16.0		18.0		19.0		20.0		22.0		24.0		14.0				16.0		18.0		19.0		20.0		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	TC	PI	TC	PI	TC	PI				
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	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	83.3	12.1	99	14.8	115	17.6	118	17.6	120	17.2	123	16.5	126	16.2	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	83.3	12.3	99	15.1	115	17.8	117	17.5	118	17.1	121	17.0	124	16.1	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	83.3	12.6	99	15.4	114	17.8	115	17.6	117	17.2	120	17.9	123	18.1	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	83.3	12.8	99	15.7	112	18.4	113	18.5	115	18.6	118	18.8	121	19.0	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	83.3	13.1	99	16.0	110	19.3	112	19.4	113	19.5	116	19.7	119	19.9	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	83.3	13.4	99	17.3	110	19.8	111	19.9	113	20.0	116	20.2	119	20.4	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	83.3	14.4	99	18.6	108	20.7	110	20.8	111	20.9	114	21.1	117	21.3	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	83.3	15.4	99	19.9	107	21.6	108	21.7	110	21.8	113	22.0	116	22.3	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	83.3	16.4	99	21.3	105	22.5	107	22.6	108	22.7	111	23.0	114	23.2	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	83.3	17.5	99	22.7	103	23.4	105	23.5	106	23.7	109	23.9	112	24.2	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	24.3					
	31	83.3	18.7	99	24.1	102	24.3	103	24.5	105	24.6	108	24.9	111	25.1	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	83.3	19.9	97.4	25.0	100	25.3	102	25.4	103	25.5	106	25.8	109	26.1	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	83.3	21.2	95.8	25.9	98.8	26.2	100	26.3	102	26.5	105	26.8	108	27.1	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	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	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	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	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					
	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	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	76.9	11.1	91.8	13.5	107	16.1	114	17.4	118	17.7	120	17.0	123	16.3	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	76.9	11.3	91.8	13.8	107	16.4	114	17.7	116	17.6	119	16.9	122	17.0	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		76.9	11.5	91.8	14.0	107	16.7	113	17.8	115	17.6	117	17.8	120	17.9	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		76.9	11.7	91.8	14.3	107	17.3	112	18.4	113	18.5	116	18.7	119	18.8	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		76.9	11.9	91.8	14.9	107	18.6	110	19.3	112	19.4	114	19.6	117	19.8	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		76.9	12.0	91.8	15.4	107	19.2	109	19.8	111	19.9	114	20.0	116	20.2	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		76.9	12.9	91.8	16.5	106	20.6	108	20.7	109	20.8	112	21.0	115	21.2	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		76.9	13.7	91.8	17.7	105	21.5	106	21.6	108	21.7	110	21.9	113	22.1	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		76.9	14.7	91.8	18.9	103	22.4	105	22.5	106	22.6	109	22.8	112	23.0	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		76.9	15.6	91.8	20.2	102	23.3	103	23.4	105	23.5	107	23.7	110	24.0	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		76.9	16.7	91.8	21.5	100	24.2	102	24.3	103	24.4	106	24.7	109	24.9	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		76.9	17.8	91.8	23.0	98.7	25.1	100	25.2	101	25.4	104	25.6	107	25.9	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		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	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		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	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		76.9	21.4	91.3	27.6	94.1	27.9	95.5	28.0	96.9	28.2	100	28.5	102	28.8	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					
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	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	70.5	10.0	84.1	12.2	97.7	14.5	105	15.7	111	16.9	118	17.5	121	16.9	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	70.5	10.2	84.1	12.5	97.7	14.8	105	16.0	111	17.2	117	17.4	119	16.9	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	70.5	10.4	84.1	12.7	97.7	15.1	105	16.3	111	17.5	115	17.6	118	17.8	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	70.5	10.6	84.1	12.9	97.7	15.4	105	16.8	111	18.4	114	18.5	116	18.7	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	70.5	10.8	84.1	13.2	97.7	16.3	105	18.0	110	19.3	112	19.5	115	19.6	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	70.5	10.9	84.1	13.6	97.7	16.9	105	18.7	109	19.7	111	19.9	114	20.1	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	70.5	11.4	84.1	14.6	97.7	18.1</																												

**RXYQ36PAHY1, PAHYL, PHTL [50/60Hz] Cooling capacity**

Combination (%) (Capacity index)	Outdoor air temp.	Indoor air temp. (°CWB)														Combination (%) (Capacity index)	Outdoor air temp.	Indoor air temp. (°CWB)																																																																																																																																																																																																																																																	
		14.0		16.0		18.0		19.0		20.0		22.0		24.0				14.0		16.0		18.0		19.0		20.0		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	TC	PI	TC	PI																																																																																																																																																																																																																																						
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	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	18.8	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			
	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	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	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	100	28.9	101	29.1	102	29.3	105	29.6	108	29.9		
		110% (990)	10	74.6	10.2	89.0	12.5	103	14.8	111	16.0	118	17.2	127	18.3		130	17.6	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	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	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	79.9	11.0	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	18.1	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
				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	10	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	12	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	14	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	16	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	18	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	20	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	21	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	23	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	25	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	27	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	29	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	31	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	33	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	35	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	37	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														

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.

TC: Total capacity: kW  
 PI: Power input: kW (Compressor+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.	Indoor air temp. (°CWB)																Combination (%) (Capacity index)	Outdoor air temp.	Indoor air temp. (°CWB)															
		14.0		16.0		18.0		19.0		20.0		22.0		24.0		14.0				16.0		18.0		19.0		20.0		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	TC	PI	TC	PI	TC	PI				
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	110	29.3	111	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	115	32.2	118	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	20.9	135	21.1																				
	18	86.7	13.7	103	16.8	120	20.3	126	21.6	127	21.7	130	21.9	134	22.0																				
	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	22.2	123	23.2	125	23.3	128	23.5	131	23.8																				
	23	86.7	15.1	103	19.4	120	24.6	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	30.9	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	20.0																				
	18	79.4	12.5	94.7	15.2	110	18.1	118	19.7	125	21.6	128	21.8	131	22.9																				
	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	110	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	128	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	3																					

**RXYQ40PAHY1, PAHYL, PHTL [50/60Hz] Cooling capacity**

Combination (%) (Capacity index)	Outdoor air temp.	Indoor air temp. (°CWB)																Combination (%) (Capacity index)	Outdoor air temp.	Indoor air temp. (°CWB)															
		14.0		16.0		18.0		19.0		20.0		22.0		24.0		14.0				16.0		18.0		19.0		20.0		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	TC	PI	TC	PI	TC	PI				
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	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	98.3	15.1	117	18.4	136	21.9	139	21.9	141	21.4	145	20.5	148	20.2	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	98.3	15.3	117	18.8	136	22.2	137	21.7	139	21.3	143	21.1	146	21.3	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	98.3	15.6	117	19.2	134	22.1	136	21.9	137	22.0	141	22.3	144	22.5	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	98.3	15.9	117	19.5	132	22.9	134	23.1	136	23.2	139	23.4	143	23.6	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	98.3	16.3	117	20.8	130	24.1	132	24.2	134	24.3	137	24.5	141	24.8	20	68.0	10.8	81.1	13.1	94.2	15.5	101	16.7	107	18.3	120	21.7	130	24.0					
	21	98.3	16.7	117	21.6	129	24.6	131	24.7	133	24.9	136	25.1	140	25.4	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	98.3	17.9	117	23.1	127	25.7	129	25.9	131	26.0	135	26.3	138	26.5	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	98.3	19.1	117	24.7	126	26.9	127	27.0	129	27.1	133	27.4	136	27.7	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	98.3	20.4	117	26.5	124	28.0	126	28.1	127	28.3	131	28.6	134	28.9	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	98.3	21.8	117	28.3	122	29.1	124	29.3	126	29.4	129	29.8	133	30.1	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	98.3	23.3	117	29.9	120	30.3	122	30.4	124	30.6	127	30.9	131	31.3	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	98.3	24.8	115	31.1	118	31.0	116	31.2	118	31.6	122	31.8	125	32.1	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	98.3	26.4	113	32.2	117	32.6	118	32.8	120	32.9	124	33.3	127	33.7	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	98.3	28.1	111	33.3	115	33.7	116	33.9	118	34.1	122	34.5	125	34.9	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	98.3	29.9	109	34.5	113	34.9	115	35.1	116	35.3	120	35.7	124	36.1	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					
	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	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	90.7	13.8	108	16.8	126	20.0	134	21.6	139	22.0	142	21.1	145	20.3	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		90.7	14.0	108	17.1	126	20.4	134	22.0	137	21.9	140	21.0	143	21.2	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		90.7	14.3	108	17.5	126	20.8	133	22.2	135	21.9	138	22.1	142	22.3	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		90.7	14.5	108	17.8	126	21.5	132	22.9	133	23.0	137	23.2	140	23.4	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		90.7	14.8	108	18.5	126	23.1	130	24.0	131	24.1	135	24.4	138	24.6	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	21.0					
21		90.7	15.0	108	19.2	126	23.9	129	24.6	131	24.7	134	24.9	137	25.2	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		90.7	16.0	108	20.5	125	25.6	127	25.7	129	25.8	132	26.1	135	26.3	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		90.7	17.1	108	22.0	124	27.6	125	26.8	127	27.0	130	27.2	133	27.5	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		90.7	18.3	108	23.5	122	28.7	123	28.0	125	28.1	128	28.4	132	28.7	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		90.7	19.5	108	25.1	120	29.0	122	29.1	123	29.2	127	29.5	130	29.8	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		90.7	20.8	108	26.8	118	30.1	120	30.2	121	30.4	125	30.7	128	31.0	31	60.5	12.2	72.1	15.2	83.8	18.6	89.6	20.4	95.4	22.3	107	26.4	117	30.0					
33		90.7	22.1	108	28.6	116	31.2	118	31.4	120	31.5	123	31.9	126	32.2	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		90.7	23.5	108	30.5	115	32.4	116	32.5	118	32.7	121	33.0	124	33.4	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		90.7	25.0	108	32.5	113	33.5	114	33.7	116	33.9	119	34.2	123	34.6	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		90.7	26.6	108	34.3	111	34.7	113	34.9	114	35.0	117	35.4	121	35.8	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					
110% (1100)		10	83.1	12.3	99	14.9	115	17.7	123	19.2	131	20.6	141	21.9	144	21.1	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	83.1	12.5	99	15.2	115	18.1	123	19.5	131	21.0	140	21.8	143	21.0	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	83.1	12.7	99	15.5	115	18.4	123	19.9	131	21.4	138	21.7	141	21.0	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	83.1	12.9	99	15.8	115	18.8	123	20.3	131	21.8	136	22.0	139	22.1	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	83.1	13.2	99	16.1	115	19.1	123	20.9	131	22.9	134	23.1	137	23.3	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	83.1	13.5	99	16.4	115	20.3	123	22.4	129	24.0	132	24.2	135	24.4	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	83.1	13.6	99	16.9	115	21.0	123	23.2	128	24.6	131	24.8	134	25.0	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	83.1	14.2	99	18.1	115	22.5	123	24.9	127	25.7	130	25.9	133	26.1	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	83.1	15.2	99	19.4	115	24.1	123	26.7	125	26.8	128	27.0	131	27.3	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	83.1	16.2	99	20.7	115	25.8	121	27.8	123	27.9	126	28.2	129	28.4	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	83.1	17.3	99	22.1	115	27.6	120	28.9	121	29.1	124	29.3	127	29.6	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	83.1	18.4	99	23.6	115	29.4	118	30.0	119	30.2	122	30.5	125	30.7	31	52.9	10.4	63.1	12.8	73.3	15.5	78.4	17.0	83.5	18.5	93.7								

**RXYQ42PAHY1, PAHYL, PHTL [50/60Hz] Cooling capacity**

Combination (%) (Capacity index)	Outdoor air temp.	Indoor air temp. (°CWB)														Combination (%) (Capacity index)	Outdoor air temp.	Indoor air temp. (°CWB)													
		14.0		16.0		18.0		19.0		20.0		22.0		24.0				14.0		16.0		18.0		19.0		20.0		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	TC	PI	TC	PI	TC	PI
130% (1365)	10	102	15.8	121	19.3	141	23.0	146	23.5	148	23.0	152	22.0	155	21.0	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	102	16.1	121	19.7	141	23.4	144	23.4	146	22.9	150	21.9	153	21.5	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	102	16.4	121	20.1	140	23.7	142	23.2	144	22.7	148	22.6	151	22.8	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	102	16.7	121	20.5	139	23.6	140	23.4	142	23.6	146	23.8	150	24.0	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	102	17.0	121	20.9	137	24.5	139	24.6	140	24.8	144	25.0	148	25.2	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	102	17.4	121	22.2	135	25.7	137	25.8	138	26.0	142	26.2	146	26.5	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	102	17.9	121	23.0	134	26.3	136	26.4	138	26.6	141	26.8	145	27.1	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	102	19.1	121	24.7	132	27.5	134	27.6	136	27.8	139	28.1	143	28.3	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	102	20.4	121	26.4	130	28.7	132	28.9	134	29.0	137	29.3	141	29.6	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	102	21.8	121	28.3	128	29.9	130	30.1	132	30.2	136	30.5	139	30.9	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	102	23.3	121	30.2	126	31.1	128	31.3	130	31.5	134	31.8	137	32.1	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	102	24.9	121	32.0	124	32.6	126	32.5	128	32.7	132	33.1	135	33.4	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	102	26.5	119	33.2	123	33.3	124	33.8	126	33.9	130	34.3	134	34.7	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	102	28.2	117	34.4	121	34.8	123	35.0	124	35.2	128	35.6	132	36.0	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	102	30.1	115	35.6	119	36.0	121	36.2	122	36.5	126	36.9	130	37.3	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	102	32.0	113	36.8	117	37.3	119	37.5	121	37.7	124	38.2	128	38.6	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	
	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	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	93.9	14.7	112	18.0	130	21.4	139	23.1	144	23.5	147	22.6	151	21.7	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		93.9	15.0	112	18.3	130	21.8	139	23.5	142	23.4	145	22.4	149	22.6	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		93.9	15.3	112	18.7	130	22.2	138	23.7	140	23.4	143	23.6	147	23.8	16	62.6	9.9	74.7	11.8	86.8	14.0	92.8	15.0	99	16.2	111	18.4	123	20.8	
18		93.9	15.5	112	19.0	130	22.6	136	24.5	138	24.6	141	24.8	145	25.0	18	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	
20		93.9	15.9	112	19.8	130	24.7	134	25.7	136	25.8	140	26.0	143	26.3	20	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	
21		93.9	16.0	112	20.5	130	25.6	134	26.3	135	26.4	139	26.6	142	26.9	21	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	
23		93.9	17.1	112	21.9	130	27.4	132	27.5	133	27.6	137	27.9	140	28.1	23	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	
25		93.9	18.3	112	23.5	128	28.5	130	28.7	131	28.8	135	29.1	138	29.4	25	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	
27		93.9	19.5	112	25.1	126	29.7	128	29.9	130	30.0	133	30.3	136	30.6	27	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	
29		93.9	20.8	112	26.8	124	30.9	126	31.1	128	31.3	131	31.6	134	31.9	29	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	
31		93.9	22.2	112	28.6	122	32.2	124	32.3	126	32.5	129	32.8	133	33.1	31	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	
33		93.9	23.6	112	30.5	121	33.4	122	33.5	124	33.7	127	34.1	131	34.4	33	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	
35		93.9	25.1	112	32.6	119	34.6	120	34.8	122	34.9	125	35.3	129	35.7	35	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	
37		93.9	26.8	112	34.7	117	35.8	118	36.0	120	36.2	124	36.6	127	37.0	37	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	
39		93.9	28.5	111	36.6	115	37.0	117	37.2	118	37.4	122	37.8	125	38.0	39	62.6	16.4	74.7	20.7	86.8	25.2	92.8	28.0	99	30.6	111	36.4	114	36.9	
110% (1155)		10	86.1	13.1	103	16.0	119	19.0	128	20.5	136	22.0	146	23.4	150	22.6	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	86.1	13.3	103	16.3	119	19.3	128	20.9	136	22.5	145	23.3	148	22.4	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	86.1	13.6	103	16.6	119	19.7	128	21.3	136	22.9	143	23.2	146	22.4	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	86.1	13.8	103	16.9	119	20.1	128	21.7	136	23.3	141	23.5	144	23.6	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	86.1	14.1	103	17.2	119	20.5	128	22.3	136	24.5	139	24.7	142	24.9	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	86.1	14.4	103	17.6	119	21.7	128	23.9	134	25.6	137	25.9	140	26.1	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	86.1	14.5	103	18.1	119	22.5	128	24.8	133	26.2	136	26.5	139	26.7	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	86.1	15.2	103	19.4	119	24.1	128	26.6	131	27.4	134	27.7	137	27.9	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	86.1	16.2	103	20.7	119	25.8	128	28.5	129	28.6	132	28.9	135	29.1	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	86.1	17.3	103	22.1	119	27.6	126	29.7	127	29.8	130	30.1	133	30.4	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	86.1	18.4	103	23.6	119	29.4	124	30.9	125	31.0	128	31.3	132	31.6	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	86.1	19.6	103	25.2	119	31.4	122	32.1	123	32.3	127	32.6	130	32.9	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	

**RXYQ44PAHY1, PAHYL, PHTL [50/60Hz] Cooling capacity**

Combination (%) (Capacity index)	Outdoor air temp.	Indoor air temp. (°CWB)																Combination (%) (Capacity index)	Outdoor air temp.	Indoor air temp. (°CWB)																																																																																																																																																																																																																																															
		14.0		16.0		18.0		19.0		20.0		22.0		24.0		14.0				16.0		18.0		19.0		20.0		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	TC	PI	TC	PI	TC	PI																																																																																																																																																																																																																																				
130% (1430)	10	108	17.2	129	21.0	150	25.0	156	25.5	157	25.0	161	24.0	165	22.9	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	21.0	133	24.2	143	27.9	21	75.0	12.7	89.5	15.4	104	18.3	111	20.1	118	22.3	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			
	120% (1320)	10	100	15.7	119	19.2	139	22.8	148	24.6	155	25.7	159	24.7	162		23.7	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	21.2	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	19.8	98.8	20.5	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		
		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	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	
			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	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														

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.

TC: Total capacity: kW  
 PI: Power input: kW (Compressor+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.	Indoor air temp. (°CWB)																Combination (%) (Capacity index)	Outdoor air temp.	Indoor air temp. (°CWB)															
		14.0		16.0		18.0		19.0		20.0		22.0		24.0		14.0				16.0		18.0		19.0		20.0		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	TC	PI	TC	PI	TC	PI				
130% (1495)	10	112	18.2	133	22.3	155	26.5	161	27.0	163	26.5	167	25.4	171	24.2	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	112	18.5	133	22.7	155	27.0	159	26.9	161	26.3	165	25.2	169	24.8	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	112	18.9	133	23.1	154	27.3	156	26.8	158	26.2	162	26.0	167	26.2	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	112	19.2	133	23.6	152	27.2	154	27.0	156	27.1	160	27.4	164	27.6	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	112	19.6	133	24.0	150	28.2	152	28.4	154	28.5	158	28.8	162	29.1	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	112	20.0	133	25.6	148	29.6	150	29.8	152	29.9	156	30.2	160	30.5	20	77.4	13.3	92.4	16.1	107	19.1	115	20.6	122	22.5	137	26.7	148	29.6					
	21	112	20.6	133	26.5	147	30.3	149	30.4	151	30.6	155	30.9	159	31.2	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	112	22.0	133	28.4	145	31.7	147	31.8	149	32.0	153	32.3	157	32.6	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	112	23.5	133	30.4	143	33.1	145	33.2	147	33.4	151	33.7	155	34.1	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	112	25.2	133	32.6	141	34.5	143	34.6	145	34.8	149	35.2	153	35.5	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	112	26.8	133	34.8	139	35.9	141	36.0	143	36.2	147	36.6	151	37.0	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	112	28.6	133	36.8	137	37.3	139	37.5	141	37.7	145	38.1	149	38.5	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	112	30.5	131	38.2	135	38.7	137	38.9	139	39.1	143	39.5	147	40.0	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	112	32.5	129	39.6	133	40.1	135	40.3	137	40.5	141	41.0	145	41.4	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	112	34.6	127	41.0	131	41.5	133	41.7	135	42.0	139	42.5	143	42.9	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	112	36.9	124	42.4	128	42.9	131	43.2	133	43.4	137	43.9	141	44.4	39	77.4	22.0	92.4	28.0	107	34.7	115	38.3	122	42.1	125	42.5	128	42.9					
	120% (1380)	10	103	16.6	123	20.3	143	24.1	153	26.1	160	27.2	164	26.2	168	25.1	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	103	16.9	123	20.7	143	24.6	153	26.6	158	27.0	162	26.0	165	25.0	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		103	17.2	123	21.1	143	25.1	153	27.1	156	26.9	160	25.9	163	26.0	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		103	17.6	123	21.5	143	25.6	152	27.3	154	27.0	158	27.2	161	27.4	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		103	17.9	123	21.9	143	26.1	150	28.2	152	28.3	155	28.6	159	28.8	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		103	18.3	123	22.8	143	28.4	148	29.6	150	29.7	153	30.0	157	30.3	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		103	18.4	123	23.6	143	29.4	147	30.3	149	30.4	152	30.7	156	31.0	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		103	19.7	123	25.3	143	31.5	145	31.6	147	31.8	150	32.1	154	32.4	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		103	21.0	123	27.0	141	32.9	143	33.0	145	33.2	148	33.5	152	33.8	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		103	22.5	123	28.9	139	34.3	141	34.4	142	34.6	146	34.9	150	35.3	27	68.8	13.3	82.1	16.5	95.4	20.1	102	21.1	109	24.1	122	28.5	135	33.2					
29		103	24.0	123	30.9	137	35.6	138	35.8	140	36.0	144	36.3	148	36.7	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		103	25.5	123	33.0	135	37.0	136	37.2	138	37.4	142	37.8	146	38.2	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		103	27.2	123	35.2	132	38.4	134	38.6	136	38.8	140	39.2	144	39.6	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		103	29.0	123	37.5	130	39.8	132	40.0	134	40.2	138	40.7	142	41.1	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		103	30.8	123	40.0	128	41.2	130	41.5	132	41.7	136	42.1	140	42.6	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		103	32.8	123	42.2	126	42.7	128	42.9	130	43.1	134	43.6	137	44.0	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					
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	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	94.7	15.4	113	18.7	131	22.2	140	24.0	149	25.9	159	26.8	162	25.9	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	94.7	15.6	113	19.1	131	22.7	140	24.5	149	26.4	157	26.7	160	25.8	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	94.7	15.9	113	19.4	131	23.1	140	25.0	149	26.9	155	27.0	158	27.2	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	94.7	16.2	113	19.8	131	23.6	140	25.7	149	28.2	153	28.4	156	28.6	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	94.7	16.6	113	20.2	131	25.0	140	27.6	147	29.5	151	29.8	154	30.0	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	94.7	16.7	113	20.8	131	25.9	140	28.6	146	30.2	150	30.5	153	30.7	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	94.7	17.5	113	22.3	131	27.7	140	30.6	144	31.6	147	31.9	151	32.1	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	94.7	18.7	113	23.9	131	29.7	140	32.8	142	33.0	145	33.3	149	33.6	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	94.7	19.9	113	25.5	131	31.7	138	34.2	140	34.4	143	34.7	147	35.0	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	94.7	21.2	113	27.2	131	33.9	136	35.6	138	35.8	141	36.1	145	36.4	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	94.7	22.6	113	29.0	131	36.2	134	37.0	136	37.1	139	37.5	143	37.8	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	94.7	24.1	113	30.9	130	38.2																												

**RXYQ48PAHY1, PAHYL, PHTL [50/60Hz] Cooling capacity**

Combination (%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. (°CWB)																Combination (%) (Capacity index)	Outdoor air temp. °CDB	Indoor air temp. (°CWB)															
		14.0		16.0		18.0		19.0		20.0		22.0		24.0		14.0				16.0		18.0		19.0		20.0		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	TC	PI	TC	PI	TC	PI				
130% (1560)	10	118	19.6	141	24.0	164	28.6	170	29.2	172	28.6	176	27.4	181	26.1	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	118	20.0	141	24.5	164	29.1	168	29.0	170	28.4	174	27.2	179	26.8	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	118	20.4	141	24.9	164	29.5	166	28.9	168	28.2	172	28.0	176	28.3	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	118	20.7	141	25.4	161	29.3	163	29.1	166	29.2	170	29.5	174	29.8	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	118	21.2	141	25.9	159	30.4	161	30.6	163	30.7	168	31.0	172	31.3	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	118	21.6	141	27.6	157	31.9	159	32.1	161	32.2	165	32.6	170	32.9	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	118	22.2	141	28.6	156	32.7	158	32.8	160	33.0	164	33.3	169	33.7	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	118	23.7	141	30.7	154	34.2	156	34.3	158	34.5	162	34.9	166	35.2	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	118	25.4	141	32.8	151	35.7	154	35.8	156	36.0	160	36.4	164	36.8	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	118	27.1	141	35.1	149	37.2	151	37.4	153	37.5	158	37.9	162	38.3	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	118	29.0	141	37.5	147	38.7	149	38.9	151	39.1	156	39.5	160	39.9	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	118	30.9	141	39.7	145	40.2	147	40.4	149	40.6	153	41.1	158	41.5	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	118	32.9	138	41.2	143	41.7	145	41.9	147	42.2	151	42.6	155	43.1	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	118	35.1	136	42.7	140	43.2	143	43.5	145	43.7	149	44.2	153	44.7	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	118	37.3	134	44.2	138	44.8	140	45.0	143	45.3	147	45.8	151	46.3	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	118	39.7	132	45.8	136	46.3	138	46.6	140	46.8	145	47.4	149	47.9	39	82.0	23.8	97.8	30.2	114	37.4	122	41.3	129	45.4	133	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	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	109	18.2	130	22.3	151	26.5	162	28.7	167	29.2	171	28.1	175	26.9	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	109	18.6	130	22.7	151	27.0	162	29.2	165	29.0	169	27.9	173	28.1	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	109	18.9	130	23.2	151	27.6	161	29.4	163	29.1	167	29.3	171	29.6	16	72.9	12.3	86.9	14.7	101	17.3	108	18.7	115	20.1	129	22.9	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	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	109	19.7	130	24.6	151	30.6	157	31.9	158	32.0	162	32.3	166	32.6	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	109	19.9	130	25.4	151	31.7	155	32.6	157	32.8	161	33.1	165	33.4	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	109	21.2	130	27.3	151	34.0	153	34.1	155	34.3	159	34.6	163	34.9	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	109	22.7	130	29.2	149	35.5	151	35.6	153	35.8	157	36.1	161	36.5	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	109	24.2	130	31.2	147	36.9	149	37.1	151	37.3	155	37.7	159	38.0	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	109	25.8	130	33.3	145	38.4	147	38.6	149	38.8	153	39.2	156	39.6	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	109	27.5	130	35.6	142	39.9	144	40.1	146	40.3	150	40.7	154	41.1	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	109	29.3	130	37.9	140	41.4	142	41.7	144	41.9	148	42.3	152	42.7	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	109	31.2	130	40.4	138	43.0	140	43.2	142	43.4	146	43.9	150	44.3	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	109	33.2	130	43.1	136	44.5	138	44.7	140	44.9	144	45.4	148	45.9	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	109	35.4	130	45.5	134	46.0	136	46.3	138	46.5	142	47.0	146	47.5	39	72.9	20.4	86.9	25.7	101	31.6	108	34.7	115	38.1	129	45.2	132	45.8						
110% (1320)	10	100	16.3	120	19.8	139	23.5	149	25.4	158	27.4	170	29.1	174	28.0	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	100	16.6	120	20.2	139	24.0	149	25.9	158	27.9	168	28.9	172	27.9	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	100	16.9	120	20.6	139	24.4	149	26.4	158	28.4	166	28.8	170	27.9	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	100	17.2	120	21.0	139	24.9	149	26.9	158	29.0	164	29.1	167	29.4	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	100	17.5	120	21.4	139	25.4	149	27.7	158	30.4	162	30.6	165	30.9	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	100	17.9	120	21.8	139	26.9	149	29.7	156	31.8	159	32.1	163	32.4	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	100	18.0	120	22.5	139	27.9	149	30.8	155	32.6	158	32.9	162	33.1	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	100	18.9	120	24.1	139	29.9	149	33.0	153	34.1	156	34.4	160	34.7	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	100	20.2	120	25.7	139	32.0	149	35.4	150	35.6	154	35.9	158	36.2	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	100	21.5	120	27.5	139	34.2	146	36.9	148	37.1	152	37.4	155	37.7	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	100	22.9	120	29.3	139	36.6	144	38.4	146	38.6	150	38.9	153	39.3	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	100	24.4	120	31.3	139	39.1	142	39.9	144	40.1	147	40.4	151	40.8	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	100	26.0	120	33.4	138	41.2	140	41.4	142																										

**RXYQ50PAHY1, PAHYL, PHTL [50/60Hz] Cooling capacity**

Combination (%) (Capacity index)	Outdoor air temp.	Indoor air temp. (°CWB)																Combination (%) (Capacity index)	Outdoor air temp.	Indoor air temp. (°CWB)															
		14.0		16.0		18.0		19.0		20.0		22.0		24.0		14.0				16.0		18.0		19.0		20.0		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	TC	PI	TC	PI	TC	PI				
130% (1625)	10	122	20.6	145	25.3	169	30.0	175	30.7	177	30.0	182	28.8	186	27.5	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	122	21.0	145	25.7	169	30.6	173	30.5	175	29.9	179	28.6	184	28.1	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	122	21.4	145	26.2	168	31.0	171	30.3	173	29.7	177	29.5	182	29.7	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	122	21.8	145	26.7	166	30.8	168	30.6	170	30.8	175	31.1	179	31.3	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	122	22.2	145	27.3	164	32.0	166	32.2	168	32.3	173	32.6	177	33.0	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	122	22.7	145	29.0	162	33.6	164	33.7	166	33.9	170	34.2	175	34.6	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	122	23.3	145	30.1	160	34.4	163	34.5	165	34.7	169	35.0	174	35.4	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	122	25.0	145	32.3	158	35.9	160	36.1	163	36.3	167	36.7	171	37.0	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	122	26.7	145	34.5	156	37.5	158	37.7	160	37.9	165	38.3	169	38.7	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	122	28.5	145	36.9	154	39.1	156	39.3	158	39.5	162	39.9	167	40.3	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	122	30.4	145	39.5	151	40.7	154	40.9	156	41.1	160	41.5	165	42.0	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	122	32.5	145	41.8	149	42.3	151	42.5	154	42.7	158	43.2	162	43.6	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	122	34.6	142	43.4	147	43.9	149	44.1	151	44.3	156	44.8	160	45.3	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	122	36.9	140	44.9	145	45.5	147	45.7	149	46.0	153	46.5	158	47.0	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	122	39.3	138	46.5	142	47.1	145	47.3	147	47.6	151	48.2	156	48.7	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	122	41.8	136	48.1	140	48.7	142	49.0	144	49.3	149	49.8	153	50.4	39	84.4	25.0	100.7	31.7	117	39.3	125	43.4	133	47.7	136	48.2	139	48.6					
	120% (1500)	10	113	18.8	134	23.0	156	27.4	167	29.6	174	30.8	179	29.7	183	28.5	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	113	19.2	134	23.5	156	27.9	167	30.2	172	30.7	176	29.5	180	28.3	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		113	19.5	134	23.9	156	28.4	167	30.7	170	30.5	174	29.3	178	29.5	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		113	19.9	134	24.4	156	29.0	166	31.0	168	30.6	172	30.8	176	31.1	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		113	20.3	134	24.8	156	30.0	163	32.0	165	32.1	170	32.4	174	32.7	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		113	20.7	134	25.8	156	32.2	161	33.5	163	33.7	167	34.0	171	34.3	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		113	20.9	134	26.8	156	33.4	160	34.3	162	34.5	166	34.8	170	35.1	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		113	22.3	134	28.7	156	35.7	158	35.9	160	36.1	164	36.4	168	36.7	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		113	23.9	134	30.7	153	37.3	156	37.5	158	37.6	162	38.0	166	38.4	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		113	25.5	134	32.8	151	38.8	153	39.0	155	39.2	159	39.6	163	40.0	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		113	27.2	134	35.0	149	40.4	151	40.6	153	40.8	157	41.2	161	41.6	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		113	29.0	134	37.4	147	42.0	149	42.2	151	42.4	155	42.8	159	43.3	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		113	30.8	134	39.9	144	43.6	146	43.8	148	44.0	153	44.5	157	44.9	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		113	32.8	134	42.5	142	45.2	144	45.4	146	45.6	150	46.1	154	46.6	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		113	34.9	134	45.3	140	46.8	142	47.0	144	47.3	148	47.8	152	48.3	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		113	37.2	134	47.8	138	48.4	140	48.6	142	48.9	146	49.4	150	50.0	39	75.0	21.5	89.5	27.0	104	33.2	111	36.5	118	40.0	133	47.5	136	48.2					
110% (1375)		10	103	17.1	123	20.8	143	24.8	153	26.8	163	28.8	175	30.6	179	29.5	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	103	17.4	123	21.2	143	25.2	153	27.3	163	29.3	173	30.4	177	29.3	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	103	17.7	123	21.6	143	25.7	153	27.8	163	29.9	171	30.2	175	29.3	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	103	18.1	123	22.0	143	26.2	153	28.3	163	30.5	169	30.6	172	30.9	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	103	18.4	123	22.5	143	26.7	153	29.1	163	31.9	166	32.2	170	32.5	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	103	18.8	123	22.9	143	28.3	153	31.3	160	33.5	164	33.8	168	34.1	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	103	19.0	123	23.6	143	29.3	153	32.4	159	34.3	163	34.6	167	34.9	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	103	19.8	123	25.3	143	31.4	153	34.8	157	35.8	161	36.1	164	36.5	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	103	21.2	123	27.1	143	33.7	153	37.2	155	37.4	158	37.7	162	38.1	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	103	22.6	123	28.9	143	36.0	151	38.8	153	39.0	156	39.3	160	39.7	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	103	24.1	123	30.8	143	38.6	148	40.4	150	40.5	154	40.9	158	41.3	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	103	25.7	123	32.9	143	41.1	146	41.9	148	42.1	152	42.5	155	42.9	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	103	27.3	123	35.1	142	43.3	144	43.5	14																									

## 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)																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	TC	PI	TC	PI				TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI				
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	-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	31.5	12.5							
	-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	-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	12.5								
	-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	-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	12.8								
	-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	-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	13.1								
	-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	-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	13.3								
	-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	-9.8	-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	13.1								
	-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	-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	12.7								
	-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	-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	12.3								
	-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	-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	11.8								
	-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	-5.0	-5.6	45.7	13.0	45.6	13.2	45.5	13.5	43.3	12.7	42.1	12.2	39.2	11.2	11.2								
	-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	-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	10.7								
	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	0.0	-0.7	50.4	13.4	50.3	13.6	45.0	11.7	43.6	11.3	42.1	10.8	39.2	10.0	10.0								
	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	3.0	2.2	50.8	12.7	50.7	12.9	45.0	11.0	43.6	10.6	42.1	10.2	39.2	9.4	9.4								
	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	5.0	4.1	50.8	12.2	50.7	12.4	45.0	10.6	43.6	10.2	42.1	9.8	39.2	9.0	9.0								
	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	7.0	6.0	50.8	11.7	50.7	11.9	45.0	10.2	43.6	9.8	42.1	9.4	39.2	8.7	8.7								
	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	9.0	7.9	50.8	11.3	50.7	11.5	45.0	9.8	43.6	9.4	42.1	9.1	39.2	8.37	8.37								
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	11.0	9.8	50.8	10.9	50.7	11.1	45.0	9.4	43.6	9.1	42.1	8.8	39.2	8.09	8.09									
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	13.0	11.8	50.8	10.5	50.7	10.7	45.0	9.1	43.6	8.8	42.1	8.45	39.2	7.81	7.81									
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	15.0	13.7	50.8	10.1	50.7	9.5	45.0	8.8	43.6	8.49	42.1	8.18	39.2	7.56	7.56									
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	-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	13.0								
	-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	-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	13.1								
	-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	-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	13.4								
	-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	-13.7	-15.0	36.5	12.4	36.4	12.7	36.3	13.0	36.3	13.2	36.3	13.4	33.3	34.9	12.8								
	-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	-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	12.0								
	-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	-9.8	-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	11.3								
	-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	-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	11.0								
	-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	-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	10.7								
	-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	-7.0	-7.6	43.6	13.3	43.5	13.5	40.0	12.1	38.7	11.7	37.4	11.2	34.9	10.3	10.3								
	-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	-5.0	-5.6	45.1	13.3	45.0	13.5	40.0	11.5	38.7	11.1	37.4	10.6	34.9	9.8	9.8								
	-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	-3.0	-3.7	47.1	12.7	47.0	12.9	40.0	11.0	38.7	10.6	37.4	10.1	34.9	9.3	9.3								
	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	0.0	-0.7	45.1	11.8	45.0	12.0	40.0	10.2	38.7	9.8	37.4	9.5	34.9	8.7	8.7								
	3.0	2.2	53.6	12.3	53.5	12.6	53.4	12.9	53.4	13.1	53.3	13.2	53.2	13.5	3.0	2.2	45.1	11.0	45.0	11.2	40.0	9.6	38.7	9.2	37.4	8.9	34.9	8.21	8.21								
	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	5.0	4.1	45.1	10.6	45.0	10.8	40.0	9.2	38.7	8.9	37.4	8.55	34.9	7.90	7.90								
	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	7.0	6.0	45.1	10.2	45.0	10.4	40.0	8.9	38.7	8.55	37.4	8.24	34.9	7.62	7.62								
	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	9.0	7.9	45.1	9.8	45.0	10.0	40.0	8.56	38.7	8.25	37.4	7.95	34.9	7.36	7.36								
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	11.0	9.8	45.1	9.5	45.0	9.7	40.0	8.26	38.7	7.97	37.4	7.68	34.9	7.11	7.11									
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	13.0	11.8	45.1	9.1	45.0	9.3	40.0	7.98	38.7	7.70	37.4	7.42	34.9	6.88	6.88									
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	15.0	13.7	45.1	8.8	45.0	9.0	40.0	7.78	38.7	7.46	37.4	7.19	34.9	6.67	6.67									
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	-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	13.0								
	-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	-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	12.5								
	-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	-16.7	-17.0	34.4	12.8	34.4	13.1	34.3	13.4	34.3	13.5	34.3	13.7	30.5	11.7	11.7								
	-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	-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	10.9								
	-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	-11.8	-13.0	38.3	13.3	38.2	13.5	35.0	12.1	33.9	11.6	32.8	11.2	30.5	10.3	10.3								
	-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	-9.8	-11.0	39.5	1																			







**RXYQ26PAHY1, PAHYL, PHTL [50/60Hz] Heating capacity**

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. (°CDB)												Combination (%) (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	TC	PI
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	-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	54.1	13.7	54.0	14.7	53.8	15.6	53.7	16.0	53.6	16.5	53.4	17.4	-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	56.9	14.6	56.7	15.4	56.5	16.3	56.4	16.7	56.3	17.2	56.1	18.0	-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	59.7	15.3	59.5	16.2	59.3	17.0	59.2	17.4	59.1	17.8	58.9	18.6	-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	62.6	16.0	62.4	16.8	62.2	17.6	62.1	18.0	62.0	18.4	61.8	19.2	-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	65.5	16.7	65.4	17.5	65.2	18.2	65.1	18.6	65.0	19.0	64.8	19.7	-9.8	-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	67.1	17.0	66.9	17.8	66.7	18.5	66.6	18.9	66.5	19.2	66.3	20.0	-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	68.5	17.3	68.3	18.0	68.1	18.7	68.0	19.1	67.9	19.5	67.7	20.2	-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	70.9	17.8	70.7	18.4	70.5	19.1	70.4	19.5	70.3	19.8	70.1	20.5	-7.0	-7.6	69.9	21.5	69.7	22.0	69.6	22.5	69.5	22.7	69.6	22.5	63.9	20.6	
	-5.0	-5.6	74.1	18.3	73.9	19.0	73.7	19.6	73.6	20.0	73.5	20.3	73.4	21.0	-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	77.3	18.8	77.1	19.5	76.9	20.1	76.8	20.4	76.7	20.7	76.5	21.4	-3.0	-3.7	76.3	22.2	76.2	22.7	76.1	23.0	71.0	21.0	68.6	20.2	63.9	18.5	
	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	0.0	-0.7	81.5	22.8	81.4	23.1	81.3	23.4	71.0	19.3	68.6	18.6	63.9	17.1	
	3.0	2.2	87.7	20.2	87.5	20.8	87.3	21.3	87.2	21.6	87.1	21.9	87.0	22.4	3.0	2.2	82.8	21.6	82.7	21.9	82.6	22.2	71.0	17.9	68.6	17.2	63.9	15.9	
	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	5.0	4.1	82.8	20.5	82.7	20.8	82.6	21.1	71.0	17.1	68.6	16.4	63.9	15.2	
	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	23.3	7.0	6.0	82.8	19.6	82.7	19.9	82.6	20.2	71.0	16.3	68.6	15.7	63.9	14.5	
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	9.0	7.9	82.8	18.7	82.7	19.0	82.6	19.6	71.0	15.6	68.6	15.0	63.9	13.9		
11.0	9.8	102.4	21.7	102.2	22.1	102.0	22.6	101.9	22.9	101.8	23.1	92.3	20.3	11.0	9.8	82.8	17.8	82.7	18.1	82.6	18.6	71.0	14.9	68.6	14.4	63.9	13.3		
13.0	11.8	106.4	22.0	106.3	22.5	106.2	22.9	106.1	23.2	106.0	23.4	92.3	19.3	13.0	11.8	82.8	17.0	82.7	17.3	82.6	17.8	71.0	14.3	68.6	13.7	63.9	12.7		
15.0	13.7	110.4	22.3	110.2	22.7	110.1	23.1	110.0	23.4	109.9	23.6	92.3	18.5	15.0	13.7	82.8	16.3	82.7	16.6	82.6	17.1	71.0	13.7	68.6	13.2	63.9	12.2		
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	-19.8	-20.0	51.6	19.7	51.5	20.3	51.3	21.0	51.1	21.1	51.2	21.4	51.1	22.0	
	-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	-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	56.6	15.7	56.4	16.5	56.3	17.3	56.2	17.7	56.1	18.2	55.9	19.0	-16.7	-17.0	55.6	20.5	55.5	21.0	55.4	21.5	55.3	21.8	55.2	21.1	55.1	22.6	
	-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	-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	62.3	17.1	62.1	17.8	62.0	18.6	61.9	18.9	61.8	19.3	61.6	20.0	-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	65.3	17.7	65.1	18.4	65.0	19.1	64.9	19.5	64.8	19.8	64.6	20.5	-9.8	-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	66.8	18.0	66.7	18.7	66.6	19.4	66.5	19.8	66.4	20.1	66.1	20.7	-9.5	-10.0	65.8	22.0	65.7	22.4	65.6	22.7	63.1	21.8	61.0	20.9	56.8	18.2	
	-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	-8.5	-9.1	67.2	22.2	67.1	22.6	67.0	23.1	63.1	21.2	61.0	20.4	56.8	17.7	
	-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	-7.0	-7.6	69.6	22.4	69.4	22.8	69.3	23.3	63.1	20.3	61.0	19.5	56.8	17.9	
	-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	-5.0	-5.6	72.9	22.8	72.8	23.2	72.7	23.7	63.1	19.2	61.0	18.4	56.8	17.0	
	-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	-3.0	-3.7	73.6	21.9	73.5	22.3	73.4	22.8	63.1	18.2	61.0	17.5	56.8	16.1	
	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	0.0	-0.7	73.6	20.2	73.5	20.6	73.4	21.1	63.1	16.8	61.0	16.2	56.8	14.9	
	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	23.4	3.0	2.2	73.6	18.7	73.5	18.9	73.4	19.4	63.1	15.6	61.0	15.1	56.8	13.9	
	5.0	4.1	91.0	21.3	90.8	21.8	90.6	22.3	90.5	22.5	90.4	22.8	85.2	21.4	5.0	4.1	73.6	17.8	73.5	18.0	73.4	18.5	63.1	14.9	61.0	14.4	56.8	13.3	
	7.0	6.0	94.6	21.7	94.4	22.1	94.3	22.6	94.2	22.9	94.1	23.1	85.2	20.3	7.0	6.0	73.6	17.0	73.5	17.5	73.4	18.0	63.1	14.3	61.0	13.8	56.8	12.7	
9.0	7.9	98.3	22.0	98.1	22.5	97.8	22.8	97.7	23.1	97.5	23.4	85.2	19.3	9.0	7.9	73.6	16.3	73.5	16.8	73.4	17.3	63.1	13.7	61.0	13.2	56.8	12.2		
11.0	9.8	102.1	22.3	101.9	22.7	101.8	23.0	101.7	23.3	101.6	23.6	85.2	18.4	11.0	9.8	73.6	15.5	73.5	16.0	73.4	16.5	63.1	13.1	61.0	12.6	56.8	11.7		
13.0	11.8	106.2	22.6	106.1	22.9	106.0	23.2	105.9	23.5	105.8	23.8	85.2	17.6	13.0	11.8	73.6	14.9	73.5	15.4	73.4	15.9	63.1	12.5	61.0	12.1	56.8	11.2		
15.0	13.7	110.2	22.9	110.1	23.2	110.0	23.5	109.9	23.8	109.8	24.1	85.2	16.8	15.0	13.7	73.6	14.2	73.5	14.7	73.4	15.2	63.1	12.0	61.0	11.6	56.8	10.8		
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	-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	53.6	16.2	53.5	17.0	53.3	17.8	53.2	18.2	53.2	18.6	53.0	19.3	-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	56.3	16.9	56.2	17.7	56.0	18.4	56.0	18.8	55.9	19.1	55.7	19.9	-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	59.2	17.6	59.0	18.3	58.8	19.0	58.8	19.3	58.7	19.7	58.5	20.4	-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	62.1	18.2	61.9	18.8	61.7	19.5	61.7	19.8	61.6	20.2	61.4	20.8	-11.8	-13.0	61.0	22.4	60.7	22.7	60.6	23.2	53.4	20.2	53.4	19.4	49.7	17.9	
	-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	-9.8	-11.0	64.0	22.8	60.7	21.7	60.6	22.2	53.4	19.1	53.4	18.3	49.7	16.9	
	-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	-9.5	-10.0	64.4	22.3	60.7	20.8	60.6	21.3	53.4	18.5	53.4	17.8	49.7	16.4	
	-8.5	-9.1	68.0	19.2																									

**RXYQ28PAHY1, PAHYL, PHTL [50/60Hz] Heating capacity**

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. (°CDB)																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	TC	PI	TC	PI				TC	PI	TC	PI	TC	PI	TC	PI																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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	-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	90% (630)	-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	-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	60.4	15.1	60.2	16.1	60.0	17.0	59.9	17.5	59.8	17.9	59.6	18.9	-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	63.4	15.9	63.2	16.8	63.0	17.7	62.9	18.2	62.8	18.6	62.6	19.5	-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	66.4	16.7	66.2	17.6	66.0	18.4	65.9	18.8	65.8	19.2	65.6	20.1	-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	69.6	17.4	69.4	18.2	69.2	19.0	69.1	19.4	69.0	19.8	68.8	20.6	-9.8	-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	71.2	17.8	71.0	18.5	70.8	19.3	70.7	19.7	70.6	20.1	70.4	20.9	-9.5	-10.0	70.2	22.0	70.0	22.5	69.9	23.1	69.8	23.4	69.7	23.6	69.6	23.6	-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	-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	75.2	18.5	75.0	19.3	74.8	20.0	74.7	20.4	74.6	20.8	74.4	21.5	-7.0	-7.6	74.2	22.5	74.0	23.0	73.9	23.6	73.8	23.8	73.7	24.0	73.6	22.0	-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	-5.0	-5.6	77.6	23.0	77.5	23.4	77.3	23.9	77.2	24.2	77.1	24.5	77.0	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	-3.0	-3.7	81.0	23.3	80.8	23.8	80.8	24.3	80.7	24.6	80.6	24.9	80.5	19.8	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	0.0	-0.7	86.5	23.9	86.3	24.5	86.2	25.0	86.1	25.3	86.0	25.6	85.9	22.0	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	3.0	2.2	92.1	25.3	91.9	25.8	91.8	26.3	91.7	26.6	91.6	26.9	91.5	23.9	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	5.0	4.1	95.8	25.4	95.6	25.9	95.5	26.4	95.4	26.7	95.3	27.0	95.2	24.0	7.0	6.0	100.8	22.0	100.6	22.5	100.4	23.1	100.3	23.4	100.2	23.6	99.9	23.9	7.0	6.0	99.7	26.5	99.5	27.0	99.4	27.5	99.3	28.0	99.2	28.3	99.1	24.0	9.0	7.9	104.7	22.4	104.5	22.9	104.3	23.4	104.2	23.7	104.1	23.9	103.9	24.7	9.0	7.9	103.6	28.0	103.4	28.5	103.3	29.0	103.2	29.3	103.1	29.6	103.0	24.0	11.0	9.8	108.8	22.7	108.6	23.2	108.4	23.7	108.3	24.0	108.2	24.3	108.1	24.7	11.0	9.8	107.7	28.6	107.5	29.1	107.4	29.6	107.3	30.1	107.2	30.4	107.1	24.0	13.0	11.8	113.1	23.1	112.9	23.6	112.7	24.1	112.6	24.4	112.5	24.7	112.4	25.1	13.0	11.8	112.0	29.5	111.8	30.0	111.7	30.5	111.6	31.0	111.5	31.3	111.4	24.0	15.0	13.7	117	23.4	117	23.9	114	24.3	110	22.4	106	21.5	99.1	19.7	15.0	13.7	116	29.9	116	30.4	116	30.9	116	31.4	116	31.9	116	24.0
	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	-13.7	-15.0	62.0	21.9	61.9	22.5	61.8	23.0	61.8	23.4	61.7	23.8	61.7	24.0	-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	-11.8	-13.0	65.1	22.4	65.0	22.9	64.9	23.4	64.8	23.8	64.7	24.1	64.6	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	-9.8	-11.0	68.2	23.0	68.1	23.5	68.0	24.0	67.9	24.4	67.8	24.7	67.7	21.0	-9.5	-10.0	71.1	18.8	70.8	19.5	70.6	20.3	70.5	20.6	70.4	21.0	70.2	21.7	-9.5	-10.0	70.0	23.5	69.9	24.0	69.8	24.5	69.7	24.9	69.6	25.2	69.5	21.0	-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	-8.5	-9.1	71.4	23.9	71.2	24.4	71.1	24.8	71.0	25.1	70.9	25.4	70.8	21.0	-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	-7.0	-7.6	74.0	24.7	73.8	25.2	73.7	25.7	73.6	26.0	73.5	26.3	73.4	21.0	-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	-5.0	-5.6	77.3	25.6	77.1	26.1	77.0	26.6	76.9	27.0	76.8	27.3	76.7	21.0	-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	-3.0	-3.7	80.7	25.1	80.5	25.6	80.4	26.1	80.3	26.4	80.2	26.7	80.1	21.0	0.0	-0.7	87.3	21.3	87.1	21.9	87.0	22.5	86.8	23.1	86.7	23.4	86.6	23.7	0.0	-0.7	86.2	25.6	86.0	26.1	85.9	26.6	85.8	27.0	85.7	27.3	85.6	21.0	3.0	2.2	92.9	22.0	92.7	22.5	92.5	23.1	92.4	23.3	92.3	23.6	92.1	23.9	3.0	2.2	91.8	26.9	91.6	27.4	91.5	27.9	91.4	28.3	91.3	28.6	91.2	21.0	5.0	4.1	96.6	22.4	96.5	22.9	96.3	23.4	96.2	23.7	96.1	23.9	95.9	24.7	5.0	4.1	95.5	27.0	95.3	27.5	95.2	28.0	95.1	28.3	95.0	28.6	94.9	21.0	7.0	6.0	100.5	22.7	100.3	23.2	100.1	23.7	100.0	24.0	99.8	24.3	99.5	24.6	7.0	6.0	99.4	28.4	99.2	28.9	99.1	29.4	99.0	29.7	98.9	30.0	98.8	21.0	9.0	7.9	104.5	23.1	104.3	23.6	104.1	24.0	104.0	24.3	103.8	24.6	103.5	24.9	9.0	7.9	103.4	29.1	103.2	29.6	103.1	30.1	103.0	30.4	102.9	30.7	102.8	21.0	11.0	9.8	108.5	23.4	108.3	23.9	108.1	24.3	108.0	24.6	107.8	24.9	107.5	25.2	11.0	9.8	107.4	29.4	107.2	29.9	107.1	30.4	107.0	30.7	106.9	31.0	106.8	21.0	13.0	11.8	112.9	23.7	112.7	24.1	112.5	24.5	112.4	24.8	112.3	25.1	112.1	25.4	13.0	11.8	111.8	29.7	111.6	30.2	111.5	30.7	111.4	31.0	111.3	31.3	111.2	21.0	15.0	13.7	117	24.0	117	24.5	114	24.9	110	23.0	106	22.1	99.1	18.0	15.0	13.7	116	30.1	116	30.6	116	31.1	116	31.6	116	32.1	116	21.0																																									
		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	-13.7	-15.0	61.7	23.1	61.6	23.6	61.5	24.1	61.4	24.5	61.3	24.8	61.2	21.0	-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	-11.8	-13.0	64.8	23.9	64.7	24.4	64.6	24.9	64.5	25.2	64.4	25.5	64.3	21.0	-9.8	-11.0	69.1	19.6	68.9	20.3	68.7	21.0	68.6	21.3	68.5	21.6	68.4	22.3	-9.8	-11.0	68.0	25.2	67.9	25.7	67.8	26.2	67.7	26.5	67.6	26.8	67.5	21.0	-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	-9.5	-10.0	69.6	24.1	69.5	24.6	69.4	25.1	69.3	25.4	69.2	25.7	69.1	21.0	-8.5	-9.1	72.2	20.1	72.0	20.8	71.8	21.4	71.8	21.7	71.7	22.1	71.5	22.7	-8.5	-9.1	71.1	25.6	71.0	26.1	70.9	26.6	70.8	27.0	70.7	27.3	70.6	21.0	-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	-7.0	-7.6	73.6	25.1	73.5	25.6	73.4	26.1	73.3	26.4	73.2	26.7	73.1	21.0	-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	-5.0	-5.6	77.1	26.6	77.0	27.1	76.9	27.6	76.8	28.0	76.7	28.3	76.6	21.0	-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	-3.0	-3.7	80.4	26.0	80.3	26.5	80.2	27.0	80.1	27.3	80.0	27.6	79.9	21.0	0.0	-0.7	87.1	22.2	86.9	22.7	86.7	23.2	86.6	23.5	86.																																																																																																																																																																																																																																																													

**RXYQ30PAHY1, PAHYL, PHTL [50/60Hz] Heating capacity**

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. (°CDB)																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	TC	PI	TC	PI				TC	PI	TC	PI	TC	PI	TC	PI																																																																																																																																																																																																																																																		
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	-19.8	-20.0	59.1	21.4	59.0	22.2	58.8	23.0	58.8	23.4	58.7	23.8	58.5	24.5	90% (680)	-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	20.2	-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	-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	-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	-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	-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	23.3	-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	23.7	-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	-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	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	25.5	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	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	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	9.0	7.9	114	25.1	114	25.7	114	26.2	114	26.5	114	26.8	106	24.8	11.0	9.8	120	25.5	119	26.1	119	26.6	118	26.7	114	25.6	106	23.4	13.0	11.8	125	26.0	125	26.5	122	26.2	118	26.2	114	24.1	106	22.2	15.0	13.7	131	26.4	130	26.8	122	24.8	118	23.8	114	22.9	106	21.0				
	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	-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	-13.7	-15.0	66.8	18.9	66.6	19.8	66.4	20.7	66.3	21.2	66.2	21.6	66.0	22.5	-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	-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	-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	-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	-7.0	-7.6	79.2	21.5	79.0	22.3	78.8	23.1	78.7	23.5	78.6	23.8	78.4	24.6	-5.0	-5.6	83.0	22.2	82.8	23.0	82.6	23.7	82.5	24.0	82.4	24.4	82.2	25.1	-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	25.6	0.0	-0.7	93.3	23.7	93.1	24.3	92.9	25.0	92.8	25.3	92.7	25.6	92.5	26.3	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	26.6	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	25.1	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	23.7	9.0	7.9	114	25.9	114	26.4	113	26.6	109	25.5	106	24.5	98.3	22.5	11.0	9.8	119	26.3	119	26.8	113	25.1	109	24.2	106	23.2	98.3	21.3	13.0	11.8	125	26.7	120	25.6	113	23.8	109	22.8	106	21.9	98.3	20.2	15.0	13.7	127	26.1	120	24.3	113	22.5	109	21.7	106	20.8	98.3	19.2																	
		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	-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	-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	-11.8	-13.0	69.6	20.9	69.4	21.7	69.2	22.5	69.1	22.9	69.1	23.3	68.9	24.1	-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	-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	-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	-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	-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	-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	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	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	23.9	5.0	4.1	104.1	25.8	104.0	26.3	103.4	26.7	100.1	25.7	96.8	24.6	90.1	22.6	7.0	6.0	108.9	26.2	108.7	26.7	103.4	25.2	100.1	24.3	96.8	23.3	90.1	21.4	9.0	7.9	114	26.6	110	25.8	103	23.9	100	23.0	96.8	22.1	90.1	20.3	11.0	9.8	117	26.2	110	24.8	103	22.6	100	21.8	96.8	20.9	90.1	19.3	13.0	11.8	117	24.7	110	23.1	103	21.4	100	20.6	96.8	19.8	90.1	18.2	15.0	13.7	117	23.5	110	21.9	103	20.3	100	19.6	96.8	18.8	90.1	17.4																
			100% (755)	-19.8	-20.0	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	60.7	20.3	60.5	21.1	60.4	21.9	60.3	22.4	60.2		22.8	60.0	23.6	-13.7	-15.0	66.2	21.6	66.1	22.3	65.9	23.1	65.8	23.5	65.7	23.9	65.6	24.6	-11.8	-13.0	69.3	22.2	69.2	22.9	69.0	23.7	68.9	24.0	68.8	24.4	68.7	25.1	-9.8	-11.0	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	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	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	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	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	86.3	24.8	86.1	25.4	85.9	26.0	85.9	26.3	85.8	26.6	81.8	25.4	0.0	-0.7	92.7	25.6	92.5	26.1	92.3	26.7	91.0	26.3	88.0	25.3	81.9	23.2	3.0	2.2	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	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	106.1	26.1	100.0	24.3	94.0	22.5	91.0	21.6	88.0	20.8	81.9	19.1	9.0	7.9	106	24.6	100	23.0	94.0	21.3	91.0	20.5	88.0	19.7	81.9	18.2	11.0	9.8	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	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	106	20.9	100	19.6	94.0	18.2	91.0	17.5	88.0	16.9	81.9	15.6															
				50% (378)	-19.8	-20.0	53.0	23.9	53.0	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	53.0	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	14.1	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	9.9	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	8.7	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

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.

