

DAIKIN

Si34 - 803_B

R-410A

**Service
Manual**

VRV[®] III

**RXYQ5-54PAY1, PAYL, PTL
R-410A Heat Pump 50Hz, 60Hz**



VRV^{III} R-410A Heat Pump 50Hz, 60Hz

1. Introduction	vi
1.1 Safety Cautions	vi
1.2 PREFACE	x

Part 1 General Information 1

1. Model Names of Indoor/Outdoor Units.....	2
2. External Appearance.....	3
2.1 Indoor Units	3
2.2 Outdoor Units	4
3. Combination of Outdoor Units.....	6
4. Model Selection.....	8

Part 2 Specifications 11

1. Specifications	12
1.1 Outdoor Units	12
1.2 Indoor Units	54

Part 3 Refrigerant Circuit 77

1. Refrigerant Circuit	78
1.1 RXYQ5P(A)	78
1.2 RXYQ8P(A)	80
1.3 RXYQ10P(A), 12P(A).....	82
1.4 RXYQ14P(A), 16P(A), 18P(A).....	84
1.5 Outdoor Air Processing Unit FXMQ125MFV1~250MFV1	86
2. Functional Parts Layout	87
2.1 RXYQ5P(A)	87
2.2 RXYQ8P(A)	88
2.3 RXYQ10P(A)	89
2.4 RXYQ12P(A)	90
2.5 RXYQ14P(A), 16P(A), 18P(A).....	91
3. Refrigerant Flow for Each Operation Mode.....	92

Part 4 Function..... 108

1. Function general	109
1.1 Symbol	109
1.2 Operation Mode.....	110
2. Basic Control.....	111
2.1 Normal Operation	111
2.2 Compressor PI Control.....	112
2.3 Electronic Expansion Valve PI Control.....	140
2.4 Step Control of Outdoor Unit Fans	140
2.5 Outdoor Unit Fan Control in Cooling Operation	141

3. Special Control.....	142
3.1 Startup Control	142
3.2 Large Capacity Start Up Control (Heating).....	143
3.3 Oil Return Operation	144
3.4 Defrosting Operation	146
3.5 Pump down Residual Operation.....	147
3.6 Standby	148
3.7 Stopping Operation	149
4. Protection Control	151
4.1 High Pressure Protection Control.....	151
4.2 Low Pressure Protection Control.....	152
4.3 Discharge Pipe Protection Control	153
4.4 Inverter Protection Control	154
4.5 STD Compressor Overload Protection.....	155
4.6 Injection Control (only for RXYQ5P(A)).....	155
5. Other Control.....	156
5.1 Outdoor Unit Rotation.....	156
5.2 Emergency Operation	157
5.3 Demand Operation	161
5.4 Heating Operation Prohibition	161
6. Outline of Control (Indoor Unit)	162
6.1 Drain Pump Control.....	162
6.2 Louver Control for Preventing Ceiling Dirt.....	164
6.3 Thermostat Sensor in Remote Controller.....	165
6.4 Thermostat Control While in Normal Operation	167
6.5 Thermostat Control in Dry Operation	167
6.6 Electronic Expansion Valve Control	168
6.7 Hot Start Control (In Heating Operation Only).....	168
6.8 Freeze Prevention	169
6.9 Heater Control	169
6.10 List of Swing Flap Operations	170
6.11 Control of Outdoor Air Processing Unit (Unique Control for Outdoor Air Processing Unit)	171

Part 5 Test Operation 175

1. Test Operation	176
1.1 Installation Process	176
1.2 Procedure and Outline	177
1.3 Operation When Power is Turned On	190
2. Outdoor Unit PCB Layout.....	191
3. Field Setting	192
3.1 Field Setting from Remote Controller	192
3.2 Field Setting from Outdoor Unit.....	211

Part 6 Troubleshooting 236

1. Symptom-based Troubleshooting	239
2. Troubleshooting by Remote Controller	242
2.1 Procedure of Self-diagnosis by Remote Controller	242
2.2 Inspection Mode	246
2.3 Service Mode	247

2.4	Malfunction Codes and Description.....	251
2.5	Malfunction Code Indication by Outdoor Unit PCB	253
3.	Troubleshooting by Indication on the Remote Controller	257
3.1	“P0” Indoor Unit: Error of External Protection Device.....	257
3.2	“P1” Indoor Unit: PCB Defect	258
3.3	“P3” Indoor Unit: Malfunction of Drain Level Control System (S1L)	259
3.4	“P5” Indoor Unit: Fan Motor (M1F) Lock, Overload.....	261
3.5	“P7” Indoor Unit: Malfunction of Swing Flap Motor (M1S).....	265
3.6	Abnormal Power Supply Voltage.....	267
3.7	“P9” Indoor Unit: Malfunction of Electronic Expansion Valve Coil (Y1E)	268
3.8	“PF” Indoor Unit: Drain Level above Limit	270
3.9	“PL” Indoor Unit: Malfunction of Capacity Determination Device	271
3.10	“L1” Indoor Unit: Failure of Transmission (Between Indoor Unit PCB and Fan PCB)	272
3.11	“L4” Indoor Unit: Malfunction of Thermistor (R2T) for Liquid Pipe	274
3.12	“L5” Indoor Unit: Malfunction of Thermistor (R3T) for Gas Pipe	275
3.13	“L8” Indoor Unit: Failure of Combination (Between Indoor Unit PCB and Fan PCB)	276
3.14	“L9” Indoor Unit: Malfunction of Thermistor (R1T) for Suction Air.....	277
3.15	“LL” Indoor Unit: Malfunction of Humidity Sensor System	278
3.16	“LJ” Indoor Unit: Malfunction of Thermostat Sensor in Remote Controller	279
3.17	“E1” Outdoor Unit: PCB Defect	280
3.18	“E3” Outdoor Unit: Actuation of High Pressure Switch.....	281
3.19	“E4” Outdoor Unit: Actuation of Low Pressure Sensor.....	283
3.20	“E5” Outdoor Unit: Inverter Compressor Motor Lock.....	285
3.21	“E8” Outdoor Unit: STD Compressor Motor Overcurrent/Lock.....	287
3.22	“E7” Outdoor Unit: Malfunction of Outdoor Unit Fan Motor	288
3.23	“E9” Outdoor Unit: Malfunction of Electronic Expansion Valve Coil (Y1E, Y2E).....	291
3.24	“F3” Outdoor Unit: Abnormal Discharge Pipe Temperature.....	293
3.25	“F8” Outdoor Unit: Refrigerant Overcharged.....	294
3.26	“H7” Outdoor Unit: Abnormal Outdoor Fan Motor Signal	295
3.27	“H9” Outdoor Unit: Malfunction of Thermistor (R1T) for Outdoor Air.....	296
3.28	“J2” Outdoor Unit: Current Sensor Malfunction	297
3.29	“J3” Outdoor Unit: Malfunction of Discharge Pipe Thermistor (R3T, R31T~R33T).....	298
3.30	“J5” Outdoor Unit: Malfunction of Thermistor (R2T, R7T) for Suction Pipe	299
3.31	“J8” Outdoor Unit: Malfunction of Thermistor (R4T) for Outdoor Unit Heat Exchanger	300
3.32	“J7” Outdoor Unit: Malfunction of Liquid Pipe Thermistor (R6T).....	301
3.33	“J9” Outdoor Unit: Malfunction of Subcooling Heat Exchanger Gas Pipe Thermistor (R5T)	302
3.34	“J9” Outdoor Unit: Malfunction of High Pressure Sensor.....	303
3.35	“JL” Outdoor Unit: Malfunction of Low Pressure Sensor	304
3.36	“L4” Outdoor Unit: Malfunction of Inverter Radiating Fin Temperature Rise.....	305
3.37	“L5” Outdoor Unit: Inverter Compressor Abnormal	307
3.38	“L8” Outdoor Unit: Inverter Current Abnormal.....	309
3.39	“L9” Outdoor Unit: Inverter Start up Error	311

3.40	“L1” Outdoor Unit: Malfunction of Transmission Between Inverter and Control PCB	313
3.41	“P1” Outdoor Unit: Inverter Over-Ripple Protection.....	316
3.42	“P4” Outdoor Unit: Malfunction of Inverter Radiating Fin Temperature Rise Sensor	317
3.43	“P5” Outdoor Unit: Faulty Field Setting after Replacing Main PCB or Faulty Combination of PCB	319
3.44	“U1” Outdoor Unit: Low Pressure Drop Due to Refrigerant Shortage or Electronic Expansion Valve Failure.....	320
3.45	“U1” Reverse Phase, Open Phase	321
3.46	“U2” Outdoor Unit: Power Supply Insufficient or Instantaneous Failure	322
3.47	“U3” Outdoor Unit: Check Operation is not Executed.....	325
3.48	“U4” Malfunction of Transmission Between Indoor Units	326
3.49	“U5” Indoor Unit: Malfunction of Transmission Between Remote Controller and Indoor Unit	328
3.50	“U7” Indoor Unit: Malfunction of Transmission Between Outdoor Units	329
3.51	“U8” Indoor Unit: Malfunction of Transmission Between Main and Sub Remote Controllers	331
3.52	“U9” Indoor Unit: Malfunction of Transmission Between Indoor and Outdoor Units in the Same System	332
3.53	“U9” Improper Combination of Indoor and Outdoor Units, Indoor Units and Remote Controller	333
3.54	“U1” Address Duplication of Centralized Controller	335
3.55	“U1” Malfunction of Transmission Between Centralized Controller and Indoor Unit.....	336
3.56	“U1” System is not Set yet.....	339
3.57	“U1” Malfunction of System, Refrigerant System Address Undefined	340
4.	Troubleshooting (OP: Centralized Remote Controller)	342
4.1	“M1” PCB Defect	342
4.2	“M8” Malfunction of Transmission Between Optional Controllers for Centralized Control.....	343
4.3	“M9” Improper Combination of Optional Controllers for Centralized Control.....	345
4.4	“M1” Address Duplication, Improper Setting	347
5.	Troubleshooting (OP: Unified ON/OFF Controller)	350
5.1	Operation Lamp Blinks	350
5.2	Display “Under Centralized Control” Blinks (Repeats Single Blink)	352
5.3	Display “Under Centralized Control” Blinks (Repeats Double Blink)	355

Part 7 Appendix..... 359





1.	Piping Diagrams	360
1.1	Outdoor Unit.....	360
1.2	Indoor Unit.....	367
2.	Wiring Diagrams for Reference	371
2.1	Outdoor Unit	371
2.2	Field Wiring	381
2.3	Indoor Unit.....	387
3.	List of Electrical and Functional Parts	402

3.1	Outdoor Unit.....	402
3.2	Outdoor Unit - 60Hz	405
3.3	Indoor Unit.....	411
4.	Option List	418
4.1	Option List of Controllers.....	418
4.2	Option Lists (Outdoor Unit).....	420
5.	Piping Installation Point.....	422
5.1	Piping Installation Point.....	422
5.2	The Example of a Wrong Pattern	423
6.	Example of Connection (R-410A Type)	424
7.	Thermistor Resistance / Temperature Characteristics.....	426
8.	Pressure Sensor	428
9.	Method of Checking The Inverter's Power Transistors and Diode Modules	429
Part 8	Precautions for New Refrigerant (R-410A).....	431
1.	Precautions for New Refrigerant (R-410A)	432
1.1	Outline	432
1.2	Refrigerant Cylinders.....	434
1.3	Service Tools.....	435








1. Introduction









1.1 Safety Cautions

Cautions and Warnings






- Be sure to read the following safety cautions before conducting repair work.
- The caution items are classified into “ **Warning**” and “ **Caution**”. The “ **Warning**” items are especially important since they can lead to death or serious injury if they are not followed closely. The “ **Caution**” items can also lead to serious accidents under some conditions if they are not followed. Therefore, be sure to observe all the safety caution items described below.
- About the pictograms
 - △ This symbol indicates an item for which caution must be exercised.
The pictogram shows the item to which attention must be paid.
 - This symbol indicates a prohibited action.
The prohibited item or action is shown inside or near the symbol.
 - This symbol indicates an action that must be taken, or an instruction.
The instruction is shown inside or near the symbol.
- After the repair work is complete, be sure to conduct a test operation to ensure that the equipment operates normally, and explain the cautions for operating the product to the customer









1.1.1 Caution in Repair




 Warning	
<p>Be sure to disconnect the power cable plug from the plug socket before disassembling the equipment for a repair. Working on the equipment that is connected to a power supply can cause an electrical shock. If it is necessary to supply power to the equipment to conduct the repair or inspecting the circuits, do not touch any electrically charged sections of the equipment.</p>	
<p>If the refrigerant gas discharges during the repair work, do not touch the discharging refrigerant gas. The refrigerant gas can cause frostbite.</p>	
<p>When disconnecting the suction or discharge pipe of the compressor at the welded section, release the refrigerant gas completely at a well-ventilated place first. If there is a gas remaining inside the compressor, the refrigerant gas or refrigerating machine oil discharges when the pipe is disconnected, and it can cause injury.</p>	
<p>If the refrigerant gas leaks during the repair work, ventilate the area. The refrigerant gas can generate toxic gases when it contacts flames.</p>	
<p>The step-up capacitor supplies high-voltage electricity to the electrical components of the outdoor unit. Be sure to discharge the capacitor completely before conducting repair work. A charged capacitor can cause an electrical shock.</p>	
<p>Do not start or stop the air conditioner operation by plugging or unplugging the power cable plug. Plugging or unplugging the power cable plug to operate the equipment can cause an electrical shock or fire.</p>	

 Caution	
Do not repair the electrical components with wet hands. Working on the equipment with wet hands can cause an electrical shock.	
Do not clean the air conditioner by splashing water. Washing the unit with water can cause an electrical shock.	
Be sure to provide the grounding when repairing the equipment in a humid or wet place, to avoid electrical shocks.	
Be sure to turn off the power switch and unplug the power cable when cleaning the equipment. The internal fan rotates at a high speed, and cause injury.	
Do not tilt the unit when removing it. The water inside the unit can spill and wet the furniture and floor.	
Be sure to check that the refrigerating cycle section has cooled down sufficiently before conducting repair work. Working on the unit when the refrigerating cycle section is hot can cause burns.	
Use the welder in a well-ventilated place. Using the welder in an enclosed room can cause oxygen deficiency.	



1.1.2 Cautions Regarding Products after Repair




 Warning	
Be sure to use parts listed in the service parts list of the applicable model and appropriate tools to conduct repair work. Never attempt to modify the equipment. The use of inappropriate parts or tools can cause an electrical shock, excessive heat generation or fire.	
When relocating the equipment, make sure that the new installation site has sufficient strength to withstand the weight of the equipment. If the installation site does not have sufficient strength and if the installation work is not conducted securely, the equipment can fall and cause injury.	
Be sure to install the product correctly by using the provided standard installation frame. Incorrect use of the installation frame and improper installation can cause the equipment to fall, resulting in injury.	For integral units only 
Be sure to install the product securely in the installation frame mounted on a window frame. If the unit is not securely mounted, it can fall and cause injury.	For integral units only 







 Warning	
Be sure to use an exclusive power circuit for the equipment, and follow the technical standards related to the electrical equipment, the internal wiring regulations and the instruction manual for installation when conducting electrical work. Insufficient power circuit capacity and improper electrical work can cause an electrical shock or fire.	
Be sure to use the specified cable to connect between the indoor and outdoor units. Make the connections securely and route the cable properly so that there is no force pulling the cable at the connection terminals. Improper connections can cause excessive heat generation or fire.	
When connecting the cable between the indoor and outdoor units, make sure that the terminal cover does not lift off or dismount because of the cable. If the cover is not mounted properly, the terminal connection section can cause an electrical shock, excessive heat generation or fire.	
Do not damage or modify the power cable. Damaged or modified power cable can cause an electrical shock or fire. Placing heavy items on the power cable, and heating or pulling the power cable can damage the cable.	
Do not mix air or gas other than the specified refrigerant (R-410A) in the refrigerant system. If air enters the refrigerating system, an excessively high pressure results, causing equipment damage and injury.	
If the refrigerant gas leaks, be sure to locate the leak and repair it before charging the refrigerant. After charging refrigerant, make sure that there is no refrigerant leak. If the leak cannot be located and the repair work must be stopped, be sure to perform pump down and close the service valve, to prevent the refrigerant gas from leaking into the room. The refrigerant gas itself is harmless, but it can generate toxic gases when it contacts flames, such as fan and other heaters, stoves and ranges.	
When replacing the coin battery in the remote controller, be sure to disposed of the old battery to prevent children from swallowing it. If a child swallows the coin battery, see a doctor immediately.	

 Caution	
Installation of a leakage breaker is necessary in some cases depending on the conditions of the installation site, to prevent electrical shocks.	
Do not install the equipment in a place where there is a possibility of combustible gas leaks. If a combustible gas leaks and remains around the unit, it can cause a fire.	
Be sure to install the packing and seal on the installation frame properly. If the packing and seal are not installed properly, water can enter the room and wet the furniture and floor.	For integral units only

1.1.3 Inspection after Repair

 Warning	
Check to make sure that the power cable plug is not dirty or loose, then insert the plug into a power outlet all the way. If the plug has dust or loose connection, it can cause an electrical shock or fire.	





 Warning	
If the power cable and lead wires have scratches or deteriorated, be sure to replace them. Damaged cable and wires can cause an electrical shock, excessive heat generation or fire.	
Do not use a joined power cable or extension cable, or share the same power outlet with other electrical appliances, since it can cause an electrical shock, excessive heat generation or fire.	

 Caution	
Check to see if the parts and wires are mounted and connected properly, and if the connections at the soldered or crimped terminals are secure. Improper installation and connections can cause excessive heat generation, fire or an electrical shock.	
If the installation platform or frame has corroded, replace it. Corroded installation platform or frame can cause the unit to fall, resulting in injury.	
Check the grounding, and repair it if the equipment is not properly grounded. Improper grounding can cause an electrical shock.	
Be sure to measure the insulation resistance after the repair, and make sure that the resistance is 1 Mohm or higher. Faulty insulation can cause an electrical shock.	
Be sure to check the drainage of the indoor unit after the repair. Faulty drainage can cause the water to enter the room and wet the furniture and floor.	

1.1.4 Using Icons

Icons are used to attract the attention of the reader to specific information. The meaning of each icon is described in the table below:

1.1.5 Using Icons List

Icon	Type of Information	Description
 Note:	Note	A “note” provides information that is not indispensable, but may nevertheless be valuable to the reader, such as tips and tricks.
 Caution	Caution	A “caution” is used when there is danger that the reader, through incorrect manipulation, may damage equipment, lose data, get an unexpected result or has to restart (part of) a procedure.
 Warning	Warning	A “warning” is used when there is danger of personal injury.
	Reference	A “reference” guides the reader to other places in this binder or in this manual, where he/she will find additional information on a specific topic.

1.2 PREFACE

Thank you for your continued patronage of Daikin products.

This is the new service manual for Daikin's Year 2010 VRVIII series Heat Pump System. Daikin offers a wide range of models to respond to building and office air conditioning needs. We are confident that customers will be able to find the models that best suit their needs.

This service manual contains information regarding the servicing of VRVIII series R-410A Heat Pump System.

November, 2010

After Sales Service Division

Part 1

General Information

1. Model Names of Indoor/Outdoor Units.....	2
2. External Appearance.....	3
2.1 Indoor Units.....	3
2.2 Outdoor Units.....	4
3. Combination of Outdoor Units.....	6
4. Model Selection.....	8

1. Model Names of Indoor/Outdoor Units

Indoor Units

Type		Model Name												Power Supply
Ceiling Mounted Cassette Type (Round Flow)	FXFQ	—	25P	32P	40P	50P	63P	80P	100P	125P	—	—	—	VE
Ceiling Mounted Cassette Type (Double Flow)	FXCQ	20M	25M	32M	40M	50M	63M	80M	—	125M	—	—	—	
Ceiling Mounted Cassette Corner Type	FXKQ	—	25MA	32MA	40MA	—	63MA	—	—	—	—	—	—	VE
Slim Ceiling Mounted Duct Type	FXDQ-PBVE	20PB	25PB	32PB	—	—	—	—	—	—	—	—	—	
	FXDQ-PBVET	20PB	25PB	32PB	—	—	—	—	—	—	—	—	—	
	FXDQ-NBVE	—	—	—	40NB	50NB	63NB	—	—	—	—	—	—	
	FXDQ-NBVET	—	—	—	40NB	50NB	63NB	—	—	—	—	—	—	
Ceiling Mounted Built-in Type	FXSQ	20M	25M	32M	40M	50M	63M	80M	100M	125M	—	—	—	
Ceiling Mounted Duct Type (Middle and high static pressure)	FXMQ	20P	25P	32P	40P	50P	63P	80P	100P	125P	140P	—	—	
Ceiling Mounted Duct Type	FXMQ	—	—	—	—	—	—	—	—	—	—	200MA	250MA	
Ceiling Suspended Type	FXHQ	—	—	32MA	—	—	63MA	—	100MA	—	—	—	—	
Wall Mounted Type	FXAQ	20MA	25MA	32MA	40MA	50MA	63MA	—	—	—	—	—	—	
Floor Standing Type	FXLQ	20MA	25MA	32MA	40MA	50MA	63MA	—	—	—	—	—	—	
Concealed Floor Standing Type	FXNQ	20MA	25MA	32MA	40MA	50MA	63MA	—	—	—	—	—	—	
Outdoor Air Processing Unit	FXMQ-MF	—	—	—	—	—	—	—	—	125MF	—	200MF	250MF	V1
Ceiling Suspended Cassette Type	FXUQ	—	—	—	—	—	—	71MA	100MA	125MA	—	—	—	
Connection Unit	BEVQ-MA	—	—	—	—	—	—	71MA	100MA	125MA	—	—	—	VE

Note: FXDQ has following 2 Series, as show below.

FXDQ-PB, NBVET: without Drain Pump

FXDQ-PB, NBVE: with Drain Pump

BEV unit is required for each indoor unit.

MA: RoHS Directive models; Specifications, Dimensions and other functions are not changed compared with M type.

Outdoor Units

Normal Series

Series	Model Name											Power Supply
Heat Pump	RXYQ	5P(A)	8P(A)	10P(A)	12P(A)	14P(A)	16P(A)	18P(A)	20P(A)	22P(A)	Y1(E) YL(E) TL(E)	
		24P(A)	26P(A)	28P(A)	30P(A)	32P(A)	34P(A)	36P(A)	38P(A)	40P(A)		
		42P(A)	44P(A)	46P(A)	48P(A)	50P(A)	52P(A)	54P(A)				

High COP Series (Energy Saving Series)

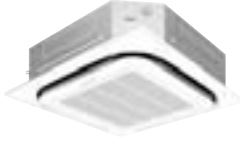











Series	Model Name										Power Supply
Heat Pump	RXYQ	16P(A)H	18P(A)H	24P(A)H	26P(A)H	28P(A)H	30P(A)H	32P(A)H	34P(A)H	36P(A)H	Y1(E) YL(E) TL(E)
		38P(A)H	40P(A)H	42P(A)H	44P(A)H	46P(A)H	48P(A)H	50P(A)H			

*Power Supply
 VE : 1 phase 220~240V, 50Hz
 V1 : 1 phase 220~240V, 50Hz
 Y1 : 3 phase 380~415V, 50Hz
 YL : 3 phase 380V, 60Hz
 TL : 3 phase 220V, 60Hz

E: The unit with anti corrosion treatment








2. External Appearance

2.1 Indoor Units






<p>Ceiling Mounted Cassette Type (Round Flow)</p> <p> FXFQ25P FXFQ32P FXFQ40P FXFQ50P FXFQ63P FXFQ80P FXFQ100P FXFQ125P </p> 	<p>Ceiling Mounted Duct Type</p> <p> FXMQ200MA FXMQ250MA </p> 
<p>Ceiling Mounted Cassette Type (Double Flow)</p> <p> FXCQ20M FXCQ25M FXCQ32M FXCQ40M FXCQ50M FXCQ63M FXCQ80M FXCQ125M </p> 	<p>Ceiling Suspended Type</p> <p> FXHQ32MA FXHQ63MA FXHQ100MA </p> 
<p>Ceiling Mounted Cassette Corner Type</p> <p> FXKQ25MA FXKQ32MA FXKQ40MA FXKQ63MA </p> 	<p>Wall Mounted Type</p> <p> FXAQ20MA FXAQ25MA FXAQ32MA FXAQ40MA FXAQ50MA FXAQ63MA </p> 
<p>Slim Ceiling Mounted Duct Type</p> <p> FXDQ20PB FXDQ40NB FXDQ25PB FXDQ50NB FXDQ32PB FXDQ63NB </p> <p>with Drain Pump (VE) without Drain Pump (VET)</p> 	<p>Floor Standing Type</p> <p> FXLQ20MA FXLQ25MA FXLQ32MA FXLQ40MA FXLQ50MA FXLQ63MA </p> 
<p>Ceiling Mounted Built-in Type</p> <p> FXSQ20M FXSQ25M FXSQ32M FXSQ40M FXSQ50M FXSQ63M FXSQ80M FXSQ100M FXSQ125M </p> 	<p>Concealed Floor Standing Type</p> <p> FXNQ20MA FXNQ25MA FXNQ32MA FXNQ40MA FXNQ50MA FXNQ63MA </p> 
<p>Ceiling Mounted Duct Type (Middle and high static pressure)</p> <p> FXMQ20P FXMQ25P FXMQ32P FXMQ40P FXMQ50P FXMQ63P FXMQ80P FXMQ100P FXMQ125P FXMQ140P </p> 	<p>Ceiling Suspended Cassette Type (Connection Unit Series)</p> <p> FXUQ71MA + BEVQ71MA FXUQ100MA + BEVQ100MA FXUQ125MA + BEVQ125MA </p> <p>Connection Unit</p> 

2.2 Outdoor Units

Normal Series (Space Saving Series)

RXYQ5P(A)	RXYQ8P(A), 10P(A)	RXYQ12P(A), 14P(A), 16P(A), 18P(A)
 <p data-bbox="336 745 384 770">5HP</p>	 <p data-bbox="756 745 836 770">8, 10HP</p>	 <p data-bbox="1155 745 1315 770">12, 14, 16, 18HP</p>
RXYQ20P(A), 22P(A), 24P(A), 26P(A), 28P(A)		RXYQ30P(A), 32P(A), 34P(A), 36P(A)
 <p data-bbox="368 1330 568 1355">20, 22, 24, 26, 28HP</p>		 <p data-bbox="1043 1330 1203 1355">30, 32, 34, 36HP</p>
RXYQ38P(A), 40P(A), 42P(A), 44P(A), 46P(A)		RXYQ48P(A), 50P(A), 52P(A), 54P(A)
 <p data-bbox="368 1910 568 1935">38, 40, 42, 44, 46HP</p>		 <p data-bbox="1043 1910 1203 1935">48, 50, 52, 54HP</p>

High COP Series (Energy Saving Series)

<p style="text-align: center;">RXYQ16P(A)H, 18P(A)H</p>  <p style="text-align: center;">16, 18HP</p>	<p style="text-align: center;">RXYQ24P(A)H, 26P(A)H</p>  <p style="text-align: center;">24, 26HP</p>
<p style="text-align: center;">RXYQ28P(A)H, 30P(A)H</p>  <p style="text-align: center;">28, 30HP</p>	<p style="text-align: center;">RXYQ32P(A)H, 34P(A)H</p>  <p style="text-align: center;">32, 34HP</p>
<p style="text-align: center;">RXYQ36P(A)H, 38P(A)H, 40P(A)H, 42P(A)H, 44P(A)H, 46P(A)H, 48P(A)H, 50P(A)H</p>  <p style="text-align: center;">36, 38, 40, 42, 44, 46, 48, 50HP</p>	

3. Combination of Outdoor Units

Normal Series

System Capacity	Number of units	Module							Outdoor Unit Multi Connection Piping Kit (Option)
		5	8	10	12	14	16	18	
5HP	1	●							—
8HP	1		●						
10HP	1			●					
12HP	1				●				
14HP	1					●			
16HP	1						●		
18HP	1							●	
20HP	2		●		●				Heat Pump: BHFP22P100
22HP	2			●	●				
24HP	2		●				●		
26HP	2		●					●	
28HP	2			●				●	
30HP	2				●			●	
32HP	2						●●		
34HP	2						●	●	
36HP	2							●●	
38HP	3		●		●			●	Heat Pump: BHFP22P151
40HP	3		●				●●		
42HP	3		●				●	●	
44HP	3		●					●●	
46HP	3			●				●●	
48HP	3				●			●●	
50HP	3					●		●●	
52HP	3						●	●●	
54HP	3							●●●	



Note: For multiple connection of 18HP system or more, an optional Daikin Outdoor Unit Multi Connection Piping Kit is required.

High COP Series (Energy Saving Series)

System Capacity	Number of units	Module						Outdoor Unit Multi Connection Piping Kit (Option)
		8	10	12	14	16	18	
16HP	2	●●						Heat Pump: BHFP22P100
18HP	2	●	●					
24HP	3	●●●						
26HP	3	●●	●					
28HP	3	●●		●				
30HP	3	●	●	●				
32HP	3	●		●●				
34HP	3		●	●●				
36HP	3			●●●				
38HP	3			●●	●			Heat Pump: BHFP22P151
40HP	3			●●		●		
42HP	3			●●			●	
44HP	3			●		●●		
46HP	3			●		●	●	
48HP	3					●●●		
50HP	3					●●	●	



Note: For multiple connection of 16HP system or more, an optional Daikin Outdoor Unit Multi Connection Piping Kit is required.

4. Model Selection

VRV8 Heat Pump Series

Outdoor Units

Normal Type (Space Saving Type)

HP	Model name	Combination	Outdoor unit multi connection piping kit	Total capacity index of connectable indoor units*	Maximum number of connectable indoor units*
5 HP	RXYQ5P(A)	RXYQ5P(A)	–	62.5 to 162.5 (250)	8 (12)
8 HP	RXYQ8P(A)	RXYQ8P(A)	–	100 to 260 (400)	13 (20)
10 HP	RXYQ10P(A)	RXYQ10P(A)	–	125 to 325 (500)	16 (25)
12 HP	RXYQ12P(A)	RXYQ12P(A)	–	150 to 390 (600)	19 (30)
14 HP	RXYQ14P(A)	RXYQ14P(A)	–	175 to 455 (700)	23 (35)
16 HP	RXYQ16P(A)	RXYQ16P(A)	–	200 to 520 (800)	26 (40)
18 HP	RXYQ18P(A)	RXYQ18P(A)	–	225 to 585 (900)	29 (45)
20 HP	RXYQ20P(A)	RXYQ8P(A) + RXYQ12P(A)	BHFP22P100	250 to 650 (800)	32 (40)
22 HP	RXYQ22P(A)	RXYQ10P(A) + RXYQ12P(A)		275 to 715 (880)	35 (44)
24 HP	RXYQ24P(A)	RXYQ8P(A) + RXYQ16P(A)		300 to 780 (960)	39 (48)
26 HP	RXYQ26P(A)	RXYQ8P(A) + RXYQ18P(A)		325 to 845 (1,040)	42 (52)
28 HP	RXYQ28P(A)	RXYQ10P(A) + RXYQ18P(A)		350 to 910 (1,120)	45 (56)
30 HP	RXYQ30P(A)	RXYQ12P(A) + RXYQ18P(A)		375 to 975 (1,200)	48 (60)
32 HP	RXYQ32P(A)	RXYQ16P(A) x 2		400 to 1,040 (1,280)	52 (64)
34 HP	RXYQ34P(A)	RXYQ16P(A) + RXYQ18P(A)		425 to 1,105 (1,360)	55 (64)
36 HP	RXYQ36P(A)	RXYQ18P(A) x 2		450 to 1,170 (1,440)	58 (64)
38 HP	RXYQ38P(A)	RXYQ8P(A) + RXYQ12P(A) + RXYQ18P(A)		475 to 1,235 (1,235)	61 (61)
40 HP	RXYQ40P(A)	RXYQ8P(A) + RXYQ16P(A) x 2		500 to 1,300 (1,300)	64 (64)
42 HP	RXYQ42P(A)	RXYQ8P(A) + RXYQ16P(A) + RXYQ18P(A)		525 to 1,365 (1,365)	
44 HP	RXYQ44P(A)	RXYQ8P(A) + RXYQ18P(A) x 2		550 to 1,430 (1,430)	
46 HP	RXYQ46P(A)	RXYQ10P(A) + RXYQ18P(A) x 2		575 to 1,495 (1,495)	
48 HP	RXYQ48P(A)	RXYQ12P(A) + RXYQ18P(A) x 2	600 to 1,560 (1,560)		
50 HP	RXYQ50P(A)	RXYQ14P(A) + RXYQ18P(A) x 2	625 to 1,625 (1,625)		
52 HP	RXYQ52P(A)	RXYQ16P(A) + RXYQ18P(A) x 2	650 to 1,690 (1,690)		
54 HP	RXYQ54P(A)	RXYQ18P(A) x 3	675 to 1,755 (1,755)		

Note: •For multiple connection of 20 HP systems and above, the above Daikin optional kit (separately sold) is required.

*Values inside brackets are based on connection of indoor units rated at maximum capacity, 200% for single outdoor units, 160% for double outdoor units, and 130% for triple outdoor units.

High COP Type (Energy Saving Type)

HP	Model name	Combination	Outdoor unit multi connection piping kit	Total capacity index of connectable indoor units*	Maximum number of connectable indoor units*
16 HP	RXYQ16P(A)H	RXYQ8P(A) x 2	BHFP22P100	200 to 520 (640)	26 (32)
18 HP	RXYQ18P(A)H	RXYQ8P(A) + RXYQ10P(A)		225 to 585 (720)	29 (36)
24 HP	RXYQ24P(A)H	RXYQ8P(A) x 3	BHFP22P151	300 to 780 (780)	39 (39)
26 HP	RXYQ26P(A)H	RXYQ8P(A) x 2 + RXYQ10P(A)		325 to 845 (845)	42 (42)
28 HP	RXYQ28P(A)H	RXYQ8P(A) x 2 + RXYQ12P(A)		350 to 910 (910)	45 (45)
30 HP	RXYQ30P(A)H	RXYQ8P(A) + RXYQ10P(A) + RXYQ12P(A)		375 to 975 (975)	48 (48)
32 HP	RXYQ32P(A)H	RXYQ8P(A) + RXYQ12P(A) x 2		400 to 1,040 (1,040)	52 (52)
34 HP	RXYQ34P(A)H	RXYQ10P(A) + RXYQ12P(A) x 2		425 to 1,105 (1,105)	55 (55)
36 HP	RXYQ36P(A)H	RXYQ12P(A) x 3		450 to 1,170 (1,170)	58 (58)
38 HP	RXYQ38P(A)H	RXYQ12P(A) x 2 + RXYQ14P(A)		475 to 1,235 (1,235)	61 (61)
40 HP	RXYQ40P(A)H	RXYQ12P(A) x 2 + RXYQ16P(A)		500 to 1,300 (1,300)	64 (64)
42 HP	RXYQ42P(A)H	RXYQ12P(A) x 2 + RXYQ18P(A)		525 to 1,365 (1,365)	
44 HP	RXYQ44P(A)H	RXYQ12P(A) + RXYQ16P(A) x 2		550 to 1,430 (1,430)	
46 HP	RXYQ46P(A)H	RXYQ12P(A) + RXYQ16P(A) + RXYQ18P(A)		575 to 1,495 (1,495)	
48 HP	RXYQ48P(A)H	RXYQ16P(A) x 3		600 to 1,560 (1,560)	
50 HP	RXYQ50P(A)H	RXYQ16P(A) x 2 + RXYQ18P(A)		625 to 1,625 (1,625)	

Note: •For multiple connection of 16 HP systems and above, the above Daikin optional kit (separately sold) is required.

*Values inside brackets are based on connection of indoor units rated at maximum capacity, 200% for single outdoor units, 160% for double outdoor units, and 130% for triple outdoor units.

Connectable Indoor Unit

Type		Model Name												Power Supply
Ceiling Mounted Cassette Type (Multi Flow)	FXFQ	—	25P	32P	40P	50P	63P	80P	100P	125P	—	—	—	VE
Ceiling Mounted Cassette Type (Double Flow)	FXCQ	20M	25M	32M	40M	50M	63M	80M	—	125M	—	—	—	
Ceiling Mounted Cassette Corner Type	FXKQ	—	25MA	32MA	40MA	—	63MA	—	—	—	—	—	—	
Slim Ceiling Mounted Duct Type	FXDQ-PBVE	20PB	25PB	32PB	—	—	—	—	—	—	—	—	—	
	FXDQ-PBVET	20PB	25PB	32PB	—	—	—	—	—	—	—	—	—	
	FXDQ-NBVE	—	—	—	40NB	50NB	63NB	—	—	—	—	—	—	
	FXDQ-NBVET	—	—	—	40NB	50NB	63NB	—	—	—	—	—	—	
Ceiling Mounted Built-in Type	FXSQ	20M	25M	32M	40M	50M	63M	80M	100M	125M	—	—	—	
Ceiling Mounted Duct Type (Middle and high static pressure)	FXMQ	20P	25P	32P	40P	50P	63P	80P	100P	125P	140P	—	—	
Ceiling Mounted Duct Type	FXMQ	—	—	—	—	—	—	—	—	—	—	200MA	250MA	
Ceiling Suspended Type	FXHQ	—	—	32MA	—	—	63MA	—	100MA	—	—	—	—	
Wall Mounted Type	FXAQ	20MA	25MA	32MA	40MA	50MA	63MA	—	—	—	—	—	—	
Floor Standing Type	FXLQ	20MA	25MA	32MA	40MA	50MA	63MA	—	—	—	—	—	—	
Concealed Floor Standing Type	FXNQ	20MA	25MA	32MA	40MA	50MA	63MA	—	—	—	—	—	—	
Outdoor Air Processing Unit	FXMQ-MF	—	—	—	—	—	—	—	—	125MF	—	200MF	250MF	V1
Ceiling Suspended Cassette Type	FXUQ	—	—	—	—	—	—	71MA	100MA	125MA	—	—	—	
Connection Unit	BEVQ-MA	—	—	—	—	—	—	71MA	100MA	125MA	—	—	—	VE

Note: FXDQ has following 2 Series, as show below.

FXDQ-PB, NBVET: without Drain Pump

FXDQ-PB, NBVE : with Drain Pump

BEV unit is required for each indoor unit.

Indoor unit capacity

New refrigerant model code	P20 type	P25 type	P32 type	P40 type	P50 type	P63 type	P80 type	P100 type	P125 type	P140 type	P200 type	P250 type
Selecting model capacity	2.2 kW	2.8 kW	3.5 kW	4.5 kW	5.6 kW	7.0 kW	9.0 kW	11.2 kW	14.0 kW	16.0 kW	22.4 kW	28.0 kW
Equivalent output	0.8HP	1HP	1.25HP	1.6HP	2.0HP	2.5HP	3.2HP	4HP	5HP	6HP	8HP	10HP

Use the above tables to determine the capacities of indoor units to be connected. Make sure the total capacity of indoor units connected to each outdoor unit is within the specified value (kW).

- The total capacity of connected indoor units must be within a range of 50 to 130% of the rated capacity of the outdoor unit.
- In some models, it is not possible to connect the maximum number of connectable indoor units. Select models so the total capacity of connected indoor units conforms to the specification.

Differences from Conventional Models

Item	Differences		
	Object	New model (P(A) Model)	Conventional model (P Model)
Compressor	Connection of equalizer oil pipe	<ul style="list-style-type: none"> ● NONE (No particular changes in terms of service) 	<ul style="list-style-type: none"> ● NONE (No particular changes in terms of service)
Workability	Equalizer oil pipe for multi-outdoor-unit system	<ul style="list-style-type: none"> ● NONE 	<ul style="list-style-type: none"> ● NONE
	Procedure for calculating refrigerant refilling quantity	<ul style="list-style-type: none"> ● Refilling quantity due to piping length + Adjustment quantity according to models of outdoor units 	<ul style="list-style-type: none"> ● Refilling quantity due to piping length + Adjustment quantity according to models of outdoor units
Optional accessories	Branch pipe for outdoor unit connection	<ul style="list-style-type: none"> ● Y branch Type: BHFP22P100/151 	<ul style="list-style-type: none"> ● Y branch Type: BHFP22P100/151
Refrigerant charge	Change of refrigerant amount Refrigerant amount reduced to less than 12 kg.	<ul style="list-style-type: none"> ● Less than 12 kg 	<ul style="list-style-type: none"> ● Some of Heat Pump units require refrigerant amount of not less than 12 kg. (Heat recovery units have been designed for refrigerant amount of less than 12 kg.)

Part 2 Specifications

1. Specifications	12
1.1 Outdoor Units	12
1.2 Indoor Units	54

1. Specifications

1.1 Outdoor Units

Heat Pump 50Hz Standard Series <RXYQ-PA>

Model Name			RXYQ5PAY1(E)	RXYQ8PAY1(E)
★1 Cooling Capacity (19.5°CWB)	kcal / h		12,100	19,400
	Btu / h		48,100	76,800
	kW		14.1	22.5
★2 Cooling Capacity (19.0°CWB)	kW		14.0	22.4
★3 Heating Capacity	kcal / h		13,800	21,500
	Btu / h		54,600	85,300
	kW		16.0	25.0
Casing Color	Without(E)		Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
	With(E)		Light Camel (2.5Y6.5/1.5)	Light Camel (2.5Y6.5/1.5)
Dimensions: (H×W×D)	mm		1680×635×765	1680×930×765
Heat Exchanger			Cross Fin Coil	Cross Fin Coil
Comp.	Type		Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type
	Piston Displacement	m ³ /h	13.34	16.90
	Number of Revolutions	r.p.m	6300	7980
	Motor Output×Number of Units	kW	2.8×1	4.5×1
	Starting Method		Soft Start	Soft Start
Fan	Type		Propeller Fan	Propeller Fan
	Motor Output	kW	0.35×1	0.75×1
	Airflow Rate	m ³ /min	95	180
	Drive		Direct Drive	Direct Drive
Connecting Pipes	Liquid Pipe	mm	φ9.5 (Brazing Connection)	φ9.5 (Brazing Connection)
	Gas Pipe	mm	φ15.9 (Brazing Connection)	φ19.1 (Brazing Connection)
Product Mass (Machine weight)	kg		160	205
Safety Devices			High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector
Defrost Method			Deicer	Deicer
Capacity Control	%		28~100	20~100
Refrigerant	Refrigerant Name		R-410A	R-410A
	Charge	kg	6.2	7.2
	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, Clamps	Installation Manual, Operation Manual, Connection Pipes, Clamps
Drawing No.			C: 4D061005	C: 4D061006

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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAY1E.

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

Model Name		RXYQ10PAY1(E)	RXYQ12PAY1(E)
★1 Cooling Capacity (19.5°CWB)	kcal / h	24,300	29,000
	Btu / h	96,200	115,000
	kW	28.2	33.7
★2 Cooling Capacity (19.0°CWB)	kW	28.0	33.5
★3 Heating Capacity	kcal / h	27,100	32,300
	Btu / h	107,000	128,000
	kW	31.5	37.5
Casing Color	Without(E)	Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
	With(E)	Light Camel (2.5Y6.5/1.5)	Light Camel (2.5Y6.5/1.5)
Dimensions: (H×W×D)	mm	1680×930×765	1680×1240×765
Heat Exchanger		Cross Fin Coil	Cross Fin Coil
Comp.	Type		Hermetically Sealed Scroll Type
	Piston Displacement	m³/h	13.34+10.53
	Number of Revolutions	r.p.m	6300, 2900
	Motor Output×Number of Units	kW	(1.4+4.5)×1
	Starting Method		Soft Start
Fan	Type		Propeller Fan
	Motor Output	kW	0.75×1
	Airflow Rate	m³/min	185
	Drive		Direct Drive
Connecting Pipes	Liquid Pipe	mm	φ9.5 (Brazing Connection)
	Gas Pipe	mm	φ22.2 (Brazing Connection)
Product Mass (Machine Weight)	kg	249	285
Safety Devices		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector
Defrost Method		Deicer	Deicer
Capacity Control		14~100	14~100
Refrigerant	Refrigerant Name		R-410A
	Charge	kg	7.9
	Control		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.		C: 4D061007	C: 4D061008

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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAY1E.

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

Model Name		RXYQ14PAY1(E)	RXYQ16PAY1(E)
★1 Cooling Capacity (19.5°CWB)	kcal / h	34,600	39,000
	Btu / h	137,000	155,000
	kW	40.2	45.3
★2 Cooling Capacity (19.0°CWB)	kW	40.0	45.0
★3 Heating Capacity	kcal / h	38,700	43,000
	Btu / h	154,000	171,000
	kW	45.0	50.0
Casing Color	Without(E)	Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
	With(E)	Light Camel (2.5Y6.5/1.5)	Light Camel (2.5Y6.5/1.5)
Dimensions: (H×W×D)	mm	1680×1240×765	1680×1240×765
Heat Exchanger		Cross Fin Coil	Cross Fin Coil
Comp.	Type		Hermetically Sealed Scroll Type
	Piston Displacement	m ³ /h	13.34+10.53+10.53
	Number of Revolutions	r.p.m	6300, 2900×2
	Motor Output×Number of Units	kW	(1.6+4.5+4.5)×1
	Starting Method		Soft Start
Fan	Type		Propeller Fan
	Motor Output	kW	0.35×2
	Airflow Rate	m ³ /min	233
	Drive		Direct Drive
Connecting Pipes	Liquid Pipe	mm	φ12.7 (Brazing Connection)
	Gas Pipe	mm	φ28.6 (Brazing Connection)
Product Mass (Machine Weight)		kg	329
Safety Devices		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector	
Defrost Method		Deicer	
Capacity Control		10~100	
Refrigerant	Refrigerant Name		R-410A
	Charge	kg	11.3
	Control		Electronic Expansion Valve
Refrigerator Oil		Refer to the nameplate of compressor	
Standard Accessories		Installation Manual, Operation Manual, Connection Pipes, Clamps	
Drawing No.		C: 4D061009	C: 4D061010

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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAY1E.

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

Model Name (Combination Unit)		RXYQ18PAY1(E)		RXYQ20PAY1(E)		
Model Name (Independent Unit)		—		RXYQ8PAY1(E)+RXYQ12PAY1(E)		
★1 Cooling Capacity (19.5°CWB)	kcal / h	42,000		48,300		
	Btu / h	168,000		192,000		
	kW	49.3		56.2		
★2 Cooling Capacity (19.0°CWB)	kW	49.0		55.9		
★3 Heating Capacity	kcal / h	48,600		53,800		
	Btu / h	193,000		213,000		
	kW	56.5		62.5		
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	1680x1240x765		(1680x930x765)+(1680x1240x765)		
Heat Exchanger		Cross Fin Coil		Cross Fin Coil		
Comp.	Type		Hermetically Sealed Scroll Type		Hermetically Sealed Scroll Type	
	Piston Displacement	m³/h	16.90+10.53+10.53		(16.90)+(13.34+10.53)	
	Number of Revolutions	r.p.m	7980, 2900, 2900		(7980)+(6300, 2900)	
	Motor OutputxNumber of Units	kW	(4.3+4.5+4.5)x1		(4.5x1)+((2.5+4.5)x1)	
	Starting Method		Soft Start		Soft Start	
Fan	Type		Propeller Fan		Propeller Fan	
	Motor Output	kW	0.75x2		(0.75x1)+(0.35x2)	
	Airflow Rate	m³/min	239		180+233	
	Drive		Direct Drive		Direct Drive	
Connecting Pipes	Liquid Pipe	mm	φ15.9 (Brazing Connection)		φ15.9 (Brazing Connection)	
	Gas Pipe	mm	φ28.6 (Brazing Connection)		φ28.6 (Brazing Connection)	
Product Mass (Machine Weight)	kg	341		205+285		
Safety Devices		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		
Defrost Method		Deicer		Deicer		
Capacity Control	%	9~100		8~100		
Refrigerant	Refrigerant Name		R-410A		R-410A	
	Charge	kg	11.7		7.2+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.		C: 4D061011				

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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAY1E.

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

Model Name (Combination Unit)		RXYQ22PAY1(E)		RXYQ24PAY1(E)		
Model Name (Independent Unit)		RXYQ10PAY1(E)+RXYQ12PAY1(E)		RXYQ8PAY1(E)+RXYQ16PAY1(E)		
★1 Cooling Capacity (19.5°CWB)	kcal / h	53,200		58,300		
	Btu / h	211,000		231,000		
	kW	61.9		67.8		
★2 Cooling Capacity (19.0°CWB)	kW	61.5		67.4		
★3 Heating Capacity	kcal / h	59,300		64,500		
	Btu / h	235,000		256,000		
	kW	69.0		75.0		
Casing Color	Without(E)	Ivory White (5Y7.5/1)		Ivory White (5Y7.5/1)		
	With(E)	Light Camel (2.5Y6.5/1.5)		Light Camel (2.5Y6.5/1.5)		
Dimensions: (HxWxD)	mm	(1680×930×765)+(1680×1240×765)		(1680×930×765)+(1680×1240×765)		
Heat Exchanger		Cross Fin Coil		Cross Fin Coil		
Comp.	Type		Hermetically Sealed Scroll Type		Hermetically Sealed Scroll Type	
	Piston Displacement	m³/h	(13.34+10.53)+(13.34+10.53)		16.90+(13.34+10.53+10.53)	
	Number of Revolutions	r.p.m	(6300, 2900)+(6300, 2900)		7980+(6300, 2900×2)	
	Motor Output×Number of Units	kW	((1.4+4.5)×1)+((2.5+4.5)×1)		(4.5×1)+((2.7+4.5+4.5)×1)	
	Starting Method		Soft Start		Soft Start	
Fan	Type		Propeller Fan		Propeller Fan	
	Motor Output	kW	(0.75×1)+(0.35×2)		(0.75×1)+(0.35×2)	
	Airflow Rate	m³/min	185+233		180+233	
	Drive		Direct Drive		Direct Drive	
Connecting Pipes	Liquid Pipe	mm	φ15.9 (Brazing Connection)		φ15.9 (Brazing Connection)	
	Gas Pipe	mm	φ28.6 (Brazing Connection)		φ34.9 (Brazing Connection)	
Product Mass (Machine Weight)	kg	249+285		205+329		
Safety Devices		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		
Defrost Method		Deicer		Deicer		
Capacity Control	%	7~100		6~100		
Refrigerant	Refrigerant Name		R-410A		R-410A	
	Charge	kg	7.9+9.5		7.2+11.5	
	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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAY1E.

Conversion Formulae

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

Model Name (Combination Unit)		RXYQ26PAY1(E)		RXYQ28PAY1(E)		
Model Name (Independent Unit)		RXYQ8PAY1(E)+RXYQ18PAY1(E)		RXYQ10PAY1(E)+RXYQ18PAY1(E)		
★1 Cooling Capacity (19.5°CWB)	kcal / h	61,700		66,700		
	Btu / h	250,000		26,400		
	kW	71.8		77.5		
★2 Cooling Capacity (19.0°CWB)	kW	71.4		77.0		
★3 Heating Capacity	kcal / h	70,100		75,700		
	Btu / h	278,000		300,000		
	kW	81.5		88.0		
Casing Color	Without(E)	Ivory White (5Y7.5/1)		Ivory White (5Y7.5/1)		
	With(E)	Light Camel (2.5Y6.5/1.5)		Light Camel (2.5Y6.5/1.5)		
Dimensions: (HxWxD)	mm	(1680x930x765)+(1680x1240x765)		(1680x930x765)+(1680x1240x765)		
Heat Exchanger		Cross Fin Coil		Cross Fin Coil		
Comp.	Type		Hermetically Sealed Scroll Type		Hermetically Sealed Scroll Type	
	Piston Displacement	m³/h	(16.90)+(16.90+10.53+10.53)		(13.34+10.53)+(16.90+10.53+10.53)	
	Number of Revolutions	r.p.m	(7980)+(7980, 2900, 2900)		(6300, 2900)+(7980, 2900x2)	
	Motor OutputxNumber of Units	kW	(4.5x1)+((4.3+4.5+4.5)x1)		((1.4+4.5)x1)+((4.3+4.5+4.5)x1)	
	Starting Method		Soft Start		Soft Start	
Fan	Type		Propeller Fan		Propeller Fan	
	Motor Output	kW	(0.75x1)+(0.75x2)		(0.75x1)+(0.75x2)	
	Airflow Rate	m³/min	180+239		185+239	
	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+341		249+341		
Safety Devices		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		High Pressure Switch, Fan Driver Overload Protector, Overcurrent 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+11.7		7.9+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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAY1E.

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

Model Name (Combination Unit)		RXYQ30PAY1(E)		RXYQ32PAY1(E)		
Model Name (Independent Unit)		RXYQ12PAY1(E)+RXYQ18PAY1(E)		RXYQ16PAY1(E)+RXYQ16PAY1(E)		
★1 Cooling Capacity (19.5°CWB)	kcal / h	71,400		77,800		
	Btu / h	283,000		309,000		
	kW	83		90.5		
★2 Cooling Capacity (19.0°CWB)	kW	82.5		90.0		
★3 Heating Capacity	kcal / h	80,800		86,000		
	Btu / h	321,000		341,000		
	kW	94.0		100		
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	(1680x1240x765)+(1680x1240x765)		(1680x1240x765)+(1680x1240x765)		
Heat Exchanger		Cross Fin Coil		Cross Fin Coil		
Comp.	Type		Hermetically Sealed Scroll Type		Hermetically Sealed Scroll Type	
	Piston Displacement	m³/h	(13.34+10.53)+(16.90+10.53+10.53)		(13.34+10.53+10.53)+(13.34+10.53+10.53)	
	Number of Revolutions	r.p.m	(6300, 2900)+(7980, 2900, 2900)		(6300, 2900, 2900)+(6300, 2900, 2900)	
	Motor OutputxNumber of Units	kW	((2.5+4.5)×1)+((4.3+4.5+4.5)×1)		((2.7+4.5+4.5)×1)+((2.7+4.5+4.5)×1)	
	Starting Method		Soft Start		Soft Start	
Fan	Type		Propeller Fan		Propeller Fan	
	Motor Output	kW	(0.35×2)+(0.75×2)		(0.35×2)+(0.35×2)	
	Airflow Rate	m³/min	233+239		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	285+341		329+329		
Safety Devices		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		
Defrost Method		Deicer		Deicer		
Capacity Control	%	5-100		5-100		
Refrigerant	Refrigerant Name		R-410A		R-410A	
	Charge	kg	9.5+11.7		11.5+11.5	
	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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAY1E.

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

Model Name (Combination Unit)		RXYQ34PAY1(E)		RXYQ36PAY1(E)		
Model Name (Independent Unit)		RXYQ16PAY1(E)+RXYQ18PAY1(E)		RXYQ18PAY1(E)+RXYQ18PAY1(E)		
★1 Cooling Capacity (19.5°CWB)	kcal / h	81,400		85,100		
	Btu / h	323,000		338,000		
	kW	94.6		99.0		
★2 Cooling Capacity (19.0°CWB)	kW	94.0		98.0		
★3 Heating Capacity	kcal / h	92,000		97,200		
	Btu / h	365,000		386,000		
	kW	107		113		
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	(1680x1240x765)+(1680x1240x765)		(1680x1240x765)+(1680x1240x765)		
Heat Exchanger		Cross Fin Coil		Cross Fin Coil		
Comp.	Type		Hermetically Sealed Scroll Type		Hermetically Sealed Scroll Type	
	Piston Displacement	m³/h	(13.34+10.53+10.53)+(16.90+10.53+10.53)		(16.90+10.53+10.53)+(16.90+10.53+10.53)	
	Number of Revolutions	r.p.m	(6300, 2900, 2900)+(7980, 2900, 2900)		(7980, 2900, 2900)+(7980, 2900, 2900)	
	Motor OutputxNumber of Units	kW	((2.7+4.5+4.5)x1)+((4.3+4.5+4.5)x1)		((4.3+4.5+4.5)x1)+((4.3+4.5+4.5)x1)	
	Starting Method		Soft Start		Soft Start	
Fan	Type		Propeller Fan		Propeller Fan	
	Motor Output	kW	(0.35x2)+(0.75x2)		(0.75x2)+(0.75x2)	
	Airflow Rate	m³/min	233+239		239+239	
	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)		φ41.3 (Brazing Connection)	
Product Mass (Machine Weight)	kg	329+341		341+341		
Safety Devices		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		
Defrost Method		Deicer		Deicer		
Capacity Control	%	5~100		4~100		
Refrigerant	Refrigerant Name		R-410A		R-410A	
	Charge	kg	11.5+11.7		11.7+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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAY1E.

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

Model Name (Combination Unit)		RXYQ38PAY1(E)		RXYQ40PAY1(E)		
Model Name (Independent Unit)		RXYQ8PAY1(E)+RXYQ12PAY1(E)+RXYQ18PAY1(E)		RXYQ8PAY1(E)+RXYQ16PAY1(E)+RXYQ16PAY1(E)		
★1 Cooling Capacity (19.5°CWB)	kcal / h	91,200		97,200		
	Btu / h	362,000		386,000		
	kW	106		113		
★2 Cooling Capacity (19.0°CWB)	kW	105		112		
★3 Heating Capacity	kcal / h	102,000		108,000		
	Btu / h	406,000		427,000		
	kW	119		125		
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	
	Piston Displacement	m³/h	(16.90)+(13.34+10.53)+(16.90+10.53+10.53)		(16.90)+(13.34+10.53+10.53)+(13.34+10.53+10.53)	
	Number of Revolutions	r.p.m	(7980)+(6300, 2900)+(7980, 2900, 2900)		(7980)+(6300, 2900, 2900)+(6300, 2900, 2900)	
	Motor Output×Number of Units	kW	(4.5×1)+((2.5+4.5)×1)+((4.3+4.5+4.5)×1)		(4.5×1)+((2.7+4.5+4.5)×1)+((2.7+4.5+4.5)×1)	
	Starting Method		Soft Start		Soft Start	
Fan	Type		Propeller Fan		Propeller Fan	
	Motor Output	kW	(0.75×1)+(0.35×2)+(0.75×2)		(0.75×1)+(0.35×2)+(0.35×2)	
	Airflow Rate	m³/min	180+233+239		180+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	205+285+341		205+329+329		
Safety Devices		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		
Defrost Method		Deicer		Deicer		
Capacity Control	%	4~100		4~100		
Refrigerant	Refrigerant Name		R-410A		R-410A	
	Charge	kg	7.2+9.5+11.7		7.2+11.5+11.5	
	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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAY1E.

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

Model Name (Combination Unit)		RXYQ42PAY1(E)		RXYQ44PAY1(E)		
Model Name (Independent Unit)		RXYQ8PAY1(E)+RXYQ16PAY1(E)+RXYQ18PAY1(E)		RXYQ8PAY1(E)+RXYQ18PAY1(E)+RXYQ18PAY1(E)		
★1 Cooling Capacity (19.5°CWB)	kcal / h	101,000		104,000		
	Btu / h	399,000		413,000		
	kW	117		121		
★2 Cooling Capacity (19.0°CWB)	kW	116		120		
★3 Heating Capacity	kcal / h	114,000		119,000		
	Btu / h	450,000		471,000		
	kW	132		138		
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		
	Piston Displacement	m³/h	(16.90)+(13.34+10.53+10.53)+(16.90+10.53+10.53)		(16.90)+(16.90+10.53+10.53)+(16.90+10.53+10.53)	
	Number of Revolutions	r.p.m	(7980)+(6300, 2900, 2900)+(7980, 2900, 2900)		(7980)+(7980, 2900×2)+(7980, 2900, 2900)	
	Motor Output×Number of Units	kW	(4.5×1)+((2.7+4.5+4.5)×1)+((4.3+4.5+4.5)×1)		(4.5×1)+((4.3+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	(0.75×1)+(0.35×2)+(0.75×2)		(0.75×1)+(0.75×2)+(0.75×2)	
	Airflow Rate	m³/min	180+233+239		180+239+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	205+329+341		205+341+341		
Safety Devices		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		
Defrost Method		Deicer		Deicer		
Capacity Control	%	4~100		4~100		
Refrigerant	Refrigerant Name	R-410A		R-410A		
	Charge	kg	7.2+11.5+11.7		7.2+11.7+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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAY1E.

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

Model Name (Combination Unit)		RXYQ46PAY1(E)		RXYQ48PAY1(E)		
Model Name (Independent Unit)		RXYQ10PAY1(E)+RXYQ18PAY1(E)+RXYQ18PAY1(E)		RXYQ12PAY1(E)+RXYQ18PAY1(E)+RXYQ18PAY1(E)		
★1 Cooling Capacity (19.5°CWB)	kcal / h	109,000		114,000		
	Btu / h	433,000		454,000		
	kW	127		133		
★2 Cooling Capacity (19.0°CWB)	kW	126		132		
★3 Heating Capacity	kcal / h	124,000		130,000		
	Btu / h	495,000		515,000		
	kW	145		151		
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)		(1680×1240×765)+(1680×1240×765)+(1680×1240×765)		
Heat Exchanger		Cross Fin Coil		Cross Fin Coil		
Comp.	Type	Hermetically Sealed Scroll Type		Hermetically Sealed Scroll Type		
	Piston Displacement	m ³ /h	(13.34+10.53)+(16.90+10.53+10.53)+(16.90+10.53+10.53)		(13.34+10.53)+(16.90+10.53+10.53)+(16.90+10.53+10.53)	
	Number of Revolutions	r.p.m	(6300, 2900)+(7980, 2900, 2900)+(7980, 2900, 2900)		(6300, 2900)+(7980, 2900, 2900)+(7980, 2900, 2900)	
	Motor Output×Number of Units	kW	((1.4+4.5)×1)+((4.3+4.5+4.5)×1)+((4.3+4.5+4.5)×1)		((2.5+4.5)×1)+((4.3+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	(0.75×1)+(0.75×2)+(0.75×2)		(0.35×2)+(0.75×2)+(0.75×2)	
	Airflow Rate	m ³ /min	185+239+239		233+239+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	249+341+341		285+341+341		
Safety Devices		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		
Defrost Method		Deicer		Deicer		
Capacity Control	%	3-100		3-100		
Refrigerant	Refrigerant Name	R-410A		R-410A		
	Charge	kg	7.9+11.7+11.7		9.5+11.7+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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAY1E.

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

Model Name (Combination Unit)		RXYQ50PAY1(E)		RXYQ52PAY1(E)	
Model Name (Independent Unit)		RXYQ14PAY1(E)+RXYQ18PAY1(E)+RXYQ18PAY1(E)		RXYQ16PAY1(E)+RXYQ18PAY1(E)+RXYQ18PAY1(E)	
★1 Cooling Capacity (19.5°CWB)	kcal / h	120,000		124,000	
	Btu / h	474,000		491,000	
	kW	139		144	
★2 Cooling Capacity (19.0°CWB)	kW	138		143	
★3 Heating Capacity	kcal / h	136,000		140,000	
	Btu / h	539,000		556,000	
	kW	158		163	
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	
	Piston Displacement	m³/h	(13.34+10.53+10.53)+(16.90+10.53+10.53)+(16.90+10.53+10.53)	(13.34+10.53+10.53)+(16.90+10.53+10.53)+(16.90+10.53+10.53)	
	Number of Revolutions	r.p.m	(6300, 2900×2)+(7980, 2900, 2900)+(7980, 2900, 2900)	(6300, 2900×2)+(7980, 2900, 2900)+(7980, 2900, 2900)	
	Motor Output×Number of Units	kW	((1.6+4.5+4.5)×1)+((4.3+4.5+4.5)×1)+((4.3+4.5+4.5)×1)	((2.7+4.5+4.5)×1)+((4.3+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)+(0.75×2)+(0.75×2)	(0.35×2)+(0.75×2)+(0.75×2)	
	Airflow Rate	m³/min	233+239+239	233+239+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+341+341		329+341+341	
Safety Devices		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector	
Defrost Method		Deicer		Deicer	
Capacity Control	%	3-100		3-100	
Refrigerant	Refrigerant Name	R-410A		R-410A	
	Charge	kg	11.3+11.7+11.7	11.5+11.7+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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAY1E.

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

Model Name (Combination Unit)		RXYQ54PAY1(E)	
Model Name (Independent Unit)		RXYQ18PAY1(E)+RXYQ18PAY1(E)+RXYQ18PAY1(E)	
★1 Cooling Capacity (19.5°CWB)	kcal / h	127,000	
	Btu / h	505,000	
	kW	148	
★2 Cooling Capacity (19.0°CWB)	kW	147	
★3 Heating Capacity	kcal / h	146,000	
	Btu / h	580,000	
	kW	170	
Casing Color	Without(E)	Ivory White (5Y7.5/1)	
	With(E)	Light Camel (2.5Y6.5/1.5)	
Dimensions: (HxWxD)	mm	(1680×1240×765)+(1680×1240×765)+(1680×1240×765)	
Heat Exchanger		Cross Fin Coil	
Comp.	Type	Hermetically Sealed Scroll Type	
	Piston Displacement	m³/h	(16.90+10.53+10.53)+(16.90+10.53+10.53)+(16.90+10.53+10.53)
	Number of Revolutions	r.p.m	(7980, 2900, 2900)+(7980, 2900, 2900)+(7980, 2900, 2900)
	Motor Output×Number of Units	kW	((4.3+4.5+4.5)×1)+((4.3+4.5+4.5)×1)+((4.3+4.5+4.5)×1)
	Starting Method	Soft Start	
Fan	Type	Propeller Fan	
	Motor Output	kW	(0.75×2)+(0.75×2)+(0.75×2)
	Airflow Rate	m³/min	239+239+239
	Drive	Direct Drive	
Connecting Pipes	Liquid Pipe	mm	φ19.1 (Brazing Connection)
	Gas Pipe	mm	φ41.3 (Brazing Connection)
Product Mass (Machine Weight)	kg	341+341+341	
Safety Devices		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector	
Defrost Method		Deicer	
Capacity Control	%	3-100	
Refrigerant	Refrigerant Name	R-410A	
	Charge	kg	11.7+11.7+11.7
	Control	Electronic Expansion Valve	
Refrigerator Oil		Refer to the nameplate of compressor	
Standard Accessories		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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAY1E.

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

Heat Pump 50Hz High COP Series <RXYQ-PAH>

Model Name		RXYQ16PAHY1(E)		RXYQ18PAHY1(E)		
Model Name (Independent Unit)		RXYQ8PAY1(E)+RXYQ8PAY1(E)		RXYQ8PAY1(E)+RXYQ10PAY1(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	(1680×930×765)+(1680×930×765)		(1680×930×765)+(1680×930×765)		
Heat Exchanger		Cross Fin Coil		Cross Fin Coil		
Comp.	Type		Hermetically Sealed Scroll Type		Hermetically Sealed Scroll Type	
	Piston Displacement	m³/h	(16.90)+(16.90)		(16.90)+(13.34+10.53)	
	Number of Revolutions	r.p.m	(7980)+(7980)		(7980)+(6300,2900)	
	Motor Output×Number of Units	kW	(4.5×1)+(4.5×1)		(4.5×1)+((1.4+4.5)×1)	
	Starting Method		Soft start		Soft start	
Fan	Type		Propeller Fan		Propeller Fan	
	Motor Output	kW	(0.75×1)+(0.75×1)		(0.75×1)+(0.75×1)	
	Airflow 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, Overcurrent Relay, Inverter Overload Protector		High Pressure Switch, Fan Driver Overload Protector, Overcurrent 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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAY1E.

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

Model Name		RXYQ24PAHY1(E)		RXYQ26PAHY1(E)		
Model Name (Independent Unit)		RXYQ8PAY1(E)+RXYQ8PAY1(E)+RXYQ8PAY1(E)		RXYQ8PAY1(E)+RXYQ8PAY1(E)+RXYQ10PAY1(E)		
★1 Cooling Capacity (19.5°CWB)	kcal / h	58,100		63,000		
	Btu / h	231,000		250,000		
	kW	67.6		73.2		
★2 Cooling Capacity (19.0°CWB)	kW	67.2		72.8		
★3 Heating Capacity	kcal / h	64,500		70,100		
	Btu / h	260,000		278,000		
	kW	75.0		81.5		
Casing Color	Without(E)	Ivory White (5Y7.5/1)		Ivory White (5Y7.5/1)		
	With(E)	Light Camel (2.5Y6.5/1.5)		Light Camel (2.5Y6.5/1.5)		
Dimensions: (HxWxD)	mm	(1680×930×765)+(1680×930×765)+(1680×930×765)		(1680×930×765)+(1680×930×765)+(1680×930×765)		
Heat Exchanger		Cross Fin Coil		Cross Fin Coil		
Comp.	Type		Hermetically Sealed Scroll Type		Hermetically Sealed Scroll Type	
	Piston Displacement	m³/h	(16.90)+(16.90)+(16.90)		(16.90)+(16.90)+(13.34+10.53)	
	Number of Revolutions	r.p.m	(7980)+(7980)+(7980)		(7980)+(7980)+(6300,2900)	
	Motor Output×Number of Units	kW	(4.5×1)+(4.5×1)+(4.5×1)		(4.5×1)+(4.5×1)+((1.4+4.5)×1)	
	Starting Method		Soft start		Soft start	
Fan	Type		Propeller Fan		Propeller Fan	
	Motor Output	kW	(0.75×1)+(0.75×1)+(0.75×1)		(0.75×1)+(0.75×1)+(0.75×1)	
	Airflow Rate	m³/min	180+180+180		180+180+185	
	Drive		Direct Drive		Direct Drive	
Connecting Pipes	Liquid Pipe	mm	φ15.9(Brazing Connection)		φ19.1(Brazing Connection)	
	Gas Pipe	mm	φ34.9(Brazing Connection)		φ34.9(Brazing Connection)	
Product Mass (Machine weight)	kg	205+205+205		205+205+249		
Safety Devices		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		
Defrost Method		Deicer		Deicer		
Capacity Control	%	7~100		6~100		
Refrigerant	Refrigerant Name		R-410A		R-410A	
	Charge	kg	7.2+7.2+7.2		7.2+7.2+7.9	
	Control		Electronic Expansion Valve		Electronic Expansion Valve	
Refrigerator Oil		Refer to the nameplate of compressor		Refer to the nameplate of compressor		
Standard Accessories		Installation Manual, Operation Manual, Connection Pipes, Clamps		Installation Manual, Operation Manual, Connection Pipes, Clamps		
Drawing No.						

Notes:

- ★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.
- ★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.
- ★3 Indoor temp. : 20°CDB / outdoor temp. : 7°CDB, 6°CWB / Equivalent piping length : 7.5m, level difference : 0m.
- 4 The units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAY1E.

Conversion Formulae

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

Model Name		RXYQ28PAHY1(E)		RXYQ30PAHY1(E)		
Model Name (Independent Unit)		RXYQ8PAY1(E)+RXYQ8PAY1(E)+RXYQ12PAY1(E)		RXYQ8PAY1(E)+RXYQ10PAY1(E)+RXYQ12PAY1(E)		
★1 Cooling Capacity (19.5°CWB)	kcal / h	67,800		72,600		
	Btu / h	269,000		288,000		
	kW	78.8		84.4		
★2 Cooling Capacity (19.0°CWB)	kW	78.3		83.9		
★3 Heating Capacity	kcal / h	75,300		80,800		
	Btu / h	299,000		321,000		
	kW	87.5		94.0		
Casing Color	Without(E)	Ivory White (5Y7.5/1)		Ivory White (5Y7.5/1)		
	With(E)	Light Camel (2.5Y6.5/1.5)		Light Camel (2.5Y6.5/1.5)		
Dimensions: (HxWxD)	mm	(1680x930x765)+(1680x930x765)+(1680x1240x765)		(1680x930x765)+(1680x930x765)+(1680x1240x765)		
Heat Exchanger		Cross Fin Coil		Cross Fin Coil		
Comp.	Type		Hermetically Sealed Scroll Type		Hermetically Sealed Scroll Type	
	Piston Displacement	m³/h	(16.90)+(16.90)+(13.34+10.53)		(16.90)+(13.34+10.53)+(13.34+10.53)	
	Number of Revolutions	r.p.m	(7980)+(7980)+(6300,2900)		(7980)+(6300,2900)+(6300,2900)	
	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)	
	Airflow Rate	m³/min	180+180+233		180+185+233	
	Drive		Direct Drive		Direct Drive	
Connecting Pipes	Liquid Pipe	mm	φ19.1(Brazing Connection)		φ19.1(Brazing Connection)	
	Gas Pipe	mm	φ34.9(Brazing Connection)		φ34.9(Brazing Connection)	
Product Mass (Machine weight)	kg	205+205+285		205+249+285		
Safety Devices		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		High Pressure Switch, Fan Driver Overload Protector, Overcurrent 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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAY1E.

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

Model Name		RXYQ32PAHY1(E)		RXYQ34PAHY1(E)		
Model Name (Independent Unit)		RXYQ8PAY1(E)+RXYQ12PAY1(E)+RXYQ12PAY1(E)		RXYQ10PAY1(E)+RXYQ12PAY1(E)+RXYQ12PAY1(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	
	Piston Displacement	m³/h	(16.90)+(13.34+10.53)+(13.34+10.53)		(13.34+10.53)+(13.34+10.53)+(13.34+10.53)	
	Number of Revolutions	r.p.m	(7980)+(6300,2900)+(6300,2900)		(6300,2900)+(6300,2900)+(6300,2900)	
	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)	
	Airflow Rate	m³/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, Overcurrent Relay, Inverter Overload Protector		High Pressure Switch, Fan Driver Overload Protector, Overcurrent 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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAY1E.

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

Model Name		RXYQ36PAHY1(E)		RXYQ38PAHY1(E)		
Model Name (Independent Unit)		RXYQ12PAY1(E)+RXYQ12PAY1(E)+RXYQ12PAY1(E)		RXYQ12PAY1(E)+RXYQ12PAY1(E)+RXYQ14PAY1(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		
	Piston Displacement	m³/h	(13.34+10.53)+(13.34+10.53)+(13.34+10.53)		(13.34+10.53)+(13.34+10.53)+(13.34+10.53+10.53)	
	Number of Revolutions	r.p.m	(6300,2900)+(6300,2900)+(6300,2900)		(6300,2900)+(6300,2900)+(6300,2900,2900)	
	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)	
	Airflow Rate	m³/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, Overcurrent Relay, Inverter Overload Protector		High Pressure Switch, Fan Driver Overload Protector, Overcurrent 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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAY1E.

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

Model Name		RXYQ40PAHY1(E)		RXYQ42PAHY1(E)		
Model Name (Independent Unit)		RXYQ12PAY1(E)+RXYQ12PAY1(E)+RXYQ16PAY1(E)		RXYQ12PAY1(E)+RXYQ12PAY1(E)+RXYQ18PAY1(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		
	Piston Displacement	m³/h	(13.34+10.53)+(13.34+10.53)+(13.72+10.53+10.53)		(13.34+10.53)+(13.34+10.53)+(16.90+10.53+10.53)	
	Number of Revolutions	r.p.m	(6300,2900)+(6300,2900)+(6300,2900,2900)		(6300,2900)+(6300,2900)+(7980,2900,2900)	
	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)	
	Airflow Rate	m³/min	233+233+233		233+233+239	
	Drive	Direct Drive		Direct Drive		
Connecting Pipes	Liquid Pipe	mm	φ19.1(Brazing Connection)		φ19.1(Brazing Connection)	
	Gas Pipe	mm	φ41.3(Brazing Connection)		φ41.3(Brazing Connection)	
Product Mass (Machine weight)	kg	285+285+329		285+285+341		
Safety Devices		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		High Pressure Switch, Fan Driver Overload Protector, Overcurrent 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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAY1E.

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

Model Name		RXYQ44PAHY1(E)		RXYQ46PAHY1(E)		
Model Name (Independent Unit)		RXYQ12PAY1(E)+RXYQ16PAY1(E)+RXYQ16PAY1(E)		RXYQ12PAY1(E)+RXYQ16PAY1(E)+RXYQ18PAY1(E)		
★1 Cooling Capacity (19.5°CWB)	kcal / h	108,000		111,000		
	Btu / h	427,000		440,000		
	kW	125		129		
★2 Cooling Capacity (19.0°CWB)	kW	124		128		
★3 Heating Capacity	kcal / h	119,000		124,000		
	Btu / h	471,000		491,000		
	kW	138		144		
Casing Color	Without(E)	Ivory White (5Y7.5/1)		Ivory White (5Y7.5/1)		
	With(E)	Light Camel (2.5Y6.5/1.5)		Light Camel (2.5Y6.5/1.5)		
Dimensions: (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		
	Piston Displacement	m³/h	(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)		
	Number of Revolutions	r.p.m	(6300,2900)+(6300,2900,2900)+(6300,2900,2900)	(6300,2900)+(6300,2900,2900)+(7980,2900,2900)		
	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)		
	Airflow Rate	m³/min	233+233+233	233+233+239		
	Drive		Direct Drive		Direct Drive	
Connecting Pipes	Liquid Pipe	mm	φ19.1(Brazing Connection)	φ19.1(Brazing Connection)		
	Gas Pipe	mm	φ41.3(Brazing Connection)	φ41.3(Brazing Connection)		
Product Mass (Machine weight)	kg	285+329+329		285+329+341		
Safety Devices		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		High Pressure Switch, Fan Driver Overload Protector, Overcurrent 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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAY1E.

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

Model Name			RXYQ48PAHY1(E)	RXYQ50PAHY1(E)
Model Name (Independent Unit)			RXYQ16PAY1(E)+RXYQ16PAY1(E)+RXYQ16PAY1(E)	RXYQ16PAY1(E)+RXYQ16PAY1(E)+RXYQ18PAY1(E)
★1 Cooling Capacity (19.5°CWB)	kcal / h		117,000	120,000
	Btu / h		464,000	478,000
	kW		136	140
★2 Cooling Capacity (19.0°CWB)	kW		135	139
★3 Heating Capacity	kcal / h		129,000	134,000
	Btu / h		512,000	532,000
	kW		150	156
Casing Color	Without(E)		Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
	With(E)		Light Camel (2.5Y6.5/1.5)	Light Camel (2.5Y6.5/1.5)
Dimensions: (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
	Piston Displacement	m ³ /h	(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)
	Number of Revolutions	r.p.m	(6300,2900,2900)+(6300,2900,2900)+(6300,2900,2900)	(6300,2900,2900)+(6300,2900,2900)+(7980,2900,2900)
	Motor Output×Number of Units	kW	((2.7+4.5+4.5)×1)+((2.7+4.5+4.5)×1)+((2.7+4.5+4.5)×1)	((2.7+4.5+4.5)×1)+((2.7+4.5+4.5)×1)+((4.3+4.5+4.5)×1)
	Starting Method		Soft start	Soft start
Fan	Type		Propeller Fan	Propeller Fan
	Motor Output	kW	(0.35×2)+(0.35×2)+(0.35×2)	(0.35×2)+(0.35×2)+(0.75×2)
	Airflow Rate	m ³ /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, Overcurrent Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Overcurrent 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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAY1E.

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

Heat Pump 60Hz-Normal Series (Space Saving Series) <RXYQ-P(A)>

Model Name	60Hz	YL(E)	RXYQ5PAYL(E)	RXYQ8PAYL(E)	
		TL(E)	RXYQ5PTL(E)	RXYQ8PTL(E)	
★1 Cooling Capacity (19.5°CWB)		kcal / h	12,100	19,400	
		Btu / h	48,100	76,800	
		kW	14.1	22.5	
★2 Cooling Capacity (19.0°CWB)		kW	14.0	22.4	
★3 Heating Capacity		kcal / h	13,800	21,500	
		Btu / h	54,600	85,300	
		kW	16.0	25.0	
Casing Color		Without(E)	Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)	
		With(E)	Light Camel (2.5Y6.5/1.5)	Light Camel (2.5Y6.5/1.5)	
Dimensions: (HxWxD)		mm	1680x635x765	1680x930x765	
Heat Exchanger			Cross Fin Coil	Cross Fin Coil	
Comp.	Type		Hermetically Sealed Scroll Type		
	Piston Displacement	m³/h	YL(E)	13.34	
			TL(E)	13.34	
	Number of Revolutions	r.p.m	YL(E)	6300	
			TL(E)	6300	
	Motor Output×Number of Units		kW	2.8×1	4.5×1
Starting Method			Soft Start	Soft Start	
Fan	Type		Propeller Fan		
	Motor Output		kW	0.35×1	0.75×1
	Airflow Rate		m³/min	95	180
	Drive			Direct Drive	Direct Drive
	Connecting Pipes		mm	φ9.5 (Brazing Connection)	φ9.5 (Brazing Connection)
Product Mass (Machine weight)		kg	160	205	
Safety Devices			High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector	
Defrost Method			Deicer	Deicer	
Capacity Control		%	28~100	20~100	
Refrigerant	Refrigerant Name		R-410A		
	Charge	kg	6.2	7.2	
	Control		Electronic Expansion Valve		
Refrigerator Oil			Refer to the nameplate of compressor	Refer to the nameplate of compressor	
Standard Accessories			Installation Manual, Operation Manual, Clamps	Installation Manual, Operation Manual, Connection Pipes, Clamps	
Drawing No.	60Hz	YL(E)	4D061025	4D061026	
		TL(E)	4D060845A	4D060846A	

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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAYLE.

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

Model Name	60Hz	YL(E)	RXYQ10PAYL(E)	RXYQ12PAYL(E)
		TL(E)	RXYQ10PTL(E)	RXYQ12PTL(E)
★1 Cooling Capacity (19.5°CWB)		kcal / h	24,300	29,000
		Btu / h	96,200	115,000
		kW	28.2	33.7
★2 Cooling Capacity (19.0°CWB)		kW	28.0	33.5
★3 Heating Capacity		kcal / h	27,100	32,300
		Btu / h	107,000	128,000
		kW	31.5	37.5
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	1680x1240x765
Heat Exchanger			Cross Fin Coil	Cross Fin Coil
Comp.	Type		Hermetically Sealed Scroll Type	
	Piston Displacement	m ³ /h	YL(E)	13.34+12.52
			TL(E)	13.34+12.52
	Number of Revolutions	r.p.m	YL(E)	6300, 3450
			TL(E)	6300, 3450
	Motor Output×Number of Units		kW	(1.4+4.5)×1
Starting Method			Soft Start	Soft Start
Fan	Type		Propeller Fan	
	Motor Output	kW	0.75×1	0.35×2
	Airflow Rate	m ³ /min	185	233
	Drive		Direct Drive	
Connecting Pipes	Liquid Pipe	mm	φ9.5 (Brazing Connection)	φ12.7 (Brazing Connection)
	Gas Pipe	mm	φ22.2 (Brazing Connection)	φ28.6 (Brazing Connection)
Product Mass (Machine Weight)		kg	249	285
Safety Devices			High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector
Defrost Method			Deicer	Deicer
Capacity Control		%	14~100	14~100
Refrigerant	Refrigerant Name		R-410A	
	Charge	kg	7.9	9.5
	Control		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.	60Hz	YL(E)	4D061027	4D061028
		TL(E)	4D060847A	4D060848A

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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAYLE.

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

Model Name	60Hz	YL(E)	RXYQ14PAYL(E)	RXYQ16PAYL(E)
		TL(E)	RXYQ14PTL(E)	RXYQ16PTL(E)
★1 Cooling Capacity (19.5°CWB)		kcal / h	34,600	39,000
		Btu / h	137,000	155,000
		kW	40.2	45.3
★2 Cooling Capacity (19.0°CWB)		kW	40.0	45.0
★3 Heating Capacity		kcal / h	38,700	43,000
		Btu / h	154,000	171,000
		kW	45.0	50.0
Casing Color		Without(E)	Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
		With(E)	Light Camel (2.5Y6.5/1.5)	Light Camel (2.5Y6.5/1.5)
Dimensions: (HxWxD)		mm	1680x1240x765	1680x1240x765
Heat Exchanger			Cross Fin Coil	Cross Fin Coil
Comp.	Type		Hermetically Sealed Scroll Type	
	Piston Displacement	m³/h	YL(E)	12.84+12.52+12.52
			TL(E)	12.84+12.52+12.52
	Number of Revolutions	r.p.m	YL(E)	6060, 3450, 3450
			TL(E)	6060, 3450, 3450
	Motor Output×Number of Units		kW	(1.6+4.5+4.5)×1
Starting Method			Soft Start	
Fan	Type		Propeller Fan	
	Motor Output	kW	0.35×2	
	Airflow Rate	m³/min	233	
	Drive		Direct Drive	
	Connecting Pipes	Liquid Pipe	mm	φ12.7 (Brazing Connection)
	Gas Pipe	mm	φ28.6 (Brazing Connection)	
Product Mass (Machine Weight)		kg	329	
Safety Devices			High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector	
Defrost Method			Deicer	
Capacity Control		%	10~100	
Refrigerant	Refrigerant Name		R-410A	
	Charge	kg	11.3	
	Control		Electronic Expansion Valve	
Refrigerator Oil			Refer to the nameplate of compressor	
Standard Accessories			Installation Manual, Operation Manual, Connection Pipes, Clamps	
Drawing No.	60Hz	YL(E)	4D061029	
		TL(E)	4D060849A	

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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAYLE.

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

Model Name (Combination Unit)		YL(E)	RXYQ18PAYL(E)	RXYQ20PAYL(E)	
Model Name (Independent Unit)			—	RXYQ8PAYL(E)+RXYQ12PAYL(E)	
Model Name (Combination Unit)		TL(E)	RXYQ18PTL(E)	RXYQ20PTL(E)	
Model Name (Independent Unit)			—	RXYQ8PTL(E)+RXYQ12PTL(E)	
★1 Cooling Capacity (19.5°CWB)	kcal / h		42,400	48,300	
	Btu / h		168,000	192,000	
	kW		49.3	56.2	
★2 Cooling Capacity (19.0°CWB)	kW		49.0	55.9	
★3 Heating Capacity	kcal / h		48,600	53,800	
	Btu / h		193,000	213,000	
	kW		56.5	62.5	
Casing Color	Without(E)		Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)	
	With(E)		Light Camel (2.5Y6.5/1.5)	Light Camel (2.5Y6.5/1.5)	
Dimensions: (H×W×D)	mm		1680×1240×765	(1680×930×765)+(1680×1240×765)	
Heat Exchanger			Cross Fin Coil	Cross Fin Coil	
Comp.	Type		Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type	
	Piston Displacement	m ³ /h	YL(E)	12.84+12.52+12.52	(16.90)+(13.34+12.52)
			TL(E)	12.84+12.52+12.52	(16.90)+(13.34+12.52)
	Number of Revolutions	r.p.m	YL(E)	6060, 3450, 3450	(7980)+(6300, 3450)
			TL(E)	6060, 3450, 3450	(7980)+(6300, 3450)
Motor Output×Number of Units	kW		(4.3+4.5+4.5)×1	(4.5×1)+((2.5+4.5)×1)	
Starting Method			Soft Start	Soft Start	
Fan	Type		Propeller Fan	Propeller Fan	
	Motor Output	kW	0.75×2	(0.75×1)+(0.35×2)	
	Airflow Rate	m ³ /min	239	180+233	
	Drive			Direct Drive	Direct Drive
Connecting Pipes	Liquid Pipe	mm	φ15.9 (Brazing Connection)	φ15.9 (Brazing Connection)	
	Gas Pipe	mm	φ28.6 (Brazing Connection)	φ28.6 (Brazing Connection)	
Product Mass (Machine Weight)	kg		341	205+285	
Safety Devices			High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector	
Defrost Method			Deicer	Deicer	
Capacity Control	%		9~100	8~100	
Refrigerant	Refrigerant Name		R-410A	R-410A	
	Charge	kg	11.7	7.2+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.	60Hz	YL(E)	4D061031		
		TL(E)	4D060851A		

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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAYLE.

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

Model Name (Combination Unit)		YL(E)		RXYQ22PAYL(E)	RXYQ24PAYL(E)
Model Name (Independent Unit)				RXYQ10PAYL(E)+RXYQ12PAYL(E)	RXYQ8PAYL(E)+RXYQ16PAYL(E)
Model Name (Combination Unit)		TL(E)		RXYQ22PTL(E)	RXYQ24PTL(E)
Model Name (Independent Unit)				RXYQ10PTL(E)+RXYQ12PTL(E)	RXYQ8PTL(E)+RXYQ16PTL(E)
★1 Cooling Capacity (19.5°CWB)		kcal / h		53,200	58,300
		Btu / h		211,000	231,000
		kW		61.9	67.8
★2 Cooling Capacity (19.0°CWB)		kW		61.5	67.4
★3 Heating Capacity		kcal / h		59,300	64,500
		Btu / h		235,000	256,000
		kW		69.0	75.0
Casing Color		Without(E)		Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
		With(E)		Light Camel (2.5Y6.5/1.5)	Light Camel (2.5Y6.5/1.5)
Dimensions: (H×W×D)		mm		(1680×930×765)+(1680×1240×765)	(1680×930×765)+(1680×1240×765)
Heat Exchanger				Cross Fin Coil	Cross Fin Coil
Comp.	Type			Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type
	Piston Displacement	m³/h	YL(E)	(13.34+12.52)+(13.34+12.52)	(16.90)+(12.84+12.52+12.52)
			TL(E)	(13.34+12.52)+(13.34+12.52)	(16.90)+(12.84+12.52+12.52)
	Number of Revolutions	r.p.m	YL(E)	(6300, 3450)+(6300, 3450)	(7980)+(6060, 3450, 3450)
			TL(E)	(6300, 3450)+(6300, 3450)	(7980)+(6060, 3450, 3450)
Motor Output×Number of Units		kW		((1.4+4.5)×1)+((2.5+4.5)×1)	(4.5×1)+((2.7+4.5+4.5)×1)
Starting Method				Soft Start	Soft Start
Fan	Type			Propeller Fan	Propeller Fan
	Motor Output	kW		(0.75×1)+(0.35×2)	(0.75×1)+(0.35×2)
	Airflow Rate	m³/min		185+233	180+233
	Drive				Direct Drive
Connecting Pipes	Liquid Pipe	mm		φ15.9 (Brazing Connection)	φ15.9 (Brazing Connection)
	Gas Pipe	mm		φ28.6 (Brazing Connection)	φ34.9 (Brazing Connection)
Product Mass (Machine Weight)		kg		249+285	205+329
Safety Devices				High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector
Defrost Method				Deicer	Deicer
Capacity Control		%		7~100	6~100
Refrigerant	Refrigerant Name			R-410A	R-410A
	Charge	kg		7.9+9.5	7.2+11.5
	Control				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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAYLE.

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

Model Name (Combination Unit)		YL(E)		RXYQ26PAYL(E)	RXYQ28PAYL(E)
Model Name (Independent Unit)				RXYQ8PAYL(E)+RXYQ18PAYL(E)	RXYQ10PAYL(E)+RXYQ18PAYL(E)
Model Name (Combination Unit)		TL(E)		RXYQ26PTL(E)	RXYQ28PTL(E)
Model Name (Independent Unit)				RXYQ8PTL(E)+RXYQ18PTL(E)	RXYQ10PTL(E)+RXYQ18PTL(E)
★1 Cooling Capacity (19.5°CWB)		kcal / h		61,700	66,700
		Btu / h		250,000	264,000
		kW		71.8	77.5
★2 Cooling Capacity (19.0°CWB)		kW		71.4	77.0
★3 Heating Capacity		kcal / h		70,100	75,700
		Btu / h		278,000	300,000
		kW		81.5	88.0
Casing Color		Without(E)		Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
		With(E)		Light Camel (2.5Y6.5/1.5)	Light Camel (2.5Y6.5/1.5)
Dimensions: (H×W×D)		mm		(1680×930×765)+(1680×1240×765)	(1680×930×765)+(1680×1240×765)
Heat Exchanger				Cross Fin Coil	Cross Fin Coil
Comp.	Type			Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type
	Piston Displacement	m ³ /h	YL(E)	(16.90)+(12.84+12.52+12.52)	(13.34+12.52)+(12.84+12.52+12.52)
			TL(E)	(16.90)+(12.84+12.52+12.52)	(13.34+12.52)+(12.84+12.52+12.52)
	Number of Revolutions	r.p.m	YL(E)	(7980)+(6060, 3450, 3450)	(6300, 3450)+(6060, 3450, 3450)
			TL(E)	(7980)+(6060, 3450, 3450)	(6300, 3450)+(6060, 3450, 3450)
Motor Output×Number of Units		kW	(4.5×1)+((4.3+4.5+4.5)×1)	((1.4+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	(0.75×1)+(0.75×2)	(0.75×1)+(0.75×2)
	Airflow Rate		m ³ /min	180+239	185+239
	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+341	249+341
Safety Devices				High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Overcurrent 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+11.7	7.9+11.7
	Control				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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAYLE.

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

Model Name (Combination Unit)		YL(E)		RXYQ30PAYL(E)	RXYQ32PAYL(E)
Model Name (Independent Unit)				RXYQ12PAYL(E)+RXYQ18PAYL(E)	RXYQ16PAYL(E)+RXYQ16PAYL(E)
Model Name (Combination Unit)		TL(E)		RXYQ30PTL(E)	RXYQ32PTL(E)
Model Name (Independent Unit)				RXYQ12PTL(E)+RXYQ18PTL(E)	RXYQ16PTL(E)+RXYQ16PTL(E)
★1 Cooling Capacity (19.5°CWB)		kcal / h		71,400	77,800
		Btu / h		283,000	309,000
		kW		83.0	90.5
★2 Cooling Capacity (19.0°CWB)		kW		82.5	90.0
★3 Heating Capacity		kcal / h		80,800	86,000
		Btu / h		321,000	341,000
		kW		94.0	100
Casing Color		Without(E)		Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
		With(E)		Light Camel (2.5Y6.5/1.5)	Light Camel (2.5Y6.5/1.5)
Dimensions: (H×W×D)		mm		(1680×1240×765)+(1680×1240×765)	(1680×1240×765)+(1680×1240×765)
Heat Exchanger				Cross Fin Coil	Cross Fin Coil
Comp.	Type			Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type
	Piston Displacement	m³/h	YL(E)	(13.34+12.52)+(12.84+12.52+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)+(12.84+12.52+12.52)
	Number of Revolutions	r.p.m	YL(E)	(6300, 3450)+(6060, 3450, 3450)	(6060, 3450, 3450)+(6060, 3450, 3450)
			TL(E)	(6300, 3450)+(6060, 3450, 3450)	(6060, 3450, 3450)+(6060, 3450, 3450)
Motor Output×Number of Units		kW	((2.5+4.5)×1)+(4.3+4.5+4.5)×1	((2.7+4.5+4.5)×1)+(2.7+4.5+4.5)×1	
Starting Method				Soft Start	Soft Start
Fan	Type			Propeller Fan	Propeller Fan
	Motor Output		kW	(0.35×2)+(0.75×2)	(0.35×2)+(0.35×2)
	Airflow Rate		m³/min	233+239	233+233
	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		285+341	329+329
Safety Devices				High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector
Defrost Method				Deicer	Deicer
Capacity Control		%		5~100	5~100
Refrigerant	Refrigerant Name			R-410A	R-410A
	Charge		kg	9.5+11.7	11.5+11.5
	Control				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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAYLE.

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

Model Name (Combination Unit)			YL(E)	RXYQ34PAYL(E)	RXYQ36PAYL(E)
Model Name (Independent Unit)				RXYQ16PAYL(E)+RXYQ18PAYL(E)	RXYQ18PAYL(E)+RXYQ18PAYL(E)
Model Name (Combination Unit)			TL(E)	RXYQ34PTL(E)	RXYQ36PTL(E)
Model Name (Independent Unit)				RXYQ16PTL(E)+RXYQ18PTL(E)	RXYQ18PTL(E)+RXYQ18PTL(E)
★1 Cooling Capacity (19.5°CWB)	kcal / h			81,400	85,100
	Btu / h			323,000	338,000
	kW			94.6	99.0
★2 Cooling Capacity (19.0°CWB)	kW			94.0	98.0
★3 Heating Capacity	kcal / h			92,000	97,200
	Btu / h			365,000	386,000
	kW			107	113
Casing Color	Without(E)			Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
	With(E)			Light Camel (2.5Y6.5/1.5)	Light Camel (2.5Y6.5/1.5)
Dimensions: (H×W×D)	mm			(1680×1240×765)+(1680×1240×765)	(1680×1240×765)+(1680×1240×765)
Heat Exchanger				Cross Fin Coil	Cross Fin Coil
Comp.	Type			Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type
	Piston Displacement	m ³ /h	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)
			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)
	Number of Revolutions	r.p.m	YL(E)	(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)
	Motor Output×Number of Units		kW	((2.7+4.5+4.5)×1)+((4.3+4.5+4.5)×1)	((4.3+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)+(0.75×2)	(0.75×2)+(0.75×2)
	Airflow Rate		m ³ /min	233+239	239+239
	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)	φ41.3 (Brazing Connection)
Product Mass (Machine Weight)		kg		329+341	341+341
Safety Devices				High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector
Defrost Method				Deicer	Deicer
Capacity Control		%		5~100	4~100
Refrigerant	Refrigerant Name			R-410A	R-410A
	Charge		kg	11.5+11.7	11.7+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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAYLE.

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

Model Name (Combination Unit)		YL(E)	RXYQ38PAYL(E)		RXYQ40PAYL(E)		
Model Name (Independent Unit)			RXYQ8PAYL(E)+RXYQ12PAYL(E)+RXYQ18PAYL(E)		RXYQ8PAYL(E)+RXYQ16PAYL(E)+RXYQ16PAYL(E)		
Model Name (Combination Unit)		TL(E)	RXYQ38PTL(E)		RXYQ40PTL(E)		
Model Name (Independent Unit)			RXYQ8PTL(E)+RXYQ12PTL(E)+RXYQ18PTL(E)		RXYQ8PTL(E)+RXYQ16PTL(E)+RXYQ16PTL(E)		
★1 Cooling Capacity (19.5°CWB)	kcal / h		91,200		97,200		
	Btu / h		362,000		386,000		
	kW		106		113		
★2 Cooling Capacity (19.0°CWB)	kW		105		112		
★3 Heating Capacity	kcal / h		102,000		108,000		
	Btu / h		406,000		427,000		
	kW		119		125		
Casing Color	Without(E)		Ivory White (5Y7.5/1)		Ivory White (5Y7.5/1)		
	With(E)		Light Camel (2.5Y6.5/1.5)		Light Camel (2.5Y6.5/1.5)		
Dimensions: (H×W×D)	mm		(1680×930×765)+(1680×1240×765)+(1680×1240×765)		(1680×930×765)+(1680×1240×765)+(1680×1240×765)		
Heat Exchanger			Cross Fin Coil		Cross Fin Coil		
Comp.	Type		Hermetically Sealed Scroll Type		Hermetically Sealed Scroll Type		
	Piston Displacement	m³/h	YL(E)	(16.90)+(13.34+12.52)+(12.84+12.52+12.52)		(16.90)+(12.84+12.52+12.52)+(12.84+12.52+12.52)	
			TL(E)	(16.90)+(13.34+12.52)+(12.84+12.52+12.52)		(16.90)+(12.84+12.52+12.52)+(12.84+12.52+12.52)	
	Number of Revolutions	r.p.m	YL(E)	(7980)+(6300, 3450)+(6060, 3450, 3450)		(7980)+(6060, 3450, 3450)+(6060, 3450, 3450)	
			TL(E)	(7980)+(6300, 3450)+(6060, 3450, 3450)		(7980)+(6060, 3450, 3450)+(6060, 3450, 3450)	
	Motor Output×Number of Units	kW		(4.5×1)+(2.5+4.5)×1)+(4.3+4.5+4.5)×1)		(4.5×1)+((2.7+4.5+4.5)×1)+(2.7+4.5+4.5)×1)	
Starting Method			Soft Start		Soft Start		
Fan	Type		Propeller Fan		Propeller Fan		
	Motor Output	kW	(0.75×1)+(0.35×2)+(0.75×2)		(0.75×1)+(0.35×2)+(0.35×2)		
	Airflow Rate	m³/min	180+233+239		180+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	205+285+341		205+329+329		
Safety Devices			High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		
Defrost Method			Deicer		Deicer		
Capacity Control		%	4~100		4~100		
Refrigerant	Refrigerant Name		R-410A		R-410A		
	Charge	kg	7.2+9.5+11.7		7.2+11.5+11.5		
	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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAYLE.

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

Model Name (Combination Unit)		YL(E)	RXYQ42PAYL(E)		RXYQ44PAYL(E)		
Model Name (Independent Unit)			RXYQ8PAYL(E)+RXYQ16PAYL(E)+RXYQ18PAYL(E)		RXYQ8PAYL(E)+RXYQ18PAYL(E)+RXYQ18PAYL(E)		
Model Name (Combination Unit)		TL(E)	RXYQ42PTL(E)		RXYQ44PTL(E)		
Model Name (Independent Unit)			RXYQ8PTL(E)+RXYQ16PTL(E)+RXYQ18PTL(E)		RXYQ8PTL(E)+RXYQ18PTL(E)+RXYQ18PTL(E)		
★1 Cooling Capacity (19.5°CWB)	kcal / h		101,000		104,000		
	Btu / h		399,000		413,000		
	kW		117		121		
★2 Cooling Capacity (19.0°CWB)	kW		116		120		
★3 Heating Capacity	kcal / h		114,000		119,000		
	Btu / h		450,000		471,000		
	kW		132		138		
Casing Color	Without(E)		Ivory White (5Y7.5/1)		Ivory White (5Y7.5/1)		
	With(E)		Light Camel (2.5Y6.5/1.5)		Light Camel (2.5Y6.5/1.5)		
Dimensions: (H×W×D)	mm		(1680×930×765)+(1680×1240×765)+(1680×1240×765)		(1680×930×765)+(1680×1240×765)+(1680×1240×765)		
Heat Exchanger			Cross Fin Coil		Cross Fin Coil		
Comp.	Type		Hermetically Sealed Scroll Type		Hermetically Sealed Scroll Type		
	Piston Displacement	m ³ /h	YL(E)	(16.90)+(12.84+12.52+12.52)+(12.84+12.52+12.52)		(16.90)+(12.84+12.52+12.52)+(12.84+12.52+12.52)	
			TL(E)	(16.90)+(12.84+12.52+12.52)+(12.84+12.52+12.52)		(16.90)+(12.84+12.52+12.52)+(12.84+12.52+12.52)	
	Number of Revolutions	r.p.m	YL(E)	(7980)+(6060, 3450, 3450)+(6060, 3450, 3450)		(7980)+(6060, 3450, 3450)+(6060, 3450, 3450)	
			TL(E)	(7980)+(6060, 3450, 3450)+(6060, 3450, 3450)		(7980)+(6060, 3450, 3450)+(6060, 3450, 3450)	
	Motor Output×Number of Units	kW		(4.5×1)+((2.7+4.5+4.5)×1)+((4.3+4.5+4.5)×1)		(4.5×1)+((4.3+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	(0.75×1)+(0.35×2)+(0.75×2)		(0.75×1)+(0.75×2)+(0.75×2)		
	Airflow Rate	m ³ /min	180+233+239		180+239+239		
	Drive		Direct Drive		Direct Drive		
Connecting Pipes	Liquid Pipe	mm	φ19.1 (Brazeing Connection)		φ19.1 (Brazeing Connection)		
	Gas Pipe	mm	φ41.3 (Brazeing Connection)		φ41.3 (Brazeing Connection)		
Product Mass (Machine Weight)	kg		205+329+341		205+341+341		
Safety Devices			High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		
Defrost Method			Deicer		Deicer		
Capacity Control	%		4~100		4~100		
Refrigerant	Refrigerant Name		R-410A		R-410A		
	Charge	kg	7.2+11.5+11.7		7.2+11.7+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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAYLE.

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

Model Name (Combination Unit)		YL(E)		RXYQ46PAYL(E)		RXYQ48PAYL(E)	
Model Name (Independent Unit)				RXYQ10PAYL(E)+RXYQ18PAYL(E)+RXYQ18PAYL(E)		RXYQ12PAYL(E)+RXYQ18PAYL(E)+RXYQ18PAYL(E)	
Model Name (Combination Unit)		TL(E)		RXYQ46PTL(E)		RXYQ48PTL(E)	
Model Name (Independent Unit)				RXYQ10PTL(E)+RXYQ18PTL(E)+RXYQ18PTL(E)		RXYQ12PTL(E)+RXYQ18PTL(E)+RXYQ18PTL(E)	
★1 Cooling Capacity (19.5°CWB)		kcal / h		109,000		114,000	
		Btu / h		433,000		454,000	
		kW		127		133	
★2 Cooling Capacity (19.0°CWB)		kW		126		132	
★3 Heating Capacity		kcal / h		125,000		130,000	
		Btu / h		495,000		515,000	
		kW		145		151	
Casing Color		Without(E)		Ivory White (5Y7.5/1)		Ivory White (5Y7.5/1)	
		With(E)		Light Camel (2.5Y6.5/1.5)		Light Camel (2.5Y6.5/1.5)	
Dimensions: (H×W×D)		mm		(1680×930×765)+(1680×1240×765)+(1680×1240×765)		(1680×1240×765)+(1680×1240×765)+(1680×1240×765)	
Heat Exchanger				Cross Fin Coil		Cross Fin Coil	
Comp.	Type			Hermetically Sealed Scroll Type		Hermetically Sealed Scroll Type	
	Piston Displacement	m³/h	YL(E)	(13.34+12.52)+(12.84+12.52+12.52)+(12.84+12.52+12.52)		(13.34+12.52)+(12.84+12.52+12.52)+(12.84+12.52+12.52)	
			TL(E)	(13.34+12.52)+(12.84+12.52+12.52)+(12.84+12.52+12.52)		(13.34+12.52)+(12.84+12.52+12.52)+(12.84+12.52+12.52)	
	Number of Revolutions	r.p.m	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		((1.4+4.5)×1)+((4.3+4.5+4.5)×1)+((4.3+4.5+4.5)×1)		((2.5+4.5)×1)+((4.3+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	(0.75×1)+(0.75×2)+(0.75×2)		(0.35×2)+(0.75×2)+(0.75×2)	
	Airflow Rate		m³/min	185+239+239		233+239+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		249+341+341		285+341+341	
Safety Devices				High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector	
Defrost Method				Deicer		Deicer	
Capacity Control		%		3~100		3~100	
Refrigerant	Refrigerant Name			R-410A		R-410A	
	Charge		kg	7.9+11.7+11.7		9.5+11.7+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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAYLE.

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

Model Name (Combination Unit)		YL(E)	RXYQ50PAYL(E)		RXYQ52PAYL(E)		
Model Name (Independent Unit)			RXYQ14PAYL(E)+RXYQ18PAYL(E)+RXYQ18PAYL(E)		RXYQ16PAYL(E)+RXYQ18PAYL(E)+RXYQ18PAYL(E)		
Model Name (Combination Unit)		TL(E)	RXYQ50PTL(E)		RXYQ52PTL(E)		
Model Name (Independent Unit)			RXYQ14PTL(E)+RXYQ18PTL(E)+RXYQ18PTL(E)		RXYQ16PTL(E)+RXYQ18PTL(E)+RXYQ18PTL(E)		
★1 Cooling Capacity (19.5°CWB)	kcal / h		120,000		124,000		
	Btu / h		474,000		491,000		
	kW		139		144		
★2 Cooling Capacity (19.0°CWB)	kW		138		143		
★3 Heating Capacity	kcal / h		136,000		140,000		
	Btu / h		539,000		556,000		
	kW		158		163		
Casing Color	Without(E)		Ivory White (5Y7.5/1)		Ivory White (5Y7.5/1)		
	With(E)		Light Camel (2.5Y6.5/1.5)		Light Camel (2.5Y6.5/1.5)		
Dimensions: (H×W×D)	mm		(1680×1240×765)+(1680×1240×765)+(1680×1240×765)		(1680×1240×765)+(1680×1240×765)+(1680×1240×765)		
Heat Exchanger			Cross Fin Coil		Cross Fin Coil		
Comp.	Type		Hermetically Sealed Scroll Type		Hermetically Sealed Scroll Type		
	Piston Displacement	m ³ /h	YL(E)	(12.84+12.52+12.52)+(12.84+12.52+12.52)+(12.84+12.52+12.52)		(12.84+12.52+12.52)+(12.84+12.52+12.52)+(12.84+12.52+12.52)	
			TL(E)	(12.84+12.52+12.52)+(12.84+12.52+12.52)+(12.84+12.52+12.52)		(12.84+12.52+12.52)+(12.84+12.52+12.52)+(12.84+12.52+12.52)	
	Number of Revolutions	r.p.m	YL(E)	(6060, 3450, 3450)+(6060, 3450, 3450)+(6060, 3450, 3450)		(6060, 3450, 3450)+(6060, 3450, 3450)+(6060, 3450, 3450)	
			TL(E)	(6060, 3450, 3450)+(6060, 3450, 3450)+(6060, 3450, 3450)		(6060, 3450, 3450)+(6060, 3450, 3450)+(6060, 3450, 3450)	
	Motor Output×Number of Units	kW		((1.6+4.5+4.5)×1)+((4.3+4.5+4.5)×1)+((4.3+4.5+4.5)×1)		((2.7+4.5+4.5)×1)+((4.3+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)+(0.75×2)+(0.75×2)		(0.35×2)+(0.75×2)+(0.75×2)		
	Airflow Rate	m ³ /min	233+239+239		233+239+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+341+341		329+341+341		
Safety Devices			High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		
Defrost Method			Deicer		Deicer		
Capacity Control	%		3~100		3~100		
Refrigerant	Refrigerant Name		R-410A		R-410A		
	Charge	kg	11.3+11.7+11.7		11.5+11.7+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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAYLE.

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

Model Name (Combination Unit)		YL(E)	RXYQ54PAYL(E)	
Model Name (Independent Unit)			RXYQ18PAYL(E)+RXYQ18PAYL(E)+RXYQ18PAYL(E)	
Model Name (Combination Unit)		TL(E)	RXYQ54PTL(E)	
Model Name (Independent Unit)			RXYQ18PTL(E)+RXYQ18PTL(E)+RXYQ18PTL(E)	
★1 Cooling Capacity (19.5°CWB)		kcal / h	127,000	
		Btu / h	505,000	
		kW	148	
★2 Cooling Capacity (19.0°CWB)		kW	147	
★3 Heating Capacity		kcal / h	146,000	
		Btu / h	580,000	
		kW	170	
Casing Color		Without(E)	Ivory White (5Y7.5/1)	
		With(E)	Light Camel (2.5Y6.5/1.5)	
Dimensions: (H×W×D)		mm	(1680×1240×765)+(1680×1240×765)+(1680×1240×765)	
Heat Exchanger			Cross Fin Coil	
Comp.	Type		Hermetically Sealed Scroll Type	
	Piston Displacement	m³/h	YL(E)	(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)
	Number of Revolutions	r.p.m	YL(E)	(6060, 3450, 3450)+(6060, 3450, 3450)+(6060, 3450, 3450)
			TL(E)	(6060, 3450, 3450)+(6060, 3450, 3450)+(6060, 3450, 3450)
Motor Output×Number of Units		kW	((4.3+4.5+4.5)×1)+((4.3+4.5+4.5)×1)+((4.3+4.5+4.5)×1)	
Starting Method			Soft Start	
Fan	Type		Propeller Fan	
	Motor Output	kW	(0.75×2)+(0.75×2)+(0.75×2)	
	Airflow Rate	m³/min	239+239+239	
	Drive		Direct Drive	
Connecting Pipes	Liquid Pipe	mm	φ19.1 (Brazing Connection)	
	Gas Pipe	mm	φ41.3 (Brazing Connection)	
Product Mass (Machine Weight)		kg	341+341+341	
Safety Devices			High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector	
Defrost Method			Deicer	
Capacity Control		%	3-100	
Refrigerant	Refrigerant Name		R-410A	
	Charge	kg	11.7+11.7+11.7	
	Control		Electronic Expansion Valve	
Refrigerator Oil			Refer to the nameplate of compressor	
Standard Accessories			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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ5PAYLE.

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

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

Model Name (Combination Unit)		YL(E)	RXYQ16PAHYL(E)		RXYQ18PAHYL(E)		
Model Name (Independent Unit)			RXYQ8PAYL(E)+RXYQ8PAYL(E)		RXYQ8PAYL(E)+RXYQ10PAYL(E)		
Model Name (Combination Unit)		TL(E)	RXYQ16PHTL(E)		RXYQ18PHTL(E)		
Model Name (Independent Unit)			RXYQ8PTL(E)+RXYQ8PTL(E)		RXYQ8PTL(E)+RXYQ10PTL(E)		
★1 Cooling Capacity (19.5°CWB)	kcal / h		38,800		43,600		
	Btu / h		154,000		173,000		
	kW		45.1		50.7		
★2 Cooling Capacity (19.0°CWB)	kW		44.8		50.4		
★3 Heating Capacity	kcal / h		43,000		48,600		
	Btu / h		171,000		193,000		
	kW		50.0		56.5		
Casing Color	Without(E)		Ivory White (5Y7.5/1)		Ivory White (5Y7.5/1)		
	With(E)		Light Camel (2.5Y6.5/1.5)		Light Camel (2.5Y6.5/1.5)		
Dimensions: (H×W×D)	mm		(1680×930×765)+(1680×930×765)		(1680×930×765)+(1680×930×765)		
Heat Exchanger			Cross Fin Coil		Cross Fin Coil		
Comp.	Type		Hermetically Sealed Scroll Type		Hermetically Sealed Scroll Type		
	Piston Displacement	m ³ /h	YL(E)	(16.90)+(16.90)		(16.90)+(13.34+12.52)	
			TL(E)	(16.90)+(16.90)		(16.90)+(13.34+12.52)	
	Number of Revolutions	r.p.m	YL(E)	(7980)+(7980)		(7980)+(6300, 3450)	
			TL(E)	(7980)+(7980)		(7980)+(6300, 3450)	
	Motor Output×Number of Units	kW		(4.5×1)+(4.5×1)		(4.5×1)+(1.4+4.5)×1	
Starting Method			Soft start		Soft start		
Fan	Type		Propeller Fan		Propeller Fan		
	Motor Output	kW	(0.75×1)+(0.75×1)		(0.75×1)+(0.75×1)		
	Airflow Rate	m ³ /min	180+180		180+185		
	Drive			Direct Drive		Direct Drive	
Connecting Pipes	Liquid Pipe	mm	φ12.7 (Brazeing Connection)		φ15.9 (Brazeing Connection)		
	Gas Pipe	mm	φ28.6 (Brazeing Connection)		φ28.6 (Brazeing Connection)		
Product Mass (Machine weight)		kg	205+205		205+249		
Safety Devices			High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		High Pressure Switch, Fan Driver Overload Protector, Overcurrent 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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ16PAHYLE.

Conversion Formulae

$$\begin{aligned} \text{kcal/h} &= \text{kW} \times 860 \\ \text{Btu/h} &= \text{kW} \times 3412 \\ \text{cfm} &= \text{m}^3/\text{min} \times 35.3 \end{aligned}$$

Model Name (Combination Unit)		YL(E)	RXYQ24PAHYL(E)		RXYQ26PAHYL(E)		
Model Name (Independent Unit)			RXYQ8PAYL(E)+RXYQ8PAYL(E)+RXYQ8PAYL(E)		RXYQ8PAYL(E)+RXYQ8PAYL(E)+RXYQ10PAYL(E)		
Model Name (Combination Unit)		TL(E)	RXYQ24PHTL(E)		RXYQ26PHTL(E)		
Model Name (Independent Unit)			RXYQ8PTL(E)+RXYQ8PTL(E)+RXYQ8PTL(E)		RXYQ8PTL(E)+RXYQ8PTL(E)+RXYQ10PTL(E)		
★1 Cooling Capacity (19.5°CWB)		kcal / h	58,100		63,000		
		Btu / h	231,000		250,000		
		kW	67.6		73.2		
★2 Cooling Capacity (19.0°CWB)		kW	67.2		72.8		
★3 Heating Capacity		kcal / h	64,500		70,100		
		Btu / h	260,000		278,000		
		kW	75.0		81.5		
Casing Color		Without(E)	Ivory White (5Y7.5/1)		Ivory White (5Y7.5/1)		
		With(E)	Light Camel (2.5Y6.5/1.5)		Light Camel (2.5Y6.5/1.5)		
Dimensions: (H×W×D)		mm	(1680×930×765)+(1680×930×765)+(1680×930×765)		(1680×930×765)+(1680×930×765)+(1680×930×765)		
Heat Exchanger			Cross Fin Coil		Cross Fin Coil		
Comp.	Type		Hermetically Sealed Scroll Type		Hermetically Sealed Scroll Type		
	Piston Displacement	m³/h	YL(E)	(16.90)+(16.90)+(16.90)		(16.90)+(16.90)+(13.34+12.52)	
			TL(E)	(16.90)+(16.90)+(16.90)		(16.90)+(16.90)+(13.34+12.52)	
	Number of Revolutions	r.p.m	YL(E)	(7980)+(7980)+(7980)		(7980)+(7980)+(6300, 3450)	
			TL(E)	(7980)+(7980)+(7980)		(7980)+(7980)+(6300, 3450)	
	Motor Output×Number of Units		kW	(4.5×1)+(4.5×1)+(4.5×1)		(4.5×1)+(4.5×1)+((1.4+4.5)×1)	
Starting Method			Soft start		Soft start		
Fan	Type		Propeller Fan		Propeller Fan		
	Motor Output		kW	(0.75×1)+(0.75×1)+(0.75×1)		(0.75×1)+(0.75×1)+(0.75×1)	
	Airflow Rate		m³/min	180+180+180		180+180+185	
	Drive			Direct Drive		Direct Drive	
Connecting Pipes	Liquid Pipe	mm	φ15.9 (Brazing Connection)		φ19.1 (Brazing Connection)		
	Gas Pipe	mm	φ34.9 (Brazing Connection)		φ34.9 (Brazing Connection)		
Product Mass (Machine Weight)		kg	205+205+205		205+205+249		
Safety Devices			High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector		
Defrost Method			Deicer		Deicer		
Capacity Control		%	7~100		6~100		
Refrigerant	Refrigerant Name		R-410A		R-410A		
	Charge	kg	7.2+7.2+7.2		7.2+7.2+7.9		
	Control			Electronic Expansion Valve		Electronic Expansion Valve	
Refrigerator Oil			Refer to the nameplate of compressor		Refer to the nameplate of compressor		
Standard Accessories			Installation Manual, Operation Manual, Connection Pipes, Clamps		Installation Manual, Operation Manual, Connection Pipes, Clamps		
Drawing No.							

Notes:

- ★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.
- ★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.
- ★3 Indoor temp. : 20°CDB / outdoor temp. : 7°CDB, 6°CWB / Equivalent piping length : 7.5m, level difference : 0m.
- 4 The units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ16PAHYLE.

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

Model Name (Combination Unit)		YL(E)		RXYQ28PAHYL(E)	RXYQ30PAHYL(E)
Model Name (Independent Unit)				RXYQ8PAYL(E)+RXYQ8PAYL(E)+RXYQ12PAYL(E)	RXYQ8PAYL(E)+RXYQ10PAYL(E)+RXYQ12PAYL(E)
Model Name (Combination Unit)		TL(E)		RXYQ28PHTL(E)	RXYQ30PHTL(E)
Model Name (Independent Unit)				RXYQ8PTL(E)+RXYQ8PTL(E)+RXYQ12PTL(E)	RXYQ8PTL(E)+RXYQ10PTL(E)+RXYQ12PTL(E)
★1 Cooling Capacity (19.5°CWB)	kcal / h			67,800	72,600
	Btu / h			269,000	288,000
	kW			78.8	84.4
★2 Cooling Capacity (19.0°CWB)	kW			78.3	83.9
★3 Heating Capacity	kcal / h			75,300	80,800
	Btu / h			299,000	321,000
	kW			87.5	94.0
Casing Color	Without(E)			Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
	With(E)			Light Camel (2.5Y6.5/1.5)	Light Camel (2.5Y6.5/1.5)
Dimensions: (H×W×D)	mm			(1680×930×765)+(1680×930×765)+(1680×1240×765)	(1680×930×765)+(1680×930×765)+(1680×1240×765)
Heat Exchanger				Cross Fin Coil	Cross Fin Coil
Comp.	Type			Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type
	Piston Displacement	m ³ /h	YL(E)	(16.90)+(16.90)+(13.34+12.52)	(16.90)+(13.34+12.52)+(13.34+12.52)
	Number of Revolutions	r.p.m	TL(E)	(16.90)+(16.90)+(13.34+12.52)	(16.90)+(13.34+12.52)+(13.34+12.52)
			YL(E)	(7980)+(7980)+(6300, 3450)	(7980)+(6300, 3450)+(6300, 3450)
			TL(E)	(7980)+(7980)+(6300, 3450)	(7980)+(6300, 3450)+(6300, 3450)
Motor Output×Number of Units	kW			(4.5×1)+(4.5×1)+(2.5+4.5)×1	(4.5×1)+((1.4+4.5)×1)+(2.5+4.5)×1
Starting Method				Soft start	Soft start
Fan	Type			Propeller Fan	Propeller Fan
	Motor Output	kW		(0.75×1)+(0.75×1)+(0.35×2)	(0.75×1)+(0.75×1)+(0.35×2)
	Airflow Rate	m ³ /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, Overcurrent Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Overcurrent 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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ16PAHYLE.

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

Model Name (Combination Unit)		YL(E)		RXYQ32PAHYL(E)	RXYQ34PAHYL(E)
Model Name (Independent Unit)				RXYQ8PAYL(E)+RXYQ12PAYL(E)+RXYQ12PAYL(E)	RXYQ10PAYL(E)+RXYQ12PAYL(E)+RXYQ12PAYL(E)
Model Name (Combination Unit)		TL(E)		RXYQ32PHTL(E)	RXYQ34PHTL(E)
Model Name (Independent Unit)				RXYQ8PTL(E)+RXYQ12PTL(E)+RXYQ12PTL(E)	RXYQ10PTL(E)+RXYQ12PTL(E)+RXYQ12PTL(E)
★1 Cooling Capacity (19.5°CWB)	kcal / h			77,300	82,200
	Btu / h			307,000	326,000
	kW			89.9	95.6
★2 Cooling Capacity (19.0°CWB)	kW			89.4	95.0
★3 Heating Capacity	kcal / h			86,000	92,000
	Btu / h			341,000	365,000
	kW			100	107
Casing Color	Without(E)			Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
	With(E)			Light Camel (2.5Y6.5/1.5)	Light Camel (2.5Y6.5/1.5)
Dimensions: (H×W×D)	mm			(1680×930×765)+(1680×1240×765)+(1680×1240×765)	(1680×930×765)+(1680×1240×765)+(1680×1240×765)
Heat Exchanger				Cross Fin Coil	Cross Fin Coil
Comp.	Type			Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type
	Piston Displacement	m ³ /h	YL(E)	(16.90)+(13.34+12.52)+(13.34+12.52)	(13.34+12.52)+(13.34+12.52)+(13.34+12.52)
			TL(E)	(16.90)+(13.34+12.52)+(13.34+12.52)	(13.34+12.52)+(13.34+12.52)+(13.34+12.52)
	Number of Revolutions	r.p.m	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)
	Airflow Rate		m ³ /min	180+233+233	185+233+233
	Drive			Direct Drive	Direct Drive
Connecting Pipes	Liquid Pipe	mm	φ19.1 (Brazing Connection)	φ19.1 (Brazing Connection)	
	Gas Pipe	mm	φ34.9 (Brazing Connection)	φ34.9 (Brazing Connection)	
Product Mass (Machine Weight)			kg	205+285+285	249+285+285
Safety Devices				High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Overcurrent 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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ16PAHYLE.

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

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
	kcal / h			97,200	103,000
★3 Heating Capacity	Btu / h			386,000	409,000
	kW			113	120
	kcal / h			97,200	103,000
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: (H×W×D)		mm		(1680×1240×765)+(1680×1240×765)+(1680×1240×765)	(1680×1240×765)+(1680×1240×765)+(1680×1240×765)
Heat Exchanger				Cross Fin Coil	Cross Fin Coil
Comp.	Type			Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type
	Piston Displacement	m ³ /h	YL(E)	(13.34+12.52)+(13.34+12.52)+(13.34+12.52)	(13.34+12.52)+(13.34+12.52)+(12.84+12.52+12.52)
			TL(E)	(13.34+12.52)+(13.34+12.52)+(13.34+12.52)	(13.34+12.52)+(13.34+12.52)+(12.84+12.52+12.52)
	Number of Revolutions	r.p.m	YL(E)	(6300, 3450)+(6300, 3450)+(6300, 3450)	(6300, 3450)+(6300, 3450)+(6060, 3450, 3450)
			TL(E)	(6300, 3450)+(6300, 3450)+(6300, 3450)	(6300, 3450)+(6300, 3450)+(6060, 3450, 3450)
	Motor Output×Number of Units		kW	((2.5+4.5)×1)+((2.5+4.5)×1)+((2.5+4.5)×1)	((2.5+4.5)×1)+((2.5+4.5)×1)+(1.6+4.5+4.5)×1)
Starting Method			Soft start	Soft start	
Fan	Type			Propeller Fan	Propeller Fan
	Motor Output		kW	(0.35×2)+(0.35×2)+(0.35×2)	(0.35×2)+(0.35×2)+(0.35×2)
	Airflow Rate		m ³ /min	233+233+233	233+233+233
	Drive			Direct Drive	Direct Drive
Connecting Pipes	Liquid Pipe		mm	φ19.1 (Brazing Connection)	φ19.1 (Brazing Connection)
	Gas Pipe		mm	φ41.3 (Brazing Connection)	φ41.3 (Brazing Connection)
Product Mass (Machine Weight)		kg		285+285+285	285+285+329
Safety Devices				High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Overcurrent 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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ16PAHYLE.

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

Model Name (Combination Unit)		YL(E)		RXYQ40PAHYL(E)	RXYQ42PAHYL(E)
Model Name (Independent Unit)				RXYQ12PAYL(E)+RXYQ12PAYL(E)+RXYQ16PAYL(E)	RXYQ12PAYL(E)+RXYQ12PAYL(E)+RXYQ18PAYL(E)
Model Name (Combination Unit)		TL(E)		RXYQ40PHTL(E)	RXYQ42PHTL(E)
Model Name (Independent Unit)				RXYQ12PTL(E)+RXYQ12PTL(E)+RXYQ16PTL(E)	RXYQ12PTL(E)+RXYQ12PTL(E)+RXYQ18PTL(E)
★1 Cooling Capacity (19.5°CWB)		kcal / h		97,200	101,000
		Btu / h		386,000	399,000
		kW		113	117
★2 Cooling Capacity (19.0°CWB)		kW		112	116
★3 Heating Capacity		kcal / h		108,000	114,000
		Btu / h		427,000	450,000
		kW		125	132
Casing Color		Without(E)		Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
		With(E)		Light Camel (2.5Y6.5/1.5)	Light Camel (2.5Y6.5/1.5)
Dimensions: (H×W×D)		mm		(1680×1240×765)+(1680×1240×765)+(1680×1240×765)	(1680×1240×765)+(1680×1240×765)+(1680×1240×765)
Heat Exchanger				Cross Fin Coil	Cross Fin Coil
Comp.	Type			Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type
	Piston Displacement	m³/h	YL(E)	(13.34+12.52)+(13.34+12.52)+(12.84+12.52+12.52)	(13.34+12.52)+(13.34+12.52)+(12.84+12.52+12.52)
			TL(E)	(13.34+12.52)+(13.34+12.52)+(12.84+12.52+12.52)	(13.34+12.52)+(13.34+12.52)+(12.84+12.52+12.52)
	Number of Revolutions	r.p.m	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)
	Airflow Rate		m³/min	233+233+233	233+233+239
	Drive			Direct Drive	Direct Drive
Connecting Pipes	Liquid Pipe		mm	φ19.1 (Brazing Connection)	φ19.1 (Brazing Connection)
	Gas Pipe		mm	φ41.3 (Brazing Connection)	φ41.3 (Brazing Connection)
Product Mass (Machine Weight)			kg	285+285+329	285+285+341
Safety Devices				High Pressure Switch, Fan Driver Overload Protector, Overcurrent Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Overcurrent 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
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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ16PAHYLE.

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

Model Name (Combination Unit)		YL(E)		RXYQ44PAHYL(E)	RXYQ46PAHYL(E)
Model Name (Independent Unit)				RXYQ12PAYL(E)+RXYQ16PAYL(E)+RXYQ16PAYL(E)	RXYQ12PAYL(E)+RXYQ16PAYL(E)+RXYQ18PAYL(E)
Model Name (Combination Unit)		TL(E)		RXYQ44PHTL(E)	RXYQ46PHTL(E)
Model Name (Independent Unit)				RXYQ12PTL(E)+RXYQ16PTL(E)+RXYQ16PTL(E)	RXYQ12PTL(E)+RXYQ16PTL(E)+RXYQ18PTL(E)
★1 Cooling Capacity (19.5°CWB)		kcal / h		108,000	111,000
		Btu / h		427,000	440,000
		kW		125	129
★2 Cooling Capacity (19.0°CWB)		kW		124	128
		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: (H×W×D)		mm		(1680×1240×765)+(1680×1240×765)+(1680×1240×765)	(1680×1240×765)+(1680×1240×765)+(1680×1240×765)
Heat Exchanger				Cross Fin Coil	Cross Fin Coil
Comp.	Type			Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type
	Piston Displacement	m ³ /h	YL(E)	(13.34+12.52)+(12.84+12.52+12.52)+(12.84+12.52+12.52)	(13.34+12.52)+(12.84+12.52+12.52)+(12.84+12.52+12.52)
			TL(E)	(13.34+12.52)+(12.84+12.52+12.52)+(12.84+12.52+12.52)	(13.34+12.52)+(12.84+12.52+12.52)+(12.84+12.52+12.52)
	Number of Revolutions	r.p.m	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)
	Airflow Rate		m ³ /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, Overcurrent Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Overcurrent 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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ16PAHYLE.

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

Model Name (Combination Unit)		YL(E)	RXYQ48PAHYL(E)		RXYQ50PAHYL(E)		
Model Name (Independent Unit)			RXYQ16PAYL(E)+RXYQ16PAYL(E)+RXYQ16PAYL(E)		RXYQ16PAYL(E)+RXYQ16PAYL(E)+RXYQ18PAYL(E)		
Model Name (Combination Unit)		TL(E)	RXYQ48PHTL(E)		RXYQ50PHTL(E)		
Model Name (Independent Unit)			RXYQ16PTL(E)+RXYQ16PTL(E)+RXYQ16PTL(E)		RXYQ16PTL(E)+RXYQ16PTL(E)+RXYQ18PTL(E)		
★1 Cooling Capacity (19.5°CWB)	kcal / h		117,000		120,000		
	Btu / h		464,000		478,000		
	kW		136		140		
★2 Cooling Capacity (19.0°CWB)	kW		135		139		
★3 Heating Capacity	kcal / h		129,000		134,000		
	Btu / h		512,000		532,000		
	kW		150		156		
Casing Color	Without(E)		Ivory White (5Y7.5/1)		Ivory White (5Y7.5/1)		
	With(E)		Light Camel (2.5Y6.5/1.5)		Light Camel (2.5Y6.5/1.5)		
Dimensions: (H×W×D)	mm		(1680×1240×765)+(1680×1240×765)+(1680×1240×765)		(1680×1240×765)+(1680×1240×765)+(1680×1240×765)		
Heat Exchanger			Cross Fin Coil		Cross Fin Coil		
Comp.	Type		Hermetically Sealed Scroll Type		Hermetically Sealed Scroll Type		
	Piston Displacement	m ³ /h	YL(E)	(12.84+12.52+12.52)+(12.84+12.52+12.52)+(12.84+12.52+12.52)		(12.84+12.52+12.52)+(12.84+12.52+12.52)+(12.84+12.52+12.52)	
			TL(E)	(12.84+12.52+12.52)+(12.84+12.52+12.52)+(12.84+12.52+12.52)		(12.84+12.52+12.52)+(12.84+12.52+12.52)+(12.84+12.52+12.52)	
	Number of Revolutions	r.p.m	YL(E)	(6060, 3450, 3450)+(6060, 3450, 3450)+(6060, 3450, 3450)		(6060, 3450, 3450)+(6060, 3450, 3450)+(6060, 3450, 3450)	
			TL(E)	(6060, 3450, 3450)+(6060, 3450, 3450)+(6060, 3450, 3450)		(6060, 3450, 3450)+(6060, 3450, 3450)+(6060, 3450, 3450)	
	Motor Output×Number of Units	kW		((2.7+4.5+4.5)×1)+((2.7+4.5+4.5)×1)+((2.7+4.5+4.5)×1)		((2.7+4.5+4.5)×1)+((2.7+4.5+4.5)×1)+((4.3+4.5+4.5)×1)	
Starting Method			Soft start		Soft start		
Fan	Type		Propeller Fan		Propeller Fan		
	Motor Output	kW	(0.35×2)+(0.35×2)+(0.35×2)		(0.35×2)+(0.35×2)+(0.75×2)		
	Airflow Rate	m ³ /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, Overcurrent Relay, Inverter Overload Protector		High Pressure Switch, Fan Driver Overload Protector, Overcurrent 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 units with anti-corrosion treatment will be available as standard. Please specify the suffix "E" as RXYQ16PAHYLE.

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

1.2 Indoor Units

Ceiling Mounted Cassette (Round Flow) Type

Model		FXFQ25PVE	FXFQ32PVE	FXFQ40PVE	FXFQ50PVE	
★1 Cooling Capacity (19.5°CWB)	kcal/h	2,500	3,200	4,000	5,000	
	Btu/h	9,900	12,600	16,000	19,800	
	kW	2.9	3.7	4.7	5.8	
★2 Cooling Capacity (19.0°CWB)	kW	2.8	3.6	4.5	5.6	
★3 Heating Capacity	kcal/h	2,800	3,400	4,300	5,400	
	Btu/h	10,900	13,600	17,100	21,500	
	kW	3.2	4.0	5.0	6.3	
Casing		Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate	
Dimensions: (H×W×D)		mm	246×840×840	246×840×840	246×840×840	
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm	2×6×1.2	2×6×1.2	2×6×1.2	
	Face Area	m ²	0.267	0.267	0.267	
Fan	Model		QTS48C15M	QTS48C15M	QTS48C15M	QTS48C15M
	Type		Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan
	Motor Output × Number of Units	W	56×1	56×1	56×1	56×1
	Airflow Rate (HH/H/L)	m ³ /min	13/11.5/10	13/11.5/10	15/13/11	16/13.5/11
		cfm	459/406/353	459/406/353	530/459/388	565/477/388
Drive		Direct Drive	Direct Drive	Direct Drive	Direct Drive	
Temperature Control		Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	
Sound Absorbing Thermal Insulation Material		Polyurethane Form	Polyurethane Form	Polyurethane Form	Polyurethane Form	
Piping Connections	Liquid Pipes	mm	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)
	Gas Pipes	mm	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)
	Drain Pipe	mm	VP25 (External Dia. 32 Internal Dia. 25)	VP25 (External Dia. 32 Internal Dia. 25)	VP25 (External Dia. 32 Internal Dia. 25)	VP25 (External Dia. 32 Internal Dia. 25)
Mass (Weight)		kg	19.5	19.5	19.5	19.5
★5 Sound Level (HH/H/L) (220-240V)		dBA	30/28.5/27	30/28.5/27	31/29/27	32/29.5/27
Safety Devices			Fuse	Fuse	Fuse	Fuse
Refrigerant Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Connectable Outdoor Unit			R-410A VRV P(A) Series	R-410A VRV P(A) Series	R-410A VRV P(A) Series	R-410A VRV P(A) Series
Decoration Panels (Option)	Model		BYCP125K-W1	BYCP125K-W1	BYCP125K-W1	BYCP125K-W1
	Panel Color		Fresh White	Fresh White	Fresh White	Fresh White
	Dimensions: (H×W×D)	mm	50×950×950	50×950×950	50×950×950	50×950×950
	Air Filter		Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)
	Weight	kg	5.5	5.5	5.5	5.5
Standard Accessories			Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Washer Fixing Plate. Sealing Pads. Clamps. Screws. Washer for Hanging Bracket. Insulation for Fitting. Installation Guide.	Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Washer Fixing Plate. Sealing Pads. Clamps. Screws. Washer for Hanging Bracket. Insulation for Fitting. Installation Guide.	Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Washer Fixing Plate. Sealing Pads. Clamps. Screws. Washer for Hanging Bracket. Insulation for Fitting. Installation Guide.	Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Washer Fixing Plate. Sealing Pads. Clamps. Screws. Washer for Hanging Bracket. Insulation for Fitting. Installation Guide.
Drawing No.			C : 3D060255			

Note:

- ★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.
- ★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.
- ★3 Indoor temp. : 20°CDB / outdoor temp. : 7°CDB, 6°CWB / Equivalent piping length : 7.5 m, level difference : 0 m.
- 4 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★5 Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit center. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

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

Ceiling Mounted Cassette (Round Flow) Type

Model		FXFQ63PVE	FXFQ80PVE	FXFQ100PVE	FXFQ125PVE	
★1 Cooling Capacity (19.5°CWB)	kcal/h	6,300	8,000	10,000	12,500	
	Btu/h	24,900	31,700	39,600	49,500	
	kW	7.3	9.3	11.6	14.5	
★2 Cooling Capacity (19.0°CWB)	kW	7.1	9.0	11.2	14.0	
★3 Heating Capacity	kcal/h	6,900	8,600	10,800	13,800	
	Btu/h	27,300	34,100	42,700	54,600	
	kW	8.0	10.0	12.5	16.0	
Casing		Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate	
Dimensions: (H×W×D)		mm 246×840×840	246×840×840	288×840×840	288×840×840	
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm 2×10×1.2	2×10×1.2	2×12×1.2	2×12×1.2	
	Face Area	m ² 0.446	0.446	0.535	0.535	
Fan	Model		QTS48C15M	QTS48C15M	QTS48C15M	QTS48C15M
	Type		Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan
	Motor Output × Number of Units	W	56×1	56×1	120×1	120×1
	Airflow Rate (HH/H/L)	m ³ /min	19/16.5/13.5	21/18/15	32/26/20	33/28/22.5
		cfm	671/583/477	742/636/530	1,130/918/706	1,165/989/794
Drive		Direct Drive	Direct Drive	Direct Drive	Direct Drive	
Temperature Control		Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	
Sound Absorbing Thermal Insulation Material		Polyurethane Form	Polyurethane Form	Polyurethane Form	Polyurethane Form	
Piping Connections	Liquid Pipes	mm φ9.5 (Flare Connection)	φ9.5 (Flare Connection)	φ9.5 (Flare Connection)	φ9.5 (Flare Connection)	
	Gas Pipes	mm φ15.9 (Flare Connection)	φ15.9 (Flare Connection)	φ15.9 (Flare Connection)	φ15.9 (Flare Connection)	
	Drain Pipe	mm VP25 (External Dia. 32 Internal Dia. 25)	VP25 (External Dia. 32 Internal Dia. 25)	VP25 (External Dia. 32 Internal Dia. 25)	VP25 (External Dia. 32 Internal Dia. 25)	
Mass (Weight)	kg	22	22	25	25	
★5 Sound Level (HH/H/L) (220-240V)	dBA	34/31/28	36/33.5/31	43/37.5/32	44/39/34	
Safety Devices		Fuse	Fuse	Fuse	Fuse	
Refrigerant Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	
Connectable Outdoor Unit		R-410A VRV P(A) Series	R-410A VRV P(A) Series	R-410A VRV P(A) Series	R-410A VRV P(A) Series	
Decoration Panels (Option)	Model		BYCP125K-W1	BYCP125K-W1	BYCP125K-W1	BYCP125K-W1
	Panel Color		Fresh White	Fresh White	Fresh White	Fresh White
	Dimensions: (H×W×D)	mm	50×950×950	50×950×950	50×950×950	50×950×950
	Air Filter		Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)
	Weight	kg	5.5	5.5	5.5	5.5
Standard Accessories		Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Washer Fixing Plate. Sealing Pads. Clamps. Screws. Washer for Hanging Bracket. Insulation for Fitting. Installation Guide.	Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Washer Fixing Plate. Sealing Pads. Clamps. Screws. Washer for Hanging Bracket. Insulation for Fitting. Installation Guide.	Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Washer Fixing Plate. Sealing Pads. Clamps. Screws. Washer for Hanging Bracket. Insulation for Fitting. Installation Guide.	Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Washer Fixing Plate. Sealing Pads. Clamps. Screws. Washer for Hanging Bracket. Insulation for Fitting. Installation Guide.	
Drawing No.		C : 3D060255				

Note:

- ★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.
- ★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.
- ★3 Indoor temp. : 20°CDB / outdoor temp. : 7°CDB, 6°CWB / Equivalent piping length : 7.5 m, level difference : 0 m.
- 4 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★5 Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit center. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

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

Ceiling Mounted Cassette Type (Double Flow)

Model		FXCQ20MVE	FXCQ25MVE	FXCQ32MVE	FXCQ40MVE	
★1 Cooling Capacity (19.5°CWB)	kcal/h	2,000	2,500	3,200	4,000	
	Btu/h	7,800	9,900	12,600	16,000	
	kW	2.3	2.9	3.7	4.7	
★2 Cooling Capacity (19.0°CWB)	kW	2.2	2.8	3.6	4.5	
★3 Heating Capacity	kcal/h	2,200	2,800	3,400	4,300	
	Btu/h	8,500	10,900	13,600	17,100	
	kW	2.5	3.2	4.0	5.0	
Casing		Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate	
Dimensions: (H×W×D)		mm	305×775×600	305×775×600	305×990×600	
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm	2×10×1.5	2×10×1.5	2×10×1.5	
	Face Area	m ²	2×0.100	2×0.100	2×0.145	
Fan	Model		D17K2AA1	D17K2AB1	D17K2AB1	2D17K1AA1
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	10×1	15×1	15×1	20×1
	Airflow Rate (H/L)	m ³ /min	7/5	9/6.5	9/6.5	12/9
		cfm	247/177	318/230	318/230	424/318
Drive		Direct Drive	Direct Drive	Direct Drive	Direct Drive	
Temperature Control		Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	
Sound Absorbing Thermal Insulation Material		Glass Wool/Urethane Foam	Glass Wool/Urethane Foam	Glass Wool/Urethane Foam	Glass Wool/Urethane Foam	
Piping Connections	Liquid Pipes	mm	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)
	Gas Pipes	mm	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)
	Drain Pipe	mm	VP25 (External Dia. 32 Internal Dia. 25)	VP25 (External Dia. 32 Internal Dia. 25)	VP25 (External Dia. 32 Internal Dia. 25)	VP25 (External Dia. 32 Internal Dia. 25)
Machine Weight (Mass)		kg	26	26	26	31
★5 Sound Level (H/L) (220V)		dBA	32/27	34/28	34/28	34/29
Safety Devices		Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	
Refrigerant Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	
Connectable outdoor unit		R-410A P(A) Series	R-410A P(A) Series	R-410A P(A) Series	R-410A P(A) Series	
Decoration Panels (Option)	Model		BYBC32G-W1	BYBC32G-W1	BYBC32G-W1	BYBC50G-W1
	Panel Color		White (10Y9/0.5)	White (10Y9/0.5)	White (10Y9/0.5)	White (10Y9/0.5)
	Dimensions: (H×W×D)	mm	53×1,030×680	53×1,030×680	53×1,030×680	53×1,245×680
	Air Filter		Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)
	Weight	kg	8	8	8	8.5
Standard Accessories		Operation Manual, Installation Manual, Paper Pattern for Installation, Washer for Hanging Brackets, Clamp Metal, Drain Hose, Insulation for Fitting, Washer Fixing Plates, Sealing Pads, Clamps, Screws, Washers.	Operation Manual, Installation Manual, Paper Pattern for Installation, Washer for Hanging Brackets, Clamp Metal, Drain Hose, Insulation for Fitting, Washer Fixing Plates, Sealing Pads, Clamps, Screws, Washers.	Operation Manual, Installation Manual, Paper Pattern for Installation, Washer for Hanging Brackets, Clamp Metal, Drain Hose, Insulation for Fitting, Washer Fixing Plates, Sealing Pads, Clamps, Screws, Washers.	Operation Manual, Installation Manual, Paper Pattern for Installation, Washer for Hanging Brackets, Clamp Metal, Drain Hose, Insulation for Fitting, Washer Fixing Plates, Sealing Pads, Clamps, Screws, Washers.	
Drawing No.		3D039413				

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. (Heat Pump only)
- 4 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★5 Anechoic chamber conversion value, measured under JISB8616 conditions. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

Conversion Formulae

$$\begin{aligned} \text{kcal/h} &= \text{kW} \times 860 \\ \text{Btu/h} &= \text{kW} \times 3412 \\ \text{cfm} &= \text{m}^3/\text{min} \times 35.3 \end{aligned}$$

Ceiling Mounted Cassette Type (Double Flow)

Model		FXCQ50MVE	FXCQ63MVE	FXCQ80MVE	FXCQ125MVE	
★1 Cooling Capacity (19.5°CWB)	kcal/h	5,000	6,300	8,000	12,500	
	Btu/h	19,800	24,900	31,700	49,500	
	kW	5.8	7.3	9.3	14.5	
★2 Cooling Capacity (19.0°CWB)	kW	5.6	7.1	9.0	14.0	
★3 Heating Capacity	kcal/h	5,400	6,900	8,600	13,800	
	Btu/h	21,500	27,300	34,100	54,600	
	kW	6.3	8.0	10.0	16.0	
Casing		Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate	
Dimensions: (H×W×D)		mm	305×990×600	305×1,175×600	305×1,665×600	
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm	2×10×1.5	2×10×1.5	2×10×1.5	
	Face Area	m ²	2×0.145	2×0.184	2×0.287	
Fan	Model		2D17K1AA1	2D17K2AA1VE	3D17K2AA1	3D17K2AB1
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	20×1	30×1	50×1	85×1
	Airflow Rate (H/L)	m ³ /min	12/9	16.5/13	26/21	33/25
		cfm	424/318	582/459	918/741	1,165/883
Drive		Direct Drive	Direct Drive	Direct Drive	Direct Drive	
Temperature Control		Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	
Sound Absorbing Thermal Insulation Material		Glass Wool/Urethane Foam	Glass Wool/Urethane Foam	Glass Wool/Urethane Foam	Glass Wool/Urethane Foam	
Piping Connections	Liquid Pipes	mm	φ6.4 (Flare Connection)	φ9.5 (Flare Connection)	φ9.5 (Flare Connection)	φ9.5 (Flare Connection)
	Gas Pipes	mm	φ12.7 (Flare Connection)	φ15.9 (Flare Connection)	φ15.9 (Flare Connection)	φ15.9 (Flare Connection)
	Drain Pipe	mm	VP25 (External Dia. 32 Internal Dia. 25)	VP25 (External Dia. 32 Internal Dia. 25)	VP25 (External Dia. 32 Internal Dia. 25)	VP25 (External Dia. 32 Internal Dia. 25)
Machine Weight (Mass)		kg	32	35	47	48
★5 Sound Level (H/L)		dBA	34/29	37/32	39/34	44/38
Safety Devices		Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	
Refrigerant Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	
Connectable outdoor unit		R-410A P(A) Series	R-410A P(A) Series	R-410A P(A) Series	R-410A P(A) Series	
Decoration Panels (Option)	Model		BYBC50G-W1	BYBC63G-W1	BYBC125G-W1	BYBC125G-W1
	Panel Color		White (10Y9/0.5)	White (10Y9/0.5)	White (10Y9/0.5)	White (10Y9/0.5)
	Dimensions: (H×W×D)	mm	53×1,245×680	53×1,430×680	53×1,920×680	53×1,920×680
	Air Filter		Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)
	Weight	kg	8.5	9.5	12	12
Standard Accessories		Operation Manual, Installation Manual, Paper Pattern for Installation, Washer for Hanging Brackets, Clamp Metal, Drain Hose, Insulation for Fitting, Washer Fixing Plates, Sealing Pads, Clamps, Screws, Washers.	Operation Manual, Installation Manual, Paper Pattern for Installation, Washer for Hanging Brackets, Clamp Metal, Drain Hose, Insulation for Fitting, Washer Fixing Plates, Sealing Pads, Clamps, Screws, Washers.	Operation Manual, Installation Manual, Paper Pattern for Installation, Washer for Hanging Brackets, Clamp Metal, Drain Hose, Insulation for Fitting, Washer Fixing Plates, Sealing Pads, Clamps, Screws, Washers.	Operation Manual, Installation Manual, Paper Pattern for Installation, Washer for Hanging Brackets, Clamp Metal, Drain Hose, Insulation for Fitting, Washer Fixing Plates, Sealing Pads, Clamps, Screws, Washers.	
Drawing No.		3D039413				

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. (Heat Pump only)
- 4 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★5 Anechoic chamber conversion value, measured under JISB8616 conditions. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

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

Ceiling Mounted Cassette Corner Type

Model		FXKQ25MAVE	FXKQ32MAVE	FXKQ40MAVE	FXKQ63MAVE	
★1 Cooling Capacity (19.5°CWB)	kcal/h	2,500	3,200	4,000	6,300	
	Btu/h	9,900	12,600	16,000	24,900	
	kW	2.9	3.7	4.7	7.3	
★2 Cooling Capacity (19.0°CWB)	kW	2.8	3.6	4.5	7.1	
★3 Heating Capacity	kcal/h	2,800	3,400	4,300	6,900	
	Btu/h	10,900	13,600	17,100	27,300	
	kW	3.2	4.0	5.0	8.0	
Casing		Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate	
Dimensions: (HxWxD)		mm	215x1,110x710	215x1,110x710	215x1,110x710	
Coil (Cross Fin Coil)	RowsxStagesxFin Pitch	mm	2x11x1.75	2x11x1.75	2x11x1.75	
	Face Area	m ²	0.180	0.180	0.180	
Fan	Model		3D12H1AN1V1	3D12H1AN1V1	3D12H1AP1V1	4D12H1AJ1V1
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	15×1	15×1	20×1	45×1
	Airflow Rate (H/L)	m ³ /min	11/9	11/9	13/10	18/15
		cfm	388/318	388/318	459/353	635/530
Drive		Direct Drive	Direct Drive	Direct Drive	Direct Drive	
Temperature Control		Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	
Sound Absorbing Thermal Insulation Material		Polyethylene Foam	Polyethylene Foam	Polyethylene Foam	Polyethylene Foam	
Piping Connections	Liquid Pipes	mm	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ9.5 (Flare Connection)
	Gas Pipes	mm	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ15.9 (Flare Connection)
	Drain Pipe	mm	VP25 (External Dia. 32 Internal Dia. 25)	VP25 (External Dia. 32 Internal Dia. 25)	VP25 (External Dia. 32 Internal Dia. 25)	VP25 (External Dia. 32 Internal Dia. 25)
Machine Weight (Mass)		kg	31	31	31	34
★5 Sound Level (H/L) (220V)		dBA	38/33	38/33	40/34	42/37
Safety Devices		Fuse, Thermal Fuse for Fan Motor	Fuse, Thermal Fuse for Fan Motor	Fuse, Thermal Fuse for Fan Motor	Fuse, Thermal Fuse for Fan Motor	
Refrigerant Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	
Connectable Outdoor Units		R-410A P(A) Series	R-410A P(A) Series	R-410A P(A) Series	R-410A P(A) Series	
Decoration Panels (Option)	Model		BYK45FJW1	BYK45FJW1	BYK45FJW1	BYK71FJW1
	Panel Color		White (10Y9/0.5)	White (10Y9/0.5)	White (10Y9/0.5)	White (10Y9/0.5)
	Dimensions: (HxWxD)	mm	70x1,240x800	70x1,240x800	70x1,240x800	70x1,440x800
	Air Filter		Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)
	Weight	kg	8.5	8.5	8.5	9.5
Standard Accessories		Operation Manual, Installation Manual, Paper Pattern for Installation, Drain Hose, Clamp Metal, Insulation for Fitting, Sealing Pads, Clamps, Screws, Washers, Positioning Jig for Installation, Insulation for Hanger Bracket, Air Outlet Blocking Pad.	Operation Manual, Installation Manual, Paper Pattern for Installation, Drain Hose, Clamp Metal, Insulation for Fitting, Sealing Pads, Clamps, Screws, Washers, Positioning Jig for Installation, Insulation for Hanger Bracket, Air Outlet Blocking Pad.	Operation Manual, Installation Manual, Paper Pattern for Installation, Drain Hose, Clamp Metal, Insulation for Fitting, Sealing Pads, Clamps, Screws, Washers, Positioning Jig for Installation, Insulation for Hanger Bracket, Air Outlet Blocking Pad.	Operation Manual, Installation Manual, Paper Pattern for Installation, Drain Hose, Clamp Metal, Insulation for Fitting, Sealing Pads, Clamps, Screws, Washers, Positioning Jig for Installation, Insulation for Hanger Bracket, Air Outlet Blocking Pad.	
Drawing No.		3D038813A				

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. (Heat Pump only)
- 4 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★5 Anechoic chamber conversion value, measured at a point 1m in front of the unit and 1m downward. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

Conversion Formulae

$$\begin{aligned} \text{kcal/h} &= \text{kW} \times 860 \\ \text{Btu/h} &= \text{kW} \times 3412 \\ \text{cfm} &= \text{m}^3/\text{min} \times 35.3 \end{aligned}$$

Slim Ceiling Mounted Duct Type (VE: with Drain Pump, VET: without Drain Pump)

Model		FXDQ20PBVE (T)	FXDQ25PBVE (T)	FXDQ32PBVE (T)
★1 Cooling Capacity (19.5°CWB)	kcal/h	2,000	2,500	3,200
	Btu/h	7,800	9,900	12,600
	kW	2.3	2.9	3.7
★2 Cooling Capacity (19.0°CWB)	kW	2.2	2.8	3.6
★3 Heating Capacity	kcal/h	2,200	2,800	3,400
	Btu/h	8,500	10,900	13,600
	kW	2.5	3.2	4.0
Casing		Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate
Dimensions: (H×W×D)		mm 200×700×620	200×700×620	200×700×620
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm 2×12×1.5	2×12×1.5	3×12×1.5
	Face Area	m ² 0.126	0.126	0.126
Fan	Model		—	—
	Type		Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	62×1	62×1
	Airflow Rate (HH/H/L)	m ³ /min	8.0/7.2/6.4	8.0/7.2/6.4
	★5 External Static Pressure	Pa	30-10	30-10
	Drive		Direct Drive	Direct Drive
Temperature Control		Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material		Foamed Polyethylene	Foamed Polyethylene	Foamed Polyethylene
Air Filter		Removal / Washable / Mildew Proof	Removal / Washable / Mildew Proof	Removal / Washable / Mildew Proof
Piping Connections	Liquid Pipes	mm φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)
	Gas Pipes	mm φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)
	Drain Pipe	mm VP20 (External Dia. 26 Internal Dia. 20)	VP20 (External Dia. 26 Internal Dia. 20)	VP20 (External Dia. 26 Internal Dia. 20)
Machine Weight (Mass)		kg 23	23	23
★6 Sound Pressure Level (HH/H/L)		dBA 33/31/29	33/31/29	33/31/29
Safety Devices		Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor
Refrigerant Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Standard Accessories		Operation Manual, Installation Manual, Drain Hose, Sealing Pads, Clamps, Washers, Insulation for Fitting, Clamp Metal, Washer Fixing Plate, Screws for Duct Flanges, Air Filter, (Product Quality Certificate ★7)	Operation Manual, Installation Manual, Drain Hose, Sealing Pads, Clamps, Washers, Insulation for Fitting, Clamp Metal, Washer Fixing Plate, Screws for Duct Flanges, Air Filter, (Product Quality Certificate ★7)	Operation Manual, Installation Manual, Drain Hose, Sealing Pads, Clamps, Washers, Insulation for Fitting, Clamp Metal, Washer Fixing Plate, Screws for Duct Flanges, Air Filter, (Product Quality Certificate ★7)
Drawing No.		3D060921A		

Note:

- ★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 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★5 External static pressure is changeable to set by the remote controller. This pressure means "High static pressure - Standard static pressure". (Factory setting is 10 Pa.)
- ★6 The operation sound levels are the conversion values in anechoic chamber. In practice, the sound tend to be larger than the specified values due to ambient noise or reflections.
When the place of suction is changed to the bottom suction, the sound level will increase by approx. 5dBA.
- ★7 FXDQ20 / 25 / 32PBVE only.

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

Slim Ceiling Mounted Duct Type (VE: with Drain Pump, VET: without Drain Pump)

Model		FXDQ40NBVE(T)	FXDQ50NBVE(T)	FXDQ63NBVE(T)
★1 Cooling Capacity (19.5°CWB)	kcal/h	4,000	5,000	6,300
	Btu/h	16,000	19,800	24,900
	kW	4.7	5.8	7.3
★2 Cooling Capacity (19.0°CWB)	kW	4.5	5.6	7.1
★3 Heating Capacity	kcal/h	4,300	5,400	6,900
	Btu/h	17,100	21,500	27,300
	kW	5.0	6.3	8.0
Casing Color		Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate
Dimensions: (H×W×D)		mm 200×900×620	200×900×620	200×1100×620
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm 3×12×1.5	3×12×1.5	3×12×1.5
	Face Area	m ² 0.176	0.176	0.227
Fan	Model		—	—
	Type		Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	62×1	130×1
	Airflow Rate (HH/H/L)	m ³ /min	10.5/9.5/8.5	12.5/11.0/10.0
	★5 External Static Pressure	Pa	44-15	44-15
	Drive		Direct Drive	Direct Drive
Temperature Control		Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material		Foamed Polyethylene	Foamed Polyethylene	Foamed Polyethylene
Air Filter		Removal / Washable / Mildew Proof	Removal / Washable / Mildew Proof	Removal / Washable / Mildew Proof
Piping Connections	Liquid Pipes	mm φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ9.5 (Flare Connection)
	Gas Pipes	mm φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ15.9 (Flare Connection)
	Drain Pipe	mm VP20 (External Dia. 26 Internal Dia. 20)	VP20 (External Dia. 26 Internal Dia. 20)	VP20 (External Dia. 26 Internal Dia. 20)
Machine Weight (Mass)		kg 27	28	31
★6 Sound Pressure Level (HH/H/L)		dBA 34/32/30	35/33/31	36/34/32
Safety Devices		Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor
Refrigerant Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Standard Accessories		Operation Manual, Installation Manual, Drain Hose, Sealing Pads, Clamps, Washers, Insulation for Fitting, Clamp Metal, Washer Fixing Plate, Screws for Duct Flanges, Air Filter, (Product Quality Certificate ★7)	Operation Manual, Installation Manual, Drain Hose, Sealing Pads, Clamps, Washers, Insulation for Fitting, Clamp Metal, Washer Fixing Plate, Screws for Duct Flanges, Air Filter, (Product Quality Certificate ★7)	Operation Manual, Installation Manual, Drain Hose, Sealing Pads, Clamps, Washers, Insulation for Fitting, Clamp Metal, Washer Fixing Plate, Screws for Duct Flanges, Air Filter, (Product Quality Certificate ★7)
Drawing No.		3D060921A		

Note:

- ★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 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★5 External static pressure is changeable to set by the remote controller. This pressure means "High static pressure - Standard static pressure". (Factory setting is 15 Pa.)
- ★6 The operation sound levels are the conversion values in anechoic chamber. In practice, the sound tend to be larger than the specified values due to ambient noise or reflections.
When the place of suction is changed to the bottom suction, the sound level will increase by approx. 5dBA.
- ★7 FXDQ40 / 50 / 63NBVE only.

Conversion Formulae

$$\begin{aligned} \text{kcal/h} &= \text{kW} \times 860 \\ \text{Btu/h} &= \text{kW} \times 3412 \\ \text{cfm} &= \text{m}^3/\text{min} \times 35.3 \end{aligned}$$

Ceiling Mounted Built-in Type

Model			FXSQ20MVE	FXSQ25MVE	FXSQ32MVE
★1 Cooling Capacity (19.5°CWB)	kcal/h		2,000	2,500	3,200
	Btu/h		7,800	9,900	12,600
	kW		2.3	2.9	3.7
★2 Cooling Capacity (19.0°CWB)	kW		2.2	2.8	3.6
★3 Heating Capacity	kcal/h		2,200	2,800	3,400
	Btu/h		8,500	10,900	13,600
	kW		2.5	3.2	4.0
Casing			Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate
Dimensions: (H×W×D)		mm	300×550×800	300×550×800	300×550×800
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm	3×14×1.75	3×14×1.75	3×14×1.75
	Face Area	m ²	0.088	0.088	0.088
Fan	Model		D18H3A	D18H3A	D18H3A
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	50×1	50×1	50×1
	Airflow Rate (H/L)	m ³ /min	9/6.5	9/6.5	9.5/7
	★4 External static pressure	Pa	88-39-20	88-39-20	64-39-15
	Drive		Direct Drive	Direct Drive	Direct Drive
Temperature Control			Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material			Glass Fiber	Glass Fiber	Glass Fiber
Air Filter			Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)
Piping Connections	Liquid Pipes	mm	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)
	Gas Pipes	mm	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)
	Drain Pipe	mm	VP25 (External Dia. 32 Internal Dia. 25)	VP25 (External Dia. 32 Internal Dia. 25)	VP25 (External Dia. 32 Internal Dia. 25)
Machine Weight (Mass)		kg	30	30	30
★6 Sound Level (H/L) (220V)		dBA	37/32	37/32	38/32
Safety Devices			Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor
Refrigerant Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Connectable outdoor unit			R-410A P(A) Series	R-410A P(A) Series	R-410A P(A) Series
Decoration Panel (Option)	Model		BYBS32DJW1	BYBS32DJW1	BYBS32DJW1
	Panel Color		White (10Y9/0.5)	White (10Y9/0.5)	White (10Y9/0.5)
	Dimensions: (H×W×D)	mm	55×650×500	55×650×500	55×650×500
	Weight	kg	3	3	3
Standard Accessories			Operation Manual, Installation Manual, Paper Pattern for Installation, Drain Hose, Clamp Metal, Insulation for Fitting, Sealing Pads, Clamps, Screws, Washers.	Operation Manual, Installation Manual, Paper Pattern for Installation, Drain Hose, Clamp Metal, Insulation for Fitting, Sealing Pads, Clamps, Screws, Washers.	Operation Manual, Installation Manual, Paper Pattern for Installation, Drain Hose, Clamp Metal, Insulation for Fitting, Sealing Pads, Clamps, Screws, Washers.
Drawing No.			3D039431		

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. (Heat Pump only)
- ★4 External static pressure is changeable to change over the connectors inside electrical box, this pressure means "High static pressure-Standard -Low static pressure".
- 5 Capacities are net, including a deduction for cooling (an additional for heating) for indoor fan motor heat.
- ★6 Anechoic chamber conversion value, measured at a point 1.5m downward from the unit center. These values are normally somewhat higher during actual operation as a result of ambient conditions.

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

Ceiling Mounted Built-in Type

Model		FXSQ40MVE	FXSQ50MVE	FXSQ63MVE	
★1 Cooling Capacity (19.5°CWB)	kcal/h	4,000	5,000	6,300	
	Btu/h	16,000	19,800	24,900	
	kW	4.7	5.8	7.3	
★2 Cooling Capacity (19.0°CWB)	kW	4.5	5.6	7.1	
★3 Heating Capacity	kcal/h	4,300	5,400	6,900	
	Btu/h	17,100	21,500	27,300	
	kW	5.0	6.3	8.0	
Casing		Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate	
Dimensions: (H×W×D)		mm	300×700×800	300×700×800	300×1,000×800
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm	3×14×1.75	3×14×1.75	3×14×1.75
	Face Area	m ²	0.132	0.132	0.221
Fan	Model		D18H2A	D18H2A	2D18H2A
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	65×1	85×1	125×1
	Airflow Rate (H/L)	m ³ /min	11.5/9	15/11	21/15.5
	★4 External static pressure	Pa	88-49-20	88-59-29	88-49-20
	Drive		Direct Drive	Direct Drive	Direct Drive
Temperature Control		Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	
Sound Absorbing Thermal Insulation Material		Glass Fiber	Glass Fiber	Glass Fiber	
Air Filter		Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	
Piping Connections	Liquid Pipes	mm	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ9.5 (Flare Connection)
	Gas Pipes	mm	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ15.9 (Flare Connection)
	Drain Pipe	mm	VP25 (External Dia. 32 Internal Dia. 25)	VP25 (External Dia. 32 Internal Dia. 25)	VP25 (External Dia. 32 Internal Dia. 25)
Machine Weight (Mass)	kg	30	31	41	
★6 Sound Level (H/L)	dBA	38/32	41/36	42/35	
Safety Devices		Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	
Refrigerant Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	
Connectable outdoor unit		R-410A P(A) Series	R-410A P(A) Series	R-410A P(A) Series	
Decoration Panel (Option)	Model		BYBS45DJW1	BYBS45DJW1	BYBS71DJW1
	Panel Color		White (10Y9/0.5)	White (10Y9/0.5)	White (10Y9/0.5)
	Dimensions: (H×W×D)	mm	55×800×500	55×800×500	55×1,100×500
	Weight	kg	3.5	3.5	4.5
Standard Accessories		Operation Manual, Installation Manual, Paper Pattern for Installation, Drain Hose, Clamp Metal, Insulation for Fitting, Sealing Pads, Clamps, Screws, Washers.	Operation Manual, Installation Manual, Paper Pattern for Installation, Drain Hose, Clamp Metal, Insulation for Fitting, Sealing Pads, Clamps, Screws, Washers.	Operation Manual, Installation Manual, Paper Pattern for Installation, Drain Hose, Clamp Metal, Insulation for Fitting, Sealing Pads, Clamps, Screws, Washers.	
Drawing No.		3D039431			

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. (Heat Pump only)
- ★4 External static pressure is changeable to change over the connectors inside electrical box, this pressure means "High static pressure-Standard -Low static pressure".
- 5 Capacities are net, including a deduction for cooling (an additional for heating) for indoor fan motor heat.
- ★6 Anechoic chamber conversion value, measured at a point 1.5m downward from the unit center. These values are normally somewhat higher during actual operation as a result of ambient conditions.

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

Ceiling Mounted Built-in Type

Model		FXSQ80MVE	FXSQ100MVE	FXSQ125MVE	
★1 Cooling Capacity (19.5°CWB)	kcal/h	8,000	10,000	12,500	
	Btu/h	31,700	39,600	49,500	
	kW	9.3	11.6	14.5	
★2 Cooling Capacity (19.0°CWB)	kW	9.0	11.2	14.0	
★3 Heating Capacity	kcal/h	8,600	10,800	13,800	
	Btu/h	34,100	42,700	54,600	
	kW	10.0	12.5	16.0	
Casing		Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate	
Dimensions: (H×W×D)		mm 300×1,400×800	300×1,400×800	300×1,400×800	
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm 3×14×1.75	3×14×1.75	3×14×1.75	
	Face Area	m ² 0.338	0.338	0.338	
Fan	Model		3D18H2A	3D18H2A	3D18H2A
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	225×1	225×1	225×1
	Airflow Rate (H/L)	m ³ /min	27/21.5	28/22	38/28
	★4 External static pressure	Pa	113-82	107-75	78-39
	Drive		Direct Drive	Direct Drive	Direct Drive
Temperature Control		Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	
Sound Absorbing Thermal Insulation Material		Glass Fiber	Glass Fiber	Glass Fiber	
Air Filter		Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	
Piping Connections	Liquid Pipes	mm φ9.5 (Flare Connection)	φ9.5 (Flare Connection)	φ9.5 (Flare Connection)	
	Gas Pipes	mm φ15.9 (Flare Connection)	φ15.9 (Flare Connection)	φ15.9 (Flare Connection)	
	Drain Pipe	mm VP25 (External Dia. 32 Internal Dia. 25)	VP25 (External Dia. 32 Internal Dia. 25)	VP25 (External Dia. 32 Internal Dia. 25)	
Machine Weight (Mass)	kg	51	51	52	
★6 Sound Level (H/L)	dBA	43/37	43/37	46/41	
Safety Devices		Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	
Refrigerant Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	
Connectable outdoor unit		R-410A P(A) Series	R-410A P(A) Series	R-410A P(A) Series	
Decoration Panel (Option)	Model		BYBS125DJW1	BYBS125DJW1	BYBS125DJW1
	Panel Color		White (10Y9/0.5)	White (10Y9/0.5)	White (10Y9/0.5)
	Dimensions: (H×W×D)	mm	55×1,500×500	55×1,500×500	55×1,500×500
	Weight	kg	6.5	6.5	6.5
Standard Accessories		Operation Manual, Installation Manual, Paper Pattern for Installation, Drain Hose, Clamp Metal, Insulation for Fitting, Sealing Pads, Clamps, Screws, Washers.	Operation Manual, Installation Manual, Paper Pattern for Installation, Drain Hose, Clamp Metal, Insulation for Fitting, Sealing Pads, Clamps, Screws, Washers.	Operation Manual, Installation Manual, Paper Pattern for Installation, Drain Hose, Clamp Metal, Insulation for Fitting, Sealing Pads, Clamps, Screws, Washers.	
Drawing No.		3D039431			

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. (Heat Pump only)
- ★4 External static pressure is changeable to change over the connectors inside electrical box, this pressure means "High static pressure-Standard".
- ★5 Capacities are net, including a deduction for cooling (an additional for heating) for indoor fan motor heat.
- ★6 Anechoic chamber conversion value, measured at a point 1.5m downward from the unit center. These values are normally somewhat higher during actual operation as a result of ambient conditions.

