DAIKIN

SiENBE37-701

R-410A

Service Manual

VRV III®

REYQ8-48PY1B
R-410 Heat Recovery 50HZ

VRV III R-410A Heat Recovery 50Hz

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**	
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 shook. 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.	
If the refrigerant gas discharges during the repair work, do not touch the discharging refrigerant gas. The refrigerant gas can cause frostbite.	
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.	
If the refrigerant gas leaks during the repair work, ventilate the area. The refrigerant gas can generate toxic gases when it contacts flames.	
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.	
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.	

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
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.	

Warning	
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 control, 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.	
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, loose 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 2007 VRVIII series Heat Recovery 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 Recovery System.

Jan., 2008

After Sales Service Division

Part 1
General Information

1. Model Names of Indoor/Outdoor Units

Indoor Units

Type		Model Name											Power Supply
Roundflow Ceiling Mounted Cassette	FXFQ	20P	25P	32P	40P	50P	63P	80P	100P	125P	—	—	VE
600×600 4-Way Blow Ceiling Mounted Cassette	FXZQ	20M	25M	32M	40M	50M	—	—	—	—	—	—	V1
2-Way Blow Ceiling Mounted Cassette	FXCQ	20M	25M	32M	40M	50M	63M	80M	—	125M	—	—	V3
Ceiling Mounted Corner Cassette	FXKQ	—	25MA	32MA	40MA	—	63MA	—	—	—	—	—	VE
Slim Concealed Ceiling Unit	FXDQ-PVE	20P	25P	32P	—	—	—	—	—	—	—	—	
	FXDQ-NAVE	—	—	—	40NA	50NA	63NA	—	—	—	—	—	
Concealed Ceiling Unit (Small)	FXDQ	20M	25M	—	—	—	—	—	—	—	—	—	V3
Concealed Ceiling Unit	FXSQ	20M	25M	32M	40M	50M	63M	80M	100M	125M	—	—	
Concealed Ceiling Unit (Large)	FXMQ	—	—	—	40MA	50MA	63MA	80MA	100MA	125MA	200MA	250MA	VE
Ceiling Suspended Unit	FXHQ	—	—	32MA	—	—	63MA	—	100MA	—	—	—	
Wall Mounted Unit	FXAQ	20MA	25MA	32MA	40MA	50MA	63MA	—	—	—	—	—	
Floor Standing Unit	FXLQ	20MA	25MA	32MA	40MA	50MA	63MA	—	—	—	—	—	
Concealed Floor Standing Unit	FXNQ	20MA	25MA	32MA	40MA	50MA	63MA	—	—	—	—	—	

Note: FXDQ has following 2 Series, as show below.
FXDQ-P, NAVE: with Drain Pump
MA, NA: RoHS Directive models; Specifications, Dimensions and other functions are not changed compared with M, N type.

BS Units

Type	Model Name				Power Supply
Heat Recovery Series	BSVQ	100P	160P	250P	V1

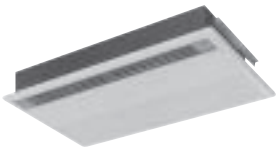
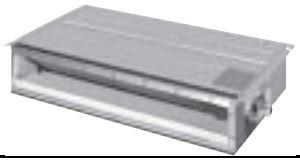
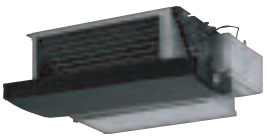
Outdoor Units
Normal Series

Series	Model Name										Power Supply
Heat Recovery	REYQ	8P	10P	12P	14P	16P	18P	20P	22P	24P	Y1
		26P	28P	30P	32P	34P	36P	38P	40P	42P	
		44P	46P	48P							

Power Supply: VE : 1ϕ, 220~240V, 50Hz, 1ϕ, 220V, 60Hz
V1 : 1ϕ, 220~240V, 50Hz
V3 : 1ϕ, 230V, 50Hz
Y1 : 3ϕ, 380~415V, 50Hz

2. External Appearance

2.1 Indoor Units

Roundflow Ceiling Mounted Cassette FXFQ20P FXFQ25P FXFQ32P FXFQ40P FXFQ50P FXFQ63P FXFQ80P FXFQ100P FXFQ125P 	Concealed Ceiling Unit (Large) FXMQ40MA FXMQ50MA FXMQ63MA FXMQ80MA FXMQ100MA FXMQ125MA FXMQ200MA FXMQ250MA  FXMQ40~125M  FXMQ200 · 250M
600×600 4-Way Blow Ceiling Mounted Cassette FXZQ20M FXZQ25M FXZQ32M FXZQ40M FXZQ50M 	Ceiling Suspended Unit FXHQ32MA FXHQ63MA FXHQ100MA 
2-Way Blow Ceiling Mounted Cassette FXCQ20M FXCQ25M FXCQ32M FXCQ40M FXCQ50M FXCQ63M FXCQ80M FXCQ125M 	Wall Mounted Unit FXAQ20MA FXAQ25MA FXAQ32MA FXAQ40MA FXAQ50MA FXAQ63MA
Ceiling Mounted Corner Cassette FXKQ25MA FXKQ32MA FXKQ40MA FXKQ63MA 	Floor Standing Unit FXLQ20MA FXLQ25MA FXLQ32MA FXLQ40MA FXLQ50MA FXLQ63MA 
Slim Concealed Ceiling Unit FXDQ20P FXDQ40NA FXDQ25P FXDQ50NA FXDQ32P FXDQ63NA with Drain Pump (VE) 	Concealed Floor Standing Unit FXNQ20MA FXNQ25MA FXNQ32MA FXNQ40MA FXNQ50MA FXNQ63MA 
Concealed Ceiling Unit (Small) FXDQ20M FXDQ25M 	BS Units BSVQ100P BSVQ160P BSVQ250P 
Concealed Ceiling Unit FXSQ20M FXSQ25M FXSQ32M FXSQ40M FXSQ50M FXSQ63M FXSQ80M FXSQ100M FXSQ125M 	

2.2 Outdoor Units

REYQ8P, 10P, 12P, 14P, 16P	REYQ18P, 20P, 22P, 24P
 8, 10, 12, 14, 16 HP 22.4 ~ 40.0, 45.0 kW	 18, 20, 22, 24 HP 50.4 ~ 67.0 kW

REYQ26P, 28P	REYQ30P, 32P	REYQ34P, 36P, 38P, 40P
 26, 28 HP 73.0, 78.5 kW	 30, 32 HP 85.0, 90.0 kW	 34, 36, 38, 40 HP 95.4 ~ 112 kW

REYQ42P, 44P	REYQ46P, 48P
 42, 44 HP 118 ~ 124 kW	 46, 48 HP 130, 135 kW

3. Combination of Outdoor Units

Single Use

System Capacity	Number of units	Single Unit					Outdoor Unit Multi Connection Piping Kit (Option)
		8	10	12	14	16	
8HP	1	●					—
10HP	1		●				
12HP	1			●			
14HP	1				●		
16HP	1					●	

Multiple Use

System Capacity	Number of units	Multi Unit Module					Outdoor Unit Multi Connection Piping Kit (Option)
		8	10	12	14	16	
18HP	2	●	●				Heat Recovery: BHFP26P90
20HP	2	●		●			
22HP	2		●	●			
24HP	2			●●			
26HP	2		●			●	
28HP	2			●		●	
30HP	2				●	●	
32HP	2					●●	
34HP	3	●	●			●	Heat Recovery: BHFP26P136
36HP	3	●		●		●	
38HP	3		●	●		●	
40HP	3			●●		●	
42HP	3		●			●●	
44HP	3			●		●●	
46HP	3				●	●●	
48HP	3					●●●	

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

4. Model Selection

VRV III Heat Recovery Series

Connectable indoor units number and capacity

Normal Series

HP	8HP	10HP	12HP	14HP	16HP	18HP	20HP
System name	REYQ8P	REYQ10P	REYQ12P	REYQ14P	REYQ16P	REYQ18P	REYQ20P
Outdoor unit 1	REYQ8P	REYQ10P	REYQ12P	REYQ14P	REYQ16P	REMQ8P	REMQ8P
Outdoor unit 2	–	–	–	–	–	REMQ10P	REMQ12P
Outdoor unit 3	–	–	–	–	–	–	–
Total number of connectable indoor units	13	16	19	22	26	29	32
Total capacity of connectable indoor units (kW)	10.0~26.0	12.5~32.5	15.0~39.0	17.5~45.5	20.0~52.0	22.5~58.5	25.0~65.0

HP	22HP	24HP	26HP	28HP	30HP	32HP	34HP
System name	REYQ22P	REYQ24P	REYQ26P	REYQ28P	REYQ30P	REYQ32P	REYQ34P
Outdoor unit 1	REMQ10P	REMQ12P	REMQ10P	REMQ12P	REMQ14P	REMQ16P	REMQ8P
Outdoor unit 2	REMQ12P	REMQ12P	REMQ16P	REMQ16P	REMQ16P	REMQ16P	REMQ10P
Outdoor unit 3	–	–	–	–	–	–	REMQ16P
Total number of connectable indoor units	35	39	42	45	48	52	55
Total capacity of connectable indoor units (kW)	27.5~71.5	30.0~78.0	32.5~84.5	35.0~91.0	37.5~97.5	40.0~104.0	42.5~110.5

HP	36HP	38HP	40HP	42HP	44HP	46HP	48HP
System name	REYQ36P	REYQ38P	REYQ40P	REYQ42P	REYQ44P	REYQ46P	REYQ48P
Outdoor unit 1	REMQ8P	REMQ10P	REMQ12P	REMQ10P	REMQ12P	REMQ14P	REMQ16P
Outdoor unit 2	REMQ12P	REMQ12P	REMQ12P	REMQ16P	REMQ16P	REMQ16P	REMQ16P
Outdoor unit 3	REMQ16P	REMQ16P	REMQ16P	REMQ16P	REMQ16P	REMQ16P	REMQ16P
Total number of connectable indoor units	58	61	64				
Total capacity of connectable indoor units (kW)	45.0~117.0	47.5~123.5	50.0~130.0	52.5~136.5	55.0~143.0	57.5~149.5	60.0~156.0

Connectable Indoor Unit

Type		Model Name											Power Supply
Roundflow Ceiling Mounted Cassette	FXFQ	20P	25P	32P	40P	50P	63P	80P	100P	125P	—	—	VE
600×600 4-Way Blow Ceiling Mounted Cassette	FXZQ	20M	25M	32M	40M	50M	—	—	—	—	—	—	V1
2-Way Blow Ceiling Mounted Cassette	FXCQ	20M	25M	32M	40M	50M	63M	80M	—	125M	—	—	V3
Ceiling Mounted Corner Cassette	FXKQ	—	25MA	32MA	40MA	—	63MA	—	—	—	—	—	VE
Slim Concealed Ceiling Unit	FXDQ-PVE	20P	25P	32P	—	—	—	—	—	—	—	—	
	FXDQ-NAVE	—	—	—	40NA	50NA	63NA	—	—	—	—	—	
Concealed Ceiling Unit (Small)	FXDQ	20M	25M	—	—	—	—	—	—	—	—	—	V3
Concealed Ceiling Unit	FXSQ	20M	25M	32M	40M	50M	63M	80M	100M	125M	—	—	
Concealed Ceiling Unit (Large)	FXMQ	—	—	—	40MA	50MA	63MA	80MA	100MA	125MA	200MA	250MA	VE
Ceiling Suspended Unit	FXHQ	—	—	32MA	—	—	63MA	—	100MA	—	—	—	
Wall Mounted Unit	FXAQ	20MA	25MA	32MA	40MA	50MA	63MA	—	—	—	—	—	
Floor Standing Unit	FXLQ	20MA	25MA	32MA	40MA	50MA	63MA	—	—	—	—	—	
Concealed Floor Standing Unit	FXNQ	20MA	25MA	32MA	40MA	50MA	63MA	—	—	—	—	—	

Note: FXDQ has following 2 Series, as shown below.
FXDQ-P, NAVE : with Drain Pump

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	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	22.4 kW	28.0 kW
Equivalent output	0.8HP	1HP	1.25HP	1.6HP	2.0HP	2.5HP	3.2HP	4HP	5HP	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 Model)	Conventional model (M Model)
Compressor	Connection of equalizer oil pipe	● NONE (No particular changes in terms of service)	● YES
Workability	Equalizer oil pipe for multi-outdoor-unit system	● NONE	● YES
	Procedure for calculating refrigerant refilling quantity	● Refilling quantity due to piping length + Adjustment quantity according to models of outdoor units	● Refilling quantity due to piping length - Adjustment quantity according to models of outdoor units
Optional accessories	Branch pipe for outdoor unit connection	● Y branch Type: BHFP26P90/136	● T branch Type: BHFP26M90+BHFP22M90P BHFP26M135+BHFP22M135P

Part 2
Specifications

1. Specifications

1.1 Outdoor Units

Heat Recovery 50Hz <REYQ-P>

Model Name			REYQ8PY1B	REYQ10PY1B
★1 Cooling Capacity (19.5°CWB)		kcal / h	19,400	24,300
		Btu / h	76,800	96,200
		kW	22.5	28.2
★2 Cooling Capacity (19.0°CWB)		kW	22.4	28.0
★3 Heating Capacity		kcal / h	21,500	27,100
		Btu / h	85,300	107,000
		kW	25.0	31.5
Casing Color	Y1 Type		Ivory White 5Y7.5/1	Ivory White 5Y7.5/1
	Y1E Type		Light Camel 2.5Y6.5/1.5	Light Camel 2.5Y6.5/1.5
Dimensions: (H×W×D)		mm	1680×1300×765	1680×1300×765
Heat Exchanger			Cross Fin Coil	Cross Fin Coil
Comp.	Type		Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type
	Piston Displacement	m³/h	7.88+10.53	13.34+10.53
	Number of Revolutions	r.p.m	3720, 2900	6300, 2900
	Motor Output×Number of Units	kW	1.0+4.5	2.2+4.5
	Starting Method		Soft Start	Soft Start
Fan	Type		Propellor Fan	Propellor Fan
	Motor Output	kW	0.35×2	0.35×2
	Air Flow Rate	l/s	3,166	3,166
		m³/min	190	190
	Drive		Direct Drive	Direct Drive
Connecting Pipes	Liquid Pipe		ϕ9.5 C1220T (Brazing Connection)	ϕ9.5 C1220T (Brazing Connection)
	Suction Gas Pipe		ϕ19.1 C1220T (Brazing Connection)	ϕ22.2 C1220T (Brazing Connection)
	High and Low Pressure Gas Pipe		ϕ15.9 C1220T (Brazing Connection)	ϕ19.1 C1220T (Brazing Connection)
	Pressure Equalizer Tube		—	—
Mass (Weight)		kg	331	331
Safety Devices			High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector
Defrost Method			Deicer	Deicer
Capacity Control		%	20~100	14~100
Refrigerant	Refrigerant Name		R-410A	R-410A
	Charge	kg	10.3	10.6
	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.			4D057563B	4D057564B

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.

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

The Reference Number
C~: Partly corrected drawings.
J~ : Original drawing is Japanese
V~: Printing Convenience

Model Name			REYQ12PY1B	REYQ14PY1B
★1 Cooling Capacity (19.5°CWB)		kcal / h	29,000	35,500
		Btu / h	115,000	141,000
		kW	33.7	41.3
★2 Cooling Capacity (19.0°CWB)		kW	33.5	40.0
★3 Heating Capacity		kcal / h	32,300	38,700
		Btu / h	128,000	154,000
		kW	37.5	45.0
Casing Color	Y1 Type		Ivory White 5Y7.5/1	Ivory White 5Y7.5/1
	Y1E Type		Light Camel 2.5Y6.5/1.5	Light Camel 2.5Y6.5/1.5
Dimensions: (H×W×D)		mm	1680×1300×765	1680×1300×765
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	16.90+16.90
	Number of Revolutions	r.p.m	6300, 2900	7980, 7980
	Motor Output×Number of Units	kW	3.3+4.5	3.8+3.8
	Starting Method		Soft Start	Soft Start
Fan	Type		Propellor Fan	Propellor Fan
	Motor Output	kW	0.35×2	0.75×2
	Air Flow Rate	l/s	3,500	3,916
		m³/min	210	235
	Drive		Direct Drive	Direct Drive
Connecting Pipes	Liquid Pipe		ϕ12.7 C1220T (Brazing Connection)	ϕ12.7 C1220T (Brazing Connection)
	Suction Gas Pipe		ϕ28.6 C1220T (Brazing Connection)	ϕ28.6 C1220T (Brazing Connection)
	High and Low Pressure Gas Pipe		ϕ19.1 C1220T (Brazing Connection)	ϕ22.2 C1220T (Brazing Connection)
	Pressure Equalizer Tube		—	—
Mass (Weight)		kg	331	339
Safety Devices			High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector
Defrost Method			Deicer	Deicer
Capacity Control		%	14~100	10~100
Refrigerant	Refrigerant Name		R-410A	R-410A
	Charge	kg	10.8	11.1
	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.			4D057565B	4D057566B

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.

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

Model Name			REYQ16PY1B
★1 Cooling Capacity (19.5°CWB)		kcal / h	40,000
		Btu / h	159,000
		kW	46.5
★2 Cooling Capacity (19.0°CWB)		kW	45.0
★3 Heating Capacity		kcal / h	43,000
		Btu / h	171,000
		kW	50.0
Casing Color	Y1 Type		Ivory White 5Y7.5/1
	Y1E Type		Light Camel 2.5Y6.5/1.5
Dimensions: (H×W×D)		mm	1680×1300×765
Heat Exchanger			Cross Fin Coil
Comp.	Type		Hermetically Sealed Scroll Type
	Piston Displacement	m³/h	16.90+16.90
	Number of Revolutions	r.p.m	7980, 7980
	Motor Output×Number of Units	kW	4.4+4.4
	Starting Method		Soft Start
Fan	Type		Propellor Fan
	Motor Output	kW	0.75×2
	Air Flow Rate	l/s	4,000
		m³/min	240
	Drive		Direct Drive
Connecting Pipes	Liquid Pipe		ϕ12.7 C1220T (Brazing Connection)
	Suction Gas Pipe		ϕ28.6 C1220T (Brazing Connection)
	High and Low Pressure Gas Pipe		ϕ22.2 C1220T (Brazing Connection)
	Pressure Equalizer Tube		—
Mass (Weight)		kg	339
Safety Devices			High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector
Defrost Method			Deicer
Capacity Control		%	10~100
Refrigerant	Refrigerant Name		R-410A
	Charge	kg	11.1
	Control		Electronic Expansion Valve
Refrigerator Oil			Refer to the nameplate of compressor
Standard Accessories			Installation Manual, Operation Manual, Connection Pipes, Clamps
Drawing No.			4D057567B

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.

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

Model Name (Combination Unit)			REYQ18P7Y1B	REYQ20P7Y1B
Model Name (Independent Unit)			REMQ8P7Y1B+REMQ10P7Y1B	REMQ8P7Y1B+REMQ12P7Y1B
★1 Cooling Capacity (19.5°CWB)		kcal / h	43,600	48,300
		Btu / h	173,000	192,000
		kW	50.7	56.2
★2 Cooling Capacity (19.0°CWB)		kW	50.4	55.9
★3 Heating Capacity		kcal / h	48,600	53,800
		Btu / h	193,000	213,000
		kW	56.5	62.5
Casing Color	Y1 Type		Ivory White 5Y7.5/1	Ivory White 5Y7.5/1
	Y1E Type		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	m³/h	(13.34+10.53)+16.90	(13.34+10.53)+16.90
	Number of Revolutions	r.p.m	(6300, 2900), 7980	(6300, 2900), 7980
	Motor Output×Number of Units	kW	(2.2+4.5)×1+4.7×1	(3.5+4.5)×1+4.7×1
	Starting Method		Soft start	Soft start
Fan	Type		Propellor fan	Propellor fan
	Motor Output	kW	(0.75×1)+(0.75×1)	(0.75×1)+(0.75×1)
	Air Flow Rate	l/s	3,000+3,083	3,000+3,333
		m³/min	180+185	180+200
	Drive		Direct drive	Direct drive
Connecting Pipes	Liquid Pipe		ϕ15.9 C1220T (Brazing connection)	ϕ15.9 C1220T (Brazing connection)
	Suction Gas Pipe		ϕ28.6 C1220T (Brazing connection)	ϕ28.6 C1220T (Brazing connection)
	High and Low Pressure Gas Pipe		ϕ22.2 C1220T (Brazing connection)	ϕ28.6 C1220T (Brazing connection)
	Pressure Equalizer Tube		ϕ19.1 C1220T (Brazing connection)	ϕ19.1 C1220T (Brazing connection)
Mass (Weight)		kg	204+254	204+254
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	7~100
Refrigerant	Refrigerant Name		R-410A	R-410A
	Charge	kg	8.2+9.0	8.2+9.1
	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, Cramps	Installation manual, Operation manual, Connection pipes, Cramps
Drawing No.			4D057568A	4D057569A

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.

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

Model Name (Combination Unit)			REYQ22P7Y1B	REYQ24P7Y1B
Model Name (Independent Unit)			REMQ10P7Y1B+REMQ12P7Y1B	REMQ12P7Y1B+REMQ12P7Y1B
★1 Cooling Capacity (19.5°CWB)		kcal / h	53,200	58,000
		Btu / h	211,000	230,000
		kW	61.9	67.4
★2 Cooling Capacity (19.0°CWB)		kW	61.5	67.0
★3 Heating Capacity		kcal / h	59,300	64,500
		Btu / h	235,000	256,000
		kW	69.0	75.0
Casing Color	Y1 Type		Ivory White 5Y7.5/1	Ivory White 5Y7.5/1
	Y1E Type		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	m³/h	(13.34+10.53)×2	(13.34+10.53)×2
	Number of Revolutions	r.p.m	(6300, 2900)×2	(6300, 2900)×2
	Motor Output×Number of Units	kW	(3.5+4.5)×1+(2.2+4.5)×1	(3.5+4.5)×2
	Starting Method		Soft start	Soft start
Fan	Type		Propellor fan	Propellor fan
	Motor Output	kW	(0.75×1)+(0.75×1)	0.75×2
	Air Flow Rate	l/s	3,083+3,333	3,333+3,333
		m³/min	185+200	200+200
	Drive		Direct drive	Direct drive
Connecting Pipes	Liquid Pipe		ϕ15.9 C1220T (Brazing connection)	ϕ15.9 C1220T (Brazing connection)
	Suction Gas Pipe		ϕ28.6 C1220T (Brazing connection)	ϕ34.9 C1220T (Brazing connection)
	High and Low Pressure Gas Pipe		ϕ28.6 C1220T (Brazing connection)	ϕ28.6 C1220T (Brazing connection)
	Pressure Equalizer Tube		ϕ19.1 C1220T (Brazing connection)	ϕ19.1 C1220T (Brazing connection)
Mass (Weight)		kg	254+254	254+254
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	9.0+9.1	9.1+9.1
	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, Cramps	Installation manual, Operation manual, Connection pipes, Cramps
Drawing No.			4D057570A	4D057571A

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.

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

Model Name (Combination Unit)			REYQ26P7Y1B	REYQ28P7Y1B
Model Name (Independent Unit)			REMQ10P7Y1B+REMQ16P7Y1B	REMQ12P7Y1B+REMQ16P7Y1B
★1 Cooling Capacity (19.5°CWB)		kcal / h	63,100	67,900
		Btu / h	250,000	270,000
		kW	73.4	79.0
★2 Cooling Capacity (19.0°CWB)		kW	73.0	78.5
★3 Heating Capacity		kcal / h	70,100	75,300
		Btu / h	278,000	299,000
		kW	81.5	87.5
Casing Color	Y1 Type		Ivory White 5Y7.5/1	Ivory White 5Y7.5/1
	Y1E Type		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	(13.34+10.53+10.53)+(13.34+10.53)	(13.34+10.53+10.53)+(13.34+10.53)
	Number of Revolutions	r.p.m	(6300, 2900, 2900)+(6300, 2900)	(6300, 2900, 2900)+(6300, 2900)
	Motor Output×Number of Units	kW	(3.2+4.5+4.5)×1+(2.2+4.5)×1	(3.2+4.5+4.5)×1+(3.5+4.5)×1
	Starting Method		Soft start	Soft start
Fan	Type		Propellor fan	Propellor fan
	Motor Output	kW	(0.75×1)+(0.35×2)	(0.75×1)+(0.35×2)
	Air Flow Rate	l/s	3,083+3,833	3,333+3,833
		m³/min	185+230	200+230
	Drive		Direct drive	Direct drive
Connecting Pipes	Liquid Pipe		ϕ19.1 C1220T (Brazing connection)	ϕ19.1 C1220T (Brazing connection)
	Suction Gas Pipe		ϕ34.9 C1220T (Brazing connection)	ϕ34.9 C1220T (Brazing connection)
	High and Low Pressure Gas Pipe		ϕ28.6 C1220T (Brazing connection)	ϕ28.6 C1220T (Brazing connection)
	Pressure Equalizer Tube		ϕ19.1 C1220T (Brazing connection)	ϕ19.1 C1220T (Brazing connection)
Mass (Weight)		kg	254+334	254+334
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	6~100
Refrigerant	Refrigerant Name		R-410A	R-410A
	Charge	kg	9.0+11.7	9.1+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, Cramps	Installation manual, Operation manual, Connection pipes, Cramps
Drawing No.			4D057572A	4D057808A

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.

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

Model Name (Combination Unit)			**REYQ30P7Y1B**	**REYQ32P7Y1B**
Model Name (Independent Unit)			**REMQ14P7Y1B+REMQ16P7Y1B**	**REMQ16P7Y1B+REMQ16P7Y1B**
★1 Cooling Capacity (19.5°CWB)		kcal / h	73,500	77,800
		Btu / h	292,000	309,000
		kW	85.5	90.5
★2 Cooling Capacity (19.0°CWB)		kW	85.0	90.0
★3 Heating Capacity		kcal / h	81,700	86,000
		Btu / h	324,000	341,000
		kW	95.0	100
Casing Color	Y1 Type		Ivory White 5Y7.5/1	Ivory White 5Y7.5/1
	Y1E Type		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	(13.34+10.53+10.53)×2	(13.34+10.53+10.53)×2
	Number of Revolutions	r.p.m	(6300, 2900, 2900)×2	(6300, 2900, 2900)×2
	Motor Output×Number of Units	kW	(3.2+4.5+4.5)×1+(1.9+4.5+4.5)×1	(3.2+4.5+4.5)×2
	Starting Method		Soft start	Soft start
Fan	Type		Propellor fan	Propellor fan
	Motor Output	kW	(0.35×2)+(0.35×2)	(0.35×2)×2
	Air Flow Rate	l/s	3,833+3,833	3,833+3,833
		m³/min	230+230	230+230
	Drive		Direct drive	Direct drive
Connecting Pipes	Liquid Pipe		ϕ19.1 C1220T (Brazing connection)	ϕ19.1 C1220T (Brazing connection)
	Suction Gas Pipe		ϕ34.9 C1220T (Brazing connection)	ϕ34.9 C1220T (Brazing connection)
	High and Low Pressure Gas Pipe		ϕ28.6 C1220T (Brazing connection)	ϕ28.6 C1220T (Brazing connection)
	Pressure Equalizer Tube		ϕ19.1 C1220T (Brazing connection)	ϕ19.1 C1220T (Brazing connection)
Mass (Weight)		kg	334+334	334+334
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	11.7+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, Cramps	Installation manual, Operation manual, Connection pipes, Cramps
Drawing No.			4D057809A	4D057810A

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.

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

Model Name (Combination Unit)			REYQ34P7Y1B	REYQ36P7Y1B
Model Name (Independent Unit)			REMQ8P7Y1B+REMQ10P7Y1B+REMQ16P7Y1B	REMQ8P7Y1B+REMQ12P7Y1B+REMQ16P7Y1B
★1 Cooling Capacity (19.5°CWB)		kcal / h	82,600	87,700
		Btu / h	328,000	348,000
		kW	96.0	102
★2 Cooling Capacity (19.0°CWB)		kW	95.4	101
★3 Heating Capacity		kcal / h	92,000	97,200
		Btu / h	365,000	386,000
		kW	107	113
Casing Color	Y1 Type		Ivory White 5Y7.5/1	Ivory White 5Y7.5/1
	Y1E Type		Light Camel 2.5Y6.5/1.5	Light Camel 2.5Y6.5/1.5
Dimensions: (H×W×D)		mm	1680×930×765+1680×930×765+1680×1240×765	1680×930×765+1680×930×765+1680×1240×765
Heat Exchanger			Cross fin coil	Cross fin coil
Comp.	Type		Hermetically sealed scroll type	Hermetically sealed scroll type
	Piston Displacement	m³/h	(13.34+10.53+10.53)+(13.34+10.53)+16.90	(13.34+10.53+10.53)+(13.34+10.53)+16.90
	Number of Revolutions	r.p.m	(6300, 2900, 2900)+(6300, 2900)+7980	(6300, 2900, 2900)+(6300, 2900)+7980
	Motor Output×Number of Units	kW	(3.2+4.5+4.5)×1+(2.2+4.5)×1+4.7×1	(3.2+4.5+4.5)×1+(3.5+4.5)×1+4.7×1
	Starting Method		Soft start	Soft start
Fan	Type		Propellor fan	Propellor fan
	Motor Output	kW	(0.75×1)+(0.75×1)+(0.35×2)	(0.75×1)+(0.75×1)+(0.35×2)
	Air Flow Rate	l/s	3,000+3,083+3,833	3,000+3,333+3,833
		m³/min	180+185+230	180+200+230
	Drive		Direct drive	Direct drive
Connecting Pipes	Liquid Pipe		ϕ19.1 C1220T (Brazing connection)	ϕ19.1 C1220T (Brazing connection)
	Suction Gas Pipe		ϕ34.9 C1220T (Brazing connection)	ϕ41.3 C1220T (Brazing connection)
	High and Low Pressure Gas Pipe		ϕ28.6 C1220T (Brazing connection)	ϕ28.6 C1220T (Brazing connection)
	Pressure Equalizer Tube		ϕ19.1 C1220T (Brazing connection)	ϕ19.1 C1220T (Brazing connection)
Mass (Weight)		kg	204+254+334	204+254+334
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	8.2+9.0+11.7	8.2+9.1+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, Cramps	Installation manual, Operation manual, Connection pipes, Cramps
Drawing No.			4D057811A	4D057812A

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.

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

Model Name (Combination Unit)			**REYQ38P7Y1B**	**REYQ40P7Y1B**
Model Name (Independent Unit)			**REMQ10P7Y1B+REMQ12P7Y1B+REMQ16P7Y1B**	**REMQ12P7Y1B+REMQ12P7Y1B+REMQ16P7Y1B**
★1 Cooling Capacity (19.5°CWB)		kcal / h	92,900	97,200
		Btu / h	368,000	386,000
		kW	108	113
★2 Cooling Capacity (19.0°CWB)		kW	107	112
★3 Heating Capacity		kcal / h	102,000	108,000
		Btu / h	406,000	427,000
		kW	119	125
Casing Color	Y1 Type		Ivory White 5Y7.5/1	Ivory White 5Y7.5/1
	Y1E Type		Light Camel 2.5Y6.5/1.5	Light Camel 2.5Y6.5/1.5
Dimensions: (H×W×D)		mm	1680×930×765+1680×930×765+1680×1240×765	1680×930×765+1680×930×765+1680×1240×765
Heat Exchanger			Cross fin coil	Cross fin coil
Comp.	Type		Hermetically sealed scroll type	Hermetically sealed scroll type
	Piston Displacement	m³/h	(13.34+10.53+10.53)+(13.34+10.53)×2	(13.34+10.53+10.53)+(13.34+10.53)×2
	Number of Revolutions	r.p.m	(6300, 2900, 2900)+(6300, 2900)×2	(6300, 2900, 2900)+(6300, 2900)×2
	Motor Output×Number of Units	kW	(3.2+4.5+4.5)×1+(3.5+4.5)×1+(2.2+4.5)×1	(3.2+4.5+4.5)×1+(3.5+4.5)×2
	Starting Method		Soft start	Soft start
Fan	Type		Propellor fan	Propellor fan
	Motor Output	kW	(0.75×1)+(0.75×1)+(0.35×2)	(0.75×2)+(0.35×2)
	Air Flow Rate	l/s	3,083+3,333+3,833	3,333+3,333+3,833
		m³/min	185+200+230	200+200+230
	Drive		Direct drive	Direct drive
Connecting Pipes	Liquid Pipe		ϕ19.1 C1220T (Brazing connection)	ϕ19.1 C1220T (Brazing connection)
	Suction Gas Pipe		ϕ41.3 C1220T (Brazing connection)	ϕ41.3 C1220T (Brazing connection)
	High and Low Pressure Gas Pipe		ϕ34.9 C1220T (Brazing connection)	ϕ34.9 C1220T (Brazing connection)
	Pressure Equalizer Tube		ϕ19.1 C1220T (Brazing connection)	ϕ19.1 C1220T (Brazing connection)
Mass (Weight)		kg	254+254+334	254+254+334
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	9.0+9.1+11.7	9.1+9.1+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, Cramps	Installation manual, Operation manual, Connection pipes, Cramps
Drawing No.			4D057813A	4D057814A

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.

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

Model Name (Combination Unit)			REYQ42P7Y1B	REYQ44P7Y1B
Model Name (Independent Unit)			REMQ10P7Y1B+REMQ16P7Y1B+REMQ16P7Y1B	REMQ12P7Y1B+REMQ16P7Y1B+REMQ16P7Y1B
★1 Cooling Capacity (19.5°CWB)		kcal / h	102,000	108,000
		Btu / h	406,000	427,000
		kW	119	125
★2 Cooling Capacity (19.0°CWB)		kW	118	124
★3 Heating Capacity		kcal / h	114,000	119,000
		Btu / h	450,000	471,000
		kW	132	138
Casing Color	Y1 Type		Ivory White 5Y7.5/1	Ivory White 5Y7.5/1
	Y1E Type		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	(13.34+10.53+10.53)×2+(13.34+10.53)	(13.34+10.53+10.53)×2+(13.34+10.53)
	Number of Revolutions	r.p.m	(6300, 2900, 2900)×2+(6300, 2900)	(6300, 2900, 2900)×2+(6300, 2900)
	Motor Output×Number of Units	kW	(3.2+4.5+4.5)×1+(2.2+4.5)×1	(3.2+4.5+4.5)×2+(3.5+4.5)×1
	Starting Method		Soft start	Soft start
Fan	Type		Propellor fan	Propellor fan
	Motor Output	kW	(0.75×1)+(0.35×2)×2	(0.75×1)+(0.35×2)×2
	Air Flow Rate	l/s	3,083+3,833+3,833	3,333+3,833+3,833
		m³/min	185+230+230	200+230+230
	Drive		Direct drive	Direct drive
Connecting Pipes	Liquid Pipe		ϕ19.1 C1220T (Brazing connection)	ϕ19.1 C1220T (Brazing connection)
	Suction Gas Pipe		ϕ41.3 C1220T (Brazing connection)	ϕ41.3 C1220T (Brazing connection)
	High and Low Pressure Gas Pipe		ϕ34.9 C1220T (Brazing connection)	ϕ34.9 C1220T (Brazing connection)
	Pressure Equalizer Tube		ϕ19.1 C1220T (Brazing connection)	ϕ19.1 C1220T (Brazing connection)
Mass (Weight)		kg	254+334+334	254+334+334
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	9.0+11.7+11.7	9.1+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, Cramps	Installation manual, Operation manual, Connection pipes, Cramps
Drawing No.			4D057815A	4D057816A

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.

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

Model Name (Combination Unit)			REYQ46P7Y1B	REYQ48P7Y1B
Model Name (Independent Unit)			REMQ14P7Y1B+REMQ16P7Y1B+REMQ16P7Y1B	REMQ16P7Y1B+REMQ16P7Y1B+REMQ16P7Y1B
★1 Cooling Capacity (19.5°CWB)		kcal / h	113,000	117,000
		Btu / h	447,000	464,000
		kW	131	136
★2 Cooling Capacity (19.0°CWB)		kW	130	135
★3 Heating Capacity		kcal / h	124,000	129,000
		Btu / h	495,000	512,000
		kW	145	150
Casing Color	Y1 Type		Ivory White 5Y7.5/1	Ivory White 5Y7.5/1
	Y1E Type		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	(13.34+10.53+10.53)×3	(13.34+10.53+10.53)×3
	Number of Revolutions	r.p.m	(6300, 2900, 2900)×3	(6300, 2900, 2900)×3
	Motor Output×Number of Units	kW	(3.2+4.5+4.5)×2+(1.9+4.5+4.5)×1	(3.2+4.5+4.5)×3
	Starting Method		Soft start	Soft start
Fan	Type		Propellor fan	Propellor fan
	Motor Output	kW	(0.35×2)+(0.35×2)×2	(0.35×2)×3
	Air Flow Rate	l/s	3,833+3,833+3,833	3,833+3,833+3,833
		m³/min	230+230+230	230+230+230
	Drive		Direct drive	Direct drive
Connecting Pipes	Liquid Pipe		ϕ19.1 C1220T (Brazing connection)	ϕ19.1 C1220T (Brazing connection)
	Suction Gas Pipe		ϕ41.3 C1220T (Brazing connection)	ϕ41.3 C1220T (Brazing connection)
	High and Low Pressure Gas Pipe		ϕ34.9 C1220T (Brazing connection)	ϕ34.9 C1220T (Brazing connection)
	Pressure Equalizer Tube		ϕ19.1 C1220T (Brazing connection)	ϕ19.1 C1220T (Brazing connection)
Mass (Weight)		kg	334+334+334	334+334+334
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	11.7+11.7+11.7	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, Cramps	Installation manual, Operation manual, Connection pipes, Cramps
Drawing No.			4D057817A	4D057818A

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.

