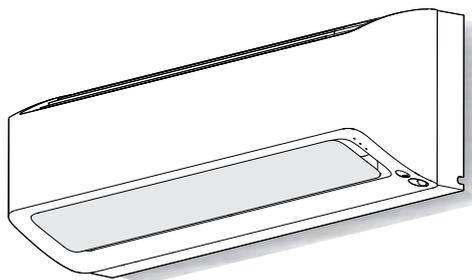




BOSCH SERVICE MANUAL

S1101AYXP9YMBT

AIR/AIR HEAT PUMP



MODELS

INDOOR UNIT

CLC6101i-W 50 HE
CLC6101i-W 65 HE
CLC8101i-W 65 HE(T/S/R)

OUTDOOR UNIT

CLC6101i 50 HE
CLC6101i 65 HE
CLC8101i 65 HE

CLC6001i-W 25 E
CLC6001i-W 35 E
CLC8001i-W 25 E(T/S/R)
CLC8001i-W 35 E(T/S/R)

CLC6001i 25 E
CLC6001i 35 E
CLC8001i 25 E
CLC8001i 35 E

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

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PARTS LIST

FAILURE DIAGNOSIS FLOWCHART

Parts marked with "▲" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

"Vertical louver (V-louver)" in this document means "horizontal air flow louver" in the operation manual.

"Horizontal louver (H-louver)" in this document means "vertical air flow louver" in the operation manual.

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

CHAPTER 1. PRODUCT SPECIFICATION

[1] SPECIFICATION

ITEMS	MODEL	INDOOR UNIT	OUTDOOR UNIT	INDOOR UNIT	OUTDOOR UNIT
		CLC6101i-W 50 HE	CLC6101i 50 HE	CLC6101i-W 65 HE	CLC6101i 65 HE
Rated cooling capacity (Min. - Max.)	kW	2.5 (0.9 - 3.0)		3.5 (0.9 - 4.2)	
Rated heating capacity (Min. - Max.)	kW	3.2 (0.9 - 5.0)		4.2 (0.9 - 6.5)	
Moisture removal (at cooling)	Liters/h	0.8		1.2	

Electrical data

Phase			1		1	
Rated frequency		Hz	50		50	
Rated voltage		V	230		230	
Rated current (Min. - Max.)	Cool	A	2.9 (0.9 - 3.8)		4.5 (0.9 - 6.3)	
	Heat	A	3.6 (0.7 - 6.5)		4.7 (0.7 - 9.1)	
Rated input (Min. - Max.)	Cool	W	550 (170 - 710)		850 (170 - 1180)	
	Heat	W	750 (150 - 1350)		1000 (150 - 1950)	
Power factor	Cool	%	82		82	
	Heat	%	91		93	
Maximum operating current		A	7.0		10.2	
Compressor	Type		Hermetically sealed rotary type		Hermetically sealed rotary type	
	Model		KSN98D42UFZA		KSN98D42UFZA	
	Oil charge		ESTER OIL VG74(300ml)		ESTER OIL VG74(300ml)	
Refrigerant system	Evaporator		Slit Fin and Grooved tube type		Slit Fin and Grooved tube type	
	Condenser		Corrugate Fin and Grooved tube type		Corrugate Fin and Grooved tube type	
	Control		Expansion Valve		Expansion Valve	
	Refrigerant (R32)		910 g		910 g	
	De-Ice system		Micro computer controlled reversed systems		Micro computer controlled reversed systems	
Noise level (Sound Pressure) (at cooling)	High	dB(A)	39	48	40	49
	Low	dB(A)	33	-	34	-
	Soft	dB(A)	26	-	27	-
	Silent	dB(A)	20	-	20	-

Fan system

Drive			Direct drive		Direct drive	
Air flow quantity (at cooling)	High	m ³ /min	10.6	28.8	11.5	31.2
	Low	m ³ /min	8.0	-	8.1	-
	Soft	m ³ /min	6.1	-	6.6	-
	Silent	m ³ /min	4.7	-	4.4	-
Fan			Cross flow fan	Propeller fan	Cross flow fan	Propeller fan

Connections

Refrigerant coupling		Flare type		Flare type	
Refrigerant tube size Gas, Liquid		inch	3/8", 1/4"		3/8", 1/4"
Drain piping mm		mm	O.D.φ17 and φ20		O.D.φ17 and φ20

Others

Safety device			Compressor: Thermistor			
			Fan motors: Inherent thermistor			
			Fuse, Micro computer control			
Air filter			Polypropylene net (Washable)			
Net dimensions	Width	mm	879	780	879	780
	Height	mm	289	540	289	540
	Depth	mm	229	269	229	269
Net weight		kg	9	31	10	31

ITEMS	MODEL		INDOOR UNIT	OUTDOOR UNIT	INDOOR UNIT	OUTDOOR UNIT
			CLC8101i-W 65 HE (T/S/R)	CLC8101i 65 HE	CLC6001i-W 25 E	CLC6001i 25 E
Rated cooling capacity (Min. - Max.)	kW		3.5 (0.9 - 4.2)		2.5 (0.9 - 3.0)	
Rated heating capacity (Min. - Max.)	kW		4.2 (0.9 - 6.5)		3.2 (0.9 - 4.5)	
Moisture removal (at cooling)	Liters/h		1.2		0.8	

Electrical data

Phase			1		1	
Rated frequency		Hz	50		50	
Rated voltage		V	230		230	
Rated current (Min. - Max.)	Cool	A	3.7 (0.7 - 5.2)		2.9 (0.9 - 3.8)	
	Heat	A	4.2 (0.7 - 8.6)		3.6 (0.7 - 5.6)	
Rated input (Min. - Max.)	Cool	W	780 (150 - 1100)		550 (170 - 710)	
	Heat	W	910 (150 - 1750)		750 (150 - 1180)	
Power factor	Cool	%	92		82	
	Heat	%	88		91	
Maximum operating current		A	8.7		6.2	
Compressor	Type		Hermetically sealed rotary type		Hermetically sealed rotary type	
	Model		KSN98D42UERA		KSN98D42UFZA	
	Oil charge		ESTER OIL VG74(300ml)		ESTER OIL VG74(300ml)	
Refrigerant system	Evaporator		Slit Fin and Grooved tube type		Slit Fin and Grooved tube type	
	Condenser		Corrugate Fin and Grooved tube type		Corrugate Fin and Grooved tube type	
	Control		Expansion Valve		Expansion Valve	
	Refrigerant (R32)		1100 g		910 g	
	De-Ice system		Micro computer controlled reversed systems		Micro computer controlled reversed systems	
Noise level (Sound Pressure) (at cooling)	High	dB(A)	46	48	39	49
	Low	dB(A)	37	-	33	-
	Soft	dB(A)	27	-	26	-
	Silent	dB(A)	20	-	20	-

Fan system

Drive			Direct drive		Direct drive	
Air flow quantity (at cooling)	High	m ³ /min	14.2	32.5	10.6	28.8
	Low	m ³ /min	9.8	-	8.1	-
	Soft	m ³ /min	6.3	-	6.1	-
	Silent	m ³ /min	4.4	-	4.7	-
Fan			Cross flow fan	Propeller fan	Cross flow fan	Propeller fan

Connections

Refrigerant coupling			Flare type		Flare type	
Refrigerant tube size Gas, Liquid		inch	3/8", 1/4"		3/8", 1/4"	
Drain piping mm		mm	O.D.φ17 and φ20		O.D.φ17 and φ20	

Others

Safety device			Compressor: Thermistor			
			Fan motors: Inherent thermistor			
			Fuse, Micro computer control			
Air filter			Polypropylene net (Washable)			
Net dimensions	Width	mm	879	800	879	780
	Height	mm	289	630	289	540
	Depth	mm	229	300	229	269
Net weight		kg	10	40	9	30

ITEMS	MODEL		INDOOR UNIT	OUTDOOR UNIT	INDOOR UNIT	OUTDOOR UNIT
			CLC6001i-W 35 E	CLC6001i 35 E	CLC8001i-W 25 E (T/S/R)	CLC8001i 25 E
Rated cooling capacity (Min. - Max.)	kW		3.5 (0.9 - 4.2)		2.5 (0.9 - 3.0)	
Rated heating capacity (Min. - Max.)	kW		4.0 (0.9 - 5.5)		3.2 (0.9 - 5.0)	
Moisture removal (at cooling)	Liters/h		1.2		0.8	

Electrical data

Phase			1		1	
Rated frequency		Hz	50		50	
Rated voltage		V	230		230	
Rated current (Min. - Max.)	Cool	A	4.6 (1.0 - 6.6)		2.3 (0.7 - 2.9)	
	Heat	A	4.9 (0.7 - 7.6)		2.9 (0.7 - 5.6)	
Rated input (Min. - Max.)	Cool	W	870 (180 - 1250)		480 (150 - 600)	
	Heat	W	1000 (150 - 1550)		610 (150 - 1170)	
Power factor	Cool	%	82		91	
	Heat	%	89		91	
Maximum operating current		A	8.0		6.7	
Compressor	Type		Hermetically sealed rotary type		Hermetically sealed rotary type	
	Model		KSN98D42UFZA		KSN98D42UERA	
	Oil charge		ESTER OIL VG74(300ml)		ESTER OIL VG74(300ml)	
Refrigerant system	Evaporator		Slit Fin and Grooved tube type		Slit Fin and Grooved tube type	
	Condenser		Corrugate Fin and Grooved tube type		Corrugate Fin and Grooved tube type	
	Control		Expansion Valve		Expansion Valve	
	Refrigerant (R32)		910 g		1100 g	
	De-Ice system		Micro computer controlled reversed systems		Micro computer controlled reversed systems	
Noise level (Sound Pressure) (at cooling)	High	dB(A)	40	49	44	47
	Low	dB(A)	34	-	35	-
	Soft	dB(A)	27	-	26	-
	Silent	dB(A)	20	-	20	-

Fan system

Drive			Direct drive		Direct drive	
Air flow quantity (at cooling)	High	m ³ /min	11.3	31.2	13.1	32.5
	Low	m ³ /min	8.6	-	9.3	-
	Soft	m ³ /min	6.9	-	6.0	-
	Silent	m ³ /min	5.4	-	4.4	-
Fan			Cross flow fan	Propeller fan	Cross flow fan	Propeller fan

Connections

Refrigerant coupling			Flare type		Flare type	
Refrigerant tube size Gas, Liquid		inch	3/8", 1/4"		3/8", 1/4"	
Drain piping mm		mm	O.D.φ17 and φ20		O.D.φ17 and φ20	

Others

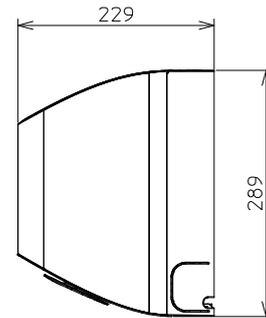
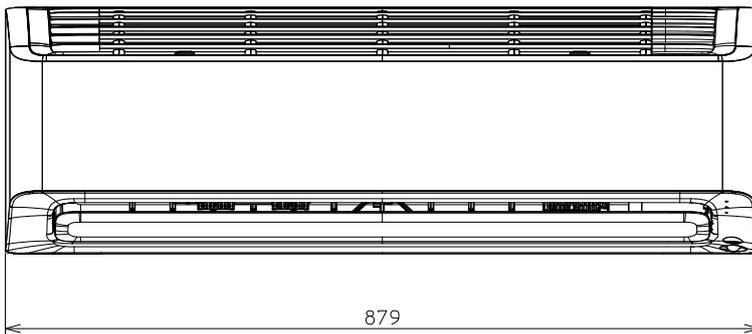
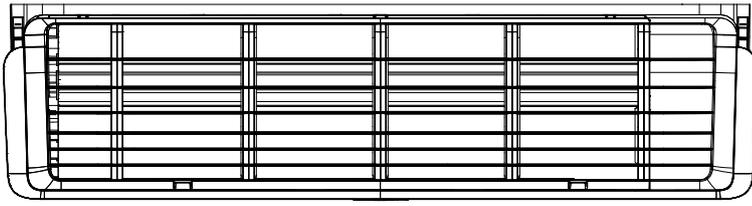
Safety device			Compressor: Thermistor			
			Fan motors: Inherent thermistor			
			Fuse, Micro computer control			
Air filter			Polypropylene net (Washable)			
Net dimensions	Width	mm	879	780	879	800
	Height	mm	289	540	289	630
	Depth	mm	229	269	229	300
Net weight		kg	9	30	10	39

ITEMS		MODEL	INDOOR UNIT CLC8001i-W 35 E (T/S/R)	OUTDOOR UNIT CLC8001i 35 E
		Rated cooling capacity (Min. - Max.)		kW
Rated heating capacity (Min. - Max.)		kW	4.2 (0.9 - 6.5)	
Moisture removal (at cooling)		Liters/h	1.2	
Electrical data				
Phase			1	
Rated frequency		Hz	50	
Rated voltage		V	230	
Rated current (Min. - Max.)	Cool	A	3.7 (0.7 - 5.2)	
	Heat	A	4.5 (0.7 - 8.6)	
Rated input (Min. - Max.)	Cool	W	780 (150 - 1100)	
	Heat	W	910 (150 - 1750)	
Power factor	Cool	%	92	
	Heat	%	88	
Maximum operating current		A	8.7	
Compressor	Type		Hermetically sealed rotary type	
	Model		KSN98D42UERA	
	Oil charge		ESTER OIL VG74(300ml)	
Refrigerant system	Evaporator		Slit Fin and Grooved tube type	
	Condenser		Corrugate Fin and Grooved tube type	
	Control		Expansion Valve	
	Refrigerant (R32)		1100 g	
	De-Ice system		Micro computer controlled reversed systems	
Noise level (Sound Pressure) (at cooling)	High	dB(A)	46	48
	Low	dB(A)	37	-
	Soft	dB(A)	27	-
	Silent	dB(A)	20	-
Fan system				
Drive			Direct drive	
Air flow quantity (at cooling)	High	m ³ /min	14.2	32.5
	Low	m ³ /min	9.8	-
	Soft	m ³ /min	6.3	-
	Silent	m ³ /min	4.4	-
Fan			Cross flow fan	Propeller fan
Connections				
Refrigerant coupling			Flare type	
Refrigerant tube size Gas, Liquid		inch	3/8", 1/4"	
Drain piping mm		mm	O.D.φ17 and φ20	
Others				
Safety device		Compressor: Thermistor		
		Fan motors: Inherent thermistor		
		Fuse, Micro computer control		
Air filter		Polypropylene net (Washable)		
Net dimensions	Width	mm	879	800
	Height	mm	289	630
	Depth	mm	229	300
Net weight		kg	10	39

[2] EXTERNAL DIMENSION

1. Indoor unit

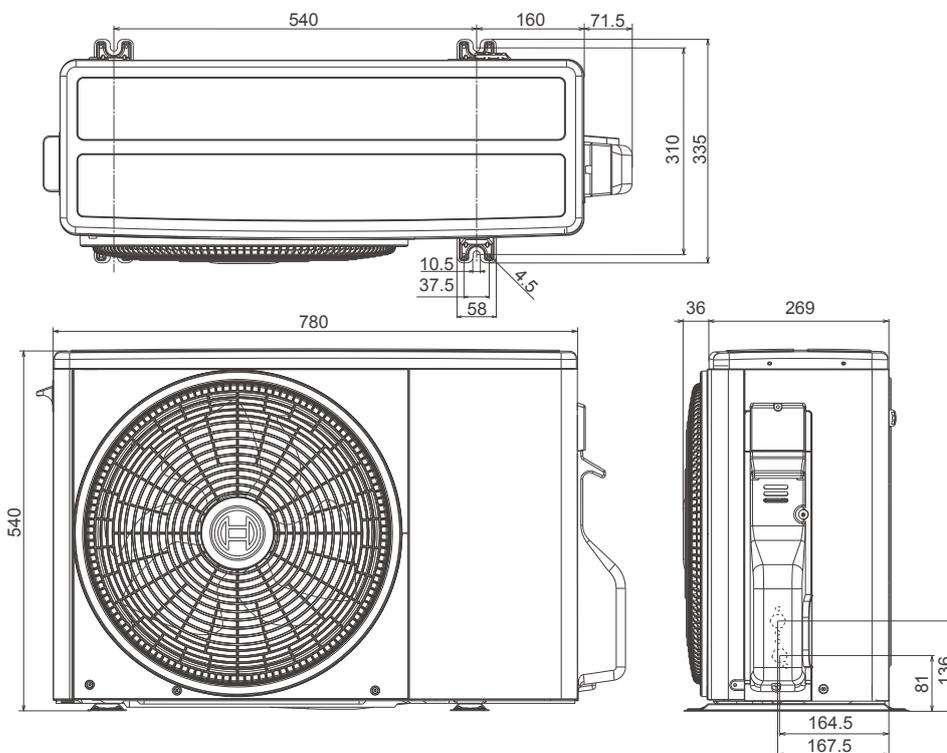
Length unit: mm



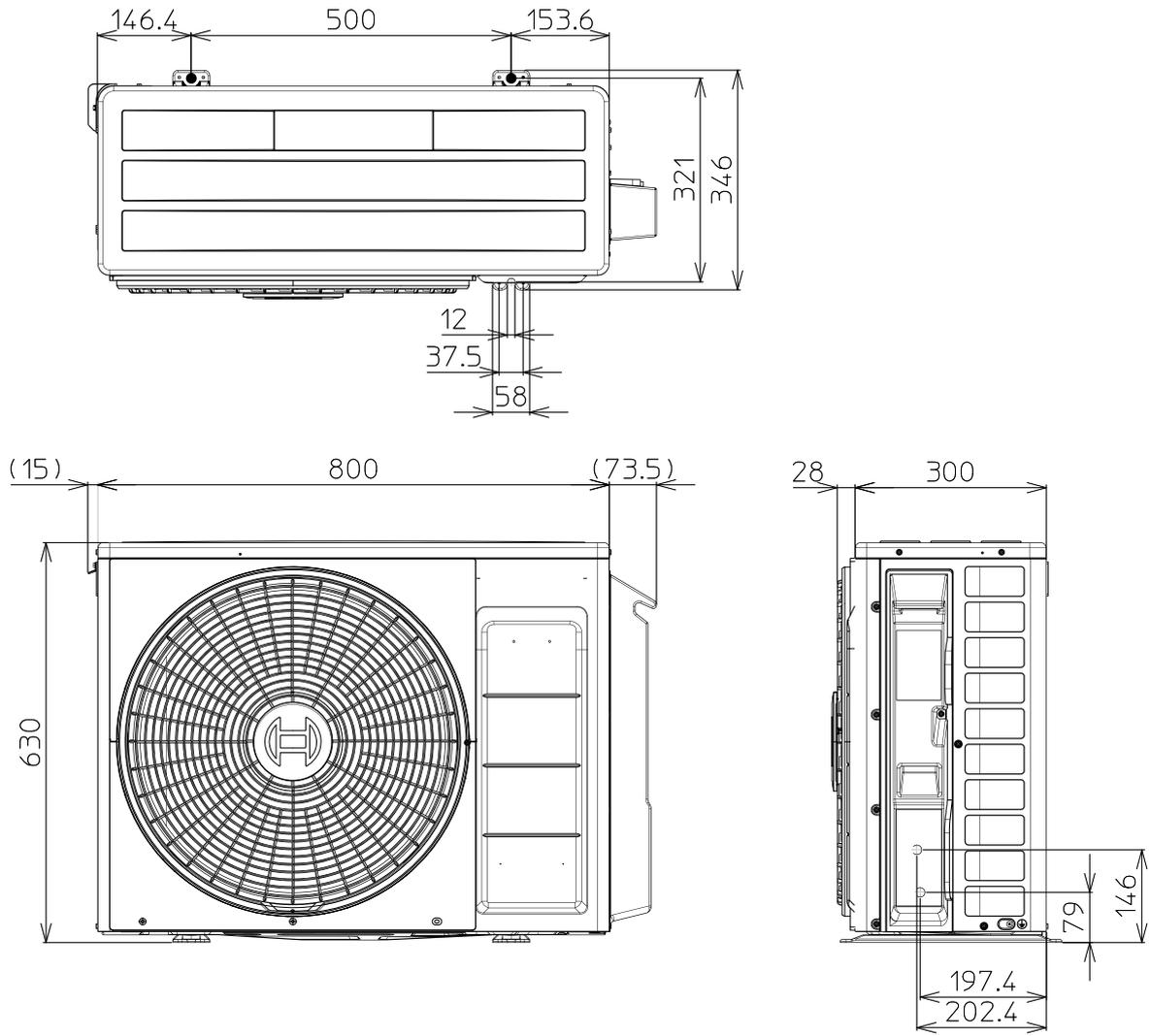
2. Outdoor unit

For CLC6101i 50 HE/ CLC6101i 65 HE/ CLC6001i 25 E/ CLC6001i 35 E models

Length unit: mm

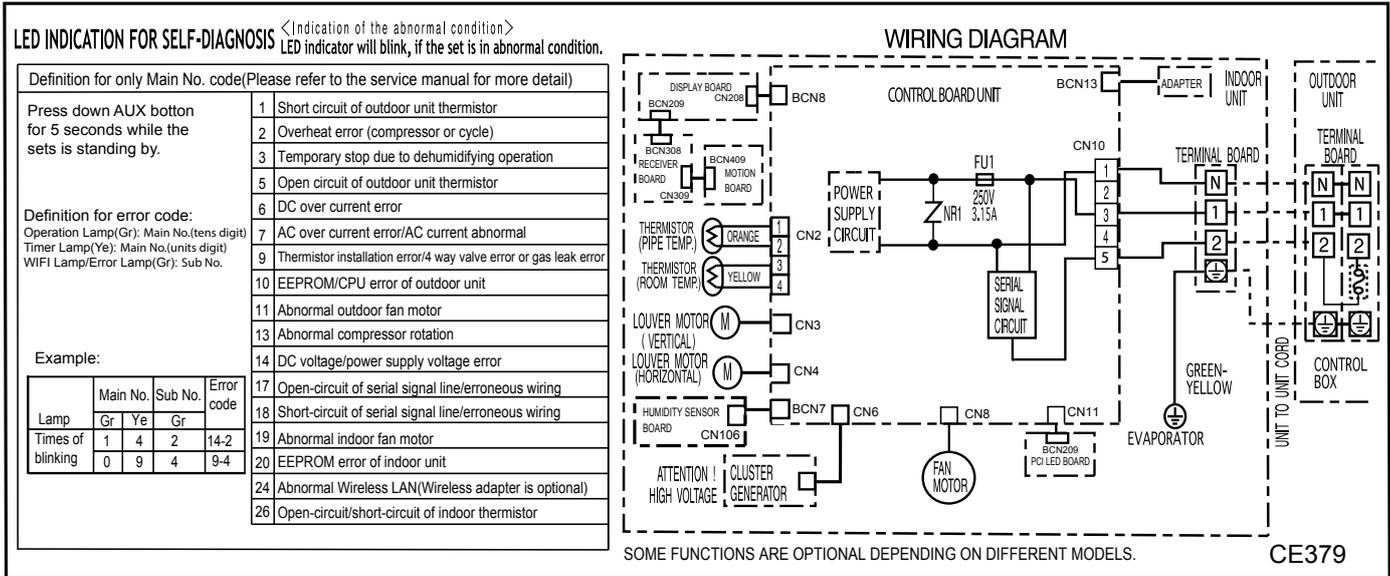


For CLC8101i 65 HE/ CLC8001i 25 E/ CLC8001i 35 E models



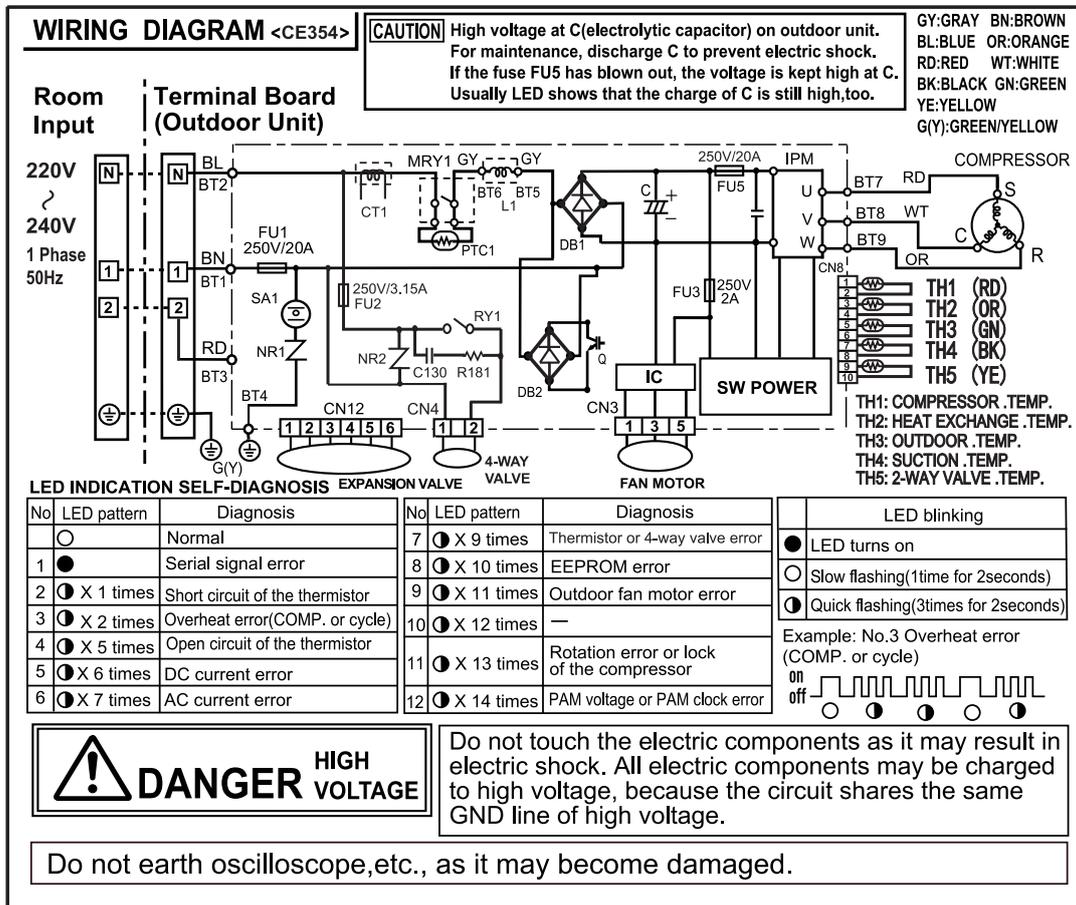
[3] WIRING DIAGRAM

1. Indoor unit

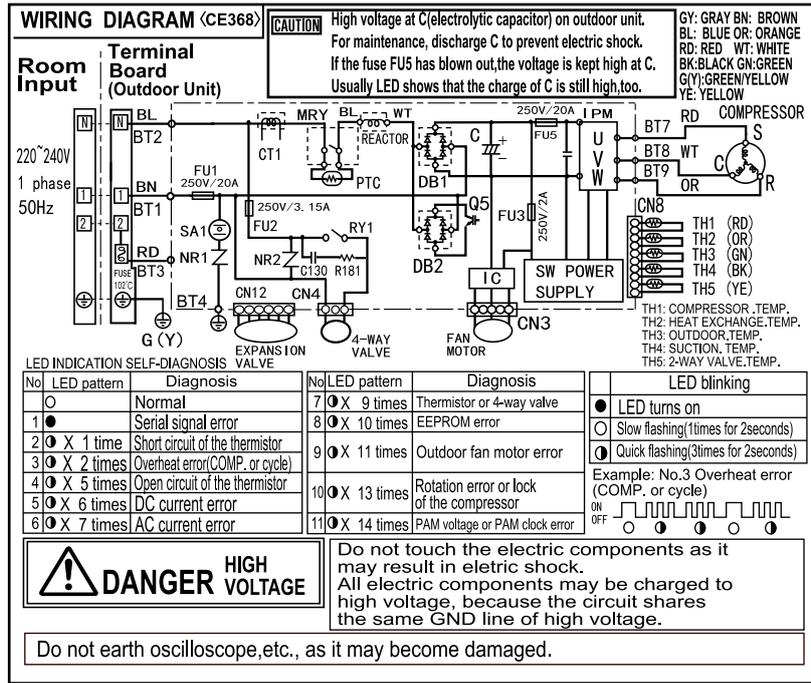


2. Outdoor unit

For CLC6101i 50 HE/ CLC6101i 65 HE/ CLC6001i 25 E/ CLC6001i 35 E models



For CLC8101i 65 HE/ CLC8001i 25 E/ CLC8001i 35 E models



[4] ELECTRICAL PARTS

1. Indoor unit

DESCRIPTION	MODEL	REMARKS
Indoor fan motor	DAI239P-H030A-3207	30W, Class E
Transformer	TE20SMSW-G08V	DC 5V, 12V, 19V
FU1	2010 T 3.15A 250A	250V 3.15A

2. Outdoor unit

For CLC6101i 50 HE/ CLC6101i 65 HE/ CLC6001i 25 E/ CLC6001i 35 E models

DESCRIPTION	MODEL	REMARKS
Compressor	KSN98D42UFZA	
Outdoor fan motor	DBI445P-L041A-AL01-1	280V, 41W, 8Pole
FU1 /FU5	-	250V 20A
FU2	-	250V 3.15A
FU3	-	250V 2A

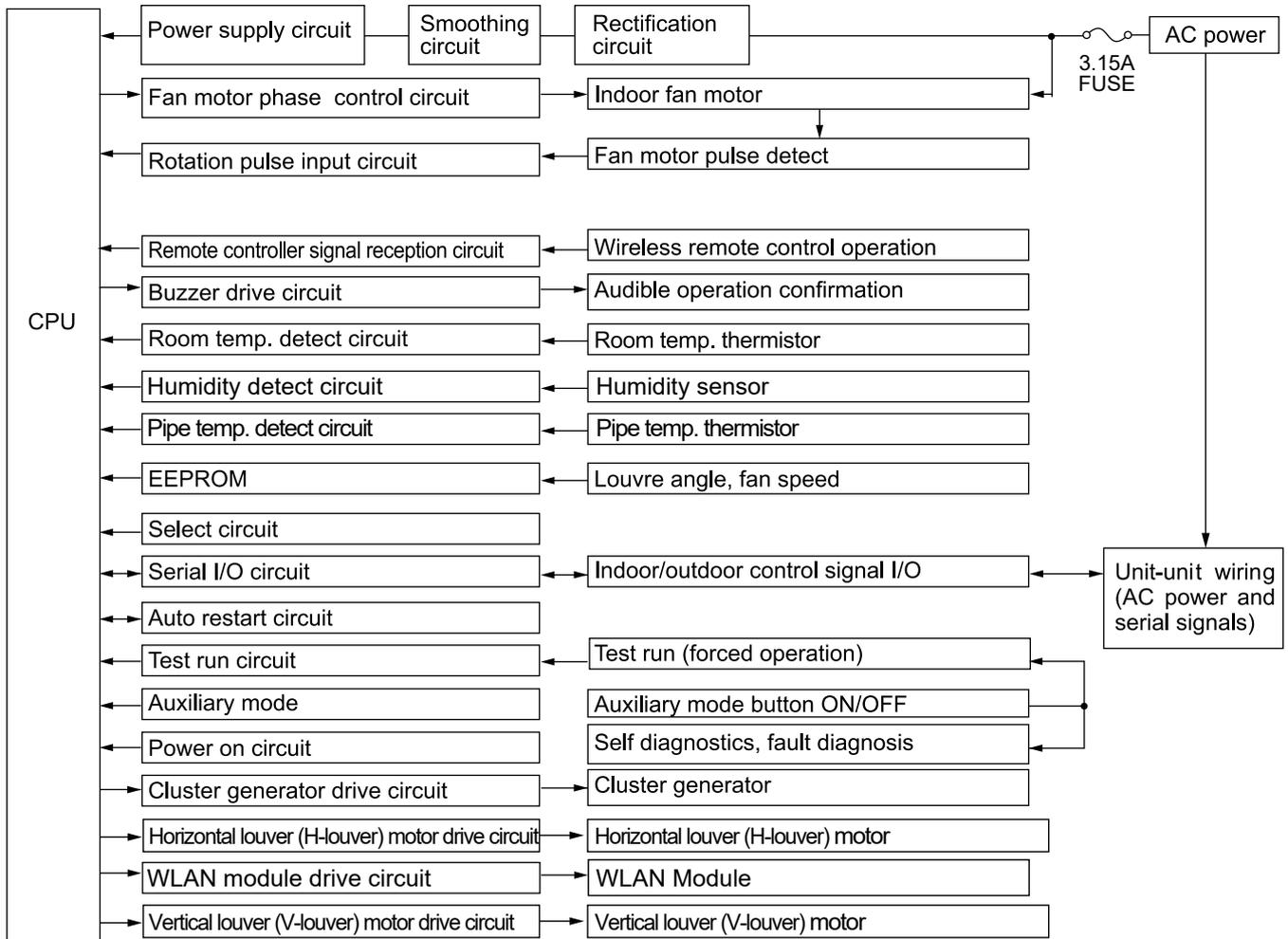
For CLC8101i 65 HE/ CLC8001i 25 E/ CLC8001i 35 E models

DESCRIPTION	MODEL	REMARKS
Compressor	KSN98D42UERA	
Outdoor fan motor	ZKFN-41-8-23	280V, 41W, 8Pole
FU1 / FU5	-	250V 20A
FU2	-	250V 3.15A
FU3	-	250V 2A