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

Ceiling Mounted Duct Type

Model		FXMQ20PVE	FXMQ25PVE	FXMQ32PVE		
Power supply		1 phase 50Hz 220-240V / 60Hz 220V	1 phase 50Hz 220-240V / 60Hz 220V	1 phase 50Hz 220-240V / 60Hz 220V		
★1 *6 Cooling capacity (19.5°CWB)	kcal/h	2,000	2,500	3,200		
	Btu/h	7,800	9,900	12,600		
	kW	2.3	2.9	3.7		
★2 *6 Cooling capacity (19.0°CWB)		kW	2.2	2.8	3.6	
★3 *6 Heating capacity	kcal/h	2,200	2,800	3,400		
	Btu/h	8,500	10,900	13,600		
	kW	2.5	3.2	4.0		
Casing		Galvanized steel plate	Galvanized steel plate	Galvanized steel plate		
Dimensions: (HxWxD)		mm	300x550x700	300x550x700	300x550x700	
Coil (Cross fin coil)	RowsxStagesxFin pitch	mm	3x16x1.75	3x16x1.75	3x16x1.75	
	Face area	m ²	0.098	0.098	0.098	
Fan	Model		—		—	
	Type		Sirocco fan		Sirocco fan	
	Motor output x Number of units		W		90x1	
	Airflow rate (HH/H/L)		m ³ /min		9/7.5/6.5	
			cfm		318/265/230	
	External static pressure		Pa		Standard 50 (100-30 ★4)	
Drive		Direct drive		Direct drive		
Temperature control		Microprocessor thermostat for cooling and heating		Microprocessor thermostat for cooling and heating		
Air filter		★5		★5		
Piping connections	Liquid pipes	mm	φ6.4 (Flare connection)	φ6.4 (Flare connection)	φ6.4 (Flare connection)	
	Gas pipes	mm	φ12.7 (Flare connection)	φ12.7 (Flare connection)	φ12.7 (Flare connection)	
	Drain pipe	mm	VP25 (External dia. 32 Internal dia. 25)	VP25 (External dia. 32 Internal dia. 25)	VP25 (External dia. 32 Internal dia. 25)	
Mass (Weight)		kg	25		25	
★7 Sound level (HH/H/L)	dBA	220V	33/31/29		34/32/30	
		240V	33/31/29		34/32/30	
Safety devices		Fuse. Fan driver overload protector.		Fuse. Fan driver overload protector.		
Refrigerant control		Electronic expansion valve		Electronic expansion valve		
Connectable outdoor unit		R-410A P(A) series		R-410A P(A) series		
Standard accessories		Operation manual. Installation manual. Drain hose. Sealing pads. Clamps. Washers. Screws. Insulation for fitting. Clamp metal. Air discharge flange. Air suction flange.		Operation manual. Installation manual. Drain hose. Sealing pads. Clamps. Washers. Screws. Insulation for fitting. Clamp metal. Air discharge flange. Air suction flange.		
Drawing No.		C : 3D060388E				

Note:

- ★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.
- ★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.
- ★3 Indoor temp. : 20°CDB / outdoor temp. : 7°CDB, 6°CWB / Equivalent piping length : 7.5 m, level difference : 0 m.
- ★4 External static pressure is changeable in 7 (FXMQ20PVE / FXMQ25PVE / FXMQ32PVE), 13 (FXMQ40PVE), 14 (FXMQ50PVE / FXMQ63PVE / FXMQ80PVE / FXMQ100PVE / FXMQ125PVE), 10 (FXMQ140PVE) stages within the () range by remote controller.
- ★5 Air filter is not standard accessory, but please mount it in the duct system of the suction side. Select its colourimetric method (gravity method) 50% or more.
- ★6 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★7 Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit center. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

Conversion formulae
kcal/h=kWx860
Btu/h=kWx3412
cfm=m ³ /minx35.3

Ceiling Mounted Duct Type

Model		FXMQ40PVE	FXMQ50PVE	FXMQ63PVE	FXMQ80PVE	
Power supply		1 phase 50Hz 220-240V / 60Hz 220V	1 phase 50Hz 220-240V / 60Hz 220V	1 phase 50Hz 220-240V / 60Hz 220V	1 phase 50Hz 220-240V / 60Hz 220V	
★1 *6 Cooling capacity (19.5°CWB)	kcal/h	4,000	5,000	6,300	8,000	
	Btu/h	16,000	19,800	24,900	31,700	
	kW	4.7	5.8	7.3	9.3	
★2 *6 Cooling capacity (19.0°CWB)	kW	4.5	5.6	7.1	9.0	
★3 *6 Heating capacity	kcal/h	4,300	5,400	6,900	8,600	
	Btu/h	17,100	21,500	27,300	34,100	
	kW	5.0	6.3	8.0	10.0	
Casing		Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	
Dimensions: (HxWxD)		mm 300x700x700	300x1,000x700	300x1,000x700	300x1,000x700	
Coil (Cross fin coil)	RowsxStagesxFin pitch	mm 3x16x1.75	3x16x1.75	3x16x1.75	3x16x1.75	
	Face area	m ² 0.148	0.249	0.249	0.249	
Fan	Model	—				
	Type	Sirocco fan				
	Motor output x Number of units	W 140x1	350x1	350x1	350x1	
	Airflow rate (HH/H/L)	m ³ /min	16/13/11	18/16.5/15	19.5/17.5/16	25/22.5/20
		cfm	565/459/388	635/582/530	688/618/565	883/794/706
	External static pressure	Pa Standard 100 (160-30 ★4)	Standard 100 (200-50 ★4)	Standard 100 (200-50 ★4)	Standard 100 (200-50 ★4)	
Drive	Direct drive					
Temperature control		Microprocessor thermostat for cooling and heating				
Air filter		★5				
Piping connections	Liquid pipes	mm φ6.4 (Flare connection)	φ6.4 (Flare connection)	φ9.5 (Flare connection)	φ9.5 (Flare connection)	
	Gas pipes	mm φ12.7 (Flare connection)	φ12.7 (Flare connection)	φ15.9 (Flare connection)	φ15.9 (Flare connection)	
	Drain pipe	mm VP25 (External dia. 32 Internal dia. 25)	VP25 (External dia. 32 Internal dia. 25)	VP25 (External dia. 32 Internal dia. 25)	VP25 (External dia. 32 Internal dia. 25)	
Mass (Weight)		kg 28	36	36	36	
★7 Sound level (HH/H/L)	dBA	220V	39/37/35	41/39/37	42/40/38	
		240V	39/37/35	41/39/37	42/40/38	
Safety devices		Fuse. Fan driver overload protector.				
Refrigerant control		Electronic expansion valve				
Connectable outdoor unit		R-410A P(A) series				
Standard accessories		Operation manual. Installation manual. Drain hose. Sealing pads. Clamps. Washers. Screws. Insulation for fitting. Clamp metal. Air discharge flange. Air suction flange.				
Drawing No.		C : 3D060388E				

Note:

- ★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.
- ★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.
- ★3 Indoor temp. : 20°CDB / outdoor temp. : 7°CDB, 6°CWB / Equivalent piping length : 7.5 m, level difference : 0 m.
- ★4 External static pressure is changeable in 7 (FXMQ20PVE / FXMQ25PVE / FXMQ32PVE), 13 (FXMQ40PVE), 14 (FXMQ50PVE / FXMQ63PVE / FXMQ80PVE / FXMQ100PVE / FXMQ125PVE), 10 (FXMQ140PVE) stages within the () range by remote controller.
- ★5 Air filter is not standard accessory, but please mount it in the duct system of the suction side. Select its colourimetric method (gravity method) 50% or more.
- ★6 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★7 Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit center. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

Conversion formulae
kcal/h=kWx860
Btu/h=kWx3412
cfm=m ³ /minx35.3

Ceiling Mounted Duct Type

Model		FXMQ100PVE	FXMQ125PVE	FXMQ140PVE	
Power supply		1 phase 50Hz 220-240V / 60Hz 220V	1 phase 50Hz 220-240V / 60Hz 220V	1 phase 50Hz 220-240V / 60Hz 220V	
★1 *6 Cooling capacity (19.5°CWB)	kcal/h	10,000	12,500	14,300	
	Btu/h	39,600	49,500	57,000	
	kW	11.6	14.5	16.7	
★2 *6 Cooling capacity (19.0°CWB)		kW	11.2	14.0	16.0
★3 *6 Heating capacity	kcal/h	10,800	13,800	15,500	
	Btu/h	42,700	54,600	61,400	
	kW	12.5	16.0	18.0	
Casing		Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	
Dimensions: (HxWxD)		mm	300x1,400x700	300x1,400x700	
Coil (Cross fin coil)	RowsxStagesxFin pitch	mm	3x16x1.75	3x16x1.5	
	Face area	m ²	0.383	0.383	
Fan	Model		—	—	
	Type		Sirocco fan	Sirocco fan	Sirocco fan
	Motor output x Number of units	W	350x1	350x1	350x1
	Airflow rate (HH/H/L)	m ³ /min	32/27/23	39/33/28	46/39/32
		cfm	1,130/953/812	1,377/1,165/988	1,624/1,377/1,130
	External static pressure	Pa	Standard 100 (200-50 ★4)	Standard 100 (200-50 ★4)	Standard 100 (140-50 ★4)
Drive		Direct drive	Direct drive	Direct drive	
Temperature control		Microprocessor thermostat for cooling and heating	Microprocessor thermostat for cooling and heating	Microprocessor thermostat for cooling and heating	
Air filter		★5	★5	★5	
Piping connections	Liquid pipes	mm	φ9.5 (Flare connection)	φ9.5 (Flare connection)	φ9.5 (Flare connection)
	Gas pipes	mm	φ15.9 (Flare connection)	φ15.9 (Flare connection)	φ15.9 (Flare connection)
	Drain pipe	mm	VP25 (External dia. 32 Internal dia. 25)	VP25 (External dia. 32 Internal dia. 25)	VP25 (External dia. 32 Internal dia. 25)
Mass (Weight)		kg	46	46	47
★7 Sound level (HH/H/L)	dBA	220V	43/41/39	44/42/40	46/45/43
		240V	43/41/39	44/42/40	46/45/43
Safety devices		Fuse. Fan driver overload protector.	Fuse. Fan driver overload protector.	Fuse. Fan driver overload protector.	
Refrigerant control		Electronic expansion valve	Electronic expansion valve	Electronic expansion valve	
Connectable outdoor unit		R-410A P(A) series	R-410A P(A) series	R-410A P(A) series	
Standard accessories		Operation manual. Installation manual. Drain hose. Sealing pads. Clamps. Washers. Screws. Insulation for fitting. Clamp metal. Air discharge flange. Air suction flange.	Operation manual. Installation manual. Drain hose. Sealing pads. Clamps. Washers. Screws. Insulation for fitting. Clamp metal. Air discharge flange. Air suction flange.	Operation manual. Installation manual. Drain hose. Sealing pads. Clamps. Washers. Screws. Insulation for fitting. Clamp metal. Air discharge flange. Air suction flange.	
Drawing No.		C : 3D060388E			

Note:

- ★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.
- ★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.
- ★3 Indoor temp. : 20°CDB / outdoor temp. : 7°CDB, 6°CWB / Equivalent piping length : 7.5 m, level difference : 0 m.
- ★4 External static pressure is changeable in 7 (FXMQ20PVE / FXMQ25PVE / FXMQ32PVE), 13 (FXMQ40PVE), 14 (FXMQ50PVE / FXMQ63PVE / FXMQ80PVE / FXMQ100PVE / FXMQ125PVE), 10 (FXMQ140PVE) stages within the () range by remote controller.
- ★5 Air filter is not standard accessory, but please mount it in the duct system of the suction side. Select its colourimetric method (gravity method) 50% or more.
- ★6 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★7 Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit center. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

Conversion formulae
kcal/h=kWx860
Btu/h=kWx3412
cfm=m ³ /minx35.3

Ceiling Mounted Duct Type

Model			FXMQ200MAVE	FXMQ250MAVE
★1 Cooling Capacity (19.5°CWB)	kcal/h		19,800	24,800
	Btu/h		78,500	98,300
	kW		23.0	28.8
★2 Cooling Capacity (19.0°CWB)	kW		22.4	28.0
★3 Heating Capacity	kcal/h		21,500	27,100
	Btu/h		85,300	107,500
	kW		25.0	31.5
Casing			Galvanized Steel Plate	Galvanized Steel Plate
Dimensions: (H×W×D)		mm	470×1,380×1,100	470×1,380×1,100
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm	3×26×2.0	3×26×2.0
	Face Area	m ²	0.68	0.68
Fan	Model		D13/4G2DA1×2	D13/4G2DA1×2
	Type		Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	380×2	380×2
	Airflow Rate (H/L)	m ³ /min	58/50	72/62
		cfm	2,047/1,765	2,542/2,189
	External Static Pressure 50Hz/60Hz	Pa	221/270-132 ★4	270/191-147 ★4
Drive		Direct Drive	Direct Drive	
Temperature Control			Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material			Glass Fiber	Glass Fiber
Air Filter			★5	★5
Piping Connections	Liquid Pipes	mm	φ9.5 (Flare Connection)	φ9.5 (Flare Connection)
	Gas Pipes	mm	φ19.1(Brazing Connection)	φ22.2 (Brazing Connection)
	Drain Pipe	mm	PS1B	PS1B
Machine Weight (Mass)		kg	137	137
★7 Sound Level (H/L) (220V)		dBA	48/45	48/45
Safety Devices			Fuse. Thermal Protector for Fan Motor.	Fuse. Thermal Protector for Fan Motor.
Refrigerant Control			Electronic Expansion Valve	Electronic Expansion Valve
Connectable Outdoor Unit			R-410A P(A) Series	R-410A P(A) Series
Standard Accessories			Operation Manual. Installation Manual. Sealing Pads. Connection Pipes. Screws. Clamps.	Operation Manual. Installation Manual. Sealing Pads. Connection Pipes. Screws. Clamps.
Drawing No.			C : 3D038814A	

Note:

- ★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.
- ★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.
- ★3 Indoor temp. : 20°CDB / outdoor temp. : 7°CDB, 6°CWB / Equivalent piping length : 7.5 m, level difference : 0 m.
- ★4 External static pressure is changeable to change over the connectors inside electrical box, this pressure means "High static pressure-Standard".
- ★5 Air filter is not standard accessory, but please mount it in the duct system of the suction side. Select its colorimetric method (gravity method) 50% or more.
- 6 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★7 Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit center. These values are normally somewhat higher during actual operation as a result of ambient conditions.

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

Ceiling Suspended Type

Model		FXHQ32MAVE	FXHQ63MAVE	FXHQ100MAVE	
★1 Cooling Capacity (19.5°CWB)	kcal/h	3,200	6,300	10,000	
	Btu/h	12,600	24,900	39,600	
	kW	3.7	7.3	11.6	
★2 Cooling Capacity (19.0°CWB)	kW	3.6	7.1	11.2	
★3 Heating Capacity	kcal/h	3,400	6,900	10,800	
	Btu/h	13,600	27,300	42,700	
	kW	4.0	8.0	12.5	
Casing Color		White (10Y9/0.5)	White (10Y9/0.5)	White (10Y9/0.5)	
Dimensions: (H×W×D)		mm 195×960×680	mm 195×1,160×680	mm 195×1,400×680	
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm 2×12×1.75	mm 3×12×1.75	mm 3×12×1.75	
	Face Area	m ² 0.182	m ² 0.233	m ² 0.293	
Fan	Model		3D12K1AA1	4D12K1AA1	3D12K2AA1
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	62×1	62×1	130×1
	Airflow Rate (H/L)	m ³ /min	12/10	17.5/14	25/19.5
		cfm	424/353	618/494	883/688
Drive		Direct Drive	Direct Drive	Direct Drive	
Temperature Control		Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	
Sound Absorbing Thermal Insulation Material		Glass Wool	Glass Wool	Glass Wool	
Air Filter		Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	
Piping Connections	Liquid Pipes	mm φ6.4 (Flare Connection)	mm φ9.5 (Flare Connection)	mm φ9.5 (Flare Connection)	
	Gas Pipes	mm φ12.7 (Flare Connection)	mm φ15.9 (Flare Connection)	mm φ15.9 (Flare Connection)	
	Drain Pipe	mm VP20 (External Dia. 26 Internal Dia. 20)	mm VP20 (External Dia. 26 Internal Dia. 20)	mm VP20 (External Dia. 26 Internal Dia. 20)	
Machine Weight (Mass)		kg 24	kg 28	kg 33	
★5 Sound Level (H/L)		dBA 36/31	dBA 39/34	dBA 45/37	
Safety Devices		Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	
Refrigerant Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	
Connectable outdoor unit		R-410A P(A) Series	R-410A P(A) Series	R-410A P(A) Series	
Standard Accessories		Operation Manual, Installation Manual, Paper Pattern for Installation, Drain Hose, Clamp Metal, Insulation for Fitting, Clamps, Washers.	Operation Manual, Installation Manual, Paper Pattern for Installation, Drain Hose, Clamp Metal, Insulation for Fitting, Clamps, Washers.	Operation Manual, Installation Manual, Paper Pattern for Installation, Drain Hose, Clamp Metal, Insulation for Fitting, Clamps, Washers.	
Drawing No.		3D038815A			

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. (Heat Pump only)
- 4 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★5 Anechoic chamber conversion value, measured under JISB8616 conditions. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

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

Wall Mounted Type

Model		FXAQ20MAVE	FXAQ25MAVE	FXAQ32MAVE	
★1 Cooling Capacity (19.5°CWB)	kcal/h	2,000	2,500	3,200	
	Btu/h	7,800	9,900	12,600	
	kW	2.3	2.9	3.7	
★2 Cooling Capacity (19.0°CWB)	kW	2.2	2.8	3.6	
★3 Heating Capacity	kcal/h	2,200	2,800	3,400	
	Btu/h	8,500	10,900	13,600	
	kW	2.5	3.2	4.0	
Casing Color		White (3.0Y8.5/10.5)	White (3.0Y8.5/10.5)	White (3.0Y8.5/10.5)	
Dimensions: (H×W×D)		mm 290×795×230	290×795×230	290×795×230	
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm 2×14×1.4	2×14×1.4	2×14×1.4	
	Face Area	m ² 0.161	0.161	0.161	
Fan	Model		QCL9661M	QCL9661M	QCL9661M
	Type		Cross Flow Fan	Cross Flow Fan	Cross Flow Fan
	Motor Output × Number of Units	W	40×1	40×1	40×1
	Airflow Rate (H/L)	m ³ /min	7.5/4.5	8/5	9/5.5
		cfm	265/159	282/177	318/194
Drive		Direct Drive	Direct Drive	Direct Drive	
Temperature Control		Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	
Sound Absorbing Thermal Insulation Material		Foamed Polystyrene / Foamed Polyethylene	Foamed Polystyrene / Foamed Polyethylene	Foamed Polystyrene / Foamed Polyethylene	
Air Filter		Resin Net (Washable)	Resin Net (Washable)	Resin Net (Washable)	
Piping Connections	Liquid Pipes	mm φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	
	Gas Pipes	mm φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	
	Drain Pipe	mm VP13 (External Dia. 18 Internal Dia. 13)	VP13 (External Dia. 18 Internal Dia. 13)	VP13 (External Dia. 18 Internal Dia. 13)	
Machine Weight (Mass)		kg 11	11	11	
★5 Sound Level (H/L)		dBA 35/29	36/29	37/29	
Safety Devices		Fuse	Fuse	Fuse	
Refrigerant Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	
Connectable outdoor unit		R-410A P(A) Series	R-410A P(A) Series	R-410A P(A) Series	
Standard Accessories		Operation Manual, Installation Manual, Installation Panel, Paper Pattern for Installation, Insulation Tape, Clamps, screws.	Operation Manual, Installation Manual, Installation Panel, Paper Pattern for Installation, Insulation Tape, Clamps, screws.	Operation Manual, Installation Manual, Installation Panel, Paper Pattern for Installation, Insulation Tape, Clamps, screws.	
Drawing No.		3D039370B			

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. (Heat Pump only)
- 4 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★5 Anechoic chamber conversion value, measured under JISB8616 conditions. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

Conversion Formulae

$$\begin{aligned} \text{kcal/h} &= \text{kW} \times 860 \\ \text{Btu/h} &= \text{kW} \times 3412 \\ \text{cfm} &= \text{m}^3/\text{min} \times 35.3 \end{aligned}$$

Wall Mounted Type

Model		FXAQ40MAVE	FXAQ50MAVE	FXAQ63MAVE	
★1 Cooling Capacity (19.5°CWB)	kcal/h	4,000	5,000	6,300	
	Btu/h	16,000	19,800	24,900	
	kW	4.7	5.8	7.3	
★2 Cooling Capacity (19.0°CWB)	kW	4.5	5.6	7.1	
★3 Heating Capacity	kcal/h	4,300	5,400	6,900	
	Btu/h	17,100	21,500	27,300	
	kW	5.0	6.3	8.0	
Casing Color		White (3.0Y8.5/10.5)	White (3.0Y8.5/10.5)	White (3.0Y8.5/10.5)	
Dimensions: (H×W×D)		mm 290×1,050×230	290×1,050×230	290×1,050×230	
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm 2×14×1.4	2×14×1.4	2×14×1.4	
	Face Area	m ² 0.213	0.213	0.213	
Fan	Model		QCL9686M	QCL9686M	
	Type		Cross Flow Fan	Cross Flow Fan	
	Motor Output × Number of Units	W	43×1	43×1	
	Airflow Rate (H/L)	m ³ /min	12/9	15/12	19/14
		cfm	424/318	530/424	671/494
Drive		Direct Drive	Direct Drive	Direct Drive	
Temperature Control		Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	
Sound Absorbing Thermal Insulation Material		Foamed Polystyrene / Foamed Polyethylene	Foamed Polystyrene / Foamed Polyethylene	Foamed Polystyrene / Foamed Polyethylene	
Air Filter		Resin Net (Washable)	Resin Net (Washable)	Resin Net (Washable)	
Piping Connections	Liquid Pipes	mm φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ9.5 (Flare Connection)	
	Gas Pipes	mm φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ15.9 (Flare Connection)	
	Drain Pipe	mm VP13 (External Dia. 18 Internal Dia. 13)	VP13 (External Dia. 18 Internal Dia. 13)	VP13 (External Dia. 18 Internal Dia. 13)	
Machine Weight (Mass)		kg 14	14	14	
★5 Sound Level (H/L)		dBA 39/34	42/36	46/39	
Safety Devices		Fuse	Fuse	Fuse	
Refrigerant Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	
Connectable outdoor unit		R-410A P(A) Series	R-410A P(A) Series	R-410A P(A) Series	
Standard Accessories		Operation Manual, Installation Manual, Installation Panel, Paper Pattern for Installation, Insulation Tape, Clamps, screws.	Operation Manual, Installation Manual, Installation Panel, Paper Pattern for Installation, Insulation Tape, Clamps, screws.	Operation Manual, Installation Manual, Installation Panel, Paper Pattern for Installation, Insulation Tape, Clamps, screws.	
Drawing No.		3D039370B			

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. (Heat Pump only)
- 4 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★5 Anechoic chamber conversion value, measured under JISB8616 conditions. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

Conversion Formulae

$$\begin{aligned} \text{kcal/h} &= \text{kW} \times 860 \\ \text{Btu/h} &= \text{kW} \times 3412 \\ \text{cfm} &= \text{m}^3/\text{min} \times 35.3 \end{aligned}$$

Floor Standing Type

Model		FXLQ20MAVE	FXLQ25MAVE	FXLQ32MAVE	
★1 Cooling Capacity (19.5°CWB)	kcal/h	2,000	2,500	3,200	
	Btu/h	7,800	9,900	12,600	
	kW	2.3	2.9	3.7	
★2 Cooling Capacity (19.0°CWB)	kW	2.2	2.8	3.6	
★3 Heating Capacity	kcal/h	2,200	2,800	3,400	
	Btu/h	8,500	10,900	13,600	
	kW	2.5	3.2	4.0	
Casing Color		Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)	
Dimensions: (H×W×D)		mm 600×1,000×222	mm 600×1,000×222	mm 600×1,140×222	
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm 3×14×1.5	mm 3×14×1.5	mm 3×14×1.5	
	Face Area	m ² 0.159	m ² 0.159	m ² 0.200	
Fan	Model		D14B20	D14B20	2D14B13
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	15×1	15×1	25×1
	Airflow Rate (H/L)	m ³ /min	7/6	7/6	8/6
		cfm	247/212	247/212	282/212
Drive		Direct Drive	Direct Drive	Direct Drive	
Temperature Control		Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	
Sound Absorbing Thermal Insulation Material		Glass Fiber/ Urethane Foam	Glass Fiber/ Urethane Foam	Glass Fiber/ Urethane Foam	
Air Filter		Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	
Piping Connections	Liquid Pipes	mm φ6.4 (Flare Connection)	mm φ6.4 (Flare Connection)	mm φ6.4 (Flare Connection)	
	Gas Pipes	mm φ12.7 (Flare Connection)	mm φ12.7 (Flare Connection)	mm φ12.7 (Flare Connection)	
	Drain Pipe	mm φ21 O.D (Vinyl Chloride)	mm φ21 O.D (Vinyl Chloride)	mm φ21 O.D (Vinyl Chloride)	
Machine Weight (Mass)		kg 25	kg 25	kg 30	
★5 Sound Level (H/L)		dB(A) 35/32	dB(A) 35/32	dB(A) 35/32	
Safety Devices		Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	
Refrigerant Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	
Connectable Outdoor Unit		R-410A P(A) Series	R-410A P(A) Series	R-410A P(A) Series	
Standard Accessories		Operation Manual, Installation Manual, Insulation for Fitting, Drain Hose, Clamps, Screws, Washers, Level Adjustment Screw.	Operation Manual, Installation Manual, Insulation for Fitting, Drain Hose, Clamps, Screws, Washers, Level Adjustment Screw.	Operation Manual, Installation Manual, Insulation for Fitting, Drain Hose, Clamps, Screws, Washers, Level Adjustment Screw.	
Drawing No.		3D038816A			

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. (Heat Pump only)
- 4 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★5 Anechoic chamber conversion value, measured at a point 1.5 m in front of the unit at a height of 1.5 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

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

Floor Standing Type

Model		FXLQ40MAVE	FXLQ50MAVE	FXLQ63MAVE	
★1 Cooling Capacity (19.5°CWB)	kcal/h	4,000	5,000	6,300	
	Btu/h	16,000	19,800	24,900	
	kW	4.7	5.8	7.3	
★2 Cooling Capacity (19.0°CWB)	kW	4.5	5.6	7.1	
★3 Heating Capacity	kcal/h	4,300	5,400	6,900	
	Btu/h	17,100	21,500	27,300	
	kW	5.0	6.3	8.0	
Casing Color		Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)	
Dimensions: (H×W×D)		600×1,140×222	600×1,420×222	600×1,420×222	
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm	3×14×1.5	3×14×1.5	
	Face Area	m ²	0.200	0.282	
Fan	Model		2D14B13	2D14B20	
	Type		Sirocco Fan	Sirocco Fan	
	Motor Output × Number of Units	W	25×1	35×1	
	Airflow Rate (H/L)	m ³ /min	11/8.5	14/11	16/12
		cfm	388/300	494/388	565/424
Drive		Direct Drive	Direct Drive	Direct Drive	
Temperature Control		Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	
Sound Absorbing Thermal Insulation Material		Glass Fiber/ Urethane Foam	Glass Fiber/ Urethane Foam	Glass Fiber/ Urethane Foam	
Air Filter		Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	
Piping Connections	Liquid Pipes	mm	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	
	Gas Pipes	mm	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	
	Drain Pipe	mm	φ21 O.D (Vinyl Chloride)	φ21 O.D (Vinyl Chloride)	
Machine Weight (Mass)		kg	30	36	
★5 Sound Level (H/L)		dBA	38/33	39/34	
Safety Devices		Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	
Refrigerant Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	
Connectable Outdoor Unit		R-410A P(A) Series	R-410A P(A) Series	R-410A P(A) Series	
Standard Accessories		Operation Manual, Installation Manual, Insulation for Fitting, Drain Hose, Clamps, Screws, Washers, Level Adjustment Screw.	Operation Manual, Installation Manual, Insulation for Fitting, Drain Hose, Clamps, Screws, Washers, Level Adjustment Screw.	Operation Manual, Installation Manual, Insulation for Fitting, Drain Hose, Clamps, Screws, Washers, Level Adjustment Screw.	
Drawing No.		3D038816A			

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. (Heat Pump only)
- 4 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★5 Anechoic chamber conversion value, measured at a point 1.5 m in front of the unit at a height of 1.5 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

Conversion Formulae

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

Concealed Floor Standing Type

Model		FXNQ20MAVE	FXNQ25MAVE	FXNQ32MAVE	
★1 Cooling Capacity (19.5°CWB)	kcal/h	2,000	2,500	3,200	
	Btu/h	7,800	9,900	12,600	
	kW	2.3	2.9	3.7	
★2 Cooling Capacity (19.0°CWB)	kW	2.2	2.8	3.6	
★3 Heating Capacity	kcal/h	2,200	2,800	3,400	
	Btu/h	8,500	10,900	13,600	
	kW	2.5	3.2	4.0	
Casing Color		Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate	
Dimensions: (H×W×D)		mm 610×930×220	610×930×220	610×1,070×220	
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm 3×14×1.5	3×14×1.5	3×14×1.5	
	Face Area	m ² 0.159	0.159	0.200	
Fan	Model		D14B20	D14B20	2D14B13
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	15×1	15×1	25×1
	Airflow Rate (H/L)	m ³ /min	7/6	7/6	8/6
		cfm	247/212	247/212	282/212
Drive		Direct Drive	Direct Drive	Direct Drive	
Temperature Control		Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	
Sound Absorbing Thermal Insulation Material		Glass Fiber/ Urethane Foam	Glass Fiber/ Urethane Foam	Glass Fiber/ Urethane Foam	
Air Filter		Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	
Piping Connections	Liquid Pipes	mm φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	
	Gas Pipes	mm φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	
	Drain Pipe	mm φ21 O.D (Vinyl Chloride)	φ21 O.D (Vinyl Chloride)	φ21 O.D (Vinyl Chloride)	
Machine Weight (Mass)	kg	19	19	23	
★5 Sound Level (H/L)	dBA	35/32	35/32	35/32	
Safety Devices		Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	
Refrigerant Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	
Connectable Outdoor Unit		R-410A P(A) Series	R-410A P(A) Series	R-410A P(A) Series	
Standard Accessories		Operation Manual, Installation Manual, Insulation for Fitting, Drain Hose, Clamps, Screws, Washers, Level Adjustment Screw.	Operation Manual, Installation Manual, Insulation for Fitting, Drain Hose, Clamps, Screws, Washers, Level Adjustment Screw.	Operation Manual, Installation Manual, Insulation for Fitting, Drain Hose, Clamps, Screws, Washers, Level Adjustment Screw.	
Drawing No.		3D038817A			

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. (Heat Pump only)
- 4 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★5 Anechoic chamber conversion value, measured at a point 1.5 m in front of the unit at a height of 1.5 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

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

Concealed Floor Standing Type

Model		FXNQ40MAVE	FXNQ50MAVE	FXNQ63MAVE	
★1 Cooling Capacity (19.5°CWB)	kcal/h	4,000	5,000	6,300	
	Btu/h	16,000	19,800	24,900	
	kW	4.7	5.8	7.3	
★2 Cooling Capacity (19.0°CWB)	kW	4.5	5.6	7.1	
★3 Heating Capacity	kcal/h	4,300	5,400	6,900	
	Btu/h	17,100	21,500	27,300	
	kW	5.0	6.3	8.0	
Casing Color		Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate	
Dimensions: (H×W×D)		mm 610×1,070×220	610×1,350×220	610×1,350×220	
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm 3×14×1.5	3×14×1.5	3×14×1.5	
	Face Area	m ² 0.200	0.282	0.282	
Fan	Model		2D14B13	2D14B20	2D14B20
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	25×1	35×1	35×1
	Airflow Rate (H/L)	m ³ /min	11/8.5	14/11	16/12
		cfm	388/300	494/388	565/424
Drive		Direct Drive	Direct Drive	Direct Drive	
Temperature Control		Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	
Sound Absorbing Thermal Insulation Material		Glass Fiber / Urethane Foam	Glass Fiber / Urethane Foam	Glass Fiber / Urethane Foam	
Air Filter		Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	
Piping Connections	Liquid Pipes	mm φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ9.5 (Flare Connection)	
	Gas Pipes	mm φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ15.9 (Flare Connection)	
	Drain Pipe	mm φ21 O.D (Vinyl Chloride)	φ21 O.D (Vinyl Chloride)	φ21 O.D (Vinyl Chloride)	
Machine Weight (Mass)		kg 23	27	27	
★5 Sound Level (H/L)		dBA 38/33	39/34	40/35	
Safety Devices		Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	
Refrigerant Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	
Connectable Outdoor Unit		R-410A P(A) Series	R-410A P(A) Series	R-410A P(A) Series	
Standard Accessories		Operation Manual, Installation Manual, Insulation for Fitting, Drain Hose, Clamps, Screws, Washers, Level Adjustment Screw.	Operation Manual, Installation Manual, Insulation for Fitting, Drain Hose, Clamps, Screws, Washers, Level Adjustment Screw.	Operation Manual, Installation Manual, Insulation for Fitting, Drain Hose, Clamps, Screws, Washers, Level Adjustment Screw.	
Drawing No.		3D038817A			

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. (Heat Pump only)
- 4 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★5 Anechoic chamber conversion value, measured at a point 1.5 m in front of the unit at a height of 1.5 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

Conversion Formulae

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

Ceiling Suspended Cassette Type

Model	Indoor Unit		FXUQ71MAV1	FXUQ100MAV1	FXUQ125MAV1
	Connection Unit		BEVQ71MAVE	BEVQ100MAVE	BEVQ125MAVE
★1 Cooling Capacity (19.5°CWB)	kcal/h		7,100	10,000	12,500
	Btu/h		28,300	39,600	49,500
	kW		8.3	11.6	14.5
★2 Cooling Capacity (19.0°CWB)	kW		8.0	11.2	14.0
★3 Heating Capacity	kcal/h		7,700	10,800	12,000
	Btu/h		30,700	42,700	47,800
	kW		9.0	12.5	14.0
Casing Color			White (10Y9/0.5)	White (10Y9/0.5)	White (10Y9/0.5)
Dimensions: (HxWxD)			mm 165x895x895	230x895x895	230x895x895
Coil (Cross Fin Coil)	RowsxStagesxFin Pitch	mm	3x6x1.5	3x8x1.5	3x8x1.5
	Face Area	m ²	0.265	0.353	0.353
Fan	Model		QTS48A10M	QTS50B15M	QTS50B15M
	Type		Turbo Fan	Turbo Fan	Turbo Fan
	Motor Output x Number of Units	W	45x1	90x1	90x1
	Airflow Rate (H/L)	m ³ /min	19/14	29/21	32/23
		cfm	671/494	1,024/741	1,130/812
Drive		Direct Drive	Direct Drive	Direct Drive	
Temperature Control			Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material			Heat Resistant Foamed Polyethylene, Regular Foamed Polyethylene	Heat Resistant Foamed Polyethylene, Regular Foamed Polyethylene	Heat Resistant Foamed Polyethylene, Regular Foamed Polyethylene
Piping Connections	Liquid Pipes	mm	φ9.5 (Flare Connection)	φ9.5 (Flare Connection)	φ9.5 (Flare Connection)
	Gas Pipes	mm	φ15.9 (Flare Connection)	φ15.9 (Flare Connection)	φ15.9 (Flare Connection)
	Drain Pipe	mm	I.Dφ20xO.Dφ26	I.Dφ20xO.Dφ26	I.Dφ20xO.Dφ26
Machine Weight (Mass)		kg	25	31	31
★5 Sound Level (H/L)		dBA	40/35	43/38	44/39
Safety Devices			Thermal Protector for Fan Motor	Thermal Protector for Fan Motor	Thermal Protector for Fan Motor
Standard Accessories			Operation Manual, Installation Manual, Drain Hose, Clamp Metal, Insulation for Fitting, Sealing Pads, Clamps, Screws, Washers, Holding Plate.	Operation Manual, Installation Manual, Drain Hose, Clamp Metal, Insulation for Fitting, Sealing Pads, Clamps, Screws, Washers, Holding Plate.	Operation Manual, Installation Manual, Drain Hose, Clamp Metal, Insulation for Fitting, Sealing Pads, Clamps, Screws, Washers, Holding Plate.
Drawing No.			C:4D045395A		

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. (Heat Pump only)
- 4 Capacities are net, including a deduction for cooling (an additional for heating) for indoor fan motor heat.
- ★5 Anechoic chamber conversion value, measured at a point 1.5m downward from the unit center. These values are normally somewhat higher during actual operation as a result of ambient conditions.

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

BEV Units

Model	BEVQ71MAVE		BEVQ100MAVE		BEVQ125MAVE	
Power Supply	1 Phase 50Hz 220~240V		1 Phase 50Hz 220~240V		1 Phase 50Hz 220~240V	
Casing	Galvanized Steel Plate		Galvanized Steel Plate		Galvanized Steel Plate	
Dimensions: (HxWxD)	mm	100x350x225	100x350x225	100x350x225	100x350x225	100x350x225
Sound Absorbing Thermal Insulation Material			Flame and Heat Resistant Foamed Polyethylene	Flame and Heat Resistant Foamed Polyethylene	Flame and Heat Resistant Foamed Polyethylene	Flame and Heat Resistant Foamed Polyethylene
Piping Connection	Indoor Unit	Liquid Pipes	9.5mm (Flare Connection)	9.5mm (Flare Connection)	9.5mm (Flare Connection)	9.5mm (Flare Connection)
		Gas Pipes	15.9mm (Flare Connection)	15.9mm (Flare Connection)	15.9mm (Flare Connection)	15.9mm (Flare Connection)
	Outdoor Unit	Liquid Pipes	9.5mm (Flare Connection)	9.5mm (Flare Connection)	9.5mm (Flare Connection)	9.5mm (Flare Connection)
		Suction Gas Pipes	15.9mm (Flare Connection)	15.9mm (Flare Connection)	15.9mm (Flare Connection)	15.9mm (Flare Connection)
Machine Weight (Mass)		kg	3.0	3.0	3.5	3.5
Standard Accessories			Installation manual, Gas piping connections, Insulation for fitting, Sealing material, Clamps	Installation manual, Gas piping connections, Insulation for fitting, Sealing material, Clamps	Installation manual, Gas piping connections, Insulation for fitting, Sealing material, Clamps	Installation manual, Gas piping connections, Insulation for fitting, Sealing material, Clamps
Drawing No.			4D045387A	4D045387A	4D045388A	4D045388A

Outdoor Air Processing Unit

Model		FXMQ125MFV1	FXMQ200MFV1	FXMQ250MFV1
★1 Cooling Capacity	kcal/h	12,000	19,300	24,100
	Btu/h	47,800	76,400	95,500
	kW	14.0	22.4	28.0
★1 Heating Capacity	kcal/h	7,700	12,000	15,000
	Btu/h	30,400	47,400	59,400
	kW	8.9	13.9	17.4
Casing		Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate
Dimensions: (H×W×D)		mm	470×744×1,100	470×1,380×1,100
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm	3×26×2.0	3×26×2.0
	Face Area	m ²	0.28	0.65
Fan	Model		D13/4G2DA1	D13/4G2DA1
	Type		Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	380×1	380×1
	Airflow Rate (H/L)	m ³ /min	18	28
		cfm	635	988
	External Static Pressure ★4	Pa	185	225
Drive		Direct Drive	Direct Drive	Direct Drive
Temperature Control		Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material		Glass Fiber	Glass Fiber	Glass Fiber
Air Filter		★2	★2	★2
Piping Connections	Liquid Pipes	9.5mm (Flare Connection)	9.5mm (Flare Connection)	9.5mm (Flare Connection)
	Gas Pipes	15.9mm (Flare Connection)	19.1mm (Brazing Connection)	22.2mm (Brazing Connection)
	Drain Pipe	(mm) PS1B (female thread)	PS1B (female thread)	PS1B (female thread)
Machine Weight (Mass)	kg	86	123	123
Sound Level (220V) ★3,★4	dBA	42	47	47
Safety Devices		Fuse Thermal Protector for Fan Motor	Fuse Thermal Protector for Fan Motor	Fuse Thermal Protector for Fan Motor
Refrigerant Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Standard Accessories		Operation Manual, Installation Manual, Sealing Pads, Screws, Clamps.	Operation Manual, Installation Manual, Sealing Pads, Connection Pipes, Screws, Clamps.	Operation Manual, Installation Manual, Sealing Pads, Connection Pipes, Screws, Clamps.
Connectable Outdoor Units ★5,★6		RXYQ8-54PAY1	RXYQ8-54PAY1	RXYQ10-54PAY1
Drawing No.		C:3D046147A	C:3D046147A	C:3D046147A

Notes:

- ★1. Specifications are based on the following conditions:
- Cooling: Outdoor temp. of 33°CDB, 28°CWB (68% RH). and discharge temp. of 18°CDB
 - Heating: Outdoor temp. of 0°CDB, -2.9°CWB (50% RH). and discharge temp. of 25°CDB
 - Equivalent reference piping length: 7.5m (0m Horizontal)
 - At 220V
- ★2. Air intake filter is not supplied, so be sure to install the optional long-life filter or high-efficiency filter. Please mount it in the duct system of the suction side. Select its colorimetric method (gravity method) 50% or more.
- ★3. Anechoic chamber conversion value, measured at a point 1.5m downward from the unit center. These values (measured at 220V) are normally somewhat higher during actual operation as a result of ambient conditions.
- ★4. Valves measured at 220 V.
- ★5. Within the range that the total capacity of indoor units is 50 to 100%, it is possible to connect to the outdoor unit.
- ★6. It is not possible to connect to the 5 HP outdoor unit. Not available for Heat Recovery type and VRV II-S series.
- This equipment cannot be incorporated into the refrigerant piping system or remote group control of the VRV II system.

Conversion Formulae

$$\begin{aligned} \text{kcal/h} &= \text{kW} \times 860 \\ \text{Btu/h} &= \text{kW} \times 3412 \\ \text{cfm} &= \text{m}^3/\text{min} \times 35.3 \end{aligned}$$

Part 3

Refrigerant Circuit

1. Refrigerant Circuit	78
1.1 RXYQ5P(A)	78
1.2 RXYQ8P(A)	80
1.3 RXYQ10P(A), 12P(A)	82
1.4 RXYQ14P(A), 16P(A), 18P(A)	84
1.5 Outdoor Air Processing Unit FXMQ125MFV1~250MFV1	86
2. Functional Parts Layout	87
2.1 RXYQ5P(A)	87
2.2 RXYQ8P(A)	88
2.3 RXYQ10P(A)	89
2.4 RXYQ12P(A)	90
2.5 RXYQ14P(A), 16P(A), 18P(A)	91
3. Refrigerant Flow for Each Operation Mode	92

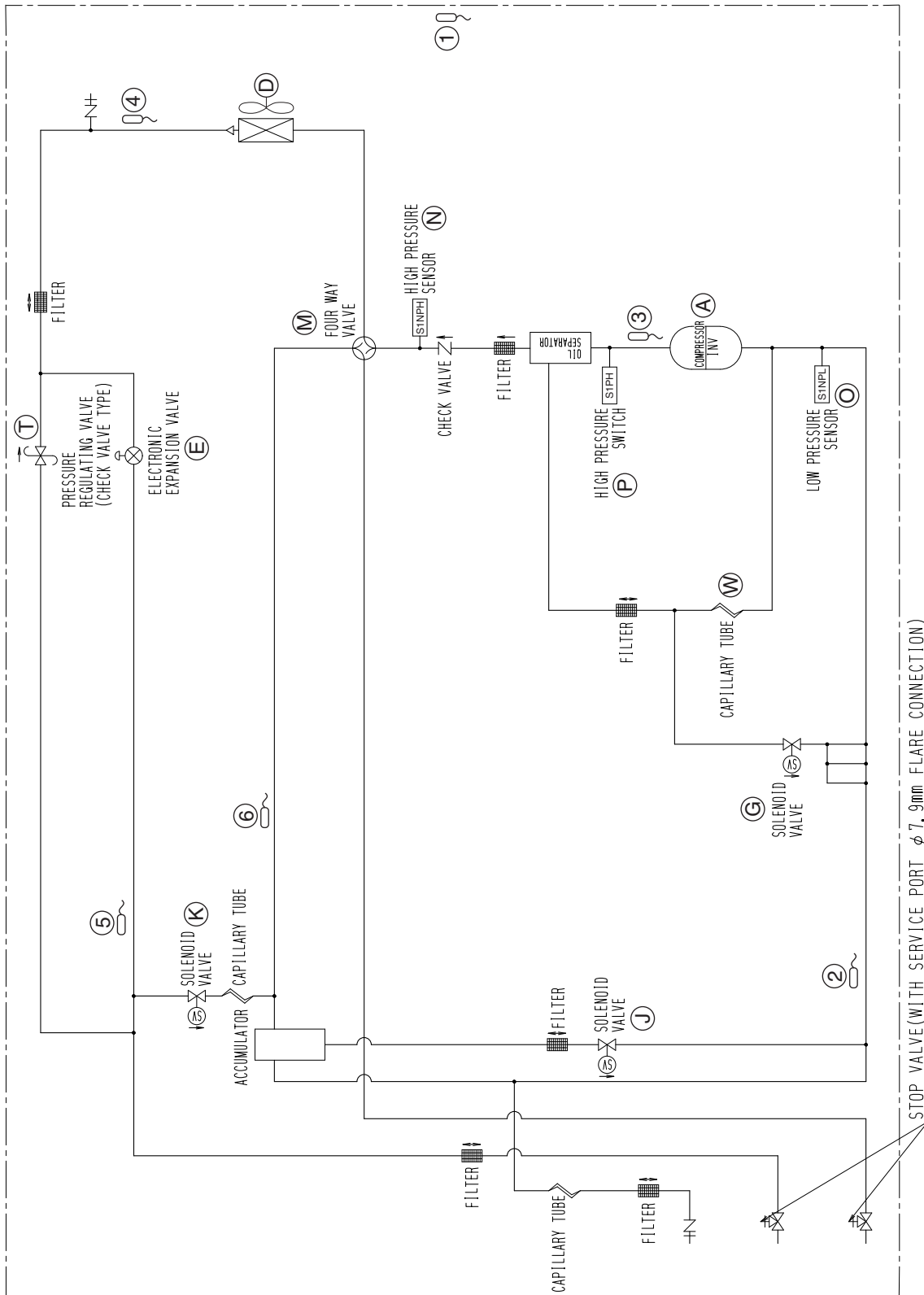
1. Refrigerant Circuit

1.1 RXYQ5P(A)

No. in refrigerant system diagram	Symbol	Name	Major Function
A	M1C	Inverter compressor (INV)	Inverter compressor is operated on frequencies between 52Hz and 188Hz by using the inverter. The number of operating steps is as follows when Inverter compressor is operated. RXYQ5P(A) : 18 steps
D	M1F	Inverter fan	Because the system is an air heat exchange type, the fan is operated 9-step rotation speed by using the inverter.
E	Y1E	Electronic expansion valve (Main: EV1)	While in heating operation, PI control is applied to keep the outlet superheated degree of air heat exchanger constant.
G	Y1S	Solenoid valve (Hot gas: SVP)	Used to prevent the low pressure from transient falling.
J	Y2S	Solenoid valve (Oil return: SVO)	Used to return oil from the accumulator to the compressor.
K	Y4S	Solenoid valve (Injection) SVT	Used to cool the compressor by injecting refrigerant when the compressor discharge temperature is high.
M	Y3S	Four way valve	Used to switch the operation mode between cooling and heating.
N	S1NPH	High pressure sensor	Used to detect high pressure.
O	S1NPL	Low pressure sensor	Used to detect low pressure.
P	S1PH	High pressure switch (For INV compressor)	In order to prevent the increase of high pressure when a malfunction occurs, this switch is activated at high pressure of 4.0 MPa or more to stop the compressor operation.
T	—	Pressure regulating valve 1	This valve opens at a pressure of 4.0 MPa for prevention of pressure increase, thus resulting in no damage of functional parts due to the increase of pressure in transportation or storage.
W	—	Capillary tube	Used to return the refrigerating oil separated through the oil separator to the compressor.
1	R1T	Thermistor (Outdoor air: Ta)	Used to detect outdoor temperature, correct discharge pipe temperature and others.
2	R2T	Thermistor (Suction pipe: Ts)	Used to detect suction pipe temperature.
3	R3T	Thermistor (INV discharge pipe: Tdi)	Used to detect discharge pipe temperature, make the temperature protection control of compressor, and others.
4	R4T	Thermistor (Heat exchanger deicer: Tb)	Used to detect liquid pipe temperature of air heat exchanger, determine defrosting operation, and others.
5	R6T	Thermistor (Liquid pipe: Tl)	Used to detect liquid pipe temperature.
6	R7T	Thermistor (Accumulator inlet: Ts1)	Used to detect gas pipe temperature at the accumulator inlet. Keep the suction superheated degree constant in heating operation, and others.

RXYQ5P(A)

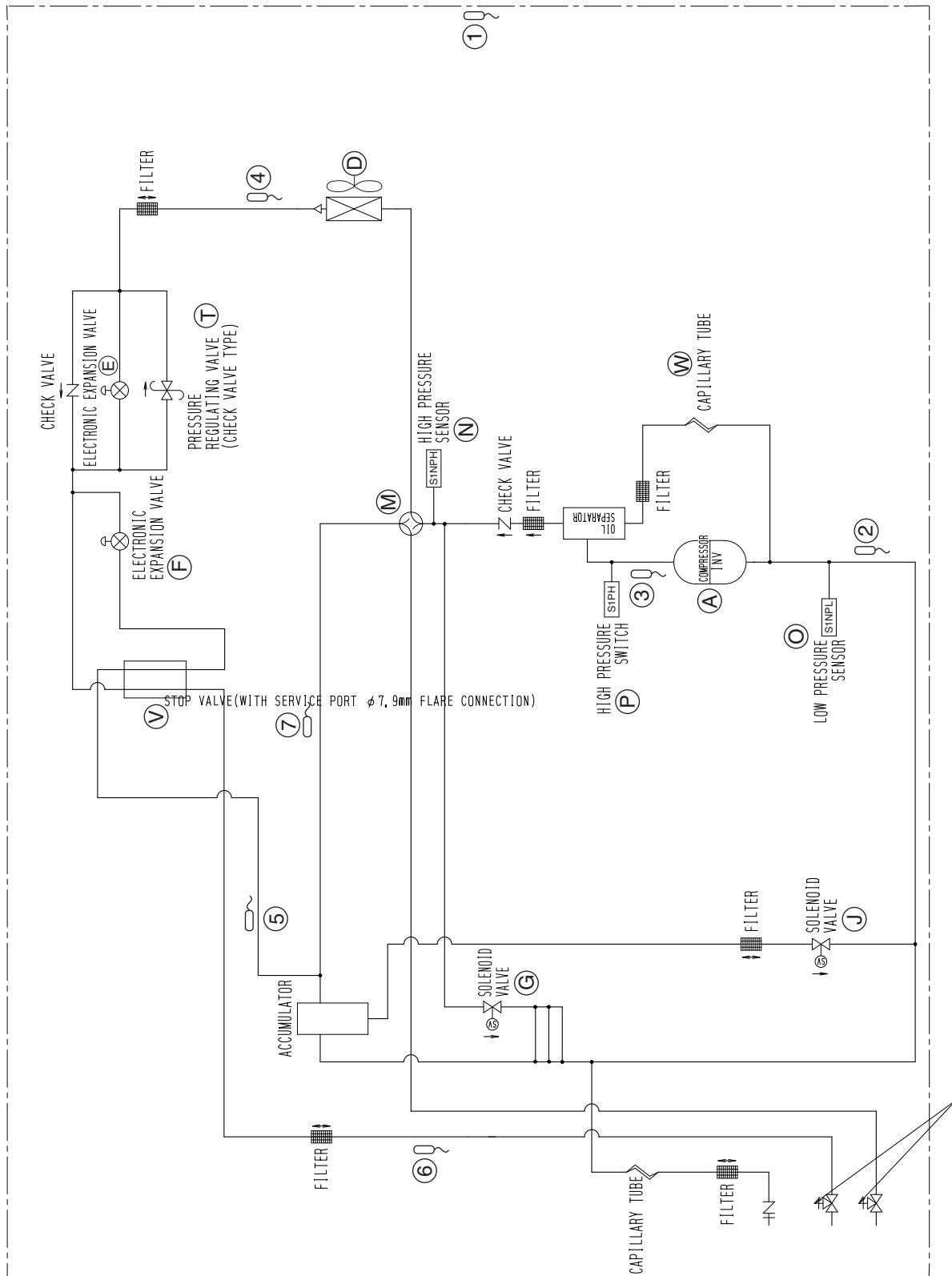
3D055764D



1.2 RXYQ8P(A)

No. in refrigerant system diagram	Symbol	Name	Major Function
A	M1C	Inverter compressor (INV)	Inverter compressor is operated on frequencies between 52Hz and 266Hz by using the inverter, while Standard compressor is operated with commercial power supply only. The number of operating steps is as follows when Inverter compressor is operated in combination with Standard compressor. RXYQ8P(A) : 24 steps
D	M1F	Inverter fan	Because the system is an air heat exchange type, the fan is operated 9-step rotation speed by using the inverter.
E	Y1E	Electronic expansion valve (Main: EV1)	While in heating operation, PI control is applied to keep the outlet superheated degree of air heat exchanger constant.
F	Y2E	Electronic expansion valve (Subcooling: EV2)	PI control is applied to keep the outlet superheated degree of subcooling heat exchanger constant.
G	Y1S	Solenoid valve (Hot gas: SVP)	Used to prevent the low pressure from transient falling.
J	Y2S	Solenoid valve (Oil return: SVO)	Used to return oil from the accumulator to the compressor.
M	Y3S	Four way valve	Used to switch the operation mode between cooling and heating.
N	S1NPH	High pressure sensor	Used to detect high pressure.
O	S1NPL	Low pressure sensor	Used to detect low pressure.
P	S1PH	High pressure switch (For INV compressor)	In order to prevent the increase of high pressure when a malfunction occurs, this switch is activated at high pressure of 4.0 MPa or more to stop the compressor operation.
T	—	Pressure regulating valve (Liquid pipe)	This valve opens at a pressure of 4.0 MPa for prevention of pressure increase, thus resulting in no damage of functional parts due to the increase of pressure in transportation or storage.
V	—	Subcooling heat exchanger	Used to subcool liquid refrigerant from the electronic expansion valve (cooling) or indoor units (heating).
W	—	Capillary tube	Used to return the refrigerating oil separated through the oil separator to the INV compressor.
1	R1T	Thermistor (Outdoor air: Ta)	Used to detect outdoor temperature, correct discharge pipe temperature, and others.
2	R2T	Thermistor (Suction pipe: Ts)	Used to detect suction pipe temperature.
3	R3T	Thermistor (INV discharge pipe: Tdi)	Used to detect discharge pipe temperature, make the temperature protection control of compressor, and others.
4	R4T	Thermistor (Heat exchanger deicer: Tb)	Used to detect liquid pipe temperature of air heat exchanger, determine defrosting operation, and others.
5	R5T	Thermistor (Subcooling heat exchanger gas pipe: Tsh)	Used to detect gas pipe temperature of gas pipe on the evaporation side of subcooling heat exchanger, keep the superheated degree at the outlet of subcooling heat exchanger constant, and others.
6	R6T	Thermistor (Receiver outlet liquid pipe: TI)	Used to detect receiver outlet liquid pipe temperature.
7	R7T	Thermistor (Accumulator inlet: Ts1)	Used to detect gas pipe temperature at the accumulator inlet. Keep the suction superheated degree constant in heating operation, and others.

RXYQ8P(A)

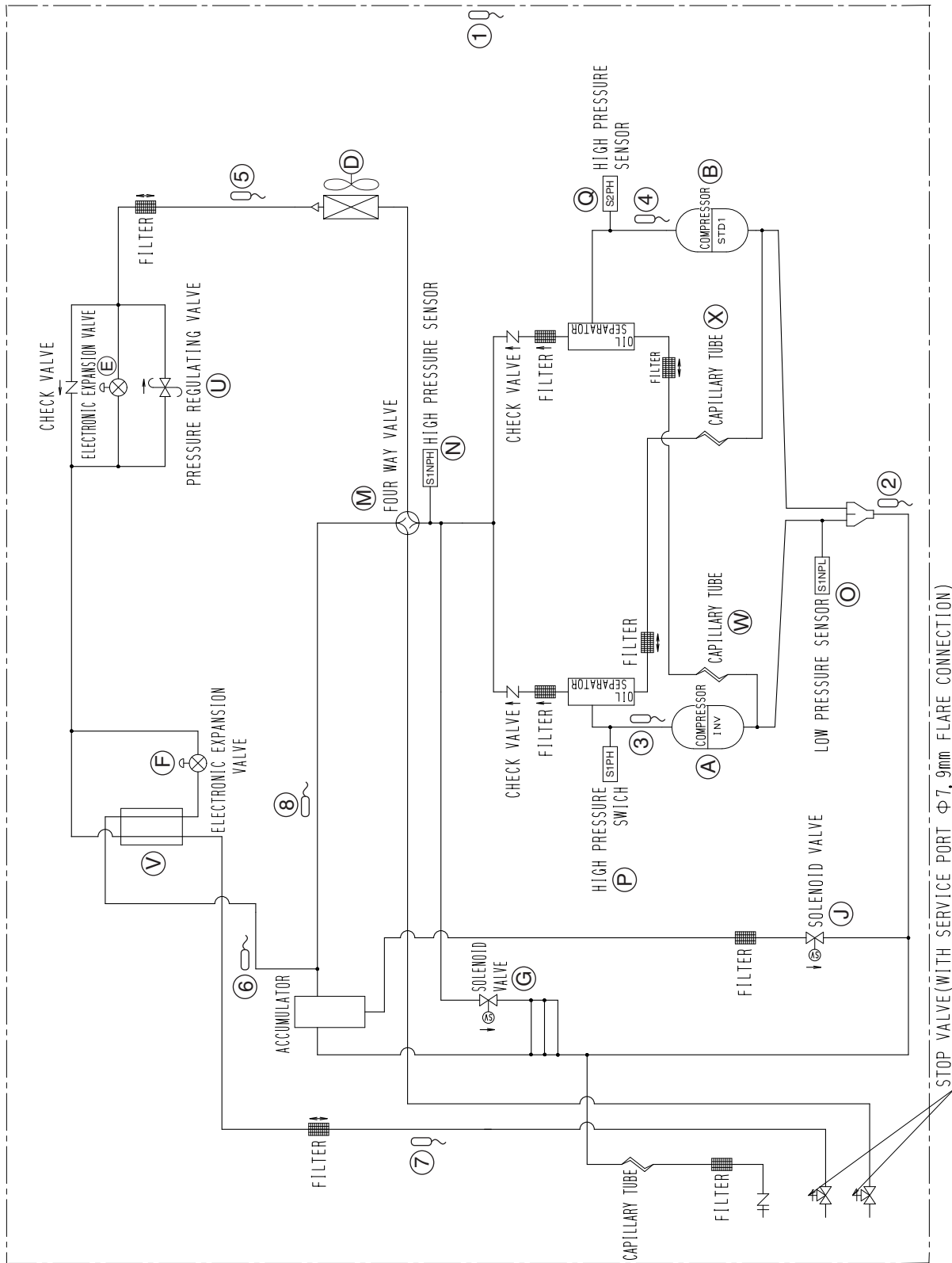


3D055765D

1.3 RXYQ10P(A), 12P(A)

No. in refrigerant system diagram	Symbol	Name	Major Function
A	M1C	Inverter compressor (INV)	Inverter compressor is operated on frequencies between 52Hz and 210Hz by using the inverter, while Standard compressor is operated with commercial power supply only. The number of operating steps is as follows when Inverter compressor is operated in combination with Standard compressor. RXYQ10, 12P(A) : 37 steps
B	M2C	Standard compressor 1 (STD1)	
D	M1F	Inverter fan	Because the system is an air heat exchange type, the fan is operated 9-step rotation speed by using the inverter.
E	Y1E	Electronic expansion valve (Main: EV1)	While in heating operation, PI control is applied to keep the outlet superheated degree of air heat exchanger constant.
F	Y2E	Electronic expansion valve (Subcooling: EV3)	PI control is applied to keep the outlet superheated degree of subcooling heat exchanger constant.
G	Y1S	Solenoid valve (Hot gas: SVP)	Used to prevent the low pressure from transient falling.
J	Y2S	Solenoid valve (Oil return: SVO)	Used to return oil from the accumulator to the compressor.
M	Y3S	Four way valve	Used to switch the operation mode between cooling and heating.
N	S1NPH	High pressure sensor	Used to detect high pressure.
O	S1NPL	Low pressure sensor	Used to detect low pressure.
P	S1PH	High pressure switch (For INV compressor)	In order to prevent the increase of high pressure when a malfunction occurs, this switch is activated at high pressure of 4.0 MPa or more to stop the compressor operation.
Q	S2PH	High pressure switch (For STD compressor 1)	
U	—	Pressure regulating valve (Liquid pipe)	This valve opens at a pressure of 4.0 MPa for prevention of pressure increase, thus resulting in no damage of functional parts due to the increase of pressure in transportation or storage.
V	—	Subcooling heat exchanger	Used to subcool liquid refrigerant from the electronic expansion valve (cooling) or indoor units (heating).
W	—	Capillary tube	Used to return the refrigerating oil separated through the oil separator to the INV compressor.
X	—	Capillary tube	Used to return the refrigerating oil separated through the oil separator to the STD1 compressor.
1	R1T	Thermistor (Outdoor air: Ta)	Used to detect outdoor temperature, correct discharge pipe temperature, and others.
2	R2T	Thermistor (Suction pipe: Ts)	Used to detect suction pipe temperature.
3	R31T	Thermistor (INV discharge pipe: Tdi)	Used to detect discharge pipe temperature, make the temperature protection control of compressor, and others.
4	R32T	Thermistor (STD1 discharge pipe: Tds1)	
5	R4T	Thermistor (Heat exchanger deicer: Tb)	Used to detect liquid pipe temperature of air heat exchanger, determine defrosting operation, and others.
6	R5T	Thermistor (Subcooling heat exchanger gas pipe: Tsh)	Used to detect gas pipe temperature on the evaporation side of subcooling heat exchanger, keep the superheated degree at the outlet of subcooling heat exchanger constant, and others.
7	R6T	Thermistor (Liquid pipe: Tl)	Used to detect liquid pipe temperature.
8	R7T	Thermistor (Accumulator inlet: Ts1)	Used to detect gas pipe temperature at the accumulator inlet. Keep the suction superheated degree constant in heating operation, and others.

RXYQ10P(A), 12P(A)

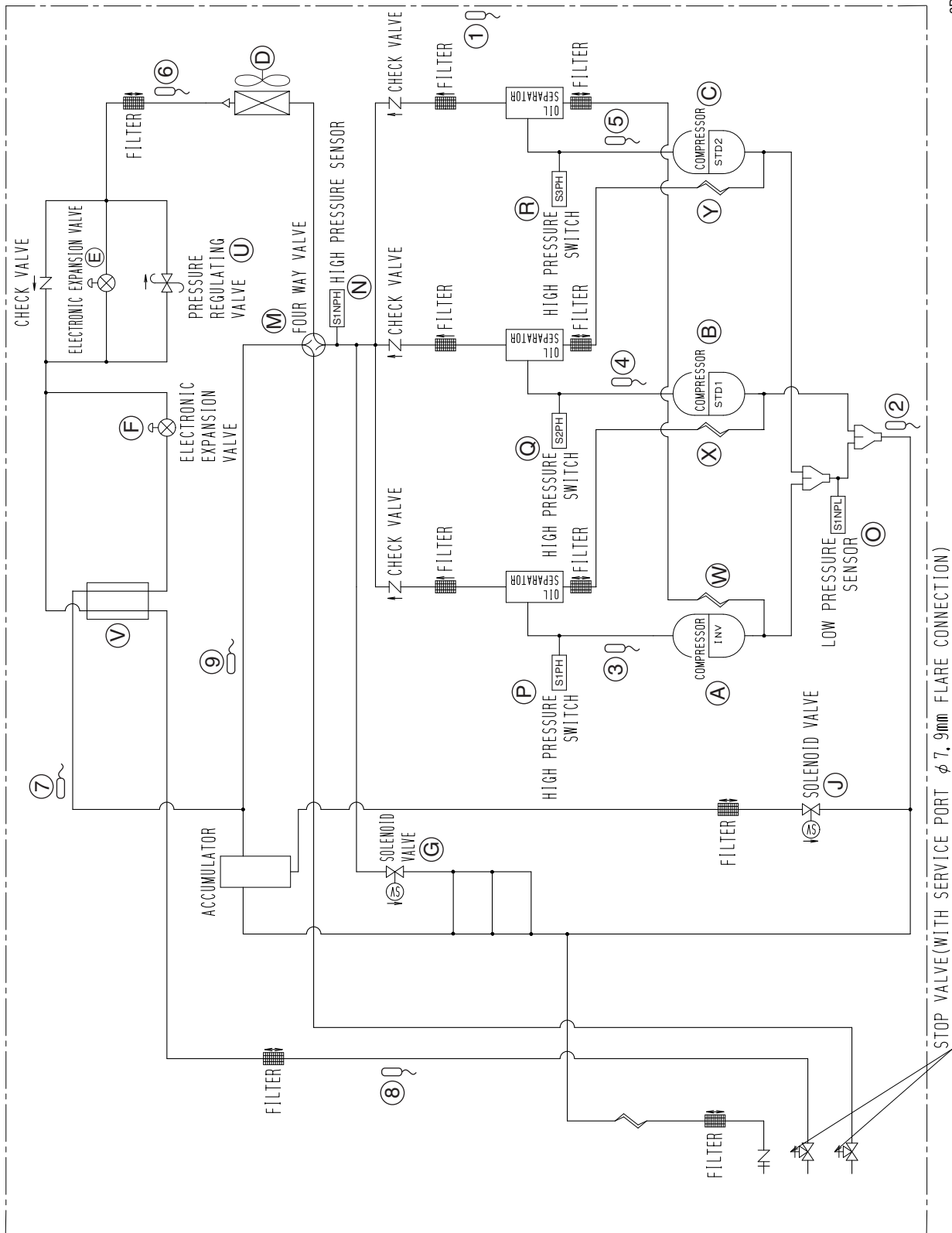


3D055766E

1.4 RXYQ14P(A), 16P(A), 18P(A)

No. in refrigerant system diagram	Symbol	Name	Major Function
A	M1C	Inverter compressor (INV)	Inverter compressor is operated on frequencies between 52Hz and 266Hz by using the inverter, while Standard compressor is operated with commercial power supply only. The number of operating steps is as follows when Inverter compressor is operated in combination with Standard compressor. RXYQ14P(A) or 16P(A) : 51 steps, RXYQ18P(A) : 55 steps
B	M2C	Standard compressor 1 (STD1)	
C	M3C	Standard compressor 1 (STD2)	
D	M1F	Inverter fan	Because the system is an air heat exchange type, the fan is operated 8-step rotation speed by using the inverter.
E	Y1E	Electronic expansion valve (Main: EV1)	While in heating operation, PI control is applied to keep the outlet superheated degree of air heat exchanger constant.
F	Y2E	Electronic expansion valve (Subcooling: EV3)	PI control is applied to keep the outlet superheated degree of subcooling heat exchanger constant.
G	Y1S	Solenoid valve (Hot gas: SVP)	Used to prevent the low pressure from transient falling.
J	Y2S	Solenoid valve (Oil return: SVO)	Used to return oil from the accumulator to the compressor.
M	Y3S	Four way valve	Used to switch the operation mode between cooling and heating.
N	S1NPH	High pressure sensor	Used to detect high pressure.
O	S1NPL	Low pressure sensor	Used to detect low pressure.
P	S1PH	High pressure switch (For INV compressor)	In order to prevent the increase of high pressure when a malfunction occurs, this switch is activated at high pressure of 4.0 MPa or more to stop the compressor operation.
Q	S2PH	High pressure switch (For STD compressor 1)	
R	S3PH	High pressure switch (For STD compressor 2)	
U	—	Pressure regulating valve (Liquid pipe)	This valve opens at a pressure of 4.0 MPa for prevention of pressure increase, thus resulting in no damage of functional parts due to the increase of pressure in transportation or storage.
V	—	Subcooling heat exchanger	Used to subcool liquid refrigerant from the electronic expansion valve (cooling) or indoor units (heating).
W	—	Capillary tube	Used to return the refrigerating oil separated through the oil separator to the INV compressor.
X	—	Capillary tube	Used to return the refrigerating oil separated through the oil separator to the STD1 compressor.
Y	—	Capillary tube	Used to return the refrigerating oil separated through the oil separator to the STD2 compressor.
1	R1T	Thermistor (Outdoor air: Ta)	Used to detect outdoor temperature, correct discharge pipe temperature, and others.
2	R2T	Thermistor (Suction pipe: Ts)	Used to detect suction pipe temperature.
3	R31T	Thermistor (INV discharge pipe: Tdi)	Used to detect discharge pipe temperature, make the temperature protection control of compressor, and others.
4	R32T	Thermistor (STD1 discharge pipe: Tds1)	
5	R33T	Thermistor (STD2 discharge pipe: Tds2)	
6	R4T	Thermistor (Heat exchanger deicer: Tb)	Used to detect liquid pipe temperature of air heat exchanger, determine defrosting operation, and others.
7	R5T	Thermistor (Subcooling heat exchanger gas pipe: Tsh)	Used to detect gas pipe temperature on the evaporation side of subcooling heat exchanger, keep the superheated degree at the outlet of subcooling heat exchanger constant, and others.
8	R6T	Thermistor (Liquid pipe: Tl)	Used to detect liquid pipe temperature.
9	R7T	Thermistor (Accumulator inlet: Ts1)	Used to detect gas pipe temperature at the accumulator inlet. Keep the suction superheated degree constant in heating operation, and others.

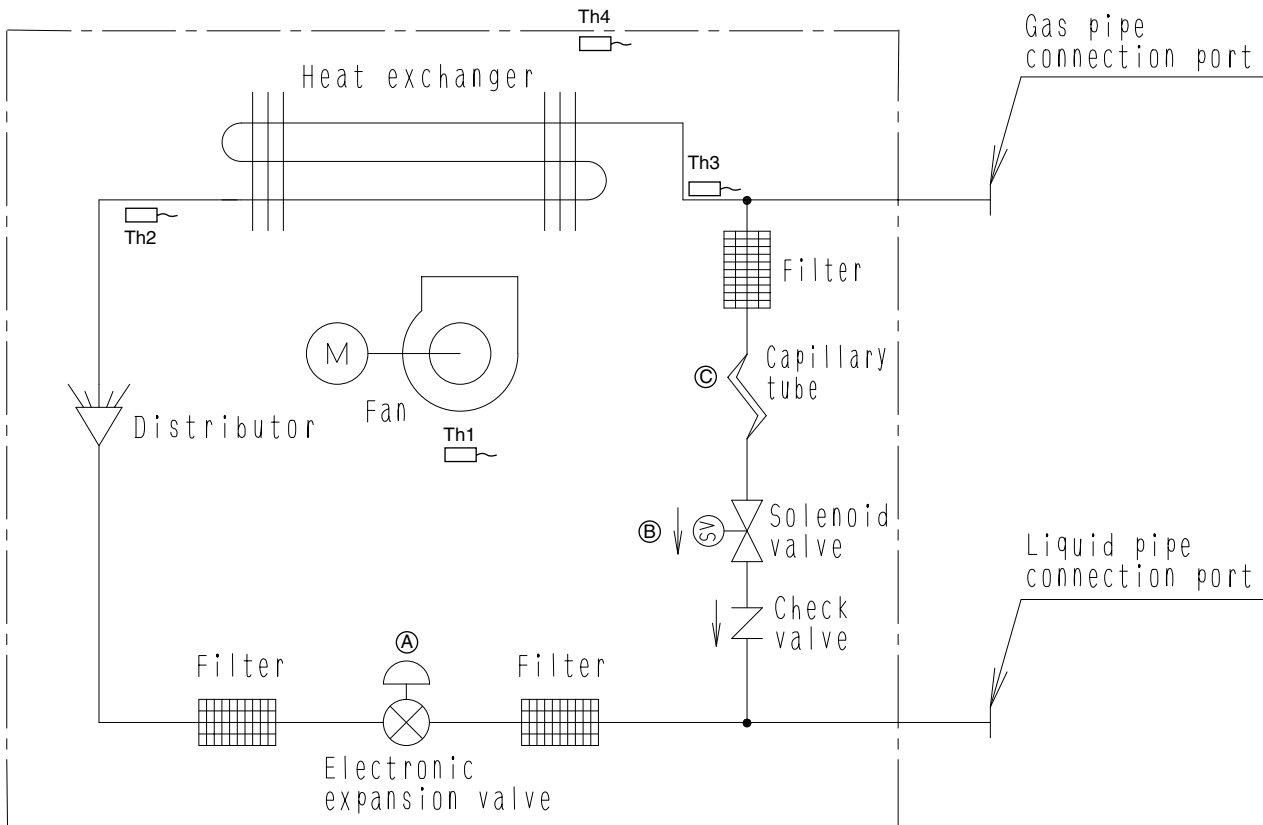
RXYQ14P(A), 16P(A), 18P(A)



3D050785C

1.5 Outdoor Air Processing Unit FXMQ125MFV1~250MFV1

1.5.1 Refrigerant System



4D018650B

Main Control Equipment

Code	Symbol	Name	Main function
A	Y1E	Electronic expansion valve	Used to control the flow rate of refrigerant, and make the SH control while in cooling or the SC control while in heating.*
B	Y1S	Solenoid valve	Used to bypass hot gas while in heating with thermostat OFF.
C	—	Capillary tube	Used to reduce pressure from high to low in bypassing hot gas.

*SH control: Superheated control of heat exchanger outlet

SC control: Subcooling control of heat exchanger outlet

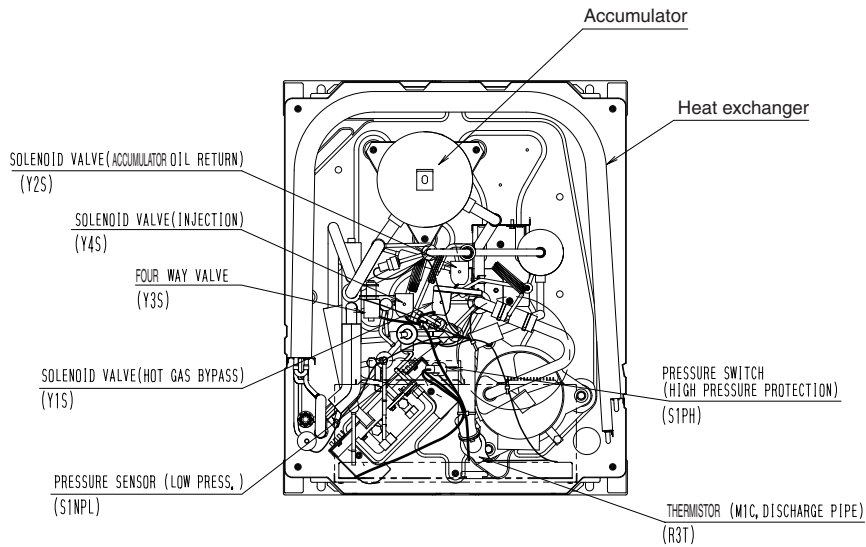
Thermistor

Code	Symbol	Name	Main function
Th1	R1T	Suction air temperature thermistor	Used to turn ON or OFF the thermostat and select cooling or heating operation.
Th2	R2T	Liquid pipe temperature thermistor	Used to control the opening degree of EV (Y1E) under the SC control.
Th3	R3T	Gas pipe temperature thermistor	Used to control the opening degree of EV (Y1E) under the SH control.
Th4	R4T	Discharge air temperature thermistor	Used to control the electronic expansion valve opening and thermostat ON/OFF so as to keep the discharge air temperature at the set temperature.

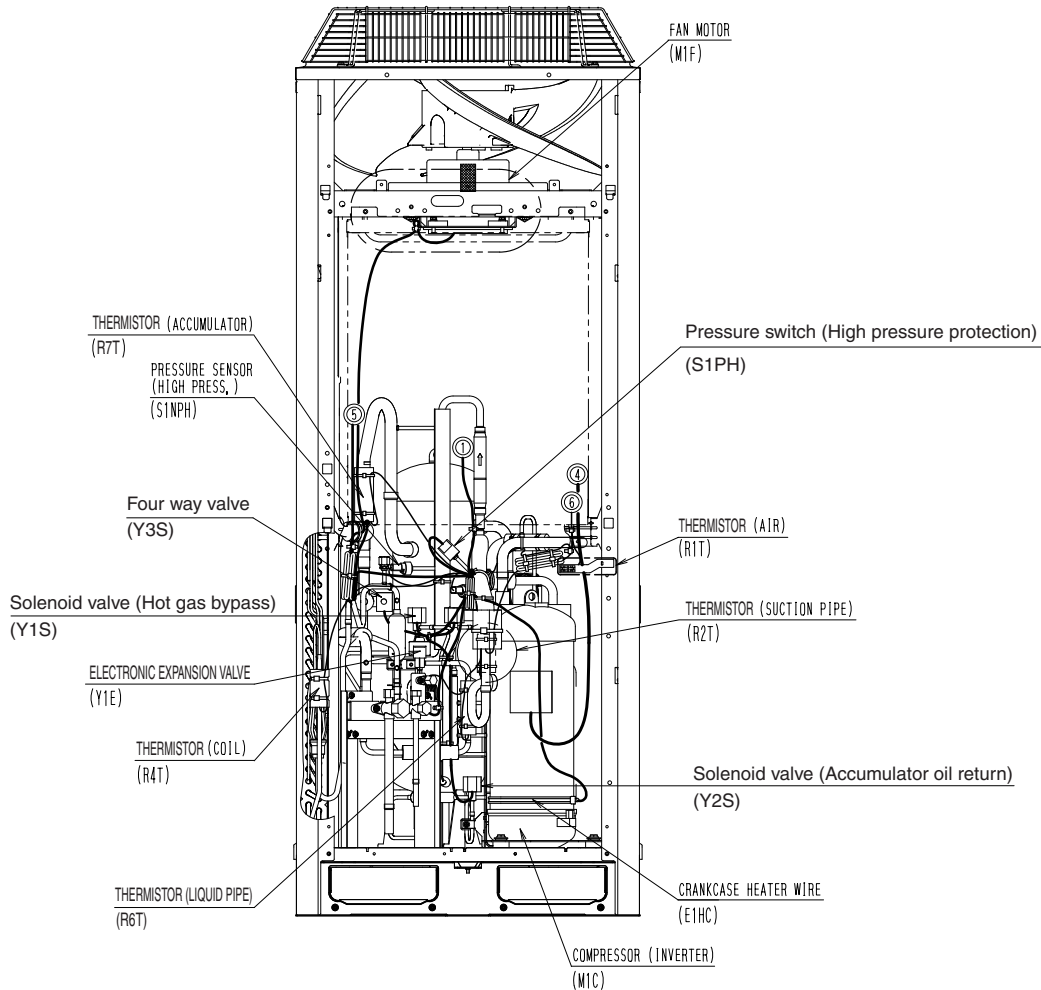
2. Functional Parts Layout

2.1 RXYQ5P(A)

Top View

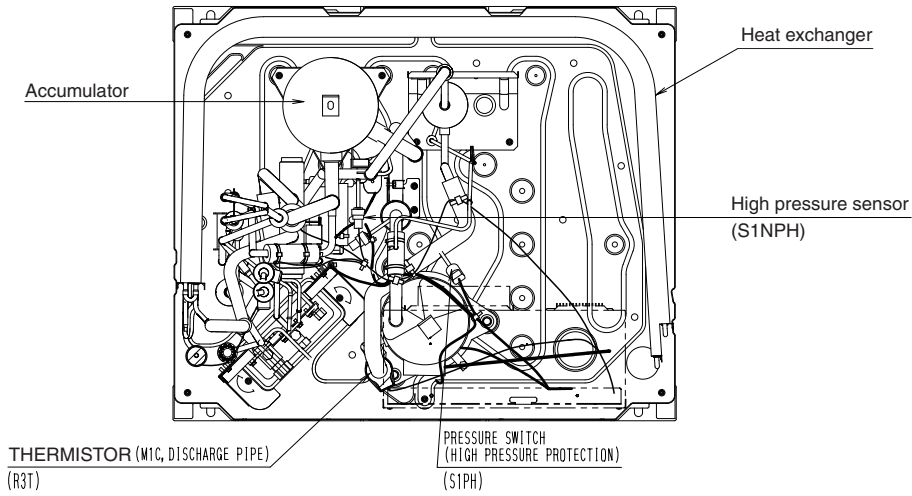


Front View

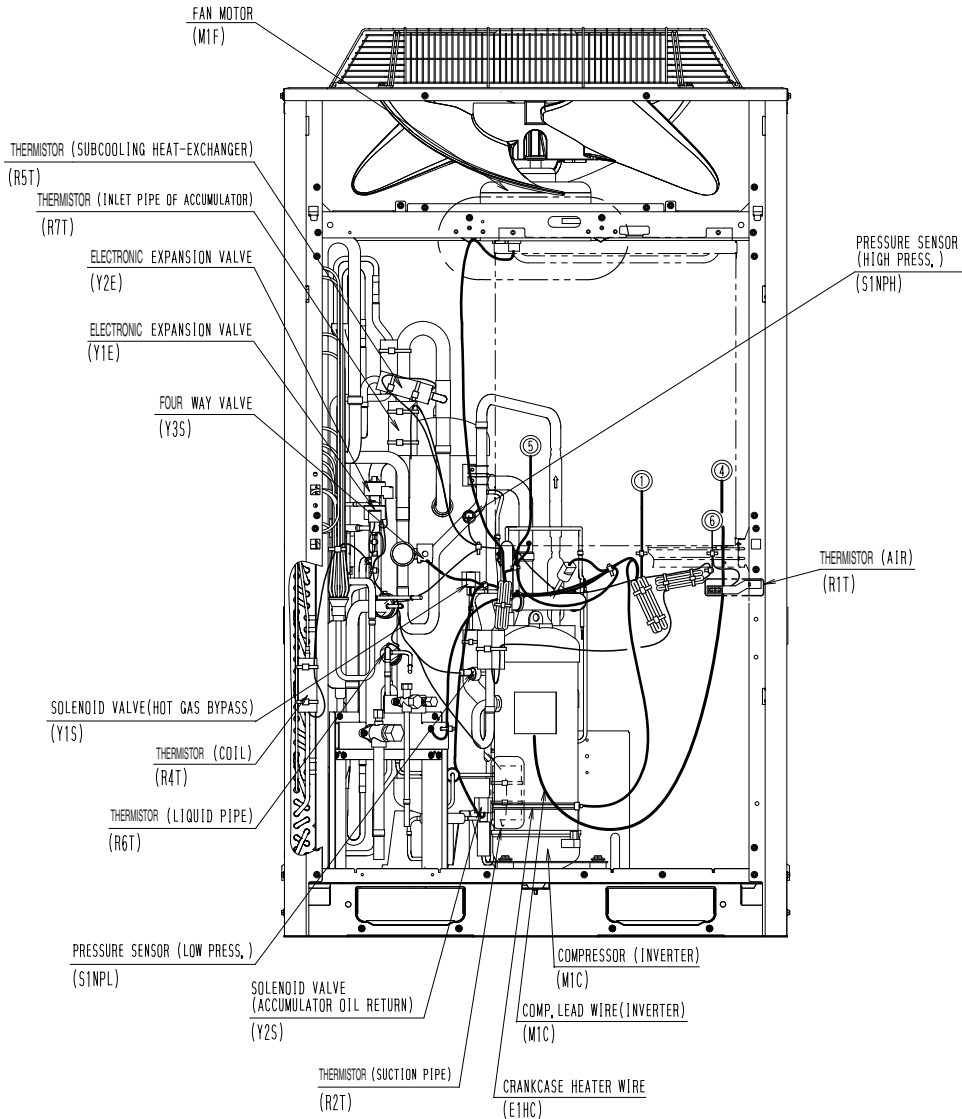


2.2 RXYQ8P(A)

Top View

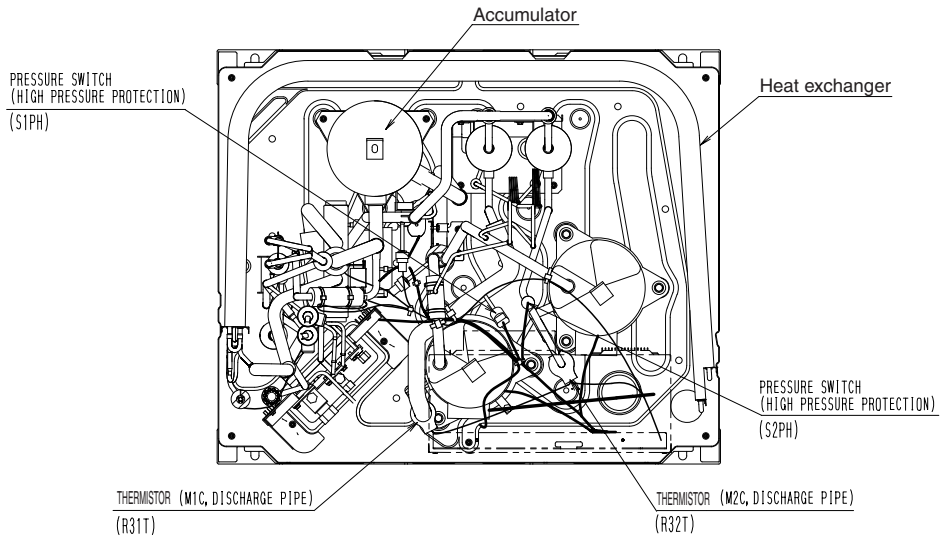


Front View

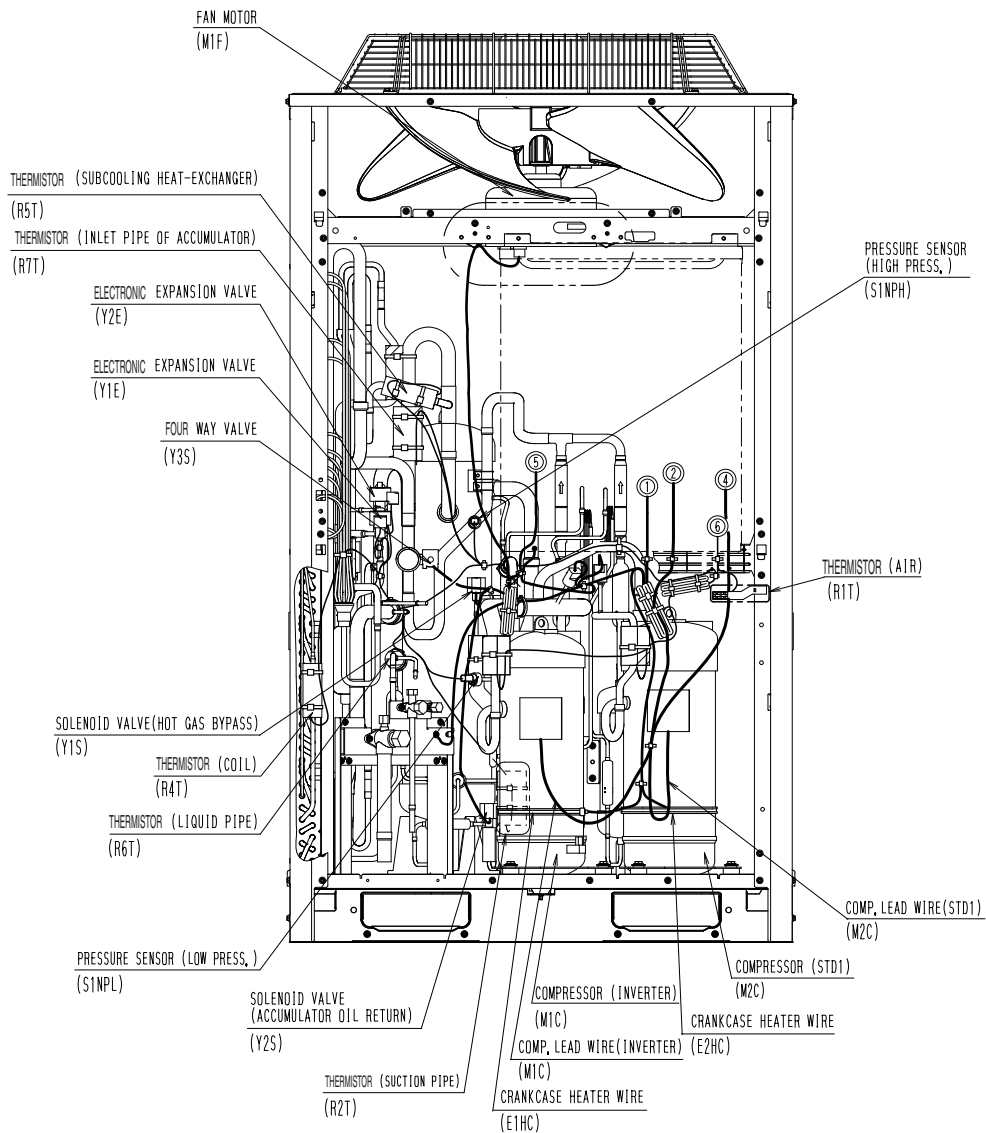


2.3 RXYQ10P(A)

Top View

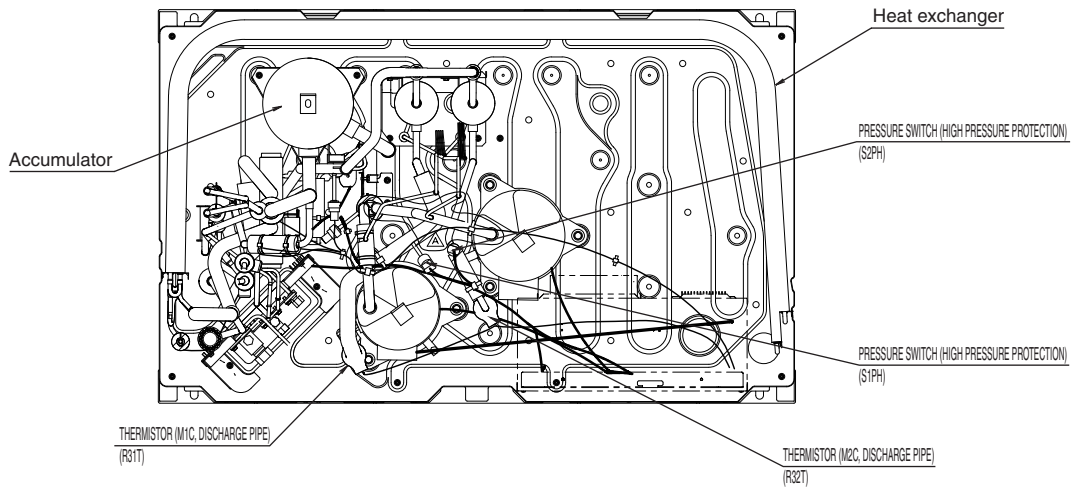


Front View

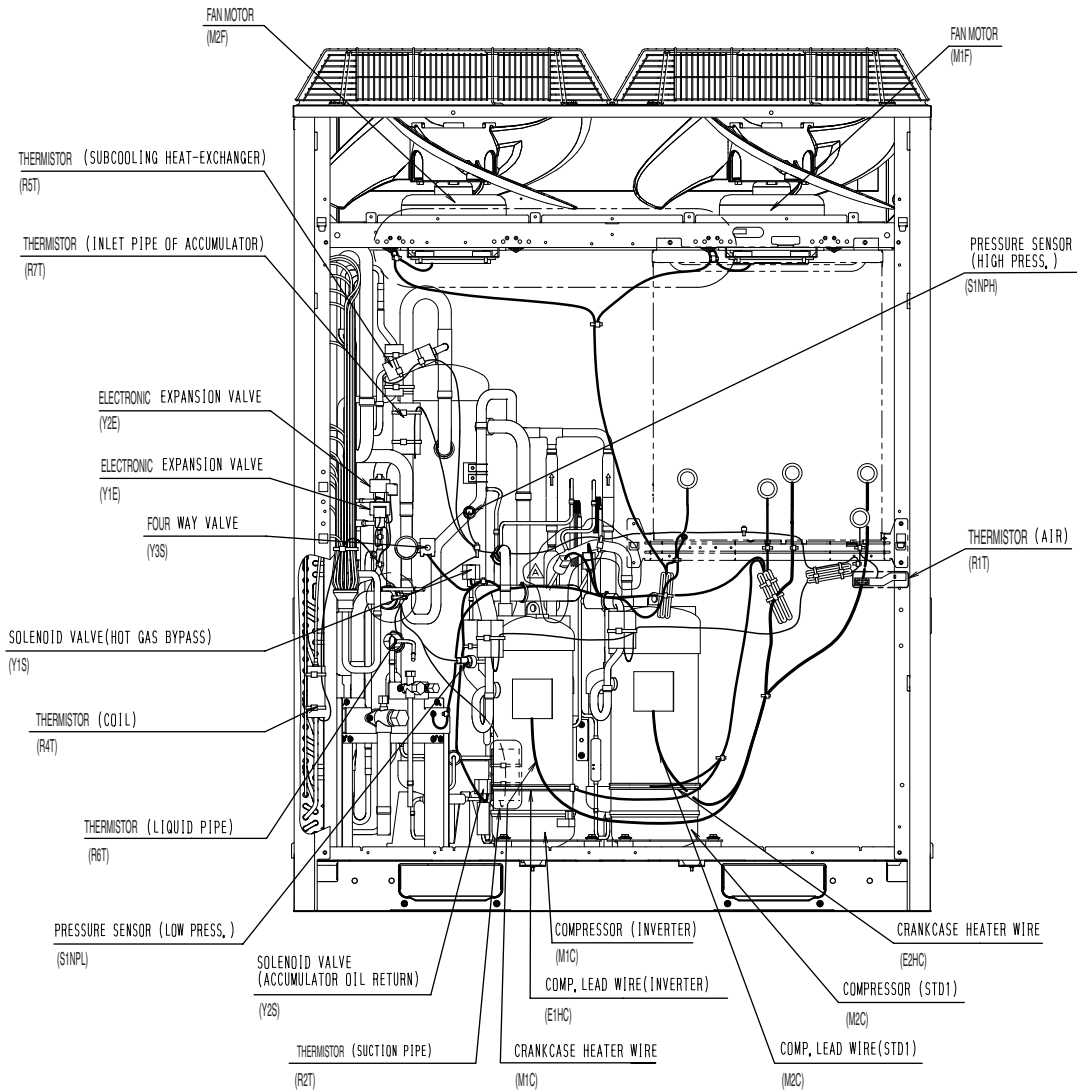


2.4 RXYQ12P(A)

Top View

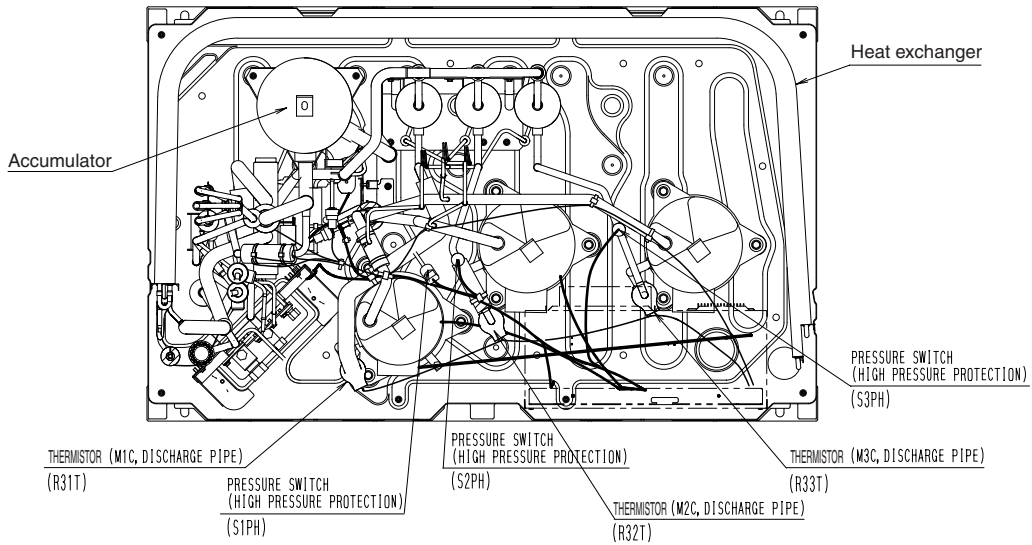


Front View

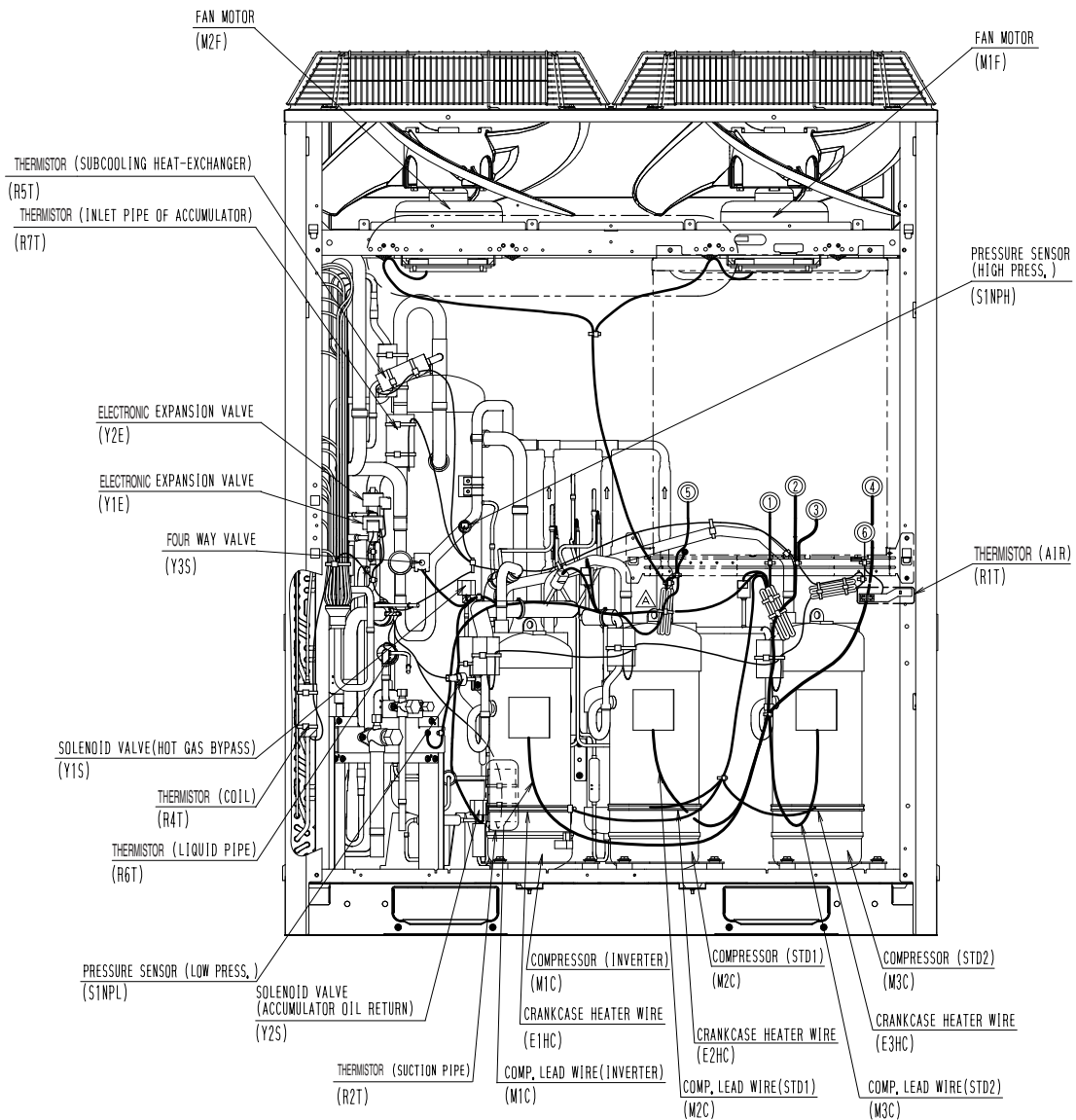


2.5 RXYQ14P(A), 16P(A), 18P(A)

Top View

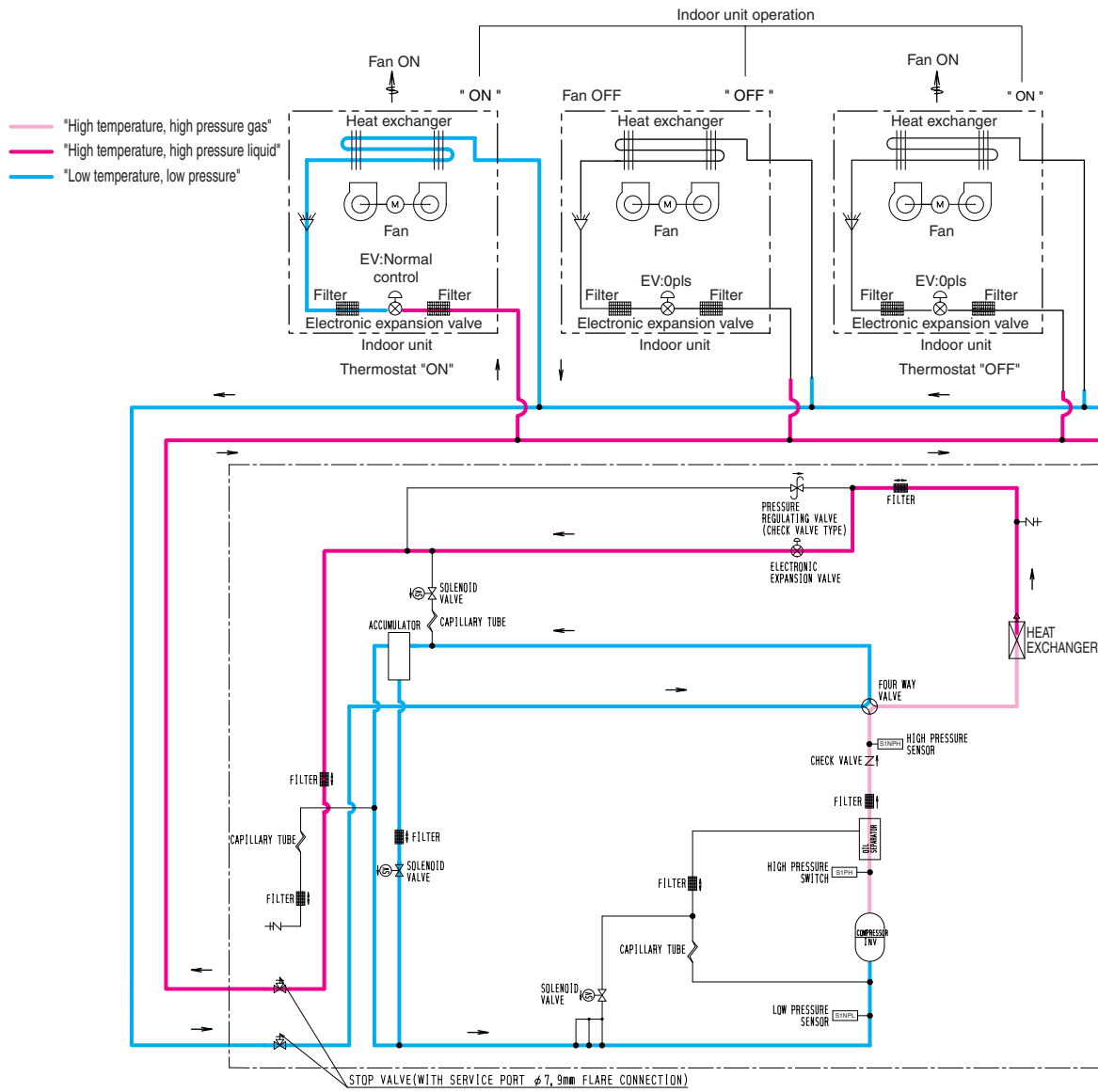


Front View

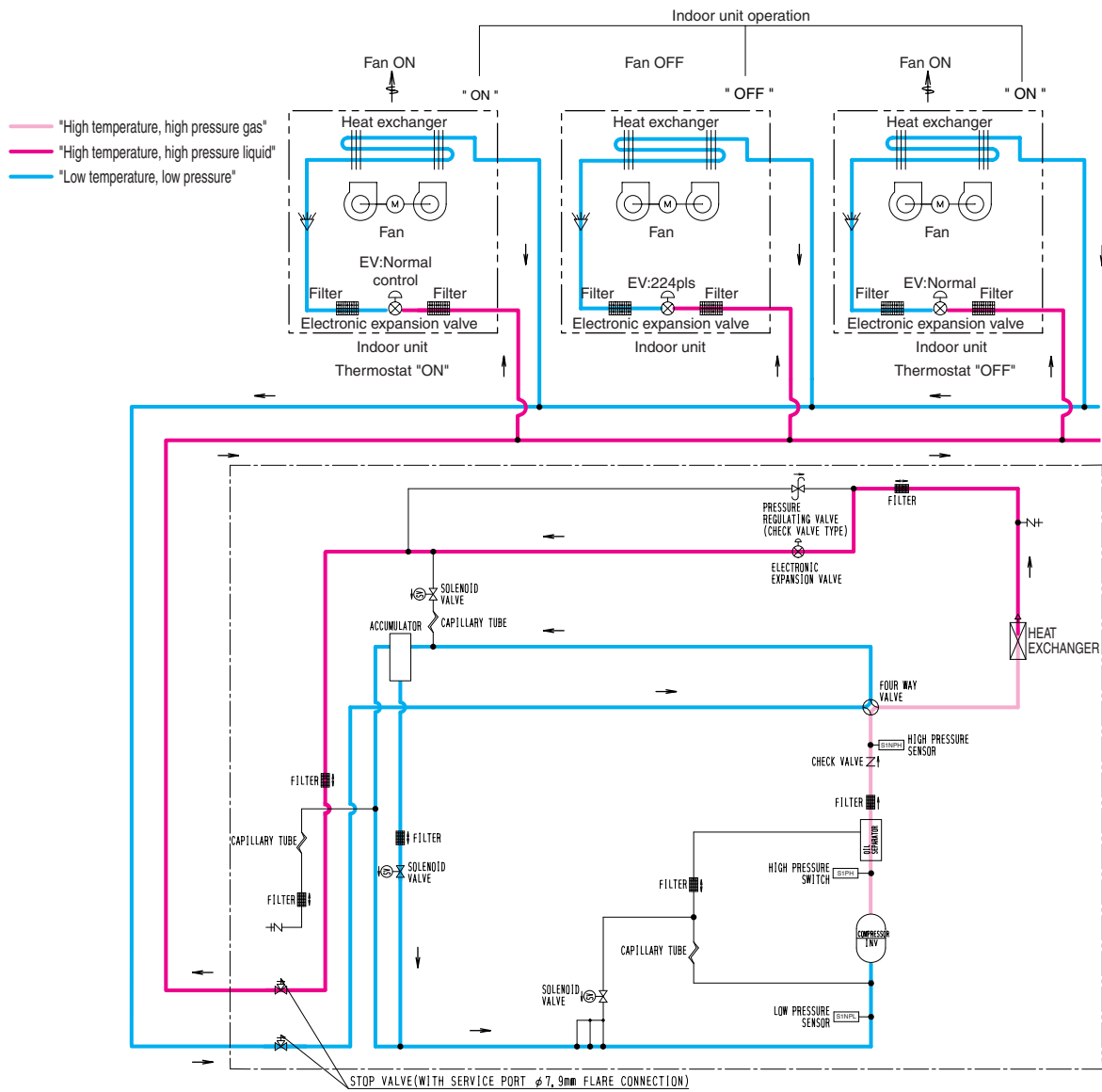


3. Refrigerant Flow for Each Operation Mode

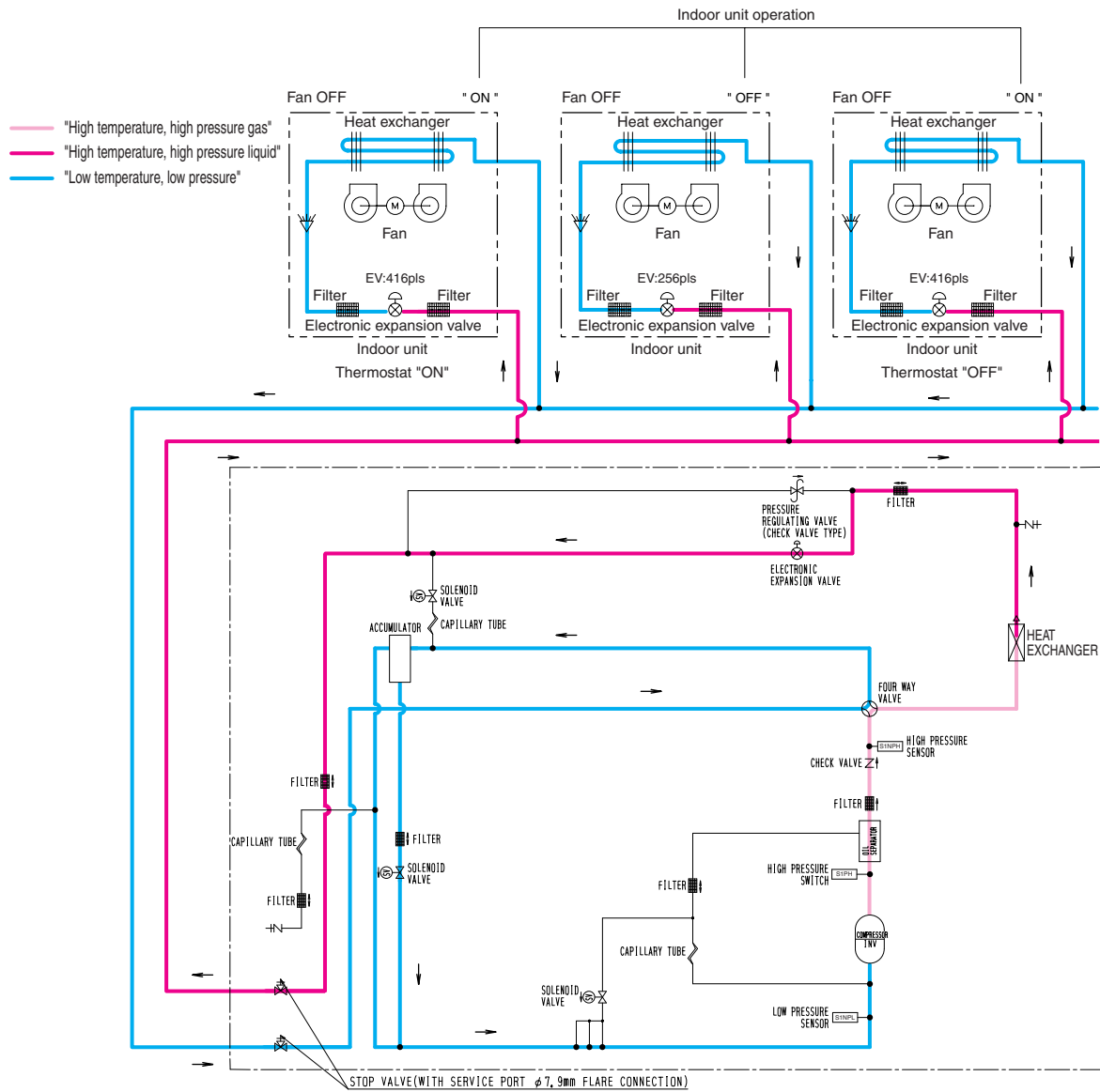
RXYQ5P(A) Cooling Operation



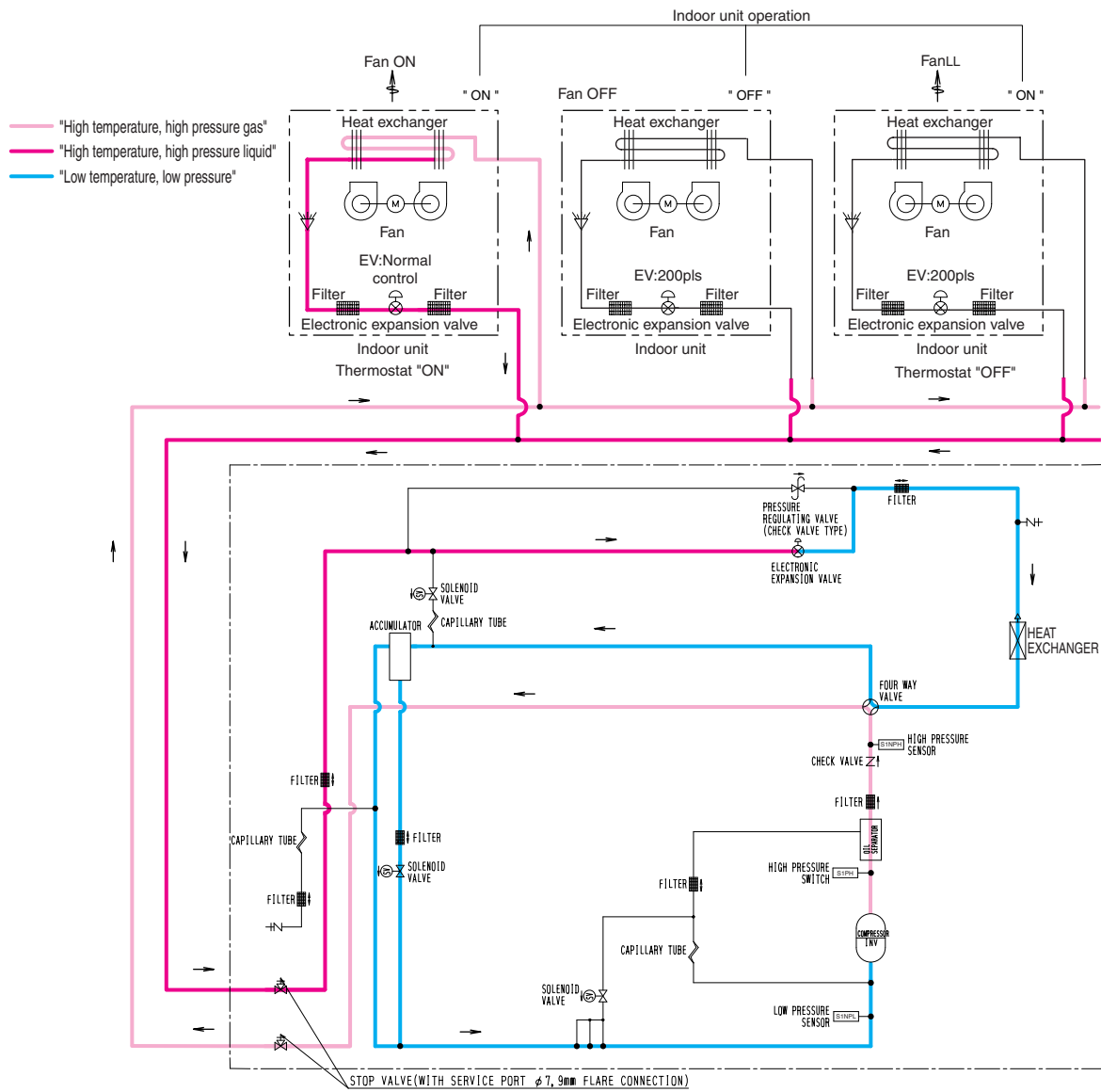
Cooling Oil Return Operation



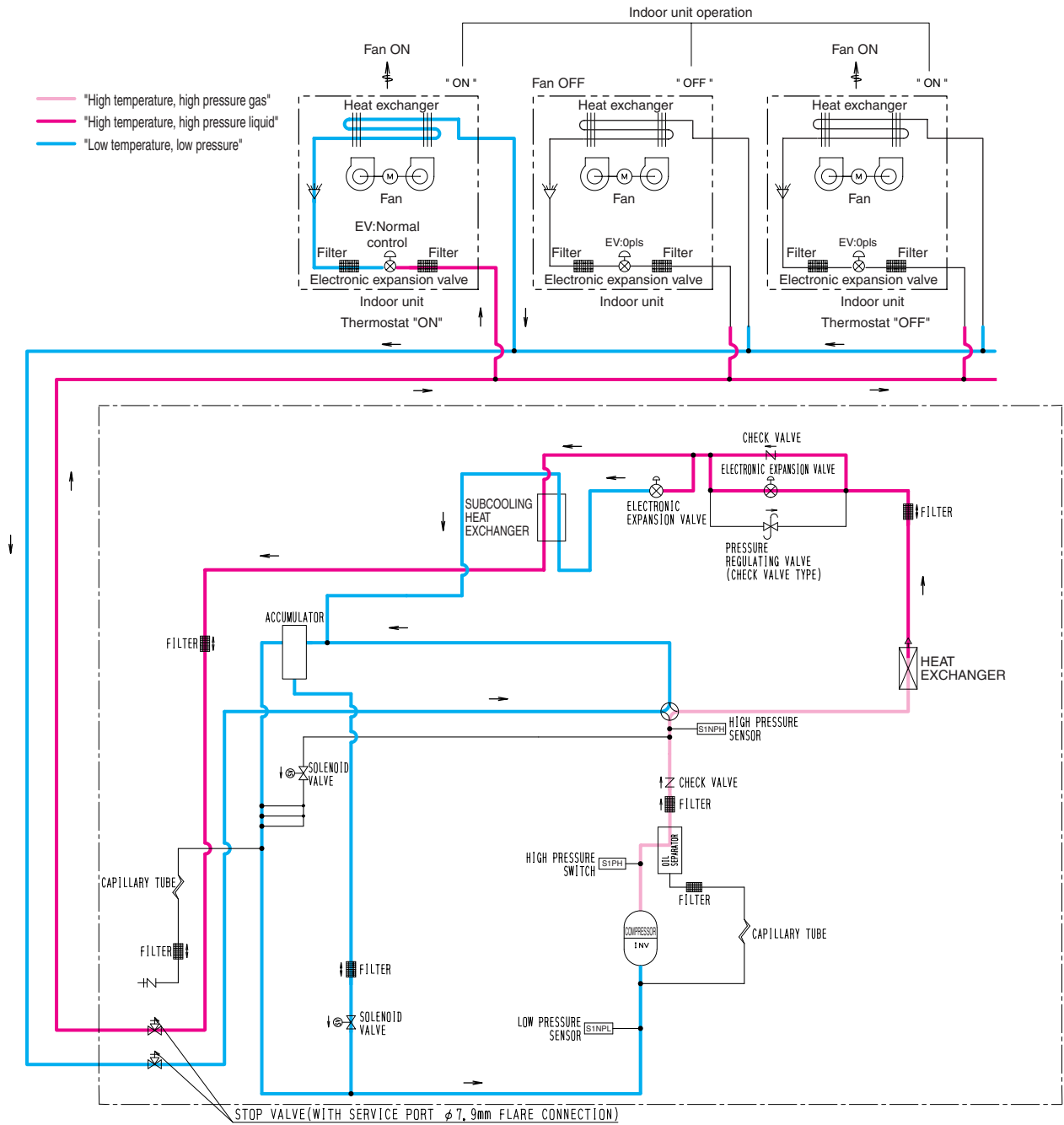
Heating Oil Return & Defrost Operation



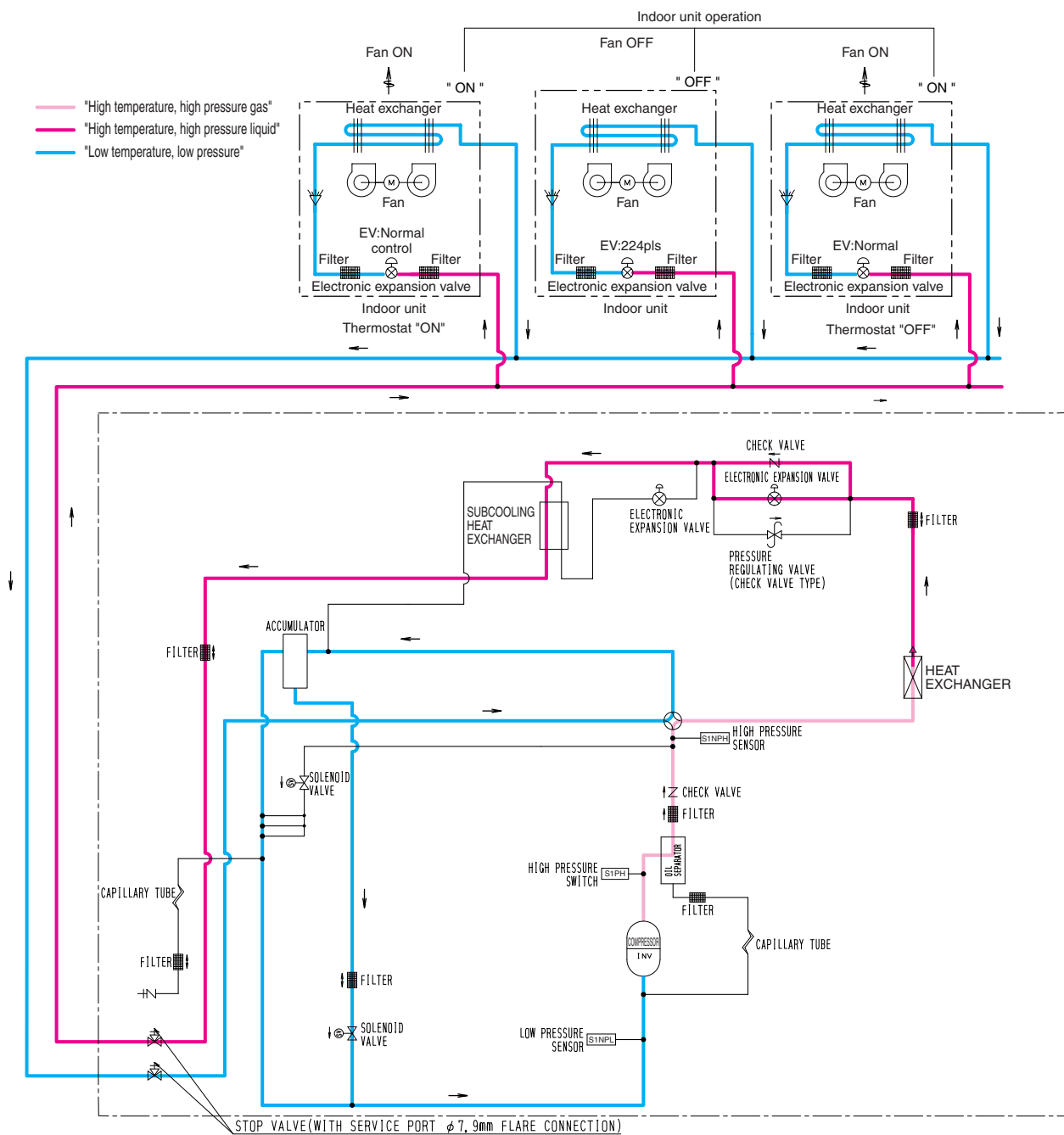
Heating Operation



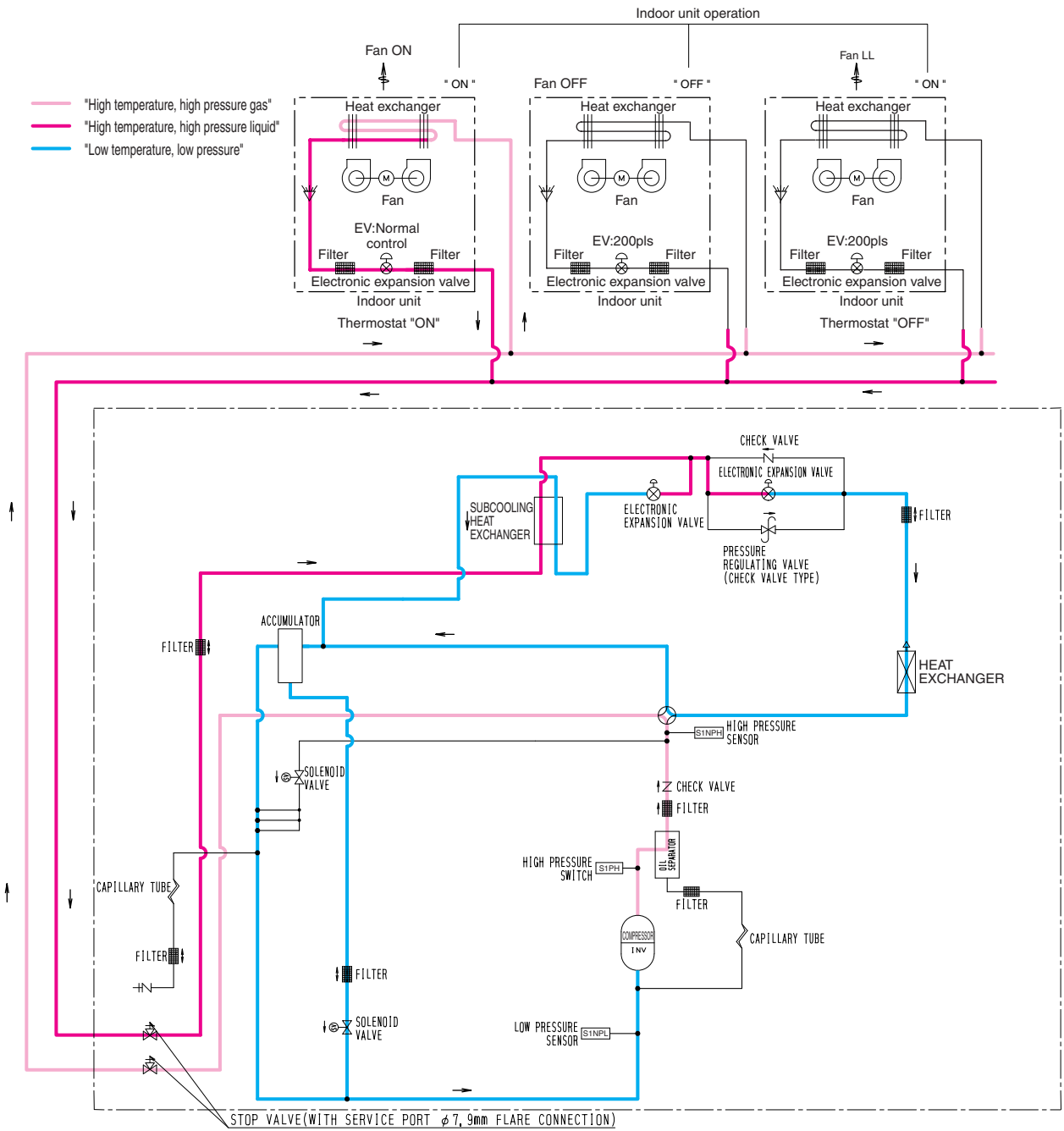
RXYQ8P(A)
Cooling Operation



Cooling Oil Return Operation

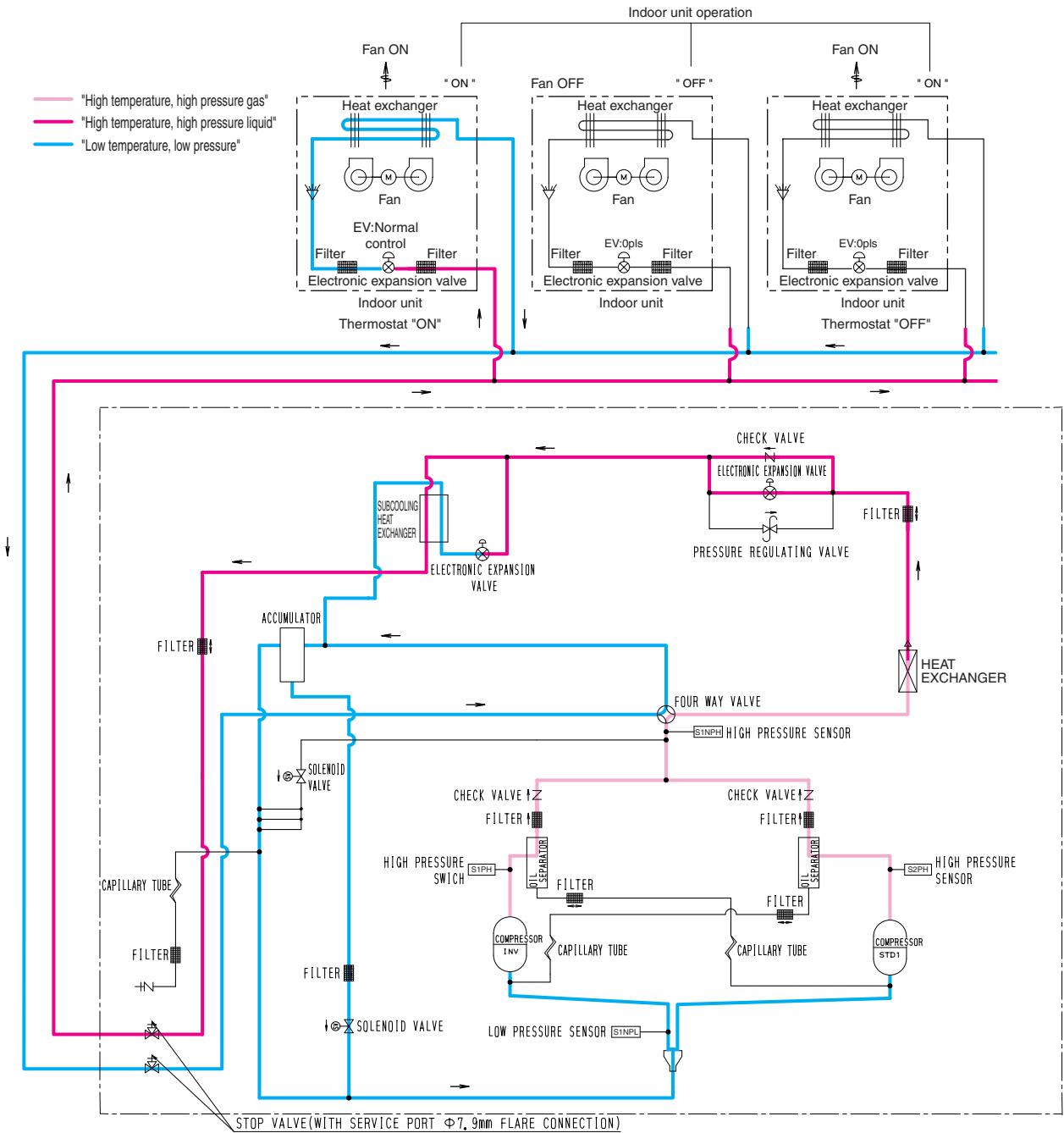


Heating Operation

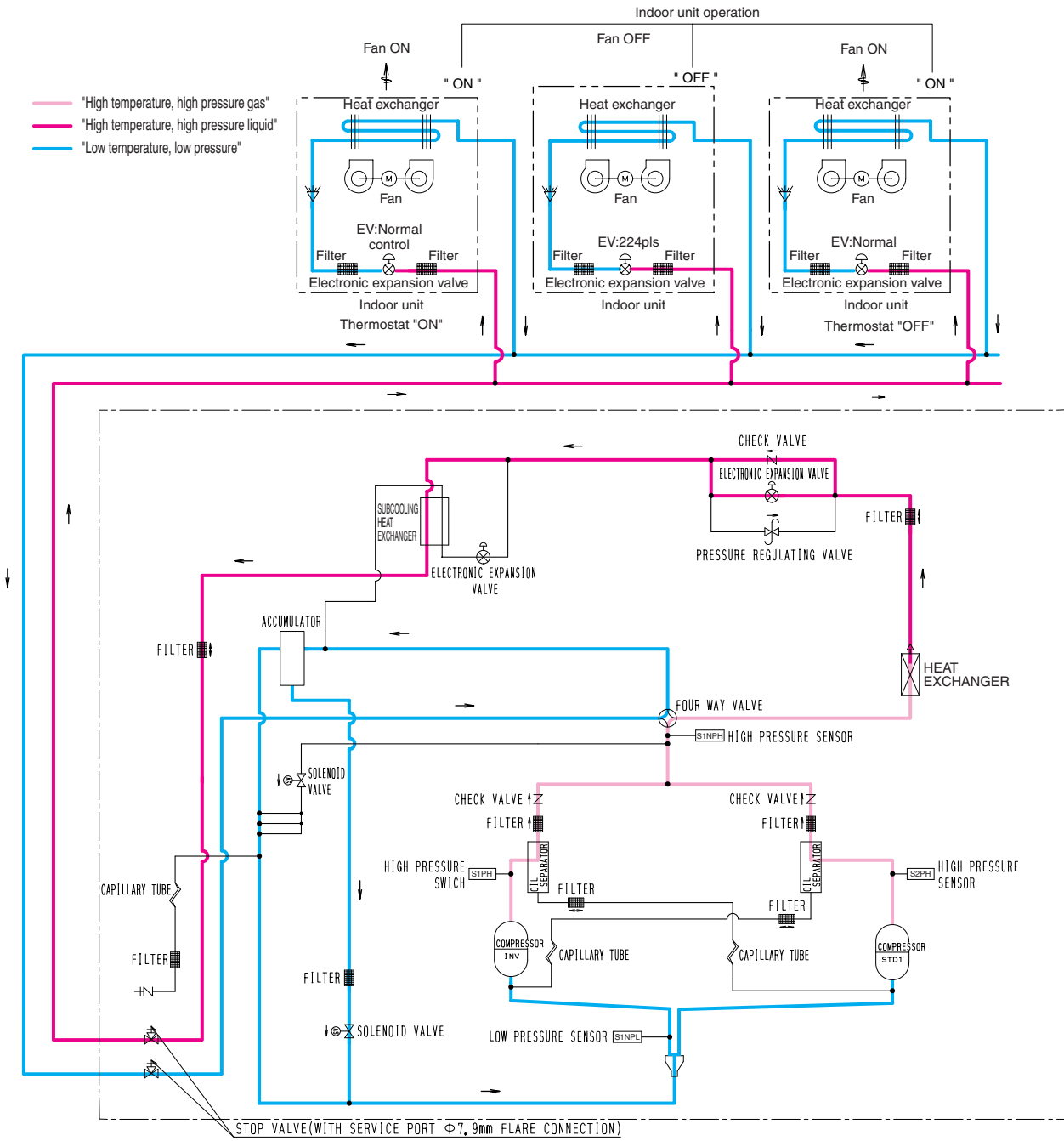


RXYQ10P(A), 12P(A)

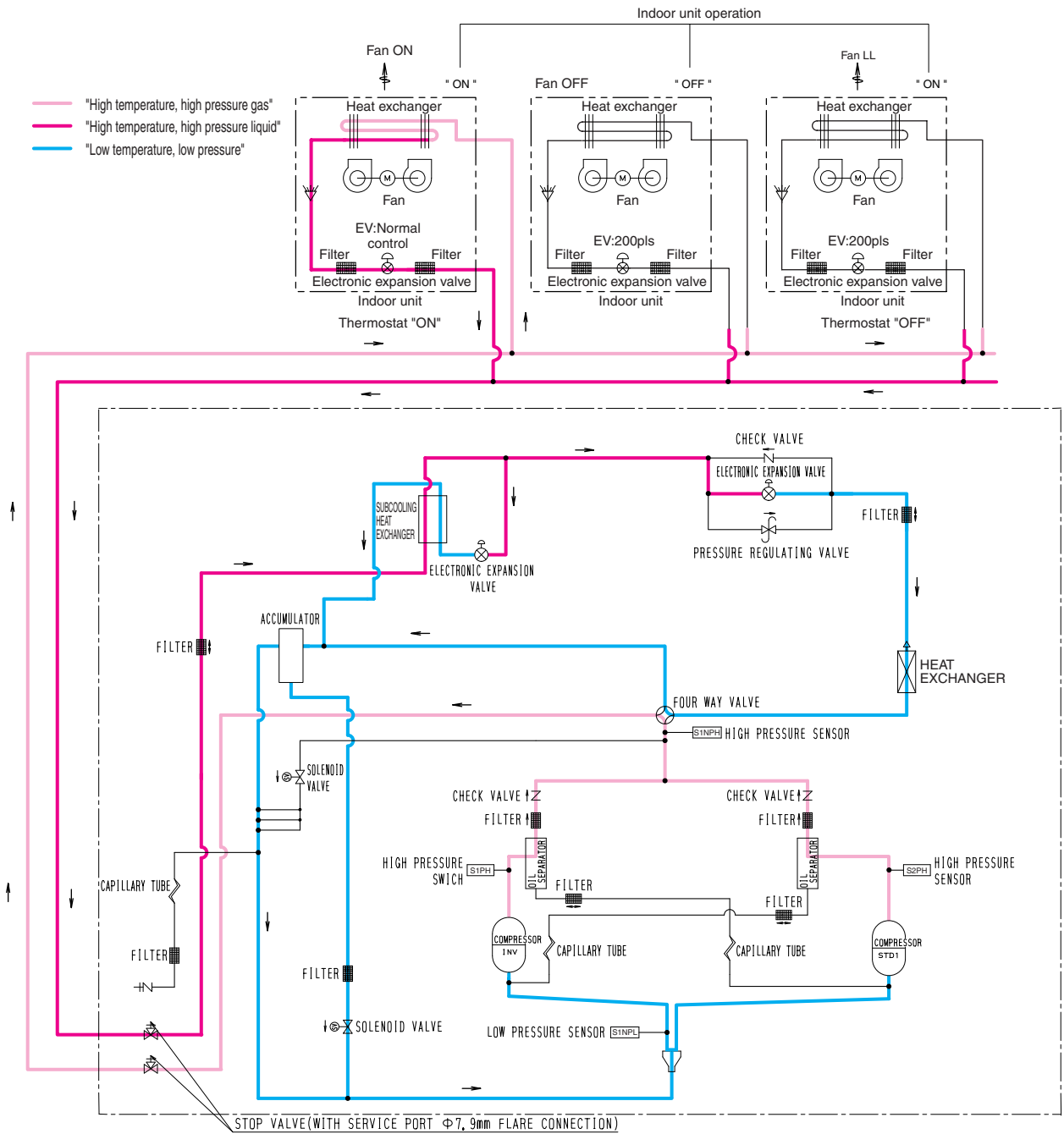
Cooling Operation



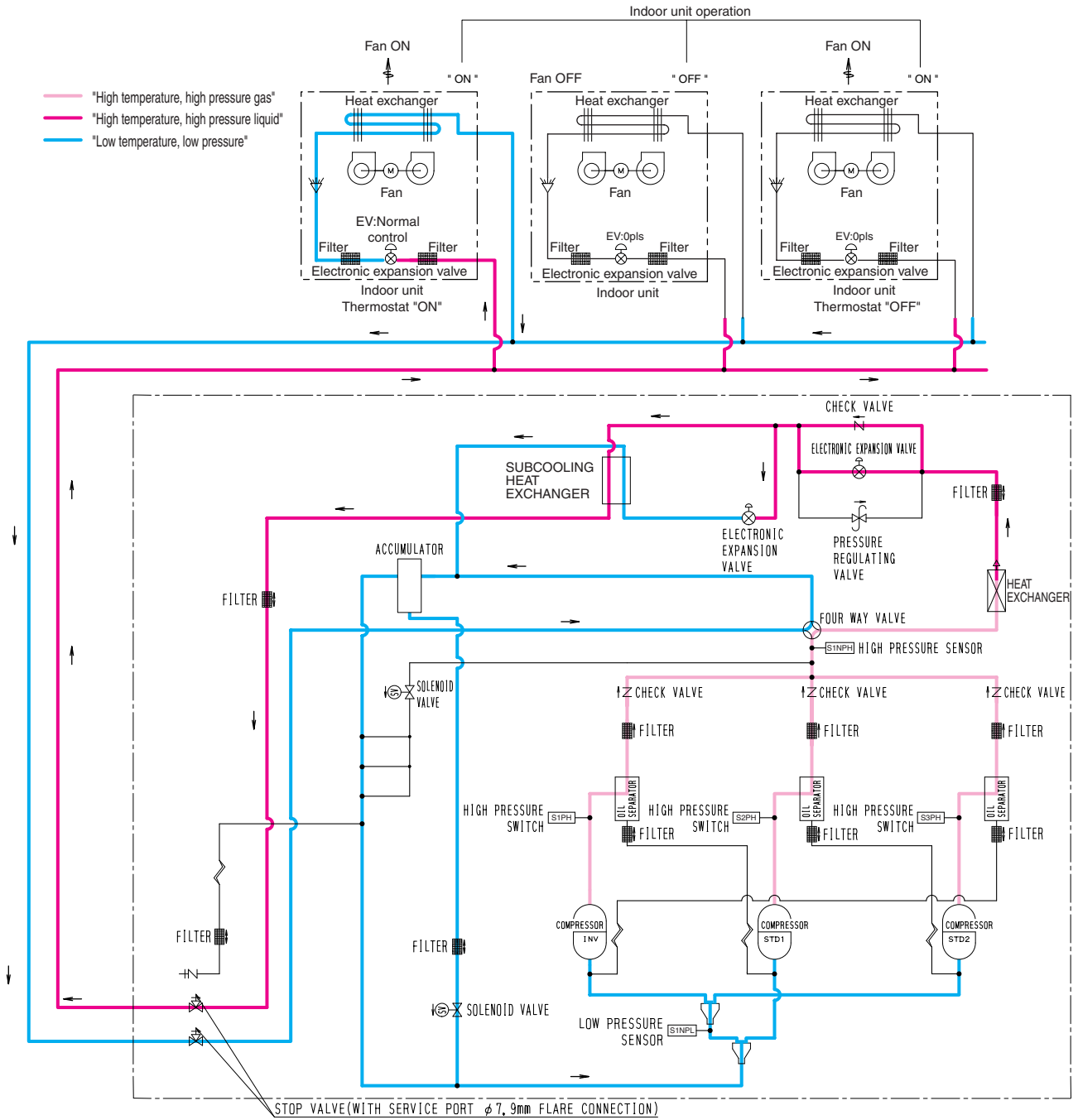
Cooling Oil Return Operation



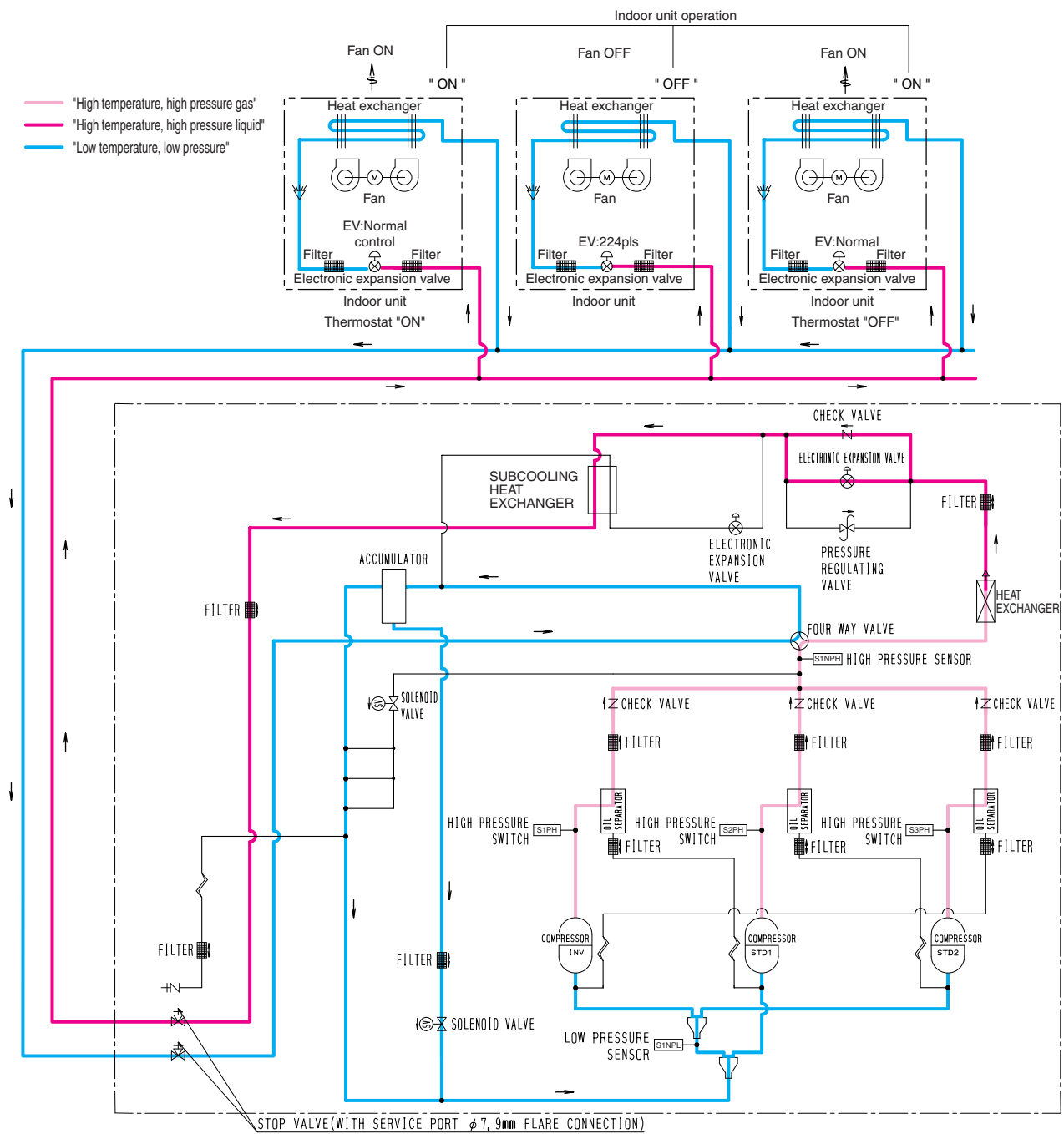
Heating Operation



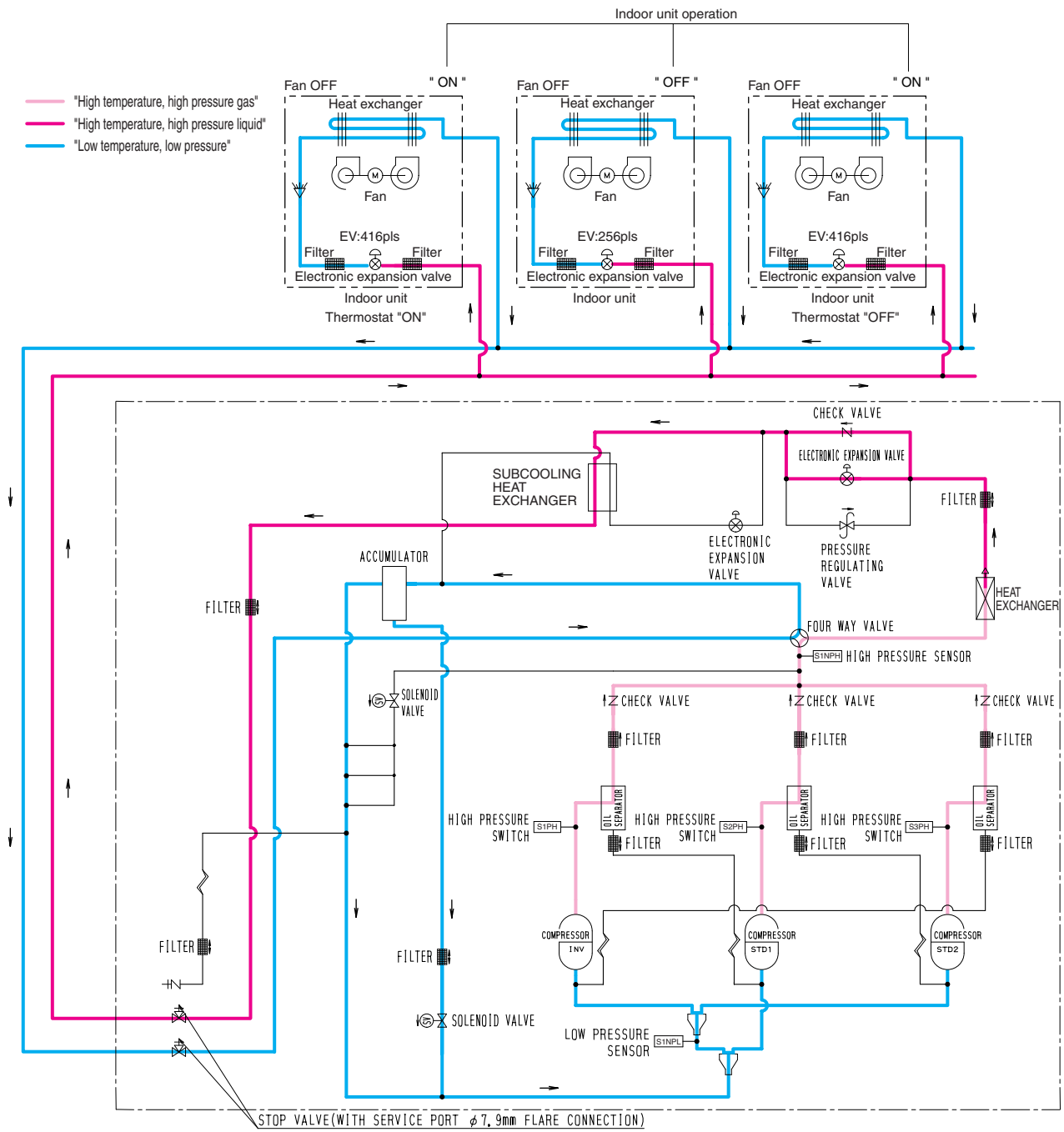
RXYQ14P(A), 16P(A), 18P(A)
Cooling Operation



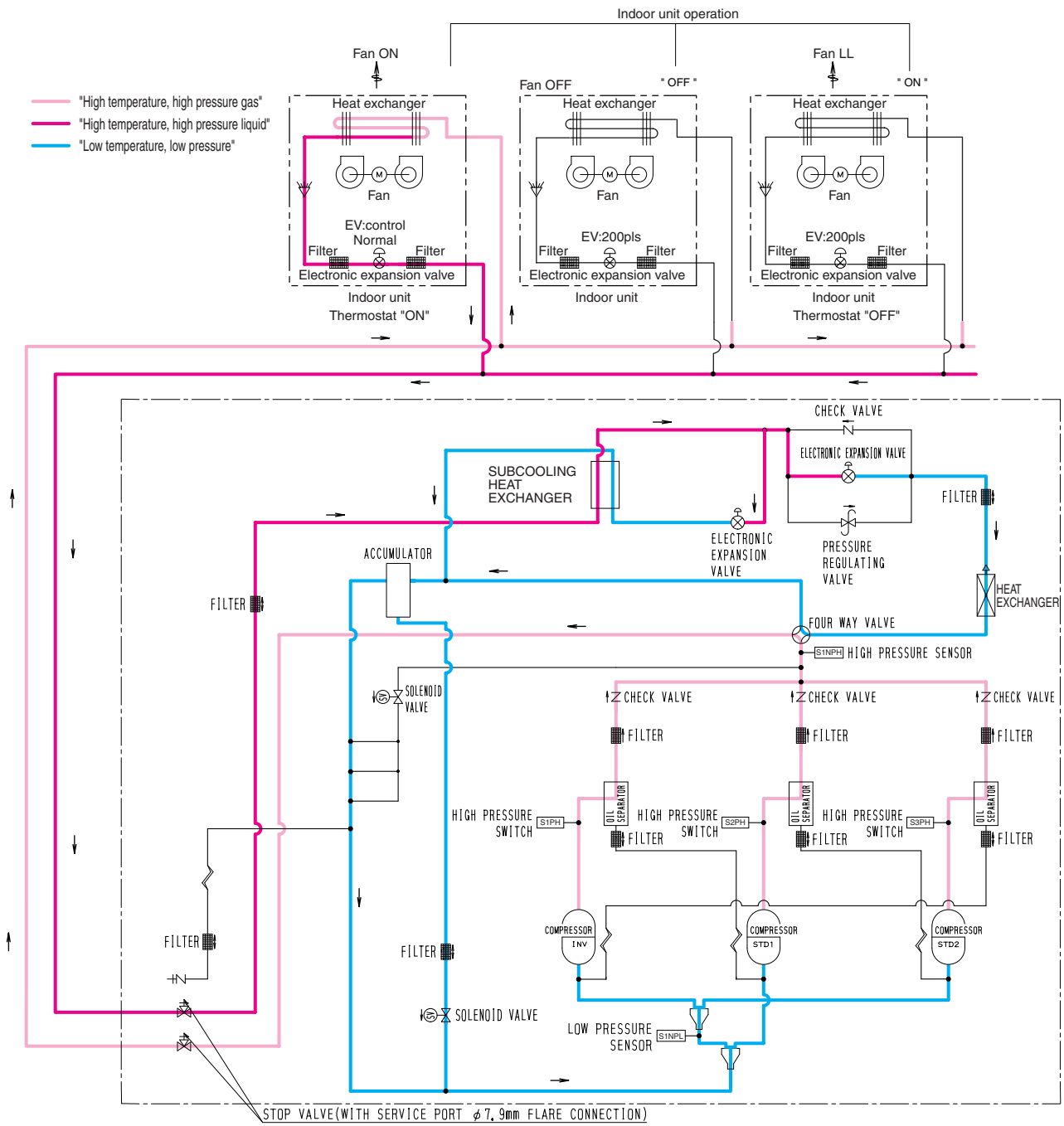
Cooling Oil Return Operation



Heating Oil Return & Defrost Operation



Heating Operation



Part 4

Function

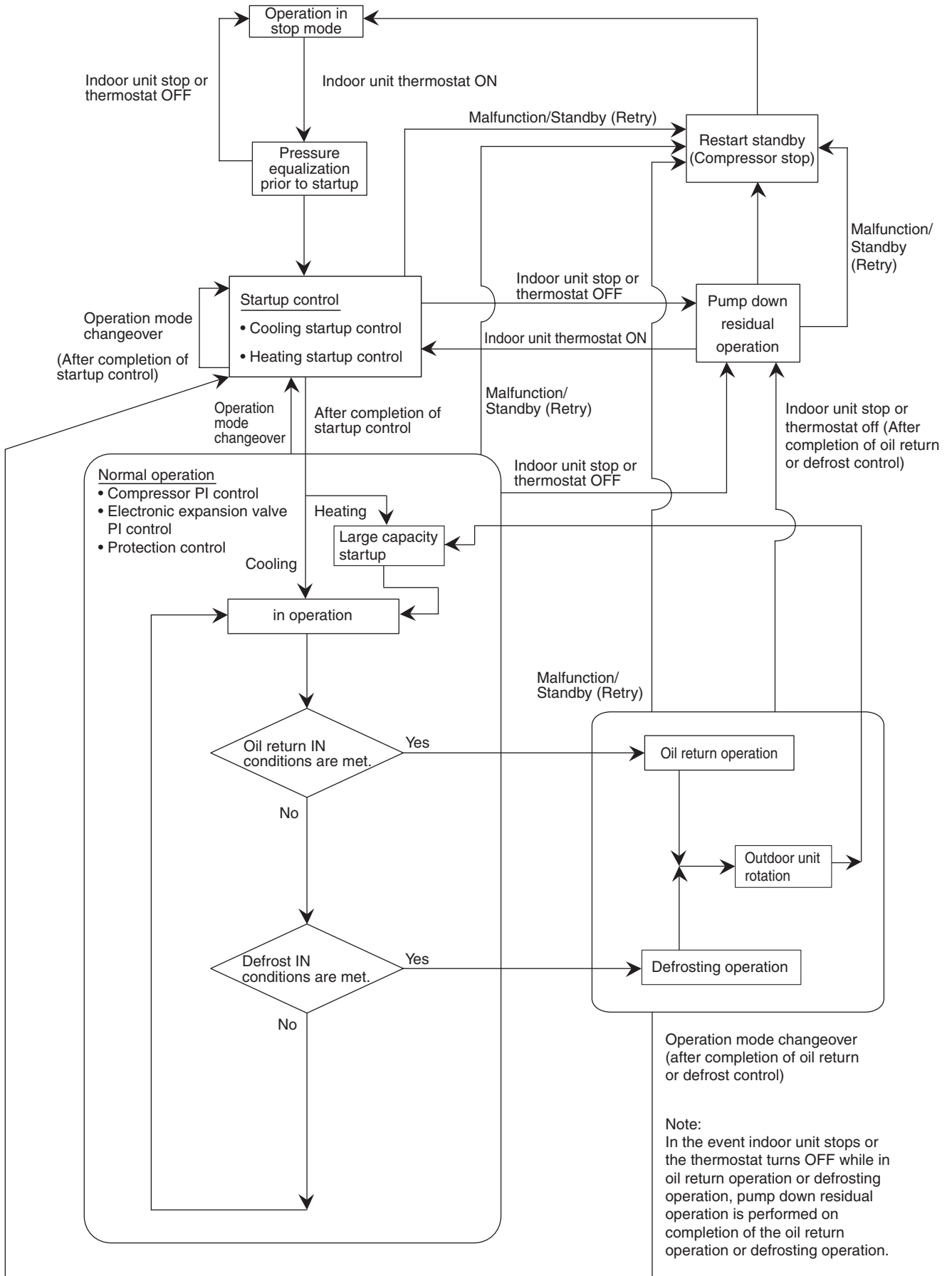
1. Function general	109
1.1 Symbol	109
1.2 Operation Mode.....	110
2. Basic Control.....	111
2.1 Normal Operation.....	111
2.2 Compressor PI Control.....	112
2.3 Electronic Expansion Valve PI Control.....	140
2.4 Step Control of Outdoor Unit Fans	140
2.5 Outdoor Unit Fan Control in Cooling Operation	141
3. Special Control.....	142
3.1 Startup Control	142
3.2 Large Capacity Start Up Control (Heating).....	143
3.3 Oil Return Operation	144
3.4 Defrosting Operation	146
3.5 Pump down Residual Operation.....	147
3.6 Standby	148
3.7 Stopping Operation	149
4. Protection Control	151
4.1 High Pressure Protection Control.....	151
4.2 Low Pressure Protection Control.....	152
4.3 Discharge Pipe Protection Control	153
4.4 Inverter Protection Control	154
4.5 STD Compressor Overload Protection.....	155
4.6 Injection Control (only for RXYQ5P(A)).....	155
5. Other Control.....	156
5.1 Outdoor Unit Rotation.....	156
5.2 Emergency Operation	157
5.3 Demand Operation	161
5.4 Heating Operation Prohibition	161
6. Outline of Control (Indoor Unit)	162
6.1 Drain Pump Control.....	162
6.2 Louver Control for Preventing Ceiling Dirt.....	164
6.3 Thermostat Sensor in Remote Controller.....	165
6.4 Thermostat Control While in Normal Operation	167
6.5 Thermostat Control in Dry Operation	167
6.6 Electronic Expansion Valve Control	168
6.7 Hot Start Control (In Heating Operation Only).....	168
6.8 Freeze Prevention.....	169
6.9 Heater Control.....	169
6.10 List of Swing Flap Operations	170
6.11 Control of Outdoor Air Processing Unit (Unique Control for Outdoor Air Processing Unit)	171

1. Function general

1.1 Symbol

Symbol	Electric symbol	Description or function
20S1	Y3S	Four way valve (Energize during heating)
DSH	–	Discharge pipe superheated degree
DSHi	–	Discharge pipe superheat of inverter compressor
DSHs	–	Discharge pipe superheat of standard compressor
EV	–	Opening of electronic expansion valve
EV1	Y1E	Electronic expansion valve for main heat exchanger
EV2	Y2E	Electronic expansion valve for subcooling heat exchanger
HTdi	–	Value of INV compressor discharge pipe temperature (R31T) compensated with outdoor air temperature
HTds	–	Value of STD compressor discharge pipe temperature (R32T, R33T) compensated with outdoor air temperature
Pc	S1NPH	Value detected by high pressure sensor
Pe	S1NPL	Value detected by low pressure sensor
SH	–	Evaporator outlet superheat
SHS	–	Target evaporator outlet superheat
SVO	Y2S	Solenoid valve for oil return
SVP	Y1S	Solenoid valve for hot gas bypass
SVT	Y4S	Solenoid valve for injection
Ta	R1T (A1P)	Outdoor air temperature
Tb	R4T	Heat exchanger outlet temperature at cooling
Ts2	R2T	Suction pipe temperature detected with the suction pipe thermistor (R2T)
Tsh	R5T (–)	Temperature detected with the subcooling heat exchanger outlet thermistor (R5T)
Tc	–	High pressure equivalent saturation temperature
TcS	–	Target temperature of Tc
Te	–	Low pressure equivalent saturation temperature
TeS	–	Target temperature of Te
Tfin	R1T	Inverter fin temperature
Tl	R6T	Liquid pipe temperature detected with the liquid pipe thermistor (R6T)
Tp	–	Calculated value of compressor port temperature
Ts1	R7T	Suction pipe temperature detected with the accumulator inlet thermistor

1.2 Operation Mode



2. Basic Control

2.1 Normal Operation

2.1.1 List of Functions in Normal Operation

Part Name	Symbol	(Electric Symbol)	Function of Functional Part	
			Normal Cooling	Normal Heating
Compressor	—	(M1C, M2C)	PI control, High pressure protection, Low pressure protection, Td protection, INV protection,	PI control, High pressure protection, Low pressure protection, Td protection, INV protection,
Outdoor unit fan		(M1F)	Cooling fan control	Step 7 or 8
Four way valve	20S1	(Y1R)	OFF	ON
Main electronic expansion valve	EV1	(Y1E)	480 pls	PI control
Subcooling heat exchanger electronic expansion valve	EV2	(Y2E)	PI control	PI control
Hot gas bypass valve	SVP	(Y1S)	OFF	Energized when the system is set to low pressure control mode
Accumulator oil return valve	SVO	(Y2S)	ON	ON

Indoor unit actuator		Normal cooling	Normal heating
Fan	Thermostat ON unit	Remote controller setting	Remote controller setting
	Stopping unit	OFF	OFF
	Thermostat OFF unit	Remote controller setting	LL
Electronic expansion valve	Thermostat ON unit	Normal opening *1	Normal opening *2
	Stopping unit	0 pls	200 pls
	Thermostat OFF unit	0 pls	200 pls

*1. PI control : Evaporator outlet superheated degree (SH) constant.

*2. PI control : Condenser outlet subcooled degree (SC) constant.

*1 and 2 : Refer "6.6 Electronic expansion valve control" on P.168.

2.2 Compressor PI Control

Compressor PI Control

Carries out the compressor capacity PI control to maintain Te at constant during cooling operation and Tc at constant during heating operation to ensure stable unit performance.

[Cooling operation]

Controls compressor capacity to adjust Te to achieve target value (TeS).

Te set value (Make this setting while in Setting mode 2.)

Te setting

L	M (Normal) (factory setting)	H
3	6	9

Te : Low pressure equivalent saturation temperature (°C)

TeS : Target Te value
(Varies depending on Te setting, operating frequency, etc.)

*On multi-outdoor-unit systems, this control is made according to values of the first-priority unit, which is detected with the pressure sensor.

[Heating operation]

Controls compressor capacity to adjust Tc to achieve target value (TcS).

Tc set value (Make this setting while in Setting mode 2.)

Tc setting

L	M (Normal) (factory setting)	H
43	46	49

Tc : High pressure equivalent saturation temperature (°C)

TcS : Target Tc value
(Varies depending on Tc setting, operating frequency, etc.)

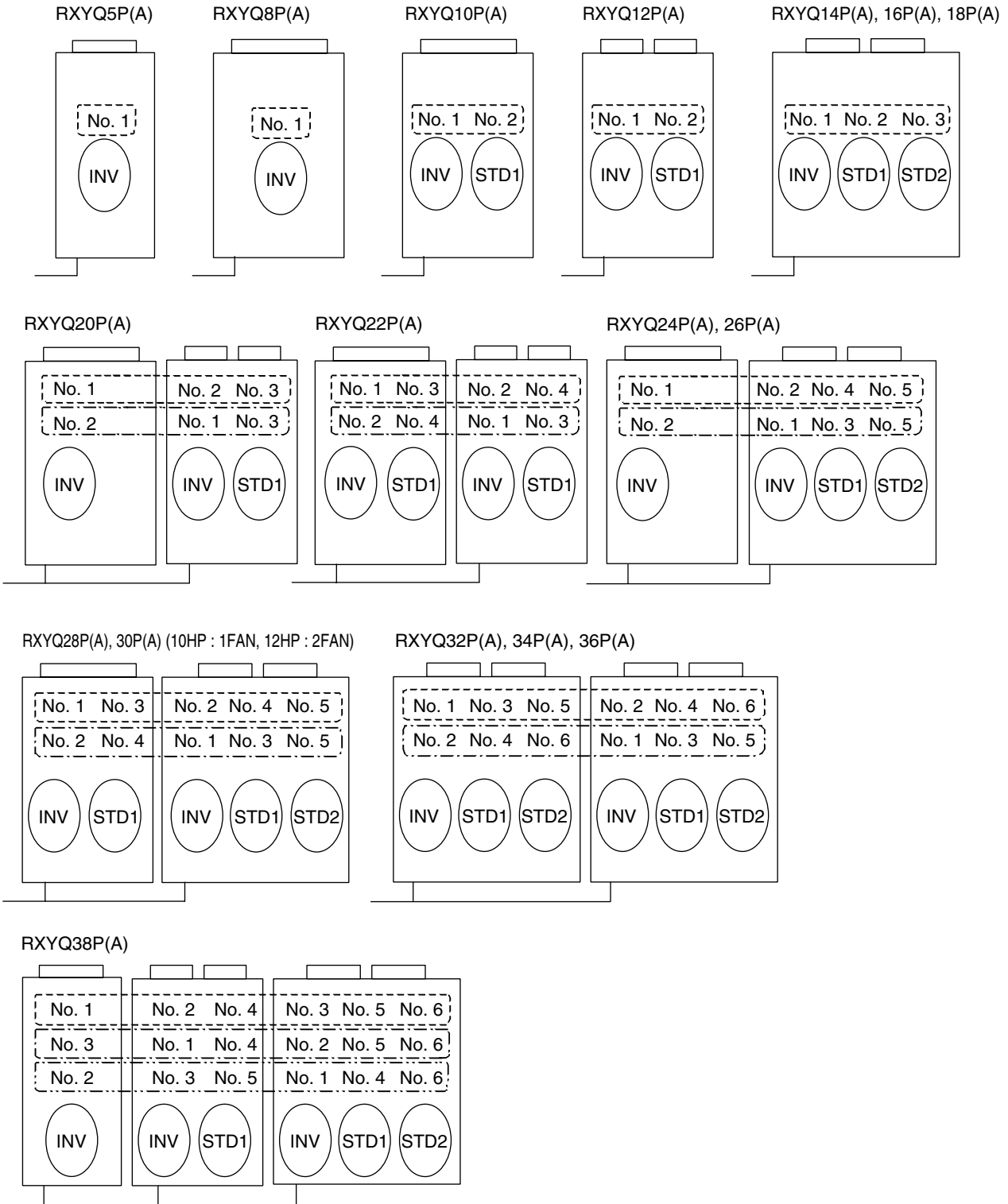
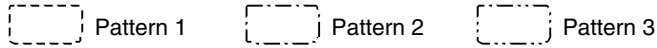
*On multi-outdoor-unit systems, this control is made according to values of the first-priority unit, which is detected with the pressure sensor.

■ Operating Priority and Rotation of Compressors (For multi standard connection system)

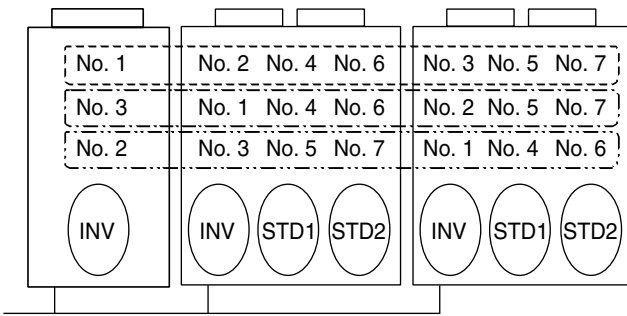
Each compressor operates in the following order of priority.

In the case of multi-outdoor-unit system, each compressor operates in any of Pattern 1 through Pattern 3 according to the rotation of outdoor units.

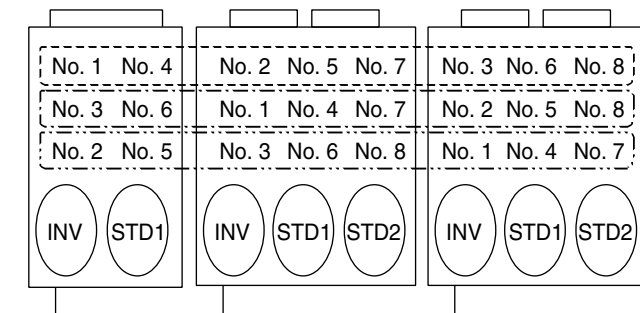
INV: Inverter compressor
 STD1: Standard compressor 1
 STD2: Standard compressor 2



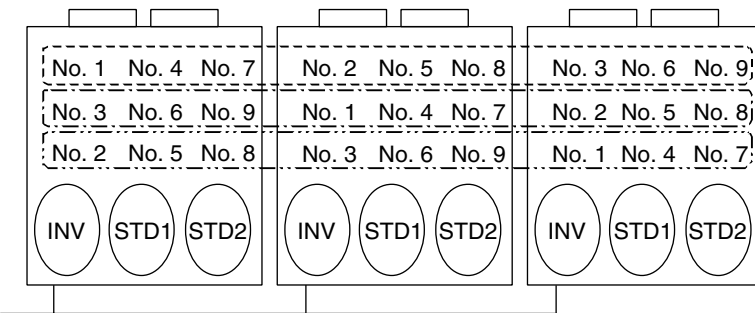
RXYQ40P(A), 42P(A), 44P(A)



RXYQ46P(A), 48P(A) (10HP : 1FAN, 12HP : 2FAN)



RXYQ50P(A), 52P(A), 54P(A)



- *
- In the case of combination of 3 outdoor units, the above diagram shows master unit, slave unit 1, and slave unit 2 from left to right.
 - Compressors may operate in any pattern other than those mentioned above according to the operating status.

- Compressor Step Control (Multi outdoor unit connection is available on the standard connection system)
Compressor operations vary with the following steps according to information in "2.2 Compressor PI Control".
Furthermore, the operating priority of compressors is subject to information in "■ Operating Priority and Rotation of Compressors".

50Hz

Stand-alone installation

RXYQ5PAY1

STEP No.	INV
1	52 Hz
2	56 Hz
3	62 Hz
4	68 Hz
5	74 Hz
6	80 Hz
7	88 Hz
8	96 Hz
9	104 Hz
10	110 Hz
11	116 Hz
12	124 Hz
13	132 Hz
14	144 Hz
15	158 Hz
16	166 Hz
17	176 Hz
18	188 Hz

RXYQ8PAY1

STEP No.	INV
1	52 Hz
2	56 Hz
3	62 Hz
4	68 Hz
5	74 Hz
6	80 Hz
7	88 Hz
8	96 Hz
9	104 Hz
10	110 Hz
11	116 Hz
12	124 Hz
13	132 Hz
14	144 Hz
15	158 Hz
16	166 Hz
17	176 Hz
18	188 Hz
19	202 Hz
20	210 Hz
21	218 Hz
22	232 Hz
23	248 Hz
24	266 Hz

RXYQ10PAY1, 12PAY1

STEP No.	INV	STD1
1	52 Hz	OFF
2	56 Hz	OFF
3	62 Hz	OFF
4	68 Hz	OFF
5	74 Hz	OFF
6	80 Hz	OFF
7	88 Hz	OFF
8	96 Hz	OFF
9	104 Hz	OFF
10	110 Hz	OFF
11	116 Hz	OFF
12	124 Hz	OFF
13	132 Hz	OFF
14	144 Hz	OFF
15	158 Hz	OFF
16	166 Hz	OFF
17	176 Hz	OFF
18	188 Hz	OFF
19	202 Hz	OFF
20	210 Hz	OFF
21	52 Hz	ON
22	62 Hz	ON
23	68 Hz	ON
24	74 Hz	ON
25	80 Hz	ON
26	88 Hz	ON
27	96 Hz	ON
28	104 Hz	ON
29	116 Hz	ON
30	124 Hz	ON
31	132 Hz	ON
32	144 Hz	ON
33	158 Hz	ON
34	176 Hz	ON
35	188 Hz	ON
36	202 Hz	ON
37	210 Hz	ON

RXYQ14PAY1, 16PAY1

STEP No.	INV	STD1	STD2
1	52 Hz	OFF	OFF
2	56 Hz	OFF	OFF
3	62 Hz	OFF	OFF
4	68 Hz	OFF	OFF
5	74 Hz	OFF	OFF
6	80 Hz	OFF	OFF
7	88 Hz	OFF	OFF
8	96 Hz	OFF	OFF
9	104 Hz	OFF	OFF
10	110 Hz	OFF	OFF
11	116 Hz	OFF	OFF
12	124 Hz	OFF	OFF
13	132 Hz	OFF	OFF
14	144 Hz	OFF	OFF
15	158 Hz	OFF	OFF
16	166 Hz	OFF	OFF
17	176 Hz	OFF	OFF
18	188 Hz	OFF	OFF
19	202 Hz	OFF	OFF
20	210 Hz	OFF	OFF
21	52 Hz	ON	OFF
22	62 Hz	ON	OFF
23	68 Hz	ON	OFF
24	74 Hz	ON	OFF
25	80 Hz	ON	OFF
26	88 Hz	ON	OFF
27	96 Hz	ON	OFF
28	104 Hz	ON	OFF
29	116 Hz	ON	OFF
30	124 Hz	ON	OFF
31	132 Hz	ON	OFF
32	144 Hz	ON	OFF
33	158 Hz	ON	OFF
34	176 Hz	ON	OFF
35	188 Hz	ON	OFF
36	202 Hz	ON	OFF
37	210 Hz	ON	OFF
38	52 Hz	ON	ON
39	62 Hz	ON	ON
40	74 Hz	ON	ON
41	88 Hz	ON	ON
42	96 Hz	ON	ON
43	104 Hz	ON	ON
44	124 Hz	ON	ON
45	144 Hz	ON	ON
46	158 Hz	ON	ON
47	166 Hz	ON	ON
48	176 Hz	ON	ON
49	188 Hz	ON	ON
50	202 Hz	ON	ON
51	210 Hz	ON	ON

RXYQ18PAY1

STEP No.	INV	STD1	STD2
1	52 Hz	OFF	OFF
2	56 Hz	OFF	OFF
3	62 Hz	OFF	OFF
4	68 Hz	OFF	OFF
5	74 Hz	OFF	OFF
6	80 Hz	OFF	OFF
7	88 Hz	OFF	OFF
8	96 Hz	OFF	OFF
9	104 Hz	OFF	OFF
10	110 Hz	OFF	OFF
11	116 Hz	OFF	OFF
12	124 Hz	OFF	OFF
13	132 Hz	OFF	OFF
14	144 Hz	OFF	OFF
15	158 Hz	OFF	OFF
16	166 Hz	OFF	OFF
17	176 Hz	OFF	OFF
18	188 Hz	OFF	OFF
19	202 Hz	OFF	OFF
20	210 Hz	OFF	OFF
21	52 Hz	ON	OFF
22	62 Hz	ON	OFF
23	68 Hz	ON	OFF
24	74 Hz	ON	OFF
25	80 Hz	ON	OFF
26	88 Hz	ON	OFF
27	96 Hz	ON	OFF
28	104 Hz	ON	OFF
29	116 Hz	ON	OFF
30	124 Hz	ON	OFF
31	132 Hz	ON	OFF
32	144 Hz	ON	OFF
33	158 Hz	ON	OFF
34	176 Hz	ON	OFF
35	188 Hz	ON	OFF
36	202 Hz	ON	OFF
37	210 Hz	ON	OFF
38	52 Hz	ON	ON
39	62 Hz	ON	ON
40	74 Hz	ON	ON
41	88 Hz	ON	ON
42	96 Hz	ON	ON
43	104 Hz	ON	ON
44	124 Hz	ON	ON
45	144 Hz	ON	ON
46	158 Hz	ON	ON
47	166 Hz	ON	ON
48	176 Hz	ON	ON
49	188 Hz	ON	ON
50	202 Hz	ON	ON
51	210 Hz	ON	ON
52	218 Hz	ON	ON
53	232 Hz	ON	ON
54	248 Hz	ON	ON
55	266 Hz	ON	ON

Notes:

1. INV : Inverter compressor
STD1 : Standard compressor 1
STD2 : Standard compressor 2
2. Depending on the operating conditions of compressors, the compressors may run in patterns other than those aforementioned.

Two-unit multi system RXYQ20PAY1 (8+12HP)

(To increase Step No.)

STEP No.	Master unit INV	Slave unit INV	STD
1	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	OFF
5	74 Hz	74 Hz	OFF
6	80 Hz	80 Hz	OFF
7	88 Hz	88 Hz	OFF
8	96 Hz	96 Hz	OFF
9	104 Hz	104 Hz	OFF
10	110 Hz	110 Hz	OFF
11	116 Hz	116 Hz	OFF
12	124 Hz	124 Hz	OFF
13	132 Hz	132 Hz	OFF
14	144 Hz	144 Hz	OFF
15	158 Hz	158 Hz	OFF
17	166 Hz	166 Hz	OFF
18	176 Hz	176 Hz	OFF
19	80 Hz	80 Hz	ON
20	88 Hz	88 Hz	ON
21	96 Hz	96 Hz	ON
22	104 Hz	104 Hz	ON
23	116 Hz	116 Hz	ON
24	124 Hz	124 Hz	ON
25	132 Hz	132 Hz	ON
26	144 Hz	144 Hz	ON
27	158 Hz	158 Hz	ON
28	176 Hz	176 Hz	ON
29	188 Hz	188 Hz	ON
30	202 Hz	202 Hz	ON
31	210 Hz	210 Hz	ON
32	218 Hz	210 Hz	ON
33	232 Hz	210 Hz	ON
34	248 Hz	210 Hz	ON
35	266 Hz	210 Hz	ON

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit INV	STD
1	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	OFF
4	68 Hz	68 Hz	OFF
5	74 Hz	74 Hz	OFF
6	80 Hz	80 Hz	OFF
7	88 Hz	88 Hz	OFF
8	96 Hz	96 Hz	OFF
9	104 Hz	104 Hz	OFF
10	110 Hz	110 Hz	OFF
11	116 Hz	116 Hz	OFF
12	124 Hz	124 Hz	OFF
13	132 Hz	132 Hz	OFF
14	144 Hz	144 Hz	OFF
15	158 Hz	158 Hz	OFF
16	166 Hz	166 Hz	OFF
17	176 Hz	176 Hz	OFF
18	188 Hz	188 Hz	OFF
19	202 Hz	202 Hz	OFF
20	210 Hz	210 Hz	OFF
21	218 Hz	210 Hz	OFF
22	232 Hz	210 Hz	OFF
23	248 Hz	210 Hz	OFF
24	266 Hz	210 Hz	OFF
25	52 Hz	52 Hz	ON
26	62 Hz	62 Hz	ON
27	68 Hz	68 Hz	ON
28	74 Hz	74 Hz	ON
29	80 Hz	80 Hz	ON
30	88 Hz	88 Hz	ON
31	96 Hz	96 Hz	ON
32	104 Hz	104 Hz	ON
33	116 Hz	116 Hz	ON
34	124 Hz	124 Hz	ON
35	132 Hz	132 Hz	ON
36	144 Hz	144 Hz	ON
37	158 Hz	158 Hz	ON
38	176 Hz	176 Hz	ON
39	188 Hz	188 Hz	ON
40	202 Hz	202 Hz	ON
41	210 Hz	210 Hz	ON
42	218 Hz	210 Hz	ON
43	232 Hz	210 Hz	ON
44	248 Hz	210 Hz	ON
45	266 Hz	210 Hz	ON

■ represents the range in which “Hz” is not stepped up.
RXYQ22PAY1 (10+12HP)

(To increase Step No.)

STEP No.	Master unit INV	Slave unit INV	STD
1	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	OFF
5	70 Hz	70 Hz	OFF
6	74 Hz	74 Hz	OFF
7	80 Hz	80 Hz	OFF
8	88 Hz	88 Hz	OFF
9	96 Hz	96 Hz	OFF
10	104 Hz	104 Hz	OFF
11	110 Hz	110 Hz	OFF
12	116 Hz	116 Hz	OFF
13	124 Hz	124 Hz	OFF
14	132 Hz	132 Hz	OFF
15	144 Hz	144 Hz	OFF
16	158 Hz	158 Hz	OFF
17	166 Hz	166 Hz	OFF
18	176 Hz	176 Hz	OFF
19	80 Hz	80 Hz	ON 1
20	88 Hz	88 Hz	ON 1
21	96 Hz	96 Hz	ON 1
22	104 Hz	104 Hz	ON 1
23	116 Hz	116 Hz	ON 1
24	124 Hz	124 Hz	ON 1
25	132 Hz	132 Hz	ON 1
26	88 Hz	88 Hz	ON 2
27	96 Hz	96 Hz	ON 2
28	104 Hz	104 Hz	ON 2
29	124 Hz	124 Hz	ON 2
30	144 Hz	144 Hz	ON 2
31	158 Hz	158 Hz	ON 2
32	166 Hz	166 Hz	ON 2
33	176 Hz	176 Hz	ON 2
34	188 Hz	188 Hz	ON 2
35	202 Hz	202 Hz	ON 2
36	210 Hz	210 Hz	ON 2

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit INV	STD
1	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	OFF
4	68 Hz	68 Hz	OFF
5	74 Hz	74 Hz	OFF
6	80 Hz	80 Hz	OFF
7	88 Hz	88 Hz	OFF
8	96 Hz	96 Hz	OFF
9	104 Hz	104 Hz	OFF
10	110 Hz	110 Hz	OFF
11	116 Hz	116 Hz	OFF
12	124 Hz	124 Hz	OFF
13	132 Hz	132 Hz	OFF
14	144 Hz	144 Hz	OFF
15	158 Hz	158 Hz	OFF
16	166 Hz	166 Hz	OFF
17	176 Hz	176 Hz	OFF
18	188 Hz	188 Hz	OFF
19	202 Hz	202 Hz	OFF
20	210 Hz	210 Hz	OFF
21	218 Hz	210 Hz	OFF
22	232 Hz	210 Hz	OFF
23	248 Hz	210 Hz	OFF
24	266 Hz	210 Hz	OFF
25	52 Hz	52 Hz	ON 1
26	62 Hz	62 Hz	ON 1
27	68 Hz	68 Hz	ON 1
28	74 Hz	74 Hz	ON 1
29	80 Hz	80 Hz	ON 1
30	88 Hz	88 Hz	ON 1
31	96 Hz	96 Hz	ON 1
32	104 Hz	104 Hz	ON 1
33	116 Hz	116 Hz	ON 1
34	124 Hz	124 Hz	ON 1
35	132 Hz	132 Hz	ON 1
36	144 Hz	144 Hz	ON 1
37	158 Hz	158 Hz	ON 1
38	176 Hz	176 Hz	ON 1
39	188 Hz	188 Hz	ON 1
40	202 Hz	202 Hz	ON 1
41	210 Hz	210 Hz	ON 1
42	218 Hz	210 Hz	ON 1
43	232 Hz	210 Hz	ON 1
44	248 Hz	210 Hz	ON 1
45	266 Hz	210 Hz	ON 1
46	210 Hz	210 Hz	ON 2

Notes:

- INV : Inverter compressor
STD : Standard compressor
Figures after ON represent the number of STD compressors in operation.
- “Master unit”, and “slave unit” in this section are the names for control, and they will be transferred according to the priority of rotation system.
- Depending on the operating conditions of compressors, the compressors may run in patterns other than those aforementioned.