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

1.2 Indoor Units

Roundflow Ceiling Mounted Cassette

1-1 TECHNICAL SPECIFICATIONS				FXFQ20PVEB	FXFQ25PVEB	FXFQ32PVEB	FXFQ40PVEB	FXFQ50PVEB
Capacity	Cooling		kW	2.2	2.8	3.6	4.5	5.6
	Heating		kW	2.5	3.2	4.0	5.0	6.3
Power Input	Cooling		kW	0.053	0.053	0.053	0.063	0.083
	Heating		kW	0.045	0.045	0.045	0.055	0.067
Casing	Material			Galvanised steel				
Dimensions	Packing	Height	mm	220	220	220	220	220
		Width	mm	882	882	882	882	882
		Depth	mm	882	882	882	882	882
	Unit	Height	mm	204	204	204	204	204
		Width	mm	840	840	840	840	840
		Depth	mm	840	840	840	840	840
Weight	Unit		kg	20.0	20.0	20.0	20.0	21.0
	Packed Unit		kg	24.0	24.0	24.0	24.0	26.0
Dimensions	Length	Inside	mm	2,096				
		Outside	mm	2,152				
Heat Exchanger	Dimensions	Nr of Rows		2	2	2	2	2
		Fin Pitch	mm	1.2	1.2	1.2	1.2	1.2
		Nr of Passes		2	2	3	3	7
		Face Area	m²	0.267	0.267	0.267	0.267	0.357
		Nr of Stages		6	6	6	6	8
		Empty Tubeplate Hole		4	4			
	Fin	Fin type		Cross fin coil (Multi louver fins and Hi-XSS tubes)				
Fan	Type			Turbo fan				
	Quantity			1	1	1	1	1
Air Flow Rate	Cooling	High	m³/min	12.5	12.5	12.5	13.5	15.5
		Low	m³/min	9.0	9.0	9.0	9.0	10.0
	Heating	High	m³/min	12.5	12.5	12.5	13.5	15.0
		Low	m³/min	9.0	9.0	9.0	9.0	9.5
Fan	Motor	Model		QTS48D11M				
		Steps		2	2	2	2	2
		Output (high)	W	56	56	56	56	56
Refrigerant	Name			R-410A				
Sound Level	Cooling	Sound power (nominal)	dBA	49	49	49	50	51
Cooling	Sound Pressure	High	dBA	31	31	31	32	33
		Low	dBA	28	28	28	28	28
Heating	Sound Pressure	High	dBA	31	31	31	32	33
		Low	dBA	28	28	28	28	28
Piping connections	Liquid (OD)	Type		Flare connection				
		Diameter	mm	6.35	6.4	6.4	6.4	6.4
	Gas	Type		Flare connection				
		Diameter	mm	12.7	12.7	12.7	12.7	12.7
	Drain	Diameter	mm	VP25 (I.D. 25/O.D. 32)				
	Heat Insulation			Foamed polystyrene/polyethylene				
	Sound absorbing insulation			(Foamed Polyurethane)				
Decoration Panel	Model			BYCQ140CW1				
	Colour			RAL9010				
	Dimensions	Height	mm	50	50	50	50	50
		Width	mm	950	950	950	950	950
		Depth	mm	950	950	950	950	950
	Weight		kg	5.5	5.5	5.5	5.5	5.5
Air Filter				Resin net with mold resistance				

Roundflow Ceiling Mounted Cassette

1-1 TECHNICAL SPECIFICATIONS		FXFQ20PVEB	FXFQ25PVEB	FXFQ32PVEB	FXFQ40PVEB	FXFQ50PVEB
Standard Accessories	Standard Accessories	Installation and operation manual				
		Drain hose				
		Washer for hanging bracket				
		Screws				
		Sealing Pads				
		Insulation for fitting				
		Clamp for drain hose				
		Installation guide				
		Drain sealing pad				
Notes		The sound pressure values are mentioned for a unit installed with rear suction				
		The sound power level is an absolute value indicating the power wich a sound source generates.				
		Nominal cooling capacities are based on: indoor temperature: 27°CDB,19°CWB, outdoor temperature: 35°CDB, equivalent refrigerant piping: 5m, level difference: 0m.				
		Nominal heating capacities are based on: indoor temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent refrigerant piping : 5m (horizontal)				
		Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.				

1-1 TECHNICAL SPECIFICATIONS				FXFQ63PVEB	FXFQ80PVEB	FXFQ100PVEB	FXFQ125PVEB
Capacity	Cooling		kW	7.1	9.0	11.2	14.0
	Heating		kW	8.0	10.0	12.5	16.0
Power Input	Cooling		kW	0.095	0.120	0.173	0.258
	Heating		kW	0.114	0.108	0.176	0.246
Casing	Material			Galvanised steel			
Dimensions	Packing	Height	mm	220	262	262	304
		Width	mm	882	882	882	882
		Depth	mm	882	882	882	882
	Unit	Height	mm	204	246	246	288
		Width	mm	840	840	840	840
		Depth	mm	840	840	840	840
Weight	Unit		kg	21.0	24.0	24.0	26.0
	Packed Unit		kg	26.0	28.0	28.0	31.0
Dimensions	Length	Inside	mm	2,096			
		Outside	mm	2,152			
Heat Exchanger	Dimensions	Nr of Rows		2	2	2	2
		Fin Pitch	mm	1.2	1.2	1.2	1.2
		Nr of Passes		7	9	9	11
		Face Area	m²	0.357	0.446	0.446	0.535
		Nr of Stages		8	10	10	12
	Fin	Fin type		Cross fin coil (Multi louver fins and Hi-XSS tubes)			
Fan	Type			Turbo fan			
	Quantity			1	1	1	1
Air Flow Rate	Cooling	High	m³/min	16.5	23.5	26.5	33.0
		Low	m³/min	11.0	14.5	17.0	20.0
	Heating	High	m³/min	17.5	23.5	28.0	33.0
		Low	m³/min	12.0	14.5	17.5	20.0
Fan	Motor	Model		QTS48D11M	QTS48C15M	QTS48C15M	QTS48C15M
		Steps		2	2	2	2
		Output (high)	W	56	120	120	120
Refrigerant	Name			R-410A			
Sound Level	Cooling	Sound power (nominal)	dBA	52	55	58	61
Cooling	Sound Pressure	High	dBA	34	38	41	44
		Low	dBA	29	32	33	34
Heating	Sound Pressure	High	dBA	36	38	42	44
		Low	dBA	30	32	34	34

Roundflow Ceiling Mounted Cassette

1-1 TECHNICAL SPECIFICATIONS				FXFQ63PVEB	FXFQ80PVEB	FXFQ100PVEB	FXFQ125PVEB
Piping connections	Liquid (OD)	Type		Flare connection			
		Diameter	mm	9.5	9.5	9.5	9.5
	Gas	Type		Flare connection			
		Diameter	mm	15.9	15.9	15.9	15.9
	Drain	Diameter	mm	VP25 (I.D. 25/O.D. 32)			
	Heat Insulation			Foamed polystyrene/polyethylene			
	Sound absorbing insulation			(Foamed Polyurethane)			
Decoration Panel	Model			BYCQ140CW1			
	Colour			RAL9010			
	Dimensions	Height	mm	50	50	50	50
		Width	mm	950	950	950	950
		Depth	mm	950	950	950	950
	Weight		kg	5.5	5.5	5.5	5.5
Air Filter				Resin net with mold resistance			
Standard Accessories	Standard Accessories			Installation and operation manual			
				Drain hose			
				Washer for hanging bracket			
				Screws			
				Sealing Pads			
				Insulation for fitting			
				Clamp for drain hose			
				Installation guide			
				Drain sealing pad			
Notes				The sound pressure values are mentioned for a unit installed with rear suction			
				The sound power level is an absolute value indicating the power wich a sound source generates.			
				Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 5m, level difference : 0m.			
				Nominal heating capacities are based on : indoor temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, equivalent refrigerant piping : 5m (horizontal)			
				Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.			

1-2 ELECTRICAL SPECIFICATIONS			FXFQ20PVEB	FXFQ25PVEB	FXFQ32PVEB	FXFQ40PVEB	FXFQ50PVEB
Power Supply	Name		VE				
	Frequency	Hz	50/60				
	Voltage	V	220-240/220				
Current	Minimum circuit amps (MCA)	A	0.4	0.4	0.4	0.5	0.6
	Maximum fuse amps (MFA)	A	16	16	16	16	16
	Full load amps (FLA)	A	0.3	0.3	0.3	0.4	0.5
Voltage range	Minimum	V	-10%				
	Maximum	V	+10%				
Notes			Voltage range : units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.				
			Maximum allowable voltage range variation between phases is 2%.				
			MCA/MFA : MCA = 1.25 × FLA				
			MFA <= 4 × FLA				
			next lower standard fuse rating minimum 16A				
			select wire size based on the MCA				
			instead of a fuse,use a circuit breaker				

1-2 ELECTRICAL SPECIFICATIONS			FXFQ63PVEB	FXFQ80PVEB	FXFQ100PVEB	FXFQ125PVEB
Power Supply	Name		VE			
	Frequency	Hz	50/60			
	Voltage	V	220-240/220			
Current	Minimum circuit amps (MCA)	A	0.9	0.9	1.4	1.9
	Maximum fuse amps (MFA)	A	16	16	16	16
	Full load amps (FLA)	A	0.7	0.7	1.1	1.5
Voltage range	Minimum	V	-10%			
	Maximum	V	+10%			
Notes			Voltage range : units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.			
			Maximum allowable voltage range variation between phases is 2%.			
			MCA/MFA : MCA = 1.25 × FLA			
			MFA <= 4 × FLA			
			next lower standard fuse rating minimum 16A			
			select wire size based on the MCA			
			instead of a fuse, use a circuit breaker			

600×600 4-Way Blow Ceiling Mounted Cassette

1-1 TECHNICAL SPECIFICATIONS				FXZQ20MV1B	FXZQ25MV1B	FXZQ32MV1B	FXZQ40MV1B	FXZQ50MV1B
Nominal Capacity	Cooling		kW	2.20	2.80	3.60	4.50	5.60
	Heating		kW	2.50	3.20	4.00	5.00	6.30
Power input (Nominal)	Cooling		kW	0.073	0.073	0.076	0.089	0.115
	Heating		kW	0.064	0.064	0.068	0.080	0.107
Casing	Material			Galvanised steel				
Dimensions	Unit	Height	mm	286	286	286	286	286
		Width	mm	575	575	575	575	575
		Depth	mm	575	575	575	575	575
Weight	Unit		kg	18	18	18	18	18
Heat Exchanger	Dimensions	Nr of Rows		2	2	2	2	2
		Fin Pitch	mm	1.50	1.50	1.50	1.50	1.50
		Face Area	m²	0.269	0.269	0.269	0.269	0.269
		Nr of Stages		10	10	10	10	10
Fan	Type			Turbo fan				
	Quantity			1	1	1	1	1
Air Flow Rate	Cooling	High	m³/min	9.00	9.00	9.50	11.00	14.00
		Low	m³/min	7.00	7.00	7.50	8.00	10.00
Fan	Motor	Quantity		1	1	1	1	1
		Model		QTS32C15M				
		Output (high)	W	55	55	55	55	55
		Drive		Direct drive				
Refrigerant	Name			R-410A				
Sound Level	Cooling	Sound power (nominal)	dBA	47.0	47.0	49.0	53.0	58.0
Cooling	Sound Pressure	High	dBA	30.0	30.0	32.0	36.0	41.0
		Low	dBA	25.0	25.0	26.0	28.0	33.0
Piping connections	Liquid (OD)	Type		Flare connection				
		Diameter	mm	6.4	6.4	6.4	6.4	6.4
	Gas	Type		Flare connection				
		Diameter	mm	12.7	12.7	12.7	12.7	12.7
	Drain	Diameter	mm	26	26	26	26	26
	Heat Insulation			Foamed polystyrene/polyethylene				
Decoration Panel	Model			BYFQ60B7W1				
	Colour			White (Ral 9010)				
	Dimensions	Height	mm	55	55	55	55	55
		Width	mm	700	700	700	700	700
		Depth	mm	700	700	700	700	700
	Weight		kg	2.7	2.7	2.7	2.7	2.7
Air Filter				Resin net with mold resistance				
Refrigerant control				Electronic expansion valve				
Temperature control				Microprocessor thermostat for cooling and heating				
Safety devices				PC board fuse				
				Fan motor thermal protector				
Standard Accessories	Standard Accessories			Installation and operation manual				
				Paper pattern for installation				
				Drain hose				
				Clamp metal				
				Washer fixing plate				
				Sealing Pads				
				Clamps				
				Screws				
				Washer for hanger bracket				
				Insulation for fitting				

1-1 TECHNICAL SPECIFICATIONS	FXZQ20MV1B	FXZQ25MV1B	FXZQ32MV1B	FXZQ40MV1B	FXZQ50MV1B
Notes	Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 7.5m (horizontal)				
	Nominal heating capacities are based on : indoor temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, equivalent refrigerant piping : 7.5m (horizontal)				
	Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.				

1-2 ELECTRICAL SPECIFICATIONS			FXZQ20MV1B	FXZQ25MV1B	FXZQ32MV1B	FXZQ40MV1B	FXZQ50MV1B
Power Supply	Name		V1				
	Phase		1	1	1	1	1
	Frequency	Hz	50	50	50	50	50
	Voltage	V	220-240				
Current	Minimum circuit amps (MCA)	A	0.80	0.80	0.80	0.80	0.90
	Maximum fuse amps (MFA)	A	15.00	15.00	15.00	15.00	15.00
	Full load amps (FLA)	A	0.60	0.60	0.60	0.60	0.70
Voltage range	Minimum	V	-10%				
	Maximum	V	+10%				
Notes			Voltage range : units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.				
			Maximum allowable voltage range variation between phases is 2%.				
			MCA/MFA : MCA = 1.25 × FLA				
			MFA <= 4 × FLA				
			next lower standard fuse rating minimum 15A				
			select wire size based on the MCA				
			instead of a fuse, use a circuit breaker				
			For more details concerning conditional connections, see http://extranet. daikineurope.com, select "E-Data Books". Finally, click on the document title of your choice.				

2-Way Blow Ceiling Mounted Cassette

1-1 TECHNICAL SPECIFICATIONS				FXCQ20MV3B	FXCQ25MV3B	FXCQ32MV3B	FXCQ40MV3B	FXCQ50MV3B
Nominal Capacity	Cooling		kW	2.20	2.80	3.60	4.50	5.60
	Heating		kW	2.50	3.20	4.00	5.00	6.30
Power input (Nominal)	Cooling		kW	0.077	0.092	0.092	0.130	0.130
	Heating		kW	0.044	0.059	0.059	0.097	0.097
Casing	Colour			Non painted				
	Material			Galvanised steel				
Dimensions	Packing	Height	mm	405	405	405	405	405
		Width	mm	1,060	1,060	1,060	1,280	1,280
		Depth	mm	665	665	665	665	665
	Unit	Height	mm	305	305	305	305	305
		Width	mm	780	780	780	995	995
		Depth	mm	600	600	600	600	600
Weight	Unit		kg	26	26	26	31	32
	Packed Unit		kg	30	30	30	37	38
Required Ceiling Void			mm	350	350	350	350	350
Heat Exchanger	Dimensions	Length	mm	475 × 2	475 × 2	475 × 2	690 × 2	475 × 2
		Nr of Rows		2 × 2				
		Fin Pitch	mm	1.50	1.50	1.50	1.50	1.50
		Nr of Passes		3 × 2				
		Face Area	m²	0.1 × 2	0.1 × 2	0.1 × 2	0.145 × 2	0.145 × 2
		Nr of Stages		10 × 2				
		Empty Tubeplate Hole					6	
	Tube type			Hi-XSS (7)				
	Fin	Fin type		Symmetric waffle louvre				
		Treatment		Hydrophilic				
Fan	Type			Sirocco fan				
	Quantity			1	1	1	2	2
Air Flow Rate	Cooling	High	m³/min	7.0	9.0	9.0	12.0	12.0
		Low	m³/min	5.0	6.5	6.5	9.0	9.0
	Heating	High	m³/min	7.0	9.0	9.0	12.0	12.0
		Low	m³/min	5.0	6.5	6.5	9.0	9.0
Fan	Motor	Quantity		1	1	1	1	1
		Steps		Phase cut control				
		Output (high)	W	10	15	15	20	20
		Drive		Direct drive				
Refrigerant	Name			R-410A				
Sound Level	Cooling	Sound power (nominal)	dBA	45.0	50.0	50.0	50.0	50.0
Cooling	Sound Pressure	High	dBA	33.0	35.0	35.0	35.5	35.5
		Low	dBA	28.0	29.0	29.0	30.5	30.5
Heating	Sound Pressure	High	dBA	33.0	35.0	35.0	35.5	35.5
		Low	dBA	28.0	29.0	29.0	30.5	30.5
Piping connections	Liquid (OD)	Type		Flare connection				
		Diameter	mm	6.35	6.35	6.35	6.35	6.35
	Gas	Type		Flare connection				
		Diameter	mm	12.7	12.7	12.7	12.7	12.7
	Drain	Diameter	mm	32	32	32	32	32
	Heat Insulation			Both liquid and gas pipes				
Decoration Panel	Model			BYBC32GJW1	BYBC32GJW1	BYBC32GJW1	BYBC50GJW1	BYBC50GJW1
	Colour			White (10Y9/0,5)				
	Dimensions	Height	mm	53	53	53	53	53
		Width	mm	1,030	1,030	1,030	1,245	1,245
		Depth	mm	680	680	680	680	680
	Weight		kg	8.0	8.0	8.0	8.5	8.5
Drain-up Height			mm	600	600	600	600	600

2-Way Blow Ceiling Mounted Cassette

1-1 TECHNICAL SPECIFICATIONS		FXCQ20MV3B	FXCQ25MV3B	FXCQ32MV3B	FXCQ40MV3B	FXCQ50MV3B
Air Filter		Resin net with mold resistance				
Air direction control		Up and downwards				
Refrigerant control		Electronic expansion valve				
Temperature control		Microprocessor thermostat for cooling and heating				
Safety devices		PC board fuse				
		Fan motor thermal fuse				
		Drain pump fuse				
Standard Accessories	Standard Accessories	Screws for fixing the paper pattern for installation				
	Quantity	4	4	4	4	4
	Standard Accessories	Washer for hanging bracket				
	Quantity	8	8	8	8	8
	Standard Accessories	Clamps				
	Quantity	1	1	1	1	1
	Standard Accessories	Installation and operation manual				
	Quantity	1	1	1	1	1
	Standard Accessories	Paper pattern for installation				
	Quantity	1	1	1	1	1
	Standard Accessories	Insulation for fitting				
	Quantity	2	2	2	2	2
	Standard Accessories	Drain hose				
	Quantity	1	1	1	1	1
Notes		Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 8m, level difference : 0m.				
		Nominal heating capacities are based on : indoor temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, equivalent refrigerant piping : 8m, level difference : 0m.				
		Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.				

1-1 TECHNICAL SPECIFICATIONS				FXCQ63MV3B	FXCQ80MV3B	FXCQ125MV3B
Nominal Capacity	Cooling		kW	7.10	9.00	14.00
	Heating		kW	8.00	10.00	16.00
Power input (Nominal)	Cooling		kW	0.161	0.209	0.256
	Heating		kW	0.126	0.176	0.223
Casing	Colour			Non painted		
	Material			Galvanised steel		
Dimensions	Packing	Height	mm	405	405	405
		Width	mm	1,460	1,808	1,808
		Depth	mm	665	645	645
	Unit	Height	mm	305	305	305
		Width	mm	1,180	1,670	1,670
		Depth	mm	600	600	600
Weight	Unit		kg	35	47	48
	Packed Unit		kg	42	55	56
Required Ceiling Void			mm	350	350	350
Heat Exchanger	Dimensions	Length	mm	875 × 2	1,365	1,365
		Nr of Rows		2 × 2		
		Fin Pitch	mm	1.50	1.50	1.50
		Nr of Passes		6 × 2	5 × 2	6
		Face Area	m²	0.184 × 2	0.287 × 2	0.287 × 2
		Nr of Stages		10 × 2		
		Empty Tubeplate Hole			8	
	Tube type			Hi-XSS (7)		
	Fin	Fin type		Symmetric waffle louvre		
		Treatment		Hydrophilic		
Fan	Type			Sirocco fan		
	Quantily			2	3	3
Air Flow Rate	Cooling	High	m³/min	16.5	26.0	33.0
		Low	m³/min	13.0	21.0	25.0
	Heating	High	m³/min	16.5	26.0	33.0
		Low	m³/min	13.0	21.0	25.0
Fan	Motor	Quantity		1	1	1
		Steps		Phase cut control		
		Output (high)	W	30	50	85
		Drive		Direct drive		
Refrigerant	Name			R-410A		
Sound Level	Cooling	Sound power (nominal)	dBA	52.0	54.0	60.0
Cooling	Sound Pressure	High	dBA	38.0	40.0	45.0
		Low	dBA	33.0	35.0	39.0
Heating	Sound Pressure	High	dBA	38.0	40.0	45.0
		Low	dBA	33.0	35.0	39.0
Piping connections	Liquid (OD)	Type		Flare connection		
		Diameter	mm	9.5	9.5	9.5
	Gas	Type		Flare connection		
		Diameter	mm	15.9	15.9	15.9
	Drain	Diameter	mm	32	32	32
	Heat Insulation			Both liquid and gas pipes		
Decoration Panel	Model			BYBC63GJW1	BYBC125GJW1	BYBC125GJW1
	Colour			White (10Y9/0,5)		
	Dimensions	Height	mm	53	53	53
		Width	mm	1,430	1,920	1,920
		Depth	mm	680	680	680
	Weight		kg	9.5	12.0	12.0
Drain-up Height			mm	600	600	600

1-1 TECHNICAL SPECIFICATIONS		FXCQ63MV3B	FXCQ80MV3B	FXCQ125MV3B
Air Filter		Resin net with mold resistance		
Air direction control		Up and downwards		
Refrigerant control		Electronic expansion valve		
Temperature control		Microprocessor thermostat for cooling and heating		
Safety devices		PC board fuse		
		Fan motor thermal fuse	Fan motor thermal protector	Fan motor thermal protector
		Drain pump fuse		
Standard Accessories	Standard Accessories	Screws for fixing the paper pattern for installation		
	Quantity	4	4	4
	Standard Accessories	Washer for hanging bracket		
	Quantity	8	8	8
	Standard Accessories	Clamps		
	Quantity	1	1	1
	Standard Accessories	Installation and operation manual		
	Quantity	1	1	1
	Standard Accessories	Paper pattern for installation		
	Quantity	1	1	1
	Standard Accessories	Insulation for fitting		
	Quantity	2	2	2
	Standard Accessories	Drain hose		
	Quantity	1	1	1
Notes		Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 8m, level difference : 0m.		
		Nominal heating capacities are based on : indoor temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, equivalent refrigerant piping : 8m, level difference : 0m.		
		Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.		

1-2 ELECTRICAL SPECIFICATIONS			FXCQ20MV3B	FXCQ25MV3B	FXCQ32MV3B	FXCQ40MV3B	FXCQ50MV3B
Power Supply	Name		V3				
	Phase		1	1	1	1	1
	Frequency	Hz	50	50	50	50	50
	Voltage	V	230	230	230	230	230
Current	Minimum circuit amps (MCA)	A	0.50	0.50	0.50	0.80	0.80
	Maximum fuse amps (MFA)	A	16.00	16.00	16.00	16.00	16.00
	Full load amps (FLA)	A	0.40	0.40	0.40	0.60	0.60
Voltage range	Minimum	V	-10%				
	Maximum	V	+10%				
Power Supply Intake			Both indoor and outdoor unit				
Notes			Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.				
			Maximum allowable voltage range variation between phases is 2%.				
			MCA/MFA : MCA = 1.25 × FLA				
			MFA <= 4 × FLA				
			select wire size based on the MCA				
			instead of a fuse, use a circuit breaker				
			For more details concerning conditional connections, see http://extranet.daikineurope.com, select "E-Data Books". Finally click on the document title of your choice.				

1-2 ELECTRICAL SPECIFICATIONS			FXCQ63MV3B	FXCQ80MV3B	FXCQ125MV3B
Power Supply	Name		V3		
	Phase		1	1	1
	Frequency	Hz	50	50	50
	Voltage	V	230	230	230
Current	Minimum circuit amps (MCA)	A	0.90	1.10	1.30
	Maximum fuse amps (MFA)	A	16.00	16.00	16.00
	Full load amps (FLA)	A	0.70	0.90	1.00
Voltage range	Minimum	V	-10%		
	Maximum	V	+10%		
Power Supply Intake			Both indoor and outdoor unit		
Notes			Voltage range : units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.		
			Maximum allowable voltage range variation between phases is 2%.		
			MCA/MFA : MCA = 1.25 × FLA		
			MFA <= 4 × FLA		
			select wire size based on the MCA		
			instead of a fuse, use a circuit breaker		
			For more details concerning conditional connections, see http://extranet.daikineurope.com, select "E-Data Books". Finally click on the document title of your choice.		

Ceiling Mounted Corner Cassette

1-1 TECHNICAL SPECIFICATIONS				FXKQ25MAVE	FXKQ32MAVE	FXKQ40MAVE	FXKQ63MAVE
Nominal Capacity	Cooling		kW	2.80	3.60	4.50	7.10
	Heating		kW	3.20	4.00	5.00	8.00
Power input (Nominal)	Cooling		kW	0.066	0.066	0.076	0.105
	Heating		kW	0.046	0.046	0.056	0.085
Casing	Material			Galvanised steel			
Dimensions	Unit	Height	mm	215	215	215	215
		Width	mm	1,110	1,110	1,110	1,310
		Depth	mm	710	710	710	710
Weight	Unit		kg	31	31	31	34
Heat Exchanger	Dimensions	Nr of Rows		2	2	2	3
		Fin Pitch	mm	1.75	1.75	1.75	1.75
		Face Area	m²	0.180	0.180	0.180	0.226
		Nr of Stages		11	11	11	11
Fan	Type			Sirocco fan			
	Quantity			1	1	1	1
Air Flow Rate	Cooling	High	m³/min	11.00	11.00	13.00	18.00
		Low	m³/min	9.00	9.00	10.00	15.00
Fan	Motor	Quantity		1	1	1	1
		Model		3D12H1AN1V1	3D12H1AN1V1	3D12H1AP1V1	4D12H1AJ1V1
		Output (high)	W	15	15	20	45
		Drive		Direct drive			
Refrigerant	Name			R-410A			
Cooling	Sound Pressure	High	dBA	38.0	38.0	40.0	42.0
		Low	dBA	33.0	33.0	34.0	37.0
Piping connections	Liquid (OD)	Type		Flare connection			
		Diameter	mm	6.4	6.4	6.4	9.5
	Gas	Type		Flare connection			
		Diameter	mm	12.7	12.7	12.7	15.9
	Drain	Diameter	mm	32	32	32	32
	Heat Insulation			Foamed Polyethylene			
Decoration Panel	Model			BYK45FJW1	BYK45FJW1	BYK45FJW1	BYK71FJW1
	Colour			White			
	Dimensions	Height	mm	70	70	70	70
		Width	mm	1,240	1,240	1,240	1,440
		Depth	mm	800	800	800	800
	Weight		kg	8.5	8.5	8.5	9.5
Air Filter				Resin net with mold resistance			
Refrigerant control				Electronic expansion valve			
Temperature control				Microprocessor thermostat for cooling and heating			
Safety devices				PC board fuse			
				Drain pump fuse			
				Fan motor thermal fuse		Fan motor thermal protector	
Standard Accessories	Standard Accessories			Installation and operation manual			
				Metal clamp for drain hose			
				Clamps			
				Insulation for hangar bracket			
				Positioning Jig for Installation			
				Paper pattern for installation			
				Drain hose			
				Insulation for fitting			
				Sealing Pads			
				Screws			
				Washer			
				Air Outlet blocking pad			

1-1 TECHNICAL SPECIFICATIONS	FXKQ25MAVE	FXKQ32MAVE	FXKQ40MAVE	FXKQ63MAVE
Notes	Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 7.5m (horizontal)			
	Nominal heating capacities are based on: indoor temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, equivalent refrigerant piping : 7.5m (horizontal)			
	Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.			
	Sound pressure levels are measured at 220V			

1-2 ELECTRICAL SPECIFICATIONS			FXKQ25MAVE	FXKQ32MAVE	FXKQ40MAVE	FXKQ63MAVE
Power Supply	Name		VE			
	Phase		1	1	1	1
	Frequency	Hz	50	50	50	50
	Voltage	V	220-240			
Current	Minimum circuit amps (MCA)	A	0.30	0.30	0.30	0.50
	Maximum fuse amps (MFA)	A	15.00	15.00	15.00	15.00
	Full load amps (FLA)	A	0.20	0.20	0.20	0.40
Voltage range	Minimum	V	-10%			
	Maximum	V	+10%			
Notes			Voltage range : units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.			
			Maximum allowable voltage range variation between phases is 2%.			
			MCA/MFA : MCA = 1.25 × FLA			
			MFA <= 4 × FLA			
			next lower standard fuse rating minimum 15A			
			select wire size based on the MCA			
			instead of a fuse, use a circuit breaker			
			For more details concerning conditional connections, see http://extranet.daikineurope.com, select "E-Data Books". Finally, click on the document title of your choice.			

Slim Concealed Ceiling Unit (with Drain Pump)

1-1 TECHNICAL SPECIFICATIONS				FXDQ20PVE	FXDQ25PVE	FXDQ32PVE	FXDQ40NAVE	FXDQ50NAVE	FXDQ63NAVE
Nominal Capacity	Cooling		kW	2.20	2.80	3.60	4.50	5.60	7.10
	Heating		kW	2.50	3.20	4.00	5.00	6.30	8.00
Power input (Nominal)	Cooling		kW	0.086	0.086	0.089	0.160	0.165	0.181
	Heating		kW	0.067	0.067	0.070	0.147	0.152	0.168
Casing	Material			Galvanised steel plate					
Dimensions	Unit	Height	mm	200	200	200	200	200	200
		Width	mm	700	700	700	900	900	1,100
		Depth	mm	620	620	620	620	620	620
Weight	Unit		kg	23.0	23.0	23.0	27.0	28.0	31.0
Heat Exchanger	Dimensions	Nr of Rows		2	2	3	3	3	3
		Fin Pitch	mm	1.50	1.50	1.50	1.50	1.50	1.50
		Face Area	m²	0.126	0.126	0.126	0.176	0.176	0.227
		Nr of Stages		12	12	12	12	12	12
	Fin	Fin type		Cross fin coil					
Fan	Type			Sirocco fan					
	Quantity			1	1	1	1	1	1
Air Flow Rate	Cooling	High	m³/min	8.0	8.0	8.0	10.50	12.50	16.50
		Low	m³/min	6.4	6.4	6.4	8.50	10.00	13.00
Fan	External static pressure	High	Pa	30	30	30	44	44	44
		Standard	Pa	10	10	10	15	15	15
	Motor	Output (high)	W	62	62	62	62	130	130
		Drive		Direct drive					
Refrigerant	Name			R-410A					
Cooling	Sound Pressure	High	dBA	33.0	33.0	33.0	34.0	35.0	36.0
		Low	dBA	29.0	29.0	29.0	30.0	31.0	32.0
Piping connections	Liquid (OD)	Type		Flare connection					
		Diameter	mm	6.4	6.4	6.4	6.4	6.4	9.5
	Gas	Type		Flare connection					
		Diameter	mm	12.7	12.7	12.7	12.7	12.7	15.9
	Drain	Diameter	mm	VP20 (I.D. 20/O.D. 26)					
Air Filter				Removable/washable/Mildew proof					
Refrigerant control				Electronic expansion valve					
Temperature control				Microprocessor thermostat for cooling and heating					
Safety devices				Fuse					
				Fan motor thermal protector					
Standard Accessories	Standard Accessories			Installation and operation manual					
				Drain hose					
				Sealing Pads					
				Clamps					
				Washer					
				Insulation for fitting					
				Clamp metal					
				Washer fixing plate					
				Screws for duct flanges					
				Air filter					
Notes				Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 7.5m (horizontal)					
				Nominal heating capacities are based on : indoor temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, equivalent refrigerant piping : 7.5m (horizontal)					
				Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.					
				External static pressure can be changed by the remote control.					
				The operation sound levels are conversion values in anechoic chamber. In practice,sound levels tend to be higher than the specified values due to ambient noise or reflection. When the suction place is changed to bottom suction, sound level will increase by approximately 5dBA.					

Slim Concealed Ceiling Unit (with Drain Pump)

1-2 ELECTRICAL SPECIFICATIONS			FXDQ20PVE	FXDQ25PVE	FXDQ32PVE	FXDQ40NAVE	FXDQ50NAVE	FXDQ63NAVE
Power Supply	Name		VE					
	Phase		1	1	1	1	1	1
	Frequency	Hz	50	50	50	50	50	50
	Voltage	V	220-240					
Current	Minimum circuit amps (MCA)	A	0.80	0.80	0.80	1.00	1.00	1.10
	Maximum fuse amps (MFA)	A	15.00	15.00	15.00	15.00	15.00	15.00
	Full load amps (FLA)	A	0.60	0.60	0.60	0.80	0.80	0.90
Voltage range	Minimum	V	-10%					
	Maximum	V	+10%					
Notes			Voltage range : units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.					
			Maximum allowable voltage range variation between phases is 2%.					
			MCA/MFA : MCA = 1.25 × FLA					
			MFA <= 4 × FLA					
			next lower standard fuse rating minimum 15A					
			select wire size based on the MCA					
			instead of a fuse, use a circuit breaker					
			For more details concerning conditional connections, see http://extranet.daikineurope.com, select "E-Data Books". Finally, click on the document title of your choice.					

Concealed Ceiling Unit (Small)

1-1 TECHNICAL SPECIFICATIONS				FXDQ20MV3B	FXDQ25MV3B
Nominal Capacity	Cooling		kW	2.20	2.80
	Heating		kW	2.50	3.20
Power input (Nominal)	Cooling		kW	0.050	0.050
	Heating		kW	0.050	0.050
Casing	Colour			Non painted	
	Material			Galvanised steel	
Dimensions	Packing	Height	mm	301	301
		Width	mm	584	584
		Depth	mm	753	753
	Unit	Height	mm	230	230
		Width	mm	502	502
		Depth	mm	652	652
Weight	Unit		kg	17	17
	Packed unit		kg	18	18
Required Ceiling Void			mm	250	250
Heat Exchanger	Dimensions	Length	mm	430	430
		Nr of Rows		2	2
		Fin Pitch	mm	1.40	1.40
		Nr of Passes		2	2
		Face Area	m²	0.108	0.108
		Nr of Stages		12	12
		Empty Tubeplate Hole		4	
	Tube type			Hi-XSS (7)	
	Fin	Fin type		Symmetric waffle louvre	
		Treatment		Hydrophilic	
Fan	Type			Sirocco fan	
	Quantity			1	1
Air Flow Rate	Cooling	High	m³/min	6.70	7.40
		Low	m³/min	5.20	5.80
	Heating	High	m³/min	6.70	7.40
		Low	m³/min	5.20	5.80
Fan	Motor	Quantity		1	1
		Steps		step motor	
		Output (high)	W	10	10
		Drive		Direct drive	
Refrigerant	Name			R-410A	
Sound Level	Cooling	Sound power (nominal)	dBA	50.0	50.0
Cooling	Sound Pressure	High	dBA	37.0	37.0
		Low	dBA	32.0	32.0
Heating	Sound Pressure	High	dBA	37.0	37.0
		Low	dBA	32.0	32.0
Piping connections	Liquid (OD)	Type		Flare connection	
		Diameter	mm	6.4	6.4
	Gas	Type		Flare connection	
		Diameter	mm	12.7	12.7
	Drain	Diameter	mm	27.2	27.2
Air Filter				Resin net with mold resistance	
Air direction control				Up and downwards	
Refrigerant control				Electronic expansion valve	
Temperature control				Microprocessor thermostat for cooling and heating	
Safety devices				PC board fuse	
				Fan motor thermal protector	

1-1 TECHNICAL SPECIFICATIONS		FXDQ20MV3B	FXDQ25MV3B
Standard Accessories	Standard Accessories	Installation and operation manual	
		Fuse	
		Caution for servicing sticker	
		Suction air filter	
Notes		Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 8m, level difference : 0m.	
		Nominal heating capacities are based on : indoor temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, equivalent refrigerant piping : 8m, level difference : 0m.	
		Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.	

1-2 ELECTRICAL SPECIFICATIONS			FXDQ20MV3B	FXDQ25MV3B
Power Supply	Name		V1	
	Phase		1	1
	Frequency	Hz	50	50
	Voltage	V	230	230
Current	Minimum circuit amps (MCA)	A	0.20	0.20
	Maximum fuse amps (MFA)	A	16.00	16.00
	Full load amps (FLA)	A	0.10	0.10
Voltage range	Minimum	V	-10%	
	Maximum	V	+10%	
Power Supply Intake			Both indoor and outdoor unit	
Notes			Voltage range : units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.	
			Maximum allowable voltage range variation between phases is 2%.	
			MCA/MFA : MCA = 1.25 × FLA	
			MFA < 4 × FLA	
			next lower standard fuse rating minimum 16A	
			select wire size based on the MCA	
			instead of a fuse, use a circuit breaker	
			For more details concerning conditional connections, see http://extranet.daikineurope.com, select "E-Data Books". Finally, click on the document title of your choice.	