TC: Total capacity: kW  
 PI: Power input:

**RXYQ32PAHY1, 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	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI																																																																																																																																																																																																																																																		
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	27.7	125	28.2	122	27.2	113	28.9	13.0	11.8	132	27.2	132	27.7	130	27.8	126	28.7	122	25.7	113	29.6	15.0	13.7	137	27.6	137	28.1	130	28.4	126	25.4	122	24.3	113	22.4																																														
	-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	109.4	28.6	7.0	6.0	115	26.6	115	27.2	115	27.8	115	28.0	112	27.5	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	126	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	24.3	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				
	-19.8	-20.0	63.0	18.2	62.8	19.3	62.7	20.4	62.6	21.1	62.5	21.7	62.5	22.5	62.3	23.2	-18.8	-19.0	64.4	19.5	64.3	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	-9.5	-10.0	78.7	22.9	78.5	23.7	78.4	24.5	78.3	24.9	78.2	25.2	78.0	26.0	-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	24.9	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	98.3	25.7	97.9	26.4	97.7	27.0	97.6	27.3	97.5	27.6	97.4	28.1	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	109.4	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	28.4	106	24.4	103	23.4	95.9	21.6	9.0	7.9	120	27.9	117	27.4	110	24.1	106	23.1	103	22.2	95.9	20.5	11.0	9.8	124	28.3	117	24.5	110	22.8	106	21.9	103	21.1	95.9	19.4	13.0	11.8	129	28.1	124	24.9	117	23.5	110	21.6	106	20.8	103	20.0	95.9	18.5	15.0	13.7	134	28.0	124	25.1	117	23.8	110	21.9	107	21.1	95.9	18.5
	-19.8	-20.0	62.7	18.7	62.5	19.8	62.4	20.6	62.3	21.3	62.2	22.0	62.2	22.8	62.0	23.6	-18.8	-19.0	64.1	19.8	64.0	21.0	63.9	21.7	63.8	22.4	63.7	23.0	63.5	23.8	63.4	24.7	-16.7	-17.0	66.9	21.8	66.7	22.7	66.5	23.5	66.5	23.9	66.4	24.4	66.2	25.2	-13.7	-15.0	69.9	22.5	69.8	23.3	69.6	24.1	69.5	24.5	69.4	24.9	69.2	25.8	-11.8	-13.0	73.2	23.2	73.0	23.9	72.8	24.7	72.7	25.1	72.6	25.5	72.5	26.3	-9.8	-11.0	76.6	23.8	76.5	24.6	76.3	25.3	76.2	25.7	76.1	26.0	75.9	26.8	-9.5	-10.0	78.4	24.1	78.3	24.9	78.1	25.6	78.0	25.9	77.9	26.3	77.7	27.0	-8.5	-9.1	80.1	24.4	79.9	25.1	79.8	25.8	79.7	26.2	79.6	26.5	79.4	27.2	-7.0	-7.6	83.0	24.9	82.8	25.5	82.6	26.2	82.5	26.6	82.5	26.9	82.3	27.6	-5.0	-5.6	87.0	25.4	86.8	26.1	86.7	26.7	86.6	27.1	86.5	27.4	86.3	28.0	-3.0	-3.7	91.0	26.0	90.8	26.6	90.7	27.2	90.6	27.5	90.5	27.8	90.4	28.9	0.0	-0.7	97.7	26.8	97.6	27.3	97.4	27.9	97.3	28.0	97.2	28.3	97.1	29.6	3.0	2.2	104.7	27.5	104.5	28.0	100.0	26.7	96.8	25.0	93.6	24.6	87.1	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	87.1	21.4	7.0	6.0	113	27.7	106	25.8	100	23.9	96.8	23.0	93.6	22.1	87.1	20.3	9.0	7.9	113	26.2	106	24.4	100	22.6	96.8	21.8	93.6	21.0	87.1	19.3	11.0	9.8	113	24.8	106	23.1	100	21.5	96.8	20.7	93.6	19.9	87.1	18.4	13.0	11.8	113	23.5	106	21.9	100	20.4	96.8	19.6	93.6	18.9	87.1	17.4	15.0	13.7	113	22.3	106	20.8	100	19.4	96.8	18.7	93.6	18.0	87.1	16.6
	-19.8	-20.0	61.5	19.2	61.3	20.5	61.2	21.2	61.1	21.9	61.0	22.6	61.0	23.4	60.9	24.2	-18.8	-19.0	63.0	20.1	62.9	21.3	62.8	22.0	62.7	22.7	62.6	23.4	62.5	24.1	62.4	24.9	-16.7	-17.0	65.7	20.9	65.5	21.8	65.4	22.5	65.3	23.1	65.2	23.6	65.1	24.1	64.9	25.0	-13.7	-15.0	68.7	21.6	68.5	22.5	68.4	23.2	68.3	23.7	68.2	24.2	68.1	25.1	-11.8	-13.0	71.7	22.3	71.5	23.2	71.4	23.9	71.3	24.4	71.2	24.9	71.1	25.8	-9.8	-11.0	75.1	23.0	74.9	23.7	74.7	24.4	74.6	24.9	74.5	25.4	74.4	26.3	-9.5	-10.0	76.9	23.3	76.7	24.0	76.5	24.7	76.4	25.2	76.3	25.7	76.2	26.6	-8.5	-9.1	78.7	23.6	78.5	24.3	78.3	25.0	78.2	25.5	78.1	26.0	78.0	26.9	-7.0	-7.6	81.6	24.1	81.4	24.8	81.2	25.5	81.1	26.0	81.0	26.5	80.9	27.4	-5.0	-5.6	85.6	24.8	85.4	25.5	85.2	26.2	85.1	26.7	85.0	27.2	84.9	28.1	-3.0	-3.7	91.6	25.4	91.4	26.1	91.2	26.8	91.1	27.3	91.0	27.8	90.9	29.0	0.0	-0.7	97.6	26.1	97.4	26.8	97.2	27.5	97.1	28.0	97.0	28.5	96.9	29.9	3.0	2.2	104.6	27.2	104.4	27.9	100.0	26.4	96.8	25.1	93.6	24.7	87.1	24.6	5.0	4.1	109.4	27.8	106.3	27.1	100.0	25.8	96.8	24.0	93.6	23.7	87.1	21.4	7.0	6.0	113	27.9	106	25.9	100	23.9	96.8	23.1	93.6	22.1	87.1	20.3	9.0	7.9	113	26.3	106	24.5	100	22.6	96.8	21.9	93.6	21.1	87.1	19.3	11.0	9.8	113	24.9	106	23.2	100	21.6	96.8	20.8	93.6	19.9	87.1	18.4	13.0	11.8	113	23.5	106	21.9	100	20.4	96.8	19.6	93.6	18.9	87.1	17.4	15.0											

**RXYQ34PAHY1, PAHYL, PHTL [50/60Hz] Heating capacity**

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. (°CDB)												Combination (%) (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	TC	PI
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	-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	69.0	17.9	68.7	19.2	68.5	20.4	68.4	21.1	68.3	21.7	68.0	23.0	-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	71.6	18.8	71.4	20.0	71.1	21.2	71.0	21.8	70.9	22.4	70.7	23.6	-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	74.6	19.7	74.3	20.8	74.1	22.0	74.0	22.6	73.8	23.2	73.6	24.3	-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	77.8	20.6	77.6	21.7	77.3	22.8	77.2	23.4	77.1	23.9	76.9	25.1	-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	81.4	21.5	81.1	22.6	80.9	23.6	80.8	24.2	80.7	24.7	80.4	25.8	-9.8	-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	83.3	21.9	83.0	23.0	82.8	24.0	82.7	24.6	82.6	25.1	82.3	26.1	-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	85.1	22.4	84.8	23.4	84.6	24.4	84.4	24.9	84.3	25.4	84.1	26.4	-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	88.1	23.0	87.9	24.0	87.7	25.0	87.5	25.5	87.4	26.0	87.2	26.9	-7.0	-7.6	86.8	28.3	86.7	29.0	86.5	29.7	86.4	30.0	86.3	30.4	86.3	30.9	
	-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	-5.0	-5.6	91.2	28.9	91.1	29.6	90.9	30.2	90.8	30.5	90.7	30.8	90.7	31.3	
	-3.0	-3.7	97.0	24.7	96.8	25.6	96.6	26.4	96.4	26.9	96.3	27.3	96.0	28.2	-3.0	-3.7	95.7	29.5	95.5	30.1	95.3	30.7	95.2	30.9	95.1	31.2	95.1	31.7	
	0.0	-0.7	105	25.9	104	26.7	104	27.5	104	27.9	104	28.3	104	29.1	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	113	26.9	112	27.7	112	28.5	112	28.8	112	29.2	112	30.0	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	118	27.6	118	28.3	118	29.0	118	29.4	117	29.8	117	30.5	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	124	28.2	124	28.9	124	29.6	123	30.0	123	30.3	121	30.0	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	130	28.8	130	29.5	130	30.1	130	30.5	129	30.8	121	28.2	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	137	29.4	136	30.0	136	30.6	134	30.2	130	29.0	121	26.6	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	144	30.0	143	30.5	138	29.5	134	28.4	130	27.2	121	25.0	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	151	30.5	147	30.0	138	27.8	134	26.7	130	25.7	121	23.6	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		
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	-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	68.7	19.6	68.4	20.8	68.2	21.9	68.1	22.5	68.0	23.1	67.8	24.3	-18.8	-19.0	67.3	26.5	67.2	27.2	67.0	28.0	67.0	28.4	66.9	29.2	66.8	30.0	
	-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	-16.7	-17.0	70.0	27.0	69.8	27.8	69.7	28.5	69.6	28.9	69.5	29.6	69.4	30.6	
	-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	-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	77.5	22.1	77.3	23.1	77.0	24.2	76.9	24.7	76.8	25.2	76.6	26.2	-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	81.1	22.9	80.8	23.9	80.6	24.9	80.5	25.4	80.4	25.9	80.2	26.9	-9.8	-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	83.0	23.4	82.7	24.3	82.5	25.3	82.4	25.8	82.3	26.2	82.1	27.2	-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	84.7	23.7	84.5	24.7	84.3	25.6	84.2	26.1	84.1	26.6	83.8	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	87.8	24.3	87.6	25.2	87.4	26.2	87.3	26.6	87.1	27.1	86.9	28.0	-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	92.2	25.1	92.0	26.0	91.8	26.9	91.6	27.3	91.5	27.7	91.3	28.6	-5.0	-5.6	90.9	30.2	90.7	30.7	89.5	30.2	82.5	29.3	79.7	26.3	74.3	24.1	
	-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	-3.0	-3.7	95.4	30.7	90.7	28.9	85.2	26.8	82.5	25.8	79.7	24.6	74.3	22.8	
	0.0	-0.7	104	27.0	104	27.4	104	28.5	104	28.9	104	29.2	103.4	30.0	0.0	-0.7	96.1	28.2	90.7	26.3	85.2	24.4	82.5	23.5	79.7	22.8	74.3	20.8	
	3.0	2.2	112	28.0	112	28.7	112	29.4	112	29.7	112	30.1	111	30.8	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	118	28.6	118	29.2	117	29.9	117	30.2	117	30.6	111	28.9	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	124	29.2	124	29.8	123	30.4	123	30.8	120	29.7	111	27.2	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	130	29.7	130	30.3	128	30.3	124	29.1	120	27.9	111	25.6	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	136	30.2	136	30.8	128	28.5	124	27.4	120	26.3	111	24.2	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	143	30.8	136	28.9	128	26.8	124	25.7	120	24.7	111	22.8	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	144	29.2	136	27.2	128	25.3	124	24.3	120	23.4	111	21.5	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		
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	-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	30.8	
	-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	-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	71.0	22.1	70.8	23.1	70.6	24.1	70.5	24.6	70.3	25.2	70.1	26.2	-16.7	-17.0	69.7	28.7	69.5	29.3	69.3	30.0	69.3	30.3	69.3	30.6	65.0	28.4	
	-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	-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	77.2	23.6	77.0	24.6	76.8	25.5	76.7	26.0	76.6	26.4	76.3	27.4	-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	80.7	24.4	80.5	25.3	80.3	26.2	80.2	26.6	80.1	27.1	79.9	28.0	-9.8	-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	82.6	24.8	82.4	25.6	82.2	26.5	82.1	27.0	82.0	27.4	81.8	28.3	-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	84.4	25.1	84.2	26.0	84.0	26.8	83.9	27.3	83.8	27.7	83.6	28.6	-8.5	-9.1	83.1	30.6	7										

**RXYQ36PAHY1, PAHYL, PHTL [50/60Hz] Heating capacity**

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. (°CDB)												Combination (%) (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	TC	PI																																																																																																																																																																																																																																																												
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	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	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	25.6	86.7	26.2	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	124	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	31.4	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
	-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														
	-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	31.4	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														
	-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	100.3	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																
	-19.8	-20.0	63.5	29.2	63.5	29.9	63.5	30.6	63.5	31.3	63.5	32.0	63.5	32.7		-18.8	-19.0	63.5	28.5	63.5	29.2	63.5	29.9	63.5	30.6	63.5	31.3	63.5	32.0	-16.7	-17.0	63.5	27.2	63.5	27.9	63.5	28.6	63.5	29.3	63.5	30.0	63.5	30.7	-13.7	-15.0	63.5	25.8	63.5	26.5	63.5	27.2	63.5	27.9	63.5	28.6	63.5	29.3	-11.8	-13.0	63.5	24.5	63.5	25.2	63.5	25.9	63.5	26.6	63.5	27.3	63.5	28.0	-9.8	-11.0	63.5	23.2	63.5	23.9	63.5	24.6	63.5	25.3	63.5	26.0	63.5	26.7	-9.5	-10.0	63.5	22.5	63.5	23.2	63.5	23.9	63.5	24.6	63.5	25.3	63.5	26.0	-8.5	-9.1	63.5	22.0	63.5	22.7	63.5	23.4	63.5	24.1	63.5	24.8	63.5	25.5	-7.0	-7.6	63.5	21.1	63.5	21.8	63.5	22.5	63.5	23.2	63.5	23.9	63.5	24.6	-5.0	-5.6	63.5	20.2	63.5	20.9	63.5	21.6	63.5	22.3	63.5	23.0	63.5	23.7	-3.0	-3.7	63.5	19.3	63.5	20.0	63.5	20.7	63.5	21.4	63.5	22.1	63.5	22.8	0.0	-0.7	63.5	18.4	63.5	19.1	63.5	19.8	63.5	20.5	63.5	21.2	63.5	21.9	3.0	2.2	63.5	17.5	63.5	18.2	63.5	18.9	63.5	19.6	63.5	20.3	63.5	21.0	5.0	4.1	63.5	16.6	63.5	17.3	63.5	18.0	63.5	18.7	63.5	19.4	63.5	20.1	7.0	6.0	63.5	15.7	63.5	16.4	63.5	17.1	63.5	17.8	63.5	18.5	63.5	19.2	9.0	7.9	63.5	14.8	63.5	15.5	63.5	16.2	63.5	16.9	63.5	17.6	63.5	18.3	11.0	9.8	63.5	13.9	63.5	14.6	63.5	15.3	63.5	16.0	63.5	16.7	63.5	17.4	13.0																																									



**RXYQ38PAHY1, PAHYL, PHTL [50/60Hz] Heating capacity**

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. (°CDB)												Combination (%) (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	TC	PI
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	-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	76.9	19.7	76.7	21.2	76.4	22.6	76.2	23.3	76.1	24.1	75.8	25.5	-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	79.9	20.7	79.6	22.1	79.4	23.5	79.2	24.2	79.1	24.9	78.8	26.3	-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	83.2	21.8	82.9	23.1	82.7	24.4	82.5	25.1	82.4	25.8	82.1	27.1	-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	86.8	22.8	86.6	24.1	86.3	25.4	86.2	26.0	86.0	26.6	85.7	27.9	-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	90.8	23.9	90.5	25.1	90.3	26.3	90.1	26.9	90.0	27.5	89.7	28.7	-9.8	-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	92.9	24.4	92.6	25.6	92.4	26.7	92.2	27.3	92.1	27.9	91.8	29.1	-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	94.9	24.8	94.6	26.0	94.3	27.1	94.2	27.7	94.1	28.3	93.8	29.5	-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	98.3	25.6	98.1	26.7	97.8	27.8	97.6	28.4	97.5	28.9	97.2	30.0	-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	103.2	26.6	102.9	27.6	102.7	28.7	102.5	29.2	102.4	29.7	102.1	30.8	-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	108	27.5	108	28.5	108	29.5	107	30.0	107	30.5	107	31.5	-3.0	-3.7	107	32.9	106	33.6	106	34.3	105	34.8	101	32.4	94.1	29.8	
	0.0	-0.7	117	28.8	116	29.7	116	30.7	116	31.1	116	31.6	115	32.5	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	125	30.0	125	30.9	125	31.7	125	32.2	125	32.6	124	33.5	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	132	30.8	131	31.6	131	32.4	131	32.8	131	33.2	130	34.1	5.0	4.1	129	34.6	115	29.6	108	27.5	105	26.5	101	25.0	94.1	23.5	
	7.0	6.0	138	31.5	138	32.3	138	33.0	137	33.4	137	33.8	136	34.2	7.0	6.0	135	35.0	115	27.9	108	26.0	105	25.0	101	24.0	94.1	22.2	
9.0	7.9	145	32.2	145	32.9	144	33.6	144	34.0	144	34.4	143	34.2	9.0	7.9	142	36.2	115	26.4	108	24.5	105	23.6	101	22.7	94.1	21.0		
11.0	9.8	152	32.8	152	33.5	151	34.2	151	34.5	146	33.1	136	30.3	11.0	9.8	149	37.8	115	24.9	108	23.0	105	22.3	101	21.5	94.1	19.9		
13.0	11.8	160	33.4	159	34.1	156	33.7	151	32.4	146	31.1	136	28.5	13.0	11.8	157	39.4	115	23.5	108	21.9	105	21.1	101	20.3	94.1	18.8		
15.0	13.7	167	34.0	166	34.3	156	31.8	151	30.5	146	29.3	136	26.9	15.0	13.7	164	41.0	115	22.2	108	20.7	105	20.0	101	19.3	94.1	17.9		
120% (1140)	-19.8	-20.0	75.2	21.2	74.9	22.6	74.7	24.0	74.6	24.4	74.5	25.3	74.2	26.7	-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	76.6	21.7	76.3	23.0	76.1	24.4	75.9	25.0	75.8	25.7	75.5	27.0	-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	79.5	22.6	79.3	23.9	79.2	25.2	78.9	25.8	78.8	26.5	78.5	27.7	-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	82.8	23.6	82.6	24.8	82.3	26.0	82.2	26.6	82.1	27.3	81.8	28.5	-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	86.5	24.5	86.2	25.7	86.0	26.9	85.8	27.5	85.7	28.1	85.5	29.2	-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	90.4	25.5	90.2	26.6	89.9	27.7	89.8	28.3	89.7	28.9	89.4	30.0	-9.8	-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	92.6	26.0	92.3	27.1	92.0	28.2	91.9	28.7	91.8	29.2	91.5	30.3	-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	94.5	26.4	94.3	27.5	94.0	28.5	93.9	29.1	93.8	29.6	93.5	30.7	-8.5	-9.1	93.0	32.7	92.9	33.4	92.7	34.1	92.6	34.4	89.8	33.7	83.7	30.5	
	-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	-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	102.8	28.0	102.6	29.0	102.3	29.9	102.2	30.4	102.1	30.9	101.8	31.9	-5.0	-5.6	101.4	33.7	101.2	34.4	96.0	32.0	92.9	31.1	89.8	29.8	83.7	27.4	
	-3.0	-3.7	108	28.8	108	29.8	107	30.7	107	31.2	107	31.6	107	32.5	-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	116	30.1	116	30.9	116	31.8	116	32.2	115	32.7	115	33.5	0.0	-0.7	114	34.9	110	32.9	96.0	27.8	92.9	26.7	89.8	25.7	83.7	23.7	
	3.0	2.2	125	31.2	125	32.0	125	32.8	124	33.2	124	33.6	124	34.4	3.0	2.2	122	35.5	117	33.3	96.0	25.4	92.9	24.5	89.8	23.5	83.7	21.7	
	5.0	4.1	131	31.9	131	32.6	131	33.4	131	33.8	130	34.2	125	33.0	5.0	4.1	128	37.2	115	31.6	96.0	24.0	92.9	23.1	89.8	22.3	83.7	20.6	
	7.0	6.0	138	32.5	137	33.3	137	34.0	137	34.3	135	33.8	125	31.0	7.0	6.0	135	39.8	115	29.6	96.0	22.7	92.9	21.9	89.8	21.1	83.7	19.5	
9.0	7.9	144	33.2	144	33.8	144	34.5	139	33.2	135	31.8	125	29.2	9.0	7.9	141	42.4	115	28.0	96.0	21.5	92.9	20.7	89.8	19.9	83.7	18.5		
11.0	9.8	152	33.7	151	34.4	144	32.5	139	31.3	135	30.0	125	27.6	11.0	9.8	149	45.0	115	26.4	96.0	20.3	92.9	19.6	89.8	18.9	83.7	17.5		
13.0	11.8	159	34.3	153	34.0	144	30.6	139	29.4	135	28.2	125	26.0	13.0	11.8	156	47.6	115	24.8	96.0	19.2	92.9	18.5	89.8	17.9	83.7	16.6		
15.0	13.7	163	34.4	153	31.1	144	28.8	139	27.7	135	26.7	125	24.6	15.0	13.7	160	50.2	115	23.2	96.0	18.2	92.9	17.6	89.8	17.0	83.7	15.8		
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	-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	76.2	23.6	76.0	24.9	75.7	26.1	75.6	26.7	75.5	27.3	75.3	28.5	-18.8	-19.0	74.7	31.4	74.6	32.2	74.4	33.0	73.3	33.4	73.3	34.2	73.2	35.9	
	-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	-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	82.5	25.4	82.2	26.5	82.0	27.6	81.9	28.2	81.8	28.7	81.5	29.9	-13.7	-15.0	81.0	32.6	80.8	33.3	80.7	34.0	80.6	34.3	80.6	34.7	80.6	35.6	
	-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	-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	90.1	27.1	89.8	28.2	89.6	29.2	89.5	29.7	89.4	30.2	89.1	31.2	-9.8	-11.0	88.6	33.7	88.4	34.4	84.0	32.4	81.3	31.1	78.6	29.9	73.2	27.4	
	-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	-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	94.2	28.0	93.9	28.9	93.7	29.9	93.6	30.4	93.5	30.9	93.2	31.9	-8.5	-9.1	92.7	34.2	89.4	33.0	84.0	30.6	81.3	2					

**RXYQ40PAHY1, PAHYL, PHTL [50/60Hz] Heating capacity**

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. (°CDB)												Combination (%) (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	TC	PI
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	-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	79.5	20.3	79.2	21.9	78.9	23.4	78.8	24.1	78.6	24.9	78.4	26.4	-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	82.6	21.4	82.3	22.9	82.0	24.3	81.9	25.1	81.7	25.8	81.4	27.3	-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	86.0	22.5	85.7	23.9	85.4	25.3	85.3	26.0	85.1	26.7	84.8	28.1	-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	89.7	23.6	89.4	24.9	89.2	26.3	89.0	26.9	88.9	27.6	88.6	28.9	-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	93.8	24.7	93.6	26.0	93.3	27.2	93.1	27.9	93.0	28.5	92.7	29.8	-9.8	-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	96.0	25.2	95.7	26.5	95.4	27.7	95.3	28.3	95.2	29.0	94.9	30.2	-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	98.1	25.7	97.8	26.9	97.5	28.1	97.3	28.8	97.2	29.4	96.9	30.6	-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	101.6	26.5	101.3	27.7	101.0	28.9	100.9	29.4	100.7	30.0	100.5	31.2	-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	107	27.5	106	28.6	106	29.8	106	30.3	106	30.9	105	32.0	-5.0	-5.6	105	33.6	105	34.3	105	35.1	105	35.5	104	35.9	104	36.0	
	-3.0	-3.7	112	28.5	111	29.5	111	30.6	111	31.1	111	31.7	111	32.7	-3.0	-3.7	110	34.2	110	35.0	110	35.7	109	35.6	109	35.6	108	36.0	
	0.0	-0.7	120	29.9	120	30.9	120	31.9	120	32.4	120	32.8	119	33.8	0.0	-0.7	119	35.2	119	35.9	119	36.7	119	37.1	118	37.1	117	37.5	
	3.0	2.2	130	31.2	129	32.1	129	33.0	129	33.5	129	33.9	128	34.8	3.0	2.2	127	35.6	127	36.2	127	36.8	127	37.1	126	37.1	125	37.5	
	5.0	4.1	136	32.0	136	32.8	135	33.7	135	34.1	135	34.6	134	35.4	5.0	4.1	127	33.5	127	34.1	127	34.7	127	35.0	126	35.0	125	35.4	
	7.0	6.0	143	32.7	142	33.5	142	34.4	142	34.8	142	35.2	142	36.0	7.0	6.0	127	31.6	127	32.5	127	33.1	127	33.4	126	33.4	125	33.8	
	9.0	7.9	150	33.4	149	34.2	149	35.0	149	35.4	149	35.8	142	33.9	9.0	7.9	127	29.8	127	27.8	127	27.8	127	27.8	126	27.8	125	28.2	
	11.0	9.8	157	34.1	157	34.8	156	35.6	156	36.0	152	34.9	142	32.0	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	165	34.8	165	35.5	163	35.5	157	34.1	152	34.8	142	30.1	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	173	35.4	173	36.0	163	35.5	157	32.2	152	30.9	142	28.4	15.0	13.7	127	25.0	120	23.4	113	21.9	109	21.1	105	20.3	98.0	18.8		
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	-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	79.1	22.4	78.9	23.8	78.6	25.2	78.5	25.9	78.3	26.6	78.1	28.0	-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	82.2	23.4	81.9	24.7	81.6	26.1	81.5	26.8	81.4	27.4	81.1	28.8	-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	85.6	24.4	85.3	25.7	85.1	27.0	84.9	27.6	84.8	28.3	84.5	29.6	-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	89.3	25.4	89.1	26.6	88.8	27.9	88.7	28.5	88.6	29.1	88.3	30.3	-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	93.5	26.4	93.2	27.6	92.9	28.8	92.8	29.4	92.7	29.9	92.4	31.1	-9.8	-11.0	91.9	33.3	91.7	34.1	91.6	34.9	91.5	35.3	91.4	35.7	91.3	36.0	
	-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	-9.5	-10.0	94.1	33.7	93.9	34.4	93.7	35.2	93.6	35.6	93.5	36.0	93.4	36.3	
	-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	-8.5	-9.1	96.1	34.0	95.9	34.7	95.8	35.5	95.7	35.8	95.6	36.1	95.5	36.4	
	-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	-7.0	-7.6	99.7	34.4	99.5	35.2	99.3	35.9	99.2	36.3	99.1	36.6	99.0	36.9	
	-5.0	-5.6	106	29.0	106	30.1	106	31.1	106	31.6	105	32.1	105	33.2	-5.0	-5.6	105	35.1	105	35.8	105	36.6	105	37.0	104	37.0	103	37.4	
	-3.0	-3.7	111	29.9	111	30.9	111	31.9	111	32.4	111	32.9	110	33.8	-3.0	-3.7	110	35.7	106	34.7	106	35.4	106	36.0	106	36.3	105	36.7	
	0.0	-0.7	120	31.2	120	32.1	120	33.0	119	33.5	119	34.0	119	34.9	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	129	32.4	129	33.3	129	34.1	129	34.5	128	34.9	128	35.8	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	136	33.1	135	33.9	135	34.7	135	35.1	135	35.5	131	34.7	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	142	33.8	142	34.6	142	35.4	142	35.7	140	35.7	131	32.7	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	149	34.5	149	35.2	149	35.9	145	35.0	140	35.6	131	30.8	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	157	35.1	156	35.8	150	34.3	145	33.0	140	31.6	131	29.1	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	165	35.7	160	34.8	150	32.2	145	31.0	140	29.8	131	27.4	13.0	11.8	113	23.1	106	21.0	100	20.3	96.8	19.6	93.6	18.9	87.1	17.5		
15.0	13.7	169	35.2	160	32.8	150	30.4	145	29.3	140	28.1	131	25.9	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		
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	-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	78.3	24.5	78.5	25.7	78.2	27.0	78.1	27.7	78.0	28.3	77.8	29.6	-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	81.8	25.4	81.6	26.6	81.3	27.8	81.2	28.5	81.1	29.1	80.8	30.3	-16.7	-17.0	80.2	33.3	80.1	34.1	79.9	34.8	79.9	35.2	79.8	35.6	79.3	36.0	
	-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	-13.7	-15.0	83.7	33.9	83.5	34.6	83.4	35.4	83.3	35.7	83.1	35.2	82.6	35.7	
	-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	-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	93.1	28.1	92.8	29.2	92.6	30.3	92.5	30.8	92.3	31.4	92.1	32.5	-9.8	-11.0	91.5	35.0	91.4	35.7	91.3	36.4	91.2	36.8	91.1	37.1	90.9	37.3	
	-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	-9.5	-10.0	93.7	35.3	93.1	35.8	93.5	36.3	93.4	36.7	93.3	37.0	93.2	37.3	
	-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	-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	

**RXYQ42PAHY1, PAHYL, PHTL [50/60Hz] Heating capacity**

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. (°CDB)																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	TC	PI	TC	PI				TC	PI	TC	PI	TC	PI	TC	PI																												
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	25.2	-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	25.9	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	83.4	20.5	83.1	22.1	82.8	23.7	82.6	24.5	82.5	25.3	82.2	26.84	-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	90.6	22.9	90.3	24.3	90.0	25.8	89.8	26.5	89.7	27.2	89.4	28.7	-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	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	-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	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	-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	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	-3.0	-3.7	111	34.3	111	35.1	111	35.9	111	36.3	111	36.7	110	37.8		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	3.0	2.2	129	36.4	128	37.1	128	37.8	128	38.3	128	38.7	127	39.8		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	7.0	6.0	134	34.0	134	34.7	134	35.2	134	35.6	134	36.0	133	37.1		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	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	166	34.9	166	35.7	166	36.5	166	36.8	160	35.7	149	32.4														
	15.0	13.7	174	35.6	174	36.3	171	36.1	165	34.7	160	33.3	149	30.3	15.0	13.7	134	27.0	126	25.2	118	23.6	115	22.7	111	21.9	103	20.3																													
	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	-19.8	-20.0	76.8	30.1	76.7	31.2	76.5	32.2	76.4	32.7	76.3	32.7	76.2		34.1																											
		-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	-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	83.0	22.7	82.7	24.1	82.4	25.6	82.3	26.3	82.1	27.0	81.9	28.5	-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	86.4	23.7	86.1	25.1	85.8	26.5	85.7	27.2	85.6	27.9	85.3	29.3	-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	90.2	24.8	89.9	26.2	89.6	27.5	89.5	28.2	89.4	28.8	89.1	30.2	-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	94.3	25.9	94.0	27.2	93.8	28.5	93.6	29.1	93.5	29.7	93.2	31.0	-9.8	-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	96.5	26.5	96.2	27.7	96.0	28.9	95.8	29.6	95.7	30.2	95.4	31.4	-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	98.6	26.9	98.3	28.2	98.0	29.4	97.9	30.0	97.7	30.6	97.5	31.8	-8.5	-9.1	96.9	34.0	96.8	34.9	96.6	35.7	96.5	36.0	96.4	36.3	96.1	37.4																													
-7.0		-7.6	102	27.7	102	28.9	102	30.1	101	30.7	101	31.2	101	32.4	-7.0	-7.6	100.5	34.6	100.3	35.4	100.1	36.1	100.1	36.5	98.4	36.9	91.7	33.1																													
-5.0		-5.6	107	28.8	107	29.9	107	31.0	107	31.5	106	32.1	106	33.2	-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	112	29.7	112	30.8	112	31.8	112	32.3	112	32.9	111	33.9	-3.0	-3.7	111	35.9	111	36.6	105	34.6	102	33.3	98.4	32.9	91.7	29.4																													
0.0		-0.7	121	31.1	121	32.1	121	33.1	120	33.6	120	34.0	120	35.0	0.0	-0.7	119	36.5	112	34.0	105	31.6	102	30.4	98.4	32.0	91.7	26.9																													
3.0		2.2	130	32.4	130	33.3	130	34.2	130	34.7	129	35.1	129	36.0	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	137	33.2	136	34.0	136	34.9	136	35.3	136	35.8	136	36.6	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	143	33.9	143	34.7	143	35.6	143	36.0	143	36.4	138	35.2	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	151	34.6	150	35.4	150	36.2	150	36.6	148	36.2	138	33.2	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	158	35.3	158	36.0	157	36.8	153	35.5	148	34.1	138	31.3	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	166	36.0	166	36.7	158	34.7	153	33.4	148	32.1	138	29.5	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	174	36.6	168	35.3	158	32.8	153	31.5	148	30.3	138	27.9	15.0	13.7	119	23.6	112	22.2	105	20.7	102	20.0	98.4	19.3	91.7	17.9																														
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	-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	79.5	23.8	79.2	25.2	78.9	26.6	78.8	27.3	78.7	28.0	78.5	29.4	-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	82.6	24.8	82.3	26.1	82.1	27.5	81.9	28.1	81.8	28.8	81.5	30.1	-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	86.0	25.8	85.7	27.1	85.5	28.3	85.4	29.0	85.2	29.8	85.0	30.9	-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	89.8	26.8	89.5	28.2	89.3	29.2	89.1	29.8	89.0	30.4	88.8	31.7	-11.8	-13.0	82.8	34.6	82.6	35.5	82.4	36.3	82.3	36.7	82.2	37.0	82.0	37.8																													
	-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	-9.8	-11.0	92.3	35.2	92.1	36.0	92.0	36.7	91.9	37.0	91.8	37.3	91.6	38.1																													
	-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	-9.5	-10.0	94.5	35.5	94.3	36.3	94.2	37.0	94.1	37.3	94.0	37.6	93.8	38.6																													
	-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	-8.5	-9.1	96.5	35.8	96.4	36.6	96.3	37.3	96.2	37.6	96.1	37.9	96.0	38.9																													
	-7.0	-7.6	102	29.4	101	30.5	101	31.6	101	32.1	101	32.7	101	33.7	-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	107	30.4	107	31.4	106	32.4	106	32.9	106	33.4	106	34.5	-5.0	-5.6	104	36.2	98.0	35.7	92.1	31.3	89.1	30.1	86.1	29.0	80.2	26.7																													
	-3.0	-3.7	112	31.2	112	32.2	111	33.2	111	33.7	111	34.2	111	35.1	-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	121	32.5	120	33.4	120	34.3	120	34.8	120	35.2	120	36.1	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	130	33.7	130	34.5	129	35.4	129	35.8	129																																														

**RXYQ44PAHY1, PAHYL, PHTL [50/60Hz] Heating capacity**

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. (°CDB)												Combination (%) (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	TC	PI
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	-19.8	-20.0	83.4	31.1	83.1	32.3	82.9	33.5	82.8	34.1	82.7	34.7	82.5	35.9	
	-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	-18.8	-19.0	84.9	31.5	84.7	32.7	84.4	33.9	84.3	34.5	84.2	35.1	84.0	36.3	
	-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	-16.7	-17.0	88.2	32.3	88.0	33.5	87.8	34.6	87.7	35.2	87.6	35.8	87.3	36.9	
	-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	-13.7	-15.0	91.9	33.2	91.7	34.3	91.5	35.4	91.4	35.9	91.3	36.5	91.1	37.6	
	-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	-11.8	-13.0	96.0	34.0	95.8	35.1	95.6	36.1	95.5	36.7	95.4	37.2	95.2	38.2	
	-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	-9.8	-11.0	100.5	34.9	100.3	35.9	100.1	36.9	99.9	37.4	99.8	37.9	99.6	38.9	
	-9.5	-10.0	105.2	27.7	104	29.1	104	30.5	104	31.2	103.6	32.0	103.3	33.4	-9.5	-10.0	102.9	35.3	102.6	36.3	102.4	37.3	102.3	37.8	102.2	38.2	102.0	39.2	
	-8.5	-9.1	107	28.3	106	29.7	106	31.0	106	31.7	106	32.4	106	33.8	-8.5	-9.1	105	35.7	105	36.7	105	37.6	105	38.1	104	38.6	104	39.5	
	-7.0	-7.6	111	29.2	110	30.5	110	31.8	110	32.5	110	33.1	109	34.5	-7.0	-7.6	109	36.3	109	37.2	109	38.2	108	38.6	108	39.1	108	39.9	
	-5.0	-5.6	116	30.3	116	31.6	115	32.8	115	33.5	115	34.1	115	35.4	-5.0	-5.6	114	37.1	114	38.0	114	38.9	114	39.3	114	39.7	108	37.5	
	-3.0	-3.7	122	31.4	121	32.6	121	33.8	121	34.4	121	35.0	120	36.2	-3.0	-3.7	120	37.9	120	38.7	120	39.5	119	39.9	116	38.5	108	35.3	
	0.0	-0.7	131	33.0	131	34.1	131	35.2	130	35.8	130	36.3	130	37.4	0.0	-0.7	129	39.0	129	39.8	129	40.6	129	41.1	129	41.5	108	32.2	
	3.0	2.2	141	34.4	141	35.5	140	36.5	140	37.0	140	37.5	140	38.5	3.0	2.2	139	40.0	139	40.8	139	41.6	139	42.1	139	42.5	108	29.5	
	5.0	4.1	148	35.3	148	36.3	147	37.3	147	37.8	147	38.3	147	39.2	5.0	4.1	140	41.0	140	41.8	140	42.6	140	43.1	140	43.5	108	27.9	
	7.0	6.0	155	36.2	155	37.1	155	38.0	155	38.5	154	39.0	154	39.9	7.0	6.0	140	42.0	140	42.8	140	43.6	140	44.1	140	44.5	108	26.3	
9.0	7.9	163	37.0	163	37.9	162	38.7	162	39.2	162	39.6	162	40.5	9.0	7.9	140	43.0	140	43.8	140	44.6	140	45.1	140	45.5	108	24.9		
11.0	9.8	171	37.7	171	38.6	170	39.4	170	39.8	167	39.3	156	36.0	11.0	9.8	140	44.0	140	44.8	140	45.6	140	46.1	140	46.5	108	23.6		
13.0	11.8	180	38.5	179	39.1	179	40.0	173	39.4	167	38.9	156	33.9	13.0	11.8	140	45.0	140	45.8	140	46.6	140	47.1	140	47.5	108	22.3		
15.0	13.7	188	39.2	188	39.9	179	37.7	173	36.2	167	34.8	156	32.0	15.0	13.7	140	46.0	140	46.8	140	47.6	140	48.1	140	48.5	108	21.2		
120% (1320)	-19.8	-20.0	84.6	24.0	84.3	25.6	84.0	27.2	83.8	28.0	83.8	28.9	83.5	30.5	-19.8	-20.0	82.9	33.5	82.7	34.5	82.5	35.6	82.4	36.1	82.3	36.7	82.2	37.8	
	-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	-18.8	-19.0	84.5	33.8	84.3	34.9	84.1	35.9	84.0	36.5	83.9	37.0	83.7	38.0	
	-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	-16.7	-17.0	87.8	34.6	87.6	35.6	87.4	36.6	87.3	37.1	87.2	37.6	87.0	38.6	
	-13.7	-15.0	93.2	26.8	92.9	28.2	92.6	29.7	92.5	30.4	92.3	31.2	92.1	32.6	-13.7	-15.0	91.5	35.3	91.3	36.3	91.1	37.3	91.0	37.7	90.9	38.2	90.7	39.2	
	-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	-11.8	-13.0	95.6	36.1	95.4	37.0	95.2	37.9	95.1	38.4	95.0	38.9	94.8	39.8	
	-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	-9.8	-11.0	100.1	36.8	99.9	37.7	99.7	38.6	99.6	39.1	99.5	39.5	99.4	40.2	
	-8.5	-9.1	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	102.4	37.2	102.2	38.1	102.0	39.0	102.0	39.4	101.9	39.8	99.9	37.1	
	-7.0	-7.6	110	31.0	110	32.2	110	33.4	109	34.0	109	34.6	109	35.8	-7.0	-7.6	109	38.1	108	38.9	108	39.7	106	39.2	103	37.7	95.9	34.6	
	-5.0	-5.6	116	32.0	115	33.2	115	34.4	115	34.9	115	35.5	115	36.7	-5.0	-5.6	114	38.8	114	39.6	114	40.4	106	39.9	103	37.4	95.9	32.6	
	-3.0	-3.7	121	33.0	121	34.1	121	35.2	121	35.8	120	36.3	120	37.4	-3.0	-3.7	120	39.5	117	39.0	116	39.2	106	34.8	103	33.4	95.9	30.7	
	0.0	-0.7	131	34.5	130	35.5	130	36.5	130	37.1	130	37.6	130	38.6	0.0	-0.7	124	40.1	117	39.5	116	39.0	106	31.7	103	30.5	95.9	28.1	
	3.0	2.2	141	35.8	140	36.8	140	37.7	140	38.2	140	38.7	139	39.6	3.0	2.2	124	41.1	117	40.6	116	40.1	106	29.1	103	28.0	95.9	25.8	
	5.0	4.1	148	36.6	147	37.5	147	38.5	147	38.9	147	39.4	144	39.1	5.0	4.1	124	42.1	117	41.6	116	41.1	106	27.4	103	26.4	95.9	24.4	
	7.0	6.0	155	37.4	155	38.3	154	39.1	154	39.6	154	40.0	144	36.8	7.0	6.0	124	43.1	117	42.6	116	42.1	106	26.0	103	25.0	95.9	23.1	
	9.0	7.9	163	38.2	162	39.0	162	39.8	160	39.4	154	37.8	144	34.7	9.0	7.9	124	44.1	117	43.6	116	43.1	106	24.6	103	23.7	95.9	21.9	
11.0	9.8	170	38.9	170	39.6	165	38.6	160	37.1	154	35.6	144	32.7	11.0	9.8	124	45.1	117	44.6	116	44.1	106	23.3	103	22.4	95.9	20.8		
13.0	11.8	179	39.6	176	39.1	165	36.3	160	34.9	154	33.5	144	30.8	13.0	11.8	124	46.1	117	45.6	116	45.1	106	22.0	103	21.2	95.9	19.7		
15.0	13.7	186	39.6	176	36.9	165	34.2	160	32.9	154	31.7	144	29.2	15.0	13.7	124	47.1	117	46.6	116	46.1	106	20.9	103	20.2	95.9	18.7		
110% (1210)	-19.8	-20.0	84.2	26.4	83.9	27.9	83.7	29.3	83.5	30.1	83.4	30.8	83.1	32.3	-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	85.7	26.9	85.5	28.3	85.2	29.8	85.1	30.5	84.9	31.2	84.7	32.7	-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	89.1	27.9	88.8	29.3	88.5	30.7	88.4	31.4	88.3	32.1	88.0	33.5	-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	92.8	28.9	92.5	30.3	92.3	31.6	92.1	32.3	92.0	32.9	91.7	34.3	-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	96.9	30.0	96.6	31.2	96.3	32.5	96.2	33.2	96.1	33.8	95.8	35.1	-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	101.3	31.0	101.1	32.2	100.8	33.5	100.7	34.1	100.5	34.7	100.3	35.9	-9.8	-11.0	99.6	38.8	99.5	39.6	99.3	40.4	93.2	36.9	90.1	35.5	83.9	32.6	
	-9.5	-10.0	103.7	31.5	103.4	32.7	103.2	33.9	103.0	34.5	102.9	35.1	102.6	36.3	-9.5	-10.0	102.0	39.1	101.8	39.9	101.6	40.7	93.2	35.9	90.1	34.4	83.9	31.7	
	-8.5	-9.1	106	32.0	106	33.2	105	34.3	105	34.9	105	35.5	105	36.6	-8.5	-9.1	104	39.4	102	39.2	99.3	40.2	93.2	34.9	90.1	33.6	83.9	30.9	
	-7.0	-7.6	110	32.7	110	33.9	109	35.0	109	35.6	109	36.1	109	37.2	-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	115	33.7	11																								

**RXYQ46PAHY1, PAHYL, PHTL [50/60Hz] Heating capacity**

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. (°CDB)												Combination (%) (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	TC	PI
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	-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	87.4	21.2	87.0	23.1	86.7	24.9	86.5	25.8	86.4	26.7	86.1	28.6	-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	90.7	22.5	90.4	24.3	90.1	26.0	89.9	26.9	89.7	27.8	89.4	29.5	-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	94.5	23.8	94.1	25.5	93.8	27.2	93.6	28.0	93.5	28.9	93.1	30.6	-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	98.6	25.1	98.3	26.7	97.9	28.4	97.8	29.2	97.6	30.0	97.3	31.6	-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	103	26.4	103	28.0	102	29.5	102	30.3	102	31.1	102	32.6	-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	105	27.1	105	28.6	105	30.1	105	30.9	104	31.6	104	33.1	-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	108	27.7	107	29.1	107	30.6	107	31.4	107	32.1	106	33.6	-8.5	-9.1	106	35.6	106	36.6	105	37.2	105	38.2	105	38.7	105	39.7	
	-7.0	-7.6	112	28.6	111	30.0	111	31.5	111	32.2	111	32.9	110	34.3	-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	117	29.9	117	31.2	116	32.6	116	33.2	116	33.9	116	35.3	-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	123	31.0	122	32.3	122	33.6	122	34.2	122	34.9	121	36.1	-3.0	-3.7	121	37.9	121	38.8	120	39.7	120	40.2	120	40.6	119	41.3	
	0.0	-0.7	132	32.7	132	33.9	132	35.1	131	35.7	131	36.3	131	37.5	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	142	34.3	142	35.4	142	36.5	141	37.0	141	37.6	141	38.7	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	149	35.2	149	36.3	149	37.3	148	37.8	148	38.3	148	39.4	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	157	36.1	156	37.1	156	38.1	156	38.6	156	39.1	155	40.1	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	164	37.0	164	37.9	164	38.9	163	39.3	163	39.8	163	40.7	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	172	38.0	172	38.7	172	39.6	171	40.0	171	40.5	163	38.5	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	181	38.6	181	39.4	180	40.3	180	40.7	175	39.4	163	36.2	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	190	39.3	189	40.1	187	40.3	181	38.7	175	37.2	163	34.2	15.0	13.7	146	30.1	138	28.2	130	26.3	125	25.4	121	24.5	113	22.7		
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	-19.8	-20.0	83.6	33.2	83.4	34.4	83.2	35.3	83.1	36.1	83.0	36.7	82.8	37.8	
	-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	-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	90.3	24.9	90.0	26.5	89.7	28.1	89.5	28.9	89.4	29.8	89.1	31.4	-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	94.0	26.1	93.7	27.7	93.4	29.2	93.3	30.0	93.1	30.8	92.8	33.3	-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	98.1	27.3	97.8	28.8	97.5	30.3	97.4	31.0	97.2	31.8	96.9	35.0	-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	103	28.5	102	29.9	102	31.4	102	32.1	102	32.8	101	34.2	-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	105	29.1	105	30.5	104	31.9	104	32.6	104	33.3	104	34.7	-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	107	29.7	107	31.0	107	32.4	106	33.1	106	33.7	106	35.1	-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	111	30.5	111	31.9	111	33.2	110	33.8	110	34.5	110	35.8	-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	117	31.7	116	32.9	116	34.2	116	34.8	116	35.4	115	36.7	-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	122	32.7	122	33.9	122	35.1	121	35.7	121	36.3	121	37.5	-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	132	34.3	131	35.4	131	36.5	131	37.1	131	37.6	131	38.7	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	142	35.7	141	36.8	141	37.8	141	38.3	141	38.8	141	39.8	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	149	36.6	148	37.6	148	38.5	148	39.0	148	39.5	148	40.5	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	156	37.5	156	38.4	155	39.3	155	39.7	155	40.2	151	39.4	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	164	38.2	163	39.1	163	40.0	163	40.4	162	40.4	151	37.1	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	172	39.0	171	39.8	171	40.7	167	39.7	162	38.1	151	35.0	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	181	39.7	180	40.5	173	38.8	167	37.3	162	35.8	151	32.9	13.0	11.8	130	27.9	123	25.1	115	24.4	111	23.5	108	22.7	100	21.1		
15.0	13.7	189	40.4	184	39.4	173	36.6	167	35.2	162	33.8	151	31.2	15.0	13.7	130	26.4	123	24.7	115	23.1	111	22.3	108	21.6	100	20.0		
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	-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	86.5	26.2	86.2	27.7	85.9	29.3	85.8	30.1	85.6	30.8	85.4	32.4	-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	89.8	27.3	89.6	28.8	89.3	30.2	89.1	31.0	89.0	31.7	88.7	33.2	-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	93.6	28.4	93.3	29.8	93.0	31.2	92.9	31.9	92.7	32.7	92.5	34.1	-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	97.7	29.5	97.4	30.9	97.1	32.2	97.0	32.9	96.9	33.6	96.6	34.9	-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	102	30.6	102	31.9	102	33.2	101	33.9	101	34.5	101	35.8	-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	105	31.2	104	32.4	104	33.7	104	34.3	104	35.0	103	36.2	-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	107	31.6	107	32.9	106	34.1	106	34.8	106	35.4	106	36.6	-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	111	32.5	110	33.7	110	34.9	110	35.5	110	36.1	110	37.2	-7.0	-7.6	109	40.1	107										