■ represents the range in which “Hz” is not stepped up.

RXYQ24PAY1 (8+16HP)

(To increase Step No.)

STEP No.	Master unit INV	Slave unit INV	STD
1	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	OFF
5	70 Hz	70 Hz	OFF
6	74 Hz	74 Hz	OFF
7	80 Hz	80 Hz	OFF
8	88 Hz	88 Hz	OFF
9	96 Hz	96 Hz	OFF
10	104 Hz	104 Hz	OFF
11	110 Hz	110 Hz	OFF
12	116 Hz	116 Hz	OFF
13	124 Hz	124 Hz	OFF
14	132 Hz	132 Hz	OFF
15	144 Hz	144 Hz	OFF
16	158 Hz	158 Hz	OFF
17	166 Hz	166 Hz	OFF
18	176 Hz	176 Hz	OFF
19	80 Hz	80 Hz	ON 1
20	88 Hz	88 Hz	ON 1
21	96 Hz	96 Hz	ON 1
22	104 Hz	104 Hz	ON 1
23	116 Hz	116 Hz	ON 1
24	124 Hz	124 Hz	ON 1
25	132 Hz	132 Hz	ON 1
26	88 Hz	88 Hz	ON 2
27	96 Hz	96 Hz	ON 2
28	104 Hz	104 Hz	ON 2
29	124 Hz	124 Hz	ON 2
30	144 Hz	144 Hz	ON 2
31	158 Hz	158 Hz	ON 2
32	166 Hz	166 Hz	ON 2
33	176 Hz	176 Hz	ON 2
34	188 Hz	188 Hz	ON 2
35	202 Hz	202 Hz	ON 2
36	210 Hz	210 Hz	ON 2
37	218 Hz	210 Hz	ON 2
38	232 Hz	210 Hz	ON 2
39	248 Hz	210 Hz	ON 2
40	266 Hz	210 Hz	ON 2

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit INV	STD
1	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	OFF
5	74 Hz	74 Hz	OFF
6	80 Hz	80 Hz	OFF
7	88 Hz	88 Hz	OFF
8	96 Hz	96 Hz	OFF
9	104 Hz	104 Hz	OFF
10	52 Hz	52 Hz	OFF
11	56 Hz	56 Hz	OFF
12	62 Hz	62 Hz	OFF
13	66 Hz	66 Hz	OFF
14	70 Hz	70 Hz	OFF
15	74 Hz	74 Hz	OFF
16	80 Hz	80 Hz	OFF
17	88 Hz	88 Hz	OFF
18	92 Hz	92 Hz	OFF
19	96 Hz	96 Hz	OFF
20	104 Hz	104 Hz	OFF
21	110 Hz	110 Hz	OFF
22	116 Hz	116 Hz	OFF
23	124 Hz	124 Hz	OFF
24	132 Hz	132 Hz	OFF
25	52 Hz	52 Hz	ON 1
26	62 Hz	62 Hz	ON 1
27	68 Hz	68 Hz	ON 1
28	74 Hz	74 Hz	ON 1
29	80 Hz	80 Hz	ON 1
30	88 Hz	88 Hz	ON 1
31	96 Hz	96 Hz	ON 1
32	104 Hz	104 Hz	ON 1
33	52 Hz	52 Hz	ON 2
34	62 Hz	62 Hz	ON 2
35	74 Hz	74 Hz	ON 2
36	88 Hz	88 Hz	ON 2
37	96 Hz	96 Hz	ON 2
38	104 Hz	104 Hz	ON 2
39	124 Hz	124 Hz	ON 2
40	144 Hz	144 Hz	ON 2
41	158 Hz	158 Hz	ON 2
42	166 Hz	166 Hz	ON 2
43	176 Hz	176 Hz	ON 2
44	188 Hz	188 Hz	ON 2
45	202 Hz	202 Hz	ON 2
46	210 Hz	210 Hz	ON 2
47	218 Hz	210 Hz	ON 2
48	232 Hz	210 Hz	ON 2
49	248 Hz	210 Hz	ON 2
50	266 Hz	210 Hz	ON 2

RXYQ26PAY1 (8+18HP)

(To increase Step No.)

STEP No.	Master unit INV	Slave unit INV	STD
1	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	OFF
5	70 Hz	70 Hz	OFF
6	74 Hz	74 Hz	OFF
7	80 Hz	80 Hz	OFF
8	88 Hz	88 Hz	OFF
9	96 Hz	96 Hz	OFF
10	104 Hz	104 Hz	OFF
11	110 Hz	110 Hz	OFF
12	116 Hz	116 Hz	OFF
13	124 Hz	124 Hz	OFF
14	132 Hz	132 Hz	OFF
15	144 Hz	144 Hz	OFF
16	158 Hz	158 Hz	OFF
17	166 Hz	166 Hz	OFF
18	176 Hz	176 Hz	OFF
19	80 Hz	80 Hz	ON 1
20	88 Hz	88 Hz	ON 1
21	96 Hz	96 Hz	ON 1
22	104 Hz	104 Hz	ON 1
23	116 Hz	116 Hz	ON 1
24	124 Hz	124 Hz	ON 1
25	132 Hz	132 Hz	ON 1
26	88 Hz	88 Hz	ON 2
27	96 Hz	96 Hz	ON 2
28	104 Hz	104 Hz	ON 2
29	124 Hz	124 Hz	ON 2
30	144 Hz	144 Hz	ON 2
31	158 Hz	158 Hz	ON 2
32	166 Hz	166 Hz	ON 2
33	176 Hz	176 Hz	ON 2
34	188 Hz	188 Hz	ON 2
35	202 Hz	202 Hz	ON 2
36	210 Hz	210 Hz	ON 2
37	218 Hz	218 Hz	ON 2
38	232 Hz	232 Hz	ON 2
39	248 Hz	248 Hz	ON 2
40	266 Hz	266 Hz	ON 2

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit INV	STD
1	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	OFF
5	74 Hz	74 Hz	OFF
6	80 Hz	80 Hz	OFF
7	88 Hz	88 Hz	OFF
8	96 Hz	96 Hz	OFF
9	104 Hz	104 Hz	OFF
10	52 Hz	52 Hz	OFF
11	56 Hz	56 Hz	OFF
12	62 Hz	62 Hz	OFF
13	66 Hz	66 Hz	OFF
14	70 Hz	70 Hz	OFF
15	74 Hz	74 Hz	OFF
16	80 Hz	80 Hz	OFF
17	88 Hz	88 Hz	OFF
18	92 Hz	92 Hz	OFF
19	96 Hz	96 Hz	OFF
20	104 Hz	104 Hz	OFF
21	110 Hz	110 Hz	OFF
22	116 Hz	116 Hz	OFF
23	124 Hz	124 Hz	OFF
24	132 Hz	132 Hz	OFF
25	52 Hz	52 Hz	ON 1
26	62 Hz	62 Hz	ON 1
27	68 Hz	68 Hz	ON 1
28	74 Hz	74 Hz	ON 1
29	80 Hz	80 Hz	ON 1
30	88 Hz	88 Hz	ON 1
31	96 Hz	96 Hz	ON 1
32	104 Hz	104 Hz	ON 1
33	52 Hz	52 Hz	ON 2
34	62 Hz	62 Hz	ON 2
35	74 Hz	74 Hz	ON 2
36	88 Hz	88 Hz	ON 2
37	96 Hz	96 Hz	ON 2
38	104 Hz	104 Hz	ON 2
39	124 Hz	124 Hz	ON 2
40	144 Hz	144 Hz	ON 2
41	158 Hz	158 Hz	ON 2
42	166 Hz	166 Hz	ON 2
43	176 Hz	176 Hz	ON 2
44	188 Hz	188 Hz	ON 2
45	202 Hz	202 Hz	ON 2
46	210 Hz	210 Hz	ON 2
47	218 Hz	218 Hz	ON 2
48	232 Hz	232 Hz	ON 2
49	248 Hz	248 Hz	ON 2
50	266 Hz	266 Hz	ON 2

Notes:

1. INV : Inverter compressor
STD : Standard compressor
Figures after ON represent the number of STD compressors in operation.
2. “Master unit”, and “slave unit” in this section are the names for control, and they will be transferred according to the priority of rotation system.
3. Depending on the operating conditions of compressors, the compressors may run in patterns other than those aforementioned.

■ represents the range in which “Hz” is not stepped up.

RXYQ28PAY1, 30PAY1 (10/12+18HP)

RXYQ 32PAY1 (16+16HP)

(To increase Step No.)				(To decrease Step No.)				(To increase Step No.)				(To decrease Step No.)			
STEP No.	Master unit INV	Slave unit INV	STD	STEP No.	Master unit INV	Slave unit INV	STD	STEP No.	Master unit INV	Slave unit INV	STD	STEP No.	Master unit INV	Slave unit INV	STD
1	52 Hz	52 Hz	OFF	1	52 Hz	52 Hz	OFF	1	52 Hz	52 Hz	OFF	1	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	OFF	2	56 Hz	56 Hz	OFF	2	56 Hz	56 Hz	OFF	2	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	OFF	3	62 Hz	62 Hz	OFF	3	62 Hz	62 Hz	OFF	3	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	OFF	4	68 Hz	66 Hz	OFF	4	66 Hz	66 Hz	OFF	4	68 Hz	66 Hz	OFF
5	70 Hz	70 Hz	OFF	5	74 Hz	70 Hz	OFF	5	70 Hz	70 Hz	OFF	5	74 Hz	70 Hz	OFF
6	74 Hz	74 Hz	OFF	6	80 Hz	74 Hz	OFF	6	74 Hz	74 Hz	OFF	6	80 Hz	74 Hz	OFF
7	80 Hz	80 Hz	OFF	7	88 Hz	80 Hz	OFF	7	80 Hz	80 Hz	OFF	7	88 Hz	80 Hz	OFF
8	88 Hz	88 Hz	OFF	8	96 Hz	88 Hz	OFF	8	88 Hz	88 Hz	OFF	8	96 Hz	88 Hz	OFF
9	96 Hz	96 Hz	OFF	9	104 Hz	96 Hz	OFF	9	96 Hz	96 Hz	OFF	9	104 Hz	96 Hz	OFF
10	104 Hz	104 Hz	OFF	10	52 Hz	52 Hz	OFF	10	104 Hz	104 Hz	OFF	10	52 Hz	52 Hz	OFF
11	110 Hz	110 Hz	OFF	11	56 Hz	56 Hz	OFF	11	110 Hz	110 Hz	OFF	11	56 Hz	56 Hz	OFF
12	116 Hz	116 Hz	OFF	12	62 Hz	62 Hz	OFF	12	116 Hz	116 Hz	OFF	12	62 Hz	62 Hz	OFF
13	124 Hz	124 Hz	OFF	13	66 Hz	66 Hz	OFF	13	124 Hz	124 Hz	OFF	13	66 Hz	66 Hz	OFF
14	132 Hz	132 Hz	OFF	14	70 Hz	70 Hz	OFF	14	132 Hz	132 Hz	OFF	14	70 Hz	70 Hz	OFF
15	144 Hz	144 Hz	OFF	15	74 Hz	74 Hz	OFF	15	144 Hz	144 Hz	OFF	15	74 Hz	74 Hz	OFF
16	158 Hz	158 Hz	OFF	16	80 Hz	80 Hz	OFF	16	158 Hz	158 Hz	OFF	16	80 Hz	80 Hz	OFF
17	166 Hz	166 Hz	OFF	17	88 Hz	88 Hz	OFF	17	166 Hz	166 Hz	OFF	17	88 Hz	88 Hz	OFF
18	176 Hz	176 Hz	OFF	18	92 Hz	92 Hz	OFF	18	176 Hz	176 Hz	OFF	18	92 Hz	92 Hz	OFF
19	80 Hz	80 Hz	ON 1	19	96 Hz	96 Hz	OFF	19	80 Hz	80 Hz	ON 1	19	96 Hz	96 Hz	OFF
20	88 Hz	88 Hz	ON 1	20	104 Hz	104 Hz	OFF	20	88 Hz	88 Hz	ON 1	20	104 Hz	104 Hz	OFF
21	96 Hz	96 Hz	ON 1	21	110 Hz	110 Hz	OFF	21	96 Hz	96 Hz	ON 1	21	110 Hz	110 Hz	OFF
22	104 Hz	104 Hz	ON 1	22	116 Hz	116 Hz	OFF	22	104 Hz	104 Hz	ON 1	22	116 Hz	116 Hz	OFF
23	116 Hz	116 Hz	ON 1	23	124 Hz	124 Hz	OFF	23	116 Hz	116 Hz	ON 1	23	124 Hz	124 Hz	OFF
24	124 Hz	124 Hz	ON 1	24	132 Hz	132 Hz	OFF	24	124 Hz	124 Hz	ON 1	24	132 Hz	132 Hz	OFF
25	132 Hz	132 Hz	ON 1	25	52 Hz	52 Hz	ON 1	25	132 Hz	132 Hz	ON 1	25	52 Hz	52 Hz	ON 1
26	88 Hz	88 Hz	ON 2	26	62 Hz	62 Hz	ON 1	26	88 Hz	88 Hz	ON 2	26	62 Hz	62 Hz	ON 1
27	96 Hz	96 Hz	ON 2	27	68 Hz	68 Hz	ON 1	27	96 Hz	96 Hz	ON 2	27	68 Hz	68 Hz	ON 1
28	104 Hz	104 Hz	ON 2	28	74 Hz	74 Hz	ON 1	28	104 Hz	104 Hz	ON 2	28	74 Hz	74 Hz	ON 1
29	124 Hz	124 Hz	ON 2	29	80 Hz	80 Hz	ON 1	29	124 Hz	124 Hz	ON 2	29	80 Hz	80 Hz	ON 1
30	144 Hz	144 Hz	ON 2	30	88 Hz	88 Hz	ON 1	30	144 Hz	144 Hz	ON 2	30	88 Hz	88 Hz	ON 1
31	92 Hz	92 Hz	ON 3	31	96 Hz	96 Hz	ON 1	31	92 Hz	96 Hz	ON 3	31	96 Hz	96 Hz	ON 1
32	104 Hz	104 Hz	ON 3	32	104 Hz	104 Hz	ON 1	32	104 Hz	104 Hz	ON 3	32	104 Hz	104 Hz	ON 1
33	116 Hz	116 Hz	ON 3	33	52 Hz	52 Hz	ON 2	33	116 Hz	116 Hz	ON 3	33	52 Hz	52 Hz	ON 2
34	124 Hz	124 Hz	ON 3	34	62 Hz	62 Hz	ON 2	34	124 Hz	124 Hz	ON 3	34	62 Hz	62 Hz	ON 2
35	144 Hz	144 Hz	ON 3	35	74 Hz	74 Hz	ON 2	35	144 Hz	144 Hz	ON 3	35	74 Hz	74 Hz	ON 2
36	158 Hz	158 Hz	ON 3	36	88 Hz	88 Hz	ON 2	36	158 Hz	158 Hz	ON 3	36	88 Hz	88 Hz	ON 2
37	166 Hz	166 Hz	ON 3	37	96 Hz	96 Hz	ON 2	37	166 Hz	166 Hz	ON 3	37	96 Hz	96 Hz	ON 2
38	176 Hz	176 Hz	ON 3	38	52 Hz	52 Hz	ON 3	38	176 Hz	176 Hz	ON 3	38	52 Hz	52 Hz	ON 3
39	188 Hz	188 Hz	ON 3	39	62 Hz	62 Hz	ON 3	39	188 Hz	188 Hz	ON 3	39	62 Hz	62 Hz	ON 3
40	202 Hz	202 Hz	ON 3	40	74 Hz	74 Hz	ON 3	40	202 Hz	202 Hz	ON 3	40	74 Hz	74 Hz	ON 3
41	210 Hz	210 Hz	ON 3	41	92 Hz	92 Hz	ON 3	41	210 Hz	210 Hz	ON 3	41	92 Hz	92 Hz	ON 3
42	210 Hz	218 Hz	ON 3	42	104 Hz	104 Hz	ON 3	42	210 Hz	218 Hz	ON 3	42	104 Hz	104 Hz	ON 3
43	210 Hz	232 Hz	ON 3	43	116 Hz	116 Hz	ON 3	43	210 Hz	232 Hz	ON 3	43	52 Hz	52 Hz	ON 4
44	210 Hz	248 Hz	ON 3	44	124 Hz	124 Hz	ON 3	44	210 Hz	248 Hz	ON 3	44	62 Hz	62 Hz	ON 4
45	210 Hz	266 Hz	ON 3	45	144 Hz	144 Hz	ON 3	45	210 Hz	248 Hz	ON 3	45	74 Hz	74 Hz	ON 4
				46	158 Hz	158 Hz	ON 3	46	210 Hz	210 Hz	ON 4	46	96 Hz	96 Hz	ON 4
				47	166 Hz	166 Hz	ON 3					47	104 Hz	104 Hz	ON 4
				48	176 Hz	176 Hz	ON 3					48	116 Hz	116 Hz	ON 4
				49	188 Hz	188 Hz	ON 3					49	124 Hz	124 Hz	ON 4
				50	202 Hz	202 Hz	ON 3					50	144 Hz	144 Hz	ON 4
				51	210 Hz	210 Hz	ON 3					51	158 Hz	158 Hz	ON 4
				52	210 Hz	218 Hz	ON 3					52	166 Hz	166 Hz	ON 4
				53	210 Hz	232 Hz	ON 3					53	176 Hz	176 Hz	ON 4
				54	210 Hz	248 Hz	ON 3					54	188 Hz	188 Hz	ON 4
				55	210 Hz	266 Hz	ON 3					55	202 Hz	202 Hz	ON 4
												56	210 Hz	210 Hz	ON 4

Notes:

1. INV : Inverter compressor
STD : Standard compressor
Figures after ON represent the number of STD compressors in operation.
2. “Master unit”, and “slave unit” in this section are the names for control, and they will be transferred according to the priority of rotation system.
3. Depending on the operating conditions of compressors, the compressors may run in patterns other than those aforementioned.

■ represents the range in which “Hz” is not stepped up.

RXYQ 34PAY1 (16+18HP)

RXYQ36PAY1 (18+18HP)

(To increase Step No.)

STEP No.	Master unit INV	Slave unit INV	STD
1	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	OFF
5	70 Hz	70 Hz	OFF
6	74 Hz	74 Hz	OFF
7	80 Hz	80 Hz	OFF
8	88 Hz	88 Hz	OFF
9	96 Hz	96 Hz	OFF
10	104 Hz	104 Hz	OFF
11	110 Hz	110 Hz	OFF
12	116 Hz	116 Hz	OFF
13	124 Hz	124 Hz	OFF
14	132 Hz	132 Hz	OFF
15	144 Hz	144 Hz	OFF
16	158 Hz	158 Hz	OFF
17	166 Hz	166 Hz	OFF
18	176 Hz	176 Hz	OFF
19	80 Hz	80 Hz	ON 1
20	88 Hz	88 Hz	ON 1
21	96 Hz	96 Hz	ON 1
22	104 Hz	104 Hz	ON 1
23	116 Hz	116 Hz	ON 1
24	124 Hz	124 Hz	ON 1
25	132 Hz	132 Hz	ON 1
26	88 Hz	88 Hz	ON 2
27	96 Hz	96 Hz	ON 2
28	104 Hz	104 Hz	ON 2
29	124 Hz	124 Hz	ON 2
30	144 Hz	144 Hz	ON 2
31	92 Hz	96 Hz	ON 3
32	104 Hz	104 Hz	ON 3
33	116 Hz	116 Hz	ON 3
34	124 Hz	124 Hz	ON 3
35	144 Hz	144 Hz	ON 3
36	96 Hz	96 Hz	ON 4
37	104 Hz	104 Hz	ON 4
38	116 Hz	116 Hz	ON 4
39	124 Hz	124 Hz	ON 4
40	144 Hz	144 Hz	ON 4
41	158 Hz	158 Hz	ON 4
42	166 Hz	166 Hz	ON 4
43	176 Hz	176 Hz	ON 4
44	188 Hz	188 Hz	ON 4
45	202 Hz	202 Hz	ON 4
46	210 Hz	210 Hz	ON 4
47	210 Hz	218 Hz	ON 4
48	210 Hz	232 Hz	ON 4
49	210 Hz	248 Hz	ON 4
50	210 Hz	266 Hz	ON 4

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit INV	STD
1	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	OFF
5	74 Hz	74 Hz	OFF
6	80 Hz	80 Hz	OFF
7	88 Hz	88 Hz	OFF
8	96 Hz	96 Hz	OFF
9	104 Hz	104 Hz	OFF
10	52 Hz	52 Hz	OFF
11	56 Hz	56 Hz	OFF
12	62 Hz	62 Hz	OFF
13	66 Hz	66 Hz	OFF
14	70 Hz	70 Hz	OFF
15	74 Hz	74 Hz	OFF
16	80 Hz	80 Hz	OFF
17	88 Hz	88 Hz	OFF
18	92 Hz	92 Hz	OFF
19	96 Hz	96 Hz	OFF
20	104 Hz	104 Hz	OFF
21	110 Hz	110 Hz	OFF
22	116 Hz	116 Hz	OFF
23	124 Hz	124 Hz	OFF
24	132 Hz	132 Hz	OFF
25	52 Hz	52 Hz	ON 1
26	62 Hz	62 Hz	ON 1
27	68 Hz	68 Hz	ON 1
28	74 Hz	74 Hz	ON 1
29	80 Hz	80 Hz	ON 1
30	88 Hz	88 Hz	ON 1
31	96 Hz	96 Hz	ON 1
32	104 Hz	104 Hz	ON 1
33	52 Hz	52 Hz	ON 2
34	62 Hz	62 Hz	ON 2
35	74 Hz	74 Hz	ON 2
36	88 Hz	88 Hz	ON 2
37	96 Hz	96 Hz	ON 2
38	52 Hz	52 Hz	ON 3
39	62 Hz	62 Hz	ON 3
40	74 Hz	74 Hz	ON 3
41	92 Hz	92 Hz	ON 3
42	104 Hz	104 Hz	ON 3
43	52 Hz	52 Hz	ON 4
44	62 Hz	62 Hz	ON 4
45	74 Hz	74 Hz	ON 4
46	96 Hz	96 Hz	ON 4
47	104 Hz	104 Hz	ON 4
48	116 Hz	116 Hz	ON 4
49	124 Hz	124 Hz	ON 4
50	144 Hz	144 Hz	ON 4
51	158 Hz	158 Hz	ON 4
52	166 Hz	166 Hz	ON 4
53	176 Hz	176 Hz	ON 4
54	188 Hz	188 Hz	ON 4
55	202 Hz	202 Hz	ON 4
56	210 Hz	210 Hz	ON 4
57	210 Hz	218 Hz	ON 4
58	210 Hz	232 Hz	ON 4
59	210 Hz	248 Hz	ON 4
60	210 Hz	266 Hz	ON 4

(To increase Step No.)

STEP No.	Master unit INV	Slave unit INV	STD
1	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	OFF
5	70 Hz	70 Hz	OFF
6	74 Hz	74 Hz	OFF
7	80 Hz	80 Hz	OFF
8	88 Hz	88 Hz	OFF
9	96 Hz	96 Hz	OFF
10	104 Hz	104 Hz	OFF
11	110 Hz	110 Hz	OFF
12	116 Hz	116 Hz	OFF
13	124 Hz	124 Hz	OFF
14	132 Hz	132 Hz	OFF
15	144 Hz	144 Hz	OFF
16	158 Hz	158 Hz	OFF
17	166 Hz	166 Hz	OFF
18	176 Hz	176 Hz	OFF
19	80 Hz	80 Hz	ON 1
20	88 Hz	88 Hz	ON 1
21	96 Hz	96 Hz	ON 1
22	104 Hz	104 Hz	ON 1
23	116 Hz	116 Hz	ON 1
24	124 Hz	124 Hz	ON 1
25	132 Hz	132 Hz	ON 1
26	88 Hz	88 Hz	ON 2
27	96 Hz	96 Hz	ON 2
28	104 Hz	104 Hz	ON 2
29	124 Hz	124 Hz	ON 2
30	144 Hz	144 Hz	ON 2
31	92 Hz	96 Hz	ON 3
32	104 Hz	104 Hz	ON 3
33	116 Hz	116 Hz	ON 3
34	124 Hz	124 Hz	ON 3
35	144 Hz	144 Hz	ON 3
36	96 Hz	96 Hz	ON 4
37	104 Hz	104 Hz	ON 4
38	116 Hz	116 Hz	ON 4
39	124 Hz	124 Hz	ON 4
40	144 Hz	144 Hz	ON 4
41	158 Hz	158 Hz	ON 4
42	166 Hz	166 Hz	ON 4
43	176 Hz	176 Hz	ON 4
44	188 Hz	188 Hz	ON 4
45	202 Hz	202 Hz	ON 4
46	210 Hz	210 Hz	ON 4
47	218 Hz	218 Hz	ON 4
48	232 Hz	232 Hz	ON 4
49	248 Hz	248 Hz	ON 4
50	266 Hz	266 Hz	ON 4

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit INV	STD
1	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	OFF
5	74 Hz	74 Hz	OFF
6	80 Hz	80 Hz	OFF
7	88 Hz	88 Hz	OFF
8	96 Hz	96 Hz	OFF
9	104 Hz	104 Hz	OFF
10	52 Hz	52 Hz	OFF
11	56 Hz	56 Hz	OFF
12	62 Hz	62 Hz	OFF
13	66 Hz	66 Hz	OFF
14	70 Hz	70 Hz	OFF
15	74 Hz	74 Hz	OFF
16	80 Hz	80 Hz	OFF
17	88 Hz	88 Hz	OFF
18	92 Hz	92 Hz	OFF
19	96 Hz	96 Hz	OFF
20	104 Hz	104 Hz	OFF
21	110 Hz	110 Hz	OFF
22	116 Hz	116 Hz	OFF
23	124 Hz	124 Hz	OFF
24	132 Hz	132 Hz	OFF
25	52 Hz	52 Hz	ON 1
26	62 Hz	62 Hz	ON 1
27	68 Hz	68 Hz	ON 1
28	74 Hz	74 Hz	ON 1
29	80 Hz	80 Hz	ON 1
30	88 Hz	88 Hz	ON 1
31	96 Hz	96 Hz	ON 1
32	104 Hz	104 Hz	ON 1
33	52 Hz	52 Hz	ON 2
34	62 Hz	62 Hz	ON 2
35	74 Hz	74 Hz	ON 2
36	88 Hz	88 Hz	ON 2
37	96 Hz	96 Hz	ON 2
38	52 Hz	52 Hz	ON 3
39	62 Hz	62 Hz	ON 3
40	74 Hz	74 Hz	ON 3
41	92 Hz	92 Hz	ON 3
42	104 Hz	104 Hz	ON 3
43	52 Hz	52 Hz	ON 4
44	62 Hz	62 Hz	ON 4
45	74 Hz	74 Hz	ON 4
46	96 Hz	96 Hz	ON 4
47	104 Hz	104 Hz	ON 4
48	116 Hz	116 Hz	ON 4
49	124 Hz	124 Hz	ON 4
50	144 Hz	144 Hz	ON 4
51	158 Hz	158 Hz	ON 4
52	166 Hz	166 Hz	ON 4
53	176 Hz	176 Hz	ON 4
54	188 Hz	188 Hz	ON 4
55	202 Hz	202 Hz	ON 4
56	210 Hz	210 Hz	ON 4
57	218 Hz	218 Hz	ON 4
58	232 Hz	232 Hz	ON 4
59	248 Hz	248 Hz	ON 4
60	266 Hz	266 Hz	ON 4

Notes:

1. INV : Inverter compressor
STD : Standard compressor
Figures after ON represent the number of STD compressors in operation.
2. “Master unit”, and “slave unit” in this section are the names for control, and they will be transferred according to the priority of rotation system.
3. Depending on the operating conditions of compressors, the compressors may run in patterns other than those aforementioned.

Three-unit multi system
RXYQ38PAY1 (8+12+18HP)

(To increase Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	66 Hz	OFF
5	68 Hz	68 Hz	68 Hz	OFF
6	70 Hz	70 Hz	70 Hz	OFF
7	74 Hz	74 Hz	74 Hz	OFF
8	80 Hz	80 Hz	80 Hz	OFF
9	88 Hz	88 Hz	88 Hz	OFF
10	96 Hz	96 Hz	96 Hz	OFF
11	104 Hz	104 Hz	104 Hz	OFF
12	110 Hz	110 Hz	110 Hz	OFF
13	116 Hz	116 Hz	116 Hz	OFF
14	124 Hz	124 Hz	124 Hz	OFF
15	84 Hz	80 Hz	80 Hz	ON 1
16	88 Hz	88 Hz	88 Hz	ON 1
17	96 Hz	96 Hz	96 Hz	ON 1
18	104 Hz	104 Hz	104 Hz	ON 1
19	116 Hz	116 Hz	116 Hz	ON 1
20	124 Hz	124 Hz	124 Hz	ON 1
21	132 Hz	132 Hz	132 Hz	ON 1
22	88 Hz	88 Hz	88 Hz	ON 2
23	96 Hz	96 Hz	96 Hz	ON 2
24	104 Hz	104 Hz	104 Hz	ON 2
25	124 Hz	124 Hz	124 Hz	ON 2
26	144 Hz	144 Hz	144 Hz	ON 2
27	92 Hz	92 Hz	92 Hz	ON 3
28	104 Hz	104 Hz	104 Hz	ON 3
29	116 Hz	116 Hz	116 Hz	ON 3
30	124 Hz	124 Hz	124 Hz	ON 3
31	144 Hz	144 Hz	144 Hz	ON 3
32	158 Hz	158 Hz	158 Hz	ON 3
33	166 Hz	166 Hz	166 Hz	ON 3
34	176 Hz	176 Hz	176 Hz	ON 3
35	188 Hz	188 Hz	188 Hz	ON 3
36	202 Hz	202 Hz	202 Hz	ON 3
37	210 Hz	210 Hz	210 Hz	ON 3
38	218 Hz	210 Hz	218 Hz	ON 3
39	232 Hz	210 Hz	232 Hz	ON 3
40	248 Hz	210 Hz	248 Hz	ON 3
41	266 Hz	210 Hz	266 Hz	ON 3

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	OFF	OFF	OFF
2	56 Hz	OFF	OFF	OFF
3	62 Hz	OFF	OFF	OFF
4	68 Hz	OFF	OFF	OFF
5	74 Hz	OFF	OFF	OFF
6	80 Hz	OFF	OFF	OFF
7	88 Hz	OFF	OFF	OFF
8	96 Hz	OFF	OFF	OFF
9	104 Hz	OFF	OFF	OFF
10	52 Hz	52 Hz	OFF	OFF
11	56 Hz	56 Hz	OFF	OFF
12	62 Hz	62 Hz	OFF	OFF
13	66 Hz	66 Hz	OFF	OFF
14	70 Hz	70 Hz	OFF	OFF
15	74 Hz	74 Hz	OFF	OFF
16	52 Hz	52 Hz	52 Hz	OFF
17	56 Hz	56 Hz	56 Hz	OFF
18	62 Hz	62 Hz	62 Hz	OFF
19	66 Hz	66 Hz	66 Hz	OFF
20	68 Hz	68 Hz	68 Hz	OFF
21	70 Hz	70 Hz	70 Hz	OFF
22	74 Hz	74 Hz	74 Hz	OFF
23	80 Hz	80 Hz	80 Hz	OFF
24	88 Hz	88 Hz	88 Hz	OFF
25	96 Hz	96 Hz	96 Hz	OFF
26	52 Hz	52 Hz	52 Hz	ON 1
27	62 Hz	62 Hz	62 Hz	ON 1
28	68 Hz	68 Hz	68 Hz	ON 1
29	74 Hz	74 Hz	74 Hz	ON 1
30	80 Hz	80 Hz	80 Hz	ON 1
31	88 Hz	88 Hz	88 Hz	ON 1
32	96 Hz	96 Hz	96 Hz	ON 1
33	104 Hz	104 Hz	104 Hz	ON 1
34	52 Hz	52 Hz	52 Hz	ON 2
35	62 Hz	62 Hz	62 Hz	ON 2
36	74 Hz	74 Hz	74 Hz	ON 2
37	88 Hz	88 Hz	88 Hz	ON 2
38	96 Hz	96 Hz	96 Hz	ON 2
39	52 Hz	52 Hz	52 Hz	ON 3
40	62 Hz	62 Hz	62 Hz	ON 3
41	74 Hz	74 Hz	74 Hz	ON 3
42	92 Hz	92 Hz	92 Hz	ON 3
43	104 Hz	104 Hz	104 Hz	ON 3
44	116 Hz	116 Hz	116 Hz	ON 3
45	124 Hz	124 Hz	124 Hz	ON 3
46	144 Hz	144 Hz	144 Hz	ON 3
47	158 Hz	158 Hz	158 Hz	ON 3
48	166 Hz	166 Hz	166 Hz	ON 3
49	176 Hz	176 Hz	176 Hz	ON 3
50	188 Hz	188 Hz	188 Hz	ON 3
51	202 Hz	202 Hz	202 Hz	ON 3
52	210 Hz	210 Hz	210 Hz	ON 3
53	218 Hz	210 Hz	218 Hz	ON 3
54	232 Hz	210 Hz	232 Hz	ON 3
55	248 Hz	210 Hz	248 Hz	ON 3
56	266 Hz	210 Hz	266 Hz	ON 3

■ represents the range in which “Hz” is not stepped up.
RXYQ 40PAY1 (8+16+16HP)

(To increase Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	66 Hz	OFF
5	68 Hz	68 Hz	68 Hz	OFF
6	70 Hz	70 Hz	70 Hz	OFF
7	74 Hz	74 Hz	74 Hz	OFF
8	80 Hz	80 Hz	80 Hz	OFF
9	88 Hz	88 Hz	88 Hz	OFF
10	96 Hz	96 Hz	96 Hz	OFF
11	104 Hz	104 Hz	104 Hz	OFF
12	110 Hz	110 Hz	110 Hz	OFF
13	116 Hz	116 Hz	116 Hz	OFF
14	124 Hz	124 Hz	124 Hz	OFF
15	80 Hz	80 Hz	80 Hz	ON 1
16	88 Hz	88 Hz	88 Hz	ON 1
17	96 Hz	96 Hz	96 Hz	ON 1
18	104 Hz	104 Hz	104 Hz	ON 1
19	116 Hz	116 Hz	116 Hz	ON 1
20	124 Hz	124 Hz	124 Hz	ON 1
21	132 Hz	132 Hz	132 Hz	ON 1
22	88 Hz	88 Hz	88 Hz	ON 2
23	96 Hz	96 Hz	96 Hz	ON 2
24	104 Hz	104 Hz	104 Hz	ON 2
25	124 Hz	124 Hz	124 Hz	ON 2
26	144 Hz	144 Hz	144 Hz	ON 2
27	92 Hz	92 Hz	92 Hz	ON 3
28	104 Hz	104 Hz	104 Hz	ON 3
29	116 Hz	116 Hz	116 Hz	ON 3
30	124 Hz	124 Hz	124 Hz	ON 3
31	144 Hz	144 Hz	144 Hz	ON 3
32	96 Hz	96 Hz	96 Hz	ON 4
33	104 Hz	104 Hz	104 Hz	ON 4
34	116 Hz	116 Hz	116 Hz	ON 4
35	124 Hz	124 Hz	124 Hz	ON 4
36	144 Hz	144 Hz	144 Hz	ON 4
37	158 Hz	158 Hz	158 Hz	ON 4
38	166 Hz	166 Hz	166 Hz	ON 4
39	176 Hz	176 Hz	176 Hz	ON 4
40	188 Hz	188 Hz	188 Hz	ON 4
41	202 Hz	202 Hz	202 Hz	ON 4
42	210 Hz	210 Hz	210 Hz	ON 4
43	218 Hz	210 Hz	218 Hz	ON 4
44	232 Hz	210 Hz	232 Hz	ON 4
45	248 Hz	210 Hz	248 Hz	ON 4
46	266 Hz	210 Hz	266 Hz	ON 4

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	OFF	OFF	OFF
2	56 Hz	OFF	OFF	OFF
3	62 Hz	OFF	OFF	OFF
4	68 Hz	OFF	OFF	OFF
5	74 Hz	OFF	OFF	OFF
6	80 Hz	OFF	OFF	OFF
7	88 Hz	OFF	OFF	OFF
8	96 Hz	OFF	OFF	OFF
9	104 Hz	OFF	OFF	OFF
10	52 Hz	52 Hz	OFF	OFF
11	56 Hz	56 Hz	OFF	OFF
12	62 Hz	62 Hz	OFF	OFF
13	66 Hz	66 Hz	OFF	OFF
14	70 Hz	70 Hz	OFF	OFF
15	74 Hz	74 Hz	OFF	OFF
16	52 Hz	52 Hz	52 Hz	OFF
17	56 Hz	56 Hz	56 Hz	OFF
18	62 Hz	62 Hz	62 Hz	OFF
19	66 Hz	66 Hz	66 Hz	OFF
20	68 Hz	68 Hz	68 Hz	OFF
21	70 Hz	70 Hz	70 Hz	OFF
22	74 Hz	74 Hz	74 Hz	OFF
23	80 Hz	80 Hz	80 Hz	OFF
24	88 Hz	88 Hz	88 Hz	OFF
25	96 Hz	96 Hz	96 Hz	OFF
26	52 Hz	52 Hz	52 Hz	ON 1
27	62 Hz	62 Hz	62 Hz	ON 1
28	68 Hz	68 Hz	68 Hz	ON 1
29	74 Hz	74 Hz	74 Hz	ON 1
30	80 Hz	80 Hz	80 Hz	ON 1
31	88 Hz	88 Hz	88 Hz	ON 1
32	96 Hz	96 Hz	96 Hz	ON 1
33	104 Hz	104 Hz	104 Hz	ON 1
34	52 Hz	52 Hz	52 Hz	ON 2
35	62 Hz	62 Hz	62 Hz	ON 2
36	74 Hz	74 Hz	74 Hz	ON 2
37	88 Hz	88 Hz	88 Hz	ON 2
38	96 Hz	96 Hz	96 Hz	ON 2
39	52 Hz	52 Hz	52 Hz	ON 3
40	62 Hz	62 Hz	62 Hz	ON 3
41	74 Hz	74 Hz	74 Hz	ON 3
42	92 Hz	92 Hz	92 Hz	ON 3
43	104 Hz	104 Hz	104 Hz	ON 3
44	52 Hz	52 Hz	52 Hz	ON 4
45	62 Hz	62 Hz	62 Hz	ON 4
46	74 Hz	74 Hz	74 Hz	ON 4
47	96 Hz	96 Hz	96 Hz	ON 4
48	104 Hz	104 Hz	104 Hz	ON 4
49	116 Hz	116 Hz	116 Hz	ON 4
50	124 Hz	124 Hz	124 Hz	ON 4
51	144 Hz	144 Hz	144 Hz	ON 4
52	158 Hz	158 Hz	158 Hz	ON 4
53	166 Hz	166 Hz	166 Hz	ON 4
54	176 Hz	176 Hz	176 Hz	ON 4
55	188 Hz	188 Hz	188 Hz	ON 4
56	202 Hz	202 Hz	202 Hz	ON 4
57	210 Hz	210 Hz	210 Hz	ON 4
58	218 Hz	210 Hz	218 Hz	ON 4
59	232 Hz	210 Hz	232 Hz	ON 4
60	248 Hz	210 Hz	248 Hz	ON 4
61	266 Hz	210 Hz	266 Hz	ON 4

Notes:

1. INV : Inverter compressor
 STD : Standard compressor
 Figures after ON represent the number of STD compressors in operation.
2. “Master unit”, and “slave unit” in this section are the names for control, and they will be transferred according to the priority of rotation system.
3. Depending on the operating conditions of compressors, the compressors may run in patterns other than those aforementioned.

■ represents the range in which “Hz” is not stepped up.

RXYQ 42PAY1 (8+16+18HP)

RXYQ44PAY1 (8+18+18HP)

(To increase Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	66 Hz	OFF
5	68 Hz	68 Hz	68 Hz	OFF
6	70 Hz	70 Hz	70 Hz	OFF
7	74 Hz	74 Hz	74 Hz	OFF
8	80 Hz	80 Hz	80 Hz	OFF
9	88 Hz	88 Hz	88 Hz	OFF
10	96 Hz	96 Hz	96 Hz	OFF
11	104 Hz	104 Hz	104 Hz	OFF
12	110 Hz	110 Hz	110 Hz	OFF
13	116 Hz	116 Hz	116 Hz	OFF
14	124 Hz	124 Hz	124 Hz	OFF
15	80 Hz	80 Hz	80 Hz	ON 1
16	88 Hz	88 Hz	88 Hz	ON 1
17	96 Hz	96 Hz	96 Hz	ON 1
18	104 Hz	104 Hz	104 Hz	ON 1
19	116 Hz	116 Hz	116 Hz	ON 1
20	124 Hz	124 Hz	124 Hz	ON 1
21	132 Hz	132 Hz	132 Hz	ON 1
22	88 Hz	88 Hz	88 Hz	ON 2
23	96 Hz	96 Hz	96 Hz	ON 2
24	104 Hz	104 Hz	104 Hz	ON 2
25	124 Hz	124 Hz	124 Hz	ON 2
26	144 Hz	144 Hz	144 Hz	ON 2
27	92 Hz	92 Hz	92 Hz	ON 3
28	104 Hz	104 Hz	104 Hz	ON 3
29	116 Hz	116 Hz	116 Hz	ON 3
30	124 Hz	124 Hz	124 Hz	ON 3
31	144 Hz	144 Hz	144 Hz	ON 3
32	96 Hz	96 Hz	96 Hz	ON 4
33	104 Hz	104 Hz	104 Hz	ON 4
34	116 Hz	116 Hz	116 Hz	ON 4
35	124 Hz	124 Hz	124 Hz	ON 4
36	144 Hz	144 Hz	144 Hz	ON 4
37	158 Hz	158 Hz	158 Hz	ON 4
38	166 Hz	166 Hz	166 Hz	ON 4
39	176 Hz	176 Hz	176 Hz	ON 4
40	188 Hz	188 Hz	188 Hz	ON 4
41	202 Hz	202 Hz	202 Hz	ON 4
42	210 Hz	210 Hz	210 Hz	ON 4
43	218 Hz	210 Hz	218 Hz	ON 4
44	232 Hz	210 Hz	232 Hz	ON 4
45	248 Hz	210 Hz	248 Hz	ON 4
46	266 Hz	210 Hz	266 Hz	ON 4

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	OFF	OFF	OFF
2	56 Hz	OFF	OFF	OFF
3	62 Hz	OFF	OFF	OFF
4	68 Hz	OFF	OFF	OFF
5	74 Hz	OFF	OFF	OFF
6	80 Hz	OFF	OFF	OFF
7	88 Hz	OFF	OFF	OFF
8	96 Hz	OFF	OFF	OFF
9	104 Hz	OFF	OFF	OFF
10	52 Hz	52 Hz	52 Hz	OFF
11	56 Hz	56 Hz	56 Hz	OFF
12	62 Hz	62 Hz	62 Hz	OFF
13	66 Hz	66 Hz	66 Hz	OFF
14	70 Hz	70 Hz	70 Hz	OFF
15	74 Hz	74 Hz	74 Hz	OFF
16	52 Hz	52 Hz	52 Hz	OFF
17	56 Hz	56 Hz	56 Hz	OFF
18	62 Hz	62 Hz	62 Hz	OFF
19	66 Hz	66 Hz	66 Hz	OFF
20	68 Hz	68 Hz	68 Hz	OFF
21	70 Hz	70 Hz	70 Hz	OFF
22	74 Hz	74 Hz	74 Hz	OFF
23	80 Hz	80 Hz	80 Hz	OFF
24	88 Hz	88 Hz	88 Hz	OFF
25	96 Hz	96 Hz	96 Hz	OFF
26	52 Hz	52 Hz	52 Hz	ON 1
27	62 Hz	62 Hz	62 Hz	ON 1
28	68 Hz	68 Hz	68 Hz	ON 1
29	74 Hz	74 Hz	74 Hz	ON 1
30	80 Hz	80 Hz	80 Hz	ON 1
31	88 Hz	88 Hz	88 Hz	ON 1
32	96 Hz	96 Hz	96 Hz	ON 1
33	104 Hz	104 Hz	104 Hz	ON 1
34	52 Hz	52 Hz	52 Hz	ON 2
35	62 Hz	62 Hz	62 Hz	ON 2
36	74 Hz	74 Hz	74 Hz	ON 2
37	88 Hz	88 Hz	88 Hz	ON 2
38	96 Hz	96 Hz	96 Hz	ON 2
39	52 Hz	52 Hz	52 Hz	ON 3
40	62 Hz	62 Hz	62 Hz	ON 3
41	74 Hz	74 Hz	74 Hz	ON 3
42	92 Hz	92 Hz	92 Hz	ON 3
43	104 Hz	104 Hz	104 Hz	ON 3
44	52 Hz	52 Hz	52 Hz	ON 4
45	62 Hz	62 Hz	62 Hz	ON 4
46	74 Hz	74 Hz	74 Hz	ON 4
47	96 Hz	96 Hz	96 Hz	ON 4
48	104 Hz	104 Hz	104 Hz	ON 4
49	116 Hz	116 Hz	116 Hz	ON 4
50	124 Hz	124 Hz	124 Hz	ON 4
51	144 Hz	144 Hz	144 Hz	ON 4
52	158 Hz	158 Hz	158 Hz	ON 4
53	166 Hz	166 Hz	166 Hz	ON 4
54	176 Hz	176 Hz	176 Hz	ON 4
55	188 Hz	188 Hz	188 Hz	ON 4
56	202 Hz	202 Hz	202 Hz	ON 4
57	210 Hz	210 Hz	210 Hz	ON 4
58	218 Hz	210 Hz	218 Hz	ON 4
59	232 Hz	210 Hz	232 Hz	ON 4
60	248 Hz	210 Hz	248 Hz	ON 4
61	266 Hz	210 Hz	266 Hz	ON 4

(To increase Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	66 Hz	OFF
5	68 Hz	68 Hz	68 Hz	OFF
6	70 Hz	70 Hz	70 Hz	OFF
7	74 Hz	74 Hz	74 Hz	OFF
8	80 Hz	80 Hz	80 Hz	OFF
9	88 Hz	88 Hz	88 Hz	OFF
10	96 Hz	96 Hz	96 Hz	OFF
11	104 Hz	104 Hz	104 Hz	OFF
12	110 Hz	110 Hz	110 Hz	OFF
13	116 Hz	116 Hz	116 Hz	OFF
14	124 Hz	124 Hz	124 Hz	OFF
15	80 Hz	80 Hz	80 Hz	ON 1
16	88 Hz	88 Hz	88 Hz	ON 1
17	96 Hz	96 Hz	96 Hz	ON 1
18	104 Hz	104 Hz	104 Hz	ON 1
19	116 Hz	116 Hz	116 Hz	ON 1
20	124 Hz	124 Hz	124 Hz	ON 1
21	132 Hz	132 Hz	132 Hz	ON 1
22	88 Hz	88 Hz	88 Hz	ON 2
23	96 Hz	96 Hz	96 Hz	ON 2
24	104 Hz	104 Hz	104 Hz	ON 2
25	124 Hz	124 Hz	124 Hz	ON 2
26	144 Hz	144 Hz	144 Hz	ON 2
27	92 Hz	92 Hz	92 Hz	ON 3
28	104 Hz	104 Hz	104 Hz	ON 3
29	116 Hz	116 Hz	116 Hz	ON 3
30	124 Hz	124 Hz	124 Hz	ON 3
31	144 Hz	144 Hz	144 Hz	ON 3
32	96 Hz	96 Hz	96 Hz	ON 4
33	104 Hz	104 Hz	104 Hz	ON 4
34	116 Hz	116 Hz	116 Hz	ON 4
35	124 Hz	124 Hz	124 Hz	ON 4
36	144 Hz	144 Hz	144 Hz	ON 4
37	158 Hz	158 Hz	158 Hz	ON 4
38	166 Hz	166 Hz	166 Hz	ON 4
39	176 Hz	176 Hz	176 Hz	ON 4
40	188 Hz	188 Hz	188 Hz	ON 4
41	202 Hz	202 Hz	202 Hz	ON 4
42	210 Hz	210 Hz	210 Hz	ON 4
43	218 Hz	218 Hz	218 Hz	ON 4
44	232 Hz	232 Hz	232 Hz	ON 4
45	248 Hz	248 Hz	248 Hz	ON 4
46	266 Hz	266 Hz	266 Hz	ON 4

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	OFF	OFF	OFF
2	56 Hz	OFF	OFF	OFF
3	62 Hz	OFF	OFF	OFF
4	68 Hz	OFF	OFF	OFF
5	74 Hz	OFF	OFF	OFF
6	80 Hz	OFF	OFF	OFF
7	88 Hz	OFF	OFF	OFF
8	96 Hz	OFF	OFF	OFF
9	104 Hz	OFF	OFF	OFF
10	52 Hz	52 Hz	52 Hz	OFF
11	56 Hz	56 Hz	56 Hz	OFF
12	62 Hz	62 Hz	62 Hz	OFF
13	66 Hz	66 Hz	66 Hz	OFF
14	70 Hz	70 Hz	70 Hz	OFF
15	74 Hz	74 Hz	74 Hz	OFF
16	52 Hz	52 Hz	52 Hz	OFF
17	56 Hz	56 Hz	56 Hz	OFF
18	62 Hz	62 Hz	62 Hz	OFF
19	66 Hz	66 Hz	66 Hz	OFF
20	68 Hz	68 Hz	68 Hz	OFF
21	70 Hz	70 Hz	70 Hz	OFF
22	74 Hz	74 Hz	74 Hz	OFF
23	80 Hz	80 Hz	80 Hz	OFF
24	88 Hz	88 Hz	88 Hz	OFF
25	96 Hz	96 Hz	96 Hz	OFF
26	52 Hz	52 Hz	52 Hz	ON 1
27	62 Hz	62 Hz	62 Hz	ON 1
28	68 Hz	68 Hz	68 Hz	ON 1
29	74 Hz	74 Hz	74 Hz	ON 1
30	80 Hz	80 Hz	80 Hz	ON 1
31	88 Hz	88 Hz	88 Hz	ON 1
32	96 Hz	96 Hz	96 Hz	ON 1
33	104 Hz	104 Hz	104 Hz	ON 1
34	52 Hz	52 Hz	52 Hz	ON 2
35	62 Hz	62 Hz	62 Hz	ON 2
36	74 Hz	74 Hz	74 Hz	ON 2
37	88 Hz	88 Hz	88 Hz	ON 2
38	96 Hz	96 Hz	96 Hz	ON 2
39	52 Hz	52 Hz	52 Hz	ON 3
40	62 Hz	62 Hz	62 Hz	ON 3
41	74 Hz	74 Hz	74 Hz	ON 3
42	92 Hz	92 Hz	92 Hz	ON 3
43	104 Hz	104 Hz	104 Hz	ON 3
44	52 Hz	52 Hz	52 Hz	ON 4
45	62 Hz	62 Hz	62 Hz	ON 4
46	74 Hz	74 Hz	74 Hz	ON 4
47	96 Hz	96 Hz	96 Hz	ON 4
48	104 Hz	104 Hz	104 Hz	ON 4
49	116 Hz	116 Hz	116 Hz	ON 4
50	124 Hz	124 Hz	124 Hz	ON 4
51	144 Hz	144 Hz	144 Hz	ON 4
52	158 Hz	158 Hz	158 Hz	ON 4
53	166 Hz	166 Hz	166 Hz	ON 4
54	176 Hz	176 Hz	176 Hz	ON 4
55	188 Hz	188 Hz	188 Hz	ON 4
56	202 Hz	202 Hz	202 Hz	ON 4
57	210 Hz	210 Hz	210 Hz	ON 4
58	218 Hz	218 Hz	218 Hz	ON 4
59	232 Hz	232 Hz	232 Hz	ON 4
60	248 Hz	248 Hz	248 Hz	ON 4
61	266 Hz	266 Hz	266 Hz	ON 4

Notes:

1. INV : Inverter compressor
STD : Standard compressor
Figures after ON represent the number of STD compressors in operation.
2. “Master unit”, and “slave unit” in this section are the names for control, and they will be transferred according to the priority of rotation system.
3. Depending on the operating conditions of compressors, the compressors may run in patterns other than those aforementioned.

represents the range in which “Hz” is not stepped up.

RXYQ46PAY1, 48PAY1 (10/12+18+18HP)

RXYQ50PAY1, 52PAY1 (14/16+18+18HP)

(To increase Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	66 Hz	OFF
5	68 Hz	68 Hz	68 Hz	OFF
6	70 Hz	70 Hz	70 Hz	OFF
7	74 Hz	74 Hz	74 Hz	OFF
8	80 Hz	80 Hz	80 Hz	OFF
9	88 Hz	88 Hz	88 Hz	OFF
10	96 Hz	96 Hz	96 Hz	OFF
11	104 Hz	104 Hz	104 Hz	OFF
12	110 Hz	110 Hz	110 Hz	OFF
13	116 Hz	116 Hz	116 Hz	OFF
14	124 Hz	124 Hz	124 Hz	OFF
15	80 Hz	80 Hz	80 Hz	ON 1
16	88 Hz	88 Hz	88 Hz	ON 1
17	96 Hz	96 Hz	96 Hz	ON 1
18	104 Hz	104 Hz	104 Hz	ON 1
19	116 Hz	116 Hz	116 Hz	ON 1
20	124 Hz	124 Hz	124 Hz	ON 1
21	132 Hz	132 Hz	132 Hz	ON 1
22	88 Hz	88 Hz	88 Hz	ON 2
23	96 Hz	96 Hz	96 Hz	ON 2
24	104 Hz	104 Hz	104 Hz	ON 2
25	124 Hz	124 Hz	124 Hz	ON 2
26	144 Hz	144 Hz	144 Hz	ON 2
27	92 Hz	92 Hz	92 Hz	ON 3
28	104 Hz	104 Hz	104 Hz	ON 3
29	116 Hz	116 Hz	116 Hz	ON 3
30	124 Hz	124 Hz	124 Hz	ON 3
31	144 Hz	144 Hz	144 Hz	ON 3
32	96 Hz	96 Hz	96 Hz	ON 4
33	104 Hz	104 Hz	104 Hz	ON 4
34	116 Hz	116 Hz	116 Hz	ON 4
35	124 Hz	124 Hz	124 Hz	ON 4
36	144 Hz	144 Hz	144 Hz	ON 4
52	96 Hz	96 Hz	96 Hz	ON 5
53	104 Hz	104 Hz	104 Hz	ON 5
54	116 Hz	116 Hz	116 Hz	ON 5
55	124 Hz	124 Hz	124 Hz	ON 5
56	144 Hz	144 Hz	144 Hz	ON 5
57	158 Hz	158 Hz	158 Hz	ON 5
58	166 Hz	166 Hz	166 Hz	ON 5
59	176 Hz	176 Hz	176 Hz	ON 5
60	188 Hz	188 Hz	188 Hz	ON 5
61	202 Hz	202 Hz	202 Hz	ON 5
62	210 Hz	210 Hz	210 Hz	ON 5
63	210 Hz	218 Hz	218 Hz	ON 5
64	210 Hz	232 Hz	232 Hz	ON 5
65	210 Hz	248 Hz	248 Hz	ON 5
66	210 Hz	266 Hz	266 Hz	ON 5

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	OFF	OFF	OFF
2	56 Hz	OFF	OFF	OFF
3	62 Hz	OFF	OFF	OFF
4	68 Hz	OFF	OFF	OFF
5	74 Hz	OFF	OFF	OFF
6	80 Hz	OFF	OFF	OFF
7	88 Hz	OFF	OFF	OFF
8	96 Hz	OFF	OFF	OFF
9	104 Hz	OFF	OFF	OFF
10	52 Hz	52 Hz	52 Hz	OFF
11	56 Hz	56 Hz	56 Hz	OFF
12	62 Hz	62 Hz	62 Hz	OFF
13	66 Hz	66 Hz	66 Hz	OFF
14	70 Hz	70 Hz	70 Hz	OFF
15	74 Hz	74 Hz	74 Hz	OFF
16	52 Hz	52 Hz	52 Hz	OFF
17	56 Hz	56 Hz	56 Hz	OFF
18	62 Hz	62 Hz	62 Hz	OFF
19	66 Hz	66 Hz	66 Hz	OFF
20	68 Hz	68 Hz	68 Hz	OFF
21	70 Hz	70 Hz	70 Hz	OFF
22	74 Hz	74 Hz	74 Hz	OFF
23	80 Hz	80 Hz	80 Hz	OFF
24	88 Hz	88 Hz	88 Hz	OFF
25	96 Hz	96 Hz	96 Hz	OFF
26	52 Hz	52 Hz	52 Hz	ON 1
27	62 Hz	62 Hz	62 Hz	ON 1
28	68 Hz	68 Hz	68 Hz	ON 1
29	74 Hz	74 Hz	74 Hz	ON 1
30	80 Hz	80 Hz	80 Hz	ON 1
31	88 Hz	88 Hz	88 Hz	ON 1
32	96 Hz	96 Hz	96 Hz	ON 1
33	104 Hz	104 Hz	104 Hz	ON 1
34	52 Hz	52 Hz	52 Hz	ON 2
35	62 Hz	62 Hz	62 Hz	ON 2
36	74 Hz	74 Hz	74 Hz	ON 2
37	88 Hz	88 Hz	88 Hz	ON 2
38	96 Hz	96 Hz	96 Hz	ON 2
39	52 Hz	52 Hz	52 Hz	ON 3
40	62 Hz	62 Hz	62 Hz	ON 3
41	74 Hz	74 Hz	74 Hz	ON 3
42	92 Hz	92 Hz	92 Hz	ON 3
43	104 Hz	104 Hz	104 Hz	ON 3
44	52 Hz	52 Hz	52 Hz	ON 4
45	62 Hz	62 Hz	62 Hz	ON 4
46	74 Hz	74 Hz	74 Hz	ON 4
47	96 Hz	96 Hz	96 Hz	ON 4
48	104 Hz	104 Hz	104 Hz	ON 4
49	52 Hz	52 Hz	52 Hz	ON 5
50	68 Hz	68 Hz	68 Hz	ON 5
51	80 Hz	80 Hz	80 Hz	ON 5
52	96 Hz	96 Hz	96 Hz	ON 5
53	104 Hz	104 Hz	104 Hz	ON 5
54	116 Hz	116 Hz	116 Hz	ON 5
55	124 Hz	124 Hz	124 Hz	ON 5
56	144 Hz	144 Hz	144 Hz	ON 5
57	158 Hz	158 Hz	158 Hz	ON 5
58	166 Hz	166 Hz	166 Hz	ON 5
59	176 Hz	176 Hz	176 Hz	ON 5
60	188 Hz	188 Hz	188 Hz	ON 5
61	202 Hz	202 Hz	202 Hz	ON 5
62	210 Hz	210 Hz	210 Hz	ON 5
63	210 Hz	218 Hz	218 Hz	ON 5
64	210 Hz	232 Hz	232 Hz	ON 5
65	210 Hz	248 Hz	248 Hz	ON 5
66	210 Hz	266 Hz	266 Hz	ON 5

(To increase Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	66 Hz	OFF
5	68 Hz	68 Hz	68 Hz	OFF
6	70 Hz	70 Hz	70 Hz	OFF
7	74 Hz	74 Hz	74 Hz	OFF
8	80 Hz	80 Hz	80 Hz	OFF
9	88 Hz	88 Hz	88 Hz	OFF
10	96 Hz	96 Hz	96 Hz	OFF
11	104 Hz	104 Hz	104 Hz	OFF
12	110 Hz	110 Hz	110 Hz	OFF
13	116 Hz	116 Hz	116 Hz	OFF
14	124 Hz	124 Hz	124 Hz	OFF
15	80 Hz	80 Hz	80 Hz	ON 1
16	88 Hz	88 Hz	88 Hz	ON 1
17	96 Hz	96 Hz	96 Hz	ON 1
18	104 Hz	104 Hz	104 Hz	ON 1
19	116 Hz	116 Hz	116 Hz	ON 1
20	124 Hz	124 Hz	124 Hz	ON 1
21	132 Hz	132 Hz	132 Hz	ON 1
22	88 Hz	88 Hz	88 Hz	ON 2
23	96 Hz	96 Hz	96 Hz	ON 2
24	104 Hz	104 Hz	104 Hz	ON 2
25	124 Hz	124 Hz	124 Hz	ON 2
26	144 Hz	144 Hz	144 Hz	ON 2
27	92 Hz	92 Hz	92 Hz	ON 3
28	104 Hz	104 Hz	104 Hz	ON 3
29	116 Hz	116 Hz	116 Hz	ON 3
30	124 Hz	124 Hz	124 Hz	ON 3
31	144 Hz	144 Hz	144 Hz	ON 3
32	96 Hz	96 Hz	96 Hz	ON 4
33	104 Hz	104 Hz	104 Hz	ON 4
34	116 Hz	116 Hz	116 Hz	ON 4
35	124 Hz	124 Hz	124 Hz	ON 4
36	144 Hz	144 Hz	144 Hz	ON 4
37	96 Hz	96 Hz	96 Hz	ON 5
38	104 Hz	104 Hz	104 Hz	ON 5
39	116 Hz	116 Hz	116 Hz	ON 5
40	124 Hz	124 Hz	124 Hz	ON 5
41	144 Hz	144 Hz	144 Hz	ON 5
42	96 Hz	96 Hz	96 Hz	ON 6
43	104 Hz	104 Hz	104 Hz	ON 6
44	116 Hz	116 Hz	116 Hz	ON 6
45	124 Hz	124 Hz	124 Hz	ON 6
46	144 Hz	144 Hz	144 Hz	ON 6
47	158 Hz	158 Hz	158 Hz	ON 6
48	166 Hz	166 Hz	166 Hz	ON 6
49	176 Hz	176 Hz	176 Hz	ON 6
50	188 Hz	188 Hz	188 Hz	ON 6
51	202 Hz	202 Hz	202 Hz	ON 6
52	210 Hz	210 Hz	210 Hz	ON 6
53	210 Hz	218 Hz	218 Hz	ON 6
54	210 Hz	232 Hz	232 Hz	ON 6
55	210 Hz	248 Hz	248 Hz	ON 6
56	210 Hz	266 Hz	266 Hz	ON 6

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	OFF	OFF	OFF
2	56 Hz	OFF	OFF	OFF
3	62 Hz	OFF	OFF	OFF
4	68 Hz	OFF	OFF	OFF
5	74 Hz	OFF	OFF	OFF
6	80 Hz	OFF	OFF	OFF
7	88 Hz	OFF	OFF	OFF
8	96 Hz	OFF	OFF	OFF
9	104 Hz	OFF	OFF	OFF
10	52 Hz	52 Hz	52 Hz	OFF
11	56 Hz	56 Hz	56 Hz	OFF
12	62 Hz	62 Hz	62 Hz	OFF
13	66 Hz	66 Hz	66 Hz	OFF
14	70 Hz	70 Hz	70 Hz	OFF
15	74 Hz	74 Hz	74 Hz	OFF
16	52 Hz	52 Hz	52 Hz	OFF
17	56 Hz	56 Hz	56 Hz	OFF
18	62 Hz	62 Hz	62 Hz	OFF
19	66 Hz	66 Hz	66 Hz	OFF
20	68 Hz	68 Hz	68 Hz	OFF
21	70 Hz	70 Hz	70 Hz	OFF
22	74 Hz	74 Hz	74 Hz	OFF
23	80 Hz	80 Hz	80 Hz	OFF
24	88 Hz	88 Hz	88 Hz	OFF
25	96 Hz	96 Hz	96 Hz	OFF
26	52 Hz	52 Hz	52 Hz	ON 1
27	62 Hz	62 Hz	62 Hz	ON 1
28	68 Hz	68 Hz	68 Hz	ON 1
29	74 Hz	74 Hz	74 Hz	ON 1
30	80 Hz	80 Hz	80 Hz	ON 1
31	88 Hz	88 Hz	88 Hz	ON 1
32	96 Hz	96 Hz	96 Hz	ON 1
33	104 Hz	104 Hz	104 Hz	ON 1
34	52 Hz	52 Hz	52 Hz	ON 2
35	62 Hz	62 Hz	62 Hz	ON 2
36	74 Hz	74 Hz	74 Hz	ON 2
37	88 Hz	88 Hz	88 Hz	ON 2
38	96 Hz	96 Hz	96 Hz	ON 2
39	52 Hz	52 Hz	52 Hz	ON 3
40	62 Hz	62 Hz	62 Hz	ON 3
41	74 Hz	74 Hz	74 Hz	ON 3
42	92 Hz	92 Hz	92 Hz	ON 3
43	104 Hz	104 Hz	104 Hz	ON 3
44	52 Hz	52 Hz	52 Hz	ON 4
45	62 Hz	62 Hz	62 Hz	ON 4
46	74 Hz	74 Hz	74 Hz	ON 4
47	96 Hz	96 Hz	96 Hz	ON 4
48	104 Hz	104 Hz	104 Hz	ON 4
49	52 Hz	52 Hz	52 Hz	ON 5
50	68 Hz	68 Hz	68 Hz	ON 5
51	80 Hz	80 Hz	80 Hz	ON 5
52	96 Hz	96 Hz	96 Hz	ON 5
53	104 Hz	104 Hz	104 Hz	ON 5
54	52 Hz	52 Hz	52 Hz	ON 6
55	68 Hz	68 Hz	68 Hz	ON 6
56	80 Hz	80 Hz	80 Hz	ON 6
57	96 Hz	96 Hz	96 Hz	ON 6
58	104 Hz	104 Hz	104 Hz	ON 6
59	116 Hz	116 Hz	116 Hz	ON 6
60	124 Hz	124 Hz	124 Hz	ON 6
61	144 Hz	144 Hz	144 Hz	ON 6
62	158 Hz	158 Hz	158 Hz	ON 6
63	166 Hz	166 Hz	166 Hz	ON 6
64	176 Hz	176 Hz	176 Hz	ON 6
65	188 Hz	188 Hz	188 Hz	ON 6
66	202 Hz	202 Hz	202 Hz	ON 6
67	210 Hz	210 Hz	210 Hz	ON 6
68	210 Hz	218 Hz	218 Hz	ON 6
69	210 Hz	232 Hz	232 Hz	ON 6
70	210 Hz	248 Hz	248 Hz	ON 6
71	210 Hz	266 Hz	266 Hz	ON 6

Notes:

- INV : Inverter compressor
STD : Standard compressor
Figures after ON represent the number of STD compressors in operation.
- “Master unit”, and “slave unit” in this section are the names for control, and they will be transferred according to the priority of rotation system.
- Depending on the operating conditions of compressors, the compressors may run in patterns other than those aforementioned.

RXYQ54PAY1 (18+18+18HP)

(To increase Step No.)

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD	STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	52 Hz	52 Hz	OFF	1	52 Hz	OFF	OFF	OFF
2	56 Hz	56 Hz	56 Hz	OFF	2	56 Hz	OFF	OFF	OFF
3	62 Hz	62 Hz	62 Hz	OFF	3	62 Hz	OFF	OFF	OFF
4	66 Hz	66 Hz	66 Hz	OFF	4	68 Hz	OFF	OFF	OFF
5	68 Hz	68 Hz	68 Hz	OFF	5	74 Hz	OFF	OFF	OFF
6	70 Hz	70 Hz	70 Hz	OFF	6	80 Hz	OFF	OFF	OFF
7	74 Hz	74 Hz	74 Hz	OFF	7	88 Hz	OFF	OFF	OFF
8	80 Hz	80 Hz	80 Hz	OFF	8	96 Hz	OFF	OFF	OFF
9	88 Hz	88 Hz	88 Hz	OFF	9	104 Hz	OFF	OFF	OFF
10	96 Hz	96 Hz	96 Hz	OFF	10	52 Hz	52 Hz	OFF	OFF
11	104 Hz	104 Hz	104 Hz	OFF	11	56 Hz	56 Hz	OFF	OFF
12	110 Hz	110 Hz	110 Hz	OFF	12	62 Hz	62 Hz	OFF	OFF
13	116 Hz	116 Hz	116 Hz	OFF	13	66 Hz	66 Hz	OFF	OFF
14	124 Hz	124 Hz	124 Hz	OFF	14	70 Hz	70 Hz	OFF	OFF
15	80 Hz	80 Hz	80 Hz	ON 1	15	74 Hz	74 Hz	OFF	OFF
16	88 Hz	88 Hz	88 Hz	ON 1	16	52 Hz	52 Hz	52 Hz	OFF
17	96 Hz	96 Hz	96 Hz	ON 1	17	56 Hz	56 Hz	56 Hz	OFF
18	104 Hz	104 Hz	104 Hz	ON 1	18	62 Hz	62 Hz	62 Hz	OFF
19	116 Hz	116 Hz	116 Hz	ON 1	19	66 Hz	66 Hz	66 Hz	OFF
20	124 Hz	124 Hz	124 Hz	ON 1	20	68 Hz	68 Hz	68 Hz	OFF
21	132 Hz	132 Hz	132 Hz	ON 1	21	70 Hz	70 Hz	70 Hz	OFF
22	88 Hz	88 Hz	88 Hz	ON 2	22	74 Hz	74 Hz	74 Hz	OFF
23	96 Hz	96 Hz	96 Hz	ON 2	23	80 Hz	80 Hz	80 Hz	OFF
24	104 Hz	104 Hz	104 Hz	ON 2	24	88 Hz	88 Hz	88 Hz	OFF
25	124 Hz	124 Hz	124 Hz	ON 2	25	96 Hz	96 Hz	96 Hz	OFF
26	144 Hz	144 Hz	144 Hz	ON 2	26	52 Hz	52 Hz	52 Hz	ON 1
27	92 Hz	92 Hz	92 Hz	ON 3	27	62 Hz	62 Hz	62 Hz	ON 1
28	104 Hz	104 Hz	104 Hz	ON 3	28	68 Hz	68 Hz	68 Hz	ON 1
29	116 Hz	116 Hz	116 Hz	ON 3	29	74 Hz	74 Hz	74 Hz	ON 1
30	124 Hz	124 Hz	124 Hz	ON 3	30	80 Hz	80 Hz	80 Hz	ON 1
31	144 Hz	144 Hz	144 Hz	ON 3	31	88 Hz	88 Hz	88 Hz	ON 1
32	96 Hz	96 Hz	96 Hz	ON 4	32	96 Hz	96 Hz	96 Hz	ON 1
33	104 Hz	104 Hz	104 Hz	ON 4	33	104 Hz	104 Hz	104 Hz	ON 1
34	116 Hz	116 Hz	116 Hz	ON 4	34	52 Hz	52 Hz	52 Hz	ON 2
35	124 Hz	124 Hz	124 Hz	ON 4	35	62 Hz	62 Hz	62 Hz	ON 2
36	144 Hz	144 Hz	144 Hz	ON 4	36	74 Hz	74 Hz	74 Hz	ON 2
37	96 Hz	96 Hz	96 Hz	ON 5	37	88 Hz	88 Hz	88 Hz	ON 2
38	104 Hz	104 Hz	104 Hz	ON 5	38	96 Hz	96 Hz	96 Hz	ON 2
39	116 Hz	116 Hz	116 Hz	ON 5	39	52 Hz	52 Hz	52 Hz	ON 3
40	124 Hz	124 Hz	124 Hz	ON 5	40	62 Hz	62 Hz	62 Hz	ON 3
41	144 Hz	144 Hz	144 Hz	ON 5	41	74 Hz	74 Hz	74 Hz	ON 3
42	96 Hz	96 Hz	96 Hz	ON 6	42	92 Hz	92 Hz	92 Hz	ON 3
43	104 Hz	104 Hz	104 Hz	ON 6	43	104 Hz	104 Hz	104 Hz	ON 3
44	116 Hz	116 Hz	116 Hz	ON 6	44	52 Hz	52 Hz	52 Hz	ON 4
45	124 Hz	124 Hz	124 Hz	ON 6	45	62 Hz	62 Hz	62 Hz	ON 4
46	144 Hz	144 Hz	144 Hz	ON 6	46	74 Hz	74 Hz	74 Hz	ON 4
47	158 Hz	158 Hz	158 Hz	ON 6	47	96 Hz	96 Hz	96 Hz	ON 4
48	166 Hz	166 Hz	166 Hz	ON 6	48	104 Hz	104 Hz	104 Hz	ON 4
49	176 Hz	176 Hz	176 Hz	ON 6	49	52 Hz	52 Hz	52 Hz	ON 5
50	188 Hz	188 Hz	188 Hz	ON 6	50	68 Hz	68 Hz	68 Hz	ON 5
51	202 Hz	202 Hz	202 Hz	ON 6	51	80 Hz	80 Hz	80 Hz	ON 5
52	210 Hz	210 Hz	210 Hz	ON 6	52	96 Hz	96 Hz	96 Hz	ON 5
53	218 Hz	218 Hz	218 Hz	ON 6	53	104 Hz	104 Hz	104 Hz	ON 5
54	232 Hz	232 Hz	232 Hz	ON 6	54	52 Hz	52 Hz	52 Hz	ON 6
55	248 Hz	248 Hz	248 Hz	ON 6	55	68 Hz	68 Hz	68 Hz	ON 6
56	266 Hz	266 Hz	266 Hz	ON 6	56	80 Hz	80 Hz	80 Hz	ON 6
					57	96 Hz	96 Hz	96 Hz	ON 6
					58	104 Hz	104 Hz	104 Hz	ON 6
					59	116 Hz	116 Hz	116 Hz	ON 6
					60	124 Hz	124 Hz	124 Hz	ON 6
					61	144 Hz	144 Hz	144 Hz	ON 6
					62	158 Hz	158 Hz	158 Hz	ON 6
					63	166 Hz	166 Hz	166 Hz	ON 6
					64	176 Hz	176 Hz	176 Hz	ON 6
					65	188 Hz	188 Hz	188 Hz	ON 6
					66	202 Hz	202 Hz	202 Hz	ON 6
					67	210 Hz	210 Hz	210 Hz	ON 6
					68	218 Hz	218 Hz	218 Hz	ON 6
					69	232 Hz	232 Hz	232 Hz	ON 6
					70	248 Hz	248 Hz	248 Hz	ON 6
					71	266 Hz	266 Hz	266 Hz	ON 6

Notes:

1. INV : Inverter compressor
STD : Standard compressor
Figures after ON represent the number of STD compressors in operation.
2. "Master unit", and "slave unit" in this section are the names for control, and they will be transferred according to the priority of rotation system.
3. Depending on the operating conditions of compressors, the compressors may run in patterns other than those aforementioned.

60Hz

Stand-alone installation

RX YQ5PAYL, PTL

STEP No.	INV
1	52 Hz
2	56 Hz
3	62 Hz
4	68 Hz
5	74 Hz
6	80 Hz
7	88 Hz
8	96 Hz
9	104 Hz
10	110 Hz
11	116 Hz
12	124 Hz
13	132 Hz
14	144 Hz
15	158 Hz
16	166 Hz
17	176 Hz
18	188 Hz

RX YQ8PAYL, PTL

STEP No.	INV
1	52 Hz
2	56 Hz
3	62 Hz
4	68 Hz
5	74 Hz
6	80 Hz
7	88 Hz
8	96 Hz
9	104 Hz
10	110 Hz
11	116 Hz
12	124 Hz
13	132 Hz
14	144 Hz
15	158 Hz
16	166 Hz
17	176 Hz
18	188 Hz
19	202 Hz
20	210 Hz
21	218 Hz
22	232 Hz
23	248 Hz
24	266 Hz

RX YQ10/12PAYL, PTL

STEP No.	INV	STD1
1	52 Hz	OFF
2	56 Hz	OFF
3	62 Hz	OFF
4	68 Hz	OFF
5	74 Hz	OFF
6	80 Hz	OFF
7	88 Hz	OFF
8	96 Hz	OFF
9	104 Hz	OFF
10	110 Hz	OFF
11	116 Hz	OFF
12	124 Hz	OFF
13	132 Hz	OFF
14	144 Hz	OFF
15	158 Hz	OFF
16	166 Hz	OFF
17	176 Hz	OFF
18	188 Hz	OFF
19	202 Hz	OFF
20	210 Hz	OFF
21	52 Hz	ON
22	62 Hz	ON
23	68 Hz	ON
24	74 Hz	ON
25	80 Hz	ON
26	88 Hz	ON
27	96 Hz	ON
28	104 Hz	ON
29	116 Hz	ON
30	124 Hz	ON
31	132 Hz	ON
32	144 Hz	ON
33	158 Hz	ON
34	176 Hz	ON
35	188 Hz	ON
36	202 Hz	ON
37	210 Hz	ON

RX YQ14/16PAYL, PTL

STEP No.	INV	STD1	STD2
1	52 Hz	OFF	OFF
2	56 Hz	OFF	OFF
3	62 Hz	OFF	OFF
4	68 Hz	OFF	OFF
5	74 Hz	OFF	OFF
6	80 Hz	OFF	OFF
7	88 Hz	OFF	OFF
8	96 Hz	OFF	OFF
9	104 Hz	OFF	OFF
10	110 Hz	OFF	OFF
11	116 Hz	OFF	OFF
12	124 Hz	OFF	OFF
13	132 Hz	OFF	OFF
14	144 Hz	OFF	OFF
15	158 Hz	OFF	OFF
16	166 Hz	OFF	OFF
17	176 Hz	OFF	OFF
18	188 Hz	OFF	OFF
19	202 Hz	OFF	OFF
20	210 Hz	OFF	OFF
21	52 Hz	ON	OFF
22	62 Hz	ON	OFF
23	68 Hz	ON	OFF
24	74 Hz	ON	OFF
25	80 Hz	ON	OFF
26	88 Hz	ON	OFF
27	96 Hz	ON	OFF
28	104 Hz	ON	OFF
29	116 Hz	ON	OFF
30	124 Hz	ON	OFF
31	132 Hz	ON	OFF
32	144 Hz	ON	OFF
33	158 Hz	ON	OFF
34	176 Hz	ON	OFF
35	188 Hz	ON	OFF
36	202 Hz	ON	OFF
37	210 Hz	ON	OFF
38	52 Hz	ON	ON
39	62 Hz	ON	ON
40	74 Hz	ON	ON
41	88 Hz	ON	ON
42	96 Hz	ON	ON
43	104 Hz	ON	ON
44	124 Hz	ON	ON
45	144 Hz	ON	ON
46	158 Hz	ON	ON
47	166 Hz	ON	ON
48	176 Hz	ON	ON
49	188 Hz	ON	ON
50	202 Hz	ON	ON

RX YQ18PAYL, PTL

STEP No.	INV	STD1	STD2
1	52 Hz	OFF	OFF
2	56 Hz	OFF	OFF
3	62 Hz	OFF	OFF
4	68 Hz	OFF	OFF
5	74 Hz	OFF	OFF
6	80 Hz	OFF	OFF
7	88 Hz	OFF	OFF
8	96 Hz	OFF	OFF
9	104 Hz	OFF	OFF
10	110 Hz	OFF	OFF
11	116 Hz	OFF	OFF
12	124 Hz	OFF	OFF
13	132 Hz	OFF	OFF
14	144 Hz	OFF	OFF
15	158 Hz	OFF	OFF
16	166 Hz	OFF	OFF
17	176 Hz	OFF	OFF
18	188 Hz	OFF	OFF
19	202 Hz	OFF	OFF
20	210 Hz	OFF	OFF
21	52 Hz	ON	OFF
22	62 Hz	ON	OFF
23	68 Hz	ON	OFF
24	74 Hz	ON	OFF
25	80 Hz	ON	OFF
26	88 Hz	ON	OFF
27	96 Hz	ON	OFF
28	104 Hz	ON	OFF
29	116 Hz	ON	OFF
30	124 Hz	ON	OFF
31	132 Hz	ON	OFF
32	144 Hz	ON	OFF
33	158 Hz	ON	OFF
34	176 Hz	ON	OFF
35	188 Hz	ON	OFF
36	202 Hz	ON	OFF
37	210 Hz	ON	OFF
38	52 Hz	ON	ON
39	62 Hz	ON	ON
40	74 Hz	ON	ON
41	88 Hz	ON	ON
42	96 Hz	ON	ON
43	104 Hz	ON	ON
44	124 Hz	ON	ON
45	144 Hz	ON	ON
46	158 Hz	ON	ON
47	166 Hz	ON	ON
48	176 Hz	ON	ON
49	188 Hz	ON	ON
50	202 Hz	ON	ON

Notes:

- INV : Inverter compressor
STD1 : Standard compressor 1
STD2 : Standard compressor 2
- Depending on the operating conditions of compressors, the compressors may run in patterns other than those aforementioned.

Two-unit multi system
RXYQ20PAYL, PTL (8+12HP)

■ represents the range in which “Hz” is not stepped up.
RXYQ22PAYL, PTL (10+12HP)

(To increase Step No.)

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit INV	STD
1	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	OFF
5	74 Hz	74 Hz	OFF
6	80 Hz	80 Hz	OFF
7	88 Hz	88 Hz	OFF
8	96 Hz	96 Hz	OFF
9	104 Hz	104 Hz	OFF
10	110 Hz	110 Hz	OFF
11	116 Hz	116 Hz	OFF
12	124 Hz	124 Hz	OFF
13	132 Hz	132 Hz	OFF
14	144 Hz	144 Hz	OFF
15	158 Hz	158 Hz	OFF
17	166 Hz	166 Hz	OFF
18	176 Hz	176 Hz	OFF
19	80 Hz	80 Hz	ON
20	88 Hz	88 Hz	ON
21	96 Hz	96 Hz	ON
22	104 Hz	104 Hz	ON
23	110 Hz	110 Hz	ON
24	124 Hz	124 Hz	ON
25	132 Hz	132 Hz	ON
26	144 Hz	144 Hz	ON
27	158 Hz	158 Hz	ON
28	176 Hz	176 Hz	ON
29	188 Hz	188 Hz	ON
30	202 Hz	202 Hz	ON
31	210 Hz	210 Hz	ON
32	218 Hz	210 Hz	ON
33	232 Hz	210 Hz	ON
34	248 Hz	210 Hz	ON
35	266 Hz	210 Hz	ON

STEP No.	Master unit INV	Slave unit INV	STD
1	52 Hz	OFF	OFF
2	56 Hz	OFF	OFF
3	62 Hz	OFF	OFF
4	68 Hz	OFF	OFF
5	74 Hz	OFF	OFF
6	80 Hz	OFF	OFF
7	88 Hz	OFF	OFF
8	96 Hz	OFF	OFF
9	104 Hz	OFF	OFF
10	52 Hz	52 Hz	OFF
11	56 Hz	56 Hz	OFF
12	62 Hz	62 Hz	OFF
13	66 Hz	66 Hz	OFF
14	70 Hz	70 Hz	OFF
15	74 Hz	74 Hz	OFF
16	80 Hz	80 Hz	OFF
17	88 Hz	88 Hz	OFF
18	92 Hz	96 Hz	OFF
19	96 Hz	96 Hz	OFF
20	104 Hz	104 Hz	OFF
21	110 Hz	110 Hz	OFF
22	116 Hz	116 Hz	OFF
23	124 Hz	124 Hz	OFF
24	132 Hz	132 Hz	OFF
25	52 Hz	52 Hz	ON
26	62 Hz	62 Hz	ON
27	68 Hz	68 Hz	ON
28	74 Hz	74 Hz	ON
29	80 Hz	80 Hz	ON
30	88 Hz	88 Hz	ON
31	96 Hz	96 Hz	ON
32	104 Hz	104 Hz	ON
33	116 Hz	116 Hz	ON
34	124 Hz	124 Hz	ON
35	132 Hz	132 Hz	ON
36	144 Hz	144 Hz	ON
37	158 Hz	158 Hz	ON
38	176 Hz	176 Hz	ON
39	188 Hz	188 Hz	ON
40	202 Hz	202 Hz	ON
41	210 Hz	210 Hz	ON
42	218 Hz	210 Hz	ON
43	232 Hz	210 Hz	ON
44	248 Hz	210 Hz	ON
45	266 Hz	210 Hz	ON

(To increase Step No.)

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit INV	STD
1	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	OFF
5	70 Hz	70 Hz	OFF
6	74 Hz	74 Hz	OFF
7	80 Hz	80 Hz	OFF
8	88 Hz	88 Hz	OFF
9	96 Hz	96 Hz	OFF
10	104 Hz	104 Hz	OFF
11	110 Hz	110 Hz	OFF
12	116 Hz	116 Hz	OFF
13	124 Hz	124 Hz	OFF
14	132 Hz	132 Hz	OFF
15	144 Hz	144 Hz	OFF
16	158 Hz	158 Hz	OFF
17	166 Hz	166 Hz	OFF
18	176 Hz	176 Hz	OFF
19	80 Hz	80 Hz	ON 1
20	88 Hz	88 Hz	ON 1
21	96 Hz	96 Hz	ON 1
22	104 Hz	104 Hz	ON 1
23	116 Hz	116 Hz	ON 1
24	124 Hz	124 Hz	ON 1
25	132 Hz	132 Hz	ON 1
26	88 Hz	88 Hz	ON 2
27	96 Hz	96 Hz	ON 2
28	104 Hz	104 Hz	ON 2
29	124 Hz	124 Hz	ON 2
30	144 Hz	144 Hz	ON 2
31	158 Hz	158 Hz	ON 2
32	166 Hz	166 Hz	ON 2
33	176 Hz	176 Hz	ON 2
34	188 Hz	188 Hz	ON 2
35	202 Hz	202 Hz	ON 2
36	210 Hz	210 Hz	ON 2

STEP No.	Master unit INV	Slave unit INV	STD
1	52 Hz	OFF	OFF
2	56 Hz	OFF	OFF
3	62 Hz	OFF	OFF
4	68 Hz	OFF	OFF
5	74 Hz	OFF	OFF
6	80 Hz	OFF	OFF
7	88 Hz	OFF	OFF
8	96 Hz	OFF	OFF
9	104 Hz	OFF	OFF
10	52 Hz	52 Hz	OFF
11	56 Hz	56 Hz	OFF
12	62 Hz	62 Hz	OFF
13	66 Hz	66 Hz	OFF
14	70 Hz	70 Hz	OFF
15	74 Hz	74 Hz	OFF
16	80 Hz	80 Hz	OFF
17	88 Hz	88 Hz	OFF
18	92 Hz	92 Hz	OFF
19	96 Hz	96 Hz	OFF
20	104 Hz	104 Hz	OFF
21	110 Hz	110 Hz	OFF
22	116 Hz	116 Hz	OFF
23	124 Hz	124 Hz	OFF
24	132 Hz	132 Hz	OFF
25	52 Hz	52 Hz	ON 1
26	62 Hz	62 Hz	ON 1
27	68 Hz	68 Hz	ON 1
28	74 Hz	74 Hz	ON 1
29	80 Hz	80 Hz	ON 1
30	88 Hz	88 Hz	ON 1
31	96 Hz	96 Hz	ON 1
32	104 Hz	104 Hz	ON 1
33	52 Hz	52 Hz	ON 2
34	62 Hz	62 Hz	ON 2
35	74 Hz	74 Hz	ON 2
36	88 Hz	88 Hz	ON 2
37	96 Hz	96 Hz	ON 2
38	104 Hz	104 Hz	ON 2
39	124 Hz	124 Hz	ON 2
40	144 Hz	144 Hz	ON 2
41	158 Hz	158 Hz	ON 2
42	166 Hz	166 Hz	ON 2
43	176 Hz	176 Hz	ON 2
44	188 Hz	188 Hz	ON 2
45	202 Hz	202 Hz	ON 2
46	210 Hz	210 Hz	ON 2

Notes:

- INV : Inverter compressor
 STD : Standard compressor
 Figures after ON represent the number of STD compressors in operation.
- “Master unit”, and “slave unit” in this section are the names for control, and they will be transferred according to the priority of rotation system.
- Depending on the operating conditions of compressors, the compressors may run in patterns other than those aforementioned.

■ represents the range in which “Hz” is not stepped up.

RXYQ24PAYL, PTL (8+16HP)

RXYQ26PAYL, PTL (8+18HP)

(To increase Step No.)				(To decrease Step No.)			
STEP No.	Master unit INV	Slave unit INV	STD	STEP No.	Master unit INV	Slave unit INV	STD
1	52 Hz	52 Hz	OFF	1	52 Hz	OFF	OFF
2	56 Hz	56 Hz	OFF	2	56 Hz	OFF	OFF
3	62 Hz	62 Hz	OFF	3	62 Hz	OFF	OFF
4	66 Hz	66 Hz	OFF	4	68 Hz	OFF	OFF
5	70 Hz	70 Hz	OFF	5	74 Hz	OFF	OFF
6	74 Hz	74 Hz	OFF	6	80 Hz	OFF	OFF
7	80 Hz	80 Hz	OFF	7	88 Hz	OFF	OFF
8	88 Hz	88 Hz	OFF	8	96 Hz	OFF	OFF
9	96 Hz	96 Hz	OFF	9	104 Hz	OFF	OFF
10	104 Hz	104 Hz	OFF	10	52 Hz	52 Hz	OFF
11	110 Hz	110 Hz	OFF	11	56 Hz	56 Hz	OFF
12	116 Hz	116 Hz	OFF	12	62 Hz	62 Hz	OFF
13	124 Hz	124 Hz	OFF	13	66 Hz	66 Hz	OFF
14	132 Hz	132 Hz	OFF	14	70 Hz	70 Hz	OFF
15	144 Hz	144 Hz	OFF	15	74 Hz	74 Hz	OFF
16	158 Hz	158 Hz	OFF	16	80 Hz	80 Hz	OFF
17	166 Hz	166 Hz	OFF	17	88 Hz	88 Hz	OFF
18	176 Hz	176 Hz	OFF	18	92 Hz	92 Hz	OFF
19	80 Hz	80 Hz	ON 1	19	96 Hz	96 Hz	OFF
20	88 Hz	88 Hz	ON 1	20	104 Hz	104 Hz	OFF
21	96 Hz	96 Hz	ON 1	21	110 Hz	110 Hz	OFF
22	104 Hz	104 Hz	ON 1	22	116 Hz	116 Hz	OFF
23	116 Hz	116 Hz	ON 1	23	124 Hz	124 Hz	OFF
24	124 Hz	124 Hz	ON 1	24	132 Hz	132 Hz	OFF
25	132 Hz	132 Hz	ON 1	25	52 Hz	52 Hz	ON 1
26	88 Hz	88 Hz	ON 2	26	62 Hz	62 Hz	ON 1
27	96 Hz	96 Hz	ON 2	27	68 Hz	68 Hz	ON 1
28	104 Hz	104 Hz	ON 2	28	74 Hz	74 Hz	ON 1
29	124 Hz	124 Hz	ON 2	29	80 Hz	80 Hz	ON 1
30	144 Hz	144 Hz	ON 2	30	88 Hz	88 Hz	ON 1
31	158 Hz	158 Hz	ON 2	31	96 Hz	96 Hz	ON 1
32	166 Hz	166 Hz	ON 2	32	104 Hz	104 Hz	ON 1
33	176 Hz	176 Hz	ON 2	33	52 Hz	52 Hz	ON 2
34	188 Hz	188 Hz	ON 2	34	62 Hz	62 Hz	ON 2
35	202 Hz	202 Hz	ON 2	35	74 Hz	74 Hz	ON 2
36	210 Hz	202 Hz	ON 2	36	88 Hz	88 Hz	ON 2
37	218 Hz	202 Hz	ON 2	37	96 Hz	96 Hz	ON 2
38	232 Hz	202 Hz	ON 2	38	104 Hz	104 Hz	ON 2
39	248 Hz	202 Hz	ON 2	39	124 Hz	124 Hz	ON 2
40	266 Hz	202 Hz	ON 2	40	144 Hz	144 Hz	ON 2
				41	158 Hz	158 Hz	ON 2
				42	166 Hz	166 Hz	ON 2
				43	176 Hz	176 Hz	ON 2
				44	188 Hz	188 Hz	ON 2
				45	202 Hz	202 Hz	ON 2
				46	210 Hz	202 Hz	ON 2
				47	218 Hz	202 Hz	ON 2
				48	232 Hz	202 Hz	ON 2
				49	248 Hz	202 Hz	ON 2
				50	266 Hz	202 Hz	ON 2

(To increase Step No.)				(To decrease Step No.)			
STEP No.	Master unit INV	Slave unit INV	STD	STEP No.	Master unit INV	Slave unit INV	STD
1	52 Hz	52 Hz	OFF	1	52 Hz	OFF	OFF
2	56 Hz	56 Hz	OFF	2	56 Hz	OFF	OFF
3	62 Hz	62 Hz	OFF	3	62 Hz	OFF	OFF
4	66 Hz	66 Hz	OFF	4	68 Hz	OFF	OFF
5	70 Hz	70 Hz	OFF	5	74 Hz	OFF	OFF
6	74 Hz	74 Hz	OFF	6	80 Hz	OFF	OFF
7	80 Hz	80 Hz	OFF	7	88 Hz	OFF	OFF
8	88 Hz	88 Hz	OFF	8	96 Hz	OFF	OFF
9	96 Hz	96 Hz	OFF	9	104 Hz	OFF	OFF
10	104 Hz	104 Hz	OFF	10	52 Hz	52 Hz	OFF
11	110 Hz	110 Hz	OFF	11	56 Hz	56 Hz	OFF
12	116 Hz	116 Hz	OFF	12	62 Hz	62 Hz	OFF
13	124 Hz	124 Hz	OFF	13	66 Hz	66 Hz	OFF
14	132 Hz	132 Hz	OFF	14	70 Hz	70 Hz	OFF
15	144 Hz	144 Hz	OFF	15	74 Hz	74 Hz	OFF
16	158 Hz	158 Hz	OFF	16	80 Hz	80 Hz	OFF
17	166 Hz	166 Hz	OFF	17	88 Hz	88 Hz	OFF
18	176 Hz	176 Hz	OFF	18	92 Hz	92 Hz	OFF
19	80 Hz	80 Hz	ON 1	19	96 Hz	96 Hz	OFF
20	88 Hz	88 Hz	ON 1	20	104 Hz	104 Hz	OFF
21	96 Hz	96 Hz	ON 1	21	110 Hz	110 Hz	OFF
22	104 Hz	104 Hz	ON 1	22	116 Hz	116 Hz	OFF
23	116 Hz	116 Hz	ON 1	23	124 Hz	124 Hz	OFF
24	124 Hz	124 Hz	ON 1	24	132 Hz	132 Hz	OFF
25	132 Hz	132 Hz	ON 1	25	52 Hz	52 Hz	ON 1
26	88 Hz	88 Hz	ON 2	26	62 Hz	62 Hz	ON 1
27	96 Hz	96 Hz	ON 2	27	68 Hz	68 Hz	ON 1
28	104 Hz	104 Hz	ON 2	28	74 Hz	74 Hz	ON 1
29	124 Hz	124 Hz	ON 2	29	80 Hz	80 Hz	ON 1
30	144 Hz	144 Hz	ON 2	30	88 Hz	88 Hz	ON 1
31	158 Hz	158 Hz	ON 2	31	96 Hz	96 Hz	ON 1
32	166 Hz	166 Hz	ON 2	32	104 Hz	104 Hz	ON 1
33	176 Hz	176 Hz	ON 2	33	52 Hz	52 Hz	ON 2
34	188 Hz	188 Hz	ON 2	34	62 Hz	62 Hz	ON 2
35	202 Hz	202 Hz	ON 2	35	74 Hz	74 Hz	ON 2
36	210 Hz	202 Hz	ON 2	36	88 Hz	88 Hz	ON 2
37	218 Hz	202 Hz	ON 2	37	96 Hz	96 Hz	ON 2
38	232 Hz	202 Hz	ON 2	38	104 Hz	104 Hz	ON 2
39	248 Hz	202 Hz	ON 2	39	124 Hz	124 Hz	ON 2
40	266 Hz	202 Hz	ON 2	40	144 Hz	144 Hz	ON 2
				41	158 Hz	158 Hz	ON 2
				42	166 Hz	166 Hz	ON 2
				43	176 Hz	176 Hz	ON 2
				44	188 Hz	188 Hz	ON 2
				45	202 Hz	202 Hz	ON 2
				46	210 Hz	202 Hz	ON 2
				47	218 Hz	202 Hz	ON 2
				48	232 Hz	202 Hz	ON 2
				49	248 Hz	202 Hz	ON 2
				50	266 Hz	202 Hz	ON 2

Notes:

- INV : Inverter compressor
STD : Standard compressor
Figures after ON represent the number of STD compressors in operation.
- “Master unit”, and “slave unit” in this section are the names for control, and they will be transferred according to the priority of rotation system.
- Depending on the operating conditions of compressors, the compressors may run in patterns other than those aforementioned.

■ represents the range in which “Hz” is not stepped up.

RXYQ28/30PAYL, PTL (10/12+18HP)

RXYQ32PAYL, PTL (16+16HP)

(To increase Step No.)

STEP No.	Master unit INV	Slave unit INV	STD
1	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	OFF
5	70 Hz	70 Hz	OFF
6	74 Hz	74 Hz	OFF
7	80 Hz	80 Hz	OFF
8	88 Hz	88 Hz	OFF
9	96 Hz	96 Hz	OFF
10	104 Hz	104 Hz	OFF
11	110 Hz	110 Hz	OFF
12	116 Hz	116 Hz	OFF
13	124 Hz	124 Hz	OFF
14	132 Hz	132 Hz	OFF
15	144 Hz	144 Hz	OFF
16	158 Hz	158 Hz	OFF
17	166 Hz	166 Hz	OFF
18	176 Hz	176 Hz	OFF
19	80 Hz	80 Hz	ON 1
20	88 Hz	88 Hz	ON 1
21	96 Hz	96 Hz	ON 1
22	104 Hz	104 Hz	ON 1
23	116 Hz	116 Hz	ON 1
24	124 Hz	124 Hz	ON 1
25	132 Hz	132 Hz	ON 1
26	88 Hz	88 Hz	ON 2
27	96 Hz	96 Hz	ON 2
28	104 Hz	104 Hz	ON 2
29	124 Hz	124 Hz	ON 2
30	144 Hz	144 Hz	ON 2
31	92 Hz	92 Hz	ON 3
32	104 Hz	104 Hz	ON 3
33	116 Hz	116 Hz	ON 3
34	124 Hz	124 Hz	ON 3
35	144 Hz	144 Hz	ON 3
36	158 Hz	158 Hz	ON 3
37	166 Hz	166 Hz	ON 3
38	176 Hz	176 Hz	ON 3
39	188 Hz	188 Hz	ON 3
40	202 Hz	202 Hz	ON 3
41	210 Hz	202 Hz	ON 3

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit INV	STD
1	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	OFF
4	68 Hz	68 Hz	OFF
5	74 Hz	74 Hz	OFF
6	80 Hz	80 Hz	OFF
7	88 Hz	88 Hz	OFF
8	96 Hz	96 Hz	OFF
9	104 Hz	104 Hz	OFF
10	52 Hz	52 Hz	OFF
11	56 Hz	56 Hz	OFF
12	62 Hz	62 Hz	OFF
13	66 Hz	66 Hz	OFF
14	70 Hz	70 Hz	OFF
15	74 Hz	74 Hz	OFF
16	80 Hz	80 Hz	OFF
17	88 Hz	88 Hz	OFF
18	92 Hz	92 Hz	OFF
19	96 Hz	96 Hz	OFF
20	104 Hz	104 Hz	OFF
21	110 Hz	110 Hz	OFF
22	116 Hz	116 Hz	OFF
23	124 Hz	124 Hz	OFF
24	132 Hz	132 Hz	OFF
25	52 Hz	52 Hz	ON 1
26	62 Hz	62 Hz	ON 1
27	68 Hz	68 Hz	ON 1
28	74 Hz	74 Hz	ON 1
29	80 Hz	80 Hz	ON 1
30	88 Hz	88 Hz	ON 1
31	96 Hz	96 Hz	ON 1
32	104 Hz	104 Hz	ON 1
33	52 Hz	52 Hz	ON 2
34	62 Hz	62 Hz	ON 2
35	74 Hz	74 Hz	ON 2
36	88 Hz	88 Hz	ON 2
37	96 Hz	96 Hz	ON 2
38	52 Hz	52 Hz	ON 3
39	62 Hz	62 Hz	ON 3
40	74 Hz	74 Hz	ON 3
41	92 Hz	92 Hz	ON 3
42	104 Hz	104 Hz	ON 3
43	116 Hz	116 Hz	ON 3
44	124 Hz	124 Hz	ON 3
45	144 Hz	144 Hz	ON 3
46	158 Hz	158 Hz	ON 3
47	166 Hz	166 Hz	ON 3
48	176 Hz	176 Hz	ON 3
49	188 Hz	188 Hz	ON 3
50	202 Hz	202 Hz	ON 3
51	210 Hz	202 Hz	ON 3

(To increase Step No.)

STEP No.	Master unit INV	Slave unit INV	STD
1	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	OFF
5	70 Hz	70 Hz	OFF
6	74 Hz	74 Hz	OFF
7	80 Hz	80 Hz	OFF
8	88 Hz	88 Hz	OFF
9	96 Hz	96 Hz	OFF
10	104 Hz	104 Hz	OFF
11	110 Hz	110 Hz	OFF
12	116 Hz	116 Hz	OFF
13	124 Hz	124 Hz	OFF
14	132 Hz	132 Hz	OFF
15	144 Hz	144 Hz	OFF
16	158 Hz	158 Hz	OFF
17	166 Hz	166 Hz	OFF
18	176 Hz	176 Hz	OFF
19	80 Hz	80 Hz	ON 1
20	88 Hz	88 Hz	ON 1
21	96 Hz	96 Hz	ON 1
22	104 Hz	104 Hz	ON 1
23	116 Hz	116 Hz	ON 1
24	124 Hz	124 Hz	ON 1
25	132 Hz	132 Hz	ON 1
26	88 Hz	88 Hz	ON 2
27	96 Hz	96 Hz	ON 2
28	104 Hz	104 Hz	ON 2
29	124 Hz	124 Hz	ON 2
30	144 Hz	144 Hz	ON 2
31	92 Hz	96 Hz	ON 3
32	104 Hz	104 Hz	ON 3
33	116 Hz	116 Hz	ON 3
34	124 Hz	124 Hz	ON 3
35	144 Hz	144 Hz	ON 3
36	96 Hz	96 Hz	ON 4
37	104 Hz	104 Hz	ON 4
38	116 Hz	116 Hz	ON 4
39	124 Hz	124 Hz	ON 4
40	144 Hz	144 Hz	ON 4
41	158 Hz	158 Hz	ON 4
42	166 Hz	166 Hz	ON 4
43	176 Hz	176 Hz	ON 4
44	188 Hz	188 Hz	ON 4
45	202 Hz	202 Hz	ON 4

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit INV	STD
1	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	OFF
4	68 Hz	68 Hz	OFF
5	74 Hz	74 Hz	OFF
6	80 Hz	80 Hz	OFF
7	88 Hz	88 Hz	OFF
8	96 Hz	96 Hz	OFF
9	104 Hz	104 Hz	OFF
10	52 Hz	52 Hz	OFF
11	56 Hz	56 Hz	OFF
12	62 Hz	62 Hz	OFF
13	66 Hz	66 Hz	OFF
14	70 Hz	70 Hz	OFF
15	74 Hz	74 Hz	OFF
16	80 Hz	80 Hz	OFF
17	88 Hz	88 Hz	OFF
18	92 Hz	92 Hz	OFF
19	96 Hz	96 Hz	OFF
20	104 Hz	104 Hz	OFF
21	110 Hz	110 Hz	OFF
22	116 Hz	116 Hz	OFF
23	124 Hz	124 Hz	OFF
24	132 Hz	132 Hz	OFF
25	52 Hz	52 Hz	ON 1
26	62 Hz	62 Hz	ON 1
27	68 Hz	68 Hz	ON 1
28	74 Hz	74 Hz	ON 1
29	80 Hz	80 Hz	ON 1
30	88 Hz	88 Hz	ON 1
31	96 Hz	96 Hz	ON 1
32	104 Hz	104 Hz	ON 1
33	52 Hz	52 Hz	ON 2
34	62 Hz	62 Hz	ON 2
35	74 Hz	74 Hz	ON 2
36	88 Hz	88 Hz	ON 2
37	96 Hz	96 Hz	ON 2
38	52 Hz	52 Hz	ON 3
39	62 Hz	62 Hz	ON 3
40	74 Hz	74 Hz	ON 3
41	92 Hz	92 Hz	ON 3
42	104 Hz	104 Hz	ON 3
43	52 Hz	52 Hz	ON 4
44	62 Hz	62 Hz	ON 4
45	74 Hz	74 Hz	ON 4
46	96 Hz	96 Hz	ON 4
47	104 Hz	104 Hz	ON 4
48	116 Hz	116 Hz	ON 4
49	124 Hz	124 Hz	ON 4
50	144 Hz	144 Hz	ON 4
51	158 Hz	158 Hz	ON 4
52	166 Hz	166 Hz	ON 4
53	176 Hz	176 Hz	ON 4
54	188 Hz	188 Hz	ON 4
55	202 Hz	202 Hz	ON 4

Notes:

1. INV : Inverter compressor
STD : Standard compressor
Figures after ON represent the number of STD compressors in operation.
2. “Master unit”, and “slave unit” in this section are the names for control, and they will be transferred according to the priority of rotation system.
3. Depending on the operating conditions of compressors, the compressors may run in patterns other than those aforementioned.

■ represents the range in which “Hz” is not stepped up.

RXYQ34PAYL, PTL (16+18HP)

RXYQ36PAYL, PTL (18+18HP)

(To increase Step No.)				(To decrease Step No.)			
STEP No.	Master unit INV	Slave unit INV	STD	STEP No.	Master unit INV	Slave unit INV	STD
1	52 Hz	52 Hz	OFF	1	52 Hz	OFF	OFF
2	56 Hz	56 Hz	OFF	2	56 Hz	OFF	OFF
3	62 Hz	62 Hz	OFF	3	62 Hz	OFF	OFF
4	66 Hz	66 Hz	OFF	4	68 Hz	OFF	OFF
5	70 Hz	70 Hz	OFF	5	74 Hz	OFF	OFF
6	74 Hz	74 Hz	OFF	6	80 Hz	OFF	OFF
7	80 Hz	80 Hz	OFF	7	88 Hz	OFF	OFF
8	88 Hz	88 Hz	OFF	8	96 Hz	OFF	OFF
9	96 Hz	96 Hz	OFF	9	104 Hz	OFF	OFF
10	104 Hz	104 Hz	OFF	10	52 Hz	52 Hz	OFF
11	110 Hz	110 Hz	OFF	11	56 Hz	56 Hz	OFF
12	116 Hz	116 Hz	OFF	12	62 Hz	62 Hz	OFF
13	124 Hz	124 Hz	OFF	13	66 Hz	66 Hz	OFF
14	132 Hz	132 Hz	OFF	14	70 Hz	70 Hz	OFF
15	144 Hz	144 Hz	OFF	15	74 Hz	74 Hz	OFF
16	158 Hz	158 Hz	OFF	16	80 Hz	80 Hz	OFF
17	166 Hz	166 Hz	OFF	17	88 Hz	88 Hz	OFF
18	176 Hz	176 Hz	OFF	18	92 Hz	92 Hz	OFF
19	80 Hz	80 Hz	ON 1	19	96 Hz	96 Hz	OFF
20	88 Hz	88 Hz	ON 1	20	104 Hz	104 Hz	OFF
21	96 Hz	96 Hz	ON 1	21	110 Hz	110 Hz	OFF
22	104 Hz	104 Hz	ON 1	22	116 Hz	116 Hz	OFF
23	116 Hz	116 Hz	ON 1	23	124 Hz	124 Hz	OFF
24	124 Hz	124 Hz	ON 1	24	132 Hz	132 Hz	OFF
25	132 Hz	132 Hz	ON 1	25	52 Hz	52 Hz	ON 1
26	88 Hz	88 Hz	ON 2	26	62 Hz	62 Hz	ON 1
27	96 Hz	96 Hz	ON 2	27	68 Hz	68 Hz	ON 1
28	104 Hz	104 Hz	ON 2	28	74 Hz	74 Hz	ON 1
29	124 Hz	124 Hz	ON 2	29	80 Hz	80 Hz	ON 1
30	144 Hz	144 Hz	ON 2	30	88 Hz	88 Hz	ON 1
31	92 Hz	96 Hz	ON 3	31	96 Hz	96 Hz	ON 1
32	104 Hz	104 Hz	ON 3	32	104 Hz	104 Hz	ON 1
33	116 Hz	116 Hz	ON 3	33	52 Hz	52 Hz	ON 2
34	124 Hz	124 Hz	ON 3	34	62 Hz	62 Hz	ON 2
35	144 Hz	144 Hz	ON 3	35	74 Hz	74 Hz	ON 2
36	96 Hz	96 Hz	ON 4	36	88 Hz	88 Hz	ON 2
37	104 Hz	104 Hz	ON 4	37	96 Hz	96 Hz	ON 2
38	116 Hz	116 Hz	ON 4	38	52 Hz	52 Hz	ON 3
39	124 Hz	124 Hz	ON 4	39	62 Hz	62 Hz	ON 3
40	144 Hz	144 Hz	ON 4	40	74 Hz	74 Hz	ON 3
41	158 Hz	158 Hz	ON 4	41	92 Hz	92 Hz	ON 3
42	166 Hz	166 Hz	ON 4	42	104 Hz	104 Hz	ON 3
43	176 Hz	176 Hz	ON 4	43	52 Hz	52 Hz	ON 4
44	188 Hz	188 Hz	ON 4	44	62 Hz	62 Hz	ON 4
45	202 Hz	202 Hz	ON 4	45	74 Hz	74 Hz	ON 4
				46	96 Hz	96 Hz	ON 4
				47	104 Hz	104 Hz	ON 4
				48	116 Hz	116 Hz	ON 4
				49	124 Hz	124 Hz	ON 4
				50	144 Hz	144 Hz	ON 4
				51	158 Hz	158 Hz	ON 4
				52	166 Hz	166 Hz	ON 4
				53	176 Hz	176 Hz	ON 4
				54	188 Hz	188 Hz	ON 4
				55	202 Hz	202 Hz	ON 4

(To increase Step No.)				(To decrease Step No.)			
STEP No.	Master unit INV	Slave unit INV	STD	STEP No.	Master unit INV	Slave unit INV	STD
1	52 Hz	52 Hz	OFF	1	52 Hz	OFF	OFF
2	56 Hz	56 Hz	OFF	2	56 Hz	OFF	OFF
3	62 Hz	62 Hz	OFF	3	62 Hz	OFF	OFF
4	66 Hz	66 Hz	OFF	4	68 Hz	OFF	OFF
5	70 Hz	70 Hz	OFF	5	74 Hz	OFF	OFF
6	74 Hz	74 Hz	OFF	6	80 Hz	OFF	OFF
7	80 Hz	80 Hz	OFF	7	88 Hz	OFF	OFF
8	88 Hz	88 Hz	OFF	8	96 Hz	OFF	OFF
9	96 Hz	96 Hz	OFF	9	104 Hz	OFF	OFF
10	104 Hz	104 Hz	OFF	10	52 Hz	52 Hz	OFF
11	110 Hz	110 Hz	OFF	11	56 Hz	56 Hz	OFF
12	116 Hz	116 Hz	OFF	12	62 Hz	62 Hz	OFF
13	124 Hz	124 Hz	OFF	13	66 Hz	66 Hz	OFF
14	132 Hz	132 Hz	OFF	14	70 Hz	70 Hz	OFF
15	144 Hz	144 Hz	OFF	15	74 Hz	74 Hz	OFF
16	158 Hz	158 Hz	OFF	16	80 Hz	80 Hz	OFF
17	166 Hz	166 Hz	OFF	17	88 Hz	88 Hz	OFF
18	176 Hz	176 Hz	OFF	18	92 Hz	92 Hz	OFF
19	80 Hz	80 Hz	ON 1	19	96 Hz	96 Hz	OFF
20	88 Hz	88 Hz	ON 1	20	104 Hz	104 Hz	OFF
21	96 Hz	96 Hz	ON 1	21	110 Hz	110 Hz	OFF
22	104 Hz	104 Hz	ON 1	22	116 Hz	116 Hz	OFF
23	116 Hz	116 Hz	ON 1	23	124 Hz	124 Hz	OFF
24	124 Hz	124 Hz	ON 1	24	132 Hz	132 Hz	OFF
25	132 Hz	132 Hz	ON 1	25	52 Hz	52 Hz	ON 1
26	88 Hz	88 Hz	ON 2	26	62 Hz	62 Hz	ON 1
27	96 Hz	96 Hz	ON 2	27	68 Hz	68 Hz	ON 1
28	104 Hz	104 Hz	ON 2	28	74 Hz	74 Hz	ON 1
29	124 Hz	124 Hz	ON 2	29	80 Hz	80 Hz	ON 1
30	144 Hz	144 Hz	ON 2	30	88 Hz	88 Hz	ON 1
31	92 Hz	96 Hz	ON 3	31	96 Hz	96 Hz	ON 1
32	104 Hz	104 Hz	ON 3	32	104 Hz	104 Hz	ON 1
33	116 Hz	116 Hz	ON 3	33	52 Hz	52 Hz	ON 2
34	124 Hz	124 Hz	ON 3	34	62 Hz	62 Hz	ON 2
35	144 Hz	144 Hz	ON 3	35	74 Hz	74 Hz	ON 2
36	96 Hz	96 Hz	ON 4	36	88 Hz	88 Hz	ON 2
37	104 Hz	104 Hz	ON 4	37	96 Hz	96 Hz	ON 2
38	116 Hz	116 Hz	ON 4	38	52 Hz	52 Hz	ON 3
39	124 Hz	124 Hz	ON 4	39	62 Hz	62 Hz	ON 3
40	144 Hz	144 Hz	ON 4	40	74 Hz	74 Hz	ON 3
41	158 Hz	158 Hz	ON 4	41	92 Hz	92 Hz	ON 3
42	166 Hz	166 Hz	ON 4	42	104 Hz	104 Hz	ON 3
43	176 Hz	176 Hz	ON 4	43	52 Hz	52 Hz	ON 4
44	188 Hz	188 Hz	ON 4	44	62 Hz	62 Hz	ON 4
45	202 Hz	202 Hz	ON 4	45	74 Hz	74 Hz	ON 4
				46	96 Hz	96 Hz	ON 4
				47	104 Hz	104 Hz	ON 4
				48	116 Hz	116 Hz	ON 4
				49	124 Hz	124 Hz	ON 4
				50	144 Hz	144 Hz	ON 4
				51	158 Hz	158 Hz	ON 4
				52	166 Hz	166 Hz	ON 4
				53	176 Hz	176 Hz	ON 4
				54	188 Hz	188 Hz	ON 4
				55	202 Hz	202 Hz	ON 4

Notes:

- INV : Inverter compressor
STD : Standard compressor
Figures after ON represent the number of STD compressors in operation.
- “Master unit”, and “slave unit” in this section are the names for control, and they will be transferred according to the priority of rotation system.
- Depending on the operating conditions of compressors, the compressors may run in patterns other than those aforementioned.

■ represents the range in which “Hz” is not stepped up.

RXYQ38PAYL, PTL (8+12+18HP)

RXYQ40PAYL, PTL (8+16+16HP)

(To increase Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	66 Hz	OFF
5	68 Hz	68 Hz	68 Hz	OFF
6	70 Hz	70 Hz	70 Hz	OFF
7	74 Hz	74 Hz	74 Hz	OFF
8	80 Hz	80 Hz	80 Hz	OFF
9	88 Hz	88 Hz	88 Hz	OFF
10	96 Hz	96 Hz	96 Hz	OFF
11	104 Hz	104 Hz	104 Hz	OFF
12	110 Hz	110 Hz	110 Hz	OFF
13	116 Hz	116 Hz	116 Hz	OFF
14	124 Hz	124 Hz	124 Hz	OFF
15	80 Hz	80 Hz	80 Hz	ON 1
16	88 Hz	88 Hz	88 Hz	ON 1
17	96 Hz	96 Hz	96 Hz	ON 1
18	104 Hz	104 Hz	104 Hz	ON 1
19	116 Hz	116 Hz	116 Hz	ON 1
20	124 Hz	124 Hz	124 Hz	ON 1
21	132 Hz	132 Hz	132 Hz	ON 1
22	88 Hz	88 Hz	88 Hz	ON 2
23	96 Hz	96 Hz	96 Hz	ON 2
24	104 Hz	104 Hz	104 Hz	ON 2
25	124 Hz	124 Hz	124 Hz	ON 2
26	144 Hz	144 Hz	144 Hz	ON 2
27	92 Hz	92 Hz	92 Hz	ON 3
28	104 Hz	104 Hz	104 Hz	ON 3
29	116 Hz	116 Hz	116 Hz	ON 3
30	124 Hz	124 Hz	124 Hz	ON 3
31	144 Hz	144 Hz	144 Hz	ON 3
32	158 Hz	158 Hz	158 Hz	ON 3
33	166 Hz	166 Hz	166 Hz	ON 3
34	176 Hz	176 Hz	176 Hz	ON 3
35	188 Hz	188 Hz	188 Hz	ON 3
36	202 Hz	202 Hz	202 Hz	ON 3
37	210 Hz	210 Hz	202 Hz	ON 3
38	218 Hz	210 Hz	202 Hz	ON 3
39	232 Hz	210 Hz	202 Hz	ON 3
40	248 Hz	210 Hz	202 Hz	ON 3
41	266 Hz	210 Hz	202 Hz	ON 3

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	OFF	OFF	OFF
2	56 Hz	OFF	OFF	OFF
3	62 Hz	OFF	OFF	OFF
4	68 Hz	OFF	OFF	OFF
5	74 Hz	OFF	OFF	OFF
6	80 Hz	OFF	OFF	OFF
7	88 Hz	OFF	OFF	OFF
8	96 Hz	OFF	OFF	OFF
9	104 Hz	OFF	OFF	OFF
10	52 Hz	52 Hz	52 Hz	OFF
11	56 Hz	56 Hz	56 Hz	OFF
12	62 Hz	62 Hz	62 Hz	OFF
13	66 Hz	66 Hz	66 Hz	OFF
14	70 Hz	70 Hz	70 Hz	OFF
15	74 Hz	74 Hz	74 Hz	OFF
16	52 Hz	52 Hz	52 Hz	OFF
17	56 Hz	56 Hz	56 Hz	OFF
18	62 Hz	62 Hz	62 Hz	OFF
19	66 Hz	66 Hz	66 Hz	OFF
20	68 Hz	68 Hz	68 Hz	OFF
21	70 Hz	70 Hz	70 Hz	OFF
22	74 Hz	74 Hz	74 Hz	OFF
23	80 Hz	80 Hz	80 Hz	OFF
24	88 Hz	88 Hz	88 Hz	OFF
25	96 Hz	96 Hz	96 Hz	OFF
26	52 Hz	52 Hz	52 Hz	ON 1
27	62 Hz	62 Hz	62 Hz	ON 1
28	68 Hz	68 Hz	68 Hz	ON 1
29	74 Hz	74 Hz	74 Hz	ON 1
30	80 Hz	80 Hz	80 Hz	ON 1
31	88 Hz	88 Hz	88 Hz	ON 1
32	96 Hz	96 Hz	96 Hz	ON 1
33	104 Hz	104 Hz	104 Hz	ON 1
34	52 Hz	52 Hz	52 Hz	ON 2
35	62 Hz	62 Hz	62 Hz	ON 2
36	74 Hz	74 Hz	74 Hz	ON 2
37	88 Hz	88 Hz	88 Hz	ON 2
38	96 Hz	96 Hz	96 Hz	ON 2
39	52 Hz	52 Hz	52 Hz	ON 3
40	62 Hz	62 Hz	62 Hz	ON 3
41	74 Hz	74 Hz	74 Hz	ON 3
42	92 Hz	92 Hz	92 Hz	ON 3
43	104 Hz	104 Hz	104 Hz	ON 3
44	116 Hz	116 Hz	116 Hz	ON 3
45	124 Hz	124 Hz	124 Hz	ON 3
46	144 Hz	144 Hz	144 Hz	ON 3
47	158 Hz	158 Hz	158 Hz	ON 3
48	166 Hz	166 Hz	166 Hz	ON 3
49	176 Hz	176 Hz	176 Hz	ON 3
50	188 Hz	188 Hz	188 Hz	ON 3
51	202 Hz	202 Hz	202 Hz	ON 3
52	210 Hz	210 Hz	202 Hz	ON 3
53	218 Hz	210 Hz	202 Hz	ON 3
54	232 Hz	210 Hz	202 Hz	ON 3
55	248 Hz	210 Hz	202 Hz	ON 3
56	266 Hz	210 Hz	202 Hz	ON 3

(To increase Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	66 Hz	OFF
5	68 Hz	68 Hz	68 Hz	OFF
6	70 Hz	70 Hz	70 Hz	OFF
7	74 Hz	74 Hz	74 Hz	OFF
8	80 Hz	80 Hz	80 Hz	OFF
9	88 Hz	88 Hz	88 Hz	OFF
10	96 Hz	96 Hz	96 Hz	OFF
11	104 Hz	104 Hz	104 Hz	OFF
12	110 Hz	110 Hz	110 Hz	OFF
13	116 Hz	116 Hz	116 Hz	OFF
14	124 Hz	124 Hz	124 Hz	OFF
15	80 Hz	80 Hz	80 Hz	ON 1
16	88 Hz	88 Hz	88 Hz	ON 1
17	96 Hz	96 Hz	96 Hz	ON 1
18	104 Hz	104 Hz	104 Hz	ON 1
19	116 Hz	116 Hz	116 Hz	ON 1
20	124 Hz	124 Hz	124 Hz	ON 1
21	132 Hz	132 Hz	132 Hz	ON 1
22	88 Hz	88 Hz	88 Hz	ON 2
23	96 Hz	96 Hz	96 Hz	ON 2
24	104 Hz	104 Hz	104 Hz	ON 2
25	124 Hz	124 Hz	124 Hz	ON 2
26	144 Hz	144 Hz	144 Hz	ON 2
27	92 Hz	92 Hz	92 Hz	ON 3
28	104 Hz	104 Hz	104 Hz	ON 3
29	116 Hz	116 Hz	116 Hz	ON 3
30	124 Hz	124 Hz	124 Hz	ON 3
31	144 Hz	144 Hz	144 Hz	ON 3
32	96 Hz	96 Hz	96 Hz	ON 4
33	104 Hz	104 Hz	104 Hz	ON 4
34	116 Hz	116 Hz	116 Hz	ON 4
35	124 Hz	124 Hz	124 Hz	ON 4
36	144 Hz	144 Hz	144 Hz	ON 4
37	158 Hz	158 Hz	158 Hz	ON 4
38	166 Hz	166 Hz	166 Hz	ON 4
39	176 Hz	176 Hz	176 Hz	ON 4
40	188 Hz	188 Hz	188 Hz	ON 4
41	202 Hz	202 Hz	202 Hz	ON 4
42	210 Hz	210 Hz	202 Hz	ON 4
43	218 Hz	202 Hz	202 Hz	ON 4
44	232 Hz	202 Hz	202 Hz	ON 4
45	248 Hz	202 Hz	202 Hz	ON 4
46	266 Hz	202 Hz	202 Hz	ON 4

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	OFF	OFF	OFF
2	56 Hz	OFF	OFF	OFF
3	62 Hz	OFF	OFF	OFF
4	68 Hz	OFF	OFF	OFF
5	74 Hz	OFF	OFF	OFF
6	80 Hz	OFF	OFF	OFF
7	88 Hz	OFF	OFF	OFF
8	96 Hz	OFF	OFF	OFF
9	104 Hz	OFF	OFF	OFF
10	52 Hz	52 Hz	52 Hz	OFF
11	56 Hz	56 Hz	56 Hz	OFF
12	62 Hz	62 Hz	62 Hz	OFF
13	66 Hz	66 Hz	66 Hz	OFF
14	70 Hz	70 Hz	70 Hz	OFF
15	74 Hz	74 Hz	74 Hz	OFF
16	52 Hz	52 Hz	52 Hz	OFF
17	56 Hz	56 Hz	56 Hz	OFF
18	62 Hz	62 Hz	62 Hz	OFF
19	66 Hz	66 Hz	66 Hz	OFF
20	68 Hz	68 Hz	68 Hz	OFF
21	70 Hz	70 Hz	70 Hz	OFF
22	74 Hz	74 Hz	74 Hz	OFF
23	80 Hz	80 Hz	80 Hz	OFF
24	88 Hz	88 Hz	88 Hz	OFF
25	96 Hz	96 Hz	96 Hz	OFF
26	52 Hz	52 Hz	52 Hz	ON 1
27	62 Hz	62 Hz	62 Hz	ON 1
28	68 Hz	68 Hz	68 Hz	ON 1
29	74 Hz	74 Hz	74 Hz	ON 1
30	80 Hz	80 Hz	80 Hz	ON 1
31	88 Hz	88 Hz	88 Hz	ON 1
32	96 Hz	96 Hz	96 Hz	ON 1
33	104 Hz	104 Hz	104 Hz	ON 1
34	52 Hz	52 Hz	52 Hz	ON 2
35	62 Hz	62 Hz	62 Hz	ON 2
36	74 Hz	74 Hz	74 Hz	ON 2
37	88 Hz	88 Hz	88 Hz	ON 2
38	96 Hz	96 Hz	96 Hz	ON 2
39	52 Hz	52 Hz	52 Hz	ON 3
40	62 Hz	62 Hz	62 Hz	ON 3
41	74 Hz	74 Hz	74 Hz	ON 3
42	92 Hz	92 Hz	92 Hz	ON 3
43	104 Hz	104 Hz	104 Hz	ON 3
44	52 Hz	52 Hz	52 Hz	ON 4
45	62 Hz	62 Hz	62 Hz	ON 4
46	74 Hz	74 Hz	74 Hz	ON 4
47	96 Hz	96 Hz	96 Hz	ON 4
48	104 Hz	104 Hz	104 Hz	ON 4
49	116 Hz	116 Hz	116 Hz	ON 4
50	124 Hz	124 Hz	124 Hz	ON 4
51	144 Hz	144 Hz	144 Hz	ON 4
52	158 Hz	158 Hz	158 Hz	ON 4
53	166 Hz	166 Hz	166 Hz	ON 4
54	176 Hz	176 Hz	176 Hz	ON 4
55	188 Hz	188 Hz	188 Hz	ON 4
56	202 Hz	202 Hz	202 Hz	ON 4
57	210 Hz	210 Hz	202 Hz	ON 4
58	218 Hz	202 Hz	202 Hz	ON 4
59	232 Hz	202 Hz	202 Hz	ON 4
60	248 Hz	202 Hz	202 Hz	ON 4
61	266 Hz	202 Hz	202 Hz	ON 4

Notes:

- INV : Inverter compressor
STD : Standard compressor
Figures after ON represent the number of STD compressors in operation.
- “Master unit”, and “slave unit” in this section are the names for control, and they will be transferred according to the priority of rotation system.
- Depending on the operating conditions of compressors, the compressors may run in patterns other than those aforementioned.

■ represents the range in which “Hz” is not stepped up.

RXYQ42PAYL, PTL (8+16+18HP)

(To increase Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	66 Hz	OFF
5	68 Hz	68 Hz	68 Hz	OFF
6	70 Hz	70 Hz	70 Hz	OFF
7	74 Hz	74 Hz	74 Hz	OFF
8	80 Hz	80 Hz	80 Hz	OFF
9	88 Hz	88 Hz	88 Hz	OFF
10	96 Hz	96 Hz	96 Hz	OFF
11	104 Hz	104 Hz	104 Hz	OFF
12	110 Hz	110 Hz	110 Hz	OFF
13	116 Hz	116 Hz	116 Hz	OFF
14	124 Hz	124 Hz	124 Hz	OFF
15	80 Hz	80 Hz	80 Hz	ON 1
16	88 Hz	88 Hz	88 Hz	ON 1
17	96 Hz	96 Hz	96 Hz	ON 1
18	104 Hz	104 Hz	104 Hz	ON 1
19	116 Hz	116 Hz	116 Hz	ON 1
20	124 Hz	124 Hz	124 Hz	ON 1
21	132 Hz	132 Hz	132 Hz	ON 1
22	88 Hz	88 Hz	88 Hz	ON 2
23	96 Hz	96 Hz	96 Hz	ON 2
24	104 Hz	104 Hz	104 Hz	ON 2
25	124 Hz	124 Hz	124 Hz	ON 2
26	144 Hz	144 Hz	144 Hz	ON 2
27	92 Hz	92 Hz	92 Hz	ON 3
28	104 Hz	104 Hz	104 Hz	ON 3
29	116 Hz	116 Hz	116 Hz	ON 3
30	124 Hz	124 Hz	124 Hz	ON 3
31	144 Hz	144 Hz	144 Hz	ON 3
32	96 Hz	96 Hz	96 Hz	ON 4
33	104 Hz	104 Hz	104 Hz	ON 4
34	116 Hz	116 Hz	116 Hz	ON 4
35	124 Hz	124 Hz	124 Hz	ON 4
36	144 Hz	144 Hz	144 Hz	ON 4
37	158 Hz	158 Hz	158 Hz	ON 4
38	166 Hz	166 Hz	166 Hz	ON 4
39	176 Hz	176 Hz	176 Hz	ON 4
40	188 Hz	188 Hz	188 Hz	ON 4
41	202 Hz	202 Hz	202 Hz	ON 4
42	210 Hz	202 Hz	202 Hz	ON 4
43	218 Hz	202 Hz	202 Hz	ON 4
44	232 Hz	202 Hz	202 Hz	ON 4
45	248 Hz	202 Hz	202 Hz	ON 4
46	266 Hz	202 Hz	202 Hz	ON 4

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	OFF	OFF	OFF
2	56 Hz	OFF	OFF	OFF
3	62 Hz	OFF	OFF	OFF
4	68 Hz	OFF	OFF	OFF
5	74 Hz	OFF	OFF	OFF
6	80 Hz	OFF	OFF	OFF
7	88 Hz	OFF	OFF	OFF
8	96 Hz	OFF	OFF	OFF
9	104 Hz	OFF	OFF	OFF
10	52 Hz	52 Hz	OFF	OFF
11	56 Hz	56 Hz	OFF	OFF
12	62 Hz	62 Hz	OFF	OFF
13	66 Hz	66 Hz	OFF	OFF
14	70 Hz	70 Hz	OFF	OFF
15	74 Hz	74 Hz	OFF	OFF
16	52 Hz	52 Hz	52 Hz	OFF
17	56 Hz	56 Hz	56 Hz	OFF
18	62 Hz	62 Hz	62 Hz	OFF
19	66 Hz	66 Hz	66 Hz	OFF
20	68 Hz	68 Hz	68 Hz	OFF
21	70 Hz	70 Hz	70 Hz	OFF
22	74 Hz	74 Hz	74 Hz	OFF
23	80 Hz	80 Hz	80 Hz	OFF
24	88 Hz	88 Hz	88 Hz	OFF
25	96 Hz	96 Hz	96 Hz	OFF
26	52 Hz	52 Hz	52 Hz	ON 1
27	62 Hz	62 Hz	62 Hz	ON 1
28	68 Hz	68 Hz	68 Hz	ON 1
29	74 Hz	74 Hz	74 Hz	ON 1
30	80 Hz	80 Hz	80 Hz	ON 1
31	88 Hz	88 Hz	88 Hz	ON 1
32	96 Hz	96 Hz	96 Hz	ON 1
33	104 Hz	104 Hz	104 Hz	ON 1
34	52 Hz	52 Hz	52 Hz	ON 2
35	62 Hz	62 Hz	62 Hz	ON 2
36	74 Hz	74 Hz	74 Hz	ON 2
37	88 Hz	88 Hz	88 Hz	ON 2
38	96 Hz	96 Hz	96 Hz	ON 2
39	52 Hz	52 Hz	52 Hz	ON 3
40	62 Hz	62 Hz	62 Hz	ON 3
41	74 Hz	74 Hz	74 Hz	ON 3
42	92 Hz	92 Hz	92 Hz	ON 3
43	104 Hz	104 Hz	104 Hz	ON 3
44	52 Hz	52 Hz	52 Hz	ON 4
45	62 Hz	62 Hz	62 Hz	ON 4
46	74 Hz	74 Hz	74 Hz	ON 4
47	96 Hz	96 Hz	96 Hz	ON 4
48	104 Hz	104 Hz	104 Hz	ON 4
49	116 Hz	116 Hz	116 Hz	ON 4
50	124 Hz	124 Hz	124 Hz	ON 4
51	144 Hz	144 Hz	144 Hz	ON 4
52	158 Hz	158 Hz	158 Hz	ON 4
53	166 Hz	166 Hz	166 Hz	ON 4
54	176 Hz	176 Hz	176 Hz	ON 4
55	188 Hz	188 Hz	188 Hz	ON 4
56	202 Hz	202 Hz	202 Hz	ON 4
57	210 Hz	202 Hz	202 Hz	ON 4
58	218 Hz	202 Hz	202 Hz	ON 4
59	232 Hz	202 Hz	202 Hz	ON 4
60	248 Hz	202 Hz	202 Hz	ON 4
61	266 Hz	202 Hz	202 Hz	ON 4

RXYQ44PAYL, PTL (8+18+18HP)

(To increase Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	66 Hz	OFF
5	68 Hz	68 Hz	68 Hz	OFF
6	70 Hz	70 Hz	70 Hz	OFF
7	74 Hz	74 Hz	74 Hz	OFF
8	80 Hz	80 Hz	80 Hz	OFF
9	88 Hz	88 Hz	88 Hz	OFF
10	96 Hz	96 Hz	96 Hz	OFF
11	104 Hz	104 Hz	104 Hz	OFF
12	110 Hz	110 Hz	110 Hz	OFF
13	116 Hz	116 Hz	116 Hz	OFF
14	124 Hz	124 Hz	124 Hz	OFF
15	80 Hz	80 Hz	80 Hz	ON 1
16	88 Hz	88 Hz	88 Hz	ON 1
17	96 Hz	96 Hz	96 Hz	ON 1
18	104 Hz	104 Hz	104 Hz	ON 1
19	116 Hz	116 Hz	116 Hz	ON 1
20	124 Hz	124 Hz	124 Hz	ON 1
21	132 Hz	132 Hz	132 Hz	ON 1
22	88 Hz	88 Hz	88 Hz	ON 2
23	96 Hz	96 Hz	96 Hz	ON 2
24	104 Hz	104 Hz	104 Hz	ON 2
25	124 Hz	124 Hz	124 Hz	ON 2
26	144 Hz	144 Hz	144 Hz	ON 2
27	92 Hz	92 Hz	92 Hz	ON 3
28	104 Hz	104 Hz	104 Hz	ON 3
29	116 Hz	116 Hz	116 Hz	ON 3
30	124 Hz	124 Hz	124 Hz	ON 3
31	144 Hz	144 Hz	144 Hz	ON 3
32	96 Hz	96 Hz	96 Hz	ON 4
33	104 Hz	104 Hz	104 Hz	ON 4
34	116 Hz	116 Hz	116 Hz	ON 4
35	124 Hz	124 Hz	124 Hz	ON 4
36	144 Hz	144 Hz	144 Hz	ON 4
37	158 Hz	158 Hz	158 Hz	ON 4
38	166 Hz	166 Hz	166 Hz	ON 4
39	176 Hz	176 Hz	176 Hz	ON 4
40	188 Hz	188 Hz	188 Hz	ON 4
41	202 Hz	202 Hz	202 Hz	ON 4
42	210 Hz	202 Hz	202 Hz	ON 4
43	218 Hz	202 Hz	202 Hz	ON 4
44	232 Hz	202 Hz	202 Hz	ON 4
45	248 Hz	202 Hz	202 Hz	ON 4
46	266 Hz	202 Hz	202 Hz	ON 4

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	OFF	OFF	OFF
2	56 Hz	OFF	OFF	OFF
3	62 Hz	OFF	OFF	OFF
4	68 Hz	OFF	OFF	OFF
5	74 Hz	OFF	OFF	OFF
6	80 Hz	OFF	OFF	OFF
7	88 Hz	OFF	OFF	OFF
8	96 Hz	OFF	OFF	OFF
9	104 Hz	OFF	OFF	OFF
10	52 Hz	52 Hz	OFF	OFF
11	56 Hz	56 Hz	OFF	OFF
12	62 Hz	62 Hz	OFF	OFF
13	66 Hz	66 Hz	OFF	OFF
14	70 Hz	70 Hz	OFF	OFF
15	74 Hz	74 Hz	OFF	OFF
16	52 Hz	52 Hz	52 Hz	OFF
17	56 Hz	56 Hz	56 Hz	OFF
18	62 Hz	62 Hz	62 Hz	OFF
19	66 Hz	66 Hz	66 Hz	OFF
20	68 Hz	68 Hz	68 Hz	OFF
21	70 Hz	70 Hz	70 Hz	OFF
22	74 Hz	74 Hz	74 Hz	OFF
23	80 Hz	80 Hz	80 Hz	OFF
24	88 Hz	88 Hz	88 Hz	OFF
25	96 Hz	96 Hz	96 Hz	OFF
26	52 Hz	52 Hz	52 Hz	ON 1
27	62 Hz	62 Hz	62 Hz	ON 1
28	68 Hz	68 Hz	68 Hz	ON 1
29	74 Hz	74 Hz	74 Hz	ON 1
30	80 Hz	80 Hz	80 Hz	ON 1
31	88 Hz	88 Hz	88 Hz	ON 1
32	96 Hz	96 Hz	96 Hz	ON 1
33	104 Hz	104 Hz	104 Hz	ON 1
34	52 Hz	52 Hz	52 Hz	ON 2
35	62 Hz	62 Hz	62 Hz	ON 2
36	74 Hz	74 Hz	74 Hz	ON 2
37	88 Hz	88 Hz	88 Hz	ON 2
38	96 Hz	96 Hz	96 Hz	ON 2
39	52 Hz	52 Hz	52 Hz	ON 3
40	62 Hz	62 Hz	62 Hz	ON 3
41	74 Hz	74 Hz	74 Hz	ON 3
42	92 Hz	92 Hz	92 Hz	ON 3
43	104 Hz	104 Hz	104 Hz	ON 3
44	52 Hz	52 Hz	52 Hz	ON 4
45	62 Hz	62 Hz	62 Hz	ON 4
46	74 Hz	74 Hz	74 Hz	ON 4
47	96 Hz	96 Hz	96 Hz	ON 4
48	104 Hz	104 Hz	104 Hz	ON 4
49	116 Hz	116 Hz	116 Hz	ON 4
50	124 Hz	124 Hz	124 Hz	ON 4
51	144 Hz	144 Hz	144 Hz	ON 4
52	158 Hz	158 Hz	158 Hz	ON 4
53	166 Hz	166 Hz	166 Hz	ON 4
54	176 Hz	176 Hz	176 Hz	ON 4
55	188 Hz	188 Hz	188 Hz	ON 4
56	202 Hz	202 Hz	202 Hz	ON 4
57	210 Hz	202 Hz	202 Hz	ON 4
58	218 Hz	202 Hz	202 Hz	ON 4
59	232 Hz	202 Hz	202 Hz	ON 4
60	248 Hz	202 Hz	202 Hz	ON 4
61	266 Hz	202 Hz	202 Hz	ON 4

Notes:

- INV : Inverter compressor
STD : Standard compressor
Figures after ON represent the number of STD compressors in operation.
- “Master unit”, and “slave unit” in this section are the names for control, and they will be transferred according to the priority of rotation system.
- Depending on the operating conditions of compressors, the compressors may run in patterns other than those aforementioned.

RXVQ54PAYL, PTL (18+18+18HP)

(To increase Step No.)

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD	STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	52 Hz	52 Hz	OFF	1	52 Hz	OFF	OFF	OFF
2	56 Hz	56 Hz	56 Hz	OFF	2	56 Hz	OFF	OFF	OFF
3	62 Hz	62 Hz	62 Hz	OFF	3	62 Hz	OFF	OFF	OFF
4	66 Hz	66 Hz	66 Hz	OFF	4	68 Hz	OFF	OFF	OFF
5	68 Hz	68 Hz	68 Hz	OFF	5	74 Hz	OFF	OFF	OFF
6	70 Hz	70 Hz	70 Hz	OFF	6	80 Hz	OFF	OFF	OFF
7	74 Hz	74 Hz	74 Hz	OFF	7	88 Hz	OFF	OFF	OFF
8	80 Hz	80 Hz	80 Hz	OFF	8	96 Hz	OFF	OFF	OFF
9	88 Hz	88 Hz	88 Hz	OFF	9	104 Hz	OFF	OFF	OFF
10	96 Hz	96 Hz	96 Hz	OFF	10	52 Hz	52 Hz	OFF	OFF
11	104 Hz	104 Hz	104 Hz	OFF	11	56 Hz	56 Hz	OFF	OFF
12	110 Hz	110 Hz	110 Hz	OFF	12	62 Hz	62 Hz	OFF	OFF
13	116 Hz	116 Hz	116 Hz	OFF	13	66 Hz	66 Hz	OFF	OFF
14	124 Hz	124 Hz	124 Hz	OFF	14	70 Hz	70 Hz	OFF	OFF
15	80 Hz	80 Hz	80 Hz	ON 1	15	74 Hz	74 Hz	OFF	OFF
16	88 Hz	88 Hz	88 Hz	ON 1	16	52 Hz	52 Hz	52 Hz	OFF
17	96 Hz	96 Hz	96 Hz	ON 1	17	56 Hz	56 Hz	56 Hz	OFF
18	104 Hz	104 Hz	104 Hz	ON 1	18	62 Hz	62 Hz	62 Hz	OFF
19	116 Hz	116 Hz	116 Hz	ON 1	19	66 Hz	66 Hz	66 Hz	OFF
20	124 Hz	124 Hz	124 Hz	ON 1	20	68 Hz	68 Hz	68 Hz	OFF
21	132 Hz	132 Hz	132 Hz	ON 1	21	70 Hz	70 Hz	70 Hz	OFF
22	88 Hz	88 Hz	88 Hz	ON 2	22	74 Hz	74 Hz	74 Hz	OFF
23	96 Hz	96 Hz	96 Hz	ON 2	23	80 Hz	80 Hz	80 Hz	OFF
24	104 Hz	104 Hz	104 Hz	ON 2	24	88 Hz	88 Hz	88 Hz	OFF
25	124 Hz	124 Hz	124 Hz	ON 2	25	96 Hz	96 Hz	96 Hz	OFF
26	144 Hz	144 Hz	144 Hz	ON 2	26	52 Hz	52 Hz	52 Hz	ON 1
27	92 Hz	92 Hz	92 Hz	ON 3	27	62 Hz	62 Hz	62 Hz	ON 1
28	104 Hz	104 Hz	104 Hz	ON 3	28	68 Hz	68 Hz	68 Hz	ON 1
29	116 Hz	116 Hz	116 Hz	ON 3	29	74 Hz	74 Hz	74 Hz	ON 1
30	124 Hz	124 Hz	124 Hz	ON 3	30	80 Hz	80 Hz	80 Hz	ON 1
31	144 Hz	144 Hz	144 Hz	ON 3	31	88 Hz	88 Hz	88 Hz	ON 1
32	96 Hz	96 Hz	96 Hz	ON 4	32	96 Hz	96 Hz	96 Hz	ON 1
33	104 Hz	104 Hz	104 Hz	ON 4	33	104 Hz	104 Hz	104 Hz	ON 1
34	116 Hz	116 Hz	116 Hz	ON 4	34	52 Hz	52 Hz	52 Hz	ON 2
35	124 Hz	124 Hz	124 Hz	ON 4	35	62 Hz	62 Hz	62 Hz	ON 2
36	144 Hz	144 Hz	144 Hz	ON 4	36	74 Hz	74 Hz	74 Hz	ON 2
37	96 Hz	96 Hz	96 Hz	ON 5	37	88 Hz	88 Hz	88 Hz	ON 2
38	104 Hz	104 Hz	104 Hz	ON 5	38	96 Hz	96 Hz	96 Hz	ON 2
39	116 Hz	116 Hz	116 Hz	ON 5	39	52 Hz	52 Hz	52 Hz	ON 3
40	124 Hz	124 Hz	124 Hz	ON 5	40	62 Hz	62 Hz	62 Hz	ON 3
41	144 Hz	144 Hz	144 Hz	ON 5	41	74 Hz	74 Hz	74 Hz	ON 3
42	96 Hz	96 Hz	96 Hz	ON 6	42	92 Hz	92 Hz	92 Hz	ON 3
43	104 Hz	104 Hz	104 Hz	ON 6	43	104 Hz	104 Hz	104 Hz	ON 3
44	116 Hz	116 Hz	116 Hz	ON 6	44	52 Hz	52 Hz	52 Hz	ON 4
45	124 Hz	124 Hz	124 Hz	ON 6	45	62 Hz	62 Hz	62 Hz	ON 4
46	144 Hz	144 Hz	144 Hz	ON 6	46	74 Hz	74 Hz	74 Hz	ON 4
47	158 Hz	158 Hz	158 Hz	ON 6	47	96 Hz	96 Hz	96 Hz	ON 4
48	166 Hz	166 Hz	166 Hz	ON 6	48	104 Hz	104 Hz	104 Hz	ON 4
49	176 Hz	176 Hz	176 Hz	ON 6	49	52 Hz	52 Hz	52 Hz	ON 5
50	188 Hz	188 Hz	188 Hz	ON 6	50	68 Hz	68 Hz	68 Hz	ON 5
51	202 Hz	202 Hz	202 Hz	ON 6	51	80 Hz	80 Hz	80 Hz	ON 5
					52	96 Hz	96 Hz	96 Hz	ON 5
					53	104 Hz	104 Hz	104 Hz	ON 5
					54	52 Hz	52 Hz	52 Hz	ON 6
					55	68 Hz	68 Hz	68 Hz	ON 6
					56	80 Hz	80 Hz	80 Hz	ON 6
					57	96 Hz	96 Hz	96 Hz	ON 6
					58	104 Hz	104 Hz	104 Hz	ON 6
					59	116 Hz	116 Hz	116 Hz	ON 6
					60	124 Hz	124 Hz	124 Hz	ON 6
					61	144 Hz	144 Hz	144 Hz	ON 6
					62	158 Hz	158 Hz	158 Hz	ON 6
					63	166 Hz	166 Hz	166 Hz	ON 6
					64	176 Hz	176 Hz	176 Hz	ON 6
					65	188 Hz	188 Hz	188 Hz	ON 6
					66	202 Hz	202 Hz	202 Hz	ON 6

Notes:

- INV : Inverter compressor
STD : Standard compressor
Figures after ON represent the number of STD compressors in operation.
- "Master unit", and "slave unit" in this section are the names for control, and they will be transferred according to the priority of rotation system.
- Depending on the operating conditions of compressors, the compressors may run in patterns other than those aforementioned.

50Hz, 60Hz High COP type

Two-unit multi system

RXYQ16PAHY1 (8+8HP)
RXYQ16PAHYL
RXYQ16PHTL

(To increase Step No.)

STEP No.	Master unit INV	Slave unit INV
1	52 Hz	52 Hz
2	56 Hz	56 Hz
3	62 Hz	62 Hz
4	66 Hz	66 Hz
5	74 Hz	74 Hz
6	80 Hz	80 Hz
7	88 Hz	88 Hz
8	96 Hz	96 Hz
9	104 Hz	104 Hz
10	110 Hz	110 Hz
11	116 Hz	116 Hz
12	124 Hz	124 Hz
13	132 Hz	132 Hz
14	144 Hz	144 Hz
15	158 Hz	158 Hz
17	166 Hz	166 Hz
18	176 Hz	176 Hz
19	188 Hz	188 Hz
20	202 Hz	202 Hz
21	210 Hz	210 Hz
22	218 Hz	218 Hz
23	232 Hz	232 Hz
24	248 Hz	248 Hz
25	266 Hz	266 Hz

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit INV
1	52 Hz	OFF
2	56 Hz	OFF
3	62 Hz	OFF
4	66 Hz	OFF
5	74 Hz	OFF
6	80 Hz	OFF
7	88 Hz	OFF
8	96 Hz	OFF
9	104 Hz	OFF
10	52 Hz	52 Hz
11	56 Hz	56 Hz
12	62 Hz	62 Hz
13	66 Hz	66 Hz
14	70 Hz	70 Hz
15	74 Hz	74 Hz
16	80 Hz	80 Hz
17	88 Hz	88 Hz
18	92 Hz	96 Hz
19	96 Hz	96 Hz
20	104 Hz	104 Hz
21	110 Hz	110 Hz
22	116 Hz	116 Hz
23	124 Hz	124 Hz
24	132 Hz	132 Hz
25	144 Hz	144 Hz
26	158 Hz	158 Hz
27	176 Hz	176 Hz
28	188 Hz	188 Hz
29	202 Hz	202 Hz
30	210 Hz	210 Hz
31	218 Hz	218 Hz
32	232 Hz	232 Hz
33	248 Hz	248 Hz
34	266 Hz	266 Hz

■ represents the range in which "Hz" is not stepped up.

RXYQ18PAHY1 (8+10HP)
RXYQ18PAHYL
RXYQ18PHTL

(To increase Step No.)

STEP No.	Master unit INV	Slave unit INV	STD
1	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	OFF
5	74 Hz	74 Hz	OFF
6	80 Hz	80 Hz	OFF
7	88 Hz	88 Hz	OFF
8	96 Hz	96 Hz	OFF
9	104 Hz	104 Hz	OFF
10	110 Hz	110 Hz	OFF
11	116 Hz	116 Hz	OFF
12	124 Hz	124 Hz	OFF
13	132 Hz	132 Hz	OFF
14	144 Hz	144 Hz	OFF
15	158 Hz	158 Hz	OFF
17	166 Hz	166 Hz	OFF
18	176 Hz	176 Hz	OFF
19	80 Hz	80 Hz	ON
20	88 Hz	88 Hz	ON
21	96 Hz	96 Hz	ON
22	104 Hz	104 Hz	ON
23	116 Hz	116 Hz	ON
24	124 Hz	124 Hz	ON
25	132 Hz	132 Hz	ON
26	144 Hz	144 Hz	ON
27	158 Hz	158 Hz	ON
28	176 Hz	176 Hz	ON
29	188 Hz	188 Hz	ON
30	202 Hz	202 Hz	ON
31	210 Hz	210 Hz	ON
32	218 Hz	218 Hz	ON
33	232 Hz	232 Hz	ON
34	248 Hz	230 Hz	ON
35	266 Hz	230 Hz	ON

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit INV	STD
1	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	OFF
5	74 Hz	74 Hz	OFF
6	80 Hz	80 Hz	OFF
7	88 Hz	88 Hz	OFF
8	96 Hz	96 Hz	OFF
9	104 Hz	104 Hz	OFF
10	52 Hz	52 Hz	OFF
11	56 Hz	56 Hz	OFF
12	62 Hz	62 Hz	OFF
13	66 Hz	66 Hz	OFF
14	70 Hz	70 Hz	OFF
15	74 Hz	74 Hz	OFF
16	80 Hz	80 Hz	OFF
17	88 Hz	88 Hz	OFF
18	92 Hz	96 Hz	OFF
19	96 Hz	96 Hz	OFF
20	104 Hz	104 Hz	OFF
21	110 Hz	110 Hz	OFF
22	116 Hz	116 Hz	OFF
23	124 Hz	124 Hz	OFF
24	132 Hz	132 Hz	OFF
25	144 Hz	144 Hz	ON
26	158 Hz	158 Hz	ON
27	176 Hz	176 Hz	ON
28	188 Hz	188 Hz	ON
29	202 Hz	202 Hz	ON
30	210 Hz	210 Hz	ON
31	218 Hz	218 Hz	ON
32	232 Hz	232 Hz	ON
33	248 Hz	230 Hz	ON
34	266 Hz	230 Hz	ON
35	266 Hz	230 Hz	ON

Notes:

1. INV : Inverter compressor
STD : Standard compressor
Figures after ON represent the number of STD compressors in operation.
2. "Master unit", and "slave unit" in this section are the names for control, and they will be transferred according to the priority of rotation system.
3. Depending on the operating conditions of compressors, the compressors may run in patterns other than those aforementioned.

Three-unit multi system

RXYQ24PAHY1 (8+8+8HP)
 RXYQ24PAHYL
 RXYQ24PHTL

(To increase Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV
1	52 Hz	52 Hz	52 Hz
2	56 Hz	56 Hz	56 Hz
3	62 Hz	62 Hz	62 Hz
4	66 Hz	66 Hz	66 Hz
5	68 Hz	68 Hz	68 Hz
6	70 Hz	70 Hz	70 Hz
7	74 Hz	74 Hz	74 Hz
8	80 Hz	80 Hz	80 Hz
9	88 Hz	88 Hz	88 Hz
10	96 Hz	96 Hz	96 Hz
11	104 Hz	104 Hz	104 Hz
12	110 Hz	110 Hz	110 Hz
13	116 Hz	116 Hz	116 Hz
14	124 Hz	124 Hz	124 Hz
15	132 Hz	132 Hz	132 Hz
16	138 Hz	138 Hz	138 Hz
17	144 Hz	144 Hz	144 Hz
18	158 Hz	158 Hz	158 Hz
19	166 Hz	166 Hz	166 Hz
20	176 Hz	176 Hz	176 Hz
21	188 Hz	188 Hz	188 Hz
22	202 Hz	202 Hz	202 Hz
23	210 Hz	210 Hz	210 Hz
24	218 Hz	218 Hz	218 Hz
25	232 Hz	232 Hz	232 Hz
26	248 Hz	248 Hz	248 Hz
27	266 Hz	266 Hz	266 Hz

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV
1	52 Hz	OFF	OFF
2	56 Hz	OFF	OFF
3	62 Hz	OFF	OFF
4	66 Hz	OFF	OFF
5	74 Hz	OFF	OFF
6	80 Hz	OFF	OFF
7	88 Hz	OFF	OFF
8	96 Hz	OFF	OFF
9	104 Hz	OFF	OFF
10	52 Hz	52 Hz	52 Hz
11	56 Hz	56 Hz	56 Hz
12	62 Hz	62 Hz	62 Hz
13	66 Hz	66 Hz	66 Hz
14	70 Hz	70 Hz	70 Hz
15	74 Hz	74 Hz	74 Hz
16	80 Hz	80 Hz	80 Hz
17	88 Hz	88 Hz	88 Hz
18	96 Hz	96 Hz	96 Hz
19	62 Hz	62 Hz	62 Hz
20	66 Hz	66 Hz	66 Hz
21	70 Hz	70 Hz	70 Hz
22	74 Hz	74 Hz	74 Hz
23	80 Hz	80 Hz	80 Hz
24	88 Hz	88 Hz	88 Hz
25	96 Hz	96 Hz	96 Hz
26	104 Hz	104 Hz	104 Hz
27	116 Hz	116 Hz	116 Hz
28	124 Hz	124 Hz	124 Hz
29	132 Hz	132 Hz	132 Hz
30	138 Hz	138 Hz	138 Hz
31	144 Hz	144 Hz	144 Hz
32	158 Hz	158 Hz	158 Hz
33	166 Hz	166 Hz	166 Hz
34	176 Hz	176 Hz	176 Hz
35	188 Hz	188 Hz	188 Hz
36	202 Hz	202 Hz	202 Hz
37	210 Hz	210 Hz	210 Hz
38	218 Hz	218 Hz	218 Hz
39	232 Hz	232 Hz	232 Hz
40	248 Hz	248 Hz	248 Hz
41	266 Hz	266 Hz	266 Hz

■ represents the range in which "Hz" is not stepped up.

RXYQ26PAHY1 (8+8+10HP)
 RXYQ26PAHYL
 RXYQ26PHTL

(To increase Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	66 Hz	OFF
5	68 Hz	68 Hz	68 Hz	OFF
6	70 Hz	70 Hz	70 Hz	OFF
7	74 Hz	74 Hz	74 Hz	OFF
8	80 Hz	80 Hz	80 Hz	OFF
9	88 Hz	88 Hz	88 Hz	OFF
10	96 Hz	96 Hz	96 Hz	OFF
11	104 Hz	104 Hz	104 Hz	OFF
12	110 Hz	110 Hz	110 Hz	OFF
13	116 Hz	116 Hz	116 Hz	OFF
14	124 Hz	124 Hz	124 Hz	OFF
15	80 Hz	80 Hz	80 Hz	ON 1
16	88 Hz	88 Hz	88 Hz	ON 1
17	96 Hz	96 Hz	96 Hz	ON 1
18	104 Hz	104 Hz	104 Hz	ON 1
19	116 Hz	116 Hz	116 Hz	ON 1
20	124 Hz	124 Hz	124 Hz	ON 1
21	132 Hz	132 Hz	132 Hz	ON 1
22	144 Hz	144 Hz	144 Hz	ON 1
23	158 Hz	158 Hz	158 Hz	ON 1
24	166 Hz	166 Hz	166 Hz	ON 1
25	176 Hz	176 Hz	176 Hz	ON 1
26	188 Hz	188 Hz	188 Hz	ON 1
27	202 Hz	202 Hz	202 Hz	ON 1
28	210 Hz	210 Hz	210 Hz	ON 1
29	218 Hz	218 Hz	218 Hz	ON 1
30	232 Hz	232 Hz	232 Hz	ON 1
31	248 Hz	248 Hz	248 Hz	ON 1
32	266 Hz	266 Hz	266 Hz	ON 1

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	OFF	OFF	OFF
2	56 Hz	OFF	OFF	OFF
3	62 Hz	OFF	OFF	OFF
4	66 Hz	OFF	OFF	OFF
5	74 Hz	OFF	OFF	OFF
6	80 Hz	OFF	OFF	OFF
7	88 Hz	OFF	OFF	OFF
8	96 Hz	OFF	OFF	OFF
9	104 Hz	OFF	OFF	OFF
10	52 Hz	52 Hz	52 Hz	OFF
11	56 Hz	56 Hz	56 Hz	OFF
12	62 Hz	62 Hz	62 Hz	OFF
13	66 Hz	66 Hz	66 Hz	OFF
14	70 Hz	70 Hz	70 Hz	OFF
15	74 Hz	74 Hz	74 Hz	OFF
16	80 Hz	80 Hz	80 Hz	OFF
17	88 Hz	88 Hz	88 Hz	OFF
18	96 Hz	96 Hz	96 Hz	OFF
19	62 Hz	62 Hz	62 Hz	OFF
20	66 Hz	66 Hz	66 Hz	OFF
21	70 Hz	70 Hz	70 Hz	OFF
22	74 Hz	74 Hz	74 Hz	OFF
23	80 Hz	80 Hz	80 Hz	OFF
24	88 Hz	88 Hz	88 Hz	OFF
25	96 Hz	96 Hz	96 Hz	OFF
26	104 Hz	104 Hz	104 Hz	ON 1
27	116 Hz	116 Hz	116 Hz	ON 1
28	124 Hz	124 Hz	124 Hz	ON 1
29	132 Hz	132 Hz	132 Hz	ON 1
30	138 Hz	138 Hz	138 Hz	ON 1
31	144 Hz	144 Hz	144 Hz	ON 1
32	158 Hz	158 Hz	158 Hz	ON 1
33	166 Hz	166 Hz	166 Hz	ON 1
34	176 Hz	176 Hz	176 Hz	ON 1
35	188 Hz	188 Hz	188 Hz	ON 1
36	202 Hz	202 Hz	202 Hz	ON 1
37	210 Hz	210 Hz	210 Hz	ON 1
38	218 Hz	218 Hz	218 Hz	ON 1
39	232 Hz	232 Hz	232 Hz	ON 1
40	248 Hz	248 Hz	248 Hz	ON 1
41	266 Hz	266 Hz	266 Hz	ON 1
42	210 Hz	210 Hz	210 Hz	ON 1
43	218 Hz	218 Hz	218 Hz	ON 1
44	232 Hz	232 Hz	232 Hz	ON 1
45	248 Hz	248 Hz	248 Hz	ON 1
46	266 Hz	266 Hz	266 Hz	ON 1

Notes:

- INV : Inverter compressor
 STD : Standard compressor
 Figures after ON represent the number of STD compressors in operation.
- "Master unit", and "slave unit" in this section are the names for control, and they will be transferred according to the priority of rotation system.
- Depending on the operating conditions of compressors, the compressors may run in patterns other than those aforementioned.

■ represents the range in which "Hz" is not stepped up.

RXYQ28PAHY1 (8+8+12HP)
RXYQ28PAHYL
RXYQ28PHTL

(To increase Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	66 Hz	OFF
5	68 Hz	68 Hz	68 Hz	OFF
6	70 Hz	70 Hz	70 Hz	OFF
7	74 Hz	74 Hz	74 Hz	OFF
8	80 Hz	80 Hz	80 Hz	OFF
9	88 Hz	88 Hz	88 Hz	OFF
10	96 Hz	96 Hz	96 Hz	OFF
11	104 Hz	104 Hz	104 Hz	OFF
12	110 Hz	110 Hz	110 Hz	OFF
13	116 Hz	116 Hz	116 Hz	OFF
14	124 Hz	124 Hz	124 Hz	OFF
15	80 Hz	80 Hz	80 Hz	ON 1
16	88 Hz	88 Hz	88 Hz	ON 1
17	96 Hz	96 Hz	96 Hz	ON 1
18	104 Hz	104 Hz	104 Hz	ON 1
19	116 Hz	116 Hz	116 Hz	ON 1
20	124 Hz	124 Hz	124 Hz	ON 1
21	132 Hz	132 Hz	132 Hz	ON 1
22	144 Hz	144 Hz	144 Hz	ON 1
23	150 Hz	150 Hz	150 Hz	ON 1
24	166 Hz	166 Hz	166 Hz	ON 1
25	176 Hz	176 Hz	176 Hz	ON 1
26	188 Hz	188 Hz	188 Hz	ON 1
27	202 Hz	202 Hz	202 Hz	ON 1
28	210 Hz	210 Hz	210 Hz	ON 1
29	218 Hz	218 Hz	218 Hz	ON 1
30	232 Hz	232 Hz	232 Hz	ON 1
31	248 Hz	248 Hz	248 Hz	ON 1
32	266 Hz	266 Hz	266 Hz	ON 1

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	OFF	OFF	OFF
2	56 Hz	OFF	OFF	OFF
3	62 Hz	OFF	OFF	OFF
4	66 Hz	OFF	OFF	OFF
5	74 Hz	OFF	OFF	OFF
6	80 Hz	OFF	OFF	OFF
7	88 Hz	OFF	OFF	OFF
8	96 Hz	OFF	OFF	OFF
9	104 Hz	OFF	OFF	OFF
10	52 Hz	52 Hz	52 Hz	OFF
11	56 Hz	56 Hz	56 Hz	OFF
12	62 Hz	62 Hz	62 Hz	OFF
13	66 Hz	66 Hz	66 Hz	OFF
14	70 Hz	70 Hz	70 Hz	OFF
15	74 Hz	74 Hz	74 Hz	OFF
16	80 Hz	80 Hz	80 Hz	OFF
17	88 Hz	88 Hz	88 Hz	OFF
18	96 Hz	96 Hz	96 Hz	OFF
19	104 Hz	104 Hz	104 Hz	OFF
20	116 Hz	116 Hz	116 Hz	OFF
21	124 Hz	124 Hz	124 Hz	OFF
22	74 Hz	74 Hz	74 Hz	OFF
23	80 Hz	80 Hz	80 Hz	OFF
24	88 Hz	88 Hz	88 Hz	OFF
25	96 Hz	96 Hz	96 Hz	OFF
26	52 Hz	52 Hz	52 Hz	ON 1
27	62 Hz	62 Hz	62 Hz	ON 1
28	68 Hz	68 Hz	68 Hz	ON 1
29	74 Hz	74 Hz	74 Hz	ON 1
30	80 Hz	80 Hz	80 Hz	ON 1
31	88 Hz	88 Hz	88 Hz	ON 1
32	96 Hz	96 Hz	96 Hz	ON 1
33	104 Hz	104 Hz	104 Hz	ON 1
34	116 Hz	116 Hz	116 Hz	ON 1
35	124 Hz	124 Hz	124 Hz	ON 1
36	144 Hz	144 Hz	144 Hz	ON 1
37	158 Hz	158 Hz	158 Hz	ON 1
38	166 Hz	166 Hz	166 Hz	ON 1
39	176 Hz	176 Hz	176 Hz	ON 1
40	188 Hz	188 Hz	188 Hz	ON 1
41	202 Hz	202 Hz	202 Hz	ON 1
42	210 Hz	210 Hz	210 Hz	ON 1
43	218 Hz	218 Hz	218 Hz	ON 1
44	232 Hz	232 Hz	232 Hz	ON 1
45	248 Hz	248 Hz	248 Hz	ON 1
46	266 Hz	266 Hz	266 Hz	ON 1

RXYQ30PAHY1 (8+10+12HP)
RXYQ30PAHYL
RXYQ30PHTL

(To increase Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	66 Hz	OFF
5	68 Hz	68 Hz	68 Hz	OFF
6	70 Hz	70 Hz	70 Hz	ON 1
7	74 Hz	74 Hz	74 Hz	ON 1
8	80 Hz	80 Hz	80 Hz	ON 1
9	88 Hz	88 Hz	88 Hz	ON 1
10	96 Hz	96 Hz	96 Hz	ON 1
11	104 Hz	104 Hz	104 Hz	ON 1
12	110 Hz	110 Hz	110 Hz	ON 1
13	116 Hz	116 Hz	116 Hz	ON 1
14	124 Hz	124 Hz	124 Hz	ON 1
15	80 Hz	80 Hz	80 Hz	ON 1
16	88 Hz	88 Hz	88 Hz	ON 1
17	96 Hz	96 Hz	96 Hz	ON 1
18	104 Hz	104 Hz	104 Hz	ON 1
19	116 Hz	116 Hz	116 Hz	ON 1
20	124 Hz	124 Hz	124 Hz	ON 1
21	132 Hz	132 Hz	132 Hz	ON 1
22	88 Hz	88 Hz	88 Hz	ON 2
23	96 Hz	96 Hz	96 Hz	ON 2
24	104 Hz	104 Hz	104 Hz	ON 2
25	124 Hz	124 Hz	124 Hz	ON 2
26	144 Hz	144 Hz	144 Hz	ON 2
27	158 Hz	158 Hz	158 Hz	ON 2
28	166 Hz	166 Hz	166 Hz	ON 2
29	176 Hz	176 Hz	176 Hz	ON 2
30	188 Hz	188 Hz	188 Hz	ON 2
31	202 Hz	202 Hz	202 Hz	ON 2
32	210 Hz	210 Hz	210 Hz	ON 2
33	218 Hz	218 Hz	218 Hz	ON 2
34	232 Hz	232 Hz	232 Hz	ON 2
35	248 Hz	248 Hz	248 Hz	ON 2
36	266 Hz	266 Hz	266 Hz	ON 2

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	OFF	OFF	OFF
2	56 Hz	OFF	OFF	OFF
3	62 Hz	OFF	OFF	OFF
4	66 Hz	OFF	OFF	OFF
5	74 Hz	OFF	OFF	OFF
6	80 Hz	OFF	OFF	OFF
7	88 Hz	OFF	OFF	OFF
8	96 Hz	OFF	OFF	OFF
9	104 Hz	OFF	OFF	OFF
10	52 Hz	52 Hz	52 Hz	OFF
11	56 Hz	56 Hz	56 Hz	OFF
12	62 Hz	62 Hz	62 Hz	OFF
13	66 Hz	66 Hz	66 Hz	OFF
14	70 Hz	70 Hz	70 Hz	OFF
15	74 Hz	74 Hz	74 Hz	OFF
16	80 Hz	80 Hz	80 Hz	OFF
17	88 Hz	88 Hz	88 Hz	OFF
18	96 Hz	96 Hz	96 Hz	OFF
19	104 Hz	104 Hz	104 Hz	OFF
20	116 Hz	116 Hz	116 Hz	OFF
21	124 Hz	124 Hz	124 Hz	OFF
22	74 Hz	74 Hz	74 Hz	OFF
23	80 Hz	80 Hz	80 Hz	OFF
24	88 Hz	88 Hz	88 Hz	OFF
25	96 Hz	96 Hz	96 Hz	OFF
26	52 Hz	52 Hz	52 Hz	ON 1
27	62 Hz	62 Hz	62 Hz	ON 1
28	68 Hz	68 Hz	68 Hz	ON 1
29	74 Hz	74 Hz	74 Hz	ON 1
30	80 Hz	80 Hz	80 Hz	ON 1
31	88 Hz	88 Hz	88 Hz	ON 1
32	96 Hz	96 Hz	96 Hz	ON 1
33	104 Hz	104 Hz	104 Hz	ON 1
34	116 Hz	116 Hz	116 Hz	ON 1
35	124 Hz	124 Hz	124 Hz	ON 1
36	144 Hz	144 Hz	144 Hz	ON 1
37	158 Hz	158 Hz	158 Hz	ON 1
38	166 Hz	166 Hz	166 Hz	ON 1
39	176 Hz	176 Hz	176 Hz	ON 1
40	188 Hz	188 Hz	188 Hz	ON 1
41	202 Hz	202 Hz	202 Hz	ON 1
42	210 Hz	210 Hz	210 Hz	ON 1
43	218 Hz	218 Hz	218 Hz	ON 1
44	232 Hz	232 Hz	232 Hz	ON 1
45	248 Hz	248 Hz	248 Hz	ON 1
46	266 Hz	266 Hz	266 Hz	ON 1

Notes:

1. INV : Inverter compressor
STD : Standard compressor
Figures after ON represent the number of STD compressors in operation.
2. "Master unit", and "slave unit" in this section are the names for control, and they will be transferred according to the priority of rotation system.
3. Depending on the operating conditions of compressors, the compressors may run in patterns other than those aforementioned.

represents the range in which "Hz" is not stepped up.

RXYQ32PAHY1 (8+12+12HP)
RXYQ32PAHYL
RXYQ32PHTL

(To increase Step No.)

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	66 Hz	OFF
5	68 Hz	68 Hz	68 Hz	OFF
6	70 Hz	70 Hz	70 Hz	OFF
7	74 Hz	74 Hz	74 Hz	OFF
8	80 Hz	80 Hz	80 Hz	OFF
9	88 Hz	88 Hz	88 Hz	OFF
10	96 Hz	96 Hz	96 Hz	OFF
11	104 Hz	104 Hz	104 Hz	OFF
12	110 Hz	110 Hz	110 Hz	OFF
13	116 Hz	116 Hz	116 Hz	OFF
14	124 Hz	124 Hz	124 Hz	OFF
15	80 Hz	80 Hz	80 Hz	ON 1
16	88 Hz	88 Hz	88 Hz	ON 1
17	96 Hz	96 Hz	96 Hz	ON 1
18	104 Hz	104 Hz	104 Hz	ON 1
19	116 Hz	116 Hz	116 Hz	ON 1
20	124 Hz	124 Hz	124 Hz	ON 1
21	132 Hz	132 Hz	132 Hz	ON 1
22	88 Hz	88 Hz	88 Hz	ON 2
23	96 Hz	96 Hz	96 Hz	ON 2
24	104 Hz	104 Hz	104 Hz	ON 2
25	124 Hz	124 Hz	124 Hz	ON 2
26	144 Hz	144 Hz	144 Hz	ON 2
27	158 Hz	158 Hz	158 Hz	ON 2
28	166 Hz	166 Hz	166 Hz	ON 2
29	176 Hz	176 Hz	176 Hz	ON 2
30	188 Hz	188 Hz	188 Hz	ON 2
31	202 Hz	202 Hz	202 Hz	ON 2
32	210 Hz	210 Hz	210 Hz	ON 2
33	218 Hz	218 Hz	218 Hz	ON 2
34	232 Hz	232 Hz	232 Hz	ON 2
35	248 Hz	248 Hz	248 Hz	ON 2
36	266 Hz	266 Hz	266 Hz	ON 2

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	OFF	OFF	OFF
2	56 Hz	OFF	OFF	OFF
3	62 Hz	OFF	OFF	OFF
4	66 Hz	OFF	OFF	OFF
5	74 Hz	OFF	OFF	OFF
6	80 Hz	OFF	OFF	OFF
7	88 Hz	OFF	OFF	OFF
8	96 Hz	OFF	OFF	OFF
9	104 Hz	OFF	OFF	OFF
10	52 Hz	52 Hz	52 Hz	OFF
11	56 Hz	56 Hz	56 Hz	OFF
12	62 Hz	62 Hz	62 Hz	OFF
13	66 Hz	66 Hz	66 Hz	OFF
14	70 Hz	70 Hz	70 Hz	OFF
15	74 Hz	74 Hz	74 Hz	OFF
16	80 Hz	80 Hz	80 Hz	OFF
17	88 Hz	88 Hz	88 Hz	OFF
18	96 Hz	96 Hz	96 Hz	OFF
19	104 Hz	104 Hz	104 Hz	OFF
20	116 Hz	116 Hz	116 Hz	OFF
21	124 Hz	124 Hz	124 Hz	OFF
22	74 Hz	74 Hz	74 Hz	OFF
23	80 Hz	80 Hz	80 Hz	OFF
24	88 Hz	88 Hz	88 Hz	OFF
25	96 Hz	96 Hz	96 Hz	OFF
26	104 Hz	104 Hz	104 Hz	ON 1
27	116 Hz	116 Hz	116 Hz	ON 1
28	124 Hz	124 Hz	124 Hz	ON 1
29	74 Hz	74 Hz	74 Hz	ON 1
30	80 Hz	80 Hz	80 Hz	ON 1
31	88 Hz	88 Hz	88 Hz	ON 1
32	96 Hz	96 Hz	96 Hz	ON 1
33	104 Hz	104 Hz	104 Hz	ON 1
34	124 Hz	124 Hz	124 Hz	ON 2
35	144 Hz	144 Hz	144 Hz	ON 2
36	158 Hz	158 Hz	158 Hz	ON 2
37	166 Hz	166 Hz	166 Hz	ON 2
38	176 Hz	176 Hz	176 Hz	ON 2
39	188 Hz	188 Hz	188 Hz	ON 2
40	202 Hz	202 Hz	202 Hz	ON 2
41	210 Hz	210 Hz	210 Hz	ON 2
42	218 Hz	218 Hz	218 Hz	ON 2
43	232 Hz	232 Hz	232 Hz	ON 2
44	248 Hz	248 Hz	248 Hz	ON 2
45	266 Hz	266 Hz	266 Hz	ON 2
46	188 Hz	188 Hz	188 Hz	ON 2
47	202 Hz	202 Hz	202 Hz	ON 2
48	210 Hz	210 Hz	210 Hz	ON 2
49	218 Hz	218 Hz	218 Hz	ON 2
50	232 Hz	232 Hz	232 Hz	ON 2
51	248 Hz	248 Hz	248 Hz	ON 2
52	266 Hz	266 Hz	266 Hz	ON 2

RXYQ34PAHY1, 36PAHY1 (10/12+12+12HP)
RXYQ34PAHYL, 36PAHYL
RXYQ34PHTL, 36PHTL

(To increase Step No.)