Concealed Ceiling Unit

1-1 TECHNICAL SPECIFICATIONS				FXSQ20MV3B	FXSQ25MV3B	FXSQ32MV3B	FXSQ40MV3B	FXSQ50MV3B
Capacity (Conditions specified in 1)	Cooling		kW	2.20	2.80	3.60	4.50	5.60
	Heating		kW	2.50	3.20	4.00	5.00	6.30
Power input (Nominal)	Cooling		kW	0.110	0.110	0.114	0.127	0.143
	Heating		kW	0.090	0.090	0.094	0.107	0.123
Casing	Colour			Non painted				
	Material			Galvanised steel				
Dimensions	Packing	Height	mm	354	354	354	354	354
		Width	mm	742	742	742	892	892
		Depth	mm	936	936	936	936	936
	Unit	Height	mm	300	300	300	300	300
		Width	mm	550	550	550	700	700
		Depth	mm	800	800	800	800	800
Weight	Unit		kg	30	30	30	30	31
	Packed Unit		kg	34	34	34	34	35
Required Ceiling Void			mm	350	350	350	350	350
Heat Exchanger	Dimensions	Length	mm	300	300	300	450	450
		Nr of Rows		3	3	3	3	3
		Fin Pitch	mm	1.75	1.75	1.75	1.75	1.75
		Nr of Passes		3	3	3	4	4
		Face Area	m²	0.088	0.088	0.088	0.132	0.132
		Nr of Stages		14	14	14	14	14
		Empty Tubeplate Hole		14				
	Tube type			Hi-XSS (7)				
	Fin	Fin type		Symmetric waffle louvre				
		Treatment		Hydrophilic				
Fan	Type			Sirocco fan				
	Quantity			1	1	1	1	1
Air Flow Rate	Cooling	High	m³/min	9.00	9.00	9.50	11.50	15.00
		Low	m³/min	6.50	6.50	7.00	9.00	11.00
	Heating	High	m³/min	9.00	9.00	9.50	11.50	15.00
		Low	m³/min	6.50	6.50	7.00	9.00	11.00
Fan	External static pressure	High	Pa	125	125	104	116	136
		Standard	Pa	105	105	88	98	114
		Low	Pa	96	96	78	85	99
	Motor	Quantity		1	1	1	1	1
		Model		D18H3AA1V1	D18H3AA1V1	D18H3AA1V1	D18H2AC1V1	D18H2AB1V1
		Steps		step motor				
		Output (high)	W	50	50	50	65	85
		Drive		Direct drive				
Refrigerant	Name			R-410A				
Sound Level	Cooling	Sound power (nominal)	dBA	50.0	50.0	51.0	56.0	58.0
Cooling	Sound Pressure	High	dBA	32.0	32.0	33.0	33.0	35.0
		Low	dBA	28.0	28.0	28.0	29.0	31.0
Heating	Sound Pressure	High	dBA	32.0	32.0	33.0	33.0	35.0
		Low	dBA	28.0	28.0	28.0	29.0	31.0
Piping connections	Liquid (OD)	Type		Flare connection				
		Diameter	mm	6.35	6.35	6.35	6.35	6.35
	Gas	Type		Flare connection				
		Diameter	mm	12.7	12.7	12.7	12.7	12.7
	Drain	Diameter	mm	32	32	32	32	32
	Heat Insulation			Both liquid and gas pipes				

Concealed Ceiling Unit

1-1 TECHNICAL SPECIFICATIONS				FXSQ20MV3B	FXSQ25MV3B	FXSQ32MV3B	FXSQ40MV3B	FXSQ50MV3B
Decoration Panel	Model			BYBS32DJW1	BYBS32DJW1	BYBS32DJW1	BYBS45DJW1	BYBS45DJW1
	Colour			White (10Y9/0,5)				
	Dimensions	Height	mm	55	55	55	55	55
		Width	mm	650	650	650	800	800
		Depth	mm	500	500	500	500	500
	Weight		kg	3	3	3	3.5	3.5
Drain-up Height			mm	600	600	600	600	600
Air Filter				Resin net with mold resistance				
Air direction control				Up and downwards				
Refrigerant control				Electronic expansion valve				
Temperature control				Microprocessor thermostat for cooling and heating				
Safety devices				PC board fuse				
				Drain pump fuse				
				Fan motor thermal fuse				
Standard Accessories	Standard Accessories			Metal clamp for drain hose				
	Quantity			1	1	1	1	1
	Standard Accessories			Paper pattern for installation				
	Quantity			1	1	1	1	1
	Standard Accessories			Drain hose				
	Quantity			1	1	1	1	1
	Standard Accessories			Insulation for fitting				
	Quantity			2	2	2	2	2
	Standard Accessories			Washer for hanger bracket				
	Quantity			8	8	8	8	8
	Standard Accessories			Screws for duct flanges				
	Quantity			6	6	6	8	8
	Standard Accessories			Screws for fixing the paper pattern for installation				
	Quantity			6	6	6	6	6
	Standard Accessories			Fuse				
				Installation and operation manual				
	Quantity			1	1	1	1	1
Notes				Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 8m, level difference : 0m.				
				Nominal heating capacities are based on : indoor temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, equivalent refrigerant piping : 8m, level difference : 0m.				
				The external static pressure is changeable : change the connectors inside the electrical box, this pressure means : High static pressure-standard-low static pressure				
				The external static pressure is changeable : change the connectors inside the electrical box, this pressure means : High static pressure-standard				
				Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.				
				The sound pressure values are mentioned for a unit installed with rear suction				

Concealed Ceiling Unit

1-1 TECHNICAL SPECIFICATIONS				FXSQ63MV3B	FXSQ80MV3B	FXSQ100MV3B	FXSQ125MV3B
Capacity (Conditions specified in 1)	Cooling		kW	7.10	9.00	11.20	14.00
	Heating		kW	8.00	10.00	12.50	16.00
Power input (Nominal)	Cooling		kW	0.189	0.234	0.242	0.321
	Heating		kW	0.169	0.214	0.222	0.301
Casing	Colour			Non painted			
	Material			Galvanised steel			
Dimensions	Packing	Height	mm	354	356	356	356
		Width	mm	1,192	1,596	1,596	1,596
		Depth	mm	936	938	938	938
	Unit	Height	mm	300	300	300	300
		Width	mm	1,000	1,400	1,400	1,400
		Depth	mm	800	800	800	800
Weight	Unit		kg	41	51	51	52
	Packed Unit		kg	47	58	58	59
Required Ceiling Void			mm	350	350	350	350
Heat Exchanger	Dimensions	Length	mm	750	1,150	1,150	1,150
		Nr of Rows		3	3	3	3
		Fin Pitch	mm	1.75	1.75	1.75	1.75
		Nr of Passes		7	10	10	10
		Face Area	m²	0.221	0.338	0.338	0.338
		Nr of Stages		14	14	14	14
	Tube type			Hi-XSS (7)			
	Fin	Fin type		Symmetric waffle louvre			
		Treatment		Hydrophilic			
Fan	Type			Sirocco fan			
	Quantity			2	3	3	3
Air Flow Rate	Cooling	High	m³/min	21.00	27.00	28.00	38.00
		Low	m³/min	15.50	20.00	20.50	28.00
	Heating	High	m³/min	21.00	27.00	28.00	38.00
		Low	m³/min	15.50	20.00	20.50	28.00
Fan	External static pressure	High	Pa	123	141	141	109
		Standard	Pa	111	125	125	93
		Low	Pa	98			
	Motor	Quantity		1	1	1	1
		Model		2D18H2AB1V1	3D18H2AH1V1	3D18H2AH1V1	3D18H2AG1V1
		Steps		step motor			
		Output (high)	W	125	135	135	225
		Drive		Direct drive			
Refrigerant	Name			R-410A			
Sound Level	Cooling	Sound power (nominal)	dBA	56.0	55.0	56.0	65.0
Cooling	Sound Pressure	High	dBA	35.0	37.0	38.0	40.0
		Low	dBA	30.0	31.0	33.0	35.0
Heating	Sound Pressure	High	dBA	35.0	37.0	38.0	40.0
		Low	dBA	30.0	31.0	33.0	35.0
Piping connections	Liquid (OD)	Type		Flare connection			
		Diameter	mm	9.5	9.5	9.5	9.5
	Gas	Type		Flare connection			
		Diameter	mm	15.9	15.9	15.9	15.9
	Drain	Diameter	mm	32	32	32	32
	Heat Insulation			Both liquid and gas pipes			

1-1 TECHNICAL SPECIFICATIONS				FXSQ63MV3B	FXSQ80MV3B	FXSQ100MV3B	FXSQ125MV3B
Decoration Panel	Model			BYBS71DJW1	BYBS125DJW1	BYBS125DJW1	BYBS125DJW1
	Colour			White (10Y9/0,5)			
	Dimensions	Height	mm	55	55	55	55
		Width	mm	1,100	1,500	1,500	1,500
		Depth	mm	500	500	500	500
	Weight		kg	4.5	6.5	6.5	6.5
Drain-up Height			mm	600	600	600	600
Air Filter				Resin net with mold resistance			
Air direction control				Up and downwards			
Refrigerant control				Electronic expansion valve			
Temperature control				Microprocessor thermostat for cooling and heating			
Safety devices				PC board fuse			
				Drain pump fuse			
				Fan motor thermal fuse	Fan motor thermal protector	Fan motor thermal protector	Fan motor thermal protector
Standard Accessories	Standard Accessories			Metal clamp for drain hose			
	Quantity			1	1	1	1
	Standard Accessories			Paper pattern for installation			
	Quantity			1	1	1	1
	Standard Accessories			Drain hose			
	Quantity			1	1	1	1
	Standard Accessories			Insulation for fitting			
	Quantity			2	2	2	2
	Standard Accessories			Washer for hanger bracket			
	Quantity			8	8	8	8
	Standard Accessories			Screws for duct flanges			
	Quantity			12	16	16	16
	Standard Accessories			Screws for fixing the paper pattern for installation			
	Quantity			6	6	6	6
	Standard Accessories			Fuse			
				Installation and operation manual			
	Quantity			1	1	1	1
Notes				Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 8m, level difference : 0m.			
				Nominal heating capacities are based on : indoor temperature : 20°CDB,19°CWB, outdoor temperature : 7°CDB, 6°CWB, equivalent refrigerant piping : 8m, level difference : 0m.			
				The external static pressure is changeable : change the connectors inside the electrical box, this pressure means : High static pressure - standard - low static pressure			
				The external static pressure is changeable : change the connectors inside the electrical box, this pressure means : High static pressure - standard			
				Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.			
				The sound pressure values are mentioned for a unit installed with rear suction			

1-2 ELECTRICAL SPECIFICATIONS			FXSQ20MV3B	FXSQ25MV3B	FXSQ32MV3B	FXSQ40MV3B	FXSQ50MV3B
Power Supply	Name		V3				
	Phase		1	1	1	1	1
	Frequency	Hz	50	50	50	50	50
	Voltage	V	230	230	230	230	230
Current	Minimum circuit amps (MCA)	A	0.50	0.50	0.50	0.60	0.90
	Maximum fuse amps (MFA)	A	16.00	16.00	16.00	16.00	16.00
	Full load amps (FLA)	A	0.40	0.40	0.40	0.50	0.70
Voltage range	Minimum	V	-10%				
	Maximum	V	+10%				
Notes			Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.				
			Maximum allowable voltage range variation between phases is 2%				
			MCA/MFA : MCA = 1.25 × FLA				
			MFA < 4 × FLA				
			next lower standard fuse rating minimum 16A				
			select wire size based on the MCA				
			instead of a fuse, use a circuit breaker				
			For more details concerning conditional connections, see http://extranet.daikineurope.com, select"E-Data Books". Finally, click on the document title of your choice.				

1-2 ELECTRICAL SPECIFICATIONS			FXSQ63MV3B	FXSQ80MV3B	FXSQ100MV3B	FXSQ125MV3B
Power Supply	Name		V3			
	Phase		1	1	1	1
	Frequency	Hz	50	50	50	50
	Voltage	V	230	230	230	230
Current	Minimum circuit amps (MCA)	A	1.10	1.40	1.50	2.00
	Maximum fuse amps (MFA)	A	16.00	16.00	16.00	16.00
	Full load amps (FLA)	A	0.90	1.10	1.20	1.60
Voltage range	Minimum	V	-10%			
	Maximum	V	+10%			
Notes			Voltage range : units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.			
			Maximum allowable voltage range variation between phases is 2%.			
			MCA/MFA : MCA = 1.25 × FLA			
			MFA < 4 × FLA			
			next lower standard fuse rating minimum 16A			
			select wire size based on the MCA			
			instead of a fuse, use a circuit breaker			
			For more details concerning conditional connections, see http://extranet.daikineurope.com, select"E-Data Books". Finally, click on the document title of your choice.			

Concealed Ceiling Unit (Large)

1-1 TECHNICAL SPECIFICATIONS				FXMQ40MAVE	FXMQ50MAVE	FXMQ63MAVE	FXMQ80MAVE
Nominal Capacitry	Cooing		kW	4.50	5.60	7.10	9.00
	Heating		kW	5.00	6.30	8.00	10.00
Power input (Nominal)	Cooing		kW	0.211	0.211	0.211	0.284
	Heating		kW	0.211	0.211	0.211	0.284
Casing	Material			Galvanised steel			
Dimensions	Unit	Height	mm	390	390	390	390
		Width	mm	720	720	720	720
		Depth	mm	690	690	690	690
Weight	Unit		kg	44	44	44	45
Heat Exchanger	Dimensions	Nr of Rows		3	3	3	3
		Fin Pitch	mm	2.00	2.00	2.00	2.00
		Face Area	m²	0.181	0.181	0.181	0.181
		Nr of Stages		16	16	16	16
Fan	Type			Sirocco fan			
	Quantity			1	1	1	1
Air Flow Rate	Cooling	High	m³/min	14.00	14.00	14.00	19.50
		Low	m³/min	11.50	11.50	11.50	16.00
Fan	External static pressure	High	Pa	157	157	157	157
		Standard	Pa	118	118	118	108
	Motor	Quantity		1	1	1	1
		Model		D11/2D3AB1VE	D11/2D3AB1VE	D11/2D3AB1VE	D11/2D3AA1VE
		Output (high)	W	100	100	100	160
		Drive		Direct drive			
Refrigerant	Name			R-410A			
Cooling	Sound Pressure	High	dBA	39.0	39.0	39.0	42.0
		Low	dBA	35.0	35.0	35.0	38.0
Piping connections	Liquid (OD)	Type		Flare connection			
		Diameter	mm	6.4	6.4	9.5	9.5
	Gas	Type		Flare connection			
		Diameter	mm	12.7	12.7	15.9	15.9
	Drain	Diameter	mm	32	32	32	32
	Heat Insulation			Glass fiber			
Refrigerant control				Electronic expansion valve			
Temperature control				Microprocessor thermostat for cooling and heating			
Safety devices				PC board fuse			
				Fan motor thermal protector			
Standard Accessories	Standard Accessories			Installation and operation manual			
				Drain hose			
				Sealing Pads			
				Clamps			
				Screws			
				Insulation for fitting			
				Clamp metal			
Notes				Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 7.5m (horizontal)			
				Nominal heating capacities are based on : indoor temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, equivalent refrigerant piping : 7.5m (horizontal)			
				Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.			
				The external static pressure is changeable : change the connectors inside the electrical box, this pressure means : High static pressure-standard			
				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.			
				Sound pressure levels are measured at 220V			

Concealed Ceiling Unit (Large)

1-1 TECHNICAL SPECIFICATIONS				FXMQ100MAVE	FXMQ125MAVE	FXMQ200MAVE	FXMQ250MAVE
Nominal Capacity	Cooling		kW	11.20	14.00	22.40	28.00
	Heating		kW	12.50	16.00	25.00	31.50
Power input (Nominal)	Cooling		kW	0.411	0.619	1.294	1.465
	Heating		kW	0.411	0.619	1.294	1.465
Casing	Material			Galvanised steel			
Dimensions	Unit	Height	mm	390	390	470	470
		Width	mm	1,110	1,110	1,380	1,380
		Depth	mm	690	690	1,100	1,100
Weight	Unit		kg	63	65	137	137
Heat Exchanger	Dimensions	Nr of Rows		3	3	3	3
		Fin Pitch	mm	2.00	2.00	2.00	2.00
		Face Area	m²	0.319	0.319	0.68	0.68
		Nr of Stages		16	16	26	26
Fan	Type			Sirocco fan			
	Quantity			1	1	2	2
Air Flow Rate	Cooling	High	m³/min	29.00	36.00	58.00	72.00
		Low	m³/min	23.00	29.00	50.00	62.00
Fan	External static pressure	High	Pa	157	191	221	270
		Standard	Pa	98	152	132	147
	Motor	Quantity		1	1	2	2
		Model		2D11/2D3AG1VE	2D11/2D3AF1VE	D13/4G2DA1	D13/4G2DA1
		Output (high)	W	270	430	380	380
		Drive		Direct drive			
Refrigerant	Name			R-410A			
Cooling	Sound Pressure	High	dBA	43.0	45.0	48.0	48.0
		Low	dBA	39.0	42.0	45.0	45.0
Piping connections	Liquid (OD)	Type		Flare connection			
		Diameter	mm	9.5	9.5	9.5	9.5
	Gas	Type		Flare connection	Flare connection	Braze connection	Braze connection
		Diameter	mm	15.9	15.9	19.1	22.2
	Drain	Diameter	mm	32	32	PS1B	PS1B
	Heat Insulation			Glass fiber			
Refrigerant control				Electronic expansion valve			
Temperature control				Microprocessor thermostat for cooling and heating			
Safety devices				PC board fuse			
				Fan motor thermal protector			
Standard Accessories	Standard Accessories			Installation and operation manual			
				Drain hose		Connection pipes	
				Sealing Pads			
				Clamps			
				Screws			
				Insulation for fitting			
				Clamp metal			
Notes				Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 7.5m (horizontal)			
				Nominal heating capacities are based on : indoor temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, equivalent refrigerant piping : 7.5m (horizontal)			
				Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.			
				The external static pressure is changeable : change the connectors inside the electrical box, this pressure means : High static pressure-standard			
				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.			
				Sound pressure levels are measured at 220V			
				FXMQ200, 250MAVE cannot be connected to VRVIII-S			

1-2 ELECTRICAL SPECIFICATIONS			FXMQ40MAVE	FXMQ50MAVE	FXMQ63MAVE	FXMQ80MAVE
Power Supply	Name		VE			
	Phase		1	1	1	1
	Frequency	Hz	50	50	50	50
	Voltage	V	220-240			
Current	Minimum circuit amps (MCA)	A	1.30	1.30	1.30	1.50
	Maximum fuse amps (MFA)	A	15.00	15.00	15.00	15.00
	Full load amps (FLA)	A	1.00	1.00	1.00	1.20
Voltage range	Minimum	V	-10%			
	Maximum	V	+10%			
Notes			Voltage range : units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.			
			Maximum allowable voltage rang variation between phases is 2%.			
			MCA/MFA : MCA = 1.25 × FLA			
			MFA <= 4 × FLA			
			next lower standard fuse rating minimum 15A			
			select wire size based on the MCA			
			instead of a fuse, use a circuit breaker			
			For more details concerning conditional connections, see http://extranet. daikineurope. com, select "E-Data Books". Finally, click on the document title of your choice.			

1-2 ELECTRICAL SPECIFICATIONS			FXMQ100MAVE	FXMQ125MAVE	FXMQ200MAVE	FXMQ250MAVE
Power Supply	Name		VE			
	Phase		1	1	1	1
	Frequency	Hz	50	50	50	50
	Voltage	V	220-240			
Current	Minimum circuit amps (MCA)	A	2.50	3.80	8.10	9.00
	Maximum fuse amps (MFA)	A	15.00	15.00	15.00	15.00
	Full load amps (FLA)	A	2.00	3.00	6.50	7.20
Voltage range	Minimum	V	-10%			
	Maximum	V	+10%			
Notes			Voltage range : units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.			
			Maximum allowable voltage range variation between phases is 2%.			
			MCA/MFA : MCA = 1.25 × FLA			
			MFA <= 4 × FLA			
			next lower standard fuse rating minimum 15A			
			select wire size based on the MCA			
			instead of a fuse, use a circuit breaker			
			For more details concerning conditional connections, see http://extranet. daikineurope.com, select"E-Data Books". Finally, click on the document title of your choice.			

Ceiling Suspended Unit

1-1 TECHNICAL SPECIFICATIONS				FXHQ32MAVE	FXHQ63MAVE	FXHQ100MAVE
Nominal Capacity	Cooling		kW	3.60	7.10	11.20
	Heating		kW	4.00	8.00	12.50
Power input (Nominal)	Cooling		kW	0.111	0.115	0.135
	Heating		kW	0.111	0.115	0.135
Casing	Colour			White (10Y9/0.5)		
Dimensions	Unit	Height	mm	195	195	195
		Width	mm	960	1,160	1,400
		Depth	mm	680	680	680
Weight	Unit		kg	24	28	33
Heat Exchanger	Dimensions	Nr of Rows		2	3	3
		Fin Pitch	mm	1.75	1.75	1.75
		Face Area	m²	0.182	0.233	0.293
		Nr of Stages		12	12	12
Fan	Type			Sirocco fan		
	Quantity			1	1	1
Air Flow Rate	Cooling	High	m³/min	12.00	17.50	25.00
		Low	m³/min	10.00	14.00	19.50
Fan	Motor	Quantity		1	1	1
		Model		3D12K1AA1	4D12K1AA1	3D12K2AA1
		Output (high)	W	62	62	130
		Drive		Direct drive		
Refrigerant	Name			R-410A		
Cooling	Sound Pressure	High	dBA	36.0	39.0	45.0
		Low	dBA	31.0	34.0	37.0
Piping connections	Liquid (OD)	Type		Flare connection		
		Diameter	mm	6.4	9.5	9.5
	Gas	Type		Flare connection		
		Diameter	mm	12.7	15.9	15.9
	Drain	Diameter	mm	26	26	26
	Heat Insulation			Glass wool		
Air Filter				Resin net with mold resistance		
Refrigerant control				Electronic expansion valve		
Temperature control				Microprocessor thermostat for cooling and heating		
Safety devices				PC board fuse		
				Fan motor thermal protector		
Standard Accessories	Standard Accessories			Installation and operation manual		
				Drain hose		
				Paper pattern for installation		
				Clamp metal		
				Insulation for fitting		
				Clamps		
				Washer		
Notes				Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 7.5m (horizontal)		
				Nominal heating capacities are based on : indoor temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, equivalent refrigerant piping : 7.5m (horizontal)		
				Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.		

1-2 ELECTRICAL SPECIFICATIONS			FXHQ32MAVE	FXHQ63MAVE	FXHQ100MAVE
Power Supply	Name		VE		
	Phase		1	1	1
	Frequency	Hz	50	50	50
	Voltage	V	220-240		
Current	Minimum circuit amps (MCA)	A	0.80	0.80	0.90
	Maximum fuse amps (MFA)	A	15.00	15.00	15.00
	Full load amps (FLA)	A	0.60	0.60	0.70
Voltage range	Minimum	V	-10%		
	Maximum	V	+10%		
Notes			Voltage range : units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.		
			Maximum allowable voltage range variation between phases is 2%		
			MCA/MFA : MCA = 1.25 × FLA		
			MFA <= 4 × FLA		
			next lower standard fuse rating minimum 15A		
			select wire size based on the MCA		
			instead of a fuse, use a circuit breaker		
			For more details concerning conditional connections, see http://extranet.daikineurope.com, select "E-Data Books". Finally, click on the document title of your choice.		

Wall Mounted Unit

1-1 TECHNICAL SPECIFICATIONS				FXAQ20MAVE	FXAQ25MAVE	FXAQ32MAVE	FXAQ40MAVE	FXAQ50MAVE	FXAQ63MAVE
Nominal Capacity	Cooling		kW	2.20	2.80	3.60	4.50	5.60	7.10
	Heating		kW	2.50	3.20	4.00	5.00	6.30	8.00
Power input (Nominal)	Cooling		kW	0.016	0.022	0.027	0.020	0.027	0.050
	Heating		kW	0.024	0.027	0.032	0.020	0.032	0.060
Casing	Colour			white (3.0Y8.5/0.5)					
Dimensions	Unit	Height	mm	290	290	290	290	290	290
		Width	mm	795	795	795	1,050	1,050	1,050
		Depth	mm	230	230	230	230	230	230
Weight	Unit		kg	11	11	11	14	14	14
Heat Exchanger	Dimensions	Nr of Rows		2	2	2	2	2	2
		Fin Pitch	mm	1.40	1.40	1.40	1.40	1.40	1.40
		Face Area	m²	0.161	0.161	0.161	0.213	0.213	0.213
		Nr of Stages		14	14	14	14	14	14
Fan	Type			Cross flow fan					
	Quantity			1	1	1	1		
Air Flow Rate	Cooling	High	m³/min	7.50	8.00	9.00	12.00	15.00	19.00
		Low	m³/min	4.50	5.00	5.50	9.00	12.00	14.00
Fan	Motor	Quantity		1	1	1	1	1	1
		Model		QCL9661M	QCL9661M	QCL9661M	QCL9686M	QCL9686M	QCL9686M
		Output (high)	W	40	40	40	43	43	43
		Drive		Direct drive					
Refrigerant	Name			R-410A					
Cooling	Sound Pressure	High	dBA	35.0	36.0	37.0	39.0	42.0	46.0
		Low	dBA	29.0	29.0	29.0	34.0	36.0	39.0
Piping connections	Liquid (OD)	Type		Flare connection					
		Diameter	mm	6.4	6.4	6.4	6.4	6.35	9.5
	Gas	Type		Flare connection					
		Diameter	mm	12.7	12.7	12.7	12.7	12.7	15.9
	Drain	Diameter	mm	18	18	18	18	18	18
	Heat Insulation			Foamed polystyrene/polyethylene					
Air Filter				Washable resin net					
Refrigerant control				Electronic expansion valve					
Temperature control				Microprocessor thermostat for cooling and heating					
Safety devices				PC board fuse					
Standard Accessories	Standard Accessories			Installation and operation manual					
				Installation panel					
				Paper pattern for installation					
				Insulation tape					
				Clamps					
				Screws					
Notes				Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 5m (horizontal)					
				Nominal heating capacities are based on : indoor temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, equivalent refrigerant piping : 5m (horizontal)					
				Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.					

Wall Mounted Unit

1-2 ELECTRICAL SPECIFICATIONS			FXAQ20MAVE	FXAQ25MAVE	FXAQ32MAVE	FXAQ40MAVE	FXAQ50MAVE	FXAQ63MAVE
Power Supply	Name		VE					
	Phase		1	1	1	1	1	1
	Frequency	Hz	50	50	50	50	50	50
	Voltage	V	220-240					
Current	Minimum circuit amps (MCA)	A	0.30	0.40	0.40	0.40	0.40	0.60
	Maximum fuse amps (MFA)	A	15.00	15.00	15.00	15.00	15.00	15.00
	Full load amps (FLA)	A	0.20	0.30	0.30	0.30	0.30	0.50
Voltage range	Minimun	V	-10%					
	Maximum	V	+10%					
Notes			Voltage range : units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.					
			Maximum allowable voltage range variation between phases is 2%.					
			MCA/MFA : MCA = 1.25 × FLA					
			MFA <= 4 × FLA					
			next lower standard fuse rating minimum 15A					
			select wire size based on the MCA					
			instead of a fuse, use a circuit breaker					
			For more details concerning conditional connections, see http://extranet. daikineurope.com, select "E-Data Books". Finally, click on the document title of your choice.					

Floor Standing Unit

1-1 TECHNICAL SPECIFICATIONS				FXLQ20MAVE	FXLQ25MAVE	FXLQ32MAVE	FXLQ40MAVE	FXLQ50MAVE	FXLQ63MAVE
Nominal Capacity	Cooling		kW	2.20	2.80	3.60	4.50	5.60	7.10
	Heating		kW	2.50	3.20	4.00	5.00	6.30	8.00
Power input (Nominal)	Cooling		kW	0.049	0.049	0.090	0.090	0.110	0.110
	Heating		kW	0.049	0.049	0.090	0.090	0.110	0.110
Casing	Colour			Ivory white (5Y7, 5/1)					
Dimensions	Unit	Height	mm	600	600	600	600	600	600
		Width	mm	1,000	1,000	1,140	1,140	1,420	1,420
		Depth	mm	222	222	222	222	222	222
Weight	Unit		kg	25	25	30	30	36	36
Heat Exchanger	Dimensions	Nr of Rows		3	3	3	3	3	3
		Fin Pitch	mm	1.50	1.50	1.50	1.50	1.50	1.50
		Face Area	m²	0.159	0.159	0.200	0.200	0.282	0.282
		Nr of Stages		14	14	14	14	14	14
Fan	Type			Sirocco fan					
	Quantity			1	1	1	1	1	1
Air Flow Rate	Cooling	High	m³/min	7.00	7.00	8.00	11.00	14.00	16.00
		Low	m³/min	6.00	6.00	6.00	8.50	11.00	12.00
Fan	Motor	Quantity		1	1	1	1	1	1
		Model		D14B20	D14B20	2D14B13	2D14B13	2D14B20	2D14B20
		Output (high)	W	15	15	25	25	35	35
		Drive		Direct drive					
Refrigerant	Name			R-410A					
Cooling	Sound Pressure	High	dBA	35.0	35.0	35.0	38.0	39.0	40.0
		Low	dBA	32.0	32.0	32.0	33.0	34.0	35.0
Piping connections	Liquid (OD)	Type		Flare connection					
		Diameter	mm	6.4	6.4	6.4	6.4	6.4	9.5
	Gas	Type		Flare connection					
		Diameter	mm	12.7	12.7	12.7	12.7	12.7	15.9
	Drain	Diameter	mm	O. D. 21					
	Heat Insulation			Glass Fiber/Urethane Foam					
Air Filter				Resin net with mold resistance					
Refrigerant control				Electronic expansion valve					
Temperature control				Microprocessor thermostat for cooling and heating					
Safety devices				PC board fuse					
				Fan motor thermal protector					
Standard Accessories	Standard Accessories			Installation and operation manual					
				Insulation for fitting					
				Drain hose					
				Clamps					
				Screws					
				Level adjustment screw					
				Washer					
Notes				Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 7.5m (horizontal)					
				Nominal heating capacities are based on : indoor temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, equivalent refrigerant piping : 7.5m (horizontal)					
				Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.					
				Sound pressure levels are measured at 220V					

Floor Standing Unit

1-2 ELECTRICAL SPECIFICATIONS			FXLQ20MAVE	FXLQ25MAVE	FXLQ32MAVE	FXLQ40MAVE	FXLQ50MAVE	FXLQ63MAVE
Power Supply	Name		VE					
	Phase		1	1	1	1	1	1
	Frequency	Hz	50	50	50	50	50	50
	Voltage	V	220-240					
Current	Minimum circuit amps (MCA)	A	0.30	0.30	0.60	0.60	0.60	0.60
	Maximum fuse amps (MFA)	A	15.00	15.00	15.00	15.00	15.00	15.00
	Full load amps (FLA)	A	0.20	0.20	0.50	0.50	0.50	0.50
Voltage range	Minimum	V	-10%					
	Maximum	V	+10%					
Notes			Voltage range : units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.					
			Maximum allowable voltage range variation between phases is 2%.					
			MCA/MFA : MCA = 1.25 × FLA					
			MFA <= 4 × FLA					
			next lower standard fuse rating minimum 15A					
			select wire size based on the MCA					
			instead of a fuse, use a circuit breaker					
			For more details concerning conditional connections, see http://extranet.daikineurope.com, select "E-Data Books". Finally, click on the document title of your choice.					

Concealed Floor Standing Unit

1-1 TECHNICAL SPECIFICATIONS				FXNQ20MAVE	FXNQ25MAVE	FXNQ32MAVE	FXNQ40MAVE	FXNQ50MAVE	FXNQ63MAVE
Nominal Capacity	Cooling		kW	2.20	2.80	3.60	4.50	5.60	7.10
	Heating		kW	2.50	3.20	4.00	5.00	6.30	8.00
Power input (Nominal)	Cooling		kW	0.049	0.049	0.090	0.090	0.110	0.110
	Heating		kW	0.049	0.049	0.090	0.090	0.110	0.110
Casing	Material			Galvanised steel					
Dimensions	Unit	Height	mm	610	610	610	610	610	610
		Width	mm	930	930	1,070	1,070	1,350	1,350
		Depth	mm	220	220	220	220	220	220
Weight	Unit		kg	19	19	23	23	27	27
Heat Exchanger	Dimensions	Nr of Rows		3	3	3	3	3	3
		Fin Pitch	mm	1.50	1.50	1.50	1.50	1.50	1.50
		Face Area	m²	0.159	0.159	0.200	0.200	0.282	0.282
		Nr of Stages		14	14	14	14	14	14
Fan	Type			Sirocco fan					
	Quantity			1	1	1	1	1	1
Air Flow Rate	Cooling	High	m³/min	7.00	7.00	8.00	11.00	14.00	16.00
		Low	m³/min	6.00	6.00	6.00	8.50	11.00	12.00
Fan	Motor	Quantity		1	1	1	1	1	1
		Model		D14B20	D14B20	2D14B13	2D14B13	2D14B20	2D14B20
		Output (high)	W	15	15	25	25	35	35
		Drive		Direct drive					
Refrigerant	Name			R-410A					
Cooling	Sound Pressure	High	dBA	35.0	35.0	35.0	38.0	39.0	40.0
		Low	dBA	32.0	32.0	32.0	33.0	34.0	35.0
Piping connections	Liquid (OD)	Type		Flare connection					
		Diameter	mm	6.4	6.4	6.4	6.4	6.4	9.5
	Gas	Type		Flare connection					
		Diameter	mm	12.7	12.7	12.7	12.7	12.7	15.9
	Drain	Diameter	mm	O.D. 21					
	Heat Insulation			Glass Fiber/Urethane Foam					
Air Filter				Resin net with mold resistance					
Refrigerant control				Electronic expansion valve					
Temperature control				Microprocessor thermostat for cooling and heating					
Safety devices				PC board fuse					
				Fan motor thermal protector					
Standard Accessories	Standard Accessories			Installation and operation manual					
				Insulation for fitting					
				Drain hose					
				Clamps					
				Screws					
				Washer					
				Level adjustment screw					
Notes				Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 7.5m (horizontal)					
				Nominal heating capacities are based on : indoor temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, equivalent refrigerant piping : 7.5m (horizontal)					
				Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.					
				Sound pressure levels are measured at 220V					

Concealed Floor Standing Unit

1-2 ELECTRICAL SPECIFICATIONS			FXNQ20MAVE	FXNQ25MAVE	FXNQ32MAVE	FXNQ40MAVE	FXNQ50MAVE	FXNQ63MAVE
Power Supply	Name		VE					
	Phase		1	1	1	1	1	1
	Frequency	Hz	50	50	50	50	50	50
	Voltage	V	220-240					
Current	Minimum circuit amps (MCA)	A	0.30	0.30	0.60	0.60	0.60	0.60
	Maximum fuse amps (MFA)	A	15.00	15.00	15.00	15.00	15.00	15.00
	Full load amps (FLA)	A	0.20	0.20	0.50	0.50	0.50	0.50
Voltage range	Minimum	V	-10%					
	Maximum	V	+10%					
Notes			Voltage range : units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.					
			Maximum allowable voltage range variation between phases is 2%					
			MCA/MFA : MCA = 1.25 × FLA					
			MFA <= 4 × FLA					
			next lower standard fuse rating minimum 15A					
			select wire size based on the MCA					
			instead of a fuse, use a circuit breaker					
			For more details concerning conditional connections, see http://extranet.daikineurope.com, select "E-Data Books". Finally, click on the document title of your choice.					

1.3 BS Units

Model				BSVQ100PV1	BSVQ160PV1	BSVQ250PV1
Power Supply				1 Phase 50Hz 200-240V	1 Phase 50Hz 200-240V	1 Phase 50Hz 200-240V
Total Capacity Index of Indoor Unit				20 to 100	More than 100 but 160 or less	More than 160 but 250 or less
No. of Connectable Indoor Units				Max. 5	Max. 8	Max. 8
Casing				Galvanized steel plate	Galvanized steel plate	Galvanized steel plate
Dimensions: (H×W×D)			mm	207×388×326	207×388×326	207×388×326
Sound Absorbing Thermal Insulation Material				Foamed polyurethane, Flame resistant needle felt	Foamed polyurethane, Flame resistant needle felt	Foamed polyurethane, Flame resistant needle felt
Piping Connection	Indoor Unit	Liquid Pipes		9.5mm C1220T (brazing connection) ★1	9.5mm C1220T (brazing connection)	9.5mm C1220T (brazing connection)
		Gas Pipes		15.9mm C1220T (brazing connection) ★1	15.9mm C1220T (brazing connection) ★2	22.2mm C1220T (brazing connection) ★3
	Outdoor Unit	Liquid Pipes		9.5mm C1220T (brazing connection)	9.5mm C1220T (brazing connection)	9.5mm C1220T (brazing connection)
		Suction Gas Pipes		15.9mm C1220T (brazing connection)	15.9mm C1220T (brazing connection) ★2	22.2mm C1220T (brazing connection) ★3
		HP/LP Gas Pipes		12.7mm C1220T (brazing connection)	12.7mm C1220T (brazing connection) ★2	19.1mm C1220T (brazing connection) ★3
Weight			kg	14	14	15
Standard Accessories				Installation manual, Attached pipe Insulation pipe cover, Clamps	Installation manual, Attached pipe Insulation pipe cover, Clamps	Installation manual, Attached pipe Insulation pipe cover, Clamps
Drawing No.				C: 4D057926	C: 4D057927	C: 4D057928

Note: ★1 When connecting with a 20 to 50 class indoor unit, connect to the attached pipe to the field pipe. (Braze the connection between the attached and field pipe.)
★2 When connecting with an indoor unit of 150 or more and 160 or less, connect to the attached pipe to the field pipe. (Braze the connection between the attached and field pipe.)
★3 When connecting with a 200 class, or more than 160 and less than 200 class indoor unit, connect to the attached pipe to the field pipe. (Braze the connection between the attached and field pipe.)

Connection Range for BS Unit

Components	Outdoor unit model name	Total capacity of connectable indoor units	Number of connectable indoor units	
Indoor unit total capacity	REYQ8P	100 to 260 (400)	13 (20)	Same number of BS units
	REYQ10P	125 to 325 (500)	16 (25)	
	REYQ12P	150 to 390 (600)	19 (30)	
	REYQ14P	175 to 455 (700)	22 (35)	
	REYQ16P	200 to 520 (800)	26 (40)	
	REYQ18P	225 to 585 (720)	29 (36)	
	REYQ20P	250 to 650 (800)	32 (40)	
	REYQ22P	275 to 715 (880)	35 (44)	
	REYQ24P	300 to 780 (960)	39 (48)	
	REYQ26P	325 to 845 (1,040)	42 (52)	
	REYQ28P	350 to 910 (1,120)	45 (56)	
	REYQ30P	375 to 975 (1,200)	48 (60)	
	REYQ32P	400 to 1,040 (1,280)	52 (64)	
	REYQ34P	425 to 1,105 (1,105)	55 (55)	
	REYQ36P	450 to 1,170 (1,170)	58 (58)	
	REYQ38P	475 to 1,235 (1,235)	61 (61)	
	REYQ40P	500 to 1,300 (1,300)	64 (64)	
	REYQ42P	525 to 1,365 (1,365)		
	REYQ44P	550 to 1,430 (1,430)		
	REYQ46P	575 to 1,495 (1,495)		
	REYQ48P	600 to 1,560 (1,560)		

Note: ★ Values inside brackets are based on connection of indoor units rated at maximum capacity, 200% from single outdoor units, 160% from double outdoor units, 130% from triple outdoor units.