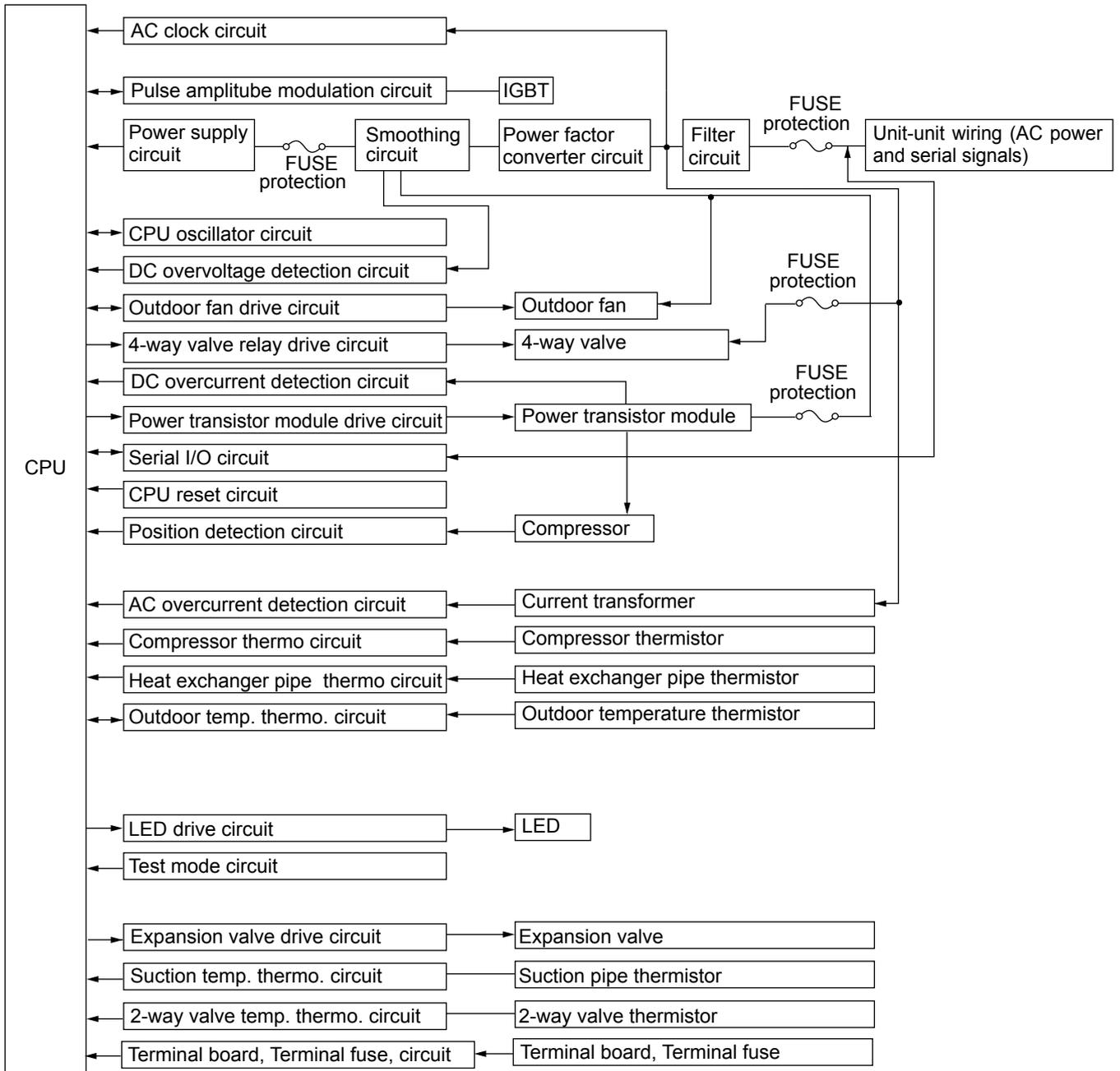
CHAPTER 2. EXPLANATION OF CIRCUIT AND OPERATION

[1] BLOCK DIAGRAMS

1. Indoor unit



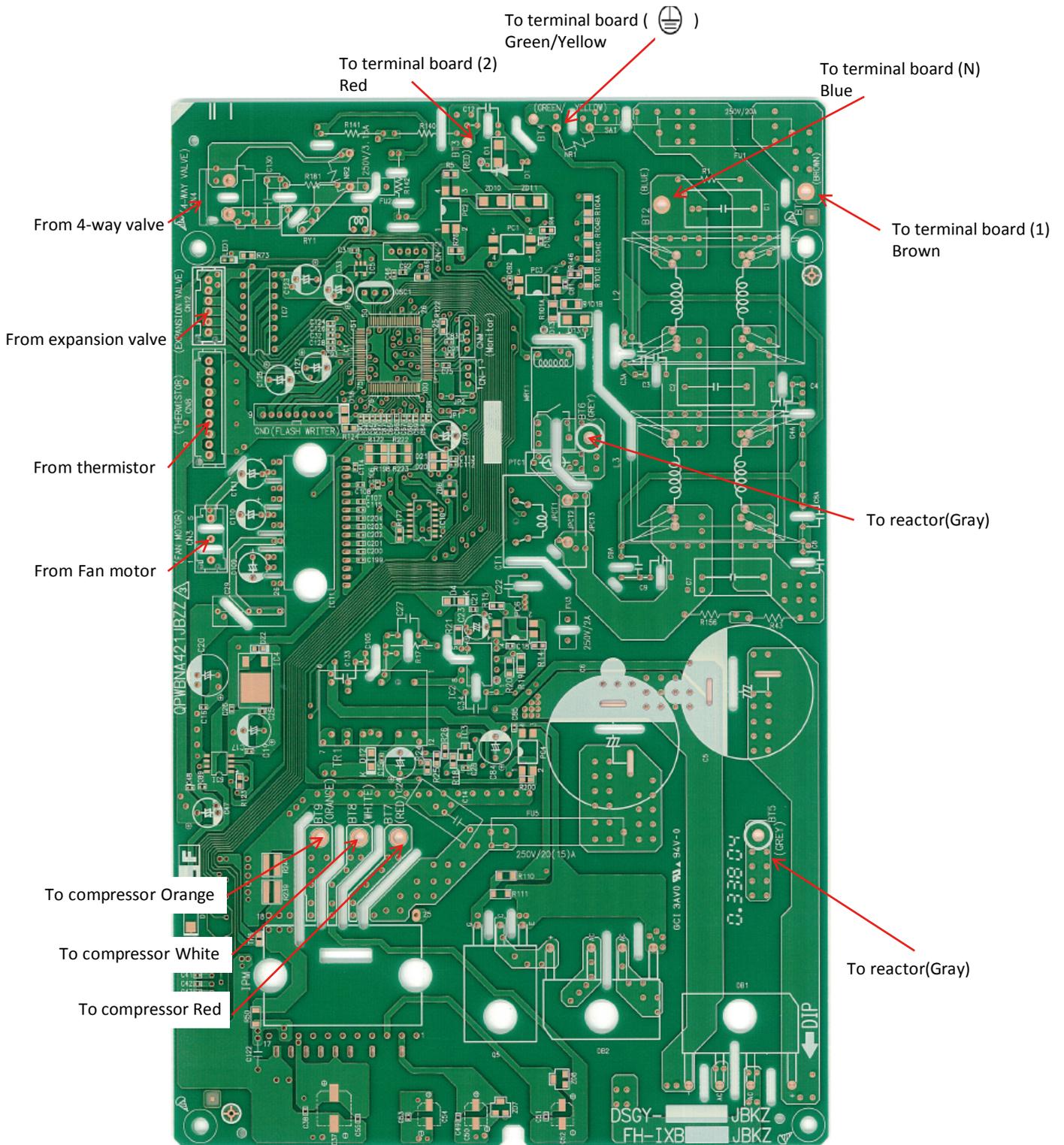
2. Outdoor unit



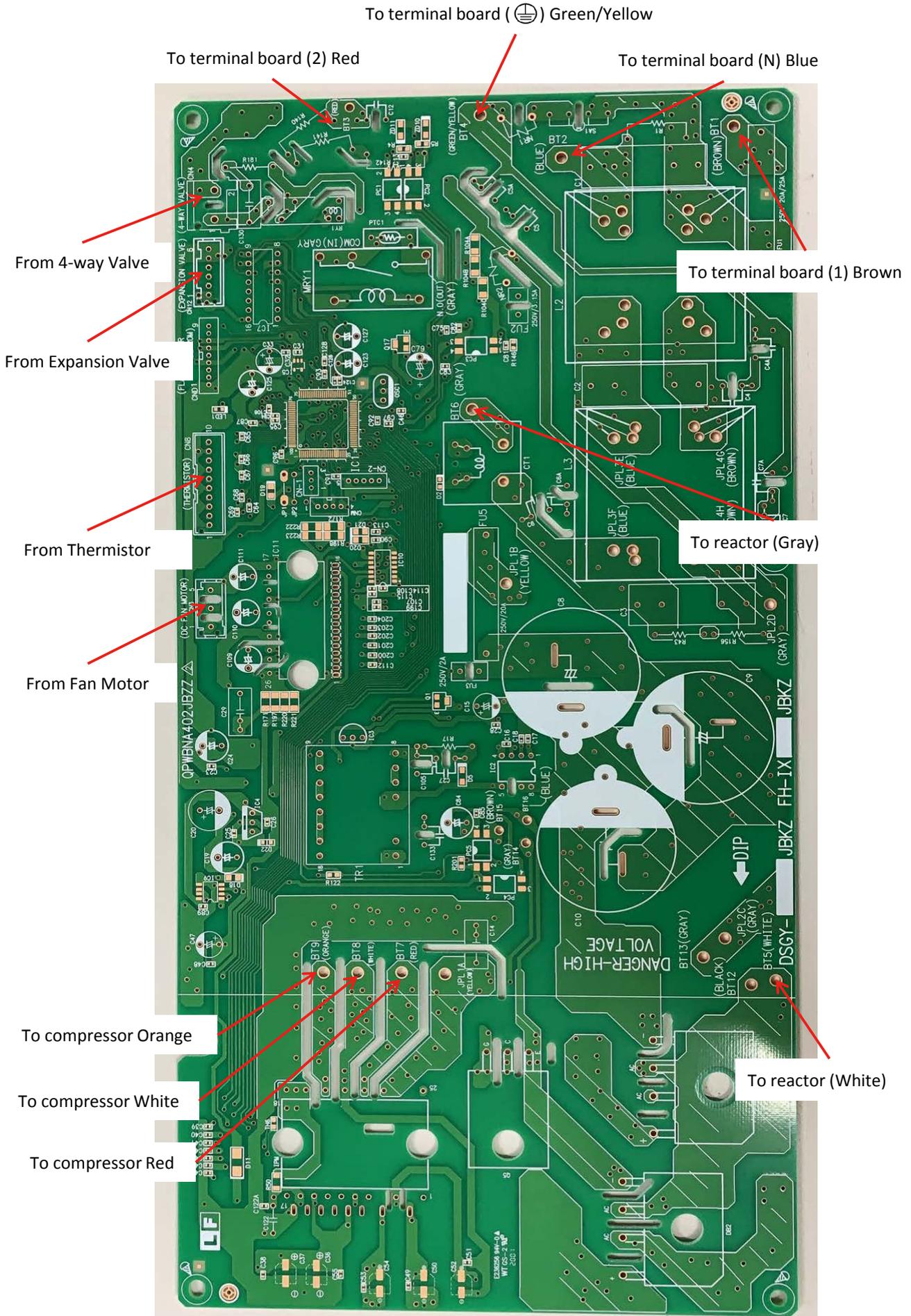
2. Outdoor unit

2.1. Printed wiring board

For CLC6101i 50 HE/ CLC6101i 65 HE/ CLC6001i 25 E/ CLC6001i 35 E models



For CLC8101i 65 HE/ CLC8001i 25 E/ CLC8001i 35 E models



CHAPTER 3. FUNCTION

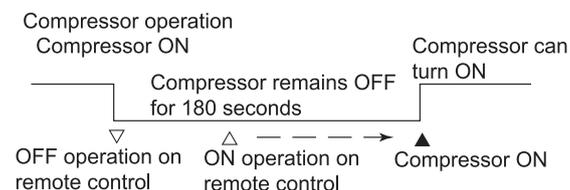
[1] FUNCTION

1 Restart control

Once the compressor stops operating, it will not restart for 180 seconds to protect the compressor.

Therefore, if the operating compressor is shut down from the remote control and then turned back on immediately after, the compressor will restart after a preset delay time.

(The indoor unit will restart operation immediately after the ON switch is operated on the remote control.)



2. Indoor unit heat exchanger freeze prevention control

If the temperature of the indoor unit heat exchanger remains below 0°C for 4 consecutive minutes during cooling or dehumidifying operation, the compressor operation stops temporarily in order to prevent freezing. When the temperature of the indoor unit heat exchanger rises to 2°C or higher after about 180 seconds, the compressor restarts and resumes normal operation.

3. Outdoor unit overheating prevention control

During cooling operation, if the temperature of the outdoor unit heat exchanger exceeds the outdoor unit heat exchanger overheating prevention temperature (about 55°C), the operating frequency is decreased by about 4 to 15 Hz.

Then, this operation is repeated every 60 seconds until the temperature of the outdoor unit heat exchanger drops to about 54°C or lower. Once the temperature of the outdoor unit heat exchanger drops to about 54°C or lower, the operating frequency is increased by about 4 to 10 Hz every 60 seconds until the normal operation condition resumes. If the temperature of the outdoor unit heat exchanger exceeds the outdoor unit heat exchanger overheating protection temperature for (120 sec : outdoor temperature $\geq 40^\circ\text{C}$ • 60 sec : outdoor temperature $< 40^\circ\text{C}$) at minimum operating frequency, the compressor stops operating and then restarts after about 180 seconds, and the above mentioned control is repeated.

4. Compressor overheating prevention control

If the temperature of the compressor exceeds the compressor overheating prevention temperature (110°C), the operation frequency is decreased by about 4 to 10 Hz.

Then, this operation is repeated every 60 seconds until the temperature of the compressor drops below the overheating protection temperature (110°C). Once the temperature of the compressor drops below the overheating protection temperature, the operating frequency is increased by about 4 to 10 Hz every 60 seconds until the normal operation condition resumes. If the temperature of the compressor exceeds the overheating protection temperature for a certain time (120 sec : outdoor temperature $\geq 40^\circ\text{C}$ • 60 sec : outdoor temperature $< 40^\circ\text{C}$) at minimum operating frequency, the compressor stops operating and then restarts after about 180 seconds, and the above control is repeated.

5. Startup control

When the air conditioner starts in the cooling mode, if the room temperature is 2°C higher than the set temperature the air conditioner operates with the operating frequency at maximum.

When the air conditioner starts in the heating mode, if the room temperature is 5.3°C lower than the set temperature the air conditioner operates with the operating frequency at maximum. Then, when the set temperature is reached, the air conditioner operates at the operating frequency determined by fuzzy logic calculation, then enters the normal control.

6. Outdoor unit fan delay control

The compressor stops immediately after cooling or dehumidifying or heating operation is shut down, but the outdoor unit fan continues operation for 50 seconds.

7 ON timer

The ON timer can be activated by pressing the ON timer button. When the ON timer is activated, the operation start time is adjusted based on fuzzy logic calculations 2 hour before the set time so that the room temperature reaches the set temperature at the set time.

8. OFF timer

The OFF timer can be activated by pressing the OFF timer button. When the OFF timer is activated, the internal timer starts to count down the remaining time from set time. And the unit will turn off automatically when it reaches zero.

9. Power ON start

If the connecting wire HAJP is put on the PWB assembly, when the power is supplied by turning on a circuit breaker, the air conditioner automatically starts operation in "AUTO". (Refer to Indoor side PWB).

10. AUTO MODE

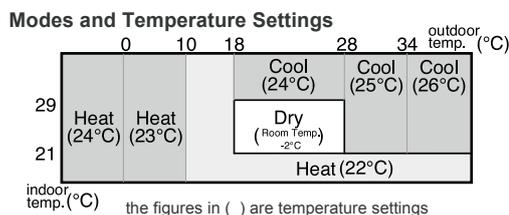
1) AUTO mode of remote control

(only for CLC6101i-W 50/65 HE model)

AUTO mode of AUX button

(for all models)

In the AUTO mode, the temperature setting and mode are automatically selected according to the room temperature and outdoor temperature when the unit is turned on.



During operation, if the outdoor temperature changes, the temperature settings will automatically slide as shown in the chart.

2) AUTO mode of remote control

(only for CLC6001i-W 25/35 E model)

In the AUTO mode, the unit selects operating mode (Heating/Cooling) according to temperature setting which is set by user and room temperature.

11. Auto restart

When power failure occurs during operation, the unit will automatically restart in the same setting which were active before the power failure.

1) Setting memorized

- Operating mode (Heat, Cool, Dry, PCI)
- Temperature adjustment (within 2°C range) automatic operation.
- Temperature setting
- Fan setting
- Air flow direction
- Power ON/OFF
- Automatic operation mode setting
- Plasmacluster mode
- OD SILENT setting
- SPOT setting

2) Setting not memorized

- Timer setting

- Full power setting
- Self cleaning
- Multi Space setting
- ECO setting

3) Disabling auto restart function

By removing (cutting) jumper (JP0) on the printed circuit board(PCB), the auto restart function can be disabled.

12. Save operation

This control is valid only in AUTO mode.

In addition, Average models (CLC6001i-W 25/35 E, CLC8001i-W 25/35 E(T/S/R)) only when ECO mode is enabled. Nordic models (CLC6101i-W 50/65 HE, CLC8101i-W 65 HE(T/S/R)) only when another mode is disabled.

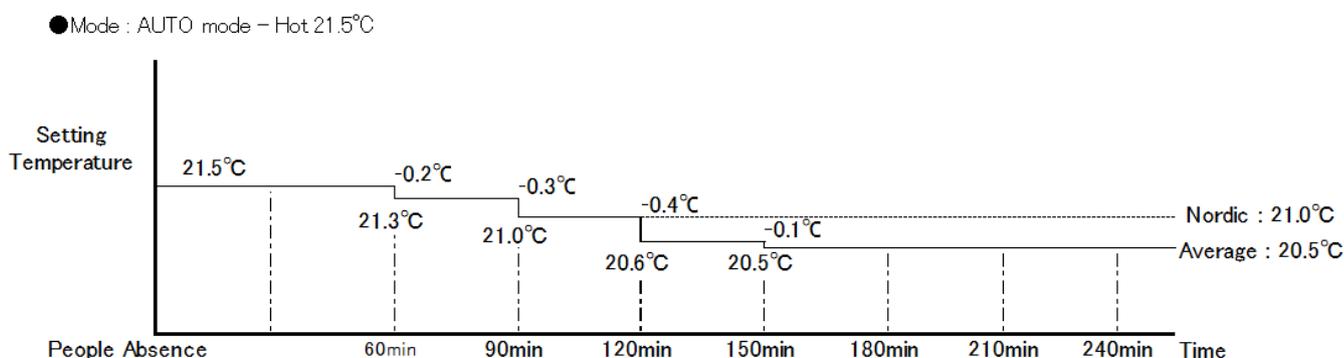
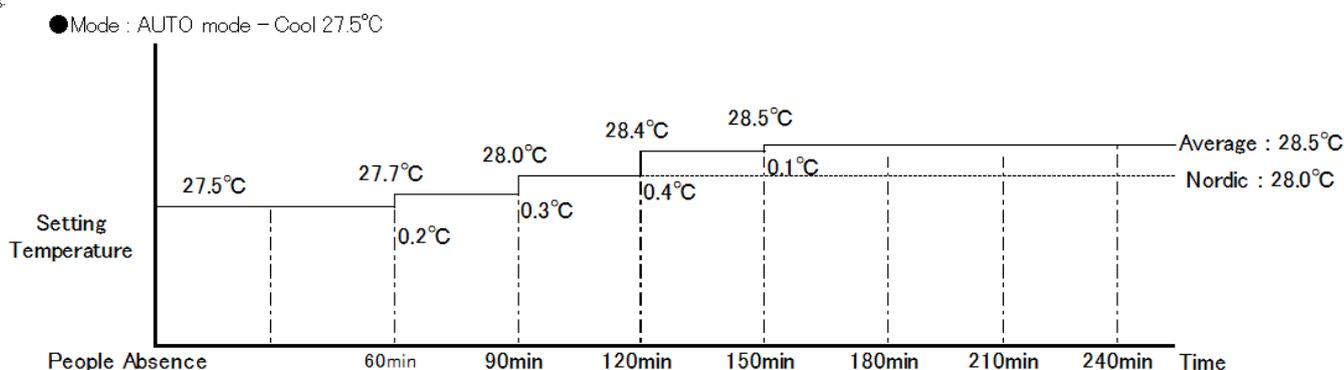
If there is no person for 1 hour, the air conditioner will arise setting temperature.

If a person is detected, correction temperature will be restored.

Limit of Temperature

Cool	BOSCH Nordic	BOSCH Average
Correction Temperature Limit	+1.0°C	+1.0°C
Setting Temperature Limit	28.0°C	Non
Hot	BOSCH Nordic	BOSCH Average
Correction Temperature Limit	-1.0°C	-1.0°C
Setting Temperature Limit	21.0°C	Non

e.g.



13. Activity Detection

This control is valid only in AUTO mode. If the amount of human activity increases for few minutes, setting temperature is lowered, fan rotation is increased by 100rpm when fan setting is AUTO, and horizontal louver (H-louver) is turned downward when the louver setting is AUTO. If a person's activity decreases, it is returned to original state.

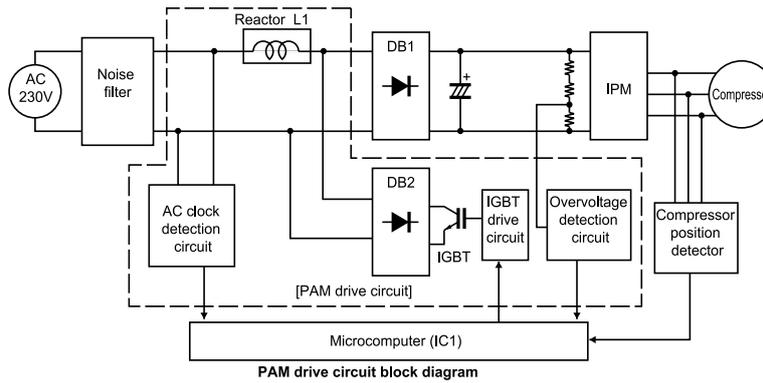
Setting temperature is corrected lower by the amount of human activity as following.

temperature correction table		temperature correction degree		
		activity weak	activity mid	activity strong
room temperature(°C)	29/30	1	1.75	2.5
	27/28	1	1.5	2
	25/26	0.5	1	1.5
	23/24	0.25	0.75	1.25
	17~22	0.25	0.5	0.75
	16	0	0	0

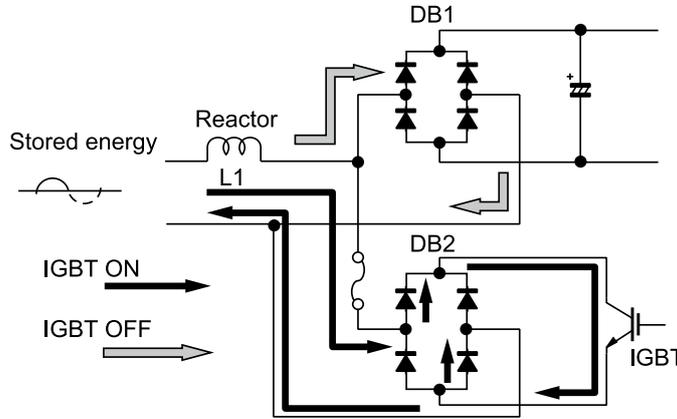
[2] PAM Circuit

1. PAM (Pulse Amplitude Modulation)

The PAM circuit varies the compressor drive voltage. The IGBT shown in the block diagram charges the energy (electromotive force) generated by the reactor to the electrolytic capacitor for the inverter by turning ON and OFF.

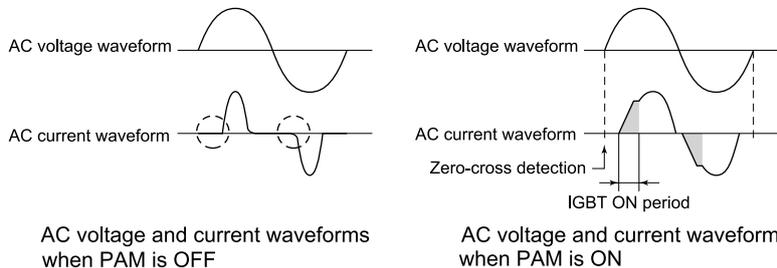


When the IGBT is ON, an electric current flows to the IGBT via the reactor (L1) and diode bridge (DB2). When the IGBT turns OFF, the energy stored while the IGBT was ON is charged to the voltage capacitor via the diode bridge (DB1). As such, by varying the ON/OFF duty of the IGBT, the output voltage is varied.

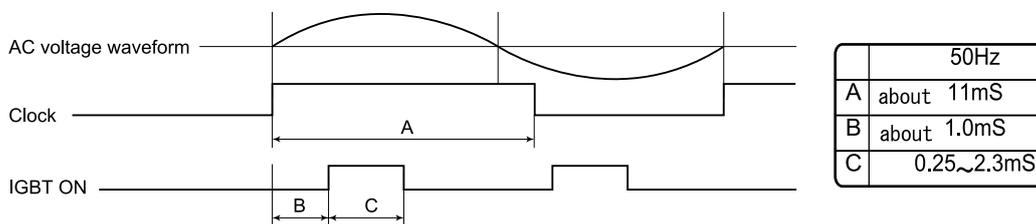


2. High power factor control circuit

This circuit brings the operating current waveform closer to the waveform of commercial power supply voltage to maintain a high power factor. Because of the capacitor input, when the PAM circuit is OFF, the phase of the current waveform deviates from the voltage waveform as shown below. To prevent this deviation, a current is supplied during the periods indicated by "t₁" in the diagram. To determine the length of period to supply a current, the zero-cross timing of the AC input voltage is input to the microcomputer via the clock circuit. The power source frequency is also determined at the same time. The IGBT turns ON after the time length determined by the zero-cross point to supply a current to the IGBT via the reactor. This brings the current waveform closer to the voltage waveform in phase. As described above, the ON/OFF operation of the IGBT controls the increase/decrease of the compressor power supply voltage (DC voltage) to improve the compressor efficiency and maintain a high power factor by keeping the current phase closer to that of the supply voltage.



1) Detailed explanation of PAM drive circuit sequence



2) AC clock (zero-cross) judgment

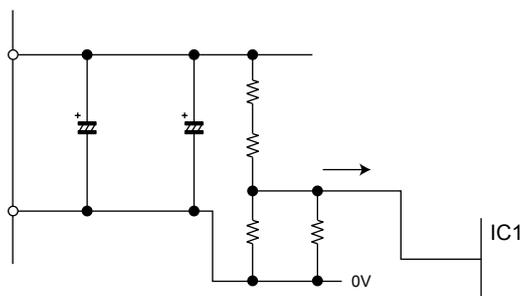
- The clock circuit determines the time from one rising point of the clock waveform to the next rising point. The detected clock waveform is used to judge the power source frequency (50Hz).
- The zero-cross of the AC voltage is judged as the rising of the clock waveform, as shown in the diagram above.

3) IGBT ON start time (delay time B)

- Based on the zero-cross of the AC voltage, the IGBT turns ON after a delay time set according to the power source frequency.

4) IGBT ON time (C)

- After the above delay time, the IGBT turns ON to supply a current to the reactor.
- The ON time of the IGBT determines the amount of energy (level of DC voltage rise) supplied to the reactor. DC voltage level in each operation mode (varies depending on external load conditions)
 - Cooling operation --- 220 to 290 V
 - Heating operation --- 220 to 290 V

3.PAM protection circuit

To prevent excessive voltage of PAM output from damaging the IPM and electrolytic capacitor as well as the control printed wiring board (PWB), this circuit monitors the PAM output voltage and turns off the PAM control signal and PAM drive immediately when an abnormal voltage output is generated. At the same time, it shuts off the compressor operation.

The protection voltage level is as follows.

Details of troubleshooting procedure for PAM**1) PAM shutdown due to error**

- (1) When the DC voltage detection circuit sends a signal exceeding the specified voltage to the microcomputer DC voltage of 400 V or higher (detection circuit input voltage of about 9.2 V or higher)
 - When an error is detected
 - PAM IGBT turns OFF.
 - Compressor turns OFF.
 - All units shut down completely when the error occurs four times.
- (2) When the outdoor unit clock waveform differs from the specified value immediately before the PAM IGBT turns ON
 - When there is no clock waveform input
 - When a clock signal of other than specified power source frequency (50Hz) is input
 - When 14-1 error is detected
 - PAM IGBT does not turn ON.
 - Compressor turns OFF.
 - All units shut down completely when the error occurs four times.

2) PAM error indication

In case of error "(1)"

- An error signal is sent to the indoor unit as soon as an error is generated.
 - Malfunction No. 14-0 is indicated when the error code is called out by the indoor unit's self-diagnosis function.
- The LED on the outdoor unit flashes 14 times when an error is generated.
 - The LED continues flashing in the 14-time cycle even after the compressor stops operating.
 - The LED turns off (data is deleted from the memory) when the outdoor unit power is turned off.

In case of error "(2)"

- An error signal is sent to the indoor unit as soon as an error is judged.
 - Malfunction No. 14-1 is indicated when the error code is called out by the indoor unit's self-diagnosis function.
- The LED on the outdoor unit flashes 14 times when an error is judged.
 - The LED continues flashing in the 14-time cycle even after the compressor stops operating.
 - The LED turns off (data is deleted from the memory) when the outdoor unit power is turned off.
- Check items
 - Clock circuit check
 - PAM IGBT check

[3] IPM Drive Circuit

The IPM is used for compressor drive. The power supply for the IPM drive, the shunt resistance for over current detection, etc., are provided outside the IPM (control PWB).

1. IPM drive power supply circuit

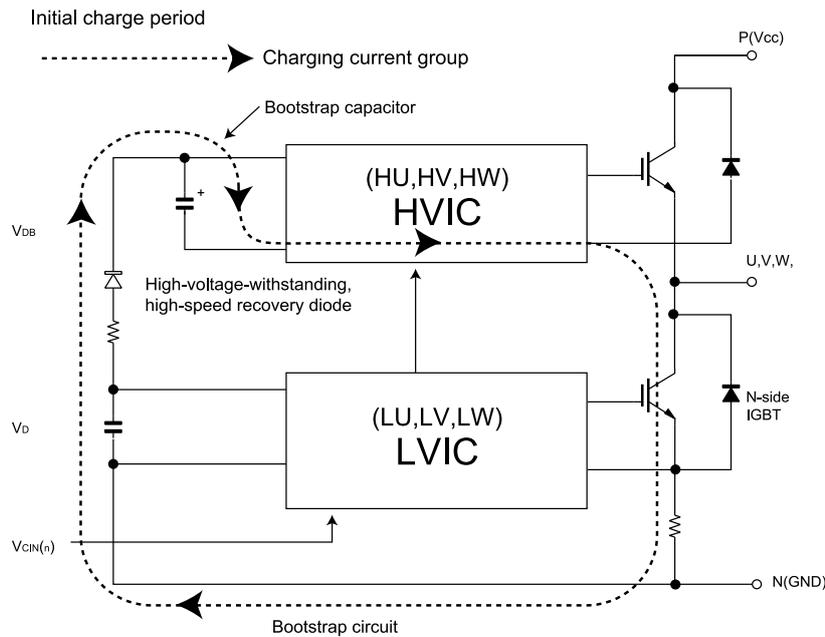
The power supply for the upper-phase IGBT (HU, HV, HW) drive employs a bootstrap system, and provides power to the upper-phase IC. The 15-V power supply for the lower-phase IC is provided by the control printed wiring board (PWB).

1.1. Brief explanation of bootstrap system (single power drive system)

To supply power to the upper-phase IC, the microcomputer (IC1) turns ON the lower-phase IGBT (LU, LV, LW).

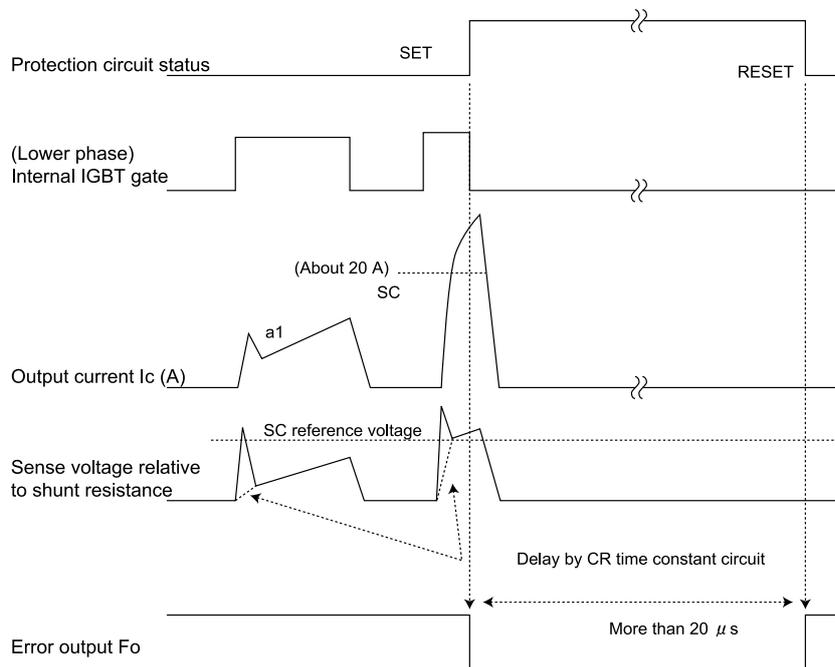
This results in a charging current that flows to the electrolytic capacitor of each upper-phase IC input and charges the bootstrap capacitor with a 15V current.

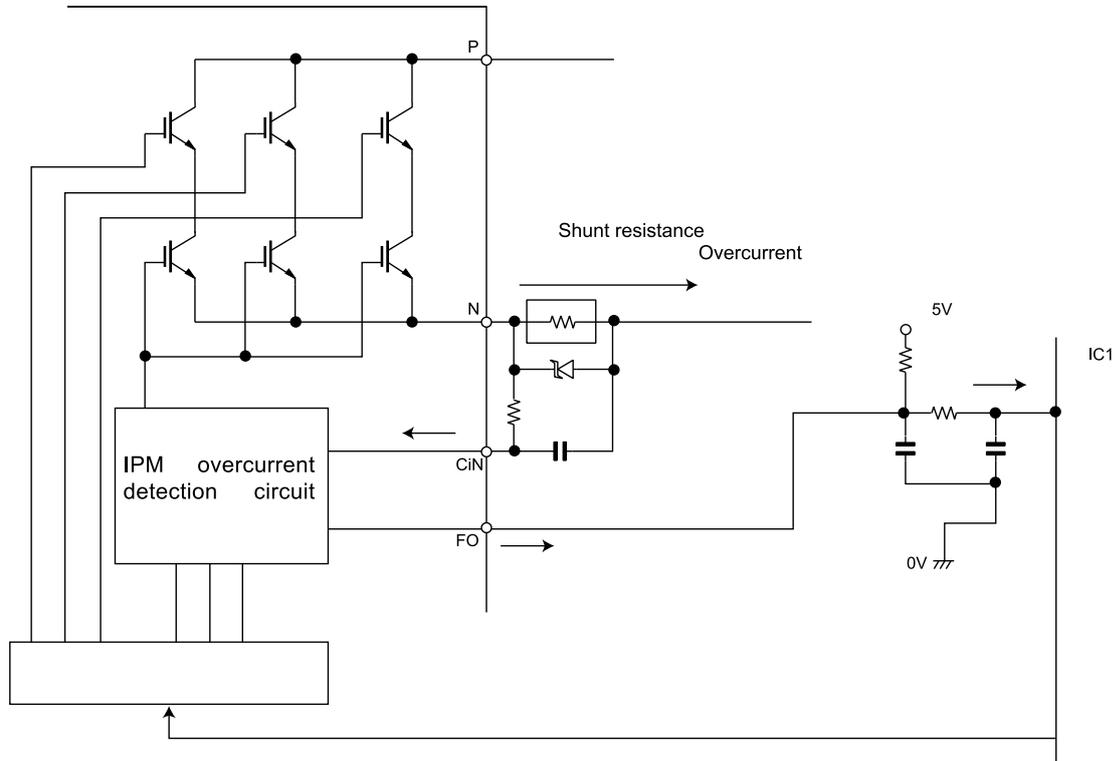
The power supply for the subsequent stages is charged while the lower-phase IGBT is ON in ordinary compressor drive control.