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	62 Hz	OFF
4	66 Hz	66 Hz	66 Hz	OFF
5	68 Hz	68 Hz	68 Hz	OFF
6	70 Hz	70 Hz	70 Hz	OFF
7	74 Hz	74 Hz	74 Hz	OFF
8	80 Hz	80 Hz	80 Hz	OFF
9	88 Hz	88 Hz	88 Hz	OFF
10	96 Hz	96 Hz	96 Hz	OFF
11	104 Hz	104 Hz	104 Hz	OFF
12	110 Hz	110 Hz	110 Hz	OFF
13	116 Hz	116 Hz	116 Hz	OFF
14	124 Hz	124 Hz	124 Hz	OFF
15	80 Hz	80 Hz	80 Hz	ON 1
16	88 Hz	88 Hz	88 Hz	ON 1
17	96 Hz	96 Hz	96 Hz	ON 1
18	104 Hz	104 Hz	104 Hz	ON 1
19	116 Hz	116 Hz	116 Hz	ON 1
20	124 Hz	124 Hz	124 Hz	ON 1
21	132 Hz	132 Hz	132 Hz	ON 1
22	88 Hz	88 Hz	88 Hz	ON 2
23	96 Hz	96 Hz	96 Hz	ON 2
24	104 Hz	104 Hz	104 Hz	ON 2
25	124 Hz	124 Hz	124 Hz	ON 2
26	144 Hz	144 Hz	144 Hz	ON 2
27	158 Hz	158 Hz	158 Hz	ON 3
28	166 Hz	166 Hz	166 Hz	ON 3
29	176 Hz	176 Hz	176 Hz	ON 3
30	188 Hz	188 Hz	188 Hz	ON 3
31	202 Hz	202 Hz	202 Hz	ON 3
32	210 Hz	210 Hz	210 Hz	ON 3
33	218 Hz	218 Hz	218 Hz	ON 3
34	232 Hz	232 Hz	232 Hz	ON 3
35	248 Hz	248 Hz	248 Hz	ON 3
36	266 Hz	266 Hz	266 Hz	ON 3
37	210 Hz	210 Hz	210 Hz	ON 3

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	OFF	OFF	OFF
2	56 Hz	OFF	OFF	OFF
3	62 Hz	OFF	OFF	OFF
4	66 Hz	OFF	OFF	OFF
5	74 Hz	OFF	OFF	OFF
6	80 Hz	OFF	OFF	OFF
7	88 Hz	OFF	OFF	OFF
8	96 Hz	OFF	OFF	OFF
9	104 Hz	OFF	OFF	OFF
10	52 Hz	52 Hz	52 Hz	OFF
11	56 Hz	56 Hz	56 Hz	OFF
12	62 Hz	62 Hz	62 Hz	OFF
13	66 Hz	66 Hz	66 Hz	OFF
14	70 Hz	70 Hz	70 Hz	OFF
15	74 Hz	74 Hz	74 Hz	OFF
16	80 Hz	80 Hz	80 Hz	OFF
17	88 Hz	88 Hz	88 Hz	OFF
18	96 Hz	96 Hz	96 Hz	OFF
19	104 Hz	104 Hz	104 Hz	OFF
20	116 Hz	116 Hz	116 Hz	OFF
21	124 Hz	124 Hz	124 Hz	OFF
22	74 Hz	74 Hz	74 Hz	OFF
23	80 Hz	80 Hz	80 Hz	OFF
24	88 Hz	88 Hz	88 Hz	OFF
25	96 Hz	96 Hz	96 Hz	OFF
26	104 Hz	104 Hz	104 Hz	ON 1
27	116 Hz	116 Hz	116 Hz	ON 1
28	124 Hz	124 Hz	124 Hz	ON 1
29	74 Hz	74 Hz	74 Hz	ON 1
30	80 Hz	80 Hz	80 Hz	ON 1
31	88 Hz	88 Hz	88 Hz	ON 1
32	96 Hz	96 Hz	96 Hz	ON 1
33	104 Hz	104 Hz	104 Hz	ON 1
34	124 Hz	124 Hz	124 Hz	ON 2
35	144 Hz	144 Hz	144 Hz	ON 2
36	158 Hz	158 Hz	158 Hz	ON 3
37	166 Hz	166 Hz	166 Hz	ON 3
38	176 Hz	176 Hz	176 Hz	ON 3
39	188 Hz	188 Hz	188 Hz	ON 3
40	202 Hz	202 Hz	202 Hz	ON 3
41	210 Hz	210 Hz	210 Hz	ON 3
42	218 Hz	218 Hz	218 Hz	ON 3
43	232 Hz	232 Hz	232 Hz	ON 3
44	248 Hz	248 Hz	248 Hz	ON 3
45	266 Hz	266 Hz	266 Hz	ON 3
46	188 Hz	188 Hz	188 Hz	ON 3
47	202 Hz	202 Hz	202 Hz	ON 3
48	210 Hz	210 Hz	210 Hz	ON 3
49	218 Hz	218 Hz	218 Hz	ON 3
50	232 Hz	232 Hz	232 Hz	ON 3
51	248 Hz	248 Hz	248 Hz	ON 3
52	266 Hz	266 Hz	266 Hz	ON 3

Notes:

- INV : Inverter compressor
STD : Standard compressor
Figures after ON represent the number of STD compressors in operation.
- "Master unit", and "slave unit" in this section are the names for control, and they will be transferred according to the priority of rotation system.
- Depending on the operating conditions of compressors, the compressors may run in patterns other than those aforementioned.

represents the range in which "Hz" is not stepped up.

RXYQ38PAHY1, 40PAHY1 (12+12+14/16HP)
 RXYQ38PAHYL, 40PAHYL
 RXYQ38PHTL, 40PHTL

RXYQ42PAHY1 (12+12+18HP)
 RXYQ42PAHYL
 RXYQ42PHTL

(To increase Step No.)

(To decrease Step No.)

(To increase Step No.)

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	62 Hz	OFF
4	68 Hz	68 Hz	68 Hz	OFF
5	68 Hz	68 Hz	68 Hz	OFF
6	70 Hz	70 Hz	70 Hz	OFF
7	74 Hz	74 Hz	74 Hz	OFF
8	80 Hz	80 Hz	80 Hz	OFF
9	88 Hz	88 Hz	88 Hz	OFF
10	96 Hz	96 Hz	96 Hz	OFF
11	104 Hz	104 Hz	104 Hz	OFF
12	110 Hz	110 Hz	110 Hz	OFF
13	116 Hz	116 Hz	116 Hz	OFF
14	124 Hz	124 Hz	124 Hz	OFF
15	80 Hz	80 Hz	80 Hz	ON 1
16	88 Hz	88 Hz	88 Hz	ON 1
17	96 Hz	96 Hz	96 Hz	ON 1
18	104 Hz	104 Hz	104 Hz	ON 1
19	110 Hz	110 Hz	110 Hz	ON 1
20	124 Hz	124 Hz	124 Hz	ON 1
21	132 Hz	132 Hz	132 Hz	ON 1
22	88 Hz	88 Hz	88 Hz	ON 2
23	96 Hz	96 Hz	96 Hz	ON 2
24	104 Hz	104 Hz	104 Hz	ON 2
25	124 Hz	124 Hz	124 Hz	ON 2
26	144 Hz	144 Hz	144 Hz	ON 2
27	92 Hz	92 Hz	92 Hz	ON 3
28	104 Hz	104 Hz	104 Hz	ON 3
29	116 Hz	116 Hz	116 Hz	ON 3
30	124 Hz	124 Hz	124 Hz	ON 3
31	144 Hz	144 Hz	144 Hz	ON 3
32	96 Hz	96 Hz	96 Hz	ON 4
33	104 Hz	104 Hz	104 Hz	ON 4
34	116 Hz	116 Hz	116 Hz	ON 4
35	124 Hz	124 Hz	124 Hz	ON 4
36	144 Hz	144 Hz	144 Hz	ON 4
37	156 Hz	156 Hz	156 Hz	ON 4
38	166 Hz	166 Hz	166 Hz	ON 4
39	176 Hz	176 Hz	176 Hz	ON 4
40	188 Hz	188 Hz	188 Hz	ON 4
41	202 Hz	202 Hz	202 Hz	ON 4
42	210 Hz	210 Hz	210 Hz	ON 4

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	OFF	OFF	OFF
2	56 Hz	OFF	OFF	OFF
3	62 Hz	OFF	OFF	OFF
4	68 Hz	OFF	OFF	OFF
5	74 Hz	OFF	OFF	OFF
6	80 Hz	OFF	OFF	OFF
7	88 Hz	OFF	OFF	OFF
8	96 Hz	OFF	OFF	OFF
9	104 Hz	OFF	OFF	OFF
10	52 Hz	52 Hz	52 Hz	OFF
11	56 Hz	56 Hz	56 Hz	OFF
12	62 Hz	62 Hz	62 Hz	OFF
13	68 Hz	68 Hz	68 Hz	OFF
14	70 Hz	70 Hz	70 Hz	OFF
15	74 Hz	74 Hz	74 Hz	OFF
16	80 Hz	80 Hz	80 Hz	OFF
17	88 Hz	88 Hz	88 Hz	OFF
18	92 Hz	92 Hz	92 Hz	OFF
19	96 Hz	96 Hz	96 Hz	OFF
20	96 Hz	96 Hz	96 Hz	OFF
21	70 Hz	70 Hz	70 Hz	OFF
22	74 Hz	74 Hz	74 Hz	OFF
23	80 Hz	80 Hz	80 Hz	OFF
24	88 Hz	88 Hz	88 Hz	OFF
25	96 Hz	96 Hz	96 Hz	OFF
26	52 Hz	52 Hz	52 Hz	ON 1
27	52 Hz	52 Hz	52 Hz	ON 1
28	58 Hz	58 Hz	58 Hz	ON 1
29	74 Hz	74 Hz	74 Hz	ON 1
30	80 Hz	80 Hz	80 Hz	ON 1
31	88 Hz	88 Hz	88 Hz	ON 1
32	96 Hz	96 Hz	96 Hz	ON 1
33	104 Hz	104 Hz	104 Hz	ON 1
34	52 Hz	52 Hz	52 Hz	ON 2
35	62 Hz	62 Hz	62 Hz	ON 2
36	74 Hz	74 Hz	74 Hz	ON 2
37	88 Hz	88 Hz	88 Hz	ON 2
38	96 Hz	96 Hz	96 Hz	ON 2
39	52 Hz	52 Hz	52 Hz	ON 3
40	62 Hz	62 Hz	62 Hz	ON 3
41	74 Hz	74 Hz	74 Hz	ON 3
42	92 Hz	92 Hz	92 Hz	ON 3
43	104 Hz	104 Hz	104 Hz	ON 3
44	52 Hz	52 Hz	52 Hz	ON 4
45	62 Hz	62 Hz	62 Hz	ON 4
46	74 Hz	74 Hz	74 Hz	ON 4
47	96 Hz	96 Hz	96 Hz	ON 4
48	104 Hz	104 Hz	104 Hz	ON 4
49	116 Hz	116 Hz	116 Hz	ON 4
50	124 Hz	124 Hz	124 Hz	ON 4
51	144 Hz	144 Hz	144 Hz	ON 4
52	156 Hz	156 Hz	156 Hz	ON 4
53	166 Hz	166 Hz	166 Hz	ON 4
54	176 Hz	176 Hz	176 Hz	ON 4
55	188 Hz	188 Hz	188 Hz	ON 4
56	202 Hz	202 Hz	202 Hz	ON 4
57	210 Hz	210 Hz	210 Hz	ON 4

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	62 Hz	OFF
4	68 Hz	68 Hz	68 Hz	OFF
5	68 Hz	68 Hz	68 Hz	OFF
6	70 Hz	70 Hz	70 Hz	OFF
7	74 Hz	74 Hz	74 Hz	OFF
8	80 Hz	80 Hz	80 Hz	OFF
9	88 Hz	88 Hz	88 Hz	OFF
10	96 Hz	96 Hz	96 Hz	OFF
11	104 Hz	104 Hz	104 Hz	OFF
12	110 Hz	110 Hz	110 Hz	OFF
13	116 Hz	116 Hz	116 Hz	OFF
14	124 Hz	124 Hz	124 Hz	OFF
15	80 Hz	80 Hz	80 Hz	ON 1
16	88 Hz	88 Hz	88 Hz	ON 1
17	96 Hz	96 Hz	96 Hz	ON 1
18	104 Hz	104 Hz	104 Hz	ON 1
19	110 Hz	110 Hz	110 Hz	ON 1
20	124 Hz	124 Hz	124 Hz	ON 1
21	132 Hz	132 Hz	132 Hz	ON 1
22	88 Hz	88 Hz	88 Hz	ON 2
23	96 Hz	96 Hz	96 Hz	ON 2
24	104 Hz	104 Hz	104 Hz	ON 2
25	124 Hz	124 Hz	124 Hz	ON 2
26	144 Hz	144 Hz	144 Hz	ON 2
27	92 Hz	92 Hz	92 Hz	ON 3
28	104 Hz	104 Hz	104 Hz	ON 3
29	116 Hz	116 Hz	116 Hz	ON 3
30	124 Hz	124 Hz	124 Hz	ON 3
31	144 Hz	144 Hz	144 Hz	ON 3
32	96 Hz	96 Hz	96 Hz	ON 4
33	104 Hz	104 Hz	104 Hz	ON 4
34	116 Hz	116 Hz	116 Hz	ON 4
35	124 Hz	124 Hz	124 Hz	ON 4
36	144 Hz	144 Hz	144 Hz	ON 4
37	156 Hz	156 Hz	156 Hz	ON 4
38	166 Hz	166 Hz	166 Hz	ON 4
39	176 Hz	176 Hz	176 Hz	ON 4
40	188 Hz	188 Hz	188 Hz	ON 4
41	202 Hz	202 Hz	202 Hz	ON 4
42	210 Hz	210 Hz	210 Hz	ON 4
43	230 Hz	230 Hz	230 Hz	ON 4
44	230 Hz	230 Hz	230 Hz	ON 4
45	230 Hz	230 Hz	230 Hz	ON 4
46	230 Hz	230 Hz	230 Hz	ON 4

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	OFF	OFF	OFF
2	56 Hz	OFF	OFF	OFF
3	62 Hz	OFF	OFF	OFF
4	68 Hz	OFF	OFF	OFF
5	74 Hz	OFF	OFF	OFF
6	80 Hz	OFF	OFF	OFF
7	88 Hz	OFF	OFF	OFF
8	96 Hz	OFF	OFF	OFF
9	104 Hz	OFF	OFF	OFF
10	52 Hz	52 Hz	52 Hz	OFF
11	56 Hz	56 Hz	56 Hz	OFF
12	62 Hz	62 Hz	62 Hz	OFF
13	68 Hz	68 Hz	68 Hz	OFF
14	70 Hz	70 Hz	70 Hz	OFF
15	74 Hz	74 Hz	74 Hz	OFF
16	80 Hz	80 Hz	80 Hz	OFF
17	88 Hz	88 Hz	88 Hz	OFF
18	92 Hz	92 Hz	92 Hz	OFF
19	96 Hz	96 Hz	96 Hz	OFF
20	96 Hz	96 Hz	96 Hz	OFF
21	70 Hz	70 Hz	70 Hz	OFF
22	74 Hz	74 Hz	74 Hz	OFF
23	80 Hz	80 Hz	80 Hz	OFF
24	88 Hz	88 Hz	88 Hz	OFF
25	96 Hz	96 Hz	96 Hz	OFF
26	52 Hz	52 Hz	52 Hz	ON 1
27	52 Hz	52 Hz	52 Hz	ON 1
28	58 Hz	58 Hz	58 Hz	ON 1
29	74 Hz	74 Hz	74 Hz	ON 1
30	80 Hz	80 Hz	80 Hz	ON 1
31	88 Hz	88 Hz	88 Hz	ON 1
32	96 Hz	96 Hz	96 Hz	ON 1
33	104 Hz	104 Hz	104 Hz	ON 1
34	52 Hz	52 Hz	52 Hz	ON 2
35	62 Hz	62 Hz	62 Hz	ON 2
36	74 Hz	74 Hz	74 Hz	ON 2
37	88 Hz	88 Hz	88 Hz	ON 2
38	96 Hz	96 Hz	96 Hz	ON 2
39	52 Hz	52 Hz	52 Hz	ON 3
40	62 Hz	62 Hz	62 Hz	ON 3
41	74 Hz	74 Hz	74 Hz	ON 3
42	92 Hz	92 Hz	92 Hz	ON 3
43	104 Hz	104 Hz	104 Hz	ON 3
44	52 Hz	52 Hz	52 Hz	ON 4
45	62 Hz	62 Hz	62 Hz	ON 4
46	74 Hz	74 Hz	74 Hz	ON 4
47	96 Hz	96 Hz	96 Hz	ON 4
48	104 Hz	104 Hz	104 Hz	ON 4
49	116 Hz	116 Hz	116 Hz	ON 4
50	124 Hz	124 Hz	124 Hz	ON 4
51	144 Hz	144 Hz	144 Hz	ON 4
52	156 Hz	156 Hz	156 Hz	ON 4
53	166 Hz	166 Hz	166 Hz	ON 4
54	176 Hz	176 Hz	176 Hz	ON 4
55	188 Hz	188 Hz	188 Hz	ON 4
56	202 Hz	202 Hz	202 Hz	ON 4
57	210 Hz	210 Hz	210 Hz	ON 4
58	230 Hz	230 Hz	230 Hz	ON 4
59	230 Hz	230 Hz	230 Hz	ON 4
60	230 Hz	230 Hz	230 Hz	ON 4
61	230 Hz	230 Hz	230 Hz	ON 4

Notes:

- INV : Inverter compressor
 STD : Standard compressor
 Figures after ON represent the number of STD compressors in operation.
- "Master unit", and "slave unit" in this section are the names for control, and they will be transferred according to the priority of rotation system.
- Depending on the operating conditions of compressors, the compressors may run in patterns other than those aforementioned.

represents the range in which "Hz" is not stepped up.

RXYQ44PAHY1 (12+16+16HP)
RXYQ44PAHYL
RXYQ44PHTL

(To increase Step No.)

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	62 Hz	OFF
4	68 Hz	68 Hz	68 Hz	OFF
5	68 Hz	68 Hz	68 Hz	OFF
6	70 Hz	70 Hz	70 Hz	OFF
7	74 Hz	74 Hz	74 Hz	OFF
8	80 Hz	80 Hz	80 Hz	OFF
9	88 Hz	88 Hz	88 Hz	OFF
10	96 Hz	96 Hz	96 Hz	OFF
11	104 Hz	104 Hz	104 Hz	OFF
12	110 Hz	110 Hz	110 Hz	OFF
13	116 Hz	116 Hz	116 Hz	OFF
14	124 Hz	124 Hz	124 Hz	OFF
15	80 Hz	80 Hz	80 Hz	ON 1
16	88 Hz	88 Hz	88 Hz	ON 1
17	96 Hz	96 Hz	96 Hz	ON 1
18	104 Hz	104 Hz	104 Hz	ON 1
19	116 Hz	116 Hz	116 Hz	ON 1
20	124 Hz	124 Hz	124 Hz	ON 1
21	132 Hz	132 Hz	132 Hz	ON 1
22	88 Hz	88 Hz	88 Hz	ON 2
23	96 Hz	96 Hz	96 Hz	ON 2
24	104 Hz	104 Hz	104 Hz	ON 2
25	124 Hz	124 Hz	124 Hz	ON 2
26	144 Hz	144 Hz	144 Hz	ON 2
27	92 Hz	92 Hz	92 Hz	ON 3
28	104 Hz	104 Hz	104 Hz	ON 3
29	116 Hz	116 Hz	116 Hz	ON 3
30	124 Hz	124 Hz	124 Hz	ON 3
31	144 Hz	144 Hz	144 Hz	ON 3
32	96 Hz	96 Hz	96 Hz	ON 4
33	104 Hz	104 Hz	104 Hz	ON 4
34	116 Hz	116 Hz	116 Hz	ON 4
35	124 Hz	124 Hz	124 Hz	ON 4
36	144 Hz	144 Hz	144 Hz	ON 4
37	96 Hz	96 Hz	96 Hz	ON 5
38	104 Hz	104 Hz	104 Hz	ON 5
39	116 Hz	116 Hz	116 Hz	ON 5
40	124 Hz	124 Hz	124 Hz	ON 5
41	144 Hz	144 Hz	144 Hz	ON 5
42	158 Hz	158 Hz	158 Hz	ON 5
43	166 Hz	166 Hz	166 Hz	ON 5
44	176 Hz	176 Hz	176 Hz	ON 5
45	188 Hz	188 Hz	188 Hz	ON 5
46	202 Hz	202 Hz	202 Hz	ON 5
47	96 Hz	96 Hz	96 Hz	ON 4
48	104 Hz	104 Hz	104 Hz	ON 4
49	116 Hz	116 Hz	116 Hz	ON 5
50	124 Hz	124 Hz	124 Hz	ON 5
51	144 Hz	144 Hz	144 Hz	ON 5
52	158 Hz	158 Hz	158 Hz	ON 5
53	166 Hz	166 Hz	166 Hz	ON 5
54	176 Hz	176 Hz	176 Hz	ON 5
55	188 Hz	188 Hz	188 Hz	ON 5
56	202 Hz	202 Hz	202 Hz	ON 5
57	158 Hz	158 Hz	158 Hz	ON 5
58	166 Hz	166 Hz	166 Hz	ON 5
59	176 Hz	176 Hz	176 Hz	ON 5
60	188 Hz	188 Hz	188 Hz	ON 5
61	202 Hz	202 Hz	202 Hz	ON 5
62	210 Hz	210 Hz	210 Hz	ON 5

RXYQ46PAHY1 (12+16+18HP)
RXYQ46PAHYL
RXYQ46PHTL

(To increase Step No.)

(To decrease Step No.)

STEP No.	Master unit INV	Slave unit1 INV	Slave unit2 INV	STD
1	52 Hz	52 Hz	52 Hz	OFF
2	56 Hz	56 Hz	56 Hz	OFF
3	62 Hz	62 Hz	62 Hz	OFF
4	68 Hz	68 Hz	68 Hz	OFF
5	68 Hz	68 Hz	68 Hz	OFF
6	70 Hz	70 Hz	70 Hz	OFF
7	74 Hz	74 Hz	74 Hz	OFF
8	80 Hz	80 Hz	80 Hz	OFF
9	88 Hz	88 Hz	88 Hz	OFF
10	96 Hz	96 Hz	96 Hz	OFF
11	104 Hz	104 Hz	104 Hz	OFF
12	110 Hz	110 Hz	110 Hz	OFF
13	116 Hz	116 Hz	116 Hz	OFF
14	124 Hz	124 Hz	124 Hz	OFF
15	80 Hz	80 Hz	80 Hz	ON 1
16	88 Hz	88 Hz	88 Hz	ON 1
17	96 Hz	96 Hz	96 Hz	ON 1
18	104 Hz	104 Hz	104 Hz	ON 1
19	116 Hz	116 Hz	116 Hz	ON 1
20	124 Hz	124 Hz	124 Hz	ON 1
21	132 Hz	132 Hz	132 Hz	ON 1
22	88 Hz	88 Hz	88 Hz	ON 2
23	96 Hz	96 Hz	96 Hz	ON 2
24	104 Hz	104 Hz	104 Hz	ON 2
25	124 Hz	124 Hz	124 Hz	ON 2
26	144 Hz	144 Hz	144 Hz	ON 2
27	92 Hz	92 Hz	92 Hz	ON 3
28	104 Hz	104 Hz	104 Hz	ON 3
29	116 Hz	116 Hz	116 Hz	ON 3
30	124 Hz	124 Hz	124 Hz	ON 3
31	144 Hz	144 Hz	144 Hz	ON 3
32	96 Hz	96 Hz	96 Hz	ON 4
33	104 Hz	104 Hz	104 Hz	ON 4
34	116 Hz	116 Hz	116 Hz	ON 4
35	124 Hz	124 Hz	124 Hz	ON 4
36	144 Hz	144 Hz	144 Hz	ON 4
37	96 Hz	96 Hz	96 Hz	ON 5
38	104 Hz	104 Hz	104 Hz	ON 5
39	116 Hz	116 Hz	116 Hz	ON 5
40	124 Hz	124 Hz	124 Hz	ON 5
41	144 Hz	144 Hz	144 Hz	ON 5
42	158 Hz	158 Hz	158 Hz	ON 5
43	166 Hz	166 Hz	166 Hz	ON 5
44	176 Hz	176 Hz	176 Hz	ON 5
45	188 Hz	188 Hz	188 Hz	ON 5
46	202 Hz	202 Hz	202 Hz	ON 5
47	96 Hz	96 Hz	96 Hz	ON 4
48	104 Hz	104 Hz	104 Hz	ON 4
49	116 Hz	116 Hz	116 Hz	ON 5
50	124 Hz	124 Hz	124 Hz	ON 5
51	144 Hz	144 Hz	144 Hz	ON 5
52	158 Hz	158 Hz	158 Hz	ON 5
53	166 Hz	166 Hz	166 Hz	ON 5
54	176 Hz	176 Hz	176 Hz	ON 5
55	188 Hz	188 Hz	188 Hz	ON 5
56	202 Hz	202 Hz	202 Hz	ON 5
57	210 Hz	210 Hz	210 Hz	ON 5
58	210 Hz	210 Hz	210 Hz	ON 5
59	210 Hz	210 Hz	210 Hz	ON 5
60	210 Hz	210 Hz	210 Hz	ON 5
61	210 Hz	210 Hz	210 Hz	ON 5
62	210 Hz	210 Hz	210 Hz	ON 5

Notes:

- INV : Inverter compressor
STD : Standard compressor
Figures after ON represent the number of STD compressors in operation.
- "Master unit", and "slave unit" in this section are the names for control, and they will be transferred according to the priority of rotation system.
- Depending on the operating conditions of compressors, the compressors may run in patterns other than those aforementioned.

represents the range in which "Hz" is not stepped up.

RXYQ48PAHY1 (16+16+16HP)
RXYQ48PAHYL
RXYQ48PHTL

(To increase Step No.)

Table with 5 columns: STEP No., Master unit INV, Slave unit1 INV, Slave unit2 INV, STD. Rows 1-52 showing frequency and compressor status.

(To decrease Step No.)

Table with 5 columns: STEP No., Master unit INV, Slave unit1 INV, Slave unit2 INV, STD. Rows 1-67 showing frequency and compressor status.

RXYQ50PAHY1 (16+16+18HP)
RXYQ50PAHYL
RXYQ50PHTL

(To increase Step No.)

Table with 5 columns: STEP No., Master unit INV, Slave unit1 INV, Slave unit2 INV, STD. Rows 1-56 showing frequency and compressor status.

(To decrease Step No.)

Table with 5 columns: STEP No., Master unit INV, Slave unit1 INV, Slave unit2 INV, STD. Rows 1-71 showing frequency and compressor status.

Notes:

- 1. INV : Inverter compressor
STD : Standard compressor
Figures after ON represent the number of STD compressors in operation.
2. "Master unit", and "slave unit" in this section are the names for control, and they will be transferred according to the priority of rotation system.
3. Depending on the operating conditions of compressors, the compressors may run in patterns other than those aforementioned.

2.3 Electronic Expansion Valve PI Control

Main Electronic Expansion Valve EV1 Control

Carries out the electronic expansion valve (Y1E) PI control to maintain the evaporator outlet superheated degree (SH) at constant during heating operation to make maximum use of the outdoor unit heat exchanger (evaporator).

$$SH = Ts1 - Te$$

SH : Evaporator outlet superheated degree (°C)

Ts1 : Suction pipe temperature detected by thermistor R6T (R7T) (°C)

Te : Low pressure equivalent saturation temperature (°C)

The optimum initial value of the evaporator outlet superheated degree is 5°C, but varies depending on the discharge pipe superheated degree of inverter compressor.

Subcooling Electronic Expansion Valve EV2 Control

Makes PI control of the electronic expansion valve (Y2E) to keep the superheated degree of the outlet gas pipe on the evaporator side for the full use of the subcooling heat exchanger.

$$SH = Tsh - Te$$

SH : Evaporator outlet superheated degree (°C)

Tsh : Suction pipe temperature detected by thermistor R5T (°C)

Te : Low pressure equivalent saturation temperature (°C)

2.4 Step Control of Outdoor Unit Fans

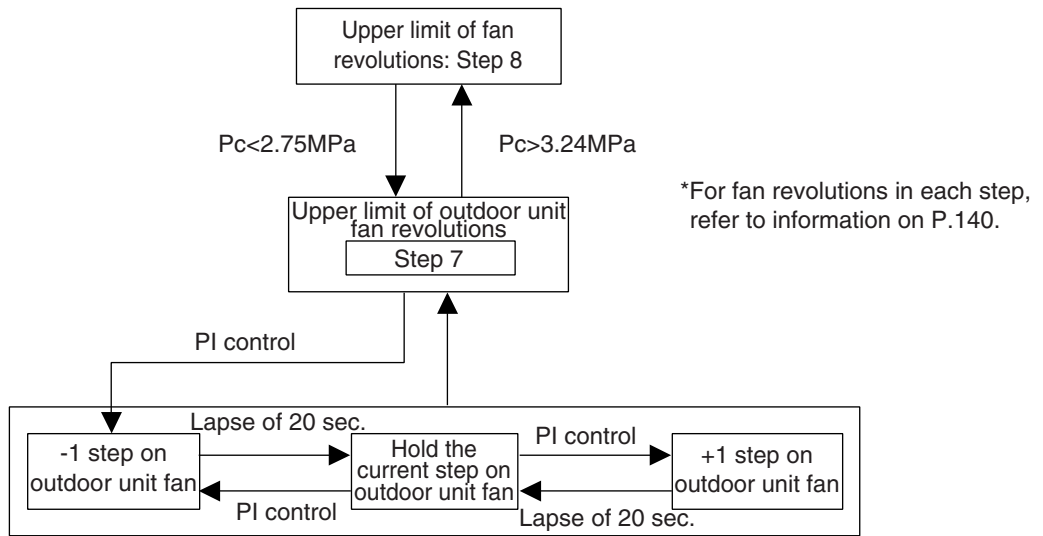
Used to control the revolutions of outdoor unit fans in the steps listed in table below, according to condition changes.

STEP No.	Fan revolutions (rpm)									
	RXYQ5P(A)	RXYQ8P(A)	RXYQ10P(A)	RXYQ12P(A) RXYQ14P(A)		RXYQ16P(A)		RXYQ18P(A)		
				FAN1	FAN2	FAN1	FAN2	FAN1	FAN2	
0	0	0	0	0	0	0	0	0	0	
1	285	350	350	230	0	230	0	395	0	
2	315	370	370	380	0	380	0	460	0	
3	360	400	400	290	260	290	260	570	0	
4	450	450	460	375	345	375	345	385	355	
5	570	540	560	570	540	570	540	550	520	
6	710	670	680	720	690	720	690	800	770	
7	Cooling: 951 Heating: 941	760	Cooling: 821 Heating: 800	1091	1061	1091	1061	1136	1106	
8	Cooling: 951 Heating: 941	Cooling: 796 Heating: 780	Cooling: 821 Heating: 800	1136	1106	1136	1106	1166	1136	

* Figures listed above are all those controlled while in standard mode, which vary when the system is set to high static pressure or capacity priority mode.

2.5 Outdoor Unit Fan Control in Cooling Operation

While in cooling operation, if the outdoor temperature is low, this mode provides high pressure control using the outdoor unit fan to retain appropriate liquid pressure, thus ensuring refrigerant circulation rate to be supplied to indoor units.



3. Special Control

3.1 Startup Control

This control is used to equalize the pressure in the front and back of the compressor prior to the startup of the compressor, thus reducing startup loads. Furthermore, the inverter is turned ON to charge the capacitor. In addition, to avoid stresses to the compressor due to oil return or else after the startup, the following control is made and the position of the four way valve is also determined. To position the four way valve, the master and slave units simultaneously start up.

3.1.1 Startup Control in Cooling Operation

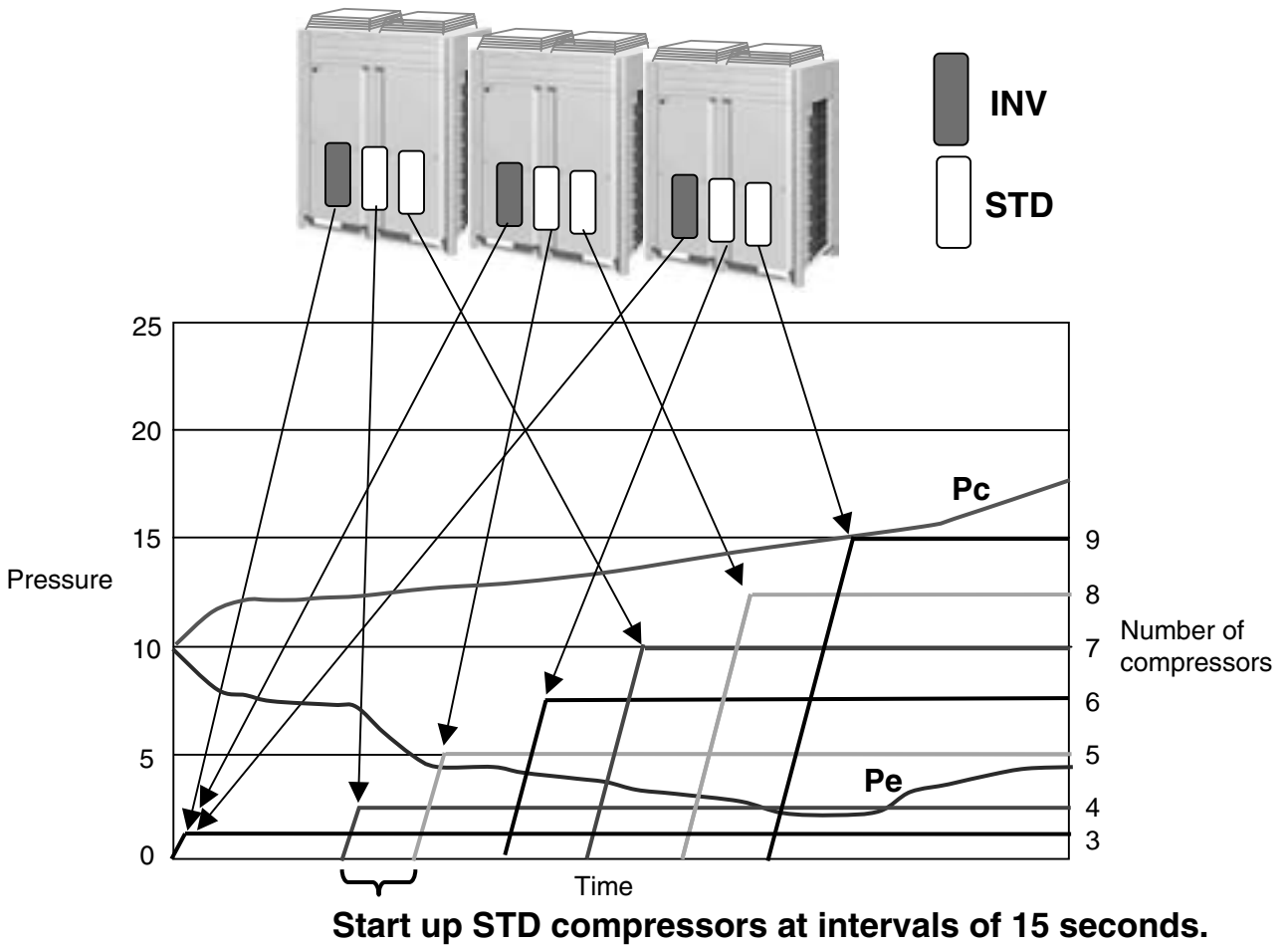
	Pressure equalization control prior to startup	Startup control	
		STEP 1	STEP 2
Compressor	0 Hz	52 Hz + OFF + OFF	124 Hz + OFF + OFF +2 steps/20 sec. (until $P_c - P_e > 0.39\text{MPa}$ is achieved)
Outdoor unit fan	STEP 4	$T_a < 20^\circ\text{C}$: OFF $T_a \geq 20^\circ\text{C}$: STEP4	+1 step/15 sec. (when $P_c > 2.16\text{MPa}$) -1 step/15 sec. (when $P_c < 1.77\text{MPa}$)
Four way valve (20S1)	Holds	OFF	OFF
Main electronic expansion valve (EV1)	0 pls	480 pls	480 pls
Subcooling electronic expansion valve (EV2) (RXYQ8~)	0 pls	0 pls	0 pls
Hot gas bypass valve (SVP)	OFF	OFF	OFF
Accumulator oil return valve (SVO)	OFF	OFF	OFF
Injection (SVT) (RXYQ5P(A) model)	OFF	OFF	OFF
Ending conditions	A lapse of one minute	A lapse of 10 sec.	OR <ul style="list-style-type: none"> • A lapse of 130 sec. • $P_c - P_e > 0.39\text{MPa}$

3.1.2 Startup Control in Heating Operation

	Pressure equalization control prior to startup	Startup control	
		STEP 1	STEP 2
Compressor	0 Hz	52 Hz + OFF + OFF	124 Hz + OFF + OFF +2 steps/20 sec. (until $P_c - P_e > 0.39\text{MPa}$ is achieved)
Outdoor unit fan	STEP 4	STEP 8	STEP 8
Four way valve	Holds	ON	ON
Main electronic expansion valve (EV1)	0 pls	0 pls	0 pls
Subcooling electronic expansion valve (EV2) (RXYQ8~)	0 pls	0 pls	0 pls
Hot gas bypass valve (SVP)	OFF	OFF	OFF
Accumulator oil return valve (SVO)	OFF	OFF	OFF
Injection (SVT) (RXYQ5P(A) model)	OFF	OFF	OFF
Ending conditions	A lapse of one minute	A lapse of 10 sec.	OR <ul style="list-style-type: none"> • A lapse of 130 sec. • $P_c > 2.70\text{MPa}$ • $P_c - P_e > 0.39\text{MPa}$

3.2 Large Capacity Start Up Control (Heating)

For startup, oil return operation, or setup after defrosting, start up multiple compressors at a high speed according to the conditions of indoor units with thermostat ON, thus maximizing the equipment capacity.



3.3 Oil Return Operation

In order to prevent the compressor from running out of oil, the oil return operation is conducted to recover oil flown out from the compressor to the system side.

3.3.1 Oil Return Operation in Cooling Operation

[Start conditions]

Referring to the set conditions for the following items, start the oil return operation in cooling.

- Cumulative oil feed rate
- Timer setting (Make this setting so as to start the oil return operation when the initial cumulative operating time reaches two hours after power supply is turned ON and then every eight hours.)

Furthermore, the cumulative oil feed rate is computed from Tc, Te, and compressor loads.

Outdoor unit actuator	Oil return preparation operation	Oil return operation	Post-oil-return operation
Compressor	Take the current step as the upper limit.	5 HP: 52 Hz (→ Low pressure constant control) Other model: 52 Hz + ON + ON (→ Low pressure constant control) ↓ Maintain number of compressors in oil return preparation operation ON	Same as the "oil return operation" mode.
Outdoor unit fan	Fan control (Normal cooling)	Fan control (Normal cooling)	Fan control (Normal cooling)
Four way valve	OFF	OFF	OFF
Main electronic expansion valve (EV1)	480 pls	480 pls	480 pls
Subcooling electronic expansion valve (EV2)	SH control	0 pls	0 pls
Hot gas bypass valve (SVP)	OFF	OFF	OFF
Accumulator oil return valve (SVO)	ON	ON	ON
Ending conditions	20 sec.	or $\left\{ \begin{array}{l} \bullet 3 \text{ min.} \\ \bullet T_s - T_e < 5^\circ\text{C} \end{array} \right.$	or $\left\{ \begin{array}{l} \bullet 3 \text{ min.} \\ \bullet P_e < 0.6 \text{ MPa} \\ \bullet HT_{di} > 110^\circ\text{C} \end{array} \right.$

* In the case of multi-outdoor-unit system,

Master unit: Performs the operations listed in the table above.

Slave units: Operating units perform the operations listed in the table above.

Non-operating units perform the operations listed in the table above from the oil return operation.

(Non-operating unit stops during "oil return preparation operation".)

* Actuators are based on RXYQ14~18P(A).

Indoor unit actuator		Cooling oil return operation
Fan	Thermostat ON unit	Remote controller setting
	Stopping unit	OFF
	Thermostat OFF unit	Remote controller setting
Electronic expansion valve	Thermostat ON unit	Normal opening
	Stopping unit	224 pls
	Thermostat OFF unit	Normal opening with forced thermostat ON

3.3.2 Oil Return Operation in Heating Operation

Outdoor Unit Actuator	Oil return preparation operation	Oil return operation	Post-oil-return operation
Compressor	Upper limit control	176 Hz + ON + ON	124 Hz + OFF + OFF 2-steps increase/20sec. till $P_c - P_e > 0.4$ MPa
Outdoor unit fan	STEP 7 or STEP 8	OFF	STEP 8
Four way valve	ON	OFF	ON
Main electronic expansion valve (EV1)	SH control → 480 pls	480 pls	55 pls
Subcooling electronic expansion valve (EV2)	SH control	0 pls	0 pls
Hot gas bypass valve (SVP)	OFF	OFF	OFF
Accumulator oil return valve (SVO)	ON	ON	ON
Injection (SVT) (RXYQ5P(A) model only)	OFF	OFF	OFF
Ending conditions	170 sec.	or [<ul style="list-style-type: none"> • 4 min. • $T_s - T_e < 5^\circ\text{C}$ 	or [<ul style="list-style-type: none"> • 10 sec. • $P_c - P_e > 0.4$ MPa

* In the case of multi-outdoor-unit system,

Master unit: Performs the operations listed in the table above.

Slave units: Operating units perform the operations listed in the table above.

Non-operating units perform the operations listed in the table above from the oil return operation.

(Non-operating unit stops during "oil return preparation operation".)

* Actuators are based on RXYQ14~18P(A).

Indoor unit actuator		Heating oil return operation
Fan	Thermostat ON unit	OFF
	Stopping unit	OFF
	Thermostat OFF unit	OFF
Electronic expansion valve	Thermostat ON unit	Oil return EV opening degree
	Stopping unit	256 pls
	Thermostat OFF unit	Oil return EV opening degree

3.4 Defrosting Operation

To defrost the outdoor unit heat exchanger while in Evaporator, the defrost operation is conducted to recover the heating capacity.

[Start conditions]

Referring to the set conditions for the following items, start the defrosting operation.

- Heat transfer coefficient of the outdoor unit heat exchanger
- Heat exchange temperature (Tb)
- Timer (Set to two hours at minimum.)

Furthermore, the heat transfer coefficient of the outdoor unit Evaporator is computed from Tc, Te, and compressor loads.

Outdoor unit actuator	Defrost preparation operation	Defrost operation	Post Defrost operation
Compressor	Upper limit control	176 Hz + ON + ON	124 Hz + OFF + OFF 2-steps increase/20sec. till Pc - Pe>0.4 MPa
Outdoor unit fan	STEP 7 or STEP 8	OFF	STEP8
Four way valve	ON	OFF	ON
Main electronic expansion valve (EV1)	SH control → 480 pls	480 pls	55 pls
Subcooling electronic expansion valve (EV2)	0 pls	0 pls	0 pls
Hot gas bypass valve (SVP)	OFF	OFF	OFF
Accumulator oil return valve (SVO)	ON	ON	ON
Injection (SVT) (RXYQ5P(A) model only)	OFF	OFF	OFF
Ending conditions	170 sec.	or [<ul style="list-style-type: none"> • 10 min. • Tb>11°C 	or [<ul style="list-style-type: none"> • 10 sec. • Pc - Pe>0.4MPa

* In the case of multi-outdoor-unit system,

Master unit: Performs the operations listed in the table above.

Slave units: Operating units perform the operations listed in the table above.

Non-operating units perform the operations listed in the table above from the Defrost operation.

(Non-operating unit stops during “Defrost preparation operation”.)

* Actuators are based on RXYQ14~18P(A).

Indoor unit actuator		During defrost
Fan	Thermostat ON unit	OFF
	Stopping unit	OFF
	Thermostat OFF unit	OFF
Electronic expansion valve	Thermostat ON unit	Defrost EV opening degree
	Stopping unit	256 pls
	Thermostat OFF unit	Defrost EV opening degree

3.5 Pump down Residual Operation

3.5.1 Pump down Residual Operation in Cooling Operation

If the liquid refrigerant stays in the evaporator at the startup of a compressor, this liquid refrigerant enters the compressor, thus resulting in diluted oil in the compressor and then degraded lubrication performance.

Consequently, in order to recover the refrigerant in the evaporator while the compressor stops, the pump down residual operation is conducted.

Actuator	Master unit operation	Slave unit operation
Compressor	124 Hz + OFF + OFF	OFF
Outdoor unit fan	Fan control	OFF
Four way valve	OFF	OFF
Main electronic expansion valve (EV1)	480 pls	0 pls
Subcooling electronic expansion valve (EV2)	0 pls	0 pls
Hot gas bypass valve (SVP)	OFF	OFF
Accumulator oil return valve (SVO)	ON	ON
Ending conditions	or <ul style="list-style-type: none"> • 5 min. • Master Unit Pe<0.49 MPa • Master Unit Td>110°C • Master Unit Pc>2.94 MPa 	

* Actuators are based on RXYQ14~18P(A).

3.5.2 Pump down Residual Operation in Heating Operation

Actuator	Master unit operation	Slave unit operation
Compressor	124 Hz + OFF + OFF	OFF
Outdoor unit fan	STEP 7	STEP 4
Four way valve	ON	ON
Main electronic expansion valve (EV1)	0 pls	0 pls
Subcooling electronic expansion valve (EV2)	0 pls	0 pls
Hot gas bypass valve (SVP)	OFF	OFF
Accumulator oil return valve (SVO)	ON	ON
Ending conditions	or <ul style="list-style-type: none"> • 3 min. • Master Unit Pe<0.25 MPa • Master Unit Td>110°C • Master Unit Pc>2.94 MPa 	

* Actuators are based on RXYQ14~18P(A).

3.6 Standby

3.6.1 Restart Standby

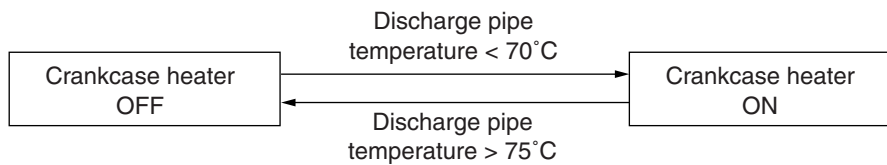
Used to forcedly stop the compressor for a period of 3 minutes, in order to prevent the frequent ON/OFF of the compressor and equalize the pressure within the refrigerant system.

Actuator	Operation
Compressor	OFF
Outdoor unit fan	Ta>30°C: STEP4 Ta≤30°C: OFF
Four way valve	Holds
Main electronic expansion valve (EV1)	0 pls
Subcooling electronic expansion valve (EV2)	0 pls
Hot gas bypass valve (SVP)	OFF
Accumulator oil return valve (SVO)	OFF
Injection (SVT) (RXYQ5P(A) model)	OFF
Ending conditions	2 min.

* Actuators are based on RXYQ14~18P(A).

3.6.2 Crankcase Heater Control

In order to prevent the refrigerant from melting in the compressor oil in the stopped mode, this mode is used to control the crankcase heater.



3.7 Stopping Operation

3.7.1 When System is in Stop Mode (Normal operation stop)

This mode is used to define actuator operations when the system stops.

Actuator	Operation
Compressor	OFF
Outdoor unit fan	OFF
Four way valve	Holds
Main electronic expansion valve (EV1)	0 pls
Subcooling electronic expansion valve (EV2)	0 pls
Hot gas bypass valve (SVP)	OFF
Accumulator oil return valve (SVO)	OFF
Injection (SVT) (RXYQ5P(A) model only)	OFF
Ending conditions	Indoor unit thermostat is turned ON.

* Actuators are based on RXYQ14~18P(A).

3.7.2 Stop due to Malfunction

In order to protect compressors, if any of the following items has an abnormal value, the system will make "stop with thermostat OFF" and the malfunction will be determined according to the number of retry times.

Item	Judgement Criteria	Malfunction Code
1. Abnormal low pressure level	0.07MPa	E4
2. Abnormal high pressure level	4.0MPa	E3
3. Abnormal discharge pipe temperature level	135°C	F3
4. Abnormal power supply voltage	Reverse-phase power supply	U1
5. Abnormal inverter current level	16.1A: 260 sec.	L8
6. Abnormal radiator fin temperature level	93°C	L4

3.7.3 Stopping Operation of Slave Units During Master Unit is in Operation with Multi-Outdoor-Unit System

While the master unit is in operation, this mode is used to set the refrigerant flow rate to a required level using a slave unit in the stopped mode.

In cooling operation: Same as that of normal operation stop.

In heating operation: The system operates with following mode.

Actuator	Operation
Compressor	OFF
Outdoor unit fan	OFF
Four way valve	ON
Main electronic expansion valve (EV1)	0 pls
Subcooling electronic expansion valve (EV2)	0 pls
Hot gas bypass valve (SVP)	OFF
Accumulator oil return valve (SVO)	OFF
Injection valve (SVT) (RXYQ5P(A) model only)	OFF
Ending conditions	Slave units are required to operate.

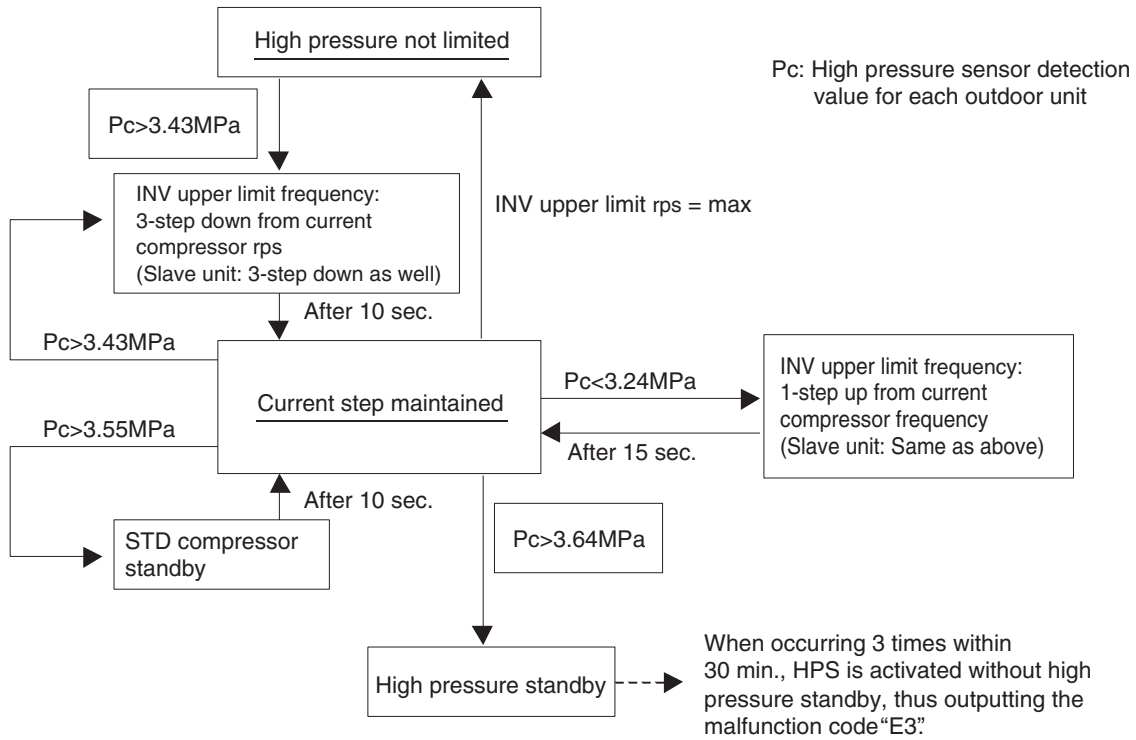
4. Protection Control

4.1 High Pressure Protection Control

This high pressure protection control is used to prevent the activation of protection devices due to abnormal increase of high pressure and to protect compressors against the transient increase of high pressure.

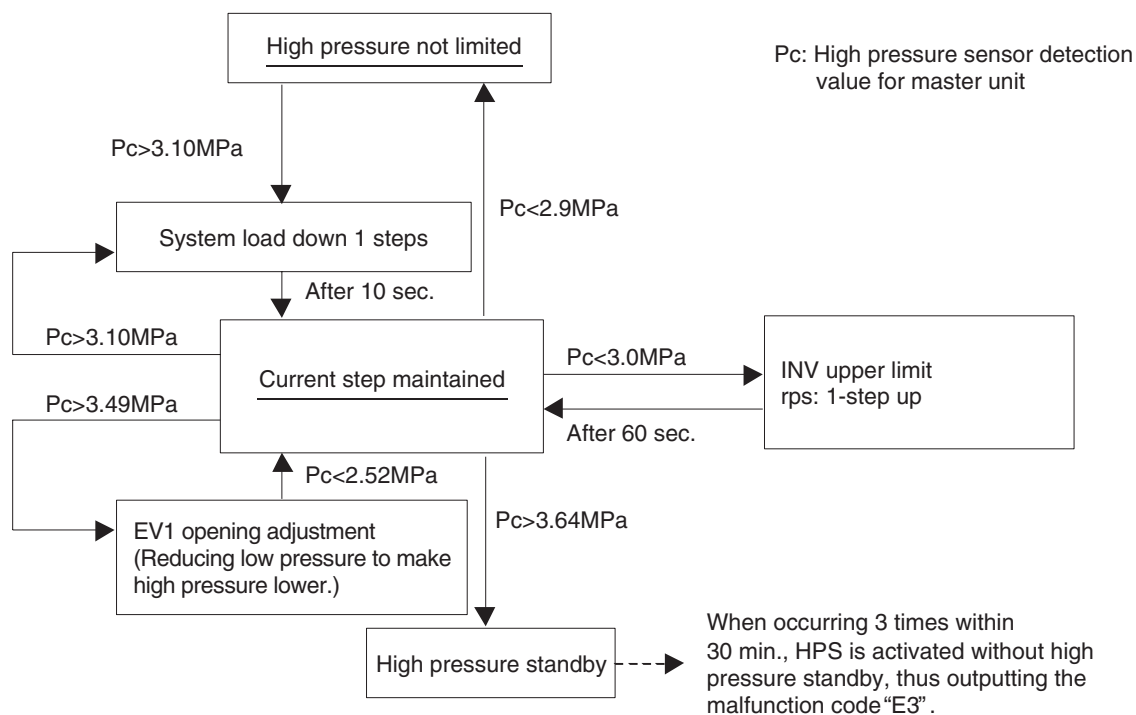
[In cooling operation]

★ In case of multi-outdoor-unit system, each outdoor unit performs this control individually in the following sequence.



[In heating operation]

★ In case of multi-outdoor-unit system, the entire system performs this control in the following sequence.

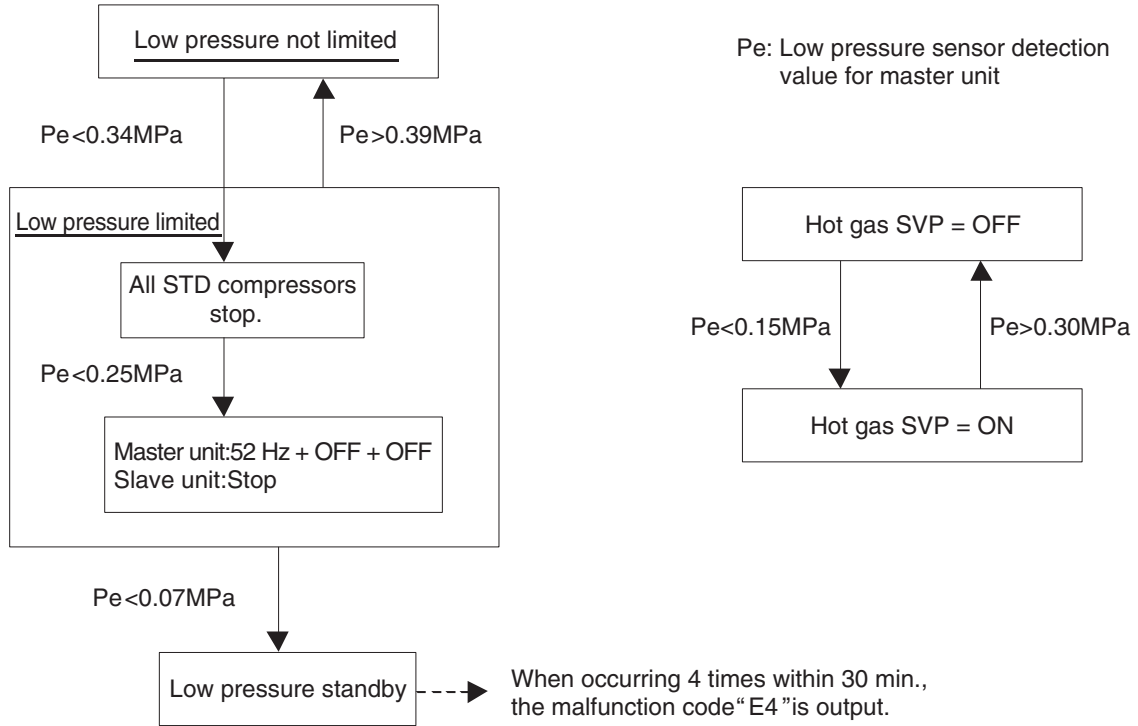


4.2 Low Pressure Protection Control

This low pressure protection control is used to protect compressors against the transient decrease of low pressure.

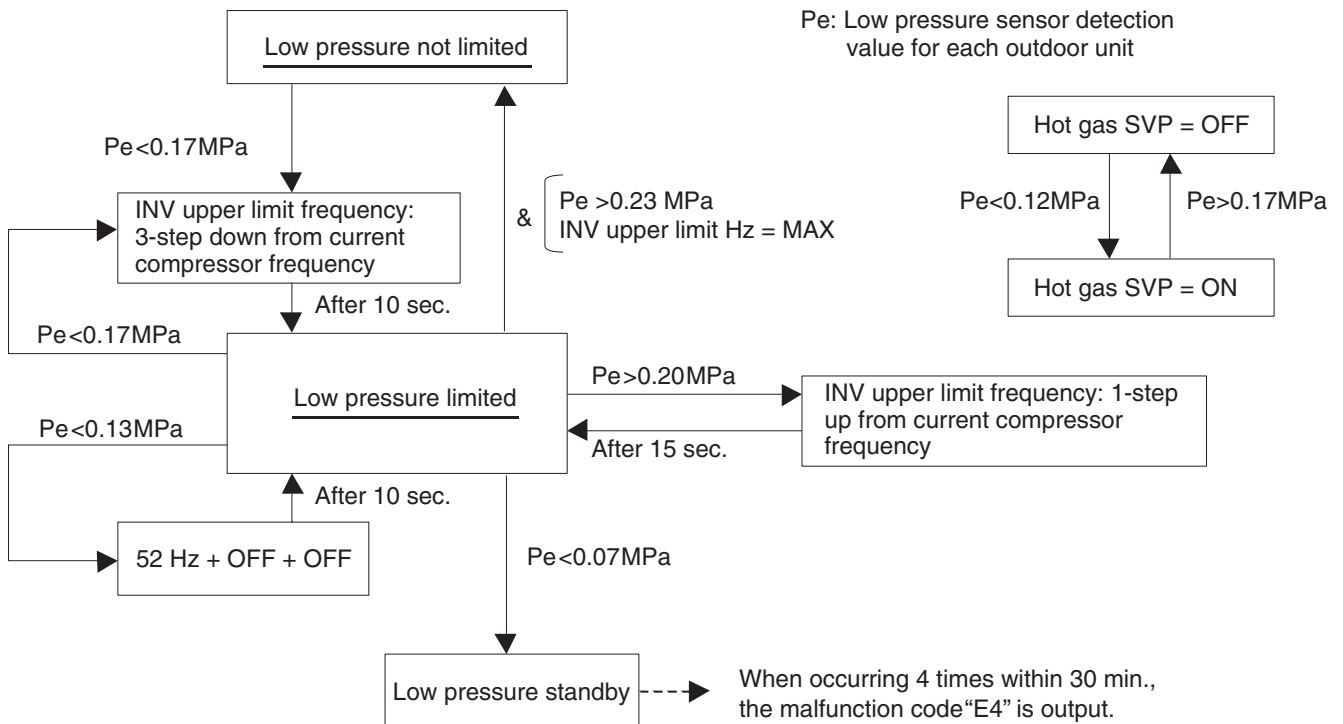
[In cooling operation]

- ★ In the case of multi-outdoor-unit system, the entire system performs this control in the following sequence.



[In heating operation]

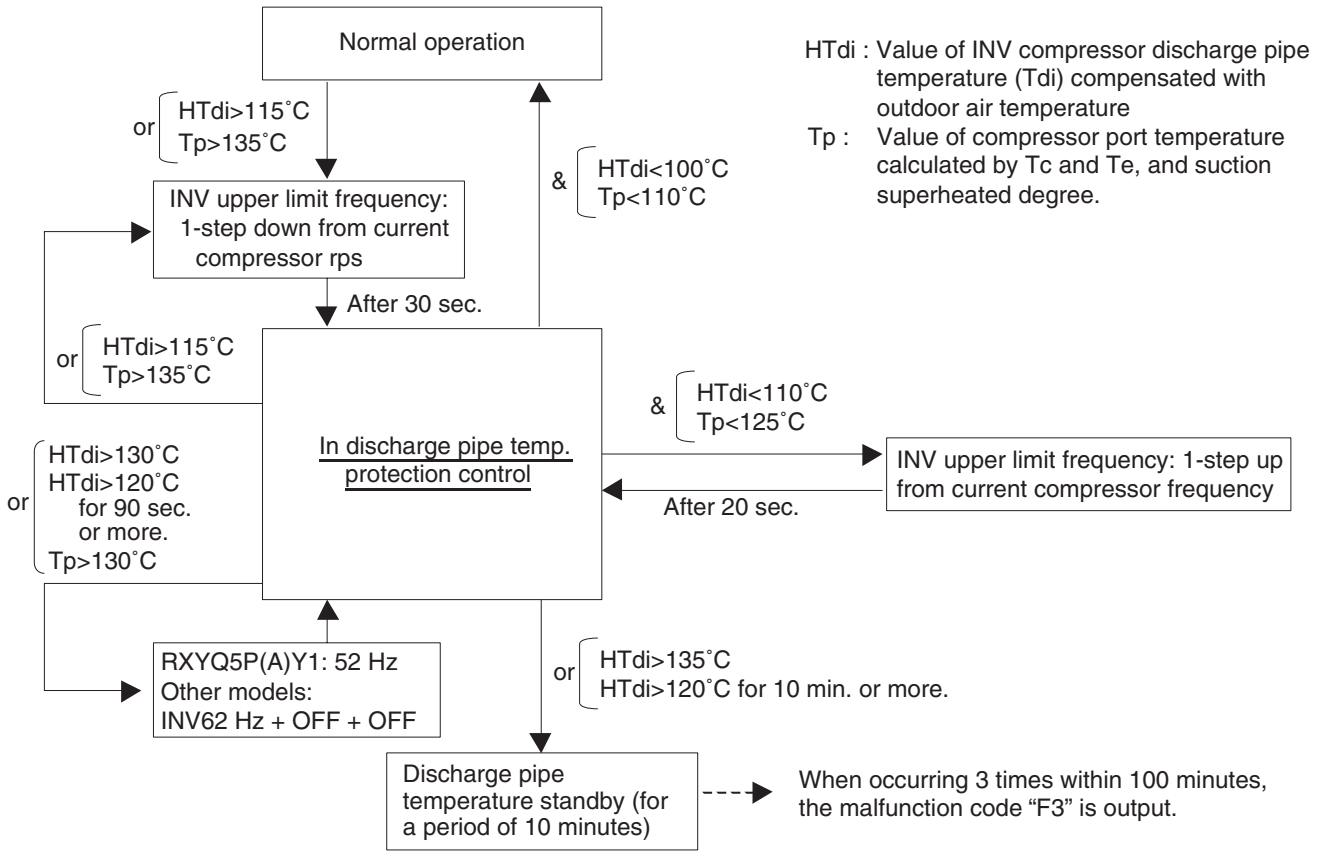
- ★ In the case of multi-outdoor-unit system, each outdoor unit performs this control individually in the following sequence.



4.3 Discharge Pipe Protection Control

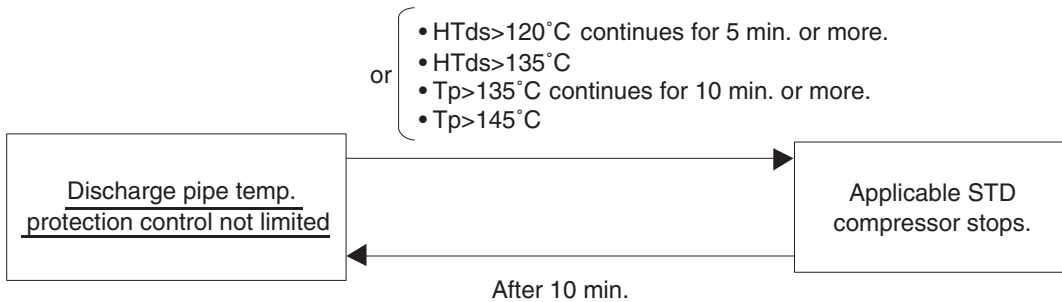
This discharge pipe protection control is used to protect the compressor internal temperature against a malfunction or transient increase of discharge pipe temperature.

[INV compressor]



[STD compressor]

HTdi : Value of INV. compressor discharge pipe temperature (Tdi) compensated with outdoor air temperature
 HTds : Value of STD compressor discharge pipe temperature (Tds) compensated with outdoor air temperature
 Tp : Value of compressor port temperature calculated by Tc and Te, and suction superheated degree.

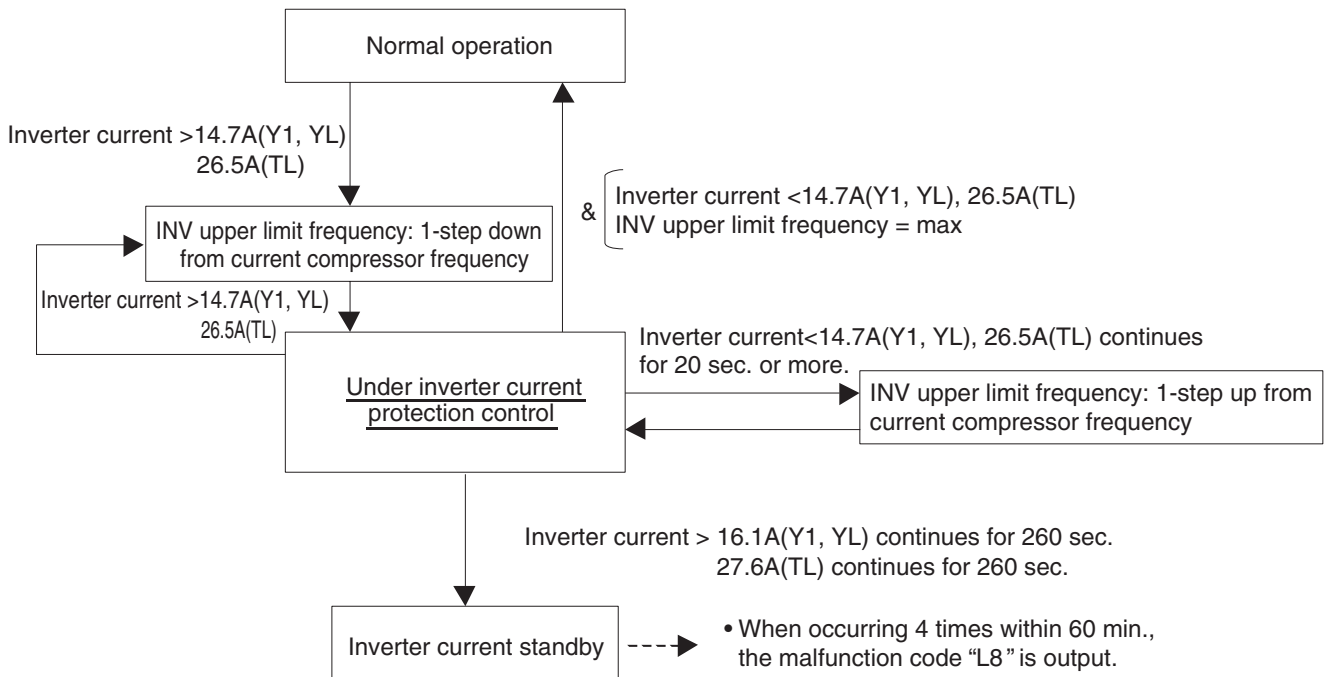


4.4 Inverter Protection Control

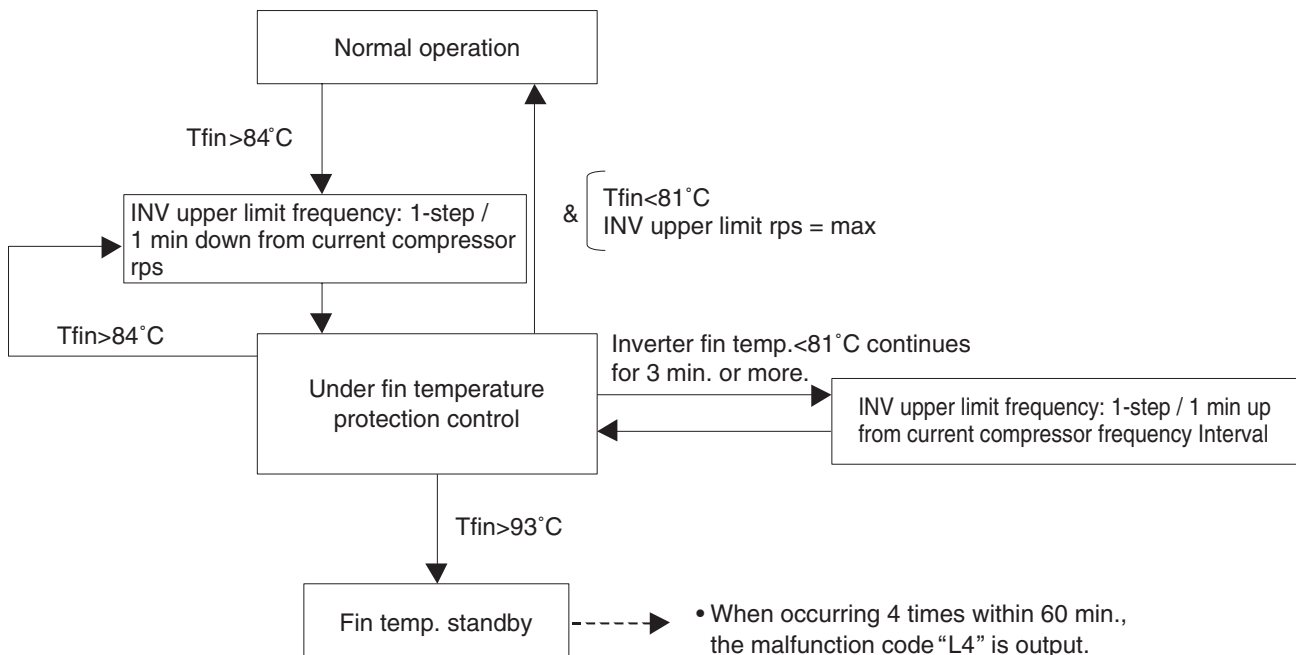
Inverter current protection control and inverter fin temperature control are performed to prevent tripping due to a malfunction, or transient inverter overcurrent, and fin temperature increase.

- ★ In the case of multi-outdoor-unit system, each INV compressor performs these controls in the following sequence.

[Inverter overcurrent protection control]

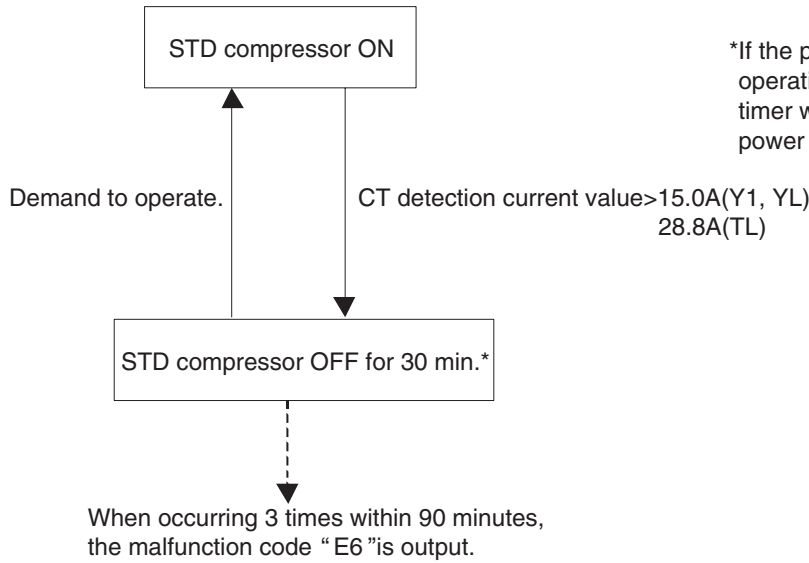


[Inverter fin temperature control]



4.5 STD Compressor Overload Protection

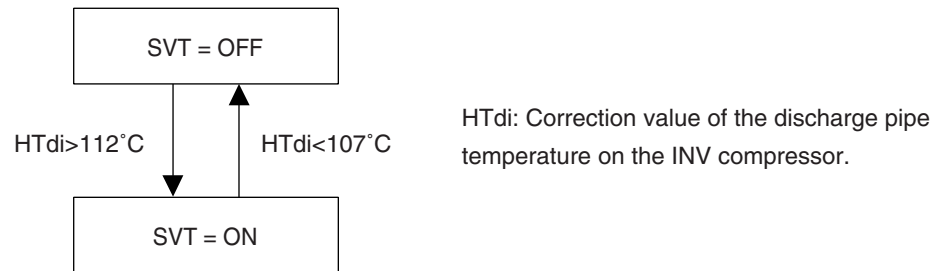
This control is used to prevent abnormal heating due to overcurrent to the compressor resulting from failures of STD compressor such as locking.



*If the power supply is reset while in operation prohibition mode, the prohibition timer will continue counting when the power supply is turned ON.

4.6 Injection Control (only for RXYQ5P(A))

For transitional rise in discharge pipe temperature, have the liquid refrigerant flow into the suction side to reduce the discharge pipe temperature for the compressor protection.



HTdi: Correction value of the discharge pipe temperature on the INV compressor.

5. Other Control

5.1 Outdoor Unit Rotation

In the case of multi-outdoor-unit system, this outdoor unit rotation is used to prevent the compressor from burning out due to unbalanced oil level between outdoor units.

[Details of outdoor unit rotation]

In the case of multi-outdoor-unit system, each outdoor unit is given an operating priority for the control.

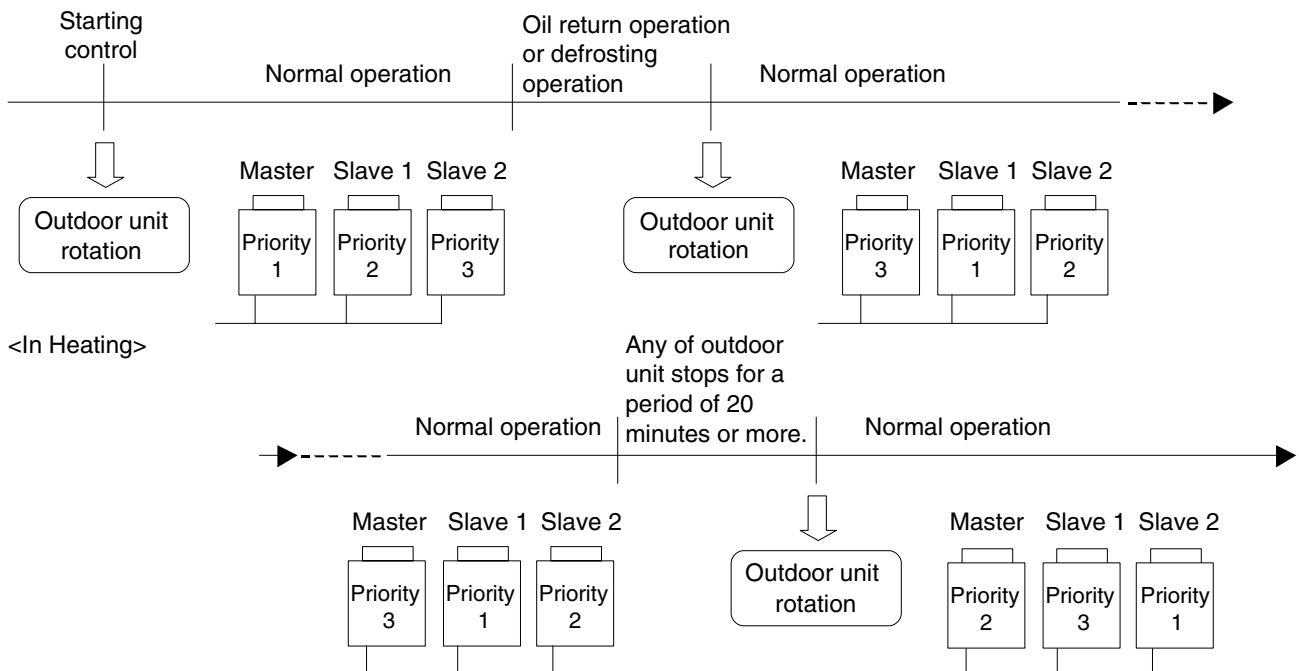
Outdoor unit rotation makes it possible to change the operating priority of outdoor units.

Thus, the system becomes free of compressors that stop over an extended period of time at the time of partial loading, preventing unbalanced oil level.

[Timing of outdoor unit rotation]

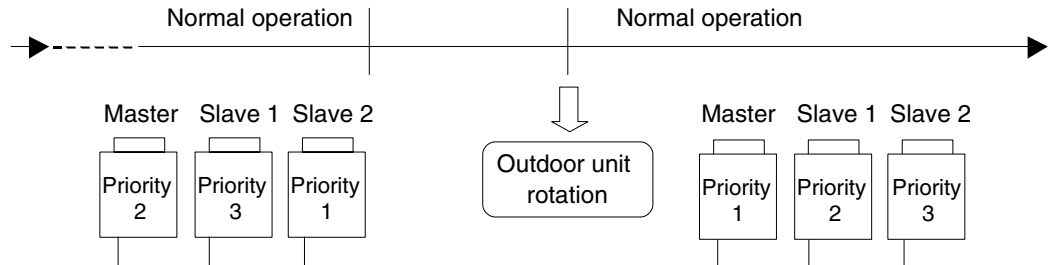
- or
- After oil return operation
 - After defrosting operation
 - At the beginning of the starting control
 - When any of outdoor unit stops for a period of 20 minutes or more (in heating)
 - There are outdoor units that stop operation (in cooling).
 - Low pressure of all outdoor units in operation is less than 0.25 MPa (in cooling).

Example) The following diagram shows outdoor unit rotation in combination of 3 outdoor units.
(in heating) (in cooling)



<In Cooling>

- There are outdoor units that stop operation.
- Low pressure of all outdoor units in operation < 0.25 MPa.



* “Master unit”, “slave unit 1” and “slave unit 2” in this section are the names for installation. They are determined in installation work, and not changed thereafter. (These names are different from “master unit” and “slave unit” for control.)
 The outdoor unit connected the control wires (F1 and F2) for the indoor unit should be designated as main unit.
 Consequently, The LED display on the main PCB for “master unit”, “slave unit 1” and “slave unit 2” do not change. (Refer to P.159.)

5.2 Emergency Operation

If the compressor cannot operate, this control inhibits any applicable compressor or outdoor unit from operating to perform emergency operation only with the operative compressor or outdoor unit.



Caution

In order to disable the compressor operation due to a failure or else, be sure to do so in emergency operation mode.

NEVER attempt to disconnect power supply wires from magnetic contactors or else. (Doing so will operate compressors in combination that disables oil equalization between the compressors, thus resulting in malfunctions of other normal compressors.)

5.2.1 Restrictions for Emergency Operation

- In the case of system with 1 outdoor unit installed, only when thermostats of indoor units having a capacity of 50% or more of the outdoor unit capacity turn ON, the emergency operation is functional. (If the total capacity of indoor units with thermostat ON is small, the outdoor unit cannot operate.)
- If the emergency operation is set while the outdoor unit is in operation, the outdoor unit stops once after pump down residual operation (a maximum of 5 minutes elapsed).

5.2.2 In the Case of 1-Outdoor-Unit System (RXYQ8P(A) to 18P(A))

[Set the system to operation prohibition mode by compressor]

- In order to set an INV compressor to operation prohibition mode, set No. 42 of Setting mode 2 to "EMERGENCY OPERATION".

LED display (○:ON ●:OFF ◐:Blink)
H1P — — — — H7P

(Procedure)

- Press and hold the MODE button (BS1) for a period of 5 seconds or more.
- Press the SET button (BS2) 42 times.
- Press the RETURN button (BS3) once.
- Press the SET button (BS2) once.
- Press the RETURN button (BS3) twice.
- Press the MODE button (BS1) once.

○ ● ● ● ● ● ● ●

○ ○ ● ● ● ● ● ●

○ ● ● ● ● ● ● ●

○ ● ● ● ● ● ● ●

○ ● ● ● ● ● ● ●

● ● ○ ● ● ● ● ●

(Factory setting)

- In order to set STD1 and STD2 compressors to operation prohibition mode, set No. 19 of Setting mode 2 to "STD1, 2 OPERATION PROHIBITION". (RXYQ10P(A) to 18P(A))

LED display (○:ON ●:OFF ◐:Blink)
H1P — — — — H7P

(Procedure)

- Press and hold the MODE button (BS1) for a period of 5 seconds or more.
- Press the SET button (BS2) 19 times.
- Press the RETURN button (BS3) once.
- Press the SET button (BS2) once.
- Press the RETURN button (BS3) twice.
- Press the MODE button (BS1) once.

○ ● ● ● ● ● ● ●

○ ● ○ ● ● ● ○ ○

○ ● ● ● ● ● ● ●

○ ● ● ● ● ● ● ●

○ ● ● ● ● ● ● ●

● ● ○ ● ● ● ● ●

(Factory setting)

- In order to set the STD 2 compressor to operation prohibition mode, set No. 19 of Setting mode 2 to "STD2 OPERATION PROHIBITION". (RXYQ14P(A), 16P(A), 18P(A))

LED display (○:ON ●:OFF ◐:Blink)
H1P — — — — H7P

(Procedure)

- Press and hold the MODE button (BS1) for a period of 5 seconds or more.
- Press the SET button (BS2) 19 times.
- Press the RETURN button (BS3) once.
- Press the SET button (BS2) twice.
- Press the RETURN button (BS3) twice.
- Press the MODE button (BS1) once.

○ ● ● ● ● ● ● ●

○ ● ○ ● ● ● ○ ○

○ ● ● ● ● ● ● ●

○ ● ● ● ● ● ● ●

○ ● ● ● ● ● ● ●

● ● ○ ● ● ● ● ●

(Factory setting)

- For RXYQ14P(A), 16P(A) and 18P(A), if the INV compressor is set to operation prohibition mode, only a single STD compressor will operate for the convenience of oil equalization.
- For RXYQ14P(A), 16P(A) and 18P(A), only the STD1 compressor cannot be put into operation prohibition mode for the convenience of oil equalization.
- For the system with a single outdoor unit (RXYQ8P(A) to 18P(A)), automatic backup operation is not functional.

5.2.3 In The Case of Multi-Outdoor-Unit System (RXYQ20P(A) to 54P(A))

[Automatic backup operation]

With multi-outdoor-unit system, if a certain outdoor unit system malfunctions (i.e., the system stops and indoor unit remote controller displays the malfunction), by resetting the system with the indoor unit remote controller, the applicable outdoor unit is inhibited from operating for 8 hours, thus making it possible to perform emergency operation automatically.

However, in the event any of the following malfunctions occurs, automatic backup operation can be performed.

Malfunctions under which automatic backup operation can be performed:

- E3, E4, E5, E7
- F3
- H7, H9
- J2, J3, J5, J6, J7, J9, JA, JC
- L4, L5, L8, L9, LC
- U2, UJ

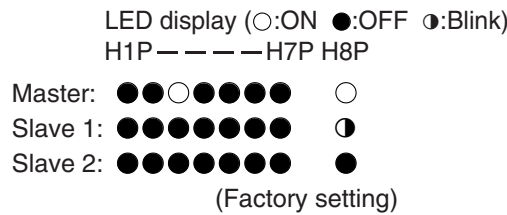
i Note : In order to forcibly clear the automatic backup operation, reset the power supply with the outdoor unit in the stopped state.

[Emergency operation with settings in service mode]

* "Inhibition of operation" is set with each outdoor unit.

Make the following settings with the master unit. (Setting with the slave unit becomes disabled.)

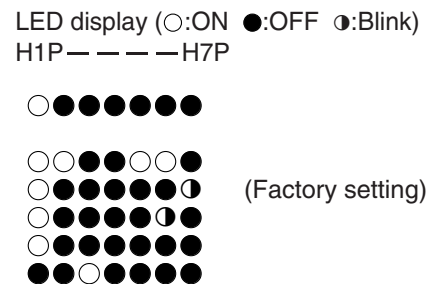
* Discriminate the operating status of the master unit / slave units through the following LED display.



- In order to set the master unit to operation prohibition mode, set No. 38 of Setting mode 2 to "MASTER OPERATION PROHIBITION".

(Procedure)

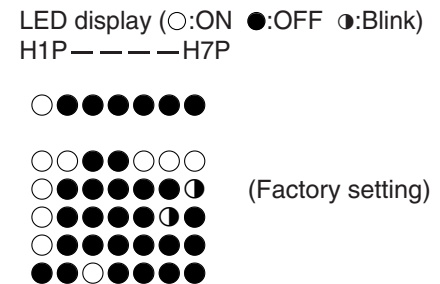
- (1) Press and hold the MODE button (BS1) for a period of 5 seconds or more.
- (2) Press the SET button (BS2) 38 times.
- (3) Press the RETURN button (BS3) once.
- (4) Press the SET button (BS2) once.
- (5) Press the RETURN button (BS3) twice.
- (6) Press the MODE button (BS1) once.



- In order to set the slave unit 1 to operation prohibition mode, set No. 39 of Setting mode 2 to "SLAVE 1 OPERATION PROHIBITION".

(Procedure)

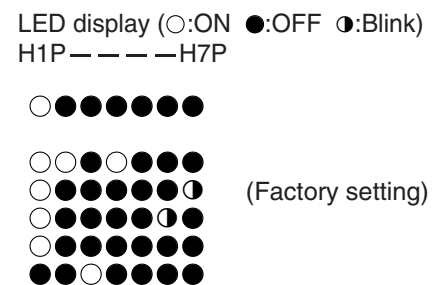
- (1) Press and hold the MODE button (BS1) for a period of 5 seconds or more.
- (2) Press the SET button (BS2) 39 times.
- (3) Press the RETURN button (BS3) once.
- (4) Press the SET button (BS2) once.
- (5) Press the RETURN button (BS3) twice.
- (6) Press the MODE button (BS1) once.



- In order to set the slave unit 2 to operation prohibition mode, set No. 40 of Setting mode 2 to "SLAVE 2 OPERATION PROHIBITION".

(Procedure)

- (1) Press and hold the MODE button (BS1) for a period of 5 seconds or more.
- (2) Press the SET button (BS2) 40 times.
- (3) Press the RETURN button (BS3) once.
- (4) Press the SET button (BS2) once.
- (5) Press the RETURN button (BS3) twice.
- (6) Press the MODE button (BS1) once.



- *
- In the case of multi-outdoor-unit system, "Inhibition of operation" is not set with each compressor individually.
 - In the case of multi-outdoor-unit system, when the above "Inhibition of operation" is set, outdoor unit rotation is not functional.

[Cancel of Emergency Operation]

To cancel the emergency operation, conduct the following setting. (Return to Factory setting.)

<RXYQ8P(A) to 18P(A)>

- Cancel to set an INV compressor from operation prohibition mode, set No. 42 of Setting mode 2 to "Normal operation".

LED display (○:ON ●:OFF ◐:Blink)
H1P — — — — H7P

(Procedure)

- (1) Press and hold the MODE button (BS1) for a period of 5 seconds or more.
- (2) Press the SET button (BS2) 42 times.
- (3) Press the RETURN button (BS3) once.
- (4) Press the SET button (BS2) once.
- (5) Press the RETURN button (BS3) twice.
- (6) Press the MODE button (BS1) once.

○ ● ● ● ● ● ● ●

○ ○ ● ● ● ● ● ●

○ ● ● ● ● ● ● ●

○ ● ● ● ● ● ● ●

○ ● ● ● ● ● ● ●

● ● ○ ● ● ● ● ●

(Factory setting)

- Cancel to set STD1 and STD2 compressors from operation prohibition mode, set No. 19 of Setting mode 2 to "OFF". (RXYQ10P(A) to 18P(A))

LED display (○:ON ●:OFF ◐:Blink)
H1P — — — — H7P

(Procedure)

- (1) Press and hold the MODE button (BS1) for a period of 5 seconds or more.
- (2) Press the SET button (BS2) 19 times.
- (3) Press the RETURN button (BS3) once.
- (4) Press the SET button (BS2) twice.
- (5) Press the RETURN button (BS3) twice.
- (6) Press the MODE button (BS1) once.

○ ● ● ● ● ● ● ●

○ ● ○ ● ● ● ○ ○

○ ● ● ● ● ● ● ●

○ ● ● ● ● ● ● ●

○ ● ● ● ● ● ● ●

● ● ○ ● ● ● ● ●

(Factory setting)

- Cancel to set the STD 2 compressor from operation prohibition mode, set No. 19 of Setting mode 2 to "STD2 OPERATION PROHIBITION". (RXYQ14P(A), 16P(A), 18P(A))

LED display (○:ON ●:OFF ◐:Blink)
H1P — — — — H7P

(Procedure)

- (1) Press and hold the MODE button (BS1) for a period of 5 seconds or more.
- (2) Press the SET button (BS2) 19 times.
- (3) Press the RETURN button (BS3) once.
- (4) Press the SET button (BS2) twice.
- (5) Press the RETURN button (BS3) twice.
- (6) Press the MODE button (BS1) once.

○ ● ● ● ● ● ● ●

○ ● ○ ● ● ● ○ ○

○ ● ● ● ● ● ● ●

○ ● ● ● ● ● ● ●

○ ● ● ● ● ● ● ●

● ● ○ ● ● ● ● ●

(Factory setting)

<RXYQ20P(A) to 54P(A)>

- Cancel to set the master unit from operation prohibition mode, set No. 38 of Setting mode 2 to "OFF".

LED display (○:ON ●:OFF ◐:Blink)
H1P — — — — H7P

(Procedure)

- (1) Press and hold the MODE button (BS1) for a period of 5 seconds or more.
- (2) Press the SET button (BS2) 38 times.
- (3) Press the RETURN button (BS3) once.
- (4) Press the SET button (BS2) once.
- (5) Press the RETURN button (BS3) twice.
- (6) Press the MODE button (BS1) once.

○ ● ● ● ● ● ● ●

○ ○ ● ● ○ ○ ● ●

○ ● ● ● ● ● ● ●

○ ● ● ● ● ● ● ●

○ ● ● ● ● ● ● ●

● ● ○ ● ● ● ● ●

(Factory setting)

- Cancel to set the slave unit 1 from operation prohibition mode, set No. 39 of Setting mode 2 to "OFF".

LED display (○:ON ●:OFF ◐:Blink)
H1P — — — — H7P

(Procedure)

- (1) Press and hold the MODE button (BS1) for a period of 5 seconds or more.
- (2) Press the SET button (BS2) 39 times.
- (3) Press the RETURN button (BS3) once.
- (4) Press the SET button (BS2) once.
- (5) Press the RETURN button (BS3) twice.
- (6) Press the MODE button (BS1) once.

○ ● ● ● ● ● ● ●

○ ○ ● ● ○ ○ ○ ○

○ ● ● ● ● ● ● ●

○ ● ● ● ● ● ● ●

○ ● ● ● ● ● ● ●

● ● ○ ● ● ● ● ●

(Factory setting)

- Cancel to set the slave unit 2 from operation prohibition mode, set No. 40 of Setting mode 2 to "OFF".

(Procedure)

- (1) Press and hold the MODE button (BS1) for a period of 5 seconds or more.
- (2) Press the SET button (BS2) 40 times.
- (3) Press the RETURN button (BS3) once.
- (4) Press the SET button (BS2) once.
- (5) Press the RETURN button (BS3) twice.
- (6) Press the MODE button (BS1) once.

LED display (○:ON ●:OFF ◐:Blink)
H1P — — — — H7P



(Factory setting)

5.3 Demand Operation

In order to save the power consumption, the capacity of outdoor unit is saved with control forcibly by using "Demand 1 Setting" or "Demand 2 Setting".

To operate the unit with this mode, additional setting of "Continuous Demand Setting" or external input by external control adaptor is required.

Set item	Condition	Content
Demand 1	Mode 1	The compressor operates at approx. 60% or less of rating.
	Mode 2	The compressor operates at approx. 70% or less of rating.
	Mode 3	The compressor operates at approx. 80% or less of rating.
Demand 2	—	The compressor operates at approx. 40% or less of rating.
Demand 3	—	Forced thermostat OFF.

5.4 Heating Operation Prohibition

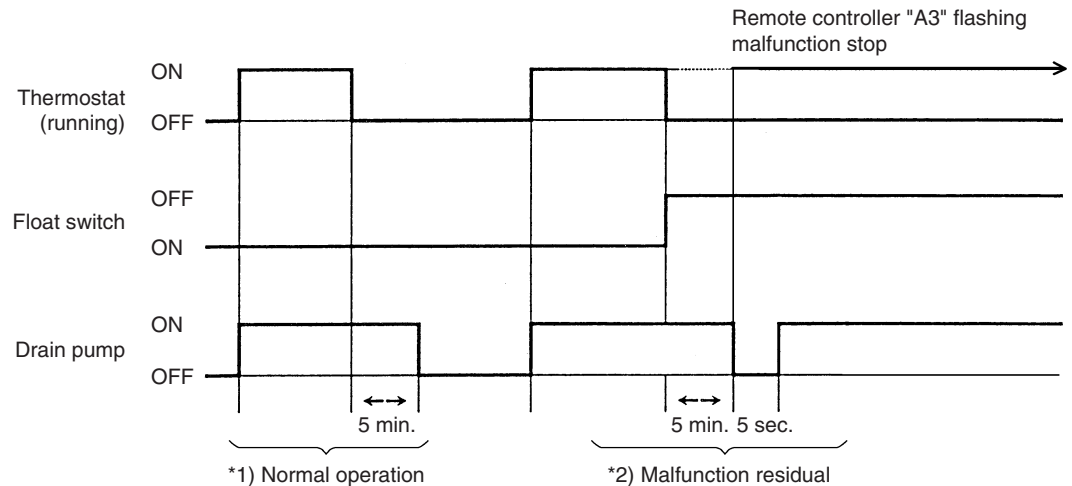
Heating operation is prohibited above 24°C ambient temperature.

6. Outline of Control (Indoor Unit)

6.1 Drain Pump Control

- The drain pump is controlled by the ON/OFF buttons (4 button (1) - (4) given in the figure below).

6.1.1 When the Float Switch is Tripped While the Cooling Thermostat is ON:



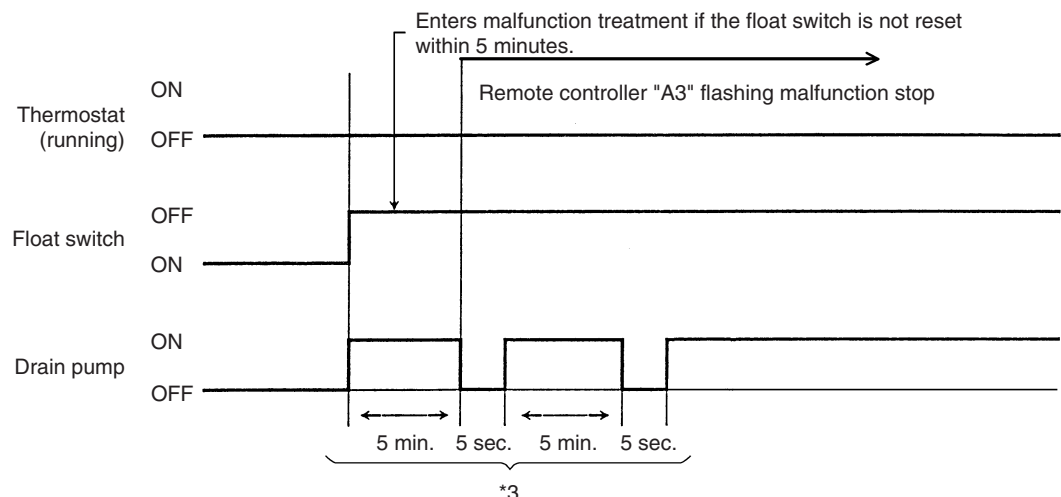
*1. (Normal operation):

The objective of residual operation is to completely drain any moisture adhering to the fin of the indoor unit heat exchanger when the thermostat goes off during cooling operation.

*2. (Malfunction residual):

The remote controller will display "A3" and the air conditioner will come to an abnormal stop in 5 minutes if the float switch is turned OFF while the cooling thermo. is ON.

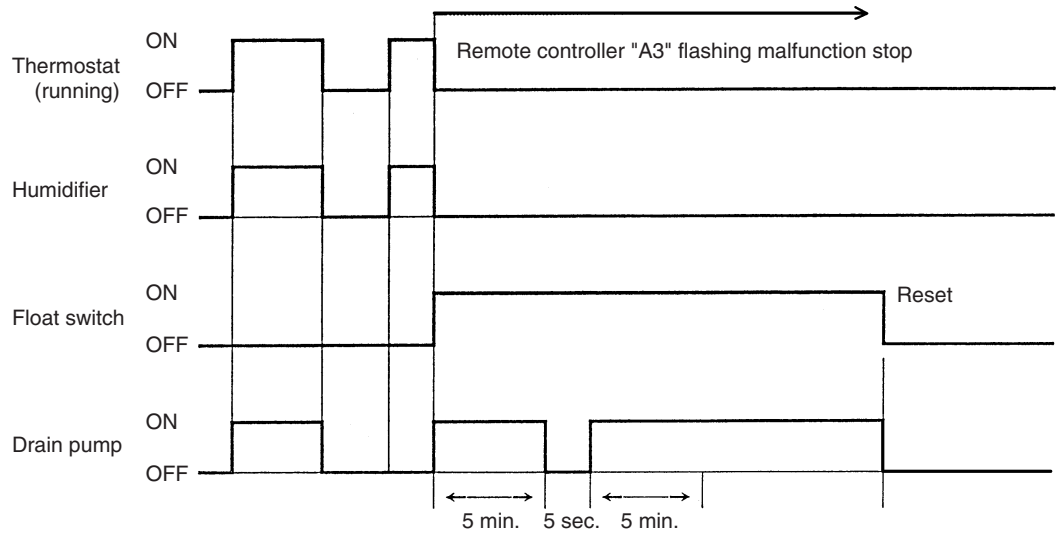
6.1.2 When the Float Switch is Tripped while the Cooling Thermostat is OFF :



*3. (Malfunction residual):

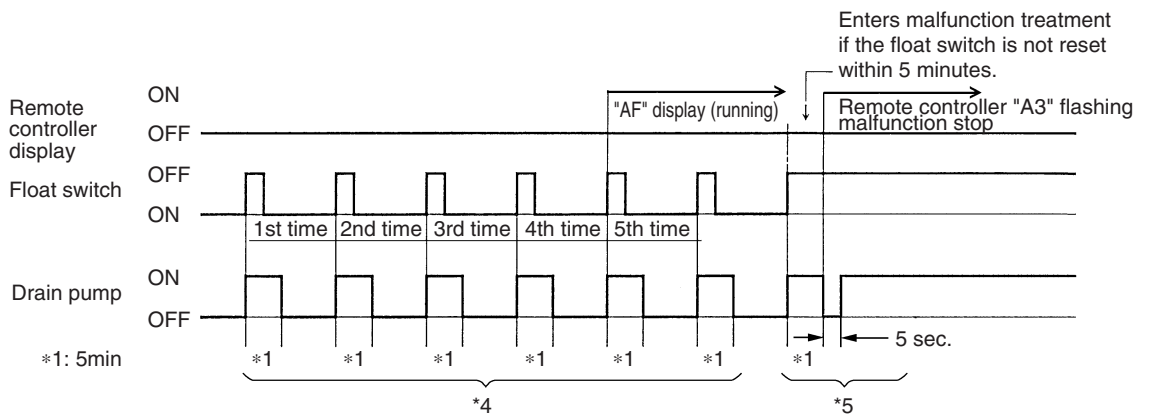
The remote controller will display "A3" and the air conditioner will come to an abnormal stop if the float switch is turned OFF and not turned ON again within 5 minutes while the cooling thermo. is OFF.

6.1.3 When the Float Switch is Tripped During Heating Operation:



During heating operation, if the float switch is not reset even after the 5 minutes operation, 5 seconds stop, 5 minutes operation cycle ends, operation continues until the switch is reset.

6.1.4 When the Float Switch is Tripped and "AF" is Displayed on the Remote Controller:



*4. (Malfunction residual):

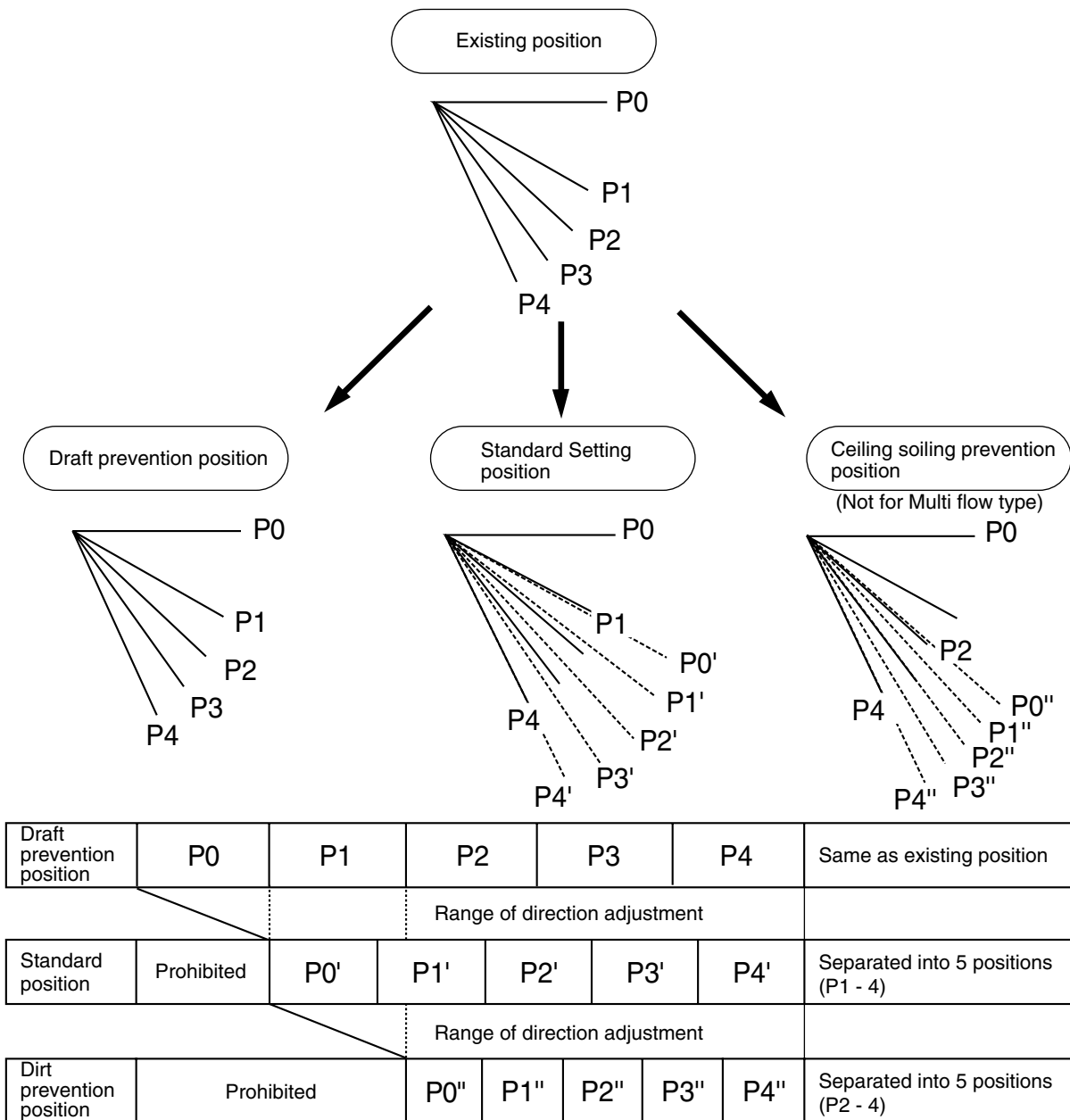
If the float switch is tripped five times in succession, a drain malfunction is determined to have occurred. "AF" is then displayed as operation continues.

*5. (Malfunction residual):

The remote controller will display "A3" and the air conditioner will come to an abnormal stop if the float switch is OFF for more than 5 minutes in the case of *4.

6.2 Louver Control for Preventing Ceiling Dirt

We have added a control feature that allows you to select the range of in which air direction can be adjusted in order to prevent the ceiling surrounding the air discharge outlet of ceiling mounted cassette type units from being soiled. (This feature is available on double flow, multi-flow and corner types.)



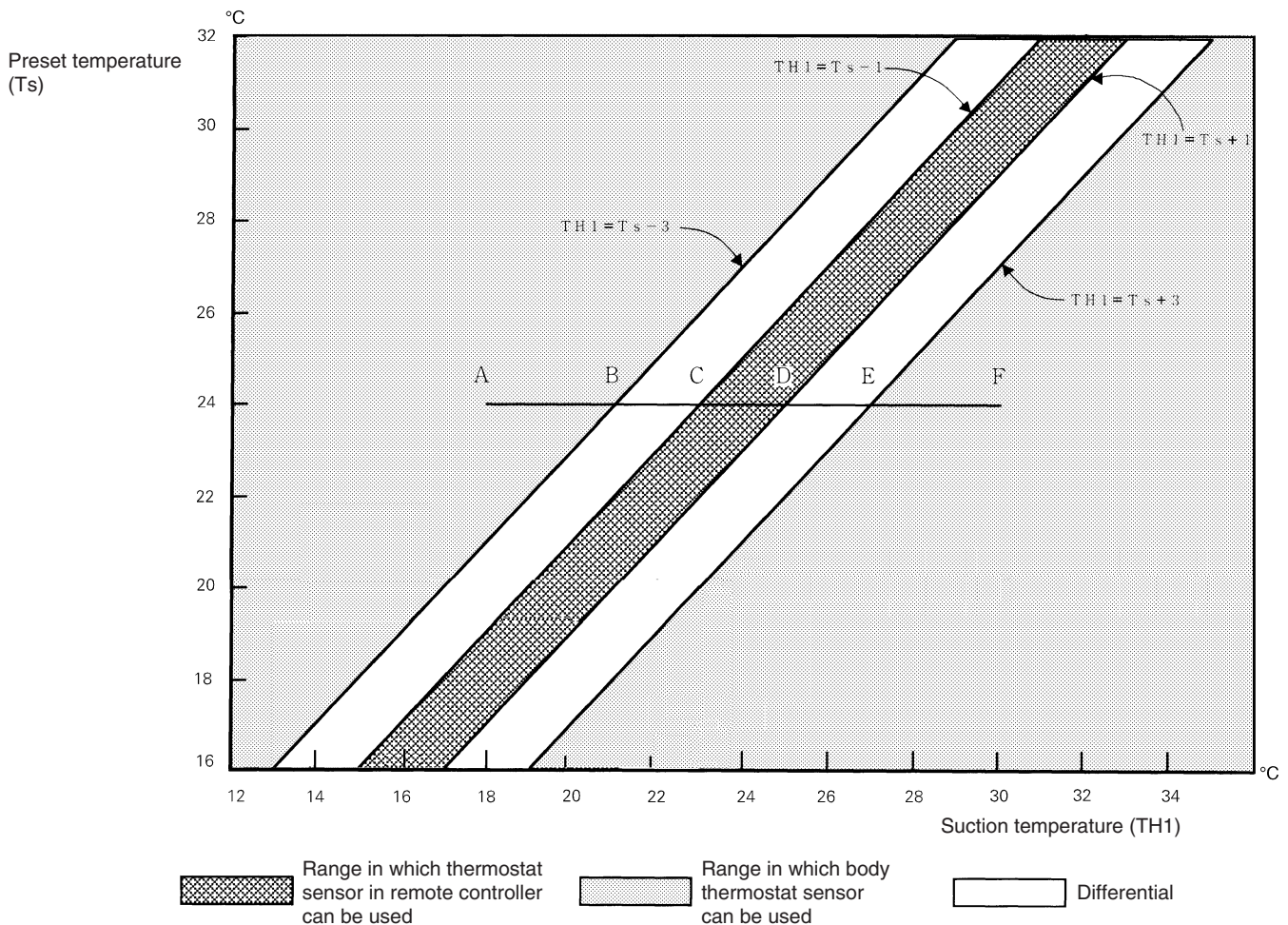
The factory setting position is standard position.

6.3 Thermostat Sensor in Remote Controller

Temperature is controlled by both the thermostat sensor in remote controller and air suction thermostat in the indoor unit. (This is however limited to when the field setting for the thermostat sensor in remote controller is set to "Use".)

Cooling

If there is a significant difference in the preset temperature and the suction temperature, fine adjustment control is carried out using a body thermostat sensor, or using the sensor in the remote controller near the position of the user when the suction temperature is near the preset temperature.



■ Ex: When cooling

Assuming the preset temperature in the figure is above 24°C, and the suction temperature has changed from 18°C to 30°C (A → F):

(This example also assumes there are several other air conditioners, the VRV system is off, and that temperature changes even when the thermostat sensor is off.)

Body thermostat sensor is used for temperatures from 18°C to 23°C (A → C).

Remote controller thermostat sensor is used for temperatures from 23°C to 27°C (C → E).

Body thermostat sensor is used for temperatures from 27°C to 30°C (E → F).

And, assuming suction temperature has changed from 30°C to 18°C (F → A):

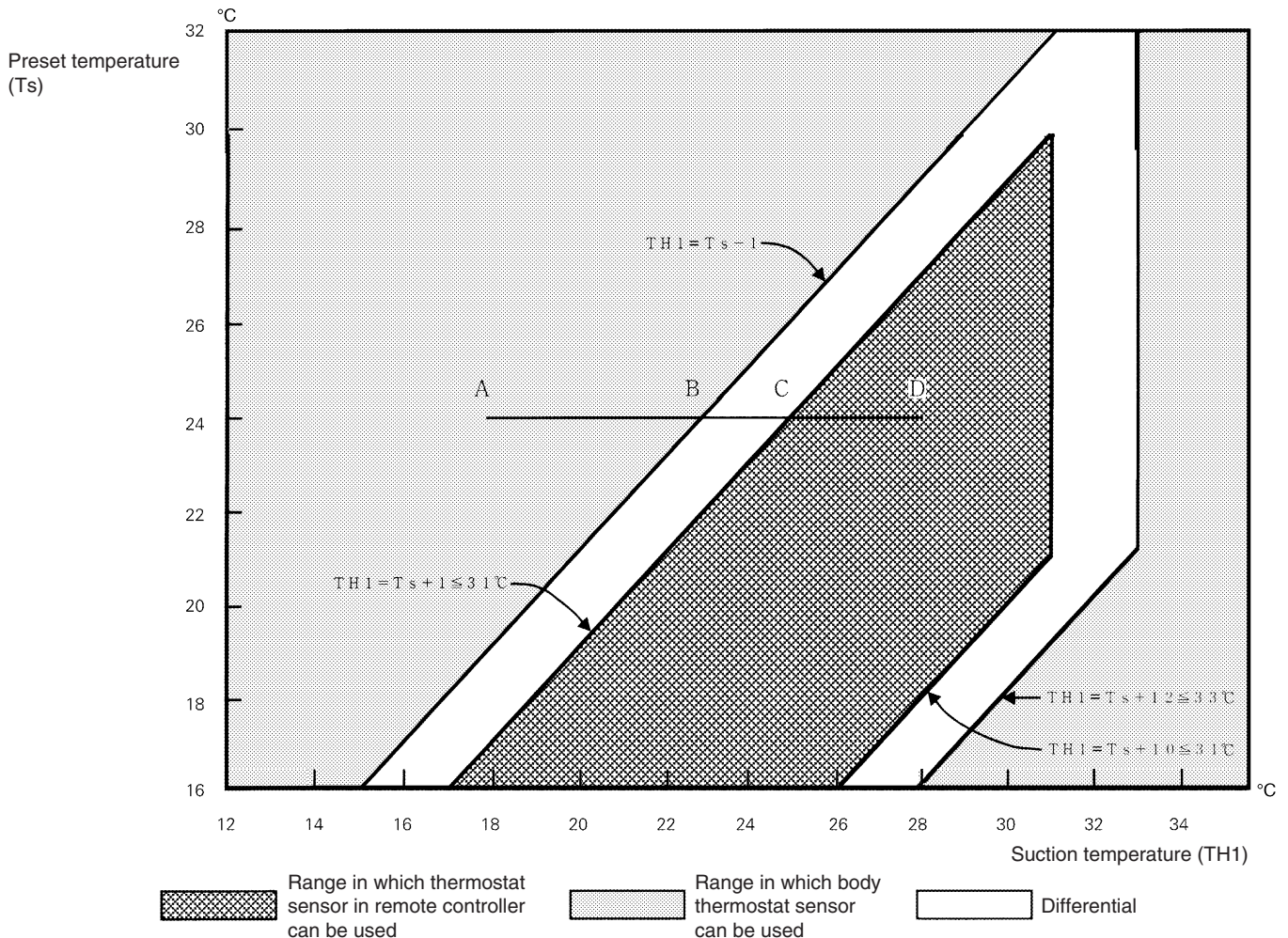
Body thermostat sensor is used for temperatures from 30°C to 25°C (F → D).

Remote controller thermostat sensor is used for temperatures from 25°C to 21°C (D → B).

Body thermostat sensor is used for temperatures from 21°C to 18°C (B → A).

Heating

When heating, the hot air rises to the top of the room, resulting in the temperature being lower near the floor where the occupants are. When controlling by body thermostat sensor only, the unit may therefore be turned off by the thermostat before the lower part of the room reaches the preset temperature. The temperature can be controlled so the lower part of the room where the occupants are does not become cold by widening the range in which thermostat sensor in remote controller can be used so that suction temperature is higher than the preset temperature.



■ **Ex: When heating Assuming the preset temperature in the figure is above 24°C, and the suction temperature has changed from 18°C to 28°C (A → D):**

(This example also assumes there are several other air conditioners, the VRV system is off, and that temperature changes even when the thermostat sensor is off.)

Body thermostat sensor is used for temperatures from 18°C to 25°C (A → C).

Remote controller thermostat sensor is used for temperatures from 25°C to 28°C (C → D).

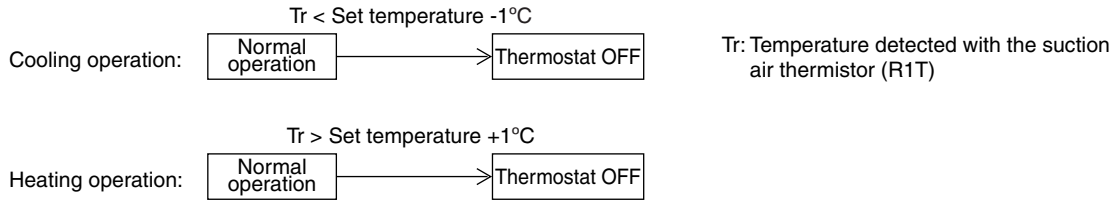
And, assuming suction temperature has changed from 28°C to 18°C (D → A):

Remote controller thermostat sensor is used for temperatures from 28°C to 23°C (D → B).

Body thermostat sensor is used for temperatures from 23°C to 18°C (B → A).

6.4 Thermostat Control While in Normal Operation

VRV multi systems are set at factory to thermostat control mode using the remote controller. While in normal thermostat differential control mode (i.e., factory setting mode), the thermostat turns OFF when the system reaches a temperature of -1°C from the set temperature while in cooling operation or of $+1^{\circ}\text{C}$ from that while in heating operation.



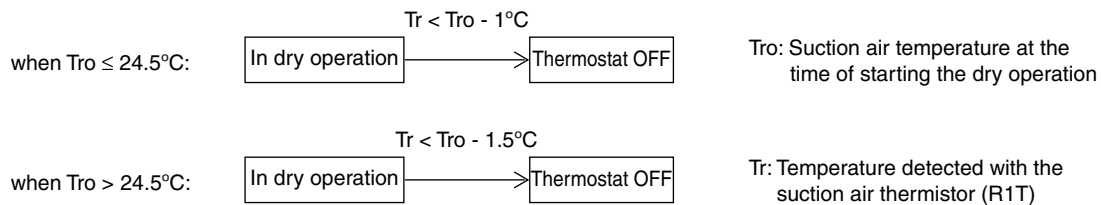
While in a single remote controller group control, the body thermostat is only used for this control.

Furthermore, while in heating operation, cassette-mounted indoor units conduct the thermostat control by a value compensated by -2°C for the value detected with the body thermostat. (Through field settings, the thermostat differential setting can be changed from 1°C to 0.5°C . For details on the changing procedure, refer to information on page onward.)

6.5 Thermostat Control in Dry Operation

While in dry operation, the thermostat control is conducted according to a suction temperature at the time of starting the dry operation.

Assuming that the suction air temperature at the time of starting the dry operation is Tr_0 and the suction air temperature in operation is Tr ,



Furthermore, while in dry operation mode, fans operate at L flow rate, stops for a period of six minutes while the thermostat is OFF, and then return to operation at L flow rate. (This control is used to prevent a rise in indoor humidity while in thermostat OFF mode.)

6.6 Electronic Expansion Valve Control

- Electronic Expansion Valve Control

In cooling, to maximize the capacity of indoor unit heat exchanger (evaporator), operate the electronic expansion valve under PI control so that the evaporator outlet superheated degree (SH) will become constant.

In heating, to maximize the capacity of indoor unit heat exchanger (condenser), operate the electronic expansion valve under PI control so that the evaporator outlet superheated degree (Condenser outlet subcooled degree) will become constant.

Cooling $SH=TH_2-TH_1$ SH : Evaporator outlet superheated degree
 (Heating $SC=TC-TH_1$) TH₁: Temperature (°C) detected with the liquid thermistor
 TH₂: Temperature (°C) detected with the gas thermistor
 SC : Condenser outlet subcooled degree
 TC : High pressure equivalent saturated temperature

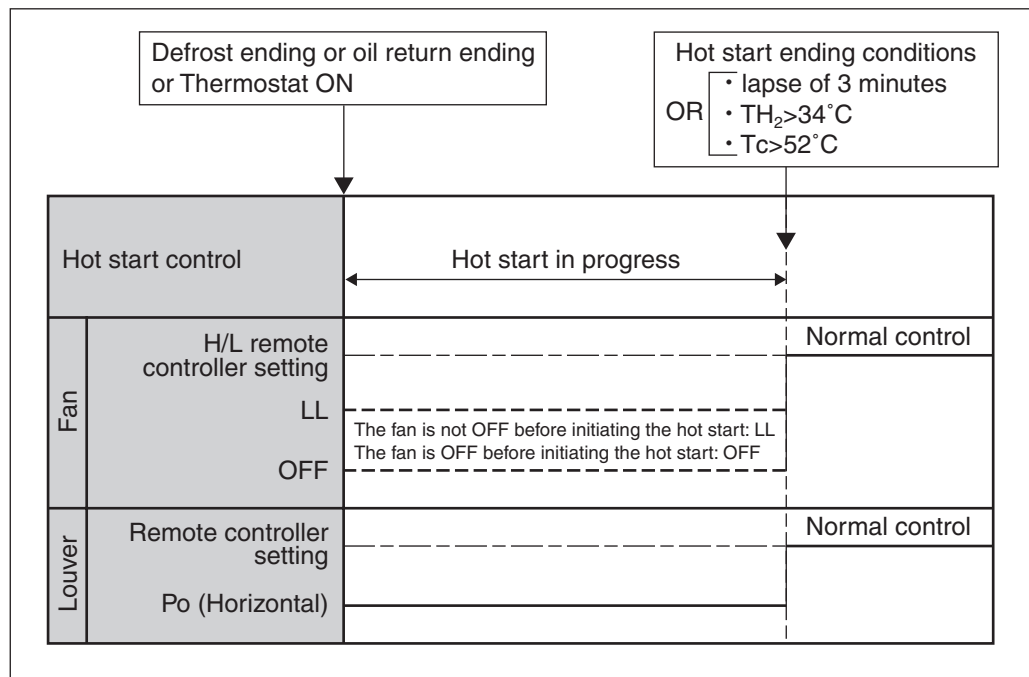
Furthermore, the default value of the optimal evaporator outlet superheated degree (condenser outlet subcooled degree) is 5 deg. However, this default value varies with the operating performance.

6.7 Hot Start Control (In Heating Operation Only)

At startup with thermostat ON or after the completion of defrosting in heating operation, the indoor unit fan is controlled to prevent cold air from blasting out and ensure startup capacity.

[Detail of operation]

When either the **start condition 1** or the **start condition 2** is established, the operations shown below will be conducted.



TH₂: Temperature (°C) detected with the gas thermistor
 TC : High pressure equivalent saturated temperature

6.8 Freeze Prevention

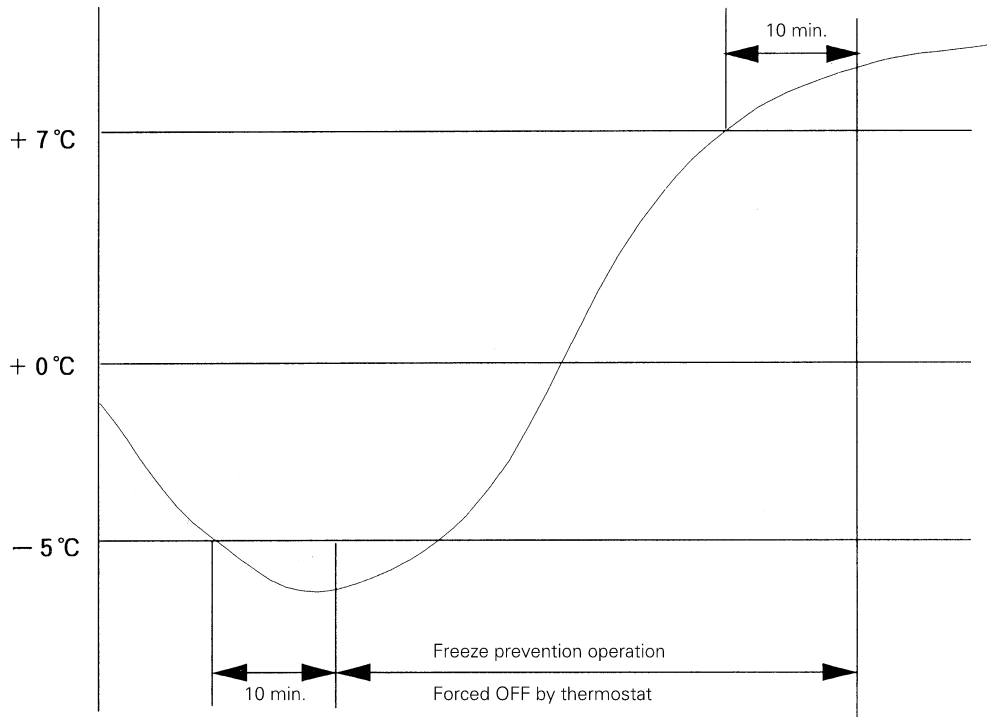
Freeze Prevention by Off Cycle (Indoor Unit)

When the temperature detected by liquid pipe temperature thermistor (R2T) of the indoor unit heat exchanger drops too low, the unit enters freeze prevention operation in accordance with the following conditions, and is also set in accordance with the conditions given below.

Conditions for starting freeze prevention: Temperature is -1°C or less for total of 40 min., or temperature is -5°C or less for total of 10 min.

Conditions for stopping freeze prevention: Temperature is $+7^{\circ}\text{C}$ or more for 10 min. continuously

Ex: Case where temperature is -5°C or less for total of 10 min.

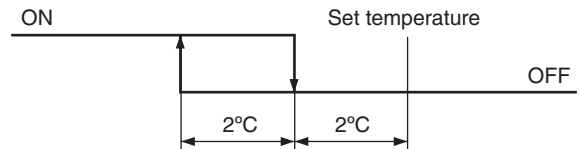


6.9 Heater Control

The heater control is conducted in the following manner.

[Normal control]

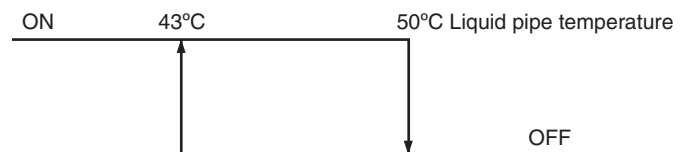
While in heating operation, the heater control (ON/OFF) is conducted as shown on the right.



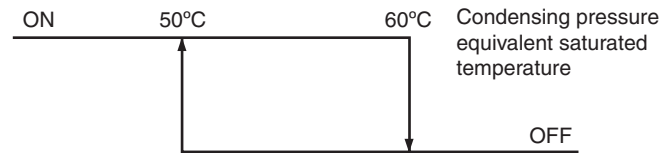
[Overload control]

When the system is overloaded in heating operation, the heater will be turned OFF in the following two manners.

- (1) The heater control (ON/OFF) is conducted through the liquid pipe temperature (R2T) of the indoor unit.



(2) The heater control (ON/OFF) is conducted by converting the heater temperature into the condensing pressure equivalent saturated temperature (T_c) according to the temperature detection through the high pressure sensor (S1NPH) of the outdoor unit.



[Fan residual operation]

While the heater turns OFF, in order to prevent the activation of the thermal protector, the fan conducts residual operation for a given period of time after the heater turns OFF. (This operation is conducted regardless of with or without heater equipped.)

Residual operation time = 100 seconds on ceiling suspended type or 60 seconds on other types

6.10 List of Swing Flap Operations

Swing flaps operate as shown in table below.

			Fan	Flap		
				FXFQ	FXCQ FXHQ FXKQ	FXAQ
Heating	Hot start from defrosting operation	Swing	OFF	Horizontal	Horizontal	Horizontal
		Wind direction set	OFF	Horizontal	Horizontal	Horizontal
	Defrosting operation	Swing	OFF	Horizontal	Horizontal	Horizontal
		Wind direction set	OFF	Horizontal	Horizontal	Horizontal
	Thermostat OFF	Swing	LL	Horizontal	Horizontal	Horizontal
		Wind direction set	LL	Horizontal	Horizontal	Horizontal
	Hot start from thermostat OFF mode (for prevention of cold air)	Swing	LL	Horizontal	Horizontal	Horizontal
		Wind direction set	LL	Horizontal	Horizontal	Horizontal
Stop	Swing	OFF	Horizontal	Horizontal	Totally closed	
	Wind direction set	OFF	Horizontal	Horizontal	Totally closed	
Cooling	Thermostat ON in dry operation using micro computer	Swing	L* ¹	Swing	Swing	Swing
		Wind direction set	L* ¹	Set	Set	Set
	Thermostat OFF in dry operation using micro computer	Swing	OFF or L	Swing	Swing	Swing
		Wind direction set		Horizontal or Set	Set	Set
	Thermostat OFF in cooling	Swing	Set	Swing	Swing	Swing
		Wind direction set	Set	Set	Set	Set
	Stop	Swing	OFF	Horizontal	Horizontal	Totally closed
		Wind direction set	OFF	Horizontal	Horizontal	Totally closed
Micro computer control (including cooling operation)	Swing	L	Swing	Swing	Swing	
	Wind direction set	L	Set	Set	Set	

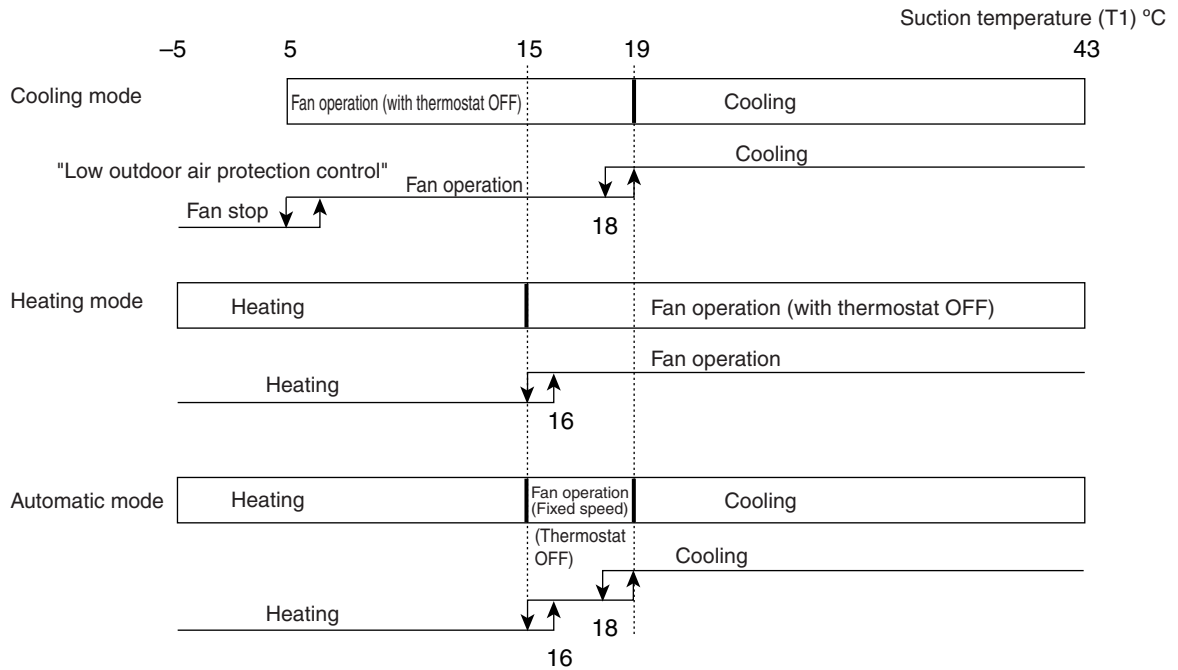
*1. L or LL only on FXFQ models

6.11 Control of Outdoor Air Processing Unit (Unique Control for Outdoor Air Processing Unit)

6.11.1 Selection of Operation Mode (by suction air thermostat)

Objective To select cooling, heating, or fan operation mode according to the suction air (outdoor air) temperature.

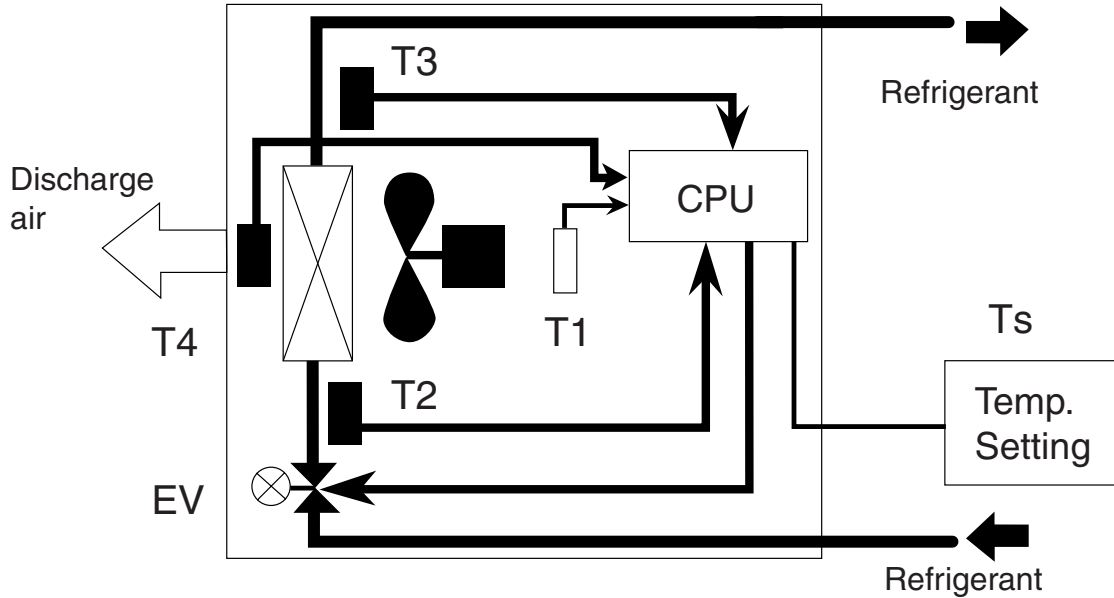
Details [Outdoor air processing unit]



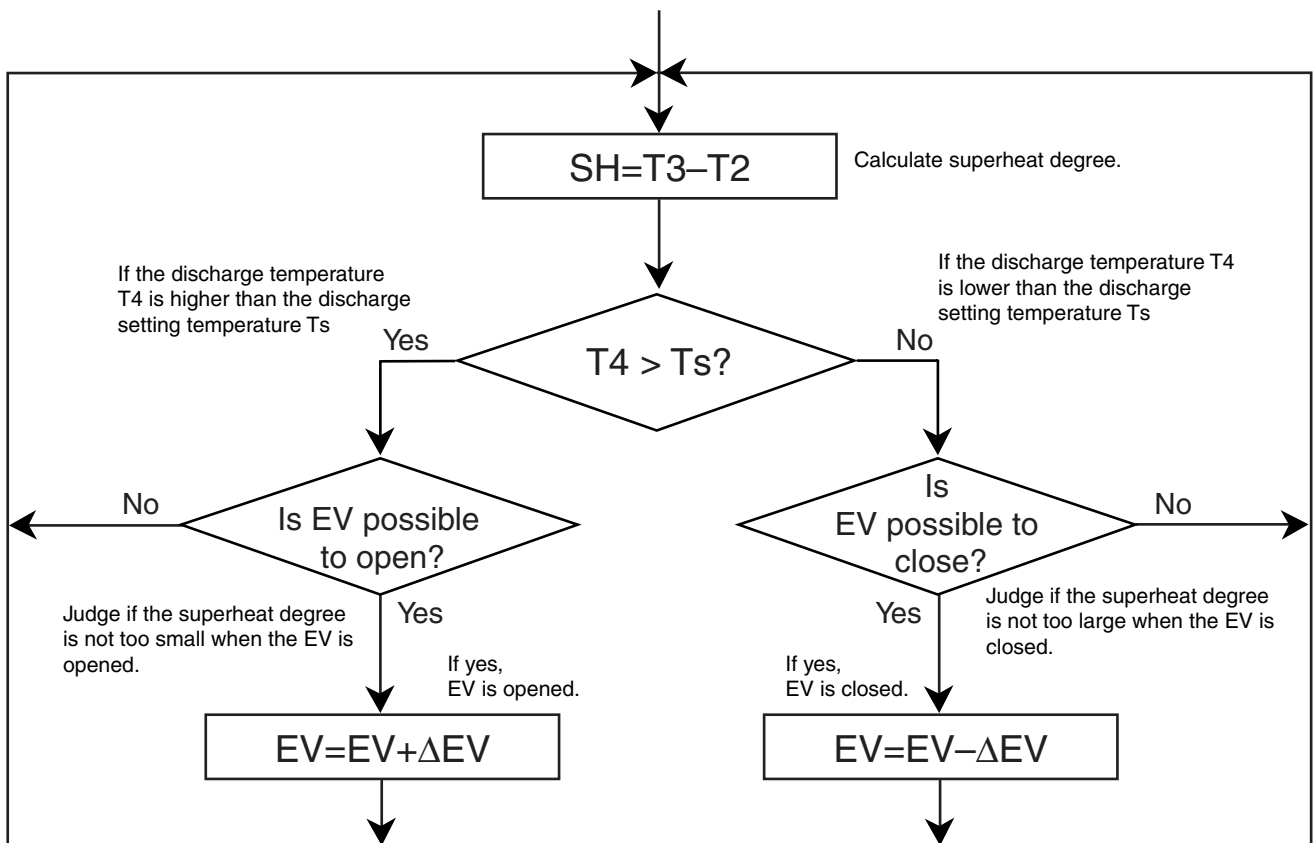
6.11.2 Discharge Air Temperature Control

Used to control the EV (electronic expansion valve) opening and thermostat ON/OFF so as to keep the discharge air temperature at the set temperature.

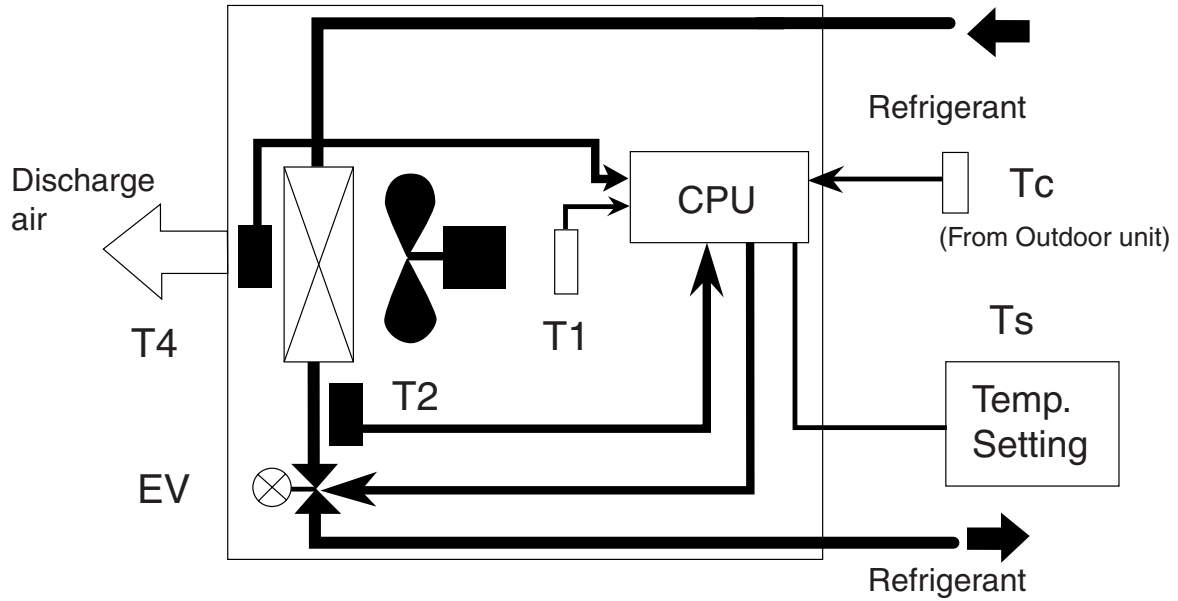
(1) Cooling operations



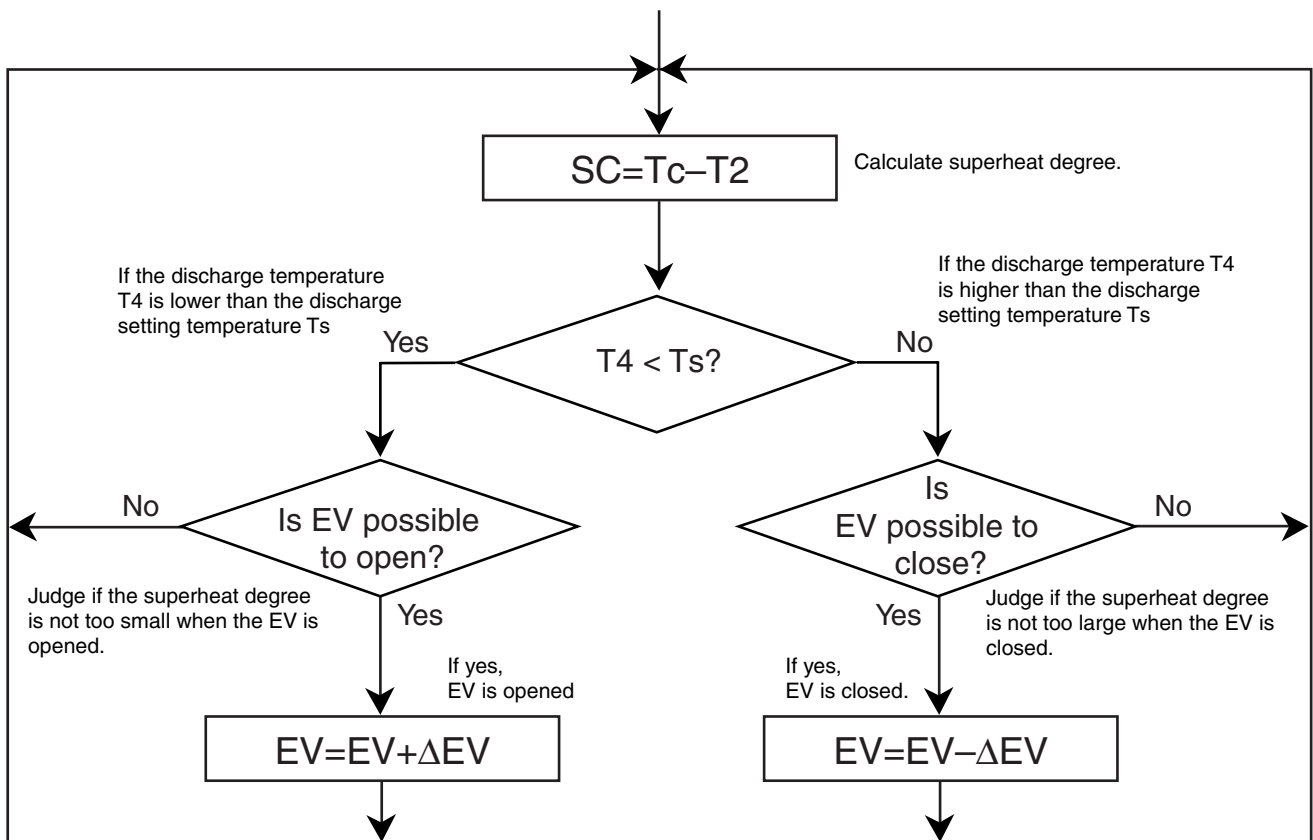
- T1: Temperature detected by suction air thermistor Th1
- T2: Temperature detected by liquid pipe temp. thermistor Th2
- T3: Temperature detected by gas pipe temp. thermistor Th3
- T4: Temperature detected by discharge air thermistor Th4
- EV: Electronic expansion valve opening



(2) Heating operations



- T1: Temperature detected by suction air thermistor Th1
- T2: Temperature detected by liquid pipe temp. thermistor Th2
- T3: Temperature detected by gas pipe temp. thermistor Th3
- T4: Temperature detected by discharge air thermistor Th4
- Tc : Outdoor unit condensing temperature
- EV: Electronic expansion valve opening



(3) Thermostat OFF by discharge air temperature**<Cooling>**

Target discharge air temp. T_s – Discharge air temp. T_4
 >5 degree continue for 5 minutes.
 →Thermostat stops for 1 minute. →Thermostat ON

<Heating>

& { Discharge air temp. T_4 – Target discharge air temp. T_s >5 degree } continue for 5
 { EV opening is low limit } minutes

→Thermostat stops for 1 minute. →Thermostat ON

6.11.3 Low Outdoor Air Temperature Protection Control**Objective**

In cooling (or fan operation) or heating, if outdoor air is low in temperature, stop the fan forcibly.

Details**[Cooling and fan operation]**

Turn OFF the fan for a period of 60 minutes at a suction temperature of 5°C or lower.
 In order to monitor the outdoor air temperature, however, turn ON the fan for a period of one minute and turn OFF the fan again at a temperature of 5°C or lower after the said timer completes the operative period.
 Reset the 60-minute timer when the fan stops running.

[Heating]

Turn OFF the fan for a period of 60 minutes at a suction temperature of –5°C or lower.
 In order to monitor the outdoor air temperature, however, turn ON the fan for a period of one minute and turn OFF the fan again at a temperature of –5°C or lower after the said timer completes the operative period.
 Reset the 60-minute timer when the fan stops running.

* The thermostat will not turn ON in one minute due to the temperature while the fan stops.

- This control shall be disabled at test run both in cooling and heating. (The test run shall be conducted first.)

Part 5

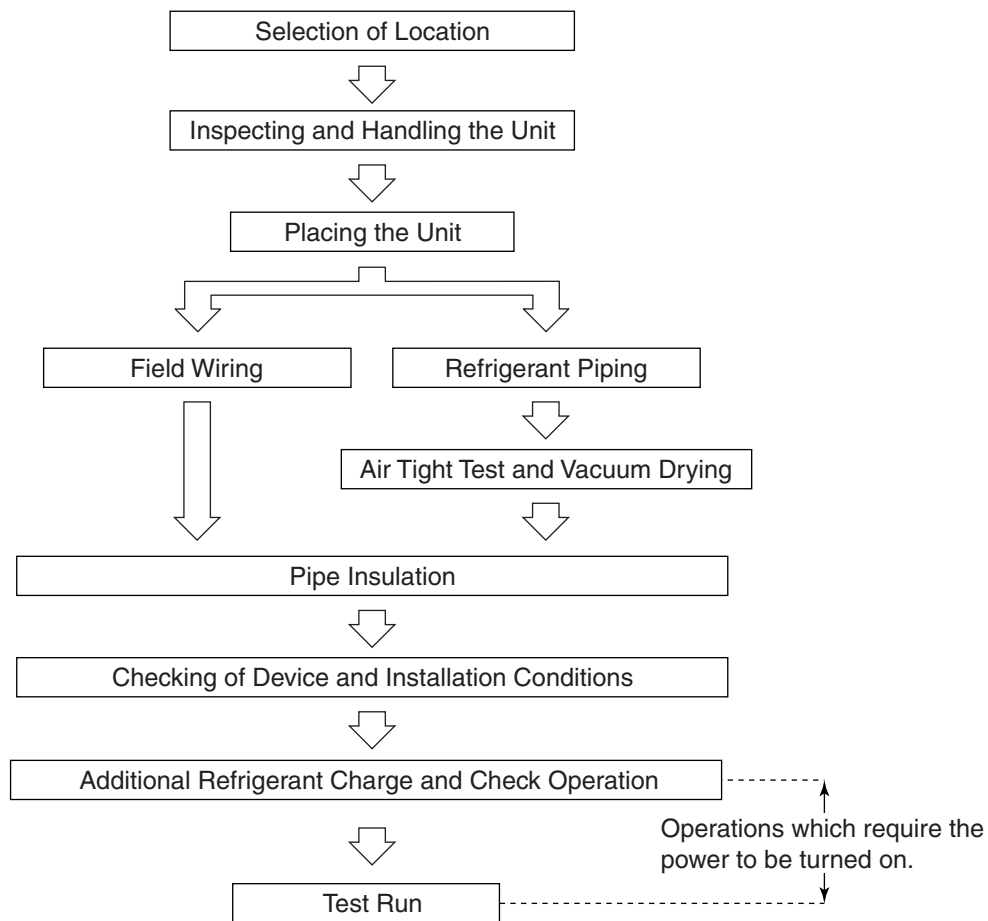
Test Operation

1. Test Operation	176
1.1 Installation Process	176
1.2 Procedure and Outline	177
1.3 Operation When Power is Turned On	190
2. Outdoor Unit PCB Layout.....	191
3. Field Setting	192
3.1 Field Setting from Remote Controller	192
3.2 Field Setting from Outdoor Unit.....	211

1. Test Operation

1.1 Installation Process

Below figure shows the installation process. Install in the order of the steps shown.



1.2 Procedure and Outline

Follow the following procedure to conduct the initial test operation after installation.

1.2.1 Check work prior to turn power supply on

Check the below items.

- Power wiring
- Control transmission wiring between units
- Earth wire

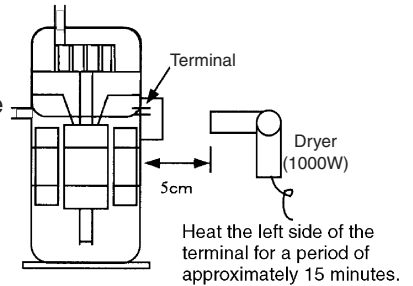


- Is the wiring performed as specified?
- Is the designated wire used?
- Is the wiring screw of wiring not loose?
- Is the grounding work completed?
- Is the insulation of the main power supply circuit deteriorated?
Use a 500V megger tester to measure the insulation. (*1)
• Do not use a megger tester for other circuits than 200V (or 240V) circuit.

*1: Measure to be taken against decreased insulation resistance in the compressor

If the compressor is left to stand for an extended period of time after the refrigerant charge with the stop valve open and the power supply OFF, the refrigerant may be mixed in the compressor, thus decreasing the insulation resistance.

Heat the compressor as shown on the right and then recheck the insulation.



Check on refrigerant piping / insulation materials



Check air tight test and vacuum drying.



Check on amount of refrigerant charge



- Is the pipe size proper?
- Is the pipe insulation material installed securely?
Liquid and gas pipes need to be insulated. (Otherwise causes water leak.)

- Have the air tight test and the vacuum drying been conducted according to the procedure in the Installation Manual?

- Is a proper quantity of refrigerant refilled?
The following two methods are available for refilling of the refrigerant.
(1) Use the automatic refrigerant refilling function.
(2) Calculate a refrigerant refilling quantity.

Check the stop valves for conditions.

- Check to be sure the stop valves are under the following conditions.

Liquid side stop valve	Gas side stop valve
Open	Open

1.2.2 Turn power on

Turn outdoor unit and indoor unit power on.



Check the LED display of the outdoor unit PCB.



Make field settings with outdoor unit PCB.



Conduct check operations.



Check for normal operation.

○ Be sure to turn the power on 6 hours before starting operation to protect compressors. (to power on crankcase heater)

○ Check to be sure the transmission is normal.
The transmission is normal if the LEDs display conditions as shown in table below.

LED display ○ ON ● OFF ● Blinking

LED display (Default status before delivery)	Micro-computer operation monitor	MODE	TEST	COOL / HEAT select			Low noise	Demand	Multi
				IND	MASTER	SLAVE			
				HAP	H1P	H2P			
One outdoor unit installed	●	●	●	○	●	●	●	●	●
When multiple outdoor unit installed (*)	Master	●	●	●	○	●	●	●	○
	Slave 1	●	●	●	●	●	●	●	●
	Slave 2	●	●	●	●	●	●	●	●

(*) The master unit is the outdoor unit to which the transmission wiring for the indoor units is connected.

The other outdoor units are slave units.

○ Make field settings if needed.
(For the setting procedure, refer to information in "3.2. Field Setting from Outdoor Unit" on P.210 onward.)
For the outdoor-multi system, make field settings with the master unit. (Field settings made with the slave unit will be all invalid.)

The check operations shown below will be automatically initiated.

- Check for erroneous wirings
- Check for failure to open stop valves
- Check for excessive refrigerant refilling
- Automatic judgement of piping length

○ Before starting the normal operation after the completion of check operations, make sure indoor and outdoor units normally operate.

1.2.3 Air Tight Test and Vacuum Drying

Note:

- Always use nitrogen gas for the air tight 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.)

1.2.3.1 Preparations

<Needed tools>

Gauge manifold Charge hose valve	<ul style="list-style-type: none"> • To prevent entry of any impurities and insure sufficient pressure resistance, always use the special tools dedicated for R-410A. • Use charge hose that have pushing stick for connecting to service port of shutoff valves or refrigerant charge port.
Vacuum pump	<ul style="list-style-type: none"> • The vacuum pump for vacuum drying should be able to lower the pressure to -100.7kPa (5 Torr -755mm Hg). • Take care the pump oil never flow backward into the refrigerant pipe during the pump stops.

<The system for air tight test and vacuum drying>

- Referring to figure 1, connect an nitrogen tank, refrigerant tank, and a vacuum pump to the outdoor unit.
- The shutoff valve and valve A~C in figure 28 should be open or closed as shown in the table below.

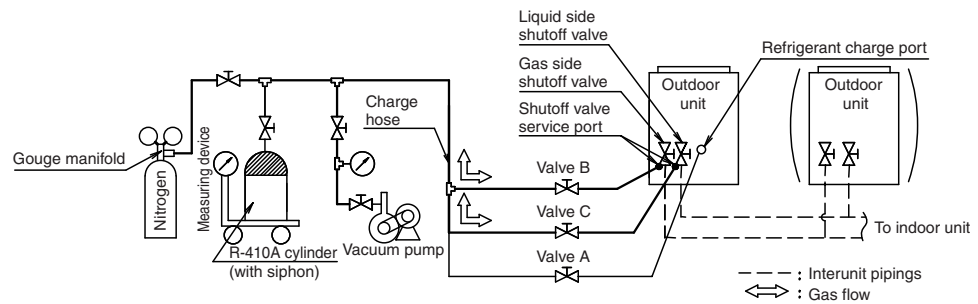
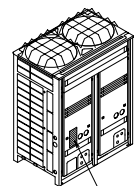


fig. 1

State of valve A, B and C and shutoff valves	Valve			Stop 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 air tight test and vacuum drying should be done using the liquid side and gas side shutoff valve service ports. See the [R-410A] Label attached to the front plate of the outdoor unit for details on the location of the service port (see figure at right).
- See [Shutoff valve operation procedure] for details on handling the shutoff valve. (Refer to P.181)
- The refrigerant charge port is connected to unit pipe. When shipped, the unit contains refrigerant, so use caution when attaching the charge hose.



[Caution] Label

1.2.3.2 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 (do not pressurize more than 4.0MPa). 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 air tight test again.

<Vacuum drying>

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

Note:

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

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

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

1.2.4 Additional Refrigerant Charge and Check Operation

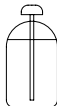

The outdoor unit is charged with refrigerant when shipped from the factory, but depending on the size and length of the piping when installed, it may require additional charging. For charging the additional refrigerant, follow the procedure in this chapter. And then carry out the check operation.

Note: Total amount of refrigerant should be 100 kg or less

1.2.4.1 Before Working

[About the refrigerant cylinder]

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

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



Caution

- Always use the proper refrigerant (R-410A). If charged with the refrigerant containing an improper material, it may cause an explosion or accident.
- R-410A is a mixed refrigerant, so charging it as a gas will cause the refrigerant composition to change, which may prevent normal operation.

[Shutoff Valve Operation Procedure]

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

Note:

- Do not open the shutoff valve until “1.2.1 Check work prior to turn power supply on” in P.177 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]

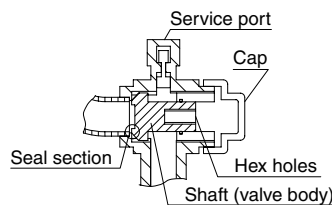
The sizes of the shutoff valves on each model and the tightening torque for each size are listed in the table below.

<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)			Service port
	Shaft (valve body)		Cap (valve lid)	
φ 9.5	5.4 - 6.6	Hexagonal wrench 4 mm	13.5 - 16.5	11.5 - 13.9
φ 12.7	8.1 - 9.9		18.0 - 22.0	
φ 15.9	13.5 - 16.5	Hexagonal wrench 6 mm	22.5 - 27.5	
φ 19.1	27.0 - 33.0	Hexagonal wrench 8 mm		
φ 25.4				



[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 BS button on the PCB (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						
	H 1 P	H 2 P	H 3 P	H 4 P	H 5 P	H 6 P	H 7 P
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".	◐	*	*	*	*	*	*
<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>Note: "000000" indicates 64 units.</p>	◐	●	◐	●	◐	◐	●
4. Press the MODE button (BS1) once. This returns to Setting Mode 1 (default).	●	●	○	●	●	●	●

Note:

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

1.2.4.2 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 PCB (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 BS buttons via the EL. COMPO. BOX's inspection door. There is a risk of electric shock if you touch any live parts, since this operation must be performed with the power on.



Caution

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

Note:

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

<About refrigerant charging>

- The refrigerant charge port is connected to the piping inside the unit.
When the unit is shipped from the factory, the unit's internal piping is already charged with refrigerant, so be careful when connecting the charge hose.
- After adding the refrigerant, make sure to close the lid of the refrigerant charging port.
The tightening torque for the lid is 11.5 to 13.9 Nm.
- See [Shutoff valve operation procedure] in 1.2.4.1 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 wrong wiring" may also cause abnormal operation. Performance may drop due to the failure of "Judgement 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. (Refer to P.189)
 - 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 Example of connection" on Part 7. Appendix in P.424.

3. Open the valve C (See the figure 2. The valve A, B and the liquid and gas side shutout valve must be left closed), and charge the refrigerant of the “additional charging amount” from the liquid side shutout valve service port.
If the “additional charging amount” was charged fully, close the valve C and go to step 5.
If the “additional charging amount” was not charged fully, go to step 4.

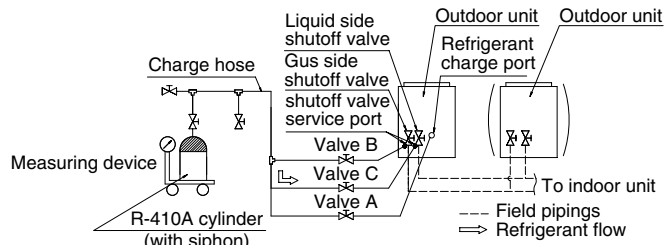


fig 2

4. Perform the refrigerant charging operation following [Refrigerant charging operation procedure] as shown in page 185, and charge the remaining refrigerant of the “additional charging amount”. For performing the refrigerant charging operation the BS button on the PCB (A1P) of outdoor unit (In case of multi system master unit) are use. (See the figure 3) In addition, the refrigerant are charged from the refrigerant charge port via the valve A. (See the figure 4)
For operating the BS 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 speed up in case of multi system, connect the refrigerant cylinders to each outdoor unit as shown in the figure 4.

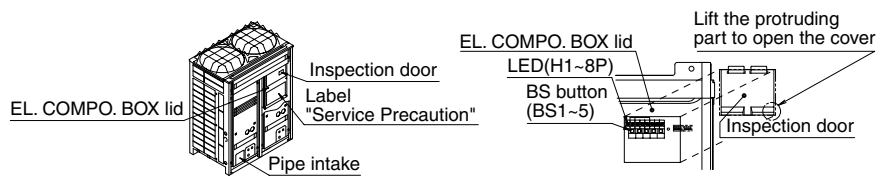


fig 3

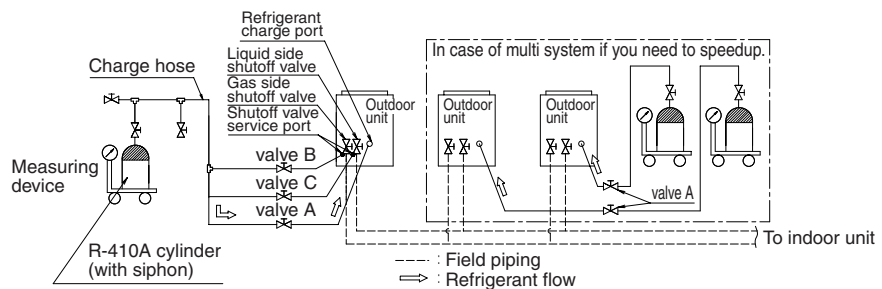


fig 4

[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 4.)

[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	MASTE R	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 PCB (A1P).
(For how to set, see “1.2.5.1 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 displays malfunction code] in P.187.
- (*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 1.2.4.1. 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 wrong wiring
 - Judgement 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 PCB (A1P) with the power off (See “1.2.5.1 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 PCB (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	MASTE R	SLAVE			
				H3P	H4P	H5P			
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 BS button (BS1-BS5) on the outdoor unit PCB (A1P) with the power on. (See “1.2.5.2 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"> • Check if the additional refrigerant charge has been finished correctly. • Recalculate the additional amount refrigerant from the piping length and add the adequate amount.
U7, U4 UF, UH	If the outdoor unit terminal is connected when there is one outdoor unit installed.	Remove the line from the outdoor multi terminals (Q1 and Q2).

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

1.2.5 Onsite Settings

NOTE:

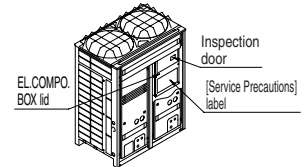
In the case of a multi system, all onsite settings should be made on the master unit. Settings made on sub units are invalid.

The outdoor unit to which the indoor unit transmission wire are connected is the master unit, and all other units are sub units.

1.2.5.1 Onsite Settings with the Power Off

If the COOL/HEAT selector was connected to the outdoor unit, set the dip switch (DS1) on the outdoor unit PCB (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.

1.2.5.2 Onsite Settings with the Power On

Use the BS button switches (BS1 through BS5) on the outdoor unit PCB (A1P) to make the necessary onsite settings.

See the "Service Precautions" label on the EL. COMPO. BOX lid for details on the positions and operating method of the BS 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 BS 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.

1.2.6 Test Run

1.2.6.1 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.

1.2.6.2 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.

1.2.6.3 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.

1.3 Operation When Power is Turned On

1.3.1 When Turning On Power First Time

The unit cannot be run for up to 12 minutes to automatically set the master power and address (indoor-outdoor address, etc.).

Status

Outdoor unit

Test lamp H2P Blinks

Can also be set during operation described above.

Indoor unit

If ON button is pushed during operation described above, the "UH" malfunction indicator blinks. (Returns to normal when automatic setting is complete.)

1.3.2 When Turning On Power The Second Time and Subsequent

Tap the RESET button on the outdoor unit PCB. Operation becomes possible for about 2 minutes. If you do not push the RESET button, the unit cannot be run for up to 10 minutes to automatically set master power.

Status

Outdoor unit

Test lamp H2P Blinks

Can also be set during operation described above.

Indoor unit

If ON button is pushed during operation described above, the operation lamp lights but the compressor does not operate. (Returns to normal when automatic setting is complete.)

1.3.3 When an Indoor Unit or Outdoor unit Has Been Added, or Indoor or Outdoor Unit PCB Has Been Changed

Be sure to push and hold the RESET button for 5 seconds. If not, the addition cannot be recognized. In this case, the unit cannot be run for up to 12 minutes to automatically set the address (indoor-outdoor address, etc.)

Status

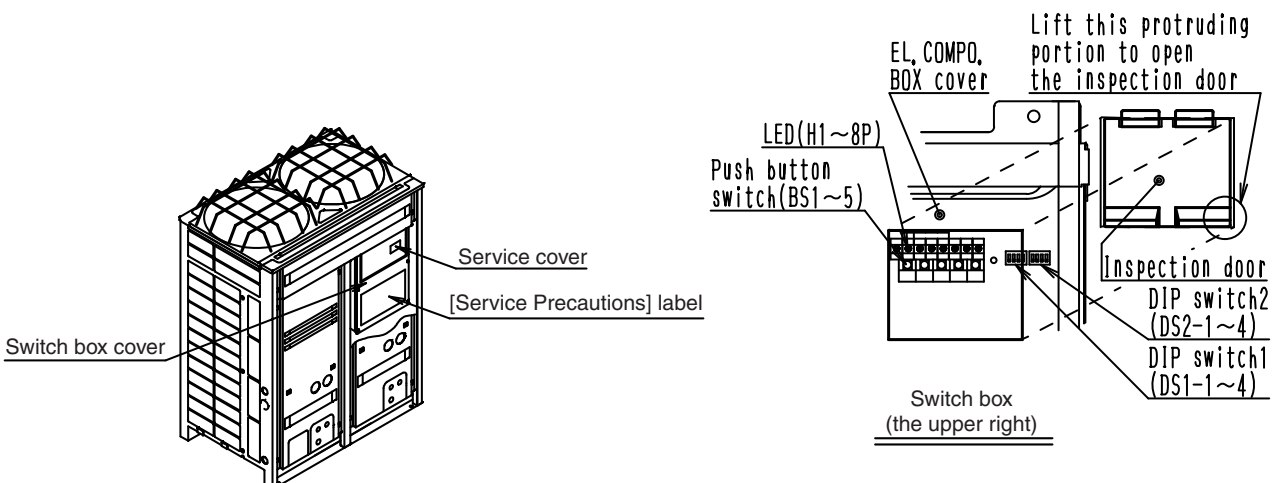
Outdoor unit

Test lamp H2P ON

Can also be set during operation described above.

Indoor unit

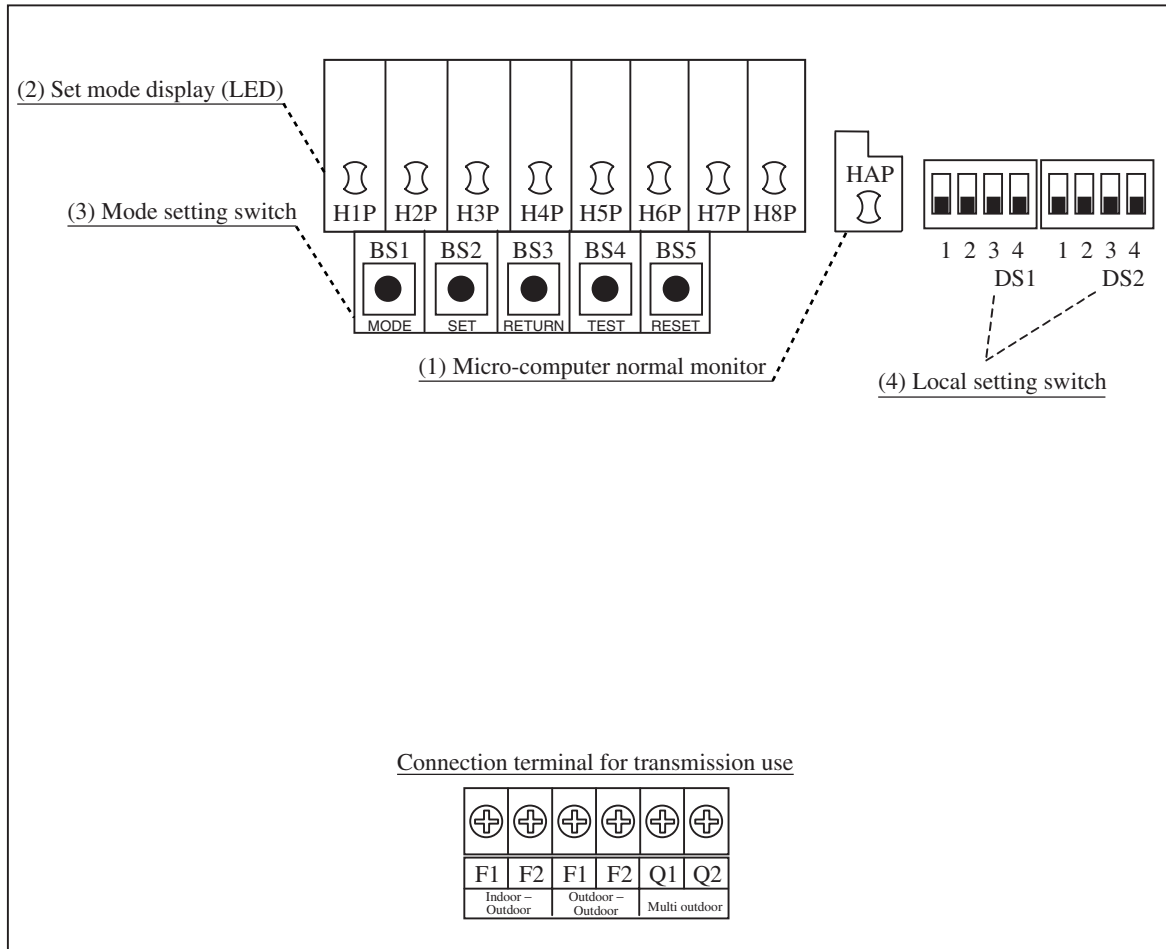
If ON button is pushed during operation described above, the "UH" or "U4" malfunction indicator blinks. (Returns to normal when automatic setting is complete.)



Caution When the 400 volt power supply is applied to "N" phase by mistake, replace Inverter PCB (A2P) and control transformer (T1R, T2R) in switch box together.

2. Outdoor Unit PCB Layout

Outdoor unit PCB



- (1) Micro-computer normal monitor
This monitor blinks while in normal operation, and turns on or off when a malfunction occurs.
- (2) Set mode display (LED)
LEDs display mode according to the setting.
- (3) Mode setting switch
Used to change mode.
- (4) Local setting switch
Used to make field settings.

3. Field Setting

3.1 Field Setting from Remote Controller

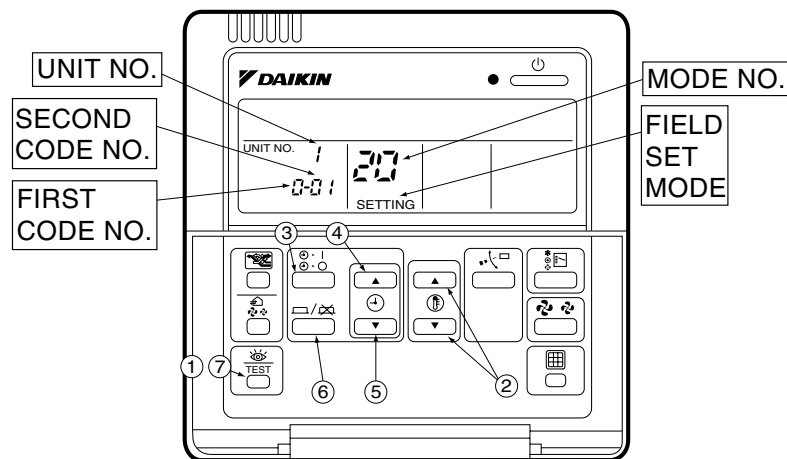
Individual function of indoor unit can be changed from the remote controller. At the time of installation or after service inspection / repair, make the local setting in accordance with the following description.








Wrong setting may cause error.

(When optional accessory is mounted on the indoor unit, setting for the indoor unit may be required to change. Refer to information in the option handbook.)

3.1.1 Wired Remote Controller

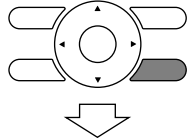
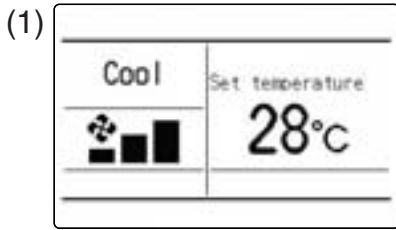
■ BRC1D61



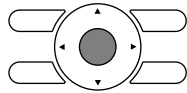
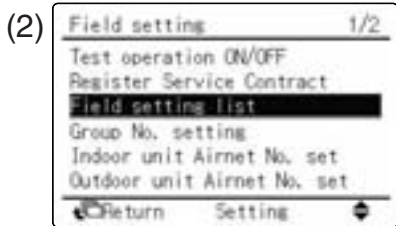
1. When in the normal mode, press the “” button for 4 seconds or more, and the FIELD SET MODE is entered.
2. Select the desired MODE NO. with the “” button (②).
3. During group control, when setting by each indoor unit (mode No. 20, 22 and 23 have been selected), press the “” button (③) and select the INDOOR UNIT NO to be set. (This operation is unnecessary when setting by group.)
4. Press the “” upper button (④) and select FIRST CODE NO.
5. Press the “” lower button (⑤) and select the SECOND CODE NO.
6. Press the “” button (⑥) once and the present settings are SET.
7. Press the “” button (⑦) to return to the NORMAL MODE.

■ BRC1E61

<Basic screen>



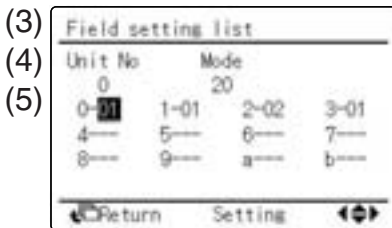
<Field setting menu screen>



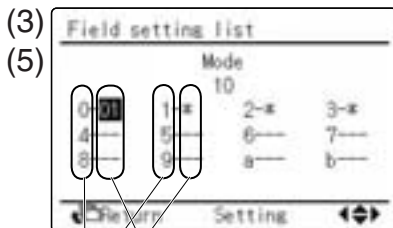
Press Menu/Enter button.

<Field setting screen>

In the case of individual setting per indoor unit

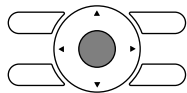


In the case of group total setting



SECOND CODE NO.

FIRST CODE (SW) NO.



Press Menu/Enter button.

1 Press Cancel button for 4 seconds or more.
Field setting menu is displayed.

2 Select **Field setting list** in the field setting menu, and press Menu/Enter button.
Field setting list screen is displayed.

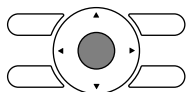
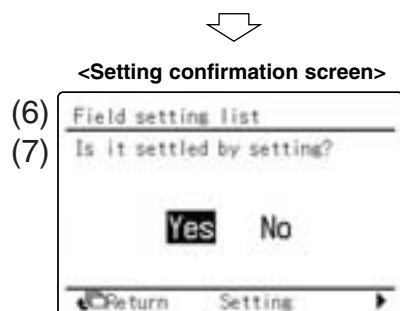
3 Highlight the mode, and select desired "Mode No." by using ▲▼ (Up/Down) button.

4 In the case of setting per indoor unit during group control (When Mode No. such as **20**, **21**, **22**, **23**, **25** are selected), highlight the unit No. and select "Indoor unit No." to be set by using ▲▼ (Up/Down) button. (In the case of group total setting, this operation is not needed.)

[In the case of individual setting per indoor unit, current settings are displayed. And, SECOND CODE NO. "-" means no function.]

5 Highlight SECOND CODE NO. of the FIRST CODE NO. to be changed, and select desired "SECOND CODE NO." by using ▲▼ (Up/Down) button. Multiple identical mode number settings are available.

[In the case of group total setting, all of SECOND CODE NO. which may be set are displayed as "*". "*" is changed to SECOND CODE NO. to be set. And, SECOND CODE NO. "-" means no function.]



Press Menu/Enter button.



Setting confirmation

6 Press Menu/Enter button. Setting confirmation screen is displayed.

7 Select **Yes** and press Menu/Enter button. Setting details are determined and field setting list screen returns.

8 In the case of multiple setting changes, repeat “(3)” to “(7)”.

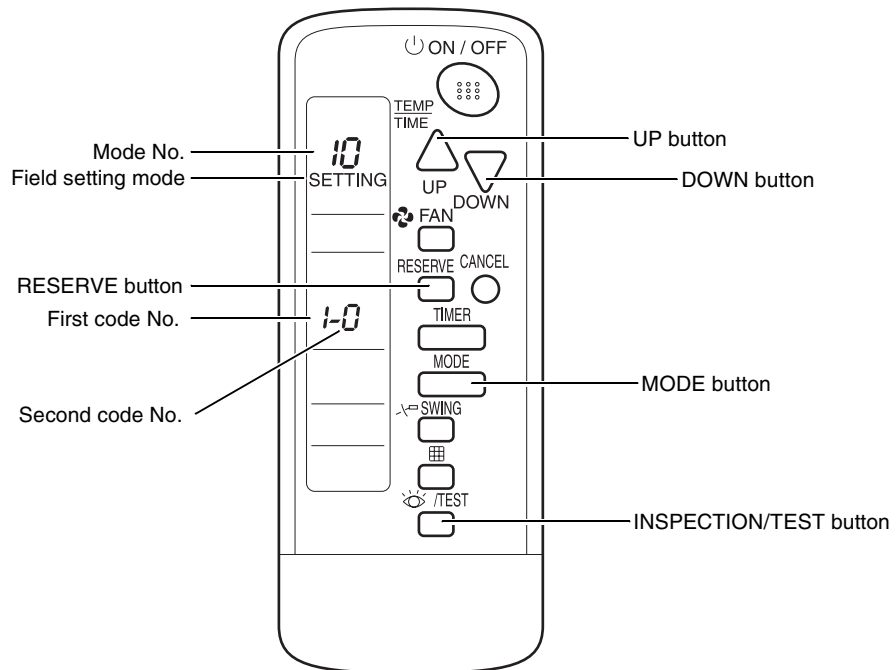
9 After all setting changes are completed, press Cancel button twice.

10 Backlight goes out, and “Connection under check Please wait for a moment” is displayed for initialization. After the initialization, the basic screen returns.

⚠ CAUTION

- When an optional accessory is installed on the indoor unit, settings of the indoor unit may be changed. See the manual of the optional accessory.
- For field setting details of the outdoor unit, see installation manual attached to the outdoor unit.