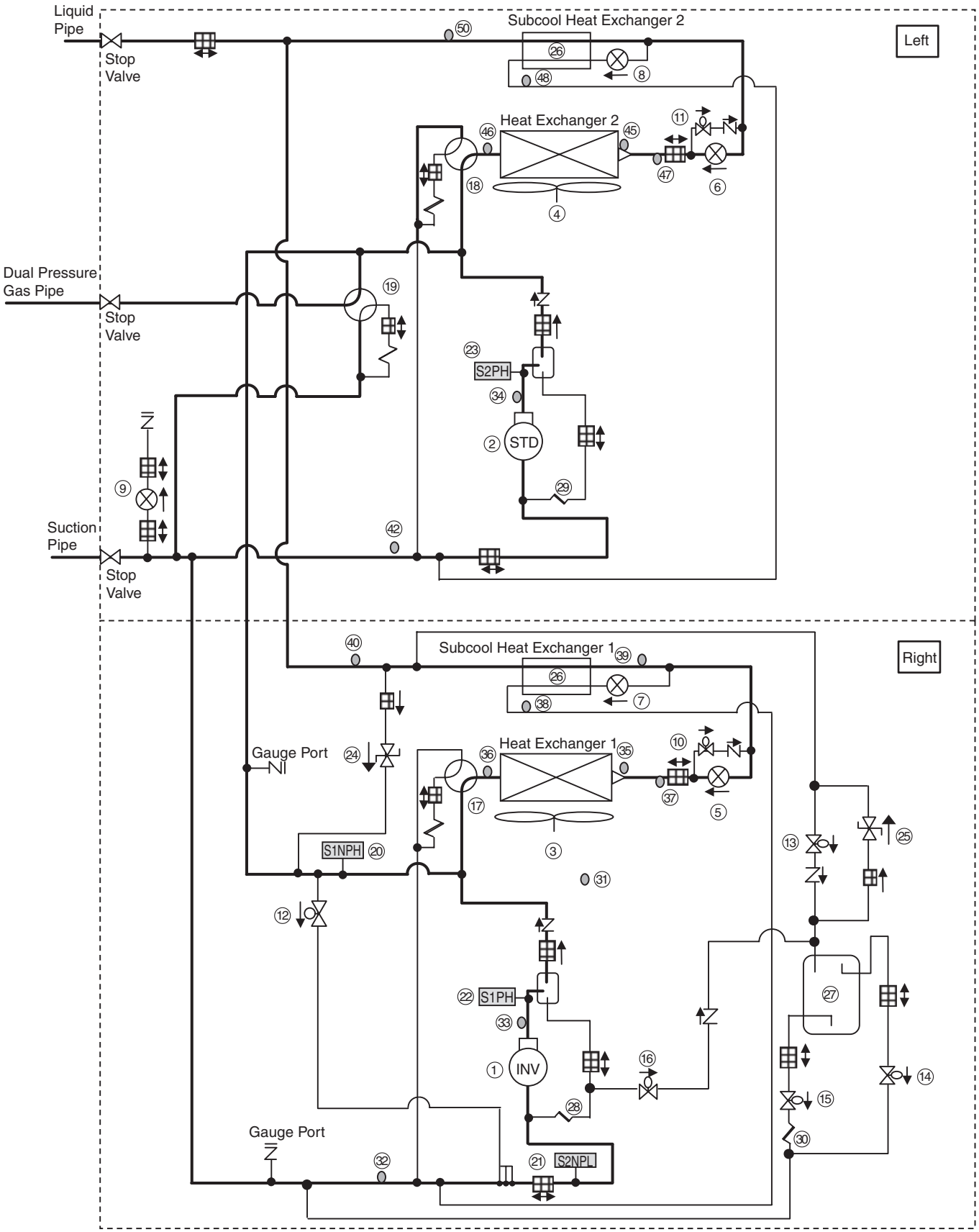
Part 3
Refrigerant Circuit

1. Refrigerant Circuit

1.1 REYQ8P, 10P, 12P

No. in refrigerant system diagram	Symbol	Name	Major Function
1	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. REYQ8, 10, 12P : 37 steps
2	M2C	Standard compressor 1 (STD1)	
3	M1F	Inverter fan	Since the system is of air heat exchanging type, the fan is operated at 9-step rotation speed by using the inverter.
4	M2F	Inverter fan	Since the system is of air heat exchanging type, the fan is operated at 9-step rotation speed by using the inverter.
5(6)	Y1E (Y3E)	Electronic expansion valve (Main1 (Main2))	While in heating operation, PI control is applied to keep the outlet superheated degree of air heat exchanger constant.
7(8)	Y2E (Y5E)	Electronic expansion valve (Subcool1 (Subcool2))	PI control is applied to keep the outlet superheated degree of subcooling heat exchanger constant.
9	Y4E	Electronic expansion valve (Refrigerant charge EVJ)	This is used to open/close refrigerant charge port.
10(11)	Y5S (Y10S)	Solenoid valve (Main bypass1 (Main bypass2))	This opens in cooling operation.
12	Y4S	Solenoid valve (Hot gas: SVP)	Used to prevent the low pressure from transient falling.
13	Y3S	Solenoid valve (Refrigerant regulator liquid pipe SVL)	This is used to collect refrigerant to the refrigerant regulator.
14	Y1S	Solenoid valve (Refrigerant regulator gas purging pipe SVG)	This is used to collect refrigerant to the refrigerant regulator.
15	Y7S	Solenoid valve (Refrigerant regulator discharge pipe SVO)	This is used to discharge refrigerant from the refrigerant regulator.
16	Y6S	Solenoid valve (Discharge pipe of refrigerant regulator)	Bypass the high pressure gas to the refrigerant regulator.
17(18)	Y2S (Y9S)	4 way valve (Heat exchanger switch 20SA)	This is used to switch outdoor heat exchanger to evaporator or condenser.
19	Y8S	4 way valve (Dual pressure gas pipe switch 20SB)	This is used to switch dual pressure gas pipe to high pressure or low pressure.
20	S1NPH	High pressure sensor	Used to detect high pressure.
21	S2NPL	Low pressure sensor	Used to detect low pressure.
22	S1PH	HP pressure switch (For INV)	This functions when pressure increases to stop operation and avoid high pressure increase in the fault operation.
23	S2PH	HP pressure switch (For STD)	
24	—	Pressure regulating valve (Liquid pipe)	This is used when pressure increases, to prevent any damage on components caused by pressure increase in transport or storage.
25	—	Pressure regulating valve (Refrigerant regulator)	This is used when pressure increases, to prevent any damage on components caused by pressure increase in transport or storage.
26	—	Subcooling heat exchanger	Apply subcooling to liquid refrigerant.
27	—	Refrigerant regulator	Surplus refrigerant is held according to the operation conditions.
28	—	Capillary tube	Used to return the refrigerating oil separated through the oil separator to the INV compressor.
29	—	Capillary tube	Used to return the refrigerating oil separated through the oil separator to the STD1 compressor.
30	—	Capillary tube	This is used to discharge refrigerant from the refrigerant regulator.
31	R1T	Thermistor (Outdoor air: Ta)	Used to detect outdoor temperature, correct discharge pipe temperature, and others.
32(42)	R8T (R10T)	Thermistor (Suction pipe: TsA)	Used to detect suction pipe temperature.
33	R31T	Thermistor (INV discharge pipe: Tdi)	Used to detect discharge pipe temperature. Used for compressor temperature protection control.
34	R32T	Thermistor (STD1 discharge pipe: Tds1)	
35(45)	R4T (R12T)	Thermistor (Heat exchanger deicer: Tb)	Used to detect liquid pipe temperature of air heat exchanger. Used to make judgments on defrosting operation.
36(46)	R2T (R11T)	Thermistor (Heat exchanger gas pipe Tg)	This detects temperature of gas pipe for air heat exchanger. Used to exercise the constant control of superheated degree when an evaporator is used for outdoor unit heat exchanging.
37(47)	R7T (R15T)	Thermistor (Heat exchanger liquid pipe Tf)	This detects temperature of liquid pipe between the air heat exchanger and main electronic expansion valve. Used to make judgments on the recover or discharge refrigerants to the refrigerant regulator.
38(48)	R5T (R13T)	Thermistor (Subcooling heat exchanger gas pipe: Tsh)	Used to detect gas pipe temperature on the evaporation side of subcooling heat exchanger. Used to exercise the constant control of superheated degree at the outlet of supercooled heat exchanger.
39	R6T	Thermistor (Subcooling heat exchanger liquid pipe Tl)	This detects temperature of liquid pipe between the main expansion valve and subcooling heat exchanger.
40(50)	R9T (R14T)	Thermistor (Liquid pipe Tsc)	This detects temperature of liquid pipe between the liquid stop valve and subcooling heat exchanger.

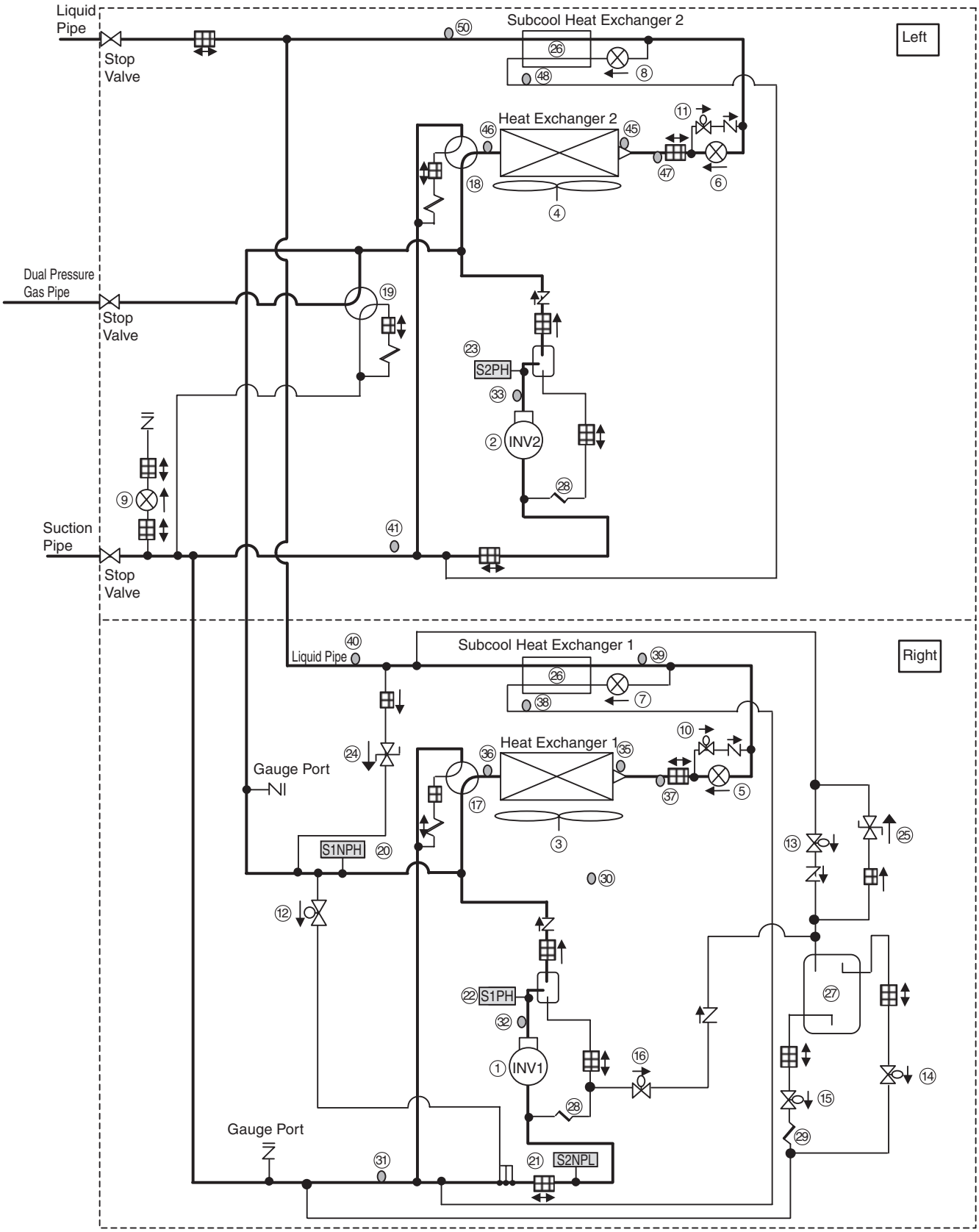
REYQ8P, 10P, 12P
(8HP, 10HP, 12HP Single Type)
(INV Unit + STD Unit)



1.2 REYQ14P, 16P

No. in refrigerant system diagram	Symbol	Name	Major Function
1	M1C	Inverter compressor (INV1)	Inverter compressor is operated on frequencies between 52Hz and 266Hz by using the inverter. The number of operating steps is as follows. REYQ14P or 16P : 26 step
2	M2C	Standard compressor 1 (INV2)	
3	M1F	Inverter fan	Since the system is of air heat exchanging type, the fan is operated at 9-step rotation speed by using the inverter.
4	M2F	Inverter fan	Since the system is of air heat exchanging type, the fan is operated at 9-step rotation speed by using the inverter.
5(6)	Y1E (Y3E)	Electronic expansion valve (Main1 (Main2))	While in heating operation, PI control is applied to keep the outlet superheated degree of air heat exchanger constant.
7(8)	Y2E (Y5E)	Electronic expansion valve (Subcool1 (Subcool2))	PI control is applied to keep the outlet superheated degree of subcooling heat exchanger constant.
9	Y4E	Electronic expansion valve (Refrigerant charge EVJ)	This is used to open/close refrigerant charge port.
10(11)	Y5S (Y10S)	Solenoid valve (Main bypass1 (Main bypass2))	This opens in cooling operation.
12	Y4S	Solenoid valve (Hot gas: SVP)	Used to prevent the low pressure from transient falling.
13	Y3S	Solenoid valve (Refrigerant regulator liquid pipe SVL)	This is used to collect refrigerant to the refrigerant regulator.
14	Y1S	Solenoid valve (Refrigerant regulator gas purging pipe SVG)	This is used to collect refrigerant to the refrigerant regulator.
15	Y7S	Solenoid valve (Refrigerant regulator discharge pipe SVO)	This is used to discharge refrigerant from the refrigerant regulator.
16	Y6S	Solenoid valve (Discharge pipe of refrigerant regulator)	Bypass the high pressure gas to the refrigerant regulator.
17(18)	Y2S (Y9S)	4 way valve (Heat exchanger switch 20SA)	This is used to switch outdoor heat exchanger to evaporator or condenser.
19	Y8S	4 way valve (Dual pressure gas pipe switch 20SB)	This is used to switch dual pressure gas pipe to high pressure or low pressure.
20	S1NPH	High pressure sensor	Used to detect high pressure.
21	S2NPL	Low pressure sensor	Used to detect low pressure.
22(23)	S1PH (S2PH)	HP pressure switch (For INV compressor)	This functions when pressure increases to stop operation and avoid high pressure increase in the fault operation.
24	—	Pressure regulating valve (Liquid pipe)	This is used when pressure increases, to prevent any damage on components caused by pressure increase in transport or storage.
25	—	Pressure regulating valve (Refrigerant regulator)	This is used when pressure increases, to prevent any damage on components caused by pressure increase in transport or storage.
26	—	Subcooling heat exchanger	Apply subcooling to liquid refrigerant.
27	—	Refrigerant regulator	Surplus refrigerant is held according to the operation conditions.
28	—	Capillary tube	Used to return the refrigerating oil separated through the oil separator to the INV compressor.
29	—	Capillary tube	This is used to discharge refrigerant from the refrigerant regulator.
30	R1T	Thermistor (Outdoor air: Ta)	Used to detect outdoor temperature, correct discharge pipe temperature, and others.
31(41)	R8T (R10T)	Thermistor (Suction pipe: TsA)	Used to detect suction pipe temperature.
32	R31T	Thermistor (INV1 discharge pipe: Tdi)	Used to detect discharge pipe temperature. Used for compressor temperature protection control.
33	R32T	Thermistor (INV2 discharge pipe: Tds1)	
35(45)	R4T (R12T)	Thermistor (Heat exchanger deicer: Tb)	Used to detect liquid pipe temperature of air heat exchanger. Used to make judgments on defrosting operation.
36(46)	R2T (R11T)	Thermistor (Heat exchanger gas pipe Tg)	This detects temperature of gas pipe for air heat exchanger. Used to exercise the constant control of superheated degree when an evaporator is used for outdoor unit heat exchanging.
37(47)	R7T (R15T)	Thermistor (Heat exchanger liquid pipe Tf)	This detects temperature of liquid pipe between the air heat exchanger and main electronic expansion valve. Used to make judgments on the recover or discharge refrigerants to the refrigerant regulator.
38(48)	R5T (R13T)	Thermistor (Subcooling heat exchanger gas pipe: Tsh)	This detects temperature of gas pipe on the evaporator side for the subcooling heat exchanger. Used to exercise the constant control of superheated degree at the outlet of supercooled heat exchanger.
39	R6T	Thermistor (Subcooling heat exchanger liquid pipe Tl)	This detects temperature of liquid pipe between the main expansion valve and subcooling heat exchanger.
40(50)	R9T (R14T)	Thermistor (Liquid pipe Tsc)	This detects temperature of liquid pipe between the liquid stop valve and subcooling heat exchanger.

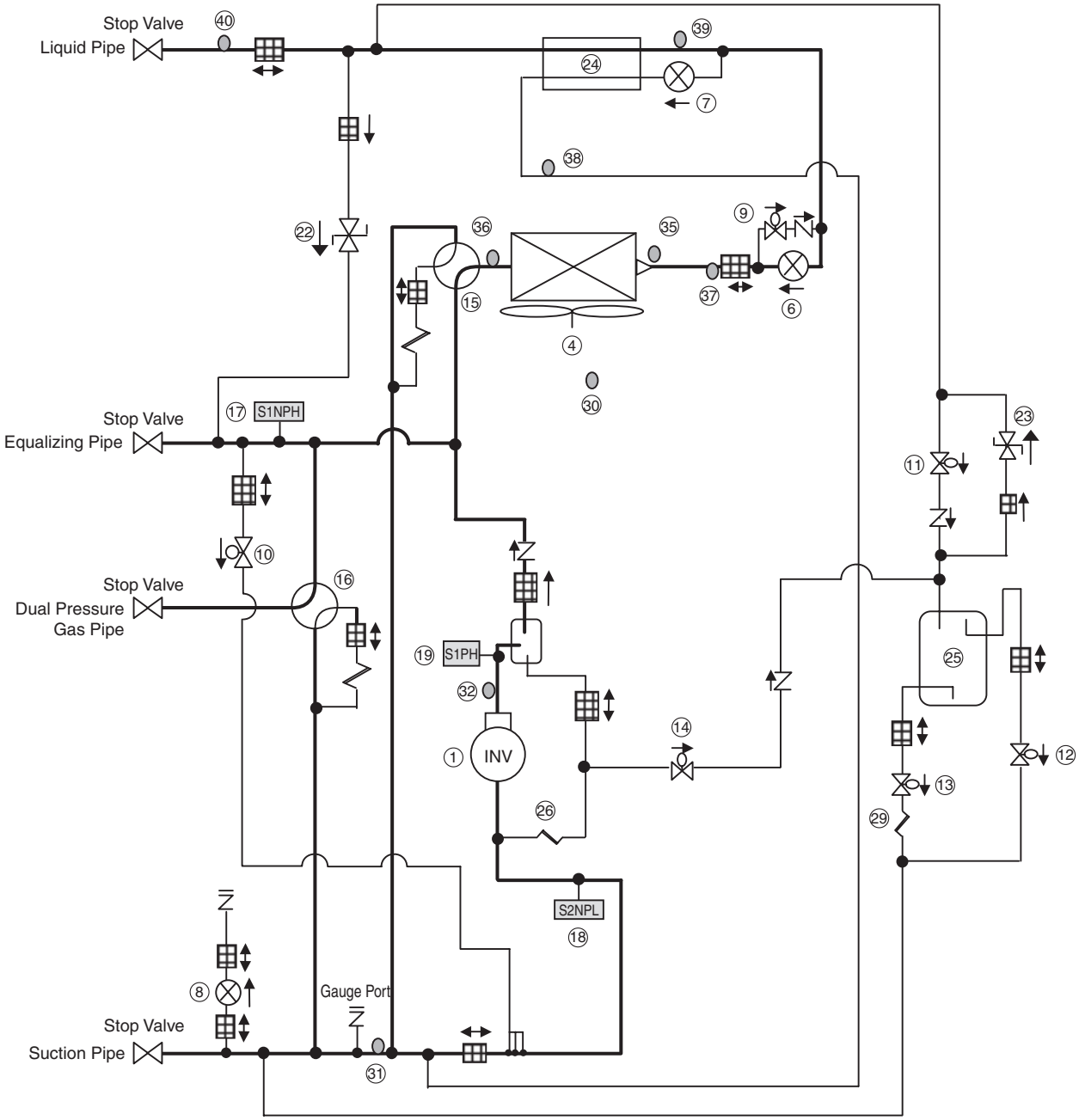
REYQ14P, 16P
(14HP, 16HP Single Type)
(INV Unit × 2)



1.3 REMQ8PY1 (Multi 8HP)

No. in refrigerant system diagram	Symbol	Name	Major Function
1	M1C	Inverter compressor (INV)	Inverter compressor is operated on frequencies between 52Hz and 210Hz by using the inverter. Compressor operation steps : Refer to page 110~113.
4	M1F	Inverter fan	Since the system is of air heat exchanging type, the fan is operated at 9-step rotation speed by using the inverter.
6	Y1E	Electronic expansion valve (Main: EVM)	While in heating operation, PI control is applied to keep the outlet superheated degree of air heat exchanger constant.
7	Y3E	Electronic expansion valve (Subcool: EVT)	PI control is applied to keep the outlet superheated degree of subcooling heat exchanger constant.
8	Y2E	Electronic expansion valve (Refrigerant charge EVJ)	This is used to open/close refrigerant charge port.
9	Y6S	Solenoid valve (Main bypass SVE)	This opens in cooling operation.
10	Y5S	Solenoid valve (Hot gas: SVP)	Used to prevent the low pressure from transient falling.
11	Y4S	Solenoid valve (Refrigerant regulator liquid pipe SVL)	This is used to collect refrigerant to the refrigerant regulator.
12	Y1S	Solenoid valve (Refrigerant regulator gas purging pipe SVG)	This is used to collect refrigerant to the refrigerant regulator.
13	Y7S	Solenoid valve (Refrigerant regulator discharge pipe SVO)	This is used to discharge refrigerant from the refrigerant regulator.
14	Y8S	Solenoid valve (Discharge pipe of refrigerant regulator)	Bypass the high pressure gas to the refrigerant regulator.
15	Y3S	4 way valve (Heat exchanger switch 20SA)	This is used to switch outdoor heat exchanger to evaporator or condenser.
16	Y2S	4 way valve (Dual pressure gas pipe switch 20SB)	This is used to switch dual pressure gas pipe to high pressure or low pressure.
17	S1NPH	High pressure sensor	Used to detect high pressure.
18	S2NPL	Low pressure sensor	Used to detect low pressure.
19	S1PH	HP pressure switch (For INV compressor)	This functions when pressure increases to stop operation and avoid high pressure increase in the fault operation.
22	—	Pressure regulating valve (Liquid pipe)	This is used when pressure increases, to prevent any damage on components caused by pressure increase in transport or storage.
23	—	Pressure regulating valve (Refrigerant regulator)	This is used when pressure increases, to prevent any damage on components caused by pressure increase in transport or storage.
24	—	Subcooling heat exchanger	Apply subcooling to liquid refrigerant.
25	—	Refrigerant regulator	Surplus refrigerant is held according to the operation conditions.
26	—	Capillary tube	Used to return the refrigerating oil separated through the oil separator to the INV compressor.
29	—	Capillary tube	This is used to discharge refrigerant from the refrigerant regulator.
30	R1T	Thermistor (Outdoor air: Ta)	Used to detect outdoor temperature.
31	R8T	Thermistor (Suction pipe: TsA)	Used to detect suction pipe temperature.
32	R31T	Thermistor (INV discharge pipe: Tdi)	Used to detect discharge pipe temperature. Used for compressor temperature protection control.
35	R4T	Thermistor (Heat exchanger deicer Tb)	This detects temperature of some of the liquid pipes for air heat exchanger. Used to make judgments on defrosting operation.
36	R2T	Thermistor (Heat exchanger gas pipe Tg)	This detects temperature of gas pipe for air heat exchanger. Used to exercise the constant control of superheated degree when an evaporator is used for outdoor unit heat exchanging.
37	R7T	Thermistor (Heat exchanger liquid pipe Tf)	This detects temperature of liquid pipe between the air heat exchanger and main electronic expansion valve. Used to make judgments on the recover or discharge refrigerants to the refrigerant regulator.
38	R5T	Thermistor (Subcooling heat exchanger gas pipe Tsh)	This detects temperature of gas pipe on the evaporator side for the subcooling heat exchanger. Used to exercise the constant control of superheated degree at the outlet of supercooled heat exchanger.
39	R6T	Thermistor (Subcooling heat exchanger liquid pipe Tl)	This detects temperature of liquid pipe between the main expansion valve and subcooling heat exchanger.
40	R9T	Thermistor (Liquid pipe Tsc)	This detects temperature of liquid pipe between the liquid stop valve and subcooling heat exchanger.

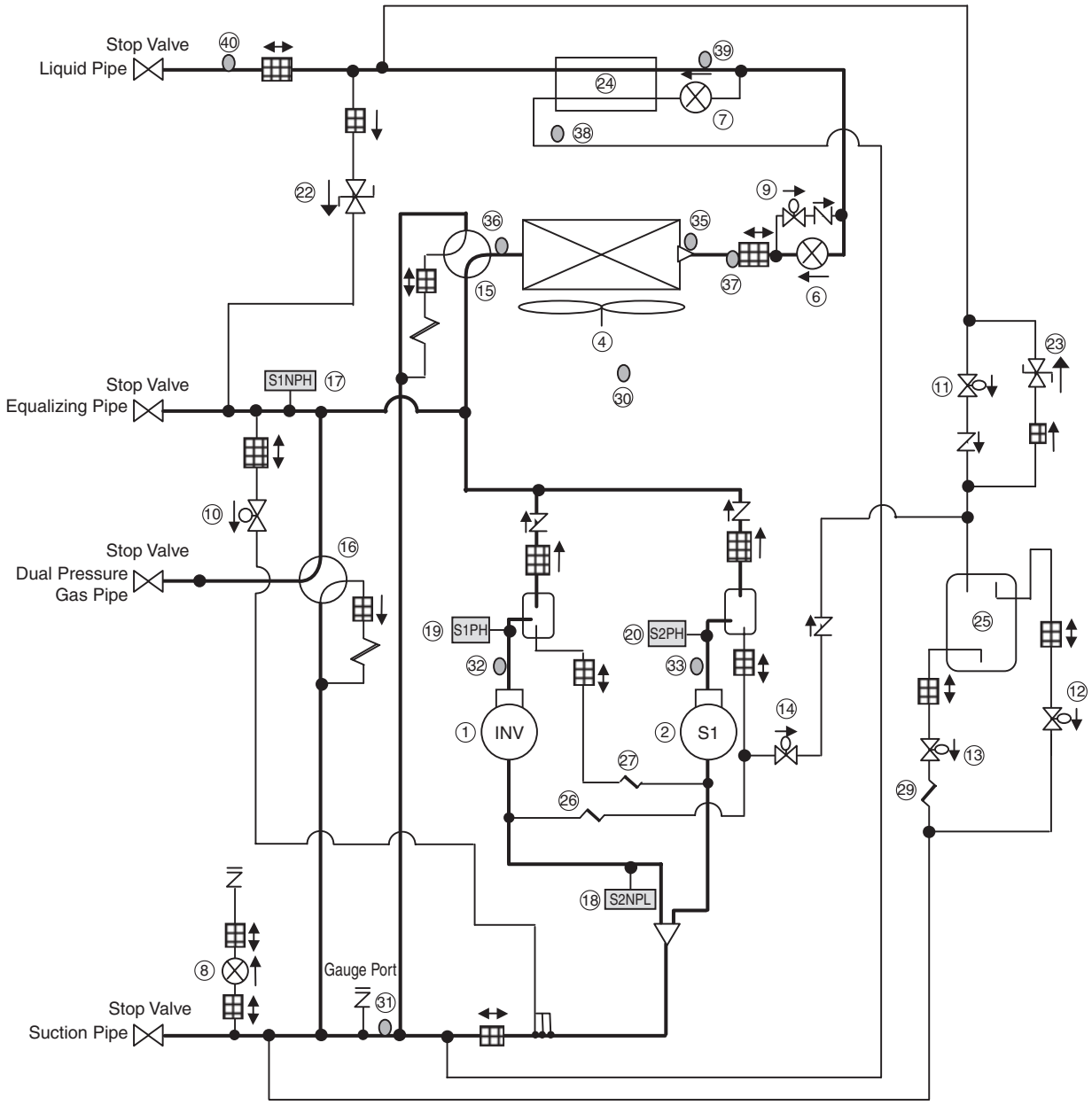
REMQ8PY1


Stop Valve
Liquid Pipe
40
39
24
7
38
22
36
35
9
37
6
15
4
30
Stop Valve
Equalizing Pipe
17
S1NPH
23
11
10
Stop Valve
Dual Pressure
Gas Pipe
16
19
S1PH
25
32
1
INV
14
12
13
26
29
S2NPL
18
8
Gauge Port
Stop Valve
Suction Pipe
31

1.4 REMQ10PY1, 12PY1 (Multi 10, 12HP)

No. in refrigerant system diagram	Symbol	Name	Major Function
1	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. Compressor operation steps : Refer to page 110~113.
2	M2C	Standard compressor 1 (STD1)	
4	M1F	Inverter fan	Since the system is of air heat exchanging type, the fan is operated at 9-step rotation speed by using the inverter.
6	Y1E	Electronic expansion valve (Main: EVM)	While in heating operation, PI control is applied to keep the outlet superheated degree of air heat exchanger constant.
7	Y3E	Electronic expansion valve (Subcool: EVT)	PI control is applied to keep the outlet superheated degree of subcooling heat exchanger constant.
8	Y2E	Electronic expansion valve (Refrigerant charge EVJ)	This is used to open/close refrigerant charge port.
9	Y6S	Solenoid valve (Main bypass SVE)	This opens in cooling operation.
10	Y5S	Solenoid valve (Hot gas: SVP)	Used to prevent the low pressure from transient falling.
11	Y4S	Solenoid valve (Refrigerant regulator liquid pipe SVL)	This is used to collect refrigerant to the refrigerant regulator.
12	Y1S	Solenoid valve (Refrigerant regulator gas purging pipe SVG)	This is used to collect refrigerant to the refrigerant regulator.
13	Y7S	Solenoid valve (Refrigerant regulator discharge pipe SVO)	This is used to discharge refrigerant from the refrigerant regulator.
14	Y8S	Solenoid valve (Discharge pipe of refrigerant regulator)	Bypass the high pressure gas to the refrigerant regulator.
15	Y3S	4 way valve (Heat exchanger switch 20SA)	This is used to switch outdoor heat exchanger to evaporator or condenser.
16	Y2S	4 way valve (Dual pressure gas pipe switch 20SB)	This is used to switch dual pressure gas pipe to high pressure or low pressure.
17	S1NPH	High pressure sensor	Used to detect high pressure.
18	S2NPL	Low pressure sensor	Used to detect low pressure.
19	S1PH	HP pressure switch (For INV compressor)	This functions when pressure increases to stop operation and avoid high pressure increase in the fault operation.
20	S2PH	HP pressure switch (For STD compressor 1)	
22	—	Pressure regulating valve (Liquid pipe)	This is used when pressure increases, to prevent any damage on components caused by pressure increase in transport or storage.
23	—	Pressure regulating valve (Refrigerant regulator)	This is used when pressure increases, to prevent any damage on components caused by pressure increase in transport or storage.
24	—	Subcooling heat exchanger	Apply subcooling to liquid refrigerant.
25	—	Refrigerant regulator	Surplus refrigerant is held according to the operation conditions.
26	—	Capillary tube	Used to return the refrigerating oil separated through the oil separator to the INV compressor.
27	—	Capillary tube	Used to return the refrigerating oil separated through the oil separator to the STD1 compressor.
29	—	Capillary tube	This is used to discharge refrigerant from the refrigerant regulator.
30	R1T	Thermistor (Outdoor air: Ta)	Used to detect outdoor temperature, correct discharge pipe temperature, and others.
31	R8T	Thermistor (Suction pipe: TsA)	Used to detect suction pipe temperature.
32	R31T	Thermistor (INV discharge pipe: Tdi)	Used to detect discharge pipe temperature. Used for compressor temperature protection control.
33	R32T	Thermistor (STD1 discharge pipe: Tds1)	
35	R4T	Thermistor (Heat exchanger deicer: Tb)	Used to detect liquid pipe temperature of air heat exchanger. Used to make judgments on defrosting operation.
36	R2T	Thermistor (Heat exchanger gas pipe Tg)	This detects temperature of gas pipe for air heat exchanger. Used to exercise the constant control of superheated degree when an evaporator is used for outdoor unit heat exchanging.
37	R7T	Thermistor (Heat exchanger liquid pipe Tf)	This detects temperature of liquid pipe between the air heat exchanger and main electronic expansion valve. Used to make judgments on the recover or discharge refrigerants to the refrigerant regulator.
38	R5T	Thermistor (Subcooling heat exchanger gas pipe: Tsh)	Used to detect gas pipe temperature on the evaporation side of subcooling heat exchanger. Used to exercise the constant control of superheated degree at the outlet of supercooled heat exchanger.
39	R6T	Thermistor (Subcooling heat exchanger liquid pipe Tl)	This detects temperature of liquid pipe between the main expansion valve and subcooling heat exchanger.
40	R9T	Thermistor (Liquid pipe Tsc)	This detects temperature of liquid pipe between the liquid stop valve and subcooling heat exchanger.

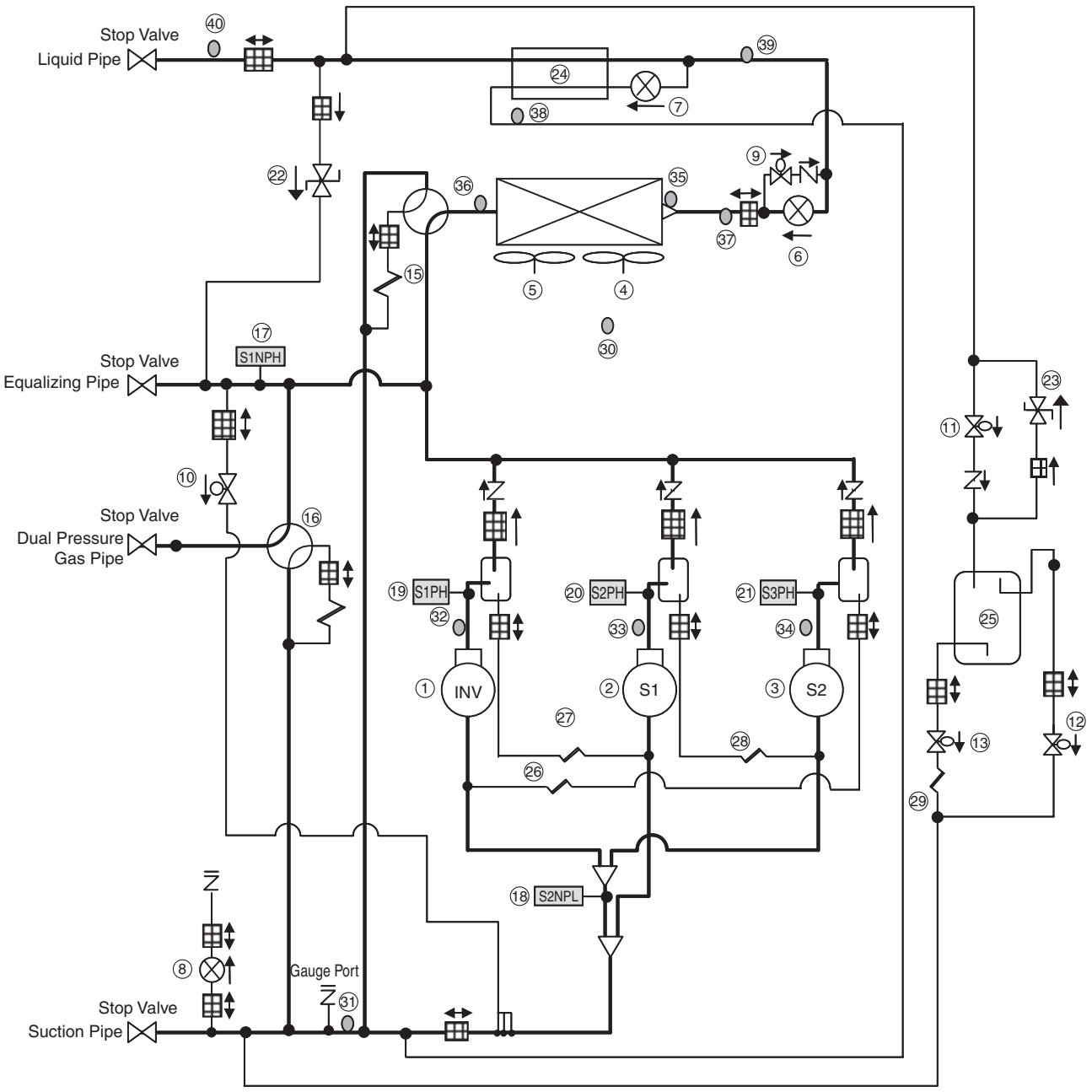
REMQ10PY1, 12PY1



1.5 REMQ14PY1, 16PY1 (Multi 14, 16HP)

No. in refrigerant system diagram	Symbol	Name	Major Function
1	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. Compressor operation steps : Refer to page 110~113.
2	M2C	Standard compressor 1 (STD1)	
3	M3C	Standard compressor 2 (STD2)	
4	M1F	Inverter fan	Since the system is of air heat exchanging type, the fan is operated at 9-step rotation speed by using the inverter.
5	M2F	Inverter fan	Since the system is of air heat exchanging type, the fan is operated at 9-step rotation speed by using the inverter.
6	Y1E	Electronic expansion valve (Main: EVM)	While in heating operation, PI control is applied to keep the outlet superheated degree of air heat exchanger constant.
7	Y3E	Electronic expansion valve (Subcool: EVT)	PI control is applied to keep the outlet superheated degree of subcooling heat exchanger constant.
8	Y2E	Electronic expansion valve (Refrigerant charge EVJ)	This is used to open/close refrigerant charge port.
9	Y6S	Solenoid valve (Main bypass SVE)	This opens in cooling operation.
10	Y5S	Solenoid valve (Hot gas: SVP)	Used to prevent the low pressure from transient falling.
11	Y4S	Solenoid valve (Refrigerant regulator liquid pipe SVL)	This is used to collect refrigerant to the refrigerant regulator.
12	Y1S	Solenoid valve (Refrigerant regulator gas purging pipe SVG)	This is used to collect refrigerant to the refrigerant regulator.
13	Y7S	Solenoid valve (Refrigerant regulator discharge pipe SVO)	This is used to discharge refrigerant from the refrigerant regulator.
14	Y8S	Solenoid valve (Discharge pipe of refrigerant regulator)	Bypass the high pressure gas to the refrigerant regulator.
15	Y3S	4 way valve (Heat exchanger switch 20SA)	This is used to switch outdoor heat exchanger to evaporator or condenser.
16	Y2S	4 way valve (Dual pressure gas pipe switch 20SB)	This is used to switch dual pressure gas pipe to high pressure or low pressure.
17	S1NPH	High pressure sensor	Used to detect high pressure.
18	S2NPL	Low pressure sensor	Used to detect low pressure.
19	S1PH	HP pressure switch (For INV compressor)	This functions when pressure increases to stop operation and avoid high pressure increase in the fault operation.
20	S2PH	HP pressure switch (For STD compressor 1)	
21	S3PH	HP pressure switch (For STD compressor 2)	
22	—	Pressure regulating valve (Liquid pipe)	This is used when pressure increases, to prevent any damage on components caused by pressure increase in transport or storage.
23	—	Pressure regulating valve (Refrigerant regulator)	This is used when pressure increases, to prevent any damage on components caused by pressure increase in transport or storage.
24	—	Subcooling heat exchanger	Apply subcooling to liquid refrigerant.
25	—	Refrigerant regulator	Surplus refrigerant is held according to the operation conditions.
26	—	Capillary tube	Used to return the refrigerating oil separated through the oil separator to the INV compressor.
27	—	Capillary tube	Used to return the refrigerating oil separated through the oil separator to the STD1 compressor.
28	—	Capillary tube	Used to return the refrigerating oil separated through the oil separator to the STD2 compressor.
29	—	Capillary tube	This is used to discharge refrigerant from the refrigerant regulator.
30	R1T	Thermistor (Outdoor air: Ta)	Used to detect outdoor temperature, correct discharge pipe temperature, and others.
31	R8T	Thermistor (Suction pipe: TsA)	Used to detect suction pipe temperature.
32	R31T	Thermistor (INV discharge pipe: Tdi)	Used to detect discharge pipe temperature. Used for compressor temperature protection control.
33	R32T	Thermistor (STD1 discharge pipe: Tds1)	
34	R33T	Thermistor (STD2 discharge pipe: Tds2)	
35	R4T	Thermistor (Heat exchanger deicer: Tb)	Used to detect liquid pipe temperature of air heat exchanger. Used to make judgments on defrosting operation.
36	R2T	Thermistor (Heat exchanger gas pipe Tg)	This detects temperature of gas pipe for air heat exchanger. Used to exercise the constant control of superheated degree when an evaporator is used for outdoor unit heat exchanging.
37	R7T	Thermistor (Heat exchanger liquid pipe Tf)	This detects temperature of liquid pipe between the air heat exchanger and main electronic expansion valve. Used to make judgments on the recover or discharge refrigerants to the refrigerant regulator.
38	R5T	Thermistor (Subcooling heat exchanger gas pipe: Tsh)	This detects temperature of gas pipe on the evaporator side for the subcooling heat exchanger. Used to exercise the constant control of superheated degree at the outlet of supercooled heat exchanger.
39	R6T	Thermistor (Subcooling heat exchanger liquid pipe Tl)	This detects temperature of liquid pipe between the main expansion valve and subcooling heat exchanger.
40	R9T	Thermistor (Liquid pipe Tsc)	This detects temperature of liquid pipe between the liquid stop valve and subcooling heat exchanger.