1.2 DC over current detection circuit

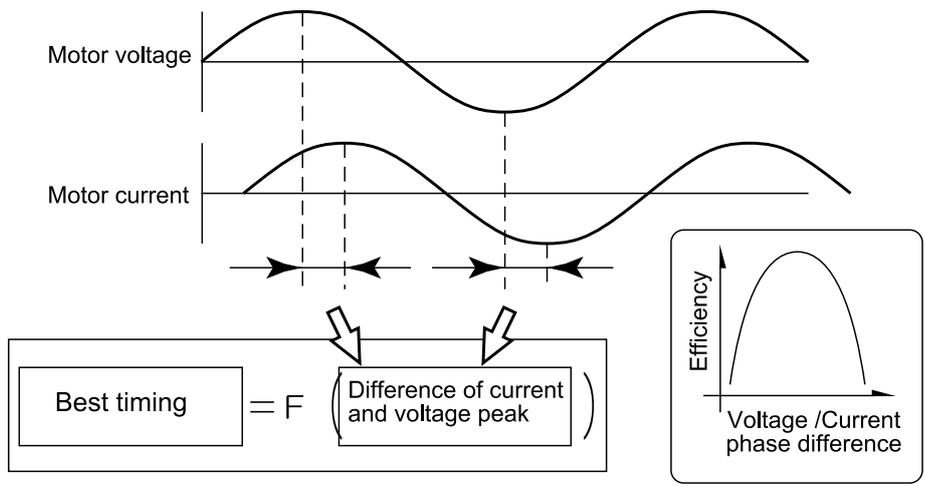
When a current of about 20 A or higher flows through the shunt resistance on the control printed wiring board (PWB), the voltage at this resistance is input to IPM CIN pin (15). Then, the gate voltage of the lower-phase IGBT (LU, LV, LW) inside the IPM turns OFF to cut off the over current. At the same time, an L output of more than $20\mu s$ is generated from IPM from pin (14), and this results in an L input to over current detection input pin (45) of the microcomputer (IC1) and turns OFF the PWM signal output (IC1 pins (37) through (39) and pins (42) through (44)) to the IGBT gate.





[4] 180deg. Energizing Control

This is the control system to moderate the speed by the current phase difference for higher efficiency and lower noise of the compressor. The current phase difference control is the control system paid attention to the interrelation between efficiency and phase gap generated by the applied voltage of motor and current in the coil of motor as shown in the figure below.



Concept chart of the current phase difference control

This control is the forced magnetization system independent of the location of rotor, detecting the phase difference between driving voltage phase and line current phase flowing in motor coil, and controls the modulation rate data to get the phase difference at the best efficiency.

CHAPTER 4. FUNCTION AND OPERATION OF PROTECTIVE PROCEDURES

[1] PROTECTION DEVICE FUNCTIONS AND OPERATIONS

* These models have following thermistors

INDOOR UNIT	OUTDOOR UNIT
TH1, TH2	TH1, TH2, TH3, TH4, TH5

The errors for the thermistors that are not mentioned above are irrelevant.

These indoor units don't have power relay.

Function		Operation				Self-diagnosis result display	
		Description	Detection period	Reset condition	Indoor unit error display	Indoor unit	Outdoor unit
1	Indoor unit fan lock	Operation stops if there is no input of rotation pulse signal from indoor unit fan motor for 1 minute.	When indoor unit fan is in operation	Operation OFF or ON	☆ 2	Yes	None
	Indoor unit fan rotation speed error	Operation stops if rotation pulse signal from indoor unit fan indicates abnormally low speed (about 300 rpm or slower).	When indoor unit fan is in operation	Operation OFF or ON	☆ 2	Yes	None
2	2-way valve freeze prevention	Compressor stops if temperature of outdoor unit 2-way valve remains below 0°C for 10 continuous minutes during cooling or dehumidifying operation.	When in cooling or dehumidifying operation	Automatic reset when temperature of 2-way valve rises above 10°C.	None	None	Yes
3	Outdoor unit heat exchanger overheat shutdown	Operation frequency lowers if outdoor unit heat exchanger temperature exceeds about 55°C during cooling operation. Compressor stops if outdoor unit heat exchanger temperature exceeds about 55°C for 120 seconds at minimum frequency.	When in cooling or dehumidifying operation	Automatic reset after safety period (180 sec).	None	None	Yes
4	Compressor discharge overheat shutdown	Operating frequency lowers if temperature of compressor discharge thermistor (TH1) falls below about 110°C. Compressor stops if temperature of compressor discharge thermistor (TH1) remains at about 110°C (for 120 seconds in cooling operation, or 60 seconds in heating operation) at minimum frequency.	When compressor is in operation	Automatic reset after safety period (180 sec).	None	None	Yes
5	Dehumidifying operation temporary stop	Compressor stops if outside air temperature thermistor is lower than about 16°C during dehumidifying operation.	When in dehumidifying operation	Automatic reset when outside air temperature rises above 16°C.	None	None	Yes
6	DC over current error	Compressor stops if DC current of about 16 A or higher flows in IPM.	When compressor is in operation	Operation OFF or ON	Yes ☆ 3	Yes	Yes
7	AC over current error	Operating frequency lowers if outdoor AC current exceeds peak control current value. Compressor stops if compressor AC current exceeds peak control current value at minimum frequency.	When compressor is in operation	Operation OFF or ON	Yes ☆ 1	Yes	Yes
8	AC over current error in compressor OFF status	Indoor and outdoor units stop if outdoor AC current exceeds about 3 A while compressor is in non-operation status.	When compressor is in non-operation	Replacement of defective parts such as IPM	Yes ☆ 2	Yes	Yes
9	AC maximum current error	Compressor stops if outdoor AC current exceeds 17 A.	When compressor is in operation	Operation OFF or ON	Yes ☆ 2	Yes	Yes
10	AC current deficiency error	Compressor stops if operating frequency is 50 Hz or higher and compressor AC current is about 2.0 A or lower.	When compressor is in operation	Operation OFF or ON	Yes ☆ 1	Yes	Yes
11	Thermistor installation error or 4-way valve error	Compressor stops if high and low values of temperatures detected by outdoor unit heat exchanger thermistor (TH2) and 2-way valve thermistor (TH5) do not match operating cycle.	3 minutes after compressor start-up	Operation OFF or ON	Yes ☆ 1	Yes	Yes
12	Compressor high temperature error	Compressor stops if compressor discharge thermistor (TH1) exceeds about 114°C, or if there is short-circuit in TH1.	When in operation	Operation OFF or ON	Yes ☆ 1	Yes	Yes

Function		Operation				Self-diagnosis result display	
		Description	Detection period	Reset condition	Indoor unit error display	Indoor unit	Outdoor unit
13	Outdoor unit heat exchanger thermistor short-circuit error	Compressor stops if there is shortcircuit in outdoor unit heat exchanger thermistor (TH2).	At compressor startup	Operation OFF or ON	Yes ☆ 1	Yes	Yes
14	Outdoor unit outside air temperature thermistor short-circuit error	Compressor stops if there is shortcircuit in outdoor unit outside air temperature thermistor (TH3).	At compressor startup	Operation OFF or ON	Yes ☆ 1	Yes	Yes
15	Outdoor unit suction thermistor short-circuit error	Compressor stops if there is shortcircuit in outdoor unit suction thermistor (TH4).	At compressor startup	Operation OFF or ON	Yes ☆ 1	Yes	Yes
16	Outdoor unit 2-way valve thermistor short-circuit error	Compressor stops if there is shortcircuit in outdoor unit 2-way valve thermistor (TH5).	At compressor startup	Operation OFF or ON	Yes ☆ 1	Yes	Yes
17	Outdoor unit heat exchanger thermistor open-circuit error	Compressor stops if there is opencircuit in outdoor unit heat exchanger thermistor (TH2).	At compressor startup	Operation OFF or ON	Yes ☆ 1	Yes	Yes
18	Outdoor unit outside air temperature thermistor open-circuit error	Compressor stops if there is opencircuit in outdoor unit outside air temperature thermistor (TH3).	At compressor startup	Operation OFF or ON	Yes ☆ 1	Yes	Yes
19	Outdoor unit suction thermistor open-circuit error	Compressor stops if there is opencircuit in outdoor unit suction thermistor (TH4).	At compressor startup	Operation OFF or ON	Yes ☆ 1	Yes	Yes
20	Outdoor unit 2-way valve thermistor open-circuit error	Compressor stops if there is opencircuit in outdoor unit 2-way valve thermistor (TH5).	At compressor startup	Operation OFF or ON	Yes ☆ 1	Yes	Yes
21	Outdoor unit discharge thermistor open-circuit error	Compressor stops if there is opencircuit in outdoor unit discharge thermistor (TH1).	At compressor startup	Operation OFF or ON	Yes ☆ 1	Yes	Yes
22	Serial signal error	Compressor stops if outdoor unit cannot receive serial signal from indoor unit for 30 seconds.	When in operation	Reset after reception of serial signal	None	None	None
23	Compressor startup error	Compressor stops if compressor fails to start up.	At compressor startup	Operation OFF or ON	Yes ☆ 3	Yes	Yes
24	Outdoor unit DC fan error	Operation stops if there is no input of rotation pulse signal from outdoor unit fan motor for 30 seconds.	When outdoor unit fan is in operation	Operation OFF or ON	Yes ☆ 1	Yes	Yes
25	PAM over voltage error	Compressor stops if DC voltage is 400 V or higher.	When in operation	Operation OFF or ON	Yes ☆ 1	Yes	Yes
26	PAM clock error	When power source frequency cannot be determined (at startup), or when power source clock cannot be detected for 1 continuous second (at startup).	At compressor startup, when in operation	Operation OFF or ON	Yes ☆ 1	Yes	Yes
27	Outdoor unit thermal fuse blown in the Terminal board	Serial signal is lost. As a result, compressor stops if outdoor unit cannot receive serial signal from indoor unit for 30 seconds.	When in operation	Reset after reception of serial signal	None	None	None

☆ 1—The outdoor unit restarts four times before the indoor unit error is displayed (complete shutdown).

☆ 2—A single error judgment results in the display of the indoor unit error (complete shutdown).

☆ 3—The outdoor unit restarts eight times before the indoor unit error is displayed (complete shutdown).

[2] AIR CONDITIONER OPERATION IN THERMISTOR ERROR

* These models have following thermistors

INDOOR UNIT	OUTDOOR UNIT
TH1, TH2	TH1, TH2, TH3, TH4, TH5

The errors for the thermistors that are not mentioned above are irrelevant.

These indoor units don't have power relay.

These models don't have Heating operation.

1. Indoor unit

Item	Mode	Control operation	When resistance is low (temperature judged higher than actual)	Short-circuit	When resistance is high (temperature judged lower than actual)	Open-circuit
Room temperature thermistor (TH1)	Auto	Operation mode judgment	Cooling mode is activated even if room temperature is low.	Cooling mode is activated in most cases.	Heating mode is activated even if room temperature is high.	Heating mode is always activated.
	Cooling	Frequency control	Room becomes too cold.	Air to air conditioner operates in full power even when set temperature is reached.	Room does not become cool.	Compressor does not operate.
	Dehumidifying	Room temperature memory Frequency control	Normal operation.	Room temperature is stored in memory as 31.0°C, and compressor does not stop.	Normal operation.	Room temperature is stored in memory as 18.5°C, and compressor does not operate.
	Heating	Frequency control	Room does not become warm.	Hot keep status results immediately after operation starts. Frequency does not increase above 30 Hz (40 Hz).	Room becomes too warm.	Air conditioner operates in full power even when set temperature is reached.
Heat exchanger thermistor (TH2)	Cooling Dehumidifying	Freeze prevention	Indoor unit evaporator may freeze.	Indoor unit evaporator may freeze.	Compressor stops occasionally.	Compressor does not operate.
	Heating	Cold air prevention Cold	Cold air prevention deactivates too soon and cold air discharges.	Compressor operates at low speed or stops, and frequency does not increase.	Cold air prevention deactivates too slow.	Cold air prevention does not deactivate, and indoor unit fan does not rotate.

2. Outdoor unit

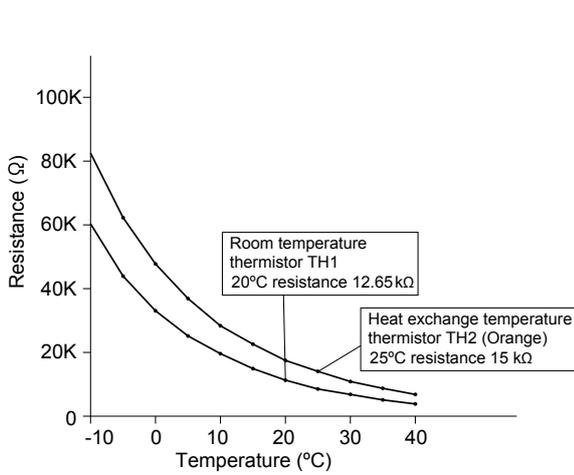
Item	Mode	Control operation	When resistance is low (temperature judged higher than actual)	Short-circuit	When resistance is high (temperature judged lower than actual)	Open-circuit
Compressor discharge thermistor (TH1)	Cooling Dehumidifying Heating	Expansion valve control and compressor protection	Compressor operates, but room does not become cool or warm (expansion valve is open).	Compressor high temperature error indication.	Layer short-circuit or open-circuit may result in compressor in normal operation.	Outdoor unit thermistor open-circuit error indication.
Heat exchanger thermistor (TH2)	Cooling Dehumidifying	Outdoor unit heat exchanger over-heat prevention	Compressor operates at low speed or stops.	Outdoor unit thermistor short-circuit error indication.	Normal operation.	Outdoor unit thermistor open-circuit error indication.
	Heating	Expansion valve control Defrosting	Defrosting operation is not activated as needed, and frost accumulates on outdoor unit (expansion valve is closed).	Outdoor unit thermistor short-circuit error indication.	Defrosting operation is activated unnecessarily, and room does not become warm (expansion valve is open).	Outdoor unit thermistor open-circuit error indication.

Item	Mode	Control operation	When resistance is low (temperature judged higher than actual)	Short-circuit	When resistance is high (temperature judged lower than actual)	Open-circuit
Outside air temperature thermistor (TH3)	Auto	Operation mode judgment	Cooling mode is activated even if room temperature is low.	Outdoor unit thermistor short-circuit error indication.	Heating mode is activated even if room temperature is high.	Outdoor unit thermistor open-circuit error indication.
	Cooling Dehumidifying	Operation not affected	Normal operation.	Outdoor unit thermistor short-circuit error indication.	Normal operation.	Outdoor unit thermistor open-circuit error indication.
	Heating	Rating control Defrosting	Defrosting operation is activated unnecessarily.	Outdoor unit thermistor short-circuit error indication.	Defrosting operation is not activated, and frost accumulates on outdoor unit.	Outdoor unit thermistor open-circuit error indication.
Suction pipe thermistor (TH4)	Cooling Dehumidifying	Expansion valve control	Compressor operates, but room does not become cool (expansion valve is open).	Outdoor unit thermistor short-circuit error indication.	Frost accumulates on evaporator inlet section, and room does not become cool (expansion valve is closed).	Outdoor unit thermistor open-circuit error indication.
	Heating	Expansion valve control	Compressor operates, but room does not become warm (expansion valve is open).	Outdoor unit thermistor short-circuit error indication.	Frost accumulates on expansion valve outlet section, and room does not become warm (expansion valve is closed).	Outdoor unit thermistor open-circuit error indication.
2-way valve thermistor (TH5)	Cooling Dehumidifying	Expansion valve control	Frost accumulates on indoor unit evaporator and room does not become cool (expansion valve is closed).	Outdoor unit thermistor short-circuit error indication.	Compressor operates, but room does not become cool (expansion valve is open).	Outdoor unit thermistor open-circuit error indication.
	Heating	Operation not affected	Normal operation.	Outdoor unit thermistor short-circuit error indication.	Normal operation.	Outdoor unit thermistor open-circuit error indication.

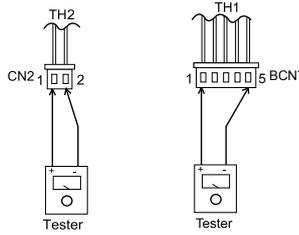
[3] THERMISTOR TEMPERATURE CHARACTERISTICS

1. Indoor unit

To measure the resistance, first remove the connector from the board.



TH1 Room temperature thermistor



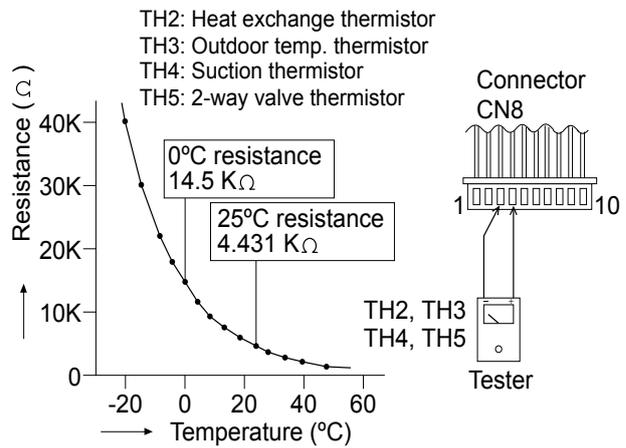
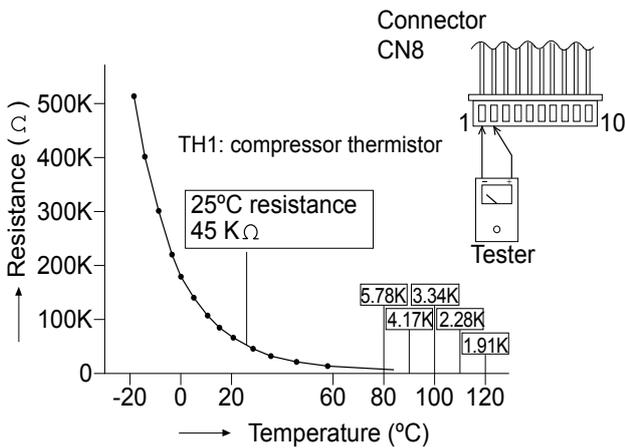
Thermistor	Symbol	Connector	Color
Room temperature	TH1 (BCN7)	① - ⑤	-
Heat exchange temperature	TH2 (CN2)	① - ②	Orange

Before measuring resistance, disconnect connectors as shown above

2. Outdoor unit

To measure the resistance, first remove the connector from the board.

Thermistor	No.	Connector	Color
Compressor thermistor	TH1	① - ②	Red
Heat exchanger pipe thermistor	TH2	③ - ④	Orange
Outdoor temp. thermistor	TH3	⑤ - ⑥	Green
Suction thermistor	TH4	⑦ - ⑧	Black
2-way valve thermistor	TH5	⑨ - ⑩	Yellow

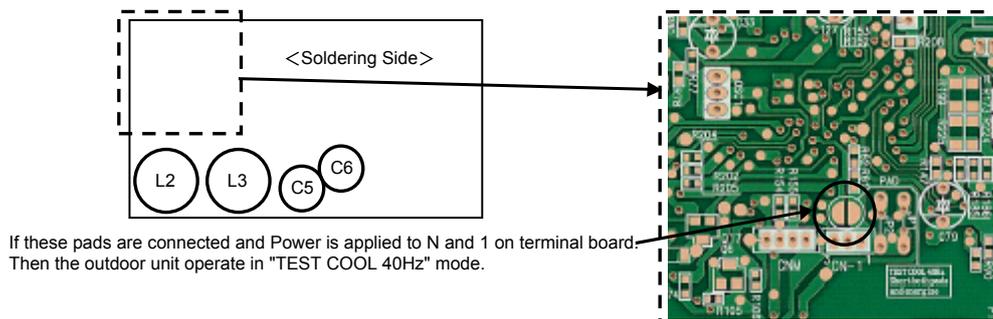


[4] HOW TO OPERATE THE OUTDOOR UNIT INDEPENDENTLY

1. Cooling in 40 Hz fixed mode

To operate the outdoor unit independently, short-circuit the sections indicated by arrows in the diagram below with an adapter, and apply 230 VAC between (1) and (N) on the terminal board of the outdoor unit. This allows the outdoor unit to be operated in cooling mode independently.

(Do not operate the outdoor unit in this condition for an extended period of time.)



[5] GENERAL TROUBLESHOOTING CHART

* These models have following thermistors

INDOOR UNIT	OUTDOOR UNIT
TH1, TH2	TH1, TH2, TH3, TH4, TH5

The errors for the thermistors that are not mentioned above are irrelevant.

These indoor units don't have power relay.

1. Indoor unit does not turn on

Main cause	Inspection method	Normal value/condition	Remedy
Cracked PWB. (Cracked pattern)	Check visually.	There should be no cracking in PWB or pattern.	Replace PWB.
Open-circuit in FU1 (250 V, 3.15 A)	Check melting of FU1.	There should be no open-circuit.	Replace PWB.

2. Indoor unit fan does not operate

Main cause	Inspection method	Normal value/condition	Remedy
Open-circuit in heat exchanger thermistor (TH2) (in heating operation)	Measure thermistor resistance (dismount for check).	Refer to THERMISTOR TEMPERATURE CHARACTERISTICS-1	Replace thermistor.
		There should be no open-circuit or faulty contact.	Replace thermistor.
Disconnected heat exchanger thermistor (TH2) (in heating operation)	Inspect connector on PWB. Check thermistor installation condition.	Thermistor should not be disconnected.	Install correctly.

3. Indoor unit fan speed does not change

Main cause	Inspection method	Normal value/condition	Remedy
Remote control not designed to allow fan speed change.	Check operation mode.	Fan speed should change except during dehumidifying operation, ventilation, light dehumidifying operation, internally normal operation	Explain to user.

4. Remote control signal is not received

Main cause	Inspection method	Normal value/condition	Remedy
Batteries at end of service life.	Measure battery voltage.	2.5 V or higher (two batteries in series connection)	Install new batteries.
Batteries installed incorrectly.	Check battery direction.	As indicated on battery compartment.	Install batteries in indicated direction.
Lighting fixture is too close, or fluorescent lamp is burning out.	Turn off light and check.	Signal should be received when light is turned off.	Change light position or install new fluorescent lamp.

Main cause	Inspection method	Normal value/condition	Remedy
Use Sevvick light (Hitachi).	Check if Sevvick light (Hitachi) is used.	Signal may not be received sometimes due to effect of Sevvick light.	Replace light or change position.
Operating position/angle are inappropriate.	Operate within range specified in manual.	Signal should be received within range specified in manual.	Explain appropriate handling to user.
Open-circuit or short-circuit in wiring of light receiving section.	Check if wires of light receiving section are caught.	Wires of light receiving section should not have any damage caused by pinching.	Replace wires of light receiving section.
Defective light receiving unit.	Check signal receiving circuit (measure voltage between terminals 5 and 9 of connector BCN8).	Tester indicator should move when signal is received.	Replace PWB.
Dew condensation on light receiving unit.	Check for water and rust.	Signal should be received within range specified in manual.	Take moisture-proof measure for lead wire outlet of light receiving section.

5.Louvers do not move

Main cause	Inspection method	Normal value/condition	Remedy
Caught in sliding section.	Operate to see if louvers are caught in place.	Louvers should operate smoothly.	Remove or correct catching section.
Disconnected connector	Inspect connectors.	Connectors or pins should not be disconnected.	Install correctly.
Contact of solder on PWB (connector section on PWB)	Check visually.	There should not be solder contact.	Correct contacting section.

6.There is noise in TV/radio

Main cause	Inspection method	Normal value/condition	Remedy
Grounding wires not connected properly.	Check grounding wire connections.	Grounding wires should be connected properly.	Connect grounding wires properly.
TV/radio is placed too close to outdoor unit.	Check distance between TV/radio and outdoor unit.	If TV/radio is placed too close, it may become affected by noise.	Move TV/radio away from outdoor unit.
Other than above.	Check for radio wave interference.		

7. Malfunction occurs

Main cause	Inspection method	Normal value/condition	Remedy
Malfunction caused by noise.	Check for radio wave interference.		

8.Compressor does not start

Main cause	Inspection method	Normal value/condition	Remedy
Erroneous inter-unit connection.	Check wiring between indoor and outdoor units.	Terminal board 1-N: 230 VAC, 50 Hz Terminal board 2: serial signal	Correct wiring.
Damaged IPM.	Check IPM continuity.	-	Replace outdoor unit PWB.
Dried-up electrolytic capacitor.	Check electrolytic capacitor.	-	Replace outdoor unit PWB.
Blown outdoor unit fuse.	Check 20-A fuse.	Fuse should not be blown.	Replace fuse. Replace outdoor unit PWB.
Power supply voltage is too low.	Measure power supply voltage during startup.	230±10 VAC, 50 Hz	Make sure that power supply voltage is 180 V or higher.
Compressor lock.	Supply current and touch compressor cover(sound absorbing material) to check if operation starts.	Compressor should start normally.	Apply external impact to compressor. Replace compressor.

9.Operation stops after a few minutes and restarts, and this process repeats

Main cause	Inspection method	Normal value/condition	Remedy
Dried-up electrolytic capacitor.	Measure 290-VDC line voltage.	250 V or higher.	Replace outdoor unit PWB.
Layer short-circuit in expansion valve coil.	Measure resistance.	46±3Ω in each phase (at 20°C)	Replace coil.

CAUTION:

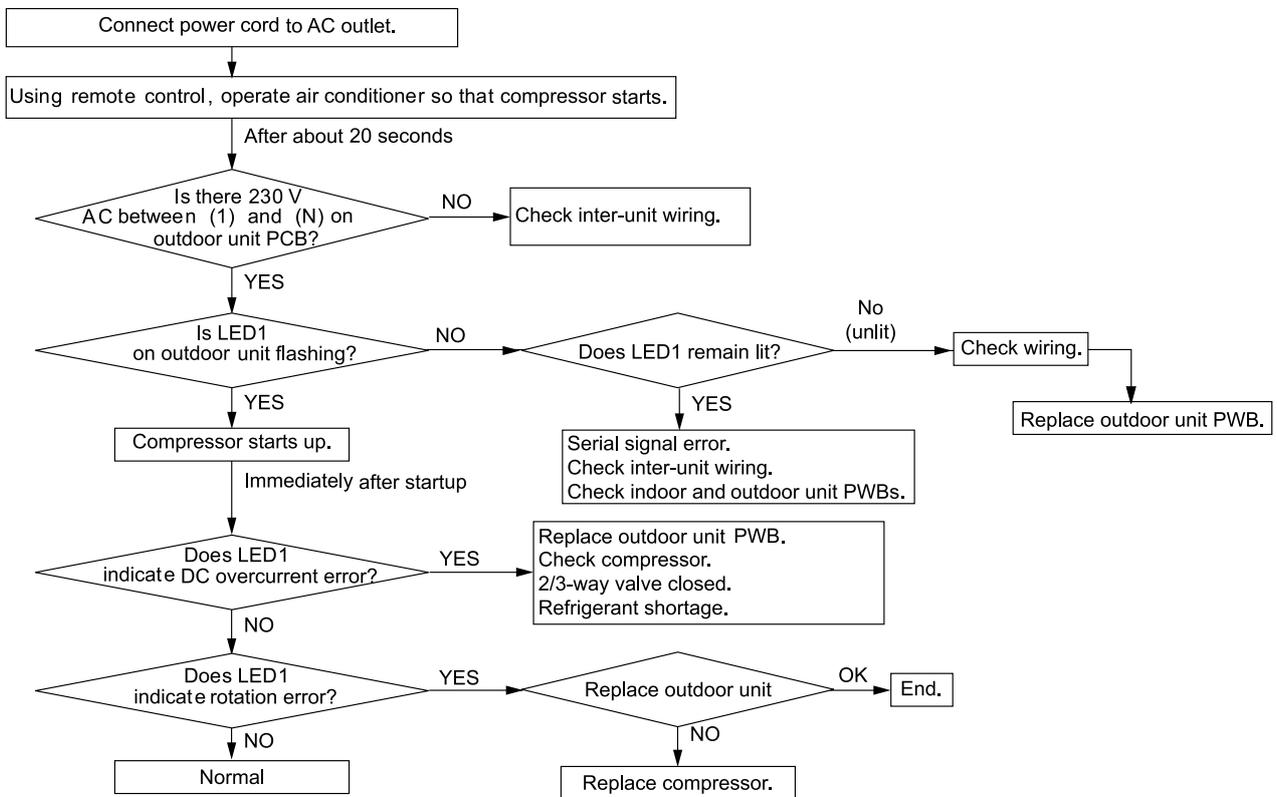
If fuse FU1/FU5 (outdoor unit control circuit board) is blown, be careful of charging voltage in inverter electrolytic capacitor C5,C6:For CLC6101i 50/65 HE/ CLC6001i 25/35 E models;C8,C9:For CLC8101i 65 HE/ CLC8001i 25 /35 models).

To discharge stored electricity, unplug the power cord and connect the plug of a soldering iron (230VAC, 30W) between the positive and negative terminals of inverter electrolytic capacitor C5,C6:For CLC6101i 50/65 HE/ CLC6001i 25/35 E models;C8,C9:For CLC8101i 65 HE/ CLC8001i 25 /35 models.

[6] MALFUNCTION (PARTS) CHECK METHOD

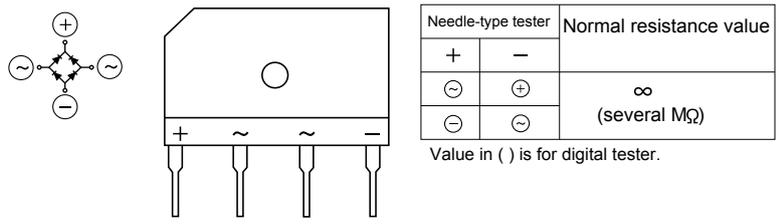
1.Procedure for determining defective outdoor unit IPM/compressor

The following flow chart shows a procedure for locating the cause of a malfunction when the compressor does not start up and a DC over current indication error occurs.



2.Diode bridge check method

Turn off the power and let the inverter electrolytic capacitor discharge completely. Then use a tester and check continuity. When using a digital tester, the (+) and (-) tester lead wires in the table must be reversed.



3. Inverter electrolytic capacitor (C5,C6:For CLC6101i 50/65 HE/ CLC6001i 25/35 E models;C8,C9:For CLC8101i 65 HE/ CLC8001i 25 /35 models) check method

Turn off the power, let the inverter electrolytic capacitor (C5,C6:For CLC6101i 50/65 HE/ CLC6001i 25/35 E models;C8,C9:For CLC8101i 65 HE/ CLC8001i 25 /35 models) discharge completely, and remove the capacitor from the control printed circuit board (PWB). First, check the case for cracks, deformation and other damages. Then, using a needle-type tester, check continuity.

Determination of normal condition		
The tester needle should move on the scale and slowly returns to the original position. The tester needle should move in the same way when polarities are reversed. (When measurement is taken with the polarities reversed, the tester needle exceeds the scale range. Therefore, let the capacitor discharge before measurement.)		

4. IPM check method

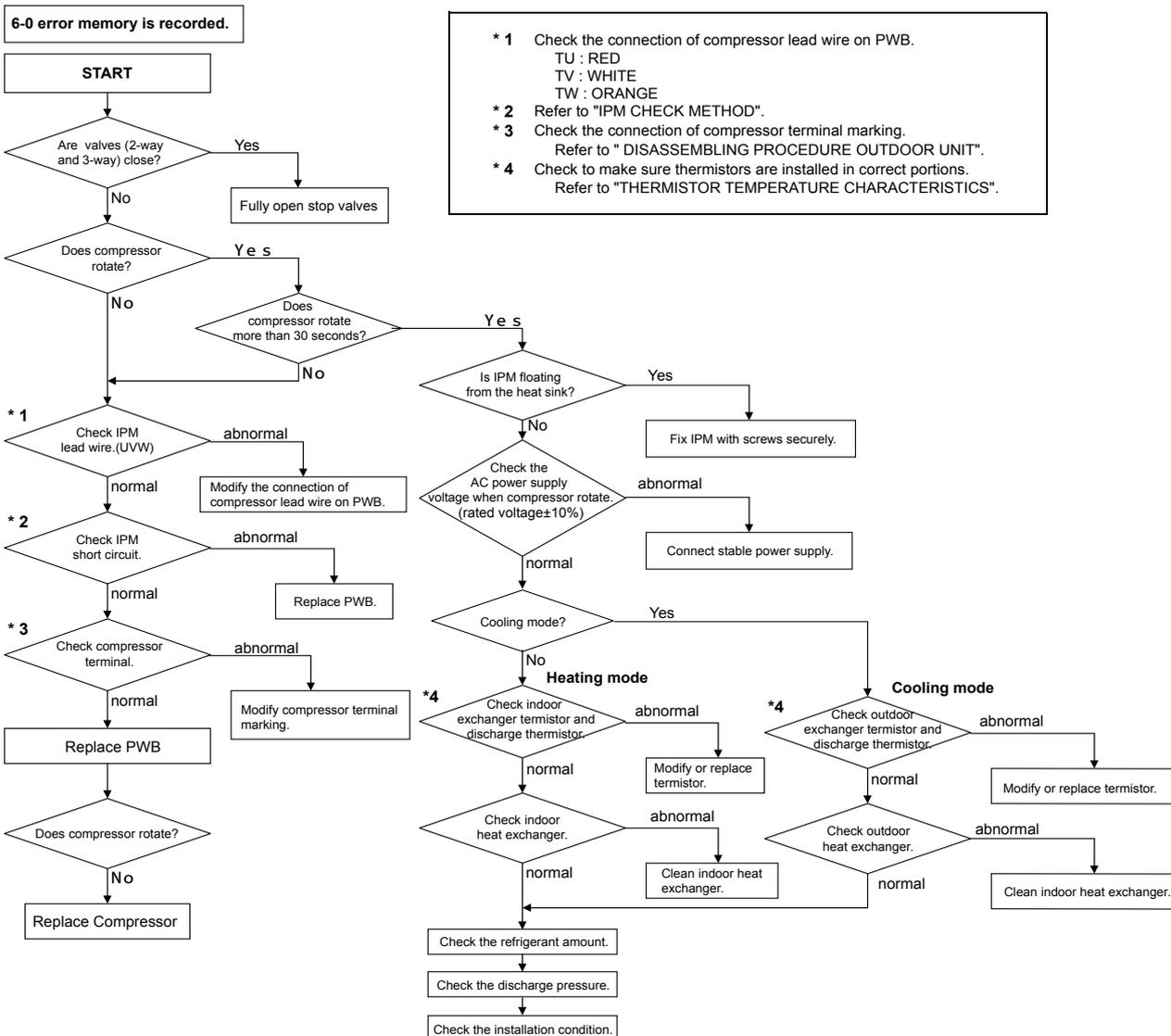
Turn off the power, let the large capacity electrolytic capacitor (C5,C6:For CLC6101i 50/65 HE/ CLC6001i 25/35 E models;C8,C9:For CLC8101i 65 HE/ CLC8001i 25 /35 models) discharge completely, and dismount the IPM. Then, using a tester, check leak current between C and E. When using a digital tester, the (+) and (-) tester lead wires in the table must be reversed.