**RXYQ48PAHY1, PAHYL, PHTL [50/60Hz] Heating capacity**

Combination (%) (Capacity index)	Outdoor air temp.		Indoor air temp. (°CDB)												Combination (%) (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	TC	PI
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	-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	93.7	24.1	93.3	26.0	93.0	27.9	92.8	28.8	92.6	29.8	92.3	31.7	-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	97.3	25.4	96.9	27.2	96.6	29.0	96.4	29.9	96.2	30.9	95.9	32.7	-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	101.3	26.7	100.9	28.5	100.6	30.2	100.4	31.1	100.3	32.0	99.9	33.7	-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	105.7	28.1	105.4	29.8	105.0	31.5	104.8	32.3	104.7	33.1	104.3	34.8	-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	111	29.5	110	31.1	110	32.7	110	33.5	110	34.3	109	35.9	-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	113	30.1	113	31.7	112	33.3	112	34.0	112	34.8	112	36.4	-9.5	-10.0	111	38.6	111	39.6	111	40.7	111	41.3	111	41.8	111	42.9	
	-8.5	-9.1	115	30.7	115	32.3	115	33.8	115	34.6	114	35.3	114	36.8	-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	120	31.7	119	33.2	119	34.7	119	35.4	119	36.1	118	37.6	-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	126	33.0	125	34.4	125	35.8	125	36.5	125	37.2	124	38.6	-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	132	34.2	131	35.5	131	36.9	131	37.5	131	38.2	130	39.5	-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	142	36.0	141	37.2	141	38.4	141	39.1	141	39.7	140	40.9	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	153	37.6	152	38.7	152	39.9	152	40.4	152	41.0	151	42.1	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	160	38.6	160	39.6	159	40.7	159	41.3	159	41.8	159	42.9	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	168	39.5	168	40.5	167	41.6	167	42.1	167	42.6	167	43.6	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	176	40.4	176	41.4	176	42.3	175	42.8	175	43.3	174	44.4	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	185	41.2	184	42.2	184	43.1	184	43.6	182	43.5	170	39.9	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	194	42.1	194	42.9	194	43.8	189	42.6	182	40.9	170	37.6	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	204	42.8	203	43.7	195	41.8	189	40.2	182	38.6	170	35.5	15.0	13.7	152	31.3	144	29.3	135	27.3	131	26.3	126	25.4	118	23.5		
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	-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	93.2	26.6	92.9	28.4	92.6	30.1	92.4	31.0	92.2	31.9	91.9	33.6	-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	96.8	27.8	96.5	29.5	96.2	31.2	96.0	32.1	95.9	32.9	95.5	34.6	-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	100.8	29.1	100.5	30.7	100.2	32.3	100.0	33.1	99.9	33.9	99.6	35.6	-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	105.2	30.4	104.9	31.9	104.6	33.5	104.5	34.2	104.3	35.0	104.0	36.5	-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	110	31.6	110	33.1	109	34.6	109	35.3	109	36.0	109	37.5	-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	113	32.3	112	33.7	112	35.1	112	35.8	112	36.6	111	38.0	-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	115	32.8	115	34.2	114	35.6	114	36.3	114	37.0	114	38.4	-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	119	33.7	119	35.1	119	36.4	118	37.1	118	37.8	118	39.1	-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	125	34.9	125	36.2	124	37.5	124	38.1	124	38.8	124	40.1	-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	131	36.0	131	37.2	131	38.5	130	39.1	130	39.7	130	40.9	-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	141	37.6	141	38.8	141	39.9	141	40.5	140	41.0	140	42.2	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	152	39.1	152	40.2	151	41.2	151	41.7	151	42.3	151	43.3	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	160	40.0	159	41.0	159	42.0	159	42.5	159	43.0	157	43.4	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	168	40.9	167	41.8	167	42.8	167	43.3	167	43.7	157	40.8	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	176	41.7	175	42.6	175	43.5	174	43.7	168	41.9	157	38.5	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	184	42.5	184	43.4	180	42.8	174	41.1	168	39.5	157	36.3	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	194	43.3	192	43.4	180	40.2	174	38.7	168	37.2	157	34.2	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	203	43.9	192	40.9	180	38.0	174	36.5	168	35.1	157	32.3	15.0	13.7	135	27.4	128	25.7	120	24.0	116	23.2	112	22.4	105	20.8		
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	-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	92.7	29.2	92.4	30.8	92.2	32.4	92.0	33.2	91.9	34.0	91.6	35.6	-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	96.3	30.3	96.1	31.9	95.8	33.4	95.6	34.2	95.5	35.0	95.2	36.5	-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	100.4	31.5	100.1	32.9	99.8	34.4	99.6	35.2	99.5	35.9	99.2	37.4	-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	104.8	32.6	104.5	34.0	104.2	35.5	104.1	36.2	103.9	36.9	103.6	38.3	-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	110	33.8	109	35.1	109	36.5	109	37.2	109	37.8	108	39.2	-9.8	-11.0	108	42.4	108	43.3	105	42.6	102	40.9	98.3	41.3	91.5	36.1	
	-9.5	-10.0	112	34.4	112	35.7	112	37.0	111	37.7	111	38.3	111	39.6	-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	115	34.9	114	36.2	114	37.4	114	38.1	114	38.7	113	40.0	-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	119	35.7	118	36.9	118	38.2	118	38.8	118	39.4	118	40.7															

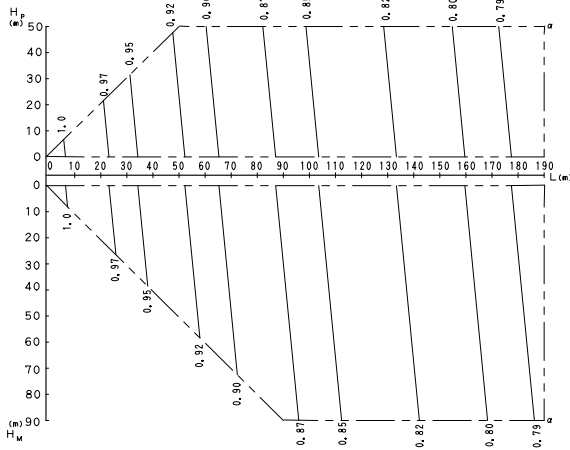
**RXYQ50PAHY1, PAHYL, PHTL [50/60Hz] Heating capacity**

Combination (%) (Capacity index)	Outdoor air temp.	Indoor air temp. (°CDB)												Combination (%) (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			
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	-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	94.4	23.2	94.1	25.2	93.7	27.3	93.5	28.3	93.4	29.3	93.0	31.3	-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	98.1	24.6	97.7	26.6	97.3	28.5	97.2	29.5	97.0	30.4	96.6	32.4	-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	102.1	26.1	101.7	27.9	101.4	29.8	101.2	30.7	101.0	31.6	100.7	33.5	-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	106.5	27.5	106.2	29.3	105.8	31.1	105.7	32.0	105.5	32.9	105.1	34.6	-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	111	29.0	111	30.7	111	32.4	111	33.2	110	34.1	110	35.8	-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	114	29.7	114	31.3	113	33.0	113	33.8	113	34.7	113	36.3	-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	116	30.3	116	31.9	116	33.6	116	34.4	115	35.2	115	36.8	-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	121	31.4	120	32.9	120	34.5	120	35.3	120	36.1	119	37.6	-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	127	32.7	126	34.2	126	35.7	126	36.5	125	37.2	125	38.7	-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	133	34.0	132	35.4	132	36.8	132	37.5	132	38.2	131	39.6	-3.0	-3.7	131	41.6	130	42.6	130	43.6	130	44.1	130	44.6	128	41.6
	0.0	-0.7	143	35.9	143	37.2	142	38.5	142	39.1	142	39.8	141	41.1	0.0	-0.7	141	42.9	141	43.8	140	44.7	139	45.0	139	45.5	138	46.8
	3.0	2.2	154	37.6	153	38.8	153	40.0	153	40.6	153	41.2	152	42.4	3.0	2.2	152	44.1	149	44.0	140	44.8	136	45.3	131	45.7	122	44.2
	5.0	4.1	161	38.6	161	39.8	161	40.9	160	41.5	160	42.1	160	42.4	5.0	4.1	158	44.5	149	44.1	140	44.8	136	45.3	131	45.7	122	44.2
	7.0	6.0	169	39.6	169	40.7	168	41.8	168	42.4	168	42.9	168	44.0	7.0	6.0	158	41.9	149	39.0	140	36.3	136	34.9	131	31.6	122	31.0
9.0	7.9	177	40.6	177	41.6	177	42.6	177	43.2	176	43.7	176	44.7	9.0	7.9	158	39.5	149	36.8	140	34.3	136	33.0	131	33.8	122	29.3	
11.0	9.8	186	41.4	186	42.4	185	43.4	185	43.9	185	44.4	177	42.4	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	196	42.3	195	43.3	195	44.2	195	44.7	190	44.4	177	39.9	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	205	43.1	205	44.0	203	44.4	196	42.7	190	41.0	177	37.7	15.0	13.7	158	33.2	149	31.1	140	29.0	136	28.0	131	26.9	122	25.0	
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	-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	93.9	25.9	93.6	27.8	93.3	29.7	93.1	30.6	93.0	31.5	92.6	33.4	-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	97.6	27.2	97.2	29.0	96.9	30.8	96.8	31.7	96.6	32.6	96.3	34.4	-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	101.6	28.6	101.3	30.3	101.0	32.0	100.8	32.9	100.6	33.7	100.3	35.4	-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	106.1	29.9	105.7	31.6	105.4	33.2	105.2	34.0	105.1	34.8	104.7	36.5	-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	111	31.3	111	32.8	110	34.4	110	35.2	110	36.0	110	37.5	-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	114	31.9	113	33.5	113	35.0	113	35.7	113	36.5	112	38.0	-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	116	32.5	116	34.0	115	35.5	115	36.3	115	37.0	115	38.5	-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	120	33.5	120	34.9	119	36.4	119	37.1	119	37.8	119	39.2	-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	126	34.7	126	36.1	125	37.5	125	38.2	125	38.9	125	40.2	-5.0	-5.6	124	42.8	124	43.7	124	44.6	123	45.1	117	41.7	109	38.3
	-3.0	-3.7	132	35.9	132	37.2	131	38.5	131	39.2	131	39.8	131	41.1	-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	142	37.6	142	38.8	142	40.1	142	40.7	141	41.3	141	42.5	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	153	39.2	153	40.3	153	41.4	152	42.0	152	42.6	152	43.7	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	161	40.2	160	41.2	160	42.3	160	42.8	160	43.4	159	44.4	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	169	41.1	168	42.1	168	43.1	168	43.6	168	44.1	163	43.4	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	177	42.0	177	42.9	176	43.9	176	44.4	175	44.5	163	40.9	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	186	42.8	185	43.7	185	44.6	181	43.7	175	42.0	163	38.6	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	196	43.6	195	44.5	187	42.7	181	41.1	175	39.5	163	36.3	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	205	44.3	199	43.4	187	40.3	181	38.8	175	37.3	163	34.3	15.0	13.7	141	29.1	133	27.3	125	25.5	121	24.6	117	23.8	109	22.1	
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	-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	93.5	28.7	93.2	30.4	92.9	32.1	92.7	32.9	92.6	33.8	92.3	35.5	-18.8	-19.0	91.5	39.6	91.3	40.7	91.2	41.8	91.1	42.3	91.0	42.8	90.8	43.9
	-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	-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	101.1	31.1	100.8	32.7	100.5	34.2	100.4	35.0	100.2	35.8	99.9	37.4	-13.7	-15.0	99.2	41.1	99.0	42.1	98.8	43.1	98.7	43.6	98.6	44.1	98.5	44.8
	-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	39.3	-11.8	-13.0	103.7	41.9	103.5	42.9	103.3	43.8	103.2	44.3	103.2	44.7	103.2	45.2
	-9.8	-11.0	110	33.6	110	35.0	110	36.4	110	37.1	110	37.9	109	39.3	-9.8	-11.0	109	42.7	108	43.6	108	44.5	108	45.2	107.2	41.7	107.2	38.4
	-9.5	-10.0	113	34.2	113	35.6	112	37.0	112	37.7	112	38.4	112	39.8	-9.5	-10.0	111	43.1	111	44.0	109	43.8	106	42.2	102.2	40.6	95.2	37.3
	-8.5	-9.1	115	34.7	115	36.1	115	37.4	115	38.1	115	38.8	114	40.2	-8.5	-9.1	114	43.5	113	44.3	109	43.9	106	41.1	102.2	39.5	95.2	36.3
	-7.0	-7.6	120	35.6	119	36.9	119	38.2	119	38.9	119	39.6	118	40.9	-7.0	-												

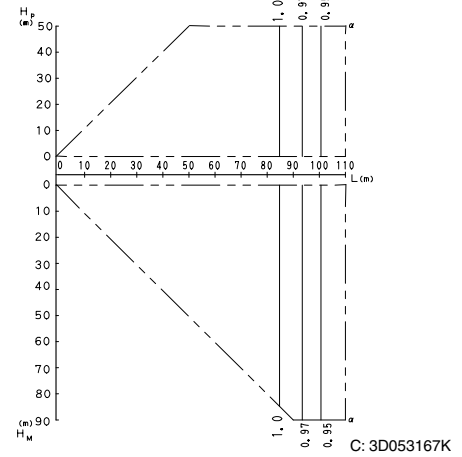
### 5.3 Capacity Correction Factor (RXYQ-P(A)H)

**RXYQ16PAHY1**  
**RXYQ16PAHYL**  
**RXYQ16PHTL**

1. Rate of change in cooling capacity



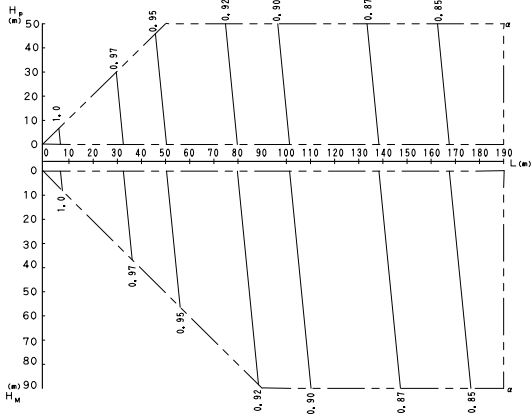
2. Rate of change in heating capacity



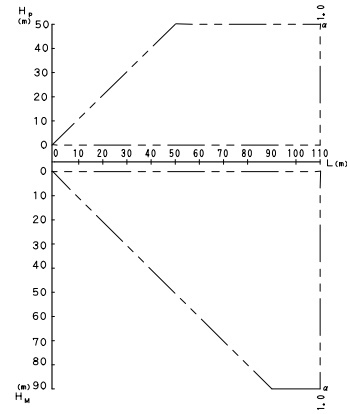
C: 3D053167K

**RXYQ24/36PAHY1**  
**RXYQ24/36PAHYL**  
**RXYQ24/36PHTL**

1. Rate of change in cooling capacity



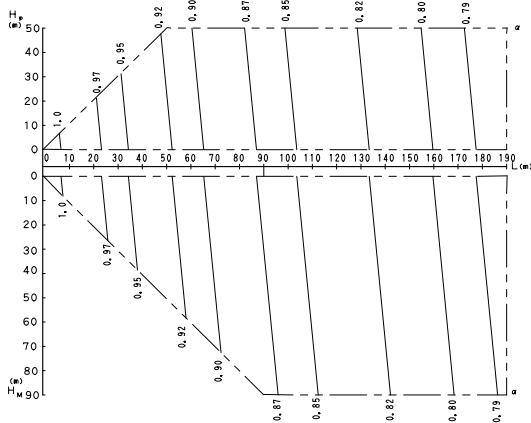
2. Rate of change in heating capacity



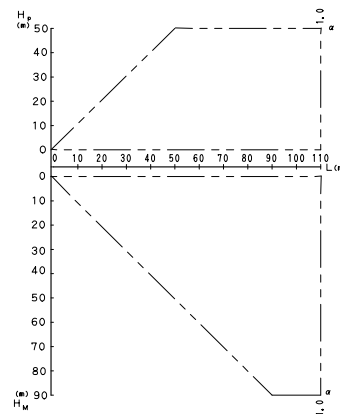
C: 3D053166J

**RXYQ18/26/28/30/38/40/42/44PAHY1**  
**RXYQ18/26/28/30/38/40/42/44PAHYL**  
**RXYQ18/26/28/30/38/40/42/44PHTL**

1. Rate of change in cooling capacity



2. Rate of change in heating capacity

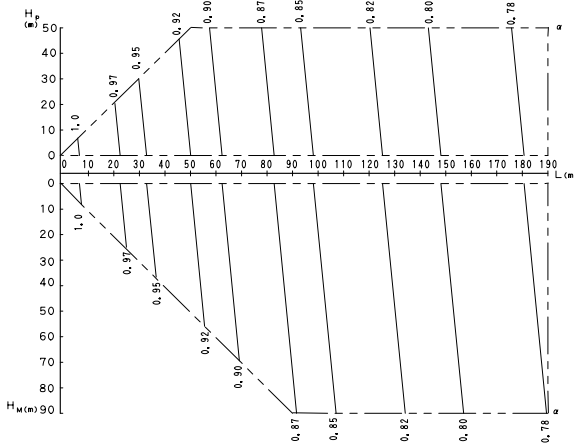


C: 3D053168G

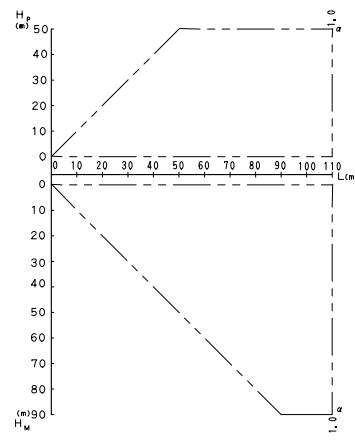


**RXYQ32/34PAHY1**  
**RXYQ32/34PAHYL**  
**RXYQ32/34PHTL**

1. Rate of change in cooling capacity



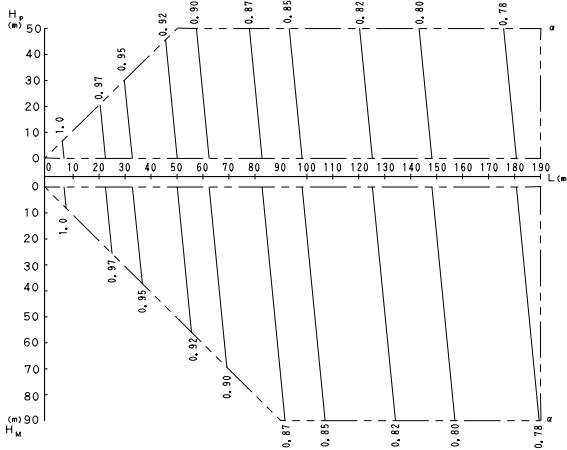
2. Rate of change in heating capacity



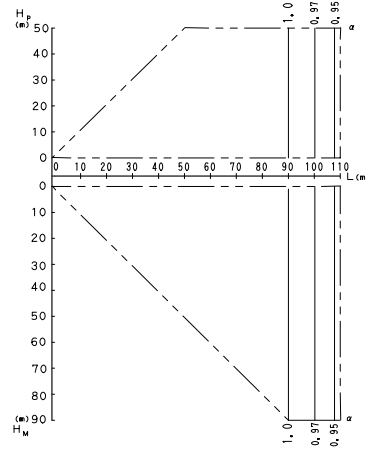
C: 3D053170G

**RXYQ46PAHY1**  
**RXYQ46PAHYL**  
**RXYQ46PHTL**

1. Rate of change in cooling capacity



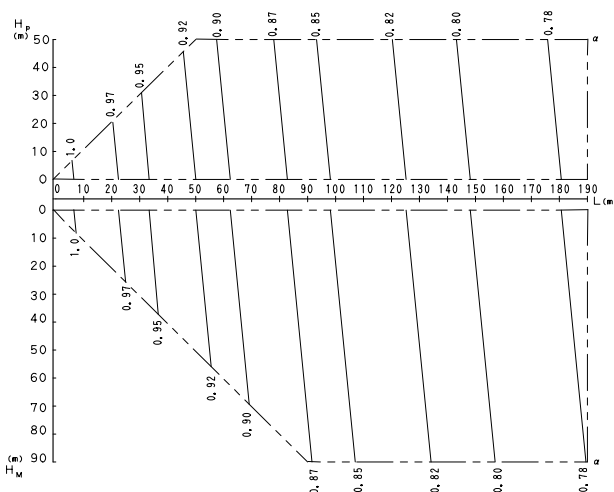
2. Rate of change in heating capacity



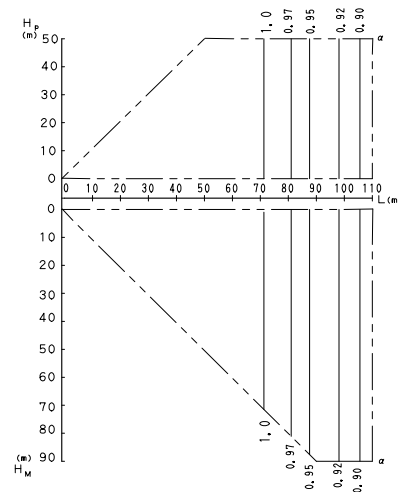
C: 3D053171G

**RXYQ48PAHY1**  
**RXYQ48PAHYL**  
**RXYQ48PHTL**

1. Rate of change in cooling capacity



2. Rate of change in heating capacity

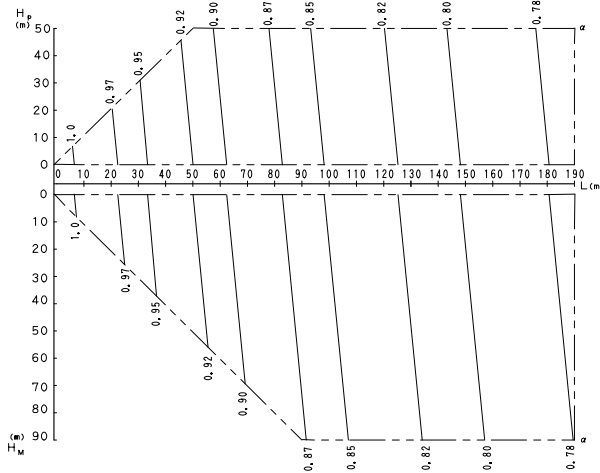


C: 3D053172G

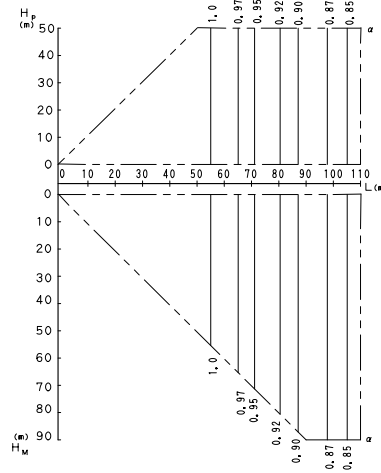
**RXYQ50PAHY1**  
**RXYQ50PAHYL**  
**RXYQ50PHTL**

AD/BOM  
 第三角投影法  
 3RD ANGLE PROJECTION

1. Rate of change in cooling capacity



2. Rate of change in heating capacity



C: 3D053173E

[Explanation of symbols]

H<sub>P</sub> : Level difference (m) between indoor and outdoor units where indoor unit in inferior position

H<sub>M</sub> : 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]

- 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.
- With this outdoor unit, evaporating pressure constant control when cooling, and condensing pressure constant control when heating is carried out.
- 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 below, whichever smaller.

Calculating A/C capacity of outdoor units

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

$$\text{Maximum A/C capacity of outdoor units} = \left[ \frac{\text{A/C capacity of outdoor units obtained from capacity characteristic table at the 100\% combination}}{\text{Capacity change rate due to piping length to the farthest indoor unit}} \right]$$

• Condition: Indoor unit combination ratio exceeds 100%.

$$\text{Maximum A/C capacity of outdoor units} = \left[ \frac{\text{A/C capacity of outdoor units obtained from capacity characteristic table at the combination}}{\text{Capacity change rate due to piping length to the farthest indoor unit}} \right]$$

- 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
RXYQ50PAHY1, PAHYL, PHTL	Not Increased	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

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

(Unit: mm)

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

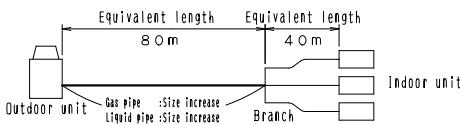
5. Read cooling / heating capacity rate of change in the above figures based on the following equivalent length.

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

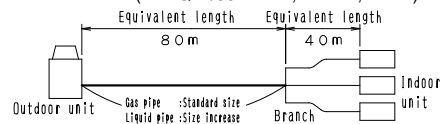
(Example) RXYQ16PAHY1, PAHYL, PHTL



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	0.5
Heating (liquid pipe)	1.0	0.4

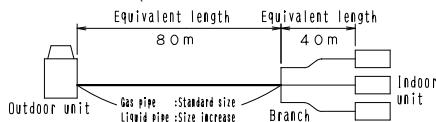
(Example) RXYQ24PAHY1, PAHYL, PHTL (RXYQ24/36PAHY1, PAHYL, PHTL)



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

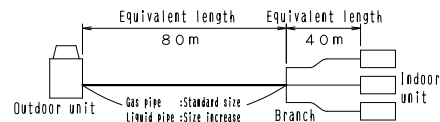
(Example) RXYQ38PAHY1, PAHYL, PHTL (RXYQ18/26/28/30/38/40/42/44PAHY1, PAHYL, PHTL)



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

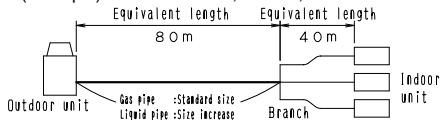
(Example) RXYQ32PAHY1, PAHYL, PHTL (RXYQ32/34PAHY1, PAHYL, PHTL)



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

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

(Example) RXYQ46PAHY1, PAHYL, PHTL



In the above case

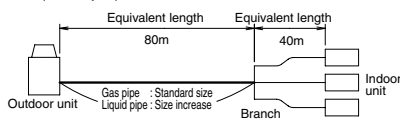
(Cooling) Overall equivalent length=80m×1.0+40m=120m  
 (Heating) Overall equivalent length=80m×0.4+40m=72m

The rate 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	0.4
Heating (liquid pipe)	1.0	0.4

(Example) RXYQ48PAHY1, PAHYL, PHTL



In the above case

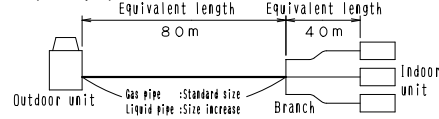
(Cooling) Overall equivalent length=80m×1.0+40m=120m  
 (Heating) Overall equivalent length=80m×0.4+40m=72m

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	0.4
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 rate 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

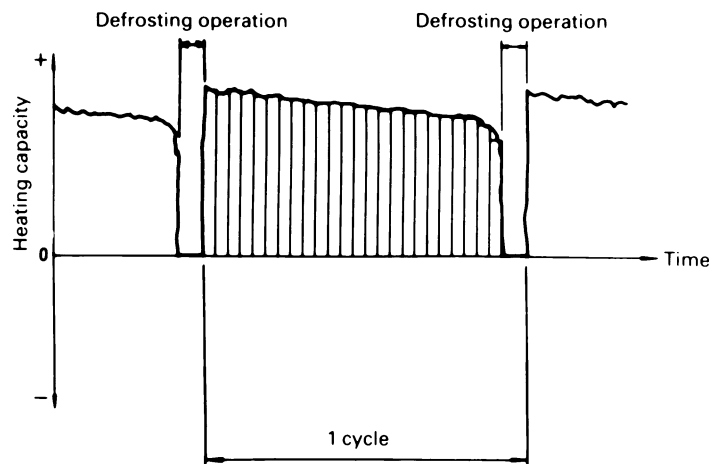
Value given in table of capacity characteristics = B

Integrating correction factor for frost accumulation = C

$A=B \times C$

- 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.

## 6. Sound Levels

### 6.1 50Hz

#### Overall

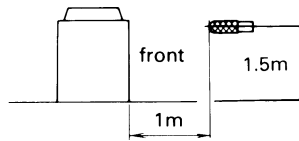
dB(A)		dB(A)		dB(A)	
Power Supply Model	Y1: 380-415V, 50Hz	Power Supply Model	Y1: 380-415V, 50Hz	Power Supply Model	Y1: 380-415V, 50Hz
RXYQ16PAHY1	60	RXYQ32PAHY1	64	RXYQ42PAHY1	66
RXYQ18PAHY1	61	RXYQ34PAHY1	64	RXYQ44PAHY1	65
RXYQ24PAHY1	62	RXYQ36PAHY1	65	RXYQ46PAHY1	66
RXYQ26PAHY1	62	RXYQ38PAHY1	65	RXYQ48PAHY1	65
RXYQ28PAHY1	63	RXYQ40PAHY1	65	RXYQ50PAHY1	66
RXYQ30PAHY1	63				

**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 359 concerning about the Band level of each module.

## 6.2 60Hz

### Overall

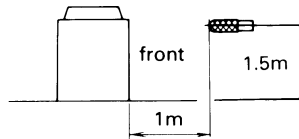
dB(A)		dB(A)		dB(A)	
Power Supply Model	YL: 380V, 60Hz TL: 220V, 60Hz	Power Supply Model	YL: 380V, 60Hz TL: 220V, 60Hz	Power Supply Model	YL: 380V, 60Hz TL: 220V, 60Hz
RXYQ16PAHYL, PHTL	60	RXYQ32PAHYL, PHTL	64	RXYQ42PAHYL, PHTL	66
RXYQ18PAHYL, PHTL	61	RXYQ34PAHYL, PHTL	64	RXYQ44PAHYL, PHTL	65
RXYQ24PAHYL, PHTL	62	RXYQ36PAHYL, PHTL	65	RXYQ46PAHYL, PHTL	66
RXYQ26PAHYL, PHTL	62	RXYQ38PAHYL, PHTL	65	RXYQ48PAHYL, PHTL	65
RXYQ28PAHYL, PHTL	63	RXYQ40PAHYL, PHTL	65	RXYQ50PAHYL, PHTL	66
RXYQ30PAHYL, PHTL	63				

**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 360 concerning about the Band level of each module.

# 7. Accessories

## 7.1 Optional Accessories

### RXYQ16/18PAHY1(E), PAHYL(E), PHTL(E)

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	
	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	KWC26C280x2	★KWC26C280E×2	
Digital Pressure Gauge Kit	BHGP26A1	★BHGP26A1E	

C: 3D053053D

### RXYQ24/26/28/30PAHY1(E), PAHYL(E), PHTL(E)

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			
	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			
	Pipe size reducer	KHRP26M73TP, KHRP26M73HP			
Outdoor unit multi connection piping kit		BHFP22P151			
Central drain pan kit	KWC26C280x3	★KWC26C280E×3	KWC26C280x2 KWC26C450	★KWC26C280E×2 ★KWC26C450E	
Digital Pressure Gauge Kit	BHGP26A1	★BHGP26A1E	BHGP26A1	★BHGP26A1E	

C: 3D053053D

### RXYQ32/34/36/38/40/42/44/46/48/50PAHY1(E), PAHYL(E), PHTL(E)

Optional accessories		RXYQ32PAHY1, PAHYL, PHTL RXYQ34PAHY1, PAHYL, PHTL	RXYQ32PAHY1E, PAHYLE, PHTLE RXYQ34PAHY1E, PAHYLE, PHTLE	RXYQ36PAHY1, PAHYL, PHTL RXYQ38PAHY1, PAHYL, PHTL RXYQ40PAHY1, PAHYL, PHTL RXYQ42PAHY1, PAHYL, PHTL RXYQ44PAHY1, PAHYL, PHTL RXYQ46PAHY1, PAHYL, PHTL RXYQ48PAHY1, PAHYL, PHTL RXYQ50PAHY1, PAHYL, PHTL	RXYQ36PAHY1E, PAHYLE, PHTLE RXYQ38PAHY1E, PAHYLE, PHTLE RXYQ40PAHY1E, PAHYLE, PHTLE RXYQ42PAHY1E, PAHYLE, PHTLE RXYQ44PAHY1E, PAHYLE, PHTLE RXYQ46PAHY1E, PAHYLE, PHTLE RXYQ48PAHY1E, PAHYLE, PHTLE RXYQ50PAHY1E, PAHYLE, PHTLE
Cool/Heat Selector		KRC19-26A			
Cool/Heat Selector	Fixing box	KJB111A			
	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			
	Pipe size reducer	KHRP26M73TP, KHRP26M73HP			
Outdoor unit multi connection piping kit		BHFP22P151			
Central drain pan kit	KWC26C280 KWC26C450x2	★KWC26C280E ★KWC26C450E×2	KWC26C450x3	★KWC26C450E×3	
Digital Pressure Gauge Kit	BHGP26A1	★BHGP26A1E	BHGP26A1	★BHGP26A1E	

C: 3D053053D

**Note:**

★: Made-to-order products



# Part 6

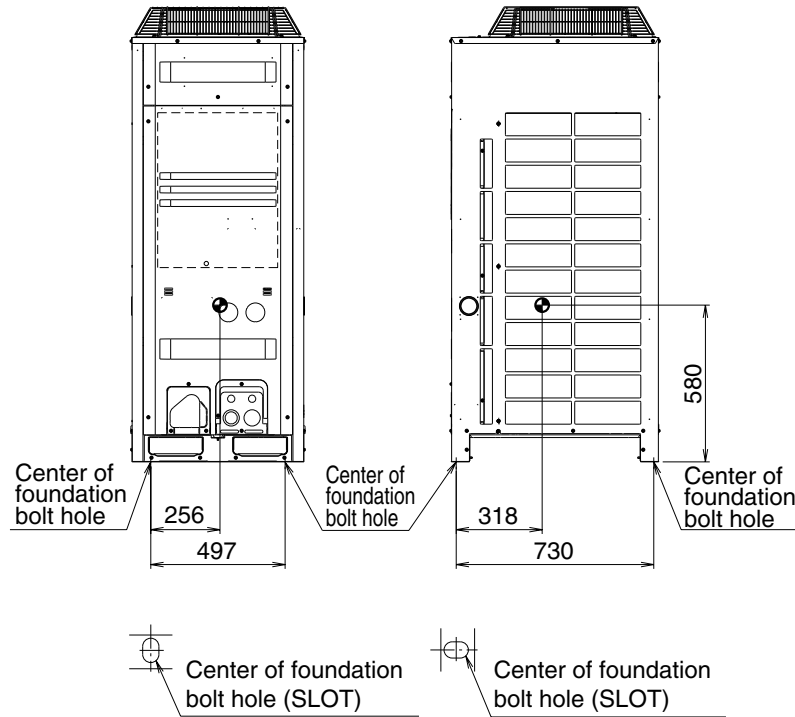
## Installation of Outdoor Units

1. Centre of Gravity .....	432
2. Installation Manual .....	436
2.1 RXYQ-PAY1 .....	436
2.2 RXYQ-PAYL, PTL .....	457
3. REFNET Pipe System.....	478
3.1 Layout Example.....	478
3.2 Max. Refrigerant Piping Length.....	479
3.3 Field Refrigerant Piping.....	480
3.4 REFNET Joints and Headers .....	481
4. REFNET Joint and Header .....	483
4.1 REFNET Joint (Branch Kit) .....	483
4.2 REFNET Header (Branch Kit) .....	486
4.3 Reducer.....	489
4.4 Outdoor Unit Multi Connection Piping Kit.....	490
4.5 Outdoor Unit Multi Connection Piping Point.....	496
4.6 The Example of a Wrong Pattern .....	497
5. Field Setting .....	498
5.1 RXYQ5-18PAY1, PAYL.....	498
5.2 RXYQ5-18PTL .....	504

# 1. Centre of Gravity

RXYQ5PAY1  
RXYQ5PAYL  
RXYQ5PTL

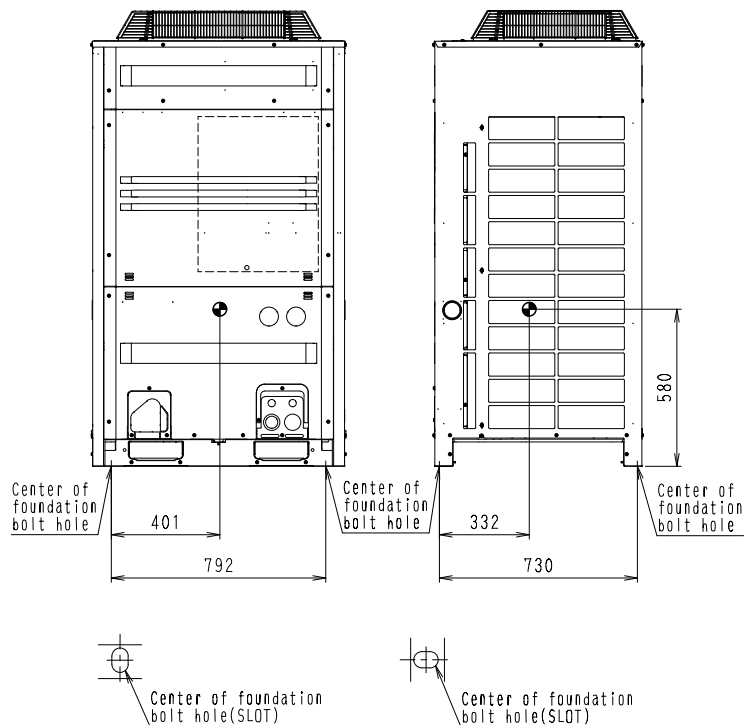
Unit (mm)



4D052145D

RXYQ8PAY1  
RXYQ8PAYL  
RXYQ8PTL

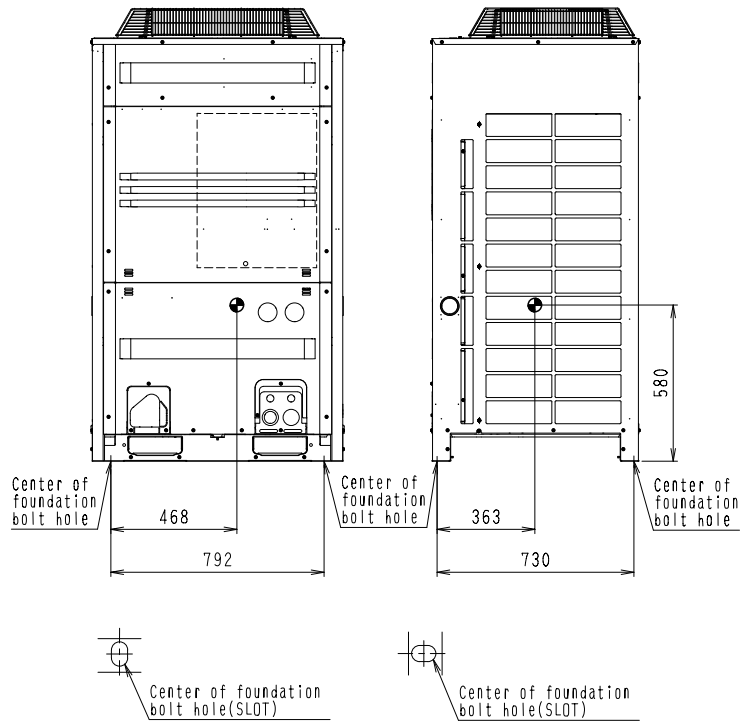
Unit (mm)



4D052146L

RXYQ10PAY1  
RXYQ10PAYL  
RXYQ10PTL

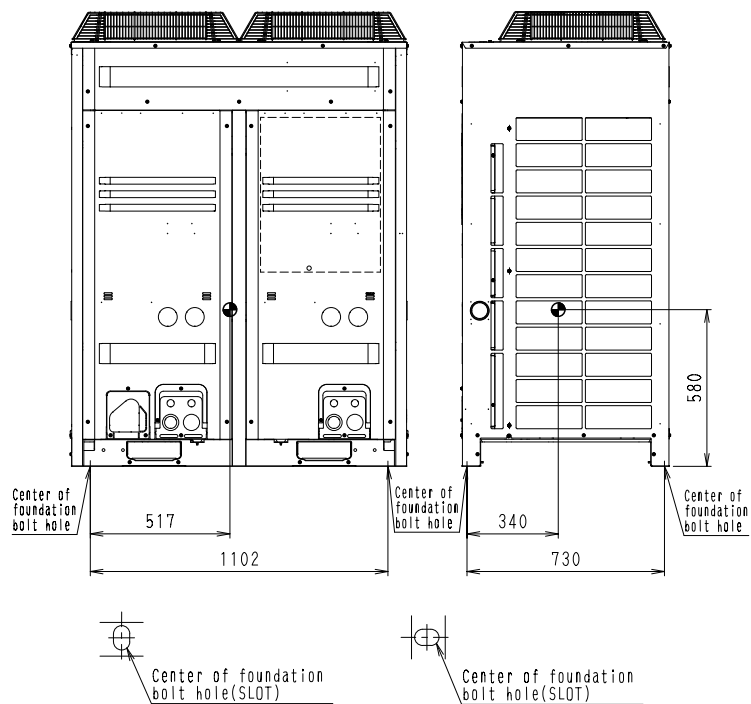
Unit (mm)



4D052147J

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RXYQ12PAYL  
RXYQ12PTL

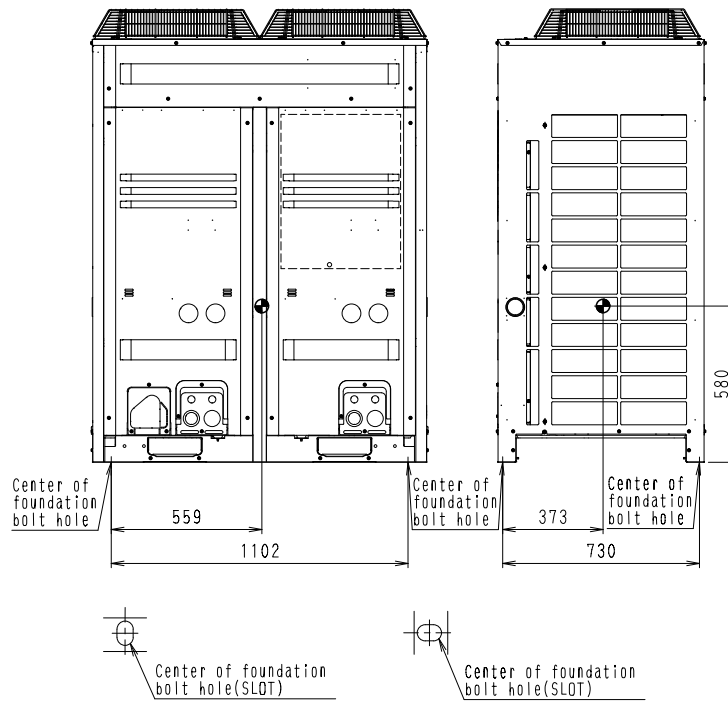
Unit (mm)



4D052148L

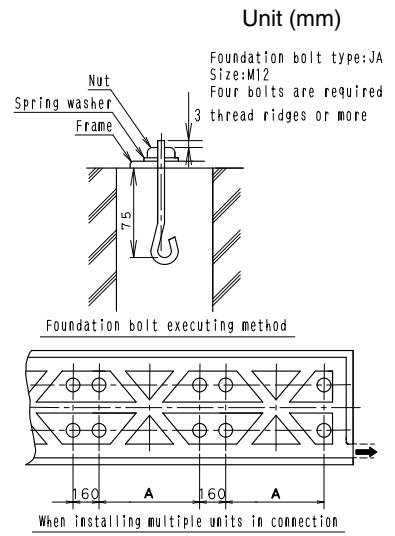
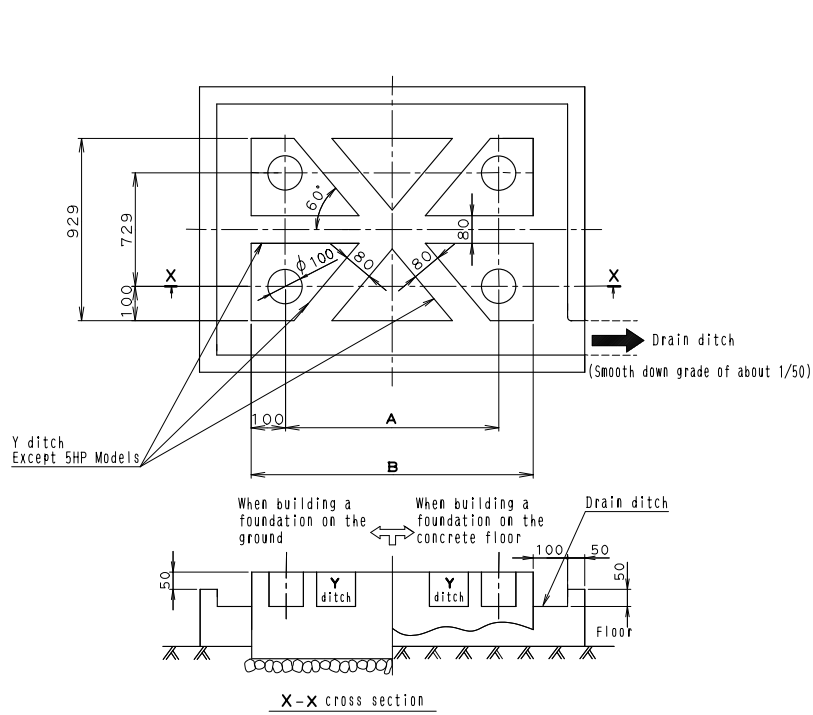
RXYQ14/16/18PAY1  
RXYQ14/16/18PAYL  
RXYQ14/16/18PTL

Unit (mm)



4D052572J

Foundation of Units



(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 Models.

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: 3D065400C

## 2. Installation Manual

### 2.1 RXYQ-PAY1

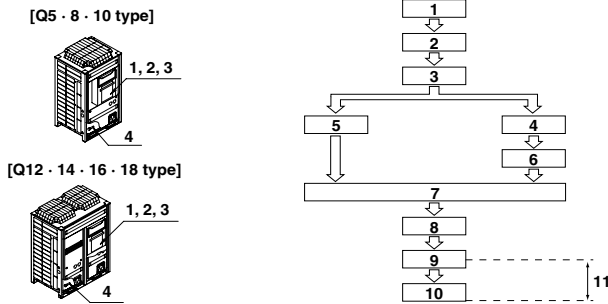


figure 1

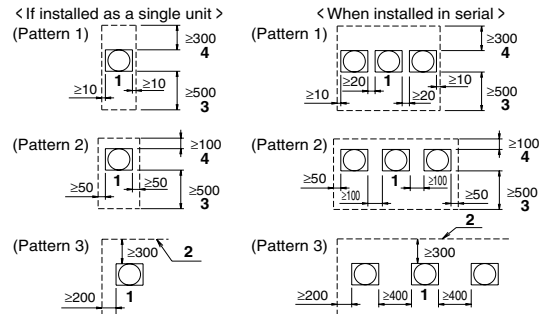


figure 2

figure 3

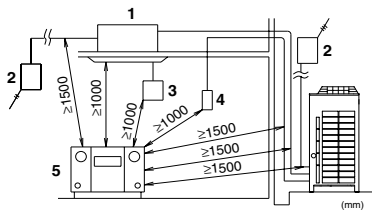


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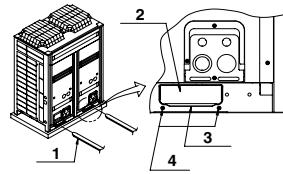


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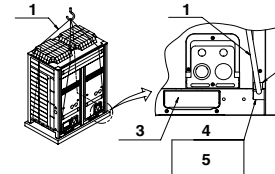


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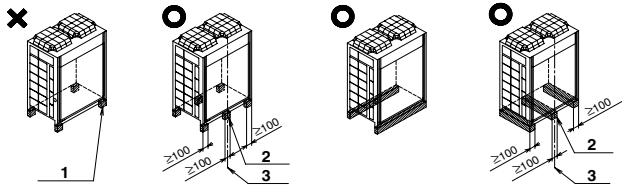


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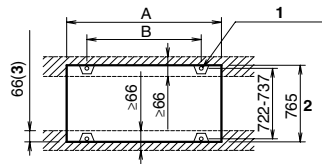


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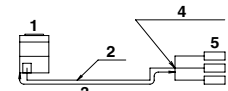


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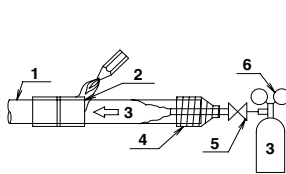


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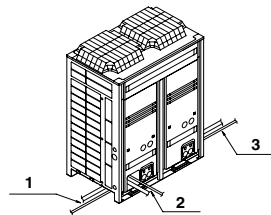


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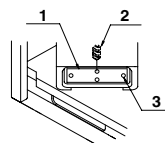


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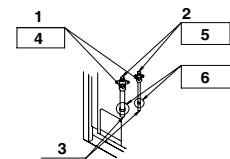


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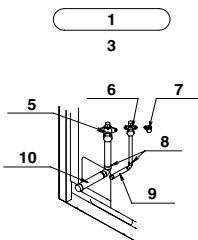


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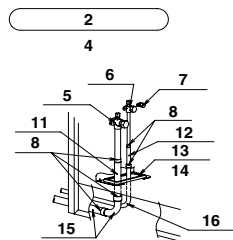


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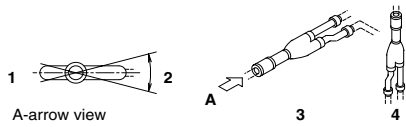


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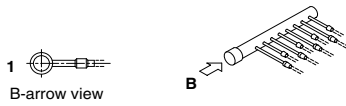


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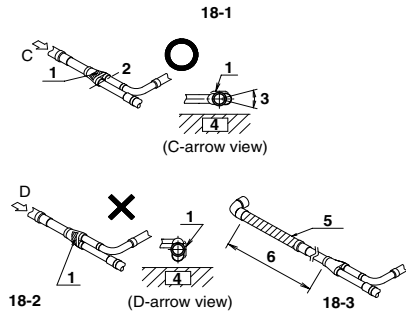


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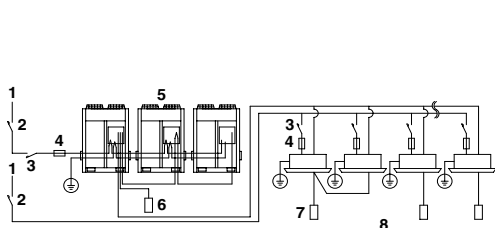


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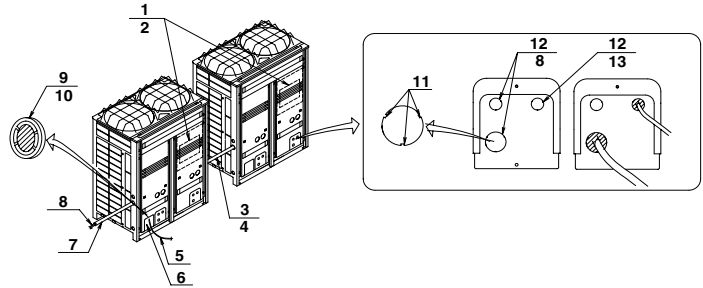


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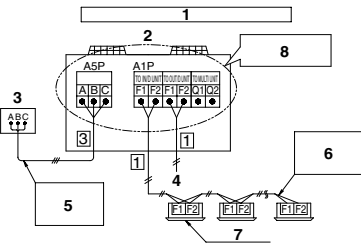


figure 21

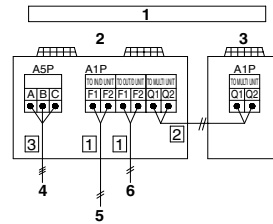


figure 22

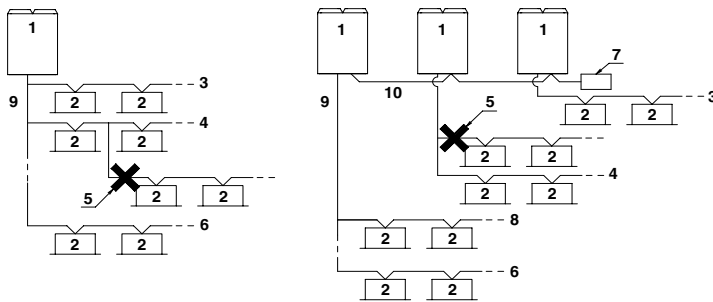


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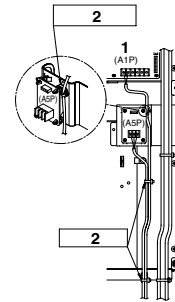


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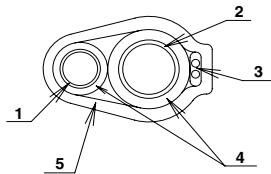


figure 25

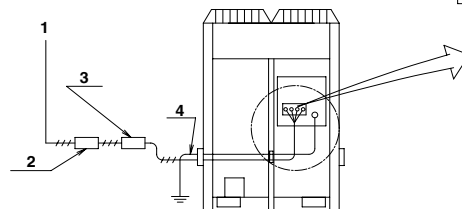
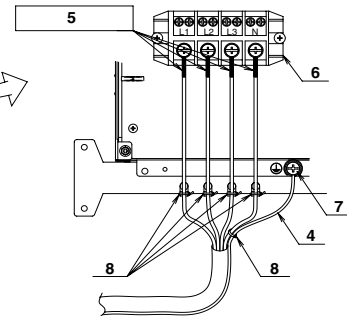


figure 26



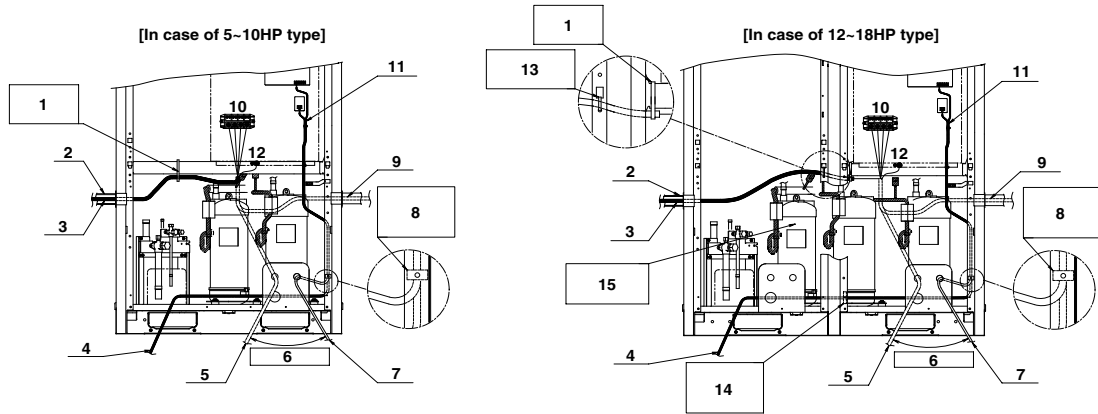


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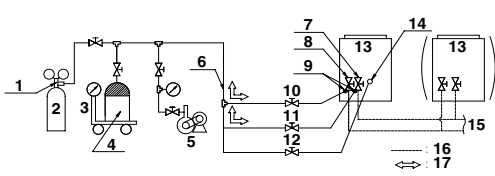


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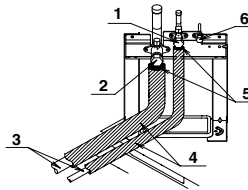


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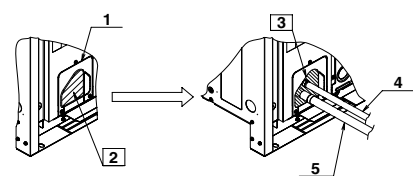


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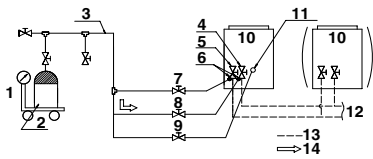


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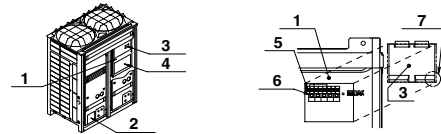


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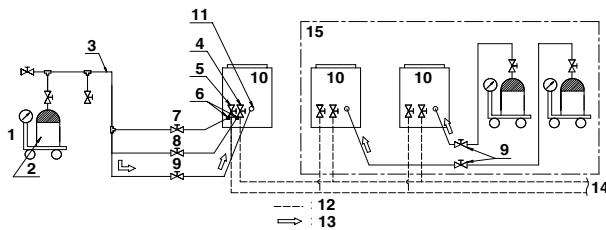


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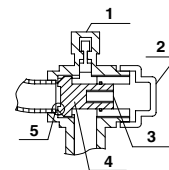


figure 34

3P226891-2G





RXYQ5PAY1(E) · PAY6(E) RXYQ16PAY1(E) · PAY6(E) RXYQ26PAY1(E) · PAY6(E) RXYQ36PAY1(E) · PAY6(E) RXYQ46PAY1(E) · PAY6(E)  
 RXYQ6PAY1(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 Installation  
 air conditioner 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.