3.1.2 Wireless Remote Controller



Setting

To set the field settings, you have to change:

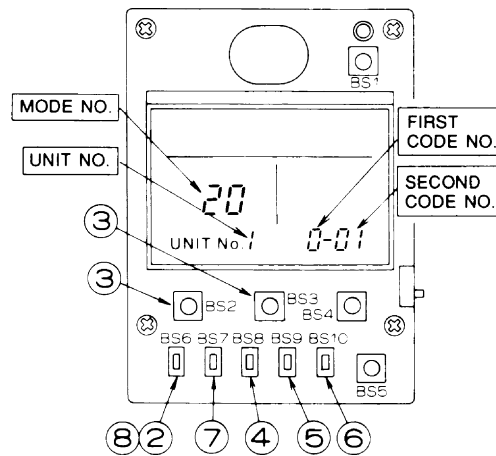
- "Mode No."
- "First code No."
- "Second code No."

To change the field settings, proceed as follows:

Step	Action
1	Hold down the INSPECTION/TEST button for at least 4 s during normal mode to enter the "Field setting mode".
2	Press the MODE button to select the desired "Mode No."
3	Press the UP button to select the "First code No."
4	Press the DOWN button to select the "Second code No."
5	Press the RESERVE button to set the present settings.
6	Press the INSPECTION/TEST button to return to the "Normal mode".

3.1.3 Simplified Remote Controller

BRC2A51
BRC2C51



1. Remove the upper part of remote controller.
2. When in the normal mode, press the [BS6] BUTTON (②) (field set), and the FIELD SET MODE is entered.
3. Select the desired MODE No. with the [BS2] BUTTON (③) (temperature setting ▲) and the [BS3] BUTTON (③) (temperature setting ▼).
4. During group control, when setting by each indoor unit (mode No. 20, 22, and 23 have been selected), push the [BS8] (④) BUTTON (unit No.) and select the INDOOR UNIT NO. to be set. (This operation is unnecessary when setting by group.)
5. Push the [BS9] BUTTON (⑤) (set A) and select FIRST CODE NO.
6. Push the [BS10] BUTTON (⑥) (set B) and select SECOND CODE NO.
7. Push the [BS7] BUTTON (⑦) (set/cancel) once and the present settings are SET.
8. Push the [BS6] BUTTON (⑧) (field set) to return to the NORMAL MODE.
9. (Example) If during group setting and the time to clean air filter is set to FILTER CONTAMINATION - HEAVY, SET MODE NO. to "10", FIRST CODE NO. to "0", and SECOND CODE NO. to "02".

3.1.4 Setting Contents and Code No.

Mode No. Note 2	First Code No.	Setting Contents	Second Code No.(Note 3)								Details No.
			01		02		03		04		
10 (20)	0	Filter contamination heavy/light (Setting for display time to clean air filter) (Sets display time to clean air filter to half when there is heavy filter contamination.)	Light	Ultra long life filter	Approx. 10,000 hrs.	Heavy	Approx. 5,000 hrs.	—	—	(1)	
				Long life filter	Approx. 2,500 hrs.		Approx. 1,250 hrs.				
				Standard filter	Approx. 200 hrs.		Approx. 100 hrs.				
	1	Long life filter type	Long life filter		Ultra long life filter		—		(2)		
2	Thermostat sensor in remote controller	Remote controller/indoor unit		Indoor unit		Remote controller		(3)			
3	Display time to clean air filter calculation (Set when filter sign is not to be displayed.)	Display		No display		—		(4)			
11 (21)	7	Airflow adjustment	OFF		Completion of airflow adjustment		Start of airflow adjustment		(5)		
12 (22)	0	Optional accessories output selection (field selection of output for adaptor for wiring)	Indoor unit turned ON by thermostat		—		Operation output		Malfunction output		(6)
	1	ON/OFF input from outside (Set when ON/OFF is to be controlled from outside.)	Forced OFF		ON/OFF control		External protection device input		—		(7)
	2	Thermostat differential changeover (Set when remote sensor is to be used.)	1°C		0.5°C		—		—		(8)
	3	OFF by thermostat fan speed	LL		Preset airflow		—		—		(9)
	4	Automatic mode differential (automatic temperature differential setting for VRV system heat recovery series cool/heat)	01:0	02:1	03:2	04:3	05:4	06:5	07:6	08:7	(10)
	5	Power failure automatic reset	Not equipped		Equipped		—		—		(11)
	6	Airflow when cooling thermostat is OFF	LL airflow		Preset airflow		—		—		(12)
13 (23)	0	High air outlet velocity (Set when installed in place with ceiling higher than 2.7 m.)	N		H		S		—		(13)
	1	Selection of airflow direction (Set when a blocking pad kit has been installed.)	F (4 directions)		T (3 directions)		W (2 directions)		—		(14)
	3	Airflow direction adjustment (Set at installation of decoration panel.)	Equipped		Not equipped		—		—		(15)
	4	Field set airflow position setting	Draft prevention		Standard		Ceiling Soiling prevention		—		(16)
	5	Setting of the static pressure selection	Standard		High static pressure		—		—		(17)
	6	External static pressure settings	01:30	02:50	03:60	04:70	05:80	06:90	07:100	08:110	(18)
15 (25)	2	Direct duct connection (when the indoor unit and heat reclaim ventilation unit are connected by duct directly.) *Note 6	Not equipped		Equipped		—		—		(19)
	5	Field set selection for individual ventilation setting by remote controller	—		Individual operation		—		—		(20)



Notes :

- Settings are made simultaneously for the entire group, however, if you select the mode No. inside parentheses, you can also set by each individual unit. Setting changes however cannot be checked except in the individual mode for those in parentheses.
- The mode numbers inside parentheses cannot be used by wireless remote controllers, so they cannot be set individually. Setting changes also cannot be checked.
- Marked are factory setting.
- Do not make settings other than those described above. Nothing is displayed for functions the indoor unit is not equipped with.
- "88" may be displayed to indicate the remote controller is resetting when returning to the normal mode.
- If the setting mode to "Equipped", heat reclaim ventilation fan conducts the fan residual operation by linking to indoor unit.
- The FXMQ50-63-80-100-125PVE cannot be set to 30Pa.
 - The FXMQ40PVE cannot be set to 180 or 200Pa.

3.1.5 Applicable range of Field setting

	Ceiling mounted cassette type			Slim Ceiling mounted duct type	Ceiling mounted built-in type	Ceiling Mounted duct type (Middle and high static pressure)	Ceiling mounted duct type	Ceiling suspended type	Wall mounted type	Floor standing type	Concealed Floor standing type	New Ceiling suspended cassette type	Outdoor air processing unit	Details No.
	Round flow	Double flow	Corner type											
	FXFQ	FXCQ	FXKQ											
Filter sign	○	○	○	○	○	○	○	○	○	○	○	○	○	(1)
Ultra long life filter sign	○	○	—	—	—	—	—	—	—	—	—	○	○	(2)
Remote controller thermostat sensor	○	○	○	○	○	○	○	○	○	○	○	○	—	(3)
Set fan speed when thermostat OFF	○	○	○	○	○	○	○	○	○	○	○	○	—	(9) (12)
Airflow auto adjustment	—	—	—	—	—	○	—	—	—	—	—	—	—	(5)
Airflow adjustment Ceiling height	○	—	—	—	—	—	—	○	—	—	—	○	—	(13)
Airflow direction	○	—	—	—	—	—	—	—	—	—	—	○	—	(14)
Airflow direction adjustment (Down flow operation)	—	—	○	—	—	—	—	—	—	—	—	—	—	(15)
Airflow direction adjustment range	○	○	○	—	—	—	—	—	—	—	—	—	—	(16)
Setting static pressure selection	—	—	—	—	—	○	—	—	—	—	—	—	—	(17)
External static pressure setting	—	—	—	○	—	—	—	—	—	—	—	—	—	(18)
Discharge air temp. (Cooling)	—	—	—	—	—	—	—	—	—	—	—	—	○	3.1.7*1
Discharge air temp. (Heating)	—	—	—	—	—	—	—	—	—	—	—	—	○	3.1.7*1

*1 Refer to 3.1.7 Outdoor Air Processing Unit-Field Setting (Remote Controller) on P.205.

3.1.6 Detailed Explanation of Setting Modes

(1) Filter Sign Setting

If switching the filter sign ON time, set as given in the table below.

Set Time

Mode No.	First Code No.	Second Code No.	Standard Filter	Long Life Filter	Ultra Long Life Filter	Setting
10 (20)	0	01	200 hrs.	2,500 hrs.	10,000 hrs.	Contamination Light
		02	100 hrs.	1,250 hrs.	5,000 hrs.	Contamination Heavy

(2) Ultra Long Life Filter Sign Setting

When a Ultra long life filter is installed, the filter sign timer setting must be changed.

Mode No.	First Code No.	Second Code No.	Setting
10 (20)	1	01	Long life filter
		02	Ultra long life filter

(3) Selection of Thermistor

Select the thermistor to control room temperature.

Mode No.	First Code No.	Second Code No.	Thermistor that controls room temperature
10 (20)	2	01	Indoor air thermistor for remote controller and suction air thermistor for indoor unit
		02	Suction air thermistor for indoor unit
		03	Thermistor for remote controller

The factory setting for the Second Code No. is "01" and room temperature is controlled by the indoor unit suction air thermistor and remote controller thermistor.

When the Second Code No. is set to "02", room temperature is controlled by the suction air thermistor.

When the Second Code No. is set to "03", room temperature is controlled by the remote controller thermistor.

(4) "Filter Cleaning" Displayed or Not Displayed

Whether or not to display "Filter Cleaning" after operation of certain duration can be selected.

Mode No.	First Code No.	Second Code No.	"Filter Cleaning" display
10 (20)	3	01	Display
		02	No display

(5) Airflow Adjustment (AUTO)**External Static Pressure Settings**

Make settings in either method (a) or method (b) as explained below.

(a) Use the airflow auto adjustment function to make settings.

Airflow auto adjustment: The volume of blow-off air is automatically adjusted to the rated quantity.

(b) Select External Static Pressure with Remote Controller Check that 01 (OFF) is set for the "SECOND CODE NO." in "MODE NO. 21" for airflow adjustment on an indoor unit basis in Table 4. The "SECOND CODE NO." is set to 01 (OFF) at factory setting. Change the "SECOND CODE NO." as shown in Table according to the external static pressure of the duct to be connected.

Mode No.	First Code No.	Second Code No.	Airflow adjustment
11 (21)	7	01	OFF
		02	Completion of airflow adjustment
		03	Start of airflow adjustment

(6) Optional Output Switching

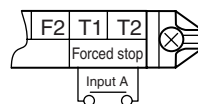
Using this setting, "operation output signal" and "abnormal output signal" can be provided.

Output signal is output between terminals K1 and K2 of "customized wiring adapter," an optional accessory.

Mode No.	First Code No.	Second Code No.	Remarks
12 (22)	0	01	Indoor unit thermostat ON/OFF signal is provided.
		03	Output linked with "Start/Stop" of remote controller is provided.
		04	In case of "Malfunction Display" appears on the remote controller, output is provided.

(7) External ON/OFF Input

This input is used for "ON / OFF operation" and "Protection device input" from the outside. The input is performed from the T1-T2 terminal of the operation terminal block (X1A) in the electric component box.



Mode No.	First Code No.	Second Code No.	Operation by input of the signal A
12 (22)	1	01	ON: Forced stop (prohibition of using the remote controller) OFF: Permission of using the remote controller
		02	OFF → ON: Permission of operation ON → OFF: Stop
		03	ON: Operation OFF: The system stops, then the applicable unit indicates "A0". The other indoor units indicate "U9".

(8) Thermostat Switching

Differential value during thermostat ON/OFF control can be changed. (For details, refer to "6.4 Thermostat Control while in Normal Operation" on P.167.)

Mode No.	First Code No.	Second Code No.	Differential value
12(22)	2	01	1°C
		02	0.5°C

(9) Airflow Setting when Heating Thermostat is OFF

This setting is used to set airflow when heating thermostat is OFF.

- * When thermostat OFF airflow volume up mode is used, careful consideration is required before deciding installation location. During heating operation, this setting takes priority over "(7) Fan Stop When Thermostat is OFF."

Mode No.	First Code No.	Second Code No.	Contents
12 (22)	3	01	LL airflow
		02	Preset airflow

(10) Setting of Operation Mode to "AUTO"

This setting makes it possible to change differential values for mode selection while in automatic operation mode.

Mode No.	First Code No.	Second Code No.							
		01	02	03	04	05	06	07	08
12 (22)	4	0°C	1°C	2°C	3°C	4°C	5°C	6°C	7°C

The automatic operation mode setting is made by the use of the "Operation Mode Selector" button.

(11) Auto Restart after Power Failure Reset

For the air conditioners with no setting for the function, the units will be left in the stop condition when the power supply is reset automatically after power failure reset or the main power supply is turned on again after once turned off. However, for the air conditioners with the setting (same as factory setting), the units may start automatically after power failure reset or the main power supply turned on again (return to the same operation condition as that of before power failure).

For the above reasons, when the unit is set enabling to utilize "Auto restart function after power failure reset", utmost care should be paid for the occurrence of the following situation.



- Caution**
1. The air conditioner starts operation suddenly after power failure reset or the main power supply turned on again. Consequently, the user might be surprised (with question for the reason why).
 2. In the service work, for example, turning off the main power switch during the unit is in operation, and turning on the switch again after the work is completed start the unit operation (the fan rotates).

(12) Airflow when Cooling Thermostat is OFF

This is used to set airflow to "LL airflow" when cooling thermostat is OFF.

Mode No.	First Code No.	Second Code No.	Contents
12 (22)	6	01	LL airflow
		02	Preset airflow

(13) Setting of Normal Airflow

Make the following setting according to the ceiling height. The setting position No. is set to "01" at the factory.

■ In the Case of FXAQ

Mode No.	First Code No.	Second Code No.	Setting
13(23)	0	01	Wall-mounted type: Standard
		02	Wall-mounted type: Slight increase
		03	Wall-mounted type: Normal increase

■ In the Case of FXHQ

Mode No.	First Code No.	Second Code No.	Ceiling Height (m)
13(23)	0	01	2.7 or less
		02	2.7-3.5

■ In the Case of FXFQ25~80 (All round outlet)

Mode No.	First Code No.	Second Code No.	Setting	Ceiling Height (m)
13 (23)	0	01	Standard • All round outlet	≤2.7
		02	High Ceiling (1)	2.7-3
		03	Higher Ceiling (2)	3-3.5

■ In the Case of FXFQ100~125 (All round outlet)

Mode No.	First Code No.	Second Code No.	Setting	Ceiling Height (m)
13 (23)	0	01	Standard • All round outlet	≤3.2
		02	High Ceiling (1)	3.2-3.6
		03	Higher Ceiling (2)	3.6-4.2

■ In the Case of FXFQ25~80 (*24-Way, 3-Way, 2-Way Outlets)

Mode No.	First Code No.	Second Code No.	Setting	Ceiling Height		
				4-way Outlets	3-way Outlets	2-way Outlets
13 (23)	0	01	Standard (N)	Lower than 3.1 m	Lower than 3.0 m	Lower than 3.5 m
		02	High Ceiling (H)	Lower than 3.4 m	Lower than 3.3 m	Lower than 3.8 m
		03	Higher Ceiling (S)	Lower than 4.0 m	Lower than 3.5 m	—

■ In the Case of FXFQ100~125 (*24-Way, 3-Way, 2-Way Outlets)

Mode No.	First Code No.	Second Code No.	Setting	Ceiling Height		
				4-way Outlets	3-way Outlets	2-way Outlets
13 (23)	0	01	Standard (N)	Lower than 3.4 m	Lower than 3.6 m	Lower than 4.2 m
		02	High Ceiling (H)	Lower than 3.9 m	Lower than 4.0 m	Lower than 4.2 m
		03	Higher Ceiling (S)	Lower than 4.5 m	Lower than 4.2 m	—

*1 "Mode No." setting is done in a batch for the group. To make or confirm settings for an individual unit, set the internal mode number in parentheses.

*2 The figure of the ceiling height is for the all round outlet. For the settings for four-direction (part of corner closed off), three-direction and two-direction outlets, see the installation manual and technical guide supplied with the separately sold closure material kit.

■ In the Case of FXUQ71~125

Mode No.	First Code No.	Second Code No.	Setting	Ceiling Height		
				4-way Outlets	3-way Outlets	2-way Outlets
13 (23)	0	01	Standard (N)	Lower than 2.7 m	Lower than 3.0 m	Lower than 3.5 m
		02	High Ceiling (H)	Lower than 3.0 m	Lower than 3.5 m	Lower than 3.8 m
		03	Higher Ceiling (S)	Lower than 3.5 m	Lower than 3.8 m	—

(14) Airflow Direction Setting

Set the airflow direction of indoor units as given in the table below. (Set when optional air outlet blocking pad has been installed.) The second code No. is factory setting to "01."

Mode No.	First Code No.	Second Code No.	Setting
13 (23)	1	01	F : 4-direction airflow
		02	T : 3-direction airflow
		03	W : 2-direction airflow

(15) Operation of Downward Flow Flap: Yes/No

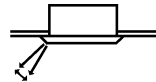
Only the model FXKQ has the function.

When only the front-flow is used, sets yes/no of the swing flap operation of down-flow.

Mode No.	First Code No.	Second Code No.	Setting
13 (23)	3	01	Down-flow operation: Yes
		02	Down-flow operation: No

(16) Setting of Airflow Direction Adjustment Range

Make the following airflow direction setting according to the respective purpose.



Mode No.	First Code No.	Second Code No.	Setting
13 (23)	4	01	Upward (Draft prevention)
		02	Standard
		03	Downward (Ceiling soiling prevention)

* Some indoor unit models are not equipped with draft prevention (upward) function.

(17) Setting of the Static Pressure Selection

■ In the Case of FXDQ20~32PB, FXDQ40~63NB

Model No.	First Code No.	Second Code No.	External static pressure
13 (23)	5	01	Standard (10Pa)
		02	High static pressure (30Pa)

(18) External Static Pressure Settings (for FXMQ-P model)

Mode No.	First Code No.	Second Code No.	External Static Pressure
13 (23)	6	01	30Pa (*1)
		02	50Pa
		03	60Pa
		04	70Pa
		05	80Pa
		06	90Pa
		07	100Pa
		08	110Pa
		09	120Pa
		10	130Pa
		11	140Pa
		12	150Pa
		13	160Pa
		14	180Pa (*2)
		15	200Pa (*2)

The "SECOND CODE NO." is set to 07 (an external static pressure of 100 Pa) at factory set.

*1 The FXMQ50 · 63 · 80 · 100 · 125 · 140PVE cannot be set to 30 Pa.

*2 The FXMQ20 · 25 · 32 · 40PVE cannot be set to 180 or 200 Pa.

(19) Setting of Direct Duct Connection

This is used when "fresh air intake kit equipped with fan" is connected. The indoor fan carries out residual operation for one minute after the thermostat is stopped. (For the purpose of preventing dust on the air filter from falling off.)

Mode No.	First Code No.	Second Code No.	Contents
15 (25)	2	01	Without direct duct connection
		02	With direct duct connection equipped with fan

(20) Individual Setting of Ventilation

This is set to perform individual operation of heat reclaim ventilation using the remote controller/ central unit when heat reclaim ventilation is built in.

(Switch only when heat reclaim ventilation is built in.)

Mode No.	First Code No.	Second Code No.	Contents
15 (25)	5	01	—
		02	Individual operation of ventilation

3.1.7 Outdoor Air Processing Unit - Field Setting (Remote Controller)

Mode No.	First Code No.	Setting contents	Second Code No.														
			01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
10 (20)	0	Stain of filter	2500hr	1250hr	—	—	—	—	—	—	—	—	—	—	—	—	—
	3	Filtering time cumulation	Display	No display	—	—	—	—	—	—	—	—	—	—	—	—	—
12 (22)	1	External ON/OFF input	Forced stop	ON-OFF control	—	—	—	—	—	—	—	—	—	—	—	—	—
	5	Power failure automatic reset	Not equipped	Equipped	—	—	—	—	—	—	—	—	—	—	—	—	—
14 (24)	3	Discharge temperature (cooling)	13°C	14	15	16	17	18	19	20	21	22	23	24	25	25	25
	4	Discharge temperature (heating)	18°C	19	20	21	22	23	24	25	26	27	28	29	30	30	30







Note) Bold face in indicates the factory setting.

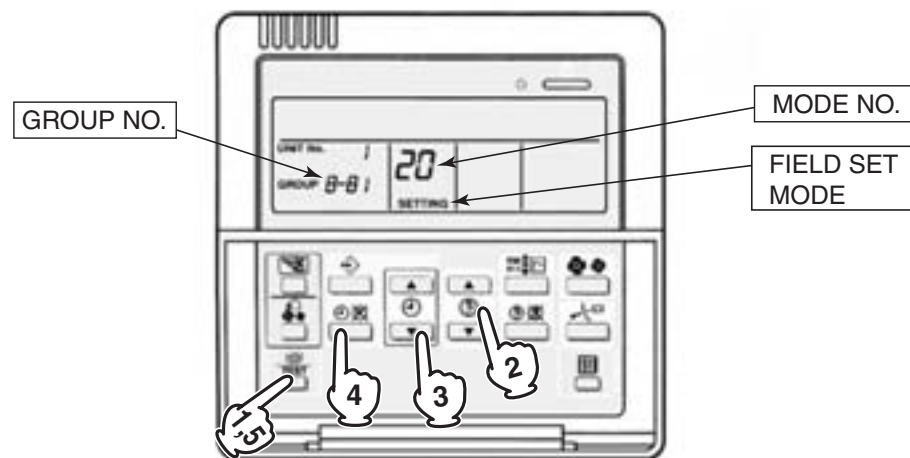
3.1.8 Centralized Control Group No. Setting

■ BRC1D61

In order to conduct the central remote control using the central remote controller and the unified ON/OFF controller, Group No. settings should be made by group using the operating remote controller.

Make Group No. settings for central remote control using the operating remote controller.

1. While in normal mode, press and hold the  switch for a period of 4 seconds or more to set the system to "Field Setting Mode".
2. Select the MODE No. "20" with the "" button.
3. Use the "" button to select the group No. for each group.
(Group numbers increase in the order of 1-00, 1-01, ... 1-15, 2-00, ... 4-15.)
4. Press "" or "" to set the selected group No.
5. Press "" to return to the NORMAL MODE.



Note:

- For setting group No. of HRV and wiring adaptor for other air conditioners, etc., refer to the instruction manual attached.

NOTICE

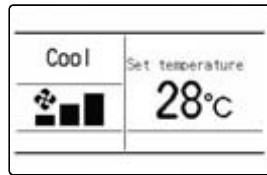
Enter the group No. and installation place of the indoor unit into the attached installation table. Be sure to keep the installation table with the operation manual for maintenance.

■ BRC1E61

In order to conduct the centralized remote control using the centralized remote controller and the unified ON/OFF controller, Group No. settings should be made by group using the operating remote controller.

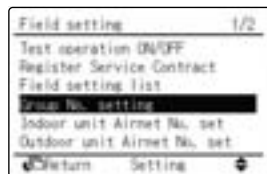
Make Group No. settings for centralized remote control using the operating remote controller.

(1) <Basic screen>



Press and hold Cancel button for 4 seconds or more.
Field setting menu is displayed.

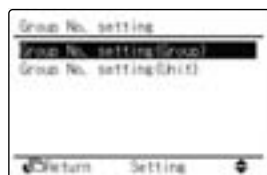
(2) <Field setting menu screen>



Select **Group No. setting** in the field setting menu, and press Menu/Enter button.

Group No. setting screen is displayed.

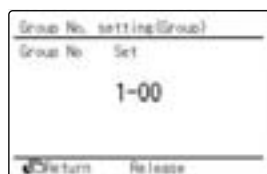
(3) <Group No. setting>



Select Group No. setting (Group), and press Menu/Enter button.

Group No. setting (Group) screen is displayed.

(4) <Group No. setting (Group)>



Select the group No. by using ▲▼ (Up/Down) button.
Press Menu/Enter button.









Note:

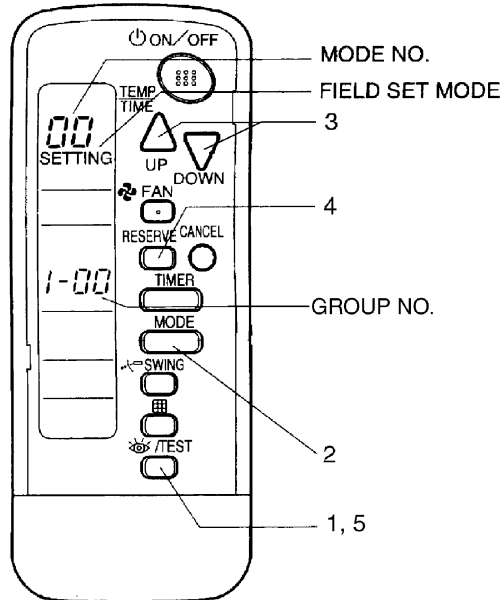
- For setting group No. of HRV and wiring adaptor for other air conditioners, etc., refer to the instruction manual attached.

NOTICE

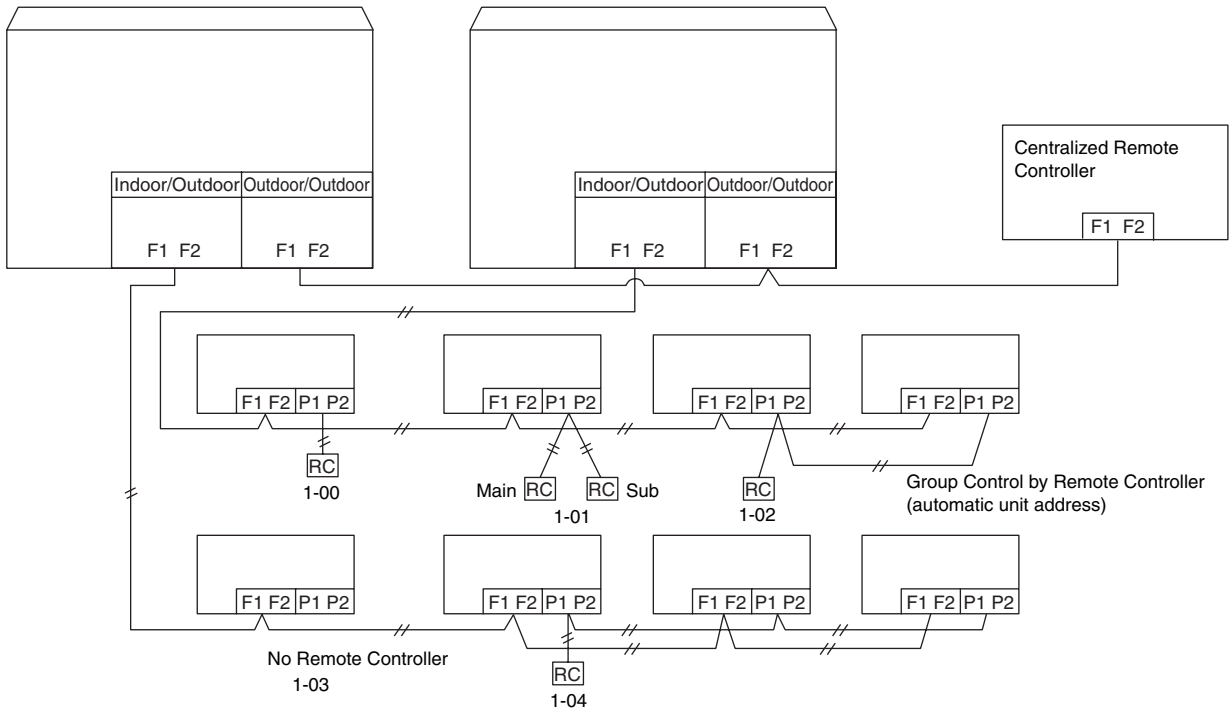
Enter the group No. and installation place of the indoor unit into the attached installation table. Be sure to keep the installation table with the operation manual for maintenance.

BRC7C Type
BRC7E Type
BRC4C Type

- Group No. setting by wireless remote controller for centralized control
- 1. When in the normal mode, push “  ” button for 4 seconds or more, and operation then enters the “field set mode.”
- 2. Set mode No. “00” with “  ” button.
- 3. Set the group No. for each group with “  ” “  ” button (advance/backward).
- 4. Enter the selected group numbers by pushing “  ” button.
- 5. Push “  ” button and return to the normal mode.



Group No. Setting Example



Caution When turning the power supply on, the unit may often not accept any operation while "88" is displaying after all indications were displayed once for about 1 minute on the liquid crystal display. This is not an operative fault.

3.1.9 Setting of Operation Control Mode from Remote Controller (Local Setting)

The operation control mode is compatible with a variety of controls and operations by limiting the functions of the operation remote controller. Furthermore, operations such as remote controller ON/OFF can be limited in accordance with the combination conditions. (Refer to information in the next page.)

Centralized remote controller is normally available for operations. (Except when centralized monitor is connected)

3.1.10 Contents of Control Modes

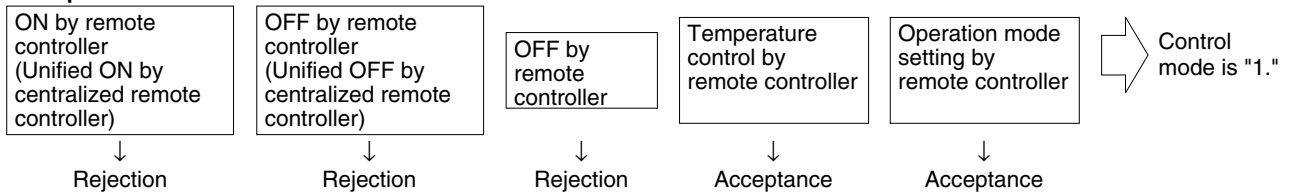
Twenty modes consisting of combinations of the following five operation modes with temperature and operation mode setting by remote controller can be set and displayed by operation modes 0 through 19.

- ◆ ON/OFF control impossible by remote controller
Used when you want to turn on/off by centralized remote controller only.
(Cannot be turned on/off by remote controller.)
- ◆ OFF control only possible by remote controller
Used when you want to turn on by centralized remote controller only, and off by remote controller only.
- ◆ Centralized
Used when you want to turn on by centralized remote controller only, and turn on/off freely by remote controller during set time.
- ◆ Individual
Used when you want to turn on/off by both centralized remote controller and remote controller.
- ◆ Timer operation possible by remote controller
Used when you want to turn on/off by remote controller during set time and you do not want to start operation by centralized remote controller when time of system start is programmed.

How to Select Operation Mode

Whether operation by remote controller will be possible or not for turning on/off, controlling temperature or setting operation mode is selected and decided by the operation mode given on the right edge of the table below.

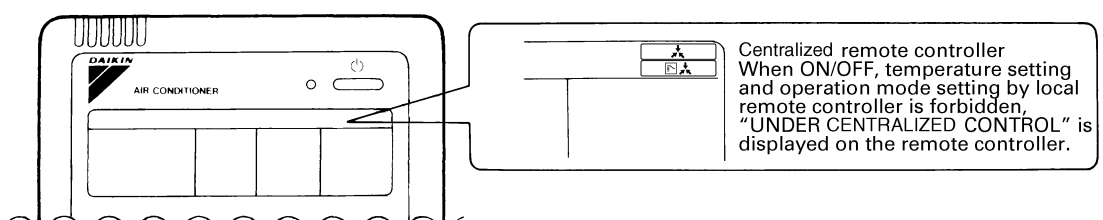
Example



Control mode	Control by remote controller					Control mode		
	Operation		OFF	Temperature control	Operation mode setting			
	Unified operation, individual operation by centralized remote controller, or operation controlled by timer	Unified OFF, individual stop by centralized remote controller, or timer stop						
ON/OFF control impossible by remote controller	Rejection (Example)	Rejection (Example)	Rejection (Example)	Rejection	Acceptance	0		
OFF control only possible by remote controller				Acceptance	Acceptance	Acceptance (Example)	Acceptance (Example)	1 (Example)
						Rejection	Rejection	11
Centralized	Acceptance		Acceptance	Acceptance	Rejection	Acceptance	2	
					Rejection	Rejection	12	
Individual	Acceptance		Acceptance	Acceptance	Acceptance	Acceptance	3	
		Rejection			Rejection	13		
Timer operation possible by remote controller	Acceptance (During timer at ON position only)	Acceptance (During timer at ON position only)	Acceptance	Rejection	Acceptance	4		
				Rejection	Rejection	14		
Timer operation possible by remote controller	Acceptance (During timer at ON position only)	Acceptance (During timer at ON position only)	Acceptance	Acceptance	Acceptance	5		
				Rejection	Rejection	15		
Timer operation possible by remote controller	Acceptance (During timer at ON position only)	Acceptance (During timer at ON position only)	Acceptance	Acceptance	Acceptance	6		
				Rejection	Rejection	16		
Timer operation possible by remote controller	Acceptance (During timer at ON position only)	Acceptance (During timer at ON position only)	Acceptance	Acceptance	Acceptance	7 *1		
				Rejection	Rejection	17		
Timer operation possible by remote controller	Acceptance (During timer at ON position only)	Acceptance (During timer at ON position only)	Acceptance	Acceptance	Acceptance	8		
				Rejection	Rejection	18		
Timer operation possible by remote controller	Acceptance (During timer at ON position only)	Acceptance (During timer at ON position only)	Acceptance	Acceptance	Acceptance	9		
				Rejection	Rejection	19		

Do not select "timer operation possible by remote controller" if not using a remote controller. Operation by timer is impossible in this case.

*1. Factory setting



3.2 Field Setting from Outdoor Unit

3.2.1 Field Setting from Outdoor Unit

■ List of Field Setting Items

This following section indicates the list of field setting items. For the lists of dip switch contents, Setting mode 1, and Setting mode 2, refer to information in tables shown on the following page onward.

For setting items of (*1), refer to detailed information provided on P.223 onward.

Setting item		Content and objective of setting	Overview of setting procedure	
Function setting	1	Setting of COOL/HEAT selection (*1)	<ul style="list-style-type: none"> ■ COOL/HEAT selection methods are possible to select from the following <ol style="list-style-type: none"> (1) Control by each outdoor unit using the indoor unit remote controller (2) Control by each outdoor unit using the COOL/HEAT selection remote controller (3) Batch control by outdoor unit group using the indoor unit remote controller (4) Batch control by outdoor unit group using the COOL/HEAT selection remote controller ■ In order to use the COOL/HEAT selection remote controller, set the DS1-1 on the outdoor unit PCB to OUT. ■ For outdoor unit group control, set the system to "BATCH MASTER" or "SLAVE" while in "Setting mode 1". Then, make setting of COOL/HEAT batch address. 	
	2	Setting of low noise operation (*1)	<p>A. Use external input to step down the upper limit of the fan (factory setting to Step 8), providing low noise level.</p> <ol style="list-style-type: none"> (1) Mode 1: Step 6 or lower (2) Mode 2: Step 5 or lower (3) Mode 3: Step 4 or lower 	<ul style="list-style-type: none"> ■ Use the "External control adaptor for outdoor unit". Set to "External control adaptor for outdoor unit" with No. 12 of "Setting mode 2" and select the mode with No. 25. If necessary, set the "Capacity priority setting" to ON with No. 29.
			<p>B. The low noise operation aforementioned is enabled in nighttime automatic low noise operation mode.</p> <p>Start time: Possible to select in the range of 20:00 to 24:00 hours.</p> <p>End time: Possible to select in the range of 06:00 to 08:00 hours.</p> <p>(Use the said time as a guide since the start time and the end time are estimated according to outdoor temperatures.)</p>	<ul style="list-style-type: none"> ■ Make this setting while in "Setting mode 2". Select a mode with No. 22 of "Setting mode 2". Select the start time with No. 26 and the end time with No. 27. If necessary, set the "Capacity priority setting" to ON with No. 29.
	3	Setting of demand operation (*1)	<ul style="list-style-type: none"> ■ Used to place limits on the compressor operating frequency to control the upper limit of power consumption. (1) Mode 1 of Demand 1: 60% or less of rating (2) Mode 2 of Demand 1: 70% or less of rating (3) Mode 3 of Demand 1: 80% or less of rating (4) Demand 2: 40% or less of rating 	<ul style="list-style-type: none"> ■ For setting with the use of "external control adaptor": Set the system to "External control adaptor for outdoor unit" with No. 12 of Setting mode 2" and select the mode with No. 30.
				<ul style="list-style-type: none"> ■ For setting only in "Setting mode 2": Set the system to Normal demand mode with No. 32 of "Setting mode 2" and select the mode with No. 30.
4	Setting of AIRNET address	<ul style="list-style-type: none"> ■ Used to make address setting with AIRNET connected. 	<ul style="list-style-type: none"> ■ Set the AIRNET to an intended address using binary numbers with No. 13 of "Setting mode 2". 	
5	Setting of high static pressure	<ul style="list-style-type: none"> ■ Make this setting to operate a system with diffuser duct while in high static pressure mode. (Use this setting mode when shields are installed on upper floors or balconies.) * In order to mount the diffuser duct, remove the cover from the outdoor unit fan. 	<ul style="list-style-type: none"> ■ Set No. 18 of "Setting mode 2" to ON. 	

Setting item		Content and objective of setting	Overview of setting procedure	
Service setting	1	Indoor unit fan forced H operation	<ul style="list-style-type: none"> Used to operate the indoor unit in the stopped state in forced H operation mode. 	<ul style="list-style-type: none"> Set No. 5 of "Setting mode 2" to indoor unit forced fan H.
	2	Indoor unit forced operation	<ul style="list-style-type: none"> Used to operate the indoor unit in forced operation mode. 	<ul style="list-style-type: none"> Set No. 6 of "Setting mode 2" to indoor unit forced operation mode.
	3	Change of targeted evaporating temperature (in cooling)	<ul style="list-style-type: none"> In cooling operation, used to change the targeted evaporating temperature for compressor capacity control. 	<ul style="list-style-type: none"> Select high side or low side with No. 8 of "Setting mode 2".
	4	Change of targeted condensing temperature (in heating)	<ul style="list-style-type: none"> In heating operation, used to change the targeted condensing temperature for compressor capacity control. 	<ul style="list-style-type: none"> Select high side or low side with No. 9 of "Setting mode 2".
	5	Setting of defrost selection	<ul style="list-style-type: none"> Used to change a temperature at which the defrost operation is initiated, thus making the initiation easy or hard. 	<ul style="list-style-type: none"> Select fast side or slow side with No. 10 of "Setting mode 2".
	6	Setting of sequential startup	<ul style="list-style-type: none"> Used to start units not in sequence but simultaneously. 	<ul style="list-style-type: none"> Set No. 11 of "Setting mode 2" to NONE.
	7	Emergency operation (*1)	<ul style="list-style-type: none"> If the compressor has a failure, used to prohibit the operation of compressor(s) concerned or outdoor unit(s) concerned and to conduct emergency operation of the system only with operable compressor(s) or outdoor unit(s). 	<ul style="list-style-type: none"> Make this setting while in "Setting mode 2". For system with a single outdoor unit: Set with No. 19 or 42. For system with multiple outdoor units: Set with No. 38, 39, or 40.
	8	Additional refrigerant charging (*1)	<ul style="list-style-type: none"> If a necessary amount of refrigerant cannot be charged due to the stop of outdoor unit, operate the outdoor unit and then refill refrigerant. 	<ul style="list-style-type: none"> Set No. 20 of "Setting mode 2" to ON and then charge refrigerant.
	9	Refrigerant recovery mode (*1)	<ul style="list-style-type: none"> Used to recover refrigerant onsite. With operations of indoor and outdoor units prohibited, fully open the expansion valve of the indoor and outdoor units. 	<ul style="list-style-type: none"> Set No. 21 of "Setting mode 2" to ON.
	10	Vacuumping mode (*1)	<ul style="list-style-type: none"> Used to conduct vacuuming onsite. Fully open the expansion valves of the indoor and outdoor units, and energize part of solenoid valves. Use a vacuum pump to conduct vacuuming. 	<ul style="list-style-type: none"> Set No. 21 of "Setting mode 2" to ON.
	11	Power transistor check mode	<ul style="list-style-type: none"> Used for the troubleshooting of DC compressors. Inverter waveform output makes it possible to judge whether a malfunction results from the compressor or the PCB. 	<ul style="list-style-type: none"> Set No. 28 of "Setting mode 2" to ON.
	12	Setting of model with spare PCB	<ul style="list-style-type: none"> In order to replace the PCB by a spare one, be sure to make model setting. 	<ul style="list-style-type: none"> For this setting, set the DS2-2, -3, and-4 switches on the PCB to the model concerned.

For setting items of (*1), refer to detailed information provided on P.223 onward.

■ **Setting by DIP switches**

Using DIP switches on the PCB enables field setting shown below. However, make no changes of factory settings except for DS1-1.

Dipswitch		Setting item	Description
No.	Setting		
DS1-1	ON	Cool / Heat select	Used to set cool / heat select by Cool/Heat selector equipped with outdoor unit.
	OFF (Factory setting)		
DS1-2 ~DS1-4	ON	Not used	Do not change the factory settings.
	OFF (Factory setting)		
DS2-1 ~4	ON	Not used	Do not change the factory settings.
	OFF (Factory setting)		

Setting at replacement by spare PCB

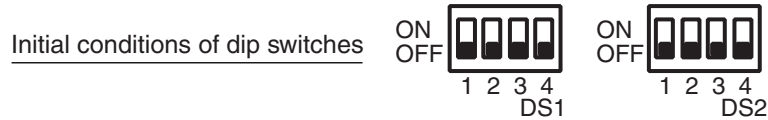


Caution

DIP switch Setting after changing the main PCB (A1P) to spare PCB

After the replacement by the spare PCB, be sure to make settings shown below.

When you change the main PCB (A1P) to spare PCB, please carry out the following setting.



DIP Switch Detail

DS No.	Item	Contents							
DS1-1	Cool/Heat change over setting	ON	COOL/HEAT setting is made with the use of a Cool/Heat selector mounted to the outdoor unit.						
		OFF (Factory setting of spare PCB)	COOL/HEAT setting is not made with the use of a Cool/Heat selector mounted to the outdoor unit.						
DS1-2	Power supply specification	ON	200V class (220V)						
		OFF (Factory setting of spare PCB)	400V class (380V)						
DS1-3	Cooling only/Heat Pump setting	ON	Cooling only setting						
		OFF (Factory setting of spare PCB)	Heat Pump setting						
DS1-4	Unit allocation setting	ON	Make the following settings according to allocation of unit. (All models are set to OFF at factory.)						
DS2-1		OFF (Factory setting of spare PCB)	Domestic Japan	Overseas General	Europe				
DS2-1			OFF	OFF	ON				
DS2-1	DS2-1	OFF	ON	OFF					
DS2-2	Model setting	Make the following settings according to models of outdoor units. (All models are set to OFF at factory.)							
DS2-3		RXYQ5P(A)	RXYQ8P(A)	RXYQ10P(A)	RXYQ12P(A)	RXYQ14P(A)	RXYQ16P(A)	RXYQ18P(A)	
DS2-4		DS2-2	OFF	OFF	ON	OFF	ON	OFF	ON
DS2-4		DS2-3	OFF	ON	ON	OFF	OFF	ON	ON
DS2-4	DS2-4	OFF	OFF	OFF	ON	ON	ON	ON	

* If the DS1-1~1-4, DS2-2~2-4 setting has not been carried out, error code "UA" are displayed and unit can not be operated.



Refer "DS1-1~4, DS2-1~4 setting detail" on next page.

“Detail of DS1-1~4, DS2-1~4 setting” (for Overseas general)

Unit	Setting method (■ represents the position of switches)	
Heat Pump (5HP) RXYQ5PAY1 RXYQ5PAYL, PTL		Set DS2-1 to ON.
Heat Pump (8HP) RXYQ8PAY1 RXYQ8PAYL, PTL		Set DS2-1 and DS2-3 to ON.
Heat Pump (10HP) RXYQ10PAY1 RXYQ10PAYL, PTL		Set DS2-1, DS2-2 and DS2-3 to ON.
Heat Pump (12HP) RXYQ12PAY1 RXYQ12PAYL, PTL		Set DS2-1 and DS2-4 to ON.
Heat Pump (14HP) RXYQ14PAY1 RXYQ14PAYL, PTL		Set DS2-1, DS2-2 and DS2-4 to ON.
Heat Pump (16HP) RXYQ16PAY1 RXYQ16PAYL, PTL		Set DS2-1, DS2-3 and DS2-4 to ON.
Heat Pump (18HP) RXYQ18PAY1 RXYQ18PAYL, PTL		Set DS2-1, DS2-2, DS2-3, and DS2-4 to ON.

■ **Setting by BS button switches**

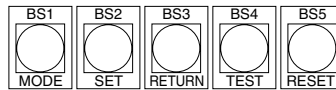
The following settings are made by BS button switches on PCB.
 In case of multi-outdoor unit system, various items should be set with the master unit.
 (Setting with the slave unit is disabled.)

The master unit and slave unit can be discriminated with the LED display as shown below.

LED display

	MODE H1P	TEST H2P	COOL/HEAT select			Low noise H6P	Demand H7P	Multi; H8P
			IND H3P	MASTER H4P	SLAVE H5P			
Single-outdoor-unit system	●	●	○	●	●	●	●	●
Outdoor-multi system	Master	●	○	●	●	●	●	○
	Slave 1	●	●	●	●	●	●	◐
	Slave 2	●	●	●	●	●	●	●

(Factory setting)



(V2760)

There are the following three setting modes.

① **Setting mode 1 (H1P off)**

Initial status (when normal) : Used to select the cool/heat setting. Also indicates during “abnormal”, “low noise control” and “demand control”.

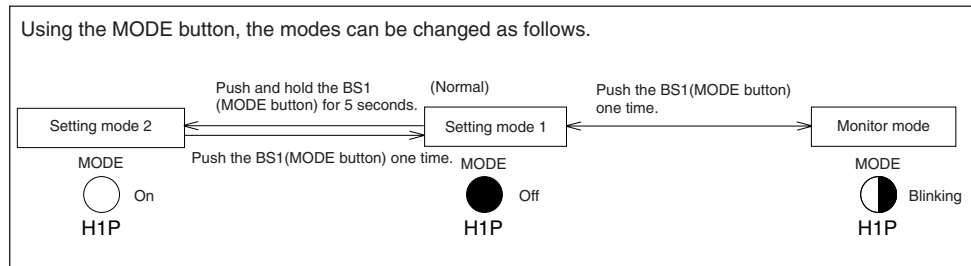
② **Setting mode 2 (H1P on)**

Used to modify the operating status and to set program addresses, etc. Usually used in servicing the system.

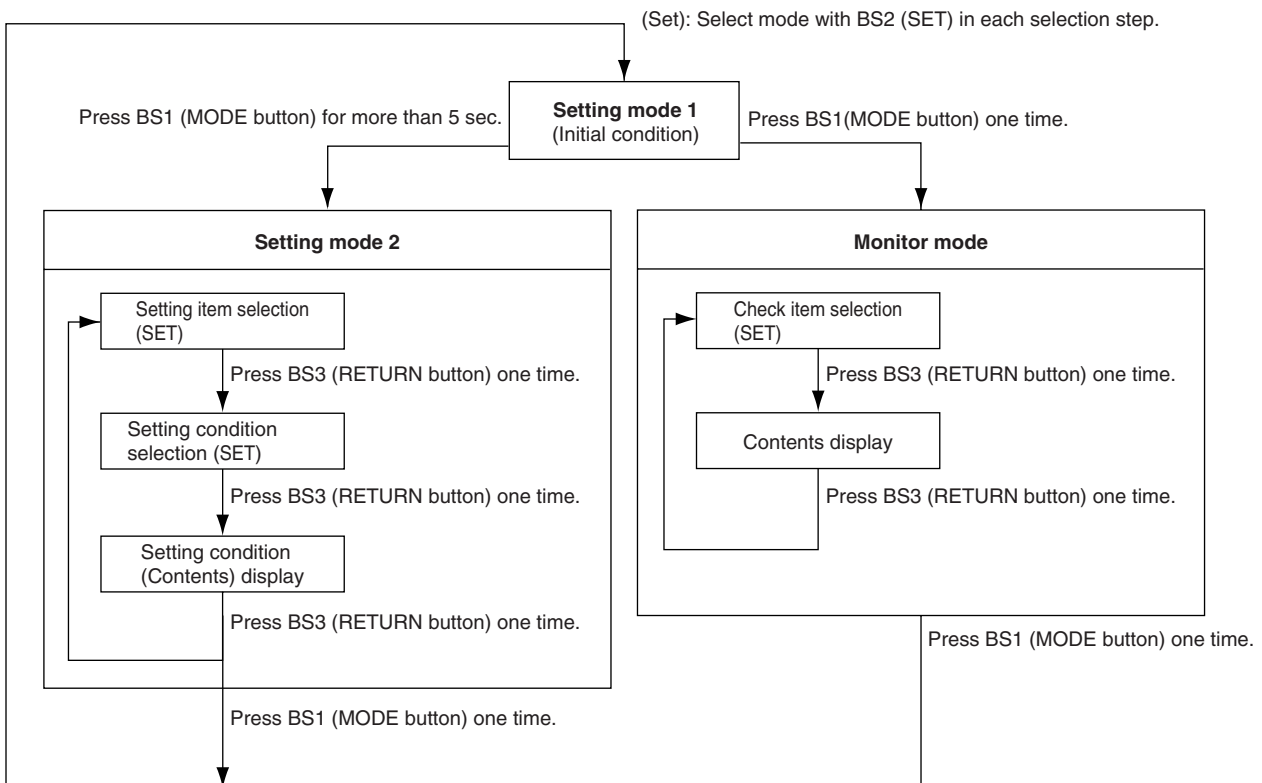
③ **Monitor mode (H1P blinks)**

Used to check the program made in Setting mode 2.

■ **Mode changing procedure 1**



■ **Mode changing procedure 2**

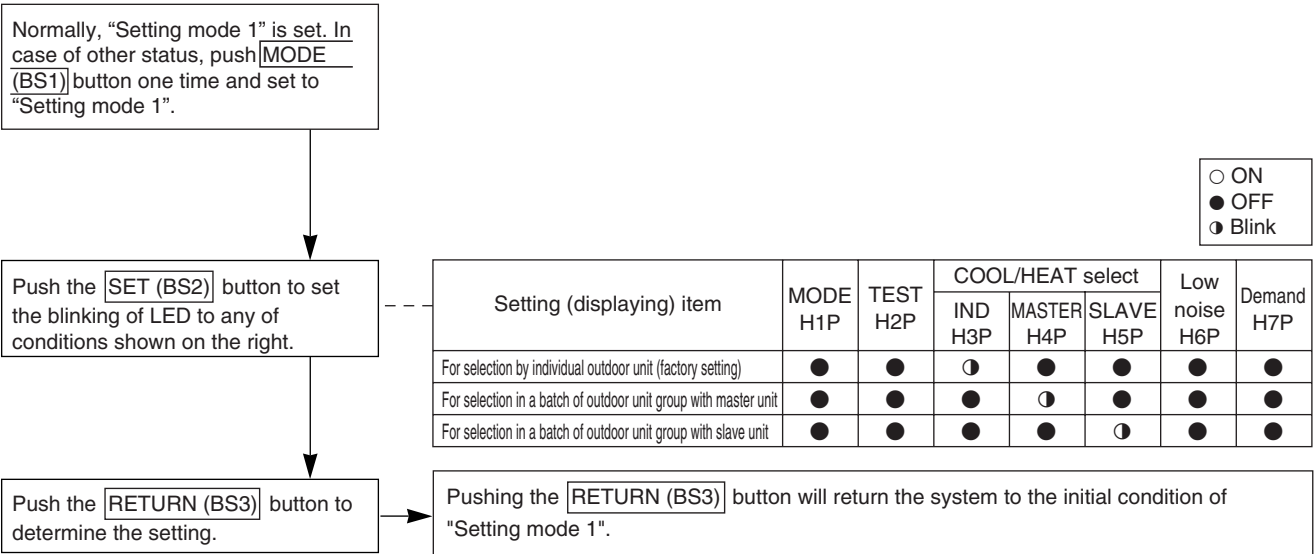


a. "Setting mode 1"

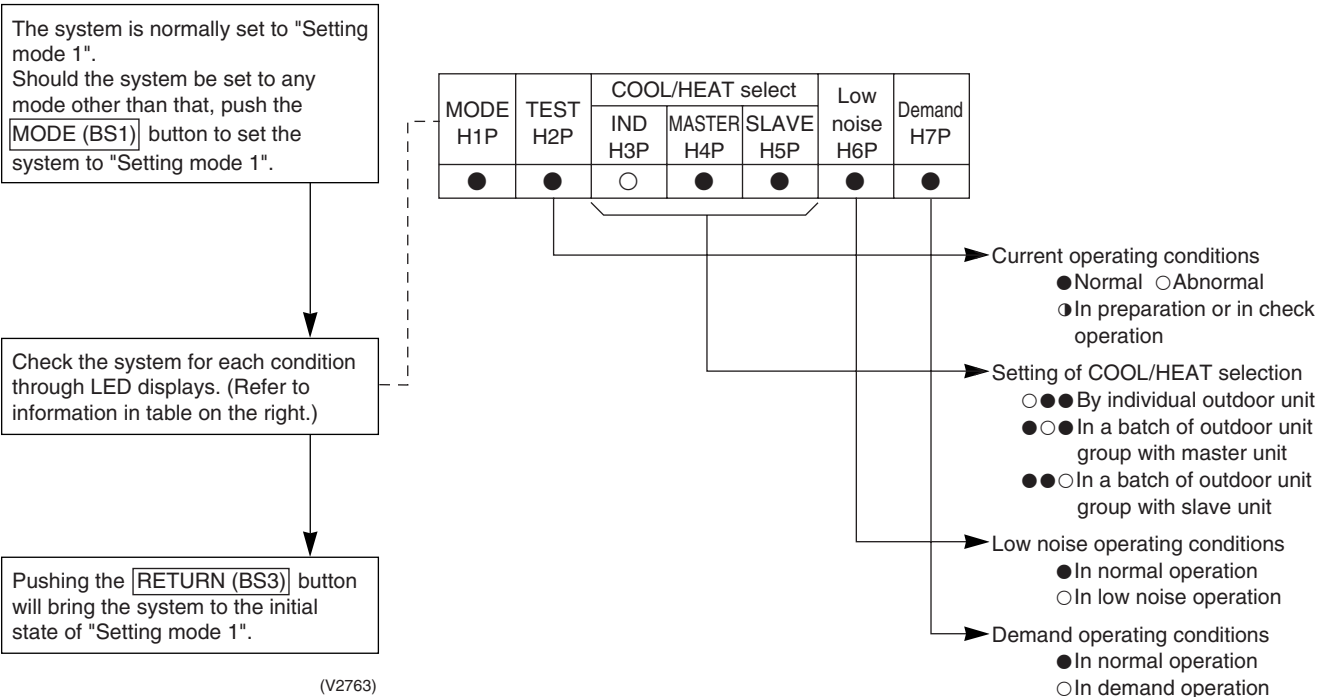
This mode is used to set and check the following items.

1. Set items In order to make COOL/HEAT selection in a batch of outdoor unit group, change the setting.
 - COOL/HEAT selection (IND) Used to select COOL or HEAT by individual outdoor unit (factory setting).
 - COOL/HEAT selection (MASTER) Used to select COOL or HEAT by outdoor unit group with the master unit.
 - COOL/HEAT selection (SLAVE) Used to select COOL or HEAT by outdoor unit group with the slave unit.
2. Check items The following items can be checked.
 - (1) Current operating conditions (Normal / Abnormal / In check operation)
 - (2) Setting conditions of COOL/HEAT selection (Individual / Batch master / Batch slave)
 - (3) Low noise operating conditions (In normal operation / In low noise operation)
 - (4) Demand operating conditions (In normal operation / In demand operation)

Procedure for changing COOL/HEAT selection setting



Procedure for checking check items



b. "Setting mode 2"

Push and hold the **MODE (BS1)** button for 5 seconds and set to "Setting mode 2".

<Selection of setting items>

Push the **SET (BS2)** button and set the LED display to a setting item shown in the table on the right.

↓
Push the **RETURN (BS3)** button and decide the item. (The present setting condition is blinked.)

<Selection of setting conditions>

Push the **SET (BS2)** button and set to the setting condition you want.

↓
Push the **RETURN (BS3)** button and decide the condition.

Push the **RETURN (BS3)** button and set to the initial status of "Setting mode 2".

* If you become unsure of how to proceed, push the **MODE (BS1)** button and return to setting mode 1.

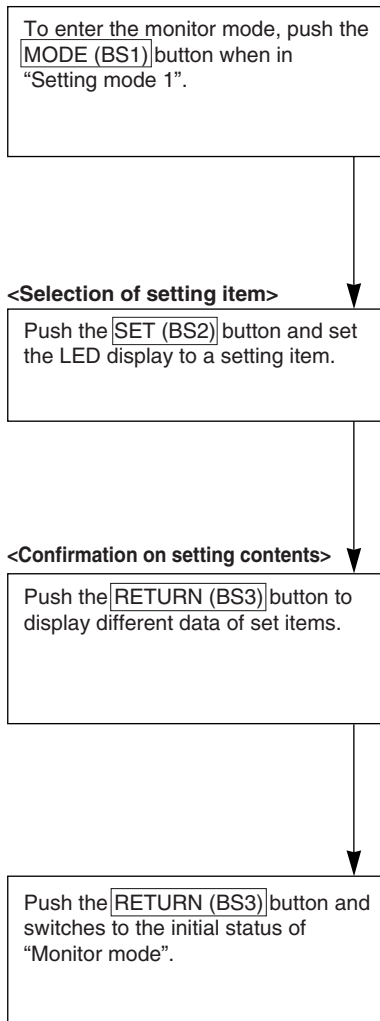
No.	Setting item	Description
0	Digital pressure gauge kit display	Used to make setting of contents to display on the digital pressure gauges (e.g. pressure sensors and temperature sensors)
1	Cool/heat unified address	Sets address for cool/heat unified operation.
2	Low noise/demand address	Address for low noise/demand operation
3	Test operation settings	Used to conduct test operation without making changes to the PCB and replacing the refrigerant, after the completion of maintenance.
5	Indoor unit forced fan H	Allows forced operation of indoor unit fan while unit is stopped. (H tap)
6	Indoor unit forced operation	Allows forced operation of indoor unit.
8	Te setting	Target evaporation temperature for cooling
9	Tc setting	Target condensation temperature for heating
10	Defrost changeover setting	Changes the temperature condition for defrost and sets to quick defrost or slow defrost.
11	Sequential operation setting	Sets sequential operation (Factory setting to ON)
12	External low noise setting / Demand setting	Reception of external low noise or demand signal
13	AIRNET address	Set address for AIRNET.
18	High static pressure setting	Make this setting in the case of operating in high static pressure mode with diffuser duct mounted. (In order to mount the diffuser duct, remove the cover from the outdoor unit fan.)
19	Emergency operation (STD compressor operation prohibited)	Used to operate system only with inverter compressor when STD compressor malfunctions. This is a temporary operation extremely impairing comfortable environment. Therefore, prompt replacement of the compressor is required. (This operation, however, is not set with RXYQ5, 8P(A).)
20	Additional refrigerant charge operation setting	Carries out additional refrigerant charge operation.
21	Refrigerant recovery/vacuuming mode setting	Sets to refrigerant recovery or vacuuming mode.
22	Night-time low noise setting	Sets automatic nighttime low noise operation in a simple way. The operating time is based on "Starting set" and "Ending set".
24	ENECUT test operation	Used to forcibly turn ON the ENECUT. (Be noted that the ENECUT is only functional with outdoor unit in the stopped state - Japanese domestic model only.)
25	Setting of external low noise level	Sets low noise level when the low noise signal is input from outside.
26	Night-time low noise operation start setting	Sets starting time of nighttime low noise operation. (Night-time low noise setting is also required.)
27	Night-time low noise operation end setting	Sets ending time of nighttime low noise operation. (Night-time low noise setting is also required.)
28	Power transistor check mode *Check after disconnection of compressor wires	Used for trouble diagnosis of DC compressor. Since the waveform of inverter is output without wiring to the compressor, it is convenient to probe whether the trouble comes from the compressor or PCB.
29	Capacity priority setting	If the capacity control is required, the low noise control is automatically released by this setting during carrying out low noise operation and nighttime low noise operation.
30	Demand setting 1	Changes target value of power consumption when demand control 1 is input.
32	Normal demand setting	Normally enables demand control 1 without external input. (Effective to prevent a problem that circuit breaker of small capacity is shut down due to large load.)

No.	Setting item	Description
38	Emergency operation (Setting for the master unit operation prohibition in multi-outdoor-unit system)	
39	Emergency operation (Setting for the slave unit 1 operation prohibition in multi-outdoor-unit system)	Used to temporarily prohibit the applicable outdoor unit from operating should there be any faulty part in multi-outdoor-unit system. Since the comfortable environment is extremely impaired, prompt replacement of the part is required.
40	Emergency operation (Setting for the slave unit 2 operation prohibition in multi-outdoor-unit system)	
42	Emergency operation (prohibition of INV compressor operation)	

No.	Setting item display								Setting condition display		
	Setting item	MODE H1P	TEST H2P	C/H selection			Low noise H6P	Demand H7P			* Factory setting
				IND H3P	Master H4P	Slave H5P					
0	Digital pressure gauge kit display	○	●	●	●	●	●	●	Address	0	○ ● ● ● ● ● ● ● *
									Binary number	1	○ ● ● ● ● ● ● ○
									(4 digits)	~	15
1	Cool / Heat Unified address	○	●	●	●	●	●	○	Address	0	○ ● ● ● ● ● ● ● *
									Binary number	1	○ ● ● ● ● ● ● ○
									(6 digits)	~	31
2	Low noise/demand address	○	●	●	●	●	○	●	Address	0	○ ● ● ● ● ● ● ● *
									Binary number	1	○ ● ● ● ● ● ● ○
									(6 digits)	~	31
3	Test operation setting	○	●	●	●	●	○	○	Test operation: OFF	○ ● ● ● ● ● ● ○ *	
									Test operation: ON	○ ● ● ● ● ● ● ●	
5	Indoor unit forced fan H	○	●	●	●	○	●	○	Normal operation	○ ● ● ● ● ● ● ○ *	
									Indoor forced fan H	○ ● ● ● ● ● ● ●	
6	Indoor forced operation	○	●	●	●	○	○	●	Normal operation	○ ● ● ● ● ● ● ○ *	
									Indoor forced operation	○ ● ● ● ● ● ● ●	
8	Te setting	○	●	●	○	●	●	●	Low (Level L)	○ ● ● ● ● ● ● ○	
									Normal (Level M)	○ ● ● ● ● ● ● ● *	
									High① } (Level H)	○ ● ● ● ● ● ● ○	
										High②	○ ● ● ● ● ● ● ●
										High③	○ ● ● ● ● ● ● ○
										High④	○ ● ● ● ● ● ● ●
High⑤	○ ● ● ● ● ● ● ○										
9	Tc setting	○	●	●	○	●	●	○	Low	○ ● ● ● ● ● ● ○	
									Normal (factory setting)	○ ● ● ● ● ● ● ● *	
									High	○ ● ● ● ● ● ● ●	
10	Defrost changeover setting	○	●	●	○	●	○	●	Slow defrost	○ ● ● ● ● ● ● ○	
									Normal (factory setting)	○ ● ● ● ● ● ● ● *	
									Quick defrost	○ ● ● ● ● ● ● ●	
11	Sequential operation setting	○	●	●	○	●	○	○	OFF	○ ● ● ● ● ● ● ○	
									ON	○ ● ● ● ● ● ● ● *	
12	External low noise setting/demand setting	○	●	●	○	○	●	●	External low noise/demand: NO	○ ● ● ● ● ● ● ○ *	
									External low noise/demand: YES	○ ● ● ● ● ● ● ●	
13	AIRNET address	○	●	●	○	○	●	○	Address	0	○ ● ● ● ● ● ● ● *
									Binary number	1	○ ● ● ● ● ● ● ○
									(6 digits)	~	63
18	High static pressure setting	○	●	○	●	●	○	●	High static pressure setting: OFF	○ ● ● ● ● ● ● ○ *	
									High static pressure setting: ON	○ ● ● ● ● ● ● ●	
19	Emergency operation (STD compressor is inhibited to operate.)	○	●	○	●	●	○	○	OFF	○ ● ● ● ● ● ● ● *	
									STD 1, 2 operation: Inhibited	○ ● ● ● ● ● ● ○	
									STD 2 operation: Inhibited	○ ● ● ● ● ● ● ●	
20	Additional refrigerant charge operation setting	○	●	○	●	○	●	●	Refrigerant charging: OFF	○ ● ● ● ● ● ● ○ *	
									Refrigerant charging: ON	○ ● ● ● ● ● ● ●	
21	Refrigerant recovery/vacuuming mode setting	○	●	○	●	○	●	○	Refrigerant recovery / vacuuming: OFF	○ ● ● ● ● ● ● ○ *	
									Refrigerant recovery / vacuuming: ON	○ ● ● ● ● ● ● ●	

No.	Setting item display								Setting condition display * Factory setting
	Setting item	MODE H1P	TEST H2P	C/H selection			Low noise H6P	Demand H7P	
				IND H3P	Master H4P	Slave H5P			
22	Night-time low noise setting	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	OFF <input type="radio"/> ● ● ● ● ● ● ● ● * Level 1 (outdoor fan with 6 step or lower) <input type="radio"/> ● ● ● ● ● ● ● ● Level 2 (outdoor fan with 5 step or lower) <input type="radio"/> ● ● ● ● ● ● ● ● Level 3 (outdoor fan with 4 step or lower) <input type="radio"/> ● ● ● ● ● ● ● ●
24	ENECUT test operation (Domestic Japan only)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	ENECUT output OFF <input type="radio"/> ● ● ● ● ● ● ● ● * ENECUT output forced ON <input type="radio"/> ● ● ● ● ● ● ● ●
25	Low noise setting	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Level 1 (outdoor fan with 6 step or lower) <input type="radio"/> ● ● ● ● ● ● ● ● Level 2 (outdoor fan with 5 step or lower) <input type="radio"/> ● ● ● ● ● ● ● ● * Level 3 (outdoor fan with 4 step or lower) <input type="radio"/> ● ● ● ● ● ● ● ●
26	Night-time low noise operation start setting	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	About 20:00 <input type="radio"/> ● ● ● ● ● ● ● ● About 22:00 (factory setting) <input type="radio"/> ● ● ● ● ● ● ● ● * About 24:00 <input type="radio"/> ● ● ● ● ● ● ● ●
27	Night-time low noise operation end setting	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	About 6:00 <input type="radio"/> ● ● ● ● ● ● ● ● About 7:00 <input type="radio"/> ● ● ● ● ● ● ● ● About 8:00 (factory setting) <input type="radio"/> ● ● ● ● ● ● ● ● *
28	Power transistor check mode	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	OFF <input type="radio"/> ● ● ● ● ● ● ● ● * ON <input type="radio"/> ● ● ● ● ● ● ● ●
29	Capacity priority setting	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	OFF <input type="radio"/> ● ● ● ● ● ● ● ● * ON <input type="radio"/> ● ● ● ● ● ● ● ●
30	Demand setting 1	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	60 % demand <input type="radio"/> ● ● ● ● ● ● ● ● 70 % demand <input type="radio"/> ● ● ● ● ● ● ● ● * 80 % demand <input type="radio"/> ● ● ● ● ● ● ● ●
32	Normal demand setting	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	OFF <input type="radio"/> ● ● ● ● ● ● ● ● * ON <input type="radio"/> ● ● ● ● ● ● ● ●
38	Emergency operation (Master unit with multi-outdoor-unit system is inhibited to operate.)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	OFF <input type="radio"/> ● ● ● ● ● ● ● ● * Master unit operation: Inhibited <input type="radio"/> ● ● ● ● ● ● ● ●
39	Emergency operation (Slave unit 1 with multi-outdoor-unit system is inhibited to operate.)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	OFF <input type="radio"/> ● ● ● ● ● ● ● ● * Slave unit 1 operation: Inhibited <input type="radio"/> ● ● ● ● ● ● ● ●
40	Emergency operation (Slave unit 2 with multi-outdoor-unit system is inhibited to operate.)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	OFF <input type="radio"/> ● ● ● ● ● ● ● ● * Slave unit 2 operation: Inhibited <input type="radio"/> ● ● ● ● ● ● ● ●
42	Emergency operation (prohibition of INV compressor operation)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Normal operation <input type="radio"/> ● ● ● ● ● ● ● ● * Emergency operation (prohibition of INV compressor operation) <input type="radio"/> ● ● ● ● ● ● ● ●

c. Monitor mode



* Push the **MODE (BS1)** button and returns to "Setting mode 1".

No.	Setting item	LED display							Data display
		H1P	H2P	H3P	H4P	H5P	H6P	H7P	
0	Various settings	●	●	●	●	●	●	●	Lower 4 digits
1	C/H unified address	●	●	●	●	●	●	○	Lower 6 digits
2	Low noise/demand address	●	●	●	●	●	○	●	
3	Not used	●	●	●	●	●	○	○	
4	AIRNET address	●	●	●	●	○	●	●	
5	Number of connected indoor units *1	●	●	●	●	○	●	○	
6	Number of connected BS units *2	●	●	●	●	○	○	●	
7	Number of connected zone units (Fixed to "0")	●	●	●	●	○	○	○	Lower 4 digits: upper
8	Number of outdoor units *3	●	●	●	○	●	●	●	
9	Number of BS units *4	●	●	●	○	●	●	○	Lower 4 digits: lower
10	Number of BS units *4	●	●	●	○	●	○	●	Lower 6 digits
11	Number of zone units	●	●	●	○	●	○	○	Lower 4 digits: upper
12	Number of terminal units *5	●	●	●	○	○	●	●	Lower 4 digits: lower
13	Number of terminal units *5	●	●	●	○	○	●	○	Malfunction code table Refer to P. 253~256
14	Contents of malfunction (the latest)	●	●	●	○	○	○	●	
15	Contents of malfunction (1 cycle before)	●	●	●	○	○	○	○	
16	Contents of malfunction (2 cycle before)	●	●	○	●	●	●	●	
20	Contents of retry (the latest)	●	●	○	●	○	●	●	
21	Contents of retry (1 cycle before)	●	●	○	●	○	●	○	Lower 6 digits
22	Contents of retry (2 cycle before)	●	●	○	●	○	○	●	
25	Number of multi connection outdoor units	●	●	○	○	●	●	○	

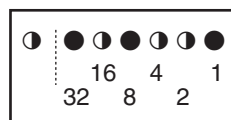
The numbers in the "No." column represent the number of times to press the SET (BS2) button.

- *1: Number of connected indoor units
Used to make setting of the number of indoor units connected to an outdoor unit.
- *2: Number of connected BS units
Used to make setting of the number of BS units connected to an outdoor unit.
- *3: Number of outdoor units
Used to make setting of the number of outdoor units connected to DIII-NET that is one of the communication lines.
- *4: Number of BS units
Used to make setting of the number of BS units connected to DIII-NET that is one of the communication lines.
- *5: Number of terminal units
Used to make setting of the number of indoor units connected to DIII-NET that is one of the communication lines.
(Only available for VRV indoor units)

Setting item 0 Display contents of “Number of units for various settings”

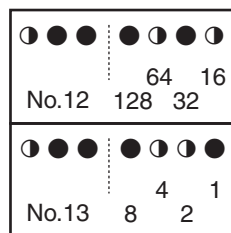
EMG operation / backup operation setting	ON	●	●	●	○	●	●	●
	OFF	●	●	●	●	●	●	●
Defrost select setting	Short	●	●	●	○	●	●	●
	Medium	●	●	●	●	○	●	●
	Long	●	●	●	●	●	●	●
Te setting	L	●	●	●	●	●	●	●
	M	●	●	●	●	●	○	●
	H ①~⑤	●	●	●	●	●	○	●
Tc setting	L	●	●	●	●	●	●	●
	M	●	●	●	●	●	●	○
	H	●	●	●	●	●	●	○

★ Data such as addresses and number of units is expressed as binary numbers; the two ways of expressing are as follows:



The No. 1 cool/heat unified address is expressed as a binary number consisting of the lower 6 digits. (0 - 63)

In ① the address is 010110 (binary number), which translates to $16 + 4 + 2 = 22$ (base 10 number). In other words, the address is 22.



The number of terminal blocks for No. 12 and 13 is expressed as an 8-digit binary number, which is the combination of four upper, and four lower digits for No. 12 and 13 respectively. (0 - 128)

In ② the address for No. 12 is 0101, the address for No. 13 is 0110, and the combination of the two is 01010110 (binary number), which translates to $64 + 16 + 4 + 2 = 86$ (base 10 number). In other words, the number of terminal block is 86.

★ See the preceding page for a list of data, etc. for No. 0 - 25.

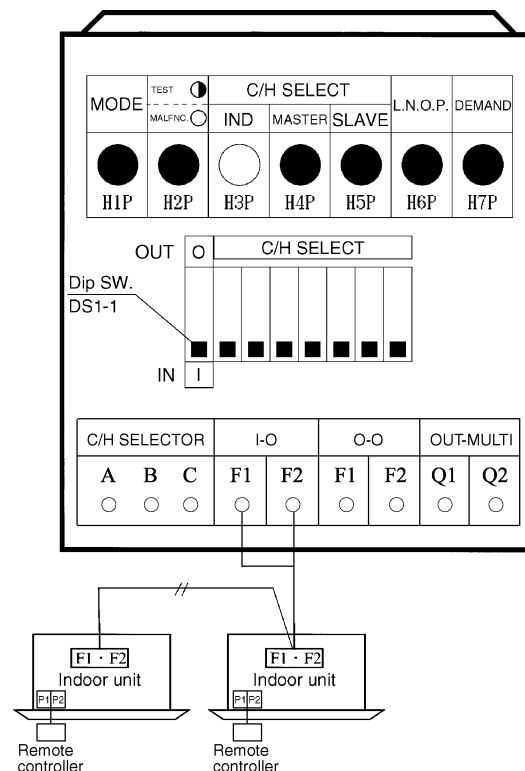
3.2.2 Cool / Heat Mode Switching

There are the following 4 cool/heat switching modes.

- ① Set cool/heat separately for each outdoor unit system by indoor unit remote controller.
- ② Set cool/heat separately for each outdoor unit system by cool/heat selector.
- ③ Set cool/heat for more than one outdoor unit system simultaneously in accordance with unified master outdoor unit by indoor unit remote controller.
- ④ Set cool/heat for more than one outdoor unit system simultaneously in accordance with unified master outdoor unit by cool/heat switching remote controller.

① Set Cool / Heat Separately for Each Outdoor Unit System by Indoor Unit Remote Controller

- ◆ It does not matter whether or not there is outdoor - outdoor unit wiring.
- ◆ Set outdoor unit PCB DS1-1 to IN (factory setting).
- ◆ Set cool/heat switching to IND (individual) for "Setting mode 1" (factory setting).
- ◆ Set the master unit (= indoor unit having the right to select the cooling/heating operation mode).



<Set the master unit (= indoor unit having the right to select the cooling/heating operation mode).>

In the case of wired remote controllers

- After the check operation, "CHANGEOVER UNDER CONTROL" is flashing in all connected remote controllers.
- Select an indoor unit to be used as the master unit in accordance with the request from the customer. (It is recommended to select an indoor unit which will be used most often as the master unit.)
- Press the operation mode selector button in the remote controller of the indoor unit selected as the master unit.
- In that remote controller, "CHANGEOVER UNDER CONTROL" disappears. That remote controller will control changeover of the cooling/heating operation mode.
- In other remote controllers, "CHANGEOVER UNDER CONTROL" lights.

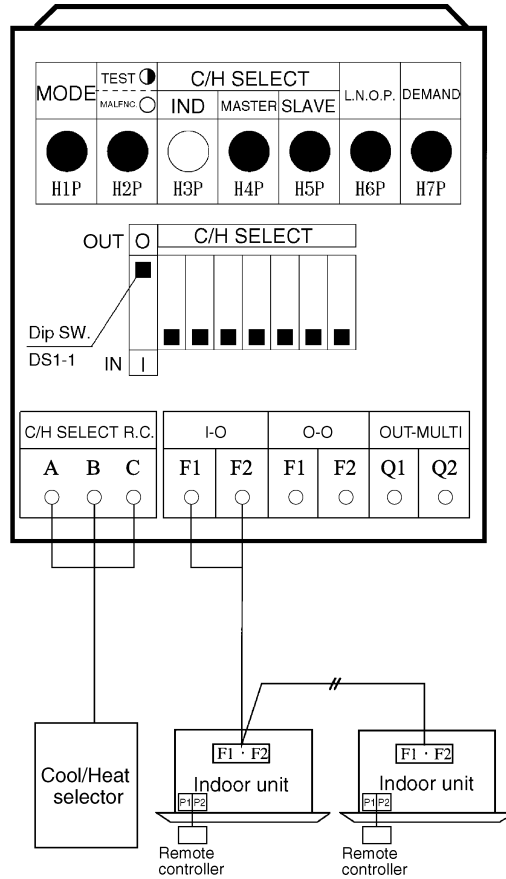
For the details, refer to the installation manual supplied together with the indoor unit.

In the case of wireless remote controllers

- After the check operation, the timer lamp is flashing in all connected indoor units.
- Select an indoor unit to be used as the master unit in accordance with the request from the customer. (It is recommended to select an indoor unit which will be used most often as the master unit.)
- Press the operation selector mode button in the remote controller of the indoor unit selected as the master unit. A "peep" sound is emitted, and the timer lamp turns off in all indoor units.
- That indoor unit will control changeover of the cooling/heating operation mode.

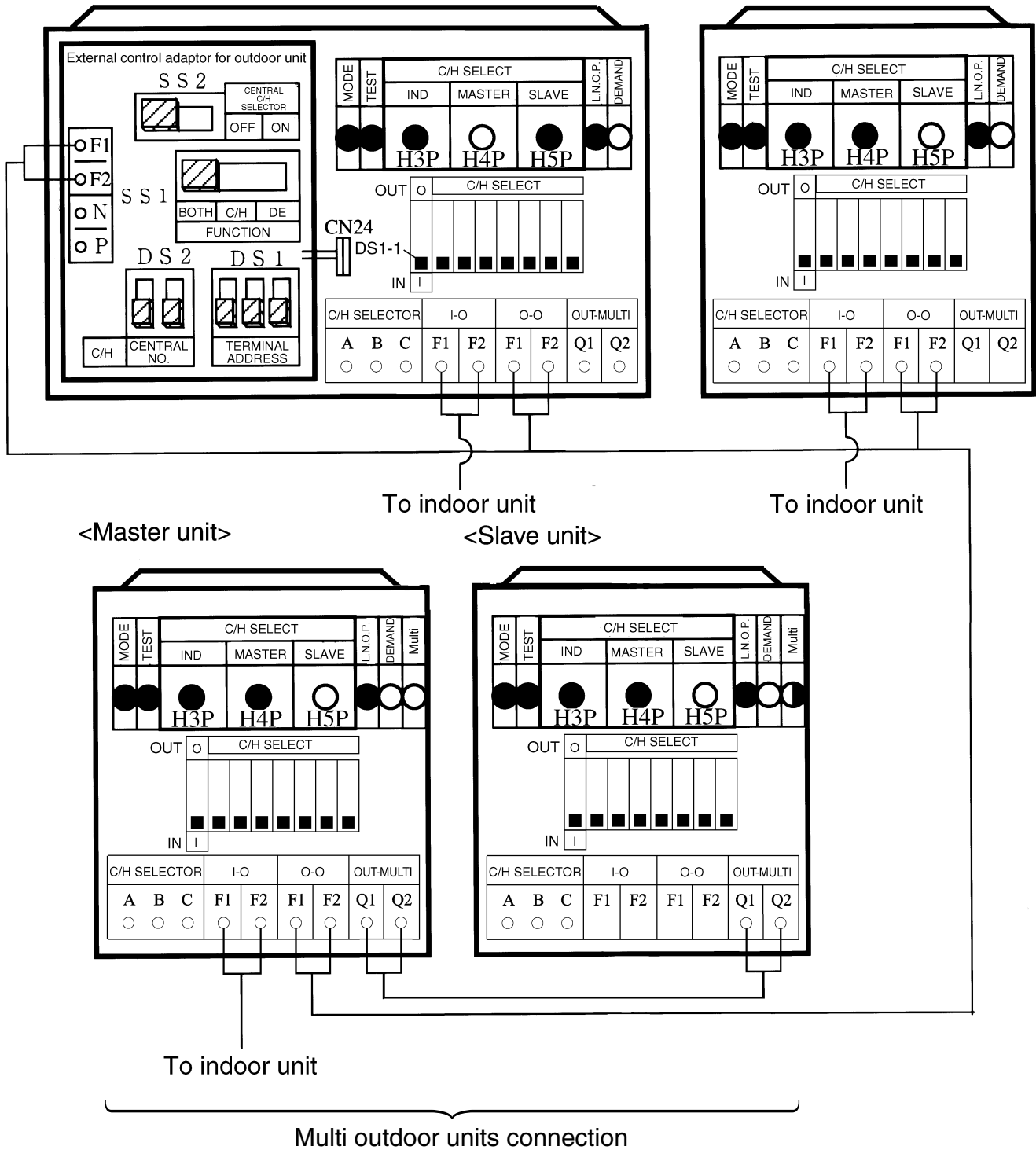
② Set Cool / Heat Separately for Each Outdoor Unit System by Cool / Heat Selector

- ◆ It does not matter whether or not there is outdoor - outdoor unit wiring.
- ◆ Set outdoor unit PCB DS1-1 to OUT (factory setting).
- ◆ Set cool/heat switching to IND (individual) for “Setting mode 1” (factory setting).



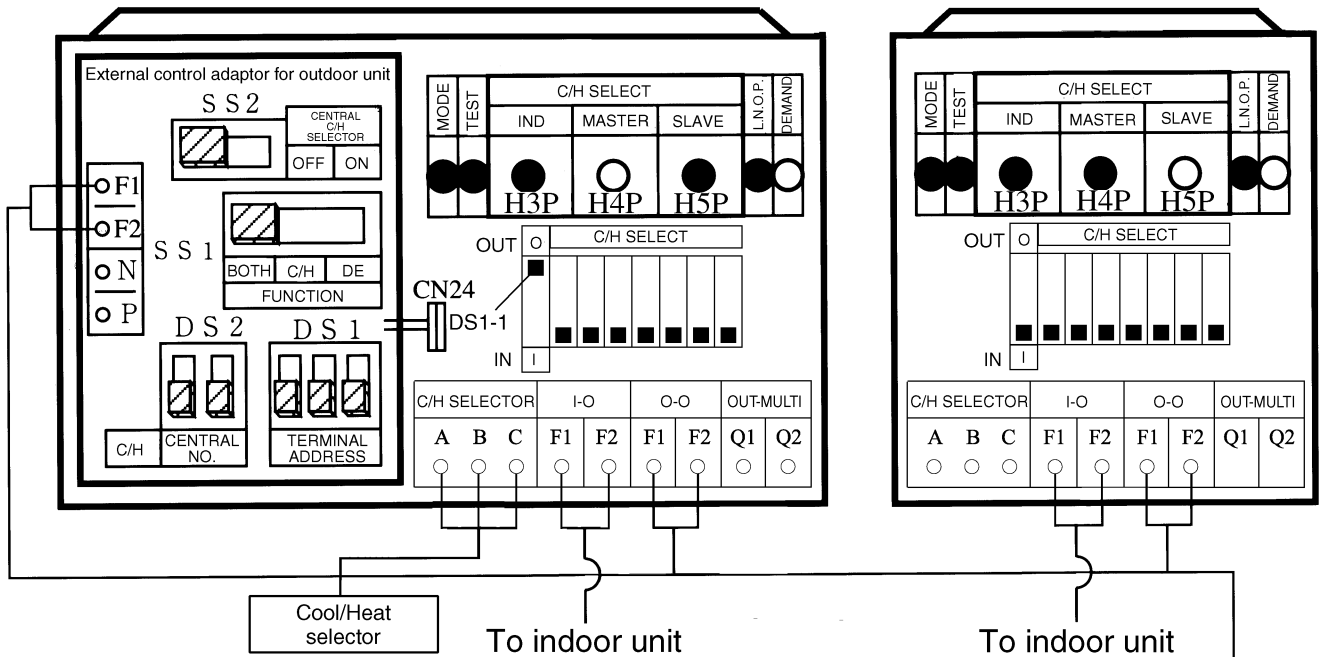
③ Set Cool / Heat for More Than One Outdoor Unit System Simultaneously in Accordance with Unified Master Outdoor Unit by Indoor Unit Remote Controller

- ◆ Install the external control adaptor for outdoor unit on either the outdoor-outdoor, indoor-outdoor transmission line.
- ◆ Set outdoor unit PCB DS1-1 to IN (factory setting).
- ◆ In setting mode 1, set the outdoor unit you want to give cool/heat selection permission to as the group master, and set the other outdoor units as group slave units.
- ◆ Set the outdoor unit external control adaptor SS1 to BOTH (factory setting) or C/H, and SS2 to OFF (factory setting).



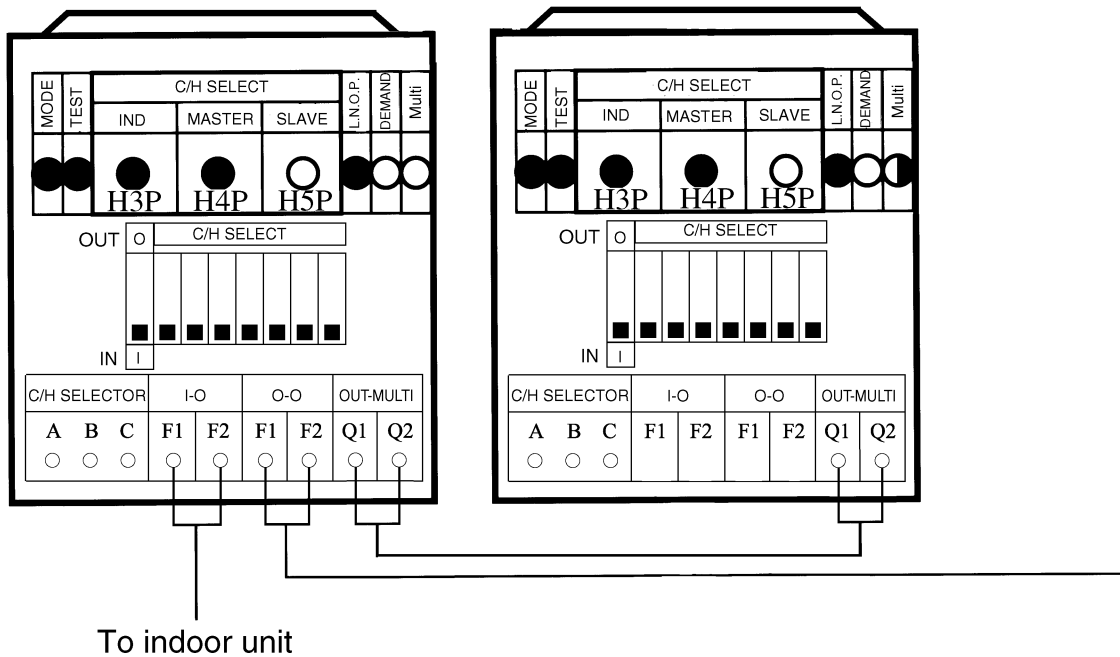
④ Set Cool / Heat for More Than One Outdoor Unit System Simultaneously in Accordance with Unified Master Outdoor Unit by Cool / Heat Selector

- ◆ Install the external control adaptor for outdoor unit on either the outdoor-outdoor, indoor-outdoor transmission line.
- ◆ Mount the COOL/HEAT selector to the master outdoor unit for the unified control.
- ◆ Set the DS1-1 on the PCB of master outdoor unit to OUT.
- ◆ In setting mode 1, set the outdoor unit you want to give cool/heat selection permission to as the group master, and set the other outdoor units as group slave units.
- ◆ Set the outdoor unit external control adaptor SS1 to BOTH (factory setting) or C/H, and SS2 to OFF (factory setting).



<Master unit>

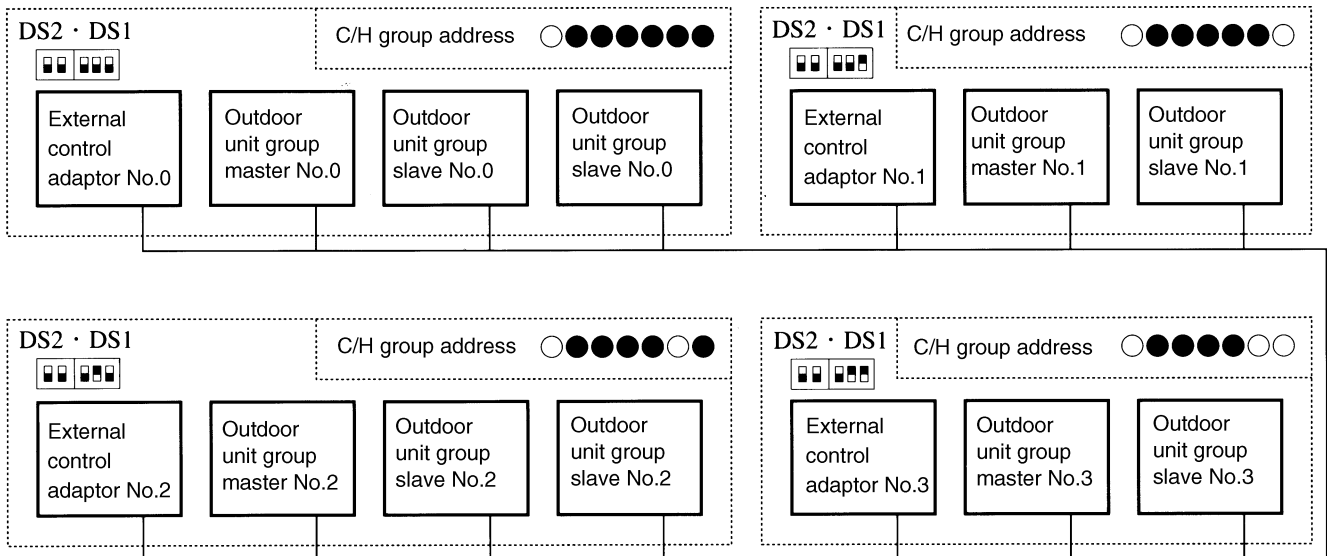
<Slave unit>



Multi outdoor units connection

Supplementation on ③ and ④.

When switching cool/heat for each adaptor PCB with the use of more than one adaptor PCB, set the address of the external control adaptor for outdoor unit PCB DS1 and DS2 so that it matches the unified cool/heat address of outdoor unit main PCB.



Address setting for ③ and ④ (Set lower 5 digits with binary number.) [No.0 to No.31]

Address No.	Outdoor unit PCB LED Set with setting mode 2		External control adaptor for outdoor unit					
			DS2		DS1			
No 0	○ ●	● ● ● ● ● 0						0
No 1	○ ●	● ● ● ● ○						1
No 2	○ ●	● ● ● ○ ●						2
No 3	○ ●	● ● ● ○ ○						3
No 4	○ ●	● ● ○ ● ●						4
}	}	}	}					
No 30	○ ●	● ● ● ● ○						30
No 31	○ ●	○ ○ ○ ○ ○						31

○ ON ● OFF Upper position (ON) lower position (OFF)
(The shaded part shows knob)

3.2.3 Setting of Low Noise Operation and Demand Operation

Setting of Low Noise Operation

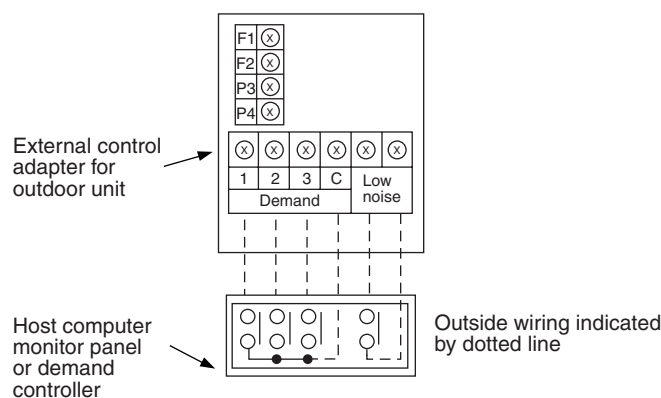
By connecting the external contact input to the low noise input of the outdoor unit external control adaptor (optional), you can lower operating noise by 2-3 dB.

Setting	Content
Mode 1	Set the outdoor unit fan to Step 6 or lower.
Mode 2	Set the outdoor unit fan to Step 5 or lower.
Mode 3	Set the outdoor unit fan to Step 4 or lower.

A. When the low noise operation is carried out by external contact (with the use of the external control adaptor for outdoor unit)

1. Connect external control adaptor for outdoor unit and short-circuit terminal of low noise (Refer below figure).

If carrying out demand or low-noise input, connect the adaptor's terminals as shown below.



2. While in "Setting mode 2", set the setting condition for set item No. 12 (Setting of external low noise/demand operation) to "YES".
3. If necessary, while in "Setting mode 2", select the setting condition (i.e., "Mode 1", "Mode 2", or "Mode 3") for set item No. 25 (Setting of external low noise level).
4. If necessary, while in "Setting mode 2", set the setting condition for the set item No. 29 (Setting of capacity precedence) to "ON".
(If the condition is set to "ON", when the air-conditioning load reaches a high level, the low noise operation command will be ignored to put the system into normal operation mode.)

B. When the low noise operation is carried out automatically at night (The external control adaptor for outdoor unit is not required)

1. While in "Setting mode 2", select the setting condition (i.e., "Mode 1", "Mode 2", or "Mode 3") for set item No. 22 (Setting of nighttime low noise level).
2. If necessary, while in "Setting mode 2", select the setting condition (i.e., "20:00", "22:00", or "24:00") for set item No. 26 (Setting of start time of nighttime low noise operation).
(Use the start time as a guide since it is estimated according to outdoor temperatures.)
3. If necessary, while in "Setting mode 2", select the setting condition (i.e., "06:00", "07:00", or "08:00") for set item No. 27 (Setting of end time of nighttime low noise operation).
(Use the end time as a guide since it is estimated according to outdoor temperatures.)
4. If necessary, while in "Setting mode 2", set the setting condition for set item No. 29 (Setting of capacity precedence) to "ON".
(If the condition is set to "ON", when the air-conditioning load reaches a high level, the system will be put into normal operation mode even during nighttime.)

Image of operation in the case of A

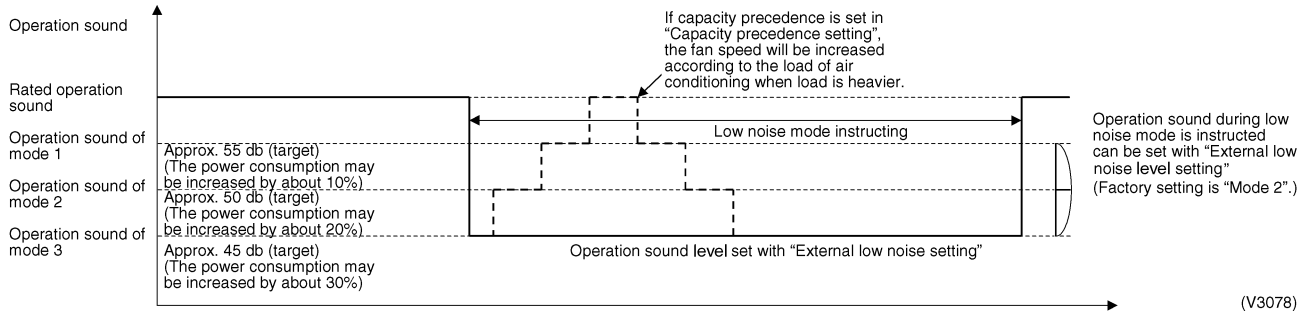


Image of operation in the case of B

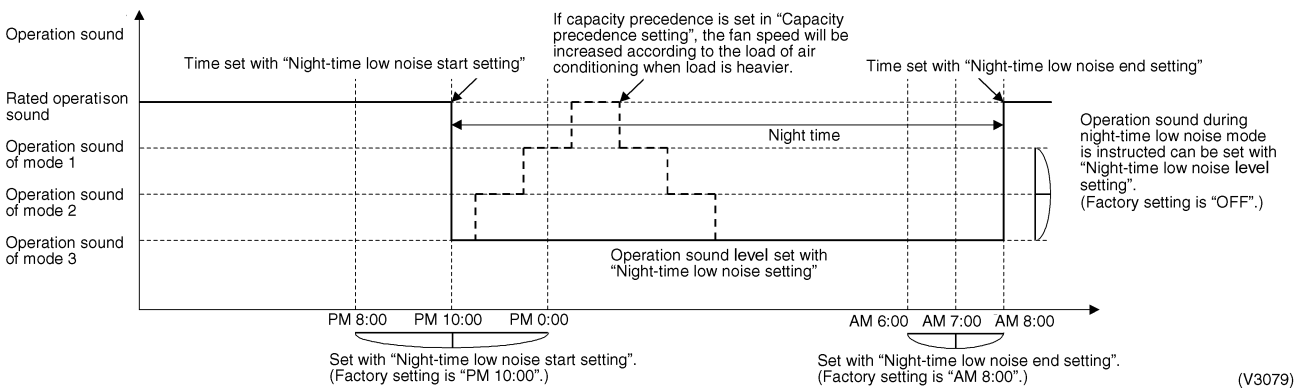
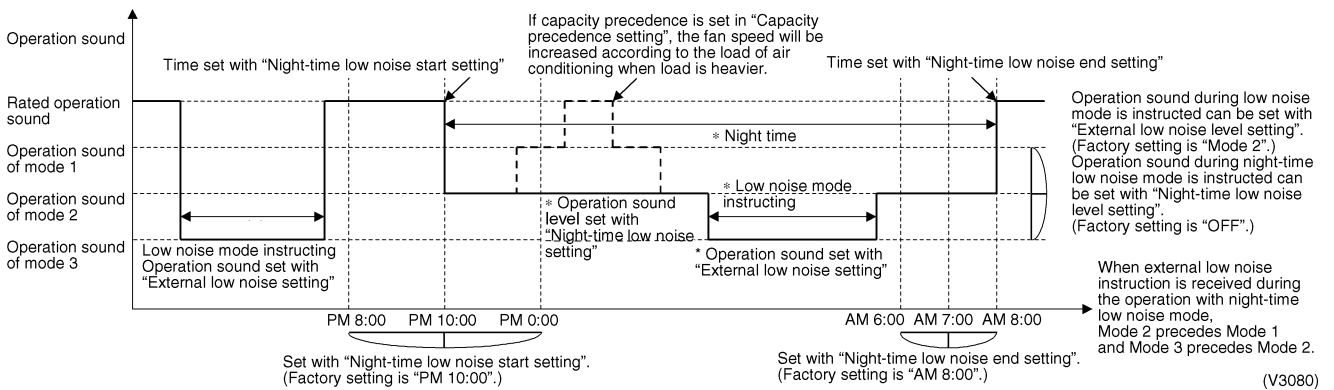


Image of operation in the case of A and B



Setting of Demand Operation

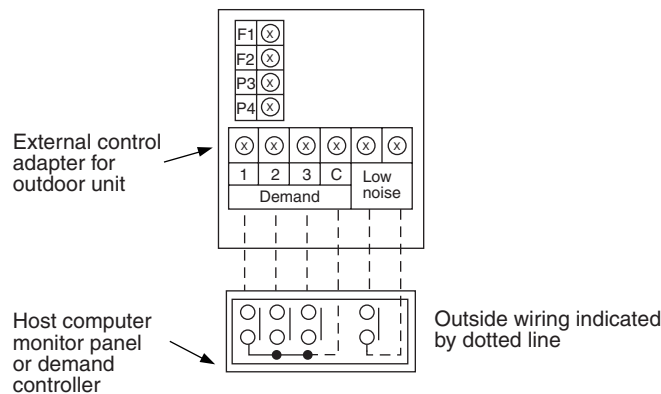
By connecting the external contact input to the demand input of the outdoor unit external control adaptor (optional), the power consumption of unit operation can be saved suppressing the compressor operating condition.

Setting content			Setting method	
Set item	Condition	Content	External control adaptor	Outdoor unit PCB
Demand 1	Mode 1	The compressor operates at approx. 60% or less of rating.	Short circuit "1" and "C" on the terminal strip (TeS1).	Set item No. 32 to "Demand 1", and item No. 30 to "Level 1".
	Mode 2	The compressor operates at approx. 70% or less of rating.		Set item No. 32 to "Demand 1", and item No. 30 to "Level 2".
	Mode 3	The compressor operates at approx. 80% or less of rating.		Set item No. 32 to "Demand 1", and item No. 30 to "Level 3".
Demand 2	—	The compressor operates at approx. 40% or less of rating.	Short circuit "2" and "C".	Set item No. 32 to "Demand 2".
Demand 3	—	Forced thermostat OFF.	Short circuit "3" and "C".	—

*: However the demand operation does not occur in the following operation modes.

- ① Startup control
- ② Oil return operation
- ③ Defrosting operation
- ④ Pump-down residual operation

If carrying out demand or low-noise input, connect the adaptor's terminals as shown below.



A. When the demand operation is carried out by external contact (with the use of the external control adaptor for outdoor unit).

1. Connect external control adaptor for outdoor unit and short-circuit terminals as required (Refer above figure).
2. While in "Setting mode 2", set the setting condition for set item No. 12 (Setting of external low noise/demand operation) to "YES".
3. If necessary, while in "Setting mode 2", select the set item No. 30 (Setting of Demand 1 level) and then set the setting condition to targeted mode.

B. When the normal demand operation is carried out. (Use of the external control adaptor for outdoor unit is not required.)

1. While in "Setting mode 2", make setting of the set item No. 32 (Setting of alternate demand) to "ON".
2. While in "Setting mode 2", select the set item No. 30 (Setting of Demand 1 level) and then set the setting condition to targeted mode.

Image of operation in the case of A

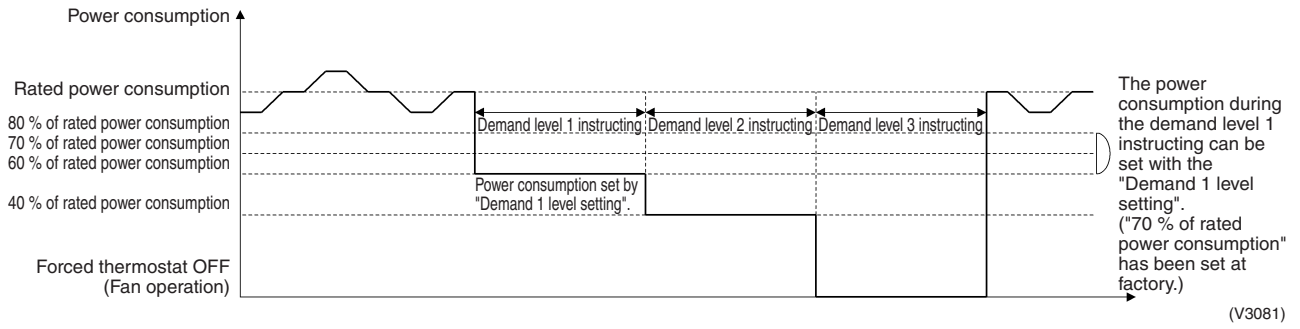


Image of operation in the case of B

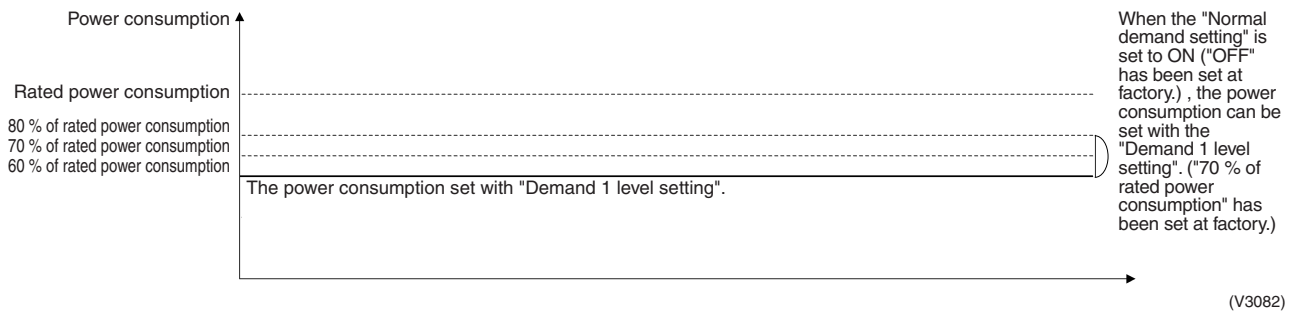
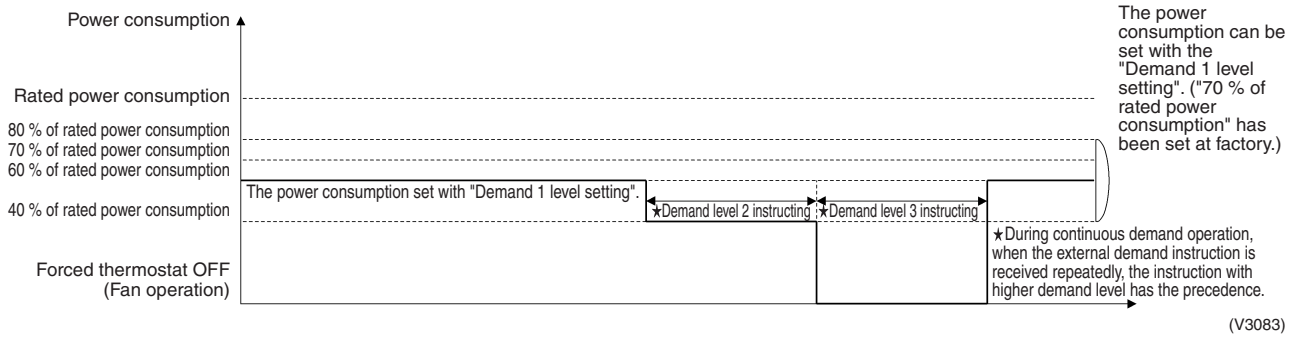


Image of operation in the case of A and B



Detailed Setting Procedure of Low Noise Operation and Demand Control

1. Setting mode 1 (H1P off)

- ① In setting mode 2, push the BS1 (MODE button) one time. → Setting mode 1 is entered and H1P lights off.
During the setting mode 1 is displayed, “In low noise operation” and “In demand control” are displayed.

2. Setting mode 2 (H1P on)

- ① In setting 1, push and hold the BS1 (MODE button) for more than 5 seconds. → Setting mode 2 is entered and H1P lights.
- ② Push the BS2 (SET button) several times and match the LED display with the Setting No. you want.
- ③ Push the BS3 (RETURN button) one time, and the present setting content is displayed.
→ Push the BS2 (SET button) several times and match the LED display with the setting content (as shown below) you want.
- ④ Push the BS3 (RETURN button) two times. → Returns to ①.
- ⑤ Push the BS1 (MODE button) one time. → Returns to the setting mode 1 and turns H1P off.

○: ON ●: OFF ◐: Blink

Setting No.	Setting contents	① Setting No. indication							② Setting No. indication							Setting contents	③ Setting contents indication (Initial setting)								
		H1P	H2P	H3P	H4P	H5P	H6P	H7P	H1P	H2P	H3P	H4P	H5P	H6P	H7P		H1P	H2P	H3P	H4P	H5P	H6P	H7P		
12	External low noise setting / Demand setting	○	●	●	●	●	●	●	○	●	●	○	○	●	●	NO (Factory setting)	○	●	●	●	●	●	●	◐	
									○	●	●	○	○	●	●	YES	○	●	●	●	●	●	◐	●	
22	Night-time low noise setting								○	●	○	●	○	○	●	OFF (Factory setting)	○	●	●	●	●	●	●	●	
									○	●	●	○	○	○	○	Mode 1	○	●	●	●	●	●	●	◐	
									○	●	●	○	○	○	○	Mode 2	○	●	●	●	●	●	●	◐	●
									○	●	●	○	○	○	○	Mode 3	○	●	●	●	●	●	●	◐	◐
25	Setting of external low noise setting								○	●	○	○	●	●	○	Mode 1	○	●	●	●	●	●	●	◐	
									○	●	○	○	●	●	○	Mode 2 (Factory setting)	○	●	●	●	●	●	◐	●	
									○	●	○	○	●	●	○	Mode 3	○	●	●	●	●	◐	●	●	
26	Night-time low noise operation start setting								○	●	○	○	●	○	●	PM 8:00	○	●	●	●	●	●	●	◐	
									○	●	○	○	●	○	●	PM 10:00 (Factory setting)	○	●	●	●	●	●	◐	●	
									○	●	○	○	●	○	●	PM 0:00	○	●	●	●	●	◐	●	●	
27	Night-time low noise operation end setting								○	●	○	○	●	○	○	AM 6:00	○	●	●	●	●	●	●	◐	
									○	●	○	○	●	○	○	AM 7:00	○	●	●	●	●	●	◐	●	
									○	●	○	○	●	○	○	AM 8:00 (Factory setting)	○	●	●	●	●	◐	●	●	
29	Capacity priority setting								○	●	○	○	○	●	○	Low noise priority (Factory setting)	○	●	●	●	●	●	●	◐	
									○	●	○	○	○	●	○	Capacity priority	○	●	●	●	●	●	◐	●	
30	Demand setting 1								○	●	○	○	○	○	●	60 % of rated power consumption	○	●	●	●	●	●	●	◐	
									○	●	○	○	○	○	●	70 % of rated power consumption (Factory setting)	○	●	●	●	●	●	◐	●	
									○	●	○	○	○	○	●	80 % of rated power consumption	○	●	●	●	●	◐	●	●	
32	Normal demand setting								○	●	●	●	●	●	●	OFF (Factory setting)	○	●	●	●	●	●	●	◐	
									○	●	●	●	●	●	●	ON	○	●	●	●	●	●	◐	●	

Setting mode indication section

Setting No. indication section

Set contents indication section

3.2.4 Setting of Refrigerant Recovery Mode

When carrying out the refrigerant collection onsite, fully open the respective expansion valve of indoor and outdoor units.

All indoor and outdoor unit's operation are prohibited.

[Operation procedure]

- ① In **setting mode 2** with units in stop mode, set "Refrigerant Recovery / Vacuuming mode" to ON. The respective expansion valve of indoor and outdoor units are fully opened. (H2P turns to display "TEST OPERATION" (blinks), "TEST OPERATION" and "UNDER CENTRALIZED CONTROL" are displayed on the remote controller, and the all indoor / outdoor unit operation is prohibited.
After setting, do not cancel "Setting Mode 2" until completion of refrigerant recovery operation.
- ② Collect the refrigerant using a refrigerant recovery unit. (See the instruction attached to the refrigerant recovery unit for more detail.)
- ③ Press Mode button "BS1" once and reset "Setting Mode 2".

3.2.5 Setting of Vacuuming Mode

In order to perform vacuuming operation at site, fully open the expansion valves of indoor and outdoor units and turn on some solenoid valves.

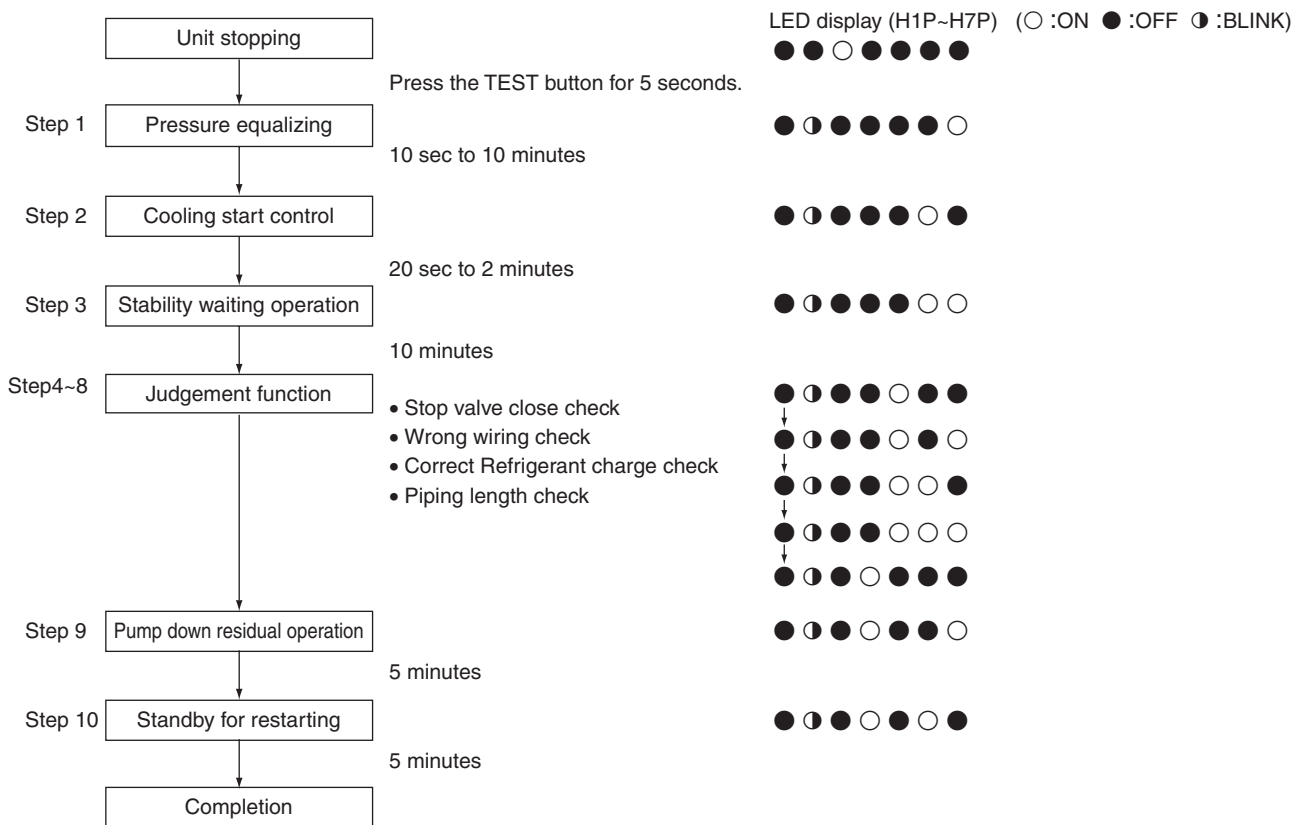
[Operating procedure]

- ① With **Setting Mode 2** while the unit stops, set "Refrigerant recovery / Vacuuming mode" to ON. The expansion valves of indoor and outdoor units fully open and some of solenoid valves open.
(H2P blinks to indicate the test operation, and the remote controller displays "Test Operation" and "Under centralized control", thus prohibiting operation.)
After setting, do not cancel "Setting Mode 2" until completion of Vacuuming operation.
- ② Use the vacuum pump to perform vacuuming operation.
- ③ Press Mode button "BS1" once and reset "Setting Mode 2".

3.2.6 Check Operation Detail

CHECK OPERATION FUNCTION

(Press the MODE button BS1 once and set to SETTING MODE 1 (H1P: OFF))



Part 6

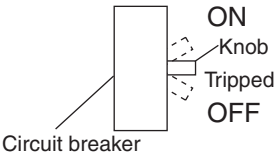
Troubleshooting

1. Symptom-based Troubleshooting	239
2. Troubleshooting by Remote Controller	242
2.1 Procedure of Self-diagnosis by Remote Controller	242
2.2 Inspection Mode	246
2.3 Service Mode	247
2.4 Malfunction Codes and Description.....	251
2.5 Malfunction Code Indication by Outdoor Unit PCB	253
3. Troubleshooting by Indication on the Remote Controller	257
3.1 “R0” Indoor Unit: Error of External Protection Device.....	257
3.2 “R1” Indoor Unit: PCB Defect	258
3.3 “R3” Indoor Unit: Malfunction of Drain Level Control System (S1L)	259
3.4 “R6” Indoor Unit: Fan Motor (M1F) Lock, Overload.....	261
3.5 “R7” Indoor Unit: Malfunction of Swing Flap Motor (M1S).....	265
3.6 Abnormal Power Supply Voltage.....	267
3.7 “R9” Indoor Unit: Malfunction of Electronic Expansion Valve Coil (Y1E)	268
3.8 “RF” Indoor Unit: Drain Level above Limit	270
3.9 “R0” Indoor Unit: Malfunction of Capacity Determination Device	271
3.10 “L1” Indoor Unit: Failure of Transmission (Between Indoor Unit PCB and Fan PCB)	272
3.11 “L4” Indoor Unit: Malfunction of Thermistor (R2T) for Liquid Pipe	274
3.12 “L5” Indoor Unit: Malfunction of Thermistor (R3T) for Gas Pipe	275
3.13 “L6” Indoor Unit: Failure of Combination (Between Indoor Unit PCB and Fan PCB)	276
3.14 “L9” Indoor Unit: Malfunction of Thermistor (R1T) for Suction Air.....	277
3.15 “LL” Indoor Unit: Malfunction of Humidity Sensor System	278
3.16 “L0” Indoor Unit: Malfunction of Thermostat Sensor in Remote Controller	279
3.17 “E1” Outdoor Unit: PCB Defect	280
3.18 “E3” Outdoor Unit: Actuation of High Pressure Switch.....	281
3.19 “E4” Outdoor Unit: Actuation of Low Pressure Sensor.....	283
3.20 “E5” Outdoor Unit: Inverter Compressor Motor Lock.....	285
3.21 “E6” Outdoor Unit: STD Compressor Motor Overcurrent/Lock.....	287
3.22 “E7” Outdoor Unit: Malfunction of Outdoor Unit Fan Motor	288
3.23 “E9” Outdoor Unit: Malfunction of Electronic Expansion Valve Coil (Y1E, Y2E).....	291
3.24 “F3” Outdoor Unit: Abnormal Discharge Pipe Temperature.....	293
3.25 “F6” Outdoor Unit: Refrigerant Overcharged.....	294
3.26 “H7” Outdoor Unit: Abnormal Outdoor Fan Motor Signal	295
3.27 “H9” Outdoor Unit: Malfunction of Thermistor (R1T) for Outdoor Air	296
3.28 “L2” Outdoor Unit: Current Sensor Malfunction	297

3.29	“U3” Outdoor Unit: Malfunction of Discharge Pipe Thermistor (R3T, R31T~R33T).....	298
3.30	“U5” Outdoor Unit: Malfunction of Thermistor (R2T, R7T) for Suction Pipe	299
3.31	“U6” Outdoor Unit: Malfunction of Thermistor (R4T) for Outdoor Unit Heat Exchanger	300
3.32	“U7” Outdoor Unit: Malfunction of Liquid Pipe Thermistor (R6T).....	301
3.33	“U9” Outdoor Unit: Malfunction of Subcooling Heat Exchanger Gas Pipe Thermistor (R5T)	302
3.34	“U8” Outdoor Unit: Malfunction of High Pressure Sensor.....	303
3.35	“U2” Outdoor Unit: Malfunction of Low Pressure Sensor	304
3.36	“L4” Outdoor Unit: Malfunction of Inverter Radiating Fin Temperature Rise.....	305
3.37	“L5” Outdoor Unit: Inverter Compressor Abnormal	307
3.38	“L8” Outdoor Unit: Inverter Current Abnormal.....	309
3.39	“L9” Outdoor Unit: Inverter Start up Error	311
3.40	“L1” Outdoor Unit: Malfunction of Transmission Between Inverter and Control PCB	313
3.41	“P1” Outdoor Unit: Inverter Over-Ripple Protection.....	316
3.42	“P4” Outdoor Unit: Malfunction of Inverter Radiating Fin Temperature Rise Sensor	317
3.43	“P4” Outdoor Unit: Faulty Field Setting after Replacing Main PCB or Faulty Combination of PCB.....	319
3.44	“U0” Outdoor Unit: Low Pressure Drop Due to Refrigerant Shortage or Electronic Expansion Valve Failure.....	320
3.45	“U1” Reverse Phase, Open Phase	321
3.46	“U2” Outdoor Unit: Power Supply Insufficient or Instantaneous Failure.....	322
3.47	“U3” Outdoor Unit: Check Operation is not Executed.....	325
3.48	“U4” Malfunction of Transmission Between Indoor Units	326
3.49	“U5” Indoor Unit: Malfunction of Transmission Between Remote Controller and Indoor Unit	328
3.50	“U7” Indoor Unit: Malfunction of Transmission Between Outdoor Units.....	329
3.51	“U8” Indoor Unit: Malfunction of Transmission Between Main and Sub Remote Controllers.....	331
3.52	“U3” Indoor Unit: Malfunction of Transmission Between Indoor and Outdoor Units in the Same System	332
3.53	“U9” Improper Combination of Indoor and Outdoor Units, Indoor Units and Remote Controller	333
3.54	“U1” Address Duplication of Centralized Controller	335
3.55	“U2” Malfunction of Transmission Between Centralized Controller and Indoor Unit.....	336
3.56	“U6” System is not Set yet.....	339
3.57	“U4” Malfunction of System, Refrigerant System Address Undefined	340
4.	Troubleshooting (OP: Centralized Remote Controller)	342
4.1	“M1” PCB Defect	342
4.2	“M3” Malfunction of Transmission Between Optional Controllers for Centralized Control.....	343
4.3	“M2” Improper Combination of Optional Controllers for Centralized Control.....	345

- 4.4 "M" Address Duplication, Improper Setting347
- 5. Troubleshooting (OP: Unified ON/OFF Controller)350
 - 5.1 Operation Lamp Blinks350
 - 5.2 Display "Under Centralized Control" Blinks
(Repeats Single Blink)352
 - 5.3 Display "Under Centralized Control" Blinks
(Repeats Double Blink)355

1. Symptom-based Troubleshooting

	Symptom	Supposed Cause	Countermeasure	
1	The system does not start operation at all.	Blowout of fuse(s)	Turn Off the power supply and then replace the fuse(s).	
		Cutout of breaker(s)	<ul style="list-style-type: none"> If the knob of any breaker is in its OFF position, turn ON the power supply. If the knob of any circuit breaker is in its tripped position, do not turn ON the power supply.  <p>The diagram shows a rectangular circuit breaker with a knob on the right side. The knob has three positions: 'ON' at the top, 'Tripped' in the middle, and 'OFF' at the bottom. A dashed line indicates the knob's movement between these positions. The label 'Circuit breaker' points to the main body of the device.</p>	
		Power failure	After the power failure is reset, restart the system.	
2	The system starts operation but makes an immediate stop.	Blocked air inlet or outlet of indoor or outdoor unit	Remove obstacle(s).	
		Clogged air filter(s)	Clean the air filter(s).	
3	The system does not cool or heat air well.	Blocked air inlet or outlet of indoor or outdoor unit	Remove obstacle(s).	
		Clogged air filter(s)	Clean the air filter(s).	
		Enclosed outdoor unit(s)	Remove the enclosure.	
		Improper set temperature	Set the temperature to a proper degree.	
		Airflow rate set to "LOW"	Set it to a proper airflow rate.	
		Improper direction of air diffusion	Set it to a proper direction.	
		Open window(s) or door(s)	Shut it tightly.	
		[In cooling] Direct sunlight received	Hang curtains or shades on windows.	
		[In cooling] Too many persons staying in a room	The model must be selected to match the air conditioning load.	
[In cooling] Too many heat sources (e.g. OA equipment) located in a room				
4	The system does not operate.	The system stops and immediately restarts operation.	Normal operation. The system will automatically start operation after a lapse of five minutes.	
		Pressing the TEMP ADJUST button immediately resets the system.		
		The remote controller displays "UNDER CENTRALIZED CONTROL", which blinks for a period of several seconds when the OPERATION button is depressed.	The system is controlled with centralized controller. Blinking display indicates that the system cannot be operated using the remote controller.	Operate the system using the COOL/HEAT centralized remote controller.
		The system stops immediately after turning ON the power supply.	The system is in preparation mode of micro computer operation.	Wait for a period of approximately one minute.
5	The system makes intermittent stops.	The remote controller displays malfunction codes "U4" and "U5", and the system stops but restarts after a lapse of several minutes.	The system stops due to an interruption in communication between units caused by electrical noises coming from equipment other than air conditioners.	Remove causes of electrical noises. If these causes are removed, the system will automatically restart operation.
6	COOL-HEAT selection is disabled.	The remote controller displays "UNDER CENTRALIZED CONTROL".	This remote controller has no option to select cooling operation.	Use a remote controller with option to select cooling operation.
		The remote controller displays "UNDER CENTRALIZED CONTROL", and the COOL-HEAT selection remote controller is provided.	COOL-HEAT selection is made using the COOL-HEAT selection remote controller.	Use the COOL-HEAT selection remote controller to select cool or heat.

	Symptom		Supposed Cause	Countermeasure
7	The system conducts fan operation but not cooling or heating operation.	This symptom occurs immediately after turning ON the power supply.	The system is in preparation mode of operation.	Wait for a period of approximately 10 minutes.
8	The airflow rate is not reproduced according to the setting.	Even pressing the AIRFLOW RATE SET button makes no changes in the airflow rate.	In heating operation, when the room temperature reaches the set degree, the outdoor unit will stop while the indoor unit is brought to fan LL operation so that no one gets cold air. Furthermore, if fan operation mode is selected when other indoor unit is in heating operation, the system will be brought to fan LL operation. (The fan LL operation is also enabled while in oil return mode in cooling operation.)	Normal operation.
9	The airflow direction is not reproduced according to the setting.	The airflow direction is not corresponding to that displayed on the remote controller. The flap does not swing.	Automatic control	Normal operation.
10	A white mist comes out from the system.	<Indoor unit> In cooling operation, the ambient humidity is high. (This indoor unit is installed in a place with much oil or dust.)	Uneven temperature distribution due to heavy stain of the inside of the indoor unit	Clean the inside of the indoor unit.
		<Indoor unit> Immediately after cooling operation stopping, the ambient temperature and humidity are low.	Hot gas (refrigerant) flown in the indoor unit results to be vapor from the unit.	Normal operation.
		<Indoor and outdoor units> After the completion of defrosting operation, the system is switched to heating operation.	Defrosted moisture turns to be vapor and comes out from the units.	Normal operation.
11	The system produces sounds.	<Indoor unit> Immediately after turning ON the power supply, indoor unit produces "ringing" sounds.	These are operating sounds of the electronic expansion valve of the indoor unit.	Normal operation. This sound becomes low after a lapse of approximately one minute.
		<Indoor and outdoor units> "Hissing" sounds are continuously produced while in cooling or defrosting operation.	These sounds are produced from gas (refrigerant) flowing respectively through the indoor and outdoor units.	Normal operation.
		<Indoor and outdoor units> "Hissing" sounds are produced immediately after the startup or stop of the system, or the startup or stop of defrosting operation.	These sounds are produced when the gas (refrigerant) stops or changes flowing.	Normal operation.
		<Indoor unit> Faint sounds are continuously produced while in cooling operation or after stopping the operation.	These sounds are produced from the drain discharge device in operation.	Normal operation.
		<Indoor unit> "Creaking" sounds are produced while in heating operation or after stopping the operation.	These sounds are produced from resin parts expanding and contracting with temperature changes.	Normal operation.
		<Indoor unit> Sounds like "trickling" or the like are produced from indoor units in the stopped state.	On VRV systems, these sounds are produced when other indoor units in operation. The reason is that the system runs in order to prevent oil or refrigerant from dwelling.	Normal operation.
		<Outdoor unit> Pitch of operating sounds changes.	The reason is that the compressor changes the operating frequency.	Normal operation.

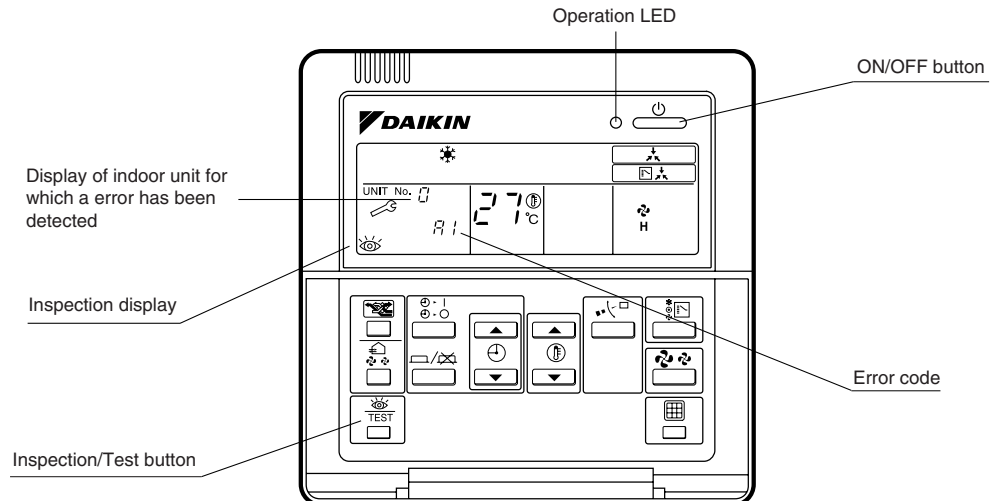
	Symptom		Supposed Cause	Countermeasure
12	Dust comes out from the system.	Dust comes out from the system when it restarts after the stop for an extended period of time.	Dust, which has deposited on the inside of indoor unit, is blown out from the system.	Normal operation.
13	Odors come out from the system.	In operation	Odors of room, cigarettes or else adsorbed to the inside of indoor unit are blown out.	The inside of the indoor unit should be cleaned.
14	Outdoor unit fan does not rotate.	In operation	The reason is that fan revolutions are controlled to put the operation to the optimum state.	Normal operation.
15	LCD display "88" appears on the remote controller.	Immediately after turning ON the power supply	The reason is that the system is checking to be sure the remote controller is normal.	Normal operation. This code is displayed for a period of approximately one minute at maximum.
16	The outdoor unit compressor or the outdoor unit fan does not stop.	After stopping operation	It stops in order to prevent oil or refrigerant from dwelling.	Normal operation. It stops after a lapse of approximately 5 to 10 minutes.
17	The outdoor gets hot.	While stopping operation	The reason is that the compressor is warmed up to provide smooth startup of the system.	Normal operation.
18	Hot air comes out from the system even though it stops.	Hot air is felt while the system stops.	On VRV systems, small quantity of refrigerant is fed to indoor units in the stopped state when other indoor units are in operation.	Normal operation.
19	The system does not cool air well.	The system is in dry operation.	The reason is that the dry operation serves not to reduce the room temperature where possible.	Change the system to cooling operation.

2. Troubleshooting by Remote Controller

2.1 Procedure of Self-diagnosis by Remote Controller

2.1.1 Wired Remote Controller — BRC1D61

If operation stops due to error, the remote controller's operation LED blinks, and error code is displayed. (Even if stop operation is carried out, error contents are displayed when the inspection mode is entered.) The error code enables you to tell what kind of error caused operation to stop. Refer to P.219 for error code and error contents.



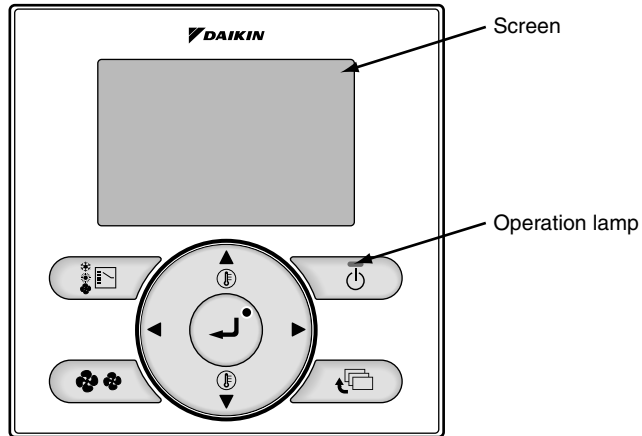
Note:

1. Pressing the INSPECTION/TEST button will blink the check indication.
2. While in service mode, holding down the ON/OFF button for a period of 5 seconds or more will clear the failure history indication shown above. In this case, on the codes display, the error code will blink twice and then change to "00" (=Normal), the Unit No. will change to "0", and the operation mode will automatically switch from service mode to normal mode (displaying the set temperature).

2.1.2 Wired Remote Controller — BRC1E61

The following will be displayed on the screen when a malfunction (or a warning) occurs during operation.

Check the malfunction code and take the corrective action specified for the particular model.



(1) Checking a malfunction or warning

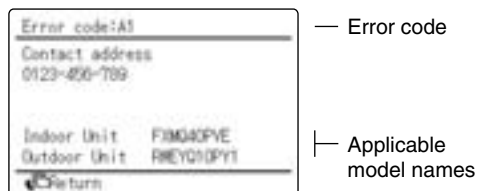
	Operation Status	Display	
Abnormal shutdown	The system stops operating.	The operation lamp (green) starts to blink. The message "Error: Press Menu button" will appear and blink at the bottom of the screen.	
Warning	The system continues its operation.	The operation lamp (green) remains on. The message "Warning: Press Menu button" will appear and blink at the bottom of the screen.	

(2) Taking corrective action

- Press the Menu/Enter button to check the error code.



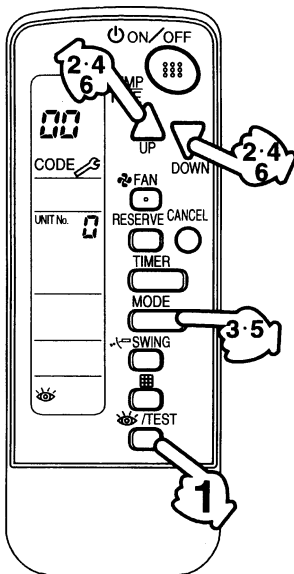
- Take the corrective action specific to the model.



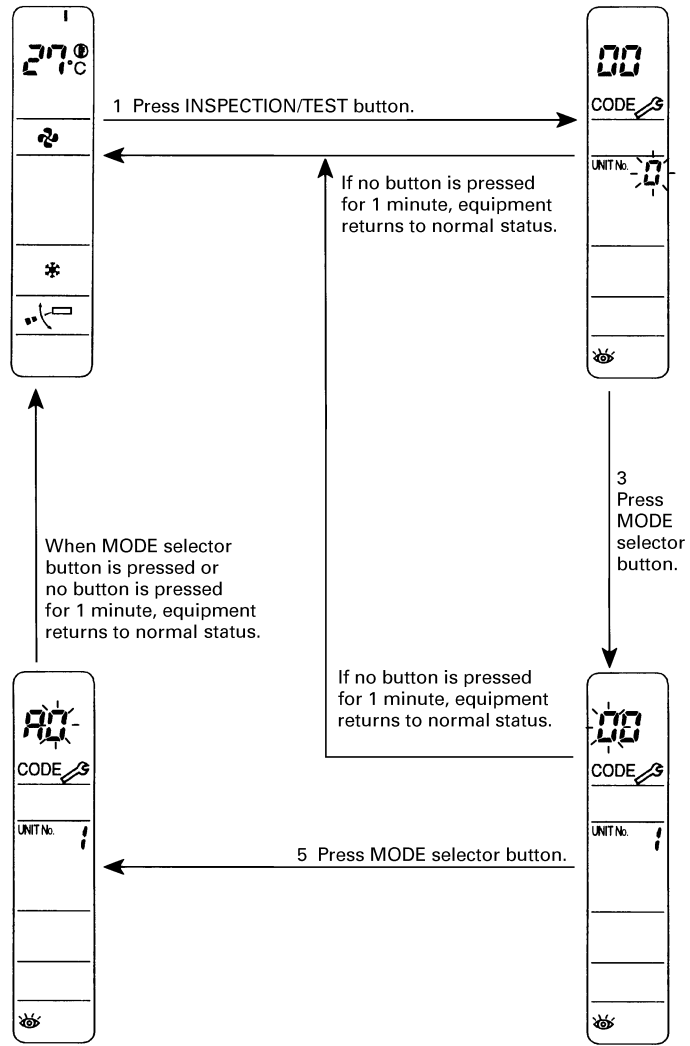
2.1.3 Wireless Remote Controller

If unit stops due to a error, the operation indicating LED on the signal receiving part of indoor unit flashes.

The error code can be determined by following the procedure described below. (The error code is displayed when an operation error has occurred. In normal condition, the error code of the last problem is displayed.)

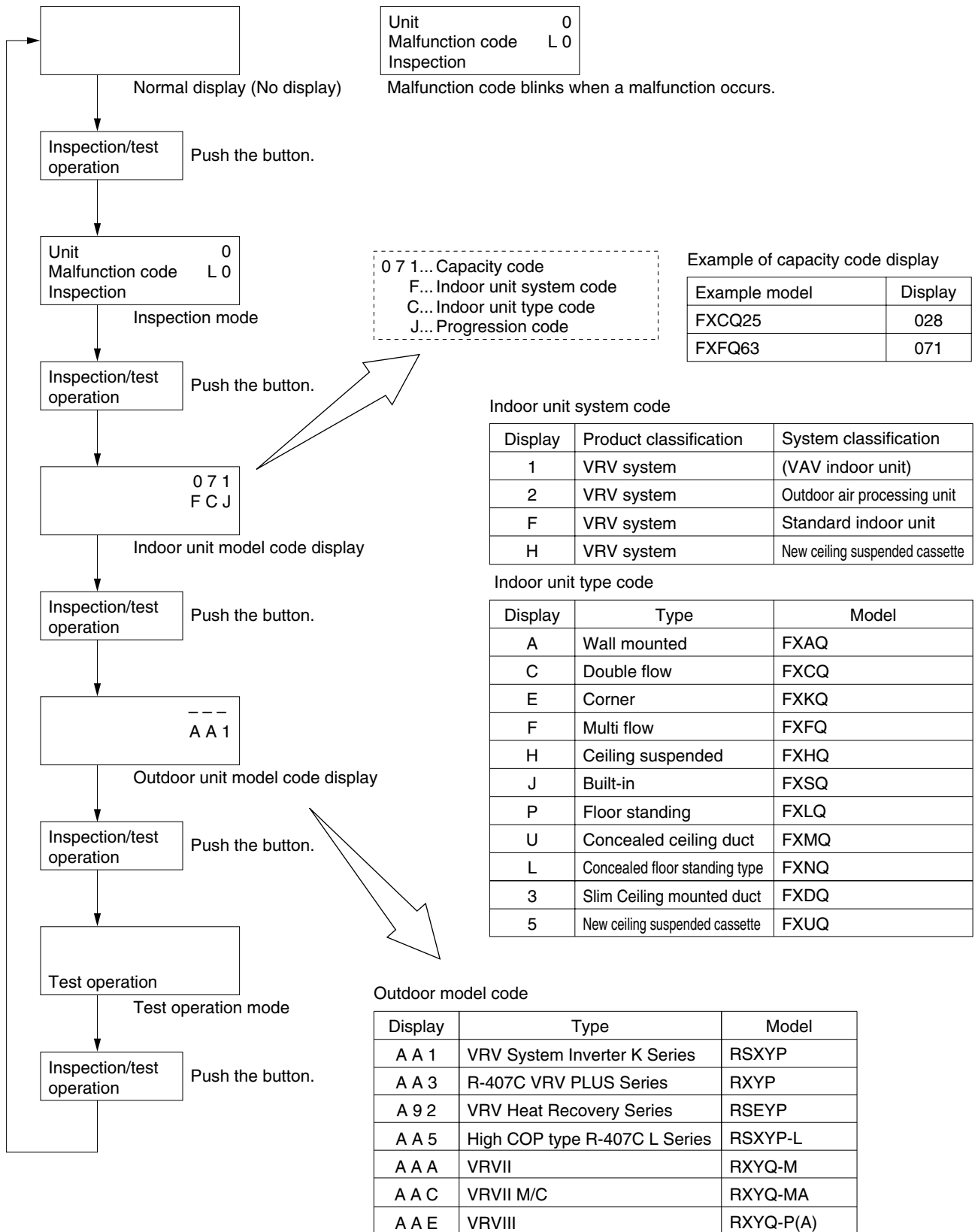
1	<p>Press the INSPECTION/TEST button to select "inspection". The equipment enters the inspection mode. The "Unit" indication is displayed and the Unit No. display shows flashing "0" indication.</p>	
2	<p>Set the Unit No. Press the UP or DOWN button and change the Unit No. display until the buzzer (*1) is generated from the indoor unit. *1 Number of beeps 3 short beeps : Conduct all of the following operations. 1 short beep : Conduct steps 3 and 4. Continue the operation in step 4 until a buzzer remains ON. The continuous buzzer indicates that the error code is confirmed. Continuous beep : No abnormality.</p>	
3	<p>Press the MODE selector button. The left "0" (upper digit) indication of the error code flashes.</p>	
4	<p>Error code upper digit diagnosis Press the UP or DOWN button and change the error code upper digit until the error code matching buzzer (*2) is generated.</p> <ul style="list-style-type: none"> ■ The upper digit of the code changes as shown below when the UP and DOWN buttons are pressed. <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>0 → A → C → E → H → F → U → L → P → U → 9 → 8 → 7 → 6 → 5 → 4</p> <p>⇒ "UP" button ← "DOWN" button</p> </div> <p>*2 Number of beeps Continuous beep : Both upper and lower digits matched. (Error code confirmed) 2 short beeps : Upper digit matched. 1 short beep : Lower digit matched.</p>	
5	<p>Press the MODE selector button. The right "0" (lower digit) indication of the error code flashes.</p>	
6	<p>Error code lower digit diagnosis Press the UP or DOWN button and change the error code lower digit until the continuous error code matching buzzer (*2) is generated.</p> <ul style="list-style-type: none"> ■ The lower digit of the code changes as shown below when the UP and DOWN buttons are pressed. <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>0 → 1 → 2 → 3 → 4 → 5 → 6 → 7 → 8 → 9 → A → H → C → U → E → F</p> <p>⇒ "UP" button ← "DOWN" button</p> </div>	

Normal status
 Enters inspection mode from normal status when the INSPECTION/TEST button is pressed.



2.2 Inspection Mode

BRC1D61

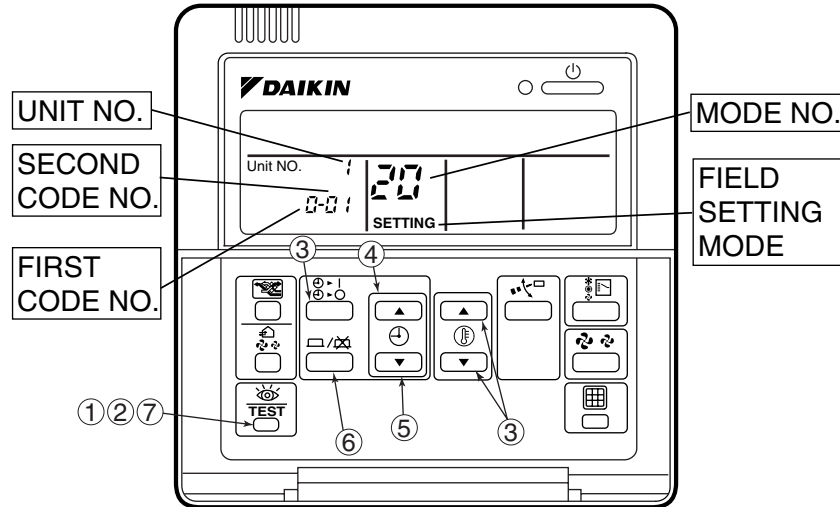


i Note: Inspection mode is not available for BRC1E61.

2.3 Service Mode

2.3.1 BRC1D61

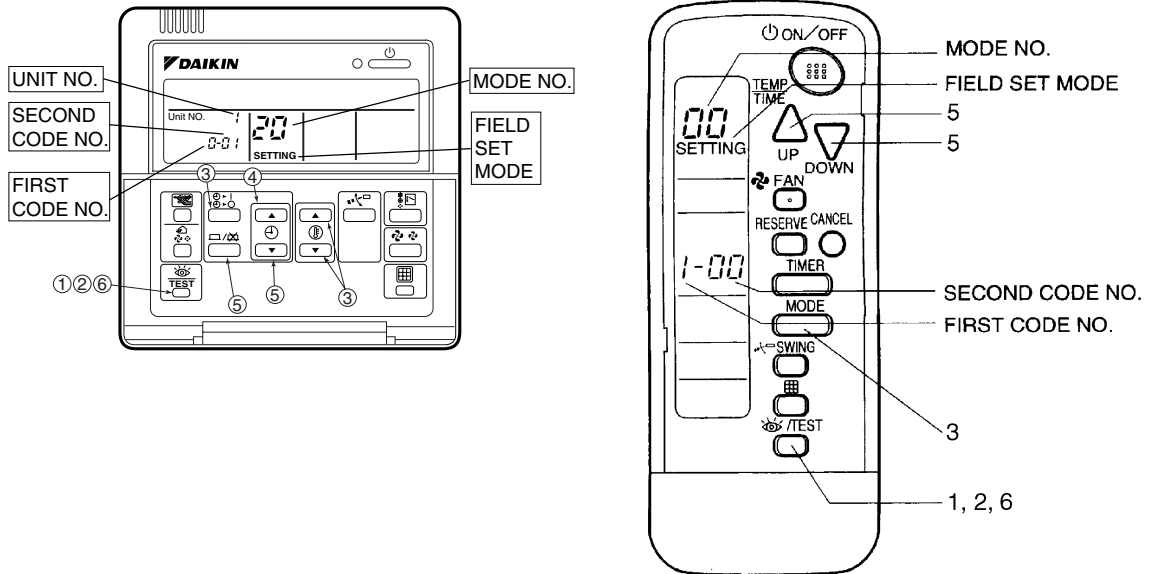
■ Display Service Data



1. Enter the field setting mode.
Press the inspection / test operation button for 4 seconds or more.
2. Enter the service mode.
After having entered the field setting mode, press the inspection / test operation button for 4 seconds or more.
3. Select the mode No.
Set the desired mode No. with the up/down temperature setting button.
4. Select the unit No.
Select the indoor unit No. set with the TIME MODE START/STOP button.
5. Select the desired error history No. or sensor data No. with or button.
6. Each data displays (Refer to the table below display)
7. Return to the normal operation mode.
Press the inspection / test operation button once.

Mode No.	Function	Content and Operation Method	Example of Remote Controller Display
40	Error History	You can change the history with the programming time up-down button.	
41	Sensor Data Display	Select the display thermistor with the programming time up-down button Display thermistor Remote controller thermistor Suction air thermistor Heat exchange thermistor	

■ Service Setting

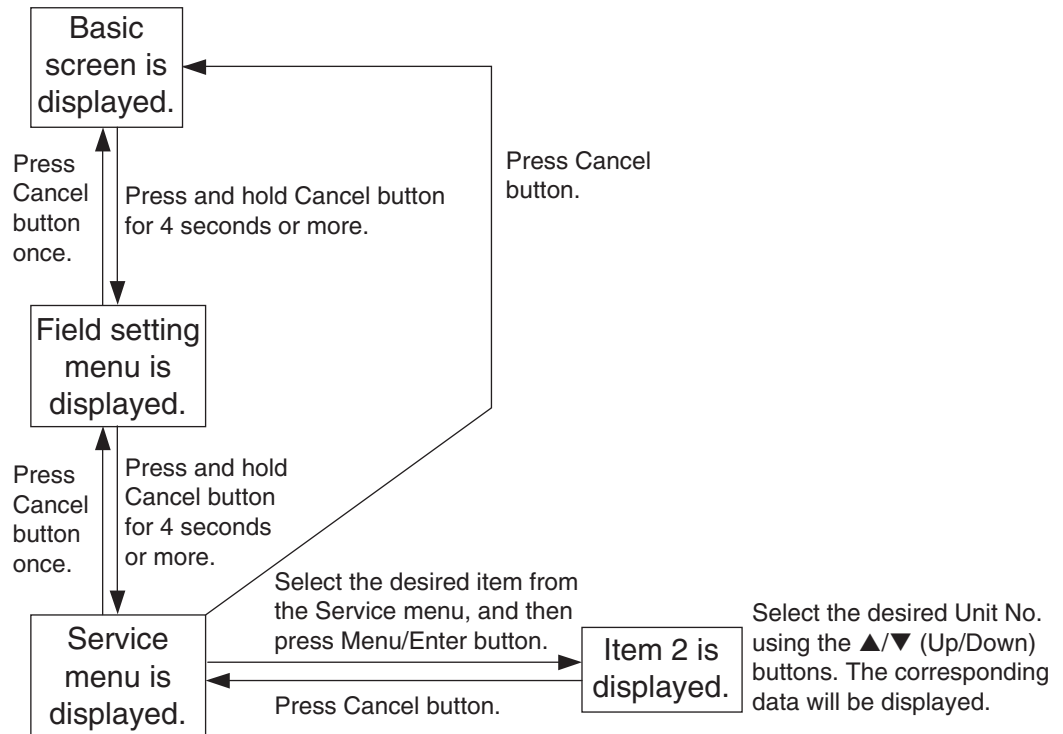


1. Enter the field setting mode.
Press the inspection / test operation button for 4 seconds or more.
2. Enter the maintenance mode.
After having entered the field setting mode, press the inspection / test operation button for a minimum of 4 seconds.
3. Select the mode No.
Set the desired mode No. with the up/down temperature setting button.
4. Select the unit No.
Select the indoor unit No. set with the TIME MODE START/STOP button.
5. Carry out the necessary settings for each mode. (Mode 43 only possible for wireless remote controller)
 - In case of Mode 43
Press TIMER ON / OFF BUTTON to decide the forced Fan ON.
 - In case of Mode 44
Set "Fan speed" with FAN SPEED CONTROL BUTTON and "Air flow direction" with AIR FLOW DIRECTION ADJUSTING BUTTON, then press TIMER ON / OFF BUTTON to decide.
 - In case of Mode 45
Select the changed unit No. with or button, then press TIMER ON / OFF BUTTON to decide.
6. Return to the normal operation mode.
Press the inspection / test operation button 1 time.

Mode No.	Function	Content and Operation Method	Example of Remote Controller Display
43	Forced Fan ON	Turns the fan ON for each unit individually.	
44	Individual Setting	Sets fan speed and air flow direction for each unit individually when using group control. Settings are made using the "air flow direction adjust" and "fan speed adjust" buttons.	
45	Unit No. Change	Changes unit No. Set the unit No. after changing with the programming time up-down button.	

2.3.2 BRC1E61

Operating the remote controller allows service data to be acquired and various services to be set.



Service Menu	Item 2	Remarks
1. Model Name Display	1. Unit No.	Select the Unit No. you want to check.
	2. Indoor unit	
	3. Outdoor unit	
2. Operating Hours Display	1. Unit No.	Select the Unit No. you want to check.
	2. Indoor unit operating time	All of these are displayed in hours.
	3. Indoor fan operation	
	4. Indoor unit energized time	
	5. Outdoor operating time	
	6. Outdoor fan 1 operation	
	7. Outdoor fan 2 operation	
	8. Outdoor comp. 1 operation	
	9. Outdoor comp. 2 operation	
3. Indoor Status Display 1/2	1. Unit No.	
	2. FAN	Tap, speed (rpm)
	3. FLAP	Swing, fixed
	4. Speed	Fan speed (rpm)
	5. EV	Degree that electronic expansion valve is open (pls)
	6. MP	Drain pump ON/OFF
	7. 52H	Electric heater ON/OFF
	8. Hu	Humidifier ON/OFF
	9. Anti-freezing	Anti-freezing control ON/OFF

Service Menu	Item 2	Remarks
3. Indoor Status Display 2/2	1. Unit No.	Select the Unit No. you want to check.
	2. Th1	Suction air thermistor
	3. Th2	Heat exchanger thermistor
	4. Th3	—
	5. Th4	Discharge air thermistor
	6. Th5	—
	7. Th6	—
4. Outdoor Status Display	1. Unit No.	Select the Unit No. you want to check.
	2. FAN Tap 1	Fan tap
	3. COMP	Compressor power supply frequency (Hz)
	4. EV1	Degree that electronic expansion valve is open (pls)
	5. SV1	Solenoid valve ON/OFF
	6. Th1	Outdoor air thermistor
	7. Th2	Heat exchanger thermistor
	8. Th3	Discharge pipe thermistor
5. Forced Defrost	1. Forced defrost ON	Enables the forced defrost operation.
	2. Forced defrost OFF	Disables the forced defrost operation.
6. Error Display Selection	1. Warning display ON	Displays a warning on the screen if an error occurs.
	2. Warning display OFF	No warning is displayed.
	3. Error display ON	Displays the error on the screen.
	4. Error display OFF	Displays neither errors nor warnings.
7. Unit No. Transfer	1. Current Unit No.	A unit No. can be transferred to another.
	2. Transfer Unit No.	
8. Sensor Address Display	○ Unit No.: 0 - 15	Select the Unit No. you want to check.
	○ Code 00: 01: 02: 03: 04: 05: 06: 07: 08: 09:	Remote controller thermistor (°C) Suction air thermistor (°C) Heat exchanger liquid pipe thermistor (°C) Heat exchanger gas pipe thermistor (°C) Indoor unit address No. Outdoor unit address No. BS unit address No. Zone control address No. Cooling/Heating batch address No. Demand/low-noise address No.
	○ Data	The corresponding data will be displayed, based on the Unit No. and Code selected.


2.4 Malfunction Codes and Description

○: ON ●: OFF ◐: Blink

	Malfunction code	Operation lamp	Malfunction contents	Page Referred
Indoor Unit	A0	●	Error of external protection device	257
	A1	◐	PCB defect, E ² PROM defect	258
	A3	◐	Malfunction of drain level control system (S1L)	259
	A6	◐	Fan motor (M1F) lock, overload	261, 262
	A7	○	Malfunction of swing flap motor (M1S)	265
	A8	◐	Abnormal power supply voltage	267
	A9	◐	Malfunction of electronic expansion valve coil (Y1E)	268
	AF	○	Drain level above limit	270
	AH	○	Malfunction of air filter maintenance	—
	AJ	◐	Malfunction of capacity Determination Device	271
	C1	◐	Failure of transmission (between indoor unit PCB and fan PCB)	272
	C4	◐	Malfunction of thermistor (R2T) for heat exchange (loose connection, disconnection, short circuit, failure)	274
	C5	◐	Malfunction of thermistor (R3T) for gas pipe (loose connection, disconnection, short circuit, failure)	275
	C6	◐	Failure of combination (between indoor unit PCB and fan PCB)	276
	C9	◐	Malfunction of thermistor (R1T) for suction air (loose connection, disconnection, short circuit, failure)	277
	CC	○	Malfunction of humidity sensor system	278
	CJ	○	Malfunction of thermostat sensor in remote controller	279
Outdoor Unit	E1	◐	PCB defect	280
	E3	◐	Actuation of high pressure switch	281
	E4	◐	Actuation of low pressure sensor	283
	E5	◐	Inverter compressor motor lock	285
	E6	◐	STD compressor motor overcurrent/lock	287
	E7	◐	Malfunction of outdoor unit fan motor	288
	E9	◐	Malfunction of electronic expansion valve coil (Y1E, Y2E)	291
	F3	◐	Abnormal discharge pipe temperature	293
	F6	◐	Refrigerant overcharged	294
	H7	◐	Abnormal outdoor fan motor signal	295
	H9	◐	Malfunction of thermistor (R1T) for outdoor air (loose connection, disconnection, short circuit, failure)	296
	J2	◐	Current sensor malfunction	297
	J3	◐	Malfunction of discharge pipe thermistor (R3, R31~33T) (loose connection, disconnection, short circuit, failure)	298
	J5	◐	Malfunction of thermistor (R2T, R7T) for suction pipe (loose connection, disconnection, short circuit, failure)	299
	J6	◐	Malfunction of thermistor (R4T) for outdoor unit heat exchanger (loose connection, disconnection, short circuit, failure)	300
	J7	◐	Malfunction of liquid pipe thermistor (R6T)	301
	J9	◐	Malfunction of subcooling heat exchanger gas pipe thermistor (R5T)	302
	JA	◐	Malfunction of high pressure sensor	303
	JC	◐	Malfunction of low pressure sensor	304
	L0	◐	Inverter system error	—
L4	◐	Malfunction of inverter radiating fin temperature rise	305	
L5	◐	Inverter compressor abnormal	307	
L8	◐	Inverter current abnormal	309	

○: ON ●: OFF ◐: Blink

	Malfunction code	Operation lamp	Malfunction contents	Page Referred
Outdoor Unit	L9	◐	Inverter start up error	311
	LA	◐	Malfunction of power unit	—
	LC	◐	Malfunction of transmission between inverter and control PCB	313
	P1	◐	Inverter over-ripple protection	316
	P4	◐	Malfunction of inverter radiating fin temperature rise sensor	317
	PJ	◐	Faulty field setting after replacing main PCB or faulty combination of PCB	319
System	U0	○	Low pressure drop due to refrigerant shortage or electronic expansion valve failure	320
	U1	◐	Reverse phase / open phase	321
	U2	◐	Power supply insufficient or instantaneous failure	322
	U3	◐	Check operation is not executed	325
	U4	◐	Malfunction of transmission between indoor units	326
	U5	◐	Malfunction of transmission between remote controller and indoor unit	328
	U5	●	Failure of remote controller PCB or setting during control by remote controller	328
	U7	◐	Malfunction of transmission between outdoor units	329
	U8	◐	Malfunction of transmission between main and sub remote controllers (malfunction of sub remote controller)	331
	U9	◐	Malfunction of transmission between indoor and outdoor units in the same system	332
	UA	◐	Improper combination of indoor and outdoor units, indoor units and remote controller	333
	UC	○	Address duplication of centralized controller	335
	UE	◐	Malfunction of transmission between centralized controller and indoor unit	336
	UF	◐	System is not set yet	339
UH	◐	Malfunction of system, refrigerant system address undefined	340	
Central Remote Controller and Schedule Timer	M1	○ or ●	PCB defect	342
	M8	○ or ●	Malfunction of transmission between optional controllers for centralized control	343
	MA	○ or ●	Improper combination of optional controllers for centralized control	345
	MC	○ or ●	Address duplication, improper setting	347
Heat Reclaim Ventilation	64	○	Indoor unit's air thermistor error	—
	65	○	Outside air thermistor error	—
	6A	○	Damper system alarm	—
	6A	◐	Damper system + thermistor error	—
	6F	○	Malfunction of simplified remote controller	—
	6H	○	Malfunction of door switch or connector	—
	94	◐	Internal transmission error	—

 The system operates for malfunction codes indicated in black squares, however, be sure to check and repair.

2.5 Malfunction Code Indication by Outdoor Unit PCB

<Monitor mode>

To enter the monitor mode, push the **[MODE (BS1)]** button when in "Setting mode 1".

* Refer to P.220 for Monitor mode.

<Selection of setting item>

Push the **[SET (BS2)]** button and set the LED display to a setting item.

* Refer to P.220 for Monitor mode.

<Confirmation of malfunction 1>

Push the **[RETURN (BS3)]** button once to display "First digit" of malfunction code.

<Confirmation of malfunction 2>

Push the **[SET (BS2)]** button once to display "Second digit" of malfunction code.

<Confirmation of malfunction 3>

Push the **[SET (BS2)]** button once to display "malfunction location".

<Confirmation of malfunction 4>

Push the **[SET (BS2)]** button once to display "master or slave 1 or slave 2" and "malfunction location".

Push the **[RETURN (BS3)]** button and switches to the initial status of "Monitor mode".

* Push the **[MODE (BS1)]** button and returns to "Setting mode 1".

Detail description on next page.

Contents of malfunction		Malfunction code
PCB malfunction	PCB malfunction	E1
	Faulty PCB	
Abnormal discharge pressure	HPS activated	E3
Abnormal suction pressure	Abnormal Pe	E4
Compressor lock	Detection of INV compressor lock	E5
Activation of OC	Detection of STD1 compressor lock	E6
	Detection of STD2 compressor lock	
Over load, overcurrent, abnormal lock of outdoor unit fan motor	Instantaneous overcurrent of DC fan 1 motor	E7
	Detection of DC fan 1 motor lock	
	Instantaneous overcurrent of DC fan 2 motor	
	Detection of DC fan 2 motor lock	
Malfunction of electronic expansion valve	EV1	E9
	EV2	
	EV3	
Abnormal position signal of outdoor unit fan motor	Abnormal position signal of DC fan 1 motor	H7
	Abnormal position signal of DC fan 2 motor	
Faulty sensor of outdoor air temperature	Faulty Ta sensor (short)	H9
	Faulty Ta sensor (open)	
Abnormal discharge pipe temperature	Abnormal Td	F3
Abnormal heat exchanger temperature	Refrigerant overcharge	F6
Faulty current sensor	Faulty CT1 sensor	J2
	Faulty CT2 sensor	
Faulty sensor of discharge pipe temperature	Faulty Tdi sensor (short)	J3
	Faulty Tds1 sensor (short)	
	Faulty Tds2 sensor (short)	
	Faulty Tdi sensor (open)	
	Faulty Tds1 sensor (open)	
	Faulty Tds2 sensor (open)	
Faulty sensor of suction pipe temperature	Faulty Ts1 sensor (short)	J5
	Faulty Ts1 sensor (open)	
	Faulty Ts2 sensor (short)	
	Faulty Ts2 sensor (open)	
Faulty sensor of heat exchanger temperature	Faulty Tb sensor (short)	J6
	Faulty Tb sensor (open)	
Malfunction of the liquid pipe temperature sensor	Faulty TI sensor (short)	J7
	Faulty TI sensor (open)	
Faulty sensor of subcooling heat exchanger temperature	Faulty Tsh sensor (short)	J9
	Faulty Tsh sensor (open)	
Faulty sensor of discharge pressure	Faulty Pc sensor (short)	JA
	Faulty Pc sensor (open)	
Faulty sensor of suction pressure	Faulty Pe sensor (short)	JC
	Faulty Pe sensor (open)	
Instantaneous power failure	*NO display on remote controller (Judge during compressor operation)	(L2)
Inverter radiation fin temperature rising	Over heating of inverter radiation fin temperature	L4
DC output overcurrent	Inverter instantaneous overcurrent	L5
	IGBT malfunction	L5
Electronic thermal	Electronic thermal switch 1	L8
	Electronic thermal switch 2	
	Out-of-step	
	Speed down after startup	
Stall prevention (Limit time)	Lightening detection	L9
	Stall prevention (Current increasing)	
	Stall prevention (Faulty start up)	
	Abnormal wave form in startup	
Transmission error between inverter and outdoor unit	Out-of-step	LC
	Inverter transmission error	

○: ON ●: OFF ◐: Blink

Malfunction code	Confirmation of malfunction 1							Confirmation of malfunction 2							Confirmation of malfunction 3							Confirmation of malfunction 4							
	H1P	H2P	H3P	H4P	H5P	H6P	H7P	H1P	H2P	H3P	H4P	H5P	H6P	H7P	H1P	H2P	H3P	H4P	H5P	H6P	H7P	H1P	H2P	H3P	H4P	H5P	H6P	H7P	
E1	●			●	●	◐	◐	◐			●	●	●	◐	◐			●	●	●	●	◐			●	●	◐	◐	*1
E3								◐			●	●	◐	◐	◐			●	●	●	●	◐			●	●	◐	◐	
E4								◐			●	◐	●	●	◐			●	●	●	●	◐			●	●	◐	◐	
E5								◐			●	◐	●	◐	◐			●	●	●	●	◐			●	●	◐	◐	
E6								◐			●	◐	◐	●	◐			●	●	●	●	◐			●	●	◐	◐	
E7								◐			●	◐	◐	◐	◐			●	●	●	●	◐			●	●	◐	◐	
E9								◐			◐	●	●	◐	◐			●	●	●	●	◐			●	●	◐	◐	
H7	◐			●	◐	●	●	◐			●	◐	◐	◐	◐			●	●	●	●	◐			●	●	◐	◐	
H9								◐			◐	●	●	◐	◐			●	●	●	●	◐			●	●	◐	◐	
F3	◐			●	◐	●	◐	◐			●	●	◐	◐	◐			●	●	●	●	◐			●	●	◐	◐	
F6								◐			●	◐	◐	●	◐			●	●	●	●	◐			●	●	◐	◐	
J2	◐			●	◐	◐	●	◐			●	●	◐	●	◐			●	●	●	●	◐			●	●	◐	◐	
J3								◐			●	●	◐	◐	◐			●	●	●	●	◐			●	●	◐	◐	
J5								◐			●	◐	●	◐	◐			●	●	●	●	◐			●	●	◐	◐	
J6								◐			●	◐	◐	●	◐			●	●	●	●	◐			●	●	◐	◐	
J7								◐			●	◐	◐	◐	◐			●	●	●	●	◐			●	●	◐	◐	
J9								◐			◐	●	●	◐	◐			●	●	●	●	◐			●	●	◐	◐	
JA								◐			◐	●	◐	●	◐			●	●	●	●	◐			●	●	◐	◐	
JC								◐			◐	◐	●	●	◐			●	●	●	●	◐			●	●	◐	◐	
(L2)	◐			●	◐	◐	◐	◐			●	●	◐	●	◐			●	●	●	●	◐			●	●	◐	◐	
L4								◐			●	◐	●	●	◐			●	●	●	●	◐			●	●	◐	◐	
L5								◐			●	◐	●	◐	◐			●	●	●	●	◐			●	●	◐	◐	
L5								◐			●	◐	●	◐	◐			●	●	●	●	◐			●	●	◐	◐	
L8								◐			◐	●	●	●	◐			●	●	●	●	◐			●	●	◐	◐	
L9								◐			◐	●	●	◐	◐			●	●	●	●	◐			●	●	◐	◐	
LC								◐			◐	◐	●	●	◐			●	●	●	●	◐			●	●	◐	◐	

Display of contents of malfunction (first digit)

Display of contents of malfunction (second digit)

Display 1 of malfunction in detail

Display 2 of malfunction in detail

- *1 ● ● Master
- ◐ Slave1
- ◐ ● Slave2
- ◐ ◐ System

<Monitor mode>

To enter the monitor mode, push the **MODE (BS1)** button when in "Setting mode 1".

* Refer to P.220 for Monitor mode.

<Selection of setting item>

Push the **SET (BS2)** button and set the LED display to a setting item.

* Refer to P.220 for Monitor mode.

<Confirmation of malfunction 1>

Push the **RETURN (BS3)** button once to display "First digit" of malfunction code.

<Confirmation of malfunction 2>

Push the **SET (BS2)** button once to display "Second digit" of malfunction code.

<Confirmation of malfunction 3>

Push the **SET (BS2)** button once to display "malfunction location".

<Confirmation of malfunction 4>

Push the **SET (BS2)** button once to display "master or slave 1 or slave 2" and "malfunction location".

Push the **RETURN (BS3)** button and switches to the initial status of "Monitor mode".

* Push the **MODE (BS1)** button and returns to "Setting mode 1".

Detail description on next page.