Needle-type tester		Normal resistance value
(-)	(+)	
P	N	∞ (several MΩ)
	U	
	V	
	W	

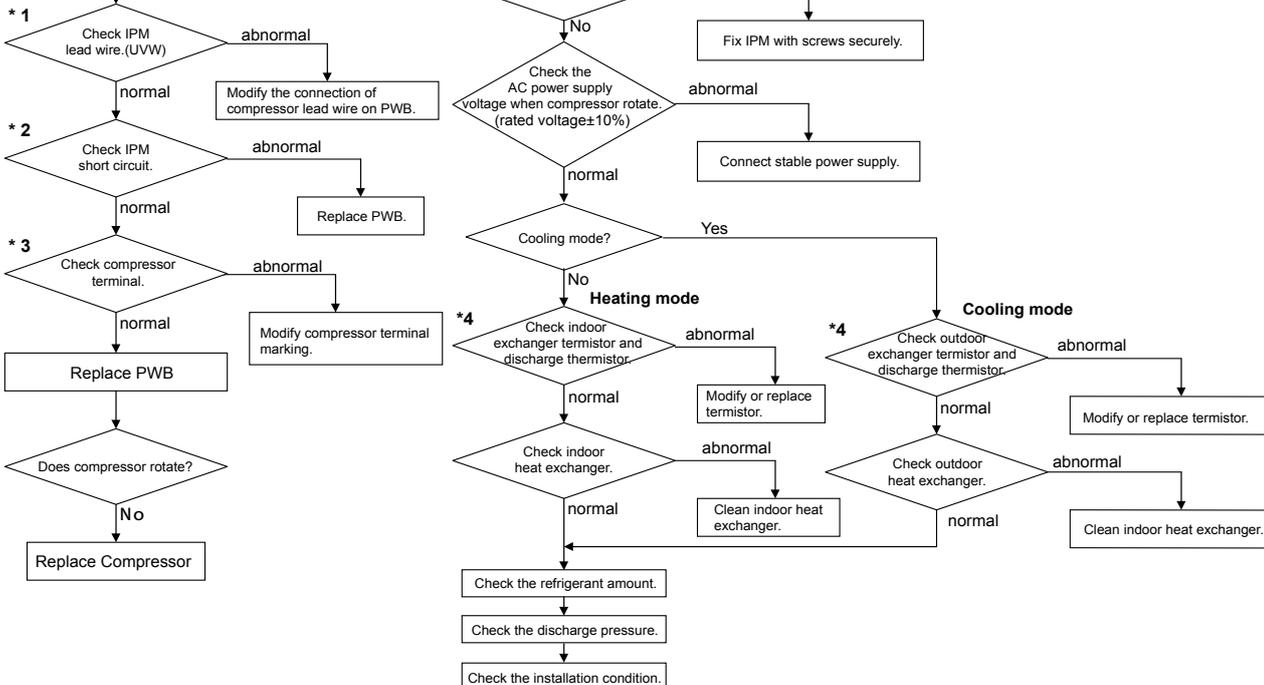
Needle-type tester		Normal resistance value
(-)	(+)	
U	N	∞ (several MΩ)
V		
W		

Values in () are for digital tester.

5. DC Over Current Error (6-0 error)



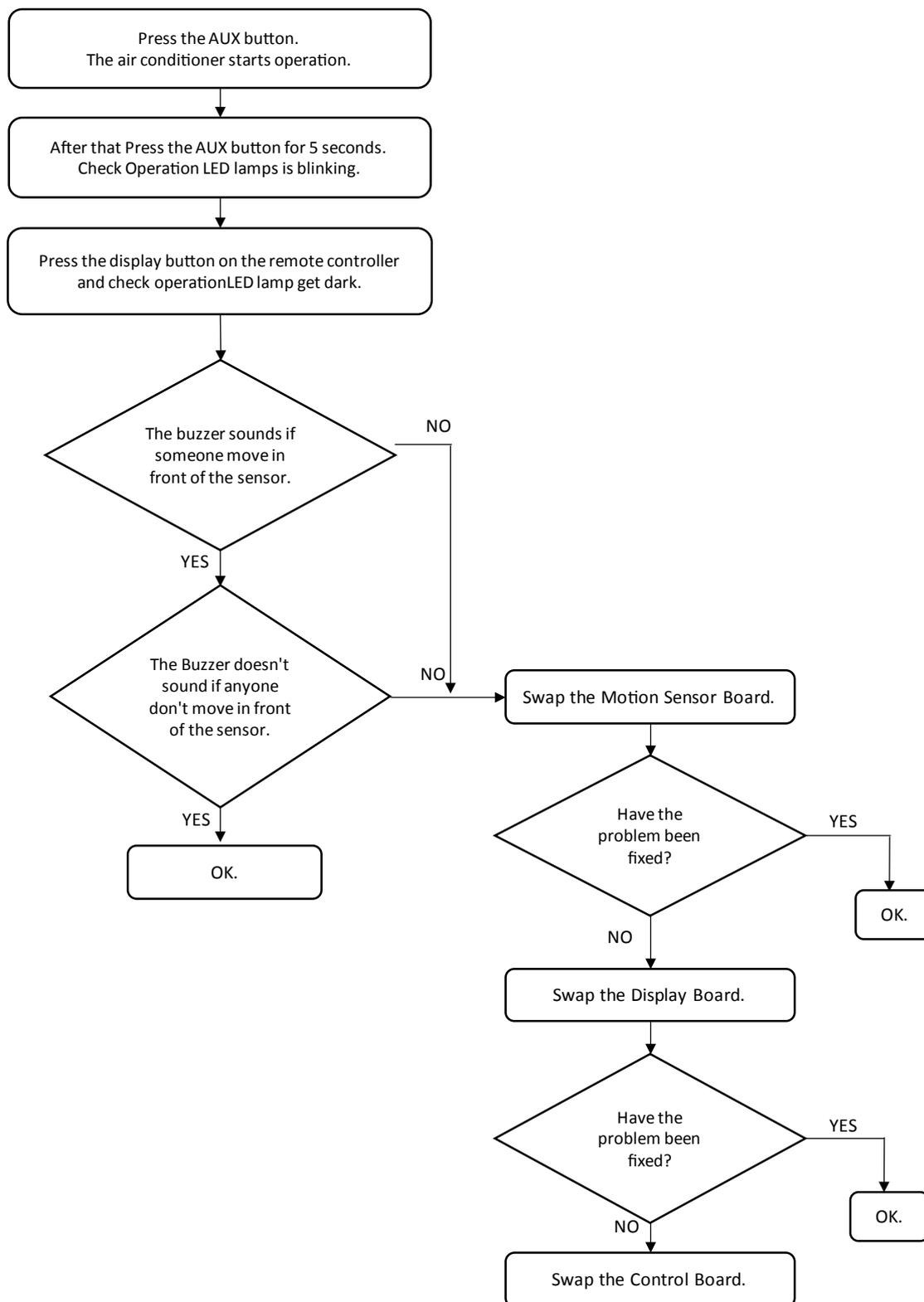
- * 1 Check the connection of compressor lead wire on PWB.
TU : RED
TV : WHITE
TW : ORANGE
- * 2 Refer to "IPM CHECK METHOD".
- * 3 Check the connection of compressor terminal marking.
Refer to "DISASSEMBLING PROCEDURE OUTDOOR UNIT".
- * 4 Check to make sure thermistors are installed in correct portions.
Refer to "THERMISTOR TEMPERATURE CHARACTERISTICS".



6.Motion sensor trouble-shooting

! CAUTION !

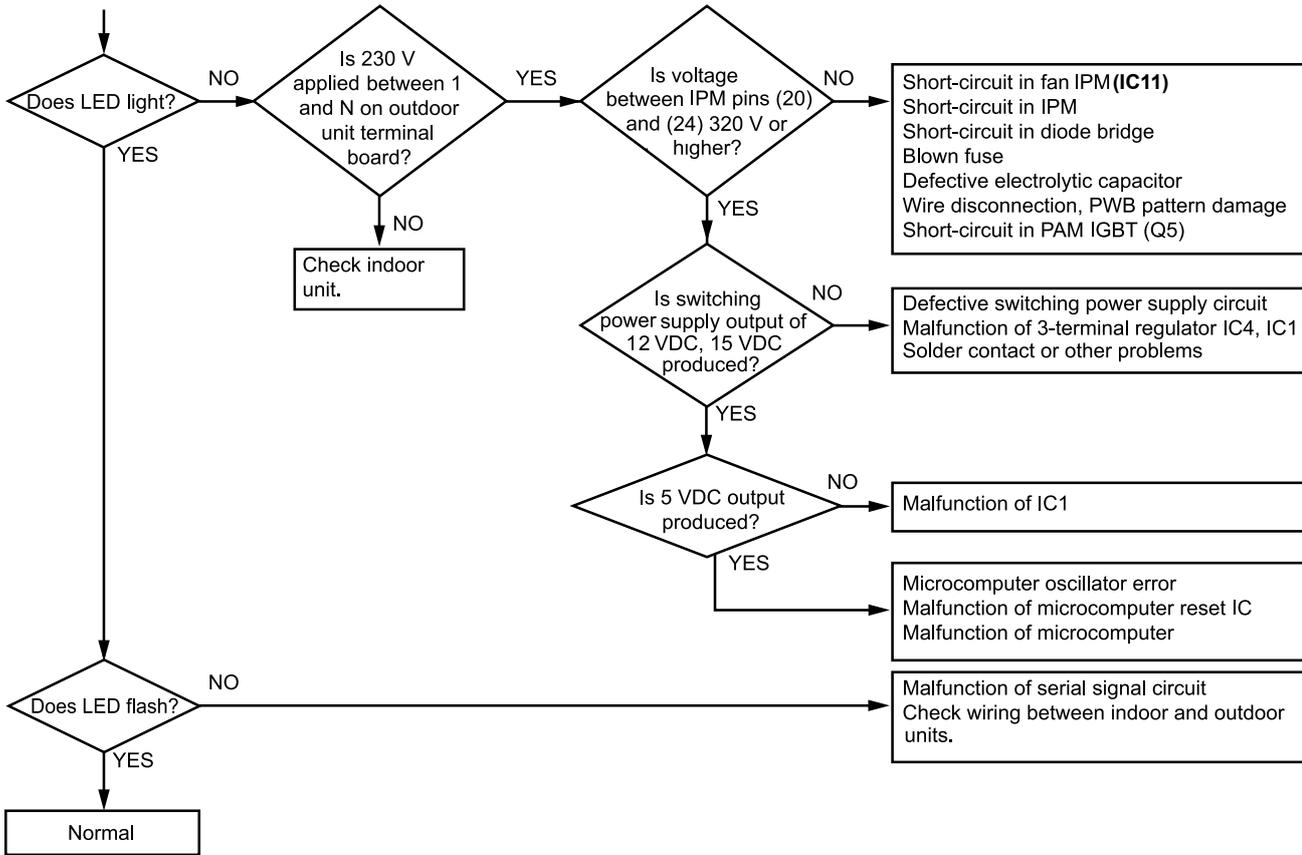
- Sometimes, the buzzer sound is not stable for 3 minutes at just after plugging the power supply.
- Sometimes, the buzzer sound lags behind movement.



[7] OUTDOOR UNIT CHECK METHOD

After repairing the outdoor unit, conduct the following inspection procedures to make sure that it has been repaired completely. Then, operate the compressor for a final operation check.

1. Troubleshooting of outdoor unit electric components



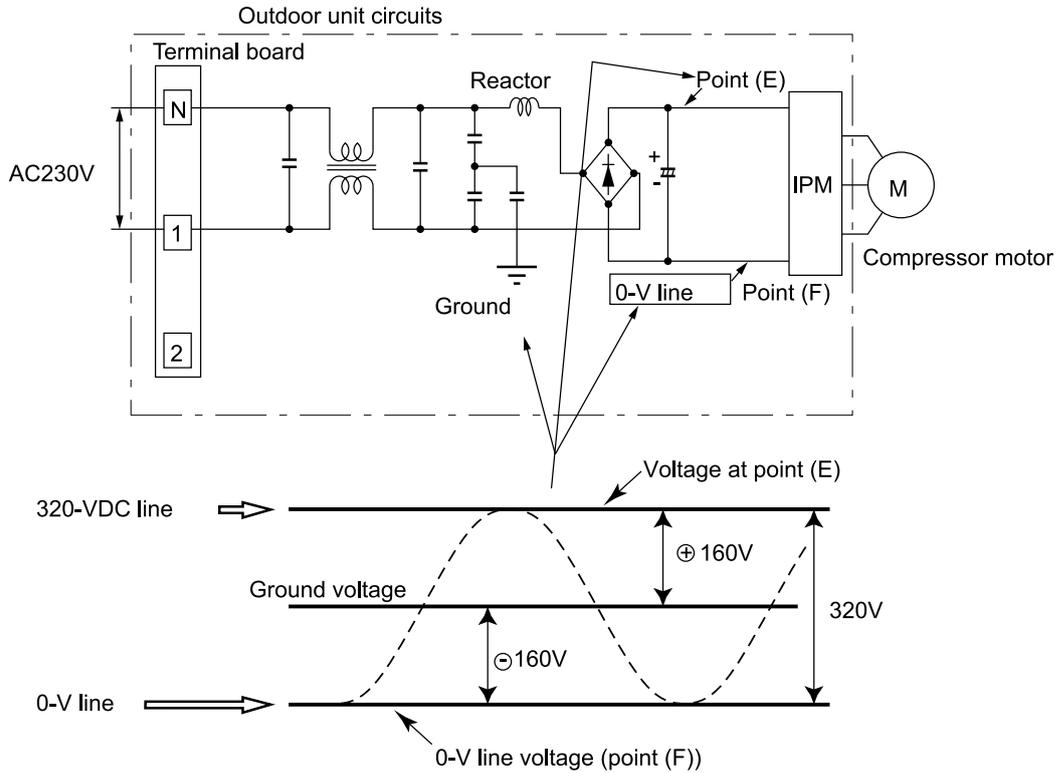
2. Caution in checking printed circuit boards (PWB)

2.1. Non-insulated control circuit

The GND terminals of the low-voltage circuits (control circuits for microcomputer and thermistors and drive circuits for expansion valve and relays) on the control printed circuit board (PWB) are connected to the compressor drive power supply (320-VDC negative terminal). Therefore, exercise utmost caution to prevent electric shock.

If a measuring instrument used for the test is grounded, its chassis (ground) has the same electric potential as the 0-V probe. Since non-insulated circuits have the following voltage potential difference from the ground, connection of the grounding wire results in a short-circuit between the 0-V line and the ground, thus allowing an excessive current to flow to the tester to cause damage.

If the sheaths of the thermistor lead wires or expansion valve lead wires inside the outdoor unit become damaged due to pinching by the front panel or other metal parts or contacting a pipe, a high voltage can flow and destroy the circuits. To prevent these problems, carefully conduct assembly work.



Reason

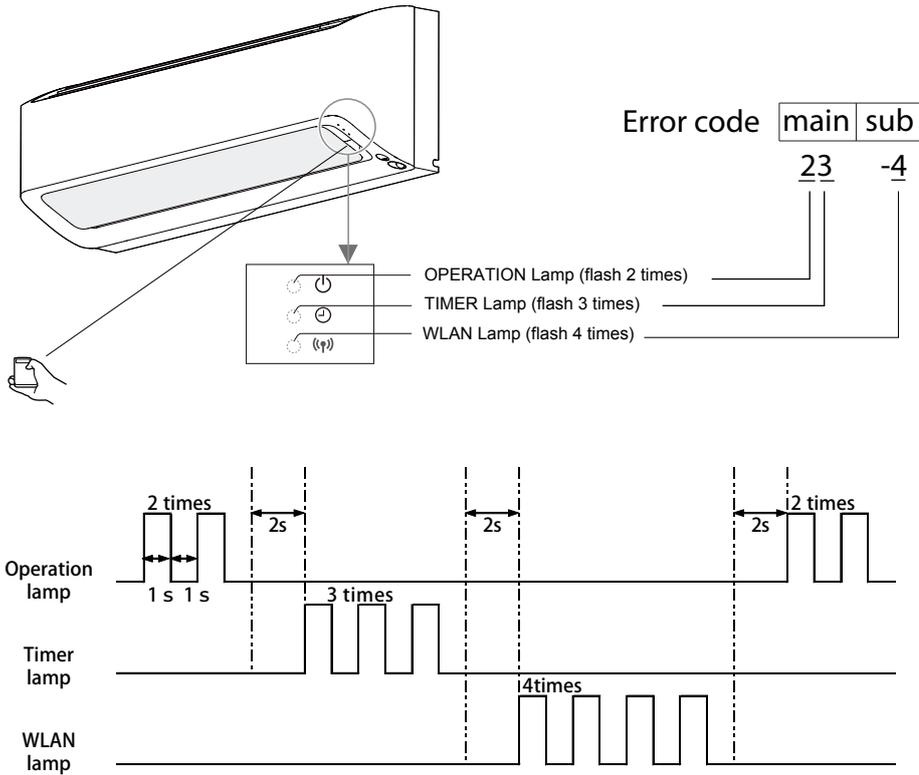
The oscilloscope (chassis ground) has the same electric potential as the 0-V probe. The entire electronic control section of the outdoor unit has a voltage potential difference from the ground as shown in the above diagram. When the oscilloscope is set up, the 0-V line and the ground voltage (ground) will be short-circuited, resulting in an excessive current flow to cause damage to the oscilloscope or indoor electric circuits.

[8] TROUBLESHOOTING GUIDE

1. Self-Diagnosis Function

1.1 Indoor unit

- At below situation, the operation lamp (Green), timer lamp (Orange) and WLAN lamp (Green) flash to indicate the information of malfunction.



1) when the unit stops all operation by itself due to malfunction, the error will indicate.

2) Press the 'STOP' button on remote control by more than 5 times when unit is not operating,

"STOP"(Bip-) → "STOP"(Bip-) → "STOP"(Bip-) → "STOP"(Bip-) → "STOP"(Bip Bip Bip), the newest error will indicate.



3) Hold the  button on remote control for a while when unit is not operating, the error will indicate.

4) Hold down the AUX button for over 5 seconds on the indoor unit when the indoor unit is not operating,

		Buzzer (Bip sound)	Indication on unit
Step 1	Hold down the AUX button for over 5 seconds on the indoor unit when the indoor unit is not operating.	Bip (when hold the button) Bip Bip Bip (after 5 seconds)	Indicate the newest error information
Step 2	Hold down the AUX button for over 5 seconds again.	Bip (when hold the button) Bip Bip (after 5 seconds)	Indeicate the second newest error information
Step 3	Hold down the AUX button for over 5 seconds again.	Bip (when hold the button) Bip Bip Bip (after 5 seconds)	Indeicate the third newest error information
Step 4	Hold down the AUX button for over 5 seconds again.	Bip (when hold the button) Bip Bip Bip Bip (after 5 seconds)	Indeicate the fourth newest error information
Step 5	Hold down the AUX button for over 10 seconds.	Bip (when hold the button) Bip- (after 10 seconds)	Delete the memory of below 4 error information.

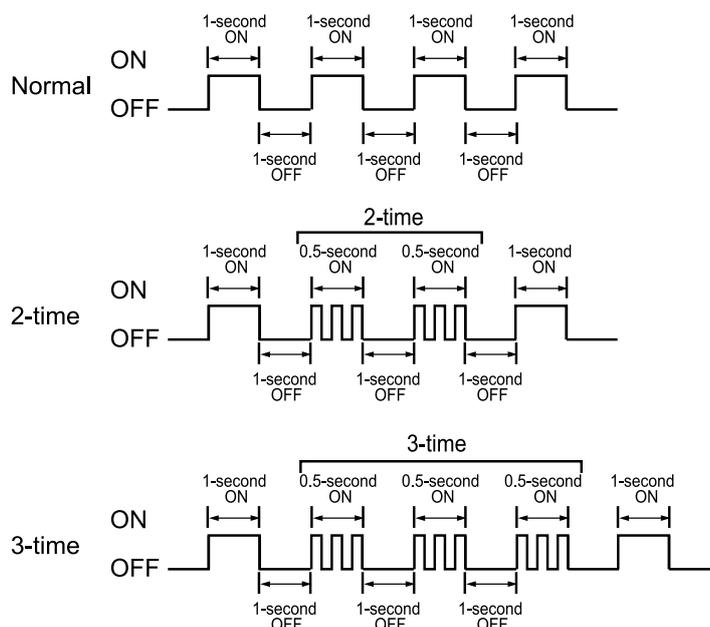
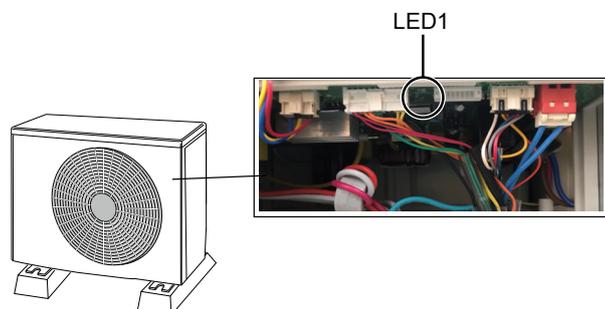
• When service finished, make sure the error information is deleted, **that will benifit to distingwish new error and old error.**

• The indication on unit will stop,

- after indicate for 3 minutes (only at the situation of 2), 3).
- after indicate for 5 minutes (only at the situation of 4).
- unit received signal of operation start.
- unit received signal of operation stop.

1.2. Outdoor unit

- The self-diagnosis is indicated the error information by flashing LED1 on the outdoor unit.
- The self-diagnosis of outdoor unit is displayed for about 3-10 minutes. Then, the LED1 returns to normal display.



2. Self-Diagnosis Function (By Remote control)

<Error code display by remote control charactor >

Example: Error **23 -4**.

STEP1

- To display the self-diagnosis, hold down the THERMOSTAT button ① for over 5 seconds on remote control when the indoor unit and remote control are off.
- The remote control will display "00".

STEP2

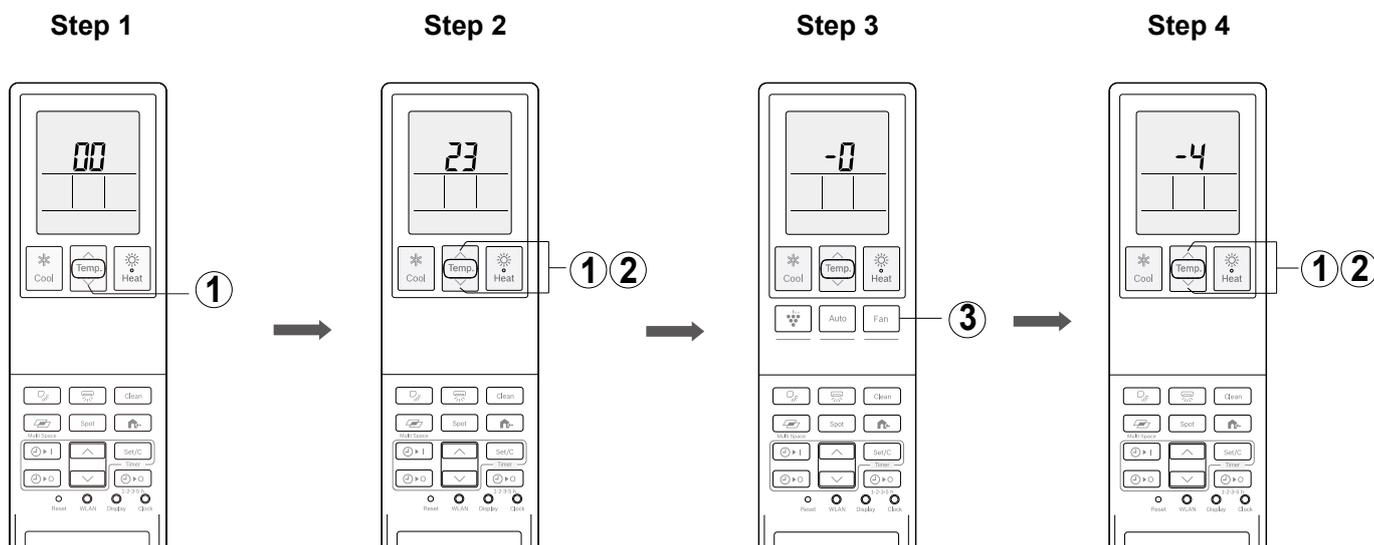
- Press the THERMOSTAT button ① and ②, remote control display will change from "00" to "31" step by step.
- Meanwhile, buzzer makes a short beep sound on every step.
- When it displays "23", the buzzer will make a long beep sound to remind you this error code "23" is main error code..

STEP3

- Press the FAN button ③ once, the remote control will display "-0".

STEP4

- then press the THERMOSTAT button ① and ②, remote control display will change from "-0" to "-7" step by step.
- Meanwhile, buzzer makes a short beep sound on every step.
- When it displays "-4", the buzzer will make a long beep sound to remind you this error code "4" is sub error code.



3.CHART FOR READING SELF-DIAGNOSIS RESULT

Problem symptom	Outdoor unit indication (LED1)	Malfunction No.*		Content of diagnosis		Check point	Action
		Main	Sub	Main	Sub		
Normal condition	Normal blinking	0	0	Normal			
Indoor and outdoor units do not operate.	1-time	1	0	Outdoor unit thermistor short-circuit	Heat exchanger thermistor short circuit error	1) Measure the resistance of the outdoor unit thermistors. 2) Check the lead wire of the outdoor unit thermistor for torn sheath and shortcircuit. 3) No abnormality found in above inspections (1) and (2).	1) Replace the outdoor unit thermistor assembly. 2) Replace the outdoor unit thermistor assembly. 3) Replace the outdoor unit control PWB assembly.
					Outdoor temperature thermistor short circuit error		
					Suction thermistor short circuit error		
					2-way valve thermistor short circuit error		
					Heatsink thermistor error		
Indoor and outdoor units do not operate.	2-time	2	0	Cycle temperature	Compressor high temperature error	1) Check the outdoor unit air outlet for blockage.	1) Ensure unobstructed air flow from the outdoor unit air outlet.
						2) Check if the power supply voltage is AC 230V at full power.	2) Connect power supply of proper voltage.
						3) Check the pipe connections for refrigerant leaks.	3) Charge the specified amount of refrigerant.
						4) Measure resistance of the outdoor unit compressor thermistor.	4) Replace the outdoor unit compressor thermistor assembly.
						5) Check the expansion valve for proper operation.	5) Replace the expansion valve coil, expansion valve or outdoor unit control PWB assembly.

Problem symptom	Outdoor unit indication (LED1)	Malfunction No.*		Content of diagnosis		Check point	Action
		Main	Sub	Main	Sub		
Indoor unit operates. Outdoor unit does not operate temporarily	2-time	2	1	Cycle temperature	Compressor discharge overheat.	1) (Temporary stop for cycle protection)	-
			2		Outdoor unit heat exchanger overheat.		-
			3		Indoor unit heat exchanger overheat.		-
							-
Indoor and outdoor units do not operate.			5		IPM high temperature error	(1)Check the outdoor unit air outlet for blockage. (2)Check the outdoor unit fan for proper rotation. (3)No abnormality found in above inspections (1) and (2).	(1)Ensure unobstructed air flow from the outdoor unit air outlet. (2)Check the outdoor unit fan motor. (3)Replace the outdoor unit control PWB.
Indoor unit operates. Outdoor unit does not operate temporarily.	3-time	3	0	Dry operation	Temporary stop due to dehumidifying operation	1) (Temporary stop for cycle protection).	-
Indoor and outdoor units do not operate.	5-time	5	0	Outdoor unit thermistor open-circuit	Heat exchanger thermistor open circuit error	1) Check connector of outdoor unit thermistor for secure installation. 2) Measure resistance of outdoor thermistors. 3) Check the lead wires of thermistors on the outdoor unit control PWB for open-circuit. 4) No abnormality found in above inspections (1) through (3).	1) Correct the installation. 2) Replace the outdoor unit thermistor assembly. 3) Replace the outdoor unit thermistor assembly. 4) Replace the outdoor unit control PWB assembly.
			1		Outdoor temperature thermistor open circuit error		
			2		Suction thermistor open circuit error		
			3		2-way valve thermistor open circuit error.		
			4		Discharge thermistor open circuit error		
			5		Heat sink thermistor open circuit error		
Indoor and outdoor units do not operate.	6-time	6	0	Outdoor unit DC Current	DC over current error	1) Go to "DC Over Current Error (6-0 error)".	
			1		IPM pin level error		

Problem symptom	Outdoor unit indication (LED1)	Malfunction No.*		Content of diagnosis		Check point	Action				
		Main	Sub	Main	Sub						
Indoor and outdoor units do not operate.	7-time	7	0	Outdoor unit AC Current	AC over current error	1) Check the outdoor unit air outlet for blockage.	1) Ensure unobstructed air flow from the outdoor unit air outlet.				
						2) Check the outdoor unit fan for proper rotation.	2) Check the outdoor unit fan motor.				
					AC current error when OFF	1) IPM continuity check.	1) Replace the outdoor IPM PWB.				
					AC maximum current error	1) Check the outdoor unit air outlet for blockage.	1) Ensure unobstructed air flow from the outdoor unit air outlet.				
			2) Check the outdoor unit fan for proper rotation.			2) Check the outdoor unit fan motor.					
			3		AC current deficiency error	1) Check if there is an open-circuit in the secondary winding of the current transformer of the outdoor unit control PWB.	1) Replace the outdoor unit control PWB assembly.				
						2) Check if the refrigerant volume is abnormally low.	2) Charge the specified amount of refrigerant.				
						3) Check if the refrigerant flows properly.	3) Correct refrigerant clogs. (Stop valve, pipe, expansion valve).				
			Indoor and outdoor units do not operate.		9-time	9	0	Cycle temperature	Thermistor installation error or 4-way valve error.	1)Check the thermistor (heat exchanger) and (2-way valve) are installed in correct positions.	1)Correct the installation.
										2)Check resistance of thermistors (heat exchanger and 2-way valve).	2)Charge the specified amount of refrigerant.
										3)Check the 4-way valve for proper operation.	3)Replace the 4- way valve.
	4)No abnormality found in above inspections (1), through(3).	4)Replace the outdoor unit control PWB assembly.									
Indoor and outdoor units do not operate.			4	4 way valve error or Gas leak error.	1) Check the indoor/ outdoor heat exchanger thermistors are installed in correct positions.	1) Correct the installation.					
					2) Check if the refrigerant volume is abnormally low.	2) Change the specified amount of refrigerant.					
					3) Check the 4-way valve for proper operation.	3) Replace the 4-way valve.					
Indoor and outdoor units do not operate.	10-time	10	2	EEPROM error	CPU(outdoor) RAM data error	-	1) Replace the outdoor unit control PWB assembly.				
			3		CPU error	-					

Problem symptom	Outdoor unit indication (LED1)	Malfunction No.*		Content of diagnosis		Check point	Action
		Main	Sub	Main	Sub		
Indoor and outdoor units do not operate.	11-time	11	1	Outdoor unit DC fan	Outdoor unit DC fan driver IC error	1) Check if the fan IPM terminal resistance values are uniform.	1) Replace the outdoor unit control PWB assembly.
						2) Outdoor unit fan motor continuity check.	2) Replace the outdoor unit fan.
			2	Outdoor unit DC fan lock error	1) Check if the fan IPM terminal resistance values are uniform.	1) Replace the outdoor unit control PWB assembly.	
					2) (1): Normal	2) Replace the outdoor unit fan.	
			3	Outdoor unit DC fan	Detection error of DC fan negative rotation before compressor is driven	1) (Temporary stop for DC fan circuit protection)	-
			4		Detection error of inverter current for DC fan	-	1) Replace the outdoor unit control PWB assembly.
			5	Outdoor unit DC fan open connector error	1) Check connector CN3 of the outdoor unit DC fan motor for secure installation.	1) Correct the installation.	
					2) No abnormality found in above inspection (1).	2) Replace the outdoor unit control PWB assembly.	

Problem symptom	Outdoor unit indication (LED1)	Malfunction No.*		Content of diagnosis		Check point	Action
		Main	Sub	Main	Sub		
Indoor and outdoor units do not operate.	13-time	13	0	DC compressor	Compressor startup error	1) Check the colors (red, white, orange) of the compressor cords for proper connection. (PWB side, compressor side) 2) Check if the IPM terminal resistance values are uniform.(Refer to IPM check method.) 3) Check if outdoor main relay (MRY1) turns on and DC voltage DB1(⊕ - ⊖)has become DC290-330V. 4) No abnormality found in above inspections (1) through (3).	1) Correct the installation. (U: Red, V: White, W: Orange) 2) Replace the outdoor unit control PWB assembly. 3) Replace the outdoor unit control PWB assembly. 4) Replace the compressor.
			2		Compressor rotation error. (at 180° energizing)		
Indoor and outdoor units do not operate.	14-time	14	0	Outdoor unit PAM	PAM over voltage error	1) Check the AC power supply voltage for fluctuation.	1) Correct the installation.
						2) No abnormality found in above inspection.	2) Replace the PWB assembly.
			1	PAM clock error	1) Check the PAM clock for proper input.	1) Replace the outdoor unit control PWB assembly.	
				2	Abnormal power supply voltage / DC low voltage.	1) Check the AC power supply voltage for fluctuation.	1) Correct the installation.
	2) No abnormality found in above inspection.	2) Replace the PWB assembly.					