- 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 learn 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.

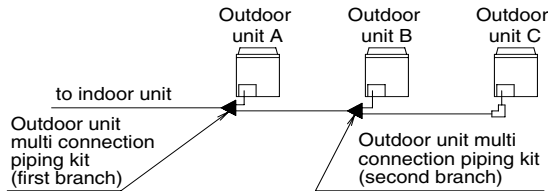
<Outdoor unit>	<Total capacity of indoor units>	<Total quantity of indoor units>
RXYQ5PAY1(E) · PAY6(E) .....	62.5 ~250	12 units
RXYQ8PAY1(E) · PAY6(E) .....	100 ~400	20 units
RXYQ10PAY1(E) · PAY6(E) .....	125 ~500	25 units
RXYQ12PAY1(E) · PAY6(E) .....	150 ~600	30 units
RXYQ14PAY1(E) · PAY6(E) .....	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) + RXYQ16PAY1(E) · PAY6(E)
RXYQ40PAY1(E) · PAY6(E)	RXYQ8PAY1(E) · PAY6(E)+ RXYQ16PAY1(E) · PAY6(E) + RXYQ18PAY1(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.	<ul style="list-style-type: none"> <li>• Operation manual</li> <li>• Installation manual</li> <li>• Declaration of conformity (PED) (RXYQ-PAY1 only)</li> <li>• "REQUEST FOR THE INDICATION" label (Installation records)</li> </ul>
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
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**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**

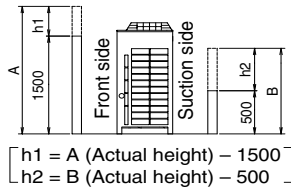
- The installation space requirement shown in figure 3 is a reference for cooling operation when the outdoor temperature is 35°C. If the design outdoor temperature exceeds 35°C or the heat load exceeds maximum capacity in all the outdoor unit, take an even large space on the intake shown in figure 3.
- 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.



**Note**

- 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
- 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.
- 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).
- 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:
  - Fragile, handle the unit with care.
  - Keep the unit upright in order to avoid compressor damage.
  - Decide on the transportation route.
  - 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)
  - 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.
- After installation, remove the transportation protector by pushing the hook attached to the large openings. (Refer to figure 6)
  - (Refer to figure 5)
  - 1. Fork
  - 2. Hole (large)
  - 3. Transportation protector (yellow)
  - 4. Hook of transportation protector

**(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**

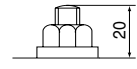
Apply a filler cloth on a fork to prevent coating of the bottom frame from coming off and rust from occurring when bringing in the unit with anti-corrosion treatment type using a forklift.

**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)**

- 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.
- It is need in the case of 8HP type or more
- Center of the product



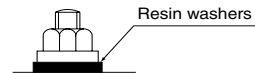
**(Refer to figure 8)**

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
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
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	
Indoor	Regardless of the period	Pinch or tape the pipe

### 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)
  - Refrigerant pipe
  - Location to be brazed
  - Nitrogen
  - Taping
  - Handy valve
  - Regulator
- The pressure regulator for the nitrogen released when doing the brazing should be set to 0.02 MPa (about 0.2kg/cm<sup>2</sup>; 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. Derecton 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)

- Left-side connection
- Front connection
- 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)

- Knock hole
- Drill
- 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)

- Shutoff valve (liquid side · gas side)
- Service port
- Pinch piping
- Procedure 1:  
Confirm the shutoff valve is closed.
- 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.
- 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

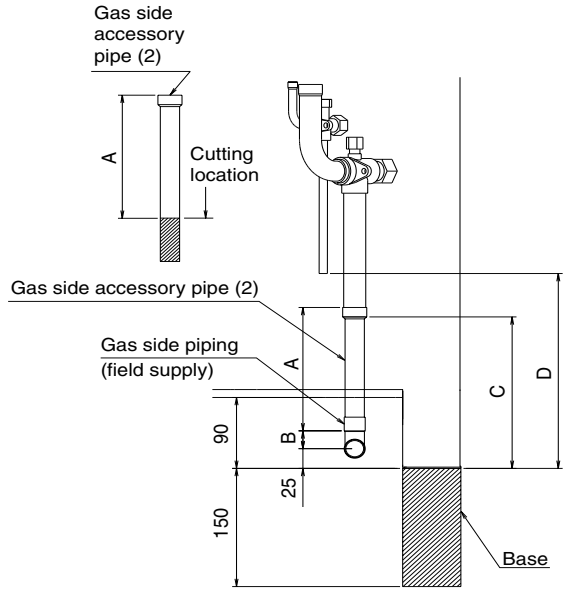
<In case of single system: 5-18HP type>

(Refer to figure 14)

- If connected to the front
- When connected at lateral side (bottom)
- Remove the shutoff valve cover to connect.
- Remove the knock hole on the bottom frame and route the piping under the bottom frame.
- Gas side shutoff valve
- Liquid side shutoff valve
- Refrigerant charge port
- Brazing
- Liquid side accessory pipe (1)
- Gas side accessory pipe (1)
- Gas side accessory pipe (2)
- Liquid side accessory pipe (2)
- Knockout hole
- Punch the knock hole.
- Gas side piping (field supply)
- 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.



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.

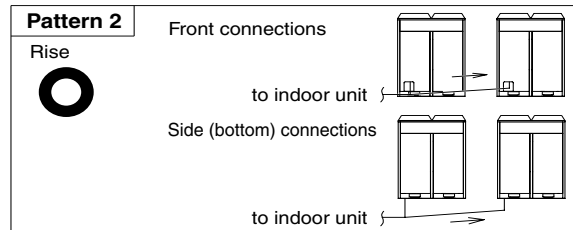
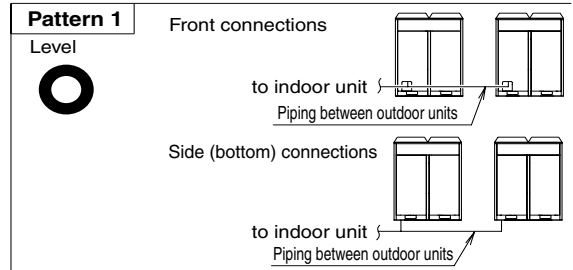
**<Multi Systems>**

- 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.

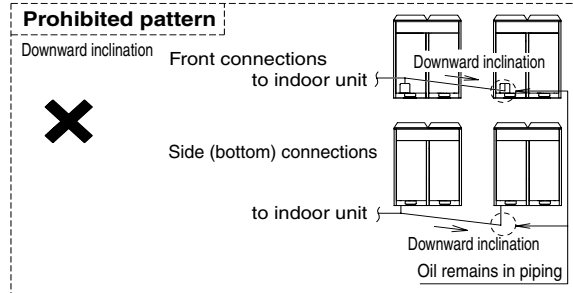
**4. Precautions when connecting piping between outdoor units (In case of multi system)**

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 and in "5. Branching the refrigerant piping", always referring to the kit's installation manual.

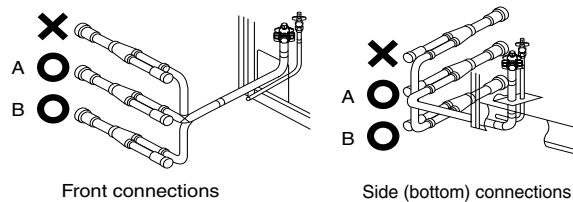
(1) The piping between outdoor units must be installed level (Pattern 1) or with a rise (Pattern 2). Otherwise oil may pool in the pipes.

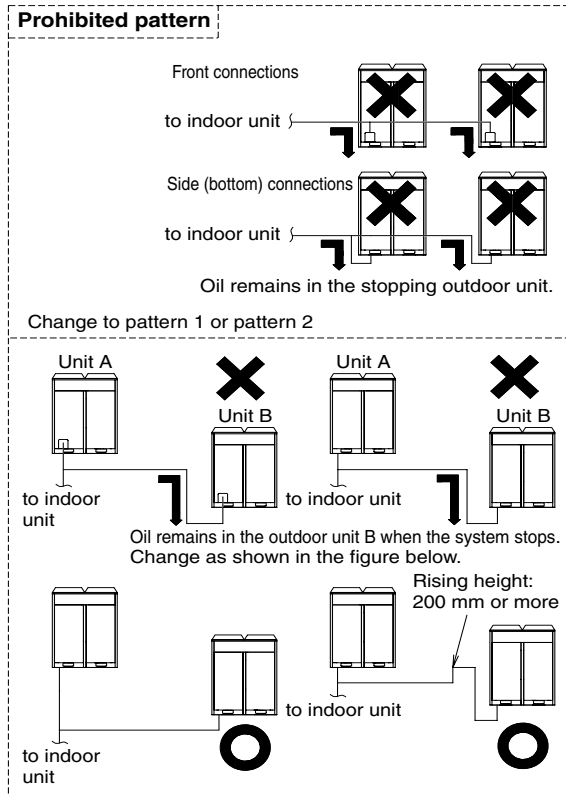


Change to pattern 1 or pattern 2

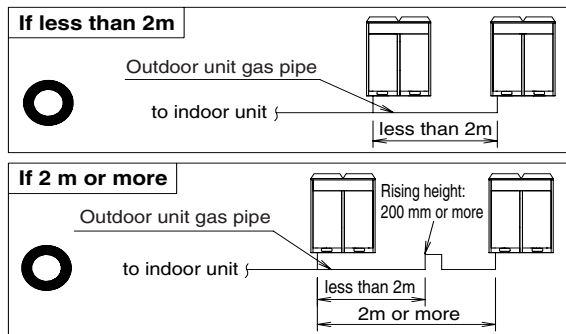


(2) To avoid the risk of oil detention in the stopping unit, always connect the shutoff valve and the piping between outdoor units as shown in the figure A or figure B.





(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 straight 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

6-5 Example of connection

**Example of connection**  
(Connection of 8 indoor units)

(+1) " ← " indicate the Outdoor unit multi connection piping kit

(+2) In case of multi outdoor system, refered to the first Outdoor unit multi connection piping kit as seen from the indoor unit.

	Example refrigerant branch using REFINET joint	Example refrigerant branch using REFINET joint and REFINET header	Example refrigerant branch using REFINET header																																																																																																																				
Single outdoor system																																																																																																																							
Multi outdoor system																																																																																																																							
Maximum and minimum pipe length	<p>Between outdoor (+2) and indoor units</p> <p>Example unit (B) : a + b + h ≤ 165m, unit (G) : a + i + k ≤ 165m</p> <p>Equivalent pipe length</p> <p>Total pipe length from outdoor unit (+2) to all indoor units ≤ 190m (assume equivalent pipe length of REFINET joint to be 1m, calculation purposes) (See Note 1 - Next page)</p>	<p>Between outdoor unit and Outdoor unit multi connection piping kit (Only for multi system)</p> <p>Between outdoor and indoor units</p> <p>Between indoor and indoor units</p> <p>Between outdoor and outdoor units</p> <p>Allowable height length</p> <p>Between indoor and outdoor units</p> <p>Between outdoor and outdoor units</p> <p>Allowable length after the branch</p>	<p>Example unit (B) : a + i + k ≤ 165m</p> <p>Example unit (G) : a + i + k ≤ 165m</p> <p>Example unit (H) : a + i + k ≤ 165m</p> <p>Example unit (I) : a + i + k ≤ 165m</p> <p>Example unit (J) : a + i + k ≤ 165m</p> <p>Example unit (K) : a + i + k ≤ 165m</p> <p>Example unit (L) : a + i + k ≤ 165m</p> <p>Example unit (M) : a + i + k ≤ 165m</p> <p>Example unit (N) : a + i + k ≤ 165m</p> <p>Example unit (O) : a + i + k ≤ 165m</p> <p>Example unit (P) : a + i + k ≤ 165m</p> <p>Example unit (Q) : a + i + k ≤ 165m</p> <p>Example unit (R) : a + i + k ≤ 165m</p> <p>Example unit (S) : a + i + k ≤ 165m</p> <p>Example unit (T) : a + i + k ≤ 165m</p> <p>Example unit (U) : a + i + k ≤ 165m</p> <p>Example unit (V) : a + i + k ≤ 165m</p> <p>Example unit (W) : a + i + k ≤ 165m</p> <p>Example unit (X) : a + i + k ≤ 165m</p> <p>Example unit (Y) : a + i + k ≤ 165m</p> <p>Example unit (Z) : a + i + k ≤ 165m</p>																																																																																																																				
Allowable height length	<p>Actual pipe length between outdoor (+2) and indoor units ≤ 165m</p> <p>Example unit (B) : a + b + h ≤ 165m, unit (G) : a + i + k ≤ 165m</p> <p>Example unit (H) : a + i + k ≤ 165m</p> <p>Example unit (I) : a + i + k ≤ 165m</p> <p>Example unit (J) : a + i + k ≤ 165m</p> <p>Example unit (K) : a + i + k ≤ 165m</p> <p>Example unit (L) : a + i + k ≤ 165m</p> <p>Example unit (M) : a + i + k ≤ 165m</p> <p>Example unit (N) : a + i + k ≤ 165m</p> <p>Example unit (O) : a + i + k ≤ 165m</p> <p>Example unit (P) : a + i + k ≤ 165m</p> <p>Example unit (Q) : a + i + k ≤ 165m</p> <p>Example unit (R) : a + i + k ≤ 165m</p> <p>Example unit (S) : a + i + k ≤ 165m</p> <p>Example unit (T) : a + i + k ≤ 165m</p> <p>Example unit (U) : a + i + k ≤ 165m</p> <p>Example unit (V) : a + i + k ≤ 165m</p> <p>Example unit (W) : a + i + k ≤ 165m</p> <p>Example unit (X) : a + i + k ≤ 165m</p> <p>Example unit (Y) : a + i + k ≤ 165m</p> <p>Example unit (Z) : a + i + k ≤ 165m</p>	<p>Actual pipe length between outdoor (+2) and indoor units ≤ 165m</p> <p>Example unit (B) : a + b + h ≤ 165m, unit (G) : a + i + k ≤ 165m</p> <p>Example unit (H) : a + i + k ≤ 165m</p> <p>Example unit (I) : a + i + k ≤ 165m</p> <p>Example unit (J) : a + i + k ≤ 165m</p> <p>Example unit (K) : a + i + k ≤ 165m</p> <p>Example unit (L) : a + i + k ≤ 165m</p> <p>Example unit (M) : a + i + k ≤ 165m</p> <p>Example unit (N) : a + i + k ≤ 165m</p> <p>Example unit (O) : a + i + k ≤ 165m</p> <p>Example unit (P) : a + i + k ≤ 165m</p> <p>Example unit (Q) : a + i + k ≤ 165m</p> <p>Example unit (R) : a + i + k ≤ 165m</p> <p>Example unit (S) : a + i + k ≤ 165m</p> <p>Example unit (T) : a + i + k ≤ 165m</p> <p>Example unit (U) : a + i + k ≤ 165m</p> <p>Example unit (V) : a + i + k ≤ 165m</p> <p>Example unit (W) : a + i + k ≤ 165m</p> <p>Example unit (X) : a + i + k ≤ 165m</p> <p>Example unit (Y) : a + i + k ≤ 165m</p> <p>Example unit (Z) : a + i + k ≤ 165m</p>	<p>Actual pipe length between outdoor (+2) and indoor units ≤ 165m</p> <p>Example unit (B) : a + b + h ≤ 165m, unit (G) : a + i + k ≤ 165m</p> <p>Example unit (H) : a + i + k ≤ 165m</p> <p>Example unit (I) : a + i + k ≤ 165m</p> <p>Example unit (J) : a + i + k ≤ 165m</p> <p>Example unit (K) : a + i + k ≤ 165m</p> <p>Example unit (L) : a + i + k ≤ 165m</p> <p>Example unit (M) : a + i + k ≤ 165m</p> <p>Example unit (N) : a + i + k ≤ 165m</p> <p>Example unit (O) : a + i + k ≤ 165m</p> <p>Example unit (P) : a + i + k ≤ 165m</p> <p>Example unit (Q) : a + i + k ≤ 165m</p> <p>Example unit (R) : a + i + k ≤ 165m</p> <p>Example unit (S) : a + i + k ≤ 165m</p> <p>Example unit (T) : a + i + k ≤ 165m</p> <p>Example unit (U) : a + i + k ≤ 165m</p> <p>Example unit (V) : a + i + k ≤ 165m</p> <p>Example unit (W) : a + i + k ≤ 165m</p> <p>Example unit (X) : a + i + k ≤ 165m</p> <p>Example unit (Y) : a + i + k ≤ 165m</p> <p>Example unit (Z) : a + i + k ≤ 165m</p>																																																																																																																				
Refrigerant branch kit selection	<p>Refrigerant branch kit can only be used with H4TUA.</p> <ul style="list-style-type: none"> <li>When multi outdoor system are installed, be sure to use the special separately sold Outdoor unit multi connection piping kit.</li> <li>The table at right shows how to select the proper kit.</li> </ul>	<p>How to select the REFINET joint</p> <ul style="list-style-type: none"> <li>When using REFINET 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: REFINET joint A)</li> </ul> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Outdoor unit capacity type</th> <th>Refrigerant branch kit name</th> </tr> </thead> <tbody> <tr> <td>5HP type</td> <td>KHRP26A22T</td> </tr> <tr> <td>8, 10HP type</td> <td>KHRP26A33T</td> </tr> <tr> <td>12-22HP type</td> <td>KHRP26A72T</td> </tr> <tr> <td>24HP type</td> <td>KHRP26A73T + KHRP26M73TP</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>Choose the REFINET 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 REFINET joint.</li> </ul> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Indoor unit total capacity index</th> <th>Refrigerant branch kit name</th> </tr> </thead> <tbody> <tr> <td>&lt; 230</td> <td>KHRP26A22T</td> </tr> <tr> <td>200 ≤ x &lt; 230</td> <td>KHRP26A33T</td> </tr> <tr> <td>230 ≤ x &lt; 640</td> <td>KHRP26A72T</td> </tr> <tr> <td>640 ≤</td> <td>KHRP26A73T + KHRP26M73TP</td> </tr> </tbody> </table>	Outdoor unit capacity type	Refrigerant branch kit name	5HP type	KHRP26A22T	8, 10HP type	KHRP26A33T	12-22HP type	KHRP26A72T	24HP type	KHRP26A73T + KHRP26M73TP	Indoor unit total capacity index	Refrigerant branch kit name	< 230	KHRP26A22T	200 ≤ x < 230	KHRP26A33T	230 ≤ x < 640	KHRP26A72T	640 ≤	KHRP26A73T + KHRP26M73TP	<p>How to select the REFINET joint</p> <ul style="list-style-type: none"> <li>Choose from the following table in accordance with the total capacity index of all the indoor units connected below the REFINET header. (Example: REFINET joint A)</li> </ul> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Indoor unit total capacity index</th> <th>Refrigerant branch kit name</th> </tr> </thead> <tbody> <tr> <td>&lt; 230</td> <td>KHRP26A22H (Max. 4 branch)</td> </tr> <tr> <td>200 ≤ x &lt; 230</td> <td>KHRP26A33H (Max. 8 branch)</td> </tr> <tr> <td>230 ≤ x &lt; 640</td> <td>KHRP26M72H (Max. 8 branch) (See Note 3 - Next page)</td> </tr> <tr> <td>640 ≤</td> <td>KHRP26M73H (Max. 8 branch) + KHRP26M73HP</td> </tr> </tbody> </table>	Indoor unit total capacity index	Refrigerant branch kit name	< 230	KHRP26A22H (Max. 4 branch)	200 ≤ x < 230	KHRP26A33H (Max. 8 branch)	230 ≤ x < 640	KHRP26M72H (Max. 8 branch) (See Note 3 - Next page)	640 ≤	KHRP26M73H (Max. 8 branch) + KHRP26M73HP	<p>How to select the Outdoor unit multi connection piping kit (This is required when the system is multi outdoor unit system.)</p> <ul style="list-style-type: none"> <li>Choose from the following table in accordance with the number of outdoor units.</li> </ul> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Number of outdoor units</th> <th>Connection piping kit name</th> </tr> </thead> <tbody> <tr> <td>2 units</td> <td>BHFP22P100</td> </tr> <tr> <td>3 units</td> <td>BHFP22P151</td> </tr> </tbody> </table>	Number of outdoor units	Connection piping kit name	2 units	BHFP22P100	3 units	BHFP22P151																																																																															
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3 units	BHFP22P151																																																																																																																						
Pipe size selection	<p>Example for indoor units connected downstream</p> <p>Example REFINET joint C: indoor units (A)-(G), (I)-(M), (O)-(S), (U)-(Y), (Z)</p> <p>Example REFINET joint B: indoor units (J), (L), (N), (P), (R), (T), (V), (X)</p> <p>Example REFINET header: indoor units (H), (K), (Q), (W), (Y), (Z)</p> <p>Piping between outdoor unit and first refrigerant branch kit</p> <ul style="list-style-type: none"> <li>Choose from the following table in accordance with the material types specified in JIS (H 5306). O type and 1/2H type indicate the material types specified in JIS (Unit:mm)</li> </ul> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Copper tube O.D.</th> <th rowspan="2">Copper tube W.T. 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Installation of Outdoor Units



**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.)

$$R = \left( \frac{\text{Total length(m) of liquid piping size at } \phi 22.2}{\text{Total length(m) of liquid piping size at } \phi 19.1} \times 0.37 \right) + \left( \frac{\text{Total length(m) of liquid piping size at } \phi 15.9}{\text{Total length(m) of liquid piping size at } \phi 12.7} \times 0.18 \right) + \left( \frac{\text{Total length(m) of liquid piping size at } \phi 9.5}{\text{Total length(m) of liquid piping size at } \phi 6.4} \times 0.059 \right) + \left( \frac{\text{Total length(m) of liquid piping size at } \phi 12.7}{\text{Total length(m) of liquid piping size at } \phi 19.1} \times 0.26 \right) + \left( \frac{\text{Total length(m) of liquid piping size at } \phi 12.7}{\text{Total length(m) of liquid piping size at } \phi 15.9} \times 0.12 \right) + \left( \frac{\text{Total length(m) of liquid piping size at } \phi 6.4}{\text{Total length(m) of liquid piping size at } \phi 9.5} \times 0.022 \right)$$

TABLE A

MODEL NAME	THE AMOUNT OF REFRIGERANT
RXYQ08P	0kg
RXYQ08-12P	0.5kg
RXYQ14-22P	1.0kg
RXYQ24-30P	1.5kg
RXYQ32-38P	2.0kg
RXYQ40-48P	2.5kg
RXYQ50-54P	3.0kg

TABLE B

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

$$R = (30 \times 0.26) + (10 \times 0.18) + (10 \times 0.12) + (40 \times 0.059) + (49 \times 0.022) + (2.0) + (0.5) = 16.738 \rightarrow [16.7kg]$$

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

**\*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	
	Outdoor unit	Indoor units (1 - 8)
1. It is necessary to increase the pipe size if the pipe length between the first branch kit and the final branch kit is more than 40 m. (Reducers must be procured on site) If the increased pipe size is larger than main pipe size, then increase the main pipe to the same size.	[8] b+c+d+e+f+g+p ≤ 90 m increase the pipe size of b, c, d, e, f, g φ9.5 → φ12.7   φ15.9 → φ19.1   φ22.2 → φ25.4* 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	

**\*Note 3**

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

**■ Diameter of above case**

Model	Gas	Liquid	Model	Gas	Liquid	Model	Gas	Liquid
RXYQ05 Type	φ19.1	Not increased	RXYQ20 Type	φ31.8*	φ19.1	RXYQ48 Type	Not increased	φ22.2
RXYQ08 Type	φ22.2	φ12.7	RXYQ22 Type	φ31.8*	φ19.1	RXYQ50 Type	Not increased	φ22.2
RXYQ10 Type	φ25.4*	φ12.7	RXYQ24 Type	Not increased	φ19.1	RXYQ52 Type	Not increased	φ22.2
RXYQ12 Type	Not increased	φ15.9	RXYQ26 Type	φ38.1*	φ22.2	RXYQ54 Type	Not increased	φ22.2
RXYQ14 Type	Not increased	φ15.9	RXYQ28 Type	φ38.1*	φ22.2			
RXYQ16 Type	φ31.8*	φ15.9	RXYQ30 Type	φ38.1*	φ22.2			
RXYQ18 Type	φ31.8*	φ19.1	RXYQ32 Type	φ38.1*	φ22.2			

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

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

## 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)

- Power supply
- Main switch
- Earth leakage circuit breaker
- Fuse
- Outdoor unit
- COOL/HEAT selector
- Remote controller
- 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)**

- Electrical wiring diagram
- On the back of the EL .COMPO. BOX lid.
- Power wiring, ground wiring (inside conduit)
- (When the wiring is routed out through the side panel.)
- Transmission wiring
- Pipe opening
- Conduit
- For power wiring and ground wiring
- Through cover
- Cut off the shaded zones before use.
- Burr
- Knockout hole
- 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)**

- Connection example for single system
- Outdoor unit
- COOL/HEAT selector
- To outdoor unit of other system
- Match up terminal symbols. (Has polarity)
- Use duplex wires
- Indoor unit
- Never connect the power wire

**(Refer to figure 22)**

- Connection example for multi system
- Outdoor unit A (Master unit)
- Outdoor unit B (Sub unit)
- COOL/HEAT selector
- To indoor unit
- 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<sup>2</sup> 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)**

- Outdoor unit
- Indoor unit
- Branch line 1
- Branch line 2
- No branch is allowed after branch
- Main line
- Central remote controller, etc.
- Branch line 3
- Transmission wiring between outdoor unit and indoor unit
- 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)**

- In the EL.COMPO.BOX
- 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)**

- Liquid pipe
- Gas pipe
- Transmission wiring
- Insulation material
- Finishing tape

- For multi system:

- 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.

- 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.

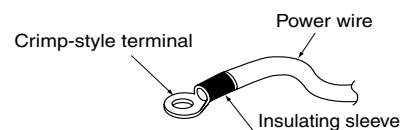
**(Refer to figure 26)**

- Power supply (3N~50Hz 380-415V)
- Earth leakage circuit breaker
- Branch switch, Overcurrent breaker
- Ground wire
- Attach insulation sleeves
- Power supply terminal block
- Ground terminal
- 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**

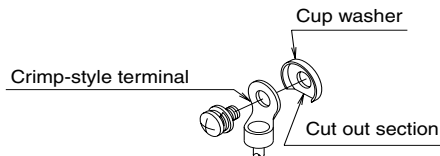
- Be sure to use crimp-style terminal with insulating sleeves for connections. (See the figure below.)



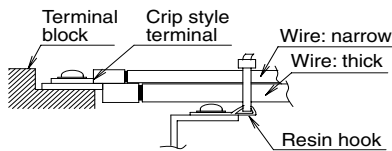
- For wiring, use the designated power wire and connect firmly, then secure to prevent outside pressure being exerted on the terminal board.
- Use an appropriate screwdriver for tightening the terminal screws. A screwdriver with a small head will strip the head and make proper tightening impossible.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



- 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 circuit 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	<ul style="list-style-type: none"> <li>• To prevent entry of any impurities and insure sufficient pressure resistance, always use the special tools dedicated for R410A.</li> <li>• Use charge hose that have pushing stick for connecting to service port of shutoff valves or refrigerant charge port.</li> </ul>
Vacuum pump	<ul style="list-style-type: none"> <li>• The vacuum pump for vacuum drying should be able to lower the pressure to <math>-100.7\text{kPa}</math> (5 Torr <math>-755\text{mm Hg}</math>).</li> <li>• Take care the pump oil never flow backward into the refrigerant pipe during the pump stops.</li> </ul>

**<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.

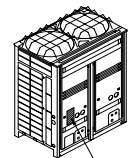
**(Refer to figure 28)**

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.



## 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 loosening of a nut.  
See "7-4 Transmission Wiring Connection Procedure".
2. Make sure there is no faulty power wiring or loosening 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 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			
φ 25.4		Hexagonal wrench 8 mm		

**(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.	◑	●	●	☼	●	●	●
	◑	●	●	●	☼	●	☼
(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".	◑	*	*	*	*	*	*
<p>Ex: For the LED display at right, this would be "0 1 0 1 1 0", which would mean 22 units are connected.</p> <p style="text-align: center;"> <math>32 \times 0 + 16 \times 1 + 8 \times 0 + 4 \times 1 + 2 \times 1 + 1 \times 0 = 22 \text{ units}</math> </p> <p>Note: "000000" indicates 64 units.</p>	◑	●	◑	●	◑	◑	●
(4) Press the MODE button (BS1) once. This returns to <b>Setting Mode 1</b> (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 grooves 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 shutoff valve must be left closed), and charge the refrigerant of the "additional charging amount" from the liquid side shutoff 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 (In case 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. 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.	<ul style="list-style-type: none"> <li>• Check if the additional refrigerant charge has been finished correctly.</li> <li>• Recalculate the additional amount refrigerant from the piping length and add the adequate amount.</li> </ul>
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

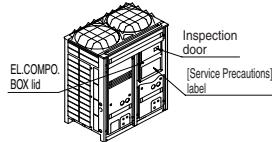
In the case of a multi system, all onsite settings should be made on the master unit. Settings made on sub units are invalid.

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.

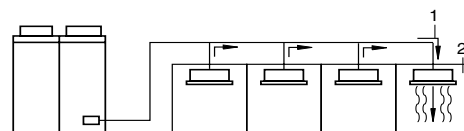
### Maximum concentration level

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  $\text{kg/m}^3$  (the weight in kg of the refrigerant gas in  $1\text{m}^3$  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  $0.35\text{kg/m}^3$  for R407C and  $0.44\text{kg/m}^3$  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.

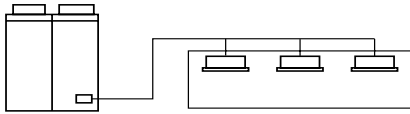
amount of refrigerant in a single unit system (amount of refrigerant with which the system is charged before leaving the factory)	+	additional charging amount (amount of refrigerant added locally in accordance with the length or diameter of the refrigerant piping)	=	total amount of refrigerant (kg) in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

### Note

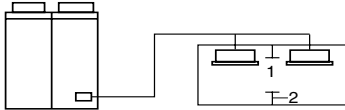
- Where a single refrigerant facility is divided into 2 entirely independent refrigerant systems then use the amount of refrigerant with which each separate system is charged.

2. Calculate the smallest room volume (m<sup>3</sup>)  
 In 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.



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.

## 2.2 RXYQ-PAYL, PTL

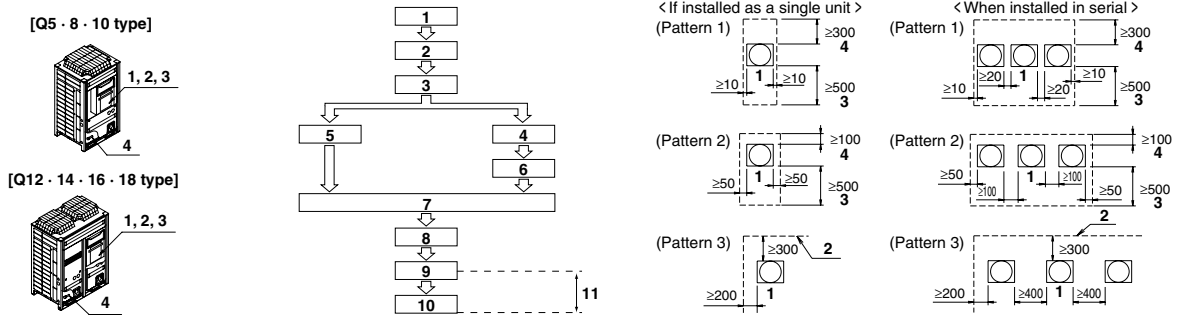


figure 1

figure 2

figure 3

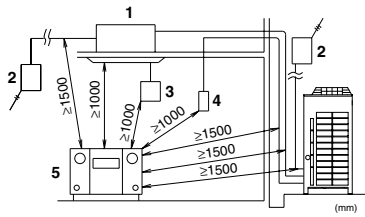


figure 4

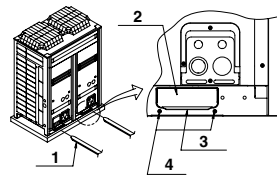


figure 5

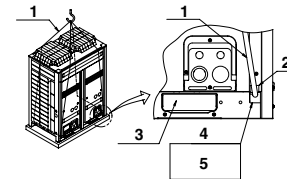


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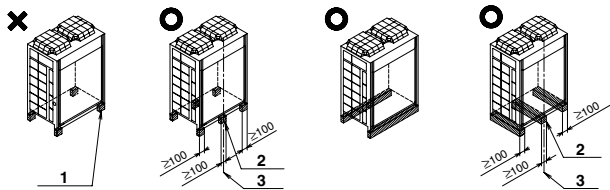


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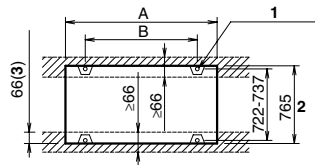


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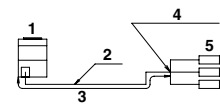


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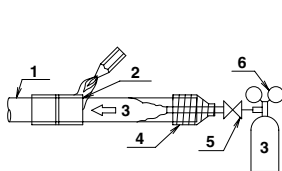


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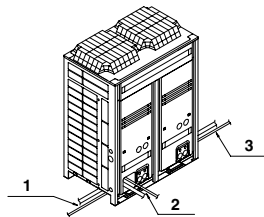


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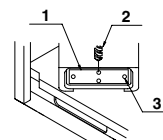


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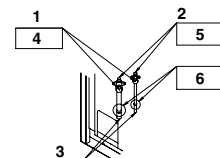


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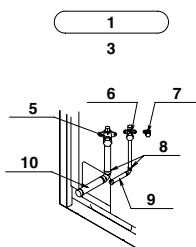


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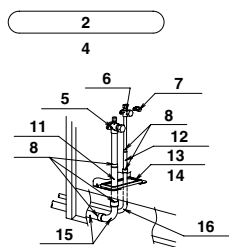


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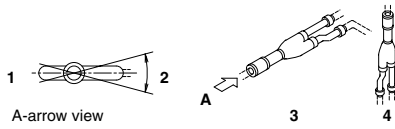


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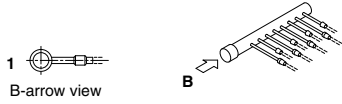


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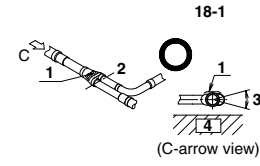


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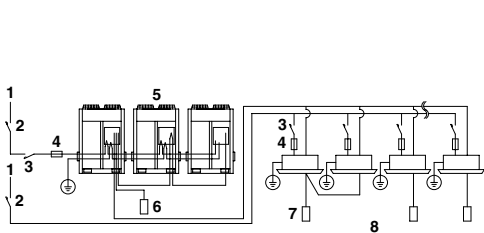
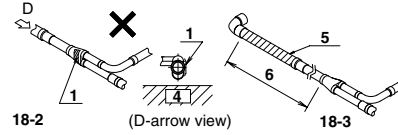


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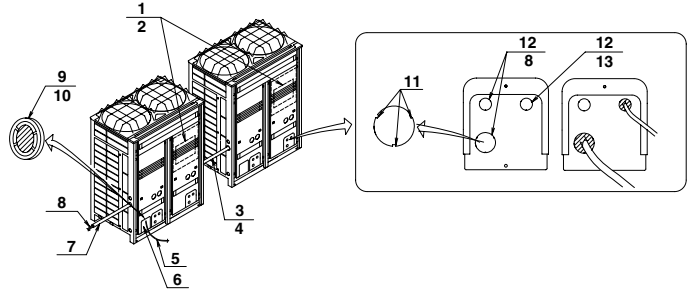


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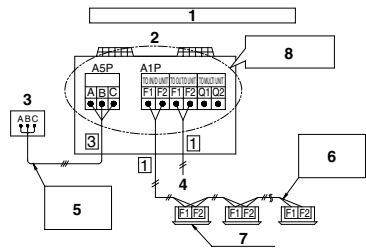


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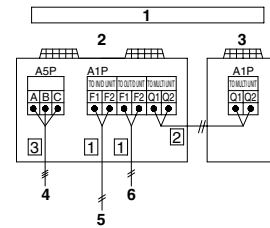


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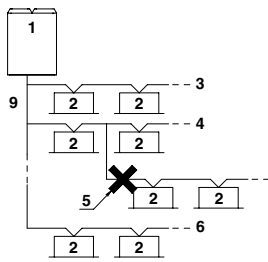


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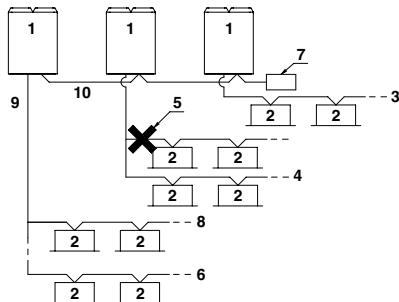


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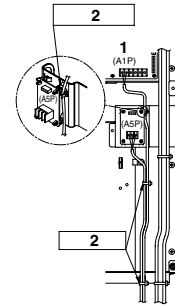


figure 25

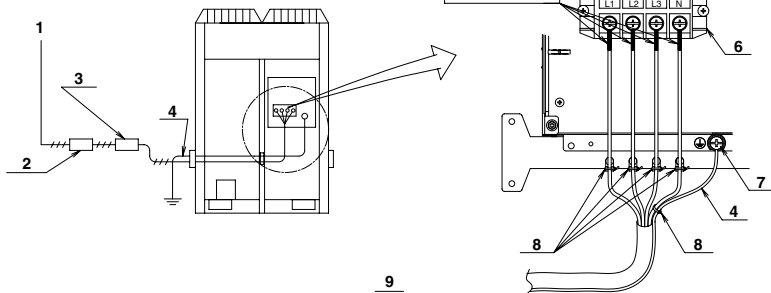


figure 26-1

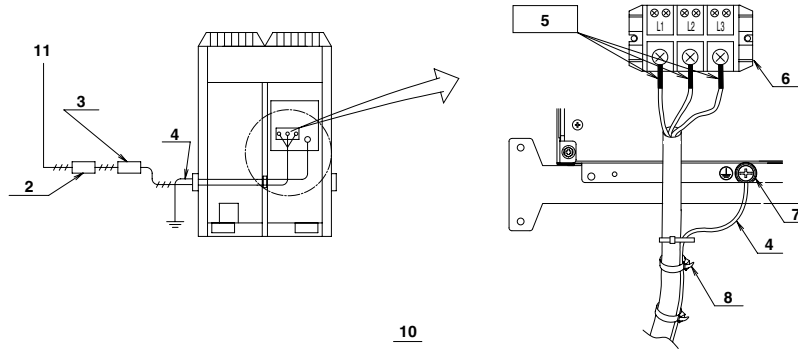


figure 26-2

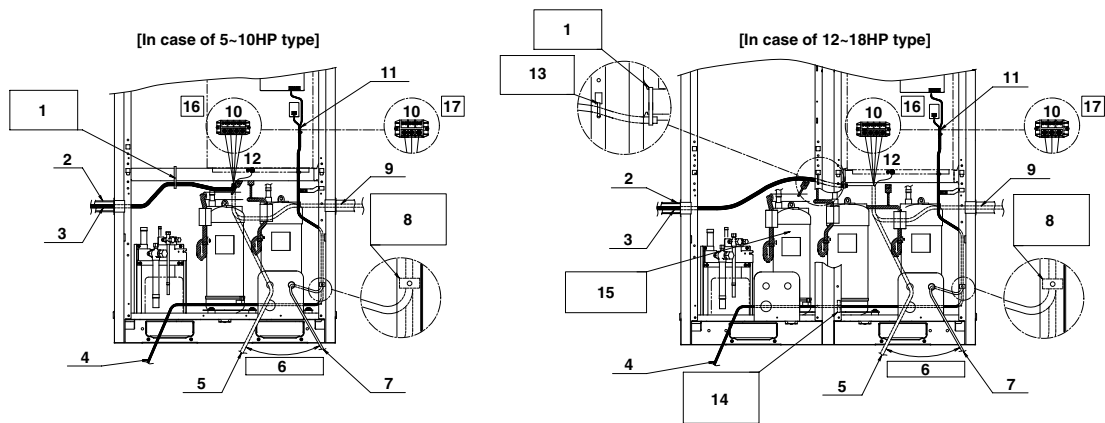


figure 27

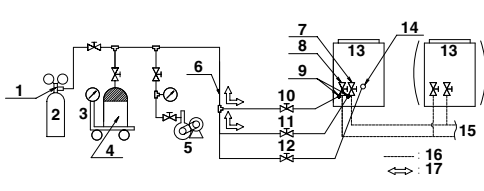


figure 28

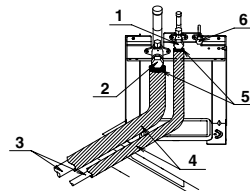


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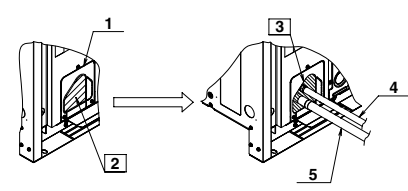


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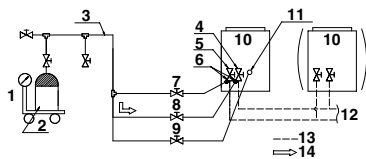


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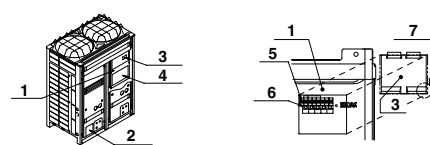


figure 32

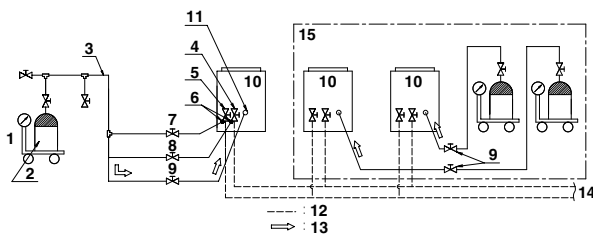


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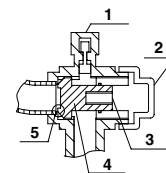


figure 34



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

Meaning of WARNING and CAUTION notices

**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

**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.

**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.

**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 learn 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.

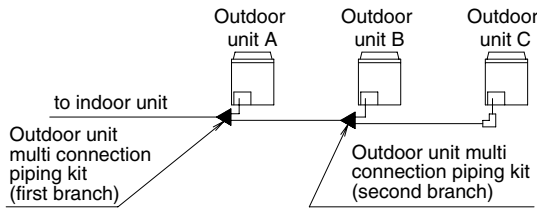
<Outdoor unit>	<Total capacity of indoor units>	<Total quantity of indoor units>
RXYQ5PAYL(E) · PTL(E) .....	62.5 ~ 250	12 units
RXYQ8PAYL(E) · PTL(E) .....	100 ~ 400	20 units
RXYQ10PAYL(E) · PTL(E) .....	125 ~ 500	25 units
RXYQ12PAYL(E) · PTL(E) .....	150 ~ 600	30 units
RXYQ14PAYL(E) · PTL(E) .....	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) + RXYQ18PAYL(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)


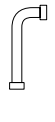

- If the total capacity of the connected indoor units exceeds the capacity of the outdoor unit, cooling and heating performance may drop when running the indoor units. See the capacity table in the Engineering Data Book for details.
- There are restrictions on the refrigerant pipe connecting order between 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		 5-10, 14,16 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
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**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.

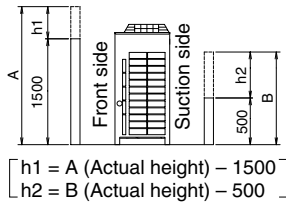
(Refer to figure 3)

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.

**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 location 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.
  2. Keep the unit upright in order to avoid compressor damage.
  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 protector by pushing the hook attached to the large openings. (Refer to figure 6)
    - (Refer to figure 5)
    1. Fork
    2. Hole (large)
    3. Transportation protector (yellow)
    4. Hook of transportation protector

**(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**

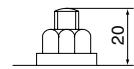
- Make sure the unit is installed level on a sufficiently strong base to prevent vibration and noise. (Refer to figure 7)
- The base should be bigger around than the width of the unit's legs (66 mm), and should support the unit. (Refer to figure 8) If protective rubber is to be attached, attach it to 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 needed in the case of 8HP type or more
3. Center of the product

**(Refer to figure 8)**

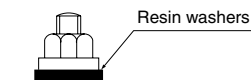
1. Foundation bolt point (φ15 dia. : 4 positions)
2. Depth of product
3. Width of support leg



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
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
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	
Indoor	Regardless of the period	Pinch or tape the pipe

**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)
  - Refrigerant pipe
  - Location to be brazed
  - Nitrogen
  - Taping
  - Handy valve
  - Regulator
- The pressure regulator for the nitrogen released when doing the brazing should be set to 0.02 MPa (about 0.2kg/cm<sup>2</sup>). 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

- 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)

- Left-side connection
- Front connection
- 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)
  - Knock hole
  - Drill
  - 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.

- 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)

- Shutoff valve (liquid side · gas side)
- Service port
- Pinch piping
- Procedure 1:  
Confirm the shutoff valve is closed.
- 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.
- 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.

- Connecting refrigerant piping to outdoor units

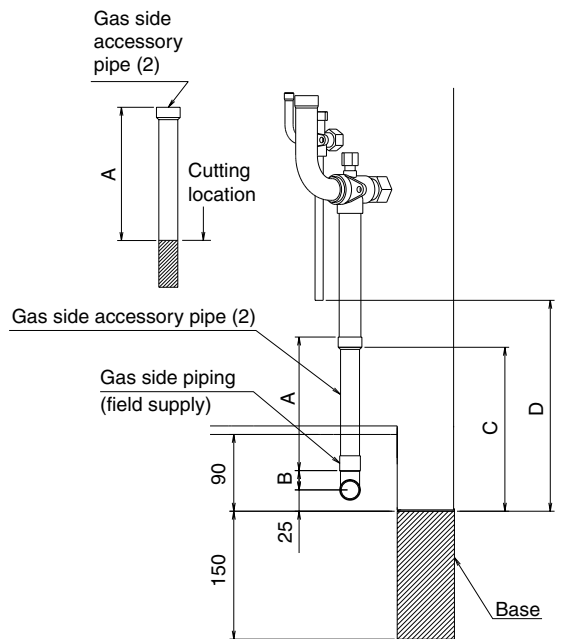
**<In case of single system: 5-18HP type>**

(Refer to figure 14)

- If connected to the front
- When connected at lateral side (bottom)
- Remove the shutoff valve cover to connect.
- Remove the knock hole on the bottom frame and route the piping under the bottom frame.
- Gas side shutoff valve
- Liquid side shutoff valve
- Refrigerant charge port
- Brazing
- Liquid side accessory pipe (1)
- Gas side accessory pipe (1)
- Gas side accessory pipe (2)
- Liquid side accessory pipe (2)
- Knockout hole
- Punch the knock hole.
- Gas side piping (field supply)
- 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.



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 knockout 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.

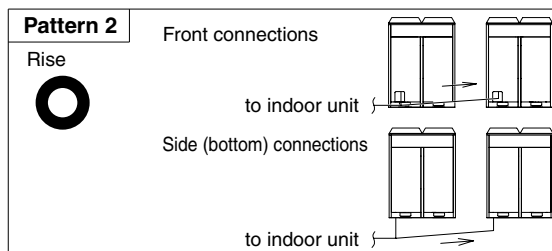
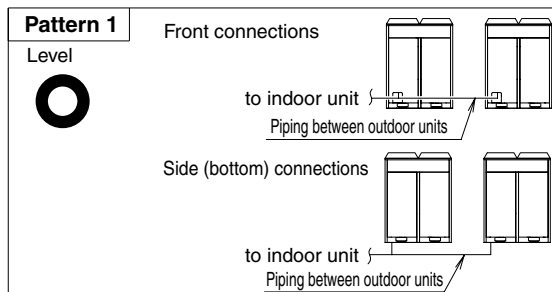
**<Multi Systems>**

- 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.

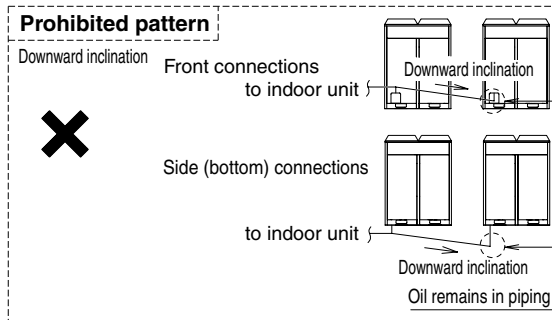
**4. Precautions when connecting piping between outdoor units (In case of multi system)**

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 and in "5. Branching the refrigerant piping", always referring to the kit's installation manual.