Contents of malfunction		Malfunction code
Open phase/Power supply imbalance	Imbalance of inverter power supply voltage	P1
Faulty temperature sensor inside switch box	Faulty thermistor of inverter box	P3
Faulty temperature sensor of inverter radiation fin	Faulty thermistor of inverter fin	P4
Incorrect combination of Inverter and fan driver	Incorrect combination of inverter	PJ
	Incorrect combination of fan driver 1	
	Incorrect combination of fan driver 2	
Gas shortage	Gas shortage alarm	U0
Reverse phase	Reverse phase error	U1
Abnormal power supply voltage	Insufficient Inverter voltage	U2
	Inverter open phase (phase T)	
	Charging error of capacitor in inverter main circuit	
No implementation of test-run		U3
Transmission error between indoor and outdoor unit	I/O transmission error	U4
	I/O transmission error	
Transmission error between outdoor units, transmission error between thermal storage units, duplication of IC address	Sequential startup ADP alarm	U7
	Sequential startup ADP malfunction	U7
	Malfunction of transmission between multi units (Multi 1)	
	Malfunction of transmission between multi units (Multi 2)	
	Abnormal multi horsepower setting	
	Abnormal multi address setting	
	Excessive multi connections	
Multi system malfunction		
Transmission error of other system	Indoor unit system abnormal in other system or other indoor unit system abnormal in own system	U9
Erroneous field setting	System transmission malfunction	UA
	Overconnection malfunction of indoor units	
	Malfunction of field setting	
	Refrigerant abnormal	UA
	Multi-ID abnormal	
	Alarm of TSS field setting	
Faulty system malfunction	Wiring error (Auto-address error)	UH
	Malfunction of multi-level connection	UJ
Transmission error in accessory devices	Alarm of multi-level connection	UJ
	Alarm of multi-level connection	UJ
Conflict in wiring and piping, no setting for system	Conflict in wiring and piping	UF

○: ON ●: OFF ◐: Blink

Malfunction code	Confirmation of malfunction 1						Confirmation of malfunction 2						Confirmation of malfunction 3						Confirmation of malfunction 4									
	H1P	H2P	H3P	H4P	H5P	H6P	H7P	H1P	H2P	H3P	H4P	H5P	H6P	H7P	H1P	H2P	H3P	H4P	H5P	H6P	H7P	H1P	H2P	H3P	H4P	H5P	H6P	H7P
P1	◐			◐	●	●	●	◐			●	●	●	◐	◐			●	●	●	●	◐			●	●		
P3								◐			●	●	◐	◐	◐			●	●	●	●	◐			●	●		
P4								◐			●	◐	●	●	◐			●	●	●	●	◐			●	●		
PJ								◐			◐	◐	●	◐	◐			●	●	●	●	◐			●	●	◐	◐
														◐			●	●	●	●	◐			●	●			
														◐			●	●	●	●	◐			◐	◐			
U0	◐			◐	●	●	◐	◐			●	●	●	●	◐			●	●	●	●	◐			●	●	◐	◐
U1								◐			●	●	●	◐	◐			●	●	●	●	◐			●	●		
U2								◐			●	●	◐	●	◐			●	●	●	●	◐			●	◐		
U3								◐			●	●	◐	◐	◐			●	●	●	●	◐			●	●	◐	◐
														◐			●	●	●	●	◐			●	◐	◐	◐	
								◐			●	◐	●	●	◐			●	●	●	●	◐			●	◐	◐	◐
														◐			●	●	●	●	◐			●	◐	◐	◐	
								◐			●	◐	◐	◐	◐			●	●	●	●	◐			◐	◐	◐	◐
														◐			●	●	●	●	◐			◐	◐	◐	◐	
														◐			●	●	●	●	◐			◐	◐	◐	◐	
U9								◐			◐	●	●	◐	◐			●	●	●	●	◐			●	●	◐	◐
UA								◐			◐	●	◐	●	◐			●	●	●	●	◐			●	●	◐	◐
														◐			●	●	●	●	◐			◐	◐	◐	◐	
														◐			●	●	●	●	◐			●	●	◐	◐	
														◐			●	●	●	●	◐			◐	◐	◐	◐	
UH								◐			◐	●	◐	◐	◐			●	●	●	●	◐			●	●	◐	◐
UJ								◐			◐	◐	●	◐	◐			●	●	●	●	◐			●	●		
UJ														◐			●	●	●	●	◐			●	◐			
UF								◐			◐	◐	◐	◐	◐			●	●	●	●	◐			●	●	◐	◐

Display of contents of malfunction (first digit)
Display of contents of malfunction (second digit)
Display 1 of malfunction in detail
Display 2 of malfunction in detail

*1

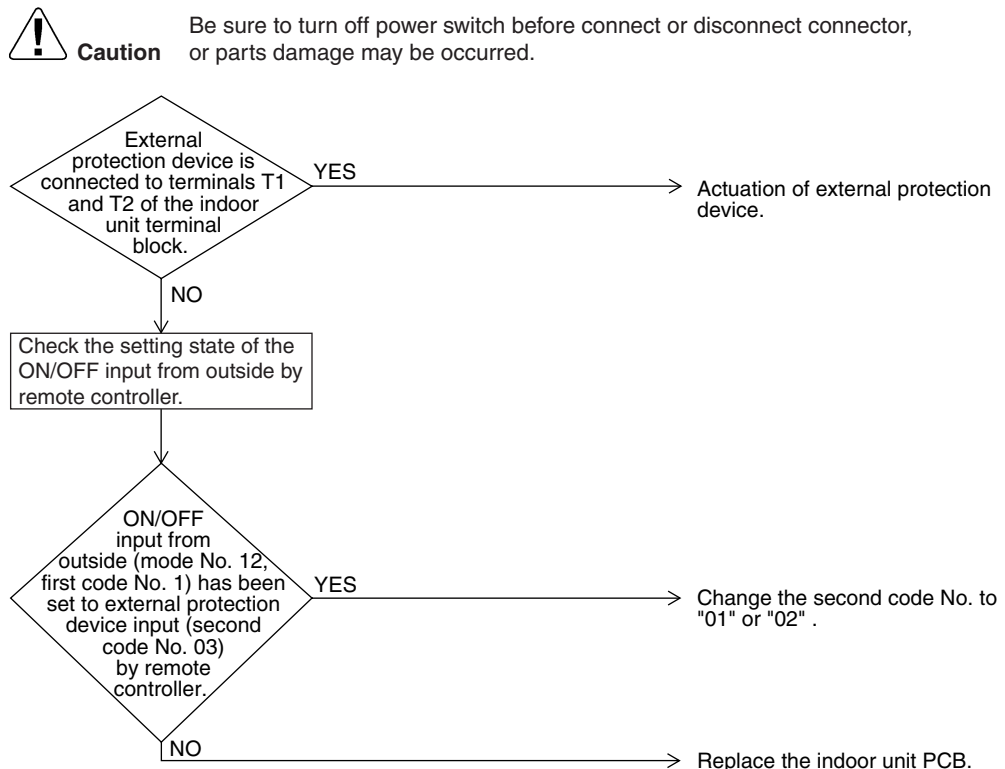
●	◐	●	◐	Master
●	◐	◐	◐	Slave1
◐	●	●	●	Slave2
◐	◐	◐	◐	System

3. Troubleshooting by Indication on the Remote Controller


3.1 "80" Indoor Unit: Error of External Protection Device

Remote Controller Display	80
Applicable Models	All indoor unit models
Method of Malfunction Detection	Detect open or short circuit between external input terminals in indoor unit.
Malfunction Decision Conditions	When an open circuit occurs between external input terminals with the remote controller set to "external ON/OFF terminal".
Supposed Causes	<ul style="list-style-type: none"> ■ Actuation of external protection device ■ Improper field set ■ Defect of indoor unit PCB

Troubleshooting



3.2 “E1” Indoor Unit: PCB Defect

Remote Controller Display	E1
Applicable Models	All indoor unit models
Method of Malfunction Detection	Check data from E ² PROM.
Malfunction Decision Conditions	When data could not be correctly received from the E ² PROM E ² PROM : Type of nonvolatile memory. Maintains memory contents even when the power supply is turned off.
Supposed Causes	<ul style="list-style-type: none"> ■ Defect of indoor unit PCB ■ External factor (Noise, etc.)
Troubleshooting	<div style="text-align: center;">  <p>Caution Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.</p> </div> <pre> graph TD Start[Turn power supply OFF, then power ON again.] --> Decision{Does the system return to normal?} Decision -- YES --> YesText[The indoor unit PCB is normal. External factor other than malfunction (for example, noise etc.).] Decision -- NO --> NoText[Replace the indoor unit PCB.] </pre>

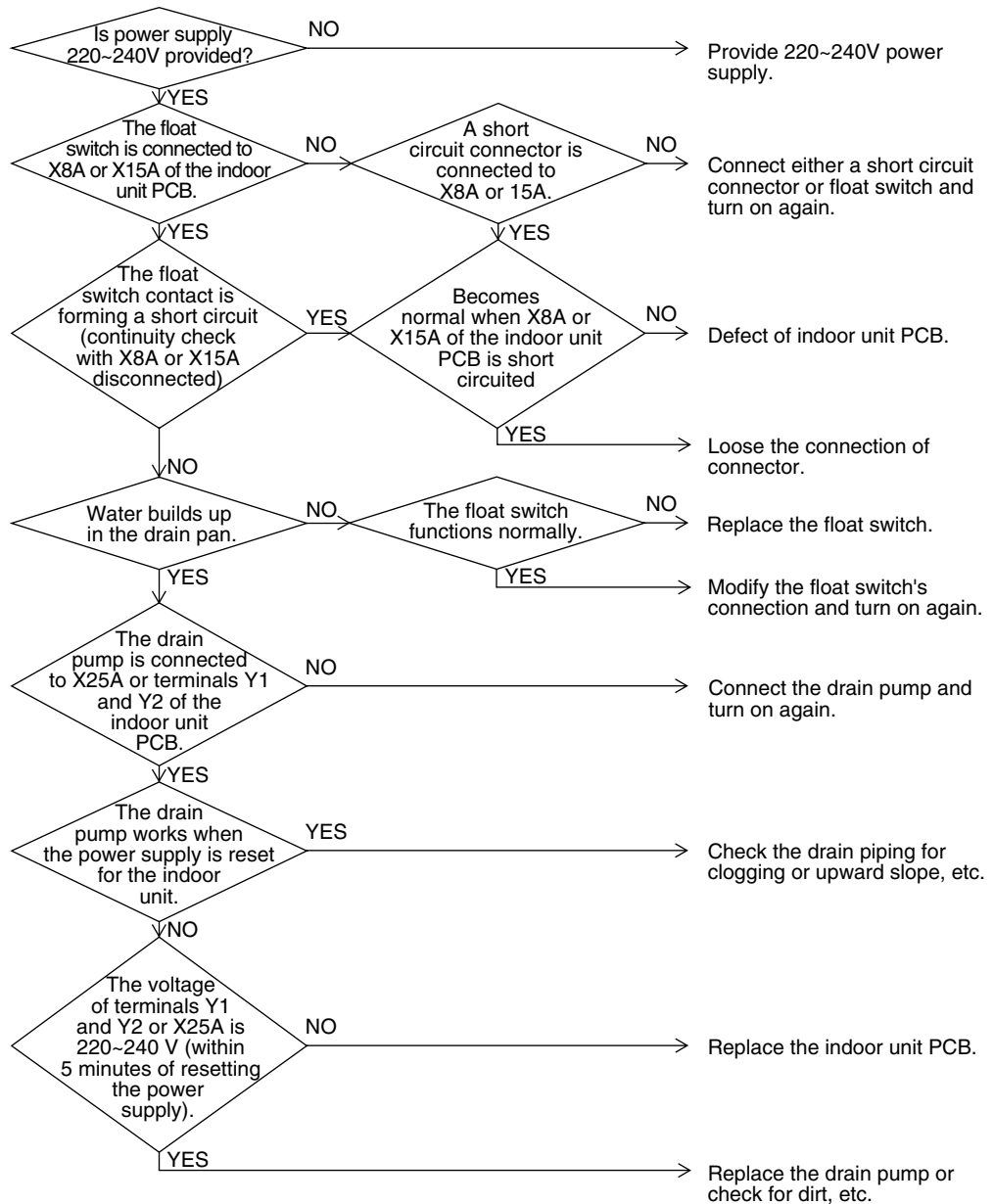
3.3 “E3” Indoor Unit: Malfunction of Drain Level Control System (S1L)

Remote Controller Display	E3
Applicable Models	FXCQ, FXFQ, FXSQ, FXKQ, FXDQ, FXMQ, FXUQ, FXHQ (Option), FXMQ200,250M (Option), FXAQ (Option), FXMQ-MF (Option)
Method of Malfunction Detection	By float switch OFF detection
Malfunction Decision Conditions	When rise of water level is not a condition and the float switch goes OFF.
Supposed Causes	<ul style="list-style-type: none"> ■ 220~240V power supply is not provided ■ Defect of float switch or short circuit connector ■ Defect of drain pump ■ Drain clogging, upward slope, etc. ■ Defect of indoor unit PCB ■ Loose connection of connector

Troubleshooting

**Caution**

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



3.4 “88” Indoor Unit: Fan Motor (M1F) Lock, Overload

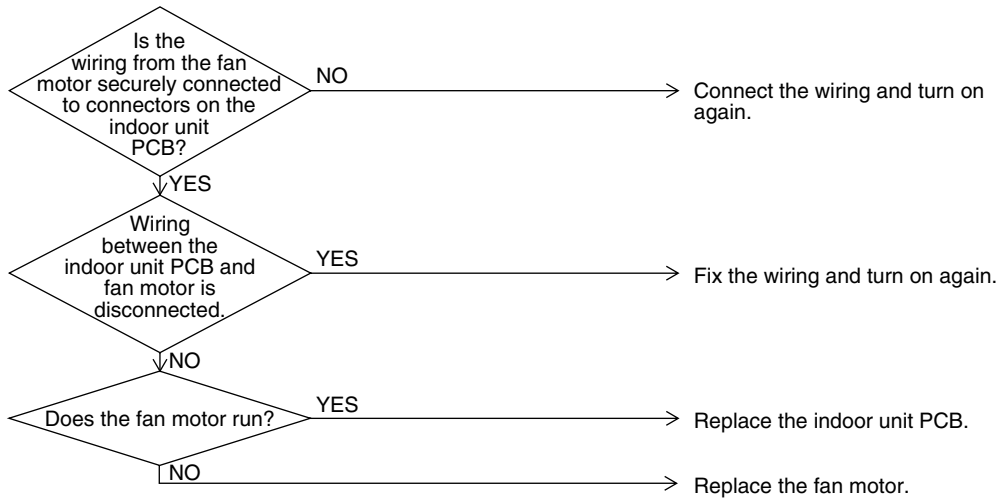
Remote Controller Display	88
Applicable Models	All indoor units (except FXMQ-P)
Method of Malfunction Detection	Detection by failure of signal for detecting number of turns to come from the fan motor
Malfunction Decision Conditions	When number of turns can not be detected even when output voltage to the fan is maximum
Supposed Causes	<ul style="list-style-type: none"> ■ Fan motor lock ■ Disconnected or faulty wiring between fan motor and PCB

Troubleshooting



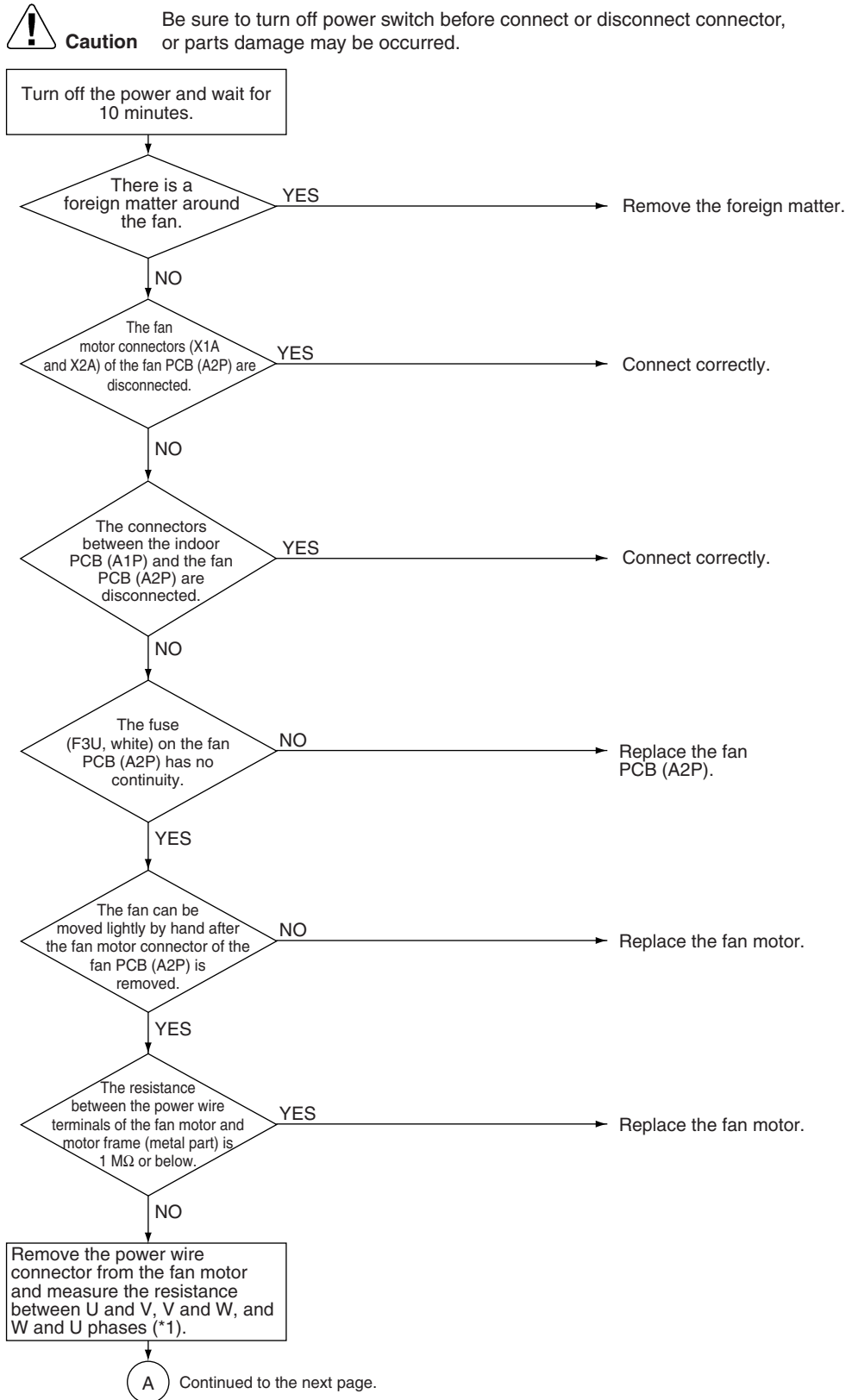
Caution

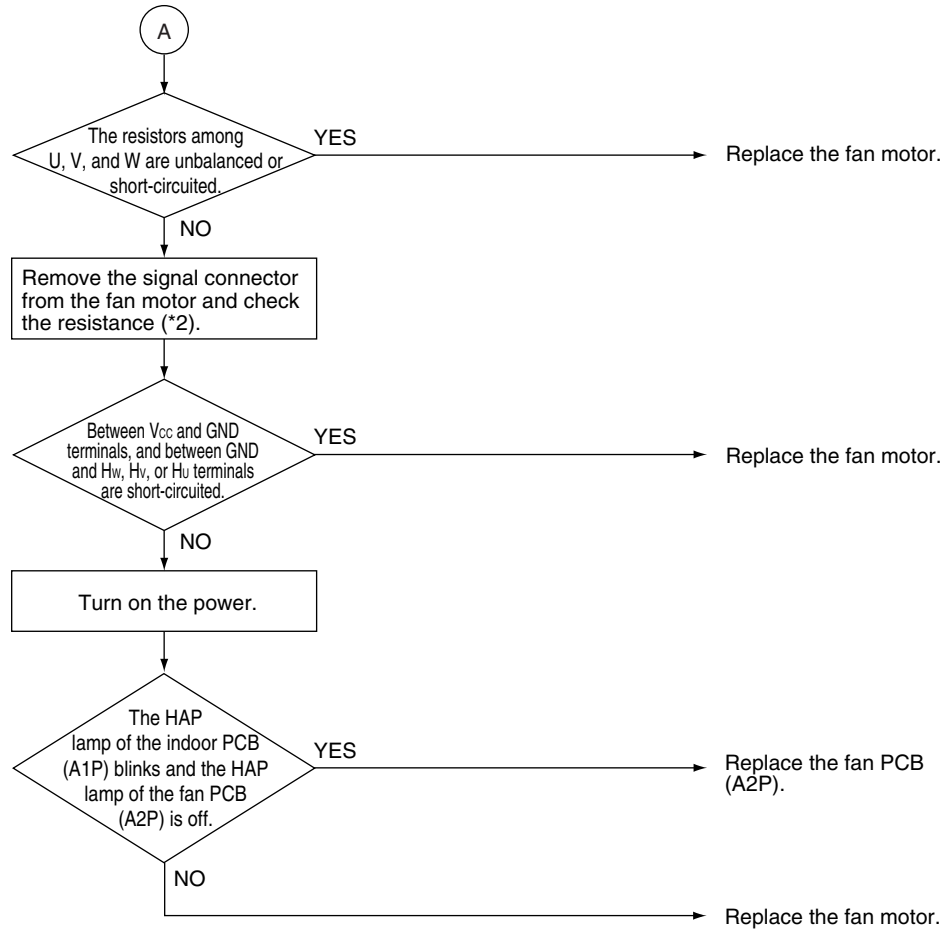
Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



Remote Controller Display	85
Applicable Models	FXMQ20~140P
Method of Malfunction Detection	<p>Detection from the current flow on the fan PCB.</p> <p>Detection from the RPM of the fan motor in operation.</p> <p>Detection from the position signal of the fan motor.</p> <p>Detection from the current flow on the fan PCB when the fan motor starting operation.</p>
Malfunction Decision Conditions	<ul style="list-style-type: none"> ■ An overcurrent flows. ■ The RPM is less than a certain level for 6 seconds. ■ A position error in the fan rotor continues for 5 seconds or more. ■ An overcurrent flows.
Supposed Causes	<ul style="list-style-type: none"> ■ The clogging of a foreign matter. ■ The disconnection of the fan motor connectors (X1A and X2A). ■ The disconnection of the connectors between the indoor PCB (A1P) and fan PCB (A2P). ■ A failure in fan PCB (A2P). ■ A failure in the fan motor.

Troubleshooting





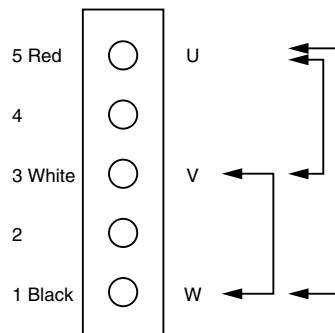
*1. Measurement of power wire connector.

Remove the X1A connector from the fan PCB (A2P) and measure the resistance between the U and V, V and W, and W and U phases of the motor connector (with five conductors) and check that each phase are balanced (within a permissible dispersion range of $\pm 20\%$).

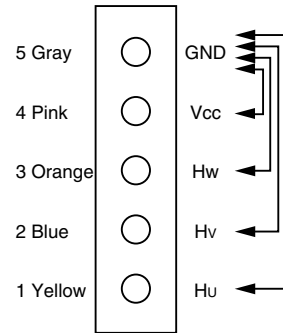
*2. Measurement of signal wire connector.

Remove the X2A connector and measure the resistance between GND and Vcc, Hw, Hv, or Hu terminals of the motor connector (with five conductors).

Connector power wire use (X1A)



Connector signal wire use (X2A)



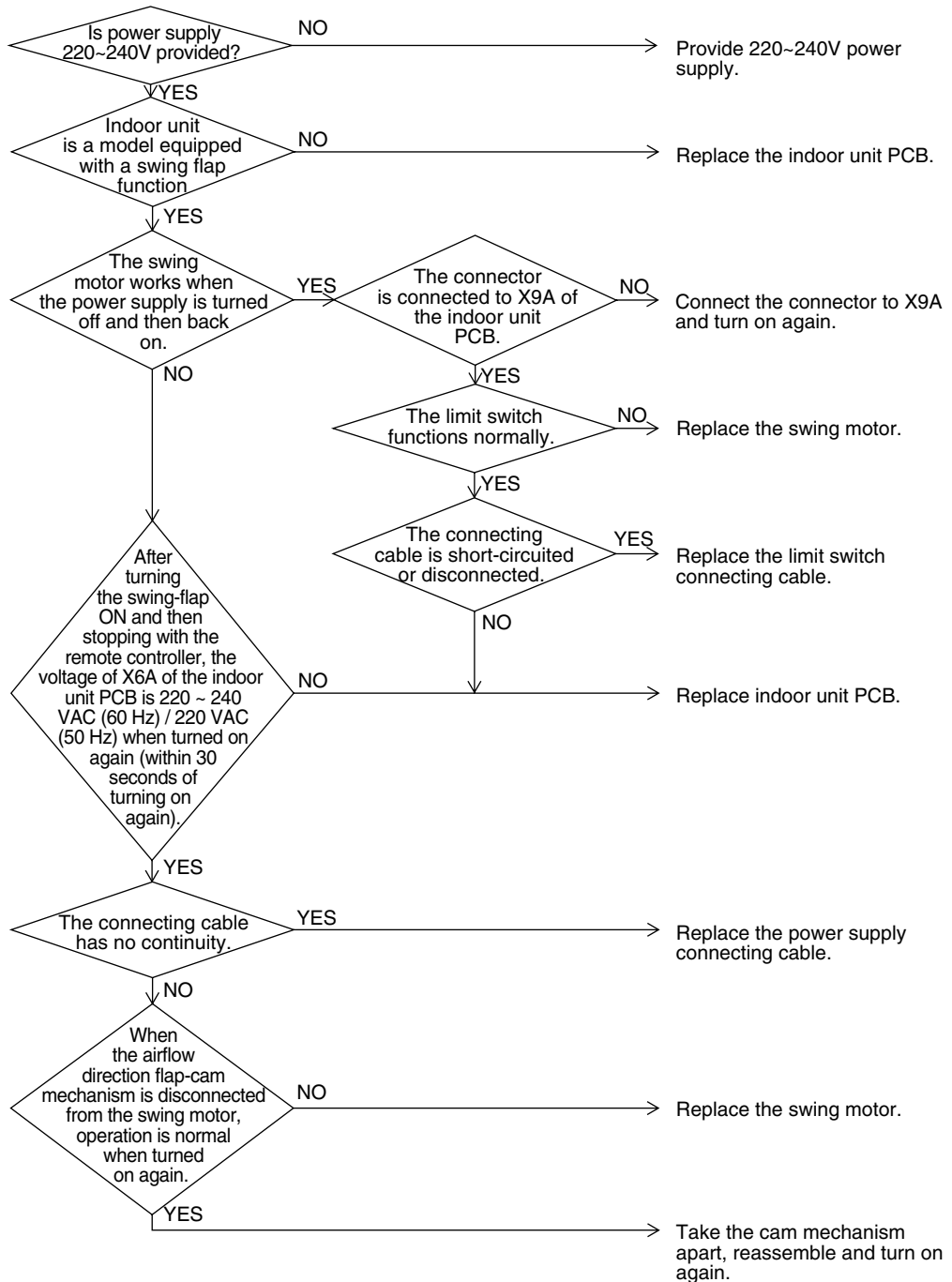
3.5 “E7” Indoor Unit: Malfunction of Swing Flap Motor (M1S)

Remote Controller Display	E7
Applicable Models	FXCQ, FXHQ, FXKQ
Method of Malfunction Detection	Utilizes ON/OFF of the limit switch when the motor turns.
Malfunction Decision Conditions	When ON/OFF of the micro-switch for positioning cannot be reversed even though the swing flap motor is energized for a specified amount of time (about 30 seconds).
Supposed Causes	<ul style="list-style-type: none"> ■ Defect of swing motor ■ Defect of connection cable (power supply and limit switch) ■ Defect of airflow direction adjusting flap-cam ■ Defect of indoor unit PCB


Troubleshooting

**Caution**


Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.

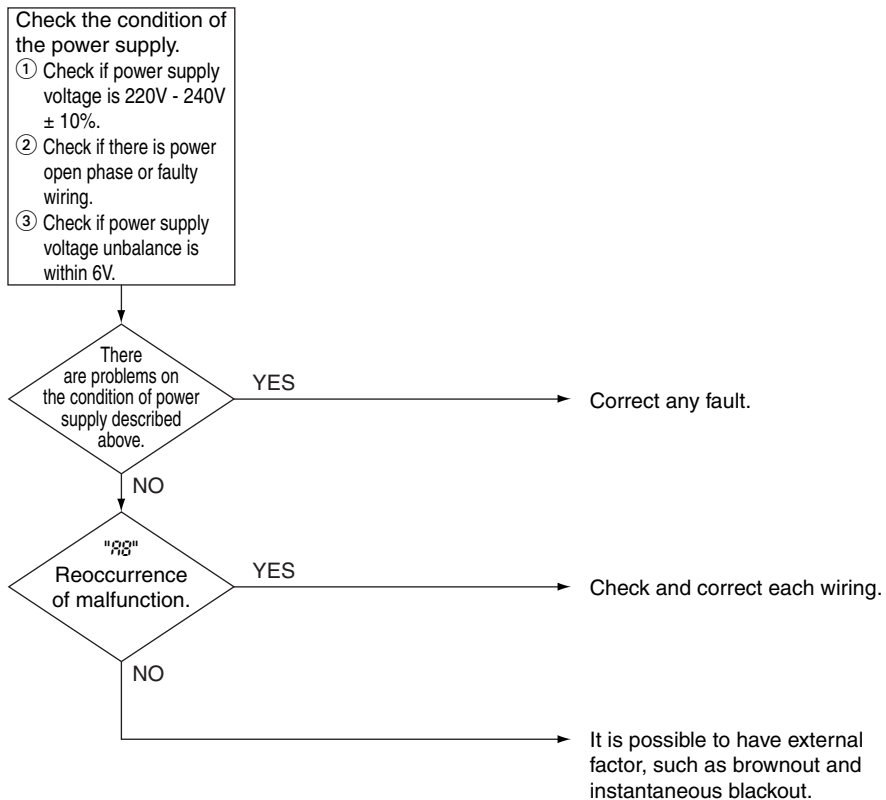


3.6 Abnormal Power Supply Voltage

Remote Controller Display	
Applicable Models	FXMQ20~140P
Method of Malfunction Detection	Detect malfunction checking the input voltage of fan motor.
Malfunction Decision Conditions	When the input voltage of fan motor is 150V or less, or 386V or more.
Supposed Causes	<p>The possible causes are:</p> <ul style="list-style-type: none"> ■ Power-supply voltage malfunction. ■ Connection defect on signal line. ■ Wiring defect. ■ Instantaneous blackout, others.

Troubleshooting

 **Caution** Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



3.7 “E9” Indoor Unit: Malfunction of Electronic Expansion Valve Coil (Y1E)

Remote
Controller
Display

E9

Applicable
Models

All indoor unit models

Method of
Malfunction
Detection

Use a micro-computer to check the electronic expansion valve for coil conditions.

Malfunction
Decision
Conditions

When the pin input of the electronic expansion valve is not normal while in the initialization of the micro-computer.

Supposed
Causes

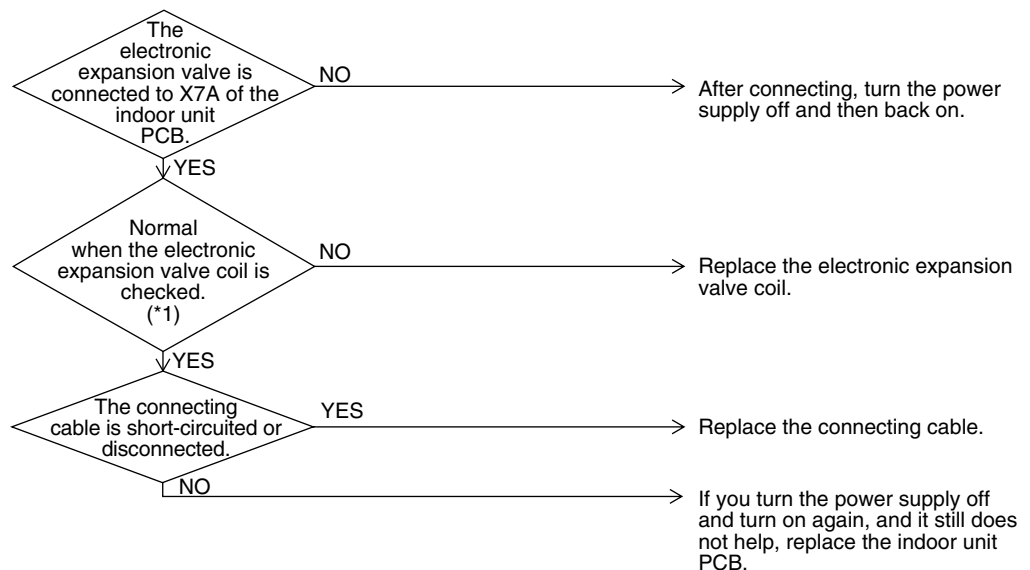
- Malfunction of electronic expansion valve coil
- Defect of indoor unit PCB
- Defect of connecting cable

Troubleshooting



Caution

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



*1: Method for the electronic expansion valve coil
 Disconnect the electronic expansion valve from the PCB and check the continuity between the connector pins.

(Normal)


Pin No.	1. White	2. Yellow	3. Orange	4. Blue	5. Red	6. Brown
1. White		x	○ Approx. 300Ω	x	○ Approx. 150Ω	x
2. Yellow			x	○ Approx. 300Ω	x	○ Approx. 150Ω
3. Orange				x	○ Approx. 150Ω	x
4. Blue					x	○ Approx. 150Ω
5. Red						x
6. Brown						

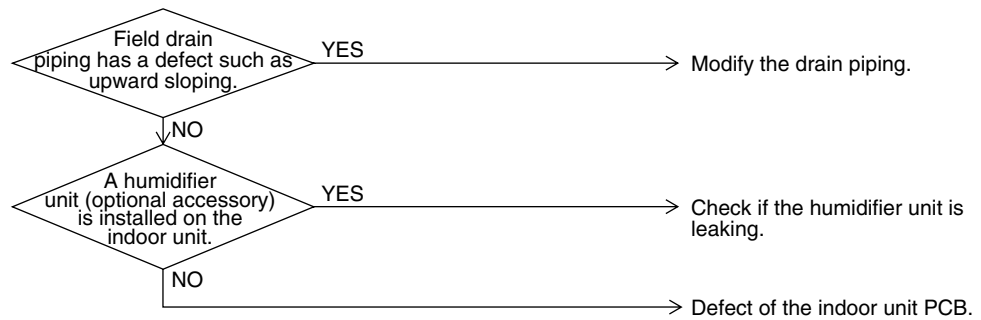
○: Continuity
 x: No continuity

3.8 “FF” Indoor Unit: Drain Level above Limit

Remote Controller Display	FF
Applicable Models	FXCQ, FXFQ, FXSQ, FXKQ, FXMQ, FXDQ, FXMQ-MF, FXUQ
Method of Malfunction Detection	Water leakage is detected based on float switch ON/OFF operation while the compressor is in non-operation.
Malfunction Decision Conditions	When the float switch changes from ON to OFF while the compressor is in non-operation.
Supposed Causes	<ul style="list-style-type: none"> ■ Humidifier unit (optional accessory) leaking ■ Defect of drain pipe (upward slope, etc.) ■ Defect of indoor unit PCB


Troubleshooting

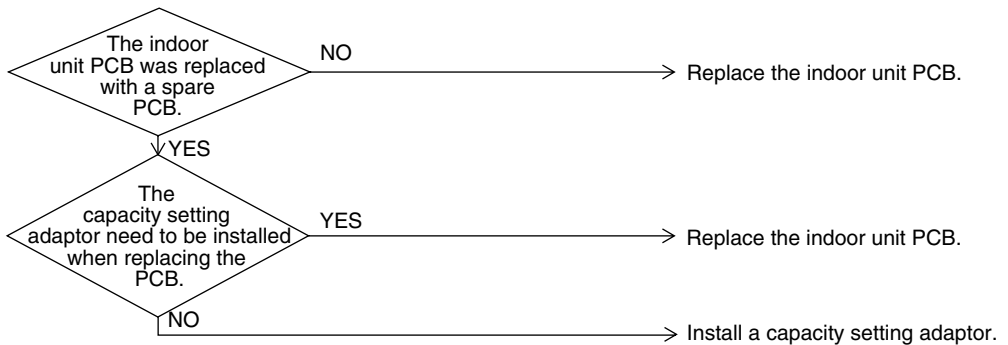
 **Caution** Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



3.9 “AU” Indoor Unit: Malfunction of Capacity Determination Device

Remote controller display	AU
Applicable Models	All indoor unit models
Method of Malfunction Detection	Capacity is determined according to resistance of the capacity setting adaptor and the memory inside the IC memory on the indoor unit PCB, and whether the value is normal or abnormal is determined.
Malfunction Decision Conditions	Operation and: When the capacity code is not saved to the PCB, and the capacity setting adaptor is not connected. When a capacity that does not exist for that unit is set.
Supposed Causes	<ul style="list-style-type: none"> ■ You have forgotten to install the capacity setting adaptor. ■ Defect of indoor unit PCB
Troubleshooting	

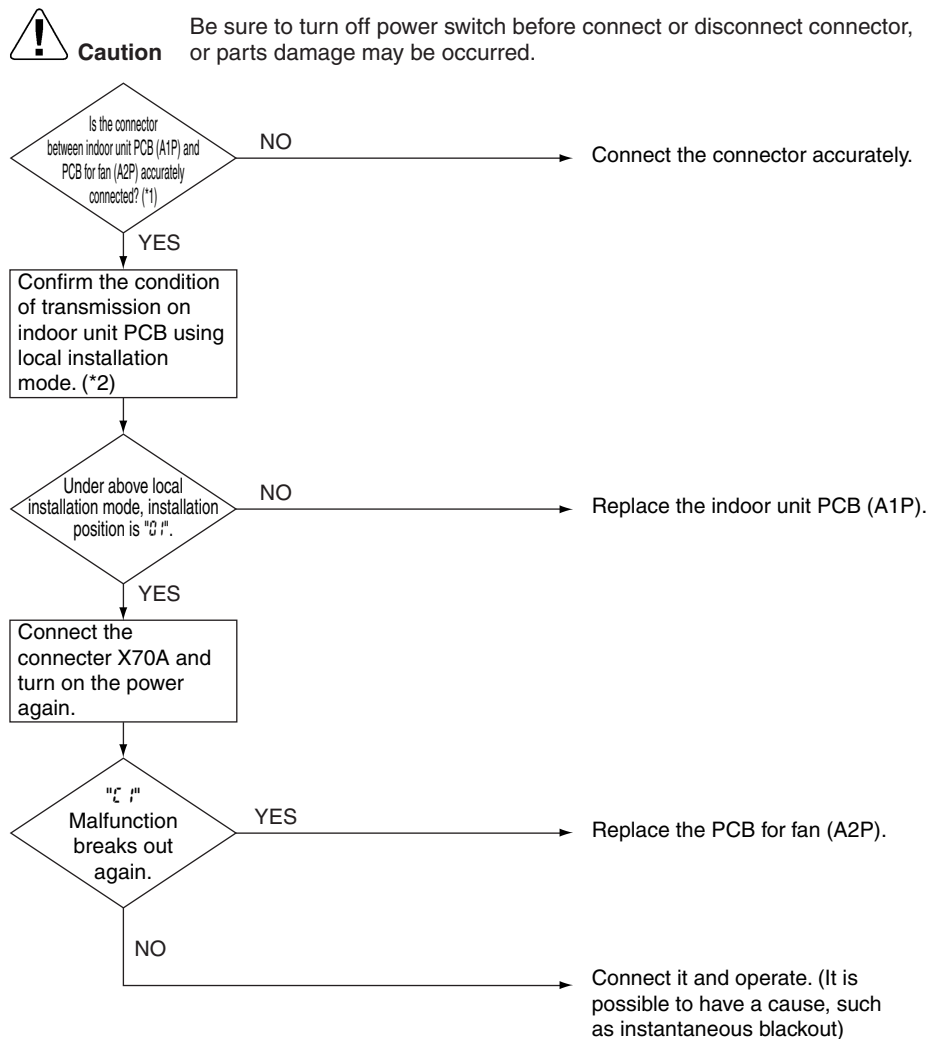
 **Caution** Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



3.10 “E1” Indoor Unit: Failure of Transmission (Between Indoor Unit PCB and Fan PCB)

Remote Controller Display	E1
Applicable Models	FXMQ20~140P
Method of Malfunction Detection	Check the condition of transmission between indoor PCB (A1P) and PCB for fan (A2P) using computer.
Malfunction Decision Conditions	When normal transmission is not conducted for certain duration.
Supposed Causes	<ul style="list-style-type: none"> ■ Connection defect of the connector between indoor PCB (A1P) and PCB for fan (A2P). ■ Malfunction of indoor PCB (A1P). ■ Malfunction of PCB for fan (A2P). ■ External factor, such as instantaneous blackout.

Troubleshooting



*1. Pull out and insert the connector once and check it is absolutely connected.

*2. Method to check transmission part of indoor unit PCB.

- ① Turn off the power and remove the connector X70A of indoor unit PCB (A1P).
- ② Short-circuit X70A.
- ③ After turning on the power, check below numbers under local setting remote control.
(Confirmation: Setting position NO. at the condition of setting switch No. 21 on mode No. 41)



Determination

01: Normal
Other than 01: Transmission defect on indoor unit PCB

★ After confirmation, turn off the power, take off the short-circuit and connect X70A back to original condition.

3.11 “E4” Indoor Unit: Malfunction of Thermistor (R2T) for Liquid Pipe

Remote
Controller
Display

E4

Applicable
Models

All indoor unit models

Method of
Malfunction
Detection

Malfunction detection is carried out by temperature detected by liquid pipe thermistor.

Malfunction
Decision
Conditions

When the liquid pipe thermistor becomes disconnected or shorted while the unit is running.

Supposed
Causes

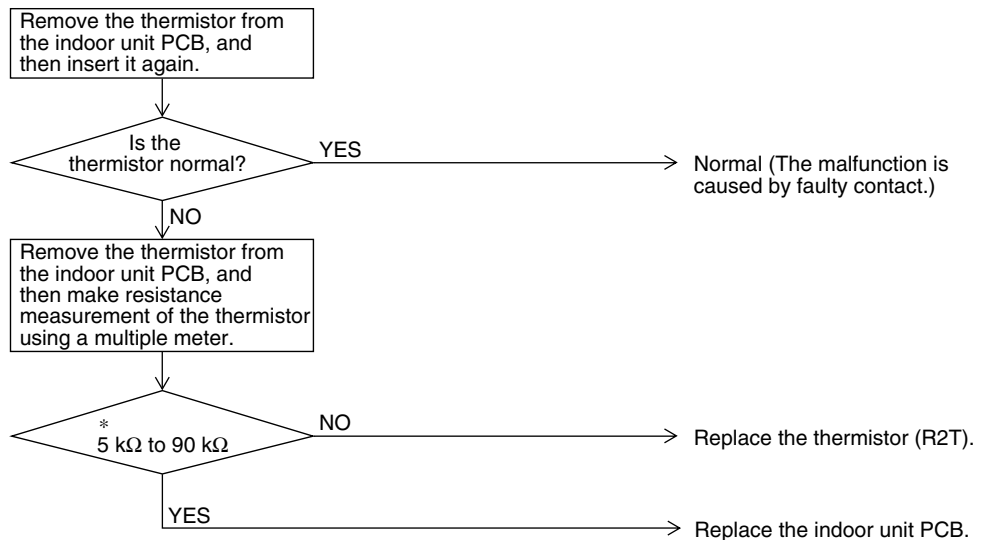
- Defect of thermistor (R2T) for liquid pipe
- Defect of indoor unit PCB

Troubleshooting



Caution

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



* Refer to “Thermistor Resistance / Temperature Characteristics” table on P.426.

3.12 “E5” Indoor Unit: Malfunction of Thermistor (R3T) for Gas Pipe

Remote Controller Display

E5

Applicable Models

All indoor unit models

Method of Malfunction Detection

Malfunction detection is carried out by temperature detected by gas pipe thermistor.

Malfunction Decision Conditions

When the gas pipe thermistor becomes disconnected or shorted while the unit is running.

Supposed Causes

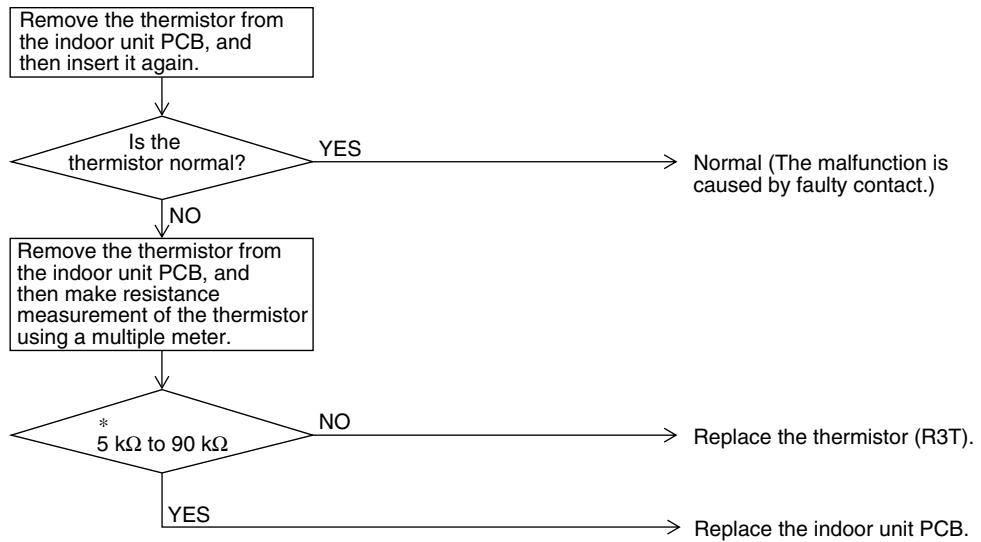
- Defect of indoor unit thermistor (R3T) for gas pipe
- Defect of indoor unit PCB

Troubleshooting



Caution

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



* Refer to “Thermistor Resistance / Temperature Characteristics” table on P.426.

3.13 “CE” Indoor Unit: Failure of Combination (Between Indoor Unit PCB and Fan PCB)

Remote
Controller
Display

CE

Applicable
Models

FXMQ20~140P

Method of
Malfunction
Detection

Conduct open line detection with PCB for fan (A2P) using indoor unit PCB (A1P).

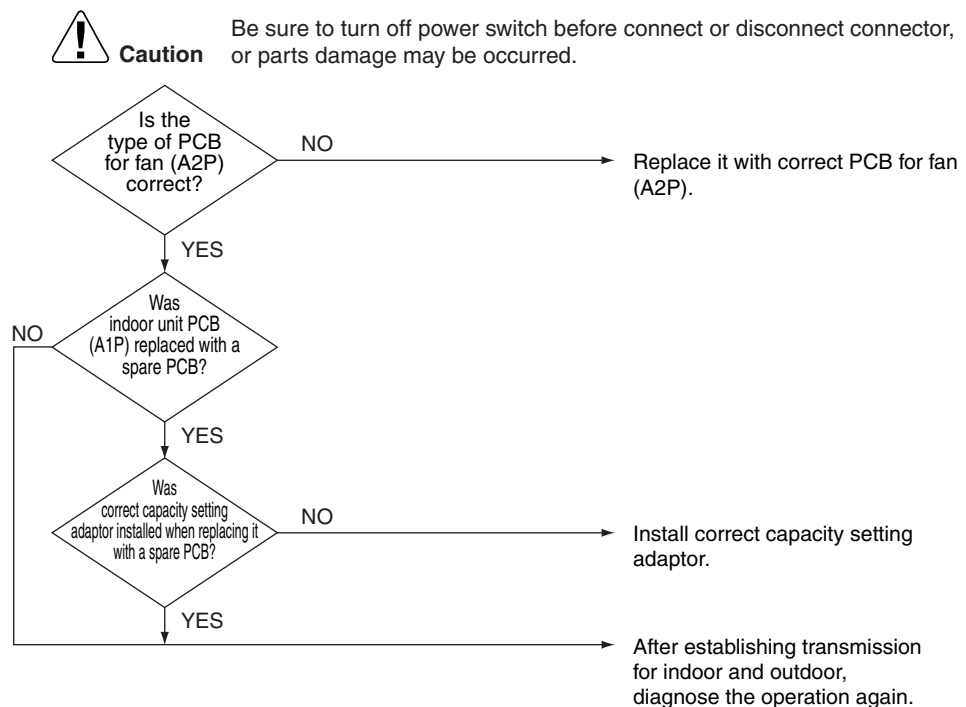
Malfunction
Decision
Conditions

When the communication data of PCB for fan (A2P) is determined as incorrect.


Supposed
Causes

- Malfunction of PCB for fan (A2P).
- Connection defect of capacity setting adaptor.
- Setting mistake onsite.


Troubleshooting

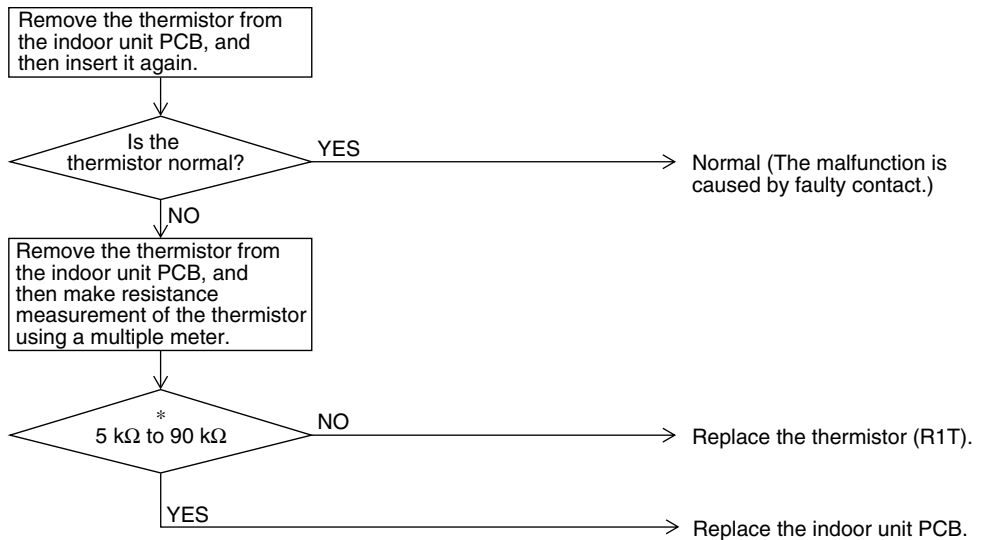


3.14 “E9” Indoor Unit: Malfunction of Thermistor (R1T) for Suction Air

Remote Controller Display	
Applicable Models	All indoor unit models
Method of Malfunction Detection	Malfunction detection is carried out by temperature detected by suction air temperature thermistor.
Malfunction Decision Conditions	When the suction air temperature thermistor becomes disconnected or shorted while the unit is running.
Supposed Causes	<ul style="list-style-type: none"> ■ Defect of indoor unit thermistor (R1T) for air inlet ■ Defect of indoor unit PCB

Troubleshooting

 **Caution** Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.

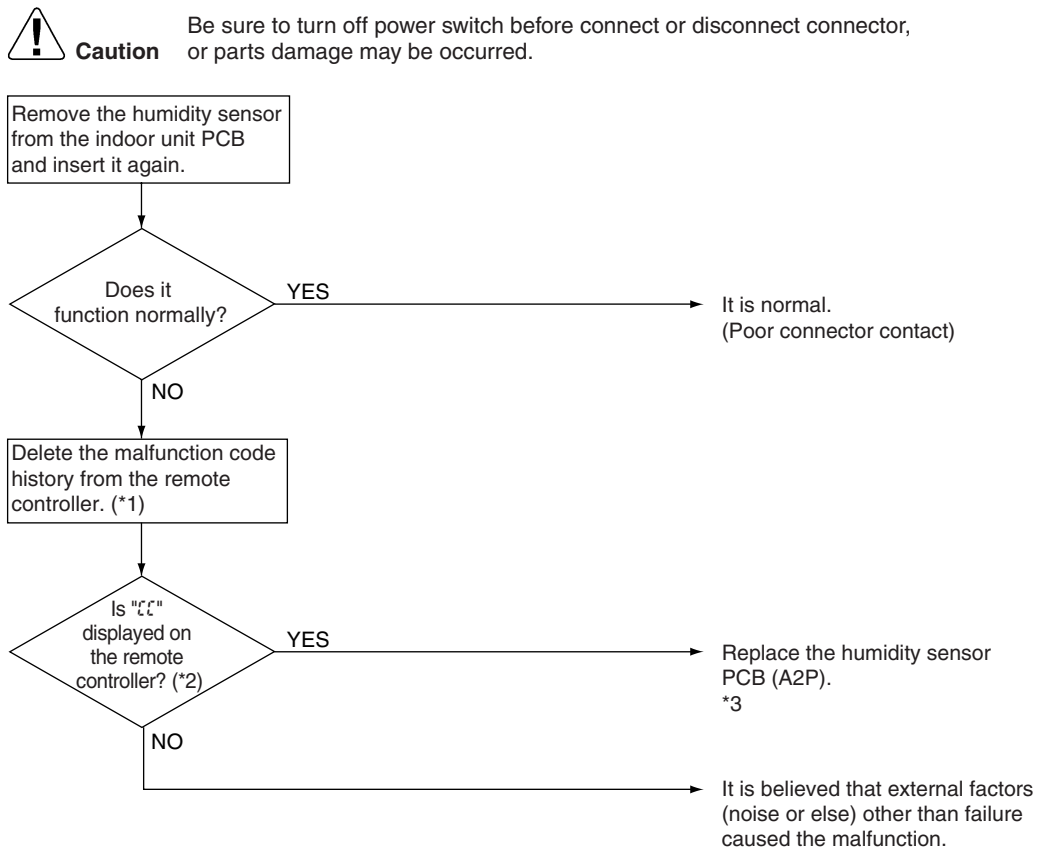


* Refer to “Thermistor Resistance / Temperature Characteristics” table on P.426.

3.15 “CC” Indoor Unit: Malfunction of Humidity Sensor System

Remote Controller Display	CC
Applicable Models	FXFQ
Method of Malfunction Detection	Even if a malfunction occurs, operation still continues. Malfunction is detected according to the moisture (output voltage) detected by the moisture sensor.
Malfunction Decision Conditions	When the moisture sensor is disconnected or short-circuited
Supposed Causes	<ul style="list-style-type: none"> ■ Faulty sensor ■ Disconnection

Troubleshooting




*1: To delete the history, the **ON/OFF** button of the remote controller must be pushed and held for 5 seconds in the check mode.


*2: To display the code, the **Inspection/Test Operation** button of the remote controller must be pushed and held in the normal mode.

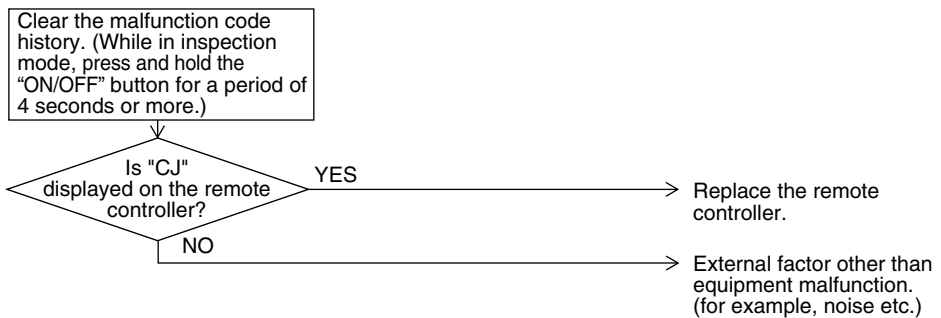
*3: If "CC" is displayed even after replacing the humidity sensor PCB (A2P) and taking the steps *1 and 2, replace the indoor PCB (A1P).


3.16 “CJ” Indoor Unit: Malfunction of Thermostat Sensor in Remote Controller

Remote Controller Display	
Applicable Models	All indoor unit models
Method of Malfunction Detection	Malfunction detection is carried out by temperature detected by remote controller air temperature thermistor. (Note:)
Malfunction Decision Conditions	When the remote controller air temperature thermistor becomes disconnected or shorted while the unit is running.
Supposed Causes	<ul style="list-style-type: none"> ■ Defect of remote controller thermistor ■ Defect of remote controller PCB

Troubleshooting

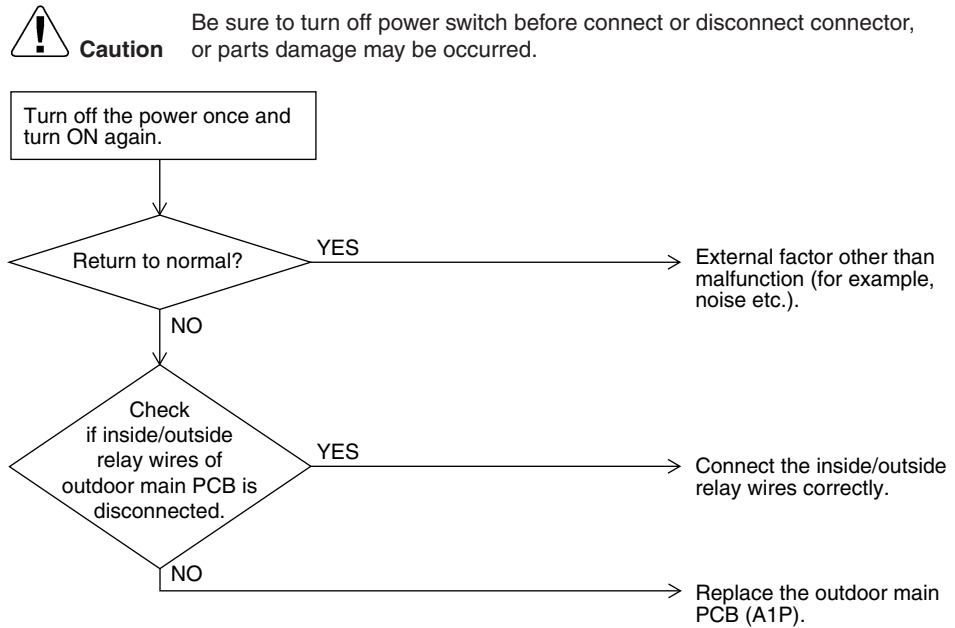
 **Caution** Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



 **Note:** In case of remote controller thermistor malfunction, unit is still operable by suction air thermistor on indoor unit.

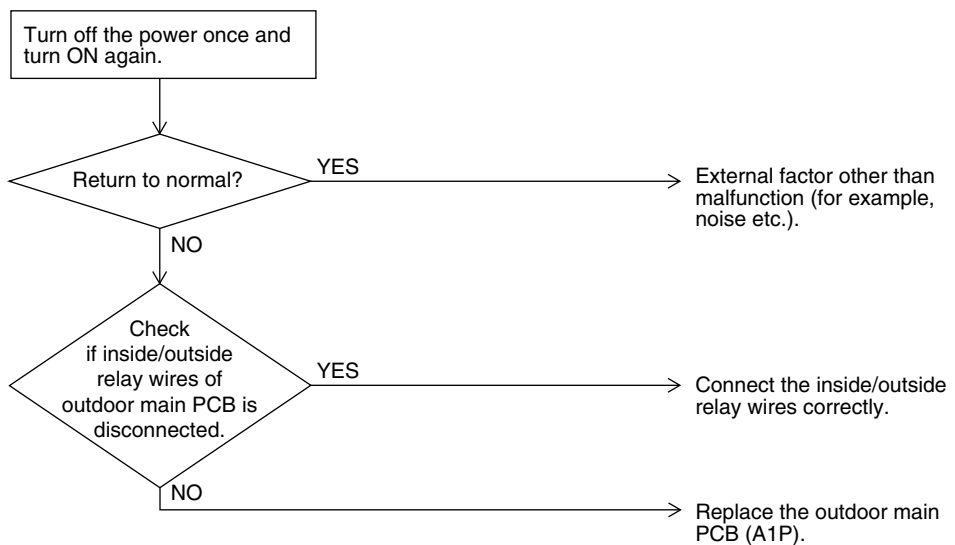
 * Refer to “Thermistor Resistance / Temperature Characteristics” table on P.426.

3.17 “E1” Outdoor Unit: PCB Defect

Remote Controller Display	E1
Applicable Models	RXYQ5P(A)~54P(A)
Method of Malfunction Detection	Check data from E ² PROM
Malfunction Decision Conditions	When data could not be correctly received from the E ² PROM E ² PROM : Type of nonvolatile memory. Maintains memory contents even when the power supply is turned OFF.
Supposed Causes	<ul style="list-style-type: none"> Defect of outdoor unit PCB (A1P)
Troubleshooting	 <pre> graph TD Start[Turn off the power once and turn ON again.] --> Dec1{Return to normal?} Dec1 -- YES --> Out1[External factor other than malfunction (for example, noise etc.).] Dec1 -- NO --> Dec2{Check if inside/outside relay wires of outdoor main PCB is disconnected.} Dec2 -- YES --> Out2[Connect the inside/outside relay wires correctly.] Dec2 -- NO --> Out3[Replace the outdoor main PCB (A1P).] </pre>


Caution

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



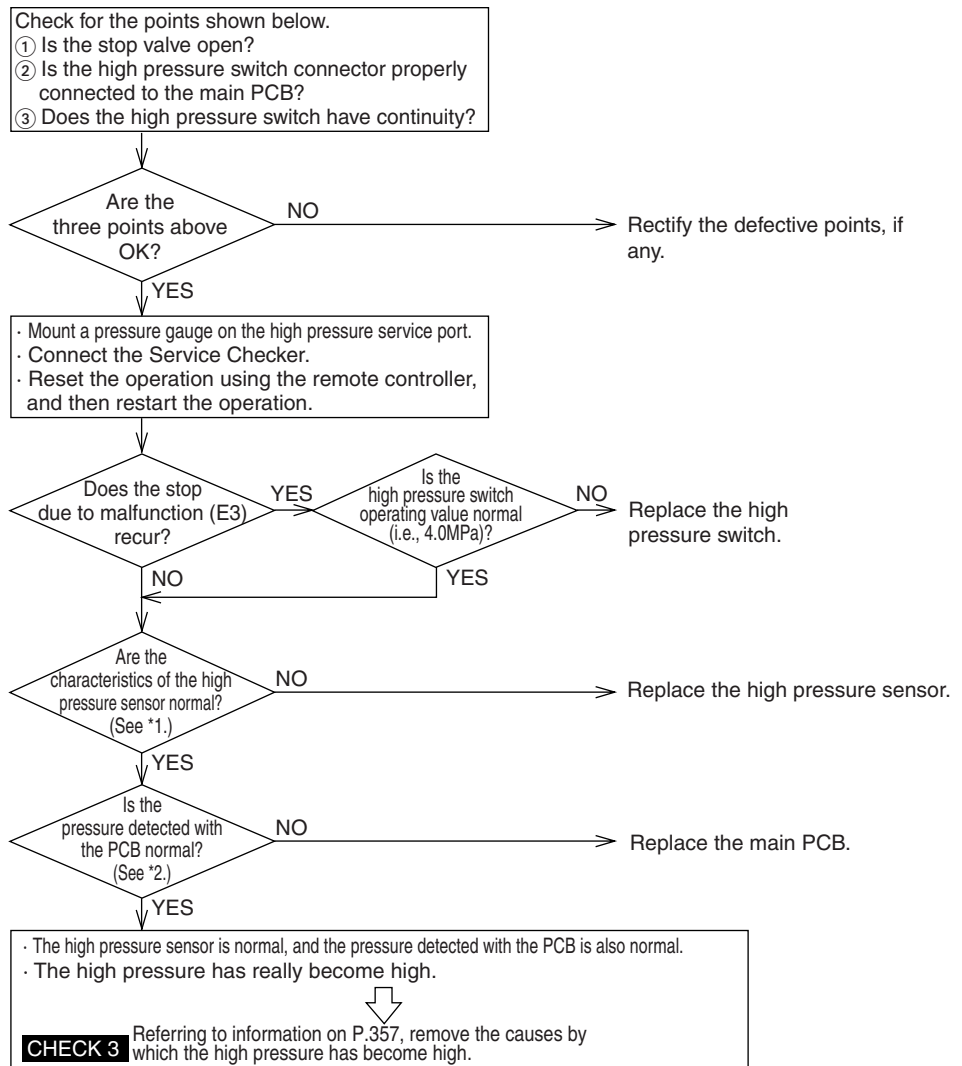
3.18 “E3” Outdoor Unit: Actuation of High Pressure Switch

Remote Controller Display	E3
Applicable Models	RXYQ5P(A)~54P(A)
Method of Malfunction Detection	Abnormality is detected when the contact of the high pressure protection switch opens.
Malfunction Decision Conditions	<p>Error is generated when the HPS activation count reaches the number specific to the operation mode.</p> <p>(Reference) Operating pressure of high pressure switch Operating pressure: 4.0MPa Reset pressure: 2.85MPa</p>
Supposed Causes	<ul style="list-style-type: none"> ■ Actuation of outdoor unit high pressure switch ■ Defect of high pressure switch ■ Defect of outdoor unit PCB ■ Instantaneous power failure ■ Faulty high pressure sensor

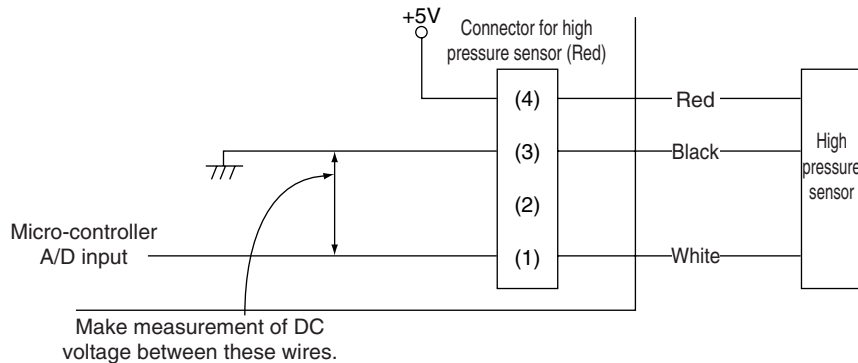
Troubleshooting



Caution Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



- *1: Make a comparison between the voltage of the pressure sensor and that read by the pressure gauge.
(As to the voltage of the pressure sensor, make measurement of voltage at the connector, and then convert it to pressure according to information on P.426.)
- *2: Make a comparison between the high pressure value checked with the Service Checker and the voltage of the pressure sensor (see *1).
- *3: Make measurement of voltage of the pressure sensor.



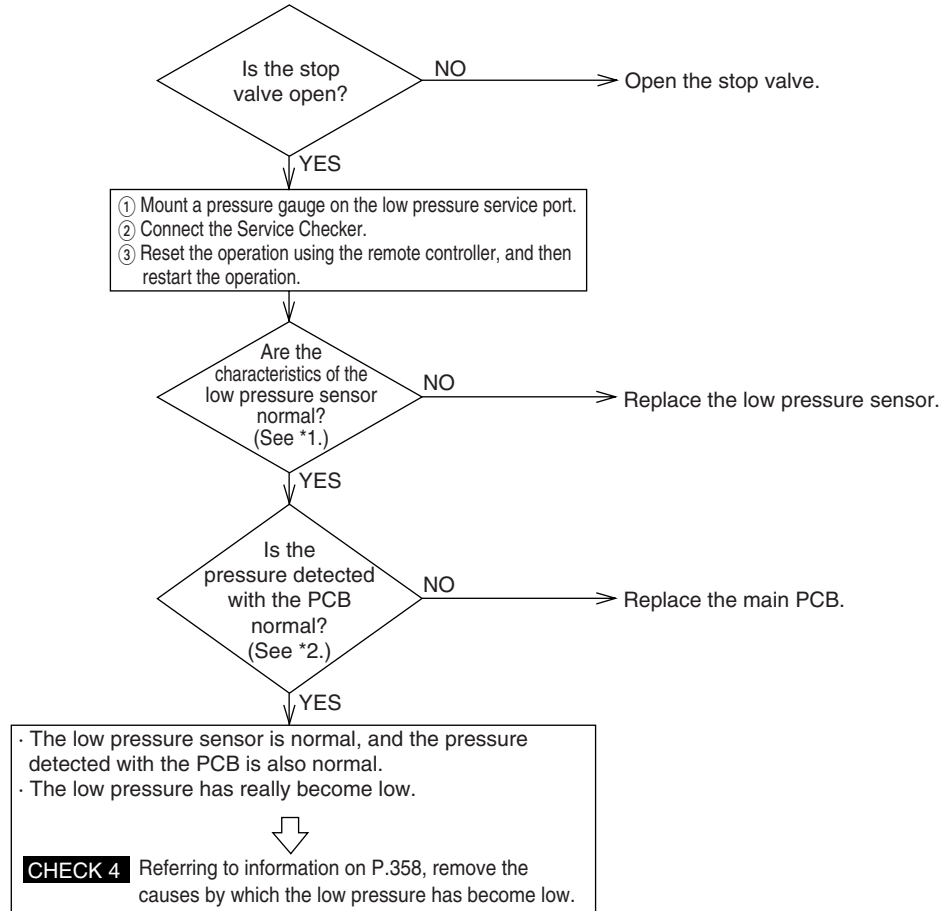
3.19 “E4” Outdoor Unit: Actuation of Low Pressure Sensor

Remote Controller Display	E4
Applicable Models	RXYQ5P(A)~54P(A)
Method of Malfunction Detection	Abnormality is detected by the pressure value with the low pressure sensor.
Malfunction Decision Conditions	Error is generated when the low pressure is dropped under specific pressure. Operating pressure: 0.07MPa
Supposed Causes	<ul style="list-style-type: none"> ■ Abnormal drop of low pressure (Lower than 0.07MPa) ■ Defect of low pressure sensor ■ Defect of outdoor unit PCB ■ Stop valve is not opened. ■ Clogged filter

Troubleshooting



Caution Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.

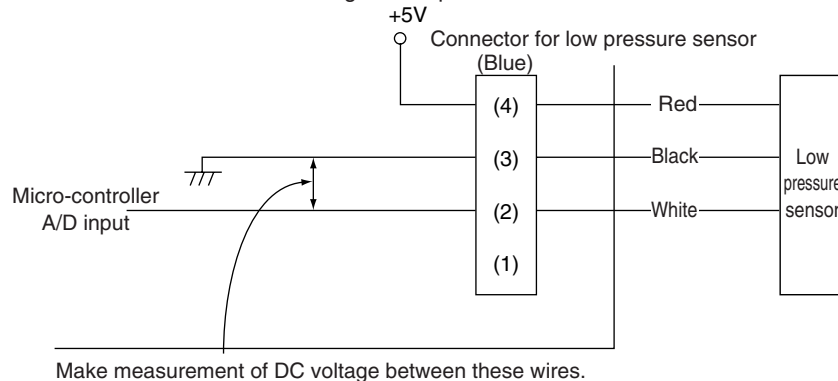


*1: Make a comparison between the voltage of the pressure sensor and that read by the pressure gauge.

(As to the voltage of the pressure sensor, make measurement of voltage at the connector, and then convert it to pressure according to information on P.426.)

*2: Make a comparison between the low pressure value checked with the Service Checker and the voltage of the pressure sensor (see *1).

*3: Make measurement of voltage of the pressure sensor.



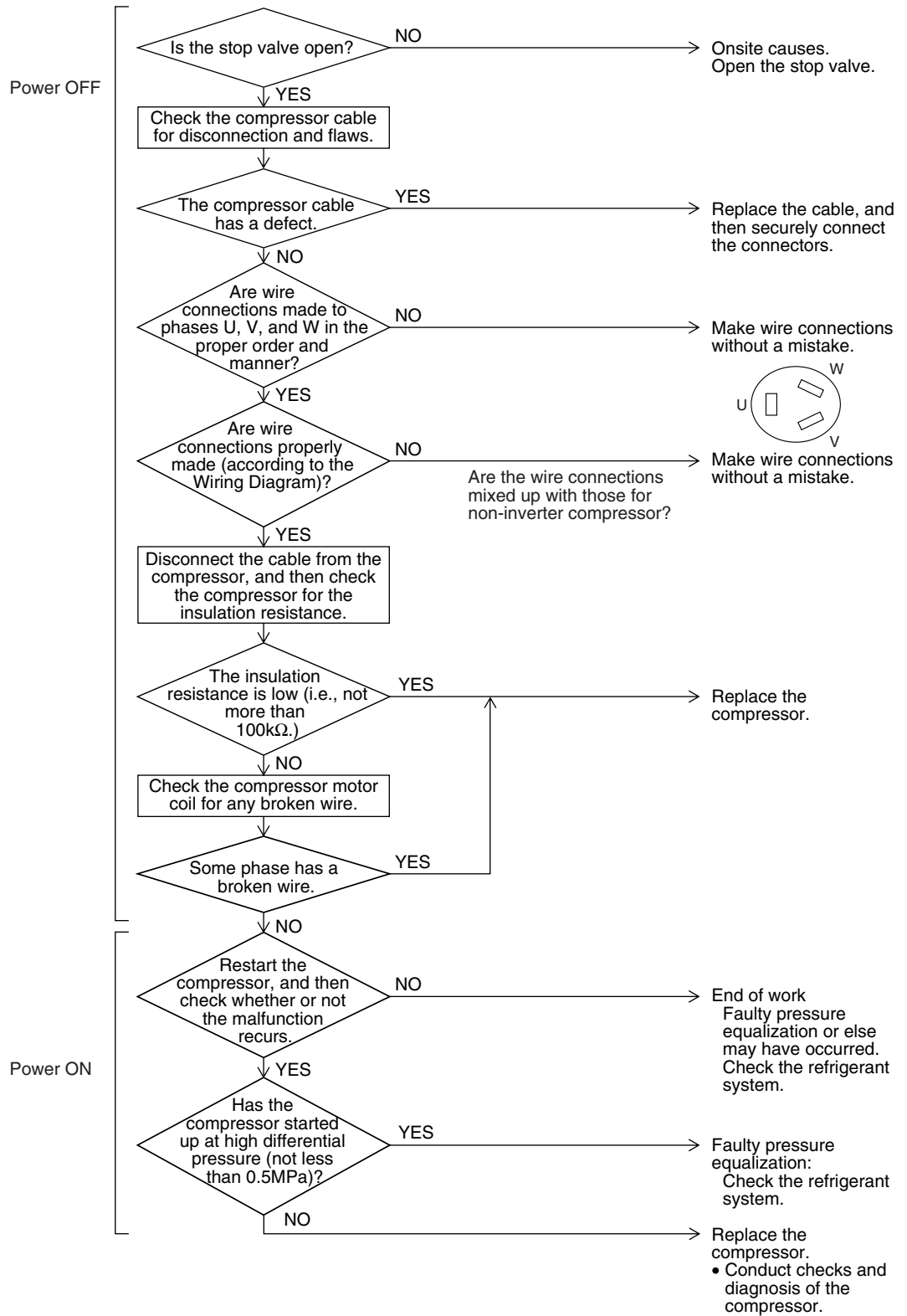
3.20 “E5” Outdoor Unit: Inverter Compressor Motor Lock

Remote Controller Display	E5
Applicable Models	RXYQ5P(A)~54P(A)
Method of Malfunction Detection	Inverter PCB takes the position signal from UVW line connected between the inverter and compressor, and the malfunction is detected when any abnormality is observed in the phase-current waveform.
Malfunction Decision Conditions	This malfunction will be output when the inverter compressor motor does not start up even in forced startup mode.
Supposed Causes	<ul style="list-style-type: none"> ■ Inverter compressor lock ■ High differential pressure (0.5MPa or more) ■ Incorrect UVW wiring ■ Faulty inverter PCB ■ Stop valve is left in closed.

Troubleshooting



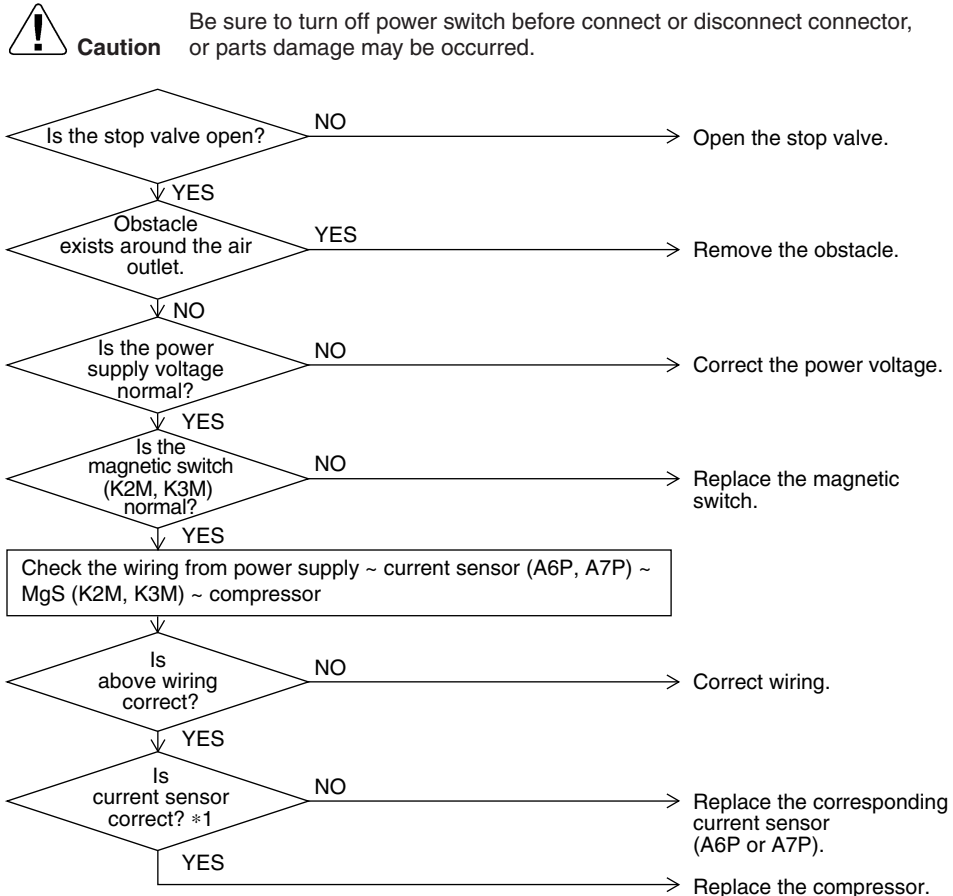
Caution Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



3.21 “EE” Outdoor Unit: STD Compressor Motor Overcurrent/ Lock

Remote Controller Display	EE
Applicable Models	RXYQ5P(A)~54P(A)
Method of Malfunction Detection	Detects the overcurrent with current sensor (CT).
Malfunction Decision Conditions	Malfunction is decided when the detected current value exceeds the below mentioned value for 2 seconds. <ul style="list-style-type: none"> ■ 400 V class unit : 15.0 A ■ 200 V class unit : 28.8 A
Supposed Causes	<ul style="list-style-type: none"> ■ Closed stop valve ■ Obstacles at the air outlet ■ Improper power voltage ■ Faulty magnetic switch ■ Faulty compressor ■ Faulty current sensor (A6P, A7P)

Troubleshooting



Note:

*1 Abnormal case

- The current sensor value is 0 during STD compressor operation.
- The current sensor value is more than 15.0A during STD compressor stop.

3.22 “E7” Outdoor Unit: Malfunction of Outdoor Unit Fan Motor

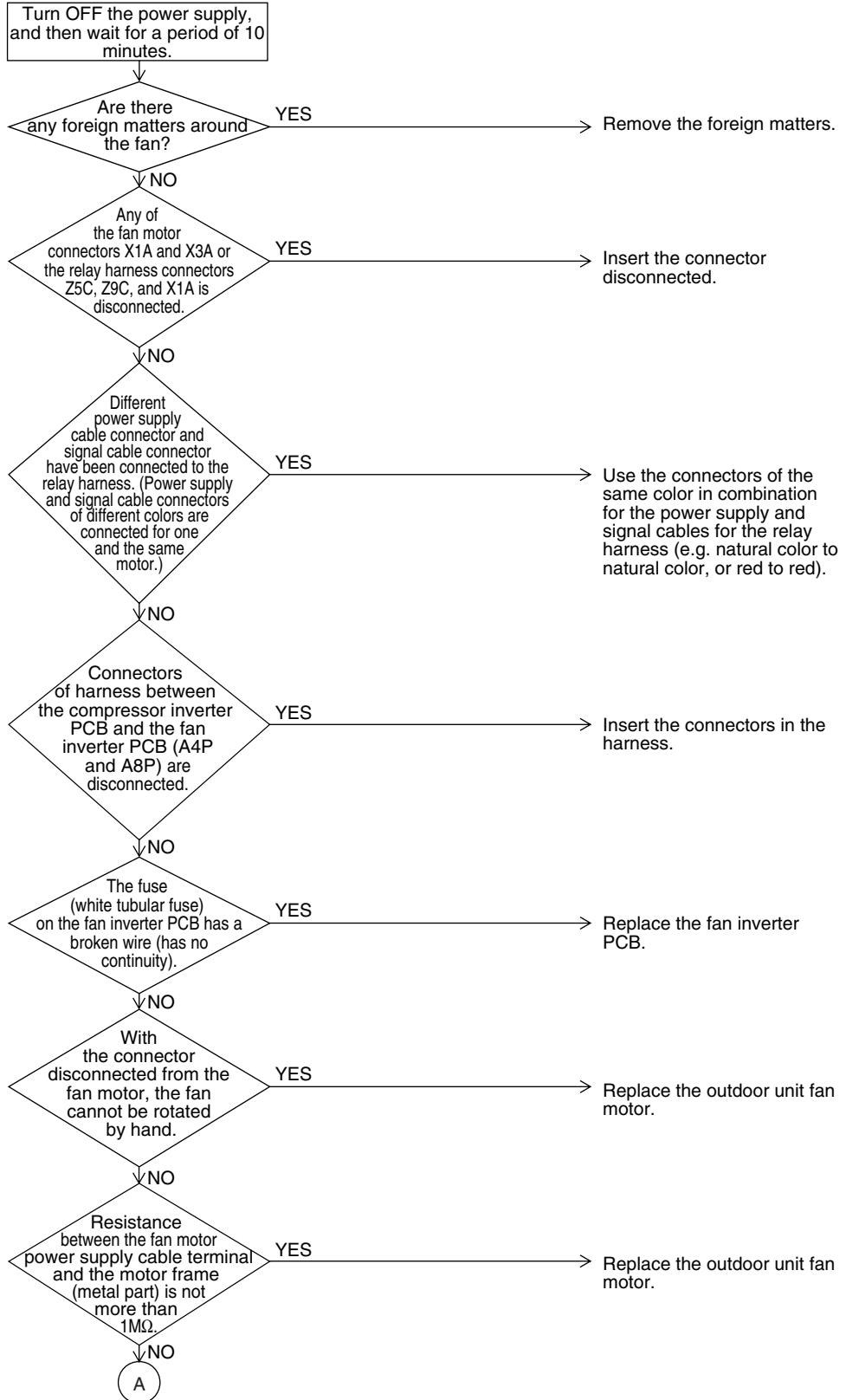
Remote Controller Display	E7
Applicable Models	RXYQ5P(A)~54P(A)
Method of Malfunction Detection	Malfunction of fan motor system is detected according to the fan speed detected by hall IC when the fan motor runs.
Malfunction Decision Conditions	<ul style="list-style-type: none"> ■ When the fan runs with speed less than a specified one for 6 seconds or more when the fan motor running conditions are met ■ When connector detecting fan speed is disconnected ■ When malfunction is generated 4 times, the system shuts down.
Supposed Causes	<ul style="list-style-type: none"> ■ Malfunction of fan motor ■ The harness connector between fan motor and PCB is left in disconnected, or faulty connector ■ Fan does not run due to foreign matters tangled ■ Clearing condition: Operate for 5 minutes (normal)

Troubleshooting

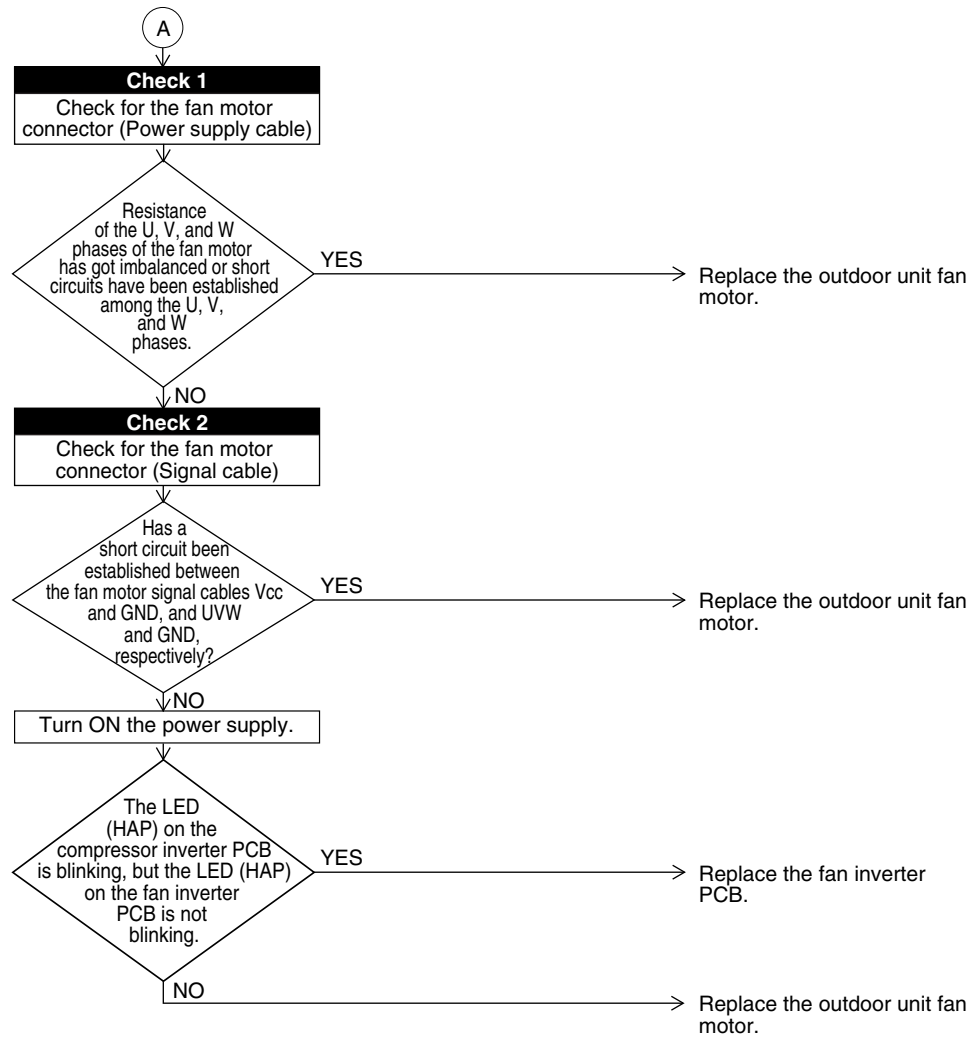


Caution

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



Troubleshooting



Note: Refer to check 1 and 2 on P.356.

3.23 “E9” Outdoor Unit: Malfunction of Electronic Expansion Valve Coil (Y1E, Y2E)

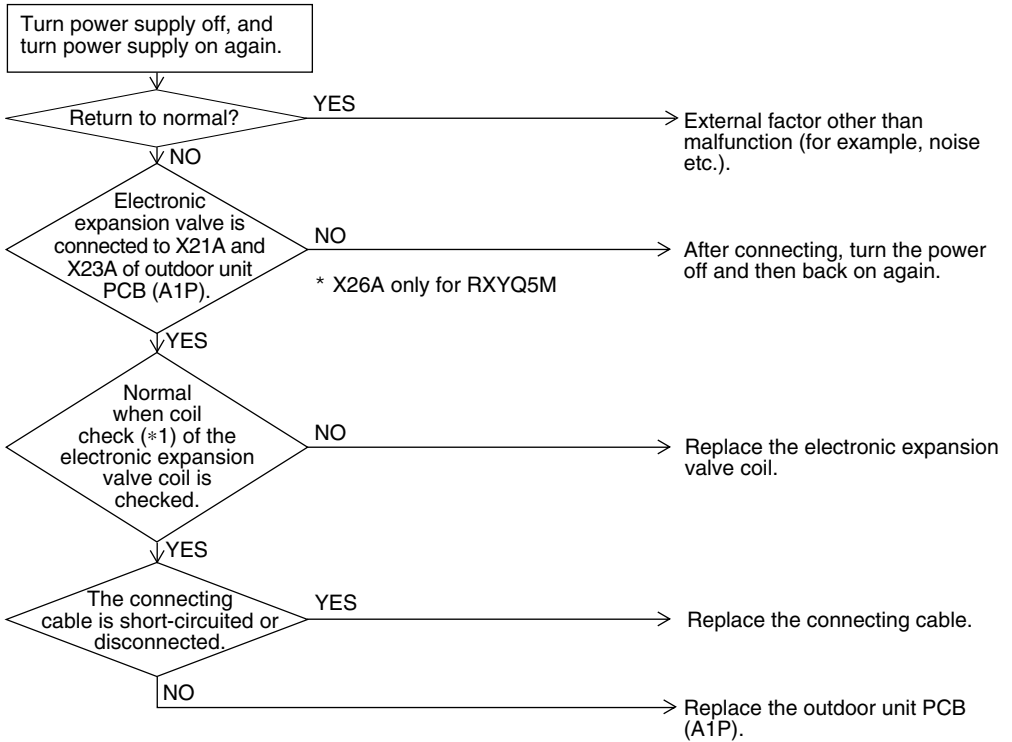
Remote Controller Display	E9
Applicable Models	RXYQ5P(A)~54P(A)Y1
Method of Malfunction Detection	<p>Check disconnection of connector</p> <p>Check continuity of electronic expansion valve coil</p>
Malfunction Decision Conditions	Error is generated under no common power supply when the power is on.
Supposed Causes	<ul style="list-style-type: none"> ■ Defect of electronic expansion valve coil ■ Defect of outdoor unit PCB (A1P) ■ Defect of connecting cable

Troubleshooting



Caution

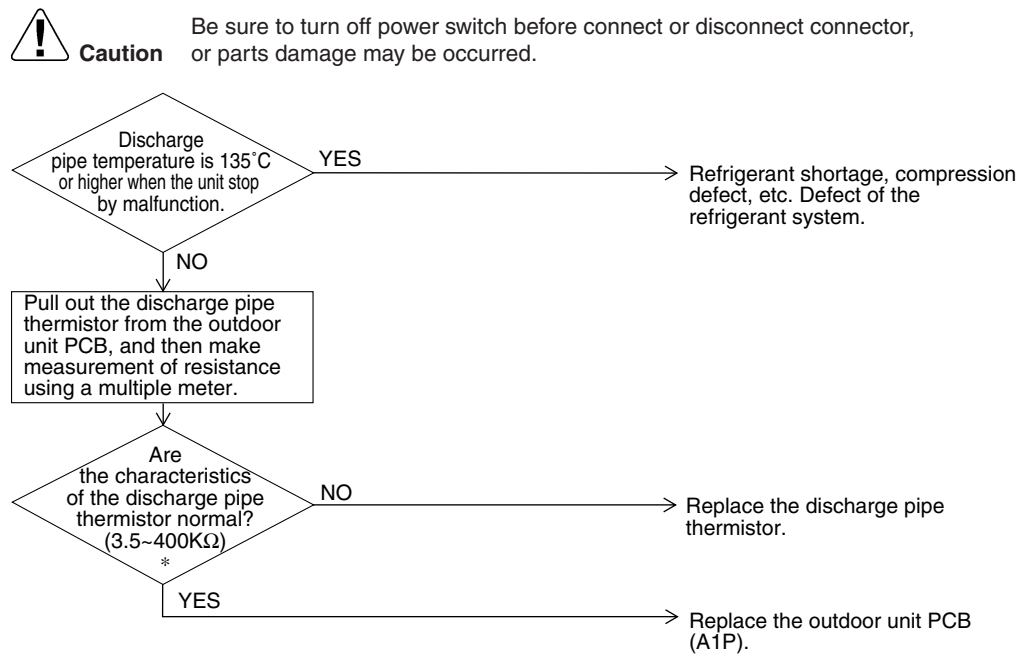
Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



3.24 “F3” Outdoor Unit: Abnormal Discharge Pipe Temperature

Remote Controller Display	F3
Applicable Models	RXYQ5P(A)~54P(A)
Method of Malfunction Detection	Abnormality is detected according to the temperature detected by the discharge pipe temperature sensor.
Malfunction Decision Conditions	When the discharge pipe temperature rises to an abnormally high level When the discharge pipe temperature rises suddenly
Supposed Causes	<ul style="list-style-type: none"> ■ Faulty discharge pipe temperature sensor ■ Faulty connection of discharge pipe temperature sensor ■ Faulty outdoor unit PCB

Troubleshooting



 * Refer to “Thermistor Resistance / Temperature Characteristics” table on P.427.

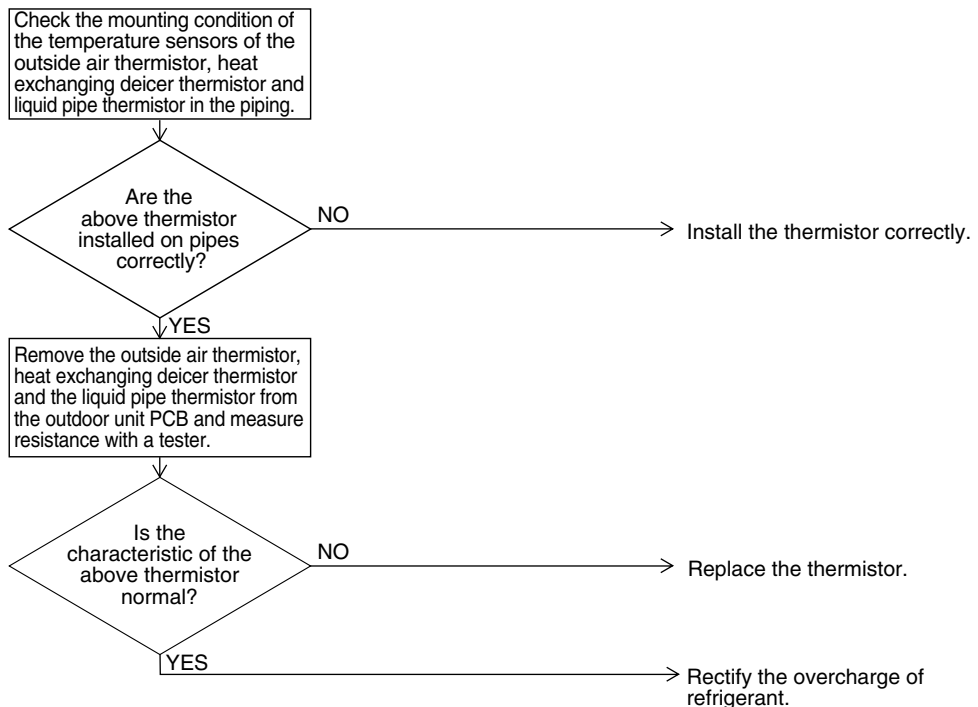
3.25 “FE” Outdoor Unit: Refrigerant Overcharged

Remote Controller Display	FE
Applicable Models	RXYQ5P(A)~54P(A)
Method of Malfunction Detection	Excessive charging of refrigerant is detected by using the outdoor air temperature, heat exchanging deicer temperature and liquid pipe temperature during check operation.
Malfunction Decision Conditions	When the amount of refrigerant, which is calculated by using the outdoor air temperature, heat exchanging deicer temperature and liquid pipe temperature during check operation, exceeds the criteria.
Supposed Causes	<ul style="list-style-type: none"> ■ Refrigerant overcharge ■ Disconnection of outdoor air thermistor ■ Disconnection of the heat exchanging deicer thermistor ■ Disconnection of the liquid pipe thermistor

Troubleshooting


Caution

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.




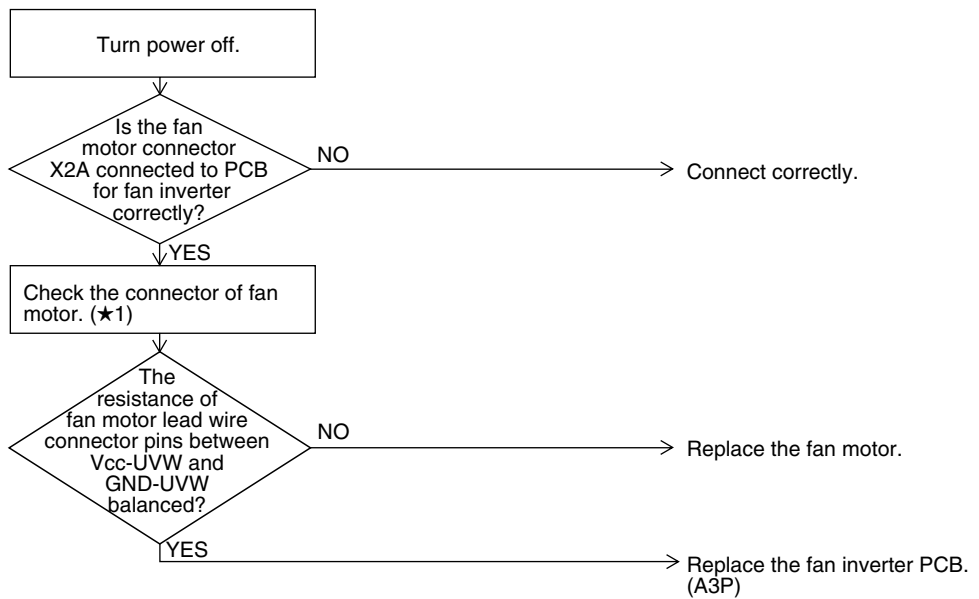
* Refer to “Thermistor Resistance / Temperature Characteristics” table on P.426.

3.26 “H7” Outdoor Unit: Abnormal Outdoor Fan Motor Signal

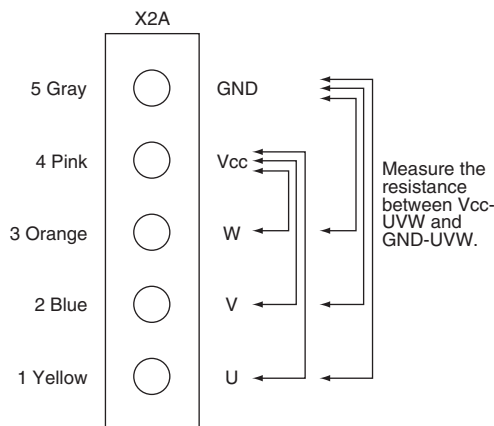
Remote Controller Display	H7
Applicable Models	RXYQ5P(A)~54P(A)
Method of Malfunction Detection	Detection of abnormal signal from fan motor.
Malfunction Decision Conditions	In case of detection of abnormal signal at starting fan motor.
Supposed Causes	<ul style="list-style-type: none"> ■ Abnormal fan motor signal (circuit malfunction) ■ Broken, short-circuited or disconnection connector of fan motor connection cable ■ Fan Inverter PCB malfunction

Troubleshooting

 **Caution** Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



★1: Disconnect connector (X2A) and measure the following resistance.



3.27 “H3” Outdoor Unit: Malfunction of Thermistor (R1T) for Outdoor Air

Remote
Controller
Display

H3

Applicable
Models

RXYQ5P(A)~54P(A)

Method of
Malfunction
Detection

Malfunction is detected from the temperature detected by the outdoor air thermistor.

Malfunction
Decision
Conditions

When the outside air temperature thermistor has short circuit or open circuit.

Supposed
Causes

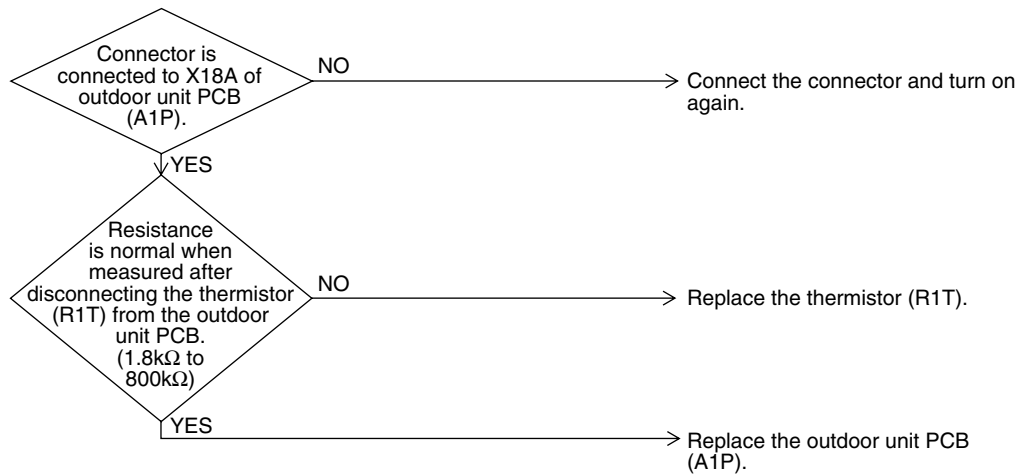
- Defect of thermistor (R1T) for outdoor air
- Defect of outdoor unit PCB (A1P)

Troubleshooting




Caution

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.




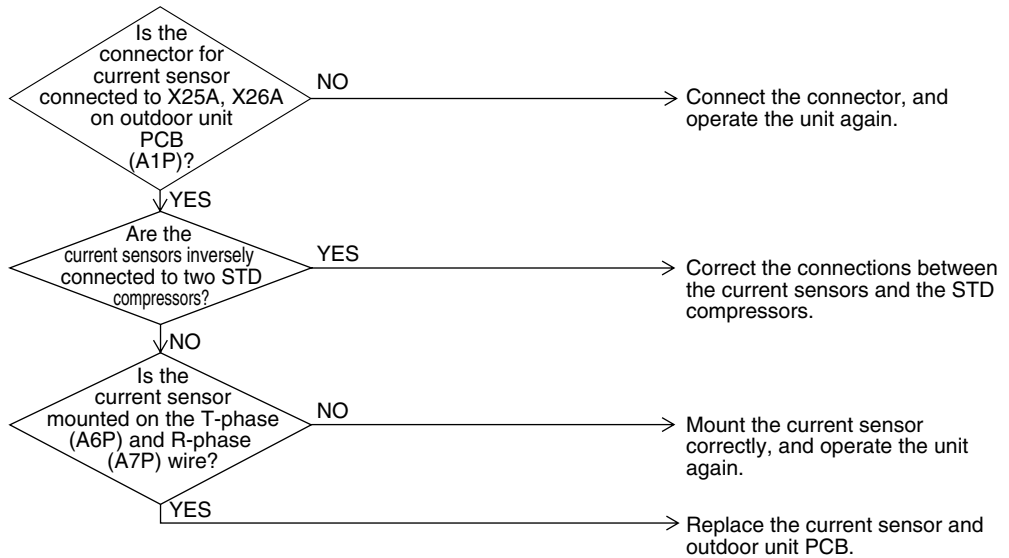
* Refer to “Thermistor Resistance / Temperature Characteristics” table on P.426.

3.28 “U2” Outdoor Unit: Current Sensor Malfunction

Remote Controller Display	
Applicable Models	RXYQ5P(A)~54P(A)
Method of Malfunction Detection	Malfunction is detected according to the current value detected by current sensor.
Malfunction Decision Conditions	When the current value detected by current sensor becomes 5A or lower, or 40A or more during standard compressor operation.
Supposed Causes	<ul style="list-style-type: none"> ■ Faulty current sensor (A6P, A7P) ■ Faulty outdoor unit PCB

Troubleshooting

 **Caution** Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



3.29 “U3” Outdoor Unit: Malfunction of Discharge Pipe Thermistor (R3T, R31T~R33T)

Remote
Controller
Display

U3

Applicable
Models

RXYQ5P(A)~54P(A)

Method of
Malfunction
Detection

Malfunction is detected from the temperature detected by discharge pipe temperature thermistor.

Malfunction
Decision
Conditions

When a short circuit or an open circuit in the discharge pipe temperature thermistor is detected.

Supposed
Causes

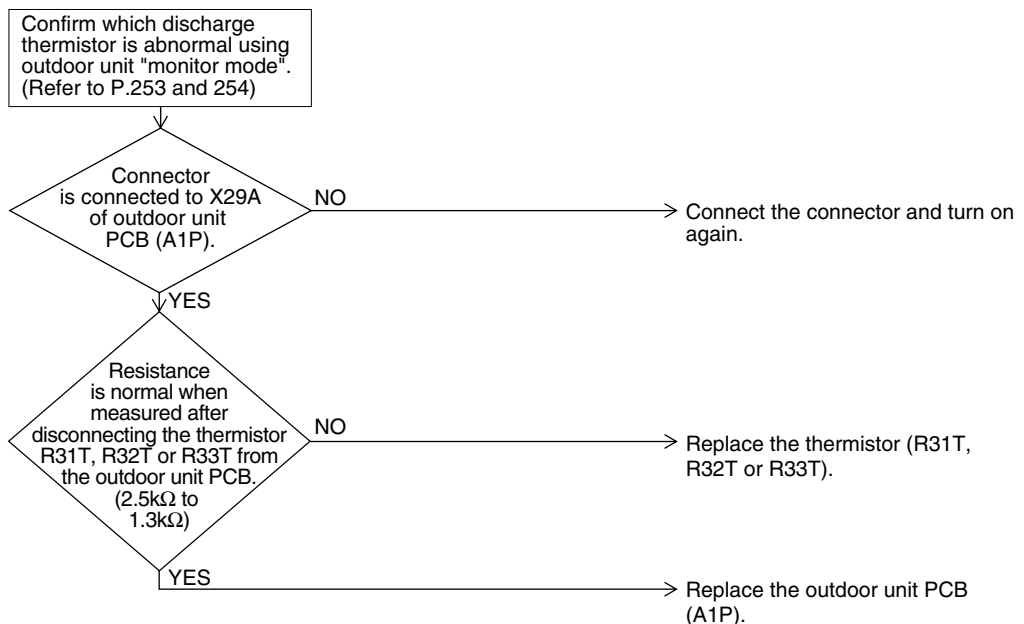
- Defect of thermistor (R31T, R32T or R33T) for outdoor unit discharge pipe
- Defect of outdoor unit PCB (A1P)
- Defect of thermistor connection

Troubleshooting



Caution

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



The alarm indicator is displayed when the fan is being used also.



Note:

5 HP class ... R3T
8~12 HP class ... R31T, R32T
14, 16HP class ... R31T, R32T and R33T




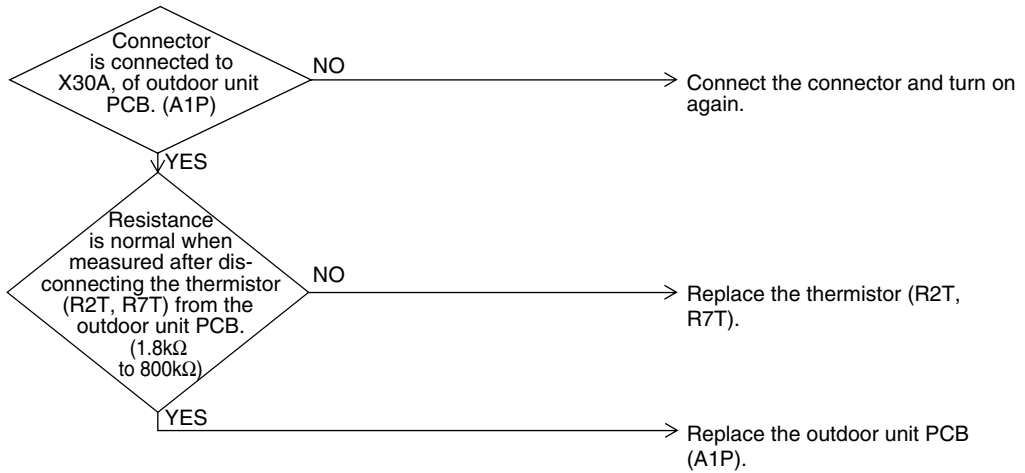
* Refer to "Thermistor Resistance / Temperature Characteristics" table on P.427.

3.30 “U5” Outdoor Unit: Malfunction of Thermistor (R2T, R7T) for Suction Pipe

Remote Controller Display	U5
Applicable Models	RXYQ5P(A)~54P(A)
Method of Malfunction Detection	Malfunction is detected from the temperature detected by the suction pipe temperature thermistor.
Malfunction Decision Conditions	When a short circuit or an open circuit in the suction pipe temperature thermistor is detected.
Supposed Causes	<ul style="list-style-type: none"> ■ Defect of thermistor (R2T), (R7T) for outdoor unit suction pipe ■ Defect of outdoor unit PCB (A1P) ■ Defect of thermistor connection

Troubleshooting

 **Caution** Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



* Refer to “Thermistor Resistance / Temperature Characteristics” table on P.426.

3.31 “UE” Outdoor Unit: Malfunction of Thermistor (R4T) for Outdoor Unit Heat Exchanger

Remote
Controller
Display



Applicable
Models

RXYQ5P(A)~54P(A)

Method of
Malfunction
Detection

Malfunction is detected from the temperature detected by the heat exchanger thermistor.

Malfunction
Decision
Conditions

When a short circuit or an open circuit in the heat exchanger thermistor is detected.

Supposed
Causes

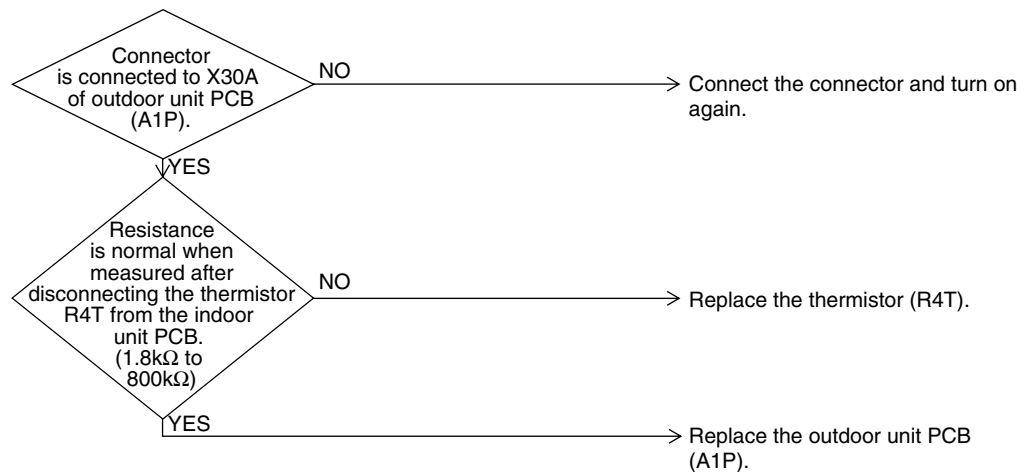
- Defect of thermistor (R4T) for outdoor unit coil
- Defect of outdoor unit PCB (A1P)
- Defect of thermistor connection

Troubleshooting



Caution

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



* Refer to “Thermistor Resistance / Temperature Characteristics” table on P.426.

3.32 “U7” Outdoor Unit: Malfunction of Liquid Pipe Thermistor (R6T)

Remote Controller Display



Applicable Models

RXYQ5P(A)~54P(A)

Method of Malfunction Detection

Malfunction is detected according to the temperature detected by liquid pipe thermistor.

Malfunction Decision Conditions

When the liquid pipe thermistor is short circuited or open circuited.

Supposed Causes

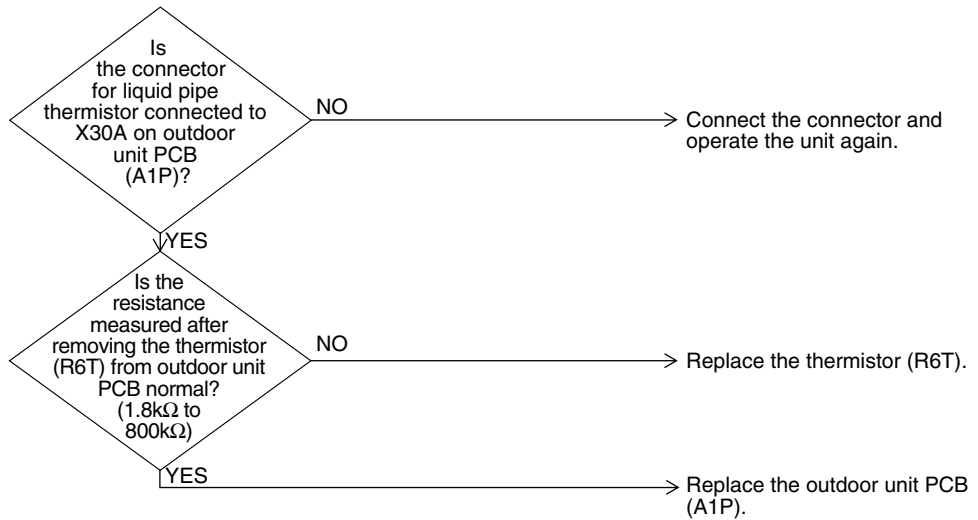
- Faulty liquid pipe thermistor (R6T)
- Faulty outdoor unit PCB
- Defect of thermistor connection

Troubleshooting



Caution

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



* Refer to “Thermistor Resistance / Temperature Characteristics” table on P.426.

3.33 “U9” Outdoor Unit: Malfunction of Subcooling Heat Exchanger Gas Pipe Thermistor (R5T)

Remote
Controller
Display

U9

Applicable
Models

RXYQ5P(A)~54P(A)

Method of
Malfunction
Detection

Malfunction is detected according to the temperature detected by subcooling heat exchanger gas pipe thermistor.

Malfunction
Decision
Conditions

When the subcooling heat exchanger gas pipe thermistor is short circuited or open circuited.

Supposed
Causes

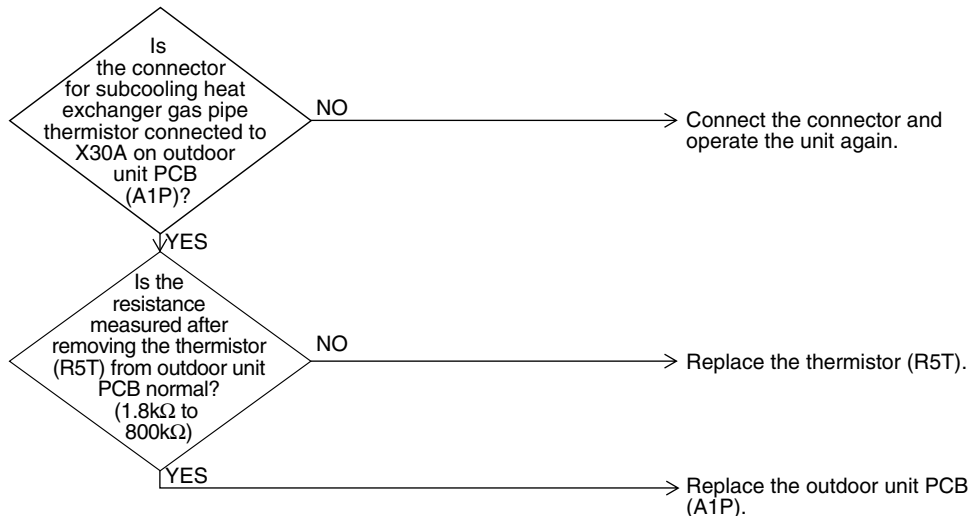
- Faulty subcooling heat exchanger gas pipe thermistor (R5T)
- Faulty outdoor unit PCB

Troubleshooting




Caution

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.




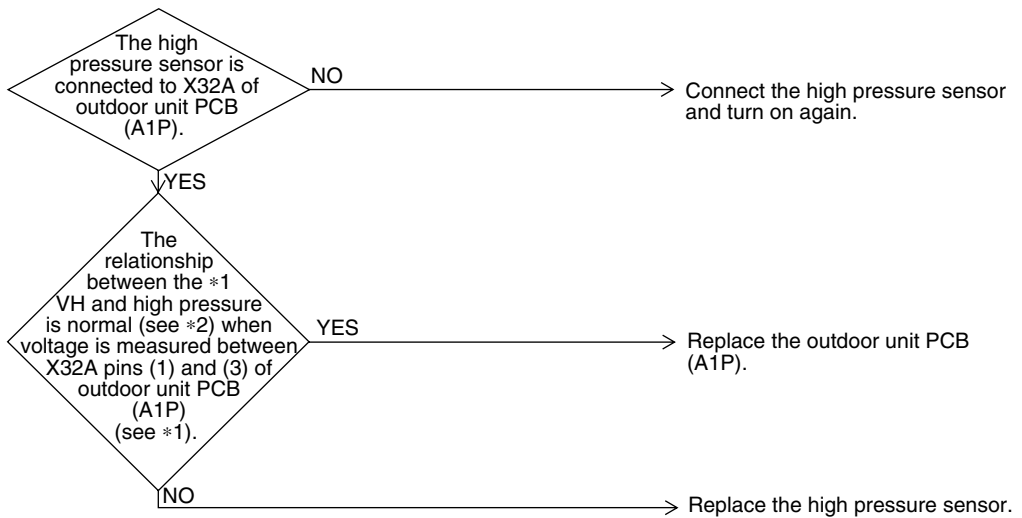
* Refer to “Thermistor Resistance / Temperature Characteristics” table on P.426.

3.34 “UR” Outdoor Unit: Malfunction of High Pressure Sensor

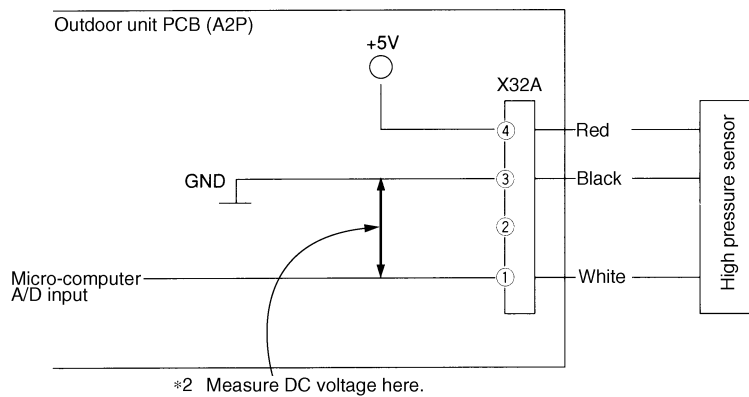
Remote Controller Display	
Applicable Models	RXYQ5P(A)~54P(A)
Method of Malfunction Detection	Malfunction is detected from the pressure detected by the high pressure sensor.
Malfunction Decision Conditions	When the high pressure sensor is short circuit or open circuit.
Supposed Causes	<ul style="list-style-type: none"> ■ Defect of high pressure sensor system ■ Connection of low pressure sensor with wrong connection. ■ Defect of outdoor unit PCB.

Troubleshooting

 **Caution** Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



*1: Voltage measurement point



*2: Refer to “Pressure Sensor, Pressure / Voltage Characteristics” table on P.428.

3.35 “” Outdoor Unit: Malfunction of Low Pressure Sensor

Remote
Controller
Display



Applicable
Models

RXYQ5P(A)~54P(A)

Method of
Malfunction
Detection

Malfunction is detected from pressure detected by low pressure sensor.

Malfunction
Decision
Conditions

When the low pressure sensor is short circuit or open circuit.

Supposed
Causes

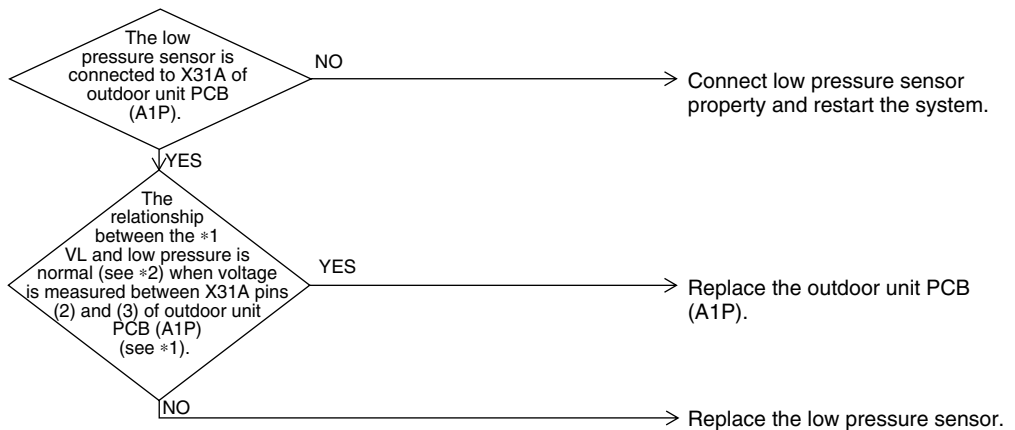
- Defect of low pressure sensor system
- Connection of high pressure sensor with wrong connection.
- Defect of outdoor unit PCB.

Troubleshooting

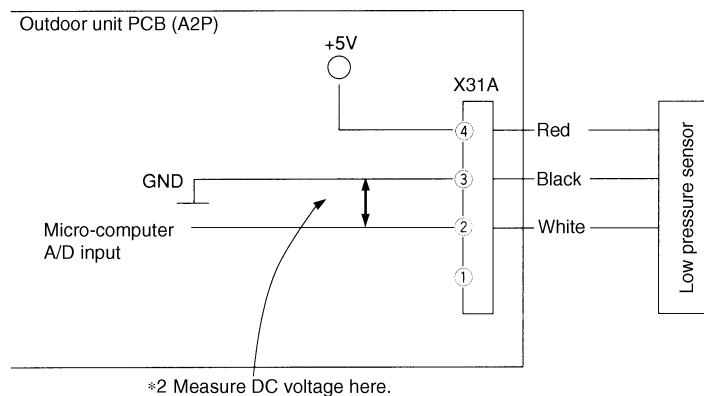


Caution

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



*1: Voltage measurement point



*2: Refer to “Pressure Sensor, Pressure / Voltage Characteristics” table on P.428.

3.36 “L4” Outdoor Unit: Malfunction of Inverter Radiating Fin Temperature Rise

Remote Controller Display

L4

Applicable Models

RXYQ5P(A)~54P(A)

Method of Malfunction Detection

Fin temperature is detected by the thermistor of the radiation fin.

Malfunction Decision Conditions

When the temperature of the inverter radiation fin increases above 93°C.

Supposed Causes

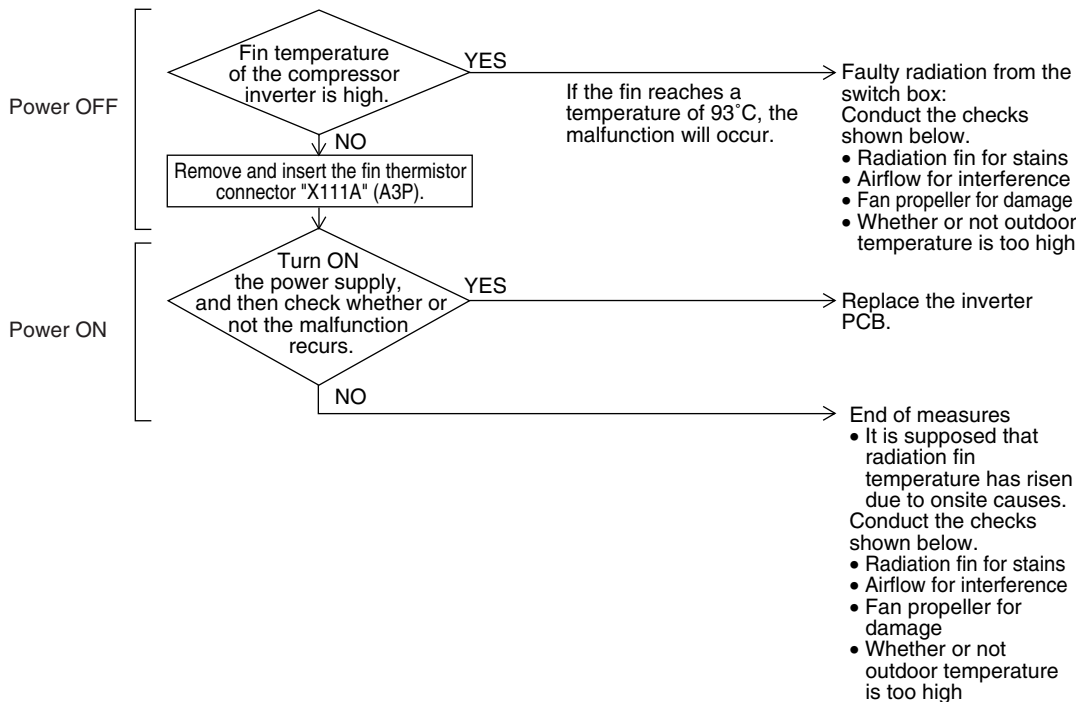
- Actuation of fin thermal (Actuates above 93°C)
- Defect of inverter PCB
- Defect of fin thermistor

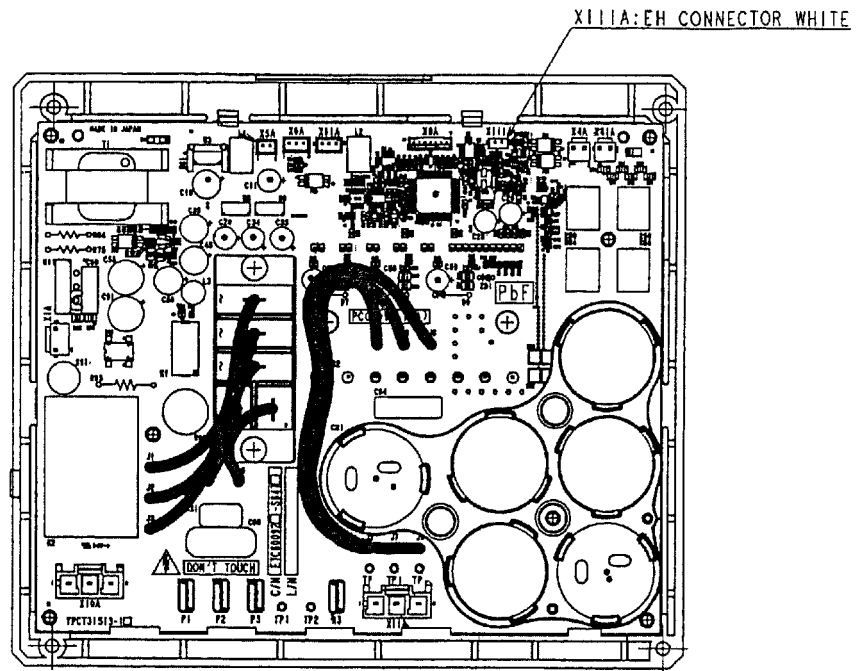
Troubleshooting



Caution

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.





Inverter PCB for compressor



* Refer to "Thermistor Resistance / Temperature Characteristics" table on P.426.

3.37 “L5” Outdoor Unit: Inverter Compressor Abnormal

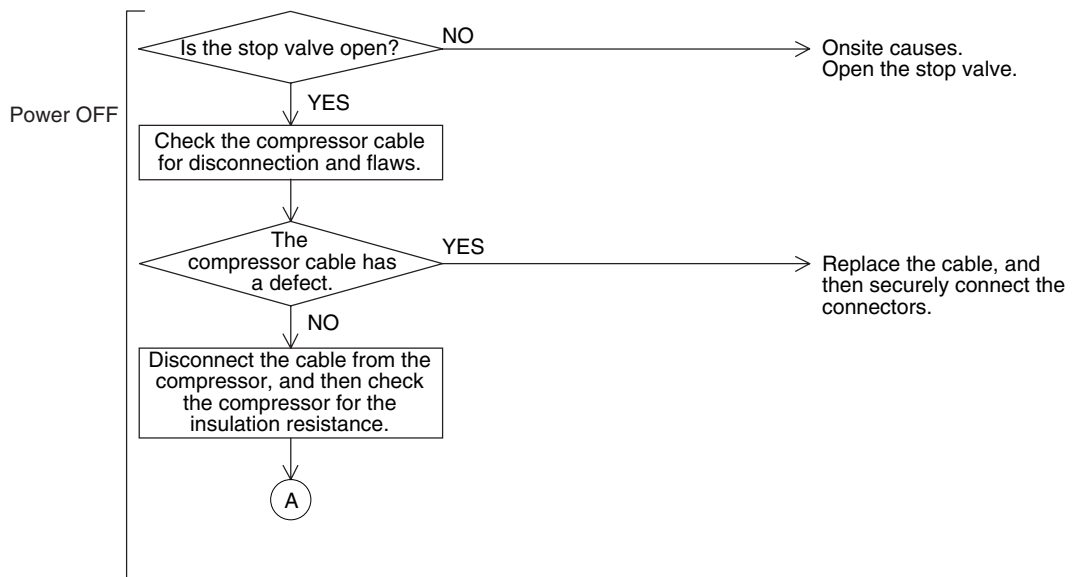
Remote Controller Display	L5
Applicable Models	RXYQ5P(A)~54P(A)
Method of Malfunction Detection	Malfunction is detected from current flowing in the power transistor.
Malfunction Decision Conditions	When an excessive current flows in the power transistor. (Instantaneous overcurrent also causes activation.)
Supposed Causes	<ul style="list-style-type: none"> ■ Defect of compressor coil (disconnected, defective insulation) ■ Compressor start-up malfunction (mechanical lock) ■ Defect of inverter PCB

Troubleshooting

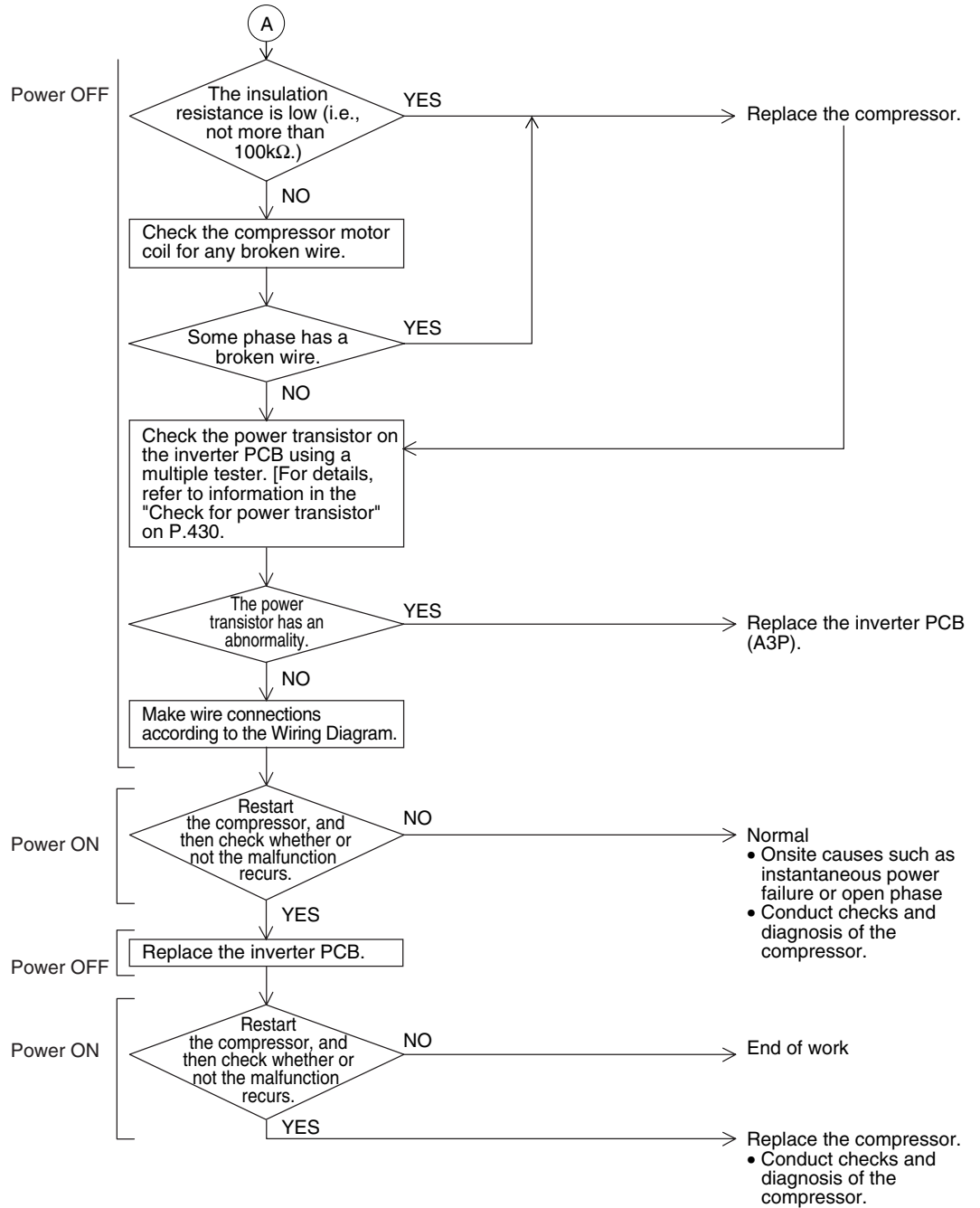
Compressor inspection




Caution Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



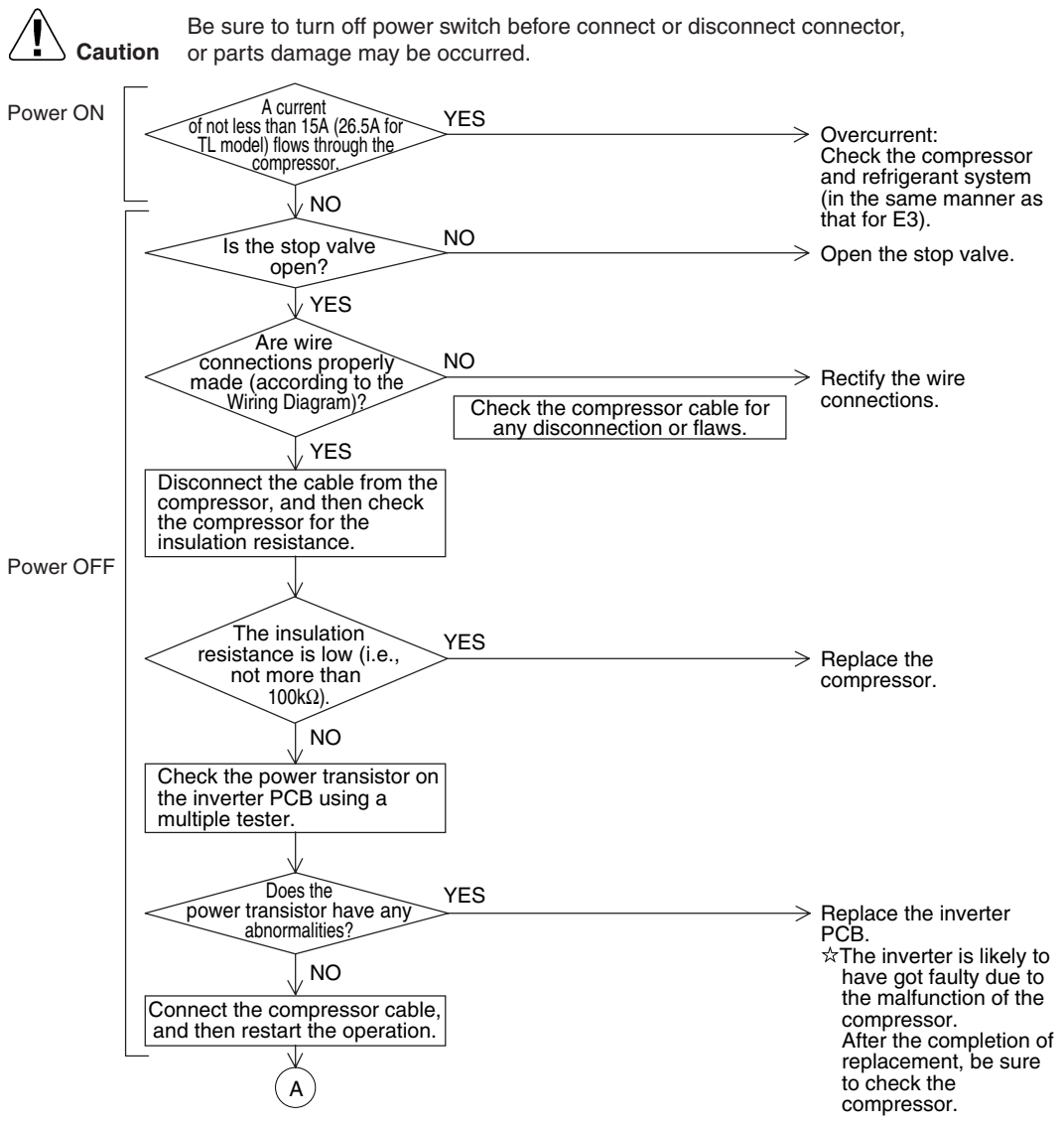
Troubleshooting



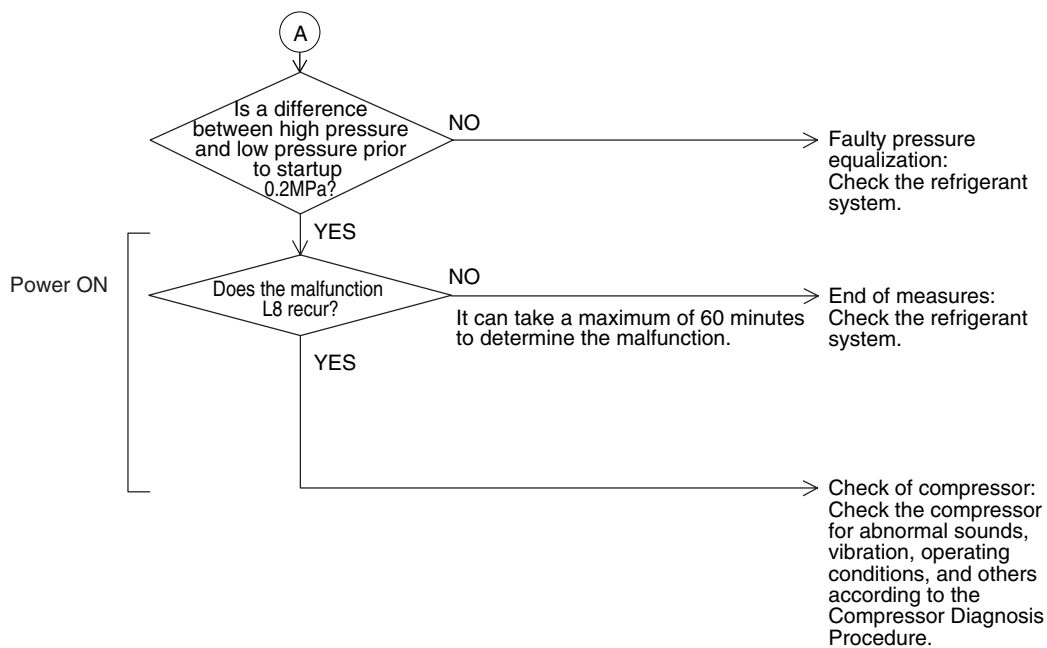
3.38 “L8” Outdoor Unit: Inverter Current Abnormal

Remote Controller Display	
Applicable Models	RXYQ5P(A)~54P(A)
Method of Malfunction Detection	Malfunction is detected by current flowing in the power transistor.
Malfunction Decision Conditions	When overload in the compressor is detected. (Inverter secondary current 16.1A (Y1, YL) and 27.6A (TL))
Supposed Causes	<ul style="list-style-type: none"> ■ Compressor overload ■ Compressor coil disconnected ■ Defect of inverter PCB ■ Faulty compressor

Troubleshooting Output current check



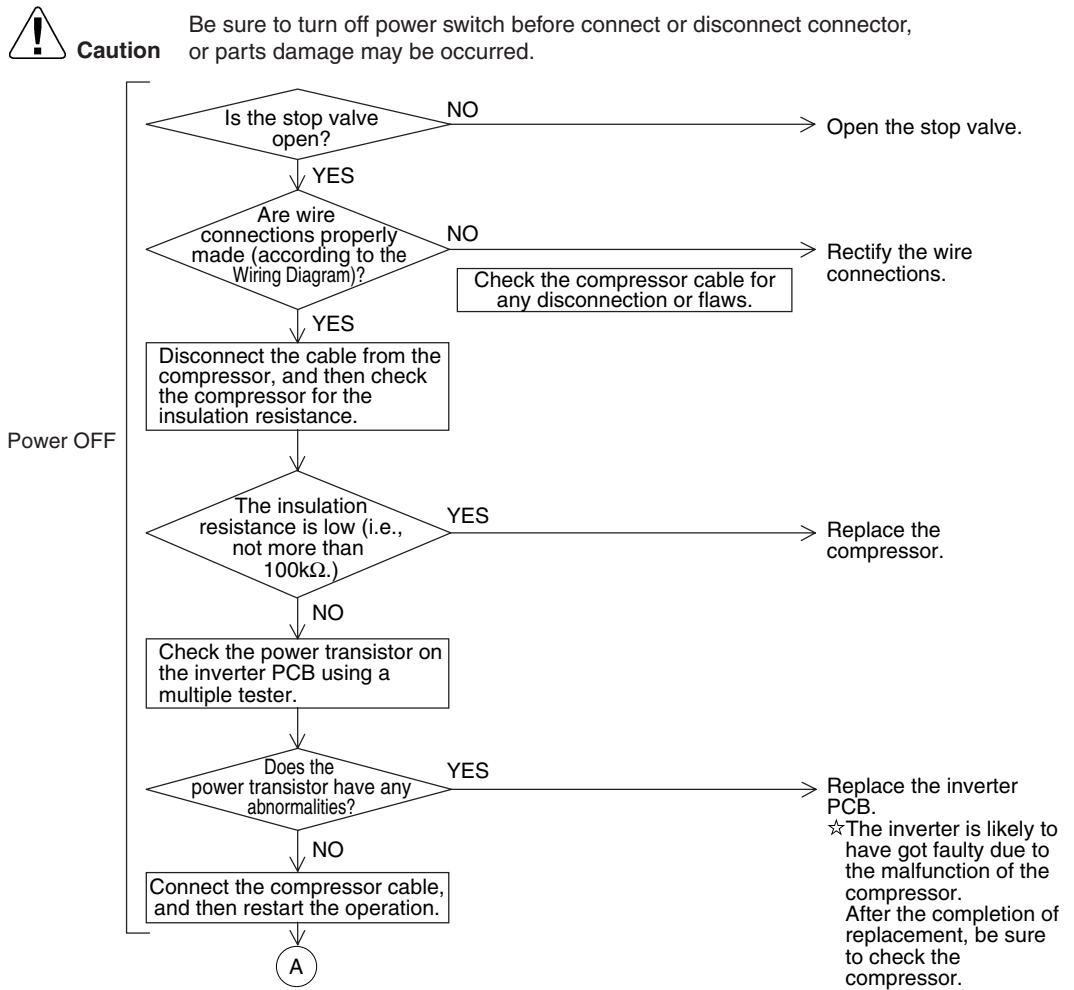
Troubleshooting



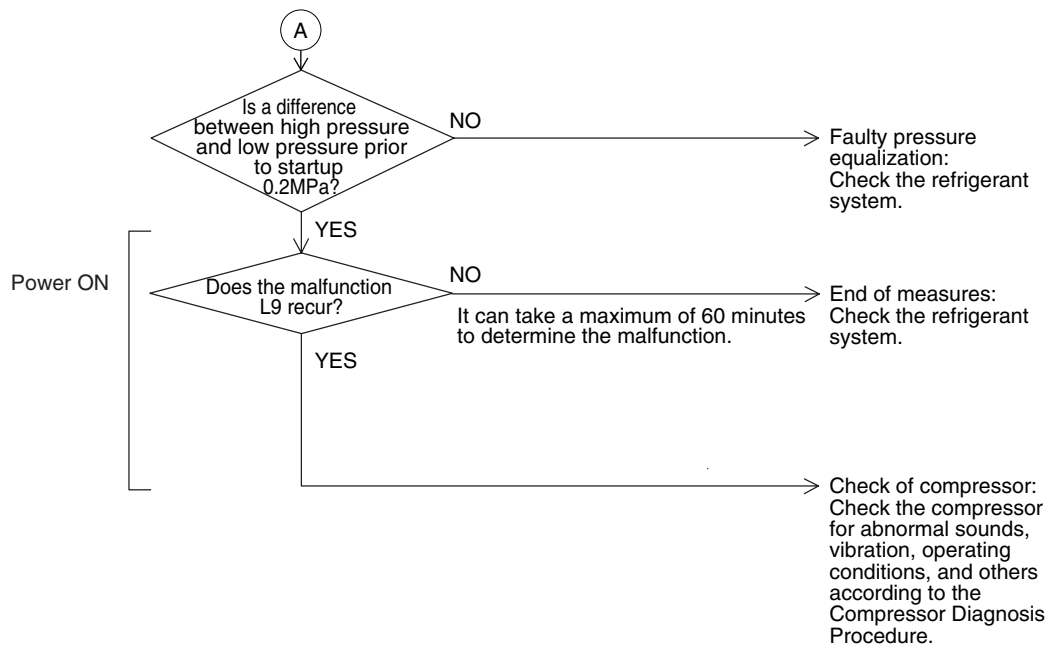
3.39 “L9” Outdoor Unit: Inverter Start up Error

Remote Controller Display	L9
Applicable Models	RXYQ5P(A)~54P(A)
Method of Malfunction Detection	This malfunction code will be output if overcurrent occurs at the time of startup.
Malfunction Decision Conditions	When the startup control is failed. When an overcurrent is passed to the inverter due to the malfunction of a compressor or electrical system.
Supposed Causes	<ul style="list-style-type: none"> ■ Defect of compressor ■ Failure to open the stop valve ■ Pressure differential start ■ Faulty compressor connection ■ Defect of inverter PCB

Troubleshooting



Troubleshooting



3.40 “LL” Outdoor Unit: Malfunction of Transmission Between Inverter and Control PCB

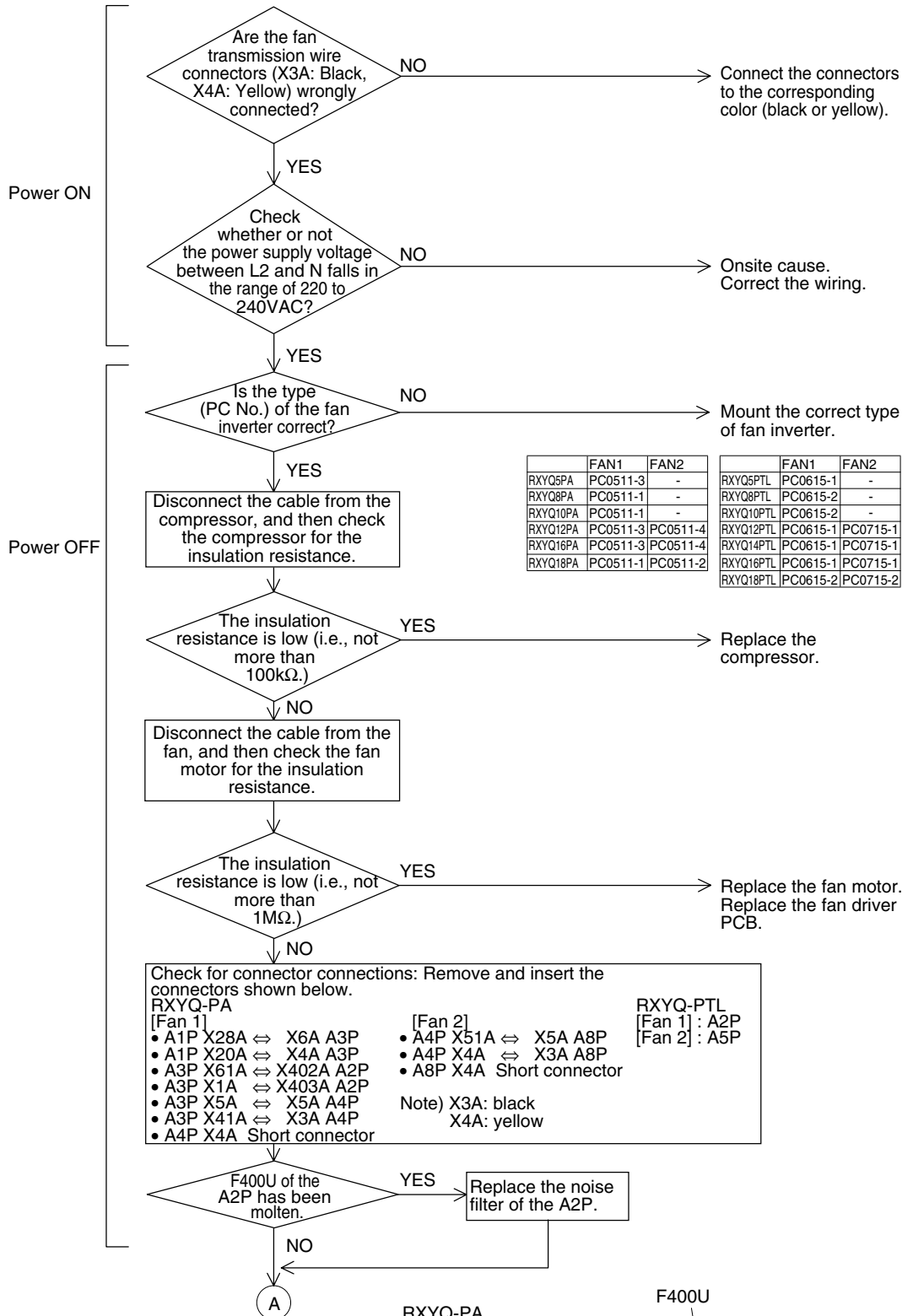
Remote Controller Display	LL
Applicable Models	RXYQ5P(A)~54P(A)
Method of Malfunction Detection	Check the communication state between inverter PCB and control PCB by micro-computer.
Malfunction Decision Conditions	When the correct communication is not conducted in certain period.
Supposed Causes	<ul style="list-style-type: none"> ■ Malfunction of connection between the inverter PCB and outdoor control PCB ■ Defect of outdoor control PCB (transmission section) ■ Defect of inverter PCB ■ Defect of noise filter ■ Faulty fan inverter ■ Incorrect type of fan inverter ■ Faulty compressor ■ Faulty fan motor

Troubleshooting



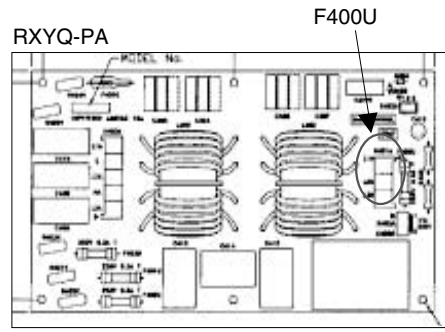
Caution

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.

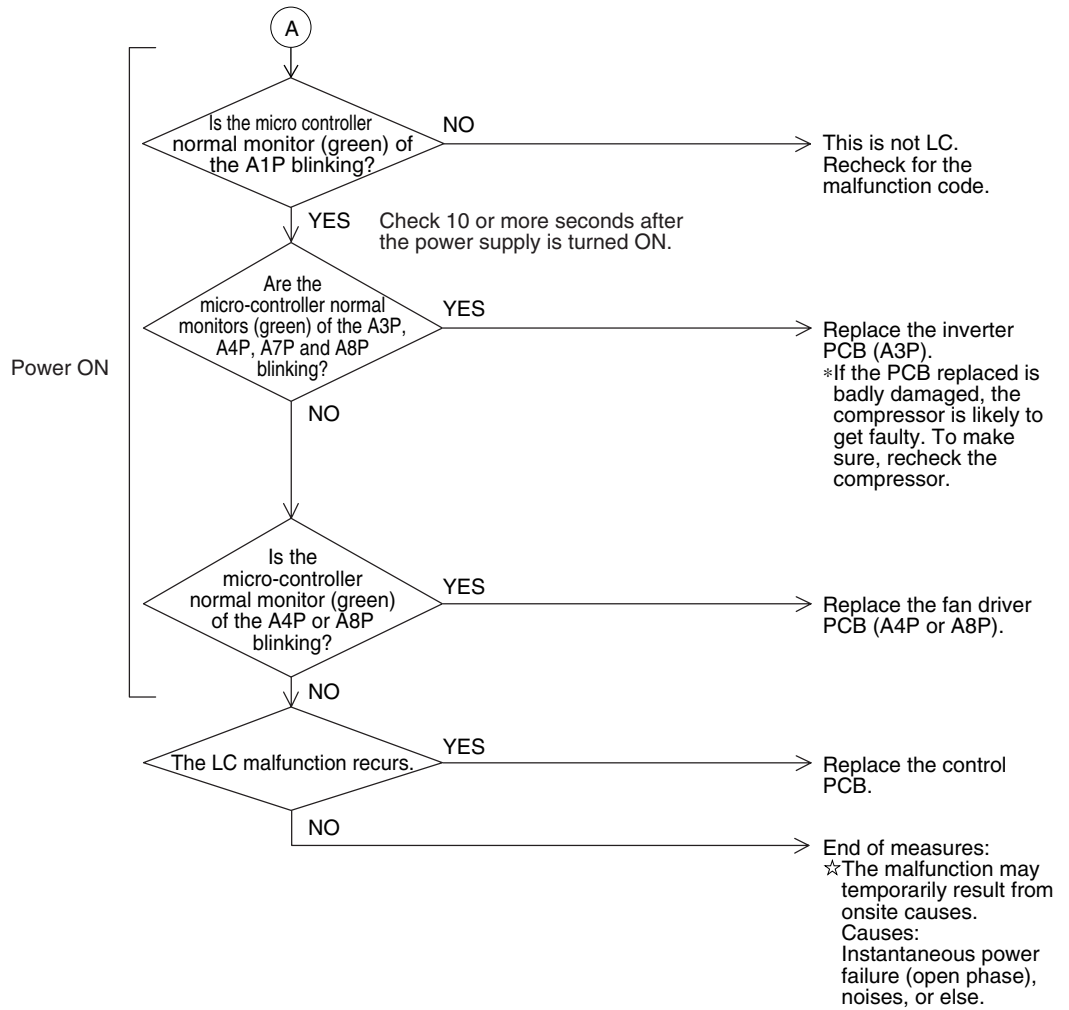


	FAN1	FAN2		FAN1	FAN2
RXYQ5PA	PC0511-3	-	RXYQ5PTL	PC0615-1	-
RXYQ6PA	PC0511-1	-	RXYQ8PTL	PC0615-2	-
RXYQ10PA	PC0511-1	-	RXYQ10PTL	PC0615-2	-
RXYQ12PA	PC0511-3	PC0511-4	RXYQ12PTL	PC0615-1	PC0715-1
RXYQ16PA	PC0511-3	PC0511-4	RXYQ14PTL	PC0615-1	PC0715-1
RXYQ18PA	PC0511-1	PC0511-2	RXYQ16PTL	PC0615-1	PC0715-1
			RXYQ18PTL	PC0615-2	PC0715-2

- Check for connector connections: Remove and insert the connectors shown below.
- RXYQ-PA**
- [Fan 1]
 - A1P X28A ⇔ X6A A3P
 - A1P X20A ⇔ X4A A3P
 - A3P X61A ⇔ X402A A2P
 - A3P X1A ⇔ X403A A2P
 - A3P X5A ⇔ X5A A4P
 - A3P X41A ⇔ X3A A4P
 - A4P X4A Short connector
 - [Fan 2]
 - A4P X51A ⇔ X5A A8P
 - A4P X4A ⇔ X3A A8P
 - A8P X4A Short connector
- Note) X3A: black
X4A: yellow
- RXYQ-PTL**
- [Fan 1]: A2P
 - [Fan 2]: A5P



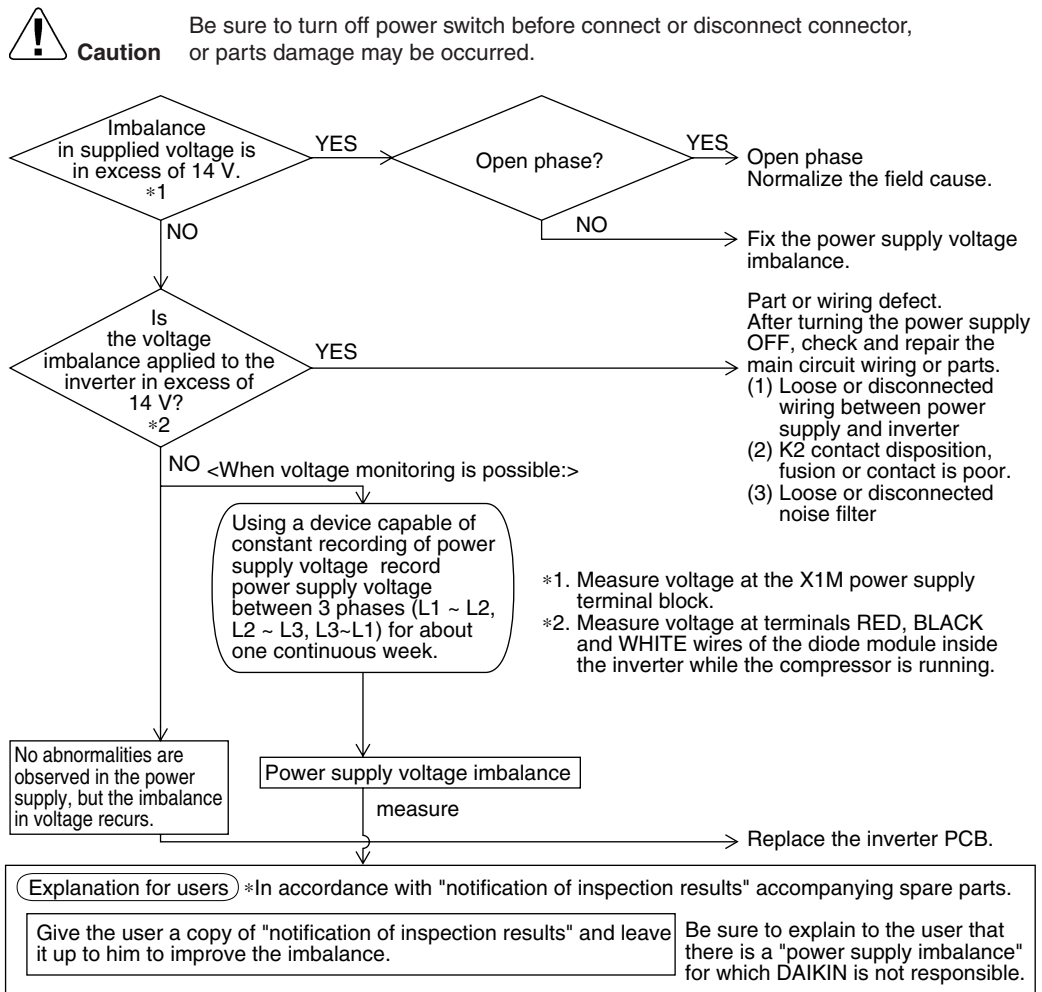
Troubleshooting



3.41 "P1" Outdoor Unit: Inverter Over-Ripple Protection

Remote Controller Display	P1
Applicable Models	RXYQ5P(A)~54P(A)
Method of Malfunction Detection	Imbalance in supply voltage is detected in PCB. Imbalance in the power supply voltage causes increased ripple of voltage of the main circuit capacitor in the inverter. Consequently, the increased ripple is detected.
Malfunction Decision Conditions	When the resistance value of thermistor becomes a value equivalent to open or short circuited status. ★ Malfunction is not decided while the unit operation is continued. "P1" will be displayed by pressing the inspection button. When the amplitude of the ripple exceeding a certain value is detected for consecutive 4 minutes.
Supposed Causes	<ul style="list-style-type: none"> ■ Open phase ■ Voltage imbalance between phases ■ Defect of main circuit capacitor ■ Defect of inverter PCB ■ Defect of K2 relay in inverter PCB ■ Improper main circuit wiring

Troubleshooting



3.42 “P4” Outdoor Unit: Malfunction of Inverter Radiating Fin Temperature Rise Sensor

Remote Controller Display

P4

Applicable Models

RXYQ5P(A)~54P(A)

Method of Malfunction Detection

Resistance of radiation fin thermistor is detected when the compressor is not operating.

Malfunction Decision Conditions

When the resistance value of thermistor becomes a value equivalent to open or short circuited status.
 ★ Malfunction is not decided while the unit operation is continued.
 "P4" will be displayed by pressing the inspection button.

Supposed Causes

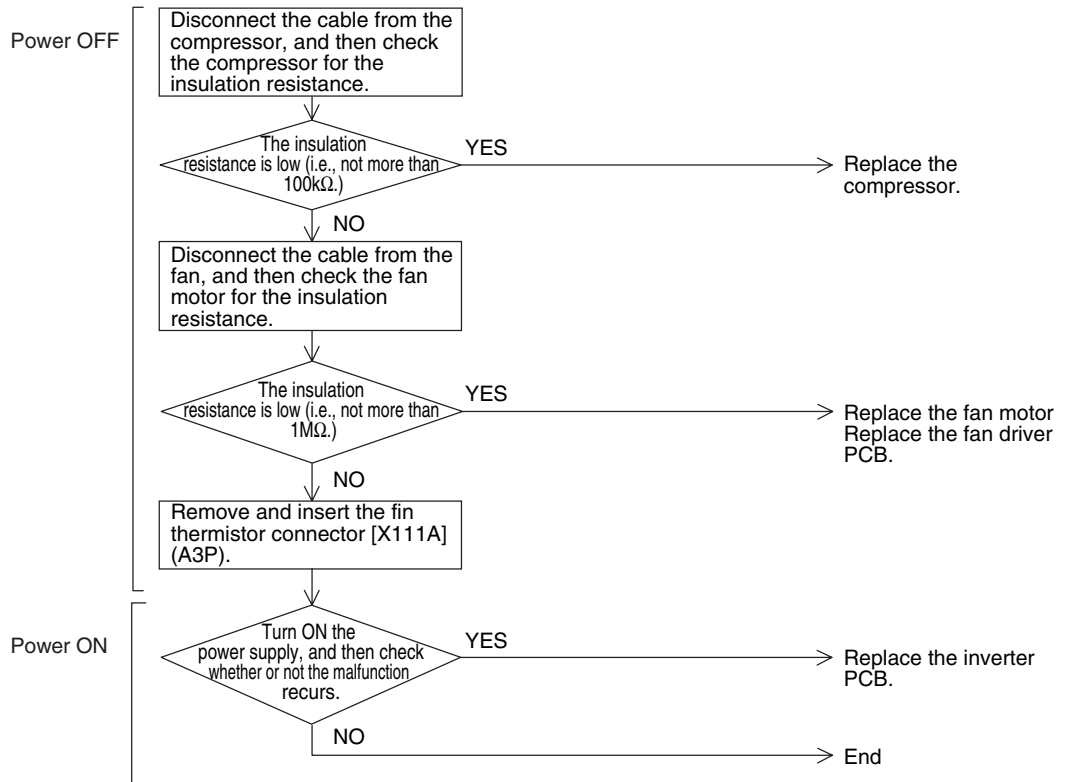
- Defect of radiator fin temperature sensor
- Defect of inverter PCB

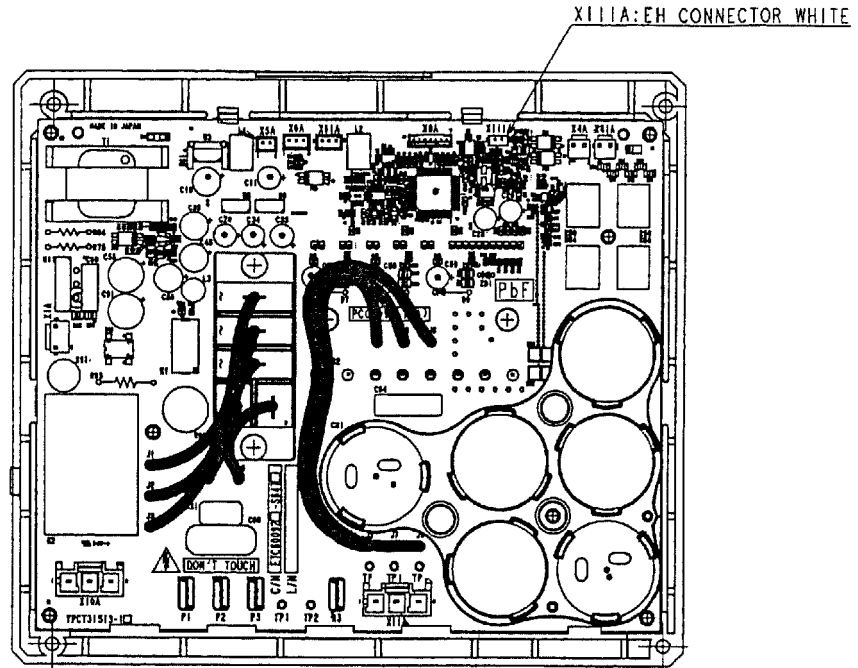
Troubleshooting



Caution

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.





Inverter PCB for compressor



* Refer to “Thermistor Resistance / Temperature Characteristics” table on P.426.

3.43 “PU” Outdoor Unit: Faulty Field Setting after Replacing Main PCB or Faulty Combination of PCB

Remote Controller Display

PU

Applicable Models

RXYQ5P(A)~54P(A)

Method of Malfunction Detection

The faulty (or no) field setting after replacing PCB or faulty PCB combination is detected through communications with the inverter.

Malfunction Decision Conditions

Whether or not the field setting or the type of the PCB is correct through the communication date is judged.

Supposed Causes

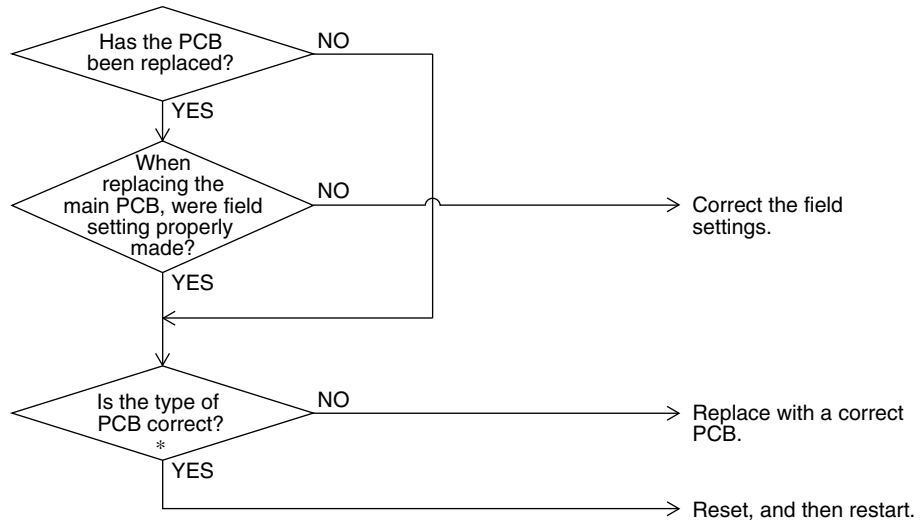
- Faulty (or no) field setting after replacing main PCB
- Mismatching of type of PCB

Troubleshooting



Caution

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



*Note) Type of PCB mismatching includes;
 Main PCB
 Inverter PCB (for compressor)
 Fan driver PCB

3.44 “” Outdoor Unit: Low Pressure Drop Due to Refrigerant Shortage or Electronic Expansion Valve Failure

Remote
Controller
Display



Applicable
Models

RXYQ5P(A)~54P(A)

Method of
Malfunction
Detection

Shortage of gas malfunction is detected by discharge pipe temperature thermistor.

Malfunction
Decision
Conditions

Micro-computer judge and detect if the system is short of refrigerant.
★Malfunction is not decided while the unit operation is continued.

Supposed
Causes

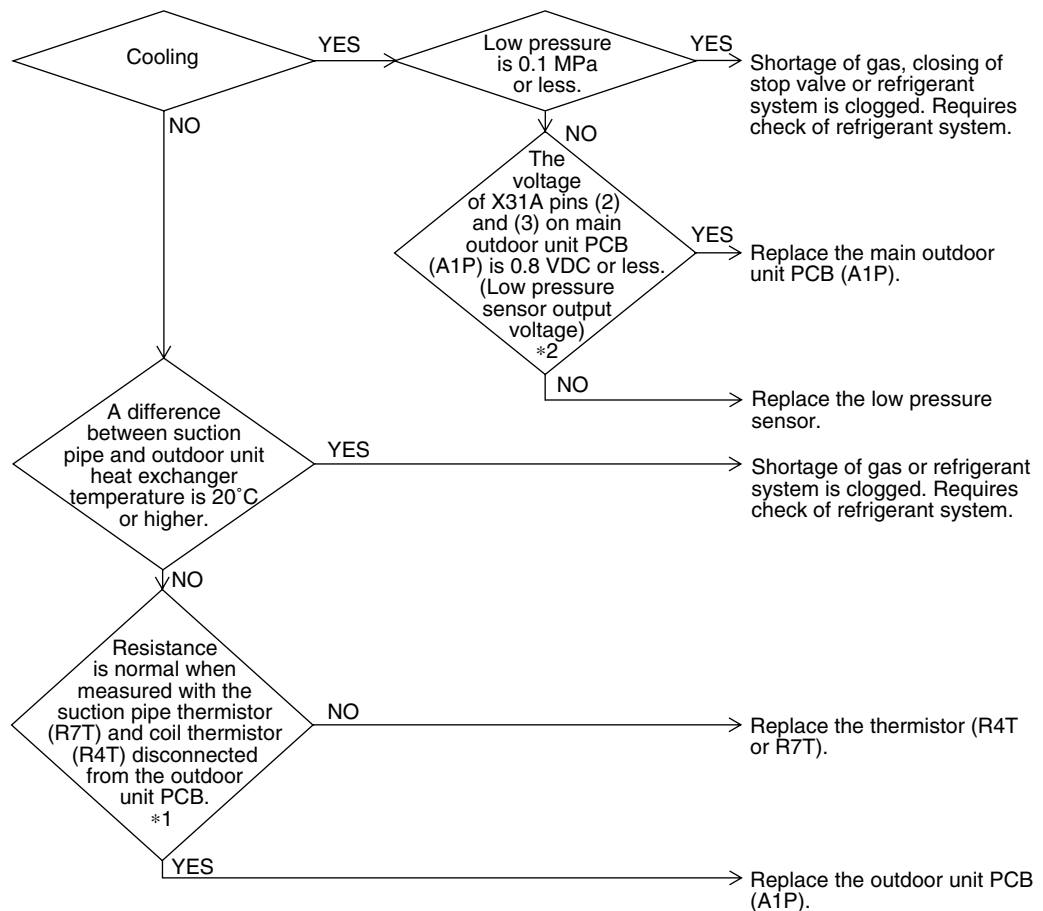
- Shortage of gas or refrigerant system clogging (incorrect piping)
- Defect of low pressure sensor
- Defect of outdoor unit PCB (A1P)
- Defect of thermistor R7T or R4T

Troubleshooting



Caution

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.




*1: Refer to “Thermistor Resistance / Temperature Characteristics” table on P.426.

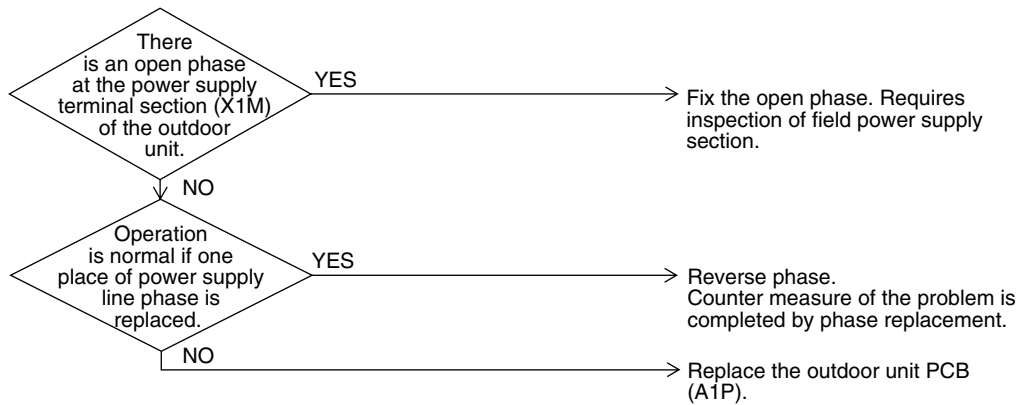
*2: Refer to “Pressure Sensor, Pressure / Voltage Characteristics” table on P.428.

3.45 “U I” Reverse Phase, Open Phase

Remote Controller Display	U I
Applicable Models	RXYQ5P(A)~54P(A)
Method of Malfunction Detection	The phase of each phase are detected by reverse phase detection circuit and right phase or reverse phase are judged.
Malfunction Decision Conditions	When a significant phase difference is made between phases.
Supposed Causes	<ul style="list-style-type: none"> ■ Power supply reverse phase ■ Power supply open phase ■ Defect of outdoor unit PCB (A1P)

Troubleshooting

 **Caution** Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



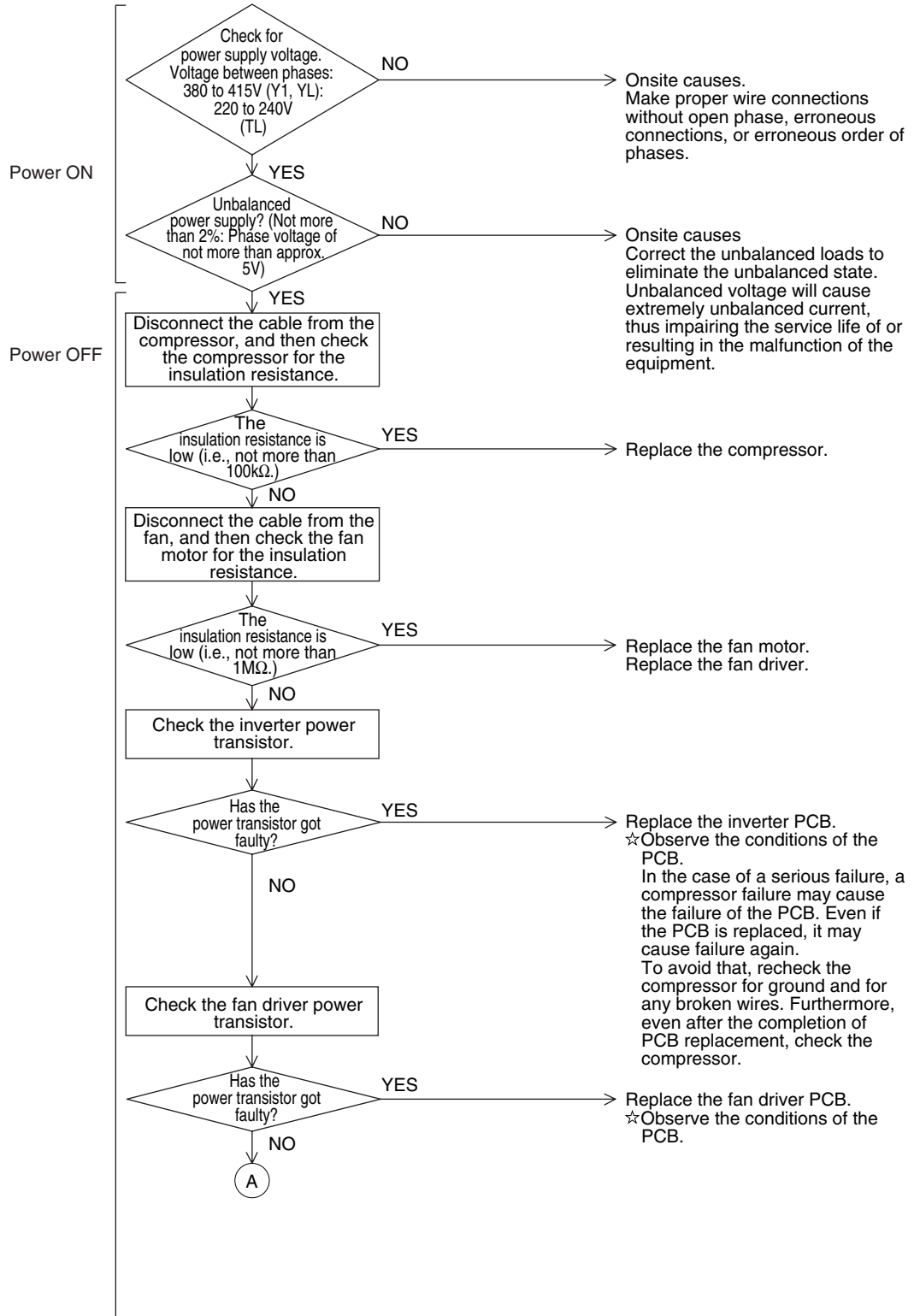
3.46 “U2” Outdoor Unit: Power Supply Insufficient or Instantaneous Failure

Remote Controller Display	U2
Applicable Models	RXYQ5P(A)~54P(A)
Method of Malfunction Detection	Detection of voltage of main circuit capacitor built in the inverter and power supply voltage.
Malfunction Decision Conditions	When the voltage aforementioned is not less than 780V or not more than 320V, or when the current-limiting voltage does not reach 200V or more or exceeds 740V.
Supposed Causes	<ul style="list-style-type: none"> ■ Power supply insufficient ■ Instantaneous power failure ■ Open phase ■ Defect of inverter PCB ■ Defect of outdoor control PCB ■ Main circuit wiring defect ■ Faulty compressor ■ Faulty fan motor ■ Faulty connection of signal cable

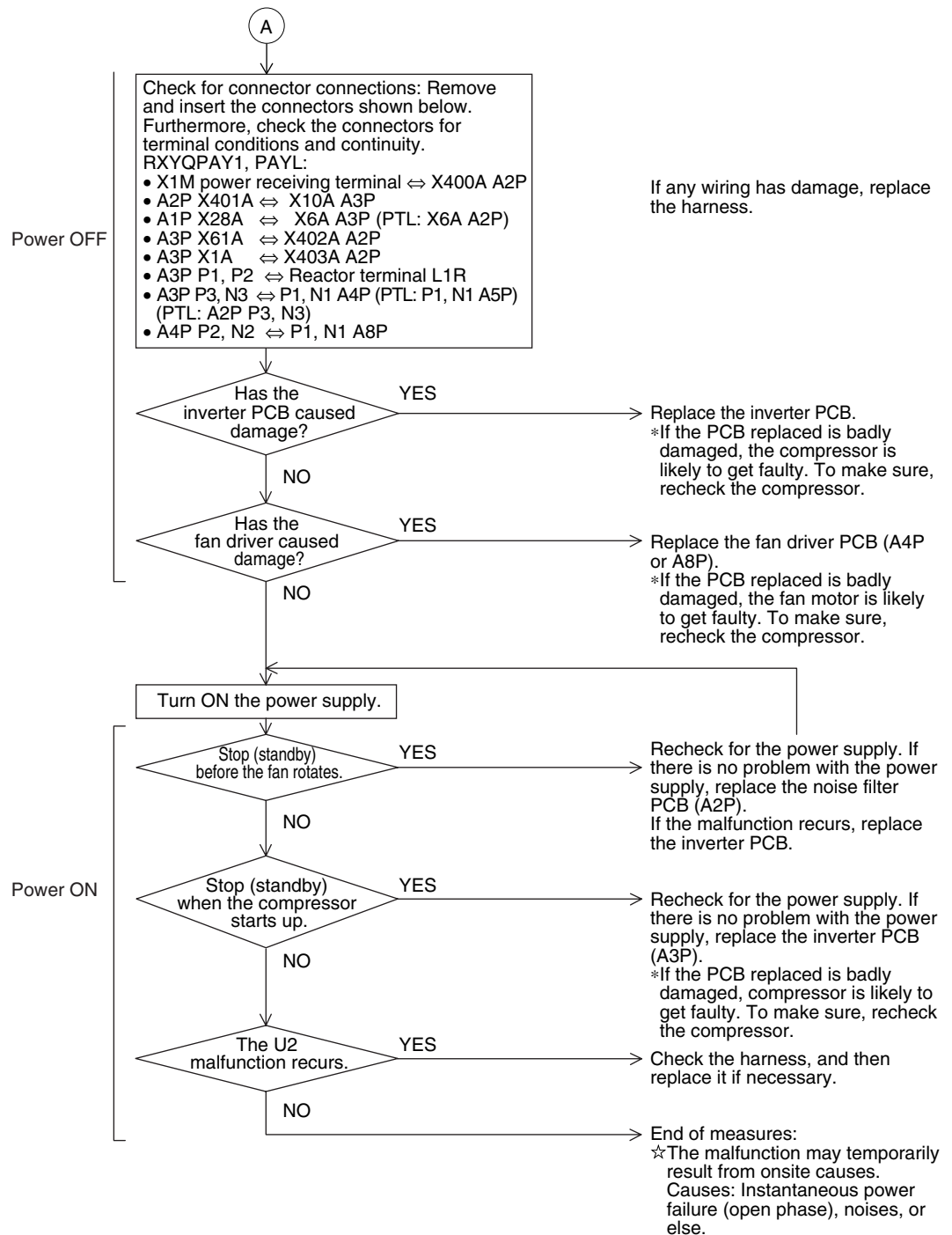
Troubleshooting



Caution Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.




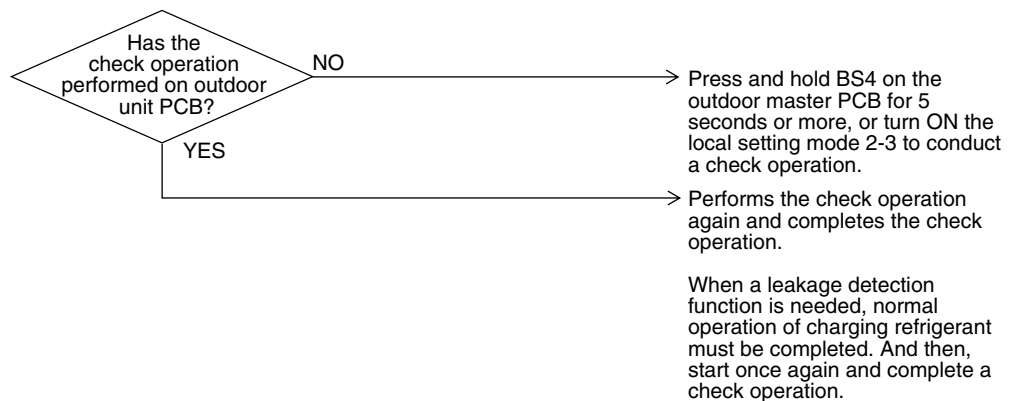
Troubleshooting



3.47 “U3” Outdoor Unit: Check Operation is not Executed

Remote Controller Display	U3
Applicable Models	RXYQ5P(A)~54P(A)
Method of Malfunction Detection	Check operation is executed or not
Malfunction Decision Conditions	Malfunction is decided when the unit starts operation without check operation.
Supposed Causes	<ul style="list-style-type: none"> ■ Check operation is not executed.
Troubleshooting	

 **Caution** Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



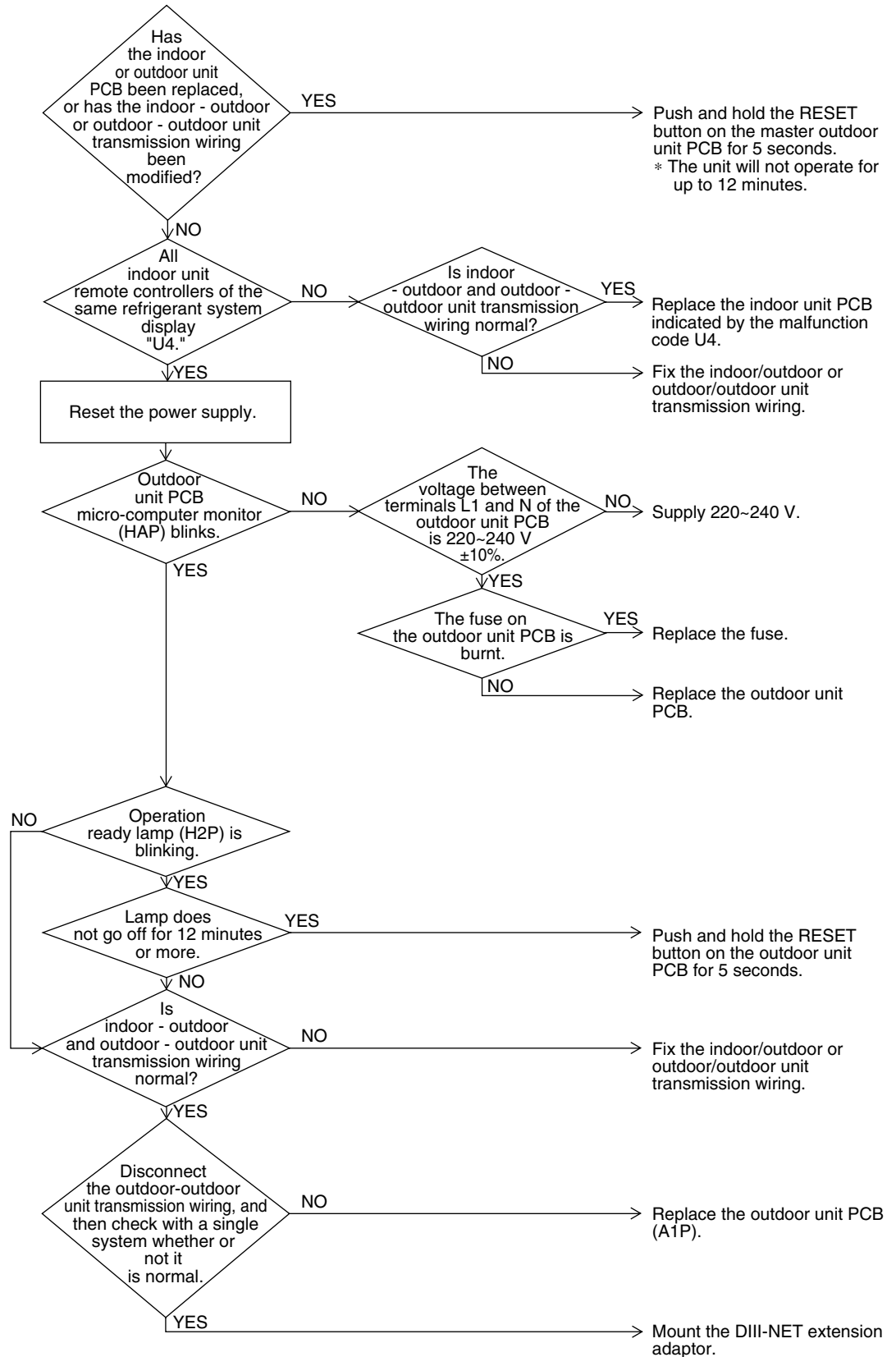
3.48 “U4” Malfunction of Transmission Between Indoor Units

Remote Controller Display	U4
Applicable Models	All model of indoor unit RXYQ5P(A)~54P(A)
Method of Malfunction Detection	Micro-computer checks if transmission between indoor and outdoor units is normal.
Malfunction Decision Conditions	When transmission is not carried out normally for a certain amount of time
Supposed Causes	<ul style="list-style-type: none"> ■ Indoor to outdoor, outdoor to outdoor transmission wiring F1, F2 disconnection, short circuit or wrong wiring ■ Outdoor unit power supply is OFF ■ System address does not match ■ Defect of indoor unit PCB ■ Defect of outdoor unit PCB

Troubleshooting



Caution Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



3.49 "U5" Indoor Unit: Malfunction of Transmission Between Remote Controller and Indoor Unit

Remote Controller Display

U5

Applicable Models

All models of indoor units

Method of Malfunction Detection

In case of controlling with 2-remote controller, check the system using micro-computer is signal transmission between indoor unit and remote controller (main and sub) is normal.