REMQ14PY1, 16PY1

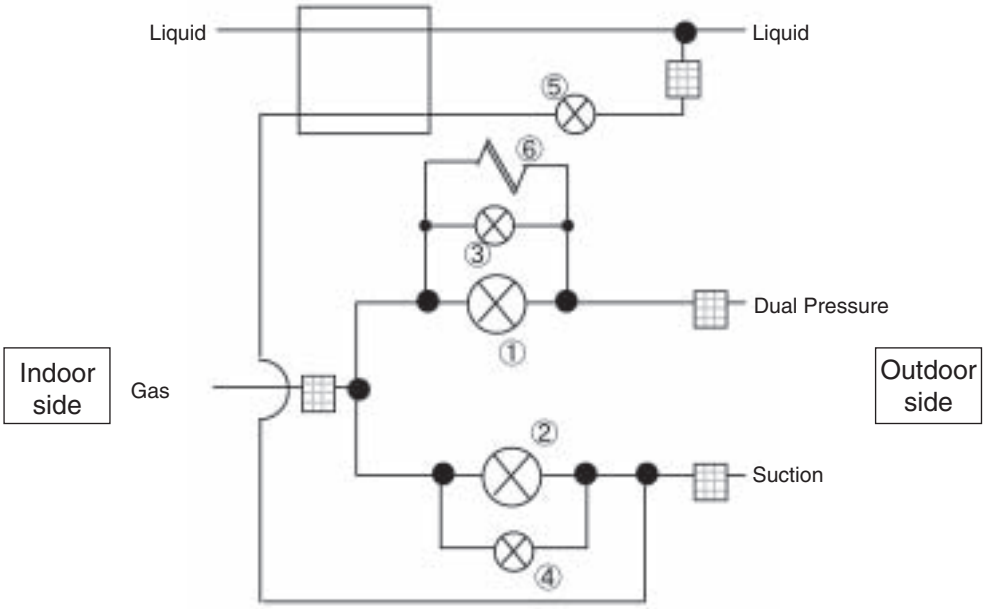


1.6 BS Unit Functional Parts

BSVQ100,160,250PV1

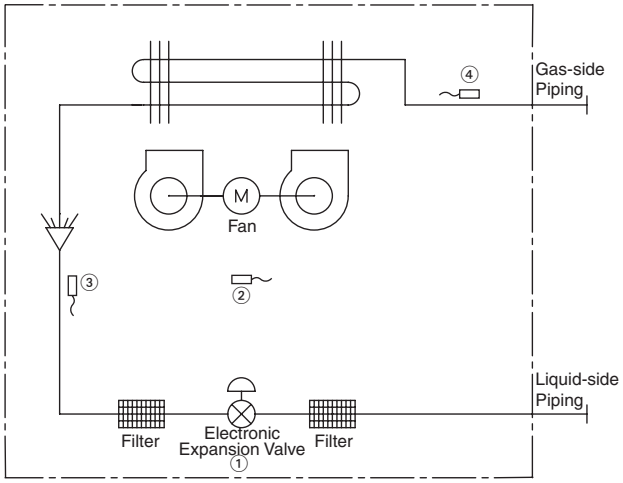
No.	Name	Symbol	Function
1	Electronic expansion valve (EVH)	Y4E	Opens while in heating operation or all indoor units are in cooling operation. (Max : 760pls)
2	Electronic expansion valve (EVL)	Y5E	Opens while in cooling operation. (Max : 760pls)
3	Electronic expansion valve (EVHS)	Y2E	Opens while in heating operation or all indoor units are in cooling operation. (Max : 480pls)
4	Electronic expansion valve (EVLS)	Y3E	Opens while in cooling operation. (Max : 480pls)
5	Electronic expansion valve (EVSC)	Y1E	In simultaneous cooling and heating operation, it is used to subcool liquid refrigerants when an indoor unit downstream of this BS unit is in heating operation.(Max : 480pls)
6	Capillary tube		Used to bypass high pressure gas to low pressure side to protect “Refrigerant accumulation” in high and low pressure gas pipes.

Note : Factory set of all EV opening : 60pls



1.7 Indoor Units

FXCQ, FXFQ, FXZQ, FXKQ, FXDQ, FXDYQ, FXSQ, FXMQ, FXHQ, FXAQ, FXLQ, FXNQ

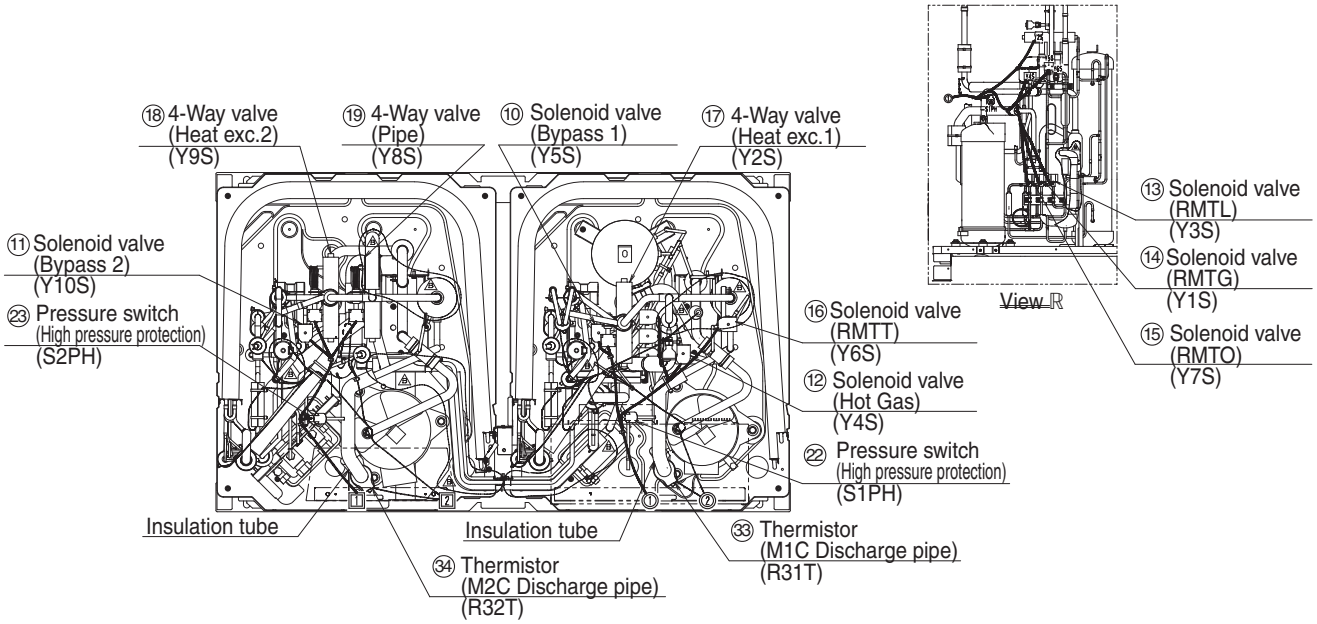


No.	Name	Symbol	Function
①	Electronic expansion valve	Y1E	Used to control superheated degree of gas when cooling and subcooled degree when heating. (Max. 2000 pls)
②	Suction air thermistor	R1T	Used for thermostat control.
③	Liquid pipe thermistor	R2T	Used to control superheated degree of gas when cooling and subcooled degree when heating.
④	Gas pipe thermistor	R3T	Used for gas superheated degree control when cooling.

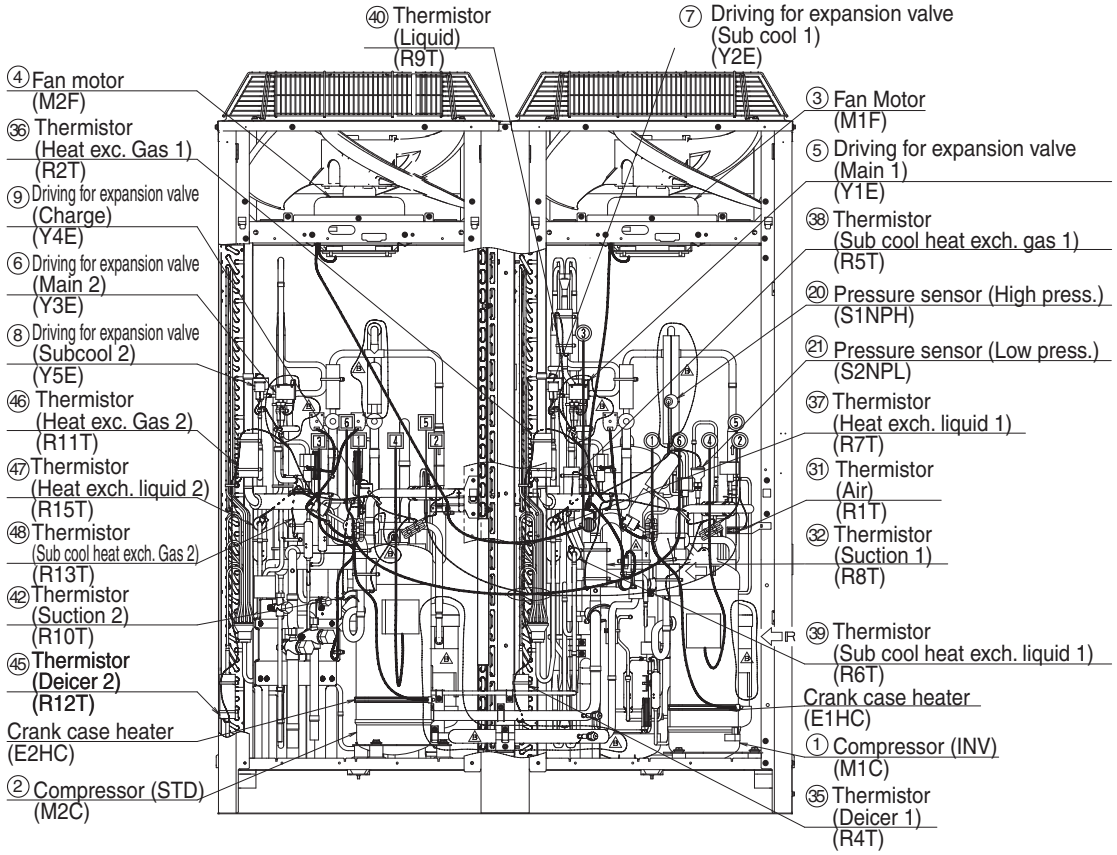
2. Functional Parts Layout

2.1 REYQ8P, 10P, 12P

Plan



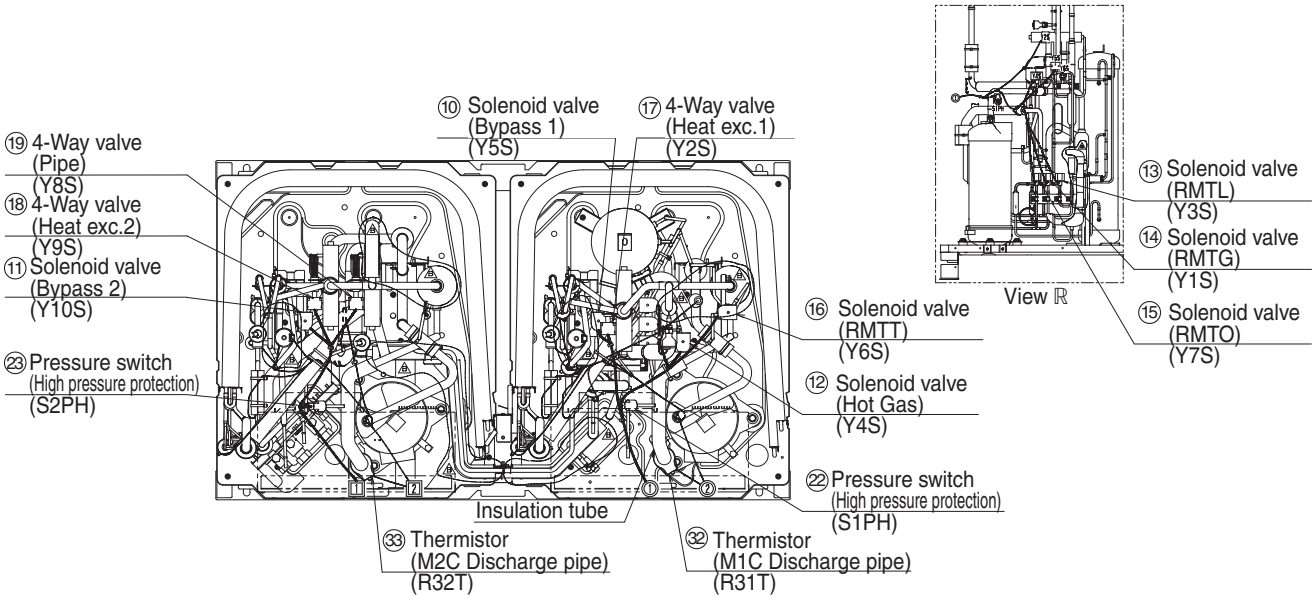
Front View



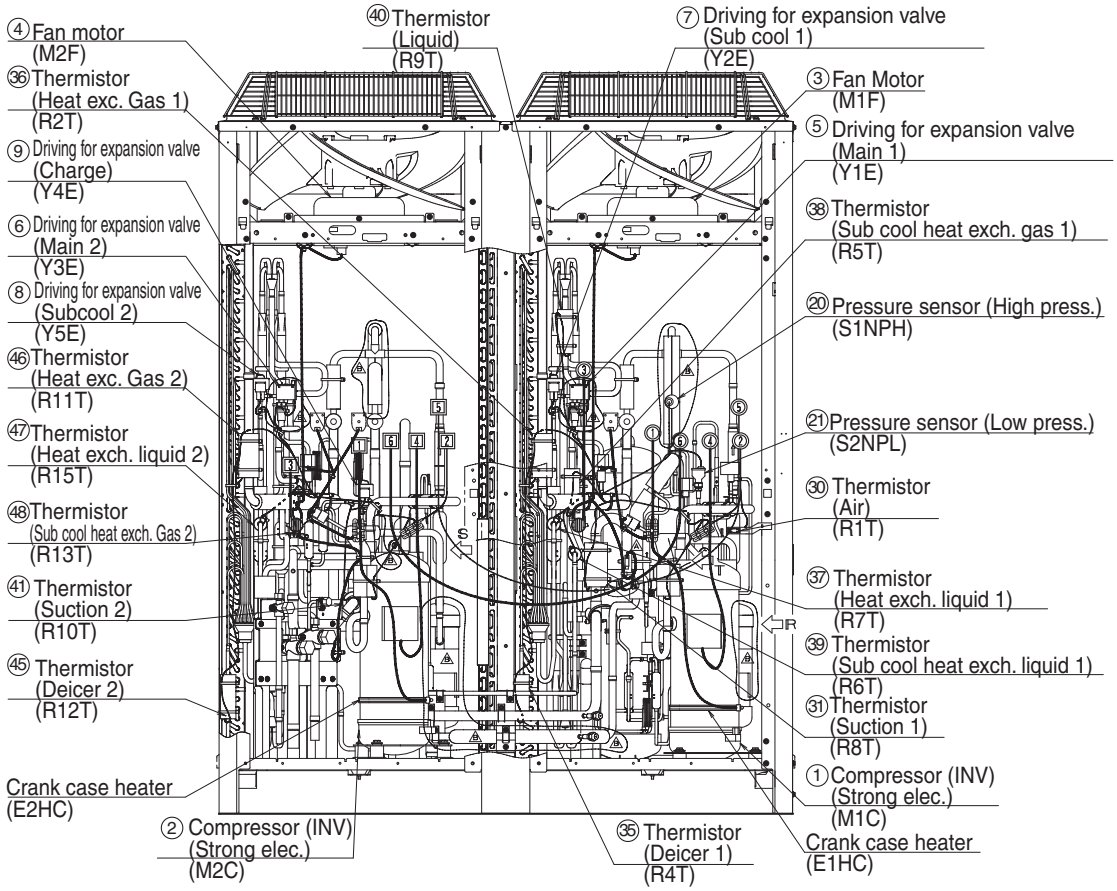
Note: For reference numbers, refer to page 56.

2.2 REYQ14P, 16P

Plan



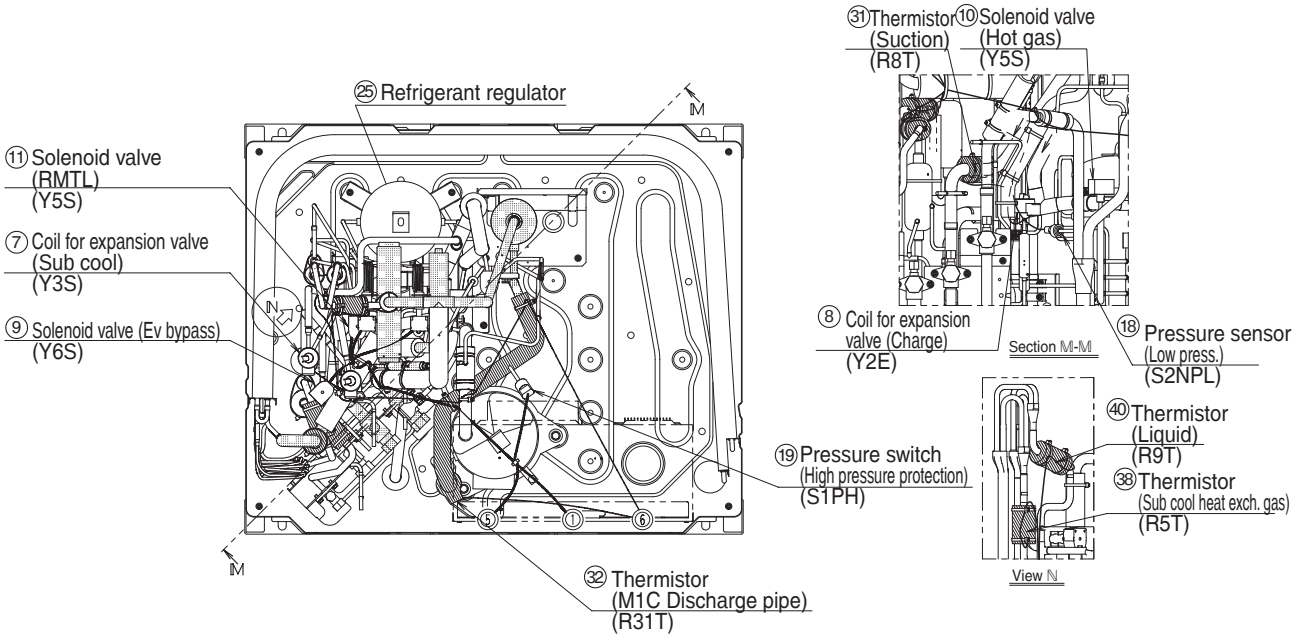
Front View



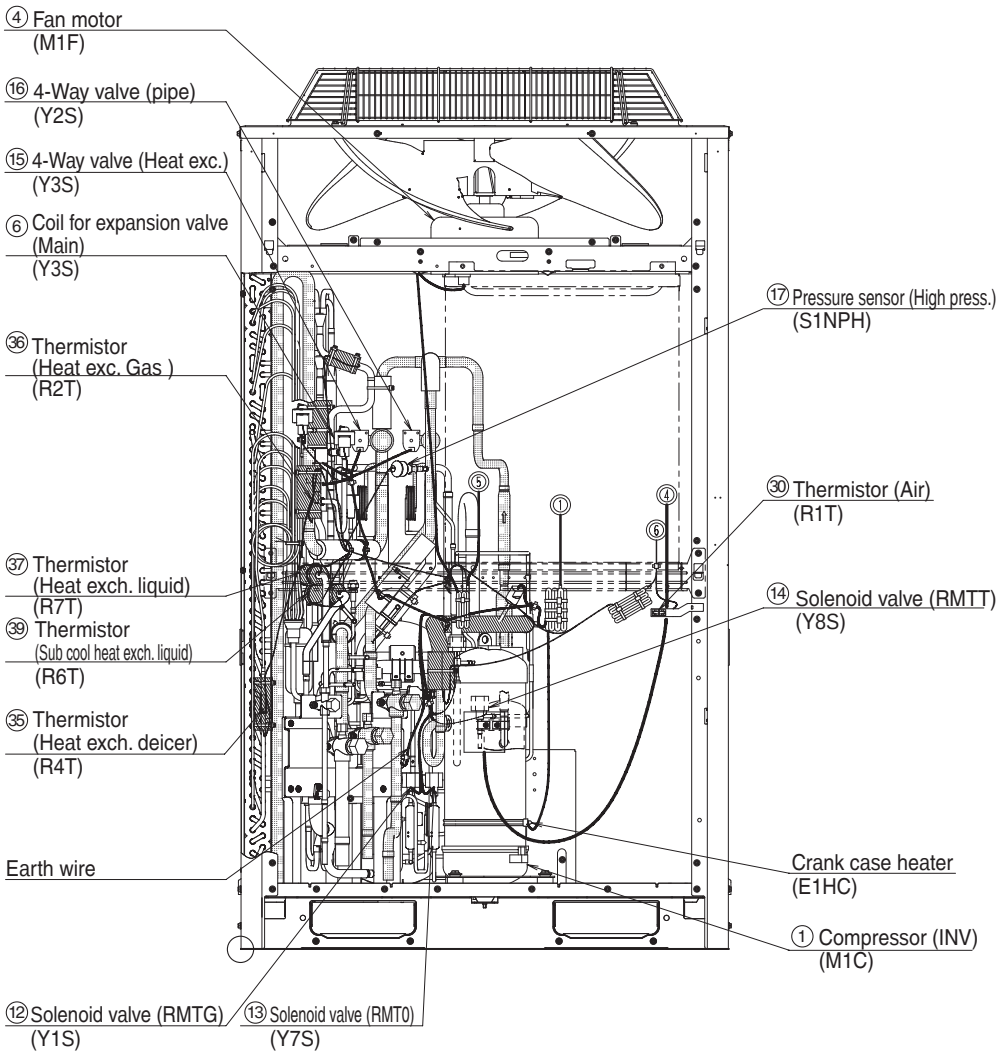
Note: For reference numbers, refer to page 58.

2.3 REMQ8P

Plan



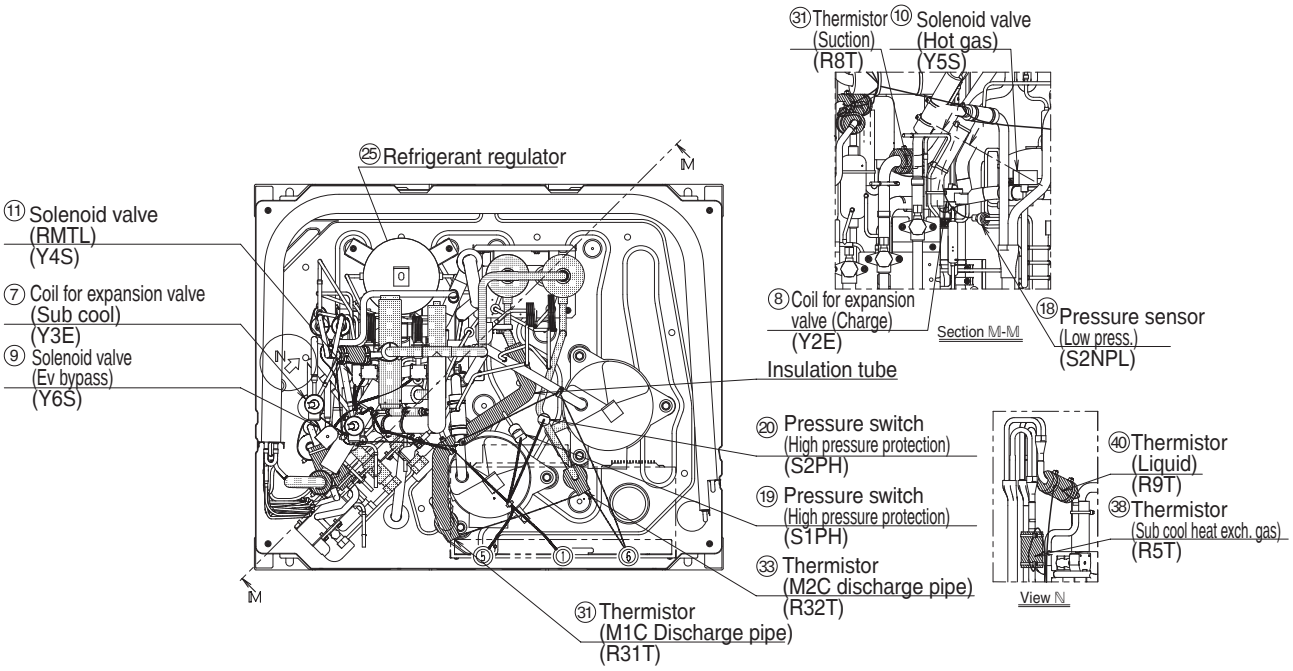
Front View



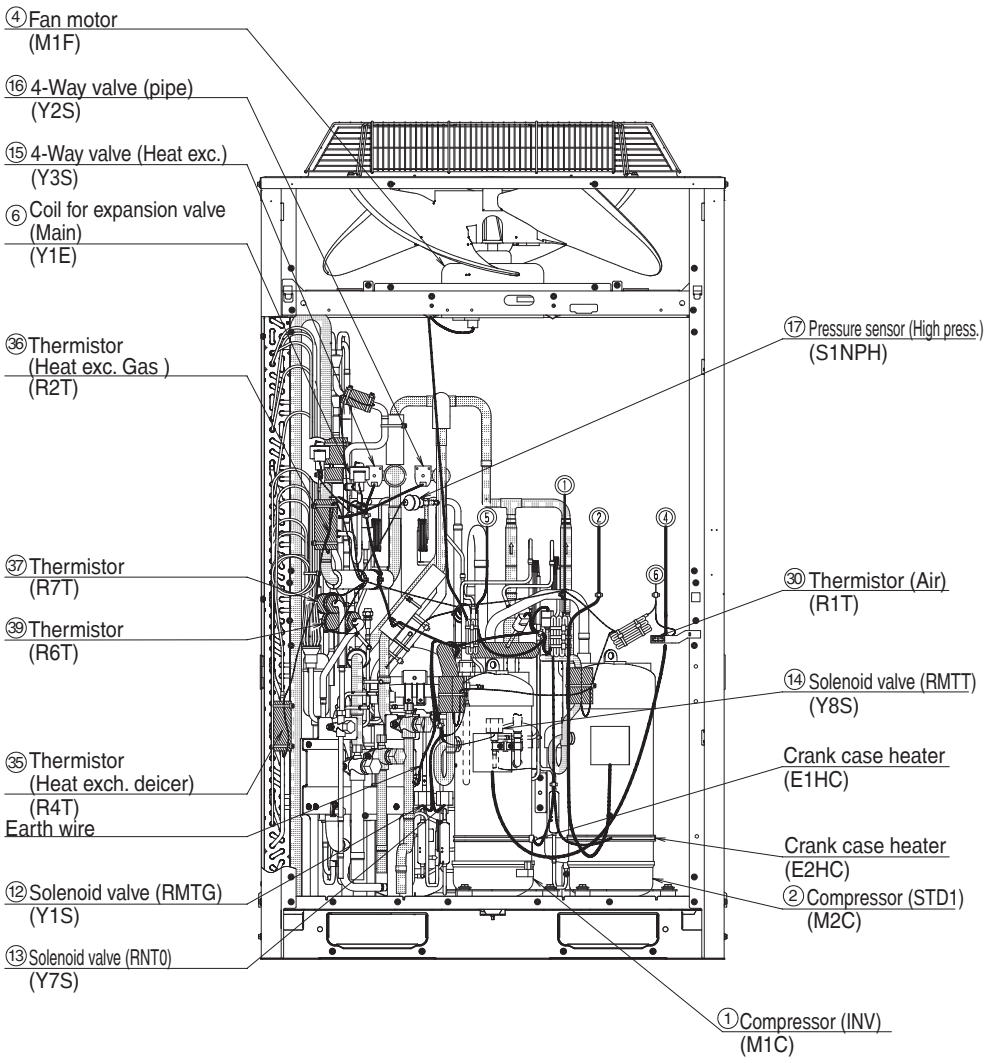
Note: For reference numbers, refer to page 60.

2.4 REMQ10P, 12P

Plan



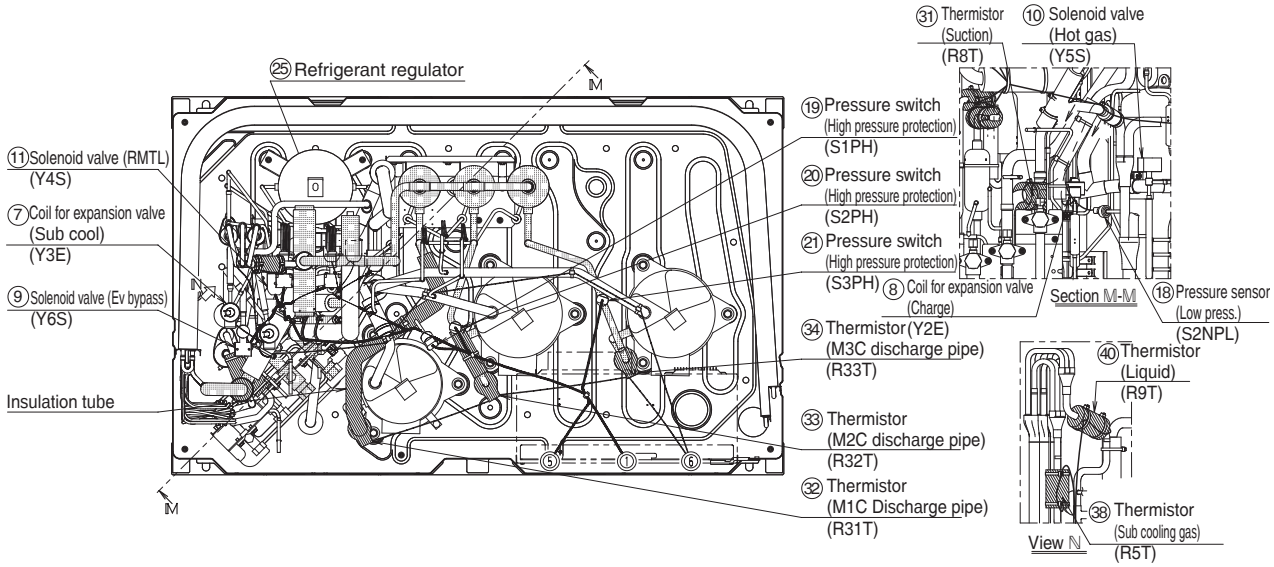
Front View



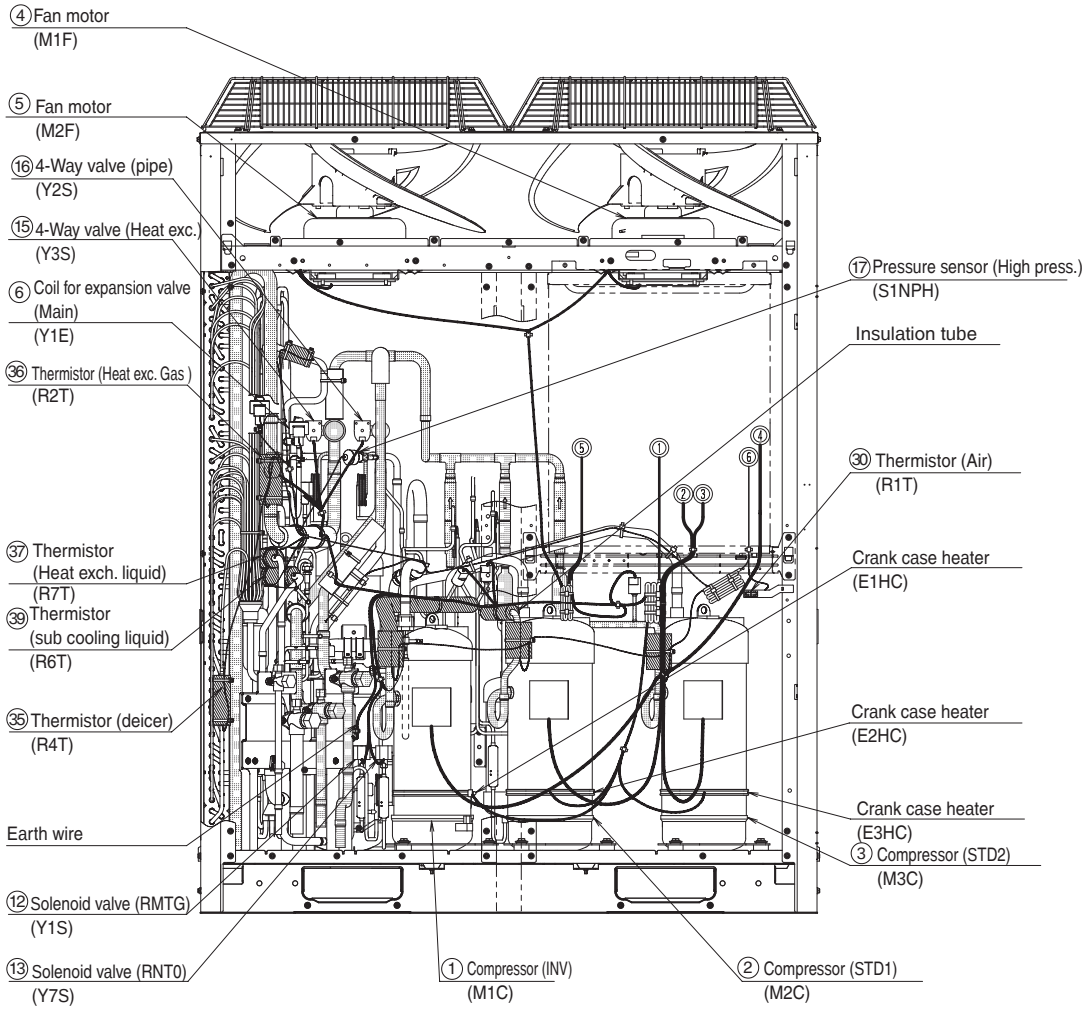
Note: For reference number, refer to page 62.