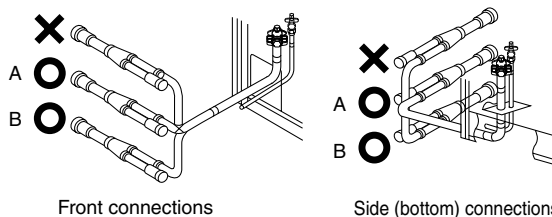
(1) The piping between outdoor units must be installed level (Pattern 1) or with a rise (Pattern 2). Otherwise oil may pool in the pipes.

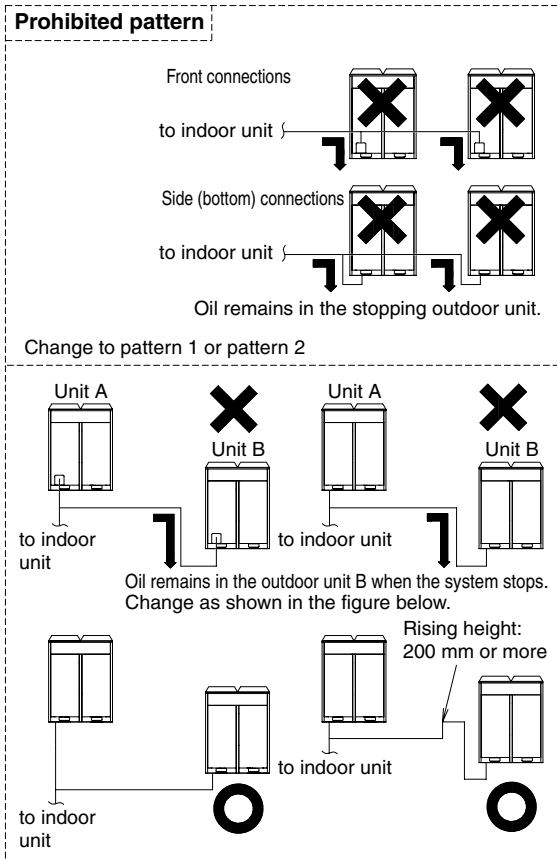


Change to pattern 1 or pattern 2

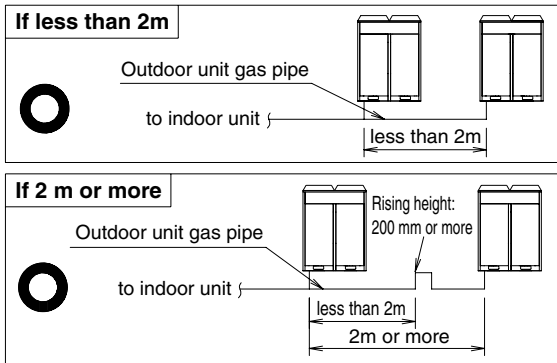


(2) To avoid the risk of oil detention in the stopping unit, always connect the shutoff valve and the piping between outdoor units as shown in the figure A or figure B.





(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.  $\pm 30^\circ$  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 straight up, and the tilt is within  $\pm 15^\circ$ . (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.  $\pm 15^\circ$  or less
  4. Ground
  5. Onsite pipe (120mm length or more)
  6. Straight part of 500mm or more

6-5 Example of connection

**Example of connection**  
(Connection of 8 indoor units)  
(1-1) \* -> indicate the Outdoor unit multi connection piping kit  
(1-2) 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 REFRNET joint**

**Example refrigerant branch using REFRNET joint and REFRNET header**

**Example refrigerant branch using REFRNET header**

Single outdoor system

Multi outdoor system

**Actual pipe length**

Example unit [8] : a + b + c + d + e + f + g + p ≤ 165m

Equivalent pipe length between outdoor (1-2) and indoor units ≤ 190m (assume equivalent pipe length of REFRNET header to be 1m, calculation purposes) (See Note 1 - Next page)

Total pipe length from outdoor unit (1-2) to all indoor units ≤ 1000m

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

Difference in height between outdoor and indoor units (H1) ≤ 50m (≤ 90m if the outdoor unit is below)

Difference in height between indoor units (H2) ≤ 15m

Difference in height between indoor units (H3) ≤ 5m

Pipe length from first refrigerant branch kit (either REFRNET joint or REFRNET header) to indoor unit ≤ 40m (See Note 2 - Next page)

Example unit [8] : b + c + d + e + f + g + p ≤ 40m

Example unit [8] : i ≤ 40m

**How to select the REFRNET joint**

- When using REFRNET 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: REFRNET joint A)

Outdoor unit capacity type	Refrigerant branch kit name
5HP type	KHRP26A22T
8, 10HP type	KHRP26A33T
12-22HP type	KHRP26A42T
24HP type	KHRP26A53T + KHRP26M73TP

- Choose the REFRNET 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 REFRNET joint.

Indoor unit total capacity index	Refrigerant branch kit name
< 200	KHRP26A22T
200 ≤ X < 290	KHRP26A33T
290 ≤ X < 640	KHRP26A42T
640 ≤	KHRP26A53T + KHRP26M73TP

**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.

**Example for indoor units connected downstream**

**Pipe size selection**

**Caution**  
The thickness of the pipes in the table shows the requirements of Japanese High Pressure Gas Control law. (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.

Indoor unit capacity type	Piping size (O.D.)	
	Gas pipe	Liquid pipe
< 150	φ15.9	φ15.9
150 ≤ X < 200	φ18.1	φ9.5
200 ≤ X < 290	φ22.2	φ12.7
290 ≤ X < 420	φ28.6	φ15.9
420 ≤ X < 640	φ34.9	φ19.1
640 ≤ X < 920	φ41.3	φ19.1
920 ≤	φ41.3	φ19.1

Match to the size of the connector piping on the indoor unit.

Indoor unit capacity type	Piping size (O.D.)	
	Gas pipe	Liquid pipe
200, 250, 300, 400, 450 type	φ15.9	φ9.5
60, 60, 100, 125 type	φ15.9	φ9.5
200 type	φ15.1	φ9.5
250 type	φ22.2	φ9.5

(See Note 1 - Next page)

**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.)

$$R = \left( \frac{\text{Total length(m) of liquid}}{\text{piping size at } \phi 22.2} \right) \times 0.37 + \left( \frac{\text{Total length(m) of liquid}}{\text{piping size at } \phi 15.9} \right) \times 0.18 + \left( \frac{\text{Total length(m) of liquid}}{\text{piping size at } \phi 9.5} \right) \times 0.059 + \left( \frac{\text{Total length(m) of liquid}}{\text{piping size at } \phi 19.1} \right) \times 0.26 + \left( \frac{\text{Total length(m) of liquid}}{\text{piping size at } \phi 12.7} \right) \times 0.12 + \left( \frac{\text{Total length(m) of liquid}}{\text{piping size at } \phi 6.4} \right) \times 0.022$$

TABLE A

MODEL NAME	THE AMOUNT OF REFRIGERANT
RX(Y)Q8P	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]
X ≤ 100%	5P-8P   10P   12P-14P   16P   18P-22P   24P-28P   30P-32P   34P   36P   38P   40P   42P-44P   46P-48P   50P   52P-54P
100% < X ≤ 120%	0.5kg
120% < X ≤ 130%	1.0kg
130% < X ≤ 140%	1.5kg
140% < X ≤ 150%	2.0kg
150% < X ≤ 160%	2.5kg
160% < X ≤ 170%	3.0kg
170% < X ≤ 180%	3.5kg
180% < X ≤ 190%	4.0kg

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

Outdoor system : RX(Y)Q34P~  
Total capacity of indoor unit : 116%

$$R = \left( \frac{50 \times 0.26}{16.738} \right) + \left( \frac{10 \times 0.18}{16.738} \right) + \left( \frac{10 \times 0.12}{16.738} \right) + \left( \frac{40 \times 0.059}{16.738} \right) + \left( \frac{49 \times 0.022}{16.738} \right) + \left( \frac{2.0}{16.738} \right) + \left( \frac{0.5}{16.738} \right)$$

a :  $\phi 19.1 \times 30m$  | d :  $\phi 9.5 \times 10m$  | g :  $\phi 6.4 \times 10m$  | j :  $\phi 6.4 \times 10m$   
 b :  $\phi 15.9 \times 10m$  | e :  $\phi 9.5 \times 10m$  | h :  $\phi 6.4 \times 20m$  | k :  $\phi 6.4 \times 9m$   
 c :  $\phi 9.5 \times 10m$  | f :  $\phi 9.5 \times 10m$  | i :  $\phi 12.7 \times 10m$

**\*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

**\*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**

1. It is necessary to increase the pipe size if the pipe length between the first branch kit and the final branch kit is more than 40 m. (Reducers must be procured on site) if the increased pipe size is larger than main pipe size, then increase the main pipe to the same size.
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)
3. Indoor unit to the nearest branch kit ≤ 40 m
4. The difference between [Outdoor unit to the farthest indoor unit] and [Outdoor unit to the nearest indoor unit] ≤ 40 m

**\*Note 3**

If the pipe size above the REFNET header is  $\phi 34.9$  or more, KHRP26M73HP is required.



TABLE A

MODEL NAME [RX(Y)Q - P]	0kg	0.5kg	1.0kg	1.5kg	2.0kg	2.5kg	3.0kg	3.5kg	4.0kg
5P-8P									
10P									
12P-14P									
16P									
18P-22P									
24P-28P									
30P-32P									
34P									
36P									
38P									
40P									
42P-44P									
46P-48P									
50P									
52P-54P									

Round off units of 0.1 kg.

$$R = \left( \frac{50 \times 0.26}{16.738} \right) + \left( \frac{10 \times 0.18}{16.738} \right) + \left( \frac{10 \times 0.12}{16.738} \right) + \left( \frac{40 \times 0.059}{16.738} \right) + \left( \frac{49 \times 0.022}{16.738} \right) + \left( \frac{2.0}{16.738} \right) + \left( \frac{0.5}{16.738} \right)$$

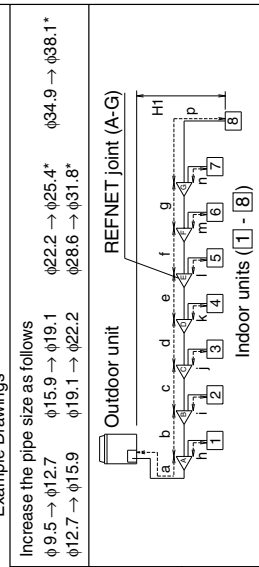
a : 16.738 | b : 16.738 | c : d+e+f | g : h+i+j+k | RXYQ34P-116%

**■ Diameter of above case**

Model	Gas	Liquid	Model	Gas	Liquid	Model	Gas	Liquid
RXYQ5 Type	$\phi 19.1$	Not increased	RXYQ34 Type	$\phi 38.1^*$	$\phi 22.2$	RXYQ48 Type	Not increased	$\phi 22.2$
RXYQ8 Type	$\phi 22.2$	$\phi 12.7$	RXYQ36 Type	Not increased	$\phi 22.2$	RXYQ50 Type	Not increased	$\phi 22.2$
RXYQ10 Type	$\phi 25.4^*$	$\phi 12.7$	RXYQ38 Type	Not increased	$\phi 22.2$	RXYQ52 Type	Not increased	$\phi 22.2$
RXYQ12 Type	Not increased	$\phi 15.9$	RXYQ40 Type	Not increased	$\phi 22.2$	RXYQ54 Type	Not increased	$\phi 22.2$
RXYQ14 Type	Not increased	$\phi 15.9$	RXYQ42 Type	Not increased	$\phi 22.2$			
RXYQ16 Type	$\phi 31.8^*$	$\phi 15.9$	RXYQ44 Type	Not increased	$\phi 22.2$			
RXYQ18 Type	$\phi 31.8^*$	$\phi 19.1$	RXYQ46 Type	Not increased	$\phi 22.2$			

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

**Example Drawings**



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

## 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

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<sup>2</sup> 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.

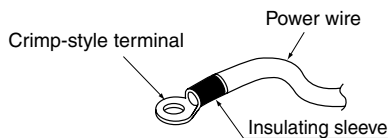
(Refer to figure 26-1, 26-2)

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

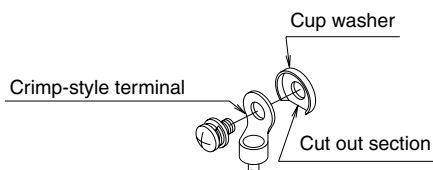
- Be sure to use crimp-style terminal with insulating sleeves for connections. (See the figure below.)



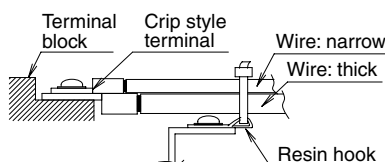
- For wiring, use the designated power wire and connect firmly, then secure to prevent outside pressure being exerted on the terminal board.
- Use an appropriate screwdriver for tightening the terminal screws. A screwdriver with a small head will strip the head and make proper tightening impossible.
- 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 circuit 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	<ul style="list-style-type: none"> <li>• To prevent entry of any impurities and insure sufficient pressure resistance, always use the special tools dedicated for R410A.</li> <li>• Use charge hose that have pushing stick for connecting to service port of shutoff valves or refrigerant charge port.</li> </ul>
Vacuum pump	<ul style="list-style-type: none"> <li>• The vacuum pump for vacuum drying should be able to lower the pressure to -100.7kPa (5 Torr -755mm Hg).</li> <li>• Take care the pump oil never flow backward into the refrigerant pipe during the pump stops.</li> </ul>

#### <The system for air tight test and vacuum drying>

- Referring to figure 28, connect a 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)

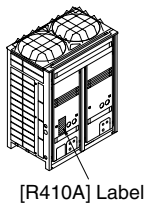
1. Gauge manifold
2. Nitrogen
3. Measuring device
4. R410A tank (with siphon)
5. Vacuum pump
6. Charge hose

- 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.



- 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.

**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.)

**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 loosening of a nut. See "7-4 Transmission Wiring Connection Procedure".
2. Make sure there is no faulty power wiring or loosening 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.

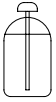
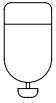
For charging the additional refrigerant, follow the procedure in this chapter.

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 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			
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 "010110", which would mean 22 units are connected.  $32 \times 0 + 16 \times 1 + 8 \times 0 + 4 \times 1 + 2 \times 1 + 1 \times 0 = 22 \text{ units}$ Note: "000000" indicates 64 units.		*	*	*	*	*	*
		⚡	●	⚡	●	⚡	⚡
(4) Press the MODE button (BS1) once. This returns to <b>Setting Mode 1</b> (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 grooves 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 (In case 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. MONI-TOR	MODE	TEST/ HWL	C/H SELECTOR			LN.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
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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			LN.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.	<ul style="list-style-type: none"> <li>• Check if the additional refrigerant charge has been finished correctly.</li> <li>• Recalculate the additional amount refrigerant from the piping length and add the adequate amount.</li> </ul>
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

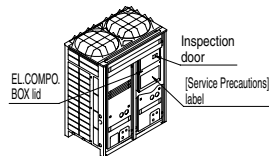
**Note**

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.

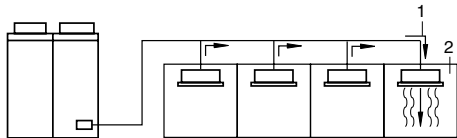
### Maximum concentration level

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  $\text{kg/m}^3$  (the weight in kg of the refrigerant gas in  $1\text{m}^3$  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  $0.35\text{kg/m}^3$  for R407C and  $0.44\text{kg/m}^3$  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.

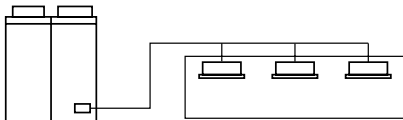
1. Calculate the amount of refrigerant (kg) charged to each system separately.

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
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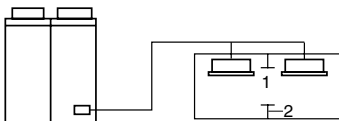
### Note

- 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 ( $\text{m}^3$ )  
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.

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

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. REFNET Pipe System

#### 3.1 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)	

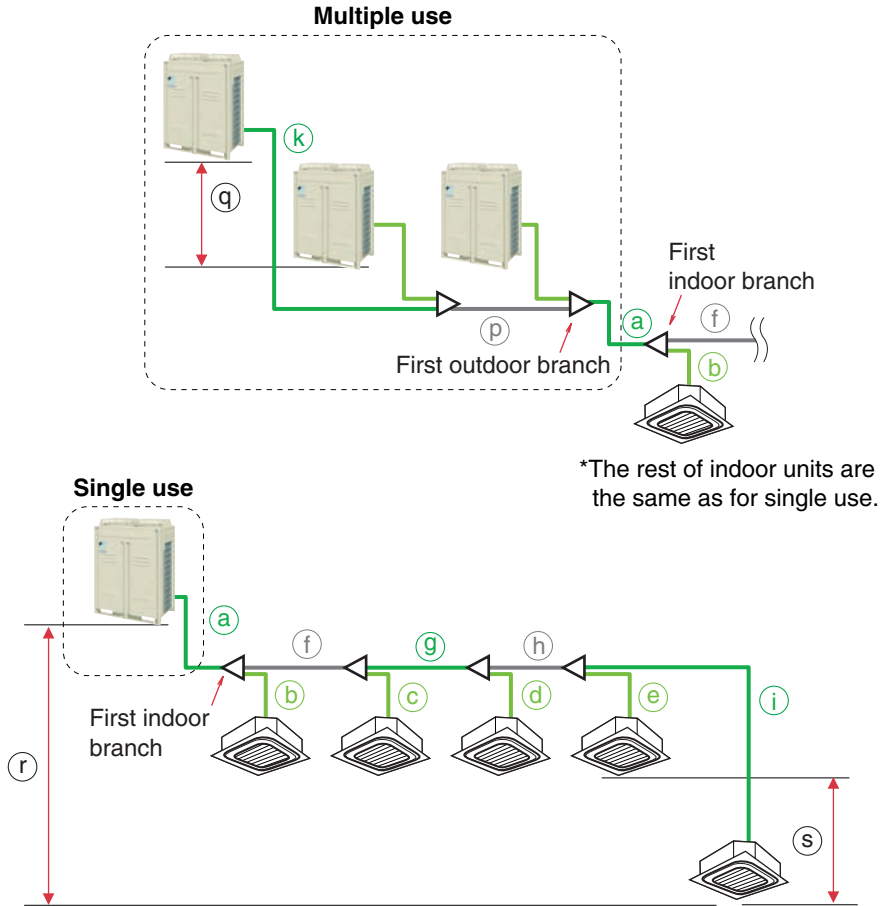
Units can be added by connecting them directly to the REFNET header or REFNET joint. Further branches cannot be included in the system below the REFNET header branch.

**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.



### 3.2 Max. Refrigerant Piping Length



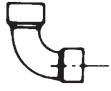
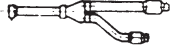

		Actual piping length	Example	Equivalent piping length
Maximum allowable piping length	Refrigerant piping length	165 m	a+f+g+h+i	190 m (Note 3)
	Total piping length	1000 m	a+b+c+d+e+f+g+h+i	—
	Between the first indoor branch and the farthest indoor unit	40 m (Note 4)	f+g+h+i	—
	Between the outdoor branch and the last outdoor unit	10 m	k+p	13 m

		Level Difference	Example	Outdoor Units	
Maximum allowable level difference	Between the outdoor units (Multiple use)	5 m	q	RXYQ8-54P(A)	
	Between the indoor units	15 m	s	—	
	Between the outdoor units and the indoor units	If the outdoor unit is above.	50 m (Note 5)	r	RXYQ8-54P(A)
		If the outdoor unit is below.	90 m	r	
		If the outdoor unit is above.	50 m	r	RXYQ5P(A)
If the outdoor unit is below.		40 m	r		

**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. When the equivalent piping length between the outdoor and indoor units exceeds 90m, the size of main pipes (**the gas side and liquid side**) must be increased according to “Example of connection” in the installation manual. In order to minimize the reduction of capacity caused by the pressure drop, the refrigerant pipe size may be increased.
4. The maximum actual piping length can be 90m, depending on conditions. Various conditions and requirements have to be met to allow utilisation of 90m piping length. Be sure to refer to “**Example of connection**” of the installation manual.
5. Max. 90m level difference is available on request.

### 1. Equivalent Piping Length of Joints and Header (Reference)

Pipe Size* (mm)	φ6.4	φ9.5	φ12.7	φ15.9	φ19.1	φ22.2	φ25.4	φ31.8	φ34.9	φ38.1	φ41.3
L Joints (m) 	0.16	0.18	0.20	0.25	0.35	0.40	0.45	0.55	0.60	0.65	0.75
REFNET Joint (m) 	0.5										
REFNET Header (m) 	1.0										

\* When the equivalent piping length in cooling operation is calculated, the gas pipe size is selected.  
When the equivalent piping length in heating operation is calculated, the liquid pipe size is selected.

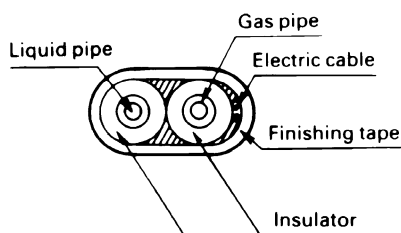
## 3.3 Field Refrigerant Piping

### 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

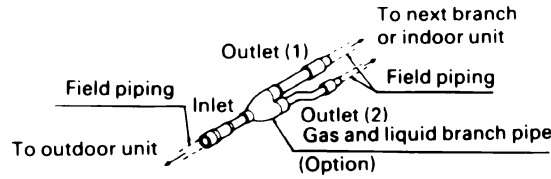
- Gas piping must be insulated.
- Be sure to insulate the liquid-side and gas-side piping for the inter-unit piping and the refrigerant branch kits and always use 18-type or better insulation for the oil pressure equalizer.
- Materials: Glass fiber or heat resistant polyethylene foam.  
Thickness: 10mm 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



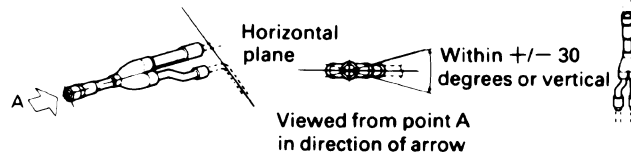
### 3.4 REFNET Joints and Headers

#### 3.4.1 REFNET Joints

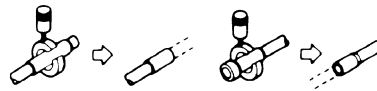
For gas and liquid branch pipes



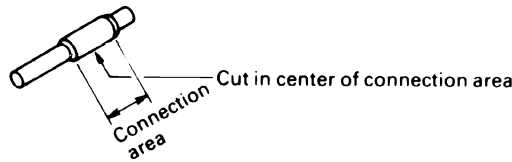
- Make sure that all branch pipes are fitted such that they branch either horizontally or vertically.



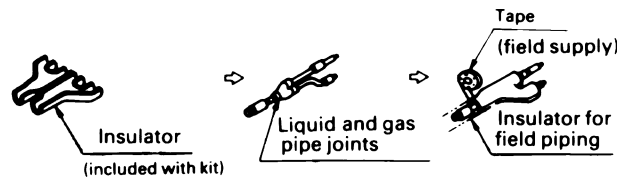
- When the size of the selected field piping is different from that of branch pipe then the connecting section should be cut with a pipe cutter as shown in the figure below.



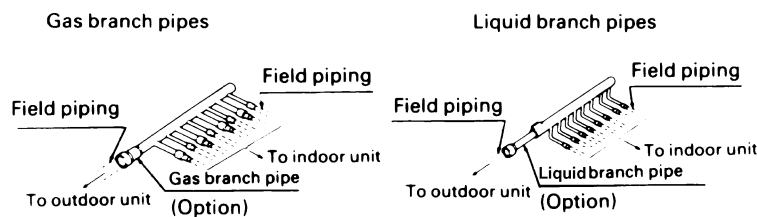
- When you are cutting an inlet or outlet pipe with a pipe cutter make sure that you make the cut in the center of the connection area.



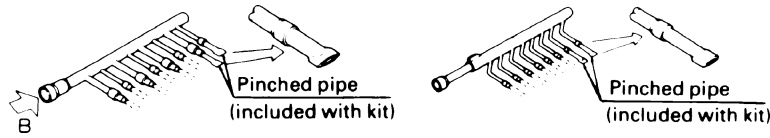
- Branch pipes must be insulated in accordance with the handbook which comes with each kit.



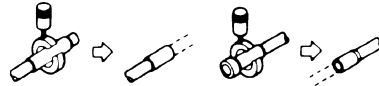
#### 3.4.2 REFNET Headers



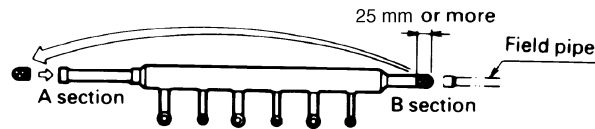
- When the number of indoor units to be connected to the branch pipes is less than the number of branch pipes available for connection then cap pipes should be fitted to the surplus branches.



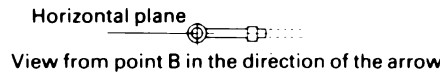
- When the size of the selected field piping is different from that of branch pipe then the connecting section should be cut with a pipe cutter as shown in the figure below.



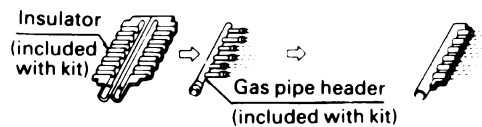
- When field piping is connected to the B section of the inlet/outlet pipe on the outdoor unit side of the liquid pipe header.
- Cut the B section with a pipe cutter as shown below and connect it to the A section.
- Connect the flared section of the field pipe to the B section.



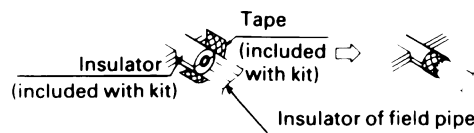
- Fit the branch pipe so that the branch lies in a horizontal plane.



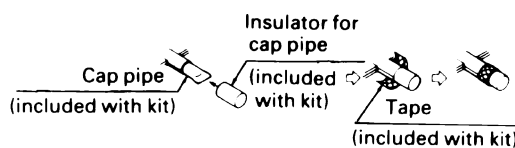
- The branch pipe must be insulated in accordance with the instruction manual which comes with each kit.
  1. Use the insulator included in the kit to insulate the header.



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.

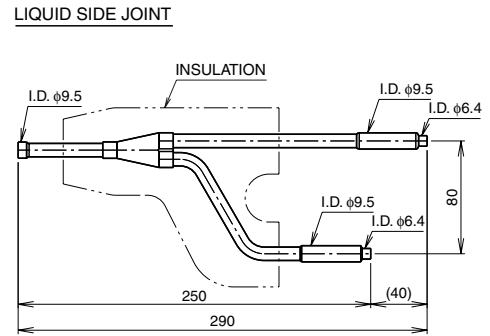
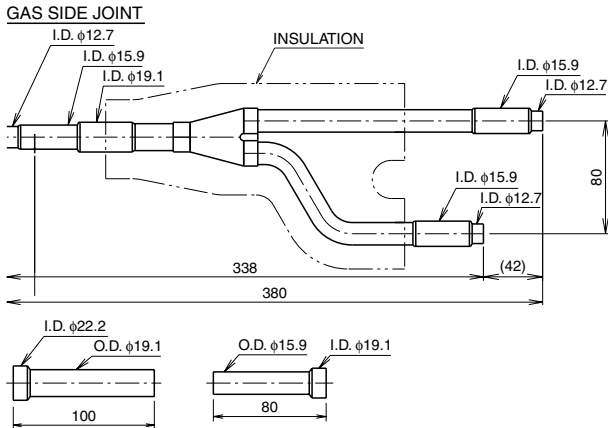


# 4. REFNET Joint and Header

## 4.1 REFNET Joint (Branch Kit)

### KHRP26A22T

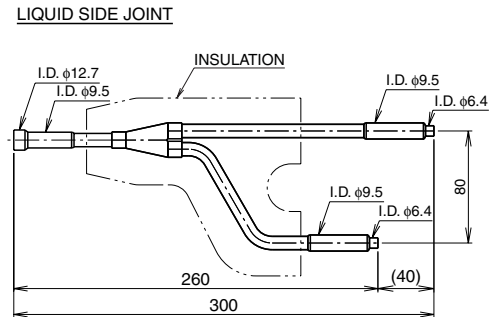
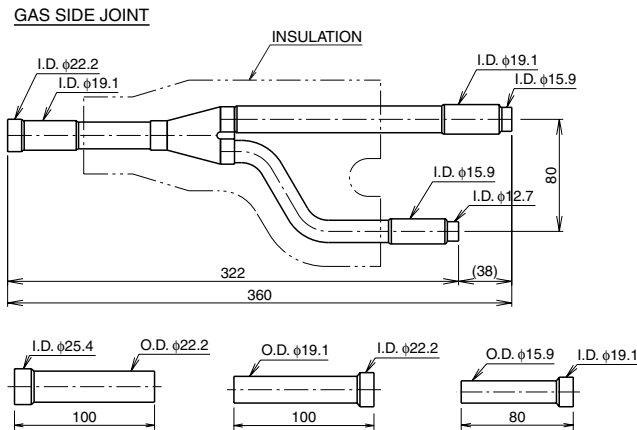
Unit (mm)



D3K05234A

### KHRP26A33T

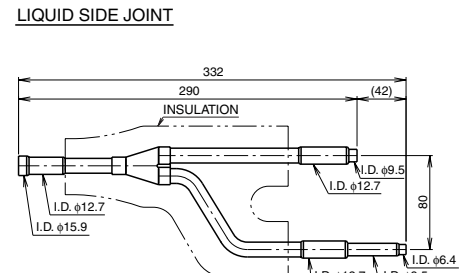
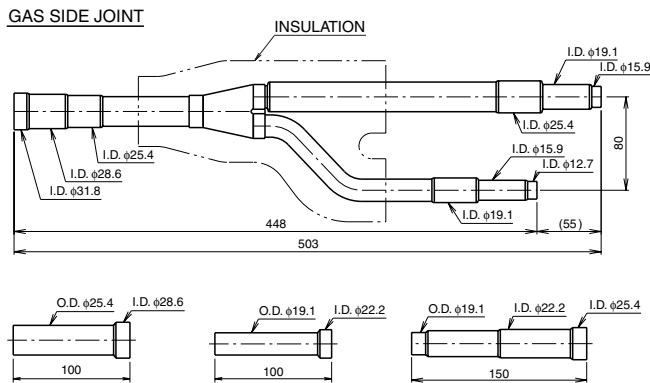
Unit (mm)



D3K05235B

### KHRP26A72T

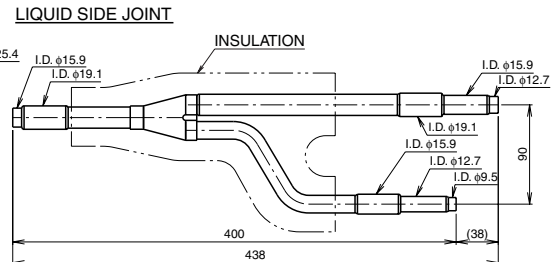
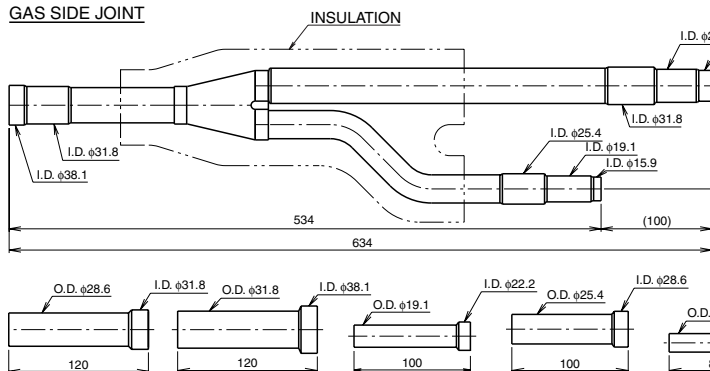
Unit (mm)



D3K05236A

### KHRP26A73T

Unit (mm)



D3K05237A

# REFNET JOINT INSTALLATION MANUAL(Except for JAPAN)

## KHRP26A22T • 33T • 72T • 73T(FOR R410A)

■ THIS KIT INCLUDES THE FOLLOWING PARTS.

KIT NAME	S H A P E				
	GAS SIDE JOINT	LIQUID SIDE JOINT	INSULATION	REDUCER(FOR GAS PIPE)	REDUCER(FOR LIQUID PIPE)
KHRP26A 22T			 2 pcs.	 φ 19,1    φ 22,2	
KHRP26A 33T			 2 pcs.	 φ 19,1    φ 22,2    φ 25,4	
KHRP26A 72T			 2 pcs.	 φ 22,2    φ 25,4/φ 22,2    φ 28,6 2 PCS.	 φ 15,9    φ 19,1
KHRP26A 73T			 2 pcs.	 φ 12,7    φ 22,2    φ 28,6    φ 31,8    φ 38,1	 φ 6,4    φ 19,1    φ 22,2

\*...Make sure gas side joint and liquid side joint are for R410A, (Label for R410A is attached on each part.)

### SELECTION PROCEDURE

According to the INSTALLATION MANUAL of outdoor unit.

### INSTALLATION PROCEDURE

① The pipe size of each parts are shown below.

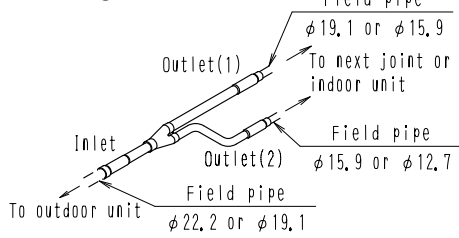
KIT NAME	GAS SIDE JOINT	LIQUID SIDE JOINT
KHRP26A 22T		
KHRP26A 33T		
KHRP26A 72T		
KHRP26A 73T		

2P182411

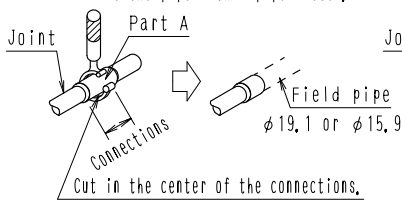
**2** According to SELECTION PROCEDURE, cut the pipe with a pipe cutter for use.

• (Ex.) FOR KHRP26A33T

① GAS SIDE JOINT

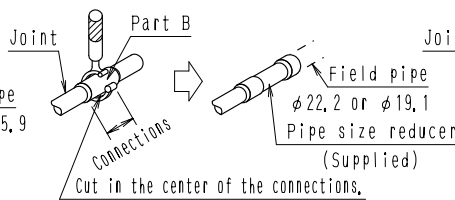


Note)For the size of inlet is  $\phi 19,1$  or the size of outlet(1) is  $\phi 19,1$ , the size of outlet(2) is  $\phi 15,9$ .  
 • Cut the pipe with a pipe cutter,



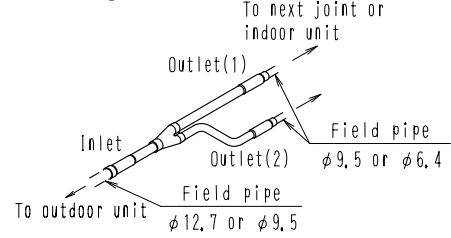
Cut in the center of the part A and connect a field pipe.

Note)For the size of outlet(1) is  $\phi 22,2$  or the size of outlet(2) is  $\phi 19,1$ .

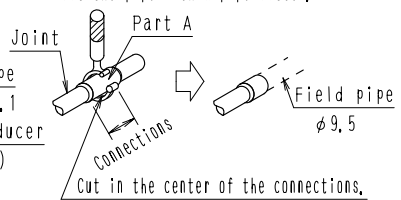


Cut in the center of the part B, use Pipe size reducer (supplied) and connect a field pipe.

② LIQUID SIDE JOINT



Note)For the size of inlet is  $\phi 9,5$  or the size of outlet(1) is  $\phi 9,5$ , the size of outlet(2) is  $\phi 9,5$ .  
 • Cut the pipe with a pipe cutter,



Cut in the center of the part A and connect a field pipe.

• Make sure to flow nitrogen gas through the pipe when brazing.

**3** Insulation of Joint

Be sure to insulate the gas and liquid side Joint.

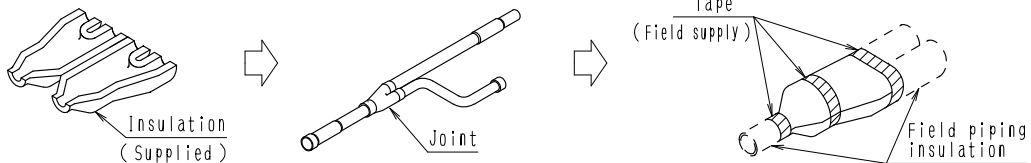
Note)The insulation of the refrigerant piping must be reinforced based on the environment of installation. Otherwise, dew may condensate on the surface of the insulation. For details, see Engineering Data.

GAS SIDE

- Set the insulation matching the joint and wind the field supplied tape from the center without any clearances on the matching face of insulation.
- Seal the insulation and field piping insulation joint with the field supplied tape.

LIQUID SIDE

- Insulate by the same method as gas side joint.

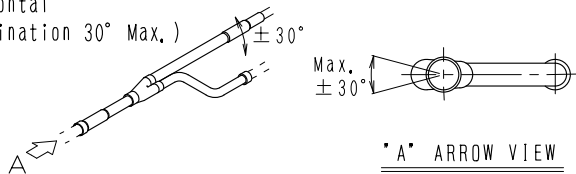


INSTALLATION PRECAUTIONS

- Install the Joint so that it is branched vertically or horizontally.

Horizontal

(Inclination  $30^\circ$  Max.)



Vertical

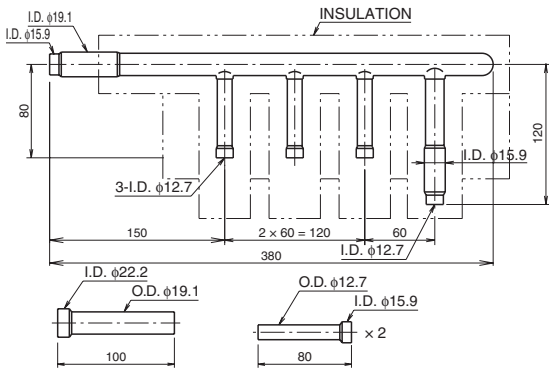
- Do not apply extra force on the piping part. The brazed part may be damaged and it may result in gas leakage.

## 4.2 REFNET Header (Branch Kit)

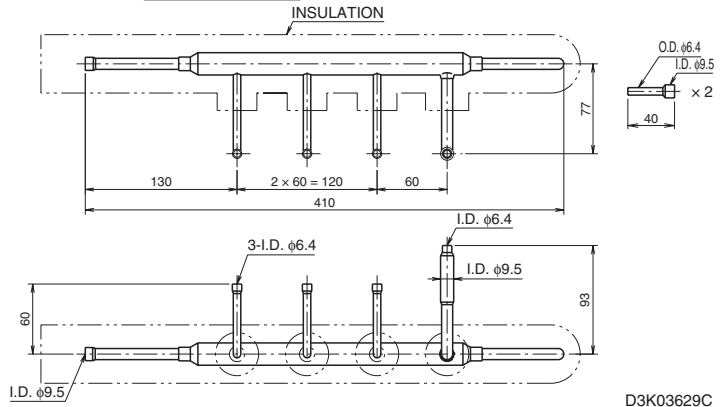
### KHRP26M22H

Unit (mm)

GAS SIDE JOINT



LIQUID SIDE JOINT

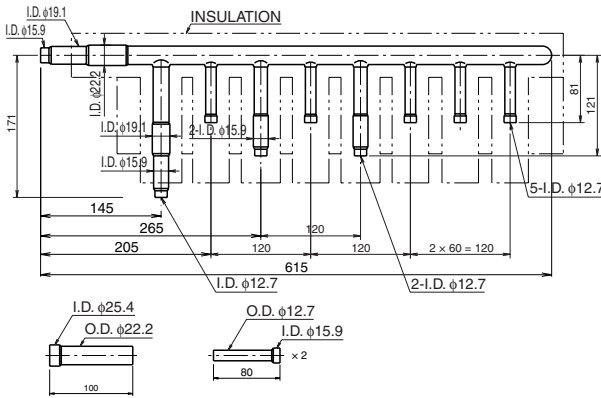


D3K03629C

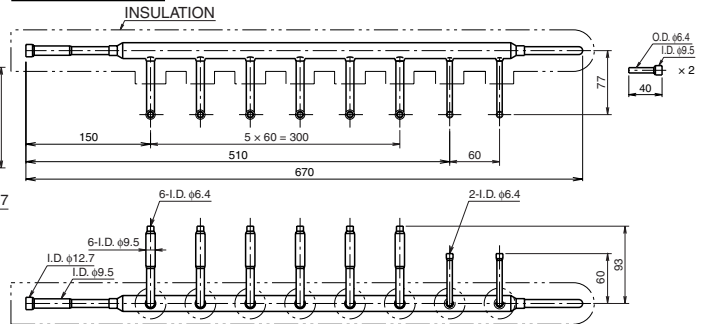
### KHRP26M33H

Unit (mm)

GAS SIDE JOINT



LIQUID SIDE JOINT

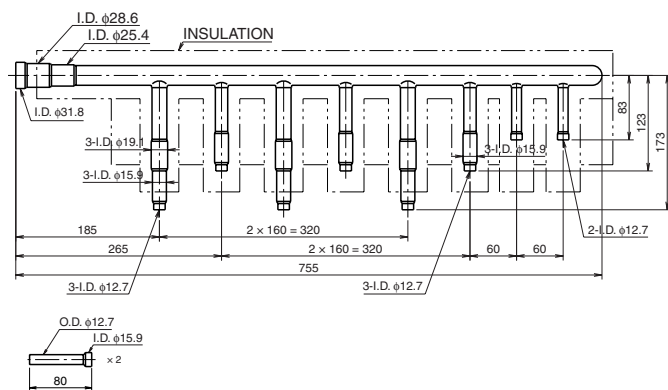


D3K03630C

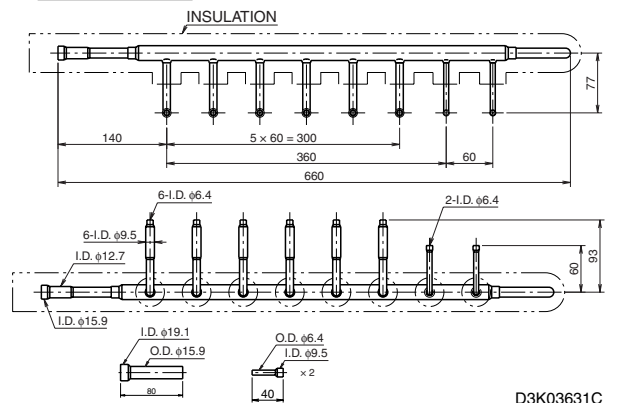
### KHRP26M72H

Unit (mm)

GAS SIDE JOINT



LIQUID SIDE JOINT

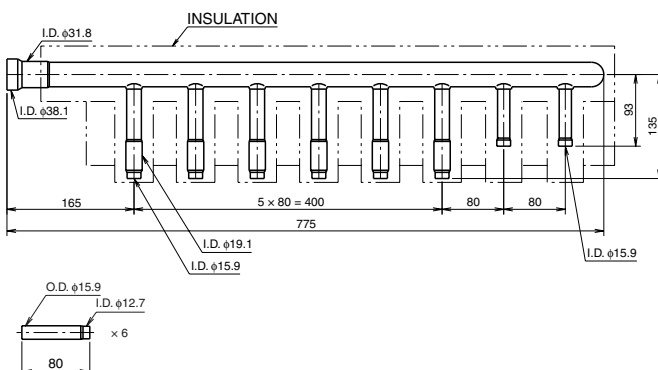


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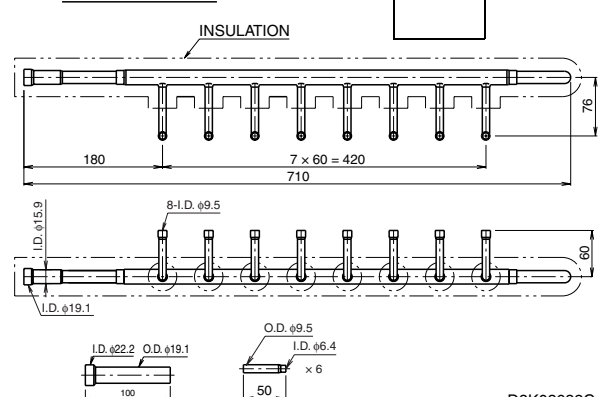
### KHRP26M73H

Unit (mm)

GAS SIDE JOINT



LIQUID SIDE JOINT

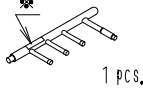
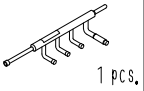
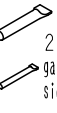
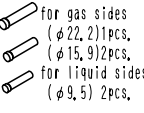
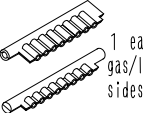


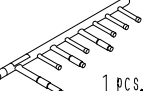
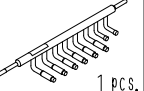

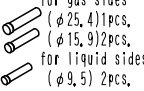
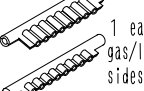


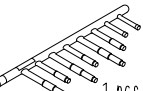
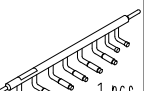

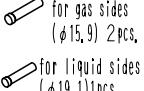
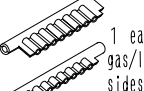


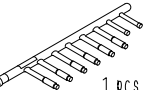
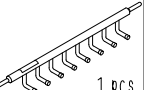

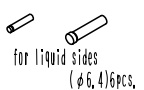
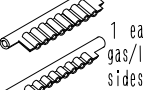




D3K03632C



REFNET HEADER INSTALLATION MANUAL(Except for JAPAN)  
 KHRP26M22H • 33H • 72H • 73H(FOR R-410A)

■ THIS KIT INCLUDES THE FOLLOWING PARTS.

KIT NAME	S H A P E						
	GAS SIDE HEADER	LIQUID SIDE HEADER	PLUGGING TUBES	REDUCER	INSULATION FOR HEADER	INSULATION FOR GAS SIDE ENCLOSED PIPING	INSULATION FOR LIQUID SIDE PIPING
KHRP 26M22H 4branches	 1 pcs.	 1 pcs.	 2 each for gas/liquid sides	 for gas sides (φ22,2)1pcs. (φ15,9)2pcs. for liquid sides (φ9,5) 2pcs.	 1 each for gas/liquid sides	 2 pcs.	 4 pcs.
KHRP 26M33H 8branches	 1 pcs.	 1 pcs.	 6 each for gas/liquid sides	 for gas sides (φ25,4)1pcs. (φ15,9)2pcs. for liquid sides (φ9,5) 2pcs.	 1 each for gas/liquid sides	 6 pcs.	 8 pcs.
KHRP 26M72H 8branches	 1 pcs.	 1 pcs.	 6 each for gas/liquid sides	 for gas sides (φ15,9) 2pcs. for liquid sides (φ19,1)1pcs. (φ9,5)2pcs.	 1 each for gas/liquid sides	 6 pcs.	 8 pcs.
KHRP 26M73H 8branches	 1 pcs.	 1 pcs.	 6 each for gas/liquid sides	 6 pcs. for gas sides(φ12,7) for liquid sides (φ6,4)6pcs. (φ22,2)1pcs.	 1 each for gas/liquid sides	 6 pcs.	 8 pcs.

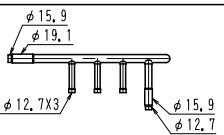
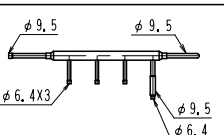
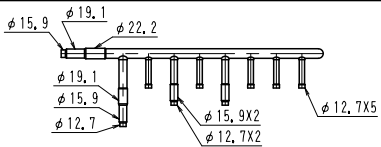
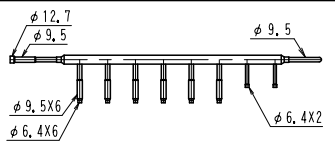
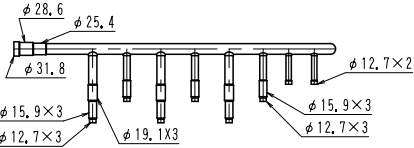
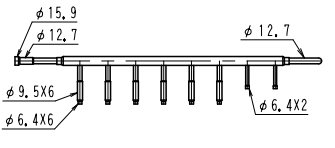
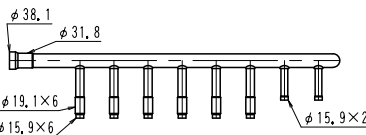
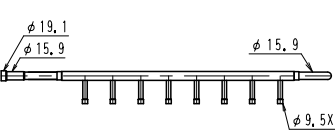
\*...Make sure gas side header and liquid side header are for R-410A. (Label for R-410A is attached on each part.)

SELECTION PROCEDURE

According to the INSTALLATION MANUAL of outdoor unit.

INSTALLATION PROCEDURE

① The pipe size of each parts are shown below.

KIT NAME	GAS SIDE HEADER	LIQUID SIDE HEADER
KHRP26M22H 4branches		
KHRP26M33H 8branches		
KHRP26M72H 8branches		
KHRP26M73H 8branches		

- ② For the outlet/inlet pipings which can be connected in several piping sizes, cut the connections of piping diameter to be used with a pipe cutter according to the left lower table,

NOTE) 1. Cut in the center of the connections,

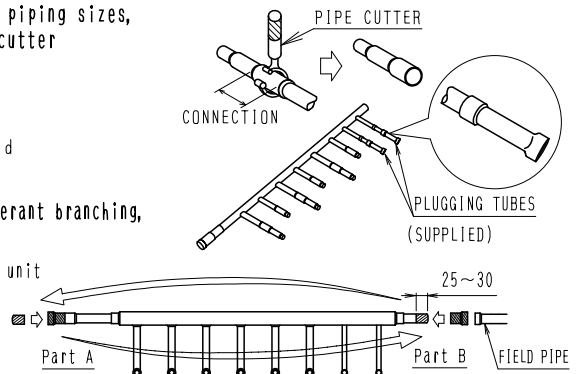
2. PIPE SIDE REDUCER

ex) When connecting the field pipe (φ22, 2) to inlet liquid side pipe of KHRP26M73H, use PIPE SIDE REDUCER,

- ③ For non-connected outlet pipings at the indoor unit side for refrigerant branching, install the supplied plugging tube,

When connecting the field piping to inlet piping part B at the outdoor unit of liquid side header,

- Cut part B as shown with a pipe cutter and install it to part A.
- Connect the flared field piping to part B.



- Make sure to flow nitrogen gas through the pipe when brazing.

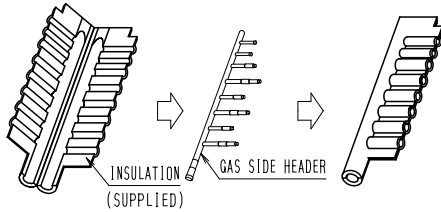
④ Insulation of HEADER

• Be sure to insulate the gas and liquid side HEADER,

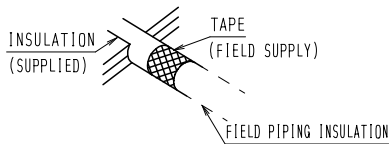
Note) The insulation of the refrigerant piping must be reinforced based on the environment of installation. Otherwise, dew may condensate on the surface of the insulation. For details, see Engineering Data.

GAS SIDE HEADER

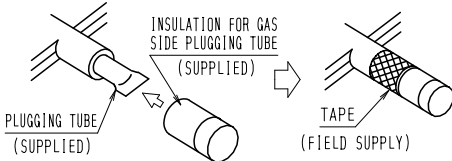
i) Insulate the gas side header with the supplied insulation,



ii) Seal the supplied insulation and field piping insulation junction with the field supplied tape,

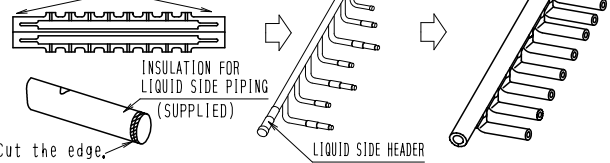


iii) Seal the plugging tube mounting part with the field supplied tape after installing the supplied insulation for the supplied plugging tube,



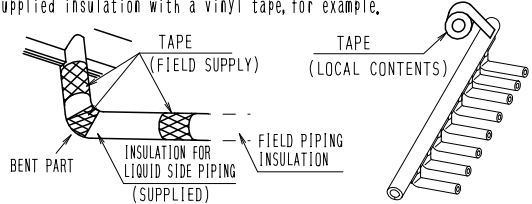
LIQUID SIDE HEADER

i) Insulate the header using the insulation for header and the insulation for liquid side piping. Cut the end part at the field piping connection side,

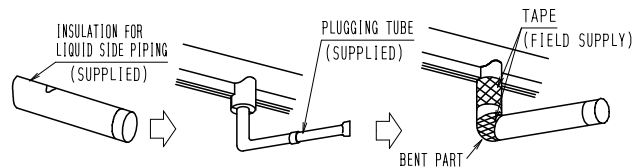


Cut the edge.

ii) Seal the supplied insulation and liquid side piping insulation joint, the supplied liquid side piping insulation bending part, and the joint with the field piping insulation, using the field supplied tape. Seal the supplied insulation with a vinyl tape, for example,



iii) Using the field supplied tape, seal the plugging tube mounting part after installing the insulation for liquid side piping (supplied),

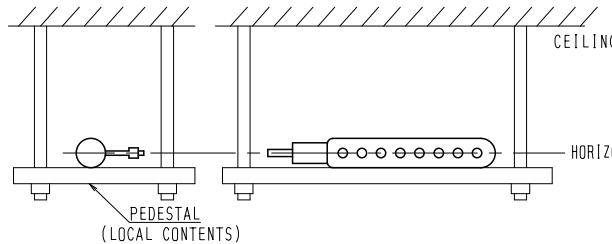


INSTALLATION PRECAUTIONS

• Do not apply extra force on the piping part. The brazed part may be damaged and it may result in gas leakage.