Problem symptom	Outdoor unit indication (LED1)	Malfunction No.*		Content of diagnosis		Check point	Action
		Main	Sub	Main	Sub		
Indoor unit operates. Outdoor unit does not operate.	Lighting or OFF	17	0	Wiring between units	Serial opencircuit	1) Check the wires between units.	1) Connect stable power supply. Correct the wiring.
						2) Check voltage between N and 1 the indoor/outdoor unit terminal boards.	2) Replace the outdoor unit control PWB assembly.
						3) Check the outdoor unit fuse.	3) Replace the fuse/ outdoor unit control PWB assembly.
						4) Check voltages of 15V-0V,12V-0V and 5V-0V on the PWB. 15V-0V :15V 12V-0V :12V 5V-0V :5V Check resistance between IPM terminals.	4) Replace the outdoor unit control PWB assembly.
						5) No abnormality found in above inspections (1) through (4).	5) Replace the outdoor unit control PWB board.
Indoor unit operates. Outdoor unit does not operate.	Lighting or OFF	18	0	Wiring between units	Serial short-circuit	1) Check the wiring between units.	1) Correct the wiring.
Indoor and outdoor units do not operate.			1			Serial erroneous wiring	1) Check the wiring between units.
Indoor and outdoor units do not operate.	Normal blinking or OFF	19	0	Indoor unit fan	Indoor unit fan error	1) Check the indoor fan motor for proper rotating operation. (Check fan lock.)	1) Replace the indoor fan motor.
						2) Check the lead wire of the indoor fan motor for open-circuit.	2) Replace the indoor fan motor.
						3) Check connector of the indoor unit fan motor for secure installation	3) Correct the installation of the indoor fan motor connector.
						4) No abnormality found in above inspections (1) through (3).	4) Replace the indoor unit control PWB
Indoor and outdoor units do not operate.	Normal blinking or OFF	20	0	Indoor unit control PWB	EEPROM data error	1) (EEPROM read data error)	1) Replace the indoor unit control PWB

Problem symptom	Outdoor unit indication (LED1)	Malfunction No.*		Content of diagnosis		Check point	Action
		Main	Sub	Main	Sub		
Indoor and outdoor units operate	Normal blinking or OFF	24	0	Wireless LAN	WLAN module communication error	1) Check WLAN module and related circuit.	1) Confirm assembly. 2) Confirm WLAN module.
			1		Wireless router connection error		
Indoor and outdoor units operate	Normal blinking or OFF	26	1	Indoor unit room temperature thermistor	Indoor unit room temperature thermistor	1) Check connector of thermistor for secure installation. 2) Check the temperature properties of the thermistor.	1) Replace the thermistor.
			2	Indoor unit pipe temperature thermistor	Indoor unit pipe temperature thermistor		
			3	Indoor unit valve temperature thermistor	Indoor unit valve temperature thermistor		

4. OTHER MALFUNCTION ERROR INDICATION / BUZZER

4.1 If the LED lamp on indoor unit indicate as below when unit is not operating, the error information as below.
(not refer to 3.CHART FOR READING SELF-DIAGNOSIS RESULT)

MALFUNCTION	Lamp flashing (flash 1 second as a cycle) (The lamp not flashing show the operation mode normally.)				Error code (main) and error information
	OPERATION LAMP (GREEN)	TIMER (ORANGE)	WLAN (GREEN)	PLASMA CLUSTER (BLUE)	
Vertical louver (V-louver)					21, Vertical louver (V-louver) L/R guide not assembled well or disassembled.

4.2 If the LED lamp on indoor unit indicate when unit is operating,

MALFUNCTION	Lamp flashing (flash 1 second as a cycle) (The lamp not flashing show the operation mode normally.)				Error code (main) and error information
	OPERATION LAMP (GREEN)	TIMER (ORANGE)	WLAN (GREEN)	PLASMA CLUSTER (BLUE)	
Serial opencircuit					17, Serial opencircuit
adapter communication error (Adapter not applicable)	LED lamp flash just 5 seconds with buzzer				24, adapter communication error (Adapter not applicable) ※ Refer to [WLAN GUIDE BOOK]
PCI	Flash just 10 seconds after operation start				-- operation over 17,500 hours (※ 1)
	Flash just 1 minute after operation start				-- operation over 19,000 hours (※ 2)

※ 1 : If PLASMA CLUSTER operation overed 17,500 hours, the PLASMA CLUSTER lamp will turn off during operation. the LED lamp will flash as above when unit start PLASMA CLUSTER operation again. In this case, the PLASMA CLUSTER lamp turns off. But PLASMA CLUSTER ion is released. Other operation (e.g. Cooling and Heating) can run as usual.

※ 2 : If PLASMA CLUSTER operation overed 19,000 hours, the PLASMA CLUSTER lamp will turn off during operation. And the unit will stop releasing PLASMA CLUSTER ion. The LED lamp will flash as above when unit start PLASMA CLUSTER operation again. Other operation (e.g. Cooling and Heating) can run as usual.

4.3 Error without indication

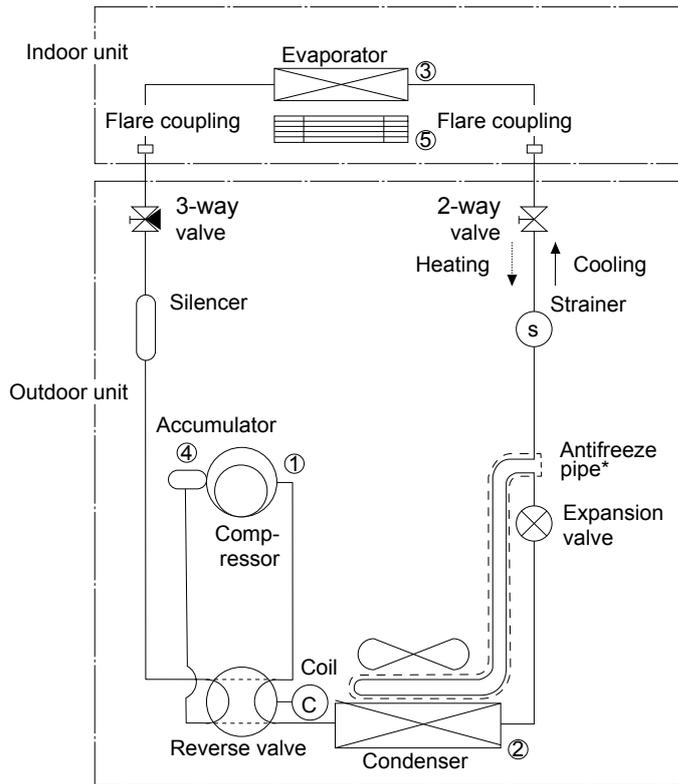
If EEPROM data has problem When power supply just connected , buzzer (Bip Bip Bip ...) will sound continuously. (LED lamp remain off.)

Malfunction indications due to erroneous wiring during air conditioner installation

	Inter-unit wiring error mode	Symptom
1	<p>Indoor unit terminals: 1, N, 2. Outdoor unit terminals: 1, N, 2. Connections: 1-1, N-N, 2-2.</p>	Malfunction diagnosis display "18-1"
2	<p>Indoor unit terminals: 1, N, 2. Outdoor unit terminals: 1, N, 2. Connections: 1-1, N-N, 2-2.</p>	Malfunction diagnosis display None (Displays "17-0" when malfunction code is called out.)
3	<p>Indoor unit terminals: 1, N, 2. Outdoor unit terminals: 1, N, 2. Connections: 1-1, N-N, 2-2.</p>	Malfunction diagnosis display None (Displays "17-0" when malfunction code is called out.)
4	<p>Indoor unit terminals: 1, N, 2. Outdoor unit terminals: 1, N, 2. Connections: 1-1, N-N, 2-2.</p>	Malfunction diagnosis display "18-1"
5	<p>Indoor unit terminals: 1, N, 2. Outdoor unit terminals: 1, N, 2. Connections: 1-1, N-N, 2-2.</p>	Malfunction diagnosis display "18-1"

CHAPTER 5. REFRIGERATION CYCLE

[1] SCHEMATIC DIAGRAM



* Only model CLC6101i-W 50 HE / CLC6101i 50 HE, CLC8101i-W 65 HE(T/S/R) have antifreeze pipe.

[2] STANDARD CONDITION

	Indoor side		Outdoor side	
	Dry-bulb Temp. (°C)	Relative Humidity (%)	Dry-bulb Temp. (°C)	Relative Humidity (%)
Cooling	27	47	35	40

[3] TEMPERATURE AT EACH PART AND PRESSURE IN 3-WAY VALVE

Model	CLC6101i-W 50 HE, CLC6101i 50 HE				CLC6101i-W 65 HE, CLC6101i 65 HE				
	Cooling		Heating		Cooling		Heating		
Mode	Max *1	Test Run *2	Max *1	Test Run *2	Max *1	Test Run *2	Max *1	Test Run *2	
Ampere(A)	3.9	3.1	6.6	2.6	5.9	3.2	9.8	2.5	
3-way valve pressure (MPaG)	1.0	1.1	3.1	2.1	0.9	1.1	3.4	2.1	
Indoor Outlet Temperature (5) (°C)	14	15	43	32	12	16	50	31	
Temperature(°C)	(1)	74	69	94	62	86	67	92	62
	(2)	39	40	2	3	41	40	1	4
	(3)	12	13	25	27	11	15	45	23
	(4)	14	16	2	4	9	16	1	4

Model	CLC8101i-W 65 HE(T/S/R), CLC8101i 65 HE				CLC6001i-W 25 E, CLC6001i 25 E				
	Cooling		Heating		Cooling		Heating		
Mode	Max *1	Test Run *2	Max *1	Test Run *2	Max *1	Test Run *2	Max *1	Test Run *2	
Ampere(A)	4.9	2.8	7.9	2.4	3.9	3.1	6.1	2.6	
3-way valve pressure (MPaG)	0.9	1.1	3.1	2.0	1.0	1.1	3.0	2.2	
Indoor Outlet Temperature (5) (°C)	13	16	46	30	14	15	42	31	
Temperature(°C)	(1)	76	62	94	60	75	71	90	64
	(2)	38	37	2	3	39	39	2	3
	(3)	12	15	30	21	12	13	32	26
	(4)	10	14	1	5	13	15	3	5

Model	CLC6001i-W 35 E, CLC6001i 35 E				CLC8001i-W 25 E(T/S/R), CLC8001i 25 E				
	Cooling		Heating		Cooling		Heating		
Mode	Max *1	Test Run *2	Max *1	Test Run *2	Max *1	Test Run *2	Max *1	Test Run *2	
Ampere(A)	6.1	3.2	7.8	2.6	3.1	3.8	5.7	2.5	
3-way valve pressure (MPaG)	0.9	1.1	3.3	2.2	1.1	1.1	2.8	2.0	
Indoor Outlet Temperature (5) (°C)	13	16	45	31	15	16	40	30	
Temperature(°C)	(1)	85	70	94	64	66	64	89	61
	(2)	40	39	2	3	37	37	2	3
	(3)	10	14	34	26	14	15	23	21
	(4)	7	16	2	5	14	15	4	5

Model	CLC8001i-W 35 E(T/S/R), CLC8001i 35 E				
	Cooling		Heating		
Mode	Max *1	Test Run *2	Max *1	Test Run *2	
Ampere(A)	4.9	2.8	7.9	2.5	
3-way valve pressure (MPaG)	0.9	1.1	3.1	2.0	
Indoor Outlet Temperature (5) (°C)	14	16	44	30	
Temperature(°C)	(1)	77	63	98	61
	(2)	38	37	2	2
	(3)	12	15	25	20
	(4)	12	15	1	5

*1 To enter cooling max, start the unit with remote control setting 16°C and high fan speed.
Check the data within 30min after start cooling.

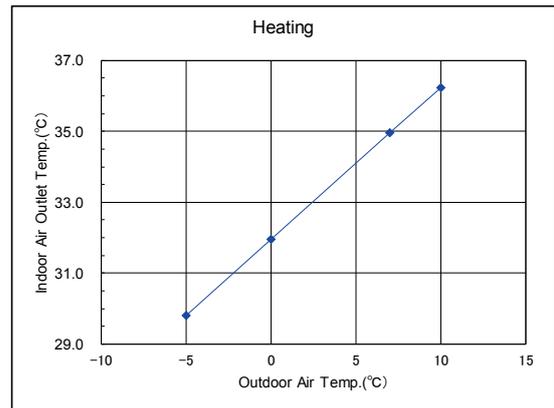
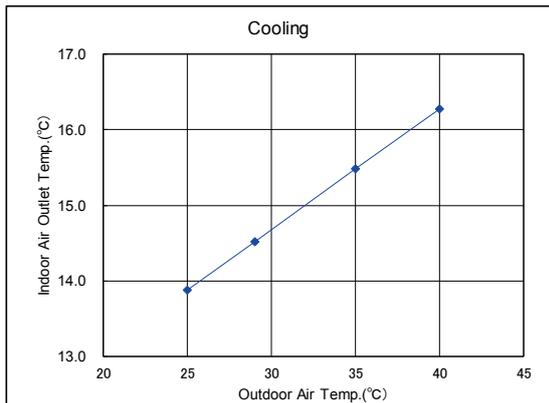
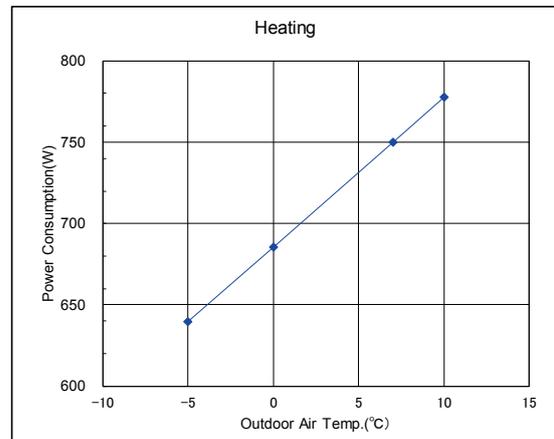
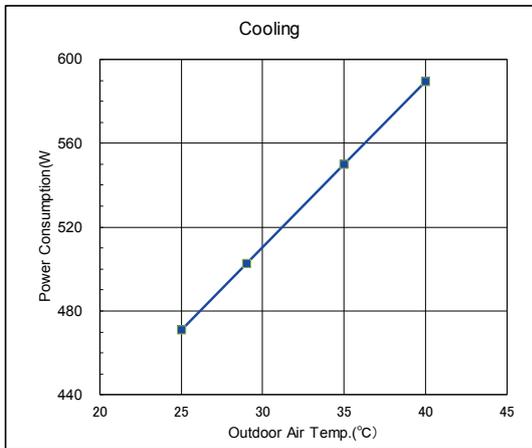
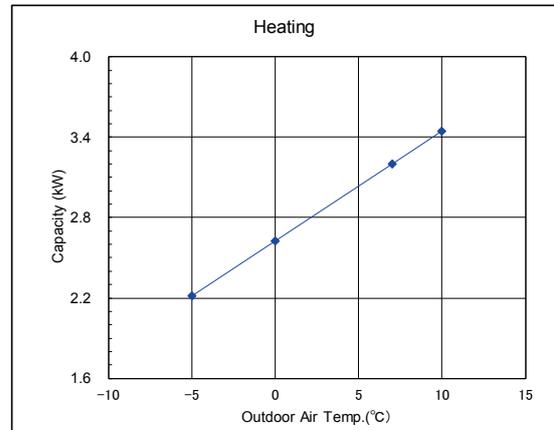
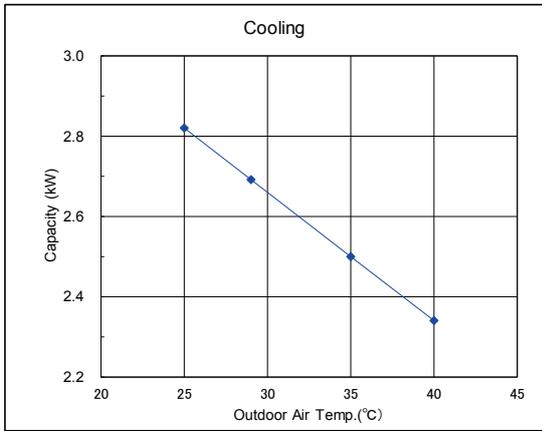
*2 Refer to installation manual for how to enter test run.

[4] PERFORMANCE CURVES

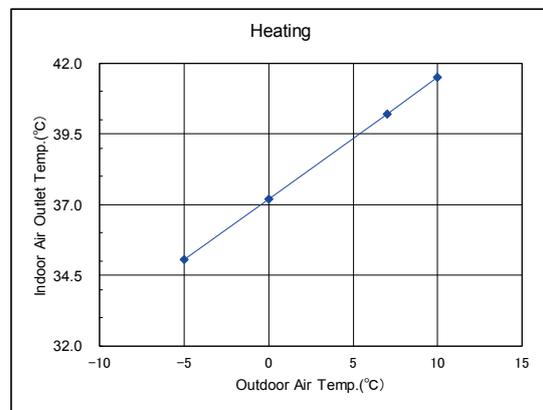
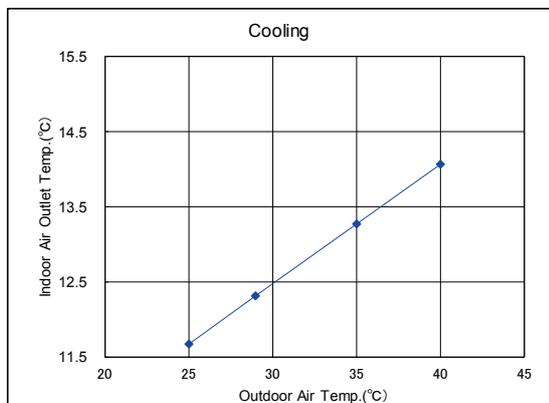
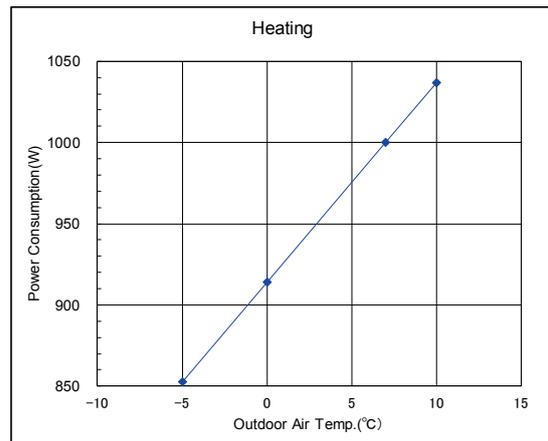
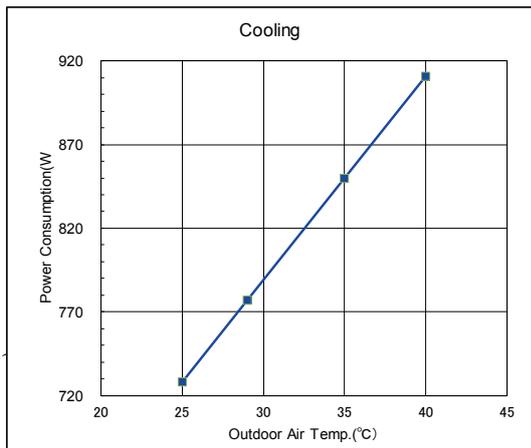
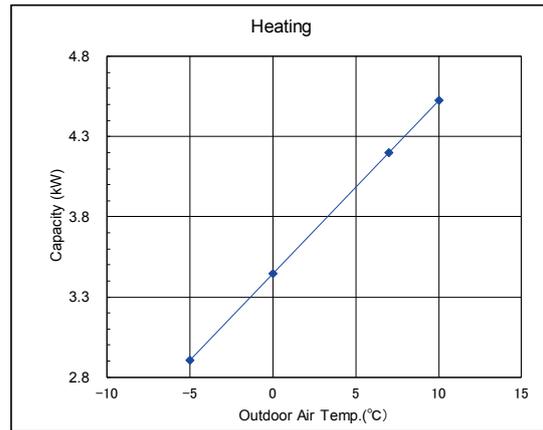
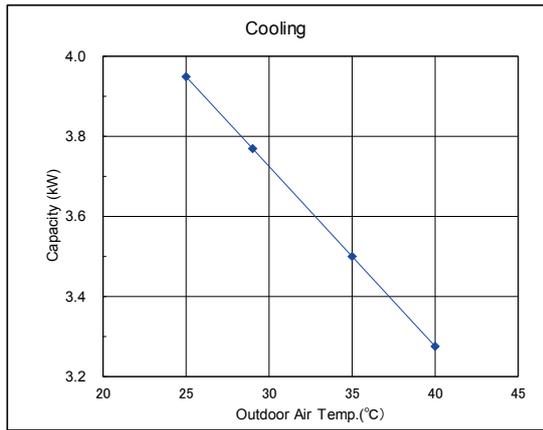
NOTE

- 1) Indoor fan speed: High
- 2) Indoor air temp.: Cooling 27°C
- 3) Power source: 230V, 50Hz

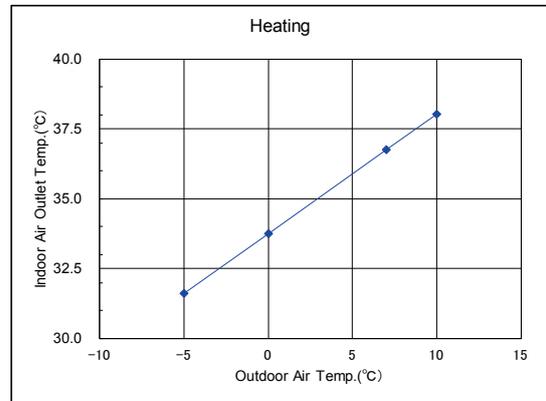
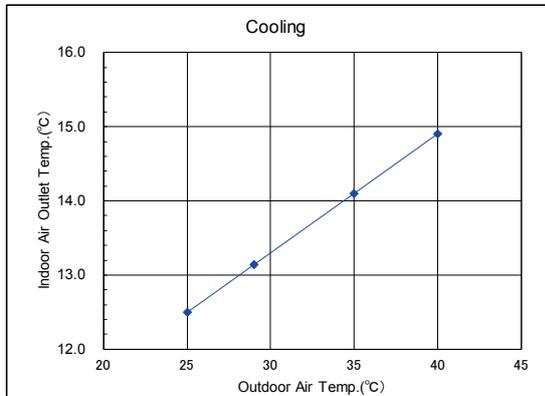
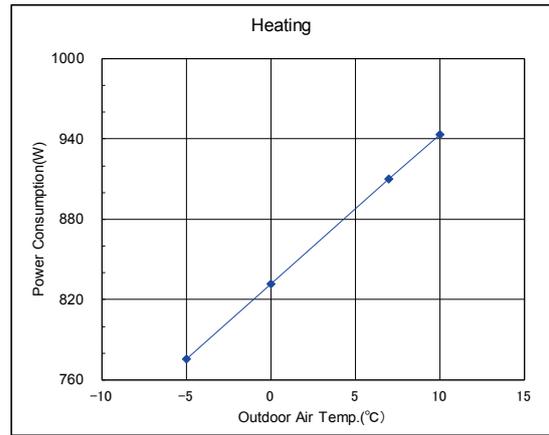
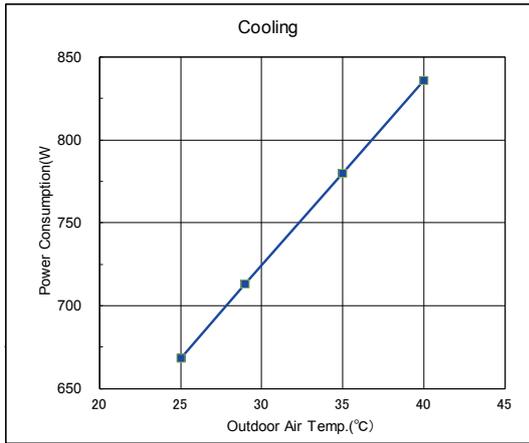
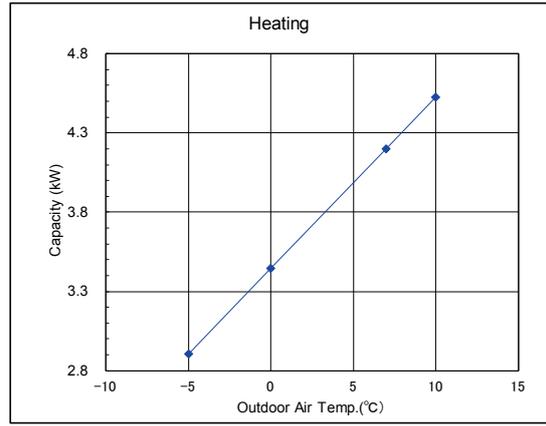
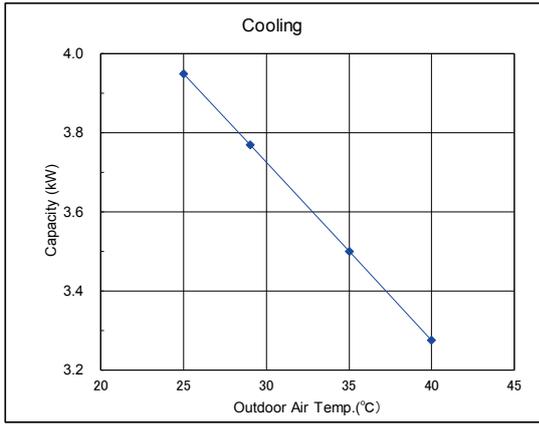
CLC6101i-W 50 HE, CLC6101i 50 HE



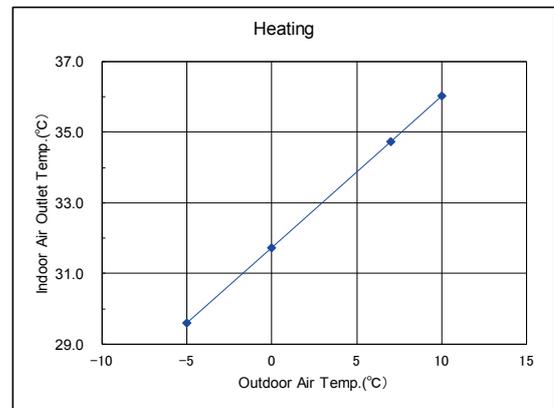
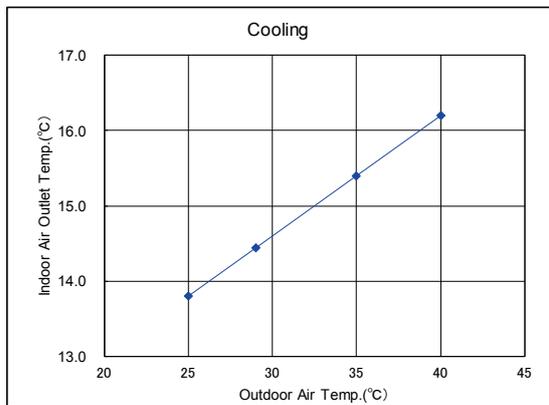
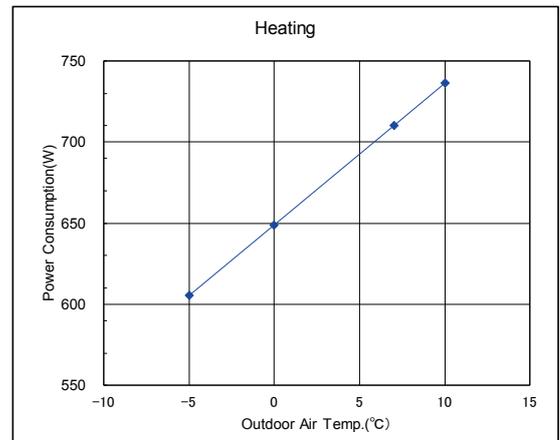
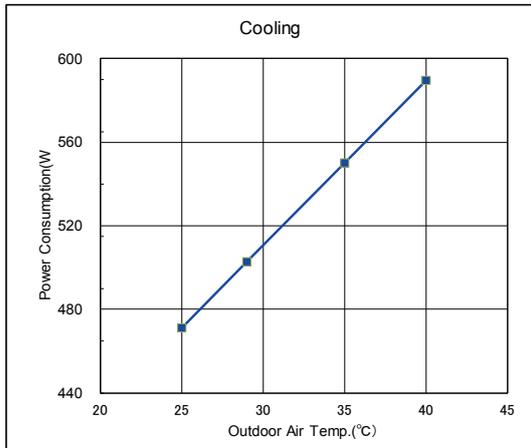
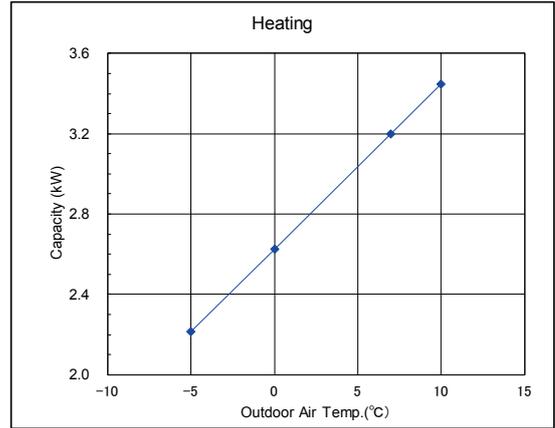
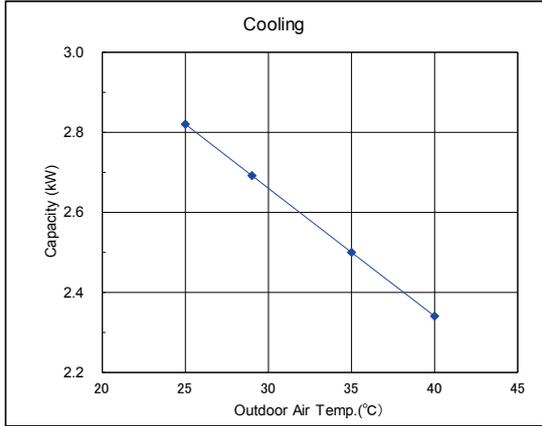
CLC6101i-W 65 HE, CLC6101i 65 HE



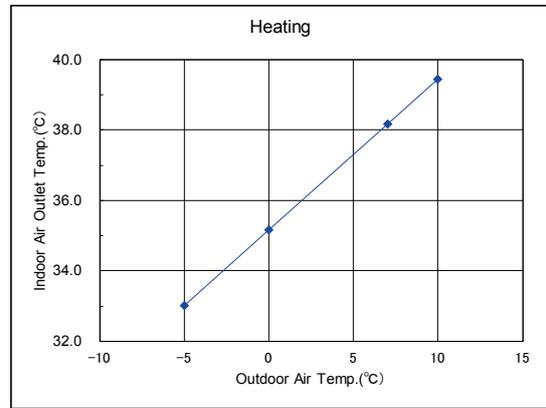
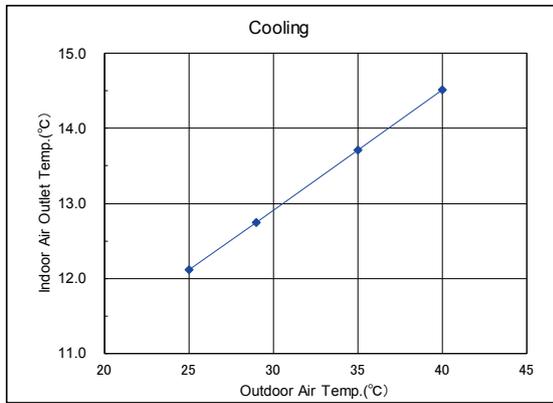
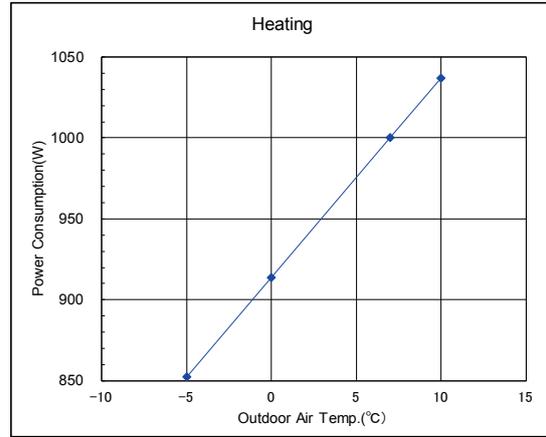
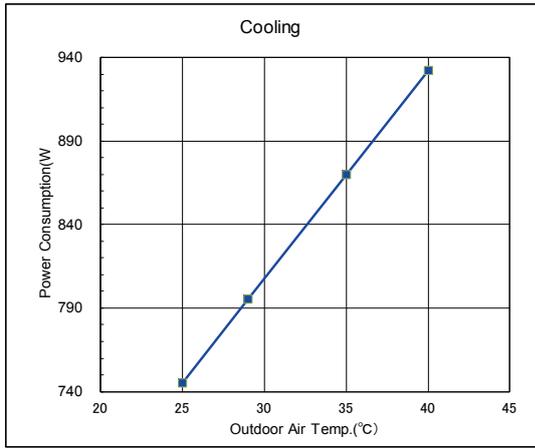
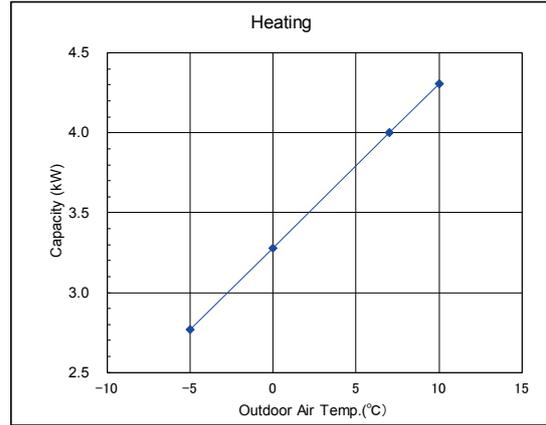
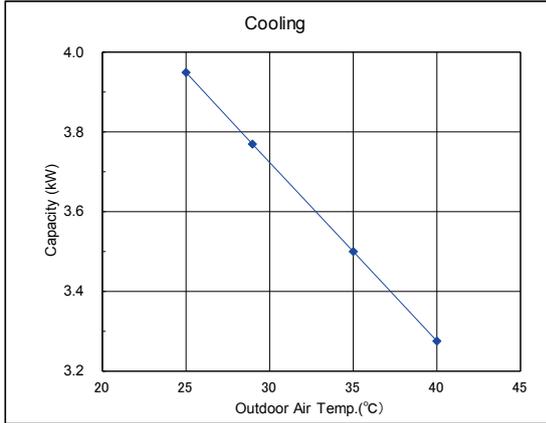
CLC8101i-W 65 HE(T/S/R), CLC8101i 65 HE