Malfunction Decision Conditions

Normal transmission does not continue for specified period.

Supposed Causes

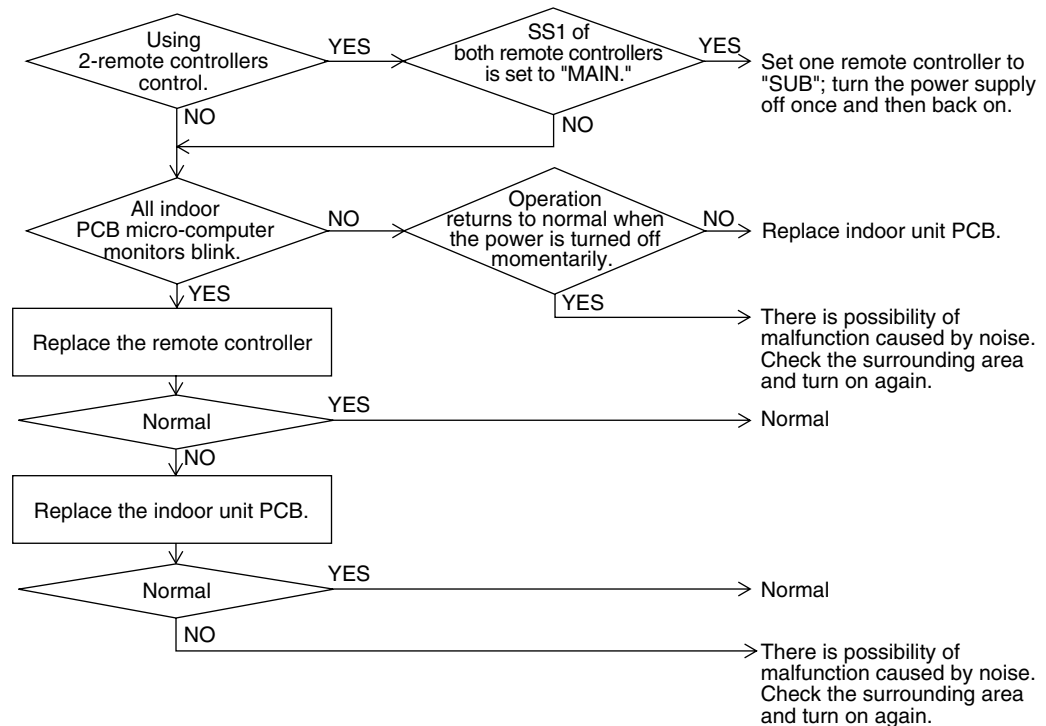
- Malfunction of indoor unit remote controller transmission
- Connection of two main remote controllers (when using 2 remote controllers)
- Defect of indoor unit PCB
- Defect of remote controller PCB
- Malfunction of transmission caused by noise

Troubleshooting



Caution

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



3.50 “U7” Indoor Unit: Malfunction of Transmission Between Outdoor Units

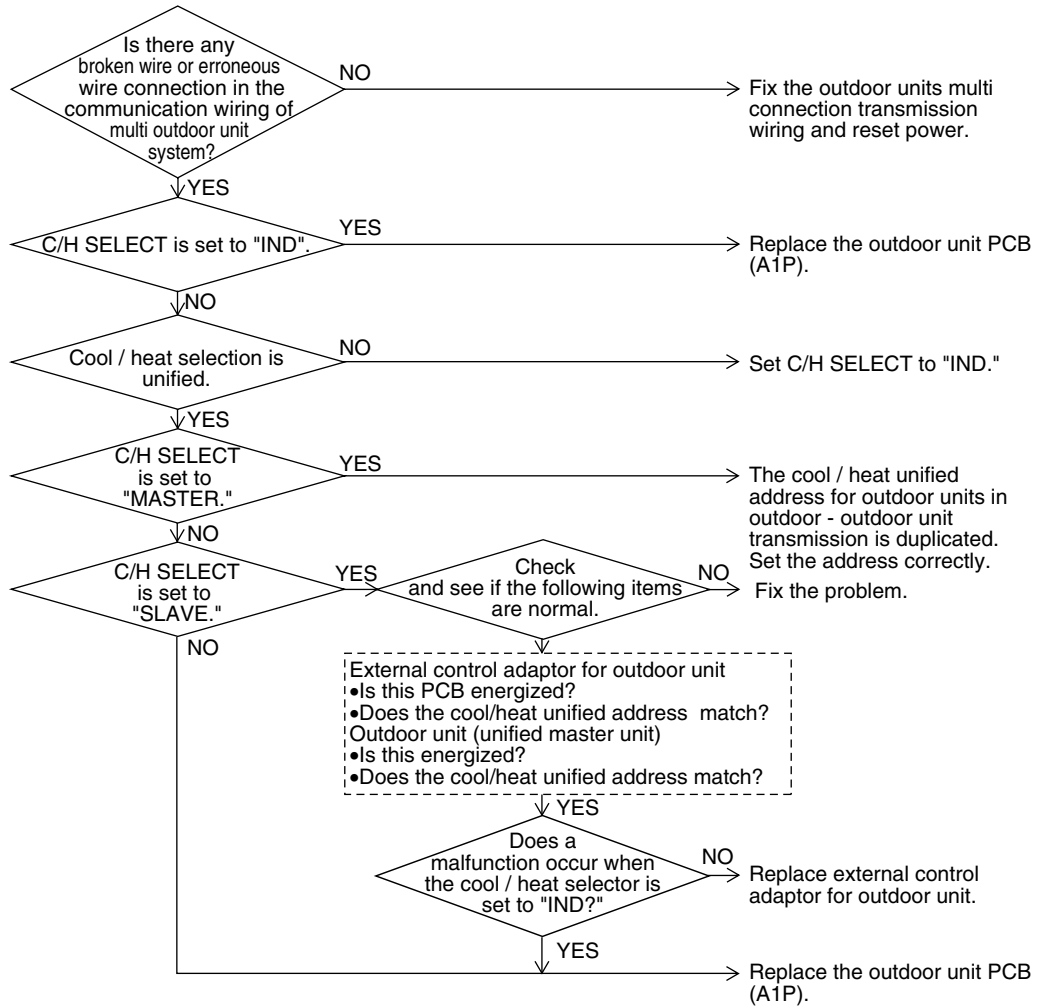
Remote Controller Display	U7
Applicable Models	All models of outdoor units
Method of Malfunction Detection	Micro-computer checks if transmission between outdoor units.
Malfunction Decision Conditions	When transmission is not carried out normally for a certain amount of time
Supposed Causes	<ul style="list-style-type: none"> ■ Improper connection of transmission wiring between outdoor unit and external control adaptor for outdoor unit ■ Improper connection of transmission wiring between outdoor units. ■ Improper cool/heat selection ■ Improper cool/heat unified address (outdoor unit, external control adaptor for outdoor unit) ■ Defect of outdoor unit PCB (A1P) ■ Defect of external control adaptor for outdoor unit

Troubleshooting



Caution

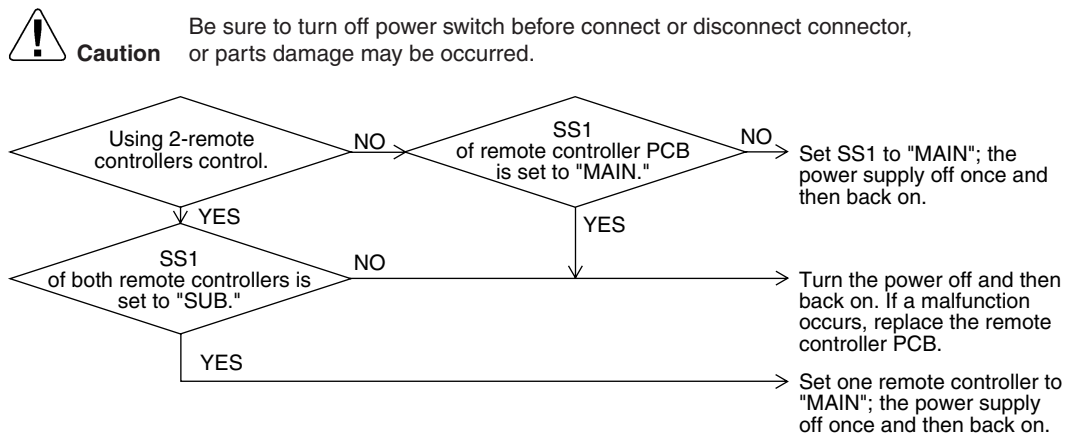
Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



3.51 “08” Indoor Unit: Malfunction of Transmission Between Main and Sub Remote Controllers

Remote Controller Display	08
Applicable Models	All models of indoor units
Method of Malfunction Detection	In case of controlling with 2-remote controller, check the system using micro-computer if signal transmission between indoor unit and remote controller (main and sub) is normal.
Malfunction Decision Conditions	Normal transmission does not continue for specified period.
Supposed Causes	<ul style="list-style-type: none"> ■ Malfunction of transmission between main and sub remote controller ■ Connection between sub remote controllers ■ Defect of remote controller PCB

Troubleshooting



3.52 "U9" Indoor Unit: Malfunction of Transmission Between Indoor and Outdoor Units in the Same System

Remote
Controller
Display

U9

Applicable
Models

All models of indoor units

Method of
Malfunction
Detection

Detect the malfunction signal of any other indoor unit within the system concerned.

Malfunction
Decision
Conditions

When the malfunction decision is made on any other indoor unit within the system concerned.

Supposed
Causes

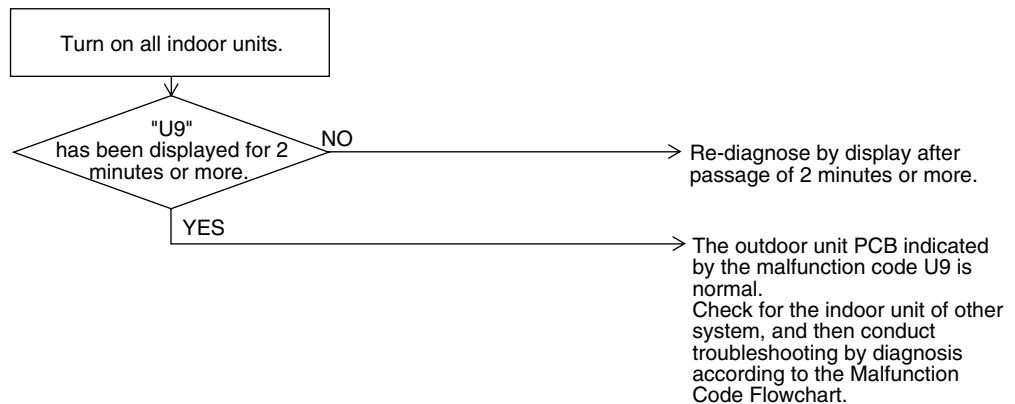
- Malfunction of transmission within or outside of other system
- Malfunction of electronic expansion valve in indoor unit of other system
- Defect of PCB of indoor unit in other system
- Improper connection of transmission wiring between indoor and outdoor unit

Troubleshooting



Caution

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



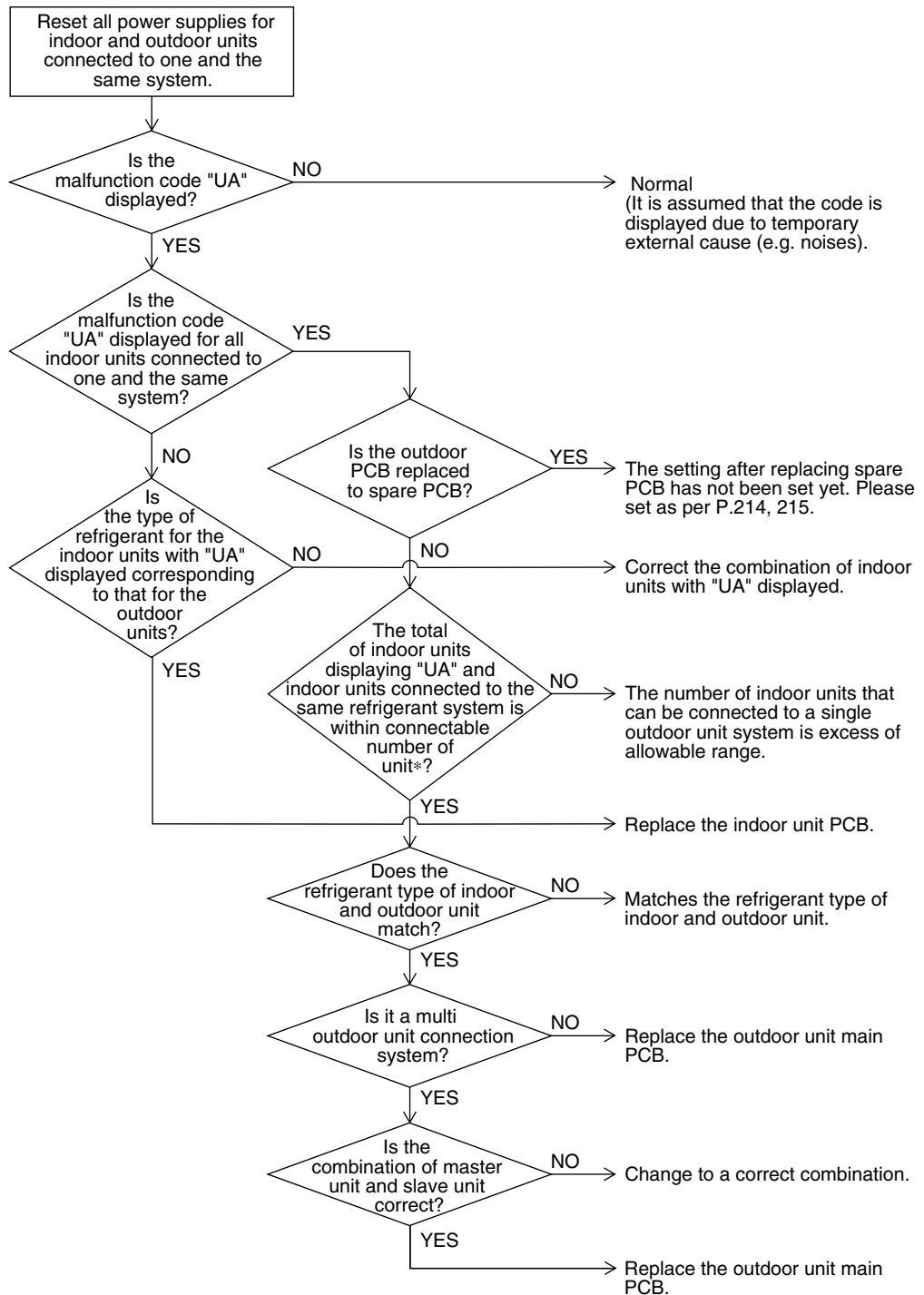
3.53 “UR” Improper Combination of Indoor and Outdoor Units, Indoor Units and Remote Controller

Remote Controller Display	UR
Applicable Models	All models of indoor unit RXYQ5P(A)~54P(A)
Method of Malfunction Detection	A difference occurs in data by the type of refrigerant between indoor and outdoor units. The number of indoor units is out of the allowable range.
Malfunction Decision Conditions	The malfunction decision is made as soon as either of the abnormalities aforementioned is detected.
Supposed Causes	<ul style="list-style-type: none"> ■ Excess of connected indoor units ■ Defect of outdoor unit PCB (A1P) ■ Mismatching of the refrigerant type of indoor and outdoor unit. ■ Setting of outdoor unit PCB was not conducted after replacing to spare PCB.

Troubleshooting




Caution Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



* The number of indoor units that can be connected to a single outdoor unit system depends on the model of outdoor unit.

3.54 “U” Address Duplication of Centralized Controller

Remote Controller Display	
Applicable Models	All models of indoor unit Centralized controller
Method of Malfunction Detection	The principal indoor unit detects the same address as that of its own on any other indoor unit.
Malfunction Decision Conditions	The malfunction decision is made as soon as the abnormality aforementioned is detected.
Supposed Causes	<ul style="list-style-type: none"> ■ Address duplication of centralized controller

Troubleshooting



Caution

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.

The centralized address is duplicated.



Make setting change so that the centralized address will not be duplicated.

3.55 “UE” Malfunction of Transmission Between Centralized Controller and Indoor Unit

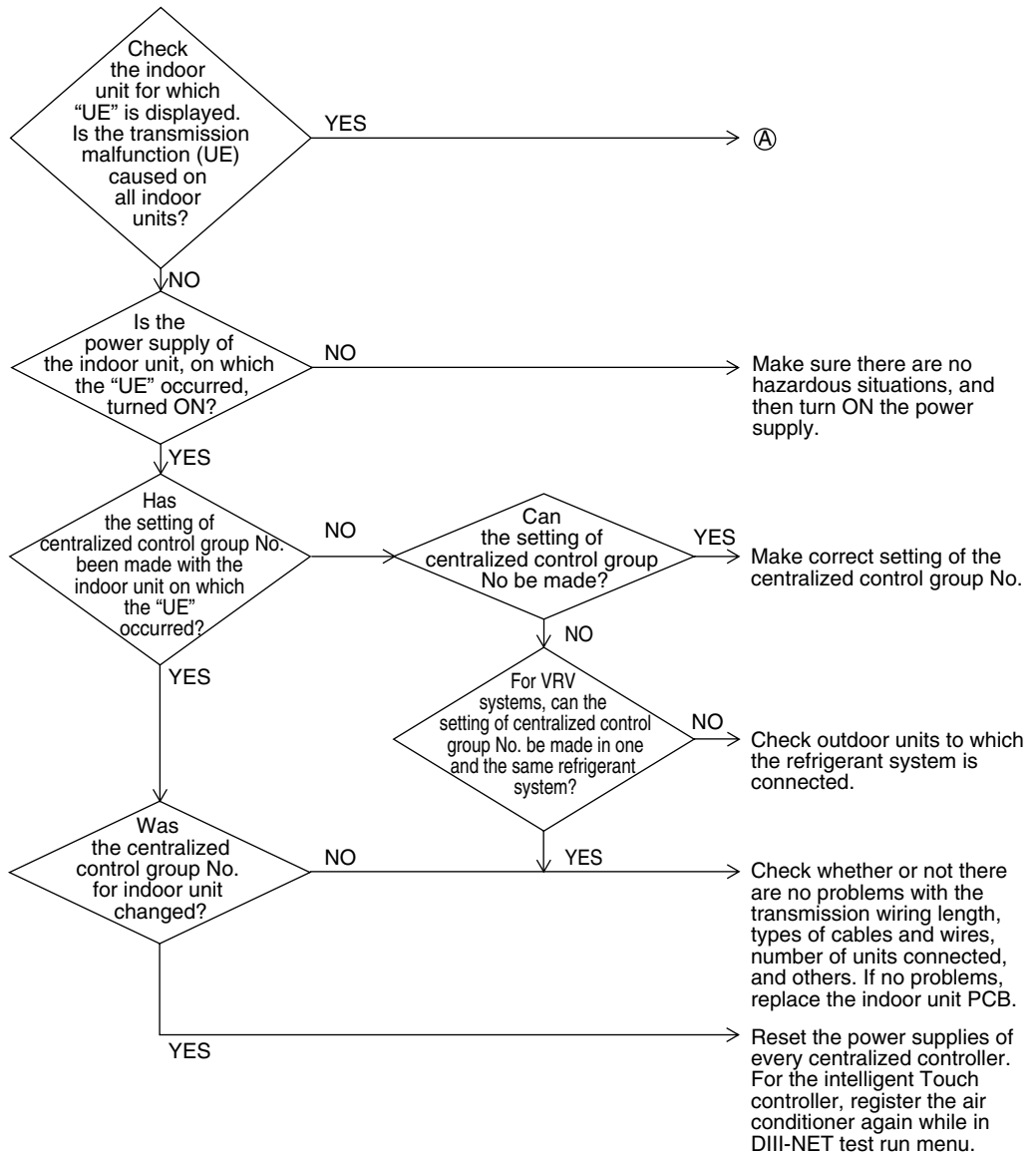
Remote Controller Display	UE
Applicable Models	All models of indoor units intelligent Touch Controller Centralized controller Schedule timer
Method of Malfunction Detection	Micro-computer checks if transmission between indoor unit and centralized controller is normal.
Malfunction Decision Conditions	When transmission is not carried out normally for a certain amount of time
Supposed Causes	<ul style="list-style-type: none"> ■ Malfunction of transmission between optional controllers for centralized control and indoor unit ■ Connector for setting master controller is disconnected. (or disconnection of connector for independent / combined use changeover switch.) ■ Failure of PCB for centralized remote controller ■ Defect of indoor unit PCB

Troubleshooting

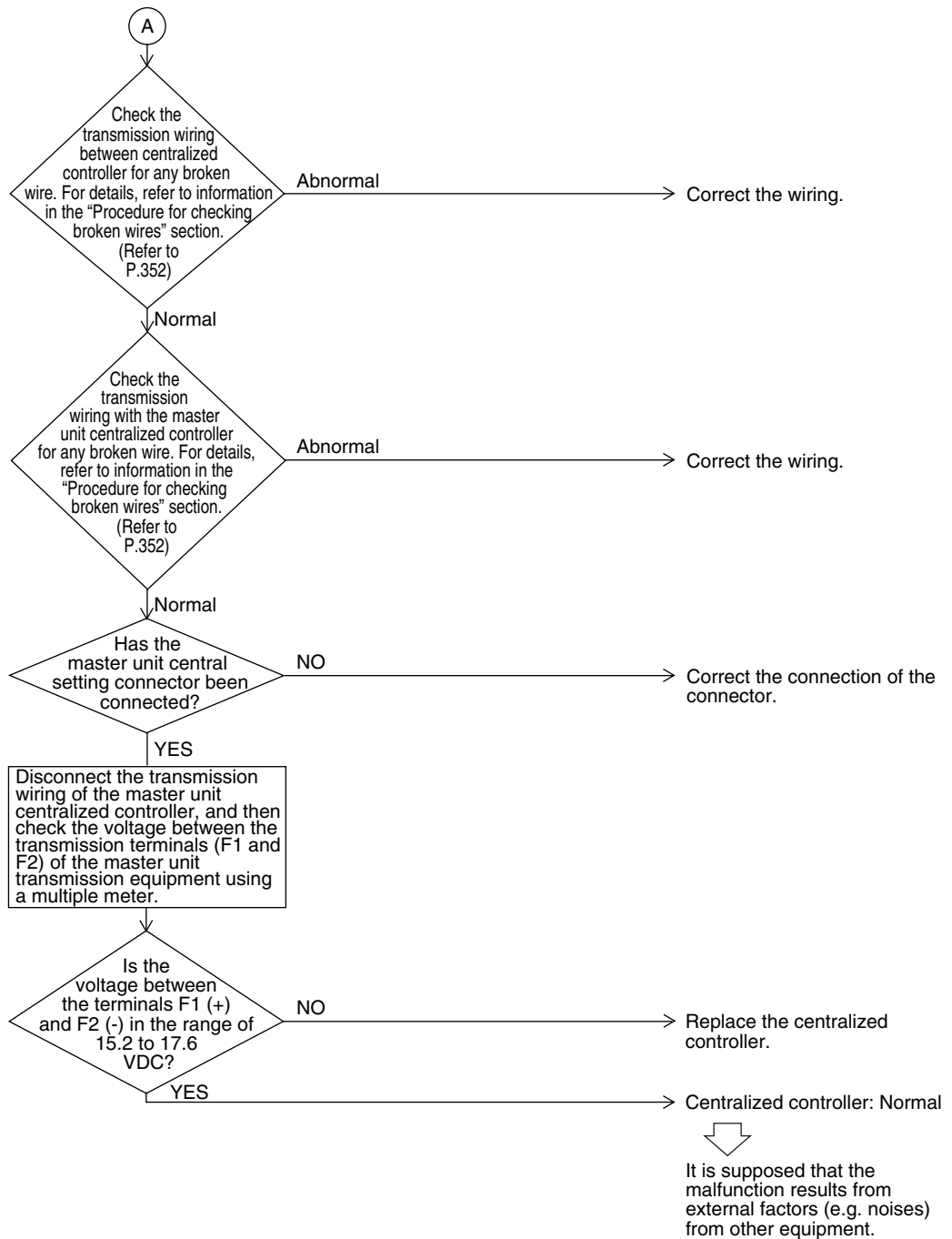


Caution


Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



Troubleshooting



3.56 “UF” System is not Set yet

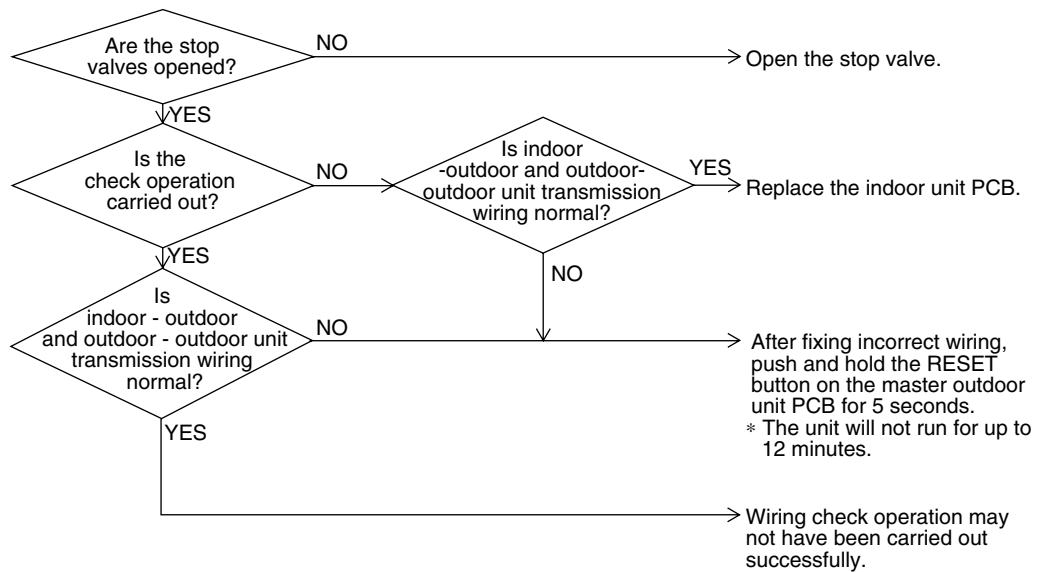
Remote Controller Display	
Applicable Models	All models of indoor units RXYQ5P(A)~54P(A)
Method of Malfunction Detection	On check operation, the number of indoor units in terms of transmission is not corresponding to that of indoor units that have made changes in temperature.
Malfunction Decision Conditions	The malfunction is determined as soon as the abnormality aforementioned is detected through checking the system for any erroneous connection of units on the check operation.
Supposed Causes	<ul style="list-style-type: none"> ■ Improper connection of transmission wiring between indoor-outdoor units and outdoor-outdoor units ■ Failure to execute check operation ■ Defect of indoor unit PCB ■ Stop valve is left in closed

Troubleshooting



Caution

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



Note:

Wiring check operation may not be successful if carried out after the outdoor unit has been off for more than 12 hours, or if it is not carried out after running all connected indoor units in the fan mode for at least an hour.

3.57 “UH” Malfunction of System, Refrigerant System Address Undefined

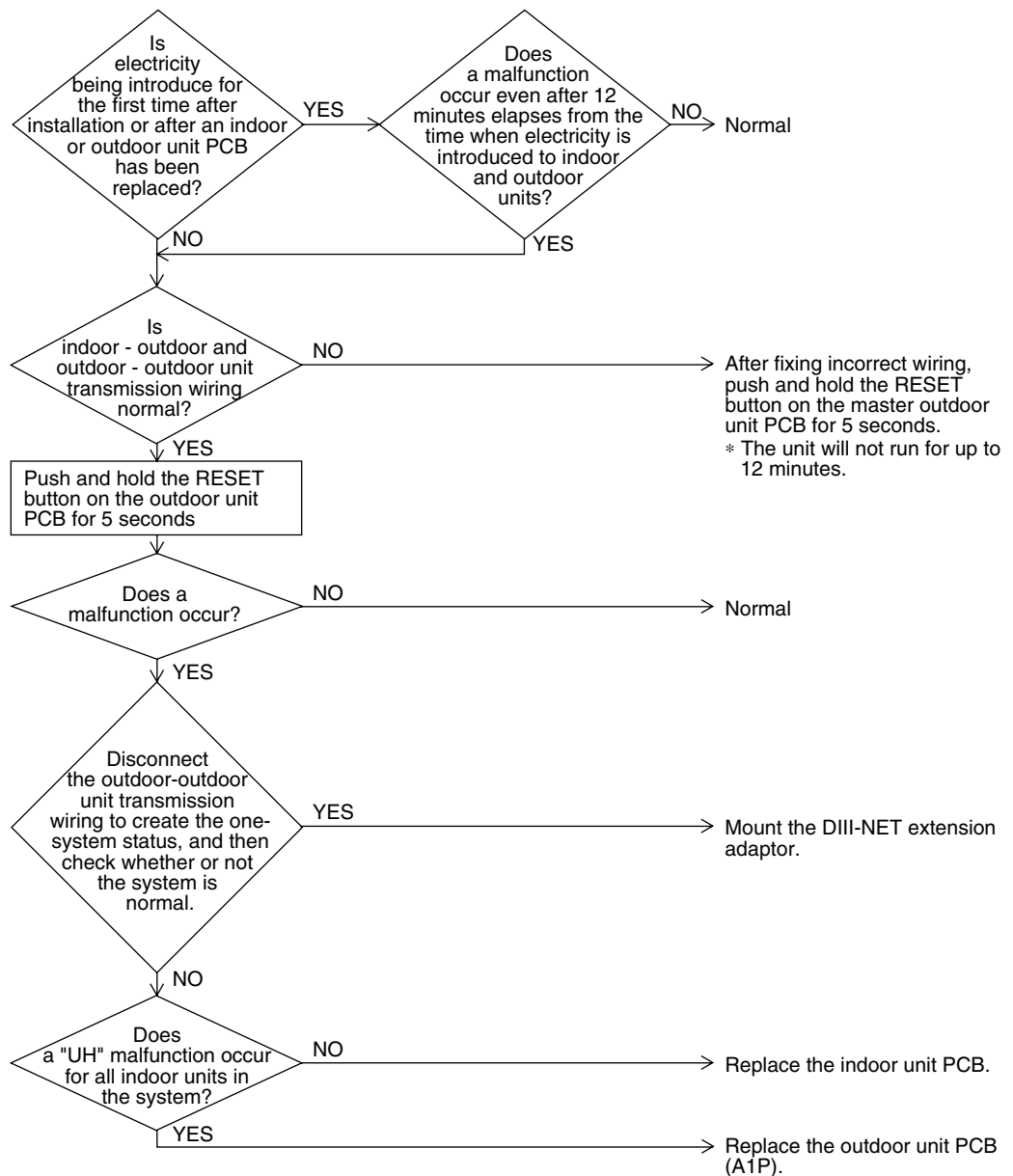
Remote Controller Display	UH
Applicable Models	All models of indoor units RXYQ5P(A)~54P(A)
Method of Malfunction Detection	Detect an indoor unit with no address setting.
Malfunction Decision Conditions	The malfunction decision is made as soon as the abnormality aforementioned is detected.
Supposed Causes	<ul style="list-style-type: none"> ■ Improper connection of transmission wiring between indoor-outdoor units and outdoor-outdoor units ■ Defect of indoor unit PCB ■ Defect of outdoor unit PCB (A1P)

Troubleshooting



Caution

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



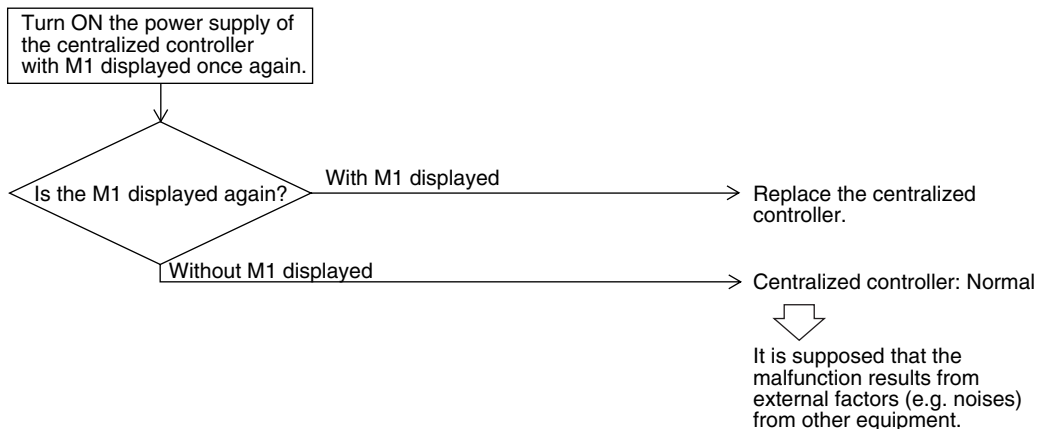
4. Troubleshooting (OP: Centralized Remote Controller)

4.1 "M1" PCB Defect

Remote Controller Display	M1
Applicable Models	Centralized remote controller Schedule timer
Method of Malfunction Detection	Detect an abnormality in the DIII-NET polarity circuit.
Malfunction Decision Conditions	When + polarity and - polarity are detected at the same time.
Supposed Causes	<ul style="list-style-type: none"> ■ Defect of centralized remote controller PCB ■ Defect of Schedule timer PCB
Troubleshooting	Replace the centralized remote controller.


Caution

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



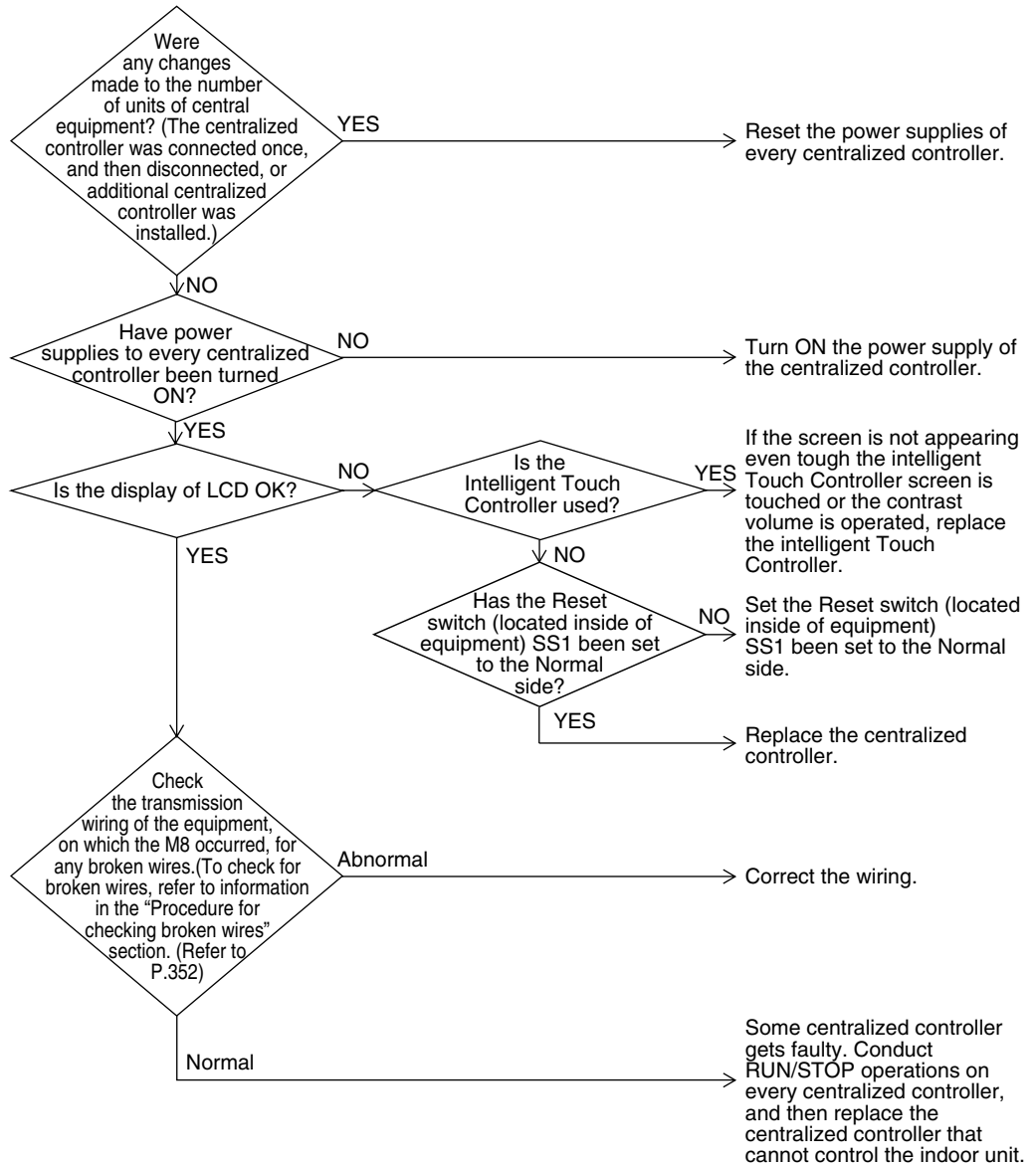
4.2 “M8” Malfunction of Transmission Between Optional Controllers for Centralized Control

Remote Controller Display	M8
Applicable Models	Centralized remote controller intelligent Touch Controller Schedule timer
Method of Malfunction Detection	Detect the malfunction according to DIII-NET transmission data. (The system will be automatically reset.)
Malfunction Decision Conditions	When no master controller is present at the time of the startup of slave controller. When the centralized controller, which was connected once, shows no response.
Supposed Causes	<ul style="list-style-type: none"> ■ Malfunction of transmission between optional controllers for centralized control ■ Defect of PCB of optional controllers for centralized control

Troubleshooting

**Caution**

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



4.3 “MR” Improper Combination of Optional Controllers for Centralized Control

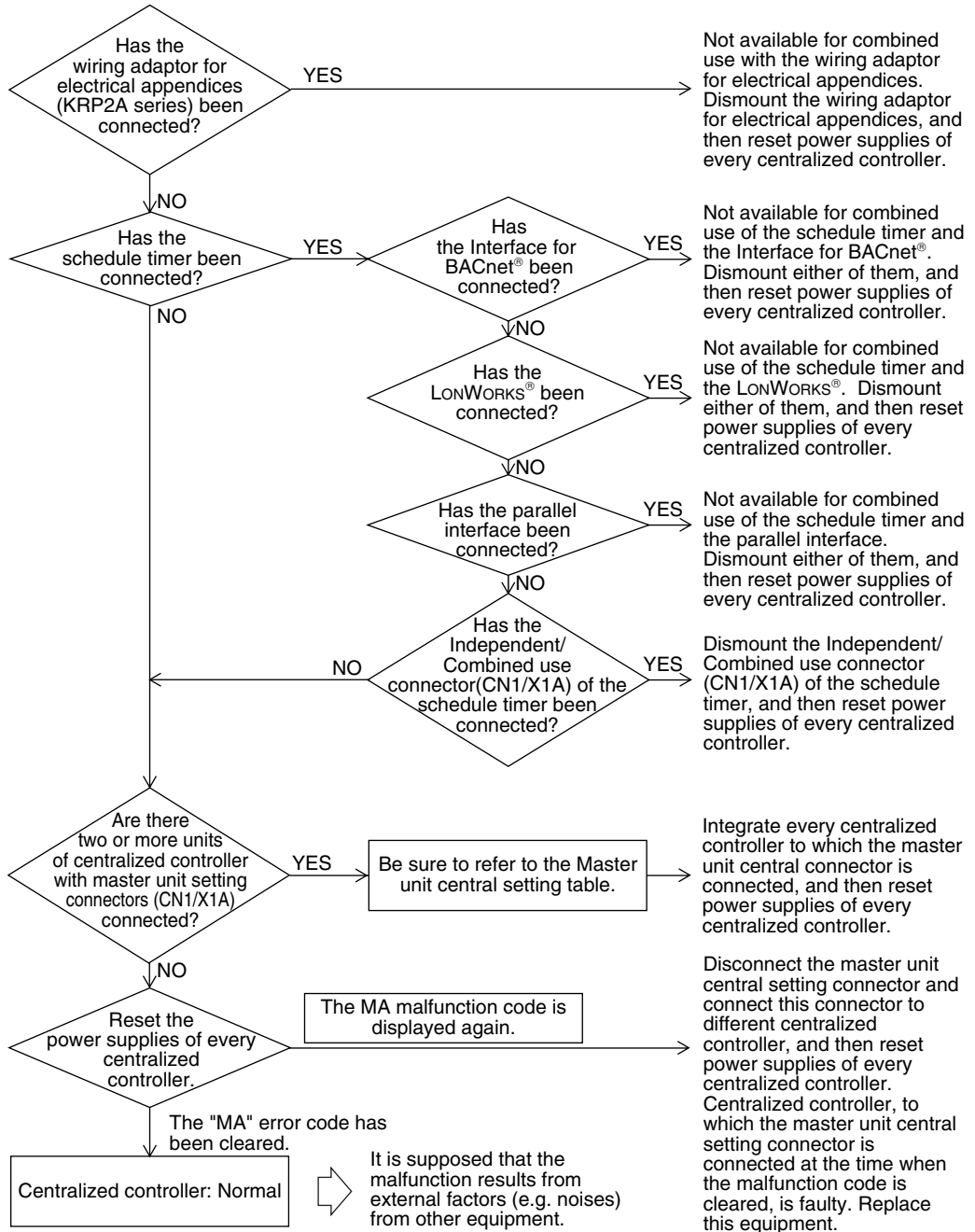
Remote Controller Display	MR
Applicable Models	Centralized remote controller intelligent touch controller Schedule timer
Method of Malfunction Detection	Detect the malfunction according to DIII-NET transmission data.
Malfunction Decision Conditions	When the schedule timer is set to individual use mode, other central component is present. When multiple master controller are present. When the wiring adaptor for electrical appendices is present.
Supposed Causes	<ul style="list-style-type: none"> ■ Improper combination of optional controllers for centralized control ■ More than one master controller is connected ■ Defect of PCB of optional controller for centralized control

Troubleshooting



Caution

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



4.4 “MC” Address Duplication, Improper Setting

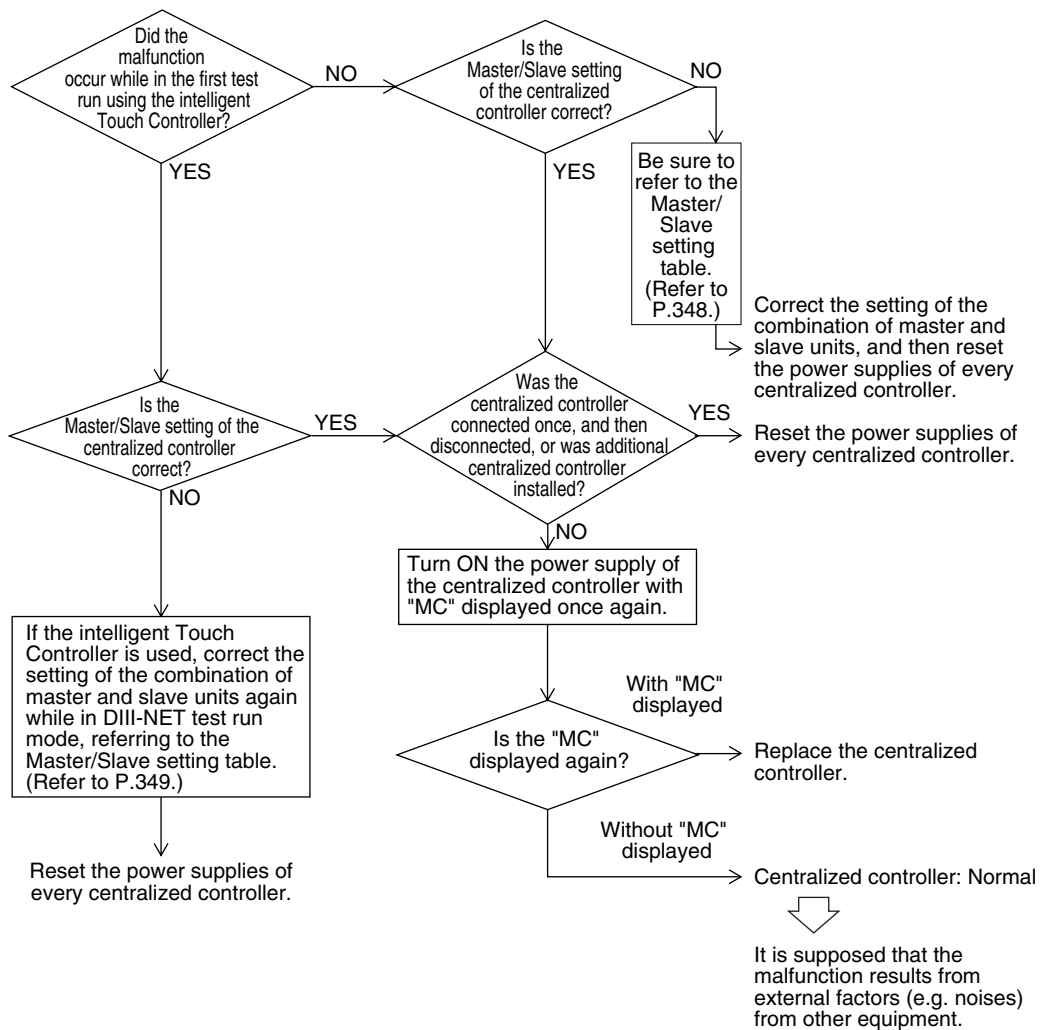
Remote Controller Display	MC	
Applicable Models	Centralized remote controller	intelligent Touch Controller
Method of Malfunction Detection	Detect the malfunction according to DIII-NET transmission data.	
Malfunction Decision Conditions	<ul style="list-style-type: none"> ■ Two or more units of centralized remote controllers and intelligent Touch Controllers are connected, and all of them are set to master unit central setting or slave unit central setting. ■ Two units of schedule timers are connected. 	
Supposed Causes	<ul style="list-style-type: none"> ■ Address duplication of centralized controller 	

Troubleshooting



Caution

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



Master-Slave Unit Setting Table

Combination of intelligent Touch Controller and centralized remote controller



*	#1		#2		#3		#4	
	Pattern	1-00~4-15	Master/Slave	5-00~8-15	Master/Slave	1-00~4-15	Master/Slave	5-00~8-15
①	CRC	Master	CRC	Master	CRC	Slave	CRC	Slave
②	CRC	Master	—	—	CRC	Slave	—	—
③	intelligent Touch Controller	Master	—	—	intelligent Touch Controller	Slave	—	—
④	CRC	Master	—	—	intelligent Touch Controller	Slave	—	—
⑤	intelligent Touch Controller	Master	—	—	CRC	Slave	—	—
⑥	CRC	Master	—	—	—	—	—	—
⑦	intelligent Touch Controller	Master	—	—	—	—	—	—

CRC: Centralized remote controller <DCS302C1>

intelligent Touch Controller: <(DCS601C51)>

The patterns marked with "" have nothing to do with those described in the list of setting of master unit central setting connector.

Master Unit Central Connector Setting Table

The master unit central setting connector (CN1/X1A) is mounted at the factory.

- To independently use a single unit of the intelligent Touch Controller or a single unit of the centralized remote controller, do not dismount the master unit central setting connector (i.e., use the connector with the factory setting unchanged).
- To independently use the schedule timer, insert an independent-use setting connector. No independent-use setting connector has been mounted at the factory. Insert the connector, which is attached to the casing of the main unit, in the PCB (CN1/X1A). (Independent-use connector=Master unit central setting connector)
- To use two or more centralized controller in combination, make settings according to the table shown below.

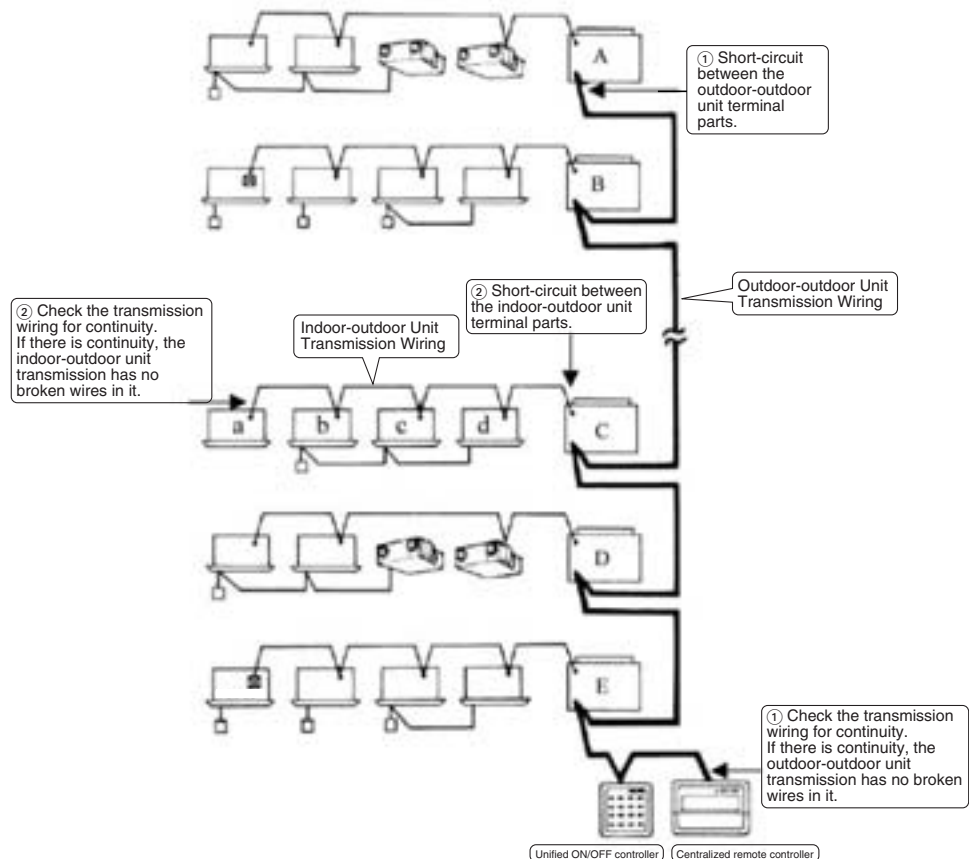
Pattern	Centralized controller connection pattern				Setting of master unit central setting connector(*2)					
	intelligent Touch Controller	Centralized remote controller	Unified ON/OFF controller	Schedule timer	intelligent Touch Controller	Centralized remote controller	Unified ON/OFF controller	Schedule timer		
①	1 to 2 units	/	/	× (*1)	Only a single unit: "Provided", Others: "Not provided"	/	/	/		
②	1 unit	1 unit	/	× (*1)	Provided	Not provided	/	/		
③				× (*1)						
④	1 to 2 units	/	1 to 8 units	× (*1)	Only a single unit: "Provided", Others: "Not provided"	/	All "Not provided"	/		
⑤	/	1 to 4 units	/	/	/	Only a single unit: "Provided", Others: "Not provided"	/	/		
⑥	/			1 to 16 units				1 unit	All "Not provided"	Not provided
⑦	/			/				1 unit	/	Not provided
⑧	/			/				1 unit	/	Not provided
⑨	/	/	1 to 16 units	/	/	Only a single unit: "Provided", Others: "Not provided"	/	/		
⑩	/	/		1 unit				Not provided		
⑪	/	/	/	1 unit	/	/	Provided			

(*1) The intelligent Touch Controller and the schedule timer are not available for combined use.

(*2) The intelligent Touch Controller, centralized remote controller, and the unified ON/OFF controller have been set to "Provided with the master unit central setting connector" at the factory. The schedule timer has been set to "Not provided with the master unit central setting connector" at the factory, which is attached to the casing of the main unit.

Procedures for Detecting Broken Wires in Transmission Wiring for Control

1. Procedure for checking outdoor-outdoor unit transmission wiring for broken wires
 On the system shown below, turn OFF the power supply to all equipment, short-circuit between the outdoor-outdoor unit terminal parts F1 and F2 in the "Outdoor Unit A" that is farthest from the centralized remote controller, and then conduct continuity checks between the transmission wiring terminal blocks F1 and F2 of the centralized remote controller using a multiple meter. If there is continuity between the said terminal blocks, the outdoor-outdoor unit transmission wiring has no broken wires in it.
 If there is no continuity, the transmission wiring may have broken wires. With the outdoor-outdoor unit terminal parts of the "Outdoor Unit A" short-circuited, conduct continuity checks between the transmission wiring terminal blocks F1 and F2 of the unified ON/OFF controller. If there is no continuity as well, conduct continuity checks between the outdoor-outdoor unit terminal parts of the "Outdoor Unit E", between the outdoor-outdoor unit terminal parts of the "Outdoor Unit D", between the outdoor-outdoor unit terminal parts of the "Outdoor Unit C", ... in the order described, thus identifying the place with continuity.
 If the place with continuity can be identified, there may be broken wires in places before the said place with continuity.
2. Procedure for checking indoor-outdoor unit transmission wiring for broken wires (for checking the indoor-outdoor unit transmission wiring of the "Outdoor Unit C" for broken wires)
 Turn OFF the power supply to all equipment, short-circuit between the indoor-outdoor unit terminal parts F1 and F2 in the "Outdoor Unit C, and then conduct continuity checks between the transmission wirings F1 and F2 of the "Indoor Unit a" that is farthest from the "Outdoor Unit C" using a multiple meter. If there is continuity between the said transmission wirings, the indoor-outdoor unit transmission wiring has no broken wires in it.
 If there is no continuity, the transmission wiring may have broken wires. With the indoor-outdoor unit terminal parts of the "Outdoor Unit C" short-circuited, identify the place with continuity in the transmission wiring of the "Indoor Unit b", transmission wiring of the "Indoor Unit c", and transmission wiring of the "Indoor Unit d" in the order described.
 If the place with continuity can be identified, there may be broken wires in places before the said place with continuity.



5. Troubleshooting (OP: Unified ON/OFF Controller)

5.1 Operation Lamp Blinks

Remote Controller Display

Operation lamp blinks

Applicable Models

All model of indoor units
Unified ON/OFF controller

Method of Malfunction Detection

Detect the malfunction according to DIII-NET transmission data.

Malfunction Decision Conditions

Supposed Causes

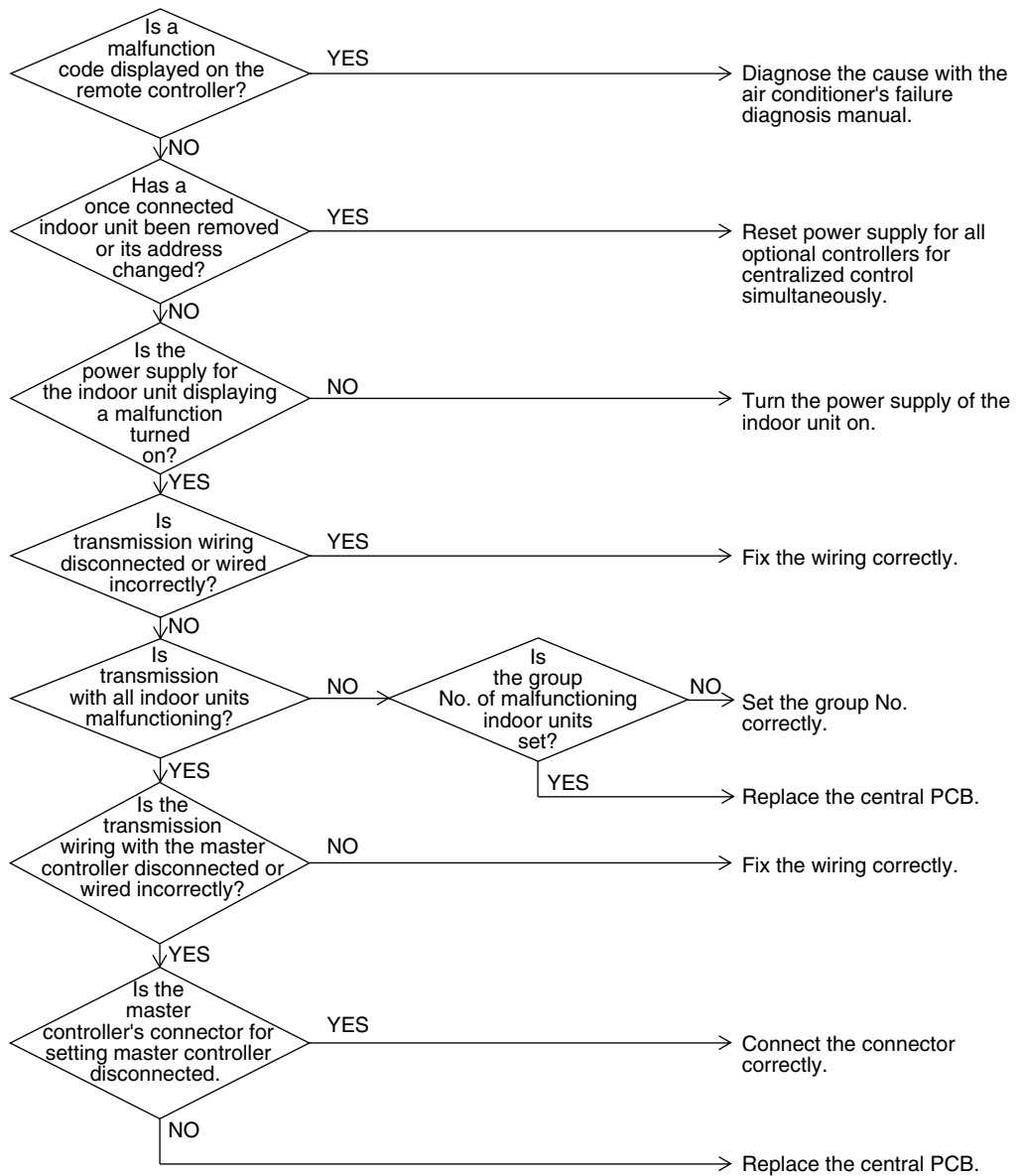
- Malfunction of transmission between optional central controller and indoor unit
- Connector for setting master controller is disconnected
- Defect of unified ON/OFF controller PCB
- Defect of indoor unit PCB
- Malfunction of air conditioner

Troubleshooting




Caution

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.



5.2 Display “Under Centralized Control” Blinks (Repeats Single Blink)

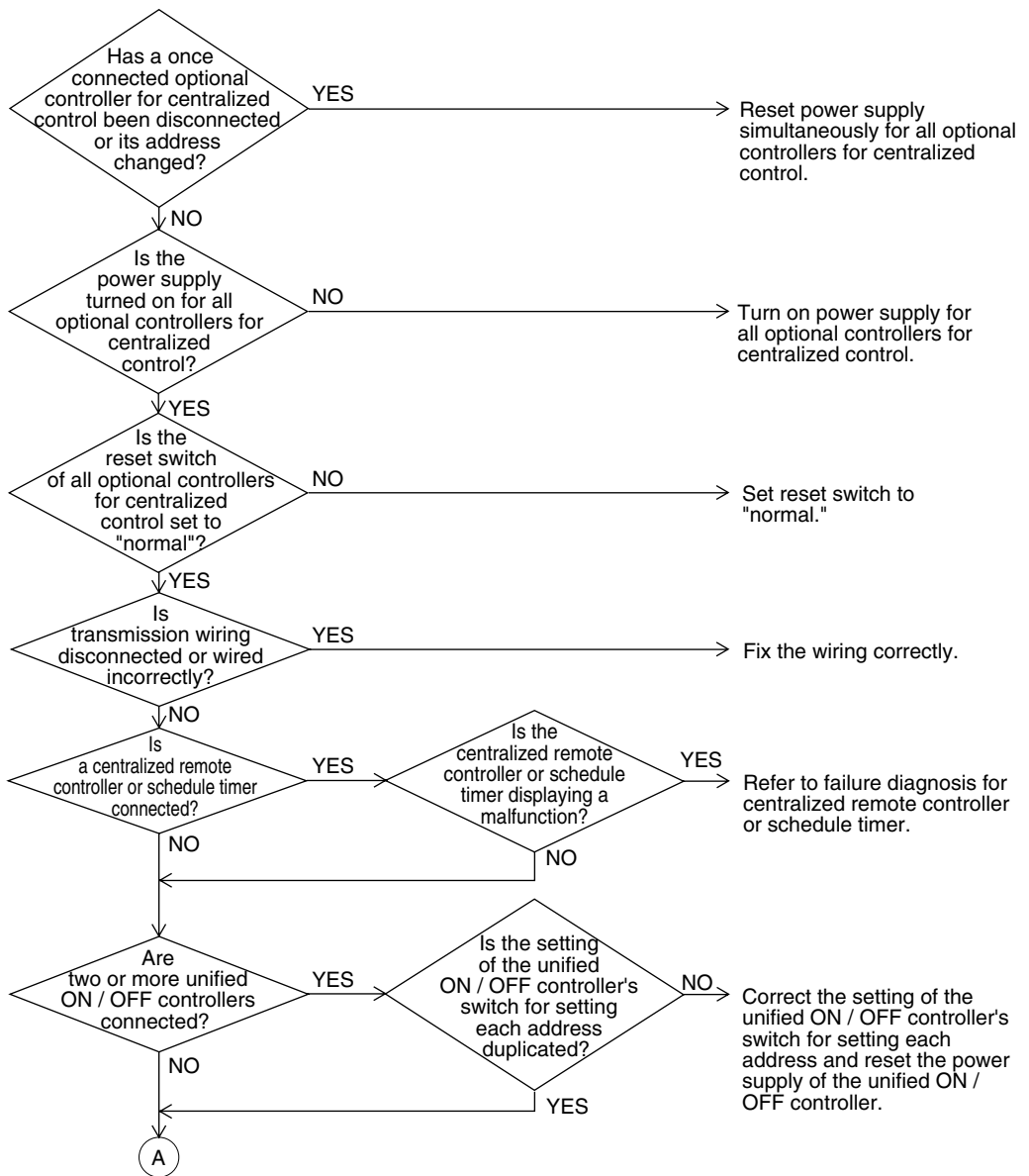
Remote Controller Display	 “under centralized control” (Repeats single blink)
Applicable Models	Unified ON/OFF controller Centralized remote controller, Schedule timer
Method of Malfunction Detection	Detect the malfunction according to DIII-NET transmission data.
Malfunction Decision Conditions	When the centralized controller, which was connected once, shows no response. The control ranges are overlapped. When multiple master central controller are present. When the schedule timer is set to individual use mode, other central controller is present. When the wiring adaptor for electrical appendices is present.
Supposed Causes	<ul style="list-style-type: none"> ■ Address duplication of optional controllers for centralized control ■ Improper combination of optional controllers for centralized control ■ Connection of more than one master controller ■ Malfunction of transmission between optional controllers for centralized control ■ Defect of PCB of optional controllers for centralized control

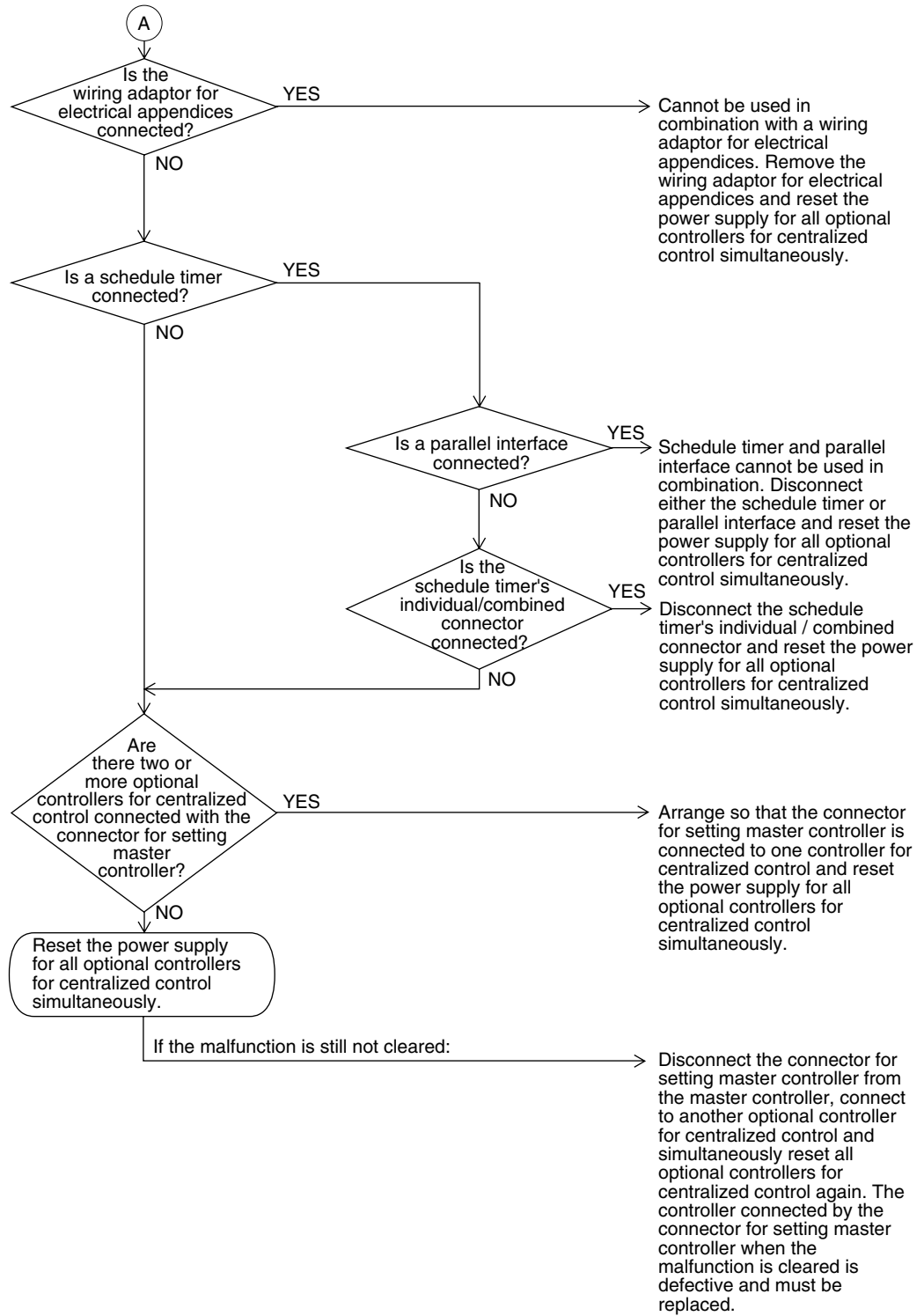
Troubleshooting



Caution

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.





5.3 Display “Under Centralized Control” Blinks (Repeats Double Blink)

Remote Controller Display

 “under centralized control” (Repeats double blink)

Applicable Models

Unified ON/OFF controller

Method of Malfunction Detection

Detect the malfunction according to DIII-NET transmission data.

Malfunction Decision Conditions

When no centralized control addresses are set to indoor units.
When no indoor units are connected within the control range.

Supposed Causes

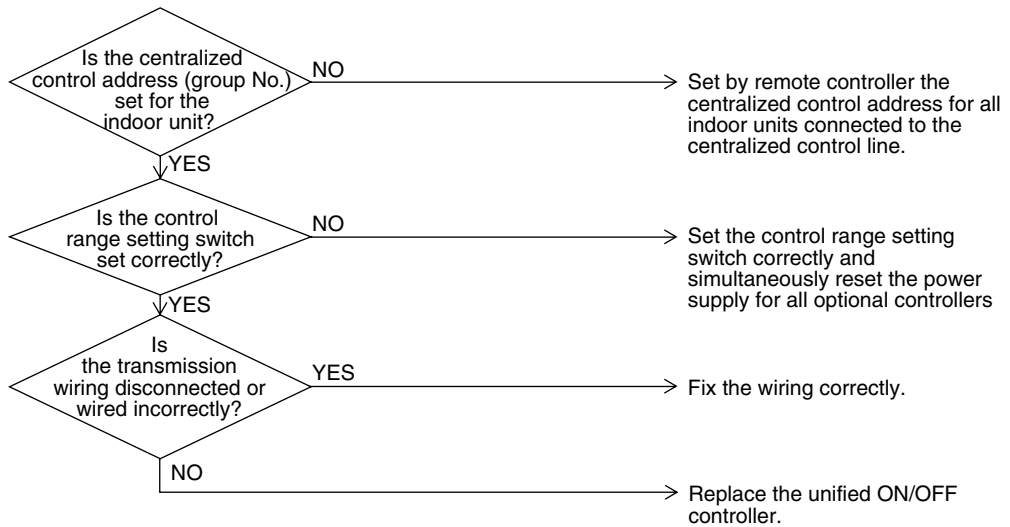
- Central control address (group No.) is not set for indoor unit.
- Improper control range setting switch
- Improper wiring of transmission wiring

Troubleshooting



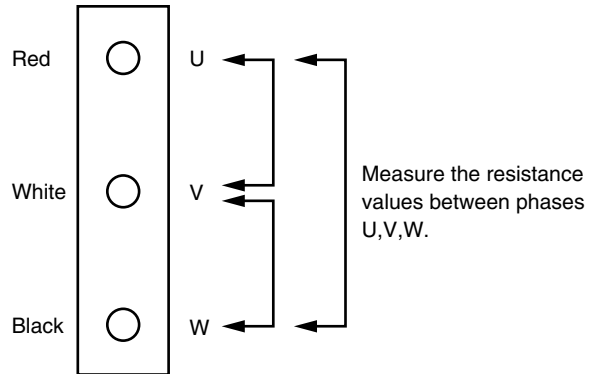
Caution

Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.

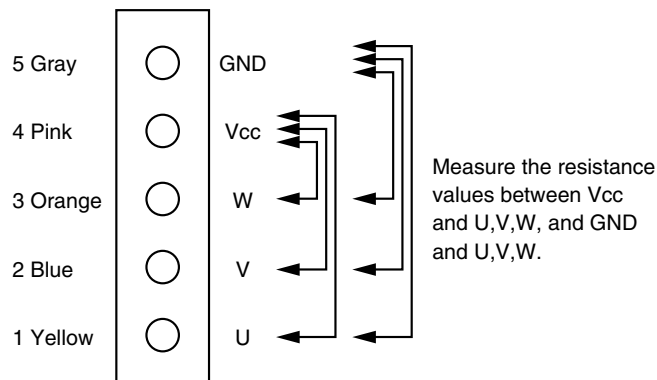


CHECK 1 Check on connector of fan motor (Power supply cable)

- (1) Turn off the power supply.
- (2) Measure the resistance between phases of U,V,W at the motor side connectors (three-core wire) to check that the values are balanced and there is no short circuiting, while connector or relay connector is disconnected.

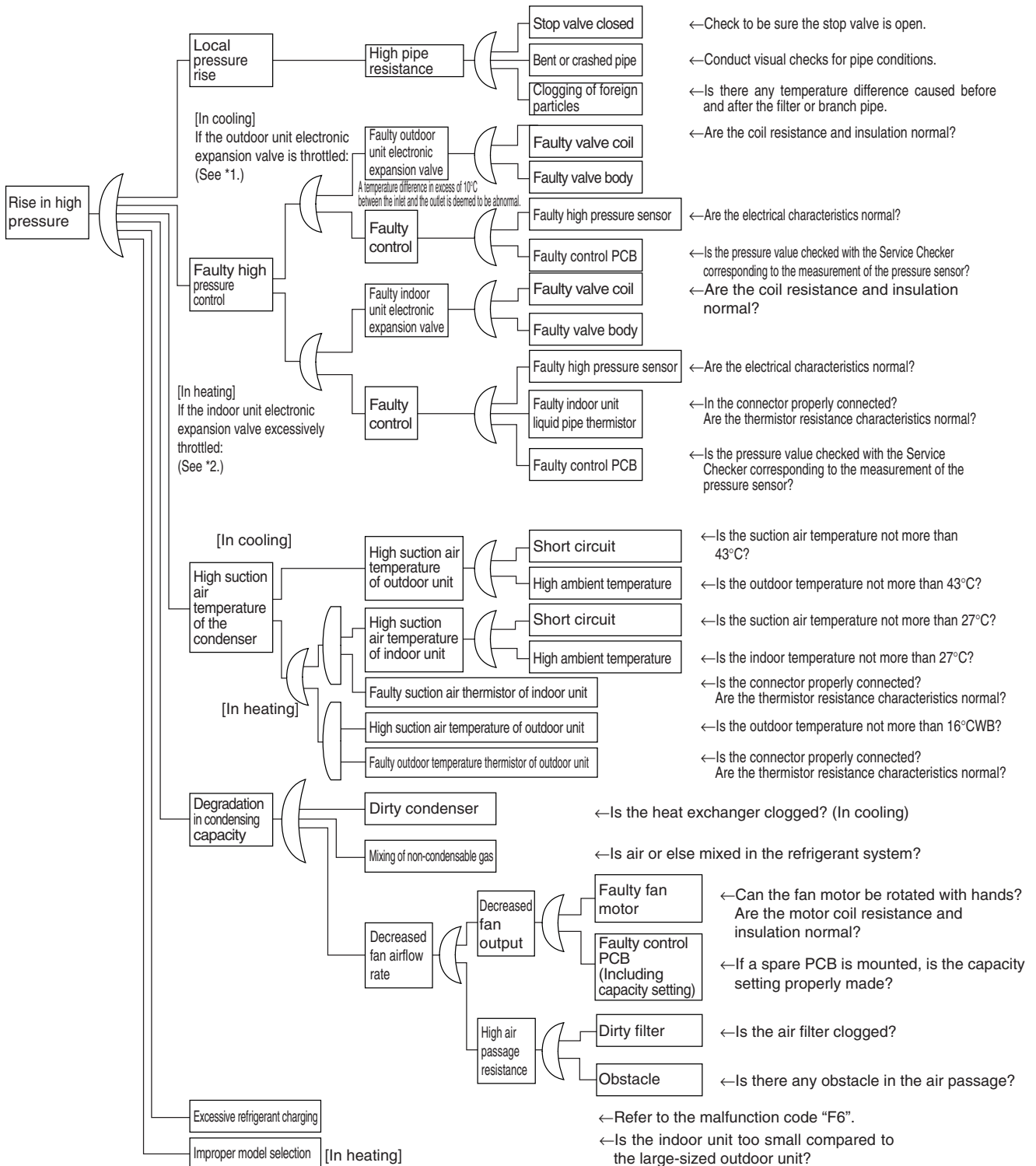
**CHECK 2**

- (1) Turn off the power supply.
 - (2) Measure the resistance between Vcc and each phase of U,V,W, and GND and each phase at the motor side connectors (five-core wire) to check that the values are balanced within the range of $\pm 20\%$, while connector or relay connector is disconnected.
- Furthermore, to use a multiple meter for measurement, connect the probe of negative pole to Vcc and that of positive pole to GND.



CHECK 3 Check for causes of rise in high pressure

Referring to the Fault Tree Analysis (FTA) shown below, probe the faulty points.

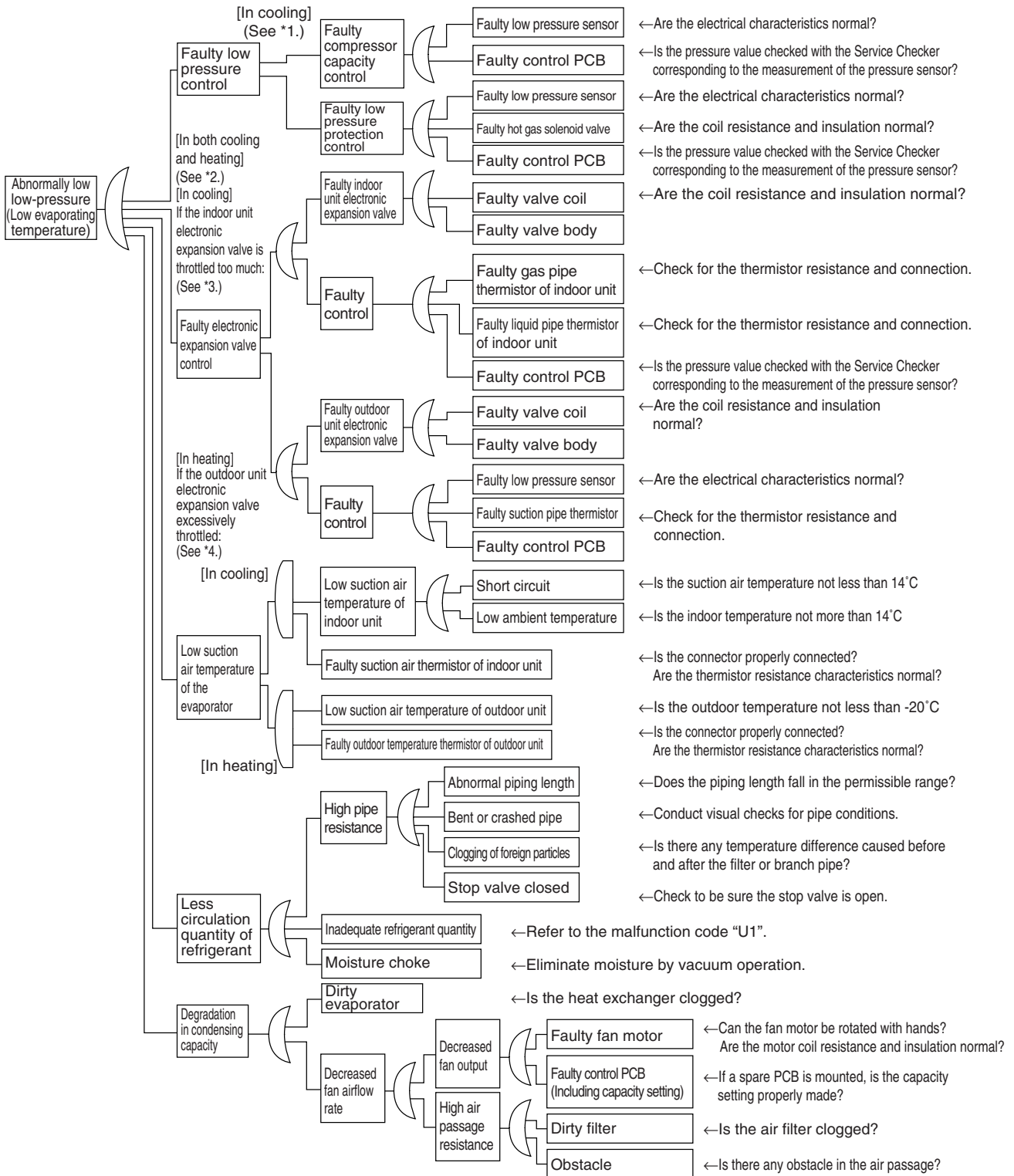


*1: In cooling, it is normal if the outdoor unit electronic expansion valve (EV1) is fully open.

*2: In heating, the indoor unit electronic expansion valve is used for "subcooled degree control".
(For details, refer to "Electronic Expansion Valve Control".)

CHECK 4 Check for causes of drop in low pressure

Referring to the Fault Tree Analysis (FTA) shown below, probe the faulty points.



*1: For details of the compressor capacity control while in cooling, refer to "Compressor PI Control".
 *2: The "low pressure protection control" includes low pressure protection control and hot gas bypass control.
 *3: In cooling, the indoor unit electronic expansion valve is used for "superheated degree control".
 *4: In heating, the outdoor unit electronic expansion valve (EV1) is used for "superheated degree control of outdoor unit heat exchanger".

Part 7

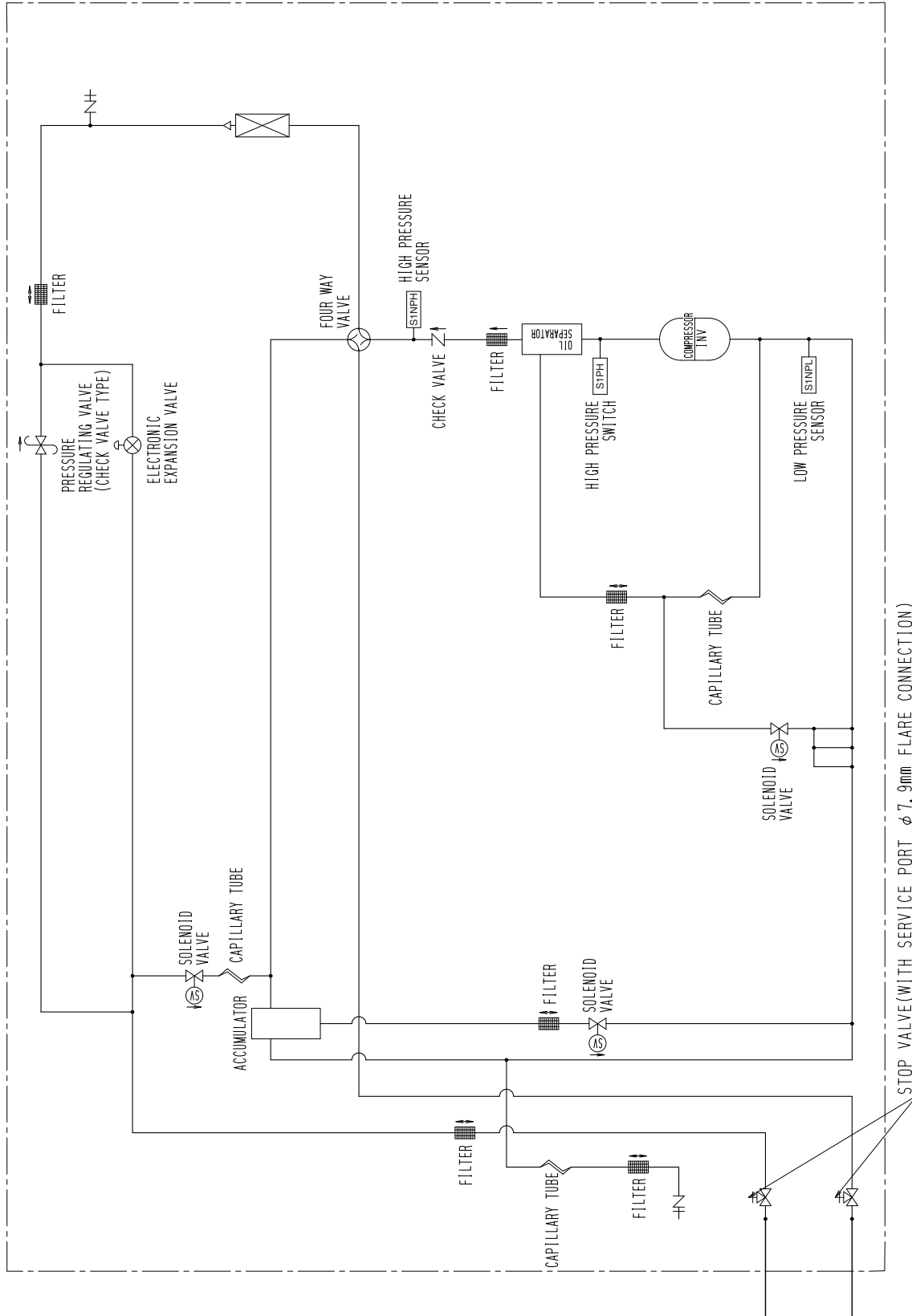
Appendix

1. Piping Diagrams.....	360
1.1 Outdoor Unit.....	360
1.2 Indoor Unit.....	367
2. Wiring Diagrams for Reference.....	371
2.1 Outdoor Unit.....	371
2.2 Field Wiring.....	381
2.3 Indoor Unit.....	387
3. List of Electrical and Functional Parts.....	402
3.1 Outdoor Unit.....	402
3.2 Outdoor Unit - 60Hz.....	405
3.3 Indoor Unit.....	411
4. Option List.....	418
4.1 Option List of Controllers.....	418
4.2 Option Lists (Outdoor Unit).....	420
5. Piping Installation Point.....	422
5.1 Piping Installation Point.....	422
5.2 The Example of a Wrong Pattern.....	423
6. Example of Connection (R-410A Type).....	424
7. Thermistor Resistance / Temperature Characteristics.....	426
8. Pressure Sensor.....	428
9. Method of Checking The Inverter's Power Transistors and Diode Modules.....	429

1. Piping Diagrams

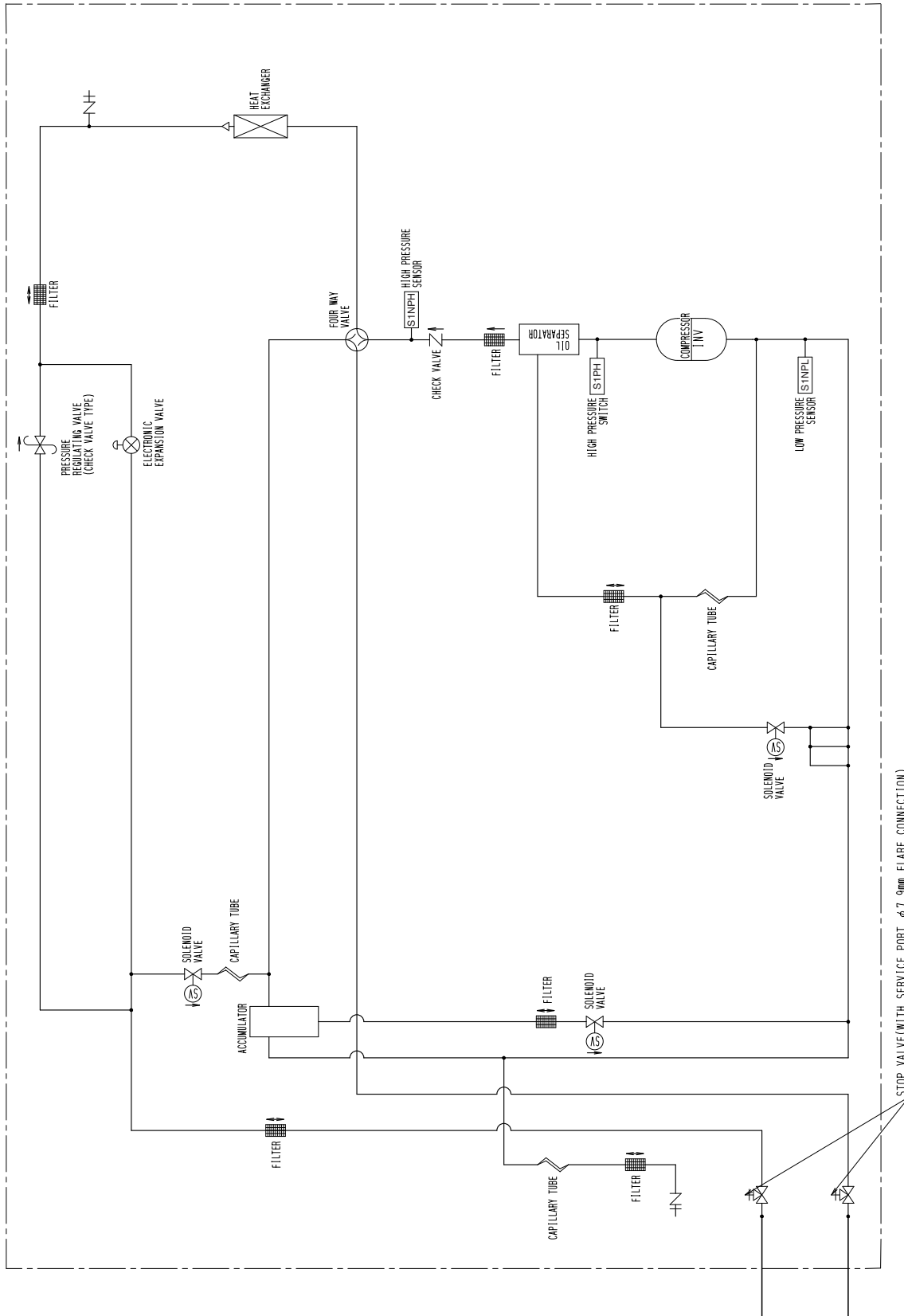
1.1 Outdoor Unit

RXYQ5PAY1



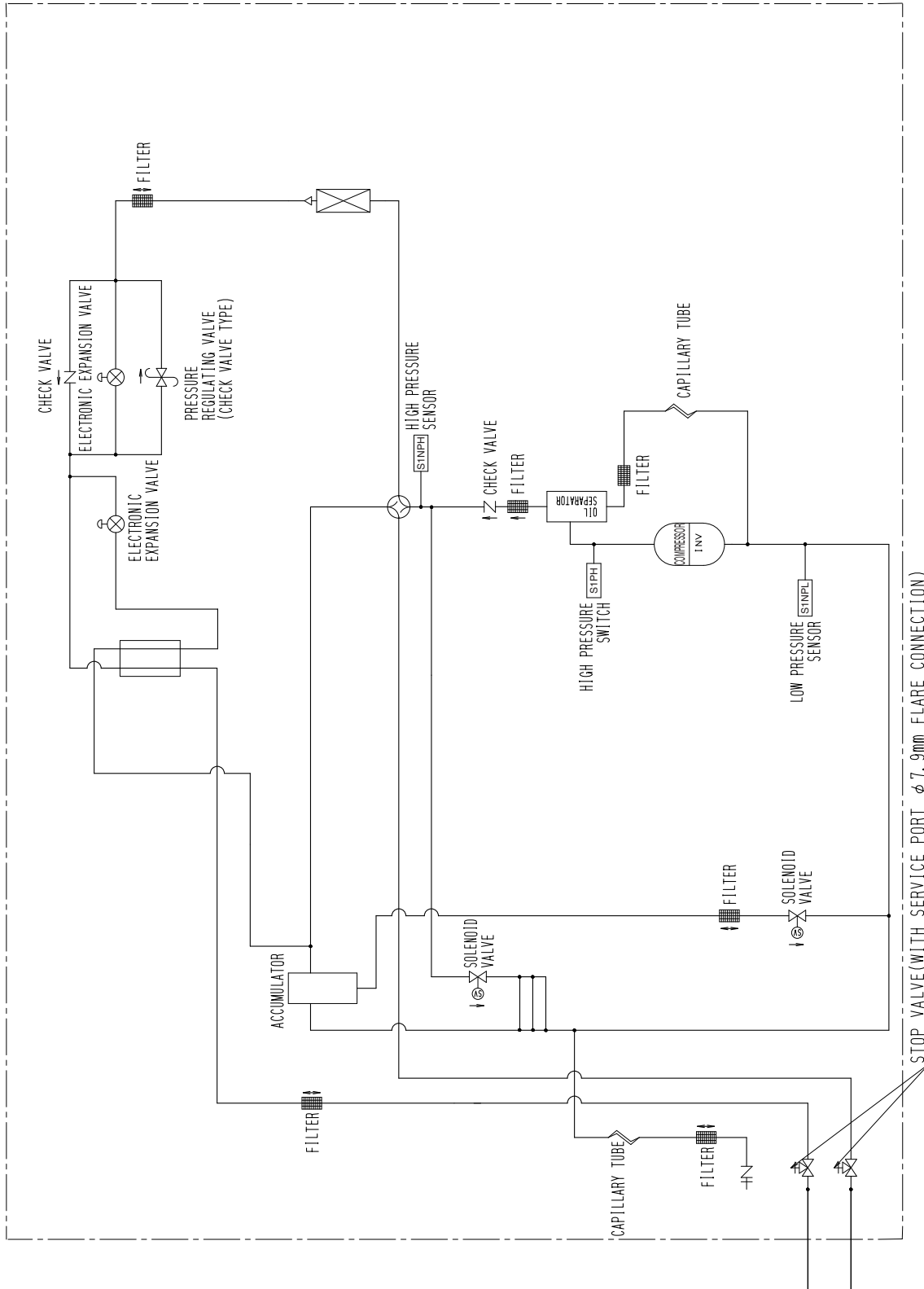
3D060782B

RXYQ5PTL
RXYQ5PAYL



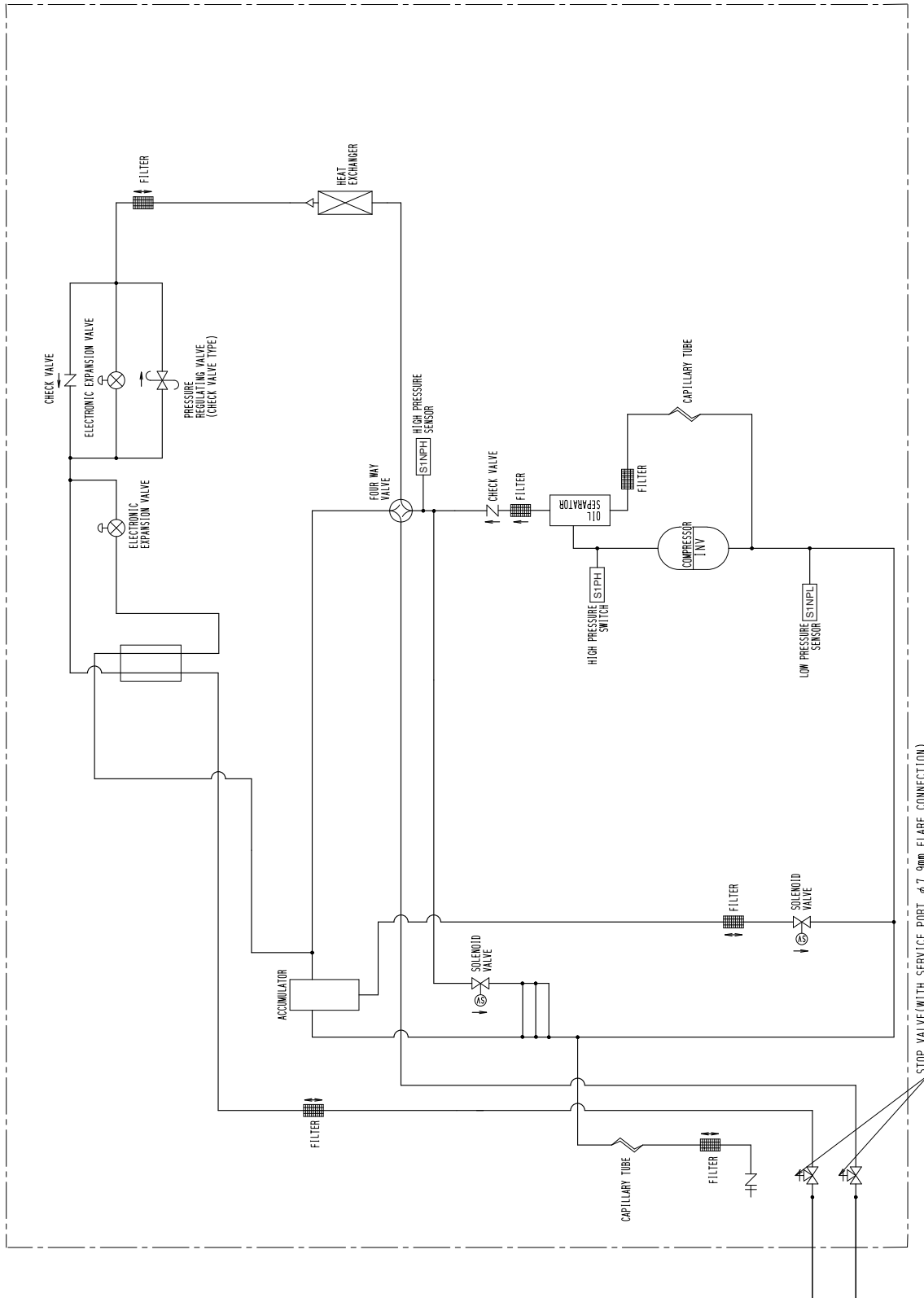
3D055764D

RXYQ8PAY1



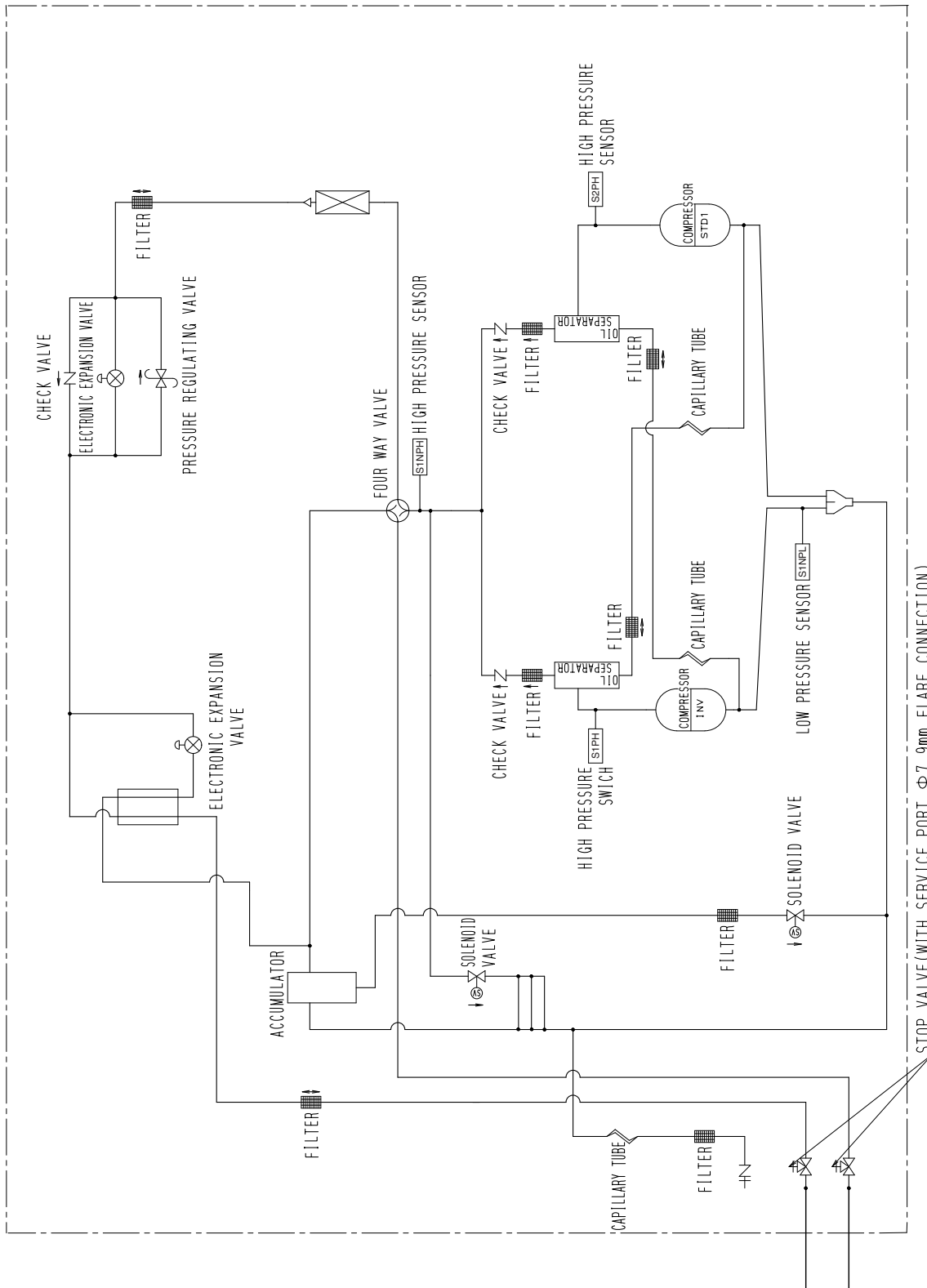
3D050783C

RXYQ8PTL
RXYQ8PAYL



3D05765E

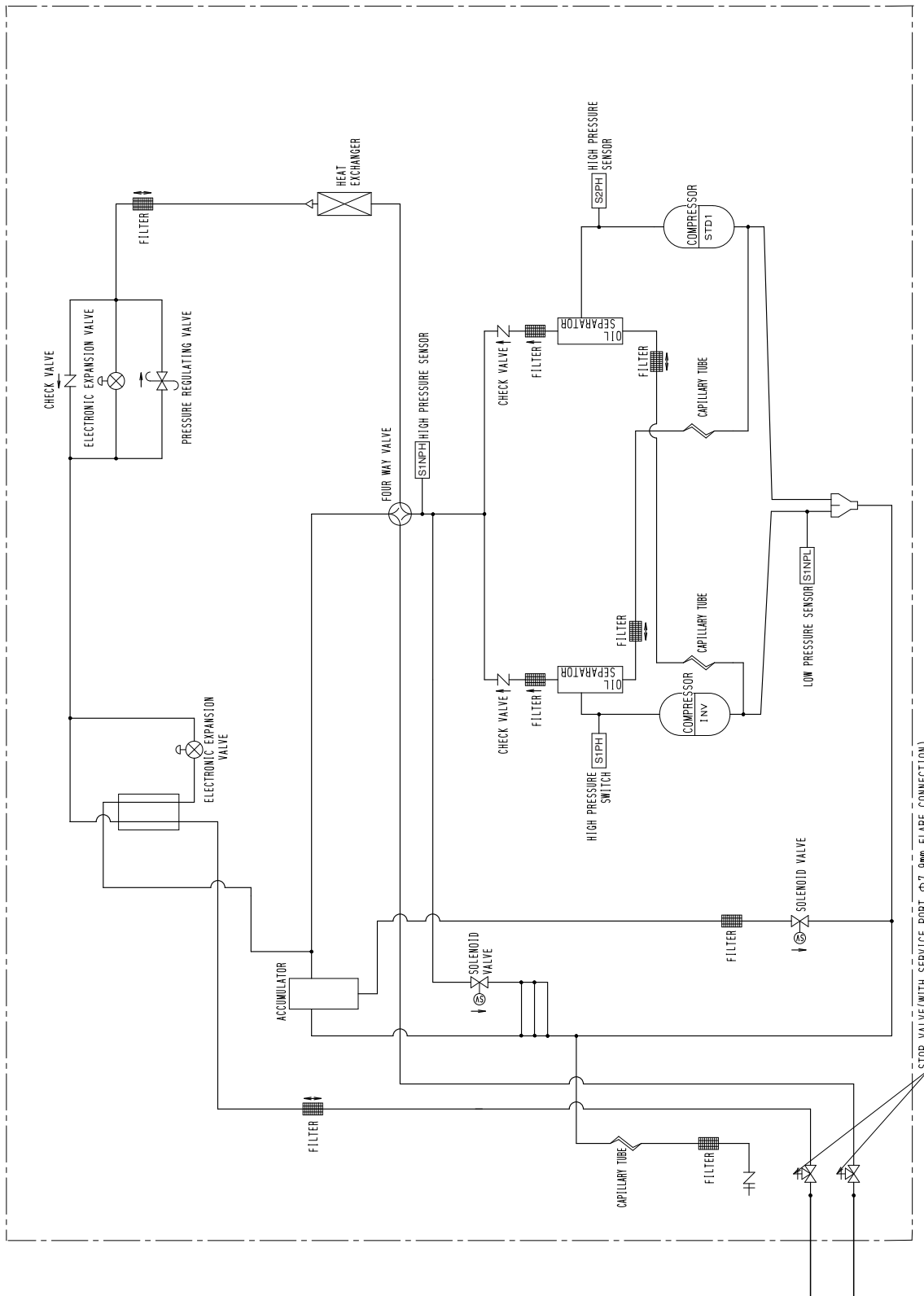
RXYQ10PA / 12PAY1



3D050784D

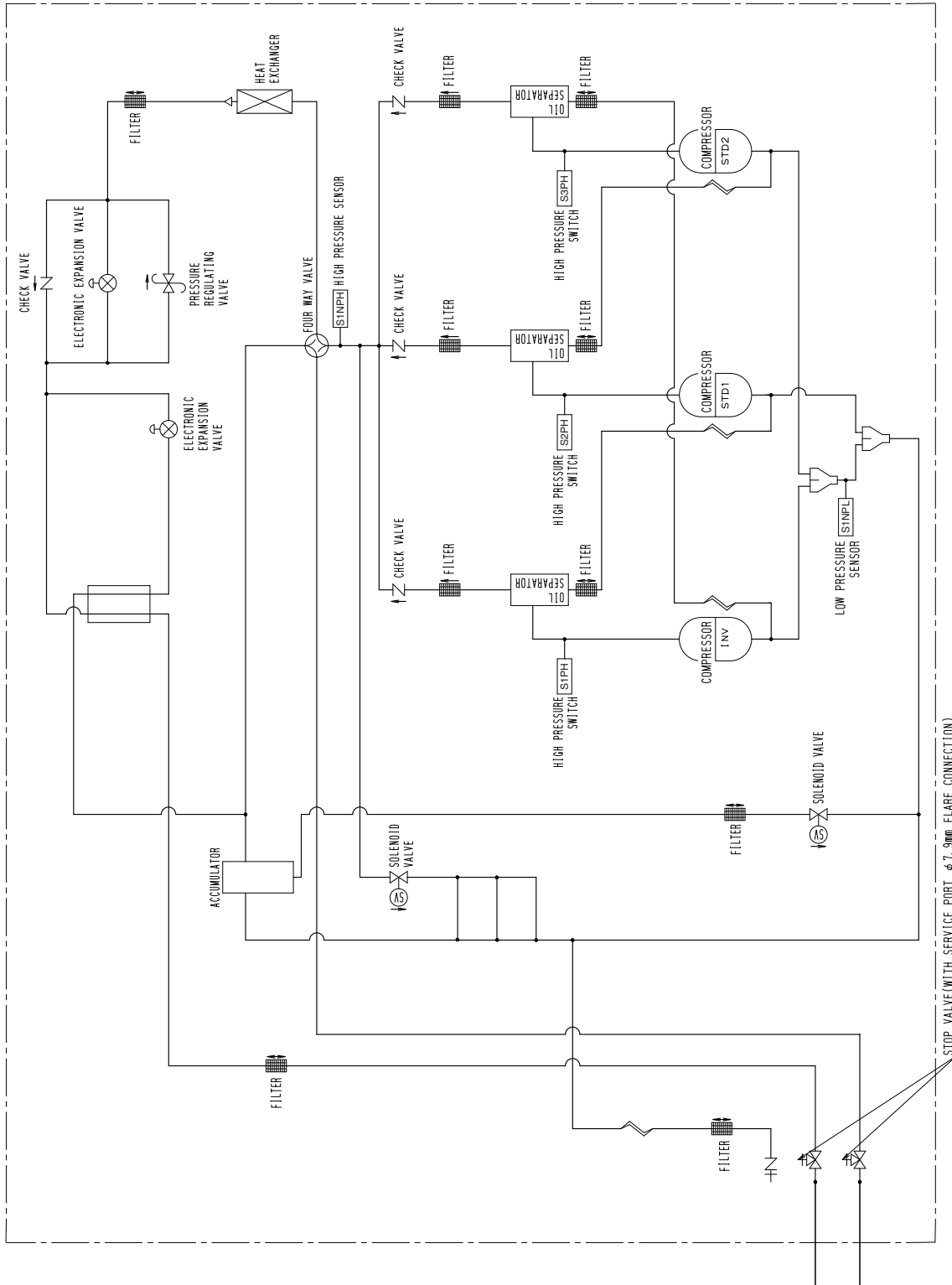
RXYQ10P / 12PTL
RXYQ10PA / 12PAYL

3D055766E



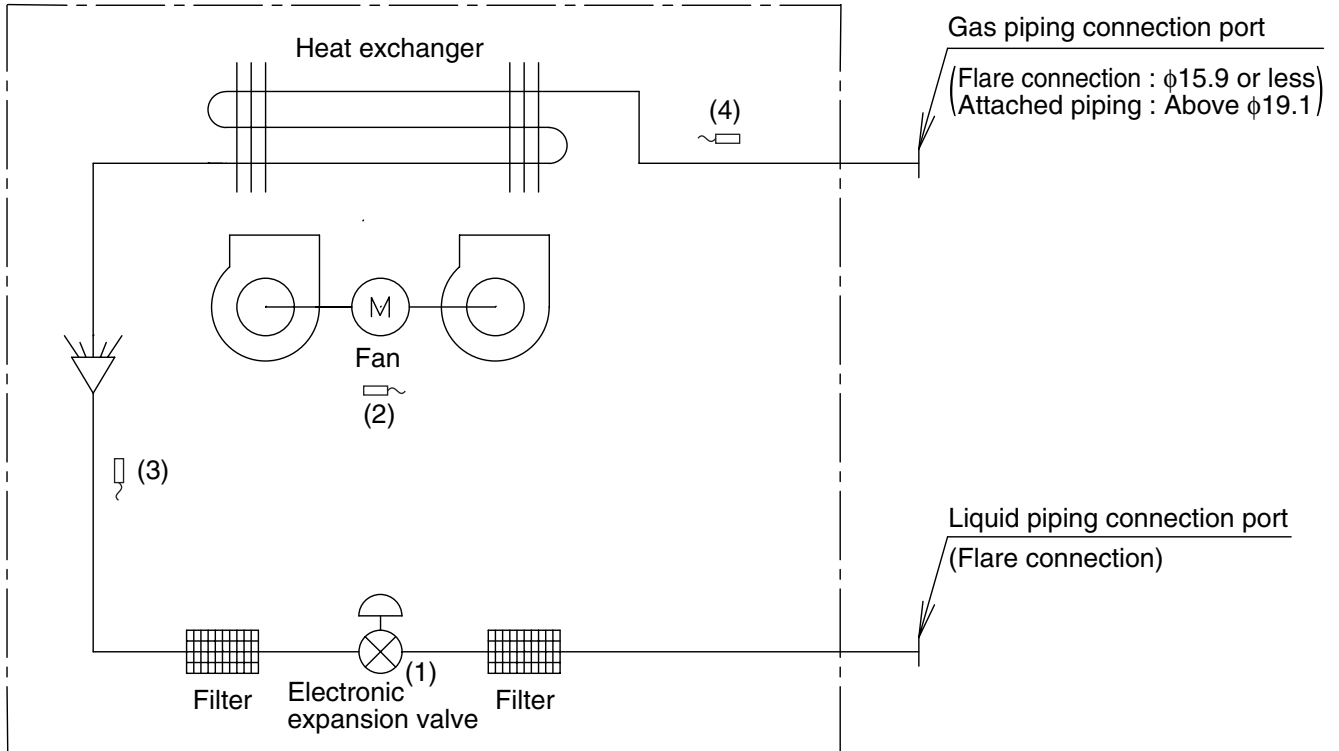
RXYQ14P / 16P / 18PTL
 RXYQ14PA / 16PA / 18PAY1
 RXYQ14PA / 16PA / 18PAYL

3D050785C



1.2 Indoor Unit

FXCQ, FXFQ, FXKQ, FXSQ, FXMQ, FXHQ, FXAQ, FXLQ, FXNQ



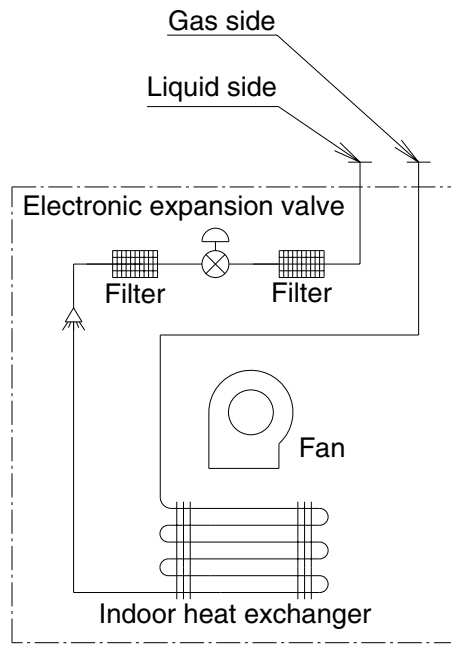
DU220-602J

Code	Name	Code	Main function
(1)	Electronic expansion valve	Y1E	Used for gas superheated degree control while in cooling operation or subcooled degree control while in heating operation.
(2)	Suction air temperature thermistor	R1T	Used for thermostat control.
(3)	Liquid pipe temperature thermistor	R2T	Used for gas superheated degree control while in cooling operation or subcooled degree control while in heating operation.
(4)	Gas pipe temperature thermistor	R3T	Used for gas superheated degree control while in cooling operation.

(mm)

Capacity	GAS	Liquid
20 / 25 / 32 / 40 / 50M(A)	φ12.7	φ6.4
63 / 80 / 100 / 125M(A)	φ15.9	φ9.5
200M(A)	φ19.1	φ9.5
250M(A)	φ22.2	φ9.5

FXDQ

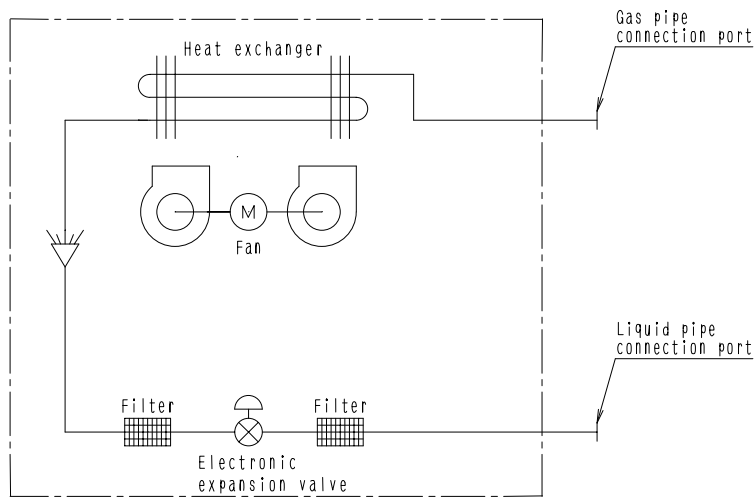


4D060927

■ Refrigerant pipe connection port diameters

Model	(mm)	
	Gas	Liquid
FXDQ20PB / 25PB / 32PB / 40NB / 50NBVE(T)	φ12.7	φ6.4
FXDQ63NBVE(T)	φ15.9	φ9.5

FXMQ20P / 25P / 32P / 40P / 50P / 63P / 80P / 100P / 125P / 140PVE

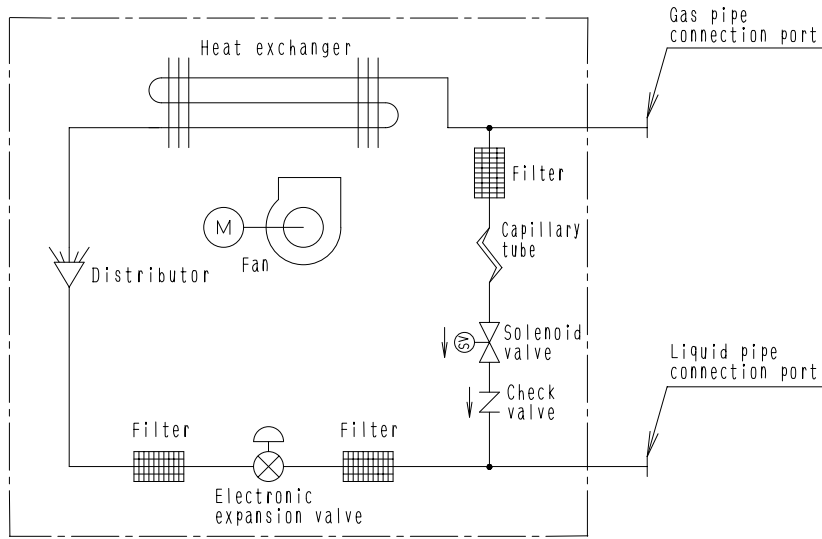


4D034245D

■ Refrigerant pipe connection port diameters

Model	(mm)	
	Gas	Liquid
FXMQ20P / 25P / 32P / 40P / 50PVE	φ12.7	φ6.4
FXMQ63P / 80P / 100P / 125P / 140PVE	φ15.9	φ9.5

FXMQ125MF / 200MF / 250MFV1



4D018650C

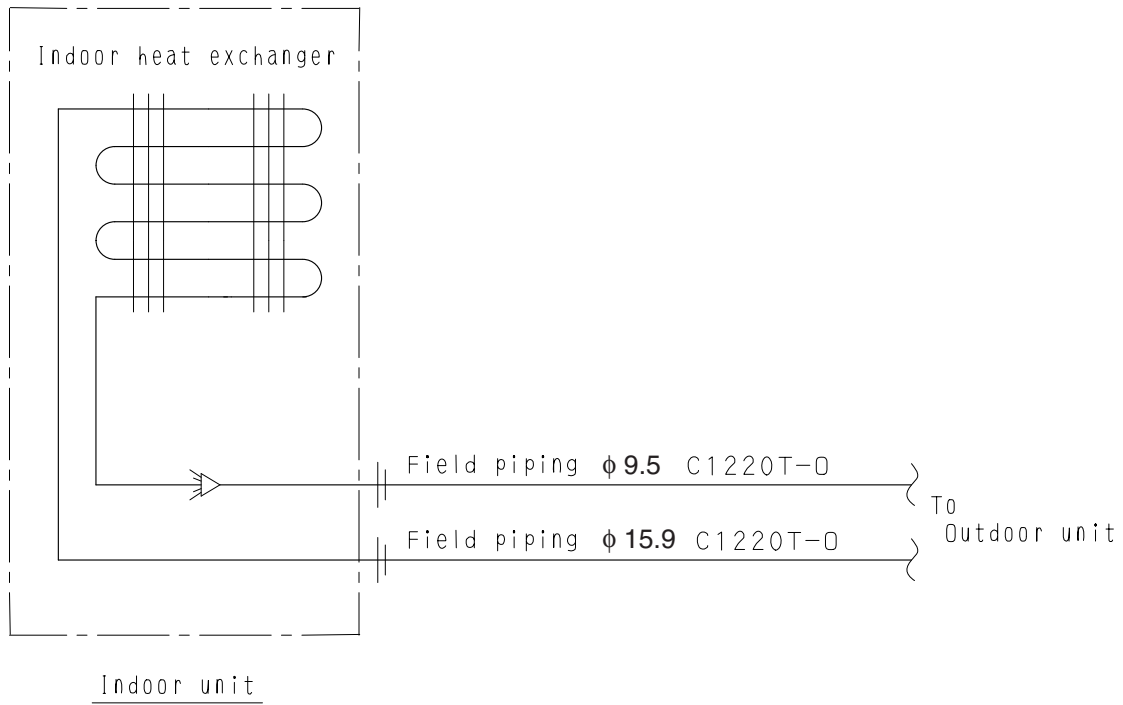
■ Refrigerant pipe connection port diameters

(mm)

Model	Gas	Liquid
FXMQ125MFV1	φ15.9	φ9.5
FXMQ200MFV1	φ19.1	φ9.5
FXMQ250MFV1	φ22.2	φ9.5

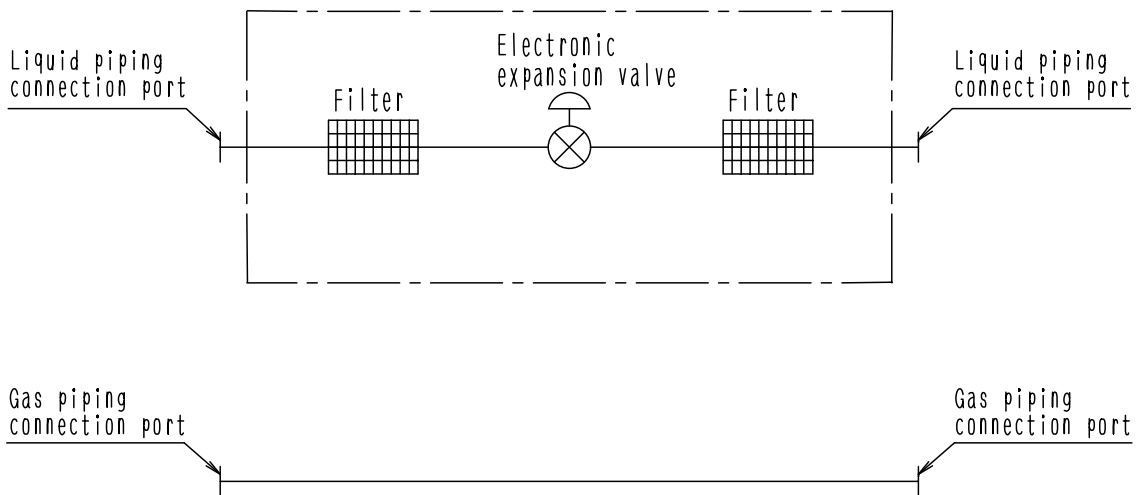
FXUQ + BEVQ

Indoor unit



4D037995J

Connection Unit

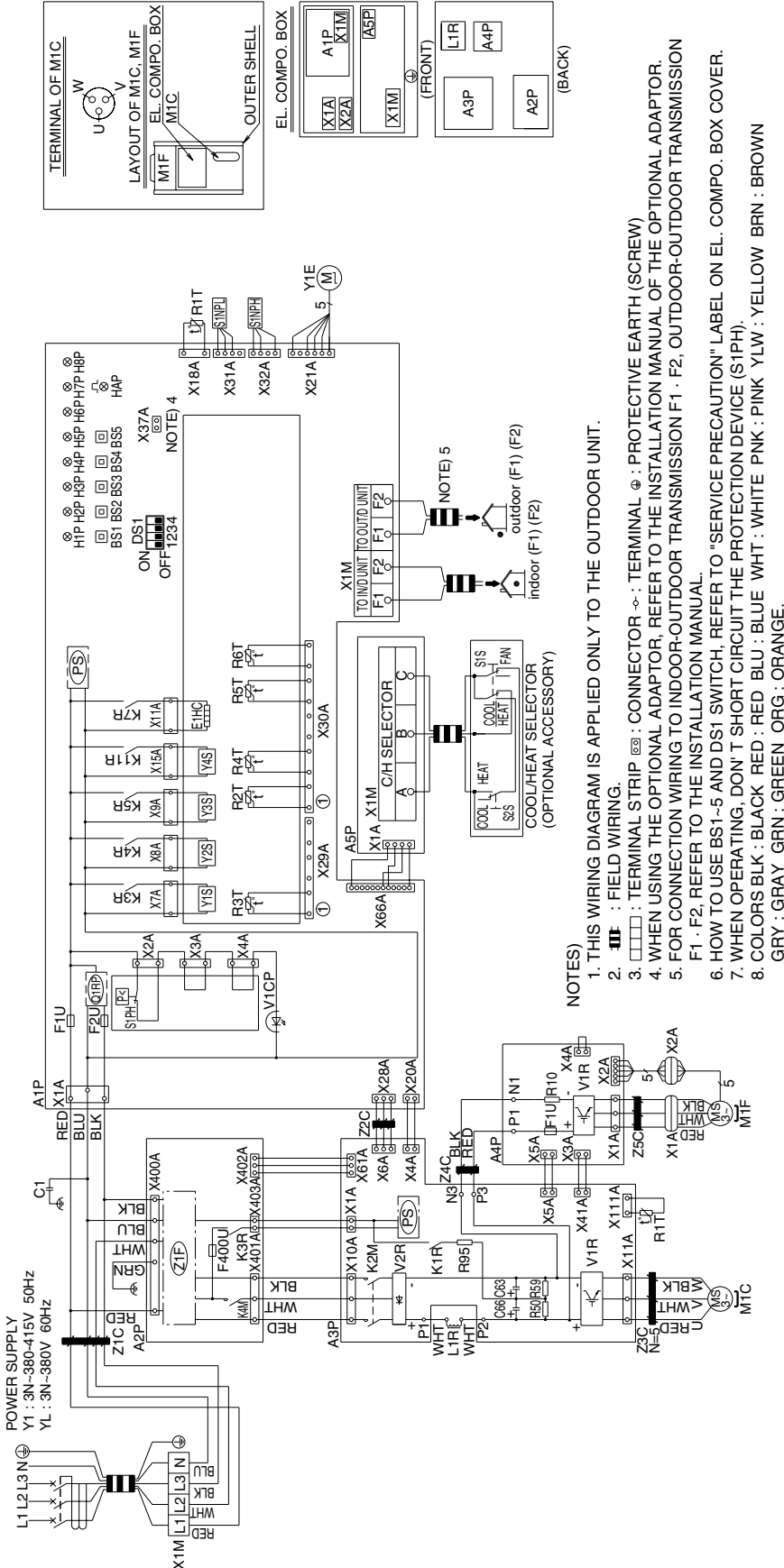


4D034127B

2. Wiring Diagrams for Reference

2.1 Outdoor Unit

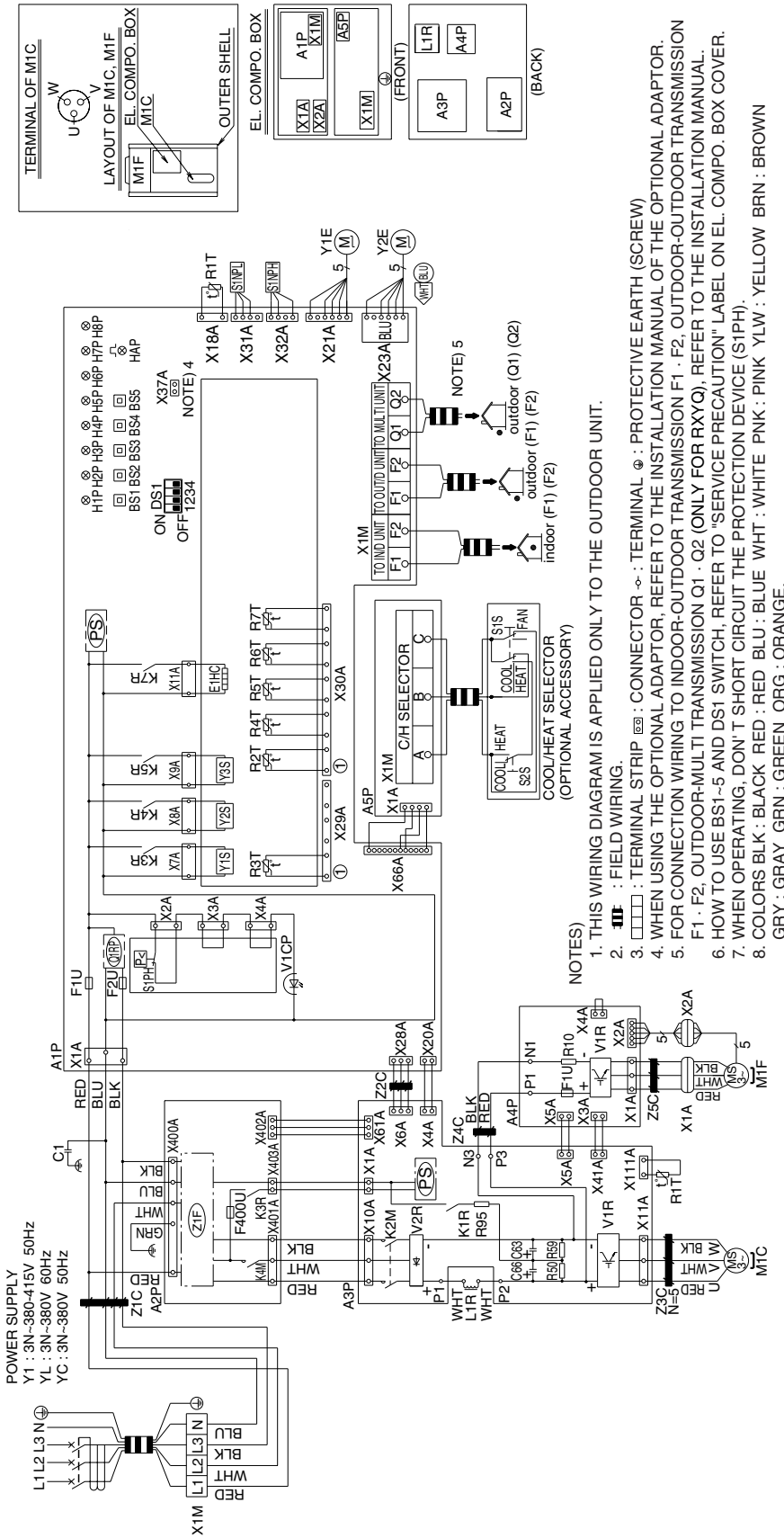
RXYQ5PAY1
RXYQ5PAYL



A1P	PRINTED CIRCUIT BOARD (MAIN)	K4M	MAGNETIC CONTACTOR (MTC) (A2P)	STNPH	PRESSURE SENSOR (HIGH)
A2P	PRINTED CIRCUIT BOARD (NOISE FILTER)	K3R	MAGNETIC RELAY (Y1S)	SINPL	PRESSURE SENSOR (LOW)
A3P	PRINTED CIRCUIT BOARD (INV)	K4R	MAGNETIC RELAY (Y2S)	S1PH	PRESSURE SWITCH (HIGH)
A4P	PRINTED CIRCUIT BOARD (FAN)	K5R	MAGNETIC RELAY (Y3S)	V1CP	SAFETY DEVICES INPUT
A5P	PRINTED CIRCUIT BOARD (ABC I/P)	K7R	MAGNETIC RELAY (E1HC)	V1R	POWER MODULE (A3P, A4P)
BS1-5	PUSH BUTTON SWITCH (MODE, SET, RETURN, TEST, RESET)	K11R	MAGNETIC RELAY (Y4S)	V2R	DIODE BRIDGE (A3P)
C1	CAPACITOR	L1R	REACTOR	X1A, X2A	CONNECTOR (M1F)
C63, C66	CAPACITOR	M1F	MOTOR (FAN)	X1M	TERMINAL STRIP (POWER SUPPLY)
DS1	DIP SWITCH	PS	SWITCHING POWER SUPPLY (A1P, A3P)	X1M	TERMINAL STRIP (CONTROL) (A1P)
E1HC	CRANKCASE HEATER	Q1RP	PHASE REVERSAL DETECT CIRCUIT	Y1E	ELECTRONIC EXPANSION VALVE (MAIN)
F1U	FUSE (8A, DC650V) (A4P)	R10	RESISTOR (CURRENT SENSOR) (A4P)	Y1S	SOLENOID VALVE (HOT GAS)
F400U	FUSE (T, 3.15A, 250V) (A1P)	R95	RESISTOR (CURRENT LIMITING)	Y2S	SOLENOID VALVE (OIL)
F400U	FUSE (T, 6.3A, 250V) (A2P)	R50	RESISTOR (CURRENT LIMITING)	Y3S	SOLENOID VALVE (4 WAY VALVE)
H1P-8P	PILOT LAMP (SERVICE MONITOR-ORANGE)	R1T	THERMISTOR (AIR) (A1P)	Y4S	SOLENOID VALVE (INJECTION)
[H2P] PREPARE, TEST	FLICKERING	R1T	THERMISTOR (FIN) (A3P)	Z1C-5C	NOISE FILTER (FERRITE CORE)
HAP	PILOT LAMP (SERVICE MONITOR-GREEN)	R2T	THERMISTOR (SUCTION)	Z1F	NOISE FILTER (WITH SURGE ABSORBER)
K1R	MAGNETIC RELAY (A3P)	R3T	THERMISTOR (MTC DISCHARGE)	COOL/HEAT	SELECTOR
K3R	MAGNETIC RELAY (A2P)	R4T	THERMISTOR (HEAT EXC. DEICER)	S1S	SELECTOR SWITCH (FAN/COOL · HEAT)
K2M	MAGNETIC CONTACTOR (M1C) (A3P)	R5T	THERMISTOR (LIQ. PIPE)	S1S	SELECTOR SWITCH (COOL/HEAT)
		R6T	THERMISTOR (ACCUMULATOR)	SSS	SELECTOR SWITCH (COOL/HEAT)

3D060907A

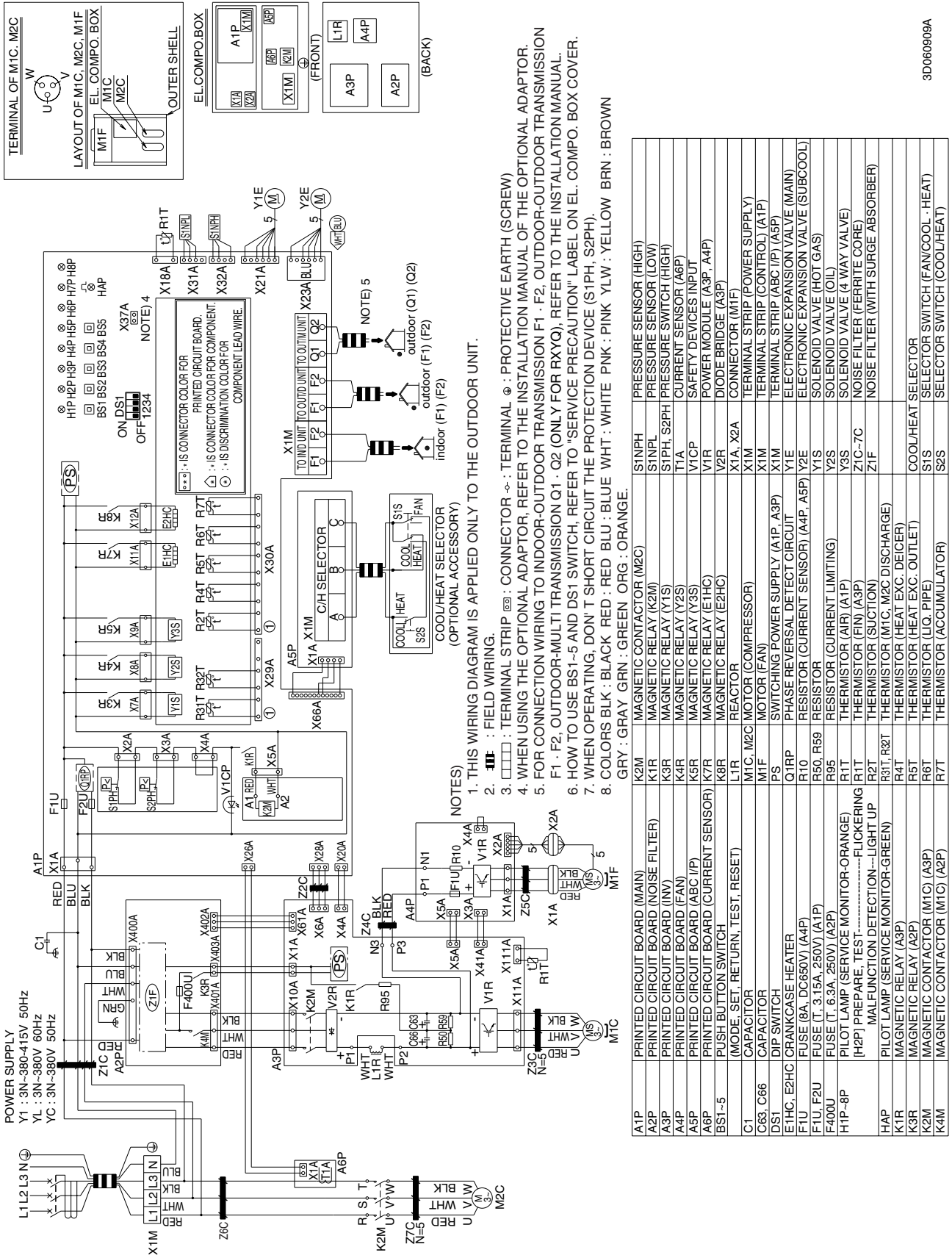
RXYQ8PAY1
RXYQ8PAYL



A1P	PRINTED CIRCUIT BOARD (MAIN)	K4M	MAGNETIC CONTACTOR (M1C) (A2P)	STNPH	PRESSURE SENSOR (HIGH)
A2P	PRINTED CIRCUIT BOARD (NOISE FILTER)	K3R	MAGNETIC RELAY (Y1S)	SINPL	PRESSURE SENSOR (LOW)
A3P	PRINTED CIRCUIT BOARD (INV)	K4R	MAGNETIC RELAY (Y2S)	S1PH	PRESSURE SWITCH (HIGH)
A4P	PRINTED CIRCUIT BOARD (FAN)	K5R	MAGNETIC RELAY (Y3S)	V1CP	SAFETY DEVICES INPUT
A5P	PRINTED CIRCUIT BOARD (ABC I/P)	K7R	MAGNETIC RELAY (E1HC)	V1R	POWER MODULE (A3P, A4P)
BS1-5	PUSH BUTTON SWITCH (MODE, SET, RETURN, TEST, RESET)	L1R	REACTOR	V2R	DIODE BRIDGE (A3P)
C1	CAPACITOR	M1C	MOTOR (COMPRESSOR)	X1A, X2A	CONNECTOR (M1F)
C63, C66	CAPACITOR	M1F	MOTOR (FAN)	X1M	TERMINAL STRIP (POWER SUPPLY)
DS1	DIP SWITCH	PS	SWITCHING POWER SUPPLY (A1P, A3P)	X1M	TERMINAL STRIP (CONTROL) (A1P)
E1HC	CRANKCASE HEATER	O1RP	PHASE REVERSAL DETECT CIRCUIT	X1M	TERMINAL STRIP (ABC I/P) (A5P)
F1U, F2U	FUSE (8A, DC650V) (A4P)	R10	RESISTOR (CURRENT SENSOR) (A4P)	Y1E	ELECTRONIC EXPANSION VALVE (MAIN)
F400U	FUSE (T, 3.15A, 250V) (A1P)	R50, R59	RESISTOR	Y2E	ELECTRONIC EXPANSION VALVE (SUBCOOL)
F400U	FUSE (T, 6.3A, 250V) (A2P)	R95	RESISTOR CURRENT LIMITING	Y1S	SOLENOID VALVE (HOT GAS)
H1P-8P	PILOT LAMP (SERVICE MONITOR-ORANGE)	R11	THERMISTOR (AIR) (A1P)	Y2S	SOLENOID VALVE (OIL)
[H2P]	PREPARE, TEST, FLICKERING	R21	THERMISTOR (FIN) (A3P)	X3S	SOLENOID VALVE (4 WAY VALVE)
HAP	PILOT LAMP (SERVICE MONITOR-GREEN)	R2T	THERMISTOR (SUCTION)	Z1C-5C	NOISE FILTER (FERRITE CORE)
K1R	MAGNETIC RELAY (A3P)	R3T	THERMISTOR (M1C DISCHARGE)	Z1F	NOISE FILTER (WITH SURGE ABSORBER)
K3R	MAGNETIC RELAY (A2P)	R4T	THERMISTOR (HEAT EXC. DEICER)		
K2M	MAGNETIC CONTACTOR (M1C) (A3P)	R5T	THERMISTOR (HEAT EXC. OUTLET)		
		R6T	THERMISTOR (LIQ. PIPE)	S1S	SELECTOR SWITCH (FAN/COOL · HEAT)
		R7T	THERMISTOR (ACCUMULATOR)	S2S	SELECTOR SWITCH (COOL/HEAT)

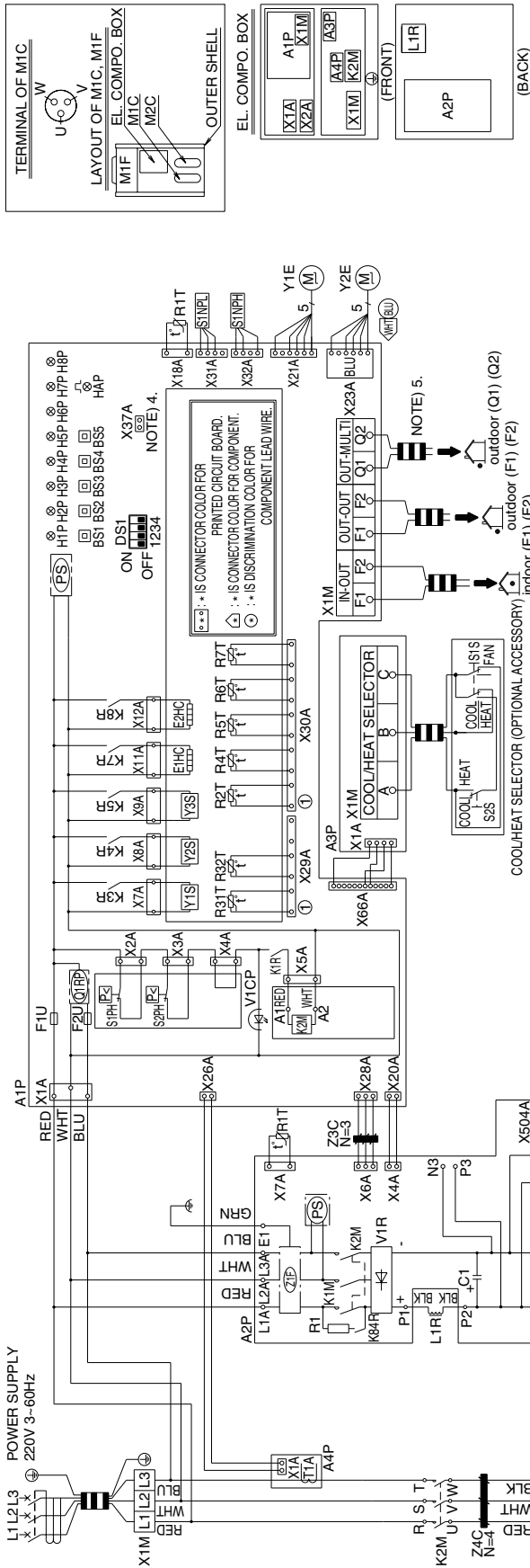
3D060908A

RXYQ10PAY1
RXYQ10PAYL



3D060909A

RXYQ10PTL



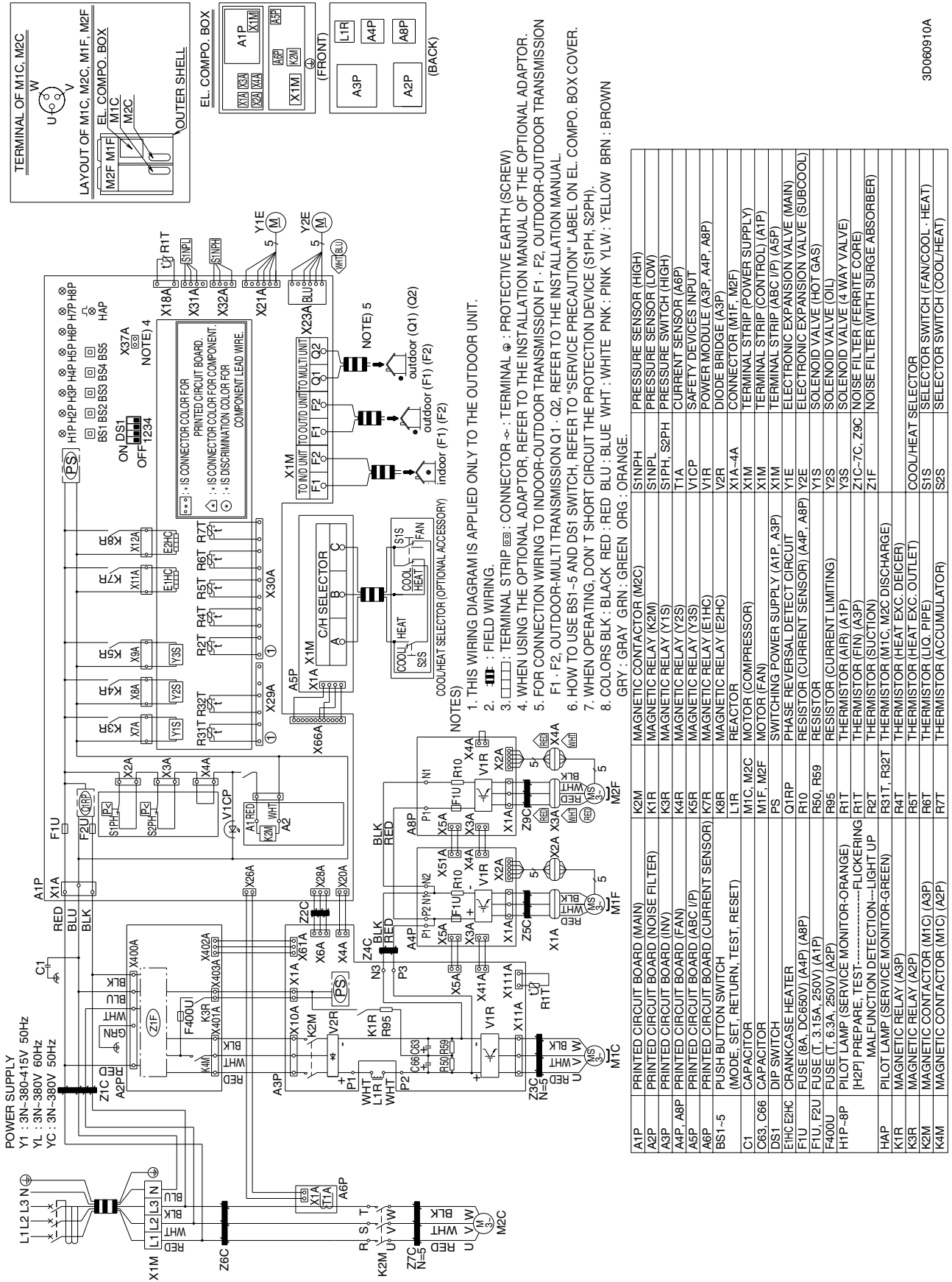
NOTES

1. THIS WIRING DIAGRAM IS APPLIED ONLY TO THE OUTDOOR UNIT.
2. : FIELD WIRING.
3. : TERMINAL STRIP : CONNECTOR : PROTECTIVE EARTH (SCREW)
4. WHEN USING THE OPTIONAL ADAPTOR, REFER TO THE INSTALLATION MANUAL OF THE OPTIONAL ADAPTOR.
5. FOR CONNECTION WIRING TO INDOOR-OUTDOOR TRANSMISSION F1 - F2, OUTDOOR-OUTDOOR TRANSMISSION Q1 - Q2, REFER TO THE INSTALLATION MANUAL.
6. HOW TO USE BS1-5 AND DS1 SWITCH, REFER TO "SERVICE PRECAUTION" LABEL ON EL. COMPO. BOX COVER.
7. WHEN OPERATING, DON'T SHORT CIRCUIT THE PROTECTION DEVICE (S1PH).
8. COLORS BLK : BLACK RED : RED BLU : BLUE WHT : WHITE PNK : PINK YLW : YELLOW BRN : BROWN GRY : GRAY GRN : GREEN ORG : ORANGE.

L1-RED	L2-WHT	L3-BLU	K6R	MAGNETIC RELAY (E2HC)	V1CP	SAFETY DEVICES INPUT
A1P	PRINTED CIRCUIT BOARD (MAIN)	K64R	MAGNETIC RELAY (CURRENT LIMITING)	V1R	DIODE BRIDGE (A2P)	
A2P	PRINTED CIRCUIT BOARD (INV)	L1R	REACTOR	V2R, V3R	POWER MODULE (A2P)	
A3P	PRINTED CIRCUIT BOARD (CURRENT SENSOR)	M1C, M2C	MOTOR (COMPRESSOR)	X1A, X2A	CONNECTOR (M1F)	
A4P	PUSH BUTTON SWITCH		MOTOR (FAN)	X1M	TERMINAL STRIP (POWER SUPPLY)	
BS1-5	(MODE, SET, RETURN, TEST, RESET)		SWITCHING POWER SUPPLY (A1P, A2P)	X1M	TERMINAL STRIP (CONTROL) (A1P)	
C1	CAPACITOR		PHASE REVERSAL DETECT CIRCUIT	X1M	TERMINAL STRIP (ABC I/P) (A3P)	
DS1	DIP SWITCH		RESISTOR (CURRENT LIMITING)	Y1E	ELECTRONIC EXPANSION VALVE (MAIN)	
E1HC, E2HC	CRANKCASE HEATER		RESISTOR (CURRENT SENSOR) (A2P)	Y2E	ELECTRONIC EXPANSION VALVE (SUBCOOL)	
F1U, F2U	FUSE (T, 3, 15A, 250V) (A1P)		THERMISTOR (AIR) (A1P)	Y2S	SOLENOID VALVE (HOT GAS)	
H1P-8P	PILOT LAMP (SERVICE MONITOR-ORANGE)		THERMISTOR (FIN) (A2P)	Y3S	SOLENOID VALVE (OIL)	
	[H2P] PREPARE, TEST-----FLICKERING		THERMISTOR (SUCTION)	Z1C-4C	NOISE FILTER (FERRITE CORE)	
HAP	PILOT LAMP (SERVICE MONITOR-GREEN)		THERMISTOR (HEAT EXC. DECER)	Z1F	NOISE FILTER (WITH SURGE ABSORBER)	
K1M, K2M	MAGNETIC CONTACTOR (M1C) (A2P)		THERMISTOR (HEAT EXC. OUTLET)			
K1R	MAGNETIC RELAY (M2C)		THERMISTOR (LIQ. PIPE)			
K2M	MAGNETIC RELAY (K2M)		THERMISTOR (ACCUMULATOR)			
K3R	MAGNETIC RELAY (Y1S)		PRESSURE SENSOR (HIGH)			
K4R	MAGNETIC RELAY (Y2S)		PRESSURE SENSOR (LOW)			
K5R	MAGNETIC RELAY (Y3S)		S1PH, S2PH	COOL/HEAT SELECTOR		
K7R	MAGNETIC RELAY (E1HC)		T1A	CURRENT SENSOR (A4P)		
			S1S	SELECTOR SWITCH (FAN/COOL - HEAT)		
			S2S	SELECTOR SWITCH (COOL/HEAT)		

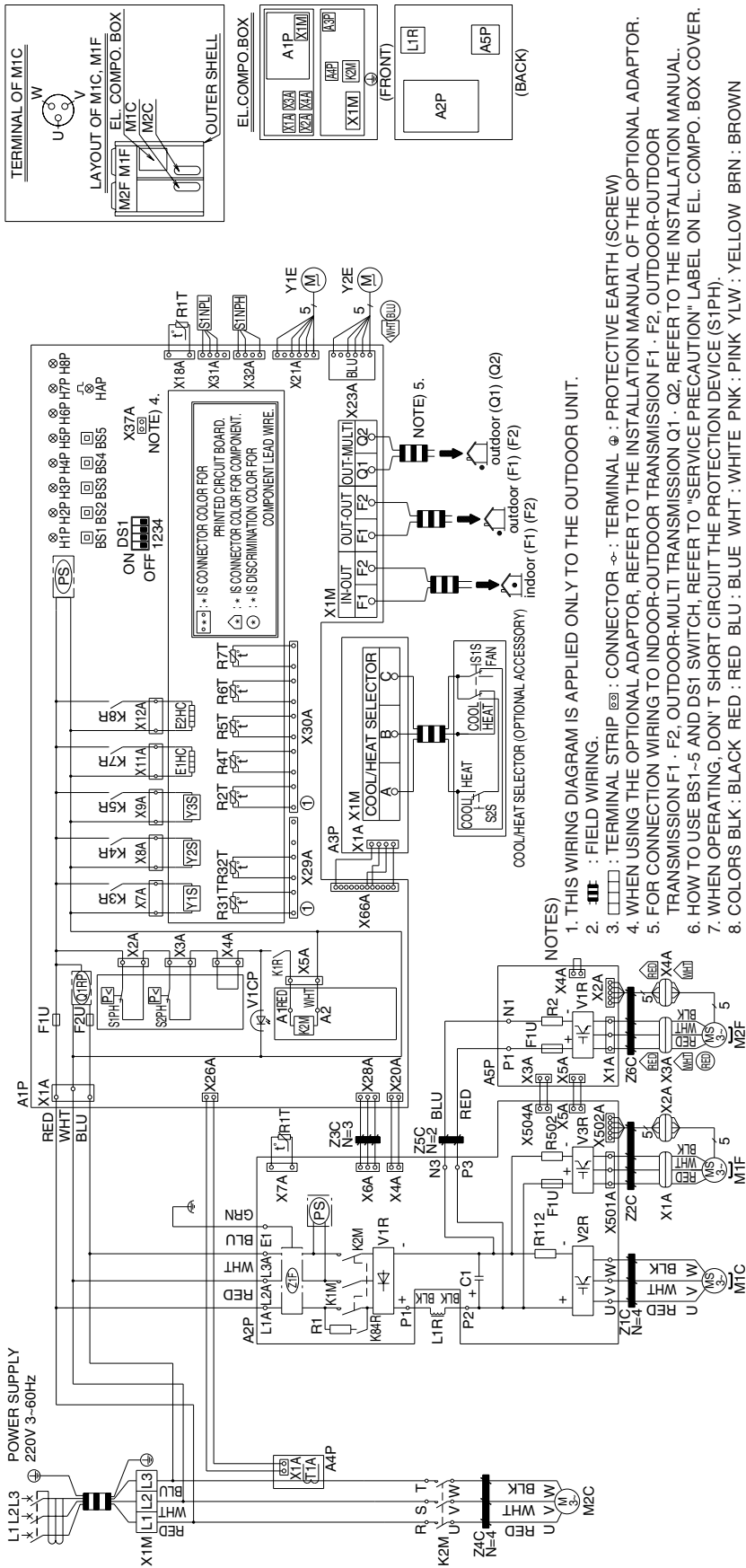
3D060629B

RXYQ12PAY1
RXYQ12PAYL

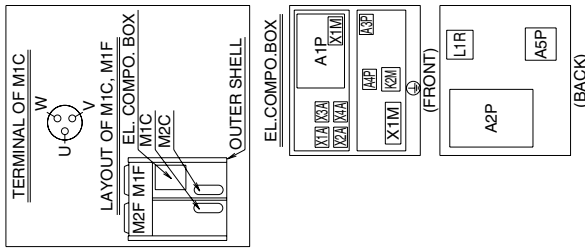


3D060910A

RXYQ12PTL



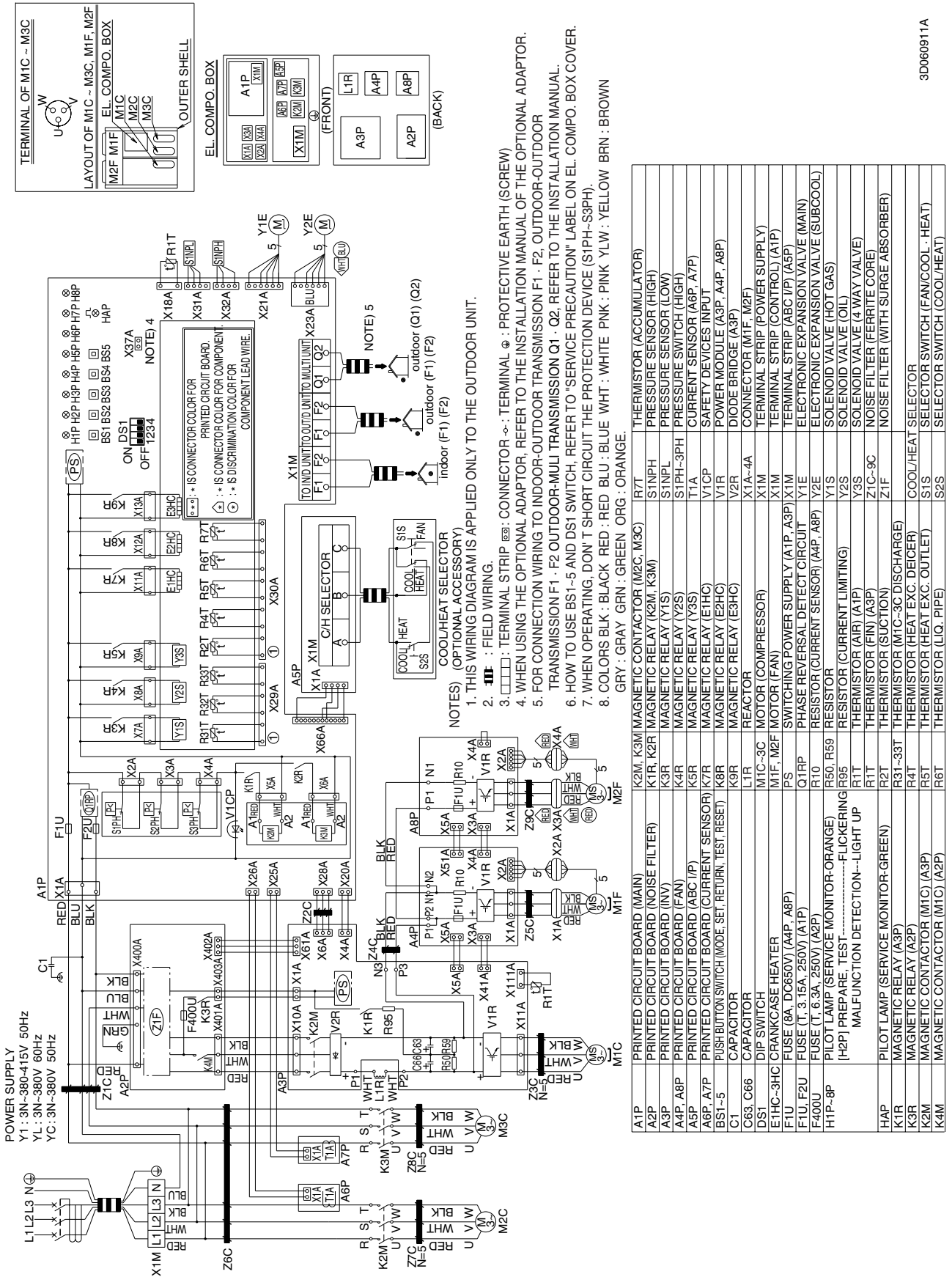
- NOTES
1. THIS WIRING DIAGRAM IS APPLIED ONLY TO THE OUTDOOR UNIT.
 2. : FIELD WIRING.
 3. : TERMINAL STRIP - CONNECTOR - : TERMINAL - : PROTECTIVE EARTH (SCREW)
 4. WHEN USING THE OPTIONAL ADAPTOR, REFER TO THE INSTALLATION MANUAL OF THE OPTIONAL ADAPTOR.
 5. FOR CONNECTION WIRING TO INDOOR-OUTDOOR TRANSMISSION F1 - F2, OUTDOOR-OUTDOOR TRANSMISSION Q1 - Q2, REFER TO THE INSTALLATION MANUAL.
 6. HOW TO USE BS1-5 AND DS1 SWITCH, REFER TO "SERVICE PRECAUTION" LABEL ON EL. COMPO. BOX COVER.
 7. WHEN OPERATING, DON'T SHORT CIRCUIT THE PROTECTION DEVICE (S1PH).
 8. COLORS BLK : BLACK RED : RED BLU : BLUE WHT : WHITE PNK : PINK YLW : YELLOW BRN : BROWN



A1P	L1-RED	L2-WHT	L3-BLU	K8R	MAGNETIC RELAY (E2HC)	V1CP	SAFETY DEVICES INPUT
A2P	PRINTED CIRCUIT BOARD (MAIN)	K84R	REACTOR	V1R	DIODE BRIDGE (A2P)	V1R	POWER MODULE (A5P)
A3P	PRINTED CIRCUIT BOARD (INV)	L1R	MOTOR (COMPRESSOR)	V2R, V3R	POWER MODULE (A2P)	X1A-4A	CONNECTOR (M1F, M2F)
A4P	PRINTED CIRCUIT BOARD (CURRENT SENSOR)	M1C, M2C	MOTOR (FAN)	X1M	TERMINAL STRIP (POWER SUPPLY)	X1M	TERMINAL STRIP (CONTROL) (A1P)
A5P	PRINTED CIRCUIT BOARD (INV)	M1F, M2F	SWITCHING, POWER SUPPLY (A1P, A2P)	X1M	TERMINAL STRIP (ABC I/P) (A3P)	Y1E	ELECTRONIC EXPANSION VALVE (MAIN)
BS1-5	PUSH BUTTON SWITCH (MODE, SET, RETURN, TEST, RESET)	PS	PHASE REVERSAL DETECT CIRCUIT	X1M	SOLENOID VALVE (HOT GAS)	Y2E	ELECTRONIC EXPANSION VALVE (SUBCOOL)
C1	CAPACITOR	Q1RP	RESISTOR (CURRENT LIMITING)	Y1E	SOLENOID VALVE (OIL)	Y2S	SOLENOID VALVE (OIL)
DS1	DIP SWITCH	R1	RESISTOR (CURRENT LIMITING)	Y1E	SOLENOID VALVE (4 WAY VALVE)	Y3S	SOLENOID VALVE (FERRITE CORE)
E1HC, E2HC	CRANKCASE HEATER	R2	RESISTOR (CURRENT SENSOR) (A5P)	Z1C-6C	NOISE FILTER (WITH SURGE ABSORBER)	Z1F	
F1U, F2U	FUSE (16A, DC450V) (A2P, A5P)	R502	RESISTOR (CURRENT SENSOR) (A2P)				
F1U, F2U	FUSE (T, 3, 15A, 250V) (A1P)	R1T	THERMISTOR (AIR) (A1P)				
H1P-8P	PILOT LAMP (SERVICE MONITOR-ORANGE)	R2T	THERMISTOR (SUCTION)				
	PILOT LAMP (SERVICE MONITOR-ORANGE)	R3T, R32T	THERMISTOR (HEAT EXC. DEIGER)				
HAP	MALFUNCTION DETECTION--LIGHT UP	R4T	THERMISTOR (HEAT EXC. OUTLET)				
K1M, K2M	MAGNETIC CONTACTOR (M1C) (A2P)	R5T	THERMISTOR (LIQ. PIPE)				
K1R	MAGNETIC CONTACTOR (M2C)	R6T	THERMISTOR (ACCUMULATOR)				
K2M	MAGNETIC RELAY (K2M)	R7T	THERMISTOR (LIQ. PIPE)				
K3R	MAGNETIC RELAY (Y1S)	S1NPH	PRESSURE SENSOR (HIGH)				
K4R	MAGNETIC RELAY (Y2S)	S1NPL	PRESSURE SENSOR (LOW)				
K5R	MAGNETIC RELAY (Y3S)	S1PH, S2PH	PRESSURE SWITCH (HIGH)				
K7R	MAGNETIC RELAY (E1HC)	T1A	CURRENT SENSOR (A4P)				

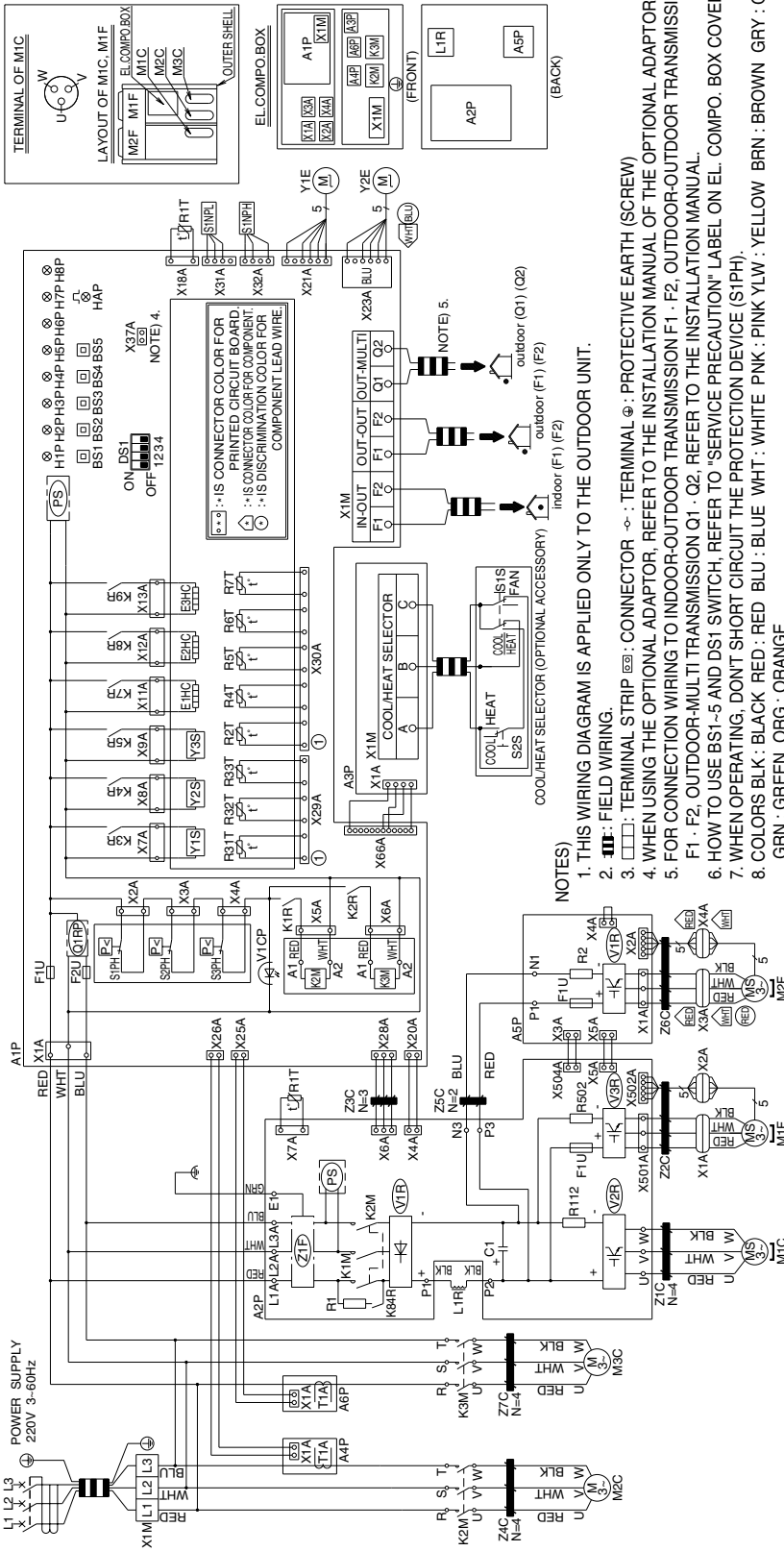
3D060630B

RXYQ14PA / 16PA / 18PAY1
RXYQ14PA / 16PA / 18PAYL



3D060911A

RXYQ14P / 16P / 18PTL



- NOTES**
1. THIS WIRING DIAGRAM IS APPLIED ONLY TO THE OUTDOOR UNIT.
 2. ■: FIELD WIRING.
 3. □: TERMINAL STRIP; CONNECTOR ∅: PROTECTIVE EARTH (SCREW).
 4. WHEN USING THE OPTIONAL ADPTOR, REFER TO THE INSTALLATION MANUAL OF THE OPTIONAL ADPTOR.
 5. FOR CONNECTION WIRING TO INDOOR-OUTDOOR TRANSMISSION F1 · F2, OUTDOOR-OUTDOOR TRANSMISSION F1 · F2, OUTDOOR-MULTI TRANSMISSION Q1 · Q2, REFER TO THE INSTALLATION MANUAL.
 6. HOW TO USE BS1-5 AND DS1 SWITCH, REFER TO "SERVICE PRECAUTION" LABEL ON EL. COMPO. BOX COVER.
 7. WHEN OPERATING, DON'T SHORT CIRCUIT THE PROTECTION DEVICE (S1PH).
 8. COLORS BLK : BLACK RED : RED WHT : WHITE PNK : PINK YLU : YELLOW BRN : BROWN GRN : GRAY

L1-RED	L2-WHT	L3-BLU	M1C	M1F	M2F	M3C	M3F	M4C	M4F	M5C	M5F	M6C	M6F	M7C	M7F	M8C	M8F	M9C	M9F	M10C	M10F	M11C	M11F	M12C	M12F	M13C	M13F	M14C	M14F	M15C	M15F	M16C	M16F	M17C	M17F	M18C	M18F	M19C	M19F	M20C	M20F	M21C	M21F	M22C	M22F	M23C	M23F	M24C	M24F	M25C	M25F	M26C	M26F	M27C	M27F	M28C	M28F	M29C	M29F	M30C	M30F	M31C	M31F	M32C	M32F	M33C	M33F	M34C	M34F	M35C	M35F	M36C	M36F	M37C	M37F	M38C	M38F	M39C	M39F	M40C	M40F	M41C	M41F	M42C	M42F	M43C	M43F	M44C	M44F	M45C	M45F	M46C	M46F	M47C	M47F	M48C	M48F	M49C	M49F	M50C	M50F	M51C	M51F	M52C	M52F	M53C	M53F	M54C	M54F	M55C	M55F	M56C	M56F	M57C	M57F	M58C	M58F	M59C	M59F	M60C	M60F	M61C	M61F	M62C	M62F	M63C	M63F	M64C	M64F	M65C	M65F	M66C	M66F	M67C	M67F	M68C	M68F	M69C	M69F	M70C	M70F	M71C	M71F	M72C	M72F	M73C	M73F	M74C	M74F	M75C	M75F	M76C	M76F	M77C	M77F	M78C	M78F	M79C	M79F	M80C	M80F	M81C	M81F	M82C	M82F	M83C	M83F	M84C	M84F	M85C	M85F	M86C	M86F	M87C	M87F	M88C	M88F	M89C	M89F	M90C	M90F	M91C	M91F	M92C	M92F	M93C	M93F	M94C	M94F	M95C	M95F	M96C	M96F	M97C	M97F	M98C	M98F	M99C	M99F	M100C	M100F
--------	--------	--------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	-------	-------

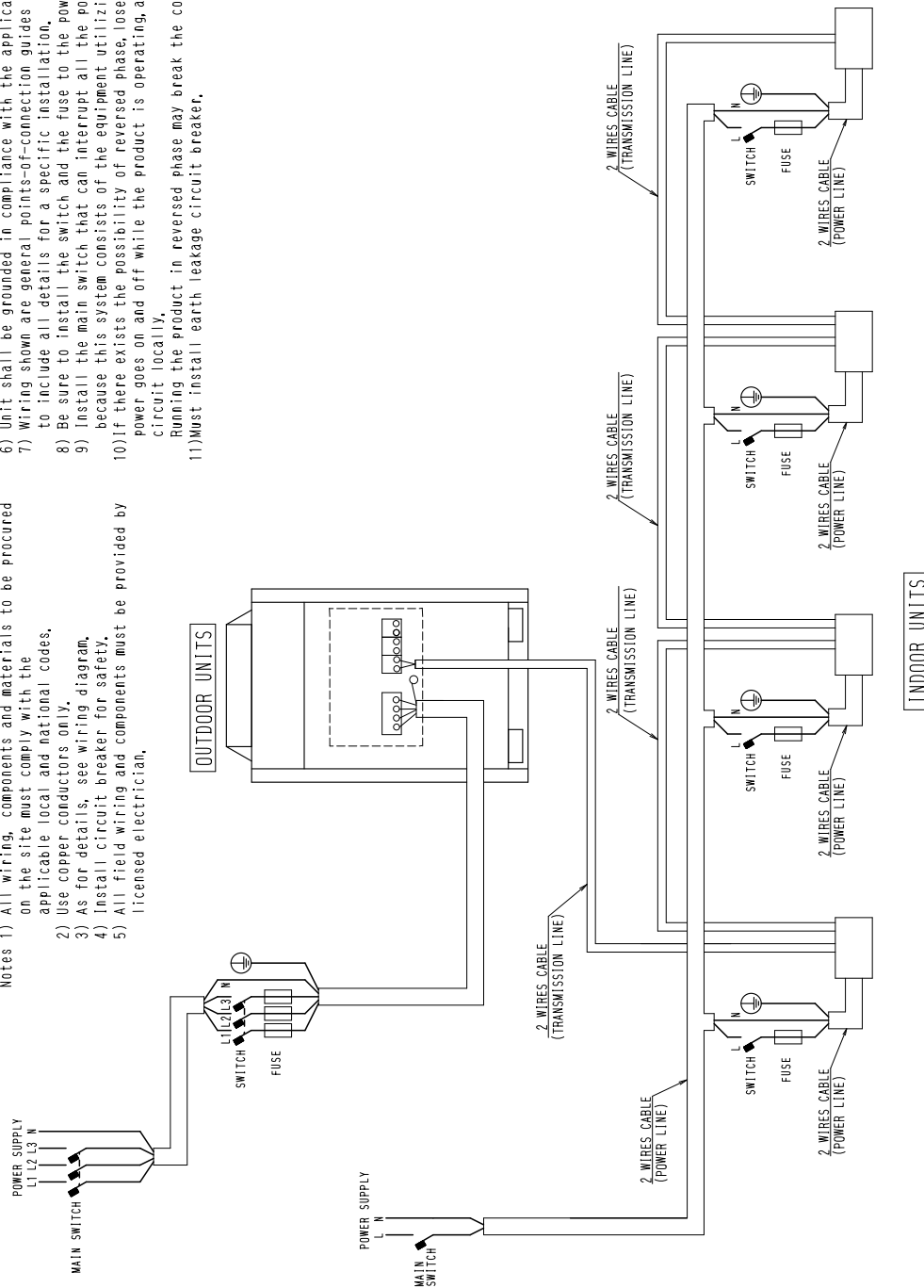
3D060632B

2.2 Field Wiring

RXYQ5PA / 8PA / 10PA / 12PA / 14PA / 16PA / 18PAY1
 RXYQ5PA / 8PA / 10PA / 12PA / 14PA / 16PA / 18PAYL

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

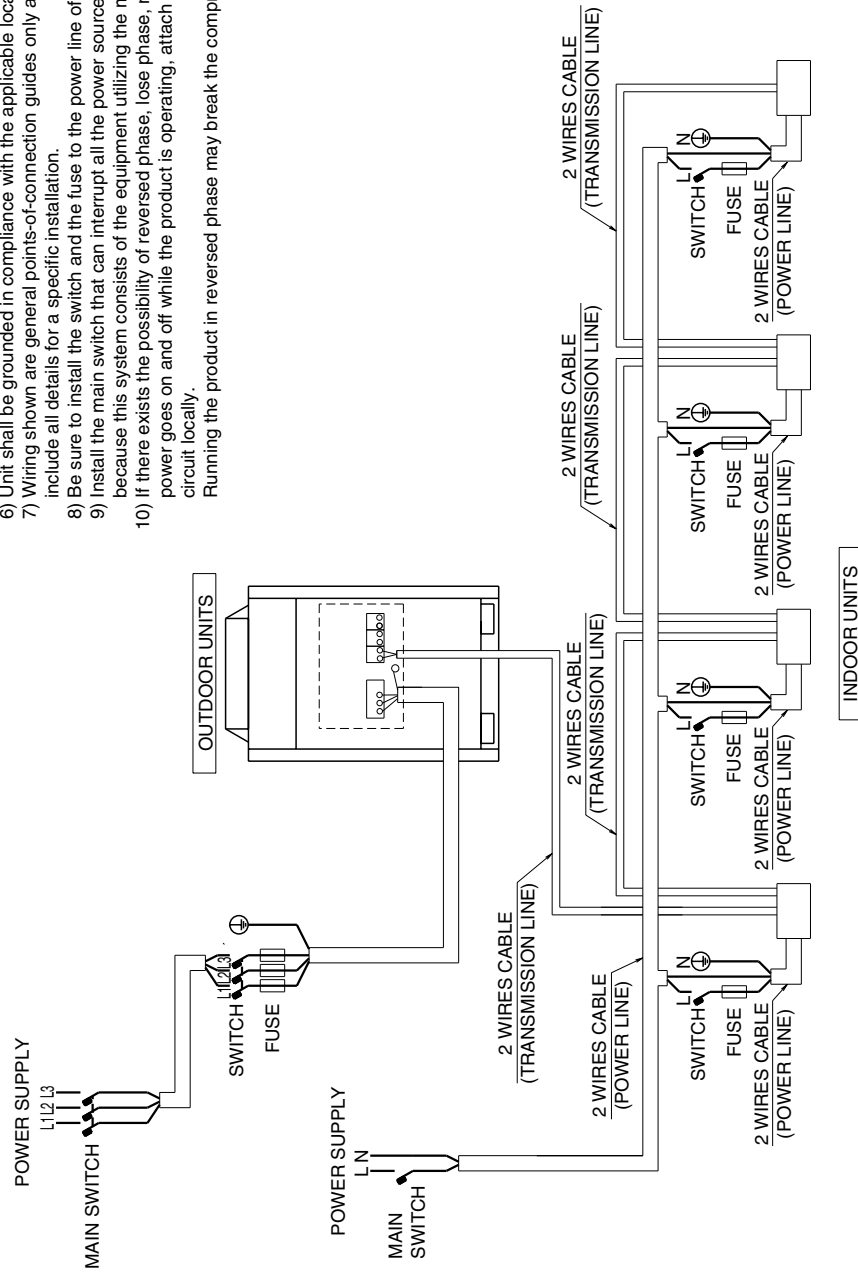
- Notes 1) All wiring, components and materials to be procured on the site must comply with the applicable local and national codes.
- 2) Use copper conductors only.
- 3) As for details, see wiring diagram.
- 4) Install circuit breaker for safety.
- 5) All field wiring and components must be provided by licensed electrician.