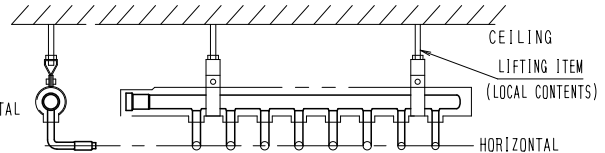
GAS SIDE HEADER

• Place the header on the pedestal and install it so that it is horizontal.



LIQUID SIDE HEADER

• Suspend the header from the ceiling, and be sure to install it so that the outlet/inlet pipings at the header indoor unit side are horizontal at the lower side as shown below,



### 4.3 Reducer

KHRP26M73TP/KHRP26M73HP

# PIPE SIZE REDUCER (For R410A)

KHRP26M73TP • 73HP

■ THIS KIT INCLUDES THE FOLLOWING PARTS.

		PIPE SIZE REDUCER ①	PIPE SIZE REDUCER ②	PIPE SIZE REDUCER ③
SHAPE				
QUANTITY	KHRP26M73TP	1 pc.	1 pc.	2 pc.
	KHRP26M73HP	1 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)

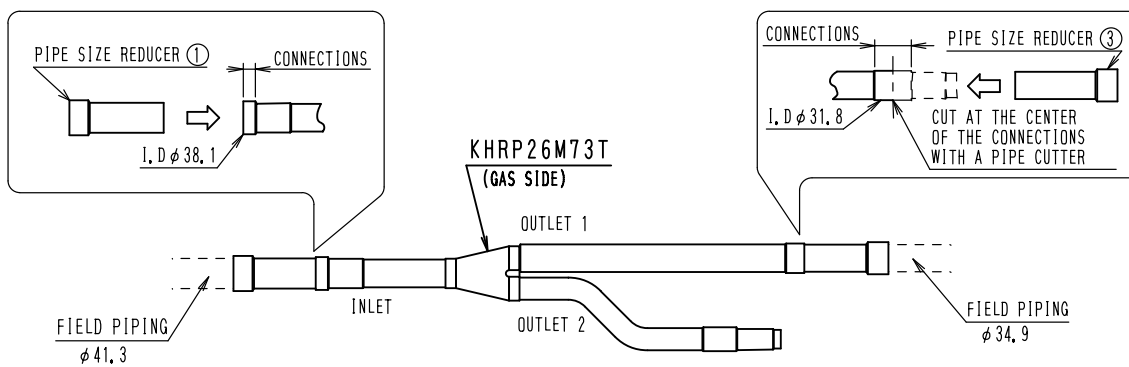
### INSTALLATION PROCEDURE

REFER TO THE INSTALATION MANUAL OF THE BRANCH PIPING KIT.

■ JOINT SIZE ARE AS FOLLOWS.

PIPE SIZE REDUCER ①	PIPE SIZE REDUCER ②	PIPE SIZE REDUCER ③

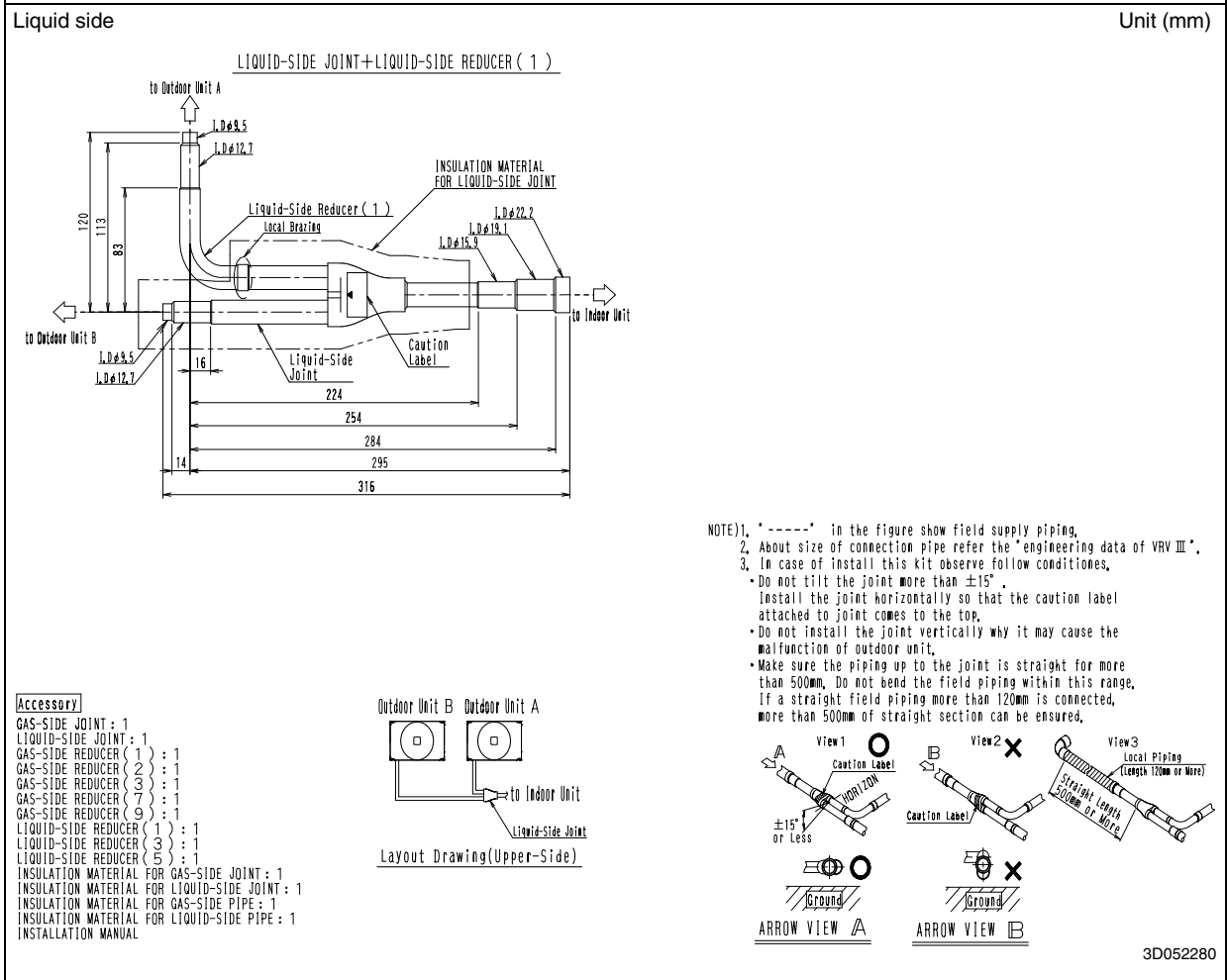
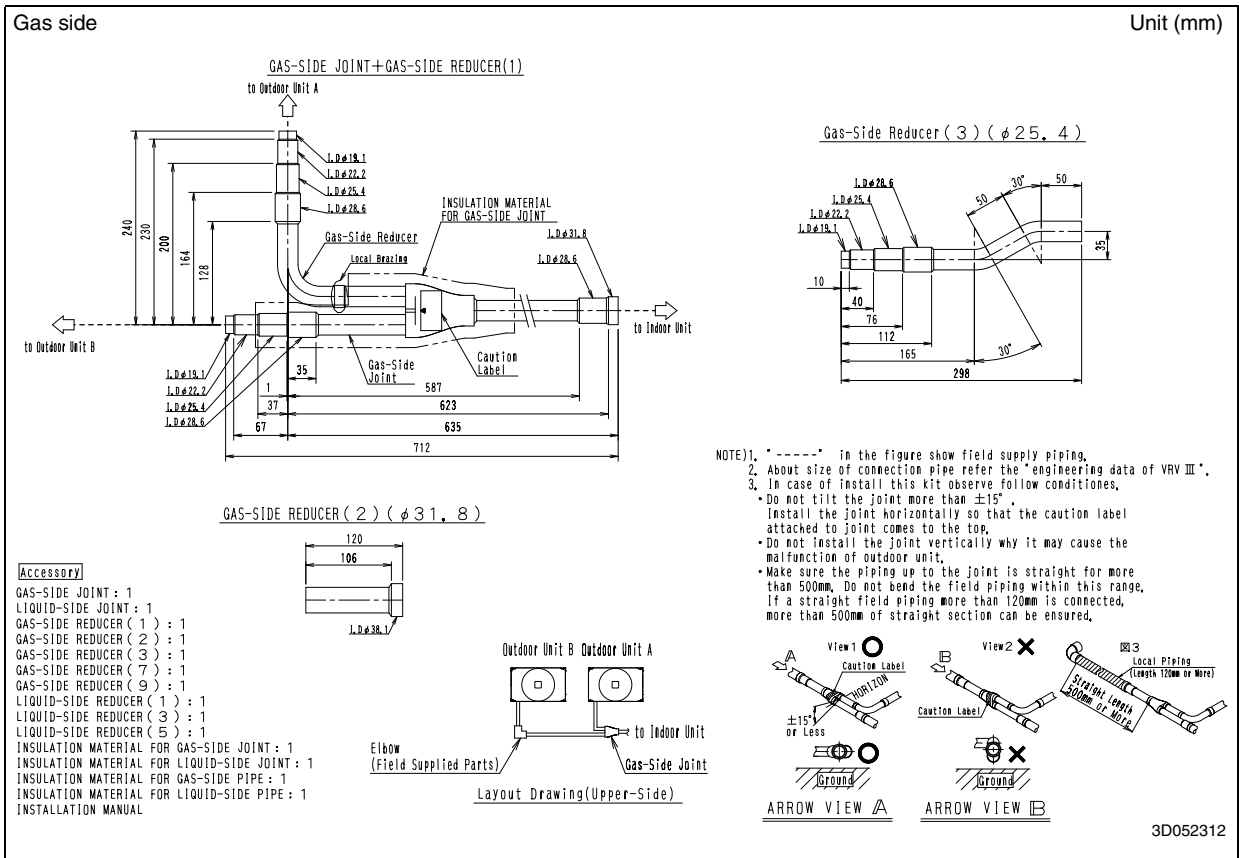
- (1) Select the field piping size according to the installation manual of the outdoor unit.
  - (2) Connect the PIPE SIZE REDUCER suitable for the field piping size to the branch piping kit.
- ex.) Connect the reducers to the branch piping kit, KHRP26M73T.  
 • For inlet piping size is  $\phi 41.3$  and outlet 1 piping size is  $\phi 34.9$ .



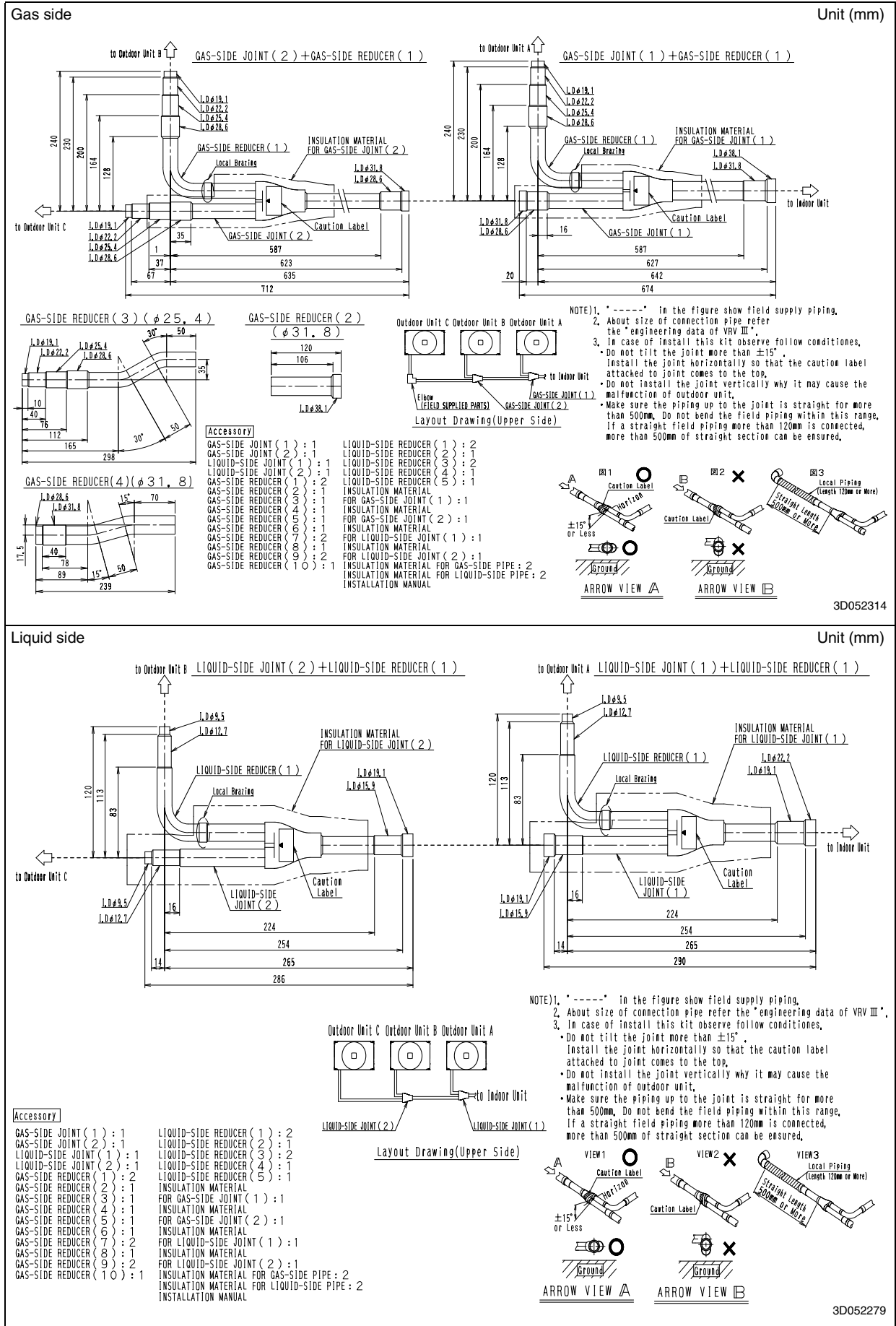
C: 3P113129B

### 4.4 Outdoor Unit Multi Connection Piping Kit

#### BHFP22P100



BHFP22P151


Liquid side
Unit (mm)

**LIQUID-SIDE JOINT (2) + LIQUID-SIDE REDUCER (1)**

**LIQUID-SIDE JOINT (1) + LIQUID-SIDE REDUCER (1)**

**Accessory**

GAS-SIDE JOINT (1) : 1	LIQUID-SIDE REDUCER (1) : 2
GAS-SIDE JOINT (2) : 1	LIQUID-SIDE REDUCER (2) : 1
LIQUID-SIDE JOINT (1) : 1	LIQUID-SIDE REDUCER (3) : 2
LIQUID-SIDE JOINT (2) : 1	LIQUID-SIDE REDUCER (4) : 1
GAS-SIDE REDUCER (1) : 2	LIQUID-SIDE REDUCER (5) : 1
GAS-SIDE REDUCER (2) : 1	INSULATION MATERIAL FOR GAS-SIDE JOINT (1) : 1
GAS-SIDE REDUCER (3) : 1	INSULATION MATERIAL FOR GAS-SIDE JOINT (2) : 1
GAS-SIDE REDUCER (4) : 1	INSULATION MATERIAL FOR LIQUID-SIDE JOINT (1) : 1
GAS-SIDE REDUCER (5) : 1	INSULATION MATERIAL FOR LIQUID-SIDE JOINT (2) : 1
GAS-SIDE REDUCER (6) : 1	INSULATION MATERIAL FOR GAS-SIDE PIPE : 2
GAS-SIDE REDUCER (7) : 2	INSULATION MATERIAL FOR LIQUID-SIDE PIPE : 2
GAS-SIDE REDUCER (8) : 1	INSTALLATION MANUAL
GAS-SIDE REDUCER (9) : 2	
GAS-SIDE REDUCER (10) : 1	

**NOTE)1,** "-----" in the figure show field supply piping.  
**2,** About size of connection pipe refer the "engineering data of VRV III".  
**3,** In case of install this kit observe follow conditions,  
 • Do not tilt the joint more than ±15°.  
 • Install the joint horizontally so that the caution label attached to joint comes to the top.  
 • Do not install the joint vertically why it may cause the malfunction of outdoor unit.  
 • 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.

ARROW VIEW A

ARROW VIEW B

3D052279

BHFP22P100/BHFP22P151

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	SHAPE		Quantity (unit)	Quantity (unit)	Quantity (unit)
	Gas-side joint	Liquid-side joint			
BHFP22P100	(1)	(1)	(2)	(1)	(1)
	(2)	(2)	(7)	(3)	(1)
	(3)	(3)	(9)	(5)	(1)
	(4)	(4)	(10)	(6)	(1)
	(5)	(5)	(11)	(7)	(1)
	(6)	(6)	(12)	(8)	(1)
	(7)	(7)	(13)	(9)	(1)
	(8)	(8)	(14)	(10)	(1)
	(9)	(9)	(15)	(11)	(1)
	(10)	(10)	(16)	(12)	(1)
BHFP22P151	(1)	(1)	(2)	(1)	(1)
	(2)	(2)	(7)	(3)	(1)
	(3)	(3)	(9)	(5)	(1)
	(4)	(4)	(10)	(6)	(1)
	(5)	(5)	(11)	(7)	(1)
	(6)	(6)	(12)	(8)	(1)
	(7)	(7)	(13)	(9)	(1)
	(8)	(8)	(14)	(10)	(1)
	(9)	(9)	(15)	(11)	(1)
	(10)	(10)	(16)	(12)	(1)

**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.

Name	Qty	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	1set	Prepare a gas pipe diameter for the upper outdoor unit as listed in "Connecting Pipe Sizes and location of cutting the joint."
Elbow	1pc	For Insulation materials
Type	1set	For Insulation materials

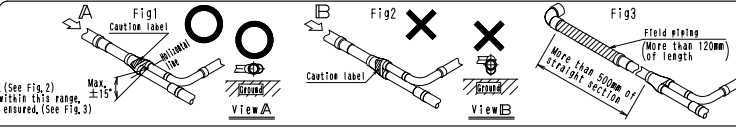
**Caution**  
 • Quantity and selection procedure of elbow only applies to a front or bottom connection.  
 • For a lower front connection, the quantity and selection procedure are different, so please refer to the instructions for a lower front connection.  
 • A joint for the same diameter pipes is needed only for a bottom connection.  
 • See the instructions for the bottom connection for details on quantity and specifications.  
 • The size, thickness of the pipes in this manual shows the requirements of Japanese High Pressure Gas Control Law (No. 3005).  
 • And the temper grade (O, 1/2H) shows the material type of JIS H 3306. The thickness and material shall be selected in accordance with local code for the design pressure 4,0MPa(40bar).

Temper grade	O Type	1/2H Type
Copper tube Ø19	0.80	0.80
Copper tube Ø22	0.80	0.80
Copper tube Ø25	0.80	0.80
Copper tube Ø28	0.80	0.80
Copper tube Ø31	0.80	0.80
Copper tube Ø34	0.80	0.80
Copper tube Ø38	0.80	0.80
Copper tube Ø41	0.80	0.80
Copper tube Ø45	0.80	0.80
Copper tube Ø49	0.80	0.80
Copper tube Ø54	0.80	0.80
Copper tube Ø59	0.80	0.80
Copper tube Ø64	0.80	0.80
Copper tube Ø70	0.80	0.80
Copper tube Ø76	0.80	0.80
Copper tube Ø82	0.80	0.80
Copper tube Ø89	0.80	0.80
Copper tube Ø95	0.80	0.80
Copper tube Ø102	0.80	0.80
Copper tube Ø109	0.80	0.80
Copper tube Ø116	0.80	0.80
Copper tube Ø124	0.80	0.80
Copper tube Ø132	0.80	0.80
Copper tube Ø141	0.80	0.80
Copper tube Ø150	0.80	0.80
Copper tube Ø160	0.80	0.80
Copper tube Ø170	0.80	0.80
Copper tube Ø180	0.80	0.80
Copper tube Ø190	0.80	0.80
Copper tube Ø200	0.80	0.80
Copper tube Ø210	0.80	0.80
Copper tube Ø220	0.80	0.80
Copper tube Ø230	0.80	0.80
Copper tube Ø240	0.80	0.80
Copper tube Ø250	0.80	0.80
Copper tube Ø260	0.80	0.80
Copper tube Ø270	0.80	0.80
Copper tube Ø280	0.80	0.80
Copper tube Ø290	0.80	0.80
Copper tube Ø300	0.80	0.80
Copper tube Ø310	0.80	0.80
Copper tube Ø320	0.80	0.80
Copper tube Ø330	0.80	0.80
Copper tube Ø340	0.80	0.80
Copper tube Ø350	0.80	0.80
Copper tube Ø360	0.80	0.80
Copper tube Ø370	0.80	0.80
Copper tube Ø380	0.80	0.80
Copper tube Ø390	0.80	0.80
Copper tube Ø400	0.80	0.80
Copper tube Ø410	0.80	0.80
Copper tube Ø420	0.80	0.80
Copper tube Ø430	0.80	0.80
Copper tube Ø440	0.80	0.80
Copper tube Ø450	0.80	0.80
Copper tube Ø460	0.80	0.80
Copper tube Ø470	0.80	0.80
Copper tube Ø480	0.80	0.80
Copper tube Ø490	0.80	0.80
Copper tube Ø500	0.80	0.80

**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.

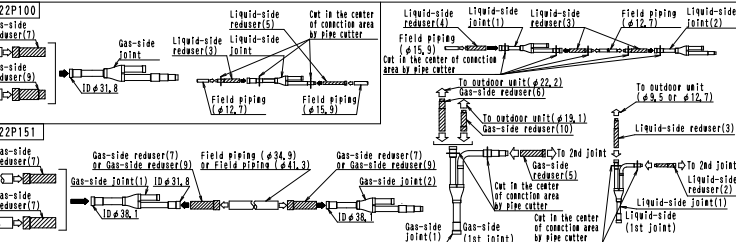
**To the piping installer** When installing this kit, please apply the following restrictions.

**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 use the field piping within this range. If a straight field piping more than 1200mm is connected, more than 500mm of straight section can be ensured. (See Fig. 3)  
 • Improper installation may lead to malfunction of the outdoor unit.



**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 joint requirements into consideration.  
 This manual explains the front connection (Ex. of construction 1).  
 For 3-unit installation on Ex. of construction 5 and 6, 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-unit system or the size of the main pipe is Ø41.3 or Ø34.9, 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-unit system is Ø12.7, Liquid-side reducer (3) will be used. And when the size of main pipe is Ø15.9, Liquid-side reducer (4) will be used. See the figure at the right for details of connection.



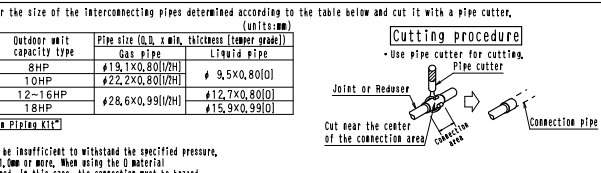
**BHFP22P100 Installation Instructions**

**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.

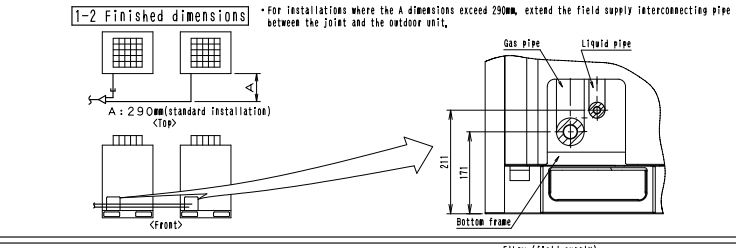
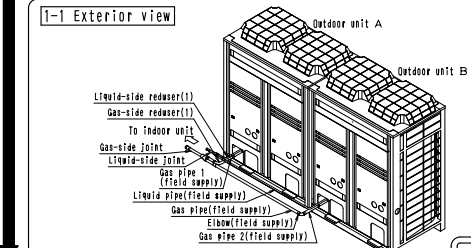
**Connecting pipe sizes and location of cutting the joint**

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.

Outdoor unit total capacity type	Pipe size (Ø, x min. thickness (temper grade))	Gas pipe	Liquid pipe
16HP	Ø28, 6X0, 99[1/2H]	Ø12, 7X0, 80[0]	Ø12, 7X0, 80[0]
18-22HP	Ø28, 6X0, 99[1/2H]	Ø12, 7X0, 80[0]	Ø12, 7X0, 80[0]
24HP	Ø34, 9X1, 21[1/2H]	Ø15, 9X0, 99[0]	Ø15, 9X0, 99[0]
26-34HP	Ø34, 9X1, 21[1/2H]	Ø15, 9X0, 99[0]	Ø15, 9X0, 99[0]
36HP	Ø41, 3X1, 43[1/2H]	Ø19, 1X0, 80[1/2H]	Ø19, 1X0, 80[1/2H]



**Installation examples Procedure for Front Connection**



**2 Connection of gas and liquid pipes**

**2-1 Cutting the field supply gas pipes**  
 • Cut the pipes according to Table 1.  
 • This table shows the case when the A dimensions shown in 1-2 Finished dimensions is 250mm. If the A dimensions exceed 250mm, see Table 1 and adjust the dimensions of the gas pipe 1 and 2.  
 • The A 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.

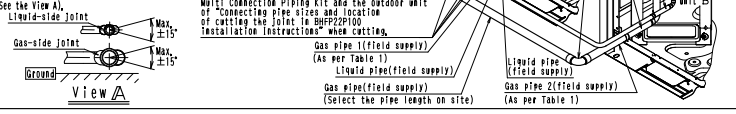
**2-2 Connection of pipes**  
 • Connect the gas and liquid pipes as shown in the figure at the right. When connecting the pipes, first connect the gas-side joint and the gas-side reducer(1), the liquid-side joint and the liquid-side reducer(1).  
 • See 1-2 Finished dimensions for the location(height) 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).

**Table 1**

Model type	Gas pipe 1 (field supply)	Gas pipe 2 (field supply)	Elbow (field supply)
8HP	7.5	2.87	1.7
10HP	8.1	2.57	2.3
12-18HP	12.5	2.23	2.9

**Table 2**

Model type	Elbow (field supply)
8HP	1.7
10HP	2.3
12-18HP	2.9



3 The work after the kit is connected

**Connection of piping between the outdoor unit and the indoor unit** Follow the instructions in the installation manual included with the outdoor unit, when performing installation work.

**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. (See section shown in the figure at the right.)

1 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).

2 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.

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).

3 The work after the kit is connected

**Connection of piping between the outdoor unit and the indoor unit** Follow the instructions in the installation manual included with the outdoor unit, when performing installation work.

**Air tight test**

**Insulation of joints**

- (1) Fit the insulation to the reducer and temporarily keep it in place with tape.
- (2) Cut insulation tube along the slit. (See the figure at the right.)
- (3) Fit the insulation to the joint and temporarily keep it in place with tape without leaving a gap between the insulation mating faces.
- (4) Seal the seam between the insulation and the field supply piping insulation with the field supply tape.
- (5) Wrap the tape around the insulation attached to the joint without leaving a gap. (See section shown in the figure at the right.)

1 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**

**1-2 Finished dimensions**

Item	Dimensions
Central drain pan kit	139
Vibration absorption stand	139
Vibration absorption stand+ central drain pan kit	233

2 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 dimensions are not identical to table 2 or straight size joint with stopper, adjust them as table 2, 4 and 5 show.

Model type	Gas-side accessory pipe(3) B (mm)			Gas pipe 1 (field supply) L (mm)		
	For 100	For 139	For 233	For 100	For 139	For 233
8HP	102	63	48	79		
10HP	72	33	25	86		
12HP	0 (no cutting)	53	0 (no cutting)	92	133	
18HP	0 (no cutting)		0 (no cutting)			

Model type	Gas-side accessory pipe(3) B (mm)			Gas pipe 2 (field supply) L (mm)		
	For 100	For 139	For 233	For 100	For 139	For 233
8HP	0 (no cutting)	0 (no cutting)	0 (no cutting)	76	115	209
10HP	18	0 (no cutting)	0 (no cutting)	88	109	203
12HP	32	0 (no cutting)	0 (no cutting)	96	103	197
18HP						

**2-2 Connection of pipes**

- Remove the knockout plate on the bottom frame.
- Connect the gas and liquid pipes 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

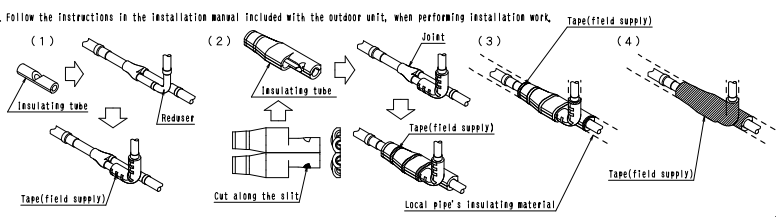
3 The work after the kit is connected

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.)
- (3) Fit the insulation to the joint and temporarily keep it in place with tape without leaving a gap between the insulation mating faces.
- (4) Seal the seam between the insulation and the field supply piping insulation with the field supply tape.
- (5) Wrap the tape around the insulation attached to the joint without leaving a gap. (Section shown in the figure at the right.)



BHPF22P151 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.

Cutting procedure

- Use pipe cutter for cutting.
- Pipe cutter

Pipe between outdoor unit Multi Connection Piping Kit

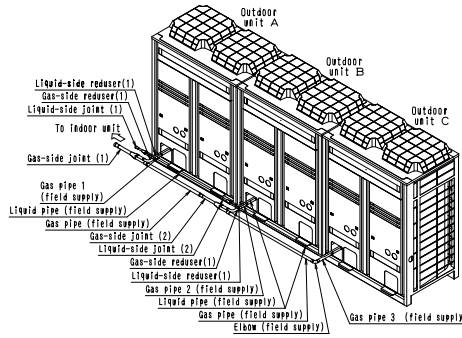
- Select the pipe size according to the total capacity of the outdoor unit (unit B, C).
- Main pipe
- Select the pipe size according to the total capacity of the outdoor unit to be connected upstream (unit A, B, C).

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 W.A. thickness (amber grade))	Gas pipe	Liquid pipe
16HP			
18~22HP		φ28.6X0.99(1/2H)	φ12.7X0.80(1/2)
24HP		φ34.9X1.2(1/2H)	φ15.9X0.99(1/2)
26~34HP		φ41.3X1.43(1/2H)	φ19.1X0.80(1/2H)
36HP~			

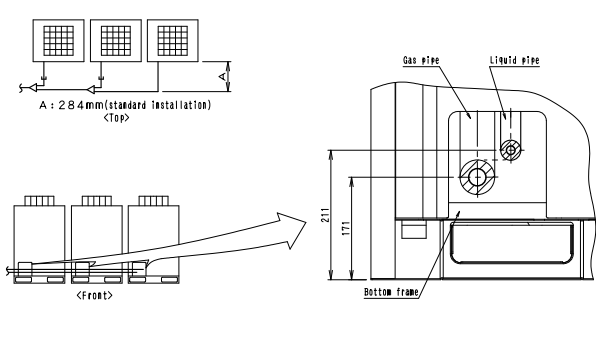
Outdoor unit capacity type	Pipe size (O.D. x W.A. thickness (amber grade))	Gas pipe	Liquid pipe
8HP		φ19.1X0.80(1/2H)	φ9.5X0.80(1/2)
10HP		φ22.2X0.80(1/2H)	φ9.5X0.80(1/2)
12~16HP		φ28.6X0.99(1/2H)	φ12.7X0.80(1/2)
18HP		φ34.9X0.99(1/2H)	φ15.9X0.99(1/2)

1 Installation examples Procedure for Front Connection

1-1 Exterior view



1-2 Finished dimensions



2 Connection of gas and liquid pipes

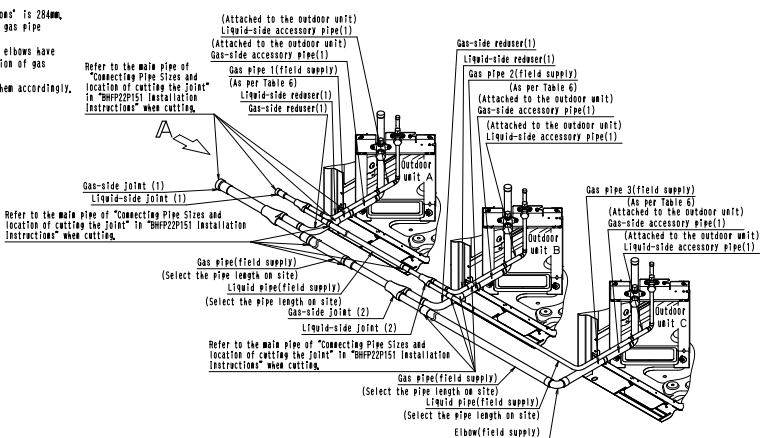
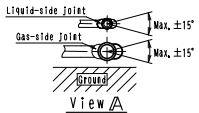
2-1 Cutting the field supply gas pipes

- 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 BHPF22P151 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.

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).



3 The work after the kit is connected

Connection of piping between the outdoor unit and the indoor unit

Air tight test

Insulation of joints

- See "The work after the kit is connected" for a front connection in "BHPF22P151 Installation Instructions."

Follow the instructions in the installation manual included with the outdoor unit, when performing installation work.



1 Installation examples Procedure for Lower Front Connection

**1-1 Exterior view**

**1-2 Finished dimensions**

2 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 BHP22P100 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.

Model type	Gas pipe 1 (field supply)		Gas pipe 2 (field supply)		Gas pipe 3 (field supply)	
	L (mm)	B (mm)	L (mm)	B (mm)	L (mm)	B (mm)
8HP	130	147	182	147	182	147
10HP	100	117	152	117	152	117
12-18HP	66	83	118	83	118	83

Model type	Gas pipe 4 (field supply)		Gas pipe 5 (field supply)	
	L (mm)	B (mm)	L (mm)	B (mm)
8HP	59	237	59	237
10HP	83	225	83	225
12-18HP	149	213	149	213

**2-2 Connection of pipes**

- Connect the gas and liquid pipes as shown in the figure of the left. (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).

3 The work after the kit is connected

**Connection of piping between the outdoor unit and the indoor unit**

**Air tight test**

**Insulation of joints**

Follow the instructions in the installation manual included with the outdoor unit, when performing installation work.

• See "The work after the kit is connected" for a lower front connection of "BHP22P100 Installation Instruction."

1 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**

Item	Dimensions
Central drain pan kit	139
Vibration absorption stand+ central drain pan kit	233

2 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" dimensions are not identical to table 2 or "straight size joint" is with stopper, adjust them as table 2, 8 and 9 show.

Model type	Gas-side accessory pipe(3)			Gas pipe 1 (field supply)	
	Dimensions			Dimensions	
	For 100	For 139	For 233	For 100	For 139
8HP	102	63	48	79	86
10HP	72	33	25	86	92
12HP	0	53	0	92	133
18HP	0 (no cutting)	0	0 (no cutting)	0	0

Model type	Gas-side accessory pipe(3)			Gas pipe 2 (field supply)		
	Dimensions			Dimensions		
	For 100	For 139	For 233	For 100	For 139	For 233
8HP	0 (no cutting)	0 (no cutting)	0 (no cutting)	76	115	209
10HP	18	0 (no cutting)	0 (no cutting)	88	109	203
12HP	32	0 (no cutting)	0 (no cutting)	96	103	197
18HP	0 (no cutting)	0 (no cutting)	0 (no cutting)	0	0	0

**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.

3 The work after the kit is connected

**Connection of piping between the outdoor unit and the indoor unit**

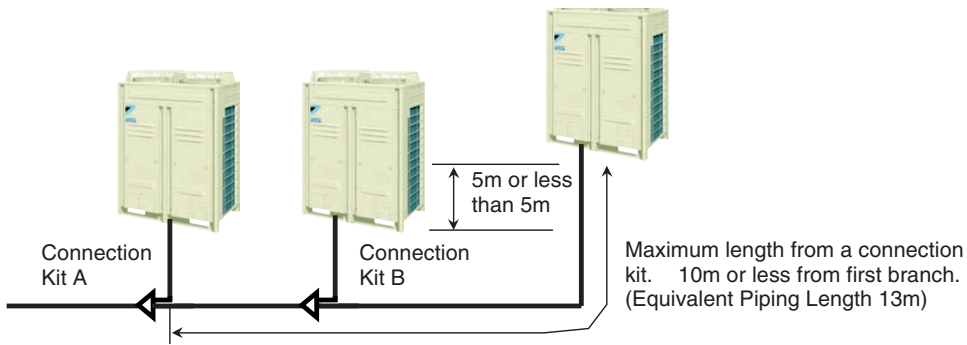
**Air tight test**

**Insulation of joints**

Follow the instructions in the installation manual included with the outdoor unit, when performing installation work.

• See "The work after the kit is connected" for a front connection in "BHP22P100 Installation Instruction."

### 4.5 Outdoor Unit Multi Connection Piping Point

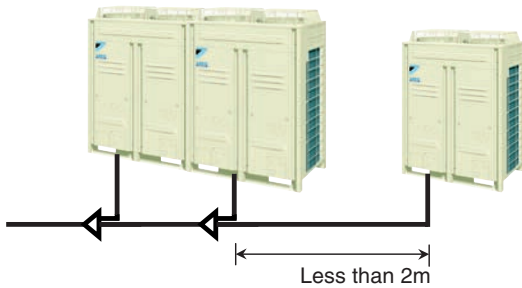


Since there is a possibility that oil may be collected on a stop machine side, install piping between outdoor units to go to level or go up to an outdoor unit, and to make a slope.

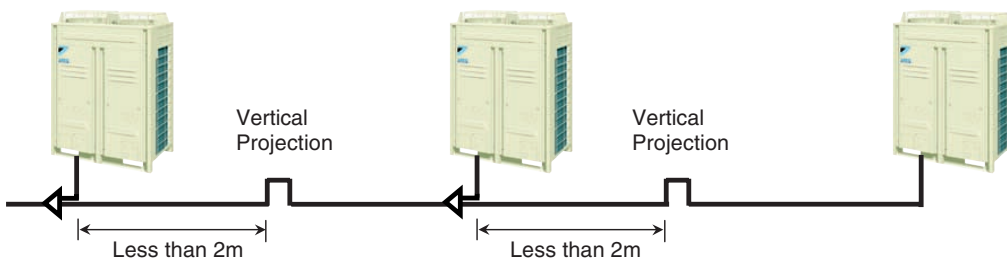
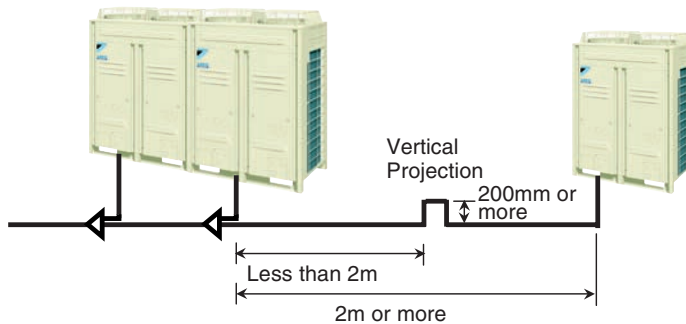
The projection part between multi connection piping kits

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.

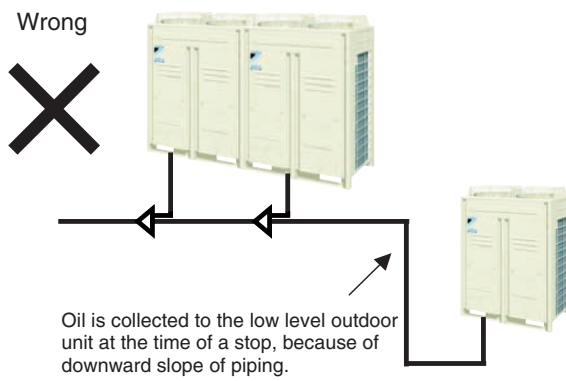
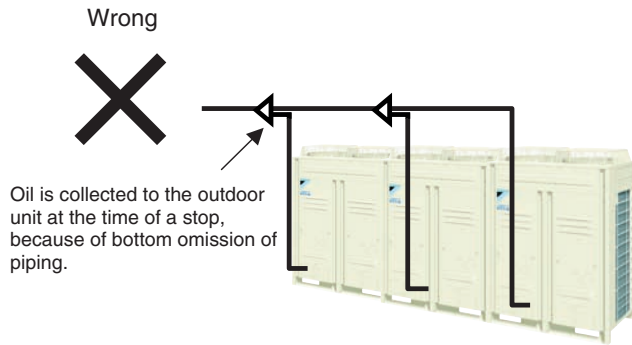
In the case of 2m or less




In the case of 2m or more

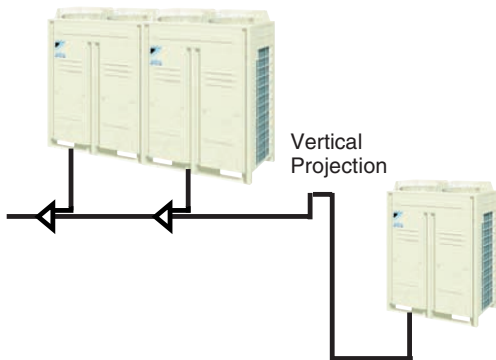


### 4.6 The Example of a Wrong Pattern

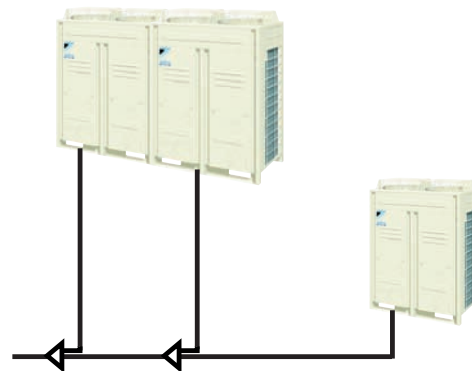


 The example of installation on which oil is not collected.

Good



Good



# 5. Field Setting

## 5.1 RXYQ5-18PAY1, PAYL

### How to set the unit to high ESP.

- (1) Standard external static pressure for VRVIII is 3mm H<sub>2</sub>O (29.4Pa).
- (2) High external static pressure of 8mm H<sub>2</sub>O (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))

TEST:	C/H SELECTOR							
H1P	H2P	H3P	H4P	H5P	H6P	H7P	H8P	
●	●	☀	●	●	●	●	●	
MODE	HWL:	IND	MASTER	SLAVE	L, N, Q, P	DEMAND	MULTI	
	MODE: BS1	SET: BS2	RETURN: BS3	TEST: BS4	RESET: BS5			

LED display: ●...Light OFF ☀...Light ON ...Flashing

- The LED display on the left shows the factory setting of the single outdoor system.
- If you get confused in the setting process, push the MODE button (BS1). Then it will return to initial state(SETTING MODE 1).

For resetting the address when the wiring is changed or an additional indoor unit is installed

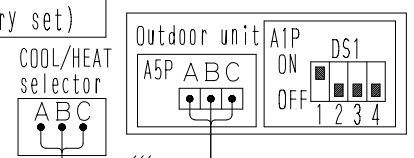
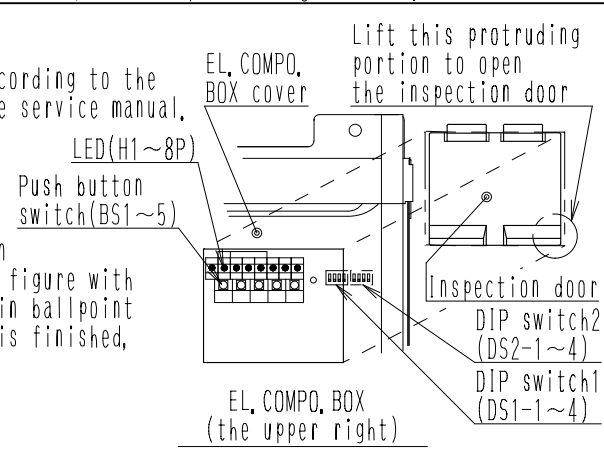
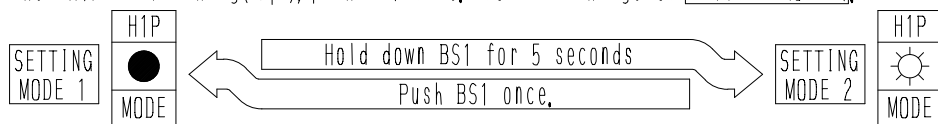
For check operation

For changing the field setting

For changing the setting mode

#### 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].



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 (A) to (H) 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
① Push the SET button (BS2) and adjust the LED display to the example shown on the right according to the required mode (A) ~ (H).	(A) Check operation (Without initial refrigerant decision)	☉	●	●	●	●	●	☉
	(B) Additional refrigerant charging operation setting	☉	●	●	●	●	●	●
	(C) Refrigerant recovery operation/Evacuation mode setting	☉	●	●	●	●	●	●
	(D) Night-time low noise setting	☉	●	●	●	●	●	●
	(E) External low noise level setting(*1)	☉	●	●	●	●	●	●
	(F) Demand level setting(*1)	☉	●	●	●	●	●	●
	(G) External low noise demand setting(*1)	☉	●	●	●	●	●	●
	(H) High static pressure setting	☉	●	●	●	●	●	●
② Push the RETURN button (BS3), (The present setting will be indicated,)		Either of ③						
③ Push the SET button (BS2) and adjust the LED display to the example shown on the right according to the required mode. *2 For (D) and (E), lower noise operation can be carried out by "level 2" than by "level 1", and by "level 3" than by "level 2". For (F), 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 (A), (B), (C), (G), (H)	ON	☉	●	●	●	●	☉
		OFF(Factory set)	☉	●	●	●	●	●
	For (D) (*2)	OFF(Factory set)	☉	●	●	●	●	●
		Level 1	☉	●	●	●	●	●
		Level 2	☉	●	●	●	●	●
		Level 3	☉	●	●	●	●	●
	For (E) and (F) (*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	●	●	☉	●	●	●	●

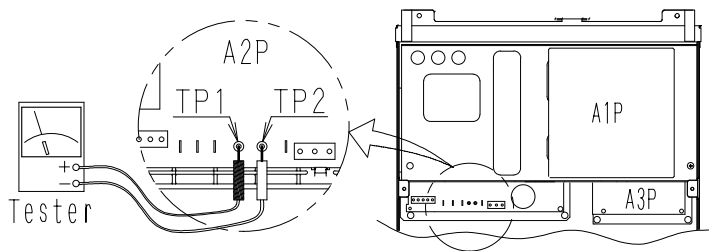
**Caution for the inspection door**

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 connector 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 connector.  
(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 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.

2P198646

## 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 expansion 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 ③ 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 vacuum pump.
- ③ After completed, push the MODE button (BS1) and reset the [SETTING MODE 2].

[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 ③ 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 ② 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 ② 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.

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	<ul style="list-style-type: none"> <li>• Check of miswiring</li> <li>• Automatic judgment of piping length</li> </ul>	<ul style="list-style-type: none"> <li>• Check of the shutoff valve opening</li> <li>• Check of refrigerant initial state(*)</li> </ul>
The additional refrigerant charging was completed by the other method, (RZYQ type match with only this case,)	<ul style="list-style-type: none"> <li>• Check of miswiring</li> <li>• Automatic judgment of piping length</li> </ul>	<ul style="list-style-type: none"> <li>• Check of the shutoff valve opening</li> <li>• Check of refrigerant overcharge</li> </ul>

(\*) 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°CDB, more than 43°CDB / Indoor : less than 20°CDB, more than 32°CDB)  
 ■ 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 starting 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 discontinuing 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 stops 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]

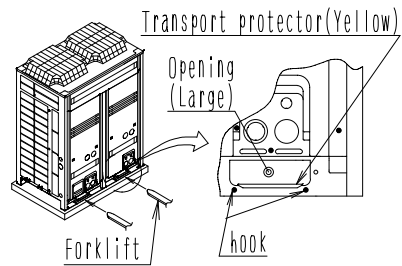
- ① Confirm the malfunction code by the remote controller, and correct the abnormality. (For how to correct the abnormality, see the installation manual.)
- ② After correcting the abnormality, push the RETURN button (BS3) and reset the malfunction code.
- ③ Carry out the check operation again and confirm that the abnormality is properly corrected.



**To Installers**

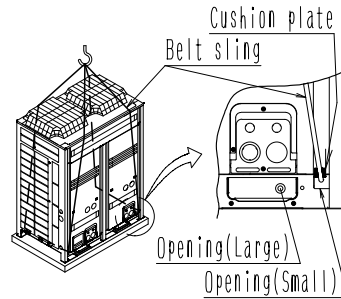
1. When carrying the unit

- 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 protector with pushing hook 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.

**To Service Person**

**⚠ WARNING ⚠ Caution to electric shock**

- Beware the fan running when inspect.
- Do not touch the charged parts when inspect.

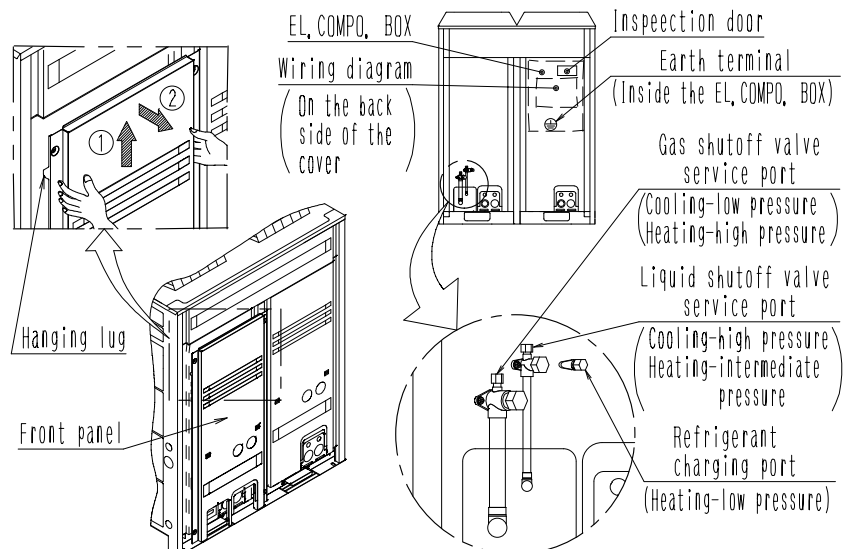
Check the system status on LED(H2P) on the PC board(A1P) from inspection door on the EL, COMPO, BOX cover.

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,



## 5.2 RXYQ5-18PTL

### How to set the unit to high ESP.

- (1) Standard external static pressure for VRVIII is 3mm H<sub>2</sub>O (29.4Pa).
- (2) High external static pressure of 8mm H<sub>2</sub>O (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.

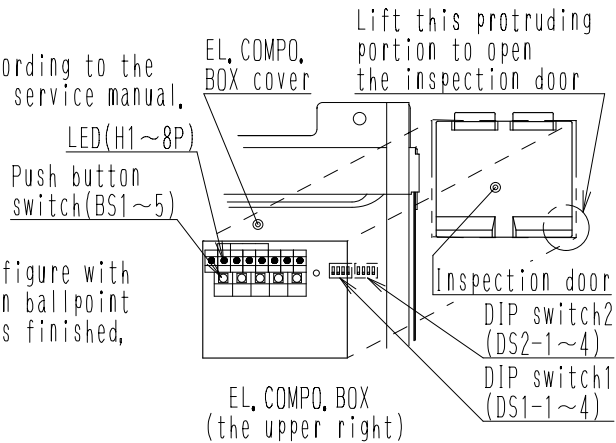
**Service Precautions** (Touch the noncoating metal part (Ex. standard type: the EL, COMPO, BOX cover, anti-corrosion treatment types: the fixing bolt of EL, COMPO, BOX) to eliminate static electricity before performing service.)

#### Field setting

If required, carry out the field setting according to the following instructions. For details, see the service manual.

##### 1. How to operate

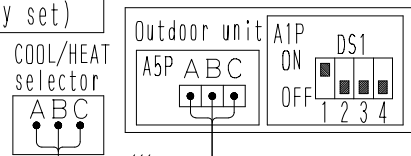
- The DIP switch must be operated before shutting the EL, COMPO, BOX cover, which the power supply must be shut off.
- For operating the push button switch, open the inspection door as shown in the right figure with the power supply turned on, and use a resin ballpoint or non-conducting object. After 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))

TEST: ●	C/H SELECTOR						
H1P	H2P	H3P	H4P	H5P	H6P	H7P	H8P
●	●	☀	●	●	●	●	●
MODE	HWL:☀	IND	MASTER	SLAVE	L, N, Q, P	DEMAND	MULTI
	○	○	○	○	○	○	○
	MODE:BS1	SET:BS2	RETURN:BS3	TEST:BS4	RESET:BS5		

LED display: ●...Light OFF ☀...Light ON ●...Flashing

- The LED display on the left shows the factory setting of the single outdoor system.
- If you get confused in the setting process, push the MODE button (BS1). Then it will return to initial state (SETTING MODE 1).