2.5 REMQ14P, 16P

Plan



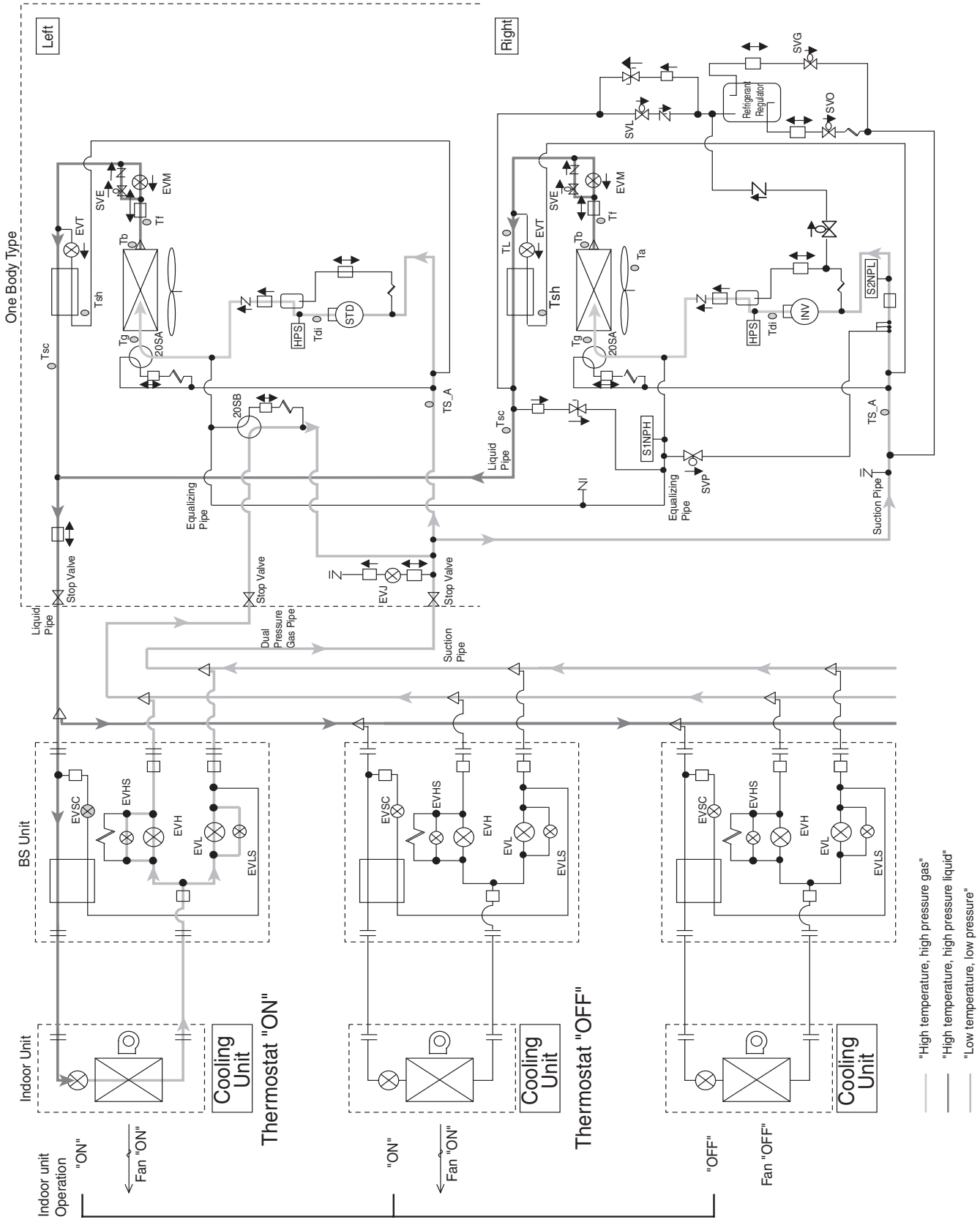
Front View



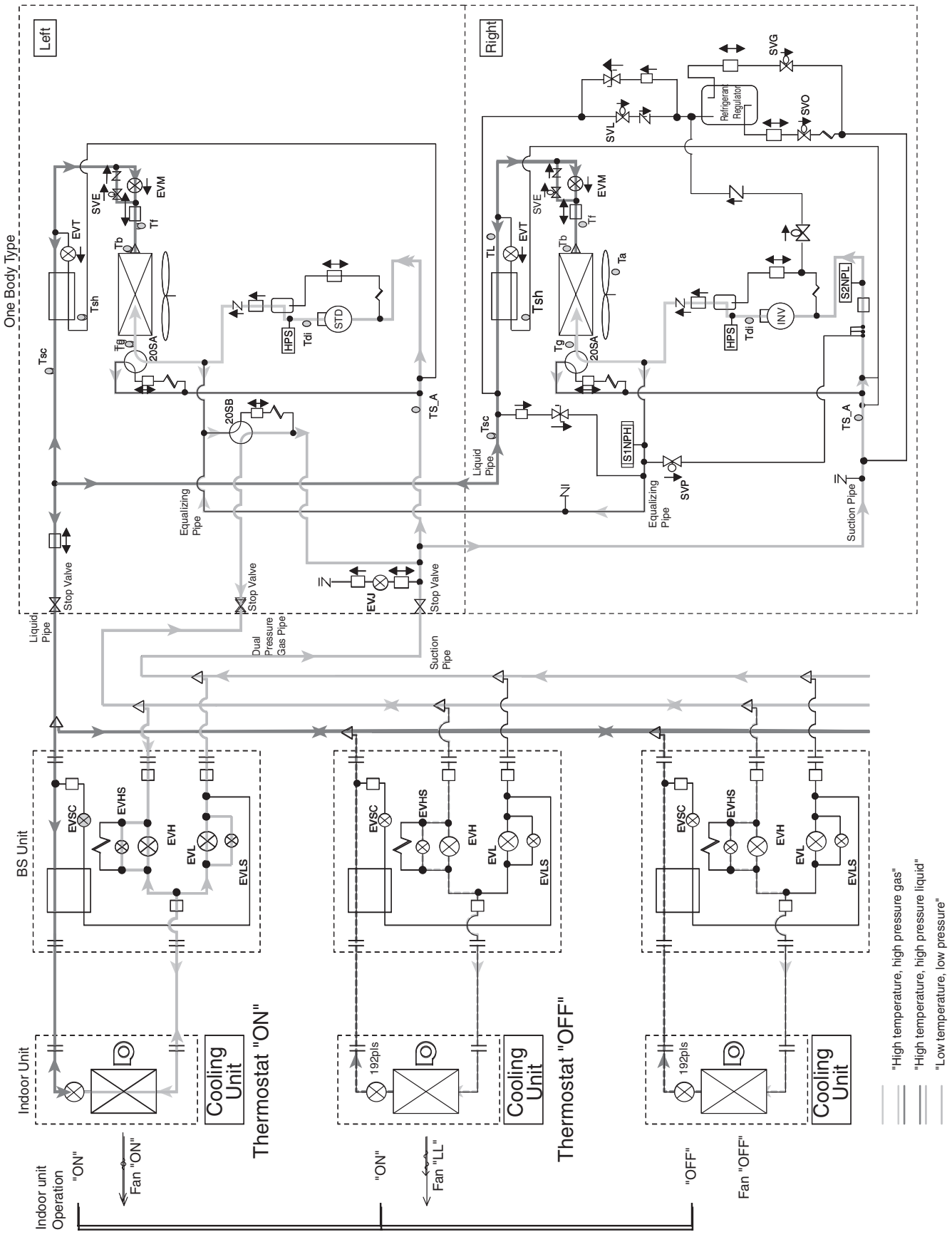
Note: For reference number, refer to page 64.

3. Refrigerant Flow for Each Operation Mode

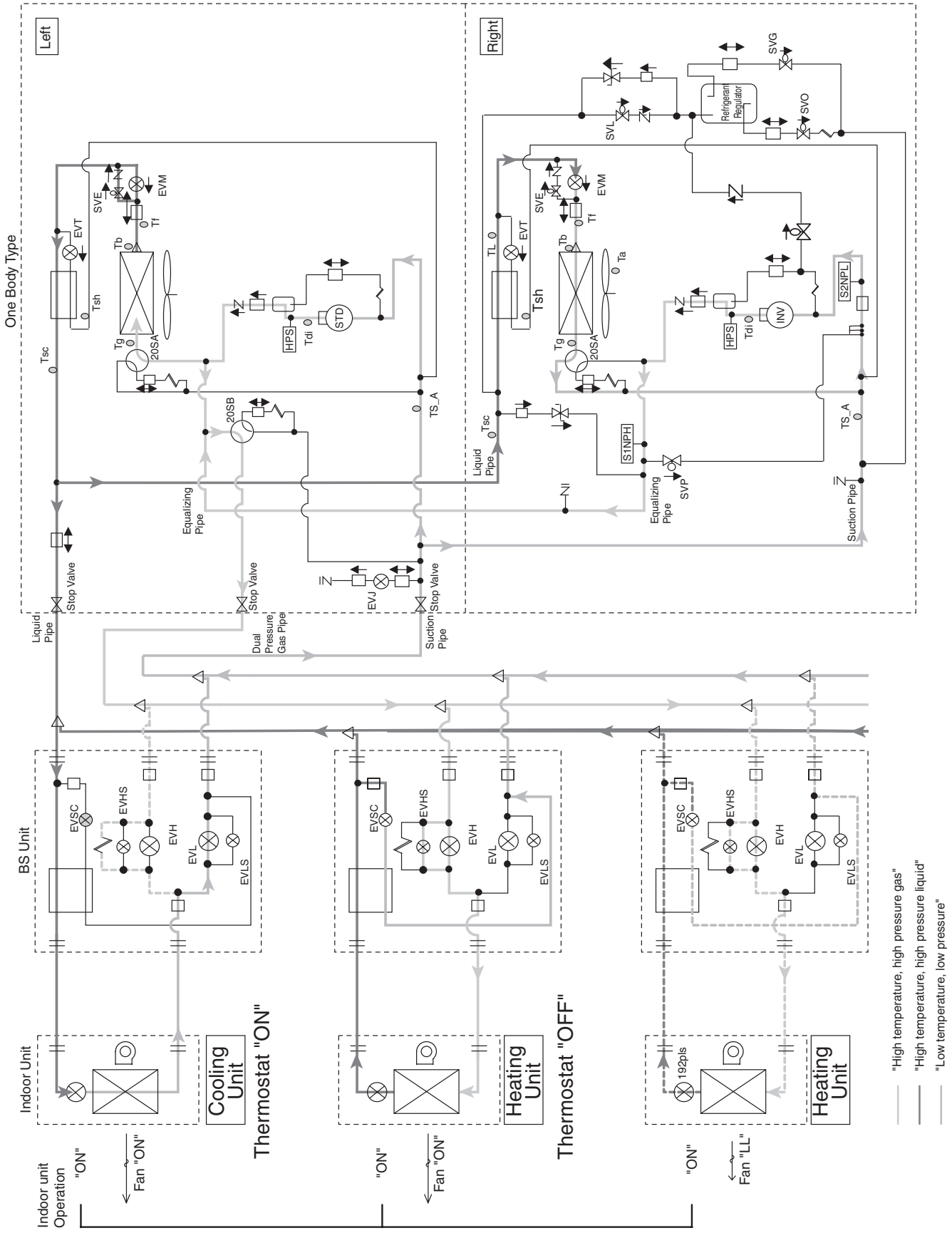
REYQ8P, 10P, 12P
Cooling Operation



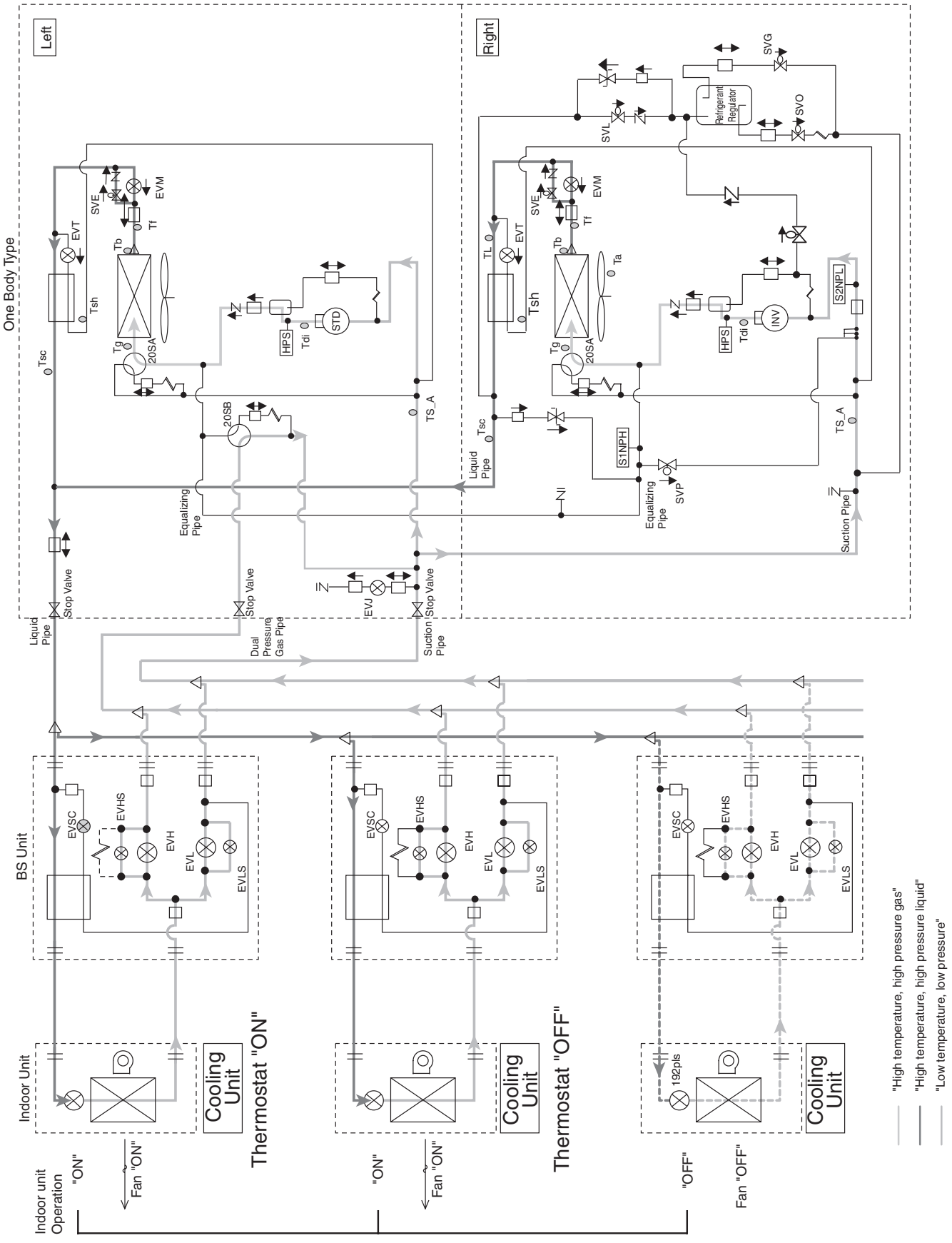
Heating Operation



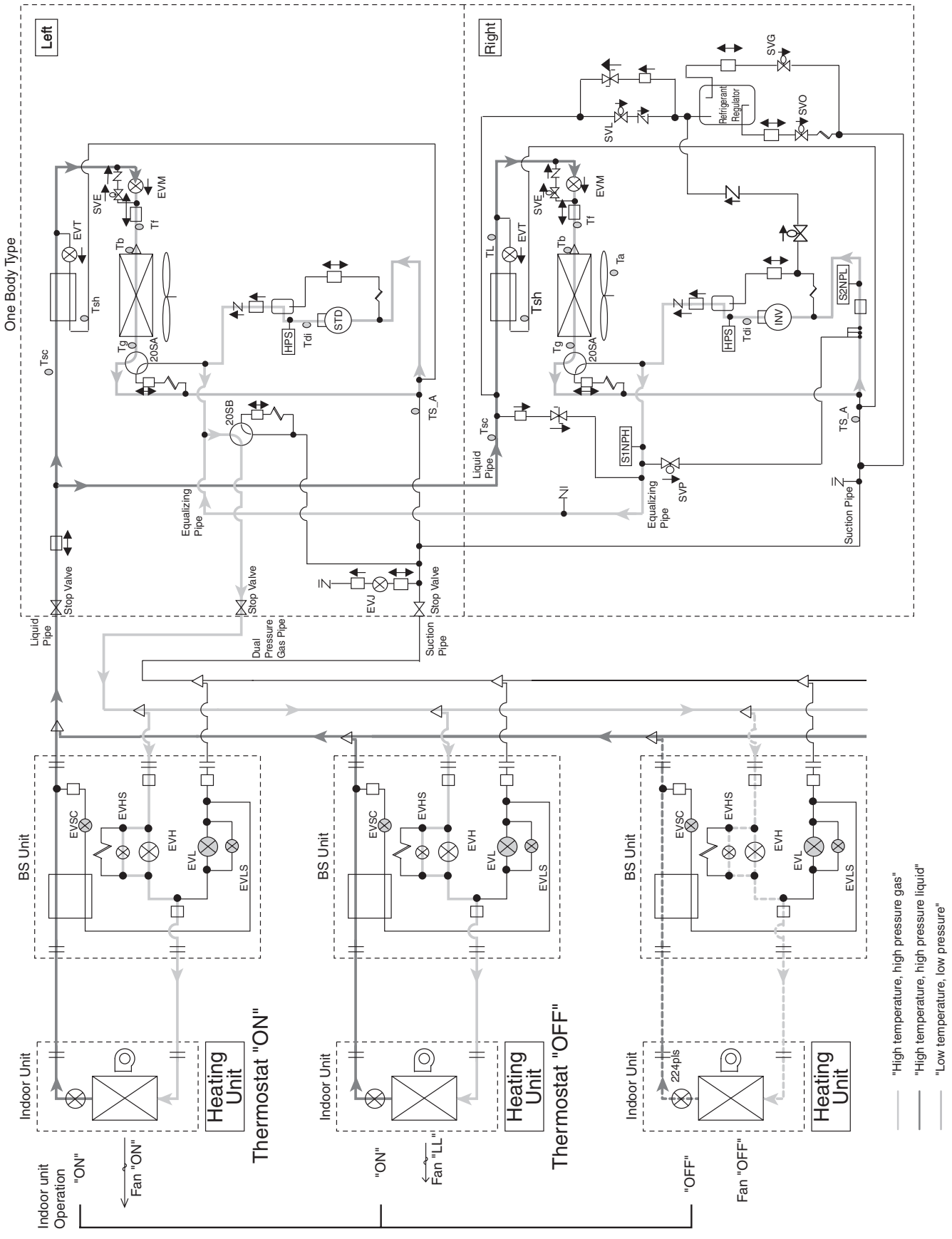
Simultaneous Cooling / Heating Operation



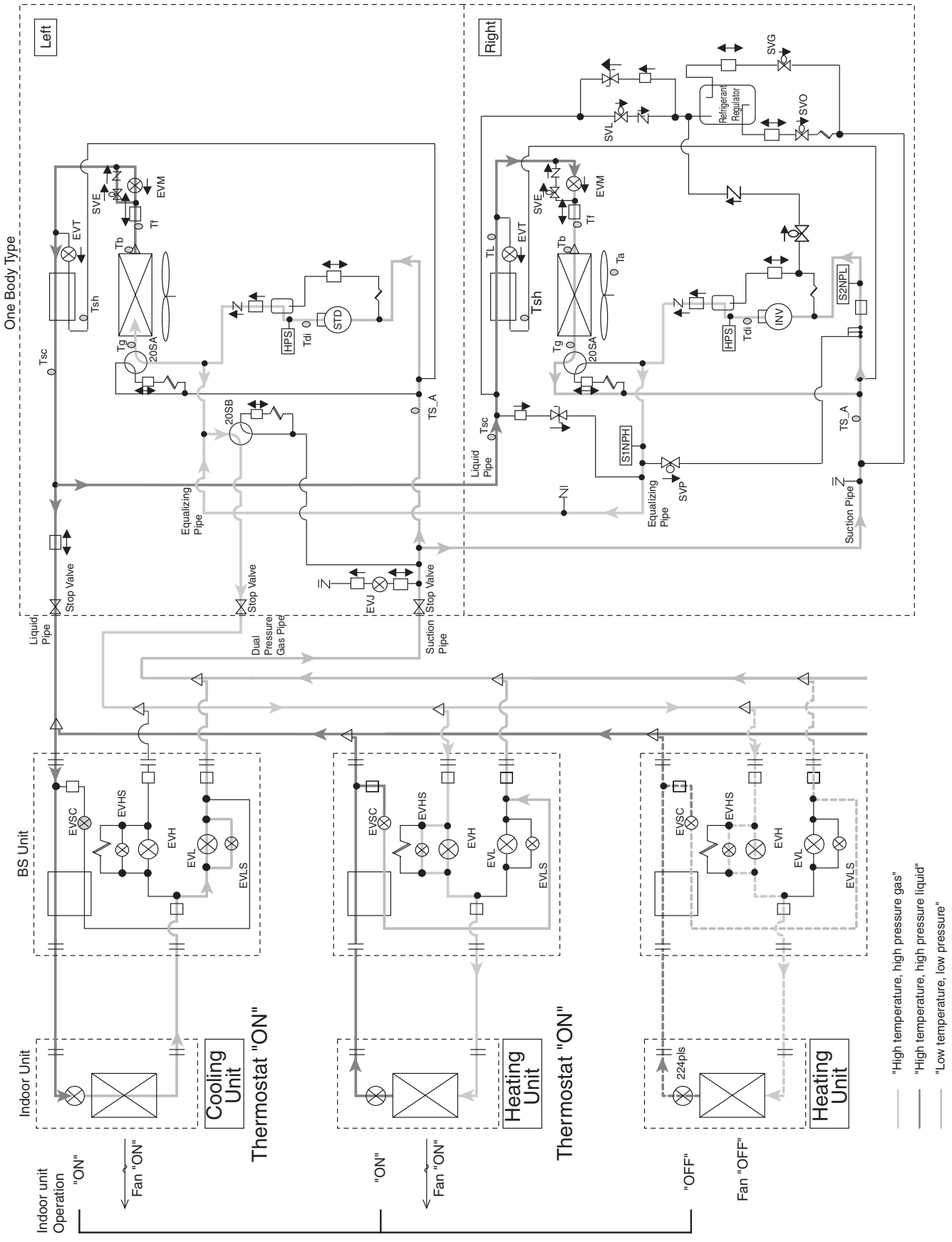
Cooling Oil Return Operation



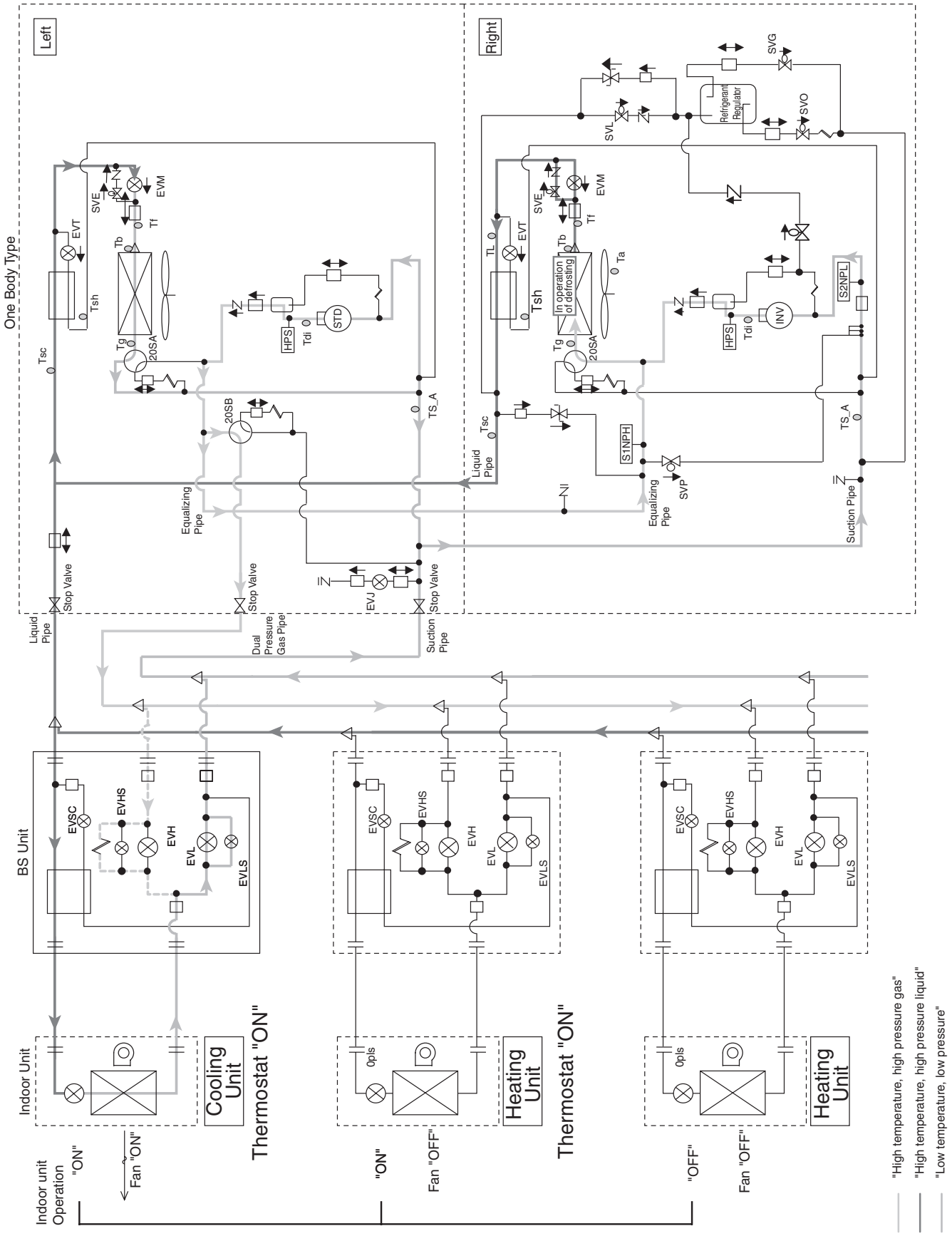
Heating Oil Return Operation



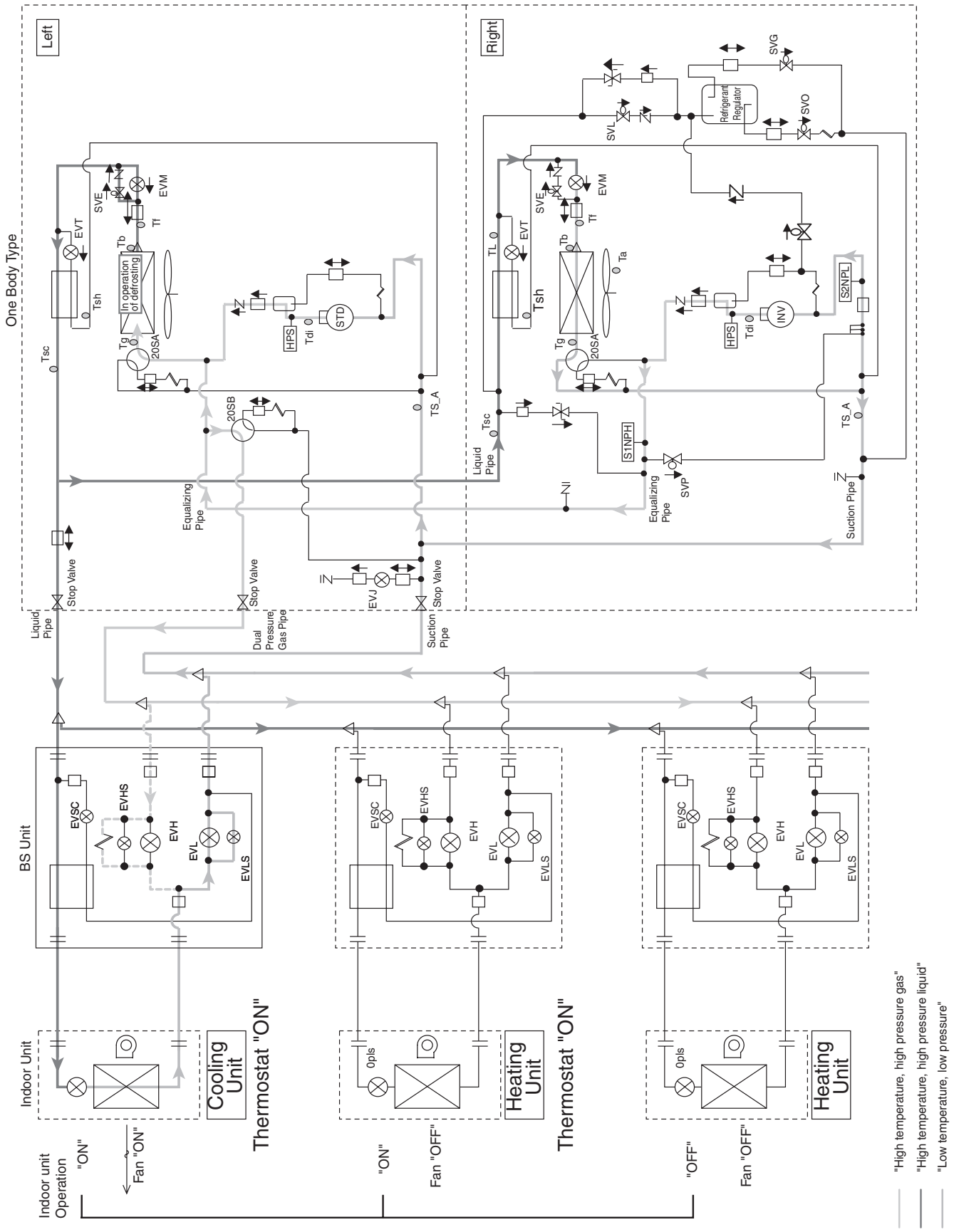
Oil Return Operation at Simultaneous Cooling / Heating Operation



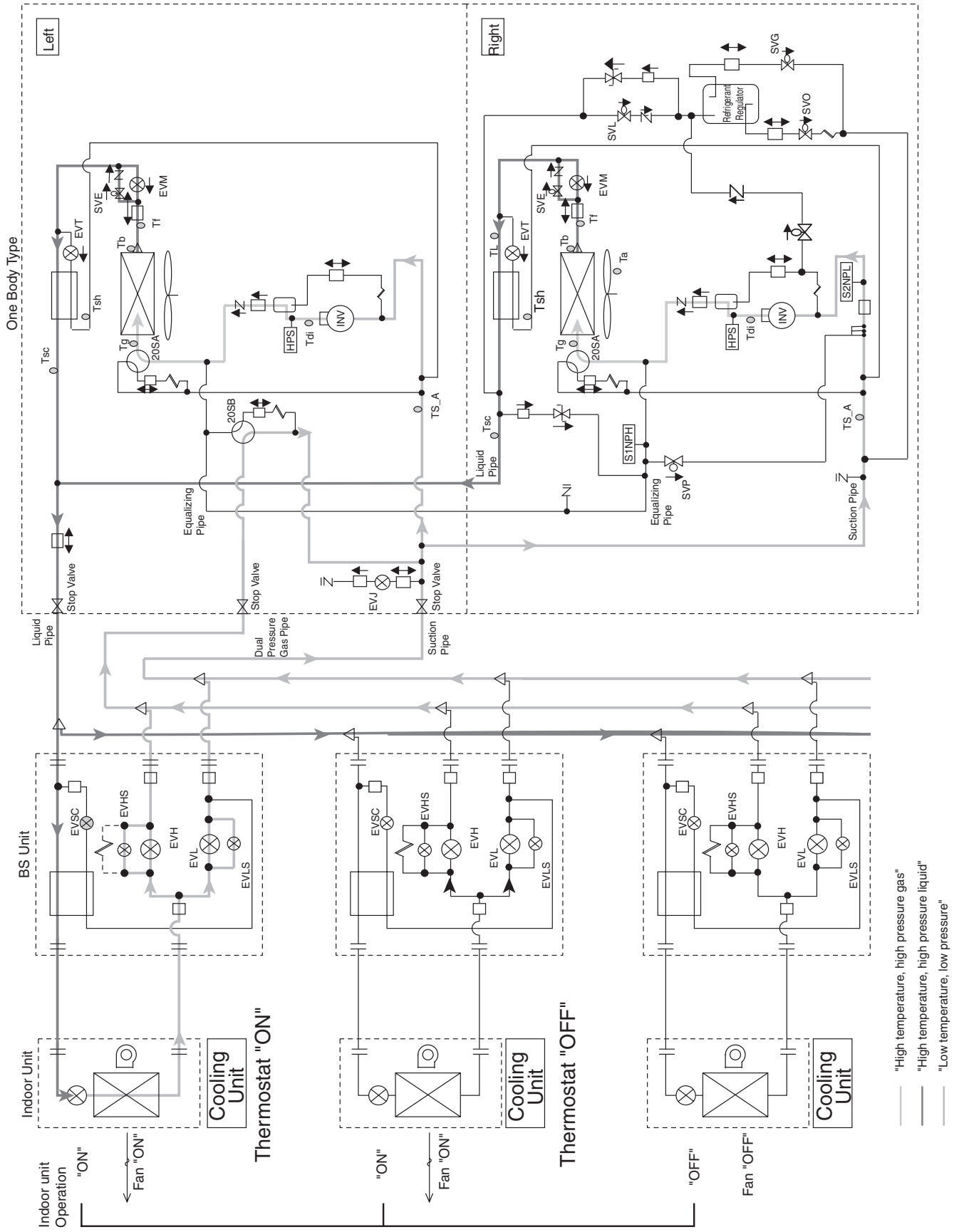
Partial Defrosting 1 (Defrosting in the Right Unit)



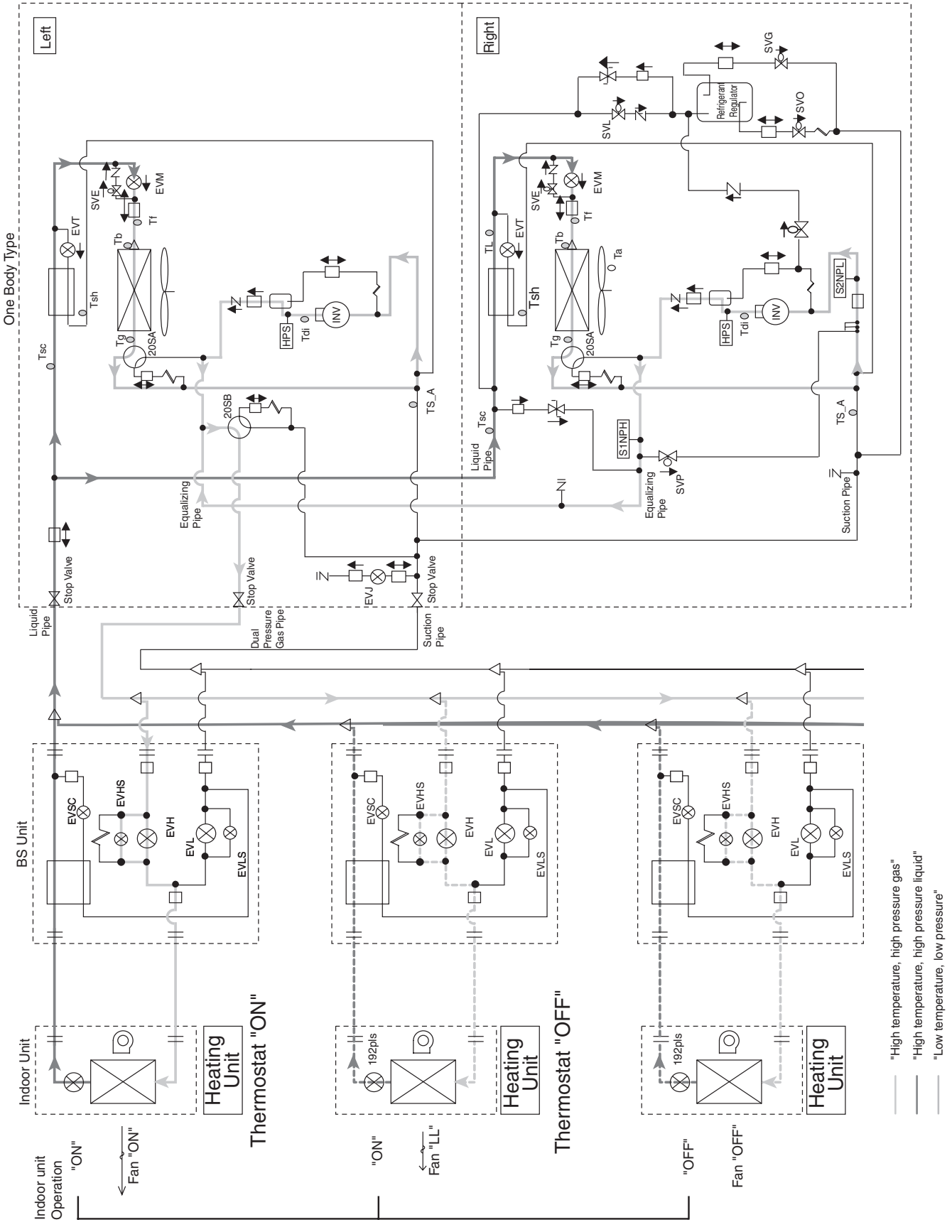
Partial Defrosting 2 (Defrosting in the Left Unit)