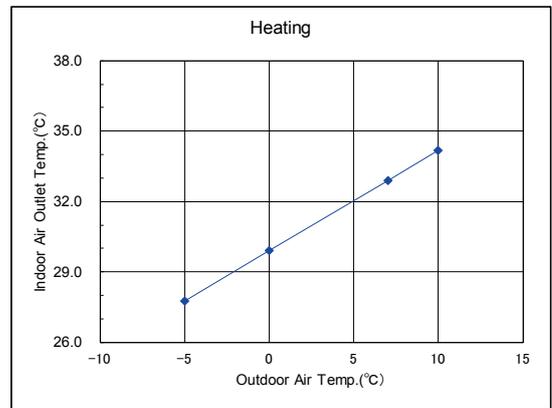
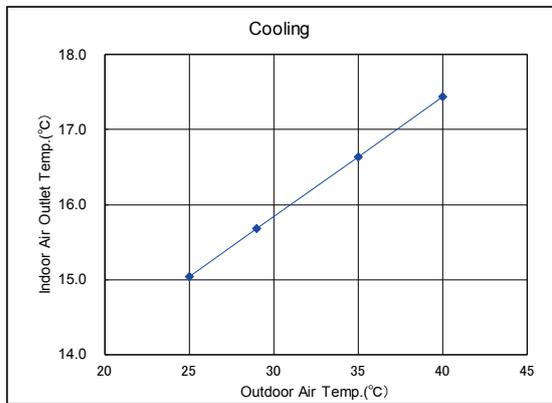
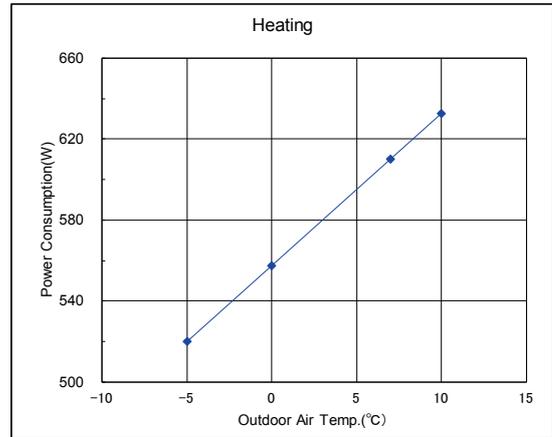
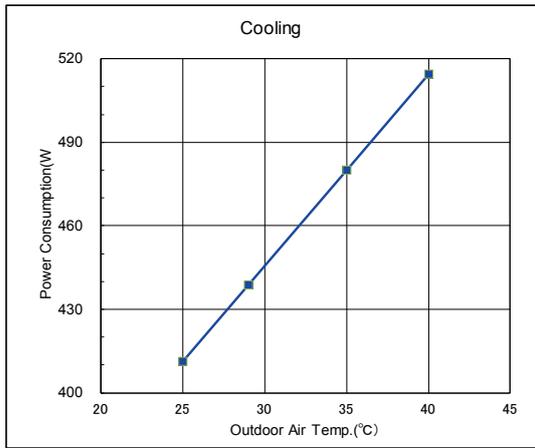
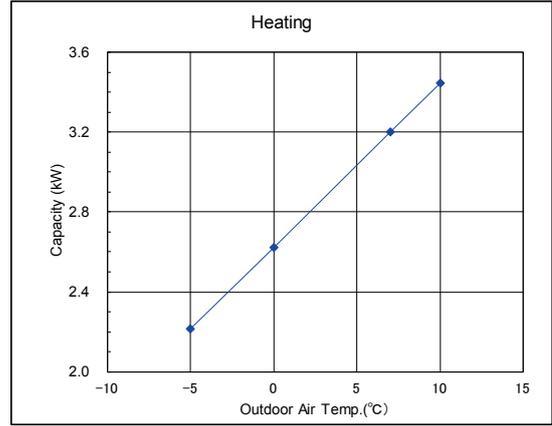
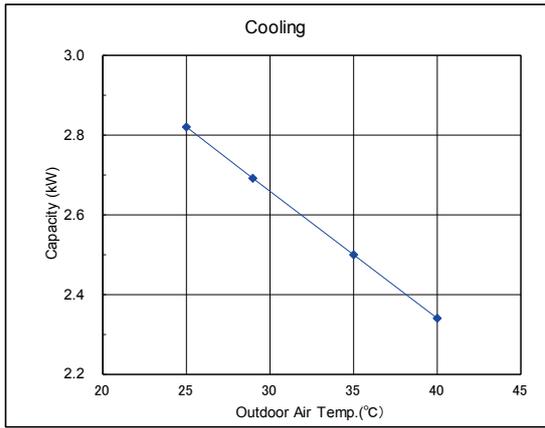
CLC6001i-W 25 E, CLC6001i 25 E



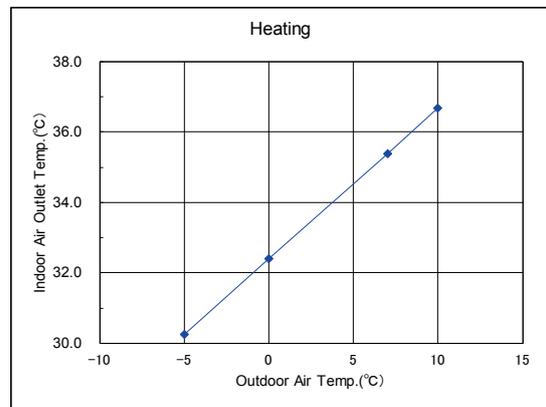
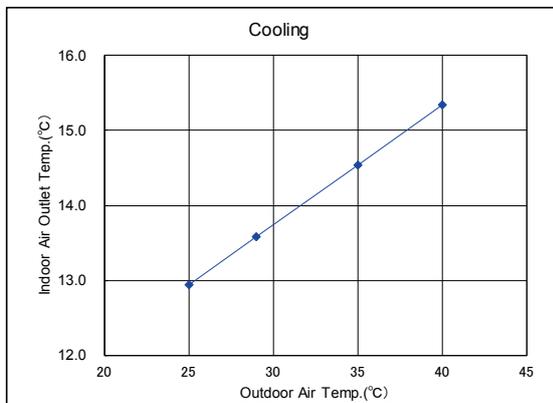
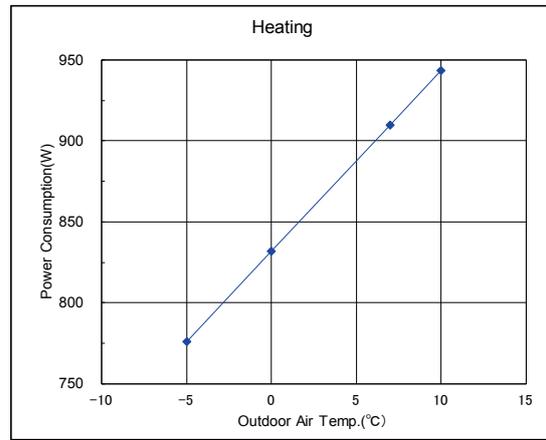
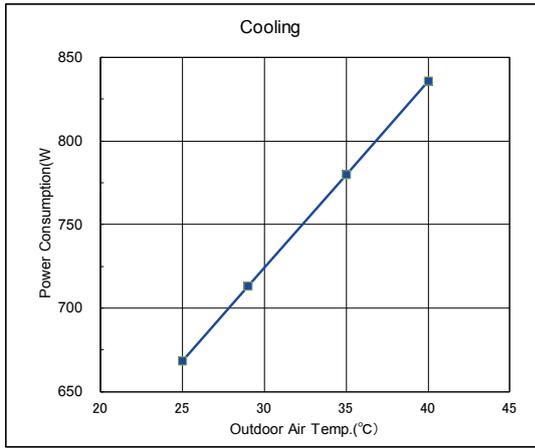
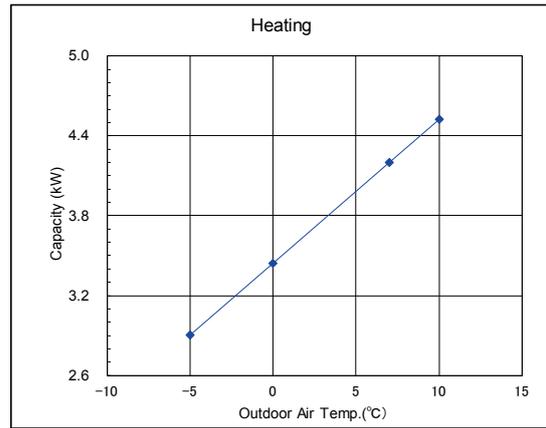
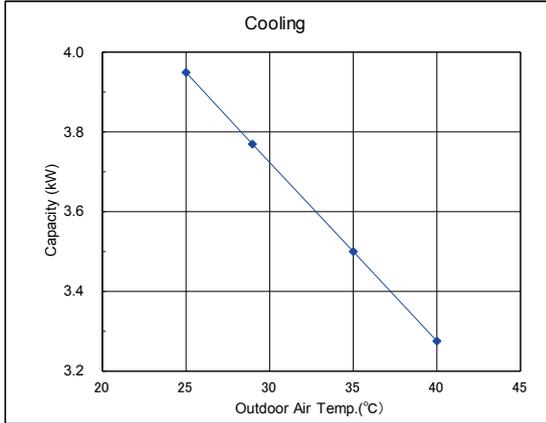
CLC6001i-W 35 E, CLC6001i 35 E



CLC8001i-W 25 E(T/S/R), CLC8001i 25 E



CLC8001i-W 35 E(T/S/R), CLC8001i 35 E



CHAPTER 6. DISASSEMBLY PROCEDURE

If, in carrying out repairs and modifications, the work requires the use of arc- and flame-producing apparatus, such as welding, brazing and soldering equipment, this work shall only be started after the rooms have been thoroughly ventilated. While the work is being carried out, the mechanical ventilation, if any, shall be kept in constant operation and all windows and doors kept open. In the case of repairs to parts of the refrigerant circuit, it may be necessary that not only the workman but also a second person shall be present for observation and assistance.

Necessary protective equipment shall be available and, in the case of open flames or arcs, fire extinguishing apparatus shall be ready to hand. Welding and brazing shall be carried out by qualified workmen.

Be sure to disconnect the power cord from the AC power outlet before starting the disassembly procedure. When reassembling the unit after repairing, be sure to install screws to their original positions.

The screws used are not the same in specifications such as corrosion-resistant treatment, tip shape and length.

After the air conditioner is repaired or parts are replaced, measure insulation resistance of the equipment using an insulation resistance meter. If the measured resistance is lower than 1MΩ, inspect parts and repair or replace defective parts.

Before changing control board, the workmen should wear anti-electrostatic gloves.

[1] INDOOR UNIT

1. INDOOR UNIT

1) Push the handles up to remove Air filter .

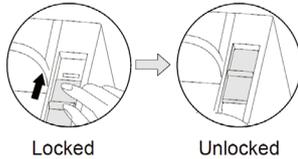


4) Remove a screw fixing the Cord Holder, then take the Cord Holder out.



2) Remove Open Panel as below step.

- Unlock Panel Lock (Right and left side).



5) Loosen the screw on Terminal Board and remove Unit-to-unit wiring.

- Lift the Open Panel up, then Slide the Open Panel' Hook along the Guide to remove it (right and left side).



6) Remove Horizontal Louver (H-louver).

- Take the center Bearing out.



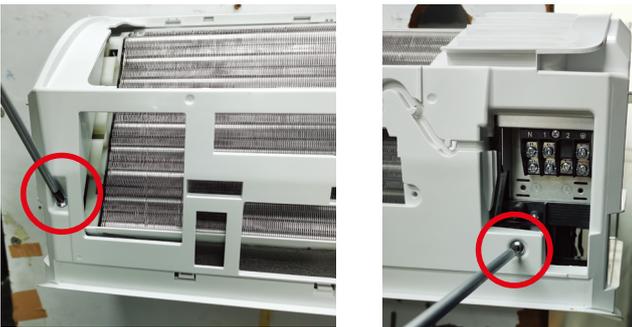
- Take the left side Louver Bushing out.



- Take the Horizontal Louver (H-louver) out.



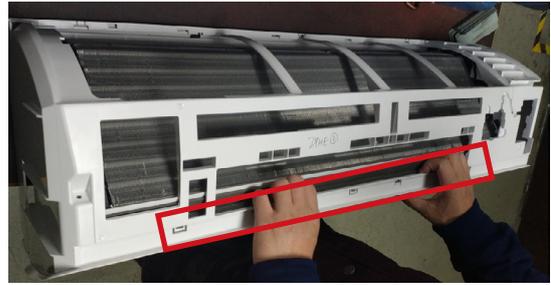
7) Remove 2 screws fixing the Front Panel.



Pull the top side of Front Panel to release the hooks.



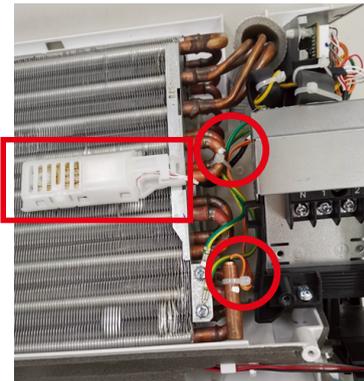
Pull this side to release these hooks.



Press below position to unfasten the hooks in side of Front Panel, then take the Front Panel out.



8) Cut the Wire Fixing Band and remove the Thermistor.
(CLC6001i-W 25/35 E, CLC6101i-W 50 HE)



(CLC8101i-W 65 HE(R/S/T), CLC8001i-W 25/35 E(R/S/T))



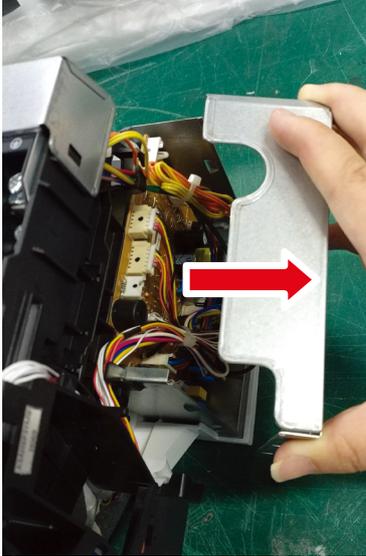
(CLC6101i-W 65 HE)



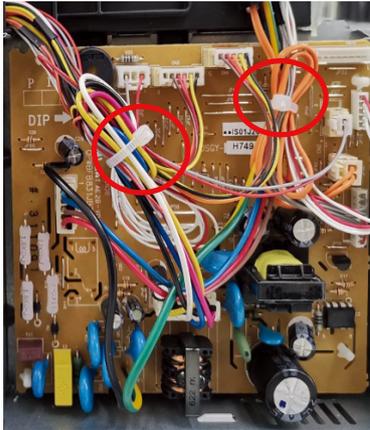
9) Remove 2 screw fixing the Ground wire.



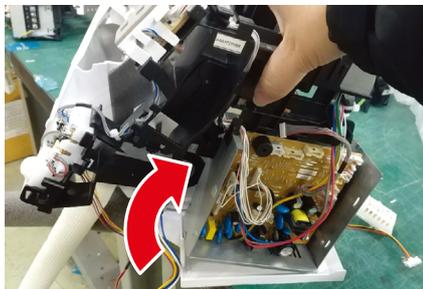
10) Take off the Control Box Cover.



11) Cut the wire fixing band and remove all the connectors.



12) Remove 1 screw, then rotate the Control Unit as below to take it out.

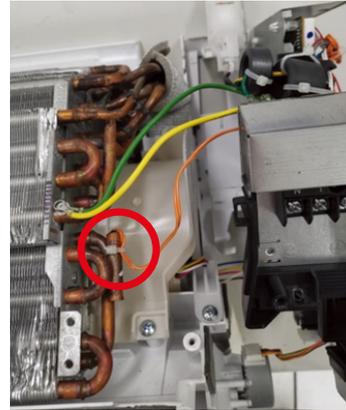


13) Cut the Wire Fixing Band and remove the Thermistor.

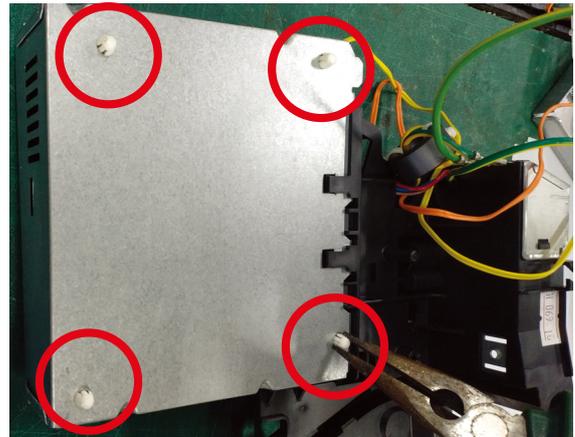
(CLC8101i-W 65 HE(R/S/T), CLC8001i-W 25/35 E(R/S/T))



(CLC6101i-W 65 HE)



14) Use a pincer to press the 4 spacer into the Control Angle to remove the PWB.



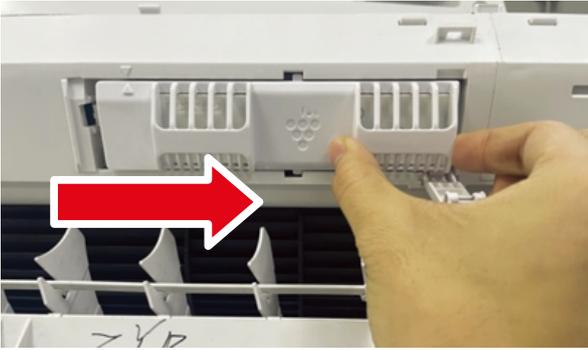
15) Remove PCI UNIT.

(CLC8101i-W 65 HE(R/S/T), CLC8001i-W 25/35 E(R/S/T))

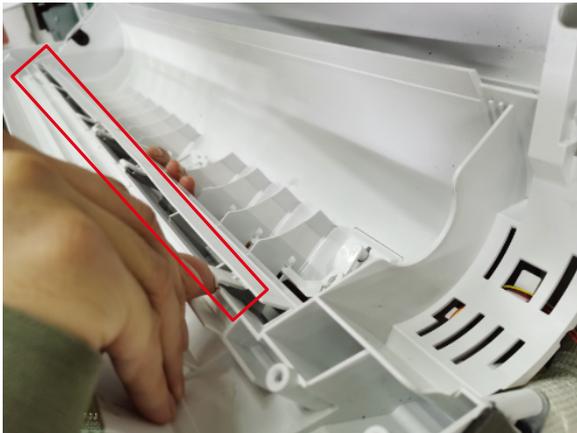
- Press the hook to rotate the PCI LOCK



- Slide the PCI cover to right side, then lift it to take it out



- Release the hook of Stabilizer R&L Ass'Y, rotate Stabilizer R&L Ass'Y out.

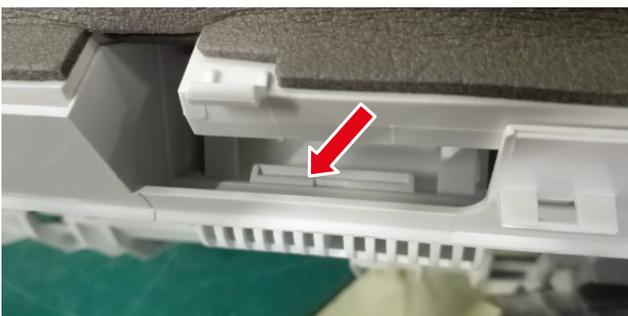


- Loose the screw of the PCI JOINT PWB UNIT B, take the PWB out.



(CLC6001i-W 25/35 E, CLC6101i-W 50/65 HE)

- Release the hook of PCI Cover

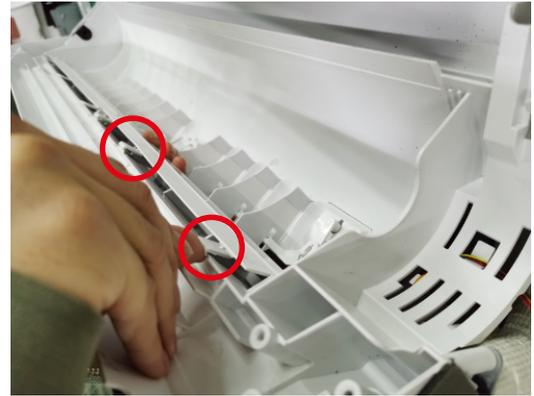


- Take PLASMACLUSTER Unit out. Then remove the connector.



16) Remove Center LED UNIT.

- Release the hook of Stabilizer R Ass'Y, rotate Stabilizer R Ass'Y out.



- Release a hook, take out the LED CASE, then take the center LED CASE out.



- Press the hook, take out the PCI LED UNIT.



- Unfold the LIGHT GUIDE COVER, take out the LIGHT GUIDE.



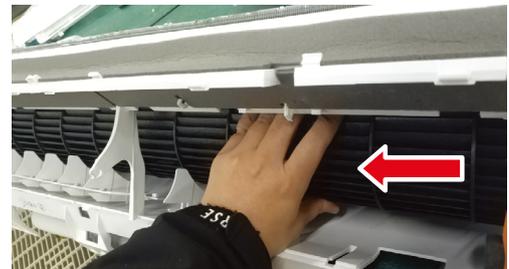
17) Remove the screw of Louver Motor, then take the Motor out.



18) Release Arm Auto/Manual from Louver Link R.



23) Hold and press the Cross Flow Fan to left side as much as possible, meanwhile, take Fan Motor out.



19) Remove the screw of Bracket, and take Bracket out.



20) Remove the 2 screws of Louver Motor V to take the motor out.

24) Remove a screws of Side Cover R.



21) Remove 2 screw fixing the Fan Motor Cover, then remove Fan Motor Cover.

25) Remove 2 screws fixing Side Cover L.



22) Remove 1 screw between Cross Flow Fan and Fan Motor.

26) Push the Pipe Holder to remove Pipe Holder.



27) Enlarge the angle between Tube Ass'y and Cabinet. Then take the Evaporator out.



28) Take Corss Flow Fan out.

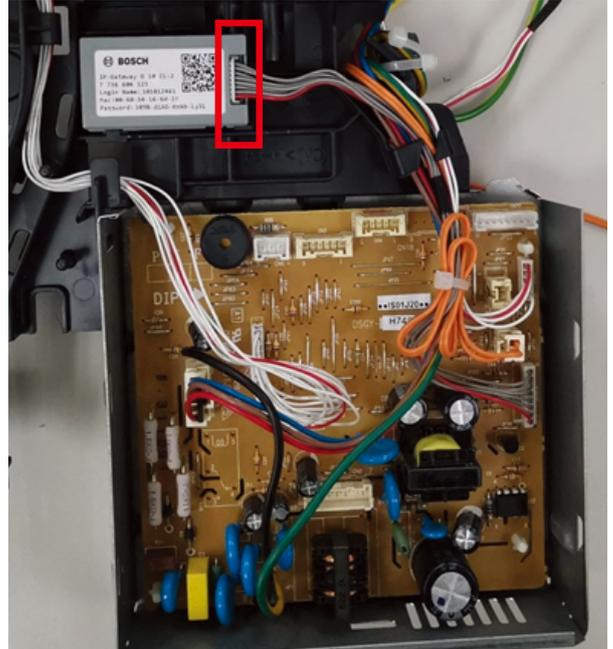


REPLACE WIRELESS ADAPTER

Maintenance shall be made by service personnel full of knowledge about wireless LAN.

Please contact BOSCH for replacement.

1) Remove the Connector of Wireless adapter, and take it off from Control unit.



2) Replace the Wireless adapter.

3) It's necessary to make the Wireless Lan connecting setting again.

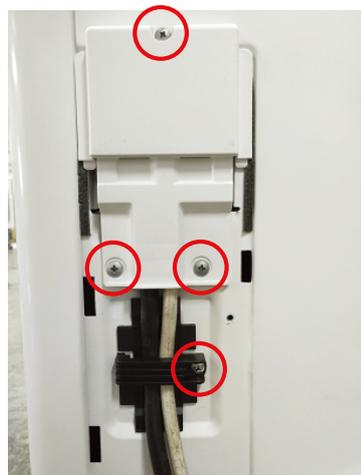
Please finish the initial connection setting after replaced wireless adapter, the procedure is same as when you just purchased the Air-conditioner.

[2] OUTDOOR UNIT (CLC6101i 50/65 HE, CLC6001i 25/35 E)

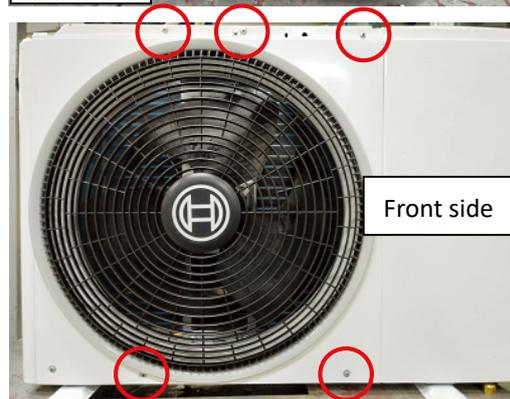
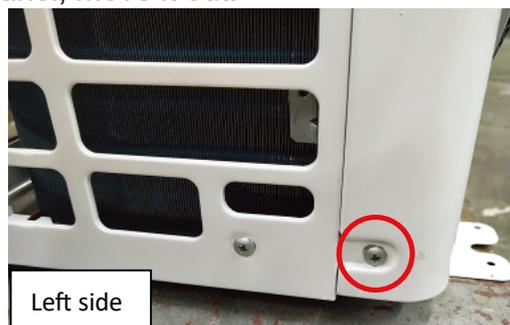
1) Remove the screw fixing the Cover, then take the cover out.



2) Remove the screw fixing Terminal Cover and Cord Clamp, then take them out.



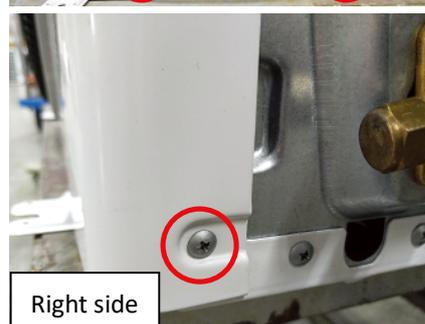
5) Remove seven screws fixing the Front Panel, move it out.



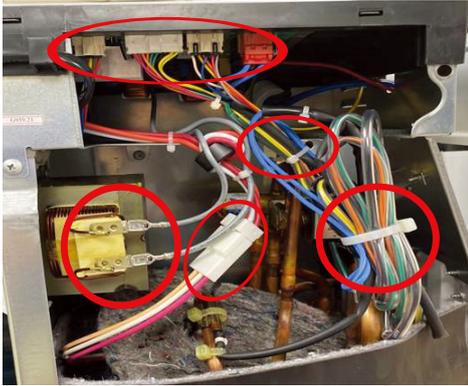
3) Loose the screws, remove the connecting cable from Terminal Board.



4) Remove five screws, lift the Top Panel to take it out.

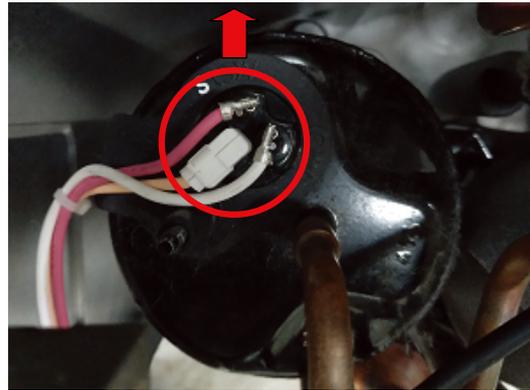


6) Cut the Wire Fixing Band. Remove two terminals from the Reator and all connectors on the Control Board Unit, and remove compressor connector.

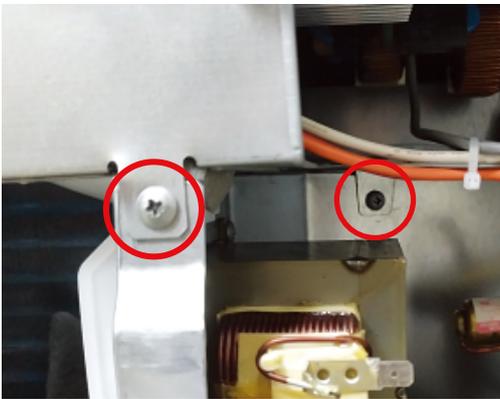


10) Disconnect three terminals on the Compressor.

7) Remove four screws fixing the Control Box, then take it out.



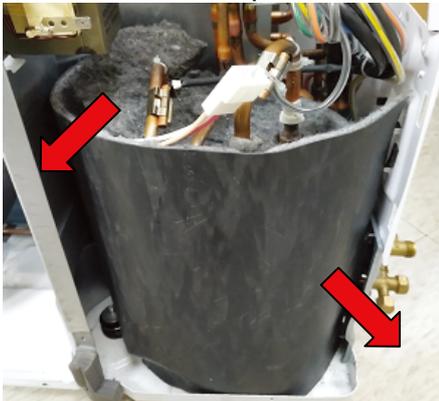
11) Remove two screws fixing the Bulkhead, and remove the Bulkhead.



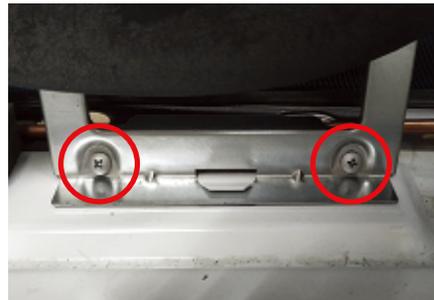
8) Remove the Compressor Cover(2pcs).



12) Remove the screw fixing Motor Angle, then take it out.



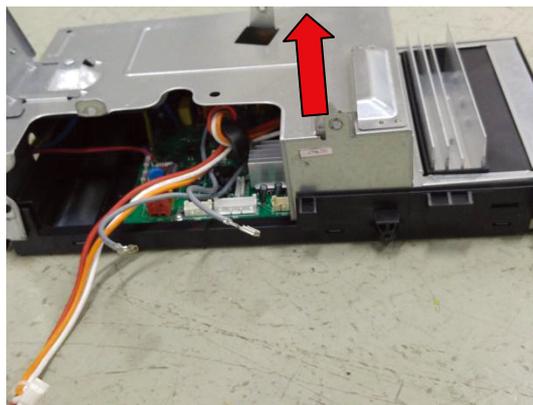
9) Unscrew the nut, move the Terminal Cover.



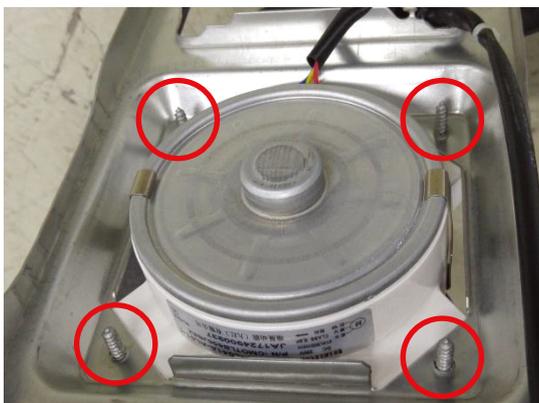
13) Unscrew the nut, take out the Propeller Fan carefully.



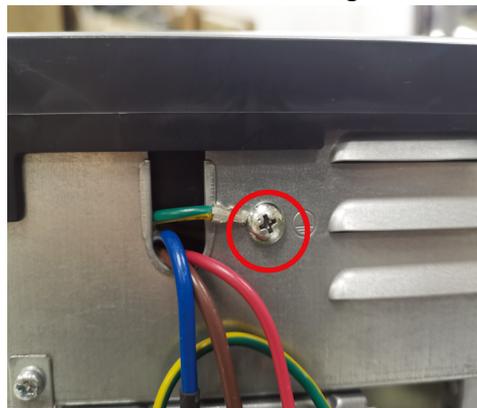
3) Lift up to remove the metal cover.



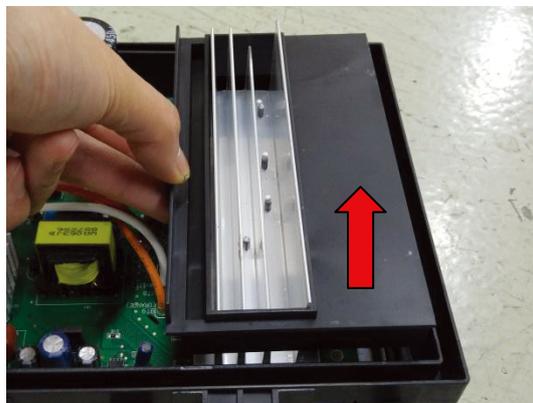
14) Remove all screws, take out the Motor.



4) Remove the screw fixing the earth wire.



5) Move out the Heat Sink Holder.



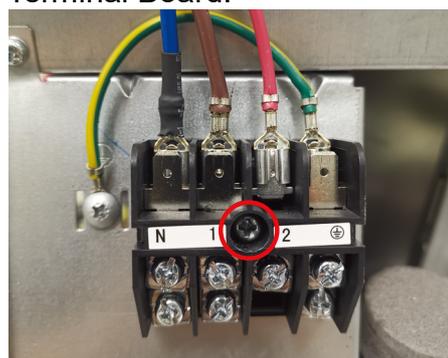
■ Control Unit

1) Cut the Fixing Band.



6) Unscrew all four screws to remove the Control Board Unit.

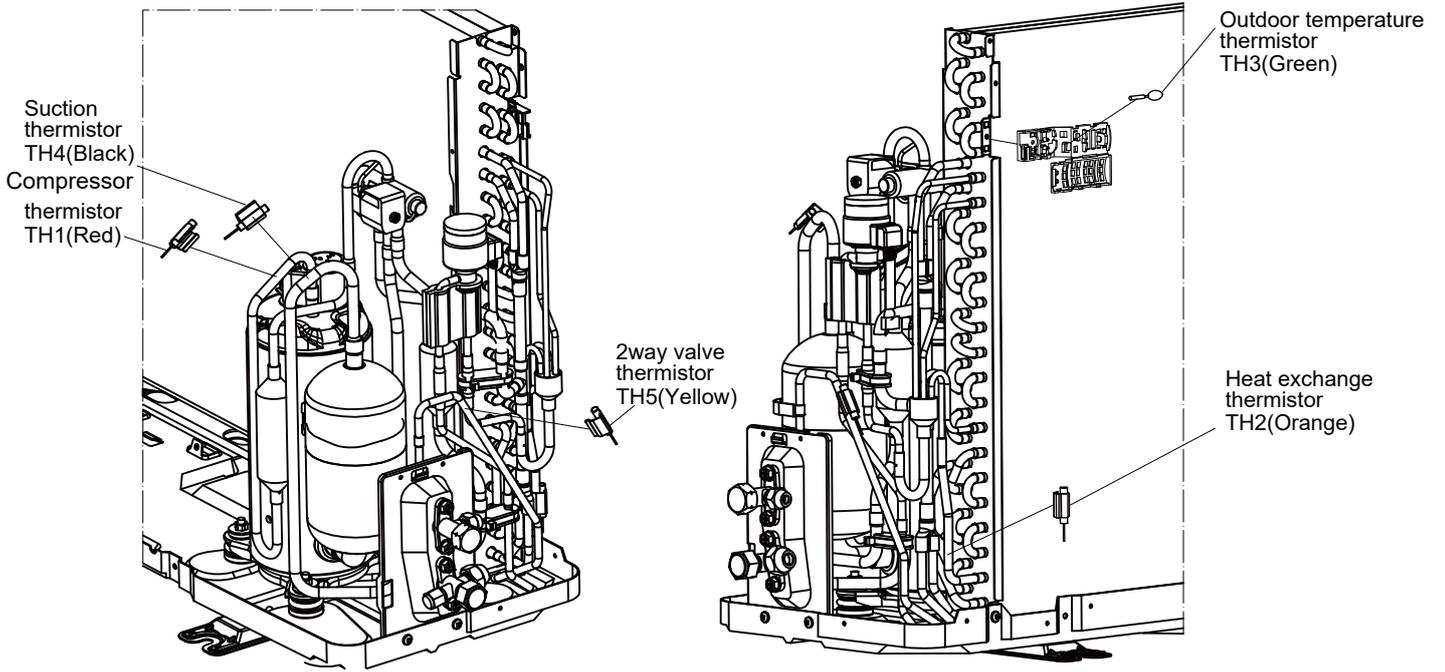
2) Remove the screw, then remove the Terminal Board.