For resetting the address when the wiring is changed or an additional indoor unit is installed

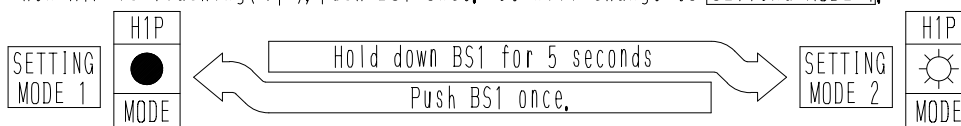
For check operation

For changing the field setting

For changing the setting mode

##### 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].



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 (A) to (H) 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
① Push the SET button (BS2) and adjust the LED display to the example shown on the right according to the required mode (A) ~ (H).	(A) Check operation (Without initial refrigerant decision)	☉	●	●	●	●	●	☉
	(B) Additional refrigerant charging operation setting	☉	●	●	●	●	●	●
	(C) Refrigerant recovery operation/Evacuation mode setting	☉	●	●	●	●	●	●
	(D) Night-time low noise setting	☉	●	●	●	●	●	●
	(E) External low noise level setting(*1)	☉	●	●	●	●	●	●
	(F) Demand level setting(*1)	☉	●	●	●	●	●	●
	(G) External low noise demand setting(*1)	☉	●	●	●	●	●	●
	(H) High static pressure setting	☉	●	●	●	●	●	●
② Push the RETURN button (BS3), (The present setting will be indicated,)		Either of ③						
③ Push the SET button (BS2) and adjust the LED display to the example shown on the right according to the required mode. *2 For (D) and (E), lower noise operation can be carried out by "level 2" than by "level 1", and by "level 3" than by "level 2". For (F), 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 (A), (B), (C), (G), (H)	ON	☉	●	●	●	●	☉
		OFF(Factory set)	☉	●	●	●	●	●
	For (D) (*2)	OFF(Factory set)	☉	●	●	●	●	●
		Level 1	☉	●	●	●	●	●
		Level 2	☉	●	●	●	●	●
		Level 3	☉	●	●	●	●	●
	For (E) and (F) (*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	●	●	☉	●	●	●	●

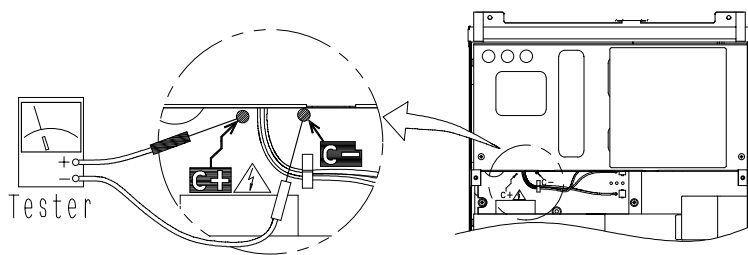
**Caution for the inspection door**

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 connector 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 connector.  
(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**

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.

2P225032

## 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 expansion 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 ③ 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 vacuum pump.
- ③ After completed, push the MODE button (BS1) and reset the [SETTING MODE 2].

[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 ③ 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 ② 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 ② 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.

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	<ul style="list-style-type: none"> <li>• Check of miswiring</li> <li>• Automatic judgment of piping length</li> </ul>	<ul style="list-style-type: none"> <li>• Check of the shutoff valve opening</li> <li>• Check of refrigerant initial state(*)</li> </ul>
The additional refrigerant charging was completed by the other method, (RZYQ type match with only this case.)	<ul style="list-style-type: none"> <li>• Check of miswiring</li> <li>• Automatic judgment of piping length</li> </ul>	<ul style="list-style-type: none"> <li>• Check of the shutoff valve opening</li> <li>• Check of refrigerant overcharge</li> </ul>

(\*) 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°CDB, more than 43°CDB / Indoor : less than 20°CDB, more than 32°CDB)
- 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 starting 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 discontinuing 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 stops 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	●	☀	☀	●	●	●	●

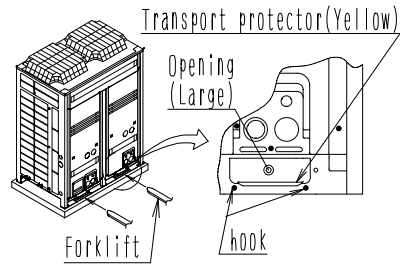
[Measure for abnormal finish]

- 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.

**To Installers**

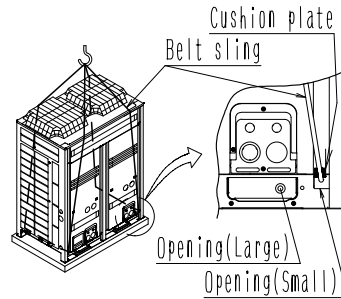
1. When carrying the unit

- 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 protector with pushing hook 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.

**To Service Person**

**⚠ WARNING ⚠ Caution to electric shock**

- Beware the fan running when inspect.
- Do not touch the charged parts when inspect.

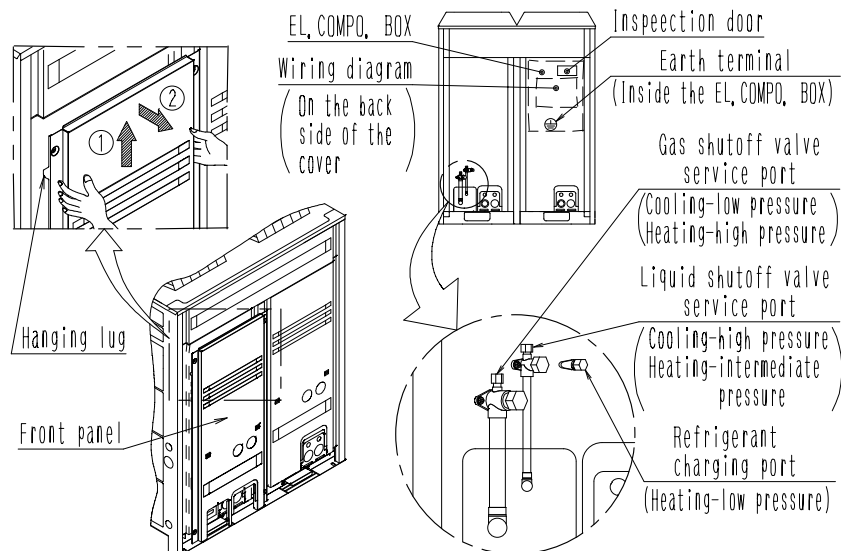
Check the system status on LED(H2P) on the PC board(A1P) from inspection door on the EL, COMPO, BOX cover.

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,







# Part 7

## Option of Control

1. Option List of Controllers.....	512
2. DAIKIN Building Air conditioning Control System (D-BACS) .....	514
2.1 System Configuration (Central Remote Controller).....	514
2.2 System Configuration (intelligent Touch Controller).....	515
2.3 System Configuration .....	516
2.4 Various PC Boards.....	517
3. Control System.....	518
3.1 Various Control by Liquid Crystal Remote Controller .....	518
3.2 Building Control System Introduction .....	524
3.3 Specifications of the Control Wiring .....	530
3.4 Wiring Example .....	531
3.5 Length of Transmission Wiring.....	533
3.6 Connection Method .....	534
4. Wired Remote Controller.....	541
5. Wireless Remote Controller / Receiver .....	543

# 1. Option List of Controllers

## Operation Control System Optional Accessories

No.	Type			FXFQ-P	FXZQ-M	FXCQ-M	FXKQ-MA	FXDQ-PB FXDQ-NB	FXMQ-P	FXMQ-MA	FXHQ-MA	FXAQ-MA	FXLQ-MA FXNQ-MA	FXUQ-MA
	Item	Wireless	H/P											
1	Remote controller	Wireless	H/P	BRC7F634F	BRC7E530W	BRC7C62	BRC4C61	BRC4C65	BRC4C65	BRC4C62	BRC7EA63W	BRC7EA618	BRC4C62	BRC7CA528W
		Wired		BRC1C62										
2	Navigation remote controller (Wired remote controller)			BRC1E61										
3	Wired remote controller with weekly schedule timer			BRC1D61										
4	Simplified remote controller (Exposed type)			—					BRC2C51		—		BRC2C51	—
5	Remote controller for hotel use (Concealed type)			—					BRC3A61		—		BRC3A61	—
6	Adaptor for wiring			★KRP1C63	★KRP1BA57	★KRP1B61	KRP1B61	★KRP1B56	★KRP1C64	KRP1B61	KRP1BA54	—	KRP1B61	—
7-1	Wiring adaptor for electrical appendices (1)			★KRP2A62		★KRP2A61	KRP2A61	★KRP2A53	★KRP2A61	KRP2A61	★KRP2A62	★KRP2A61	KRP2A61	—
7-2	Wiring adaptor for electrical appendices (2)			★KRP4AA53		★KRP4AA51	KRP4AA51	★KRP4A54	★KRP4AA51	KRP4AA51	★KRP4AA52	★KRP4AA51	KRP4AA51	★KRP4AA53
8	Remote sensor			KRCS01-4B	KRCS01-1B				KRCS01-4B	KRCS01-1B				
9	Installation box for adaptor PC board			Note 2, 3 KRP1H98	Note 4, 5 KRP1BA101	Note 2, 3 KRP1B96	—	Note 4, 5 KRP1BA101	Note 2, 3 KRP4A96	—	Note 3 KRP1CA93	Note 2, 3 KRP4AA93	—	KRP1BA97
10	External control adaptor for outdoor unit			★DTA104A62		★DTA104A61	DTA104A61	★DTA104A53	★DTA104A61	DTA104A61	★DTA104A62	★DTA104A61	DTA104A61	—
11	Adaptor for multi tenant			—										
				DTA114A61										

### Notes:

1. Installation box (No.9) 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. 9) is necessary for each adaptor.

## 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	■ 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	
7	Wiring adaptor for other air-conditioner	★ DTA102A52	
		★ DTA107A55	
8	DIII-NET Expander Adaptor	★ DTA103A51	■ Up to 1024 units can be centrally controlled in 64 different groups. ■ Wiring restrictions (max. length : 1,000m, total wiring length : 2,000m, max. number of branches : 16) apply to each adaptor.
8-1	Mounting plate	KRP4A92	
			■ Fixing plate for DTA109A51

### Notes:

1. Installation box for ★ adaptor must be obtained locally.
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.	Item				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	PPD	DCS002C51	■ PPD: 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	DAM602B51×2	
					768 units	DAM602B51×3	
					1024 units	DAM602B51×4	
2-1	Option	Software	PPD	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.	

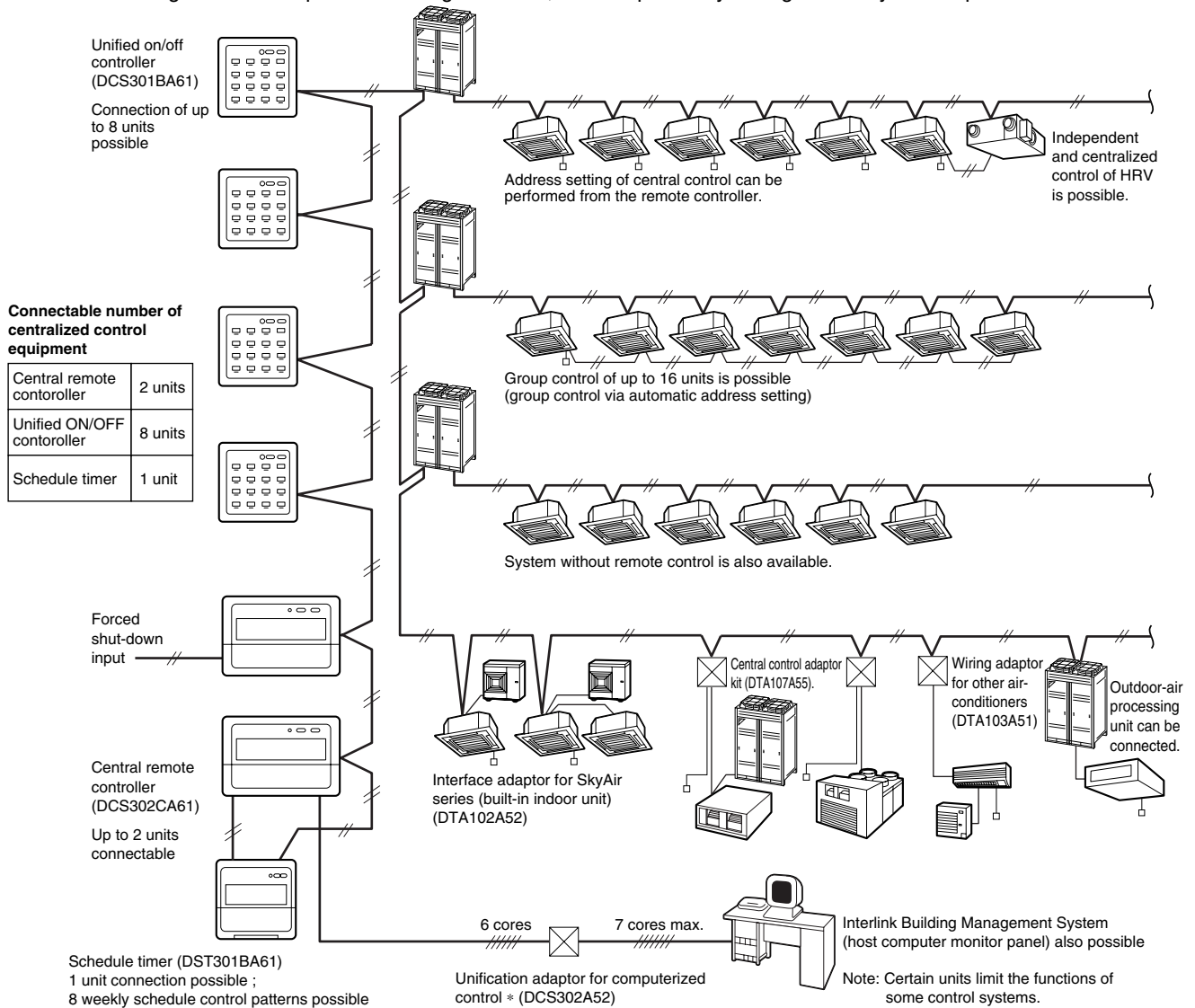
#### Notes:

- ★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 obtained locally.

## 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.



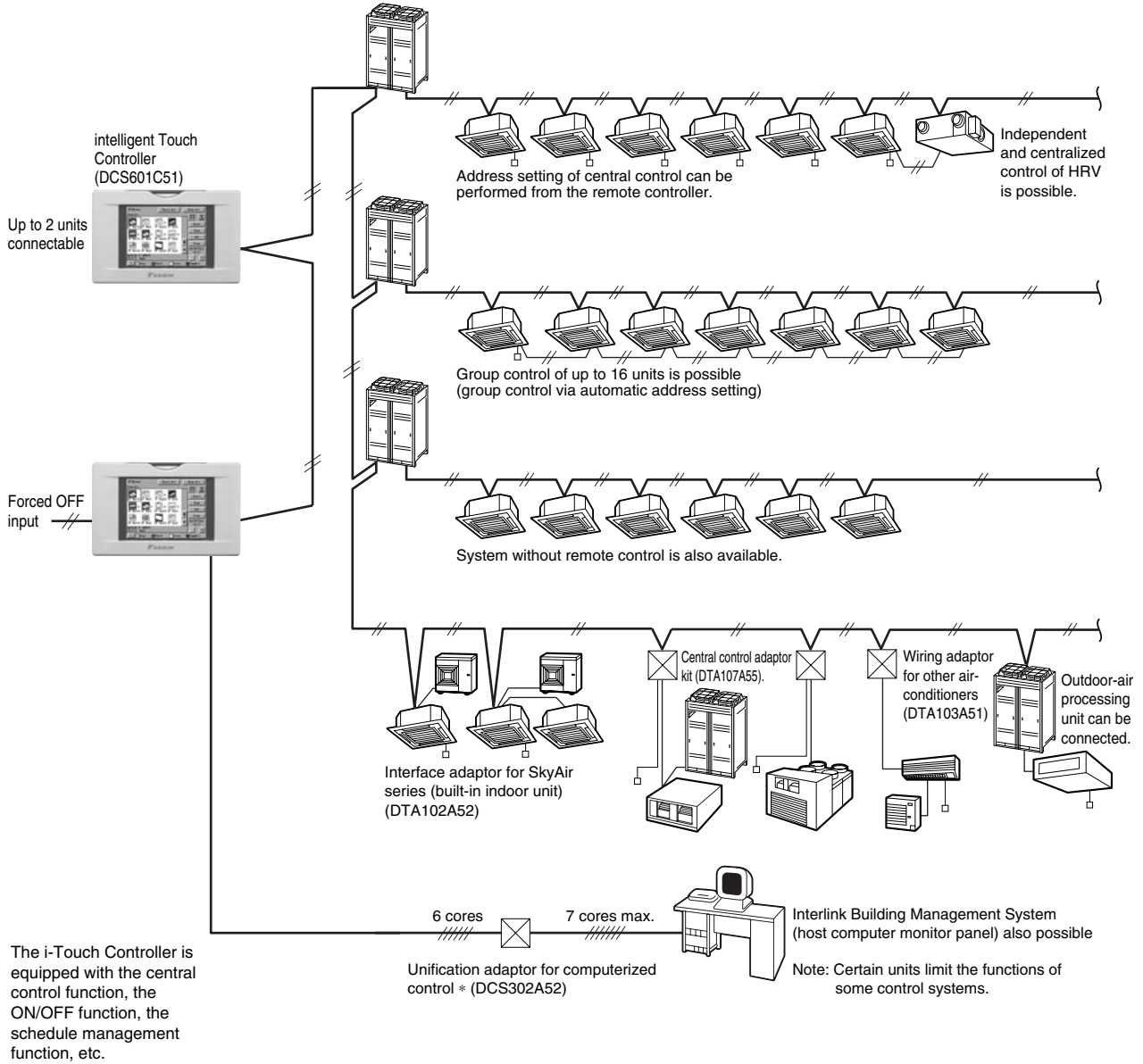
No.	Part Name	Model No.	Function
1	Residential central remote controller	Note2 DCS303A51	Up to 16 groups of indoor units (128 units) can be easily controlled using the large LCD panel. ON/OFF, temperature setting and scheduling can be controlled individually for indoor units.
2	Central Remote Controller	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)

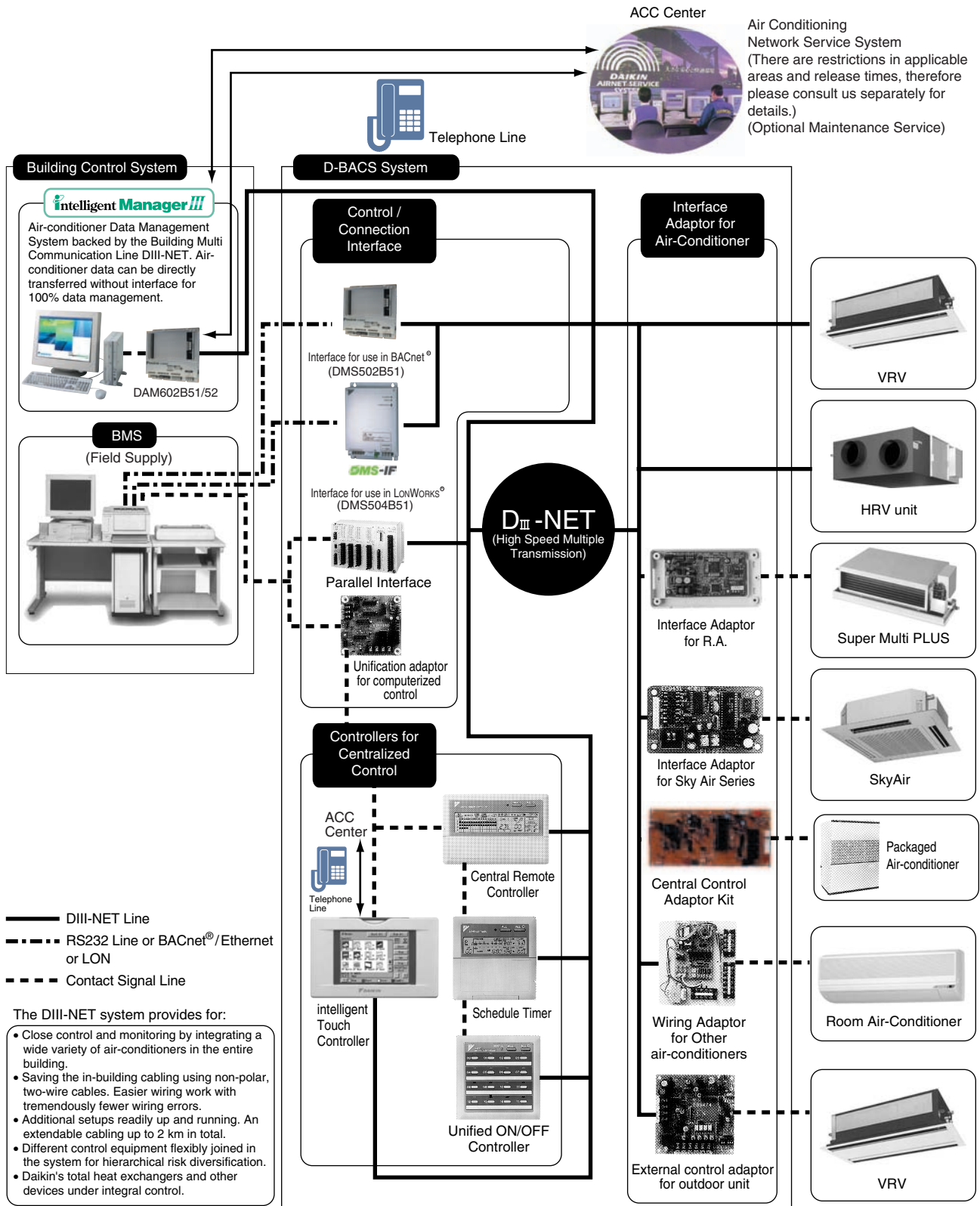
- This controller is a central remote controller offering higher functions than those of the previous central remote controller DCS302CA61, and easier operation.  
Up to 64 groups of indoor units may be connected to 1 unit of this controller.



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.

### 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**

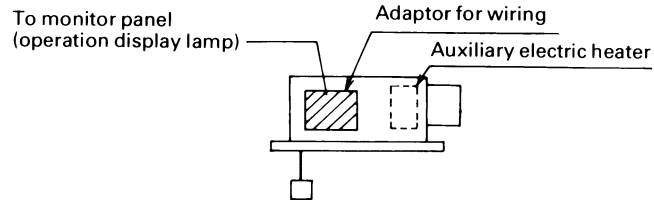
Control functions may be different from model to model.  
For trouble-free control systems, it is advisable to discuss your projects at hand. Please contact us at your planning stage.

## 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, 61 KRP1BA54, 57 KRP1C63, 64	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.

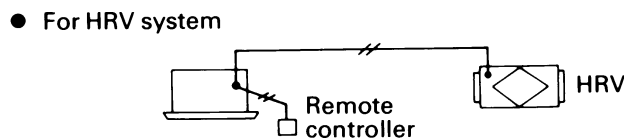
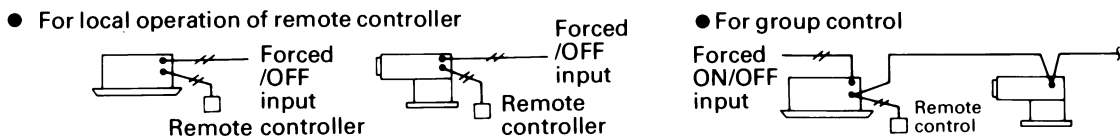
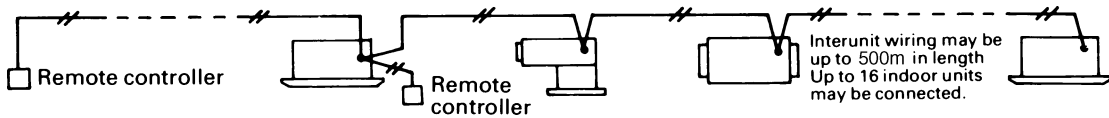
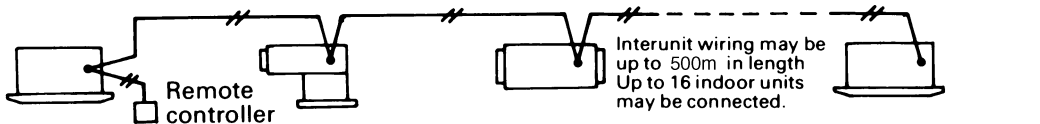
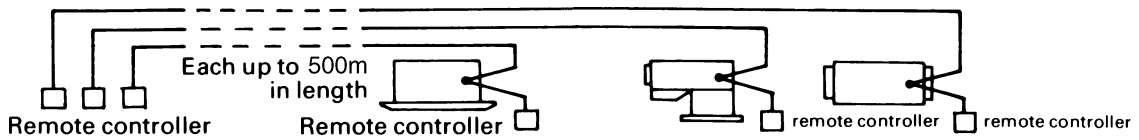
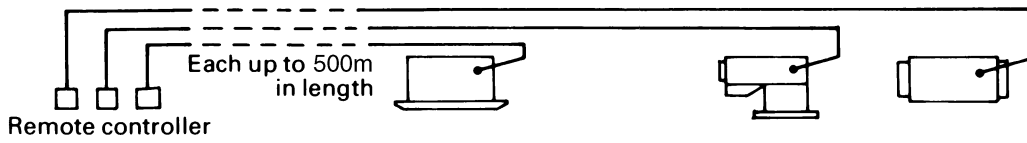
Control Method	Objective / Use	Unit Name and Model	Function	Standard Number of Units	
Control by Remote Controller	Local operation of remote controller	Example of typical use			
	Remote operation of remote controller	For control from distant place		1 remote controller controls 1 indoor unit	
	2 remote control	For control from 2 places (distant or local)	<b>BRC1E61</b> 	<b>Main Menu</b> <ul style="list-style-type: none"> <li>■ Air Flow Direction</li> <li>■ Ventilation</li> <li>■ Schedule</li> <li>■ Off Timer</li> <li>■ Celsius / Fahrenheit</li> <li>■ Maintenance Information</li> <li>■ Configuration</li> <li>■ Current Settings</li> <li>■ Clock &amp; Calendar</li> <li>■ Daylight Saving Time</li> <li>■ Language</li> </ul> <b>Service Settings</b> <ul style="list-style-type: none"> <li>■ Test Operation</li> <li>■ Maintenance Contact</li> <li>■ Field Settings</li> <li>■ Energy Saving Options</li> <li>■ Prohibit Buttons</li> <li>■ Min Setpoints Differential</li> <li>■ Group Address</li> <li>■ Indoor unit AirNet Address</li> <li>■ Outdoor unit AirNet Address</li> <li>■ Error History</li> <li>■ Indoor Unit Status</li> <li>■ Outdoor Unit Status</li> <li>■ Forced Fan ON</li> <li>■ Switch Main Sub Controller</li> <li>■ Filter Indicator</li> </ul>	2 remote controllers control 1 indoor unit
	Group control ★1	For the control of plural indoor units on a floor at the same time	<b>★2 BRC2C51</b> 		1 remote controller controls up to 16 indoor units simultaneously
	★1 Group control by 2 remote controllers	For above control from distant place.	Connected to indoor units <ul style="list-style-type: none"> <li>■ For group control it is connected to 1 unit out of the group</li> <li>■ In the case of control by 2 remote controllers both controllers are connected to the indoor unit</li> </ul>		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.		<ul style="list-style-type: none"> <li>■ Forcibly stops indoor unit operation by command from outside.</li> <li>■ During remote controller group control, input a command from outside to any one of the indoor units.</li> </ul>	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		<ul style="list-style-type: none"> <li>■ Operates HRV in accordance with indoor unit operation.</li> <li>■ In case of group control the thermostat equipped in remote controller is not available.</li> </ul>	Same as the number of units controlled by remote controller









★1 In case of group control, the controller used as master control must be selected with the wired remote controller connected with the indoor unit having auto-swing function.

★2 In case of using BRC2C51 (Simplified Remote Controller) to Heat Recovery Series, be sure not to use this independently. Use with other remote controllers (Wired remote controller (e.g. BRC1C62) or KRC19-26A or DCS302CA61).

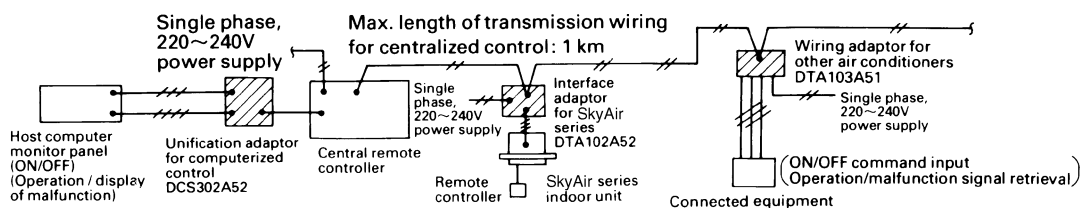
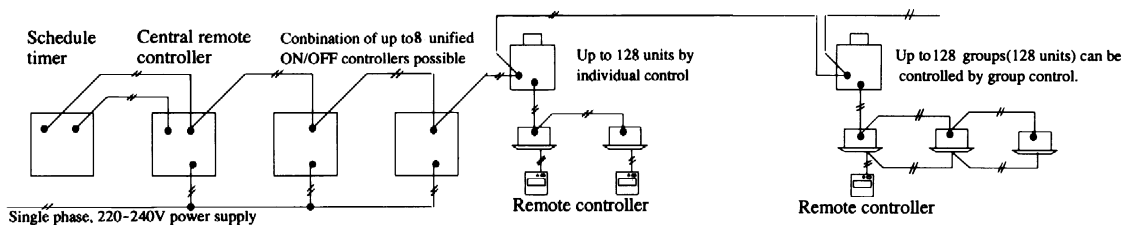
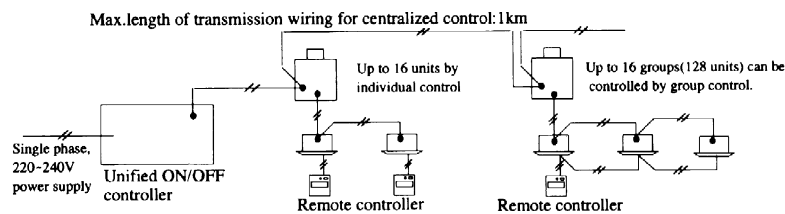
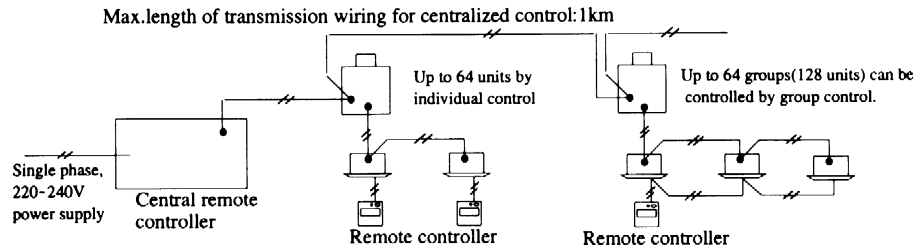
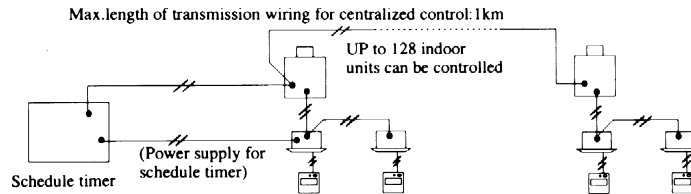
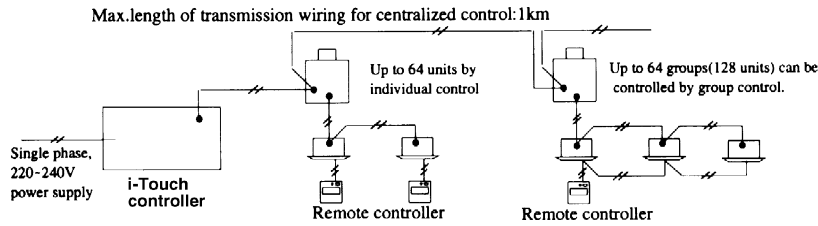
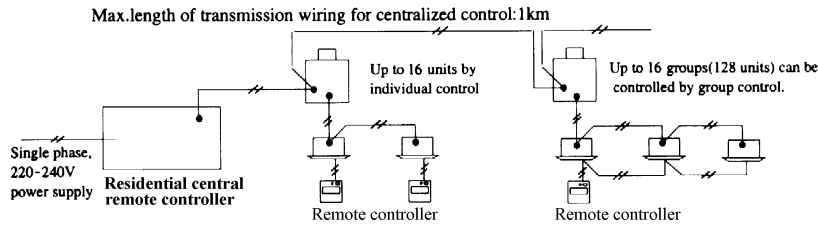


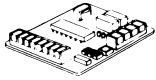
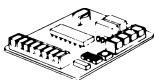
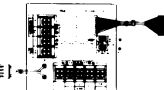

Outline of System



Control Method	Objective / Use	Unit Name and Model	Function	Standard Number of Units	
Central Control	Residential central remote controller	<p><b>DCS303A51</b></p> 	<ul style="list-style-type: none"> <li>Max. 16 groups (128 indoor units) controllable</li> <li>Large backlit LCD panel for easy readability</li> <li>ON/OFF, temperature settings and scheduling can be controlled individually for indoor units.</li> <li>All indoor units can be turned on or off at once with "ALL" button.</li> <li>Each group has a dedicated button for convenience.</li> <li>Outside temperature display</li> <li>* For residential use only. Cannot be used with other centralized control equipment.</li> </ul>	Max. 16 groups of indoor units can be easily controlled with the large LCD panel.	
	intelligent Touch Controller	<p><b>DCS601C51</b></p> 	<ul style="list-style-type: none"> <li>Adds various functions other than the functions of existing central remote controller.</li> <li>Scheduled operation and function to distribute electricity proportionally.</li> <li>Simple handling through a large sized liquid crystal display.</li> <li>Adopts a touch-panel</li> <li>Twin centralized control function</li> <li>AIR-NET Service (optional-failure prediction)</li> <li>Auto Heat/Cool Change Over</li> <li>Temperature Limitation</li> </ul>	Controls up to 64 groups (Max. 128 indoor units) with one i-touch Controller.	
	Schedule timer	<p><b>DST301BA61</b></p> 	<ul style="list-style-type: none"> <li>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.</li> </ul>	Simultaneously controls 64 groups with one schedule timer. Max. 128 units	
	Central remote controller	<p><b>DCS302CA61</b></p> 	<p>64 groups (zones) of indoor units can be controlled individually same as LCD Remote controller.</p> <ul style="list-style-type: none"> <li>Max.64 groups (128 indoor units controllable)</li> <li>Max. 128 groups (128 indoor units) are controllable by using 2 central remote controllers, which can control from 2 different places.</li> <li>Zone control</li> <li>Malfunction code display</li> <li>Max. wiring length 1,000 m (Total : 2,000 m)</li> <li>Combination with Unified ON/OFF controller, schedule timer and BMS system</li> <li>Airflow volume and direction can be controlled individually for indoor units in each group operation.</li> <li>Ventilation volume and mode can be controlled for Heat Reclaim Ventilation (HRV).</li> <li>Up to 4 Operation/Stop pairs can be set per day by connecting a schedule timer.</li> </ul>	Controls up to 64 groups of indoor units with one central remote controller. Max. 128 units	
	Unified ON/OFF controller	<p><b>DCS301BA61</b></p> 	<ul style="list-style-type: none"> <li>Double central control function</li> <li>Indoor unit ON/OFF control</li> <li>Individual/unified operation</li> <li>Remote controller operation rejected command (Central remote controller given priority when used in combination with central remote controller.)</li> <li>Sequential start function</li> </ul>	Controls up to 16 groups of indoor units with one unified ON/OFF controller. Max. 128 units	
	<ul style="list-style-type: none"> <li>Schedule timer</li> <li>Central remote controller</li> <li>Unified ON/OFF controller</li> </ul>	For controlling all indoor units from one place	<p><b>DST301BA61</b></p>  <p><b>DCS302CA61</b></p>  <p><b>DCS301BA61</b></p> 	<ul style="list-style-type: none"> <li>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.)</li> <li>Sequential start function</li> </ul>	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		<ul style="list-style-type: none"> <li>Unification adaptor for computerized control <b>DCS302A52</b></li> <li>Interface adaptor for SkyAir series <b>DTA102A52</b></li> <li>Wiring adaptor for other air conditioners <b>DTA103A51</b></li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Simultaneously controls by one unification adaptor for computerized control, all indoor units connected to a central remote controller.</li> <li>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.</li> </ul>

Outline of System

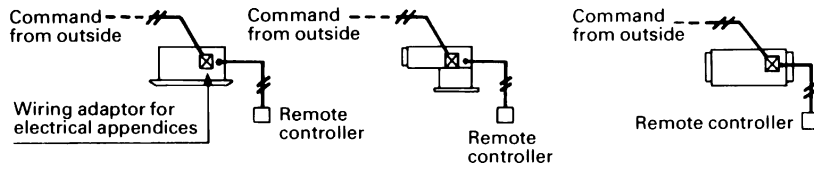


Control Method	Objective / Use	Unit Name and Model	Function	Standard Number of Controllers	
Remote Control	For control by operation command from building control room	<ul style="list-style-type: none"> <li>With remote temperature setting</li> </ul>  <p><b>KRP4AA51 KRP4AA52 KRP4AA53 KRP4A54</b> Built into indoor unit</p>	<ul style="list-style-type: none"> <li>Normally open or momentary open type contactor</li> <li>12~24 VDC or no-voltage</li> <li>Various control methods available by mode select switch</li> <li>Voltage, no-voltage selector switch</li> <li>Alarm and operation display signal (no-voltage)</li> <li>Selector switch of zone/individual of alarm display</li> <li>Remote temperature setting (resistance input of 0~135Ω)</li> <li>Selector switch for remote controller temperature setting enable/inhibit</li> </ul> <p>* 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.</p>	1 PC board controls 1 indoor unit.	
		<ul style="list-style-type: none"> <li>With remote temperature setting</li> </ul>  <p><b>KRP2A53 KRP2A61 KRP2A62</b> Built into indoor unit</p>	<ul style="list-style-type: none"> <li>In case of using wiring adaptor for Electrical Appendices (2), the control by 2 remote controller is not available.</li> </ul>	1 PC board simultaneously controls 1 group of indoor units (max. 16 units).	
Wiring Modification	When controlling operation with optional accessories added inside indoor units, the status is displayed outside.	 <p>Built into indoor unit <b>KRP1B56, 61 KRP1BA54, 57 KRP1C63, 64</b></p>	<ul style="list-style-type: none"> <li>Required when electric heater optional accessory has been added.</li> <li>Operation display signal and compressor operation signal are supplied.</li> </ul>	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.	<ul style="list-style-type: none"> <li>Interface for use in BACnet®</li> <li><b>DMS502B51</b></li> <li>Optional DIII board</li> <li><b>DAM411B51</b></li> <li>Optional Di Board</li> <li><b>DAM412B51</b></li> <li>Parallel interface</li> <li><b>DPF201A51, 52, 53</b></li> <li>Interface for use in LON WORKS®</li> <li><b>DMS504B51</b></li> </ul>	<ul style="list-style-type: none"> <li>Interface for use in BACnet® Interface unit to allow communications between VRV and BMS.</li> <li>Parallel interface Carries out operation and monitoring function of each indoor unit by contact and analog signal.</li> <li>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.</li> </ul>	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	Desired Weekly Scheduled Operation of ON/OFF and Temperature's Set-back	<p><b>BRC1D61</b></p> 	<ul style="list-style-type: none"> <li>Includes ventilation mode and airflow rate switching, the main functions of HRV series.</li> <li>24-hour clock function (1-hour backup for power failures)</li> <li>Programming function for each day of week.</li> <li>Scheduling possible of start/stop and temperature limit (5 settings/day)</li> <li>Programming can be enabled or disabled.</li> <li>Copy function for programmed schedules.</li> </ul>	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

■ Individual Control (Controls Indoor Units Individually.)

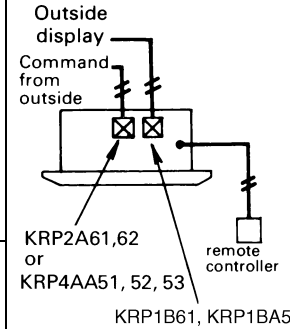
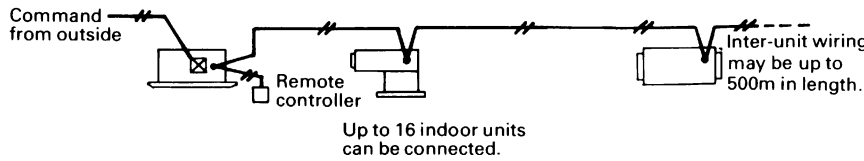
- Individual control (Controls indoor units individually.)



- KRP1B61, KRP1BA54, KRP2A61,62 and KRP4AA51,52,53 can be built-in together into the indoor units

■ Group Unified Control (Controls group controlled indoor units all at once and simultaneously.)

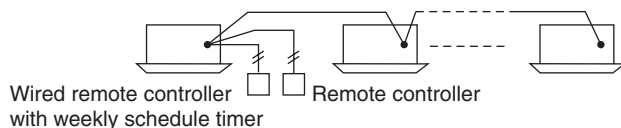
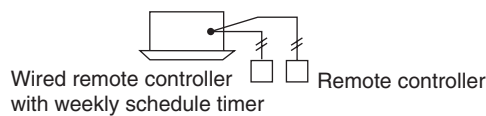
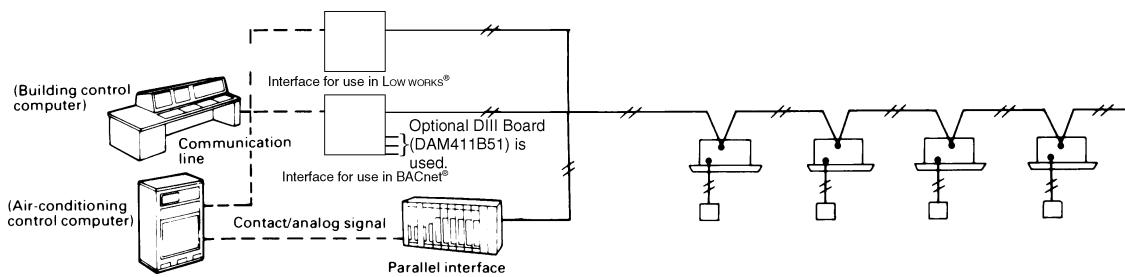
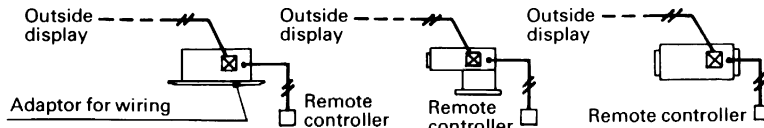
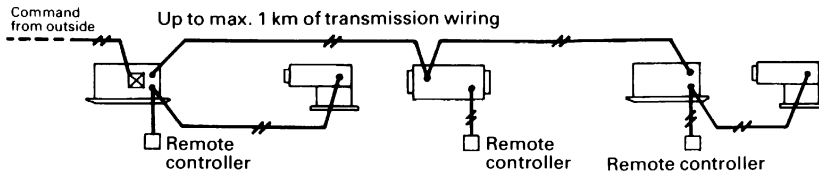
- Group unified control (Controls group controlled indoor units all at once and simultaneously.)



Combined use of wiring adaptor for Electrical Appendices (1) and (2) is not available.

■ 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.)



\* 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.

### 3.2 Building Control System Introduction

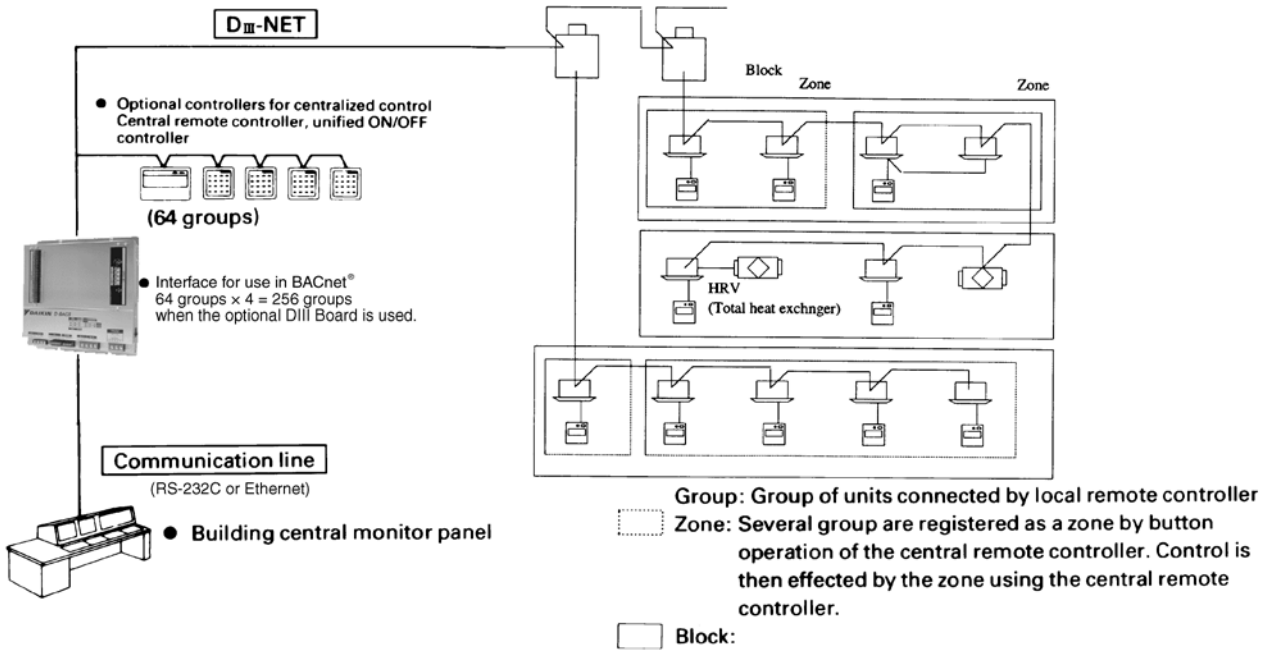
High-speed transmission type air-conditioning control system D-BACS (DAIKIN Building Air-conditioning Control System) networks up to 64 groups of indoor units (128 units). There is a complete line up of variegated control equipment for D-BACS, such as parallel interface, or a master station that can 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:**

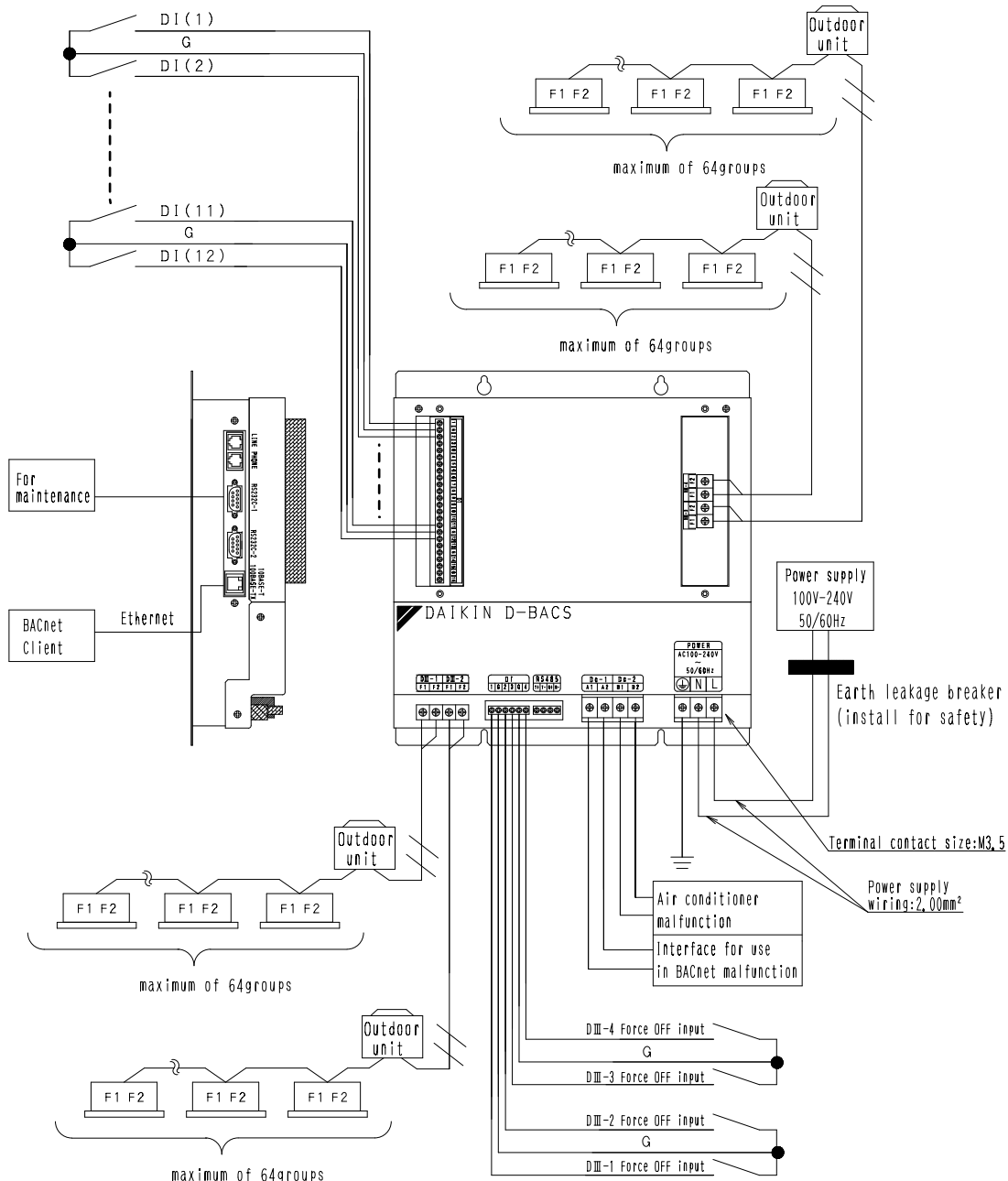
1. A group consists of several indoor units that can be started or stopped simultaneously. As shown in the figure above, a group consists of several indoor units wired to the same remote controller. For units without a remote controller, each unit is treated as a group.
2. Several groups are registered 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



C: 1P191170D

### 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

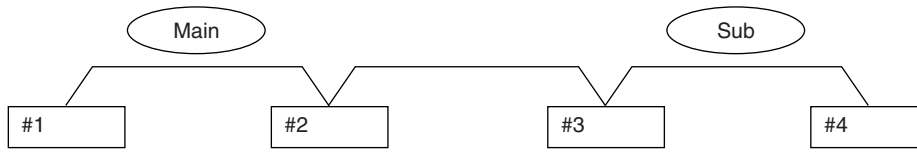
■ If using in combination with central control equipment, the relation between them is last command priority.

■ 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

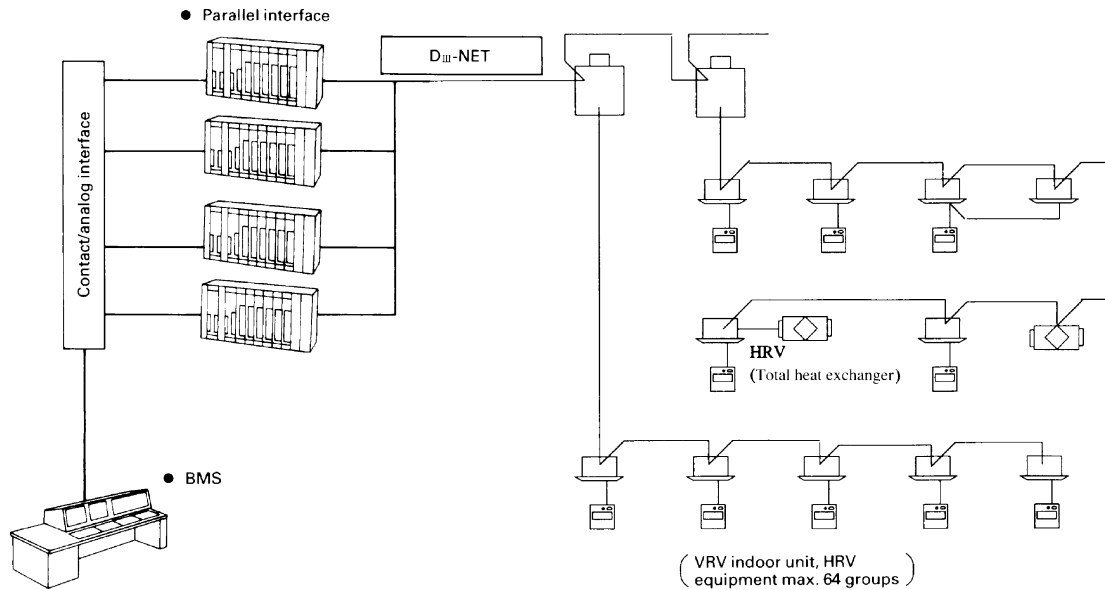


Combination	#1		#2		#3		#4	
	1-00~4-15	Main/ Sub	5-00~5-15	Main/ Sub	1-00~4-15	Main/ Sub	5-00~5-15	Main/ Sub
Impossible	intelligent Touch Controller	Main	intelligent Touch Controller	Main	intelligent Touch Controller	Sub	intelligent Touch Controller	Sub
Impossible	intelligent Touch Controller	Main	intelligent 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	intelligent Touch Controller	Sub	intelligent Touch 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.