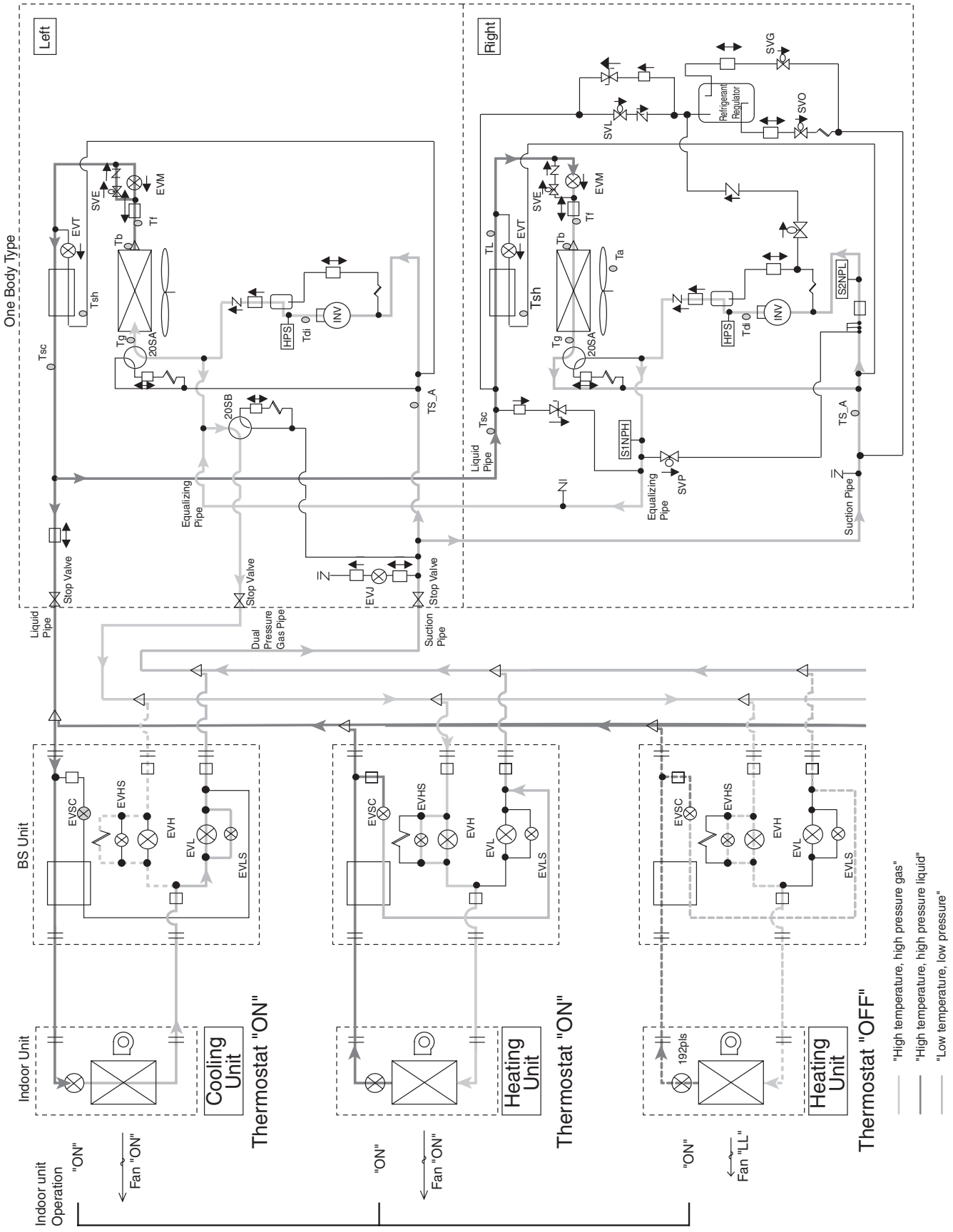
REYQ14P, 16P
Cooling Operation



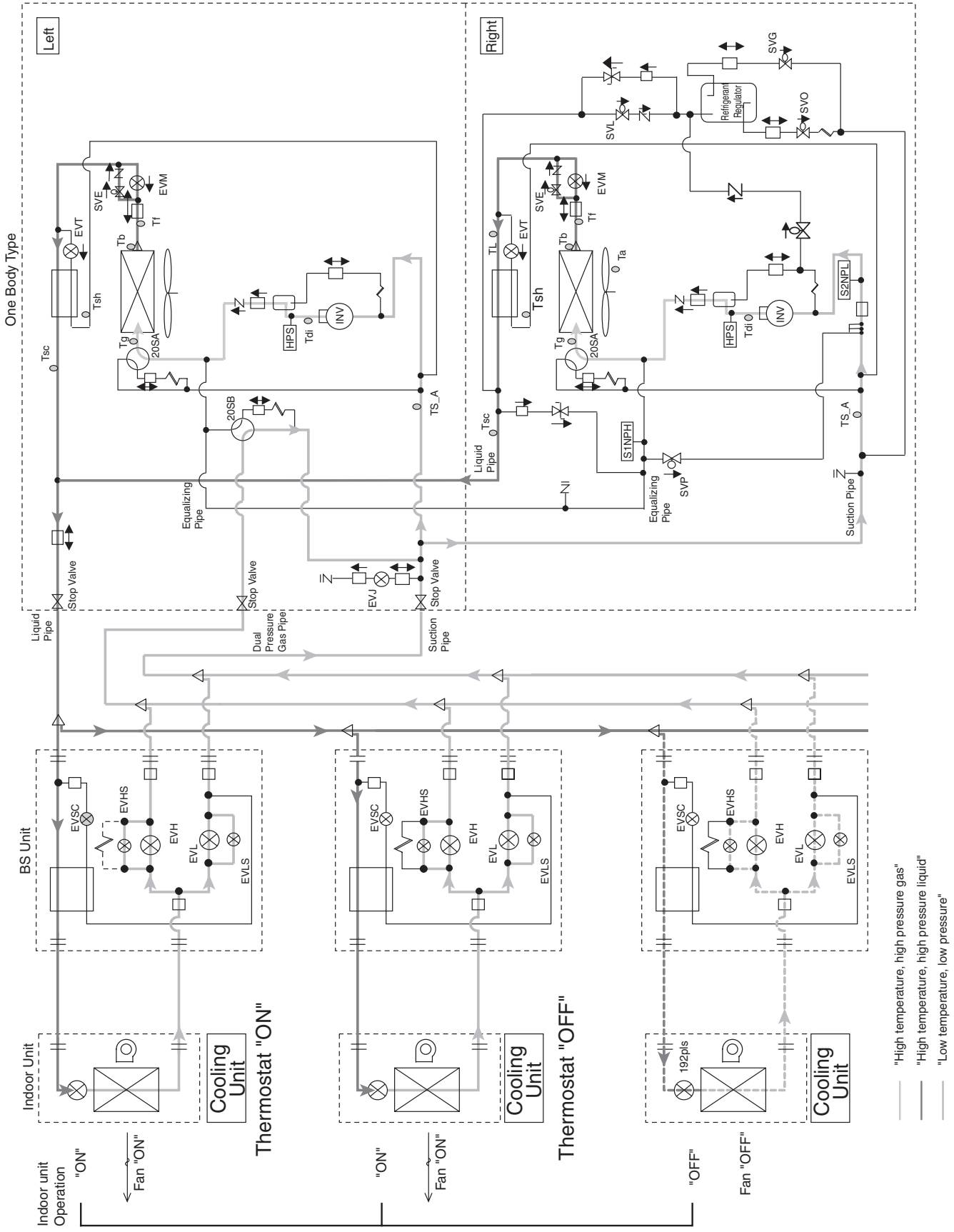
Heating Operation



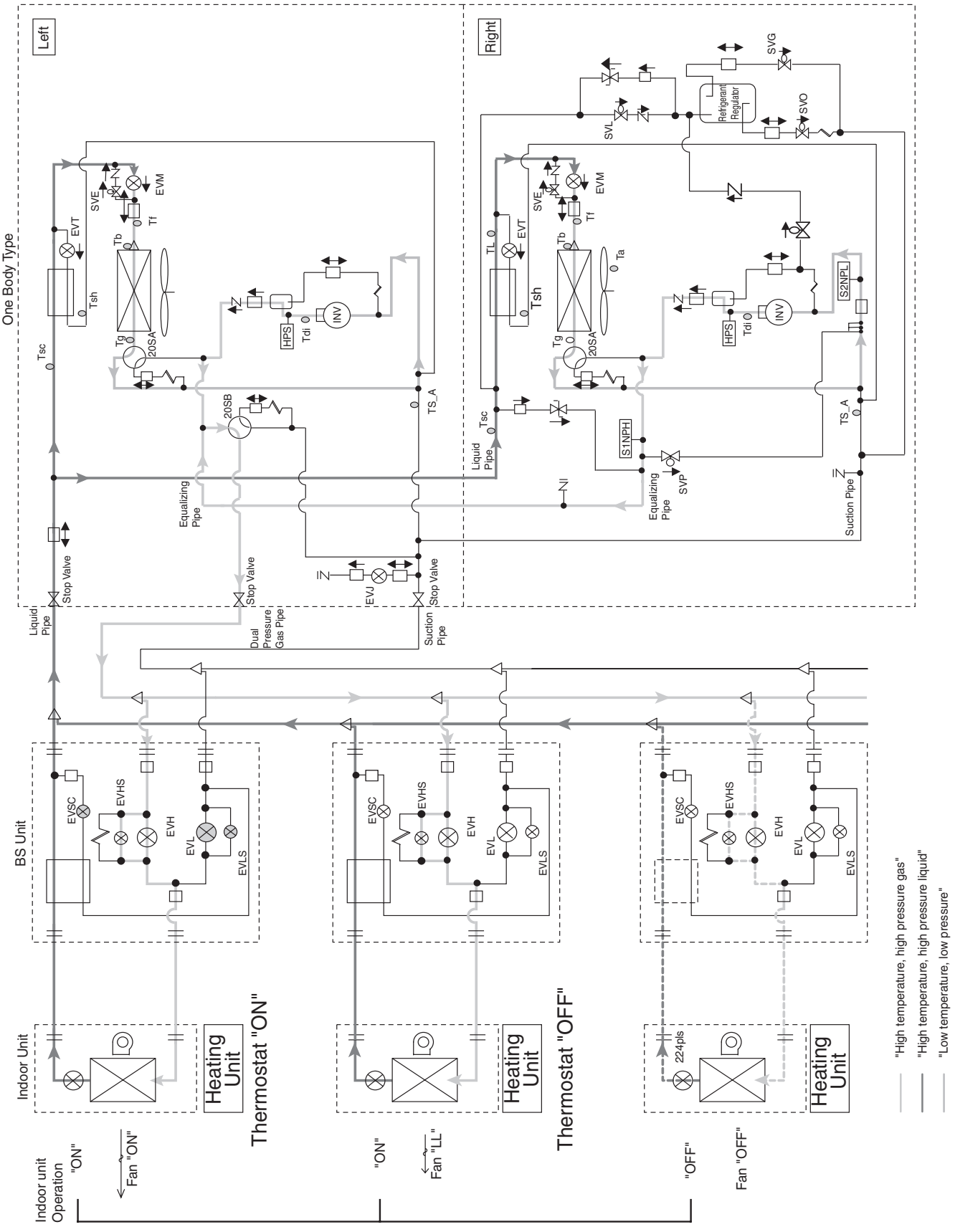
Simultaneous Cooling / Heating Operation



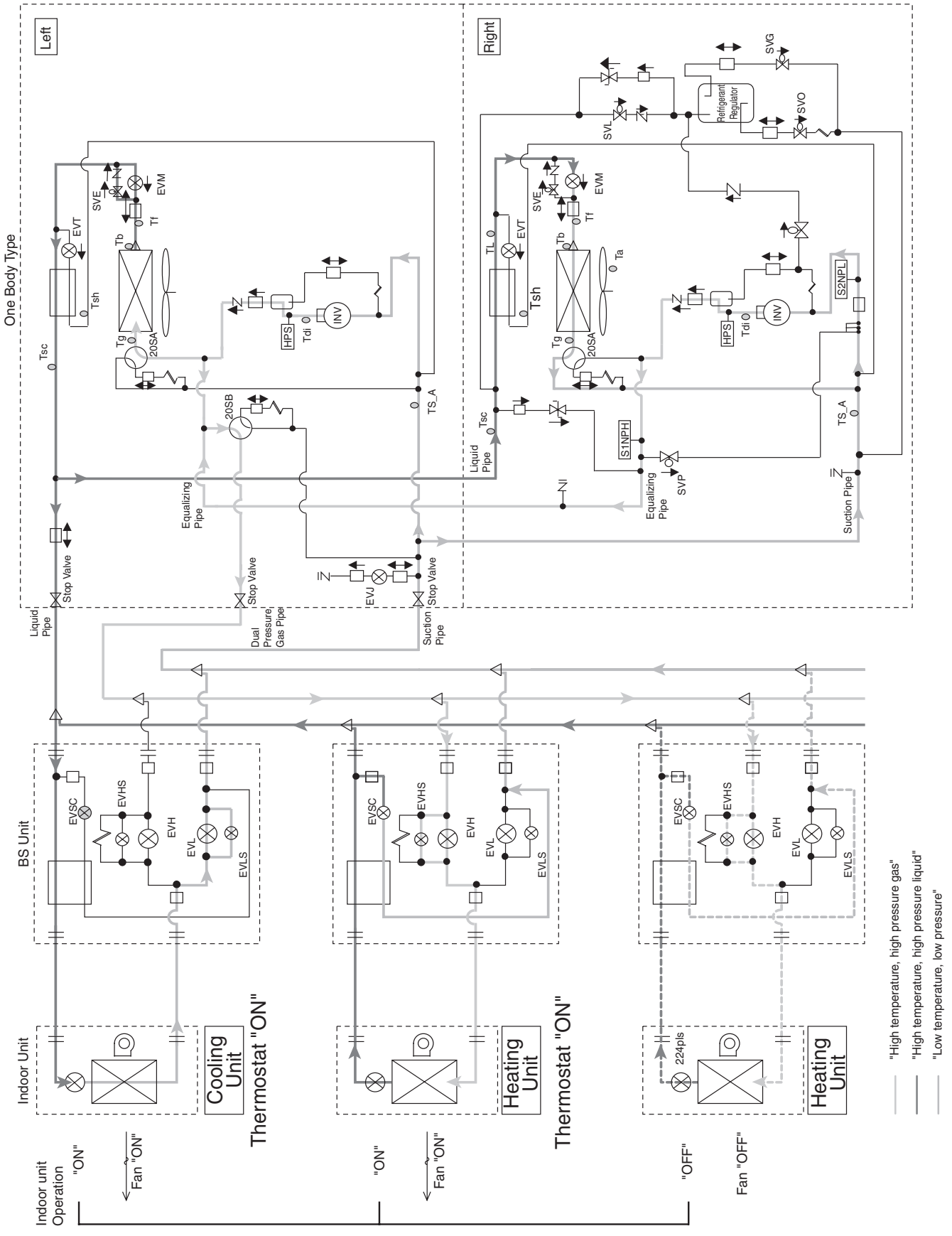
Cooling Oil Return Operation



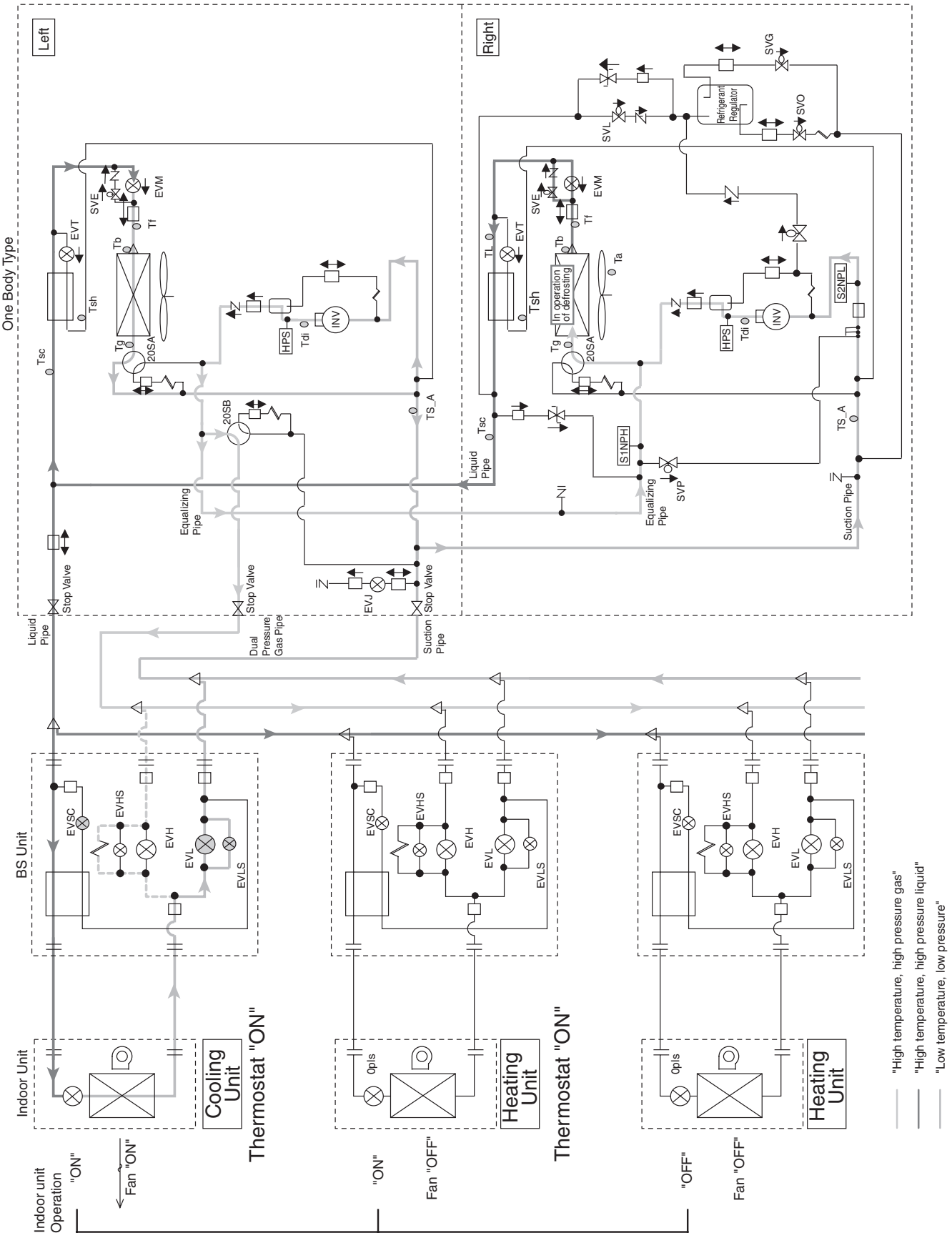
Heating Oil Return Operation



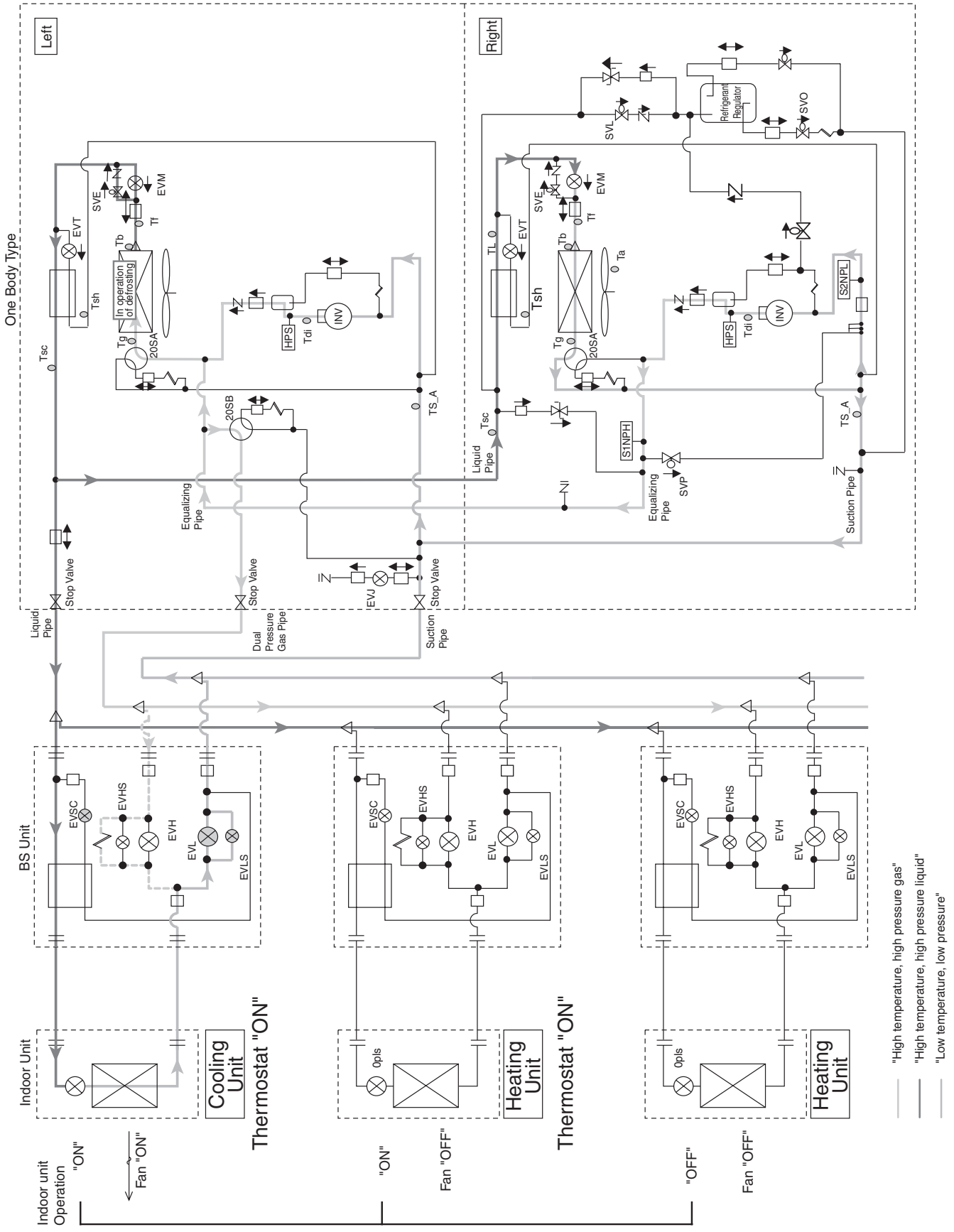
Oil Return Operation at Simultaneous Cooling / Heating Operation



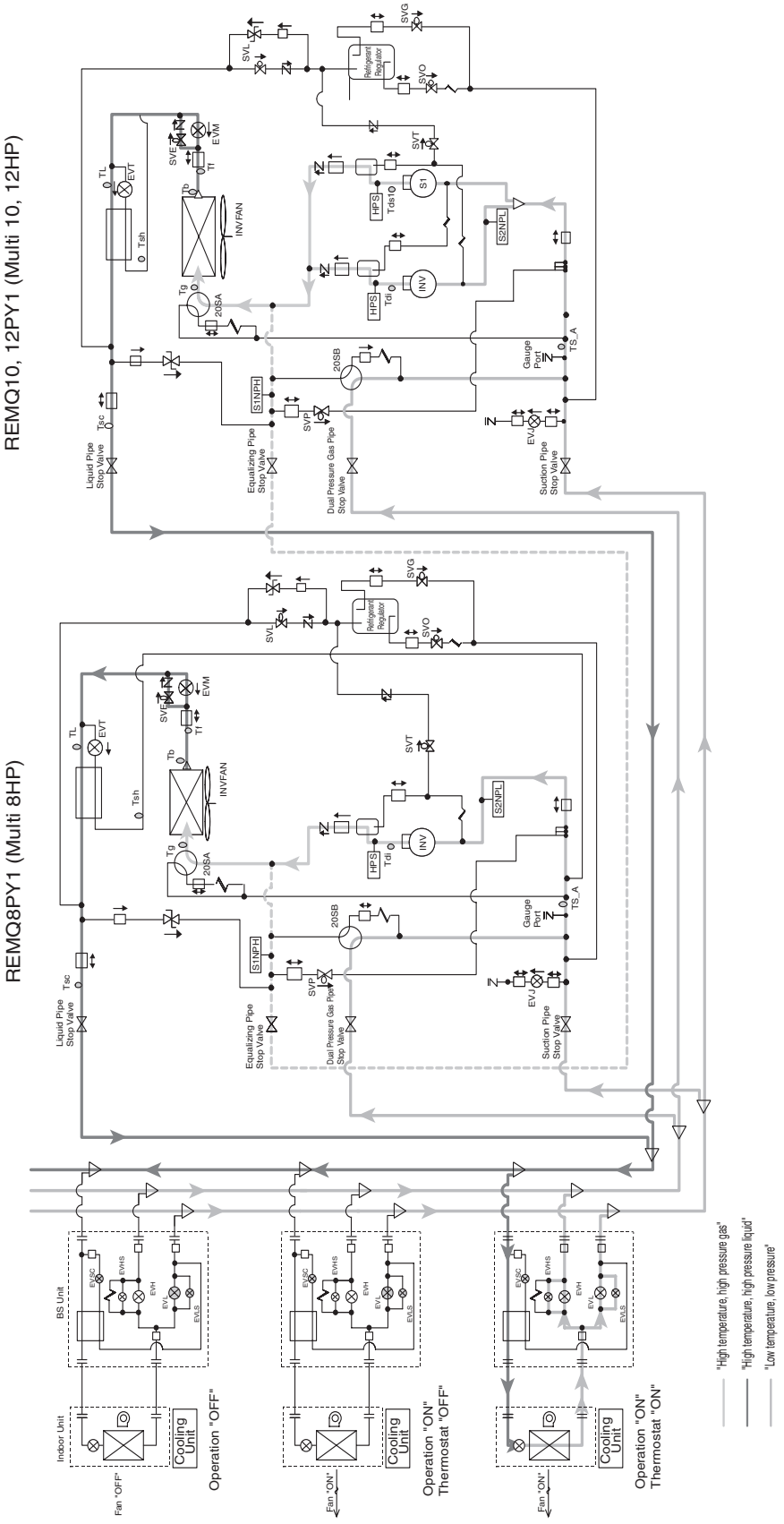
Partial Defrosting 1 (Defrosting in the Right Unit)



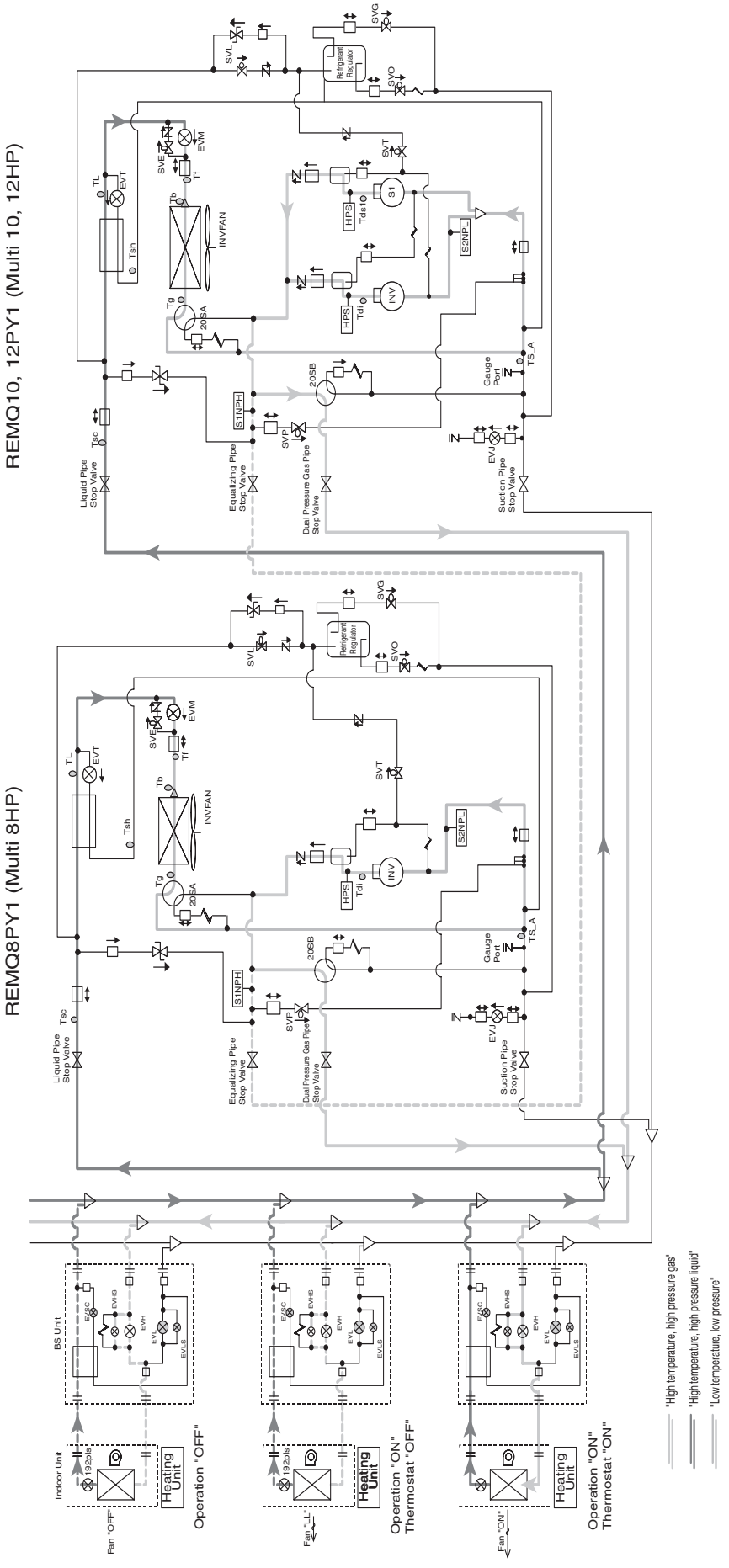
Partial Defrosting 2 (Defrosting in the Left Unit)



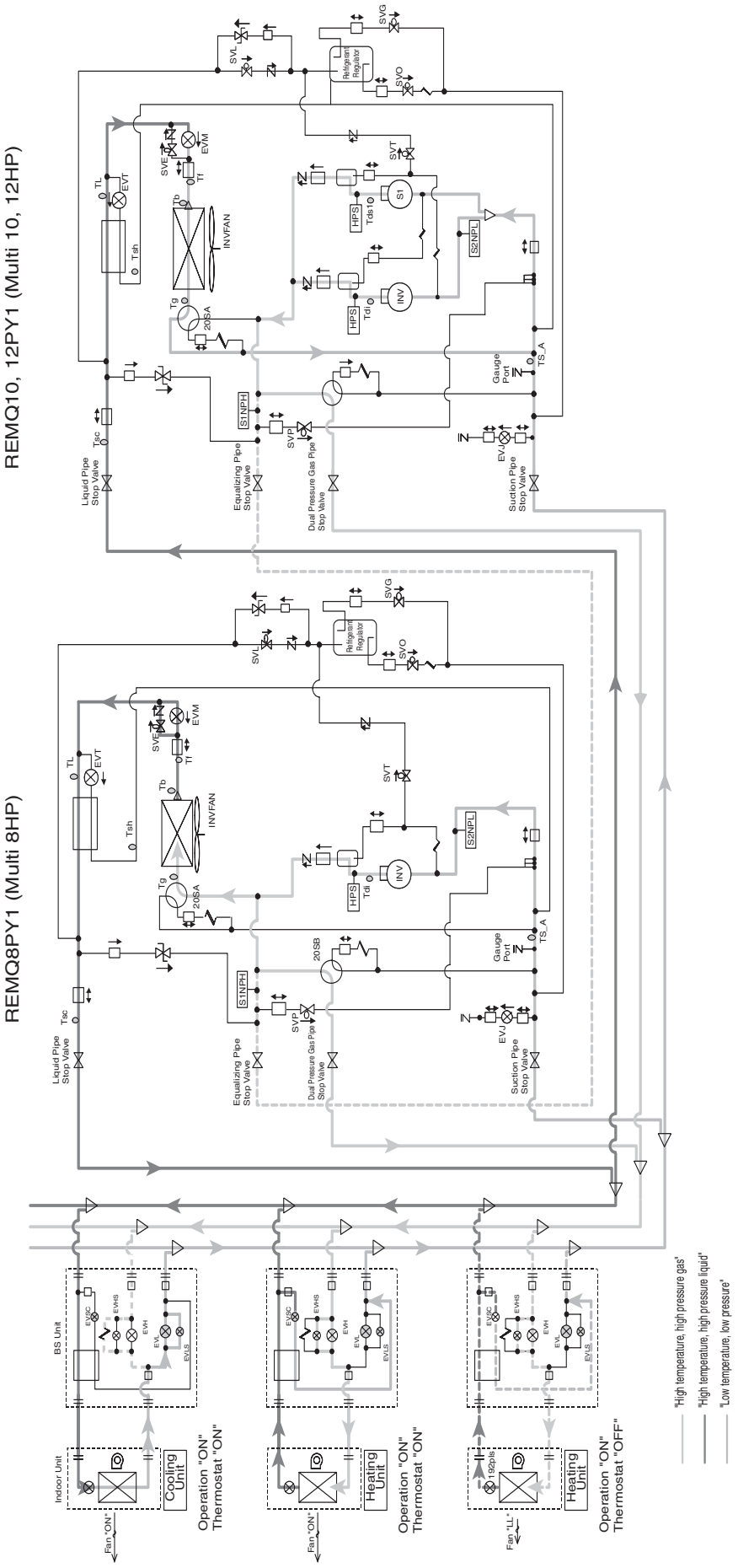
REYQ18P, 20P
Cooling Operation



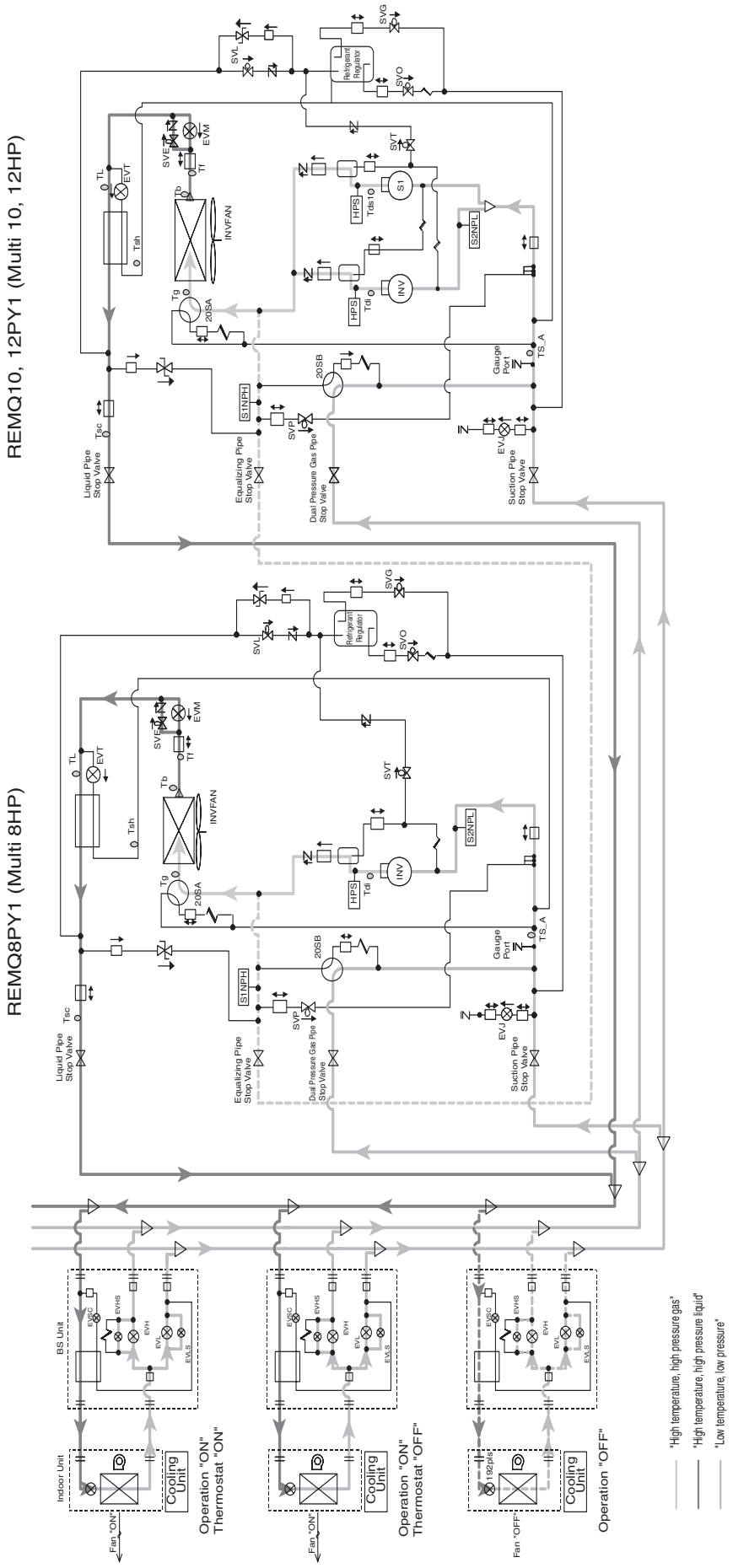
Heating Operation



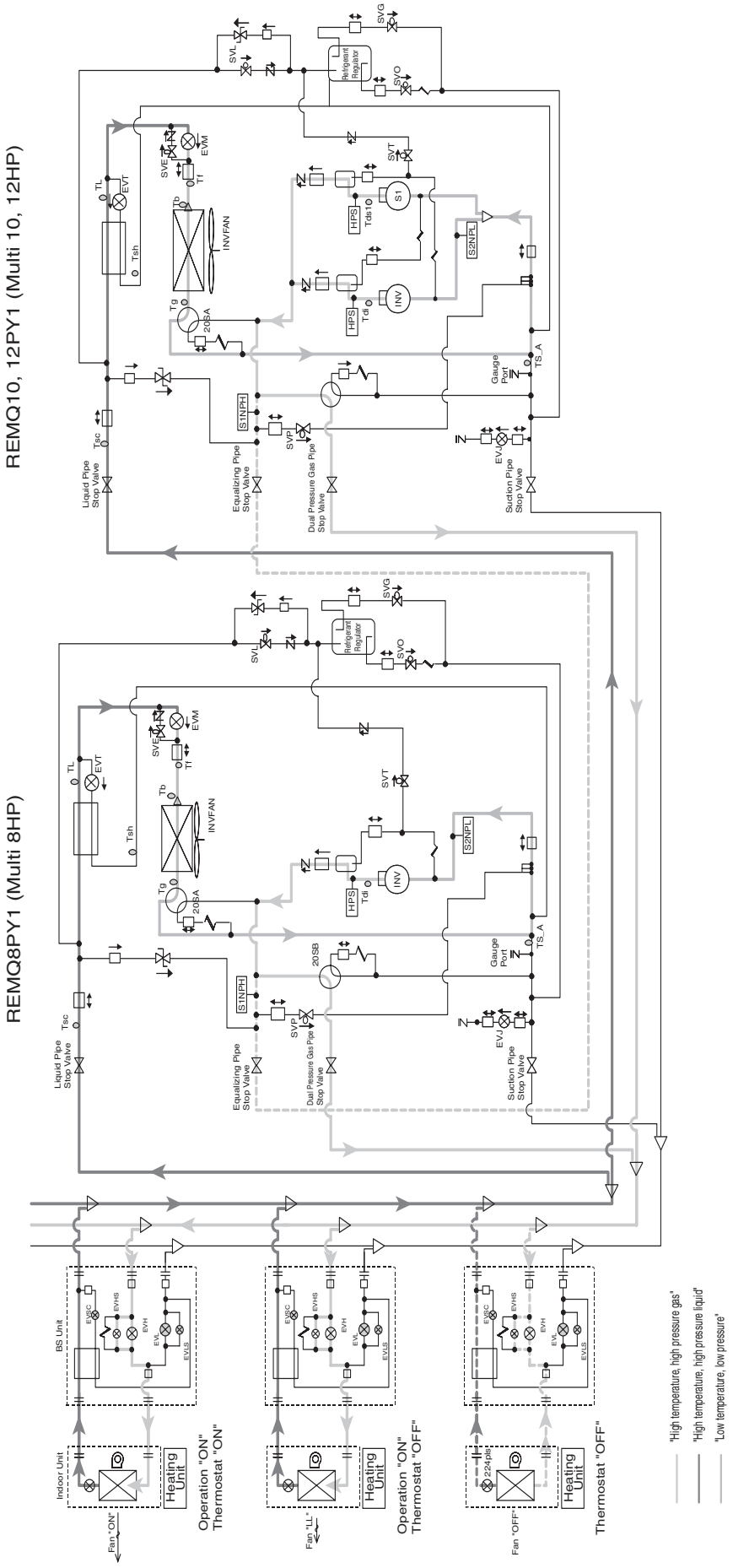
Simultaneous Cooling / Heating Operation