3D051452N

RXYQ5P / 8P / 10P / 12P / 14P / 16P / 18PTL

- 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) 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.



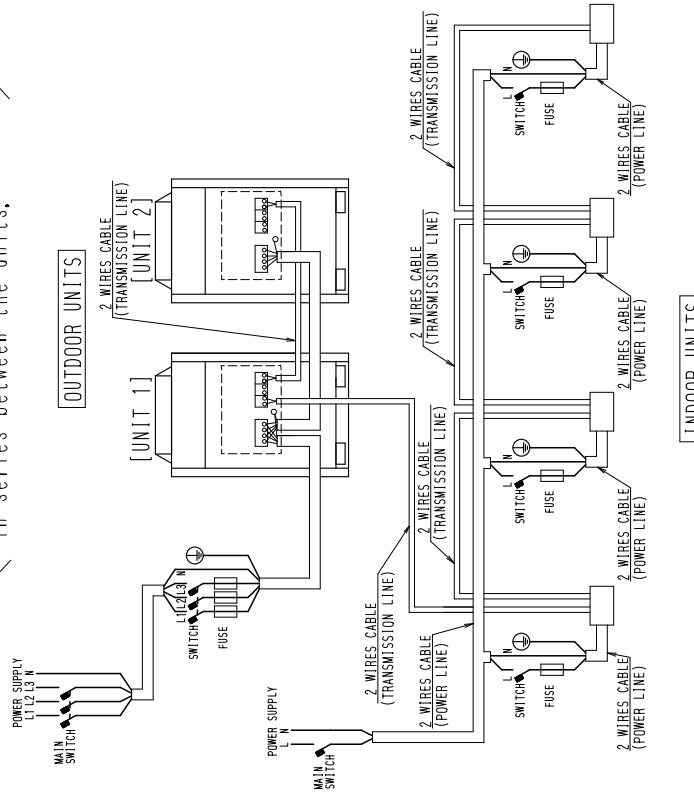
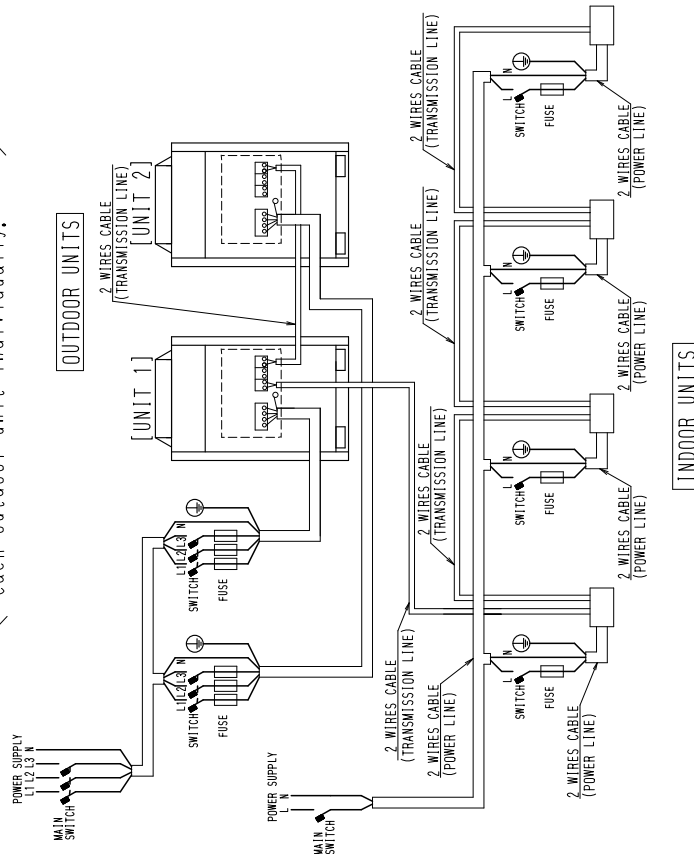
3D060852A

RXYQ20PA / 22PA / 24PA / 26PA / 28PA / 30PA / 32PAY1
 RXYQ20PA / 22PA / 24PA / 26PA / 28PA / 30PA / 32PAYL

- Notes 1) All wiring, components and materials to be procured on the site must comply with the applicable local and national codes, to include all details for a specific installation.
- 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.

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

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

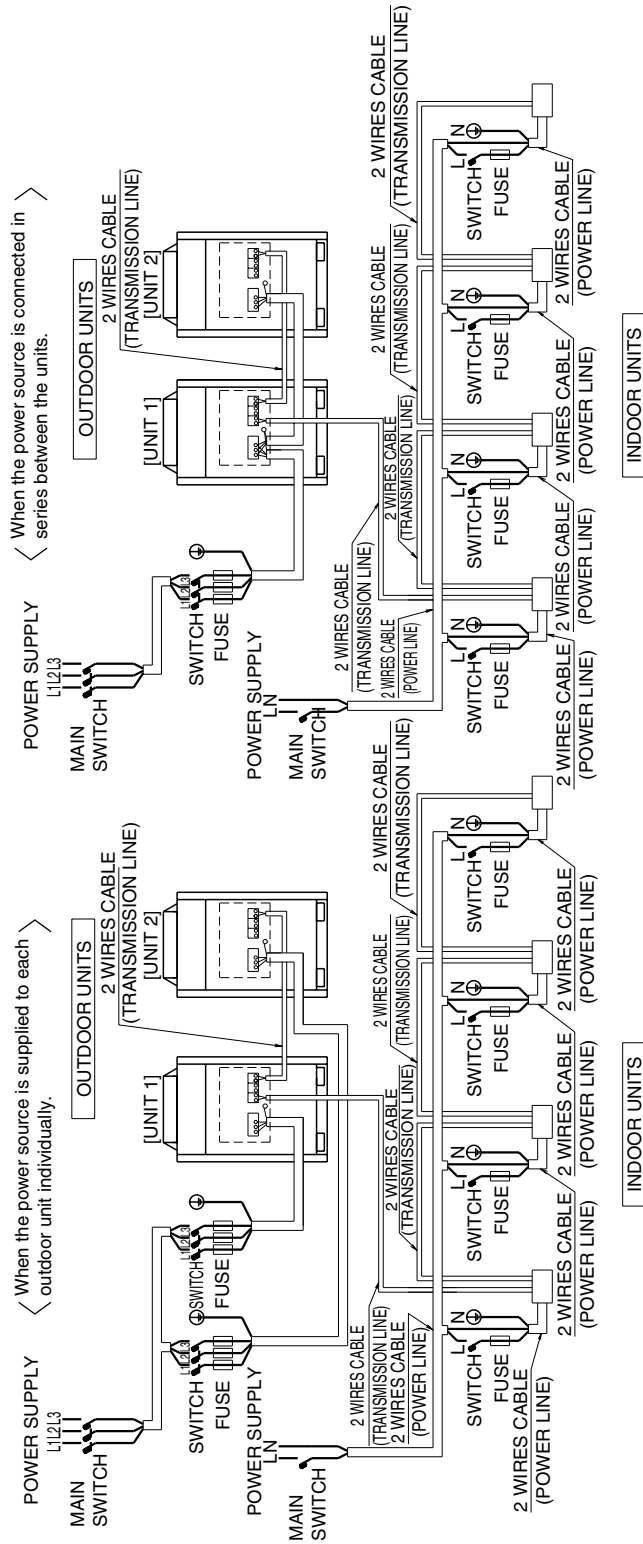


3D052261J

RXYQ20P / 22P / 24P / 26P / 28P / 30P / 32PTL

- 7) Wiring shown are general points-of-connection guides only and are not intended for or to include all details for a specific installation.
- 8) Be sure to install the switch and the fuse to the power line of each equipment.
- 9) Install the main switch that can interrupt all the power sources in an integrated manner because this system consists of the equipment utilizing the multiple power sources.
- 10) The capacity of UNIT1 must be larger than UNIT2 when the power source is connected in series between the units.
- 11) If there exists the possibility of reversed phase, lose phase, momentary blackout or the power goes on and off while the product is operating, attach a reversed phase protection circuit locally. Running the product in reversed phase may break the compressor and other parts.

- 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.



3D060853A

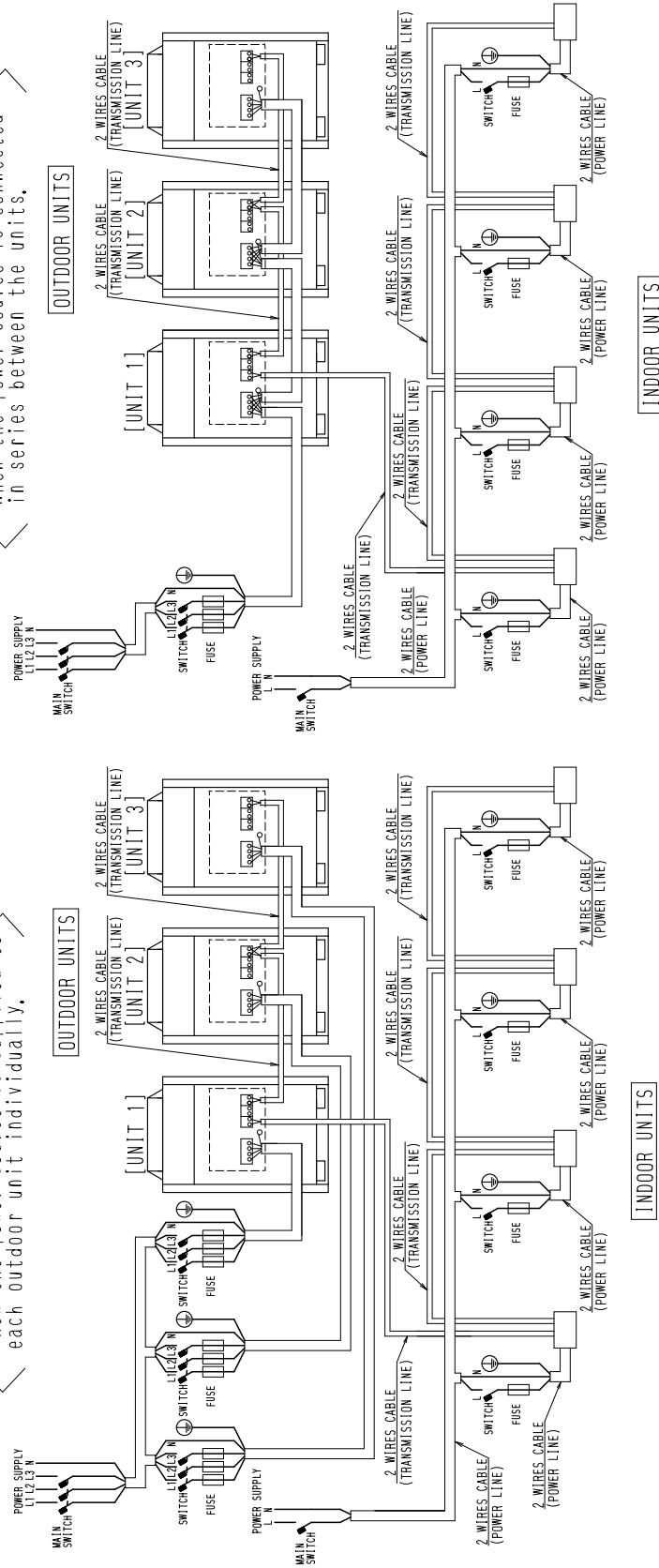
RXYQ34PA / 36PA / 38PA / 40PA / 42PA / 44PA / 46PA / 48PA / 50PA / 52PA / 54PAY1
 RXYQ34PA / 36PA / 38PA / 40PA / 42PA / 44PA / 46PA / 48PA / 50PA / 52PA / 54PAYL

- Notes 1) All wiring, components and materials to be procured on the site must comply with the applicable local and national codes.
- 2) Use copper conductors only.
 - 3) As for details, see wiring diagram.
 - 4) Install circuit breaker for safety.
 - 5) All field wiring and components must be provided by licensed electrician.

- 6) Unit shall be grounded in compliance with the applicable local and national codes.
- 7) Wiring shown are general points-of-connection guides only and are not intended for or to include all details for a specific installation.
- 8) Be sure to install the switch and the fuse to the power line of each equipment.
- 9) Install the main switch that can interrupt all the power sources in an integrated manner because this system consists of the equipment utilizing the multiple power sources.
- 10) The capacity of UNIT1 must be larger than UNIT2 when the power source is connected in series between the units.
- 11) If there exists the possibility of reversed phase, lose phase, momentary blackout or the power goes on and off while the product is operating, attach a reversed phase protection circuit locally.
- 12) Must install earth leakage circuit breaker.

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

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

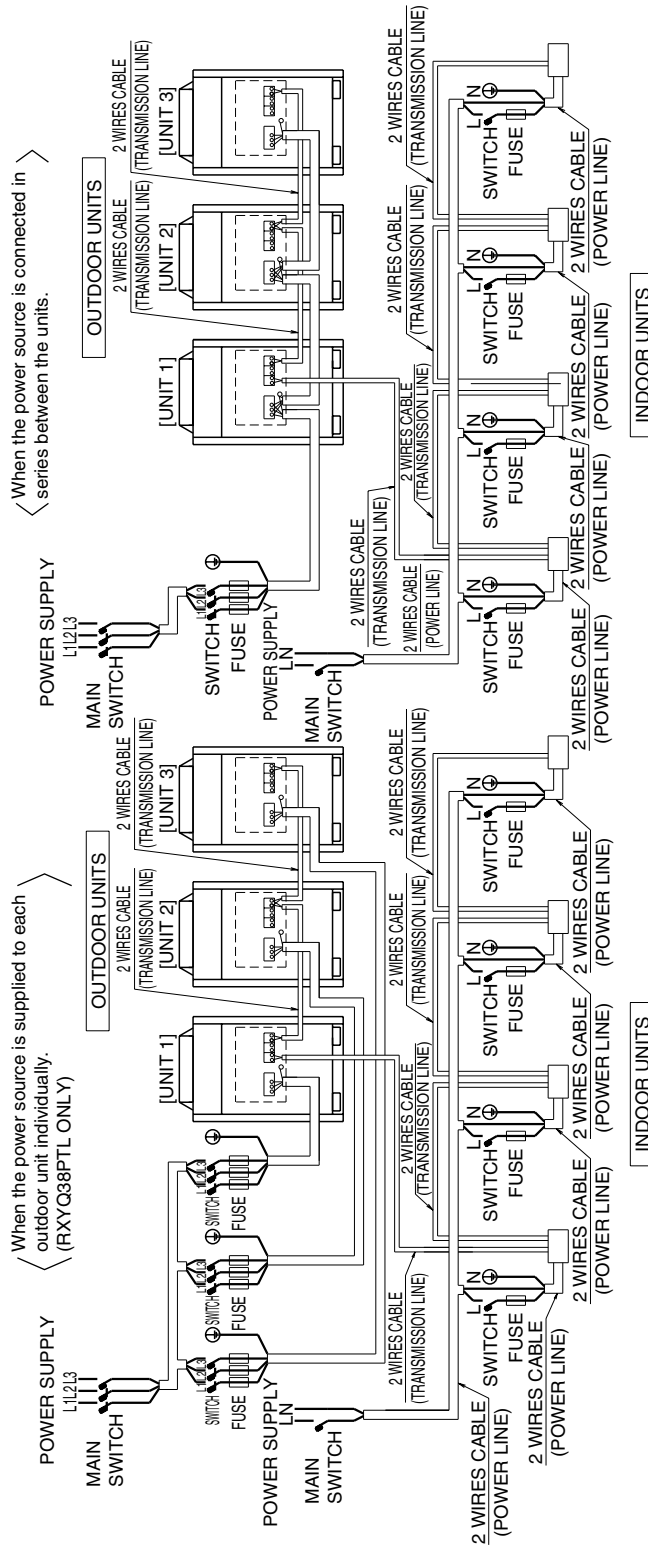


3D052262J

RXYQ34P / 36P / 38P / 40P / 42P / 44P / 46P / 48P / 50P / 52P / 54PTL

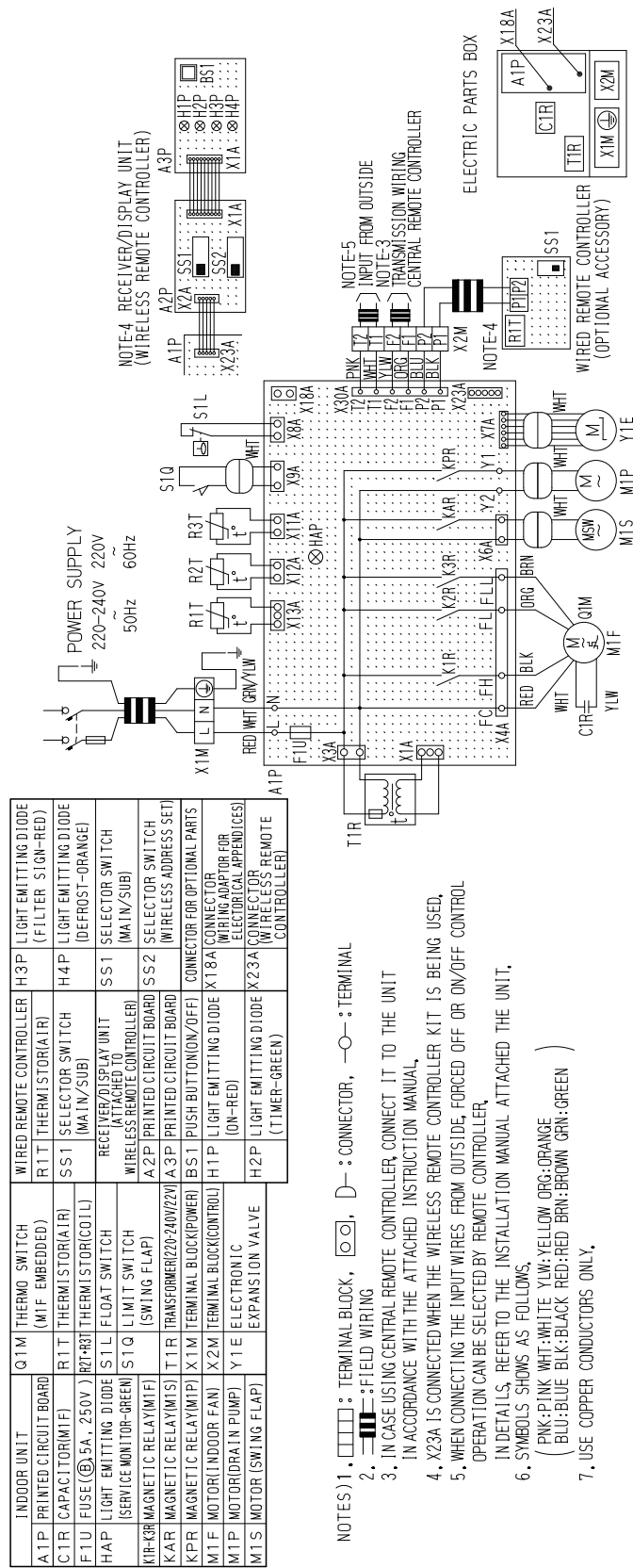
- 7) Wiring shown are general points-of-connection guides only and are not intended for or to include all details for a specific installation.
- 8) Be sure to install the switch and the fuse to the power line of each equipment.
- 9) Install the main switch that can interrupt all the power sources in an integrated manner because this system consists of the equipment utilizing the multiple power sources.
- 10) The capacity of UNIT1 must be larger than UNIT2 when the power source is connected in series between the units.
- 11) If there exists the possibility of reversed phase, lose phase, momentary blackout or the power goes on and off while the product is operating, attach a reversed phase protection circuit locally. Running the product in reversed phase may break the compressor and other parts.

- 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.



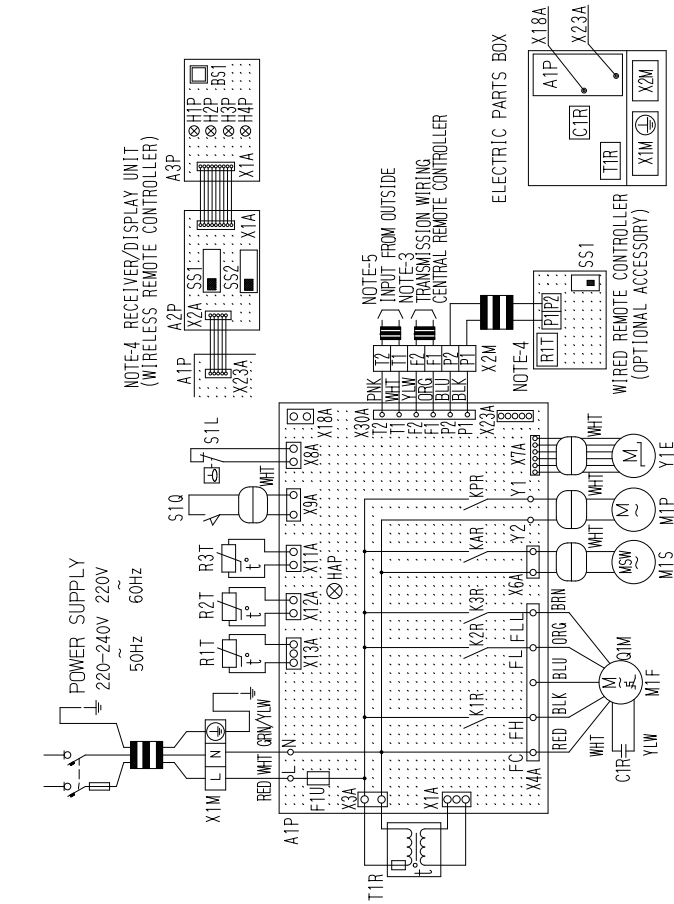
3D060854A

FXCQ20M / 25M / 32M / 63MVE



3D039556A

FXCQ40M / 50M / 80M/ 125MVE



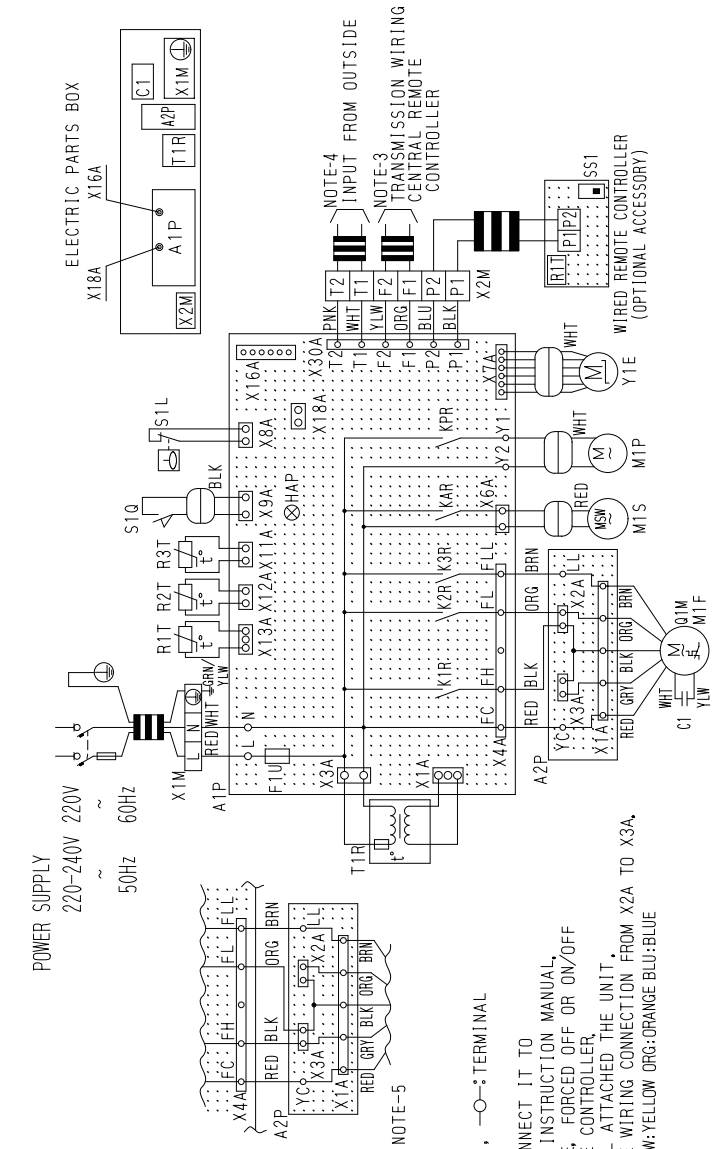
INDOOR UNIT	S1 L	FLOAT SWITCH	H1 P	LIGHT EMITTING DIODE (ON-RED)
A1 P	PRINTED CIRCUIT BOARD	S1 Q	LIMIT SWITCH (SWING FLAP)	LIGHT EMITTING DIODE (TIMER-GREEN)
C1 R	CAPACITOR(M1F)	T1 R	TRANSFORMER(220-240V/22V)	LIGHT EMITTING DIODE (FILTER S1GN-RED)
F1 U	FUSE(①.5A, 250V)	X1 M	TERMINAL BLOCK(POWER)	LIGHT EMITTING DIODE (DEFROST-ORANGE)
H1 P	LIGHT EMITTING DIODE	X2 M	TERMINAL BLOCK(CONTROL)	SELECTOR SWITCH (MAIN/SUB)
K1R-K3R	SERVICE MONITOR-GREEN)	Y1 E	ELECTRONIC EXPANSION VALVE	SELECTOR SWITCH (WIRELESS ADDRESS SET)
K1R	MAGNETIC RELAY(M1F)	W1 R	WIRELESS REMOTE CONTROLLER	CONNECTOR FOR OPTIONAL PARTS (X18A)
K2R	MAGNETIC RELAY(M1P)	X30A	RECEIVER/DISPLAY UNIT (WIRELESS REMOTE CONTROLLER)	CONNECTOR FOR WIRING ADAPTOR FOR ELECTRICAL APPENDICES)
K3R	MAGNETIC RELAY(M1S)	X31A	W1 R	CONNECTOR (WIRELESS REMOTE CONTROLLER)
M1 P	MOTOR(INDOOR FAN)	X32A	R1 T	PRINTED CIRCUIT BOARD
M1 S	MOTOR(DRAIN PUMP)	X33A	S11	PRINTED CIRCUIT BOARD
M1 E	MOTOR(SWING FLAP)	X34A	S12	PRINTED CIRCUIT BOARD
M1 F	MOTOR	X35A	BS1	PUSH BUTTON(ON/OFF)
Q1 M	THERMO SWITCH (M1F EMBEDDED)	X36A		
R1 T	THERMISTOR(AIR)	X37A		
R2T-R3T	THERMISTOR(COIL)	X38A		

- NOTES) 1. □ : TERMINAL BLOCK, ○ : FIELD WIRING, ⊠ : CONNECTOR, ○ : TERMINAL
2. — : FIELD WIRING
3. IN CASE USING CENTRAL REMOTE CONTROLLER, CONNECT IT TO THE UNIT IN ACCORDANCE WITH THE ATTACHED INSTRUCTION MANUAL.
4. X23A IS CONNECTED WHEN THE WIRELESS REMOTE CONTROLLER KIT IS BEING USED.
5. WHEN CONNECTING THE INPUT WIRES FROM OUTSIDE, FORCED OFF OR ON/OFF CONTROL OPERATION CAN BE SELECTED BY REMOTE CONTROLLER.
6. IN DETAILS, REFER TO THE INSTALLATION MANUAL ATTACHED THE UNIT.
7. USE COPPER CONDUCTORS ONLY.
- (PINK: PINK WHT: WHITE YLW: YELLOW ORG: ORANGE
BLU: BLUE BLK: BLACK RED: RED BRN: BROWN GRN: GREEN)

3D099557A

FXKQ25MA / 32MA / 40MA / 63MAVE

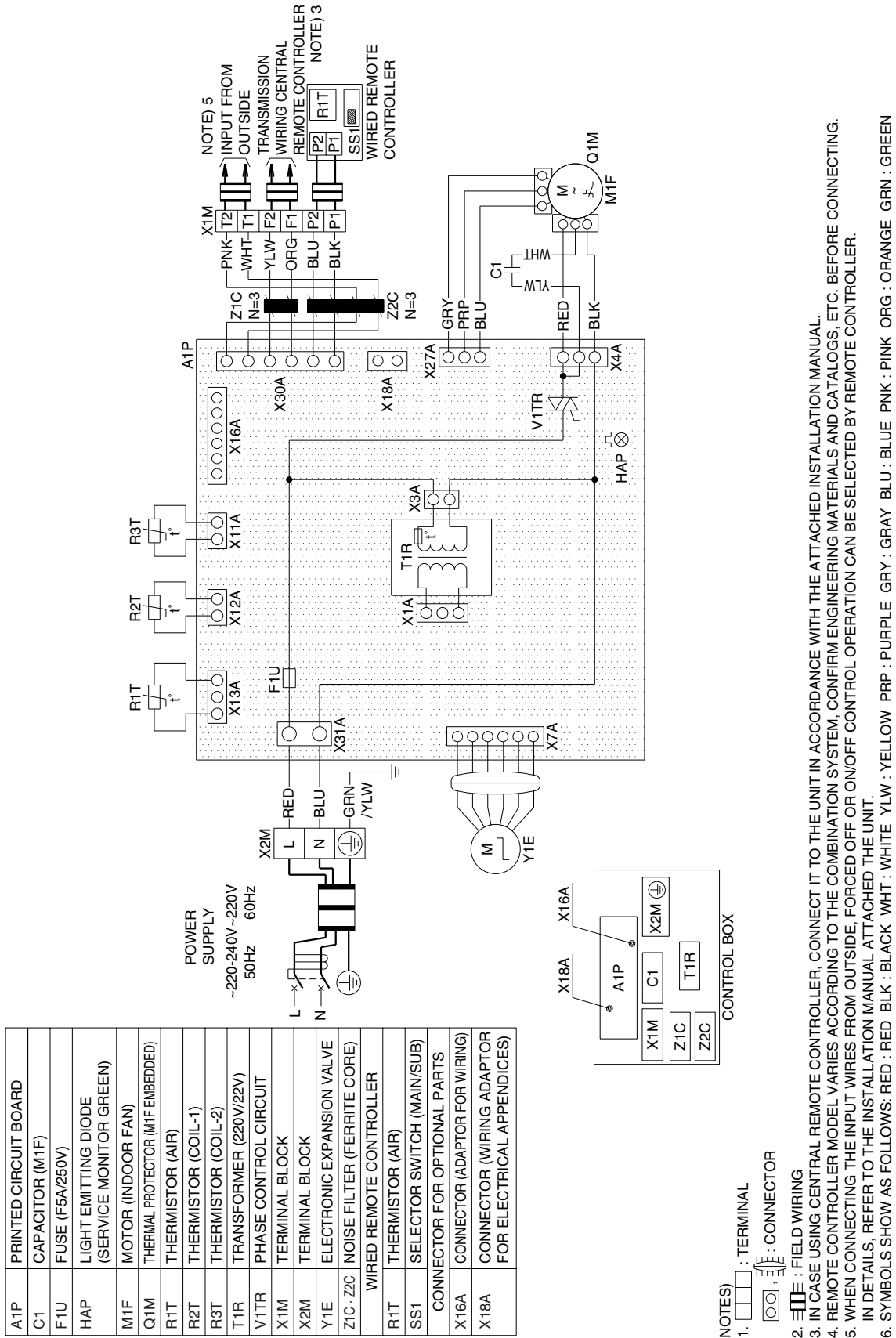
3D039564C



INDOOR UNIT	R1T	THERMISTOR(A.I.R)
A1P	R2T-R3T	THERMISTOR(COIL)
A2P	S1L	FLOAT SWITCH
C1	S1Q	LIMIT SWITCH(SWING FLAP)
F1U	T1R	TRANSFORMER(20~240V/22V)
HAP	X1M	TERMINAL BLOCK(POWER)
K1R-K3R	X2M	TERMINAL BLOCK(CONTROL)
M1F	Y1E	ELECTRONIC EXPANSION VALVE
M1P		WIRED REMOTE CONTROLLER
M1S		THERMISTOR(A.I.R)
Q1M		SELECTOR SWITCH(MAIN/SUB)
		CONNECTOR FOR OPTIONAL PARTS
		CONNECTOR(ADAPTOR FOR WIRING)
		CONNECTOR(WIRING ADAPTOR FOR ELECTRICAL APPENDICES)

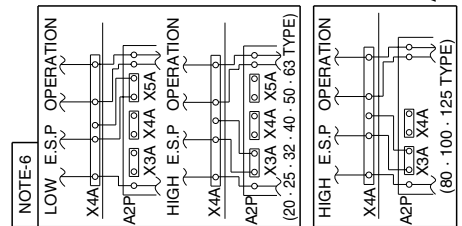
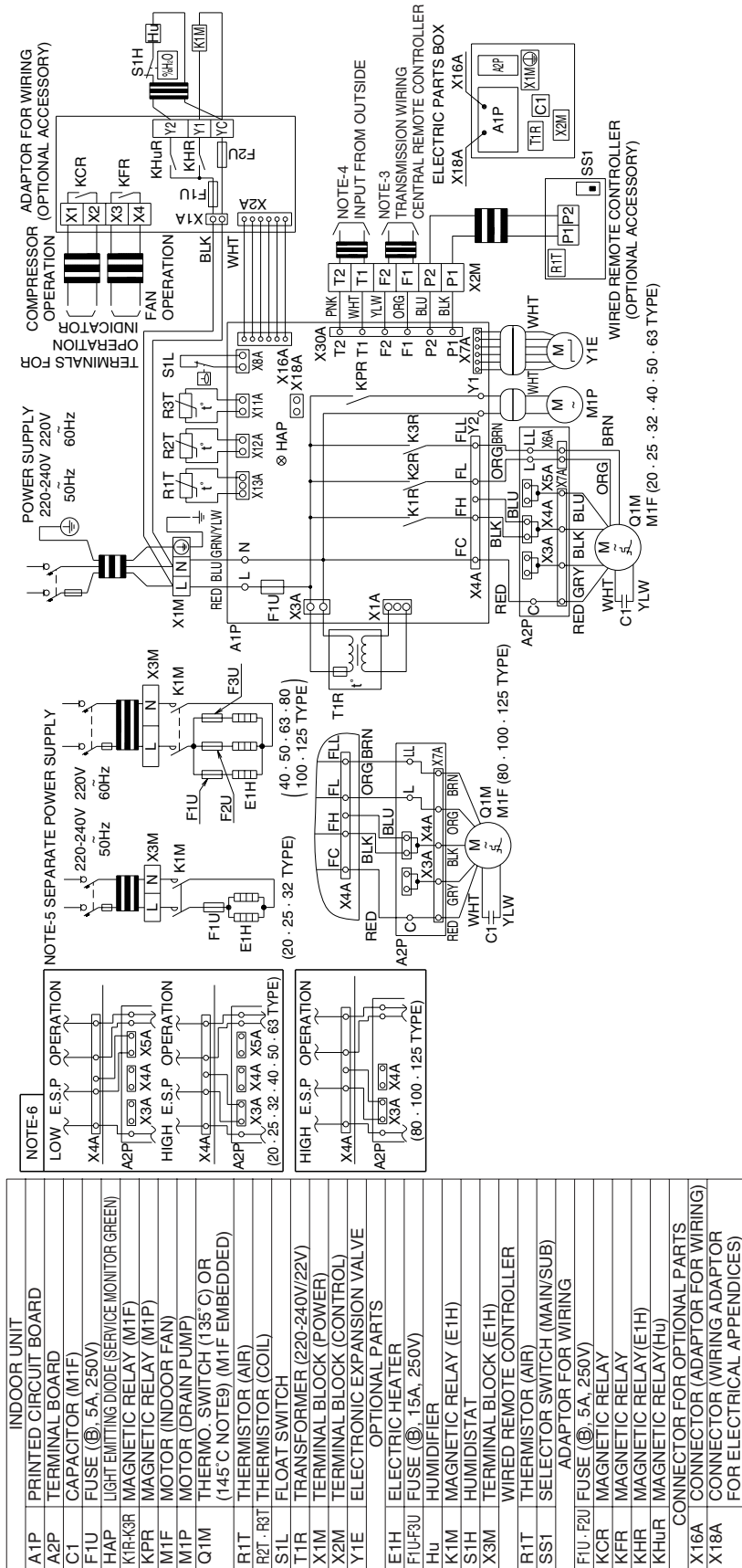
- NOTES) 1. [Symbol] : TERMINAL BLOCK, [Symbol] : CONNECTOR, —○— : TERMINAL
2. [Symbol] : FIELD WIRING
3. IN CASE USING CENTRAL REMOTE CONTROLLER, CONNECT IT TO THE UNIT IN ACCORDANCE WITH THE ATTACHED INSTRUCTION MANUAL.
4. WHEN CONNECTING THE INPUT WIRES FROM OUTSIDE, FORCED OFF OR ON/OFF CONTROL OPERATION CAN BE SELECTED BY REMOTE CONTROLLER. IN DETAILS, REFER TO THE INSTALLATION MANUAL ATTACHED THE UNIT.
5. IN CASE HIGH E.S.P. OPERATION, CHANGE OVER THE WIRING CONNECTION FROM X2A TO X3A.
6. SYMBOLS SHOW AS FOLLOWS, (PNK:PINK WHT:WHITE YLM:YELLOW ORG:ORANGE BLU:BLUE BLK:BLACK RED:RED BRN: BROWN GRY:GRAY)
7. USE COPPER CONDUCTORS ONLY.

FXDQ20PB / 25PB / 32PB
FXDQ40NB / 50NB / 63NBVET (without Drain Pump)



3D060548

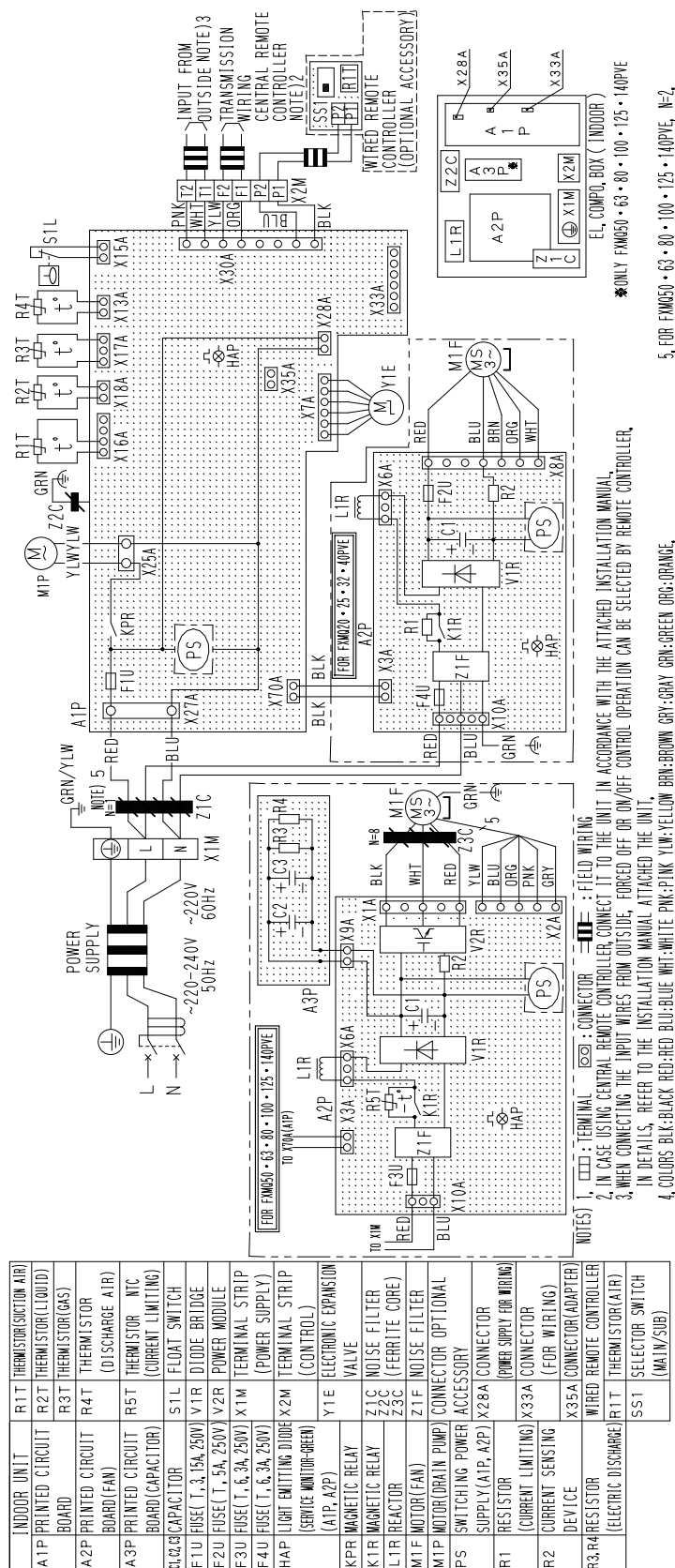
FXSQ20M / 25M / 32M / 40M / 50M / 63M / 80M / 100M / 125MVE



- NOTES)
1. □ : TERMINAL BLOCK, □ : CONNECTOR, ○ : TERMINAL
 2. ■ : FIELD WIRING
 3. IN CASE USING CENTRAL REMOTE CONTROLLER, CONNECT IT TO THE UNIT IN ACCORDANCE WITH THE ATTACHED INSTRUCTION MANUAL.
 4. WHEN CONNECTING THE INPUT WIRES FROM OUTSIDE, FORCED OFF OR ON/OFF CONTROL OPERATION CAN BE SELECTED BY REMOTE CONTROLLER. IN DETAILS, REFER TO THE INSTALLATION MANUAL ATTACHED THE UNIT.
 5. IN CASE INSTALLING THE ELECTRIC HEATER, EXECUTE THE ADDITIONAL WIRING FOR HEATER CIRCUIT (K1M, E1H). IN THIS CASE, THE MAIN POWER SUPPLY HAS TO BE SUPPLIED INDEPENDENTLY.
 6. IN CASE HIGH OR LOW E.S.P. OPERATION, CHANGE OVER THE WIRING CONNECTION FROM X4A (OF A2P) TO X3A OR X5A.
 7. SYMBOLS SHOW AS FOLLOWS. (PNK : PINK WHT : WHITE YLW : YELLOW GRY : GRAY ORG : ORANGE BLU : BLUE BLK : BLACK RED : RED BRN : BROWN GRN : GREEN)
 8. USE COPPER CONDUCTORS ONLY.
 9. ONLY 80, 100, 125 TYPE.

3D039561B

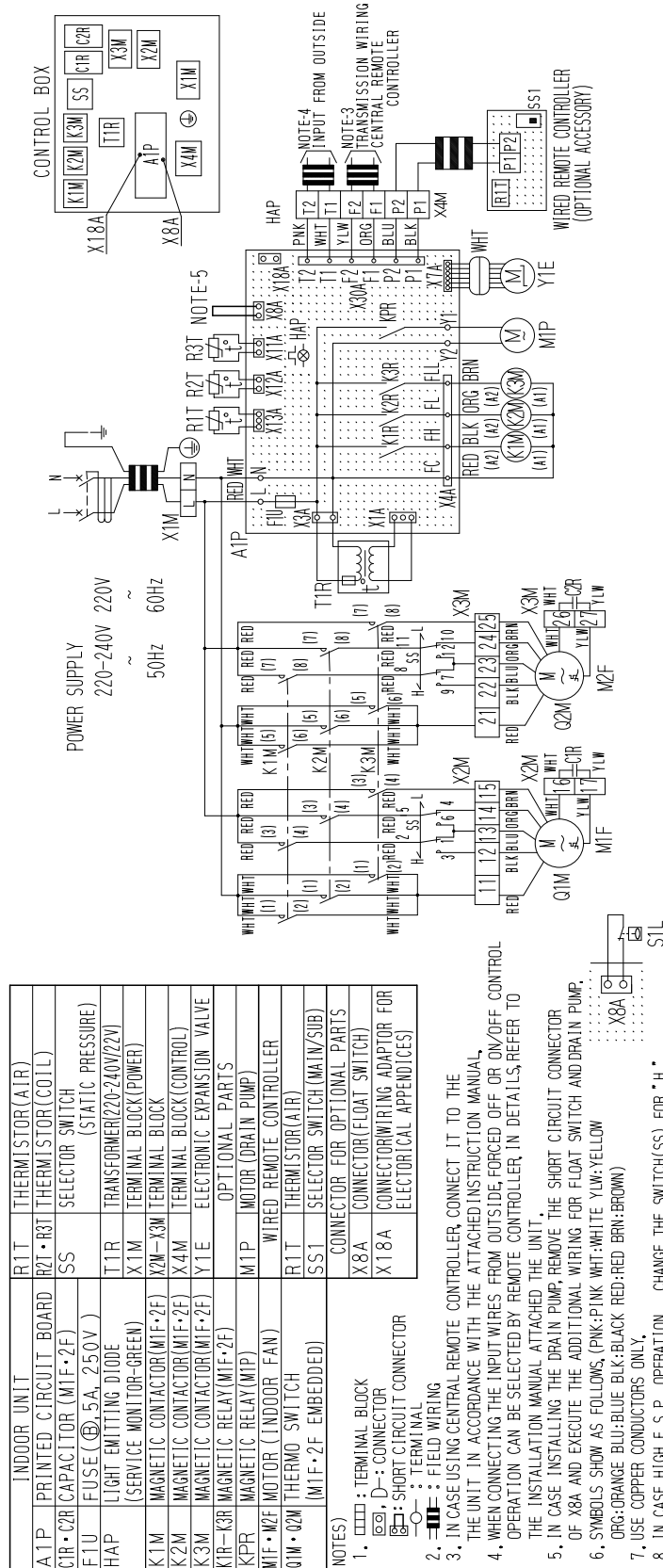
FXMQ20P / 25P / 32P / 40P / 50P / 63P / 80P / 100P / 125P / 140PVE



3D058783D

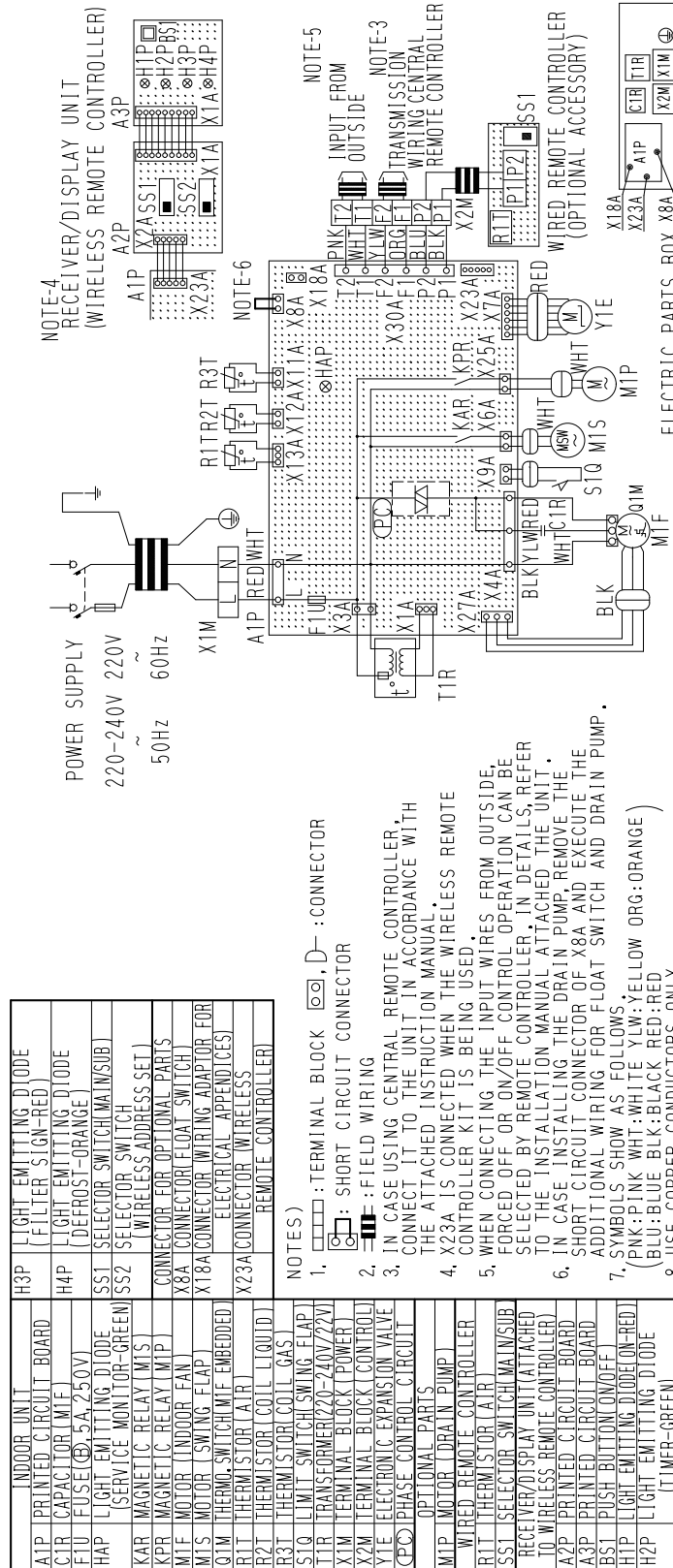
FXMQ200MA / 250MAVE

3D099621C

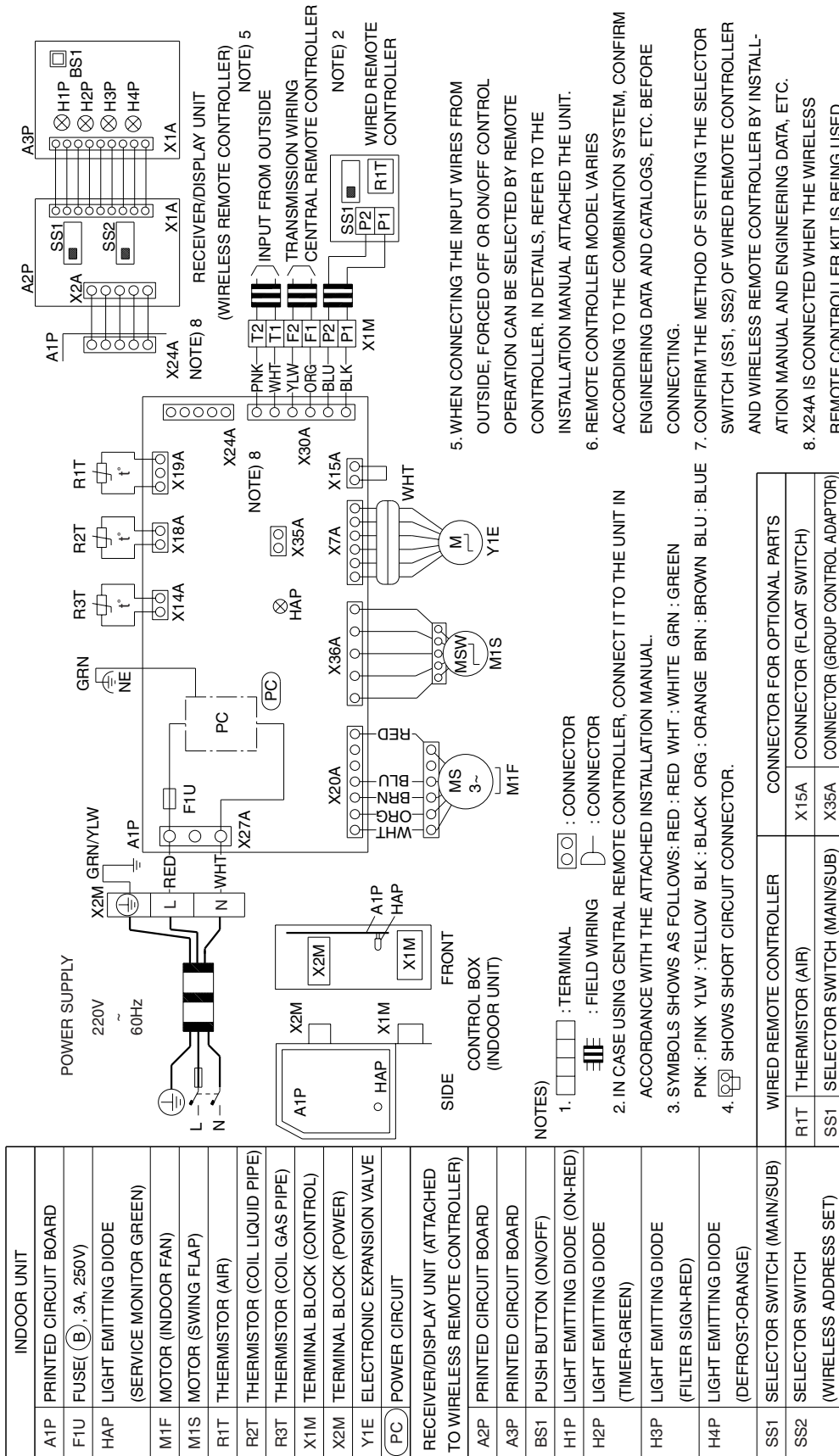


FXHQ32MA / 63MA / 100MAVE

3D039801D

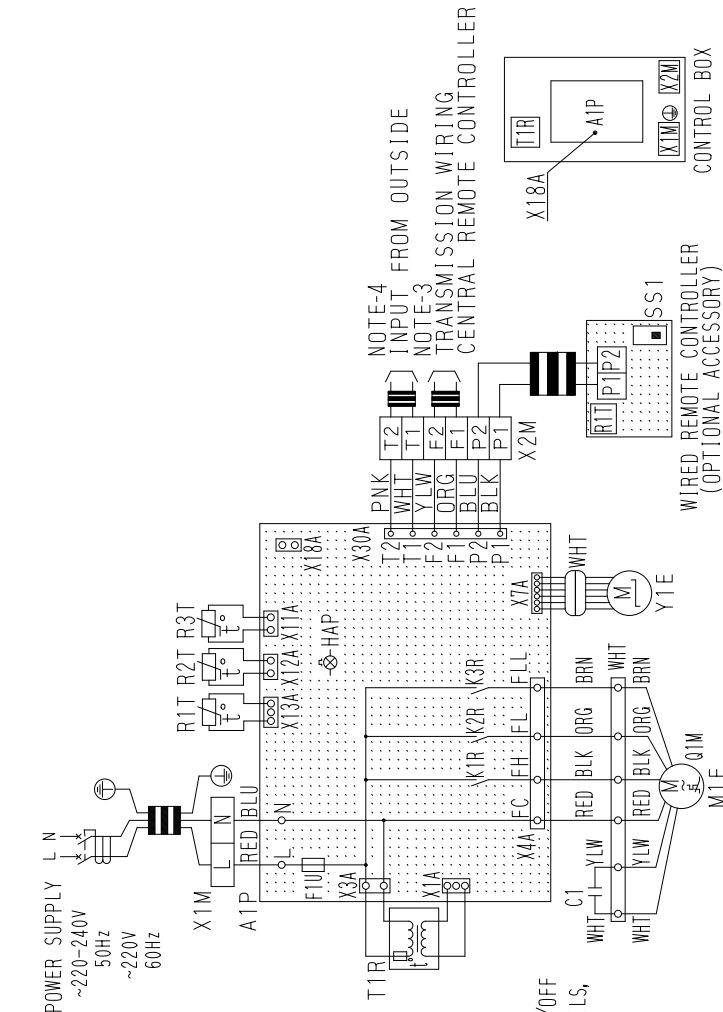


FXAQ20MA / 25MA / 32MAVE / 40MA / 50MA / 63MAVE



3D0034206D

FXLQ20MA / 25MA / 32MA / 40MA / 50MA / 63MAVE
FXNQ20MA / 25MA / 32MA / 40MA / 50MA / 63MAVE



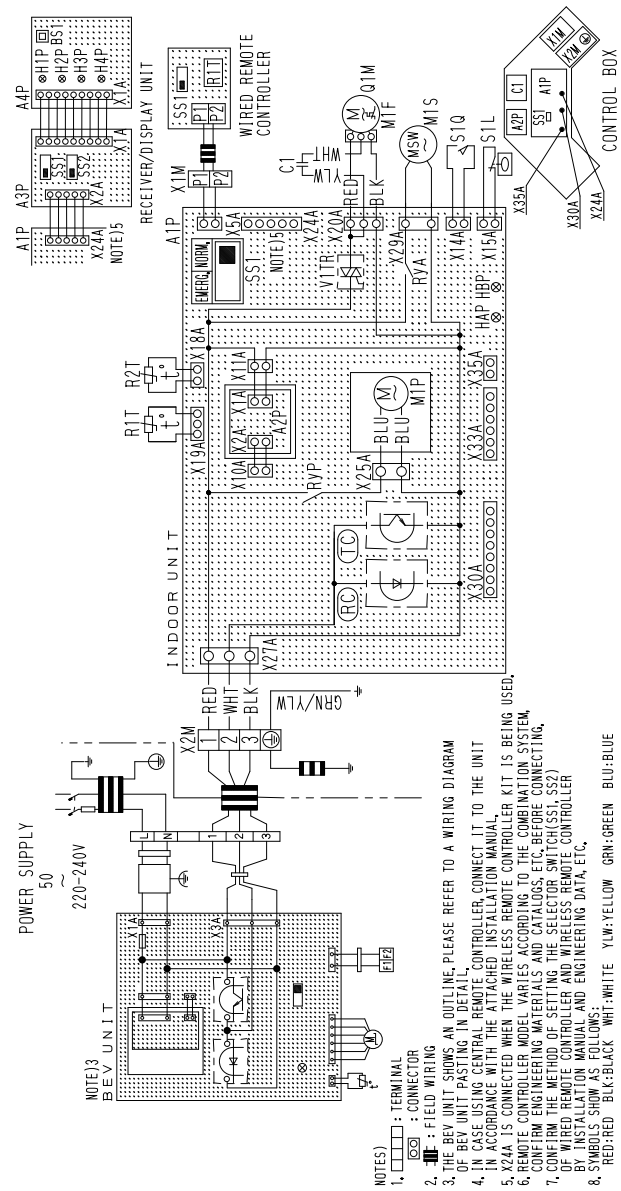
INDOOR UNIT	X2M	TERMINAL BLOCK(CONTROL)
A1P	Y1E	ELECTRONIC EXPANSION VALVE
C1	W1R	WIRED REMOTE CONTROLLER
F1U	R1T	THERMISTOR(AIR)
HAP	SS1	SELECTOR SWITCH(MAIN/SUB)
K1R-K3R	CON	CONNECTOR FOR OPTIONAL PARTS
M1F	X18A	CONNECTOR WIRING ADAPTOR FOR ELECTORICAL APPENDICES
Q1M		
R1T		
R2T-R3T		
T1R		
X1M		

NOTES)

1. □□□□: TERMINAL BLOCK, □□□: CONNECTOR, -○-: TERMINAL
2. —■—: FIELD WIRING
3. IN CASE USING CENTRAL REMOTE CONTROLLER, CONNECT IT TO THE UNIT IN ACCORDANCE WITH THE ATTACHED INSTRUCTION MANUAL.
4. WHEN CONNECTING THE INPUT WIRES FROM OUTSIDE, FORCED OFF OR ON/OFF CONTROL OPERATION CAN BE SELECTED BY REMOTE CONTROLLER. IN DETAILS, REFER TO THE INSTALLATION MANUAL ATTACHED THE UNIT.
5. SYMBOLS SHOW AS FOLLOWS, (PNK:PINK WHT:WHITE YLW:YELLOW ORG:ORANGE BLU:BLUE BLK:BLACK RED:RED BRN:BROWN)
6. USE COPPER CONDUCTORS ONLY.

3D039826F

FXUQ71MA / 100MA / 125MAV1

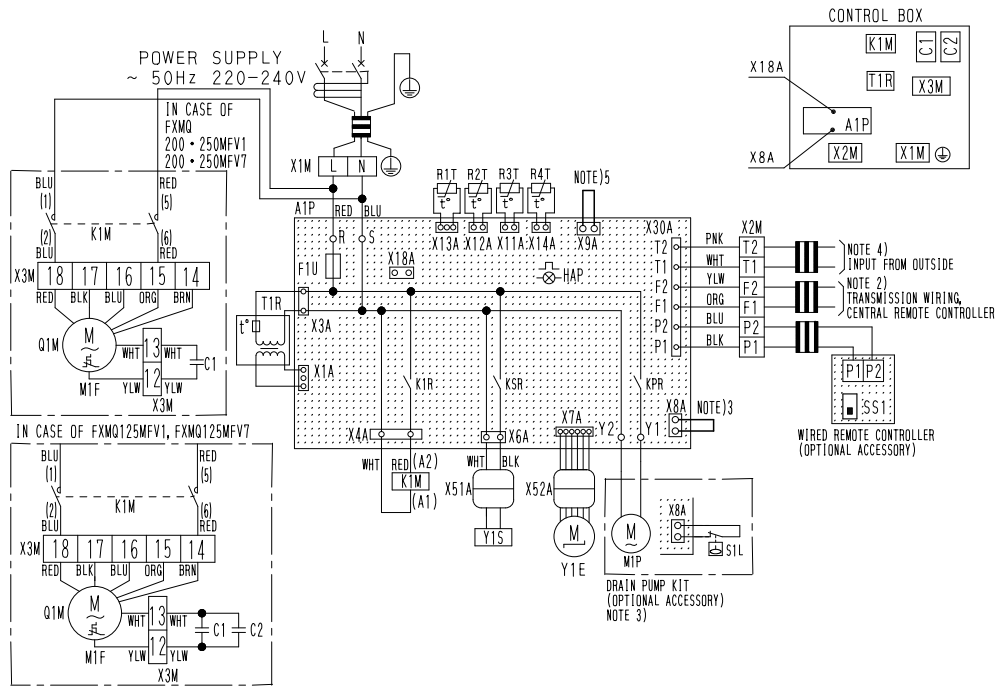


3D044973A

A1P PRINTED CIRCUIT BOARD	WIRED REMOTE CONTROLLER
A2P PRINTED CIRCUIT BOARD	R1T THERMISTOR(AIR)
(TRANSFORMER 220-240V/16V)	SS1 SELECTOR SWITCH(MAIN/SUB)
A3P CAPACITOR(M1F)	RECEIVER/DISPLAY UNIT
HAP LIGHT EMITTING DIODE	(ATTACHED TO WIRELESS REMOTE CONTROLLER)
(SERVICE MONITOR GREEN)	A3P PRINTED CIRCUIT BOARD
HBP LIGHT EMITTING DIODE	A4P PRINTED CIRCUIT BOARD
(SERVICE MONITOR GREEN)	BS1 PUSH BUTTON(ON/OFF)
M1S MOTOR(SWING FLAP)	H1P LIGHT EMITTING DIODE
(ON-RED)	
M1F MOTOR(INDOOR FAN)	H2P LIGHT EMITTING DIODE
(TIMER-GREEN)	
M1P MOTOR(DRAIN PUMP)	H3P LIGHT EMITTING DIODE
(FILLER SIGN-RED)	
R1T THERMISTOR(AIR)	H4P LIGHT EMITTING DIODE
(DEFROST-ORANGE)	
R2T THERMISTOR(COIL)	SS1 SELECTOR SWITCH(MAIN/SUB)
RVA MAGNETIC RELAY(M1A)	(WIRELESS ADDRESS SET)
RVP MAGNETIC RELAY(M1P)	CONNECTOR FOR OPTIONAL PARTS
S1L FLOAT SWITCH	X24A CONNECTOR(WIRELESS REMOTE CONTROLLER)
SS1 SELECTOR SWITCH(EMERGENCY)	X30A CONNECTOR(INTERFACE ADAPTOR FOR SKY AIR SERIES)
VTIR PHASE CONTROL CIRCUIT	X35A CONNECTOR(GROUP CONTROL ADAPTOR)
X1M TERMINAL STRIP	
X2M TERMINAL STRIP	
CSIGNAL SIGNAL RECEIVER	
CSIGNAL TRANSMISSION CIRCUIT	

- NOTES
- : TERMINAL
 - ⊞ : CONNECTOR
 - : FIELD WIRING
 - THE BEV UNIT SHOWS AN OUTLINE, PLEASE REFER TO A WIRING DIAGRAM OF THE BEV UNIT PASTING IN DETAIL.
 - IN CASE USING CENTRAL REMOTE CONTROLLER, CONNECT IT TO THE UNIT IN ACCORDANCE WITH THE ATTACHED INSTALLATION MANUAL.
 - X24A IS CONNECTED WHEN THE WIRELESS REMOTE CONTROLLER KIT IS BEING USED, REMOTE CONTROLLER MODEL VARIES ACCORDING TO THE COMBINATION SYSTEM, CONFIRM THE METHOD OF SETTING THE SELECTOR SWITCH(SS1, SS2) FROM THE ENGINEERING MATERIALS AND CATALOGS, ETC. BEFORE CONNECTING.
 - IF WIRELESS REMOTE CONTROLLER IS USED, CONFIRM THE METHOD OF SETTING THE SELECTOR SWITCH(SS1, SS2) BY REFERENCE TO THE WIRELESS REMOTE CONTROLLER INSTALLATION MANUAL AND ENGINEERING DATA, ETC.
 - SYMBOLS SHOW AS FOLLOWS: RED-RED BLK-BLACK WHI-WHITE YLW-YELLOW GRN-GREEN BLU-BLUE

FXMQ125MF / 200MF / 250MFV1



INDOOR UNIT		X1M	TERMINAL BLOCK (POWER)
A1P	PRINTED CIRCUIT BOARD	X2M	TERMINAL BLOCK (CONTROL)
C1, C2	CAPACITOR (M1F)	X3M	TERMINAL BLOCK
F1U	FUSE (5A, 250V) (A1P)	X51A, X52A	CONNECTOR
HAP	LIGHT EMITTING DIODE (SERVICE MONITOR-GREEN)	Y1E	ELECTRIC EXPANSION VALVE
K1M	MAGNETIC RELAY (M1F)	Y1S	SOLENOID VALVE (HOT GAS)
K1R	MAGNETIC RELAY (M1F)		OPTIONAL PARTS
KPR	MAGNETIC RELAY (M1P)	M1P	MOTOR (DRAIN PUMP)
KSR	MAGNETIC RELAY (Y1S)	S1L	FLOAT SWITCH (DRAIN PUMP)
M1F	MOTOR (FAN)		
Q1M	THERMAL PROTECTOR (M1F EMBEDDED 135℃)		WIRED REMOTE CONTROLLER
		SS1	SELECT SWITCH (MAIN/SUB)
R1T	THERMISTOR (SUCTION AIR)		
R2T	THERMISTOR (COIL, LIQUID)		CONNECTOR FOR OPTIONAL PARTS
R3T	THERMISTOR (COIL, GAS)	X18A	CONNECTOR (WIRING ADAPTOR FOR ELECTRICAL APPENDICES)
R4T	THERMISTOR (DISCHARGE AIR)		
T1R	TRANSFORMER (220-240V/22V)		

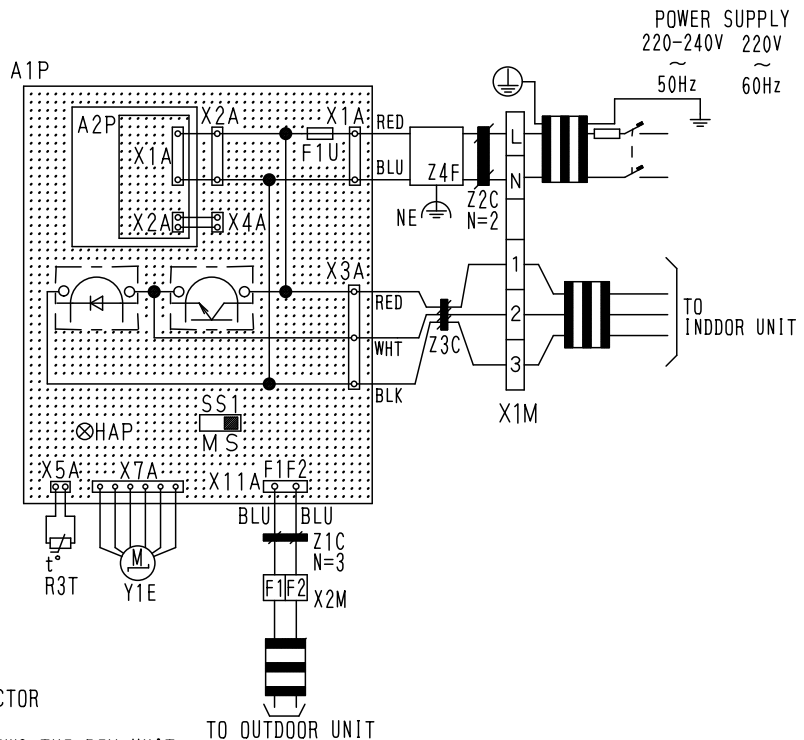
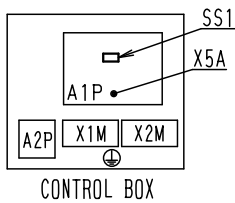
NOTES

1. □: TERMINAL BLOCK, ⊞, D: CONNECTOR, ○: TERMINAL, ⊞: SHORT CIRCUIT CONNECTOR, ■: FIELD WIRING.
2. IN CASE USING CENTRAL REMOTE CONTROLLER, CONNECT IT TO THE UNIT IN ACCORDANCE WITH THE ATTACHED INSTRUCTION MANUAL.
3. IN CASE INSTALLING THE DRAIN PUMP KIT, REMOVE THE SHORT CIRCUIT CONNECTOR OF X8A AND EXECUTE THE ADDITIONAL WIRING FOR FLOAT SWITCH AND DRAIN PUMP.
4. IN CASE CONNECTING THE INPUT WIRES FROM OUTSIDE, FORCED OFF OR ON/OFF CONTROL OPERATION CAN BE SELECTED BY REMOTE CONTROLLER. IN DETAILS, REFER TO THE INSTALLATION MANUAL ATTACHED TO THE UNIT.
5. DO NOT REMOVE SHORT CIRCUIT CONNECTOR OF X9A.
6. SYMBOLS SHOW AS FOLLOWS. (PNK: PINK WHT: WHITE YLW: YELLOW ORG: ORANGE BLU: BLUE BLK: BLACK RED: RED BRN: BROWN)

3D044996D

BEVQ71MA / 100MA / 125MAVE

BEV UNIT	
A1P	PRINTED CIRCUIT BOARD ASSY
A2P	POWER SUPPLY PRINTED CIRCUIT BOARD ASSY(220-240V/16V)
F1U	FUSE(ⓑ, 10A, 250V)
HAP	LIGHT EMITTING DIODE (SERVICE MONITOR-GRREN)
R3T	THERMISTOR(GAS)
SS1	SELECTOR SWITCH(M/S)
X1M	TERMINAL STRIP(POWER)
X2M	TERMINAL STRIP(TRANSMISSION)
Y1E	ELECTRONIC EXPANSION VALVE
Z1C · Z2C Z3C · Z4F	NOISE FILTER



注) 1. □□□□ : TERMINAL □○□ : CONNECTOR

2. ≡≡≡ : FIELD WIRING

3. THIS WIRING DIAGRAM ONLY SHOWS THE BEV UNIT, SEE THE WIRING DIAGRAMS AND INSTALLATION MANUALS FOR THE WIRING AND SETTINGS FOR THE INDOOR, OUTDOOR, AND BS UNITS.

4. SEE THE INDOOR UNIT'S WIRING DIAGRAM WHEN INSTALLING OPTIONAL PARTS FOR THE INDOOR UNIT.

5. ONLY ONE INDOOR UNIT MAY BE CONNECTED TO THE BEV UNIT.

6. ALWAYS USE THE SKY AIR CONNECTION ADAPTER FOR THE INDOOR UNIT WHEN CONNECTING THE REMOTE CONTROL.

7. COOL/HEAT CHANGEOVER OF INDOOR UNITS CONNECTED TO BEV UNIT CANNOT BE CARRIED OUT UNLESS THEY ARE CONNECTED TO BS UNIT.

8. SET THE SS1 TO "M" ONLY FOR THE BEV UNIT CONNECTED TO THE INDOOR UNIT WHICH IS TO HAVE COOL/HEAT SWITCHING CAPABILITY, WHEN CONNECTING THE BS UNIT.

THE "M/S" ON THE SS1 STANDS FOR "MAIN/SUB".

THIS IS SET TO "S" WHEN SHIPPED FROM THE FACTORY.

9. CONNECT THE ATTACHED THERMISTOR TO THE R3T.

10. SYMBOLS SHOW AS FOLLOWS,

(BLU:BLUE RED:RED WHT:WHITE BLK:BLACK)

3D044901B

3. List of Electrical and Functional Parts

3.1 Outdoor Unit

3.1.1 RXYQ5PAY1~8PAY1

Item	Name		Symbol	Model	
				RXYQ5PAY1	RXYQ8PAY1
Compressor	Inverter	Type	M1C	JT1GCVDKYR@SB	
		OC protection device		14.7A	
	STD 1	Type	M2C	—	
		OC protection device		—	
	STD 2	Type	M3C	—	
		OC protection device		—	
Fan motor		OC protection device	M1F	1.15A	3A
Electronic expansion valve coil (Main)			Y1E	Fully closed: 0pls	Fully open: 480pls
Electronic expansion valve coil (Subcooling)			Y2E	—	Fully closed: 0pls Fully open: 480pls
Pressure protection	High pressure switch	For M1C	S1PH	OFF: $4.0^{+0}_{-0.12}$ MPa ON: 3.0 ± 0.15 MPa	
		For M2C	S2PH	—	
		For M3C	S3PH	—	
	Low pressure sensor		S1NPL	OFF: 0.07MPa	
Temperature protection	Discharge gas temperature protection (Discharge pipe thermistor)		R3T	OFF: 135°C	
	Inverter fin temperature protection (Radiator fin thermistor)		R1T	OFF: 93°C	
Others	Fuse	For main PCB	A1P	250V, 15A	
			A2P	250V, 3A	
		For Noise filter PCB	F1U	250V AC 5A Class B	

3.1.2 RXYQ10PAY1~12PAY1

Item	Name		Symbol	Model	
				RXYQ10PAY1	RXYQ12PAY1
Compressor	Inverter	Type	M1C	JT1GCVDKYR@SB	
		OC protection device		14.7A	
	STD 1	Type	M2C	JT170G-KYE@T	
		OC protection device		15.0A	
	STD 2	Type	M3C	—	
		OC protection device			
Fan motor		OC protection device	M1F	3A	1.15A
Electronic expansion valve coil (Main)			Y1E	Fully closed: 0pls	Fully open: 480pls
Electronic expansion valve coil (Subcooling)			Y2E	Fully closed: 0pls	Fully open: 480pls
Pressure protection	High pressure switch	For M1C	S1PH	OFF: $4.0^{+0}_{-0.12}$ MPa ON: 3.0 ± 0.15 MPa	
		For M2C	S2PH	OFF: $4.0^{+0}_{-0.12}$ MPa ON: 3.0 ± 0.15 MPa	
		For M3C	S3PH	—	
	Low pressure sensor		S1NPL	OFF: 0.07MPa	
Temperature protection	Discharge gas temperature protection (Discharge pipe thermistor)		R3T	OFF: 135°C	
	Inverter fin temperature protection (Radiator fin thermistor)		R1T	OFF: 93°C	
Others	Fuse	For main PCB	A1P	250V, 15A	
			A2P	250V, 3A	
		For Noise filter PCB	F1U	250V AC 5A Class B	

Item	Name		Symbol	Model		
				RXYQ14PAY1	RXYQ16PAY1	RXYQ18PAY1
Compressor	Inverter	Type	M1C	JT1GCVDKYR@SB		
		OC protection device		14.7A		
	STD 1	Type	M2C	JT170G-KYE@T		
		OC protection device		15.0A		
	STD 2	Type	M3C	JT170G-KYE@T		
		OC protection device		15.0A		
Fan motor		OC protection device	M1F	1.15A		3A
Electronic expansion valve coil (Main)			Y1E	Fully closed: 0pls Fully open: 480pls		
Electronic expansion valve coil (Subcooling)			Y2E	Fully closed: 0pls Fully open: 480pls		
Pressure protection	High pressure switch	For M1C	S1PH	OFF: $4.0^{+0}_{-0.12}$ MPa ON: 3.0 ± 0.15 MPa		
		For M2C	S2PH	OFF: $4.0^{+0}_{-0.12}$ MPa ON: 3.0 ± 0.15 MPa		
		For M3C	S3PH	OFF: $4.0^{+0}_{-0.12}$ MPa ON: 3.0 ± 0.15 MPa		
	Low pressure sensor		S1NPL	OFF: 0.07MPa		
Temperature protection	Discharge gas temperature protection (Discharge pipe thermistor)		R3T	OFF: 135°C		
	Inverter fin temperature protection (Radiator fin thermistor)		R1T	OFF: 93°C		
Others	Fuse	For main PCB	A1P	250V, 15A		
			A2P	250V, 3A		
		For Noise filter PCB	F1U	250V AC 5A Class B		

3.2 Outdoor Unit - 60Hz

3.2.1 RXYQ5 / 8PAYL, PTL

Item	Name		Symbol	Model	
				RXYQ5PAYL	RXYQ8PAYL
Compressor	Inverter	Type	M1C	JT1GCVDKYR@SB	
		OC protection device		14.7A	
	STD 1	Type	M2C	—	
		OC protection device		—	
	STD 2	Type	M3C	—	
		OC protection device		—	
Fan motor	OC protection device		M1F	1.15A	3A
Electronic expansion valve (Main)			Y1E	Fully closed: 0pls	Fully open: 480pls
Electronic expansion valve (Subcooling)			Y2E	—	Fully closed: 0pls Fully open: 480pls
Pressure protection	High pressure switch	For M1C	S1PH	OFF: $4.0^{+0}_{-0.12}$ MPa ON: 3.0 ± 0.15 MPa	
		For M2C	S2PH	—	
		For M3C	S3PH	—	
	Low pressure sensor		S1NPL	OFF: 0.07MPa	
Temperature protection	Discharge gas temperature protection (Discharge pipe thermistor)		R3T	OFF: 135°C	
	Inverter fin temperature protection (Radiator fin thermistor)		R1T	OFF: 93°C	
Others	Fuse	For main PCB	A1P	250V, 15A	
			A2P	250V, 3A (PTL : 250V, 15A)	
		For Noise filter PCB	F1U	250V AC 6.3A Class B	

Item	Name		Symbol	Model	
				RXYQ5PTL	RXYQ8PTL
Compressor	Inverter	Type	M1C	JT100GCVDK@SB	
		OC protection device		26.5A	
	STD 1	Type	M2C	—	
		OC protection device		—	
	STD 2	Type	M3C	—	
		OC protection device		—	
Fan motor		OC protection device	M1F	2.3A	5.5A
Electronic expansion valve (Main)			Y1E	Fully closed: 0pls	Fully open: 480pls
Electronic expansion valve (Subcooling)			Y2E	—	Fully closed: 0pls Fully open: 480pls
Pressure protection	High pressure switch	For M1C	S1PH	OFF: $4.0^{+0}_{-0.12}$ MPa ON: 3.0 ± 0.15 MPa	
		For M2C	S2PH	—	
		For M3C	S3PH	—	
	Low pressure sensor		S1NPL	OFF: 0.07MPa	
Temperature protection	Discharge gas temperature protection (Discharge pipe thermistor)		R3T	OFF: 135°C	
	Inverter fin temperature protection (Radiator fin thermistor)		R1T	OFF: 93°C	
Others	Fuse	For main PCB	A1P	250V, 15A	
			A2P	250V, 3A (PTL : 250V, 15A)	
		For Noise filter PCB	F1U	—	

3.2.2 RXYQ10 / 12PAYL, PTL

Item	Name		Symbol	Model	
				RXYQ10PAYL	RXYQ12PAYL
Compressor	Inverter	Type	M1C	JT1GCVDKYR@SB	
		OC protection device		14.7A	
	STD 1	Type	M2C	JT170G-KYH@T	
		OC protection device		15.0A	
	STD 2	Type	M3C	—	
		OC protection device			
Fan motor		OC protection device	M1F	3A	1.15A
			M2F	—	1.15A
Electronic expansion valve (Main)			Y1E	Fully closed: 0pls	Fully open: 480pls
Electronic expansion valve (Subcooling)			Y2E	Fully closed: 0pls	Fully open: 480pls
Pressure protection	High pressure switch	For M1C	S1PH	OFF: $4.0^{+0}_{-0.12}$ MPa ON: 3.0 ± 0.15 MPa	
		For M2C	S2PH	OFF: $4.0^{+0}_{-0.12}$ MPa ON: 3.0 ± 0.15 MPa	
		For M3C	S3PH	—	
	Low pressure sensor		S1NPL	OFF: 0.07MPa	
Temperature protection	Discharge gas temperature protection (Discharge pipe thermistor)		R3T	OFF: 135°C	
	Inverter fin temperature protection (Radiator fin thermistor)		R1T	OFF: 93°C	
Others	Fuse	For main PCB	A1P	250V, 15A	
			A2P	250V, 3A (PTL : 250V, 15A)	
		For Noise filter PCB	F1U	250V AC 6.3A Class B	

Item	Name		Symbol	Model	
				RXYQ10PTL	RXYQ12PTL
Compressor	Inverter	Type	M1C	JT100GCVDK@SB	
		OC protection device		26.5A	
	STD 1	Type	M2C	JT170G-K	
		OC protection device		28.8A	
	STD 2	Type	M3C	—	
		OC protection device		—	
Fan motor		OC protection device	M1F	5.5A	2.3A
			M2F	—	2.3A
Electronic expansion valve (Main)			Y1E	Fully closed: 0pls Fully open: 480pls	
Electronic expansion valve (Subcooling)			Y2E	Fully closed: 0pls Fully open: 480pls	
Pressure protection	High pressure switch	For M1C	S1PH	OFF: $4.0^{+0}_{-0.12}$ MPa ON: 3.0 ± 0.15 MPa	
		For M2C	S2PH	OFF: $4.0^{+0}_{-0.12}$ MPa ON: 3.0 ± 0.15 MPa	
		For M3C	S3PH	—	
	Low pressure sensor		S1NPL	OFF: 0.07MPa	
Temperature protection	Discharge gas temperature protection (Discharge pipe thermistor)		R3T	OFF: 135°C	
	Inverter fin temperature protection (Radiator fin thermistor)		R1T	OFF: 93°C	
Others	Fuse	For main PCB	A1P	250V, 15A	
			A2P	250V, 3A (PTL : 250V, 15A)	
		For Noise filter PCB	F1U	—	

3.2.3 RXYQ14 / 16 / 18PAYL, PTL

Item	Name		Symbol	Model		
				RXYQ14PAYL	RXYQ16PAYL	RXYQ18PAYL
Compressor	Inverter	Type	M1C	JT1GCVDKYR@SB		
		OC protection device		14.7A		
	STD 1	Type	M2C	JT170G-KYH@T		
		OC protection device		15.0A		
	STD 2	Type	M3C	JT170G-KYH@T		
		OC protection device		15.0A		
Fan motor	OC protection device	M1F	1.15A		3A	
		M2F	1.15A		3A	
Electronic expansion valve (Main)			Y1E	Fully closed: 0pls Fully open: 480pls		
Electronic expansion valve (Subcooling)			Y2E	Fully closed: 0pls Fully open: 480pls		
Pressure protection	High pressure switch	For M1C	S1PH	OFF: $4.0^{+0}_{-0.12}$ MPa ON: 3.0 ± 0.15 MPa		
		For M2C	S2PH	OFF: $4.0^{+0}_{-0.12}$ MPa ON: 3.0 ± 0.15 MPa		
		For M3C	S3PH	OFF: $4.0^{+0}_{-0.12}$ MPa ON: 3.0 ± 0.15 MPa		
	Low pressure sensor		S1NPL	OFF: 0.07MPa		
Temperature protection	Discharge gas temperature protection (Discharge pipe thermistor)		R3T	OFF: 135°C		
	Inverter fin temperature protection (Radiator fin thermistor)		R1T	OFF: 93°C		
Others	Fuse	For main PCB	A1P	250V, 15A		
			A2P	250V, 3A (PTL : 250V, 15A)		
		For Noise filter PCB	F1U	250V AC 6.3A Class B		

Item	Name		Symbol	Model		
				RXYQ14PTL	RXYQ16PTL	RXYQ18PTL
Compressor	Inverter	Type	M1C	JT100GCVDK@SB		
		OC protection device		26.5A		
	STD 1	Type	M2C	JT170G-K		
		OC protection device		28.8A		
	STD 2	Type	M3C	JT170G-K		
		OC protection device		28.8A		
Fan motor		OC protection device	M1F	2.3A		5.5A
			M2F	2.3A		5.5A
Electronic expansion valve (Main)			Y1E	Fully closed: 0pls Fully open: 480pls		
Electronic expansion valve (Subcooling)			Y2E	Fully closed: 0pls Fully open: 480pls		
Pressure protection	High pressure switch	For M1C	S1PH	OFF: $4.0^{+0}_{-0.12}$ MPa ON: 3.0 ± 0.15 MPa		
		For M2C	S2PH	OFF: $4.0^{+0}_{-0.12}$ MPa ON: 3.0 ± 0.15 MPa		
		For M3C	S3PH	OFF: $4.0^{+0}_{-0.12}$ MPa ON: 3.0 ± 0.15 MPa		
	Low pressure sensor		S1NPL	OFF: 0.07MPa		
Temperature protection	Discharge gas temperature protection (Discharge pipe thermistor)		R3T	OFF: 135°C		
	Inverter fin temperature protection (Radiator fin thermistor)		R1T	OFF: 93°C		
Others	Fuse	For main PCB	A1P	250V, 15A		
			A2P	250V, 3A (PTL : 250V, 15A)		
		For Noise filter PCB	F1U	—		

3.3 Indoor Unit

Parts Name		Symbol	Model							Remark
			FXFQ25 PVE	FXFQ32 PVE	FXFQ40 PVE	FXFQ50 PVE	FXFQ63 PVE	FXFQ80 PVE	FXFQ100 PVE	
Remote Controller	Wired Remote Controller		BRC1D61 / BRC1E61							Option
	Wireless Remote Controller		BRC7F634F							
Motors	Fan Motor	M1F	DC280V 56W 8P					DC 320V 120W 8P		
	Drain Pump	M1P	AC220-240V (50Hz) AC220V (60Hz) PLD-12230DM Thermal Fuse 145°C							
	Swing Motor	M1S	MP35HCA[3P080801-1] Stepping Motor DC12V							
Thermistors	Thermistor (Suction Air)	R1T	In PCB A2P or wired remote controller							
	Thermistor (for Heat Exchanger High Temp.)	R3T	ST8605-14 φ8 L1000 20kΩ (25°C)							
	Thermistor (Heat Exchanger)	R2T	ST8602A-15 φ6 L1000 20kΩ (25°C)							
Others	Float Switch	S1L	FS-0211B							
	Fuse	F1U	250V 5A φ5.2							
	Thermal Fuse	TFu	—							
	Transformer	T1R	—							

Parts Name		Symbol	Model							Remark
			FXCQ 20MVE	FXCQ 25MVE	FXCQ 32MVE	FXCQ 40MVE	FXCQ 50MVE	FXCQ 63MVE	FXCQ 80MVE	
Remote Controller	Wired Remote Controller		BRC1D61 / BRC1E61							Option
	Wireless Remote Controller		BRC7C62							
Motors	Fan Motor	M1F	AC 220~240V 50Hz							
			1φ10W	1φ15W	1φ20W	1φ30W	1φ50W	1φ85W		
			Thermal Fuse 152°C			—	Thermal protector 135°C : OFF 87°C : ON			
	Drain Pump	M1P	AC220-240V (50Hz) AC220V (60Hz) PLD-12230DM Thermal Fuse 145°C							
	Swing Motor	M1S	MT8-L[3PA07509-1] AC200~240V							
Thermistors	Thermistor (Suction Air)	R1T	ST8601-6 φ4 L1250 20kΩ (25°C)							
	Thermistor (for Heat Exchanger High Temp.)	R3T	ST8605-6 φ8 L1250 20kΩ (25°C)							
	Thermistor (Heat Exchanger)	R2T	ST8602A-5 φ6 L1000 20kΩ (25°C)							
Others	Float Switch	S1L	FS-0211B							
	Fuse	F1U	250V 5A φ5.2							
	Transformer	T1R	TR22H21R8							

Parts Name		Symbol	Model				Remark
			FXKQ 25MAVE	FXKQ 32MAVE	FXKQ 40MAVE	FXKQ 63MAVE	
Remote Controller	Wired Remote Controller		BRC1D61 / BRC1E61				Option
	Wireless Remote Controller		BRC4C61				
Motors	Fan Motor	M1F	AC 220~240V 50Hz				
			1φ15W 4P		1φ20W 4P	1φ45W 4P	
			Thermal Fuse 146°C		Thermal protector 120°C : OFF 105°C : ON		
	Drain Pump	M1P	AC 220-240V (50Hz) PLD-12200DM Thermal Fuse 145°C				
Swing Motor	M1S	MP35HCA [3P080801-1] AC200~240V					
Thermistors	Thermistor (Suction Air)	R1T	ST8601-13 φ4 L630 20kΩ (25°C)				
	Thermistor (for Heat Exchanger High Temp.)	R3T	ST8605-7 φ8 L1600 20kΩ (25°C)				
	Thermistor (Heat Exchanger)	R2T	ST8602A-7 φ6 L1600 20kΩ (25°C)				
Others	Float Switch	S1L	FS-0211B				
	Fuse	F1U	250V 5A φ5.2				
	Transformer	T1R	TR22H21R8				

Parts Name		Symbol	Model						Remark
			FXDQ 20PBVE(T)	FXDQ 25PBVE(T)	FXDQ 32PBVE(T)	FXDQ 40NBVE(T)	FXDQ 50NBVE(T)	FXDQ 63NBVE(T)	
Remote Controller	Wired Remote Controller		BRC1D61 / BRC1E61						Option
	Wireless Remote Controller		BRC4C65						
Motors	Fan Motor	M1F	AC 220~240V 50Hz						
			1φ62W			1φ130W			
			Thermal protector 130°C: OFF, 83°C: ON						
Drain Pump	M1P	AC220-240V (50Hz) PLD-12230DM Thermal Fuse 145°C						*	
Thermistors	Thermistor (Suction Air)	R1T	ST8601-1 φ4 L=250 20kΩ (25°C)						
	Thermistor (for Heat Exchanger High Temp.)	R3T	ST8605-4 φ8 L=800 20kΩ (25°C)						
	Thermistor (Heat Exchanger)	R2T	ST8602A-4 φ6 L=800 20kΩ (25°C)						
Others	Float Switch	S1L	FS-0211E						*
	Fuse	F1U	250V 5A φ5.2						
	Transformer	T1R	TR22H21R8						

*only for FXDQ20~63N(B)VE, FXDQ20~32PBVE (with Drain Pump Type)

Parts Name		Symbol	Model									Remark
			FXSQ 20MVE	FXSQ 25MVE	FXSQ 32MVE	FXSQ 40MVE	FXSQ 50MVE	FXSQ 63MVE	FXSQ 80MVE	FXSQ 100MVE	FXSQ 125MVE	
Remote Controller	Wired Remote Controller		BRC1D61 / BRC1E61									Option
	Wireless Remote Controller		BRC4C62									
Motors	Fan Motor	M1F	AC 220~240V 50Hz									
			1φ50W			1φ65W	1φ85W	1φ125W	1φ225W			
	Thermal Fuse 152°C						Thermal protector 135°C : OFF 87°C : ON					
Thermistors	Drain Pump	M1P	AC220-240V (50Hz) PLD-1223ODM Thermal Fuse 145°C									
	Thermistor (Suction Air)	R1T	ST8601-4 φ4 L800 20kΩ (25°C)									
	Thermistor (for Heat Exchanger High Temp.)	R3T	ST8605-7 φ8 L1600 20kΩ (25°C)									
Others	Thermistor (Heat Exchanger)	R2T	ST8602A-6 φ6 L1250 20kΩ (25°C)									
	Float Switch	S1L	FS-0211B									
	Fuse	F1U	250V 5A φ5.2									
	Transformer	T1R	TR22H21R8									

Parts Name		Symbol	Model										Remark
			FXMQ 20PVE	FXMQ 25PVE	FXMQ 32PVE	FXMQ 40PVE	FXMQ 50PVE	FXMQ 63PVE	FXMQ 80PVE	FXMQ 100PVE	FXMQ 125PVE	FXMQ 140PVE	
Remote Controller	Wired Remote Controller		BRC1D61 / BRC1E61										
	Wireless Remote Controller		BRC4C65										
Motors	Fan Motor	M1F	DC280V 140W 8P					DC373V 350W 8P					
	Drain Pump	M1P	AC220-240V (50/60Hz) PLD-1223ODM Thermal protector 145°C										
Thermistors	Thermistor (Suction Air)	R1T	ST8601-3 φ L630 20kΩ (25°C)										
	Thermistor (for Heat Exchanger High Temp.)	R3T	ST8605-14 φ8 L1000 20kΩ (25°C)										
	Thermistor (for Heat Exchanger)	R2T	ST8602A-6 φ8 L1250 20kΩ (25°C)										
Others	Float Switch	S1L	FS-0211B										
	Fuse (A1P)	F1U	250V 3.15A										
	Fuse (A2P, A3P)	F3U F4U	250V 6.3A										
	Fuse (A2P)	F2U	250V 5A					—					

Parts Name		Symbol	Model		Remark
			FXMQ200MAVE	FXMQ250MAVE	
Remote Controller	Wired Remote Controller		BRC1D61 / BRC1E61		Option
	Wireless Remote Controller		BRC4C62		
Motors	Fan Motor	M1F	AC 220~240V 50Hz 1φ380W×2		
	Capacitor for Fan Motor	C1R	10μ F 400V	12μ F 400V	
Thermistors	Thermistor (Suction Air)	R1T	ST8601A-13 φ4 L630		
	Thermistor (for Heat Exchanger High Temp.)	R3T	ST8605A-5 φ8 L1000		
	Thermistor (Heat Exchanger)	R2T	ST8602A-6 φ6 L1250		
Others	Float switch	S1L	FS-0211		
	Fuse	F1U	250V 5A φ5.2		
	Transformer	T1R	TR22H21R8		

Parts Name		Symbol	Model			Remark
			FXHQ 32MAVE	FXHQ 63MAVE	FXHQ 100MAVE	
Remote Controller	Wired Remote Controller		BRC1D61 / BRC1E61			Option
	Wireless Controller		BRC7E63W			
Motors	Fan Motor	M1F	AC 220~240V/220V 50Hz/60Hz			
			1φ63W	1φ130W		
			Thermal protector 130°C : OFF 80°C : ON			
	Capacitor for Fan Motor	C1R	3.0μF-400V	9.0μF-400V		
	Swing Motor	M1S	MT8-L[3P058751-1] AC200~240V			
Thermistors	Thermistor (Suction Air)	R1T	ST8601A-1 φ4 L250 20kΩ (25°C)			
	Thermistor (for Heat Exchanger High Temp.)	R3T	ST8605-6 φ8 L = 1250 20kΩ (25°C)	ST8605-6 φ8 L = 1250 20kΩ (25°C)		
	Thermistor (Heat Exchanger)	R2T	ST8602A-6 φ6 L = 1250 20kΩ (25°C)	ST8602A-6 φ6 L = 1250 20kΩ (25°C)		
Others	Fuse	F1U	250V 5A φ5.2			
	Transformer	T1R	TR22H21R8			

Parts Name		Symbol	Model						Remark
			FXAQ 20MAVE	FXAQ 25MAVE	FXAQ 32MAVE	FXAQ 40MAVE	FXAQ 50MAVE	FXAQ 63MAVE	
Remote Controller	Wired Remote Controller		BRC1D61 / BRC1E61						Option
	Wireless Remote Controller		BRC7E618						
Motors	Fan Motor	M1F	AC 220~240V 50Hz						
			1φ40W			1φ43W			
			Thermal protector 130°C : OFF 80°C : ON						
	Swing Motor	M1S	MP24 [3SB40333-1] AC200~240V			MSFBC20C21 [3SB40550-1] AC200~240V			
Thermistors	Thermistor (Suction Air)	R1T	ST8601-2 φ4 L400 20kΩ (25°C)						
	Thermistor (for Heat Exchanger High Temp.)	R3T	ST8605-2 φ8 L400 20kΩ (25°C)						
	Thermistor (for Heat Exchanger)	R2T	ST8602-2 φ6 L400 20kΩ (25°C)						
Others	Float Switch	S1L	OPTION						
	Fuse	F1U	250V 5A φ5.2						

Parts Name		Symbol	Model						Remark
			FXLQ 20MAVE	FXLQ 25MAVE	FXLQ 32MAVE	FXLQ 40MAVE	FXLQ 50MAVE	FXLQ 63MAVE	
Remote Controller	Wired Remote Controller		BRC1D61 / BRC1E61						Option
	Wireless Remote Controller		BRC4C62						
Motors	Fan Motor	M1F	AC 220~240V 50Hz						
			1φ15W		1φ25W		1φ35W		
			Thermal protector 135°C : OFF 120°C : ON						
	Capacitor for Fan Motor	C1R	1.0μF-400V		0.5μF-400V	1.0μF-400V	1.5μF-400V	2.0μF-400V	
Thermistors	Thermistor (Suction Air)	R1T	ST8601-6 φ4 L1250 20kΩ (25°C)						
	Thermistor (for Heat Exchanger High Temp.)	R3T	ST8605-9 φ8 L2500 20kΩ (25°C)						
	Thermistor (for Heat Exchanger)	R2T	ST8602A-9 φ6 L2500 20kΩ (25°C)						
Others	Fuse	F1U	AC250V 5A						
	Transformer	T1R	TR22H21R8						

Parts Name		Symbol	Model					Remark
			FXNQ 20MAVE	FXNQ 25MAVE	FXNQ 32MAVE	FXNQ 40MAVE	FXNQ 50MAVE	
Remote Controller	Wired Remote Controller		BRC1D61 / BRC1E61					Option
	Wireless Remote Controller		BRC4C62					
Motors	Fan Motor	M1F	AC 220~240V 50Hz					
			1φ15W	1φ25W	1φ35W			
	Capacitor for Fan Motor	C1R	1.0μF-400V	0.5μF-400V	1.0μF-400V	1.5μF-400V	2.0μF-400V	
Thermistors	Thermistor (Suction Air)	R1T	ST8601-6 φ4 L1250 20kΩ (25°C)					
	Thermistor (for Heat Exchanger High Temp.)	R3T	ST8605-9 φ8 L2500 20kΩ (25°C)					
	Thermistor (for Heat Exchanger)	R2T	ST8602A-9 φ6 L2500 20kΩ (25°C)					
Others	Fuse	F1U	AC250V 5A					
	Transformer	T1R	TR22H21R8					

Parts Name		Symbol	Model			Remark
			FXUQ71MAV1	FXUQ100MAV1	FXUQ125MAV1	
Remote Controller	Wired Remote Controller		BRC1D61 / BRC1E61			Option
	Wireless Remote Controller		BRC7C528W			
Motors	Fan Motor	M1F	AC 220~240V 50Hz			
			1φ45W	1φ90W		
			Thermal protector 130°C	Thermal protector 130°C : OFF 83°C : ON		
	Drain Pump	M1P	AC220-240V (50Hz) AC220V (60Hz) PJV-1426			
	Swing Motor	M1S	MT8-L[3PA07572-1] AC200~240V			
Thermistors	Thermistor (Suction Air)	R1T	ST8601-1 φ4 L=250 20kΩ (25°C)			
	Thermistor (Heat Exchanger)	R2T	ST8602A-4 φ6 L=800 20kΩ (25°C)			
Others	Float Switch	S1L	FS-0211B			

Parts Name		Symbol	Model			Remark
			FXMQ125MFV1	FXMQ200MFV1	FXMQ250MFV1	
Remote Controller	Wired Remote Controller		BRC1E61			Option
	Wireless Remote Controller		—			
Motors	Fan Motor	M1F	AC200~240V 50Hz			
			1φ380W			
	Thermal protector 135°C : OFF 87°C : ON					
	Capacitor for Fan Motor	C1R	10μ F 400Vx2	10μ F 400V	16μ F 400V	
Solenoid valve	Solenoid valve (Hot gas)	Y1S	Body: VPV-603D Coil: NEV-MOAJ532C1 AC220-240V			
Thermistors	Thermistor (Suction Air)	R1T	ST8601-13 φ4 L=630 20kΩ (25°C)			
	Thermistor (for Heat Exchanger High Temp.)	R3T	ST8605-6 φ8 L=1250 20kΩ (25°C)			
	Thermistor (Heat Exchanger)	R2T	ST8602A-2 φ6 L=1250 20kΩ (25°C)			
	Thermistor (for discharge air)	R4T	ST8605-8 L=2000 20kΩ (25°C)			
Others	Float switch	S1L	Option			
	Fuse	F1U	250V 5A φ5.2			
	Transformer	T1R	TR22H21R8			

4. Option List

4.1 Option List of Controllers

Operation Control System Optional Accessories

No.	Item	Type	FXFQ-P	FXCQ-M	FXKQ-MA	FXDQ-NB FXDQ-PB	FXUQ-M	FXSQ-M	FXMQ-MA	FXMQ-P	FXHQ-MA	FXAQ-MA	FXLQ-MA FXNQ-MA
1	Remote controller	Wireless	BRC7F634F	BRC7C62	BRC4C61	BRC4C65	BRC7C528W	BRC4C62		BRC4C65	BRC7E63W	BRC7E618	BRC4C62
		Wired	BRC1E61										
2	Wired remote controller with weekly schedule timer		BRC1D61										
3	Simplified remote controller		—			Note 8 BRC2C51	—	Note 8 BRC2C51			—		Note 8 BRC2C51
4	Remote controller for hotel use		—			BRC3A61	—	BRC3A61			—		BRC3A61
5	Adaptor for wiring		★KRP1C63	★KRP1B61	KRP1B61	★KRP1B56	—	KRP1B61	★KRP1C64	KRP1C3	—		KRP1B61
6-1	Wiring adaptor for electrical appendices (1)		★KRP2A62	★KRP2A61	KRP2A61	★KRP2A53	★KRP2A62	KRP2A61	★KRP2A61	★KRP2A62	★KRP2A61	★KRP2A61	KRP2A61
6-2	Wiring adaptor for electrical appendices (2)		★KRP4AA53	★KRP4A51	KRP4A51	★KRP4A54	★KRP4A53	KRP4A51	★KRP4AA51	★KRP4A52	★KRP4A51	★KRP4A51	KRP4A51
7	Remote sensor		KRCS01-4B	KRCS01-1	KRCS01-1					KRCS01-4B	KRCS01-1		
8	Installation box for adaptor PCB		Note 2, 3 KRP1H98	Note 2, 3 KRP1B96	—	Note 4, 6 KRP1B101	KRP1B97	Note 5 KRP4A91	—	Note 2, 3 KRP4A96	Note 3 KRP1C93	Note 2, 3 KRP4A93	—
9	Centralized remote controller		DCS302CA61										
9-1	Electrical box with earth terminal (3 blocks)		KJB311AA										
10	Unified on/off controller		DCS301BA61										
10-1	Electrical box with earth terminal (2 blocks)		KJB212AA										
10-2	Noise filter (for electromagnetic interface use only)		KEK26-1A										
11	Schedule timer		DST301BA61										
12	External control adaptor for outdoor unit (Must be installed on indoor units)		★DTA104A62	★DTA104A61	DTA104A61	★DTA104A53	—	DTA104A61		★DTA104A61	★DTA104A62	★DTA104A61	DTA104A61
13	Interface adaptor for SkyAir-series		—	—	—	—	Note 7 DTA102A52	—	—	—	—	—	—

Note:

1. Installation box (No.8) is necessary for each adaptor marked ★.
2. Up to 2 adaptors can be fixed for each installation box.
3. Only one installation box can be installed for each indoor unit.
4. Up to 2 installation boxes can be installed for each indoor unit.
5. Installation box (No. 8) is necessary for second adaptor.
6. Installation box (No. 8) is necessary for each adaptor.
7. This adaptor is required when connecting with optional controller for centralized control.
8. BRC2A51 is also available.

Various PCB

No.	Part name	Model No.	Function
1	Adaptor for wiring	KRP1B56 KRP1B57 KRP1B59 KRP1B61 KRP1C3	■ PCB when equipped with auxiliary electric heater in the indoor unit.
2	DIII-NET Expander Adaptor	DTA109A51	■ Up to 1024 units can be centrally controlled in 64 different groups. ■ Wiring restrictions (max. length: 1000m, total wiring length: 2000m, max. number of branches: 16) apply to each adaptor.

System Configuration

No.	Item	Model No.	Function
1	Residential centralized remote controller	Note *2 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	Centralized 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 controllers in one system.
2-1	Electrical box with earth terminal (3 blocks)	KJB311AA	
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.
3-1	Electrical box with earth terminal (2 blocks)	KJB212AA	
3-2	Noise filter (for electromagnetic interface use only)	KEK26-1A	
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	Interface adaptor for SkyAir-series	For SkyAir, FD(Y)M-FA, FDY-KA, FDYB-KA, FVY(P)J-A *DTA102A52	■ Adaptors required to connect products other than those of the VRV System to the high-speed DIII-NET communication system adopted for the VRV System. * To use any of the above optional controllers, an appropriate adaptor must be installed on the product unit to be controlled.
6	Central control adaptor kit	For UAT(Y)-K(A), FD-K *DTA107A55	
7	Wiring adaptor for other air-conditioner	*DTA103A51	■ 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	DIII-NET Expander Adaptor	DTA109A51	
8-1	Mounting plate	KRP4A92	■ Fixing plate for DTA109A51

Note:

1. Installation box for * adaptor must be obtained locally.
2. For residential use only. Cannot be used with other centralized control equipment.

Building Management System

No.	Part name				Model No.	Function	
1	intelligent Touch Controller	Basic	Hardware	intelligent Touch Controller	DCS601C51	■ Air conditioning management system that can be controlled by a compact all-in-one unit.	
1-1		Option	Hardware	DIII-NET plus adaptor	DCS601A52	■ Additional 64 groups (10 outdoor units) is possible.	
1-2			P.P.D.	DCS002C51	■ P. P. D.: Power Proportional Distribution function		
1-3			Software	Web	DCS004A51	■ Monitors and controls the air conditioning system using the Internet and a Web browser application on a PC.	
1-4	Electrical box with earth terminal (4 blocks)				KJB411A	■ Wall embedded switch box.	
2	intelligent Manager III	Basic	Hardware	Number of units to be connected	128 units	DAM602B52	■ Air conditioner management system that can be controlled by personal computers.
					256 units	DAM602B51	
					512 units	DAM602B51x2	
					768 units	DAM602B51x3	
					1024 units	DAM602B51x4	
2-1	Option	Software	P.P.D.	DAM002A51	■ Power Proportional Distribution function		
2-2			Web	DAM004A51	■ Monitors and controls the air conditioning system using the Internet and a Web browser application on a PC.		
2-3			Eco	DAM003A51	■ ECO (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	Contact/analog signal	*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		Parallel interface	Basic unit	DPF201A51	■ Enables ON/OFF command, operation and display of malfunction; can be used in combination with up to 4 units.		
6		Temperature measurement units		DPF201A52	■ Enables temperature measurement output for 4 groups; 0-5VDC.		
7		Temperature setting units		DPF201A53	■ Enables temperature setting input for 16 groups; 0-5VDC.		
8	Unification adaptor for computerized control				* DCS302A52	■ Interface between the central monitoring board and central control units.	

Note:

- *1. BACnet® is a registered trademark of American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).
- *2. LONWORKS® is a registered trade mark of Echelon Corporation.
- *3. Installation box for * adaptor must be procured onsite.

4.2 Option Lists (Outdoor Unit)

RXYQ5 ~ 18PAY1, PAYL, PTL

Optional accessories		RXYQ5PAY1, PAYL, PTL	RXYQ5PAY1E, PAYLE, PTLE	RXYQ8PAY1, PAYL, PTL RXYQ10PAY1, PAYL, PTL	RXYQ8PAY1E, PAYLE, PTLE RXYQ10PAY1E, PAYLE, PTLE	RXYQ12PAY1, PAYL, PTL RXYQ14PAY1, PAYL, PTL RXYQ16PAY1, PAYL, PTL RXYQ18PAY1, PAYL, PTL	RXYQ12PAY1E, PAYLE, PTLE RXYQ14PAY1E, PAYLE, PTLE RXYQ16PAY1E, PAYLE, PTLE RXYQ18PAY1E, PAYLE, PTLE
Cool/Heat Selector		KRC19-26A					
Cool/Heat Selector	Fixing box	KJB111A					
Distributive Piping	REFNET header	KHRP26M22H (Max. 4 branch)	KHRP26M22H, KHRP26M33H (Max. 8 branch)		KHRP26M22H, KHRP26M33H, (Max. 4 branch) (Max. 8 branch) KHRP26M72H (Max. 8 branch)		
REFNET joint		KHRP26A22T	KHRP26A22T, KHRP26A33T		KHRP26A22T, KHRP26A33T, KHRP26A72T		
Outdoor unit multi connection piping kit		—					
Central drain pan kit		KWC26C160	★KWC26C160E	KWC26C280	★KWC26C280E	KWC26C450	★KWC26C450E
Digital Pressure Gauge Kit		BHGP26A1(E)					

C : 3D053052C

RXYQ20 ~ 36PAY1, PAYL, PTL

Optional accessories		RXYQ20PAY1, PAYL, PTL RXYQ22PAY1, PAYL, PTL	RXYQ20PAY1E, PAYLE, PTLE RXYQ22PAY1E, PAYLE, PTLE	RXYQ24PAY1, PAYL, PTL RXYQ26PAY1, PAYL, PTL RXYQ28PAY1, PAYL, PTL	RXYQ24PAY1E, PAYLE, PTLE RXYQ26PAY1E, PAYLE, PTLE RXYQ28PAY1E, PAYLE, PTLE	RXYQ30PAY1, PAYL, PTL RXYQ32PAY1, PAYL, PTL RXYQ34PAY1, PAYL, PTL RXYQ36PAY1, PAYL, PTL	RXYQ30PAY1E, PAYLE, PTLE RXYQ32PAY1E, PAYLE, PTLE RXYQ34PAY1E, PAYLE, PTLE RXYQ36PAY1E, PAYLE, PTLE
Cool/Heat Selector		KRC19-26A					
Cool/Heat Selector	Fixing box	KJB111A					
Distributive Piping	REFNET header	KHRP26M22H (Max. 4 branch), KHRP26M33H (Max. 8 branch), KHRP26M72H (Max. 8 branch)	KHRP26M22H, KHRP26M33H, KHRP26M72H, KHRP26M73H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch) (Max. 8 branch)				
REFNET joint		KHRP26A22T, KHRP26A33T, KHRP26A72T	KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T				
Outdoor unit multi connection piping kit		BHFP22P100					
Pipe size reducer		—		KHRP26M73TP, KHRP26M73HP			
Central drain pan kit		KWC26C280 KWC26C450	★KWC26C280E ★KWC26C450E	KWC26C280 KWC26C450	★KWC26C280E ★KWC26C450E	KWC26C450×2	★KWC26C450E×2
Digital Pressure Gauge Kit		BHGP26A1(E)					

C : 3D053052C

RXYQ38 ~ 54PAY1, PAYL, PTL

Optional accessories		RXYQ38PAY1, PAYL, PTL RXYQ40PAY1, PAYL, PTL RXYQ42PAY1, PAYL, PTL RXYQ44PAY1, PAYL, PTL RXYQ46PAY1, PAYL, PTL	RXYQ38PAY1E, PAYLE, PTLE RXYQ40PAY1E, PAYLE, PTLE RXYQ42PAY1E, PAYLE, PTLE RXYQ44PAY1E, PAYLE, PTLE RXYQ46PAY1E, PAYLE, PTLE	RXYQ48PAY1, PAYL, PTL RXYQ50PAY1, PAYL, PTL RXYQ52PAY1, PAYL, PTL RXYQ54PAY1, PAYL, PTL	RXYQ48PAY1E, PAYLE, PTLE RXYQ50PAY1E, PAYLE, PTLE RXYQ52PAY1E, PAYLE, PTLE RXYQ54PAY1E, PAYLE, PTLE
Cool/Heat Selector		KRC19-26A			
Cool/Heat Selector	Fixing box	KJB111A			
Distributive Piping	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M72H, KHRP26M73H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch) (Max. 8 branch)			
REFNET joint		KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T			
Outdoor unit multi connection piping kit		BHFP22P151			
Pipe size reducer		KHRP26M73TP, KHRP26M73HP			
Central drain pan kit		KWC26C280 KWC26C450×2	★KWC26C280E ★KWC26C450E×2	KWC26C450×3	★KWC26C450E×3
Digital Pressure Gauge Kit		BHGP26A1(E)			

C : 3D053052C

Note)★: Order products

RXYQ16 ~ 18PAHY1, PAHYL, PHTL

Optional accessories		RXYQ16PAHY1, PAHYL, PHTL RXYQ18PAHY1, PAHYL, PHTL	RXYQ16PAHY1E, PAHYLE, PHTLE RXYQ18PAHY1E, PAHYLE, PHTLE
Cool/Heat Selector		KRC19-26A	
Cool/Heat Selector	Fixing box	KJB111A	
	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(E)	

C : 3D053053A

RXYQ24 ~ 30PAHY1, PAHYL, PHTL

Optional accessories		RXYQ24PAHY1, PAHYL, PHTL RXYQ26PAHY1, PAHYL, PHTL	RXYQ24PAHY1E, PAHYLE, PHTLE RXYQ26PAHY1E, PAHYLE, PHTLE	RXYQ28PAHY1, PAHYL, PHTL RXYQ30PAHY1, PAHYL, PHTL	RXYQ28PAHY1E, PAHYLE, PHTLE RXYQ30PAHY1E, PAHYLE, PHTLE
Cool/Heat Selector		KRC19-26A			
Cool/Heat Selector	Fixing box	KJB111A			
	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M72H, KHRP26M73H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch) (Max. 8 branch)			
Distributive Piping	REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T			
	Outdoor unit multi connection piping kit	BHFP22P151			
Pipe size reducer		KHRP26M73TP, KHRP26M73HP			
Central drain pan kit		KWC26C280x3	★KWC26C280E×3	KWC26C280x2 KWC26C450	★KWC26C280E×2 ★KWC26C450E
Digital Pressure Gauge Kit		BHGP26A1(E)			

C : 3D053053A

RXYQ32 ~ 50PAHY1, PAHYL, PHTL

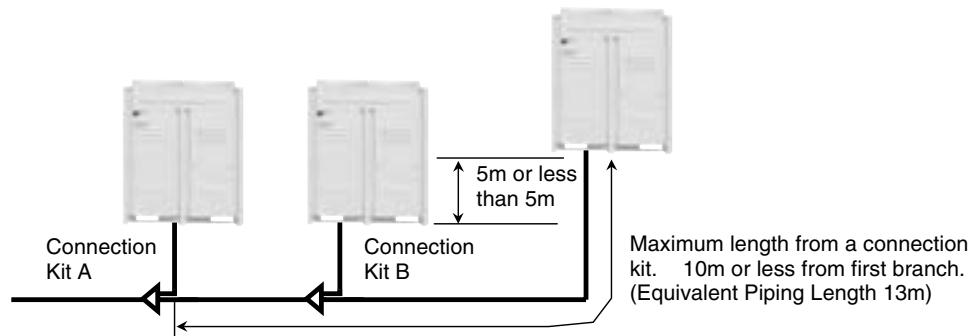
Optional accessories		RXYQ32PAHY1, PAHYL, PHTL RXYQ34PAHY1, PAHYL, PHTL	RXYQ32PAHY1E, PAHYLE, PHTLE RXYQ34PAHY1E, PAHYLE, PHTLE	RXYQ36PAHY1, PAHYL, PHTL RXYQ38PAHY1, PAHYL, PHTL RXYQ40PAHY1, PAHYL, PHTL RXYQ42PAHY1, PAHYL, PHTL RXYQ44PAHY1, PAHYL, PHTL RXYQ46PAHY1, PAHYL, PHTL RXYQ48PAHY1, PAHYL, PHTL 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			
	Outdoor unit multi connection piping kit	BHFP22P151			
Pipe size reducer		KHRP26M73TP, KHRP26M73HP			
Central drain pan kit		KWC26C280 KWC26C450x2	★KWC26C280E ★KWC26C450E×2	KWC26C450x3	★KWC26C450E×3
Digital Pressure Gauge Kit		BHGP26A1(E)			

C : 3D053053A

Note)★: Order products

5. Piping Installation Point

5.1 Piping Installation Point

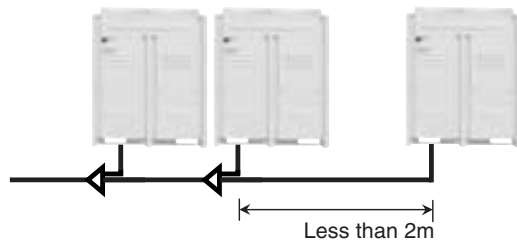


Since there is a possibility that oil may be collected on a stop machine side, install piping between outdoor units to go to level or go up to an outdoor unit, and to make a slope.

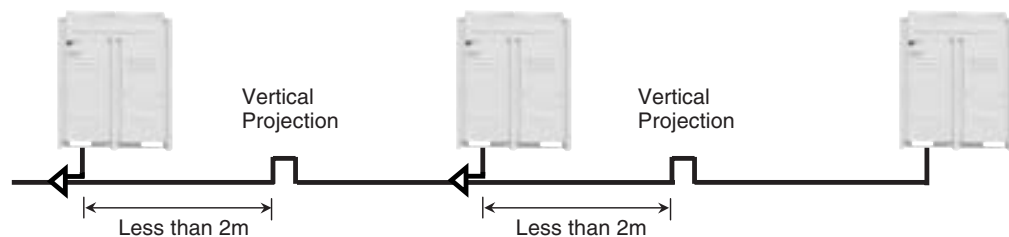
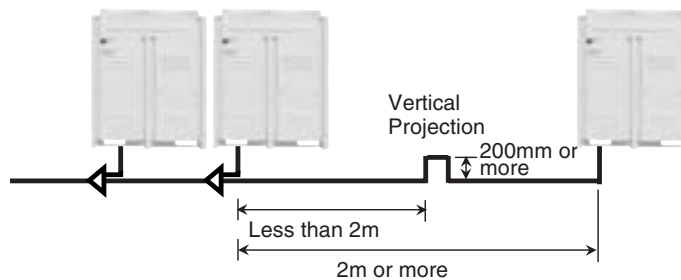
The projection part between multi connection piping kits

When the piping length between the multi connection kits or between multi connection kit and outdoor unit is 2m or more, prepare a vertical projection part (200mm or more as shown below) only on the gas pipe line location less than 2m from multi connection kit.

In the case of 2m or less

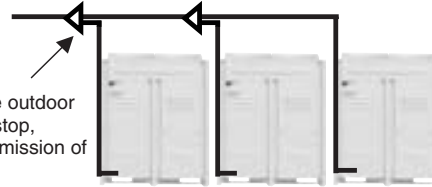


In the case of 2m or more



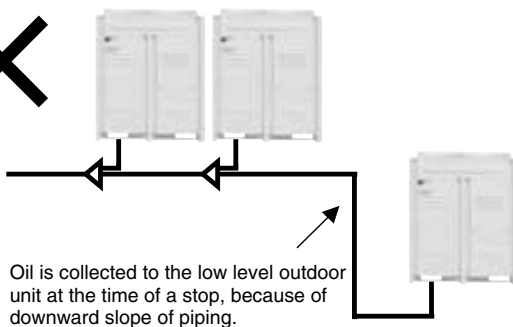
5.2 The Example of a Wrong Pattern

Wrong

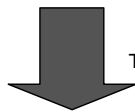


Oil is collected to the outdoor unit at the time of a stop, because of bottom omission of piping.

Wrong

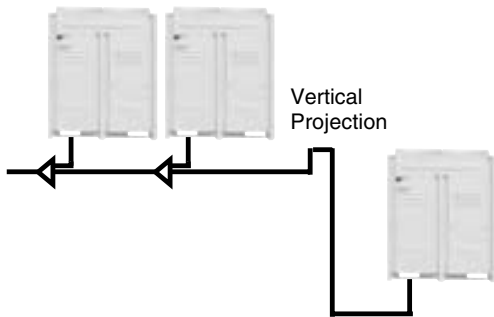


Oil is collected to the low level outdoor unit at the time of a stop, because of downward slope of piping.

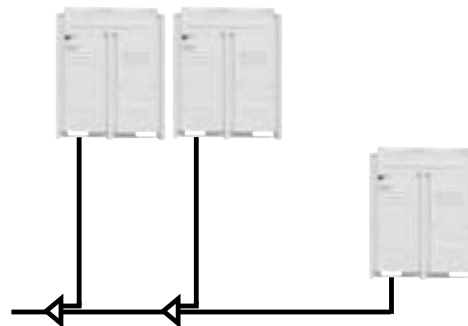


The example of installation on which oil is not collected.

Good



Good



Max. allowable Piping Length	Outdoor Unit - Multi Connection Piping Kit	Actual piping length 10m or less, equivalent length 13m or less
	Multi Connection Piping Kit - Indoor Unit	Actual piping length 165m or less, equivalent length 190m or less, the total extension 1000m or less
	REFNET Joint - Indoor Unit	Actual piping length 40m or less (Refer to P.424, 425 Note 2 in case of up to 90m)
Allowable Level Difference	Outdoor Unit - Outdoor Unit	5m or less
	Outdoor Unit - Indoor Unit	50m or less ★90m or less (when an outdoor unit is lower than indoor units: 40m or less in case of RXYQ5P(A))
	Indoor Unit - Indoor Unit	15m or less

Note)★: Available on request if the outdoor unit is above.

6. Example of Connection (R-410A Type)

Example of connection (Connection of 8 indoor units)		Example refrigerant branch using REFNET joint	Example refrigerant branch using REFNET joint and REFNET header	Example refrigerant branch using REFNET header																													
(*1) " ← " indicate the Outdoor unit multi connection piping kit (*2) In case of multi outdoor system, re-read to the first Outdoor unit multi connection piping kit as seen from the indoor unit.	Single outdoor system																																
	Multi outdoor system																																
Maximum allowable length	Between outdoor (*2) and indoor units	Actual pipe length Pipe length between outdoor (*2) and indoor units ≤ 165m Example unit ⑧ : a + b + c + d + e + f + g + p ≤ 165m	Equivalent length Pipe length between outdoor (*2) and indoor units ≤ 190m (assume equivalent pipe length of REFNET joint to be 0.5m, that of REFNET header to be 1m, calculation purposes) (See Note 1 - Next page)	Example unit ⑧ : a + i ≤ 165m																													
	Between outdoor unit and Outdoor unit multi connection piping kit (Only for multi system)	Actual pipe length Pipe length between outdoor unit and Outdoor unit multi connection piping kit ≤ 10m, Equivalent length between outdoor unit and Outdoor unit multi connection piping kit ≤ 13m																															
Allowable height length	Between outdoor and indoor units	Difference in height Difference in height between outdoor and indoor units (H1) ≤ 50m (≤ 90m if the outdoor unit is below)																															
	Between indoor and indoor units	Difference in height Difference in height between indoor units (H2) ≤ 15m																															
	Between outdoor and outdoor units	Difference in height Difference in height between outdoor unit (H3) ≤ 5m																															
Allowable length after the branch	Actual pipe length	Pipe length from first refrigerant branch kit (either REFNET joint or REFNET header) to indoor unit ≤ 40m (See Note 2 - Next page) Example unit ⑧ : b + c + d + e + f + g + p ≤ 40m	Example unit ⑧ : b + h ≤ 40m, unit ⑧ : i + k ≤ 40m	Example unit ⑧ : i ≤ 40m																													
Refrigerant branch kit selection		How to select the REFNET joint • When using REFNET joint at the first branch counted from the outdoor unit side. Choose from the following table in accordance with the outdoor unit capacity type. (Example: REFNET joint A)																															
Refrigerant branch kits can only be used with R-410A.		<table border="1"> <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>			Outdoor unit capacity type	Refrigerant branch kit name	5HP type	KHRP26A22T	8, 10HP type	KHRP26A33T	12-22HP type	KHRP26A72T	24HP type~	KHRP26A73T + KHRP26M73TP																			
Outdoor unit capacity type	Refrigerant branch kit name																																
5HP type	KHRP26A22T																																
8, 10HP type	KHRP26A33T																																
12-22HP type	KHRP26A72T																																
24HP type~	KHRP26A73T + KHRP26M73TP																																
⚠ • When multi outdoor system are installed, be sure to use the special separately sold Outdoor unit multi connection piping kit. The table at right shows how to select the proper kit.		How to select the REFNET header • Choose from the following table in accordance with the total capacity index of all the indoor units connected below the REFNET header. • Note: 250 type indoor unit cannot be connected below the REFNET header.																															
		<table border="1"> <thead> <tr> <th>Indoor unit total capacity index</th> <th>Refrigerant branch kit name</th> </tr> </thead> <tbody> <tr> <td>< 200</td> <td>KHRP26M22H (Max. 4 branch)</td> </tr> <tr> <td>200 ≤ x < 290</td> <td>KHRP26M33H (Max. 8 branch)</td> </tr> <tr> <td>290 ≤ x < 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	< 200	KHRP26M22H (Max. 4 branch)	200 ≤ x < 290	KHRP26M33H (Max. 8 branch)	290 ≤ x < 640	KHRP26M72H (Max. 8 branch) (See Note 3 - Next page)	640 ≤	KHRP26M73H (Max. 8 branch) + KHRP26M73HP																			
Indoor unit total capacity index	Refrigerant branch kit name																																
< 200	KHRP26M22H (Max. 4 branch)																																
200 ≤ x < 290	KHRP26M33H (Max. 8 branch)																																
290 ≤ x < 640	KHRP26M72H (Max. 8 branch) (See Note 3 - Next page)																																
640 ≤	KHRP26M73H (Max. 8 branch) + KHRP26M73HP																																
		How to select the Outdoor unit multi connection piping kit (This is required when the system is multi outdoor unit system.) • Choose from the following table in accordance with the number of outdoor units.																															
		<table border="1"> <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																							
Number of outdoor units	Connection piping kit name																																
2 units	BHFP22P100																																
3 units	BHFP22P151																																
Example for indoor units connected downstream		Example REFNET joint C: indoor units ③+④+⑤+⑥+⑦+⑧	Example REFNET joint B: indoor units ⑦+⑧ Example REFNET header: indoor units ①+②+③+④+⑤+⑥	Example REFNET header: indoor units ①+②+③+④+⑤+⑥+⑦+⑧																													
Pipe size selection		Temper grade and wall thickness for pipes. (Temper grade, O type and 1/2H type indicate the material types specified in JIS H 3300.) (Unit:mm)																															
⚠ 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.		<table border="1"> <thead> <tr> <th>Copper tube O.D.</th> <th>Copper tube W.T. (Minimum requirement)</th> <th>Temper grade</th> </tr> </thead> <tbody> <tr> <td>φ6.4</td> <td>0.80</td> <td rowspan="4">O type</td> </tr> <tr> <td>φ9.5</td> <td>0.80</td> </tr> <tr> <td>φ12.7</td> <td>0.80</td> </tr> <tr> <td>φ15.9</td> <td>0.99</td> </tr> <tr> <td>φ19.1</td> <td>0.80</td> <td rowspan="7">1/2H type</td> </tr> <tr> <td>φ22.2</td> <td>0.80</td> </tr> <tr> <td>φ25.4</td> <td>0.88</td> </tr> <tr> <td>φ28.6</td> <td>0.99</td> </tr> <tr> <td>φ31.8</td> <td>1.10</td> </tr> <tr> <td>φ34.9</td> <td>1.21</td> </tr> <tr> <td>φ38.1</td> <td>1.32</td> </tr> <tr> <td>φ41.3</td> <td>1.43</td> </tr> </tbody> </table>			Copper tube O.D.	Copper tube W.T. (Minimum requirement)	Temper grade	φ6.4	0.80	O type	φ9.5	0.80	φ12.7	0.80	φ15.9	0.99	φ19.1	0.80	1/2H type	φ22.2	0.80	φ25.4	0.88	φ28.6	0.99	φ31.8	1.10	φ34.9	1.21	φ38.1	1.32	φ41.3	1.43
Copper tube O.D.	Copper tube W.T. (Minimum requirement)	Temper grade																															
φ6.4	0.80	O type																															
φ9.5	0.80																																
φ12.7	0.80																																
φ15.9	0.99																																
φ19.1	0.80	1/2H type																															
φ22.2	0.80																																
φ25.4	0.88																																
φ28.6	0.99																																
φ31.8	1.10																																
φ34.9	1.21																																
φ38.1	1.32																																
φ41.3	1.43																																
		Piping between Outdoor unit and first refrigerant branch kit. Piping between first Outdoor unit multi connection piping kit and first refrigerant branch kit. (Part A) • Choose from the following table in accordance with the outdoor unit capacity type. Piping between Outdoor unit multi connection piping kits. (Part B) Piping between outdoor unit and Outdoor unit multi connection piping kit. (Part C) • Choose from the following table in accordance with the total capacity type of all the outdoor units connected above Outdoor unit multi connection piping kit. (Unit:mm)																															
		<table border="1"> <thead> <tr> <th rowspan="2">Outdoor unit capacity type</th> <th colspan="2">Piping size (O.D.)</th> </tr> <tr> <th>Gas pipe</th> <th>Liquid pipe</th> </tr> </thead> <tbody> <tr> <td>5HP type</td> <td>φ15.9</td> <td rowspan="3">φ9.5</td> </tr> <tr> <td>8HP type</td> <td>φ19.1</td> </tr> <tr> <td>10HP type</td> <td>φ22.2</td> </tr> <tr> <td>12-16HP type</td> <td>φ28.6</td> <td>φ12.7</td> </tr> <tr> <td>18-22HP type</td> <td>φ34.9</td> <td>φ15.9</td> </tr> <tr> <td>24HP type</td> <td>φ41.3</td> <td>φ19.1</td> </tr> <tr> <td>26-34HP type</td> <td></td> <td></td> </tr> <tr> <td>36-54HP type</td> <td></td> <td></td> </tr> </tbody> </table> (See Note 1 - Next page)			Outdoor unit capacity type	Piping size (O.D.)		Gas pipe	Liquid pipe	5HP type	φ15.9	φ9.5	8HP type	φ19.1	10HP type	φ22.2	12-16HP type	φ28.6	φ12.7	18-22HP type	φ34.9	φ15.9	24HP type	φ41.3	φ19.1	26-34HP type			36-54HP type				
Outdoor unit capacity type	Piping size (O.D.)																																
	Gas pipe	Liquid pipe																															
5HP type	φ15.9	φ9.5																															
8HP type	φ19.1																																
10HP type	φ22.2																																
12-16HP type	φ28.6	φ12.7																															
18-22HP type	φ34.9	φ15.9																															
24HP type	φ41.3	φ19.1																															
26-34HP type																																	
36-54HP type																																	
		Piping between refrigerant branch kits • Choose from the following table in accordance with the total capacity index of all the indoor units connected below this. • Do not let the connection piping exceed the main refrigerant piping size. (Unit:mm)																															
		<table border="1"> <thead> <tr> <th rowspan="2">Indoor unit total capacity index</th> <th colspan="2">Piping size (O.D.)</th> </tr> <tr> <th>Gas pipe</th> <th>Liquid pipe</th> </tr> </thead> <tbody> <tr> <td>< 150</td> <td>φ15.9</td> <td rowspan="3">φ9.5</td> </tr> <tr> <td>150 ≤ x < 200</td> <td>φ19.1</td> </tr> <tr> <td>200 ≤ x < 290</td> <td>φ22.2</td> </tr> <tr> <td>290 ≤ x < 420</td> <td>φ28.6</td> <td>φ12.7</td> </tr> <tr> <td>420 ≤ x < 640</td> <td>φ34.9</td> <td>φ15.9</td> </tr> <tr> <td>640 ≤ x < 920</td> <td>φ41.3</td> <td>φ19.1</td> </tr> <tr> <td>920 ≤</td> <td></td> <td></td> </tr> </tbody> </table>			Indoor unit total capacity index	Piping size (O.D.)		Gas pipe	Liquid pipe	< 150	φ15.9	φ9.5	150 ≤ x < 200	φ19.1	200 ≤ x < 290	φ22.2	290 ≤ x < 420	φ28.6	φ12.7	420 ≤ x < 640	φ34.9	φ15.9	640 ≤ x < 920	φ41.3	φ19.1	920 ≤							
Indoor unit total capacity index	Piping size (O.D.)																																
	Gas pipe	Liquid pipe																															
< 150	φ15.9	φ9.5																															
150 ≤ x < 200	φ19.1																																
200 ≤ x < 290	φ22.2																																
290 ≤ x < 420	φ28.6	φ12.7																															
420 ≤ x < 640	φ34.9	φ15.9																															
640 ≤ x < 920	φ41.3	φ19.1																															
920 ≤																																	
		Piping between refrigerant branch kit and indoor unit • Match to the size of the connection piping on the indoor unit. (Unit:mm)																															
		<table border="1"> <thead> <tr> <th rowspan="2">Indoor unit capacity type</th> <th colspan="2">Piping size (O.D.)</th> </tr> <tr> <th>Gas pipe</th> <th>Liquid pipe</th> </tr> </thead> <tbody> <tr> <td>20 · 25 · 32 · 40 · 50 type</td> <td>φ12.7</td> <td>φ6.4</td> </tr> <tr> <td>63 · 80 · 100 · 125 type</td> <td>φ15.9</td> <td rowspan="3">φ9.5</td> </tr> <tr> <td>200 type</td> <td>φ19.1</td> </tr> <tr> <td>250 type</td> <td>φ22.2</td> </tr> </tbody> </table>			Indoor unit capacity type	Piping size (O.D.)		Gas pipe	Liquid pipe	20 · 25 · 32 · 40 · 50 type	φ12.7	φ6.4	63 · 80 · 100 · 125 type	φ15.9	φ9.5	200 type	φ19.1	250 type	φ22.2														
Indoor unit capacity type	Piping size (O.D.)																																
	Gas pipe	Liquid pipe																															
20 · 25 · 32 · 40 · 50 type	φ12.7	φ6.4																															
63 · 80 · 100 · 125 type	φ15.9	φ9.5																															
200 type	φ19.1																																
250 type	φ22.2																																

How to calculate the additional refrigerant to be charged

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

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

TABLE A

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

TABLE B

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

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

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

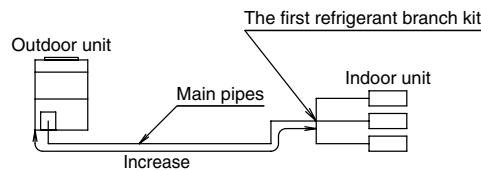
a : φ19.1 × 30m	d : φ9.5 × 10m	g : φ6.4 × 10m	j : φ6.4 × 10m
b : φ15.9 × 10m	e : φ9.5 × 10m	h : φ6.4 × 20m	k : φ6.4 × 9m
c : φ9.5 × 10m	f : φ9.5 × 10m	i : φ12.7 × 10m	

$$R = \left(\begin{aligned} & \left(\frac{30 \times 0.26}{10 \times 0.18} + \frac{10 \times 0.12}{40 \times 0.059} + \frac{49 \times 0.022}{2.0} + \frac{0.5}{0.5} \right) + 2.0 + 0.5 \\ & = 16.738 \rightarrow 16.7 \text{ kg} \end{aligned} \right)$$

Round off units of 0.1 kg.

***Note 1**

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



■ Diameter of above case

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

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

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

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

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

***Note 2**

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

Required Conditions	Example Drawings	
1. It is necessary to increase the pipe size if the pipe length between the first branch kit and the final branch kit is over than 40m. (Reducers must be procured onsite) If the increased pipe size is larger than main pipe size, then increase the main pipe size to the same pipe size.	<p>8] b+c+d+e+f+g+p ≤ 90 m increase the pipe size of b, c, d, e, f, g</p> <p>Increase the pipe size as follows φ 9.5 → φ12.7 φ15.9 → φ19.1 φ22.2 → φ25.4* φ34.9 → φ38.1* φ12.7 → φ15.9 φ19.1 → φ22.2 φ28.6 → φ31.8*</p>	
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		h, i, j,..... p ≤ 40 m
4. The difference between [Outdoor unit to the farthest indoor unit] and [Outdoor unit to the nearest indoor unit] ≤ 40 m		The farthest indoor unit 8] The nearest indoor unit 1] (a+b+c+d+e+f+g+p)-(a+h) ≤ 40 m

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

***Note 3**

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

**Outdoor Unit
Thermistors for
Discharge Pipe
(R3T, R31T~R33T)**

						(kΩ)		
T°C	0.0	0.5	T°C	0.0	0.5	T°C	0.0	0.5
0	640.44	624.65	50	72.32	70.96	100	13.35	13.15
1	609.31	594.43	51	69.64	68.34	101	12.95	12.76
2	579.96	565.78	52	67.06	65.82	102	12.57	12.38
3	552.00	538.63	53	64.60	63.41	103	12.20	12.01
4	525.63	512.97	54	62.24	61.09	104	11.84	11.66
5	500.66	488.67	55	59.97	58.87	105	11.49	11.32
6	477.01	465.65	56	57.80	56.75	106	11.15	10.99
7	454.60	443.84	57	55.72	54.70	107	10.83	10.67
8	433.37	423.17	58	53.72	52.84	108	10.52	10.36
9	413.24	403.57	59	51.98	50.96	109	10.21	10.06
10	394.16	384.98	60	49.96	49.06	110	9.92	9.78
11	376.05	367.35	61	48.19	47.33	111	9.64	9.50
12	358.88	350.62	62	46.49	45.67	112	9.36	9.23
13	342.58	334.74	63	44.86	44.07	113	9.10	8.97
14	327.10	319.66	64	43.30	42.54	114	8.84	8.71
15	312.41	305.33	65	41.79	41.06	115	8.59	8.47
16	298.45	291.73	66	40.35	39.65	116	8.35	8.23
17	285.18	278.80	67	38.96	38.29	117	8.12	8.01
18	272.58	266.51	68	37.63	36.98	118	7.89	7.78
19	260.60	254.72	69	36.34	35.72	119	7.68	7.57
20	249.00	243.61	70	35.11	34.51	120	7.47	7.36
21	238.36	233.14	71	33.92	33.35	121	7.26	7.16
22	228.05	223.08	72	32.78	32.23	122	7.06	6.97
23	218.24	213.51	73	31.69	31.15	123	6.87	6.78
24	208.90	204.39	74	30.63	30.12	124	6.69	6.59
25	200.00	195.71	75	29.61	29.12	125	6.51	6.42
26	191.53	187.44	76	28.64	28.16	126	6.33	6.25
27	183.46	179.57	77	27.69	27.24	127	6.16	6.08
28	175.77	172.06	78	26.79	26.35	128	6.00	5.92
29	168.44	164.90	79	25.91	25.49	129	5.84	5.76
30	161.45	158.08	80	25.07	24.66	130	5.69	5.61
31	154.79	151.57	81	24.26	23.87	131	5.54	5.46
32	148.43	145.37	82	23.48	23.10	132	5.39	5.32
33	142.37	139.44	83	22.73	22.36	133	5.25	5.18
34	136.59	133.79	84	22.01	21.65	134	5.12	5.05
35	131.06	128.39	85	21.31	20.97	135	4.98	4.92
36	125.79	123.24	86	20.63	20.31	136	4.86	4.79
37	120.76	118.32	87	19.98	19.67	137	4.73	4.67
38	115.95	113.62	88	19.36	19.05	138	4.61	4.55
39	111.35	109.13	89	18.75	18.46	139	4.49	4.44
40	106.96	104.84	90	18.17	17.89	140	4.38	4.32
41	102.76	100.73	91	17.61	17.34	141	4.27	4.22
42	98.75	96.81	92	17.07	16.80	142	4.16	4.11
43	94.92	93.06	93	16.54	16.29	143	4.06	4.01
44	91.25	89.47	94	16.04	15.79	144	3.96	3.91
45	87.74	86.04	95	15.55	15.31	145	3.86	3.81
46	84.38	82.75	96	15.08	14.85	146	3.76	3.72
47	81.16	79.61	97	14.62	14.40	147	3.67	3.62
48	78.09	76.60	98	14.18	13.97	148	3.58	3.54
49	75.14	73.71	99	13.76	13.55	149	3.49	3.45
50	72.32	70.96	100	13.35	13.15	150	3.41	3.37

8. Pressure Sensor

$$P_H = 1.38V_H - 0.69$$

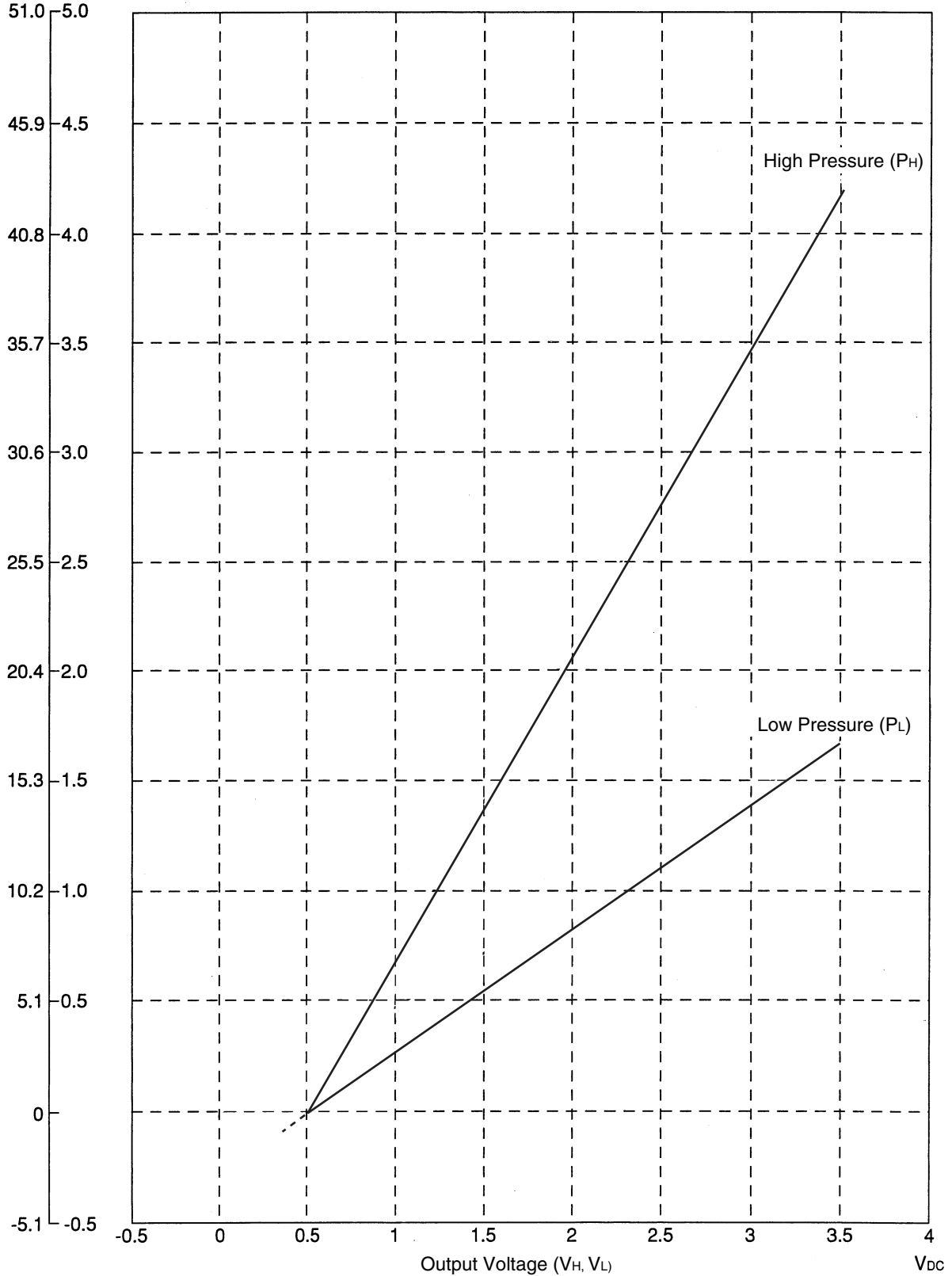
$$P_L = 0.57V_L - 0.28$$

P_H : High pressure (MPa)
 P_L : Low pressure (MPa)

V_H : Output Voltage [High Side] V_{DC}
 V_L : Output Voltage [Low Side] V_{DC}

Detected Pressure

P_H, P_L
 (kg/cm²) MPa



9. Method of Checking The Inverter's Power Transistors and Diode Modules

Checking failures in power semiconductors mounted on inverter PCB

Check the power semiconductors mounted on the inverter PCB by the use of a multiple tester.

<Items to be prepared>

- Multiple tester : Prepare the analog type of multiple tester.
For the digital type of multiple tester, those with diode check function are available for the checking.

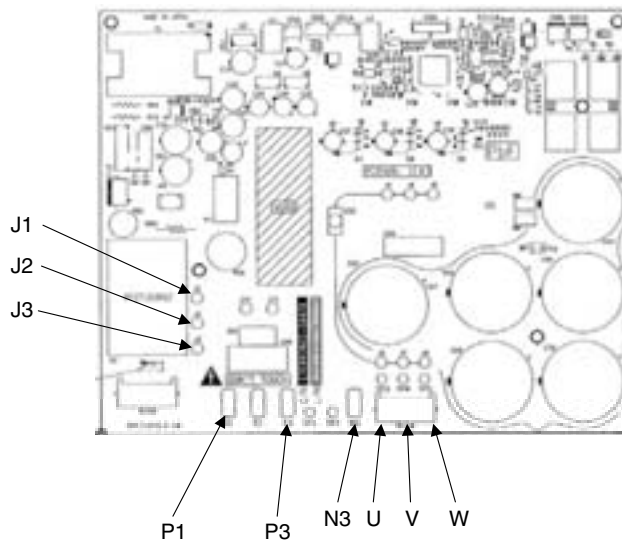
<Test points>

- Turn OFF the power supply. Then, after a lapse of 10 minutes or more, make measurement of resistance.

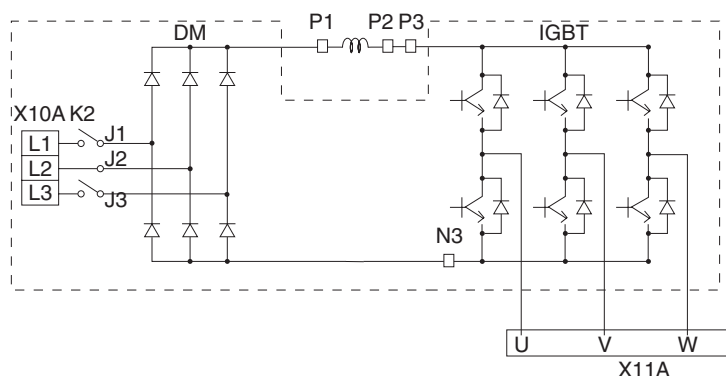
<Preparation>

- To make measurement, disconnect all connectors and terminals.

Inverter PCB



Electronic circuit



- According to the checking aforementioned, it is probed that the malfunction results from the faulty inverter. The following section describes supposed causes of the faulty inverter.
 - Faulty compressor (ground leakage)
 - Faulty fan motor (ground leakage)
 - Entry of conductive foreign particles
 - Abnormal voltage (e.g. overvoltage, surge (thunder), or unbalanced voltage)
- In order to replace the faulty inverter, be sure to check for the points aforementioned.

1. Power module checking

When using the analog type of multiple tester, make measurement in resistance measurement mode in the x1k Ω range.

No.	Measuring point		Criterion	Remark
	+	-		
1	P3	U	2 to 15k Ω	It may take time to determine the resistance due to capacitor charge or else.
2	P3	V		
3	P3	W		
4	U	P3	Not less than 15k Ω (including)	
5	V	P3		
6	W	P3		
7	N3	U		
8	N3	V		
9	N3	W		
10	U	N3	2 to 15k Ω	
11	V	N3		
12	W	N3		

When using the digital type of multiple tester, make measurement in diode check mode ($\rightarrow|$).

No.	Measuring point		Criterion	Remark
	+	-		
1	P3	U	Not less than 1.2V (including)	It may take time to determine the voltage due to capacitor charge or else.
2	P3	V		
3	P3	W		
4	U	P3	0.3 to 0.7V	
5	V	P3		
6	W	P3		
7	N3	U		
8	N3	V		
9	N3	W		
10	U	N3	Not less than 1.2V (including)	
11	V	N3		
12	W	N3		

2. Diode module checking

When using the analog type of multiple tester, make measurement in resistance measurement mode in the x1k Ω range.

No.	Measuring point		Criterion	Remark
	+	-		
1	P1	J1	2 to 15k Ω	It may take time to determine the resistance due to capacitor charge or else.
2	P1	J2		
3	P1	J3		
4	J1	P1	Not less than 15k Ω (including)	
5	J2	P1		
6	J3	P1		
7	N3	J1		
8	N3	J2		
9	N3	J3		
10	J1	N3	2 to 15k Ω	
11	J2	N3		
12	J3	N3		

When using the digital type of multiple tester, make measurement in diode check mode ($\rightarrow|$).

No.	Measuring point		Criterion	Remark
	+	-		
1	P1	J1	Not less than 1.2V (including)	It may take time to determine the voltage due to capacitor charge or else.
2	P1	J2		
3	P1	J3		
4	J1	P1	0.3 to 0.7V	
5	J2	P1		
6	J3	P1		
7	N3	J1		
8	N3	J2		
9	N3	J3		
10	J1	N3	Not less than 1.2V (including)	
11	J2	N3		
12	J3	N3		

Part 8

Precautions for New Refrigerant (R-410A)

1. Precautions for New Refrigerant (R-410A)	432
1.1 Outline	432
1.2 Refrigerant Cylinders.....	434
1.3 Service Tools.....	435

1. Precautions for New Refrigerant (R-410A)

1.1 Outline

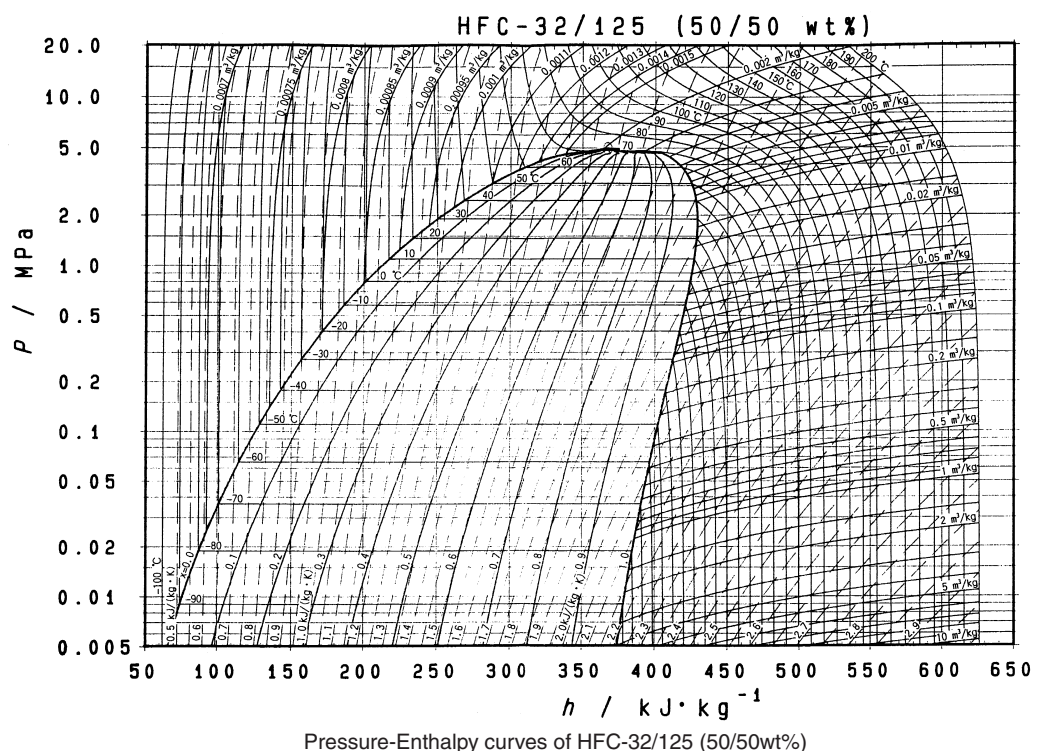
1.1.1 About Refrigerant R-410A

- Characteristics of new refrigerant, R-410A
 1. Performance
Almost the same performance as R-22 and R-407C
 2. Pressure
Working pressure is approx. 1.4 times more than R-22 and R-407C.
 3. Refrigerant composition
Few problems in composition control, since it is a Quasi-azeotropic mixture refrigerant.

	HFC units (Units using new refrigerants)		HCFC units
Refrigerant name	R-407C	R-410A	R-22
Composing substances	Non-azeotropic mixture of HFC32, HFC125 and HFC134a (*1)	Quasi-azeotropic mixture of HFC32 and HFC125 (*1)	Single-component refrigerant
Design pressure	3.2 MPa (gauge pressure) = 32.6 kgf/cm ²	4.0 MPa (gauge pressure) = 40.8 kgf/cm ²	2.75MPa (gauge pressure) = 28.0 kgf/cm ²
Refrigerant oil	Synthetic oil (Ether)		Mineral oil (Suniso)
Ozone destruction factor (ODP)	0	0	0.05
Combustibility	None	None	None
Toxicity	None	None	None

- ★1. Non-azeotropic mixture refrigerant: mixture of two or more refrigerants having different boiling points.
- ★2. Quasi-azeotropic mixture refrigerant: mixture of two or more refrigerants having similar boiling points.
- ★3. The design pressure is different at each product. Please refer to the installation manual for each product.

(Reference) 1 MPa \doteq 10.19716 kgf / cm²



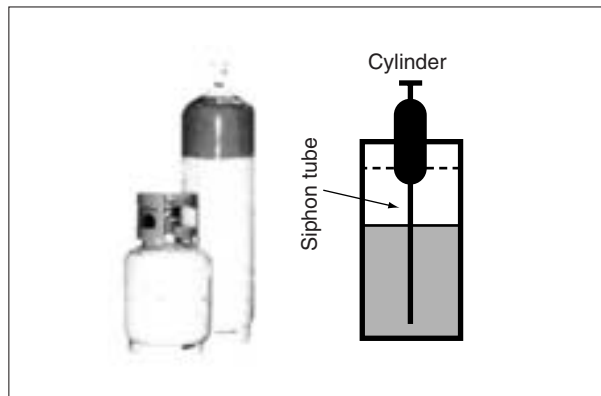
■ Thermodynamic characteristic of R-410A

DAIREP ver2.0

Temperature (°C)	Steam pressure (kPa)		Density (kg/m ³)		Specific heat at constant pressure (kJ/kgK)		Specific enthalpy (kJ/kg)		Specific entropy (kJ/KgK)	
	Liquid	Vapor	Liquid	Vapor	Liquid	Vapor	Liquid	Vapor	Liquid	Vapor
-70	36.13	36.11	1410.7	1.582	1.372	0.695	100.8	390.6	0.649	2.074
-68	40.83	40.80	1404.7	1.774	1.374	0.700	103.6	391.8	0.663	2.066
-66	46.02	45.98	1398.6	1.984	1.375	0.705	106.3	393.0	0.676	2.058
-64	51.73	51.68	1392.5	2.213	1.377	0.710	109.1	394.1	0.689	2.051
-62	58.00	57.94	1386.4	2.463	1.378	0.715	111.9	395.3	0.702	2.044
-60	64.87	64.80	1380.2	2.734	1.379	0.720	114.6	396.4	0.715	2.037
-58	72.38	72.29	1374.0	3.030	1.380	0.726	117.4	397.6	0.728	2.030
-56	80.57	80.46	1367.8	3.350	1.382	0.732	120.1	398.7	0.741	2.023
-54	89.49	89.36	1361.6	3.696	1.384	0.737	122.9	399.8	0.754	2.017
-52	99.18	99.03	1355.3	4.071	1.386	0.744	125.7	400.9	0.766	2.010
-51.58	101.32	101.17	1354.0	4.153	1.386	0.745	126.3	401.1	0.769	2.009
-50	109.69	109.51	1349.0	4.474	1.388	0.750	128.5	402.0	0.779	2.004
-48	121.07	120.85	1342.7	4.909	1.391	0.756	131.2	403.1	0.791	1.998
-46	133.36	133.11	1336.3	5.377	1.394	0.763	134.0	404.1	0.803	1.992
-44	146.61	146.32	1330.0	5.880	1.397	0.770	136.8	405.2	0.816	1.987
-42	160.89	160.55	1323.5	6.419	1.401	0.777	139.6	406.2	0.828	1.981
-40	176.24	175.85	1317.0	6.996	1.405	0.785	142.4	407.3	0.840	1.976
-38	192.71	192.27	1310.5	7.614	1.409	0.792	145.3	408.3	0.852	1.970
-36	210.37	209.86	1304.0	8.275	1.414	0.800	148.1	409.3	0.864	1.965
-34	229.26	228.69	1297.3	8.980	1.419	0.809	150.9	410.2	0.875	1.960
-32	249.46	248.81	1290.6	9.732	1.424	0.817	153.8	411.2	0.887	1.955
-30	271.01	270.28	1283.9	10.53	1.430	0.826	156.6	412.1	0.899	1.950
-28	293.99	293.16	1277.1	11.39	1.436	0.835	159.5	413.1	0.911	1.946
-26	318.44	317.52	1270.2	12.29	1.442	0.844	162.4	414.0	0.922	1.941
-24	344.44	343.41	1263.3	13.26	1.448	0.854	165.3	414.9	0.934	1.936
-22	372.05	370.90	1256.3	14.28	1.455	0.864	168.2	415.7	0.945	1.932
-20	401.34	400.06	1249.2	15.37	1.461	0.875	171.1	416.6	0.957	1.927
-18	432.36	430.95	1242.0	16.52	1.468	0.886	174.1	417.4	0.968	1.923
-16	465.20	463.64	1234.8	17.74	1.476	0.897	177.0	418.2	0.980	1.919
-14	499.91	498.20	1227.5	19.04	1.483	0.909	180.0	419.0	0.991	1.914
-12	536.58	534.69	1220.0	20.41	1.491	0.921	182.9	419.8	1.003	1.910
-10	575.26	573.20	1212.5	21.86	1.499	0.933	185.9	420.5	1.014	1.906
-8	616.03	613.78	1204.9	23.39	1.507	0.947	189.0	421.2	1.025	1.902
-6	658.97	656.52	1197.2	25.01	1.516	0.960	192.0	421.9	1.036	1.898
-4	704.15	701.49	1189.4	26.72	1.524	0.975	195.0	422.6	1.048	1.894
-2	751.64	748.76	1181.4	28.53	1.533	0.990	198.1	423.2	1.059	1.890
0	801.52	798.41	1173.4	30.44	1.543	1.005	201.2	423.8	1.070	1.886
2	853.87	850.52	1165.3	32.46	1.552	1.022	204.3	424.4	1.081	1.882
4	908.77	905.16	1157.0	34.59	1.563	1.039	207.4	424.9	1.092	1.878
6	966.29	962.42	1148.6	36.83	1.573	1.057	210.5	425.5	1.103	1.874
8	1026.5	1022.4	1140.0	39.21	1.584	1.076	213.7	425.9	1.114	1.870
10	1089.5	1085.1	1131.3	41.71	1.596	1.096	216.8	426.4	1.125	1.866
12	1155.4	1150.7	1122.5	44.35	1.608	1.117	220.0	426.8	1.136	1.862
14	1224.3	1219.2	1113.5	47.14	1.621	1.139	223.2	427.2	1.147	1.859
16	1296.2	1290.8	1104.4	50.09	1.635	1.163	226.5	427.5	1.158	1.855
18	1371.2	1365.5	1095.1	53.20	1.650	1.188	229.7	427.8	1.169	1.851
20	1449.4	1443.4	1085.6	56.48	1.666	1.215	233.0	428.1	1.180	1.847
22	1530.9	1524.6	1075.9	59.96	1.683	1.243	236.4	428.3	1.191	1.843
24	1615.8	1609.2	1066.0	63.63	1.701	1.273	239.7	428.4	1.202	1.839
26	1704.2	1697.2	1055.9	67.51	1.721	1.306	243.1	428.6	1.214	1.834
28	1796.2	1788.9	1045.5	71.62	1.743	1.341	246.5	428.6	1.225	1.830
30	1891.9	1884.2	1034.9	75.97	1.767	1.379	249.9	428.6	1.236	1.826
32	1991.3	1983.2	1024.1	80.58	1.793	1.420	253.4	428.6	1.247	1.822
34	2094.5	2086.2	1012.9	85.48	1.822	1.465	256.9	428.4	1.258	1.817
36	2201.7	2193.1	1001.4	90.68	1.855	1.514	260.5	428.3	1.269	1.813
38	2313.0	2304.0	989.5	96.22	1.891	1.569	264.1	428.0	1.281	1.808
40	2428.4	2419.2	977.3	102.1	1.932	1.629	267.8	427.7	1.292	1.803
42	2548.1	2538.6	964.6	108.4	1.979	1.696	271.5	427.2	1.303	1.798
44	2672.2	2662.4	951.4	115.2	2.033	1.771	275.3	426.7	1.315	1.793
46	2800.7	2790.7	937.7	122.4	2.095	1.857	279.2	426.1	1.327	1.788
48	2933.7	2923.6	923.3	130.2	2.168	1.955	283.2	425.4	1.339	1.782
50	3071.5	3061.2	908.2	138.6	2.256	2.069	287.3	424.5	1.351	1.776
52	3214.0	3203.6	892.2	147.7	2.362	2.203	291.5	423.5	1.363	1.770
54	3361.4	3351.0	875.1	157.6	2.493	2.363	295.8	422.4	1.376	1.764
56	3513.8	3503.5	856.8	168.4	2.661	2.557	300.3	421.0	1.389	1.757
58	3671.3	3661.2	836.9	180.4	2.883	2.799	305.0	419.4	1.403	1.749
60	3834.1	3824.2	814.9	193.7	3.191	3.106	310.0	417.6	1.417	1.741
62	4002.1	3992.7	790.1	208.6	3.650	3.511	315.3	415.5	1.433	1.732
64	4175.7	4166.8	761.0	225.6	4.415	4.064	321.2	413.0	1.450	1.722

1.2 Refrigerant Cylinders

- Cylinder specifications
 - The cylinder is painted refrigerant color (pink).
 - The cylinder valve is equipped with a siphon tube.



Refrigerant can be charged in liquid state with cylinder in upright position.

Caution: Do not lay cylinder on its side during charging, since it cause refrigerant in gas state to enter the system.

- Handling of cylinders

- (1) Laws and regulations

R-410A is liquefied gas, and the High Pressure Gas Safety Law must be observed in handling them. Before using, refer to the High Pressure Gas Safety Law.

The Law stipulates standards and regulations that must be followed to prevent accidents with high pressure gases. Be sure to follow the regulations.

- (2) Handling of vessels

Since R-410A is high pressure gas, it is contained in high pressure vessels.

Although those vessels are durable and strong, careless handling can cause damage that can lead to unexpected accidents. Do not drop vessels, let them fall, apply impact or roll them on the ground.

- (3) Storage

Although R-410A is not flammable, it must be stored in a well-ventilated, cool, and dark place in the same way as any other high pressure gases.

It should also be noted that high pressure vessels are equipped with safety devices that releases gas when the ambient temperature reaches more than a certain level (fusible plug melts) and when the pressure exceeds a certain level (spring-type safety valve operates).

1.3 Service Tools

R-410A is used under higher working pressure, compared to previous refrigerants (R-22, R-407C). Furthermore, the refrigerating machine oil has been changed from Suniso oil to Ether oil, and if oil mixing is occurred, sludge results in the refrigerants and causes other problems. Therefore, gauge manifolds and charge hoses that are used with a previous refrigerant (R-22, R-407C) can not be used for products that use new refrigerants.

Be sure to use dedicated tools and devices.

■ Tool compatibility

Tool	Compatibility			Reasons for change
	HFC		HCFC	
	R-410A	R-407C	R-22	
Gauge manifold Charge hose	×			<ul style="list-style-type: none"> Do not use the same tools for R-22 and R-410A. Thread specification differs for R-410A and R-407C.
Charging cylinder	×		○	<ul style="list-style-type: none"> Weighting instrument used for HFCs.
Gas detector	○		×	<ul style="list-style-type: none"> The same tool can be used for HFCs.
Vacuum pump (pump with reverse flow preventive function)		○		<ul style="list-style-type: none"> To use existing pump for HFCs, vacuum pump adaptor must be installed.
Weighting instrument		○		
Charge mouthpiece		×		<ul style="list-style-type: none"> Seal material is different between R-22 and HFCs. Thread specification is different between R-410A and others.
Flaring tool (Clutch type)		○		<ul style="list-style-type: none"> For R-410A, flare gauge is necessary.
Torque wrench		○		<ul style="list-style-type: none"> Torque-up for 1/2 and 5/8
Pipe cutter		○		
Pipe expander		○		
Pipe bender		○		
Pipe assembling oil		×		<ul style="list-style-type: none"> Due to refrigerating machine oil change. (No Suniso oil can be used.)
Refrigerant recovery device	Check your recovery device.			
Refrigerant piping	See the chart below.			<ul style="list-style-type: none"> Only φ19.1 is changed to 1/2H material while the previous material is "O".

As for the charge mouthpiece and packing, 1/2UNF20 is necessary for mouthpiece size of charge hose.

■ Copper tube material and thickness

Pipe size	R-407C		R-410A	
	Material	Thickness t (mm)	Material	Thickness t (mm)
φ6.4	O	0.8	O	0.8
φ9.5	O	0.8	O	0.8
φ12.7	O	0.8	O	0.8
φ15.9	O	1.0	O	1.0
φ19.1	O	1.0	1/2H	1.0
φ22.2	1/2H	1.0	1/2H	1.0
φ25.4	1/2H	1.0	1/2H	1.0
φ28.6	1/2H	1.0	1/2H	1.0
φ31.8	1/2H	1.2	1/2H	1.1
φ38.1	1/2H	1.4	1/2H	1.4
φ44.5	1/2H	1.6	1/2H	1.6

* O: Soft (Annealed)
H: Hard (Drawn)

1. Flaring tool



■ Specifications

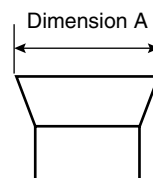
- Dimension A

Unit:mm

Nominal size	Tube O.D. Do	A ⁺⁰ _{-0.4}	
		Class-2 (R-410A)	Class-1 (Conventional)
1/4	6.35	9.1	9.0
3/8	9.52	13.2	13.0
1/2	12.70	16.6	16.2
5/8	15.88	19.7	19.4
3/4	19.05	24.0	23.3

■ Differences

- Change of dimension A



For class-1: R-407C
For class-2: R-410A

Conventional flaring tools can be used when the work process is changed.

(change of work process)

Previously, a pipe extension margin of 0 to 0.5mm was provided for flaring. For R-410A air conditioners, perform pipe flaring with a pipe extension margin of 1.0 to 1.5mm.

(For clutch type only)

Conventional tool with pipe extension margin adjustment can be used.

2. Torque wrench



■ Specifications

- Dimension B

Unit:mm

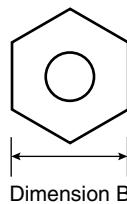
Nominal size	Class-1	Class-2	Previous
1/2	24	26	24
5/8	27	29	27

No change in tightening torque

No change in pipes of other sizes

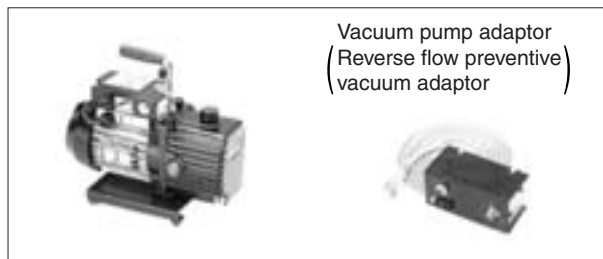
■ Differences

- Change of dimension B
Only 1/2", 5/8" are extended



For class-1: R-407C
For class-2: R-410A

3. Vacuum pump with check valve



■ Specifications

- Discharge speed
50 l/min (50Hz)
60 l/min (60Hz)
- Suction port UNF7/16-20(1/4 Flare)
UNF1/2-20(5/16 Flare) with adaptor
- Maximum degree of vacuum
Select a vacuum pump which is able to keep the vacuum degree of the system in excess of -100.7 kPa (5 torr - 755 mmHg).

■ Differences

- Equipped with function to prevent reverse oil flow
- Previous vacuum pump can be used by installing adaptor.

4. Leak tester



- Specifications
 - Hydrogen detecting type, etc.
 - Applicable refrigerants
R-410A, R-407C, R-404A, R-507A, R-134a, etc.
- Differences
 - Previous testers detected chlorine. Since HFCs do not contain chlorine, new tester detects hydrogen.

5. Refrigerant oil (Air compal)



- Specifications
 - Contains synthetic oil, therefore it can be used for piping work of every refrigerant cycle.
 - Offers high rust resistance and stability over long period of time.
- Differences
 - Can be used for R-410A and R-22 units.

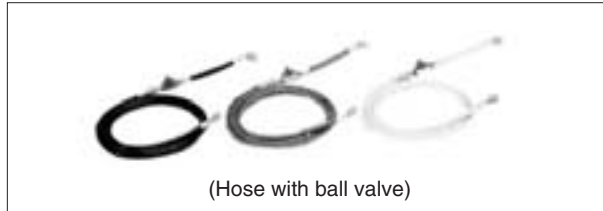
6. Gauge manifold for R-410A



- Specifications
 - High pressure gauge
- 0.1 to 5.3 MPa (-76 cmHg to 53 kg/cm²)
 - Low pressure gauge
- 0.1 to 3.8 MPa (-76 cmHg to 38 kg/cm²)
 - 1/4" → 5/16" (2min → 2.5min)
 - No oil is used in pressure test of gauges.
→ For prevention of contamination

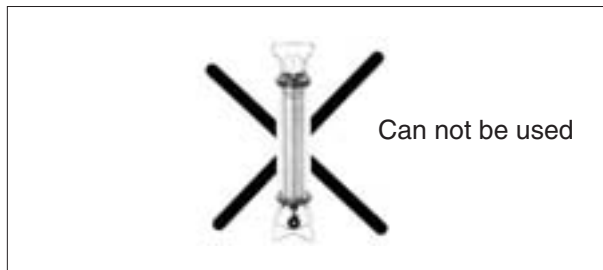
- Temperature scale indicates the relationship between pressure and temperature in gas saturated state.
- Differences
 - Change in pressure
 - Change in service port diameter

7. Charge hose for R-410A



- Specifications
 - Working pressure 5.08 MPa (51.8 kg/cm²)
 - Rupture pressure 25.4 MPa (259 kg/cm²)
 - Available with and without hand-operate valve that prevents refrigerant from outflow.
- Differences
 - Pressure proof hose
 - Change in service port diameter
 - Use of nylon coated material for HFC resistance

8. Charging cylinder



- Specifications
 - Use weigher for refrigerant charge listed below to charge directly from refrigerant cylinder.
- Differences
 - The cylinder can not be used for mixed refrigerant since mixing ratio is changed during charging.

When R-410A is charged in liquid state using charging cylinder, foaming phenomenon is generated inside charging cylinder.

9. Weigher for refrigerant charge



- Specifications
 - High accuracy
 - TA101A (for 10-kg cylinder) = $\pm 2\text{g}$
 - TA101B (for 20-kg cylinder) = $\pm 5\text{g}$
 - Equipped with pressure-resistant sight glass to check liquid refrigerant charging.
 - A manifold with separate ports for HFCs and previous refrigerants is equipped as standard accessories.
- Differences
 - Measurement is based on weight to prevent change of mixing ratio during charging.

10. Charge mouthpiece



- Specifications
 - For R-410A, 1/4" → 5/16" (2min → 2.5min)
 - Material is changed from CR to H-NBR.
- Differences
 - Change of thread specification on hose connection side (For the R-410A use)
 - Change of sealer material for the HFCs use.

Warning



- Daikin Industries, Ltd.'s products are manufactured for export to numerous countries throughout the world. Daikin Industries, Ltd. does not have control over which products are exported to and used in a particular country. Prior to purchase, please therefore confirm with your local authorised importer, distributor and/or retailer whether this product conforms to the applicable standards, and is suitable for use, in the region where the product will be used. This statement does not purport to exclude, restrict or modify the application of any local legislation.
- Ask a qualified installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Use only those parts and accessories supplied or specified by Daikin. Ask a qualified installer or contractor to install those parts and accessories. Use of unauthorised parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Read the User's Manual carefully before using this product. The User's Manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

If you have any enquiries, please contact your local importer, distributor and/or retailer.

Cautions on product corrosion

1. Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced.
2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided. If you need to install the outdoor unit close to the sea shore, contact your local distributor.



JMI-0107

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/

©All rights reserved

● Specifications, designs and other content appearing in this brochure are current as of November 2010 but subject to change without notice.