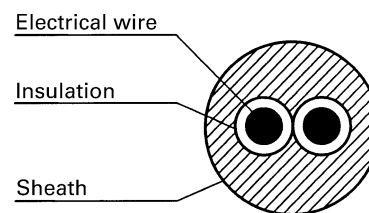
### 3.3 Specifications of the Control Wiring

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.
- The total wiring length is 1500m when shielded wire is used.

<Cautions>

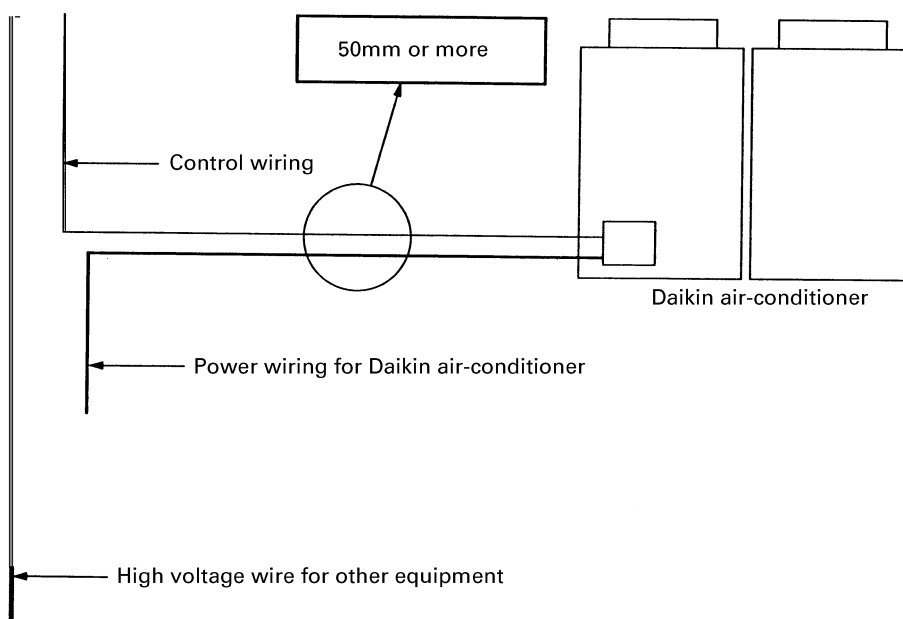
1. Never use a 3 or more core of cord or cable.
2. The size of wire should be 0.75~1.25mm<sup>2</sup>.
3. Never bundle the cable or cord of transmission line.
4. Be sure to keep the transmission wiring distant from power wiring as shown below to prevent electrical noise.

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]

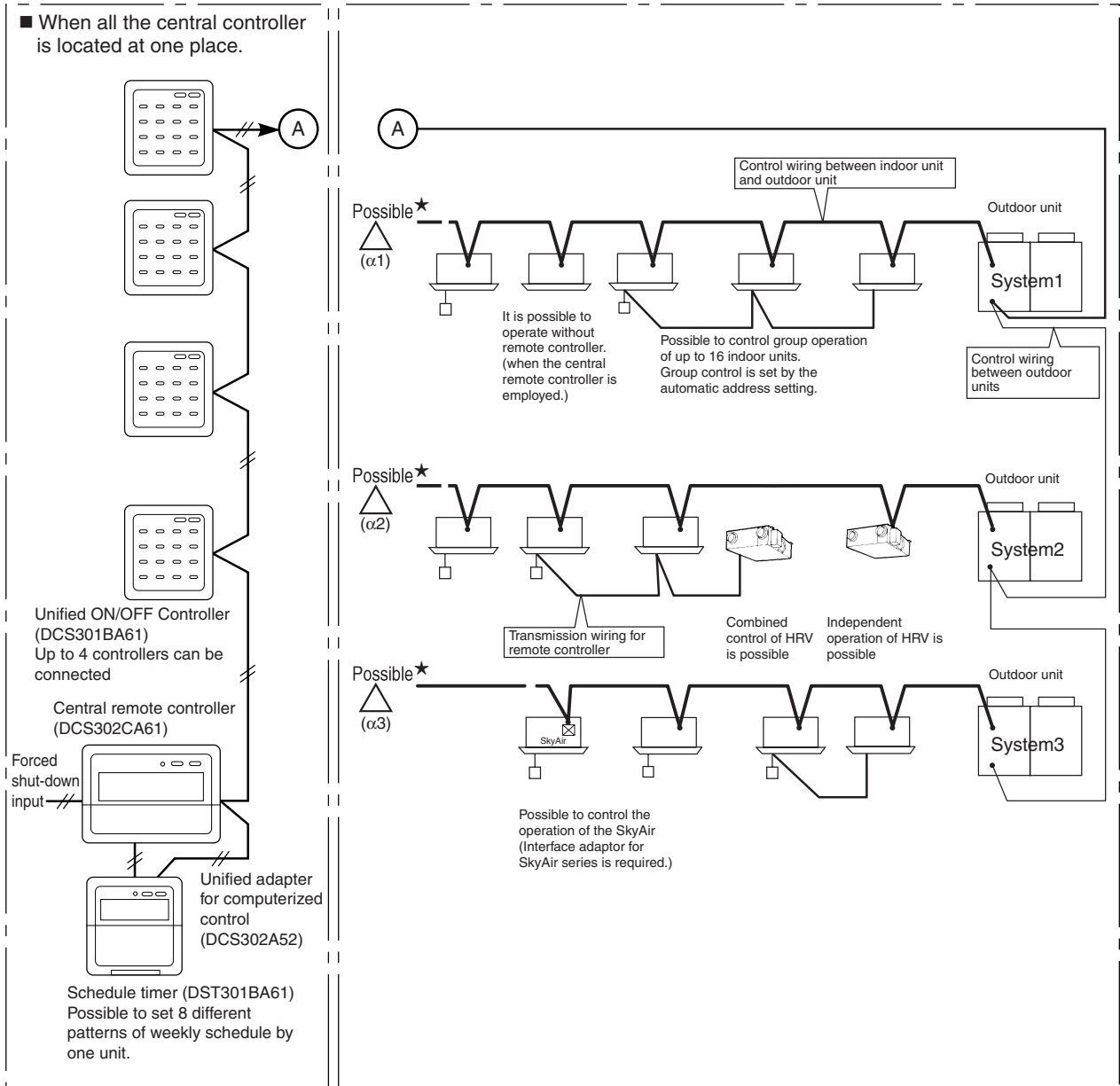


### 3.4 Wiring Example

#### Example of Control Wiring

- Be sure to connect the wiring of the central controller to control wiring between outdoor units. When wiring connections are made between indoor and outdoor units, there may be cases where control over normal systems may become impossible if one of the connected systems should happen to fail.
- Be sure to prevent the connection of three wires on the same terminal.

<Pattern 1>



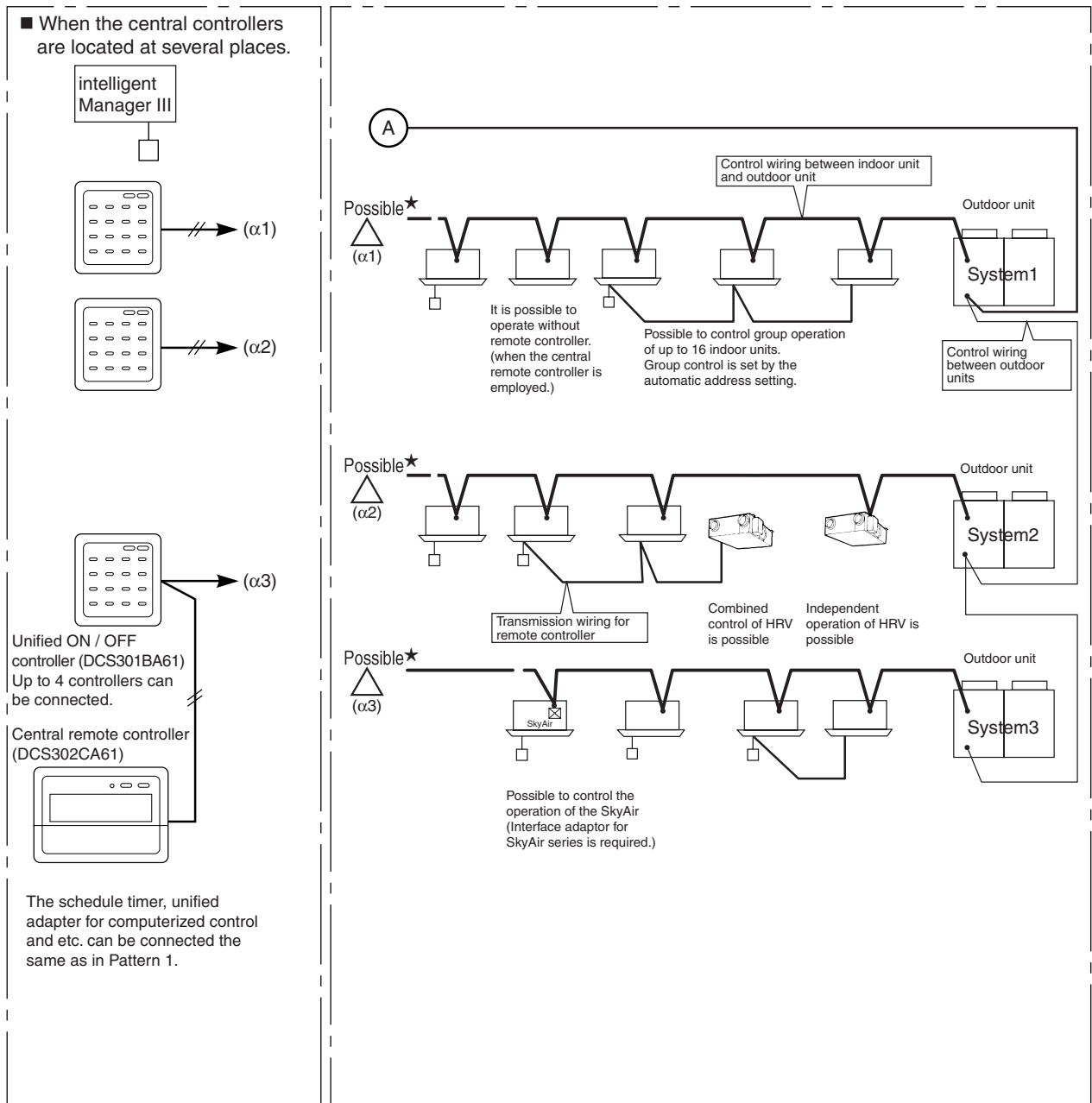
#### The advantages when the central controller are connected to A.

- If the central controllers are connected to A, 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.)

#### Caution:

- ★1. It is not recommended to connect a centralized device on (αi), as there is a risk to loose control over all systems. e.g.; If central remote controller is connected on α 1, and System1 shut down, control over System2 and System3 units is lost.

<Pattern 2>



**The advantages when the central controller are connected to A.**

- If the central controllers are connected to A, 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.)

**Caution:**

- ★1. It is not recommended to connect a centralized device on (αi), as there is a risk to loose control over all systems. e.g.; If central remote controller is connected on α 1, and System1 shut down, control over System2 and System3 units is lost.

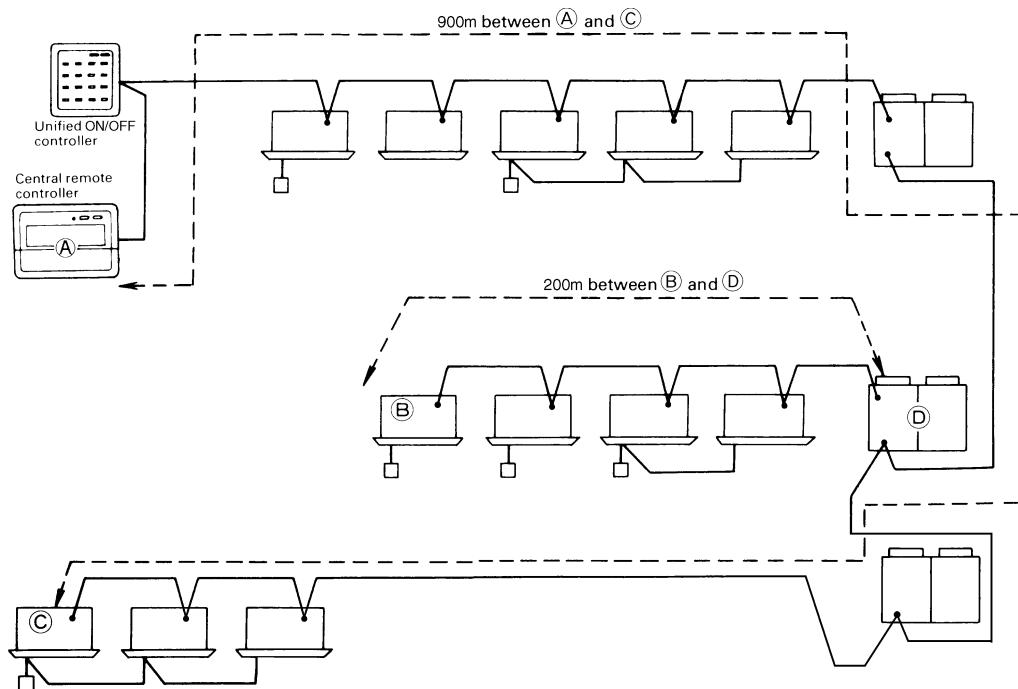
### 3.5 Length of Transmission Wiring

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 (D), 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:**

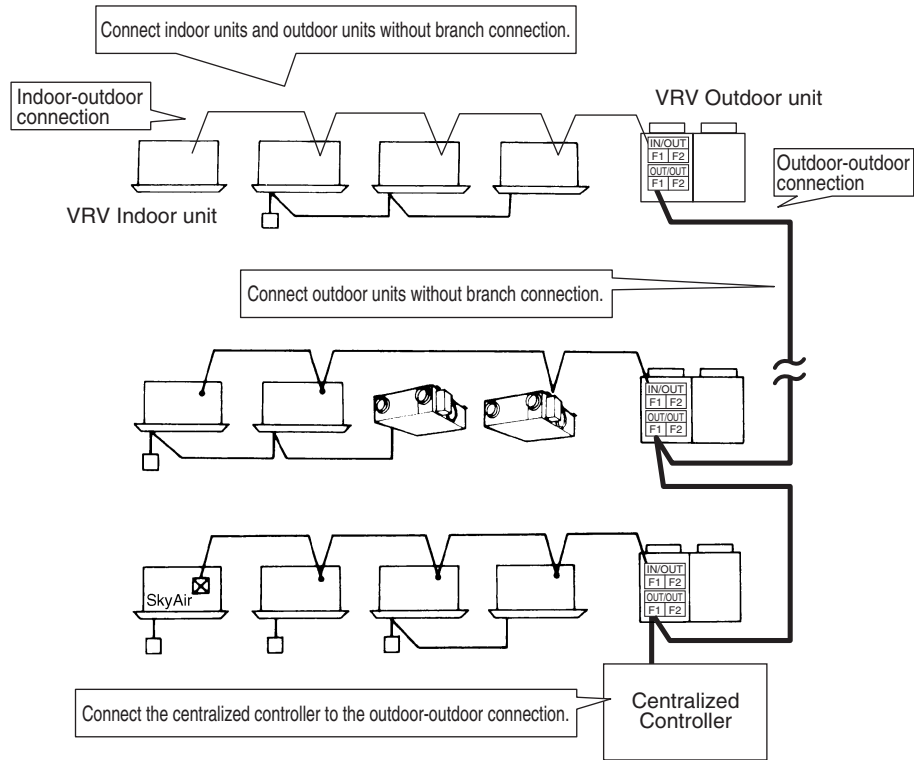
When designing the system, be sure to check both the longest extension and the total length of wiring. If it exceeds the limitation, there is no other way but to split into several systems.

### 3.6 Connection Method

#### 3.6.1 Correct wiring

- Series wiring method only should be used.

[Example]



**Note:**

Be sure to have indoor-outdoor control wiring and that of refrigerant system coincide. Crossed wiring will cause malfunctioning.



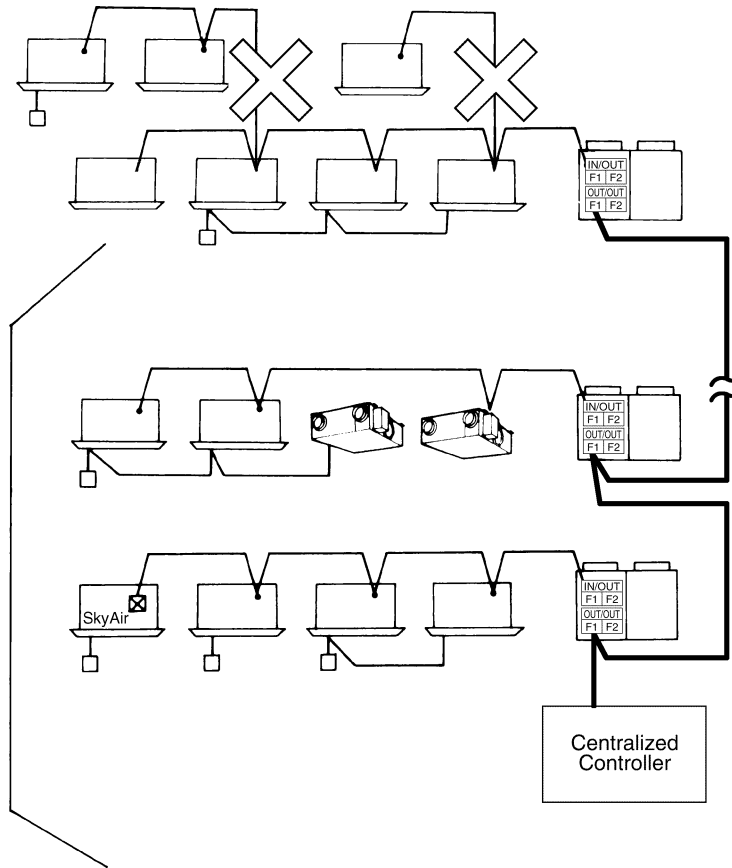
### 3.6.2 Bad example

**Caution:**

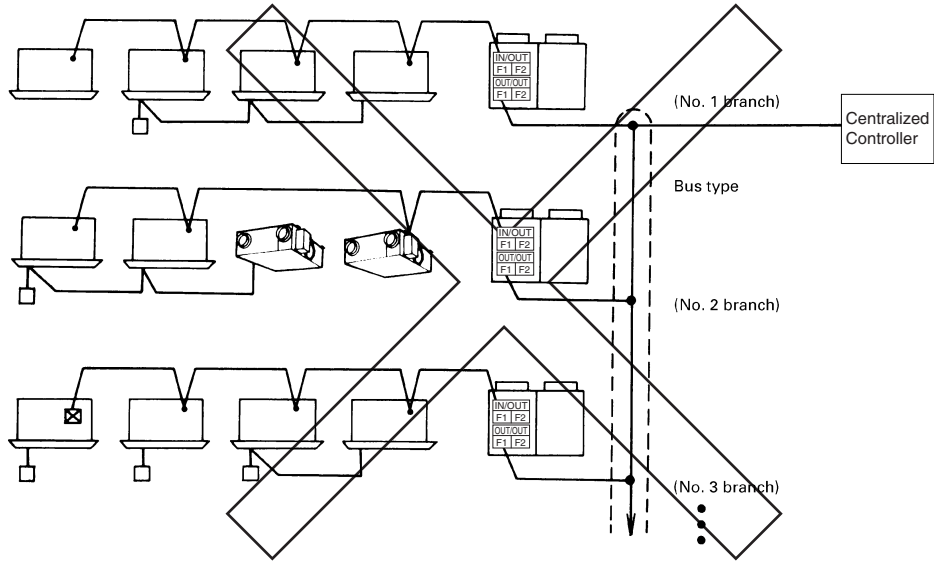
Communication problems could occur.

**[Bad Example 1]**

- Series wiring method only should be used.



[Bad Example 2]

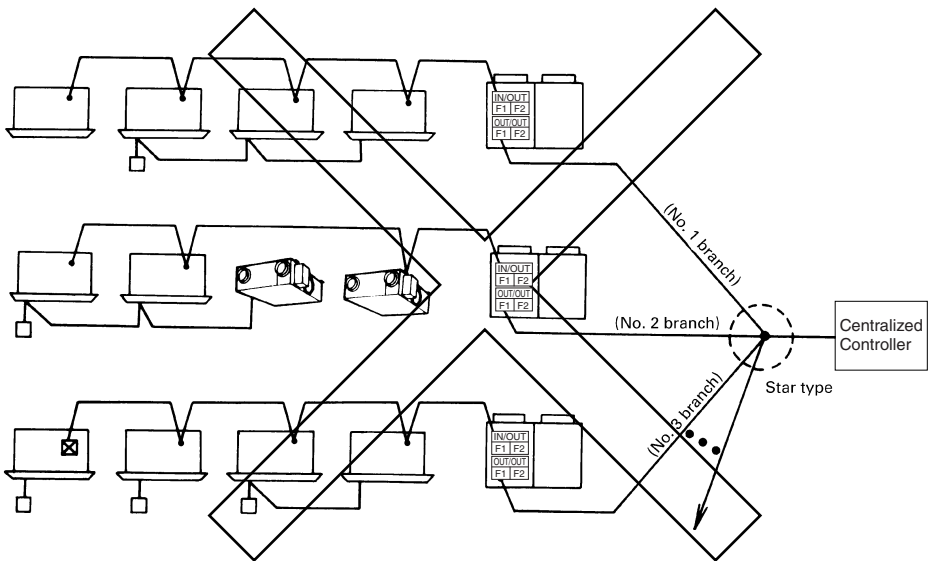


**Caution:**

[Reason]

Communication problems could occur.

[Bad Example 3]

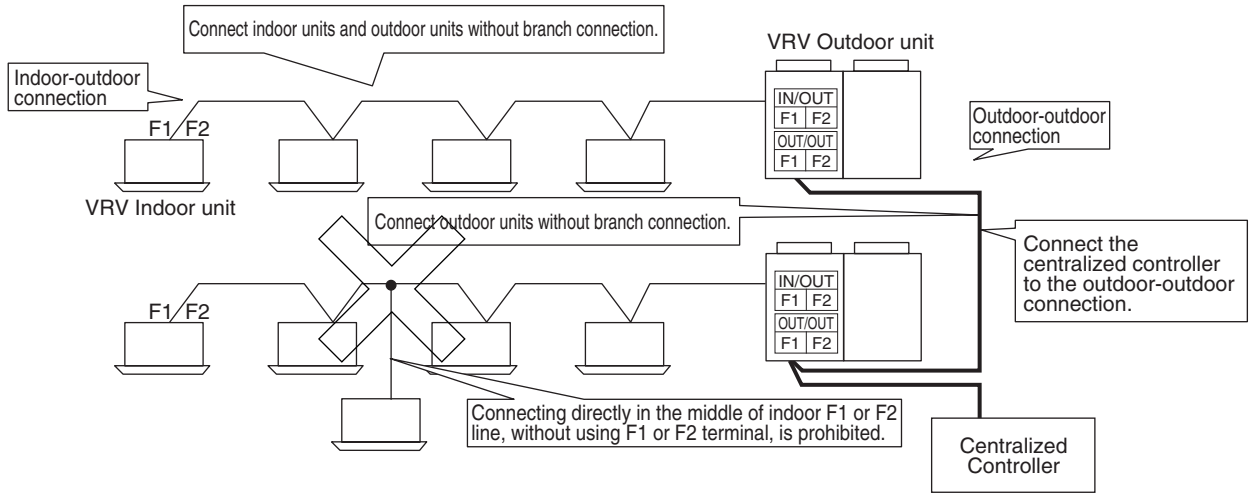


**Caution:**

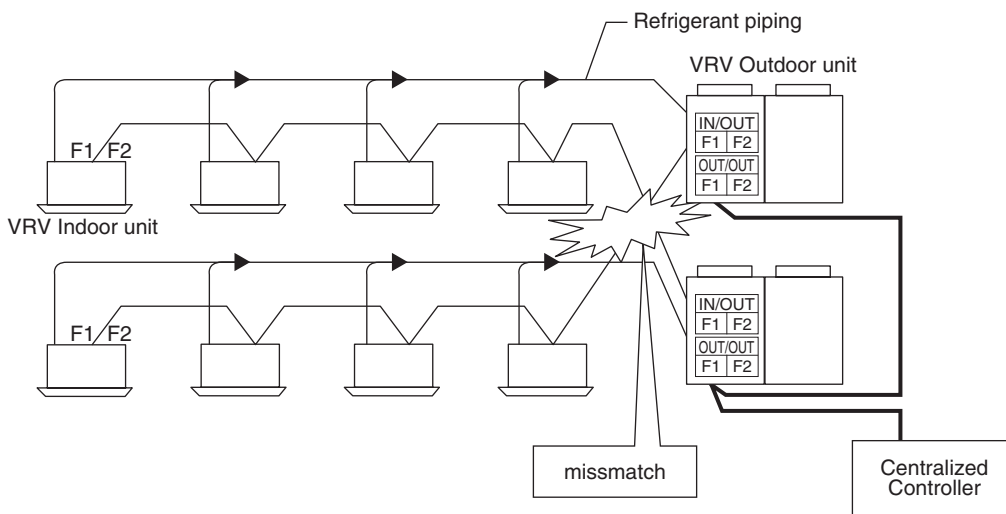
[Reason]

Communication problems could occur.

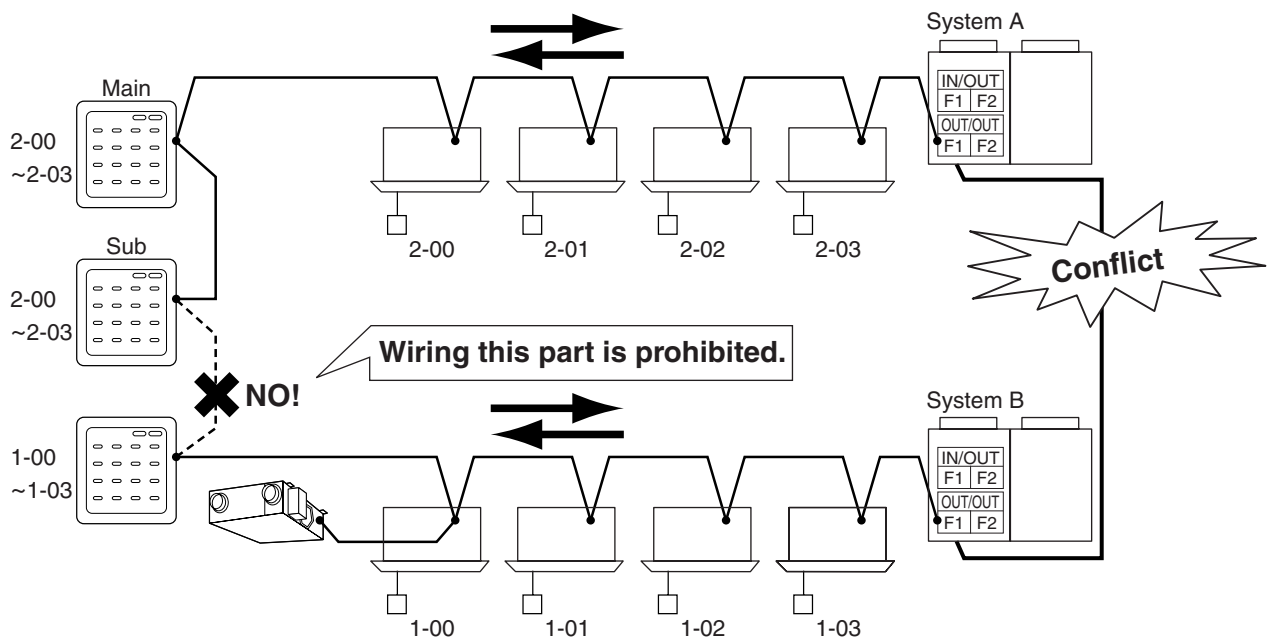
**[Bad Example 4]**



**[Bad Example 5]**



**[Bad Example 6]**



### 3.6.3 Number of Connectable Units

	Central Control Equipment	Indoor Unit	Outdoor Unit	Other Adaptors
Target Controller (Max. Number)	<ul style="list-style-type: none"> <li>■ Central remote controller (2 units) (Note 1)</li> <li>■ intelligent Touch Controller (2 units) (Note 1)</li> <li>■ Unified ON/OFF controller (8 units) (Note 1)</li> <li>■ Schedule timer (1 unit)</li> <li>■ Interface for use in BACnet® (1 unit)</li> <li>■ Parallel interface (4 units)</li> <li>■ Intelligent Manager II (1 unit)</li> <li>■ Interface for use in LON WORKS® (1 unit)</li> </ul>	<ul style="list-style-type: none"> <li>■ VRV system</li> <li>■ SkyAir series (Interface adaptor for SkyAir is required.)</li> <li>■ HRV unit</li> <li>■ Packaged air-conditioner (FD, UAT, etc.) (Wiring adaptor for other air-conditioner is required.)</li> <li>■ Room air-conditioner (Wiring adaptor for other air-conditioner is required.)</li> <li>■ BS unit (Note 3)</li> <li>■ Wiring adaptor</li> </ul>	Outdoor unit for VRV system	<ul style="list-style-type: none"> <li>■ External control adaptor for outdoor unit</li> <li>■ Wiring adaptor for electrical appendices (1)</li> </ul>
Number of Units	(Note 2)	Up to 128 units (Note 5)	Up to 10 units (Note 4)	Up to 10 units

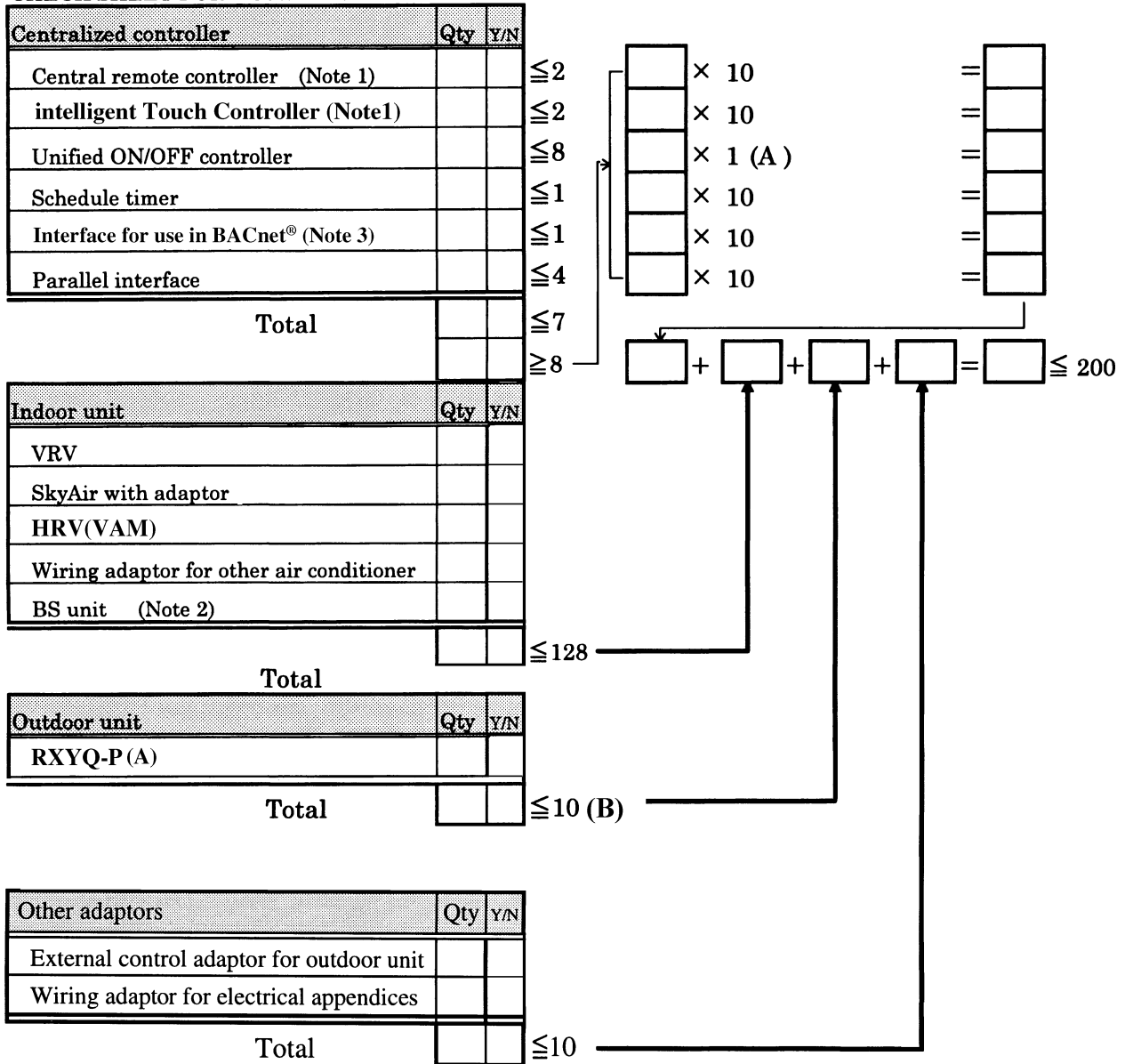
**Note:**

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 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.

### 3.6.4 Flow Chart to Determined the Number of Units to Connected

**CHECK SHEET FOR NUMBER OF UNIT IN ONE SYSTEM**



**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<sub>1</sub>, F<sub>2</sub>) 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<sup>®</sup> 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.

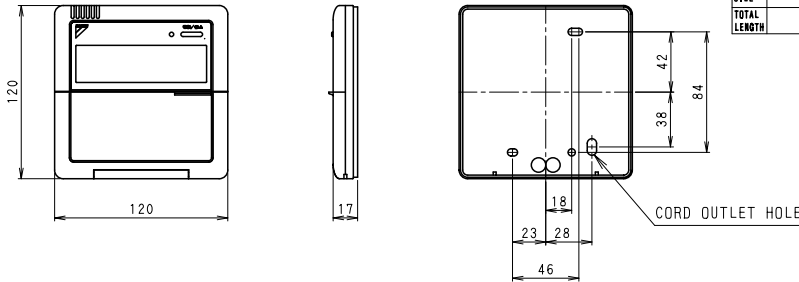
# 4. Wired Remote Controller

## BRC1C62

Unit (mm)

NOTE) 1. REMOTE CONTROLLER CORD AND STAPLE ARE NOT ATTACHED, THEY ARE FIELD SUPPLIED PARTS.

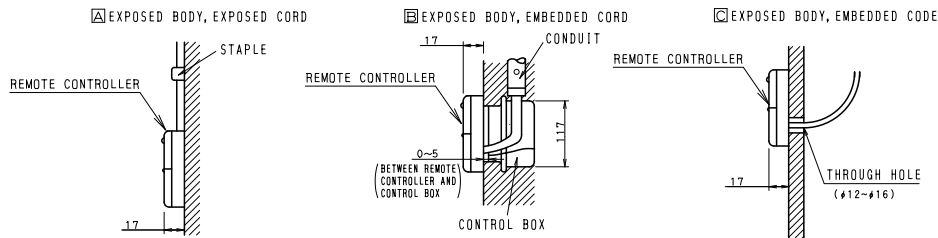
• REMOTE CONTROLLER DIMENSIONS



• 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	0.75~1.25mm <sup>2</sup>	
TOTAL LENGTH	500m	

• INSTALLATION METHOD



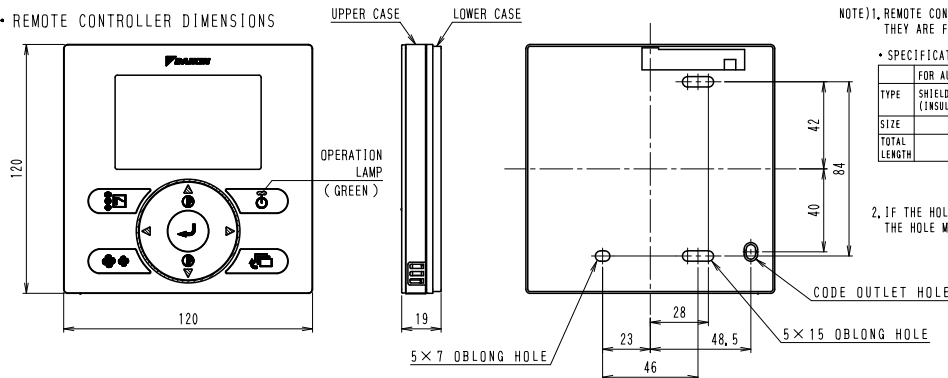
3D028952

## BRC1E61

Unit (mm)

NOTE)1. REMOTE CONTROLLER CORD AND STAPLE ARE NOT ATTACHED, THEY ARE FIELD SUPPLIED PARTS.

• REMOTE CONTROLLER DIMENSIONS

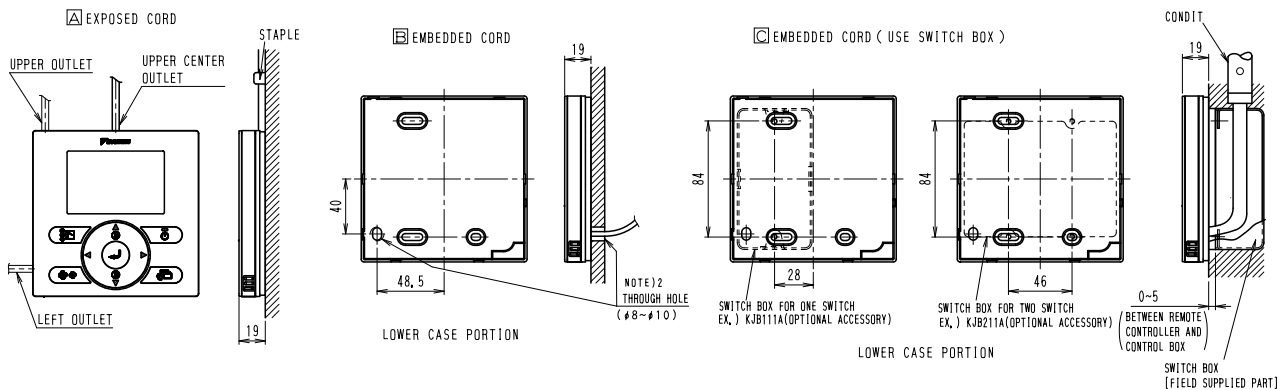


• SPECIFICATIONS OF CORD

	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	0.75~1.25mm <sup>2</sup>	
TOTAL LENGTH	500m	

2. IF THE HOLE SIZE IS TOO LARGE OR THE LOCATION IS NOT PROPER, THE HOLE MAY COME OUT FROM THE REMOTE CONTROLLER.

• INSTALLATION METHOD



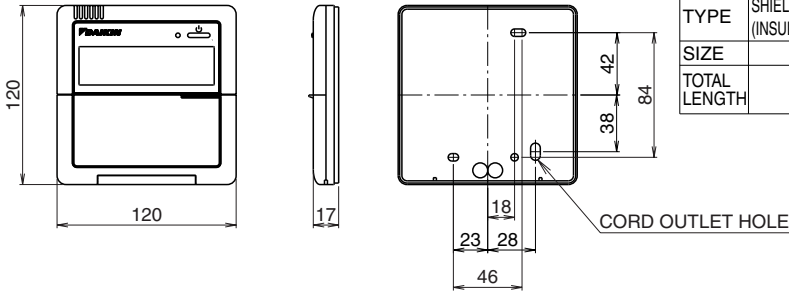
3D064037

**BRC1D61**

Unit (mm)

NOTE) 1. REMOTE CONTROLLER CORD AND STAPLE ARE NOT ATTACHED. THEY ARE FIELD SUPPLIED PARTS.

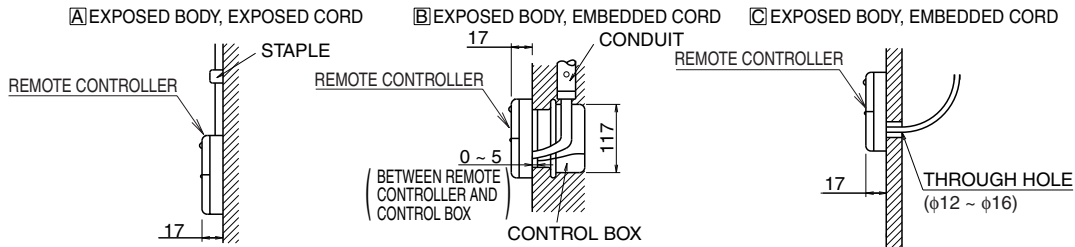
• REMOTE CONTROLLER DIMENSIONS



• 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 ~ 1.25mm <sup>2</sup>	
TOTAL LENGTH	500m	

• INSTALLATION METHOD



3D048117



# 5. Wireless Remote Controller / Receiver

## BRC7F634F (for FXFQ)

Unit (mm)

- 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
BRC7F634F1			BYCP125KW1C(9)

3D052918C

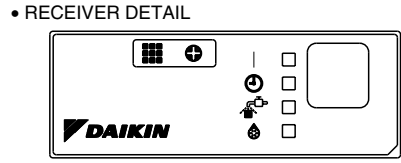
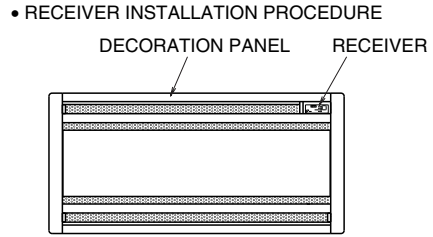
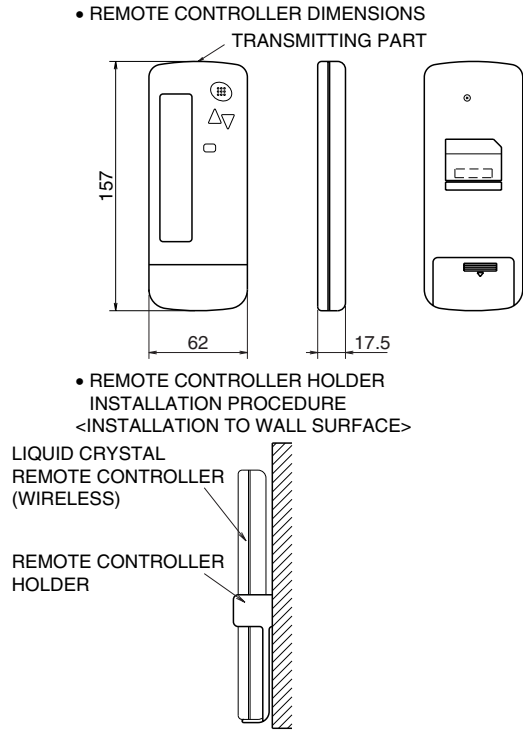
## BRC7E530W (for FXZQ)

Unit (mm)

- REMOTE CONTROLLER DIMENSIONS
- REMOTE CONTROLLER HOLDER INSTALLATION PROCEDURE <INSTALLATION TO WALL SURFACE>
- RECEIVER INSTALLATION PROCEDURE
- RECEIVER DETAIL

3D038937A

**BRC7C62 (for FXCQ)**

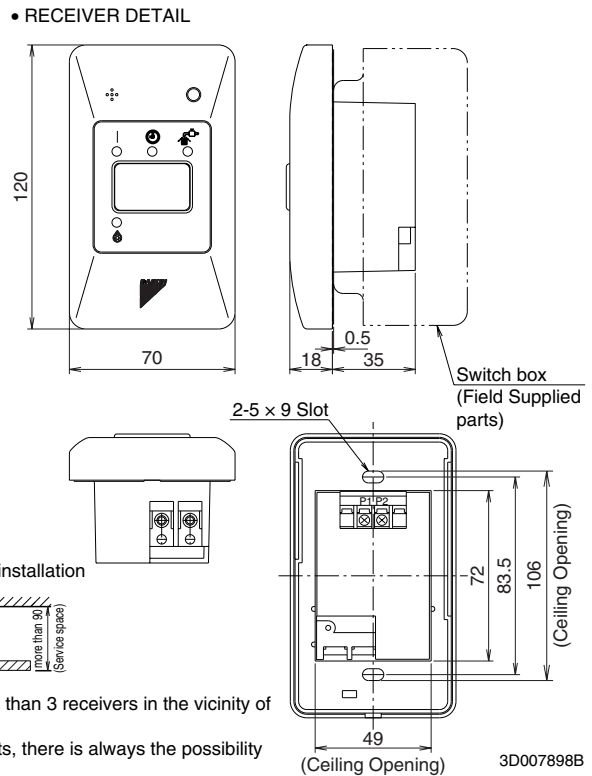
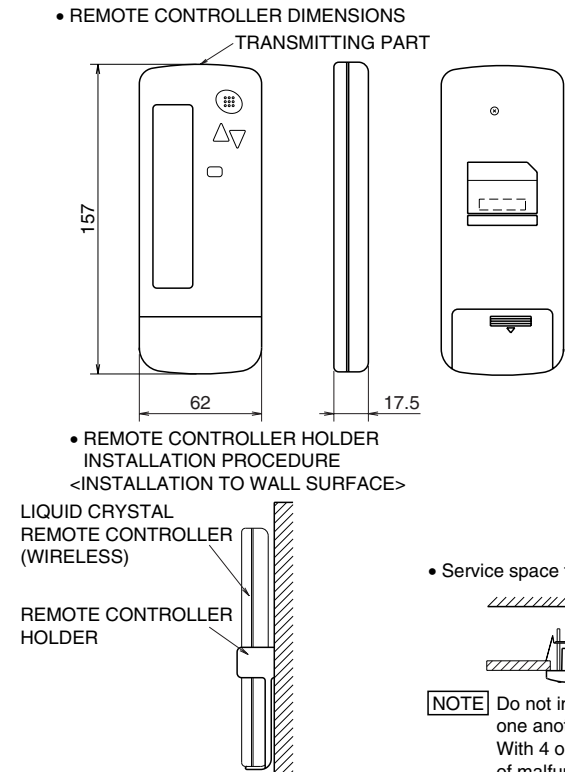


• WIRELESS REMOTE CONTROLLER KIT FOR EACH DECORATION PANEL

WIRELESS REMOTE CONTROLLER KIT	DECORATION PANEL	
BRC7C62	BYBC32GJW1	BYBC32G-W1
BRC7C67	BYBC50GJW1	BYBC50G-W1
	BYBC63GJW1	BYBC63G-W1
	BYBC125GJW1	BYBC125G-W1

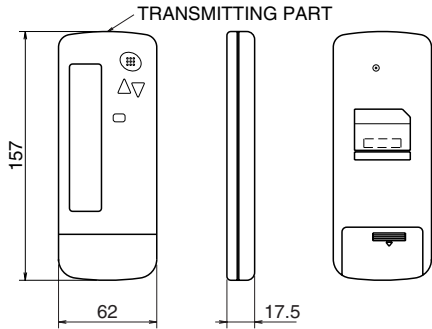
3D007588A

**BRC4C61 (for FXKQ)**  
**BRC4C62 (for FXMQ-MA, FXLQ, FXNQ)**  
**BRC4C65 (for FXDQ-PB, FXDQ-NB, FXMQ-P)**

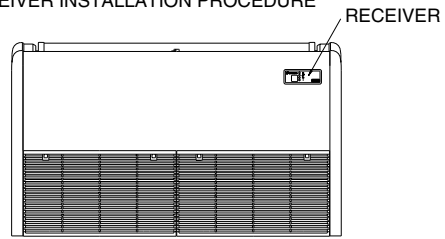


**BRC7EA63W (for FXHQ)**

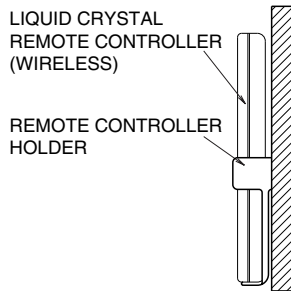
• REMOTE CONTROLLER DIMENSIONS



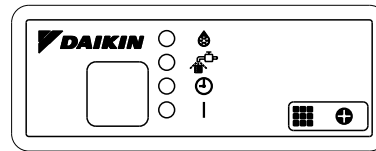
• RECEIVER INSTALLATION PROCEDURE



• REMOTE CONTROLLER HOLDER  
INSTALLATION PROCEDURE  
<INSTALLATION TO WALL SURFACE>



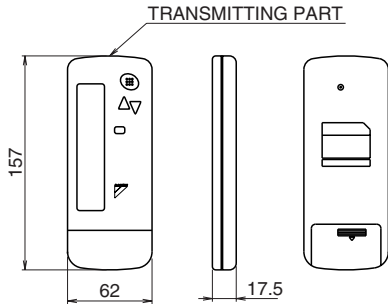
• RECEIVER DETAIL



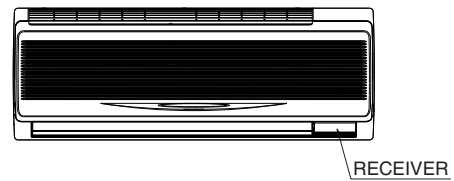
3D028963B

**BRC7EA618 (for FXAQ)**

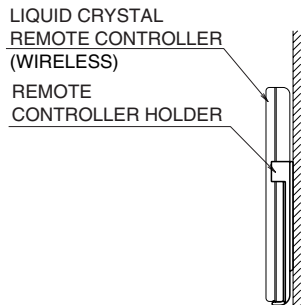
• REMOTE CONTROLLER DIMENSIONS



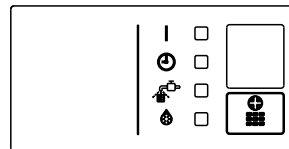
• RECEIVER INSTALLATION PROCEDURE



• REMOTE CONTROLLER HOLDER  
INSTALLATION PROCEDURE  
<INSTALLATION TO WALL SURFACE>



• RECEIVER DETAIL



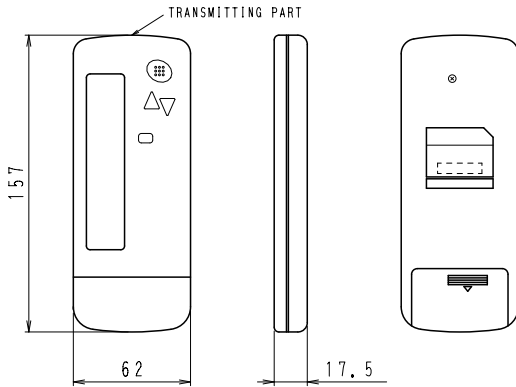
• WIRELESS REMOTE CONTROLLER KIT

WIRELESS REMOTE CONTROLLER KIT		INDOOR UNIT
BRC7E618	BRC7EA618 (For H/P)	FXAQ-MA
BRC7E619	BRC7EA619 (For C/O)	FXA-LVE(C)

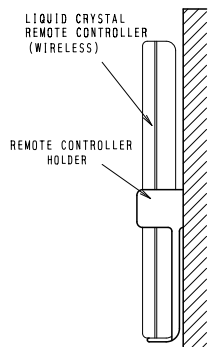
C: 3D034905B

**BRC7CA528W (for FXUQ)**

• REMOTE CONTROLLER DIMENSIONS

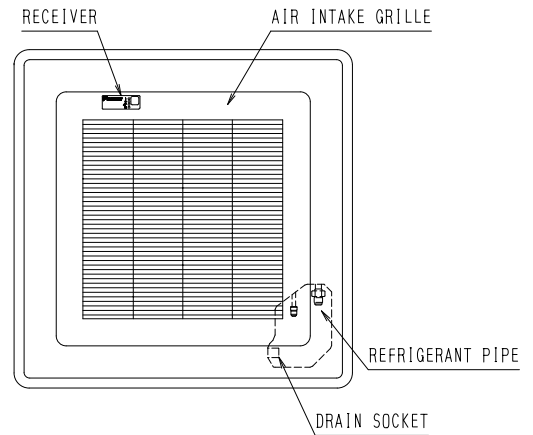


• REMOTE CONTROLLER HOLDER  
INSTALLATION PROCEDURE  
<INSTALLATION TO WALL SURFACE>



• 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







Warning



- Daikin products are manufactured for export to numerous countries throughout the world. Prior to purchase, please 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

Organization:  
DAIKIN INDUSTRIES, LTD.  
AIR CONDITIONING MANUFACTURING DIVISION

Scope of Registration:  
THE DESIGN/DEVELOPMENT AND MANUFACTURE OF  
COMMERCIAL AIR CONDITIONING, HEATING, COOLING,  
REFRIGERATING EQUIPMENT, COMMERCIAL HEATING  
EQUIPMENT, RESIDENTIAL AIR CONDITIONING  
EQUIPMENT, HEAT RECLAIM VENTILATION, AIR  
CLEANING EQUIPMENT, MARINE TYPE CONTAINER  
REFRIGERATION UNITS, COMPRESSORS AND VALVES.



JQA-1452

Organization:  
DAIKIN INDUSTRIES  
(THAILAND) LTD.

Scope of Registration:  
THE DESIGN/DEVELOPMENT  
AND MANUFACTURE OF AIR  
CONDITIONERS AND THE  
COMPONENTS INCLUDING  
COMPRESSORS USED FOR THEM



EC99J2044

All of the Daikin Group's business facilities and subsidiaries in Japan are certified under the ISO 14001 international standard for environment management.

### 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/](http://www.daikin.com/global_ac/)

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