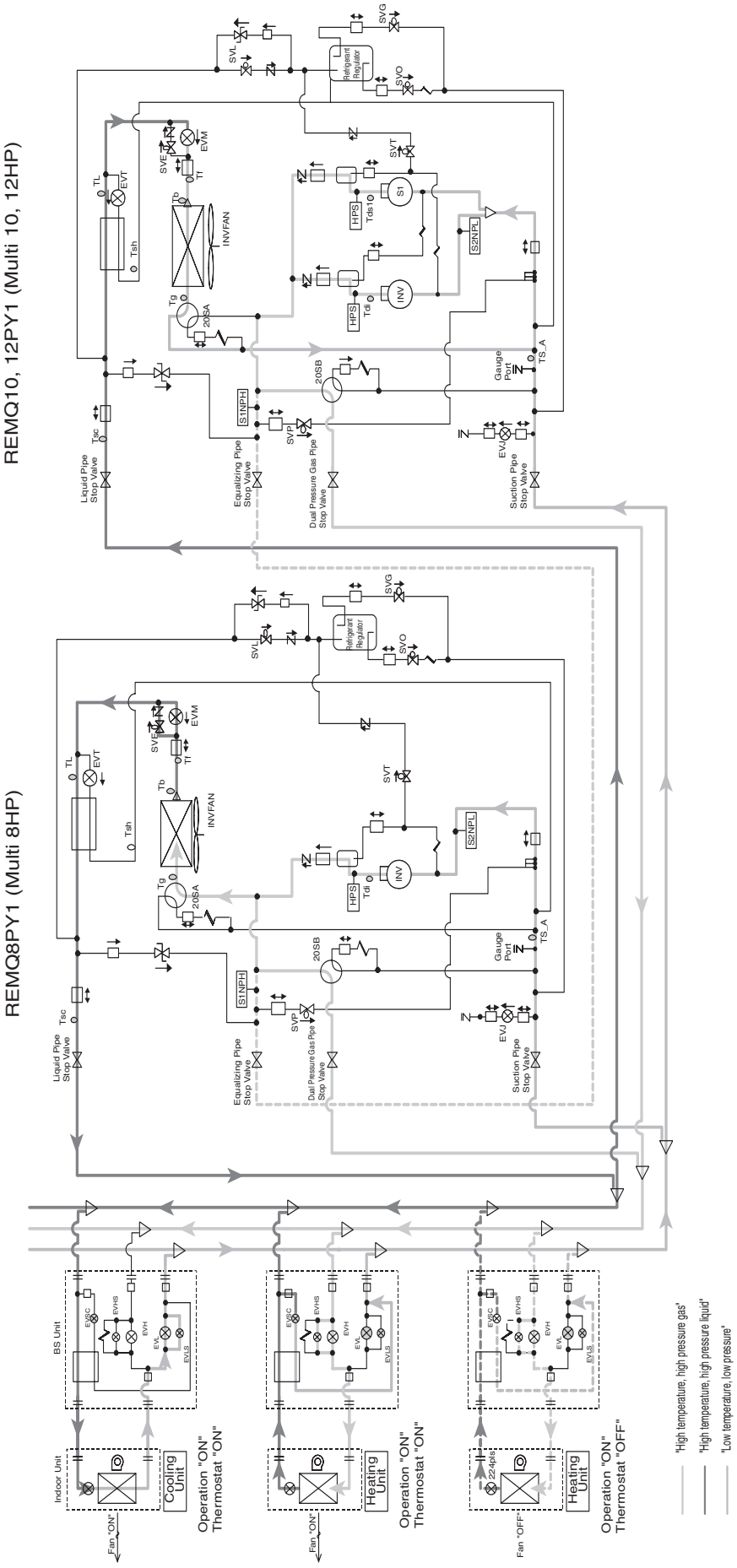
Cooling Oil Return Operation



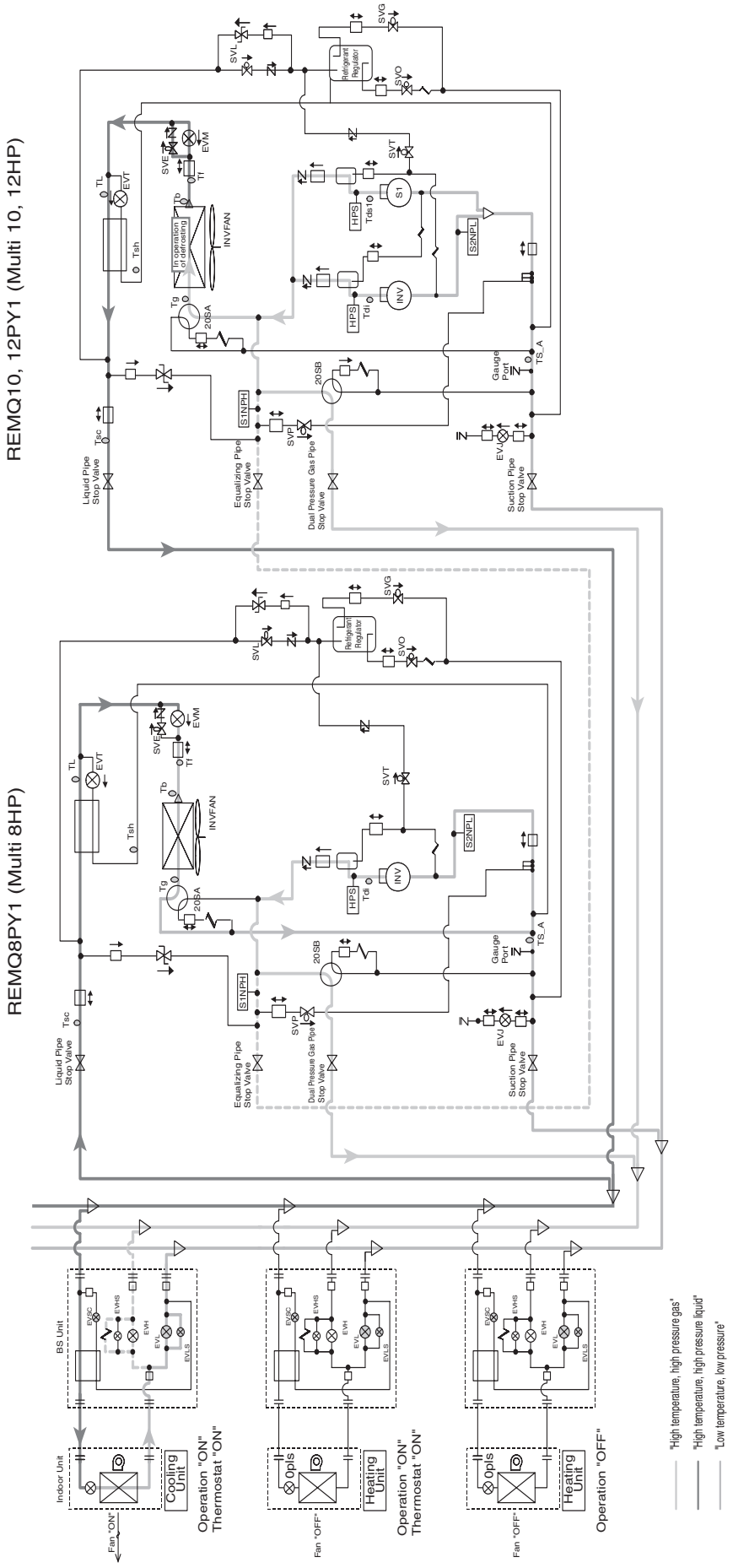
Heating Oil Return Operation



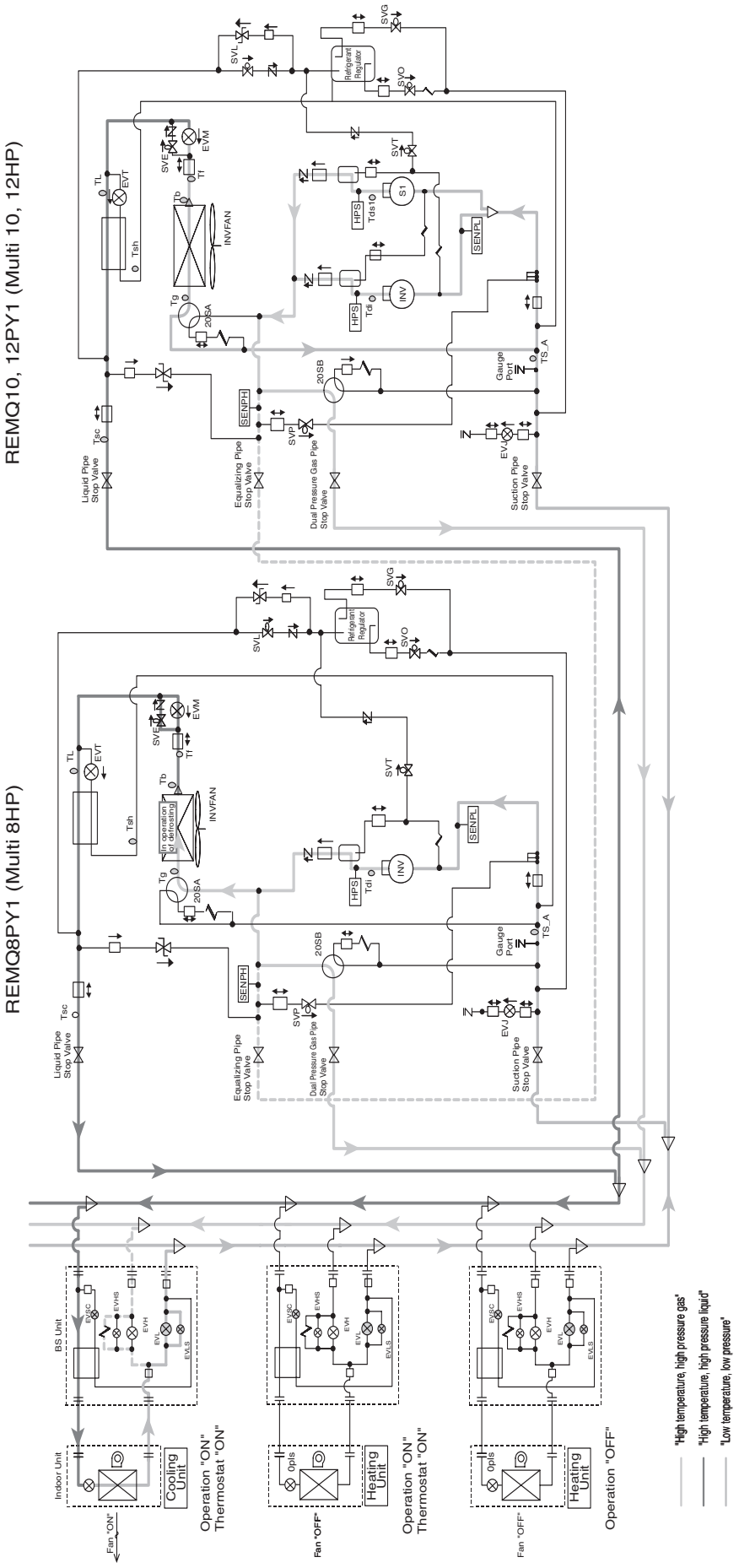
Oil Return Operation at Simultaneous Cooling / Heating Operation



Partial Defrosting 1 (Defrosting in the Right Unit)

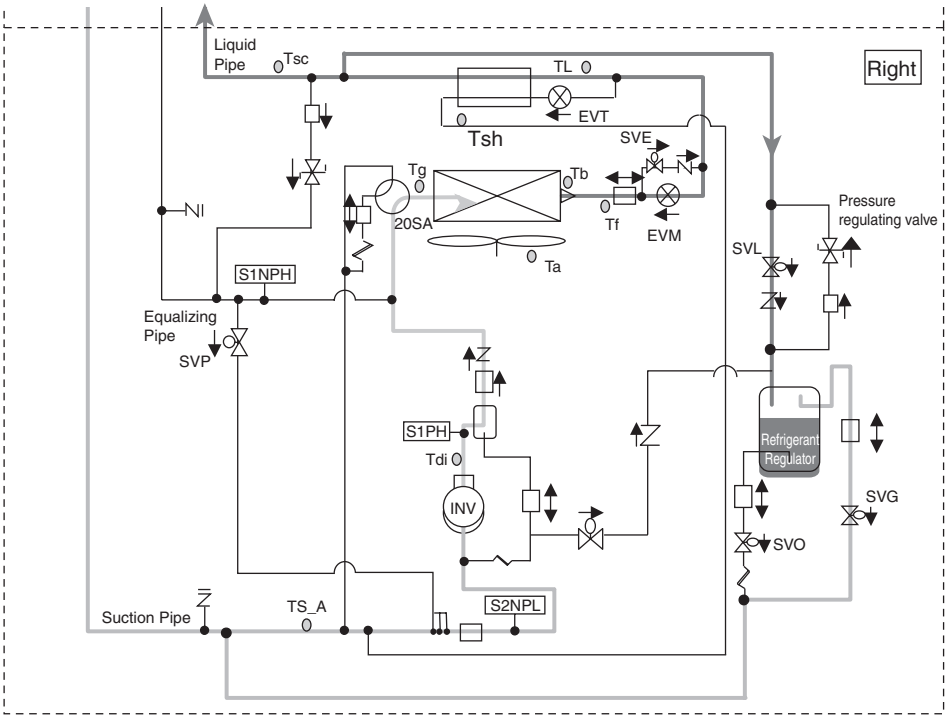


Partial Defrosting 2 (Defrosting in the Left Unit)

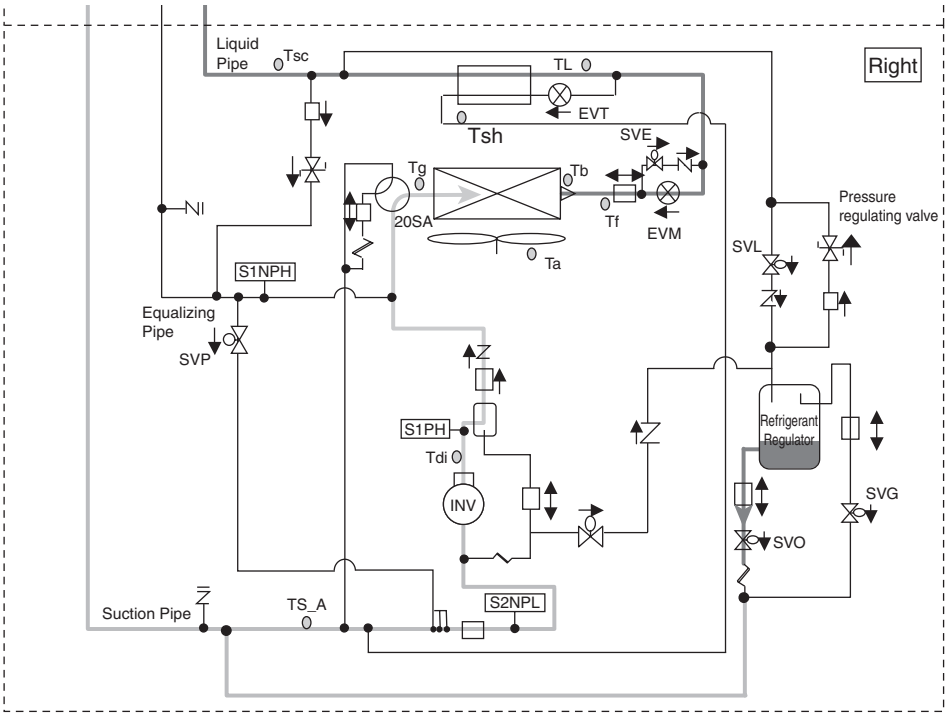


Operation of refrigerant regulator

1. **Recovery of refrigerant**
   Surplus refrigerant is recovered to refrigerant regulator by opening of SVL and SVG when the indoor unit load is small.



2. **Discharge of refrigerant**
   Discharge refrigerant from refrigerant regulator by opening of SVC when the load of the outdoor unit is large.

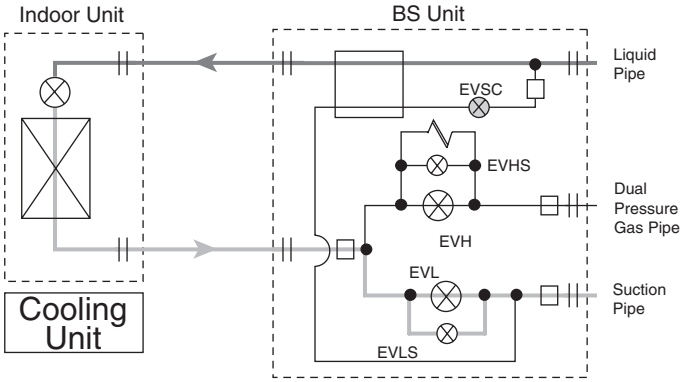


3. **Pressure regulating valve (Refrigerant regulator)**
   The circuit will be closed when SVL, SVO, SVG are all closed. In this case, the increased pressure in the refrigerant regulator will be transferred to the liquid refrigerant pipe side, to regulate the pressure.

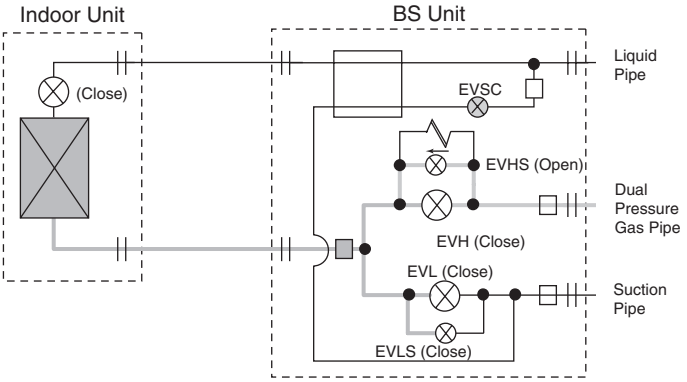
Pressure equalizing when switching operation cooling/ heating

1. **When switching operation from to cooling to heating**
   First, the electric expansion valves for EVHS, EVH, EVL and EVLS of the indoor unit will be closed.
   Next, open the EVHS, and it makes to balance the system pressure.
   Finally, EVH and EVHS are opened and the electric expansion valve of the indoor unit is opened to start the operation as a heating circuit.

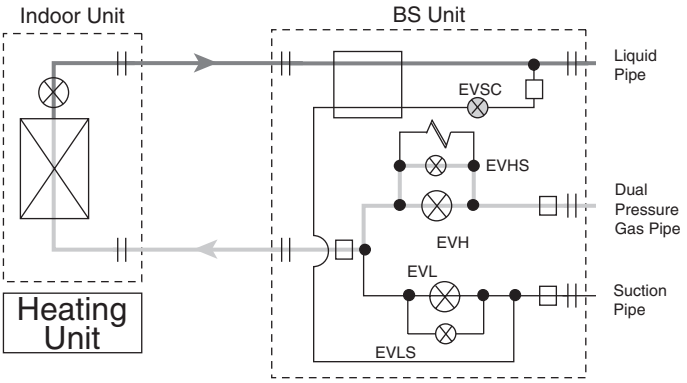
In cooling operation



In equalization



To heating operation



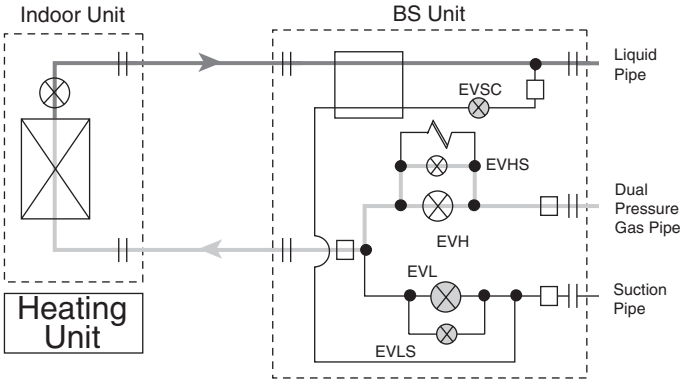
2. When switching operation from heating to cooling

First, the electric expansion valve and the solenoid valve for EVHS, EVH, EVL and EVLS of the indoor unit will be closed.

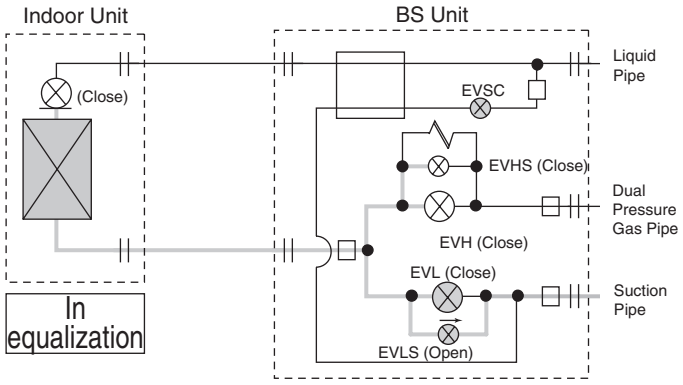
Next, open the EVLS, and it makes to balance the system pressure.

Finally, EVL and EVLS are opened and the electric expansion valve of the indoor unit is opened to start the operation as a cooling circuit.

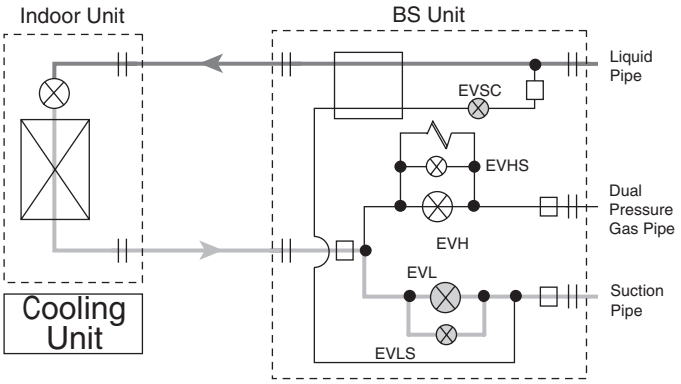
In heating operation



In equalization



To cooling operation



Part 4
Function

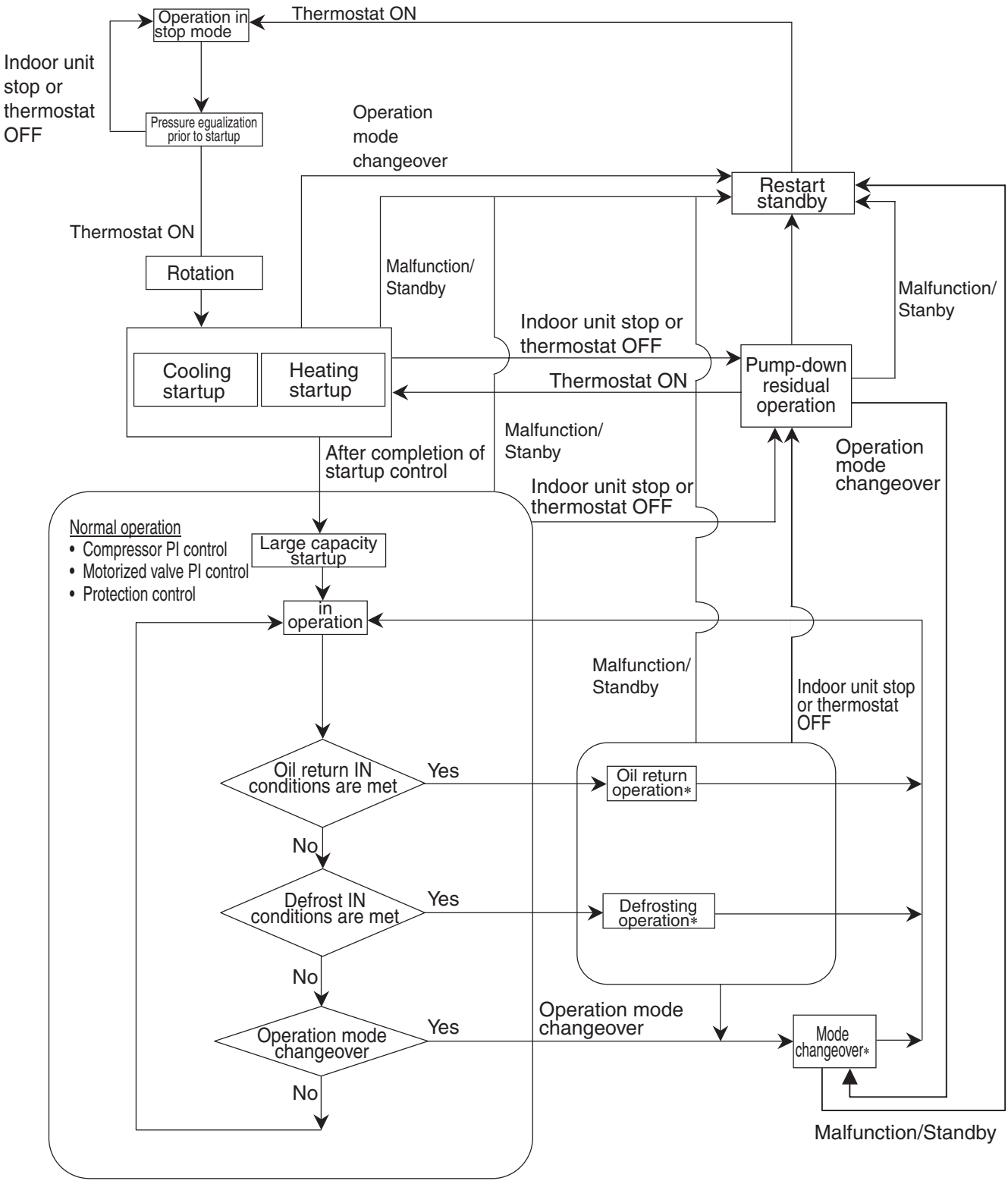
1. Function General

1.1 Symbol

Symbol	Electric symbol		Description or function
	REYQ8~16P	REMQ8~16P	
20SA	Y2S (Heat exchanger1) Y9S (Heat exchanger2)	Y3S	Four way valve (Heat exchanger switch)
20SB	Y8S	Y2S	Four way valve (High/low pressure gas pipe switch)
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
EVM	Y1E (Main1) Y3E (Main2)	Y1E	Electronic expansion valve for main heat exchanger
EVT	Y2E (Subcooling1) Y5E (Subcooling2)	Y3E	Electronic expansion valve for sub-cooling heat exchanger
EVJ	Y4E	Y2E	Electronic expansion valve at the refrigerant charge port
HTDi	–	–	Value of INV compressor discharge pipe temperature compensated with outdoor air temperature
HTDs	–	–	Value of STD compressor discharge pipe temperature compensated with outdoor air temperature
Pc	S1NPH	S1NPH	Value detected by high pressure sensor
Pe	S2NPL	S2NPL	Value detected by low pressure sensor
SH	–	–	Evaporator outlet superheat
SHS	–	–	Target evaporator outlet superheat
SVE	Y5S (Bypass1) Y10S (Bypass2)	Y6S	Main bypass solenoid valve
SVP	Y4S	Y5S	Solenoid valve for hot gas
SVL	Y3S	Y4S	Refrigerant regulator liquid pipe solenoid valve
SVG	Y1S	Y1S	Refrigerant regulator gas pipe solenoid valve
SVO	Y7S	Y7S	Refrigerant regulator exhaust pipe solenoid valve
SVT	Y6S	Y8S	Refrigerant regulator discharge pipe solenoid valve

Symbol	Electric symbol		Description or function
	REYQ8~16P	REMQ8~16P	
Ta	R1T (A1P)	R1T (A1P)	Outdoor air temperature
TsA	R8T (Suction pipe1)	R8T	Suction pipe temperature
	R10T (Suction pipe2)		
Tb	R4T (Deicer1)	R4T	Heat exchanger outlet temperature at cooling
	R12T (Deicer2)		
Tg	R2T (Gas pipe1)	R2T	Heat exchanger gas pipe temperature
	R11T (Gas pipe2)		
Tf	R7T (Liquid pipe1)	R7T	Temperature of liquid pipe between heat exchanger and main electronic expansion valve
	R15T (Liquid pipe2)		
Tsh	R5T (Gas pipe1)	R5T	Temperature detected with the subcooling heat exchanger outlet thermistor
	R13T (Gas pipe2)		
Tl	R6T (Liquid pipe1)	R6T	Liquid pipe temperature detected with the liquid pipe thermistor
	R14T (Liquid pipe2)		
Tsc	R9T	R9T	Temperature of liquid pipe between liquid shutoff valve and supercooled heat exchanger
Tc	–	–	High pressure equivalent saturation temperature
TcS	–	–	Target temperature of Tc
Te	–	–	Low pressure equivalent saturation temperature
TeS	–	–	Target temperature of Te
Tfin	R1T (A4P) (A5P)	R1T (A3P)	Inverter fin temperature
Tp	–	–	Calculated value of compressor port temperature
Tdi	R31T (R32T)	R31T	Discharge pipe temperature of inverter compressor
Tds	R32T	R32T, R33T	Discharge pipe temperature of standard compressor

1.2 Operation Mode



* "Oil return", "Defrost" and "Mode changeover" move on to the next process after the completion of above function in progress even if the thermostat is OFF during the operation.

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		
		REYQ	REMQ	Normal Cooling	Normal Heating	Normal Simultaneous Cooling / Heating
Compressor 1	—	M1C	M1C	PI control, High pressure protection, Low pressure protection, Td protection, INV protection,	PI control, High pressure protection, Low pressure protection, Td protection, INV protection,	PI control, High pressure protection, Low pressure protection, Td protection, INV protection,
Compressor 2		M2C	M2C			
Compressor 3		—	M3C			
Outdoor unit fan 1	—	M1F	M1F	Cooling fan control	Outdoor unit heat exchanger: Condenser / Cooling fan control Outdoor unit heat exchanger: Evaporator / Fan step	Outdoor unit heat exchanger: Condenser / Cooling fan control Outdoor unit heat exchanger: Evaporator / Fan step
Outdoor unit fan 2		M2F	M2F			
Electronic expansion valve (Main)	EVM	Y1E	Y1E	1375 pls	Outdoor unit heat exchanger: Condenser / Liquid pressure control Outdoor unit heat exchanger: Evaporator / PI control	Outdoor unit heat exchanger: Condenser / Liquid pressure control Outdoor unit heat exchanger: Evaporator / PI control
		Y3E				
Electronic expansion valve (Supercooling)	EVT	Y2E	Y3E	PI control	PI control	PI control
		Y5E				
Electronic expansion valve (Refrigerant charge)	EVJ	Y4E	Y2E	80 pls	80 pls	80 pls
Four way valve (Heat exchanger switch)	20SA	Y2S	Y3S	OFF	Outdoor unit heat exchanger: Condenser / OFF Outdoor unit heat exchanger: Evaporator / ON	Outdoor unit heat exchanger: Condenser / OFF Outdoor unit heat exchanger: Evaporator / ON
		Y9S				
Four way valve (High/low pressure gas pipe switch)	20SB	Y8S	Y2S	ON	OFF	OFF
Solenoid valve (Main bypass)	SVE	Y5S	Y6S	ON	OFF	OFF
		Y10S				
Solenoid valve (Hot gas)	SVP	Y4S	Y5S	OFF	OFF	OFF
Solenoid valve (Refrigerant regulator liquid pipe)	SVL	Y3S	Y4S	ON for refrigerant recovery	ON for refrigerant recovery	ON for refrigerant recovery
Solenoid valve (Refrigerant regulator gas vent pipe)	SVG	Y1S	Y1S	ON for refrigerant recovery	ON for refrigerant recovery	ON for refrigerant recovery
Solenoid valve (Refrigerant regulator exhaust pipe)	SVO	Y7S	Y7S	ON for refrigerant discharge	ON for refrigerant discharge	ON for refrigerant discharge
Solenoid valve (Refrigerant regulator discharge pipe)	SVT	Y6S	Y8S	ON for oil level control	ON for oil level control	ON for oil level control

Indoor unit actuator		Normal cooling	Normal heating
Fan	Thermostat ON unit	Remote control setting	Remote control setting
	Stopping unit	OFF	OFF
	Thermostat OFF unit	Remote control setting	LL
Electronic expansion valve	Thermostat ON unit	Normal opening *1	Normal opening *2
	Stopping unit	0 pls	192 pls
	Thermostat OFF unit	0 pls	192 pls

*1. PI control : Evaporator outlet superheated degree (SH) constant.
*2. PI control : Condenser outlet subcooled degree (SC) constant.
*1 and 2 : Refer to “6.4 Control of Electronic Expansion Valve” on page 147.

BS unit actuatior	Electoric symbol	Normal cooling	Nomal heating / Nomal simultaneous Cooling / Heating operation
Electronic expantion valve (EVH)	Y4E	760 pls (fully opened)	760 pls (fully opened)
Electronic expantion valve (EVL)	Y5E	760 pls (fully opened)	0 pls
Electronic expantion valve (EVHS)	Y2E	480 pls (fully opened)	480 pls (fully opened)
Electronic expantion valve (EVLS)	Y3E	480 pls (fully opened)	0 pls
Electronic expantion valve (EVSC)	Y1E	0 pls	0 pls (simultaneous Cooling / Heating operation : PI control)

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	7	8	9	10	11

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).

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

Tc setting

L	M (Normal) (factory setting)	H
43	46	48

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.

Rotation of outdoor units

In order to make operating time equal for each compressor of multi connection outdoor units, outdoor units are used in rotation.
However this is not applicable to single units.

[Rotation of outdoor units]

[System with two outdoor units]

	Outdoor Unit 1	Outdoor Unit 2
Previous time	Priority 1	Priority 2
This time	Priority 2	Priority 1
Next time	Priority 1	Priority 2

[System with three outdoor units]

	Outdoor Unit 1	Outdoor Unit 2	Outdoor Unit 3
Previous time	Priority 1	Priority 2	Priority 3
This time	Priority 3	Priority 1	Priority 2
Next time	Priority 2	Priority 3	Priority 1
One time after the next	Priority 1	Priority 2	Priority 3

[Timing of outdoor rotation]

In start of startup control

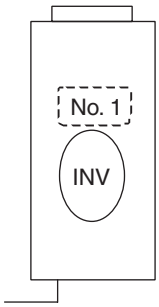
■ Operating Priority and Rotation of Compressors

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

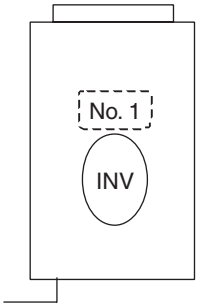
INV:Inverter compressor
STD1:Standard compressor 1
STD2:Standard compressor 2

Pattern 1 Pattern 2 Pattern 3

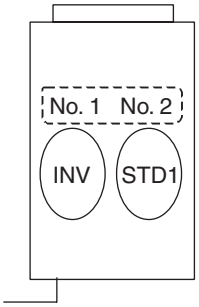
RXYQ5P



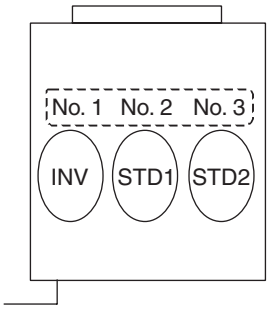
RXYQ8P



RXYQ10P, 12P



RXYQ14P, 16P, 18P



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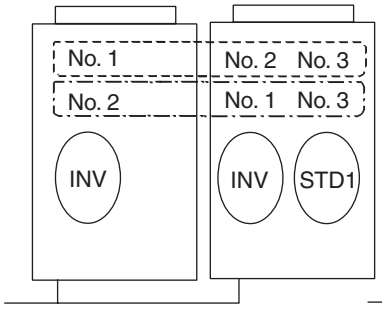

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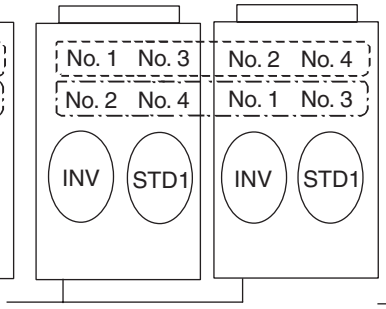
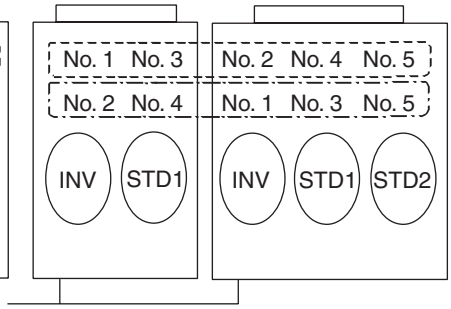
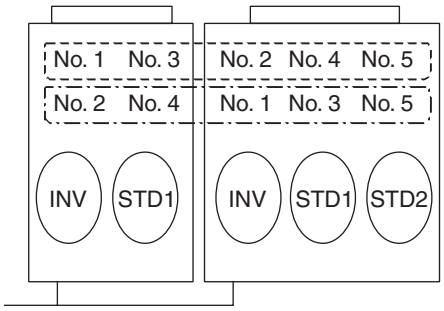


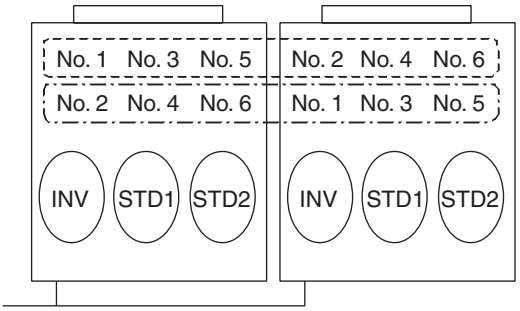
RXYQ24P, 26P



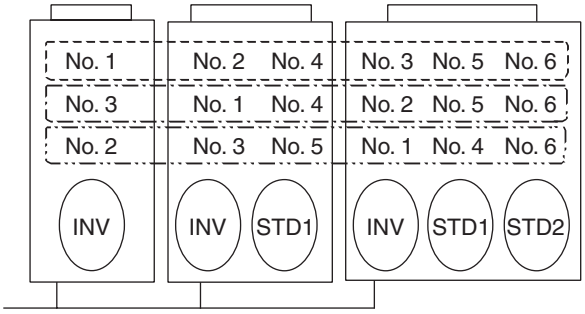
RXYQ28P, 30P



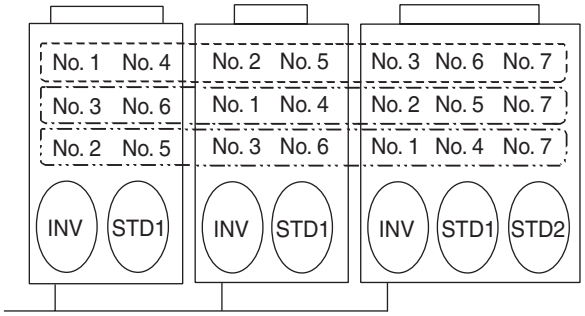
RXYQ32P, 34P, 36P



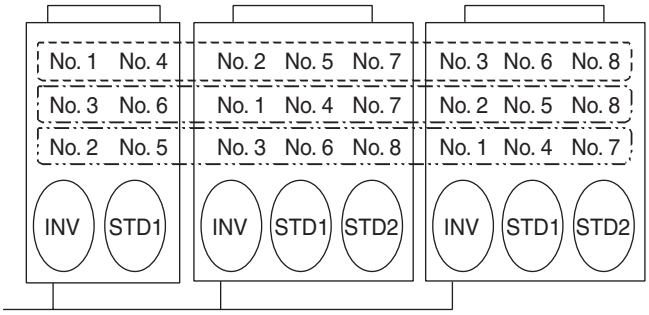
RXYQ38P



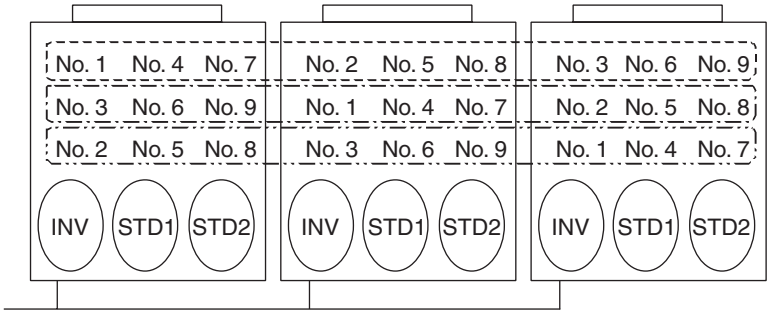
REYQ38P, 40P



REYQ42P, 44P



REYQ46P, 48P



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- 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.