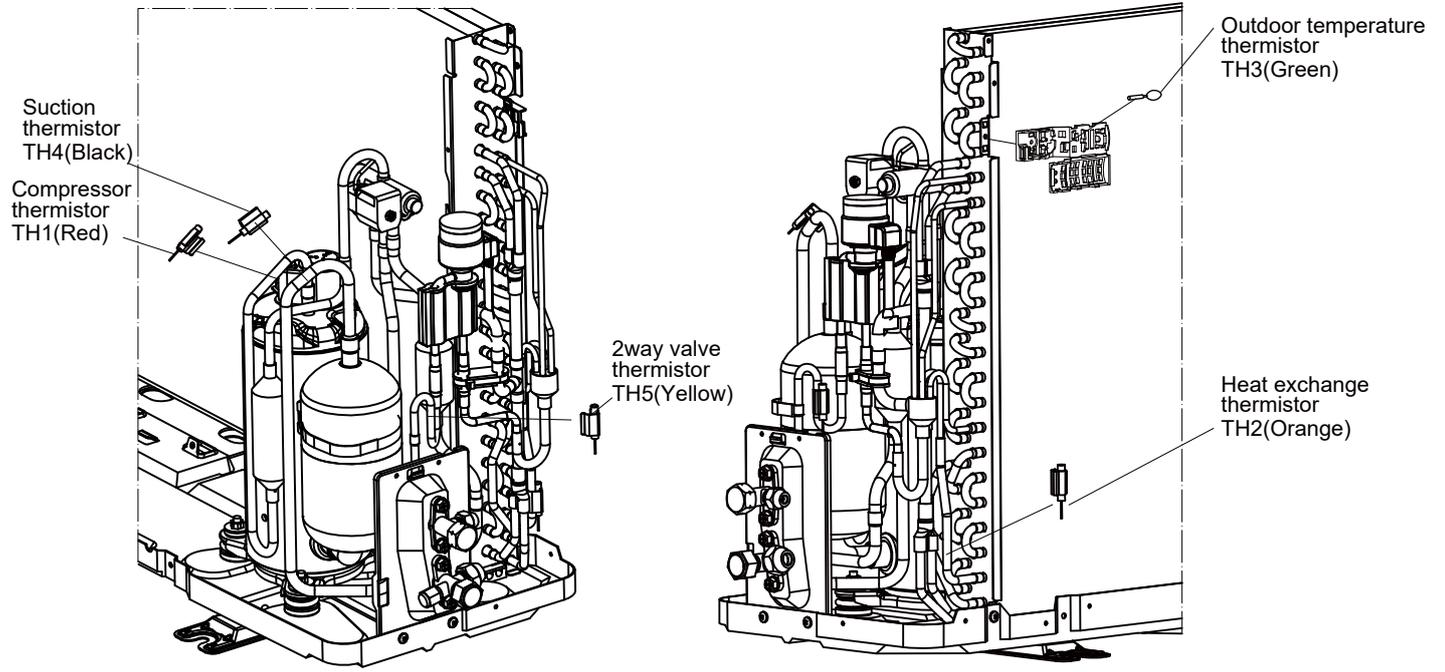
Note: Before changing control board, the workmen should wear anti-eletrostatic gloves.

- THERMISTOR ASSEMBLY INSTALLATION DRAWING

MODEL: CLC6101i 50 HE / CLC6101i 65 HE



MODEL: CLC6001i 25 E / CLC6001i 35 E



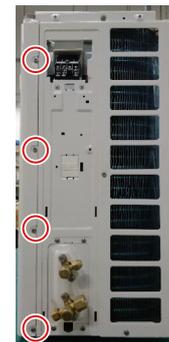
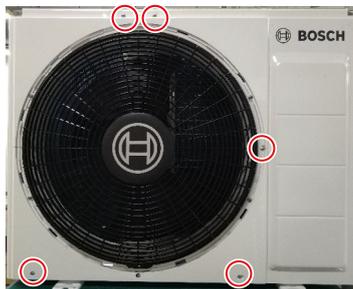
[3] OUTDOOR UNIT(CLC8101i 65 HE, CLC8001i 25/35 E)

1.Body's decomposition steps

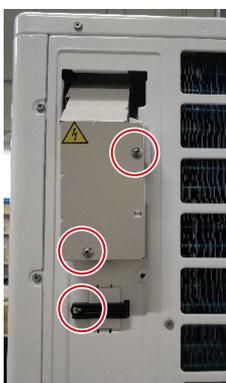
1) Disassemble the screw fixing side cover, then disassemble the side cover.



5) Disassemble the front cabinet ass'y.(5 screws in front side, 4 screws in right side.)



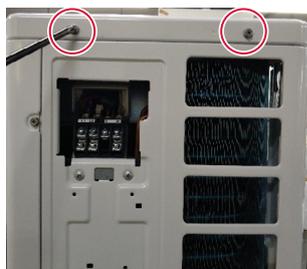
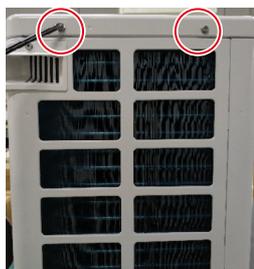
2) Disassemble fixing terminal cover and a screw of cord clamp, then remove them. At last remove cable holder.(4 screws)



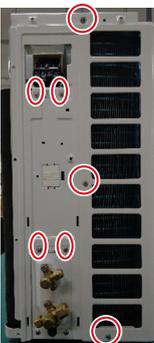
5) Open the front cabinet axis on the left
 ① Lift it up a little on the right ② Open it outward and lift up a little on the left, then open it.



3) Disassemble the top cover after removing 4 screws of it.
 (Left side of top cover) (Right side of top cover)



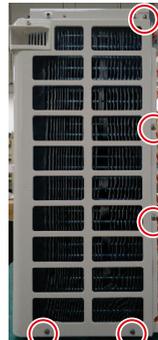
6) Disassemble side cover R.(8 screws)



4) Disassemble the screw fixing ring, then take the ring out as below picture direction.



7) Disassemble side cover L.(6 screws)



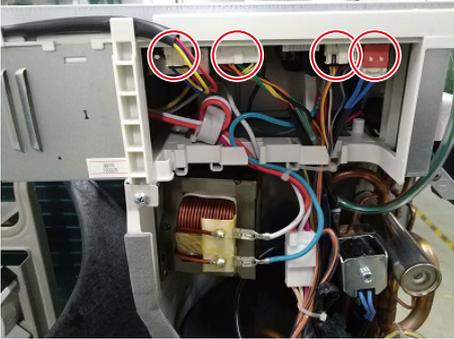
9) Disassemble the screw fixing control box ass'y.(1 screw)



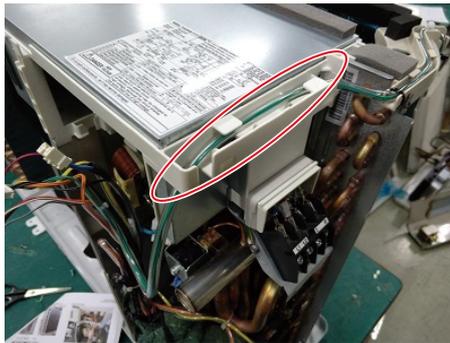
12) Remove compressor cover.(1 pcs)



10) Pull down the terminals connecting the electric box substrate. Take out the thermistor lead wire from guide groove.



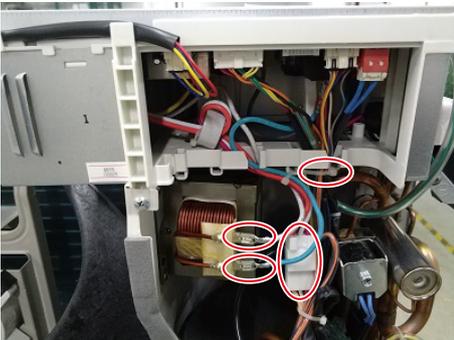
13) Disassemble Bulkhead ass'y.(2 screws)



14) Remove remain cover and compressor cover.(4 pcs)



11) Cut the wire fixing band fixing the transfer connector of the compressor and control box ass'y, then disassemble the terminal of reactor and compressor, after all, disassemble control box ass'y.

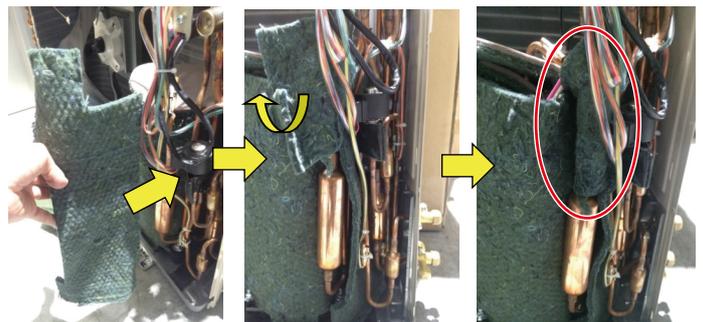
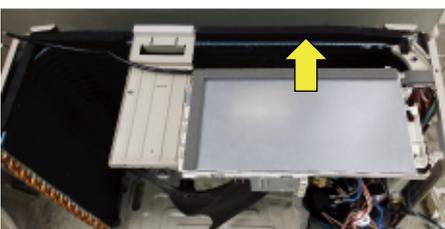


(Method of remove compressor cover)

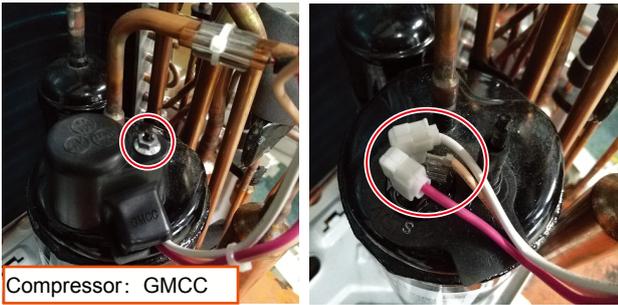


(Disassemble the control box ass'y)

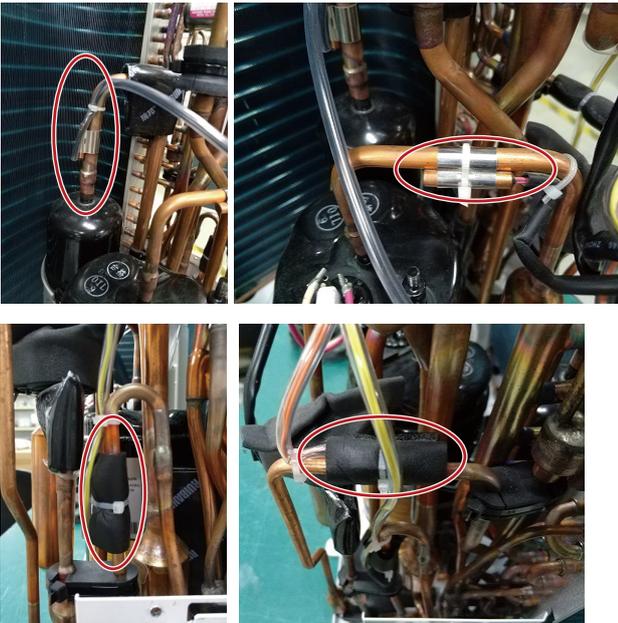
(Method of assemble cover)



- 15) Disassemble compressor terminal cover.(1 nut)
Then disassemble the compressor connecting terminal.



- 16) Disassemble thermistors(4 pieces) and thermistor clamps(1 piece) .



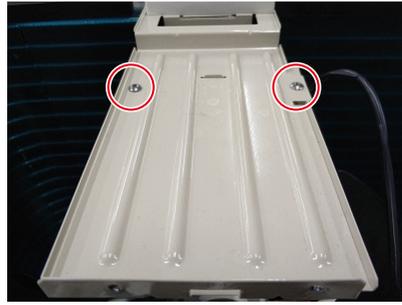
(thermistor clamps)



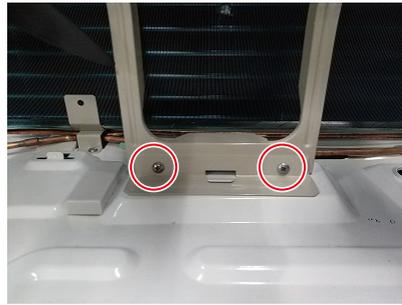
- 17) Disassemble propeller fan and fan motor.(1 nut,4 screws)



- 18) Disassemble fan motor angle ass'y.(2 screws)

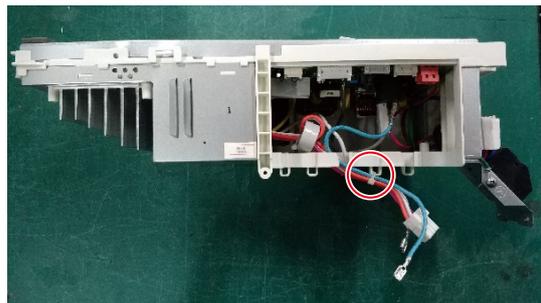


- 19) Disassemble fan motor angle.(2 screws)



2.Electrical parts exchange methods of outdoor control box unit.

- 1) Cut the fixing band.(1 pcs)



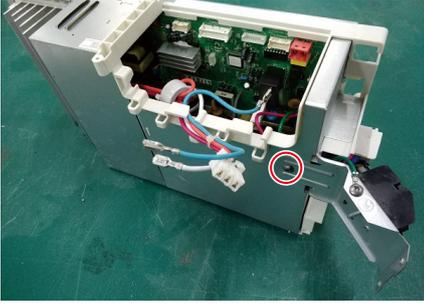
- 2) Disassemble lead wire connected with terminal board.(5 pcs)



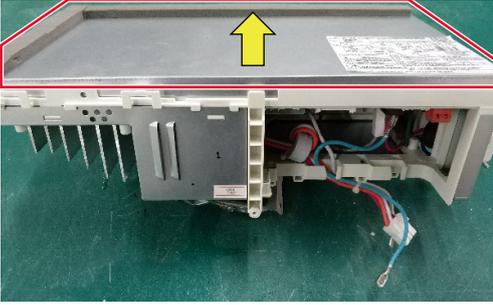
- 3) Disassemble terminal board, if terminal board broken.(1 screw)



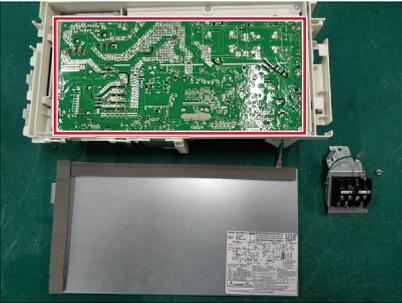
4) Disassemble terminal holder, if terminal holder broken.(1 screw)



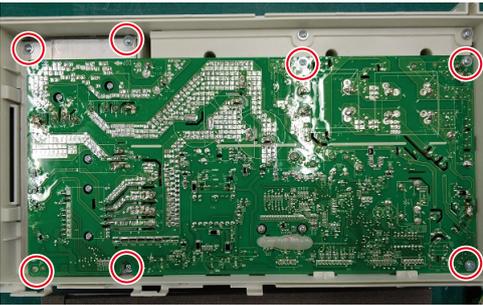
5) Disassemble cover.



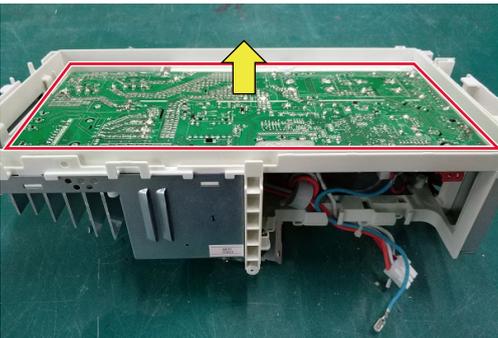
6) Disassemble 4 screw, then disassemble control board unit.



(Disassemble 7 screws on control board unit.)



(Disassemble control board unit.)



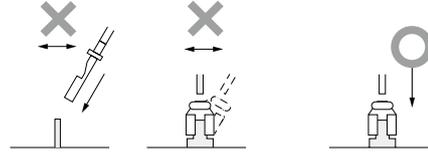
Note:

Before change control board unit, the workmen should wear anti-eletrostatic gloves.

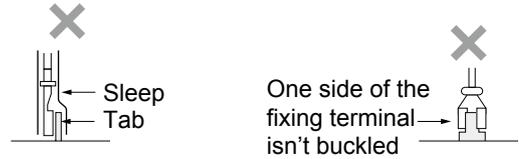
Notice:

1. Exchange outdoor circuit board.
 - 1) Remove the fixing terminals(T5, 7~9).
(Pull it out after pressing the delocking pin.)
 - 2) Reconnect terminals in order after exchanging the control basal lamina.
2. The notes of the fixing terminals connection.
 - 1) Please pull and remove the terminal straight along the tab.

Don't pull the wire to remove the terminal.



2) Don't plug between fixing terminal and sleep.



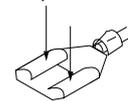
3) Pay attention to the lock pin when plugging the city block fasten terminal. Try not plug the terminal by hand, or clip the lock part with radio pench.

Don't clip it with radio pench



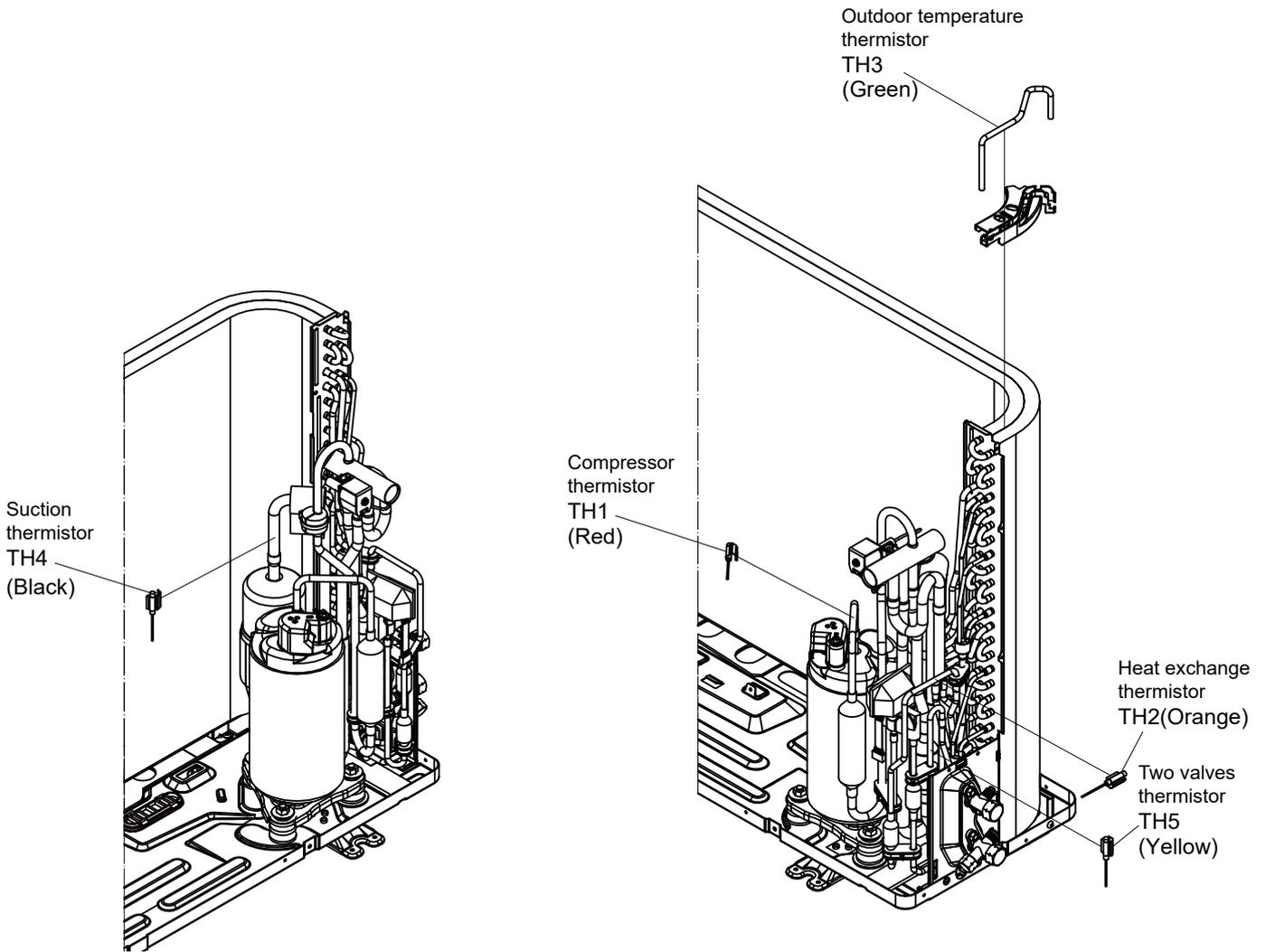
- 4) It's inappropriate that the tension in the fasten terminal is too big when wiring.
- 5) The terminal once removed can't be used again, because the interlocking decreases. It's necessary that use it after compressing it a little.

Compress it a little



- THERMISTOR ASSEMBLY INSTALLATION DRAWING

MODEL: CLC8101i 65 HE, CLC8001i 25/35 E



**BOSCH****PARTS LIST****AIR/AIR HEAT PUMP****MODELS**

INDOOR UNIT	OUTDOOR UNIT
CLC6101i-W 50 HE	CLC6101i 50 HE
CLC6101i-W 65 HE	CLC6101i 65 HE
CLC8101i-W 65 HE(T/S/R)	CLC8101i 65 HE
CLC6001i-W 25 E	CLC6001i 25 E
CLC6001i-W 35 E	CLC6001i 35 E
CLC8001i-W 25 E(T/S/R)	CLC8001i 25 E
CLC8001i-W 35 E(T/S/R)	CLC8001i 35 E

CONTENTS

[1] INDOOR UNIT (CLC8101i_CLC8001i).....1	[3] OUTDOOR UNIT (CLC6101i_CLC6001i) 13
- MODEL: CLC8101i-W 65 HE	- MODEL: CLC6101i 50/65 HE
CLC8001i-W 25/35 E3	CLC8001i 25/35 E..... 14
- MODEL: CLC8101i-W 65 HER/T	[4] OUTDOOR UNIT (CLC8101i_CLC8001i) 18
CLC8001i-W 35 ER/T	- MODEL: CLC8101i 65 HE 22
CLC8001i-W 25 ER/T5	- MODEL: CLC8001i 25 E
- MODEL: CLC8101i-W 65 HES	CLC8001i 35 E 26
CLC8001i-W 25/35 ES7	
[2] INDOOR UNIT (CLC6101i_CLC6001i).....9	
- MODEL: CLC6101i-W 50/65 HE	
CLC6001i-W 25/35 E 11	

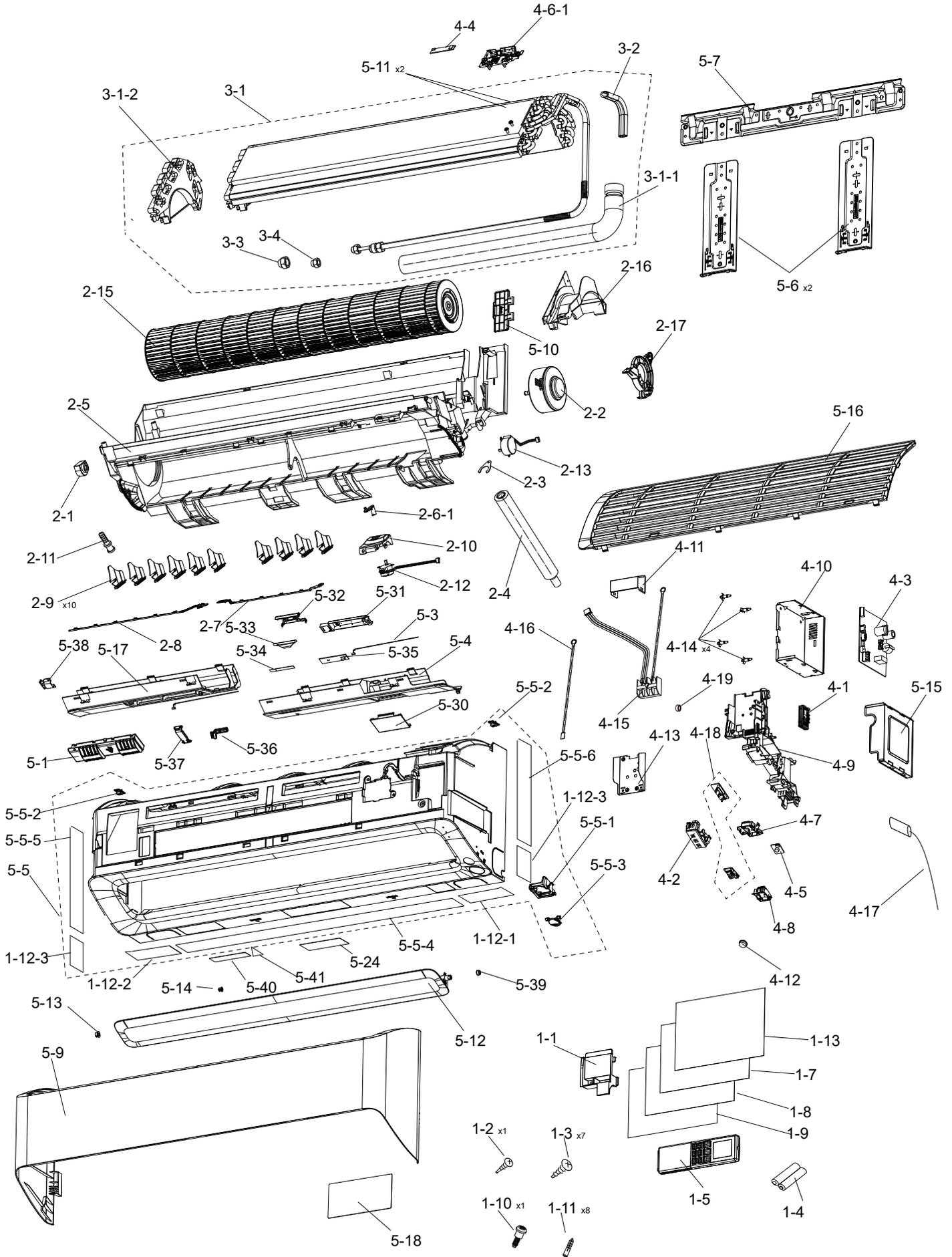
HOW TO ORDER REPLACEMENT PARTS

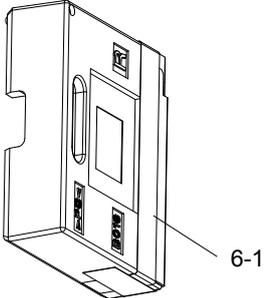
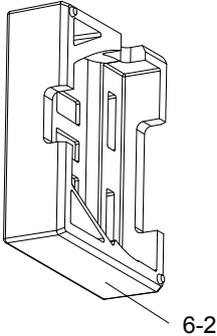
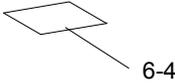
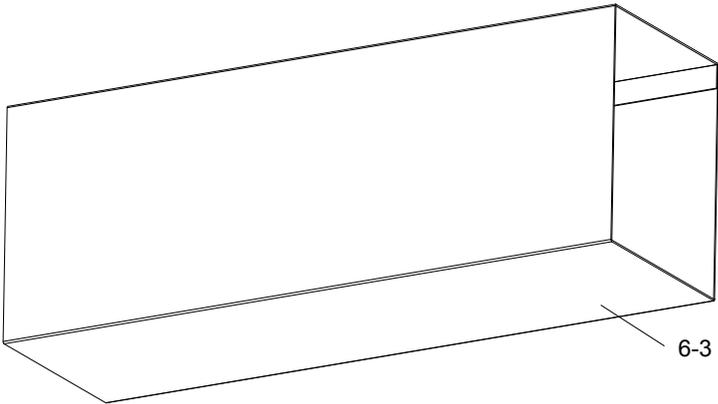
To have your order filled promptly and correctly, please furnish the following information.

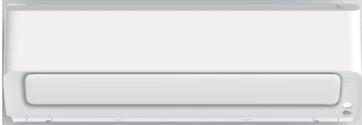
1. MODEL NUMBER
2. REF. NO.
3. PART NO.
4. DESCRIPTION.

Parts marked with "▲" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

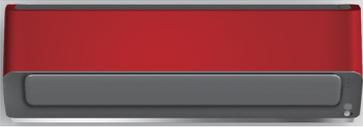
[1] INDOOR UNIT (CLC8101i_CLC8001i)





MODEL: CLC8101i-W 65 HE CLC8001i-W 35 E CLC8001i-W 25 E				
				
REF. No.	PARTS CODE	PRICE RANK	NEW MARK	DESCRIPTION
1-1	DHLD-A127JBKZ	AK	N	CORD HOLDER ASSY
1-2	XTTS740P20000	AF		TAPPING SCREW
1-3	XTTS745P30000	AC		TAPPING SCREW
1-4	UBATUA027JBE0	AE		BATTERY PACK
1-5	CRMC-B078JBEZ	AX	N	RCU NORDIC BOSCH YHB [CLC8101i]
1-5	CRMC-B080JBEZ	AX	N	RCU AVERAGE BOSCH YHR [CLC8001i]
1-7	TINS-B855JBRZ	AQ	N	INSTALLATION MANUAL [CLC8101i]
1-7	TINS-B858JBRZ	AQ	N	INSTALLATION MANUAL [CLC8001i]
1-9	TINSEB092JBRZ	AQ	N	OPERATION MANUAL [CLC8101i]
1-9	TINSEB094JBRZ	AQ	N	OPERATION MANUAL [CLC8001i]
1-10	LX-BZA357JBEZ	AE		SPECIAL SCREW
1-11	LX-NZA207JBEZ	AE		SPECIAL NUT
2-1	CHLD-A221JBKZ	AE		BEARING ASS'Y
2-2	CMOT-A672JBKZ	BC		FAN MOTOR SUB ASS'Y
2-3	LPLT-A069JBPZ	AC		HOSE HOLDER
2-4	PHOS-A073JBEZ	AG		DRAIN HOSE
2-5	DSRA-A489JBKZ	BF	N	CABINET SUB ASS'Y(White)
2-6-1	MARMPA104JBFA	AF		ARM AUTO(White)
2-7	MJNTPA236JBFA	AE		LOUVER LINK R(White)
2-8	MJNTPA237JBFA	AE		LOUVER LINK L(White)
2-9	MLOV-A661JBFA	AE		VERTICAL LOUVER (V-louver) (White)
2-10	PDAl-A394JBFA	AE		MOTOR BRACKET(White)
2-11	PGUMMA495JBEZ	AC		DRAIN PLUG
2-12	RMOT-A247JBZZ	AM		LOUVER MOTOR V
2-13	RMOT-A292JBZZ	AQ	N	LOUVER MOTOR
2-15	NFANCA146JBEZ	AW		CROSS FLOW FAN
2-16	PCOV-C936JBFZ	AK		SIDE COVER R
2-17	PCOV-C954JBFZ	AF		MOTOR COVER
3-1	CCYC-E943JBKZ	BX	N	CYCLE ASS'Y
3-1-1	PFPFPF402JBEZ	AG		PIPE DAN-S
3-1-2	PCOV-C937JBFZ	AH		SIDE COVER L
3-3	PSEN-A099JBKZ	AK		FLARE NUT ASS'Y
3-4	PSEN-A100JBKZ	AK		FLARE NUT ASS'Y
4-1	-			WIRELESS ADAPTER
4-2	DHLD-A126JBKZ	AG		LED HOLDER R ASS'Y
4-3	DSGY-H761JBKZ	BG	N	CONTROL BOARD(Service) [CLC8101i-W 65 HE]
4-3	DSGY-H773JBKZ	BG	N	CONTROL BOARD(Service) [CLC8001i-W 35 E]
4-3	DSGY-H768JBKZ	BG	N	CONTROL BOARD(Service) [CLC8001i-W 25 E]
4-4	FSGY-E705JBKZ	AK		SENSOR PWB-K
4-5	FSGY-E782JBKZ	AS		MOTION SENSOR BOARD
4-6-1	LHLD-B461JBFZ	AH		SENSOR HOLDER
4-7	LHLD-B507JBFZ	AE		RECEIVER HOLDER
4-8	LHLD-B508JBFZ	AE		MOTION SENSOR HOLDER
4-9	LHLD-B511JBFA	AN		TERMINAL HOLDER
4-10	PBOX-A674JBWZ	AH		CONTROL ANGLE
4-11	PCOV-C938JBWZ	AF		TERMINAL COVER
4-12	PCOV-C946JBEZ	AH		SENSOR LENS

REF. No.	PARTS CODE	PRICE RANK	NEW MARK	DESCRIPTION
4-13	PDAI-A395JBWZ	AE		EARTH PLATE
4-14	PSPA-A238JBEZ	AC		SPACER
4-15	QTANZA157JBZZ	AP	N	TERMINAL BORAD
4-16	QW-VZH003JBZZ	AE		LEAD WIRE-E
4-17	RH-HXA268JBZZ	AH		THERMISTOR
4-18	FSGY-E835JBKZ	AS		DISPLAY BOARD(Service)
4-19	RFIL-A151JBEZ	AU		FERRITE CORE
5-1	CKITTA288JBKZ	BH		PCI UNIT ASS'Y(White)
5-3	QW-VZH538JBZZ	AF	N	LEAD WIRE-PCI LED
5-4	PSTB-A022JBFA	AM	N	STABILIZER R(White)
5-5	CWAK-E828JBKZ	BG	N	FRONT PANEL ASS'Y(White)
5-5-1	LHLD-B509JBFZ	AE		BUTTON HOLDER
5-5-2	MLEV-A043JBFA	AD		PANEL LOCK(Light Gray)
5-5-3	PCOV-C944JBFA	AE		RECEIVER COVER(Milk white)
5-6	PPLTNA169JBWZ	AL		MOUNTING ANGLE B
5-7	PPLTNA187JBWZ	AN		MOUNTING ANGLE A
5-9	HPNL-B629JBRF	AZ	N	OPEN PANEL(White)
5-10	LHLD-B510JBFZ	AE		PIPE HOLDER
5-11	LX-BZA075JBE0	AA		SPECIAL SCREW
5-12	MLoV-A662JBFA	AV	N	HORIZONTAL LOUVER (H-louver) (White)
5-13	NBRG-A026JBFA	AB		LOUVER BUSHING(White)
5-14	NBRG-A038JBFA	AC		BEARING C(White)
5-15	PCOV-C939JBWZ	AH		CONTROL BOX COVER
5-16	PFILMA329JBEA	AT		TOP GRILLE(White)
5-17	PSTB-A021JBFA	AZ	N	STABILIZER L 25000(White)
5-18	TLABCE379JBRZ	AD	N	WIRING DIAGRAM
5-24	TSPC-M752JBRA	AK	N	NAME LABEL [CLC8101i-W 65 HE]
5-24	TSPC-M776JBRA	AK	N	NAME LABEL [CLC8001i-W 35 E]
5-24	TSPC-M777JBRA	AK	N	NAME LABEL [CLC8001i-W 25 E]
5-30	PCoV-C941JBFA	AS	N	STABILIZER COVER(White)
5-31	PCAS-A127JBFA	AG	N	LED CASE
5-32	PCoV-C719JBFA	AE		LIGHT GUIDE COVER
5-33	PPLT-B169JBFA	AE		LIGHT GUIDE
5-34	PSHE-A435JBEA	AD		PCI-LED SHEET
5-35	FSGY-F030JBKZ	AQ	N	PCI LED UNIT
5-36	PBRs-A030JBFA	AG		PCI BRUSH
5-37	MLEV-A030JBFB	AC	N	PCI LOCK(White)
5-38	FSGY-E884JBKZ	AP	N	PCI JOINT PWB UNIT B
5-39	PCAP-A184JBEZ	AE		LOUVER CAP
5-40	TLAB-J793JBRZ	AC	N	CAUTION LABEL
5-41	TLAB-H257JBRA	AD		FIRE LABEL
6-1	CPADBA348JBKZ	AL	N	PACKING PAD R ASS'Y
6-2	SPADBB017JBEZ	AG		PAD L
6-3	SPAKCE885JBEZ	AQ	N	PACKING CASE
6-4	TLABMH285JBRZ	AH	N	PRODUCT LABEL [CLC8101i-W 65 HE]
6-4	TLABMH323JBRZ	AH	N	PRODUCT LABEL [CLC8001i-W 35 E]
6-4	TLABMH324JBRZ	AH	N	PRODUCT LABEL [CLC8001i-W 25 E]

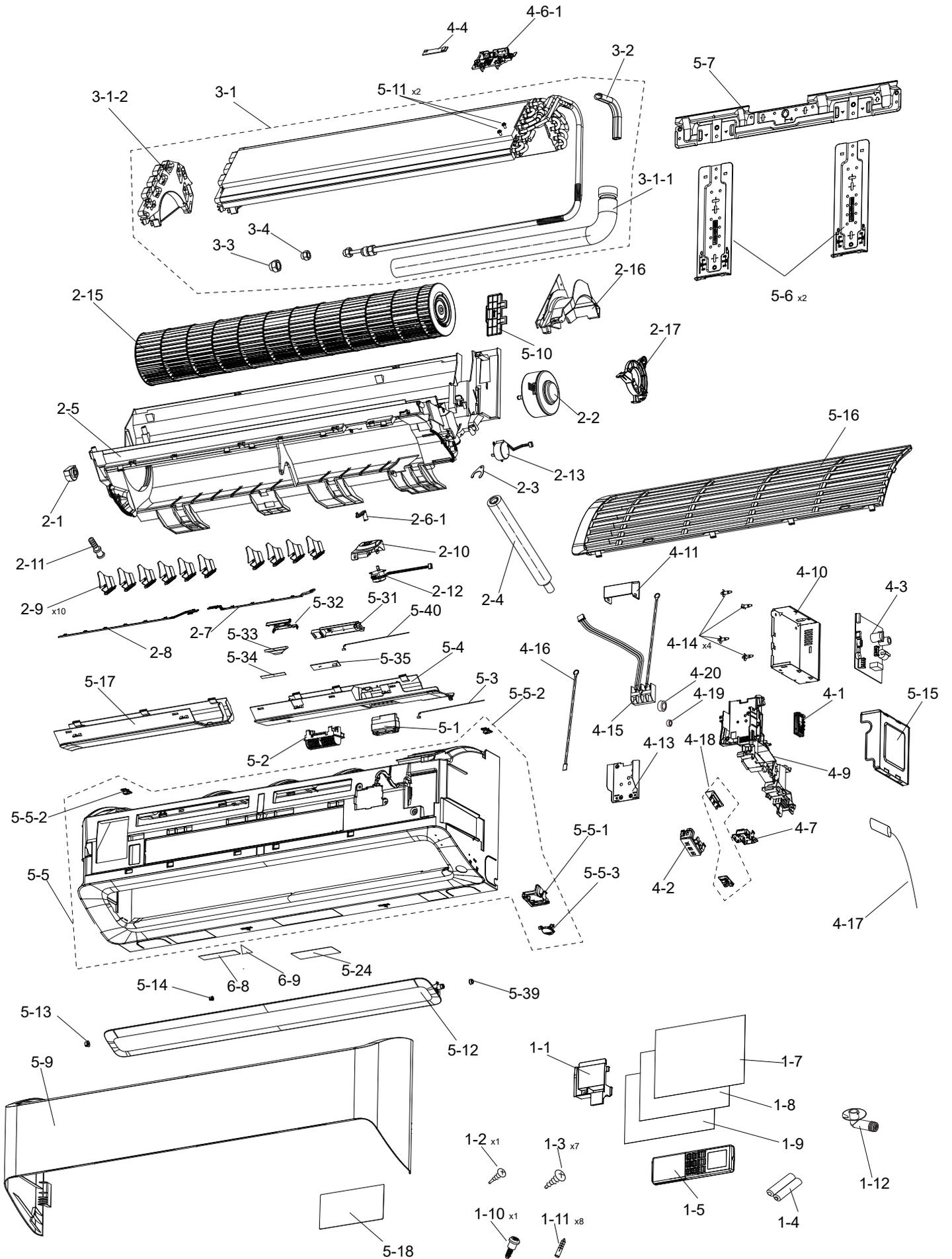
MODEL: CLC8101i-W 65 HER CLC8001i-W 35 ER CLC8001i-W 25 ER				MODEL: CLC8101i-W 65 HET CLC8001i-W 35 ET CLC8001i-W 25 ET			
REF. No.	PARTS CODE	PRICE RANK	NEW MARK	DESCRIPTION			
1-1	DHLD-A129JBKZ	AK	N	CORD HOLDER ASSY(Drak Gray)			
1-2	XTTS740P20000	AF		TAPPING SCREW			
1-3	XTTS745P30000	AC		TAPPING SCREW			
1-4	UBATUA027JBE0	AE		BATTERY PACK			
1-5	CRMC-B078JBEZ	AX		RCU NORDIC BOSCH YHB [CLC8101i]			
1-5	CRMC-B080JBEZ	AX		RCU AVERAGE BOSCH YHR [CLC8001i]			
1-7	TINS-B855JBRZ	AQ		INSTALLATION MANUAL [CLC8101i]			
1-7	TINS-B858JBRZ	AQ		INSTALLATION MANUAL [CLC8001i]			
1-9	TINSEB092JBRZ	AQ		OPERATION MANUAL [CLC8101i]			
1-9	TINSEB094JBRZ	AQ		OPERATION MANUAL [CLC8001i]			
1-10	LX-BZA357JBEZ	AE		SPECIAL SCREW			
1-11	LX-NZA207JBEZ	AE		SPECIAL NUT			
1-12-1	PSHE-A460JBEA	AN	N	MIRROR SHEET C			
1-12-2	PSHE-A461JBEA	AN	N	MIRROR SHEET B			
1-12-3	PSHE-A462JBEA	AM	N	MIRROR SHEET A			
2-1	CHLD-A221JBKZ	AE		BEARING ASS'Y			
2-2	CMOT-A672JBKZ	BC		FAN MOTOR SUB ASS'Y			
2-3	LPLT-A069JBPZ	AC		HOSE HOLDER			
2-4	PHOS-A073JBEZ	AG		DRAIN HOSE			
2-5	DSRA-A482JBKZ	BF	N	CABINET SUB ASS'Y(Dark Gray)			
2-6-1	MARMPA104JBFC	AF	N	ARM AUTO(Drak Gray)			
2-7	MJNTPA236JBFC	AE	N	LOUVER LINK R(Dark Gray)			
2-8	MJNTPA237JBFC	AE	N	LOUVER LINK L(Dark Gray)			
2-9	MLOV-A661JBFC	AE	N	VERTICAL LOUVER (V-louver) (Dark Gray)			
2-10	PDAI-A394JBFC	AE	N	MOTOR BRACKET(Dark Gray)			
2-11	PGUMMA495JBEZ	AC		DRAIN PLUG			
2-12	RMOT-A247JBZZ	AM		LOUVER MOTOR V			
2-13	RMOT-A292JBZZ	AQ		LOUVER MOTOR			
2-15	NFANCA146JBEZ	AW		CROSS FLOW FAN			
2-16	PCOV-C936JBFZ	AK		SIDE COVER R			
2-17	PCOV-C954JBFZ	AF		MOTOR COVER			
3-1	CCYC-E943JBKZ	BX		CYCLE ASS'Y			
3-1-1	PFPFPF402JBEZ	AG		PIPE DAN-S			
3-1-2	PCOV-C937JBFZ	AH		SIDE COVER L			
3-3	PSEN-A099JBKZ	AK		FLARE NUT ASS'Y			
3-4	PSEN-A100JBKZ	AK		FLARE NUT ASS'Y			
4-1	-			WIRELESS ADAPTER			
4-2	DHLD-A126JBKZ	AG		LED HOLDER R ASS'Y			
4-3	DSGY-H767JBKZ	BK	N	CONTROL BOARD(Service) [CLC8101i-W 65 HER]			
4-3	DSGY-H763JBKZ	BG	N	CONTROL BOARD(Service) [CLC8101i-W 65 HET]			
4-3	DSGY-H777JBKZ	BG	N	CONTROL BOARD(Service) [CLC8001i-W 35 ER]			
4-3	DSGY-H775JBKZ	BG	N	CONTROL BOARD(Service) [CLC8001i-W 35 ET]			
4-3	DSGY-H772JBKZ	BG	N	CONTROL BOARD(Service) [CLC8001i-W 25 ER]			
4-3	DSGY-H770JBKZ	BG	N	CONTROL BOARD(Service) [CLC8001i-W 25 ET]			
4-4	FSGY-E705JBKZ	AK		SENSOR PWB-K			
4-5	FSGY-E782JBKZ	AS		MOTION SENSOR BOARD			
4-6-1	LHLD-B461JBFZ	AH		SENSOR HOLDER			
4-7	LHLD-B507JBFZ	AE		RECEIVER HOLDER			
4-8	LHLD-B508JBFZ	AE		MOTION SENSOR HOLDER			
4-9	LHLD-B511JBFA	AN		TERMINAL HOLDER			
4-10	PBOX-A674JBWZ	AH		CONTROL ANGLE			
4-11	PCOV-C938JBWZ	AF		TERMINAL COVER			
4-12	PCOV-C946JBEZ	AH		SENSOR LENS			

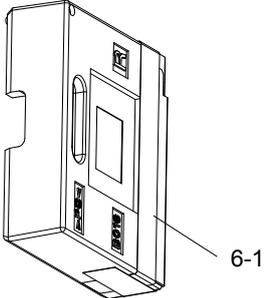
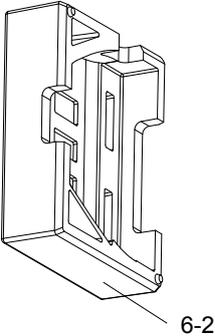
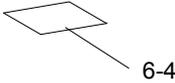
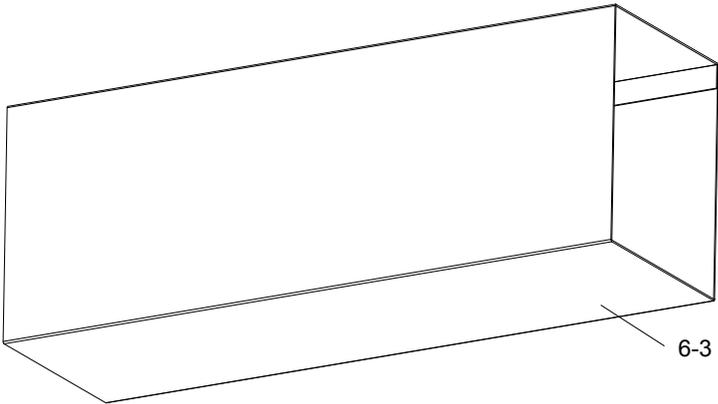
REF. No.	PARTS CODE	PRICE RANK	NEW MARK	DESCRIPTION
4-13	PDAI-A395JBWZ	AE		EARTH PLATE
4-14	PSPA-A238JBEZ	AC		SPACER
4-15	QTANZA157JBZZ	AP		TERMINAL BORAD
4-16	QW-VZH003JBZZ	AE		LEAD WIRE-E
4-17	RH-HXA268JBZZ	AH		THERMISTOR
4-18	FSGY-E835JBKZ	AS		DISPLAY BOARD(Service)
4-19	RFIL-A151JBEZ	AU		FERRITE CORE
5-1	CKITTA313JBKZ	BL	N	PCI UNIT ASS'Y(Dark Gray)
5-3	QW-VZH538JBZZ	AF		LEAD WIRE-PCI LED
5-4	PSTB-A022JBFC	AM	N	STABILIZER R(Dark Gray)
5-5	CWAK-E835JBKZ	BN	N	FRONT PANEL ASS'Y(Dark Gray)
5-5-1	LHLD-B509JBFZ	AE		BUTTON HOLDER
5-5-2	MLEV-A043JBFA	AD		PANEL LOCK(Light Gray)
5-5-3	PCOV-C964JBFB	AE	N	RECEIVER COVER(Clear White)
5-5-4	PSHE-A463JBEA	AW	N	MIRROR SHEET 1
5-5-5	PSHE-A464JBEA	AQ	N	MIRROR SHEET 2
5-5-6	PSHE-A465JBEA	AQ	N	MIRROR SHEET 3
5-6	PPLTNA169JBWZ	AL		MOUNTING ANGLE B
5-7	PPLTNA187JBWZ	AN		MOUNTING ANGLE A
5-9	HPNL-B635JBRF	BP	N	OPEN PANEL(RED)
5-9	HPNL-B634JBRF	BZ	N	OPEN PANEL(Titanimu)
5-10	LHLD-B510JBFZ	AE		PIPE HOLDER
5-11	LX-BZA075JBE0	AA		SPECIAL SCREW
5-12	MLoV-A662JBFC	AV	N	HORIZONTAL LOUVER (H-louver) (Dark Gray)
5-13	NBRG-A026JBFQ	AQ	N	LOUVER BUSHING(Dark Gray)
5-14	NBRG-A038JBFQ	AQ	N	BEARING C(Dark Gray)
5-15	PCOV-C939JBWZ	AH		CONTROL BOX COVER
5-16	PFILMA329JBEC	AW	N	TOP GRILLE(Dark Gray)
5-17	PSTB-A021JBFC	AZ	N	STABILIZER L 25000(Dark Gray)
5-18	TLABCE379JBRZ	AD		WIRING DIAGRAM
5-24	TSPC-M925JBRA	AK	N	NAME LABEL [CLC8101i-W 65 HER]
5-24	TSPC-M917JBRA	AK	N	NAME LABEL [CLC8101i-W 65 HET]
5-24	TSPC-M927JBRA	AK	N	NAME LABEL [CLC8001i-W 35 ER]
5-24	TSPC-M929JBRA	AK	N	NAME LABEL [CLC8001i-W 35 ET]
5-24	TSPC-M928JBRA	AK	N	NAME LABEL [CLC8001i-W 25 ER]
5-24	TSPC-M930JBRA	AK	N	NAME LABEL [CLC8001i-W 25 ET]
5-30	PCoV-C941JBFC	AS	N	STABILIZER COVER(Dark Gray)
5-31	PCAS-A127JBFA	AG		LED CASE
5-32	PCoV-C719JBFA	AE		LIGHT GUIDE COVER
5-33	PPLT-B169JBFA	AE		LIGHT GUIDE
5-34	PSHE-A435JBEA	AD		PCI-LED SHEET
5-35	FSGY-F030JBKZ	AQ		PCI LED UNIT
5-36	PBRS-A030JBFA	AG		PCI BRUSH
5-37	MLEV-A030JBFC	AC	N	PCI LOCK(Dark Gray)
5-38	FSGY-E884JBKZ	AP		PCI JOINT PWB UNIT B
5-39	PCAP-A184JBEZ	AE		LOUVER CAP
5-40	TLAB-J793JBRZ	AC		CAUTION LABEL
5-41	TLAB-H257JBRA	AD		FIRE LABEL
6-1	CPADBA348JBKZ	AL		PACKING PAD R ASS'Y
6-2	SPADBB017JBEZ	AG		PAD L
6-3	SPAKCE885JBEZ	AQ		PACKING CASE
6-4	TLABMH558JBRZ	AH	N	PRODUCT LABEL [CLC8101i-W 65 HER]
6-4	TLABMH545JBRZ	AH	N	PRODUCT LABEL [CLC8101i-W 65 HET]
6-4	TLABMH560JBRZ	AH	N	PRODUCT LABEL [CLC8001i-W 35 ER]
6-4	TLABMH562JBRZ	AH	N	PRODUCT LABEL [CLC8001i-W 35 ET]
6-4	TLABMH561JBRZ	AH	N	PRODUCT LABEL [CLC8001i-W 25 ER]
6-4	TLABMH563JBRZ	AH	N	PRODUCT LABEL [CLC8001i-W 25 ET]

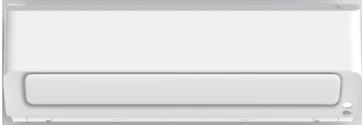
MODEL: CLC8101i-W 65 HES CLC8001i-W 35 ES CLC8001i-W 25 ES				
REF. No.	PARTS CODE	PRICE RANK	NEW MARK	DESCRIPTION
1-1	DHLD-A128JBKZ	AK	N	CORD HOLDER ASSY(Light Gray)
1-2	XTTS740P20000	AF		TAPPING SCREW
1-3	XTTS745P30000	AC		TAPPING SCREW
1-4	UBATUA027JBE0	AE		BATTERY PACK
1-5	CRMC-B078JBEZ	AX		RCU NORDIC BOSCH YHB [CLC8101i]
1-5	CRMC-B080JBEZ	AX		RCU AVERAGE BOSCH YHR [CLC8001i]
1-7	TiNS-B855JBRZ	AQ		INSTALLATION MANUAL [CLC8101i]
1-7	TiNS-B858JBRZ	AQ		INSTALLATION MANUAL [CLC8001i]
1-9	TiNSEB092JBRZ	AQ		OPERATION MANUAL [CLC8101i]
1-9	TiNSEB094JBRZ	AQ		OPERATION MANUAL [CLC8001i]
1-10	LX-BZA357JBEZ	AE		SPECIAL SCREW
1-11	LX-NZA207JBEZ	AE		SPECIAL NUT
1-12-1	PSHE-A460JBEA	AN		MIRROR SHEET C
1-12-2	PSHE-A461JBEA	AN		MIRROR SHEET B
1-12-3	PSHE-A462JBEA	AM		MIRROR SHEET A
2-1	CHLD-A221JBKZ	AE		BEARING ASS'Y
2-2	CMOT-A672JBKZ	BC		FAN MOTOR SUB ASS'Y
2-3	LPLT-A069JBPZ	AC		HOSE HOLDER
2-4	PHOS-A073JBEZ	AG		DRAIN HOSE
2-5	DSRA-A481JBKZ	BE	N	CABINET SUB ASS'Y(Light Gray)
2-6-1	MARMPA104JBFB	AF	N	ARM AUTO(Light Gray)
2-7	MJNTPA236JBFB	AE	N	LOUVER LINK R(Light Gray)
2-8	MJNTPA237JBFB	AE	N	LOUVER LINK L(Light Gray)
2-9	MLOV-A661JBFB	AE	N	VERTICAL LOUVER (V-louver) (Light Gray)
2-10	PDAI-A394JBFB	AE	N	MOTOR BRACKET(Light Gray)
2-11	PGUMMA495JBEZ	AC		DRAIN PLUG
2-12	RMOT-A247JBZZ	AM		LOUVER MOTOR V
2-13	RMOT-A292JBZZ	AQ		LOUVER MOTOR
2-15	NFANCA146JBEZ	AW		CROSS FLOW FAN
2-16	PCOV-C936JBFZ	AK		SIDE COVER R
2-17	PCOV-C954JBFZ	AF		MOTOR COVER
3-1	CCYC-E943JBKZ	BX		CYCLE ASS'Y
3-1-1	PFPFPF402JBEZ	AG		PIPE DAN-S
3-1-2	PCOV-C937JBFZ	AH		SIDE COVER L
3-3	PSEN-A099JBKZ	AK		FLARE NUT ASS'Y
3-4	PSEN-A100JBKZ	AK		FLARE NUT ASS'Y
4-1	-			WIRELESS ADAPTER
4-2	DHLD-A126JBKZ	AG		LED HOLDER R ASS'Y
4-3	DSGY-H765JBKZ	BG	N	CONTROL BOARD(Service) [CLC8101i-W 65 HES]
4-3	DSGY-H776JBKZ	BG	N	CONTROL BOARD(Service) [CLC8001i-W 35 ES]
4-3	DSGY-H771JBKZ	BG	N	CONTROL BOARD(Service) [CLC8001i-W 25 ES]
4-4	FSGY-E705JBKZ	AK		SENSOR PWB-K
4-5	FSGY-E782JBKZ	AS		MOTION SENSOR BOARD
4-6-1	LHLD-B461JBFZ	AH		SENSOR HOLDER
4-7	LHLD-B507JBFZ	AE		RECEIVER HOLDER
4-8	LHLD-B508JBFZ	AE		MOTION SENSOR HOLDER
4-9	LHLD-B511JBFA	AN		TERMINAL HOLDER
4-10	PBOX-A674JBWZ	AH		CONTROL ANGLE

REF. No.	PARTS CODE	PRICE RANK	NEW MARK	DESCRIPTION
4-11	PCOV-C938JBWZ	AF		TERMINAL COVER
4-12	PCOV-C946JBEZ	AH		SENSOR LENS
4-13	PDAL-A395JBWZ	AE		EARTH PLATE
4-14	PSPA-A238JBEZ	AC		SPACER
4-15	QTANZA157JBZZ	AP		TERMINAL BORAD
4-16	QW-VZH003JBZZ	AE		LEAD WIRE-E
4-17	RH-HXA268JBZZ	AH		THERMISTOR
4-18	FSGY-E835JBKZ	AS		DISPLAY BOARD(Service)
4-19	RFIL-A151JBEZ	AU		FERRITE CORE
5-1	CKITTA312JBKZ	BL	N	PCI UNIT ASS'Y(Light Gray)
5-3	QW-VZH538JBZZ	AF		LEAD WIRE-PCI LED
5-4	PSTB-A022JBFB	AM	N	STABILIZER R(Light Gray)
5-5	CWAK-E832JBKZ	BN	N	FRONT PANEL ASS'Y(Light Gray)
5-5-1	LHLD-B509JBFZ	AE		BUTTON HOLDER
5-5-2	MLEV-A043JBFB	AD	N	PANEL LOCK(White)
5-5-3	PCOV-C964JBFB	AE		RECEIVER COVER(Clear White)
5-5-4	PSHE-A463JBEA	AW		MIRROR SHEET 1
5-5-5	PSHE-A464JBEA	AQ		MIRROR SHEET 2
5-5-6	PSHE-A465JBEA	AQ		MIRROR SHEET 3
5-6	PPLTNA169JBWZ	AL		MOUNTING ANGLE B
5-7	PPLTNA187JBWZ	AN		MOUNTING ANGLE A
5-9	HPNL-B633JBRE	BZ	N	OPEN PANEL(Silver)
5-10	LHLD-B510JBFZ	AE		PIPE HOLDER
5-11	LX-BZA075JBE0	AA		SPECIAL SCREW
5-12	MLoV-A662JBFB	AV	N	HORIZONTAL LOUVER (H-louver) (Light Gray)
5-13	NBRG-A026JBFR	AQ	N	LOUVER BUSHING(Light Gray)
5-14	NBRG-A038JBFS	AQ	N	BEARING C(Light Gray)
5-15	PCOV-C939JBWZ	AH		CONTROL BOX COVER
5-16	PFILMA329JBEB	AW	N	TOP GRILLE(Light Gray)
5-17	PSTB-A021JBFB	AZ	N	STABILIZER L 25000(Light Gray)
5-18	TLABCE379JBRZ	AD		WIRING DIAGRAM
5-24	TSPC-M926JBRA	AK	N	NAME LABEL [CLC8101i-W 65 HES]
5-24	TSPC-M931JBRA	AK	N	NAME LABEL [CLC8001i-W 35 ES]
5-24	TSPC-M932JBRA	AK	N	NAME LABEL [CLC8001i-W 25 ES]
5-30	PCoV-C941JBFB	AS	N	STABILIZER COVER(Light Gray)
5-31	PCAS-A127JBFA	AG		LED CASE
5-32	PCoV-C719JBFA	AE		LIGHT GUIDE COVER
5-33	PPLT-B169JBFA	AE		LIGHT GUIDE
5-34	PSHE-A435JBEA	AD		PCI-LED SHEET
5-35	FSGY-F030JBKZ	AQ		PCI LED UNIT
5-36	PBRs-A030JBFA	AG		PCI BRUSH
5-37	MLEV-A030JBFA	AF		PCI LOCK(Lithg Gray)
5-38	FSGY-E884JBKZ	AP		PCI JOINT PWB UNIT B
5-39	PCAP-A184JBEZ	AE		LOUVER CAP
5-40	TLAB-J793JBRZ	AC		CAUTION LABEL
5-41	TLAB-H257JBRA	AD		FIRE LABEL
6-1	CPADBA348JBKZ	AL		PACKING PAD R ASS'Y
6-2	SPADBB017JBEZ	AG		PAD L
6-3	SPAKCE885JBEZ	AQ	N	PACKING CASE
6-4	TLABMH559JBRZ	AH	N	PRODUCT LABEL [CLC8101i-W 65 HES]
6-4	TLABMH564JBRZ	AH	N	PRODUCT LABEL [CLC8001i-W 35 ES]
6-4	TLABMH565JBRZ	AH	N	PRODUCT LABEL [CLC8001i-W 25 ES]

[2] INDOOR UNIT PARTS (CLC6101i_CLC6001i)

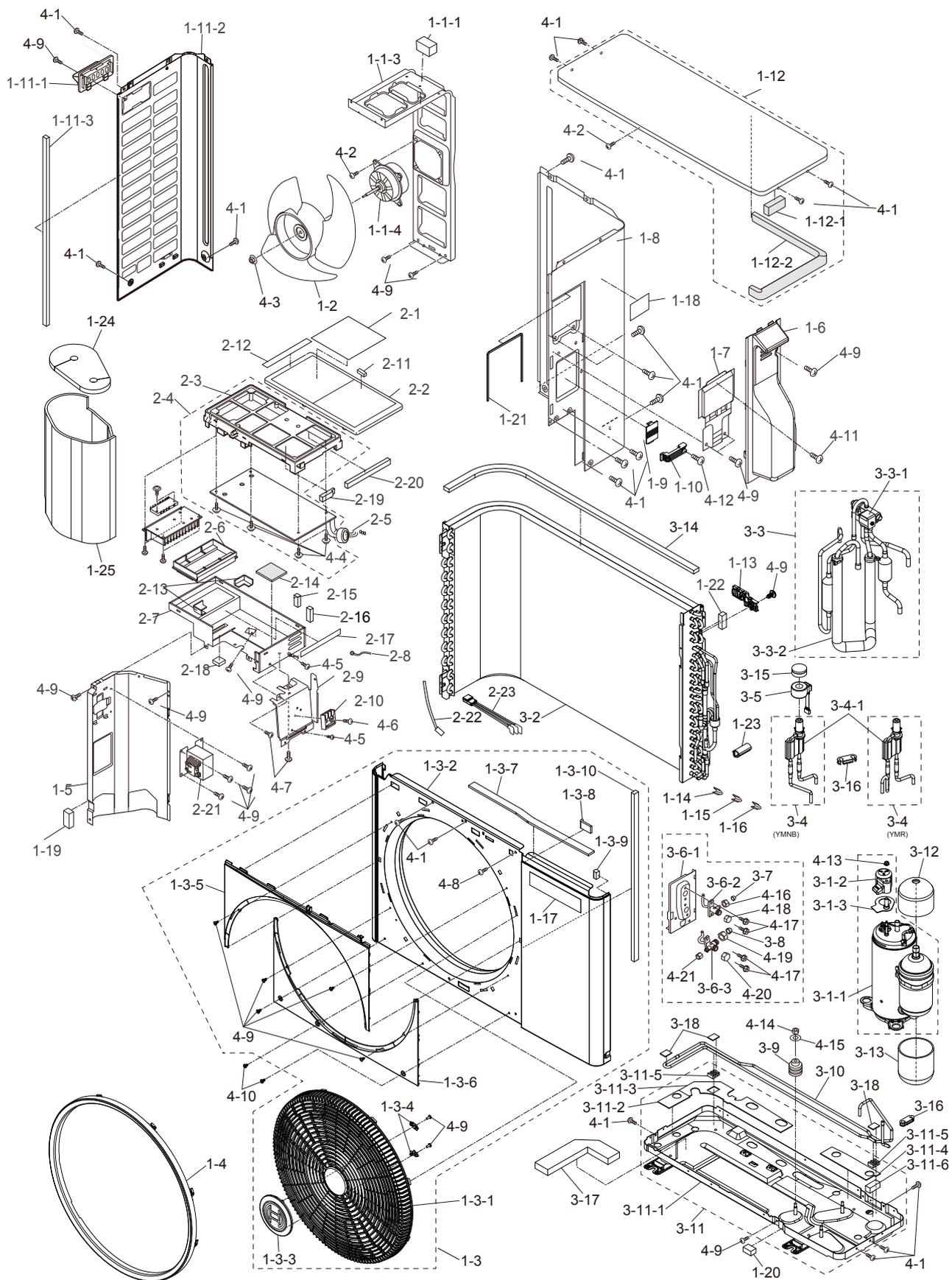




MODEL: CLC6101i-W 65 HE CLC6101i-W 50 HE CLC6001i-W 35 E CLC6001i-W 25 E				
				
REF. No.	PARTS CODE	PRICE RANK	NEW MARK	DESCRIPTION
1-1	DHLD-A127JBKZ	AK		CORD HOLDER ASSY
1-2	XTTS740P20000	AF		TAPPING SCREW
1-3	XTTS745P30000	AC		TAPPING SCREW
1-4	UBATUA027JBE0	AE		BATTERY PACK
1-5	CRMC-B078JBEZ	AX		RCU NORDIC BOSCH YHB [CLC6101i]
1-5	CRMC-B080JBEZ	AX		RCU AVERAGE BOSCH YHR [CLC6001i]
1-7	TiNS-B855JBRZ	AQ		INSTALLATION MANUAL [CLC6101i]
1-7	TiNS-B858JBRZ	AQ		INSTALLATION MANUAL [CLC6001i]
1-9	TiNSEB092JBRZ	AQ		OPERATION MANUAL [CLC6101i]
1-9	TiNSEB094JBRZ	AQ		OPERATION MANUAL [CLC6001i]
1-10	LX-BZA357JBEZ	AE		SPECIAL SCREW
1-11	LX-NZA207JBEZ	AE		SPECIAL NUT
2-1	CHLD-A221JBKZ	AE		BEARING ASS'Y
2-2	CMOT-A672JBKZ	BC		FAN MOTOR SUB ASS'Y
2-3	LPLT-A069JBPZ	AC		HOSE HOLDER
2-4	PHOS-A073JBEZ	AG		DRAIN HOSE
2-5	DSRA-A489JBKZ	BF		CABINET SUB ASS'Y
2-6-1	MARMPA104JBFA	AF		ARM AUTO
2-7	MJNTPA236JBFA	AE		LOUVER LINK R
2-8	MJNTPA237JBFA	AE		LOUVER LINK L
2-9	MLOV-A661JBFA	AE		VERTICAL LOUVER (V-louver)
2-10	PDAl-A394JBFA	AE		MOTOR BRACKET
2-11	PGUMMA495JBEZ	AC		DRAIN PLUG
2-12	RMOT-A247JBZZ	AM		LOUVER MOTOR V
2-13	RMOT-A292JBZZ	AQ		LOUVER MOTOR
2-15	NFANCA146JBEZ	AW		CROSS FLOW FAN
2-16	PCOV-C936JBFZ	AK		SIDE COVER R
2-17	PCOV-C954JBFZ	AF		MOTOR COVER
3-1	CCYC-E954JBKZ	BW	N	CYCLE ASS'Y
3-1	CCYC-E945JBKZ	BU	N	CYCLE ASS'Y
3-1-1	PFPFPF402JBEZ	AG		PIPE DAN-S
3-1-2	PCOV-C937JBFZ	AH		PCOV-C937JBFZ
3-3	PSEN-A099JBKZ	AK		FLARE NUT ASS'Y
3-4	PSEN-A100JBKZ	AK		FLARE NUT ASS'Y
4-1	-			WIRELESS ADAPTER
4-2	DHLD-A126JBKZ	AG		LED HOLDER R ASS'Y
4-3	DSGY-H756JBKZ	BG	N	CONTROL BOARD(Service) [CLC6101i-W 65 HE]
4-3	DSGY-H755JBKZ	BG	N	CONTROL BOARD(Service) [CLC6101i-W 50 HE]
4-3	DSGY-H759JBKZ	BG	N	CONTROL BOARD(Service) [CLC6001i-W 35 E]
4-3	DSGY-H757JBKZ	BG	N	CONTROL BOARD(Service) [CLC6001i-W 25 E]
4-4	FSGY-E705JBKZ	AK		SENSOR PWB-K
4-6-1	LHLD-B461JBFZ	AH		SENSOR HOLDER
4-7	LHLD-B507JBFZ	AE		RECEIVER HOLDER
4-9	LHLD-B511JBFA	AN		TERMINAL HOLDER
4-10	PBOX-A674JBWZ	AH		CONTROL ANGLE
4-11	PCOV-C938JBWZ	AF		TERMINAL COVER
4-13	PDAl-A395JBWZ	AE		EARTH PLATE
4-14	PSPA-A238JBEZ	AC		SPACER

REF. No.	PARTS CODE	PRICE RANK	NEW MARK	DESCRIPTION
4-15	QTANZA157JBZZ	AP		TERMINAL BORAD
4-16	QW-VZH003JBZZ	AE		LEAD WIRE-E
4-17	RH-HXA268JBZZ	AH		THERMISTOR
4-18	FSGY-E835JBKZ	AS		DISPLAY BOARD(Service)
4-19	RFIL-A151JBEZ	AU		FERRITE CORE
4-20	RFIL-A150JBEZ	AH		FERRITE CORE
5-1	CKITTA321AKKZ	BE		PLASMA CLUSTER UNIT
5-2	PCOV-C940JBFA	AG		PCI COVER
5-3	QW-VZG803JBZZ	AF		LEAD WIRE
5-4	PSTB-A022JBFA	AM		STABILIZER R
5-5	CWAK-E831JBKZ	BG	N	FRONT PANEL ASS'Y
5-5-1	LHLD-B509JBFZ	AE		BUTTON HOLDER
5-5-2	MLEV-A043JBFA	AD		PANEL LOCK
5-5-3	PCOV-C944JBFA	AE		RECEIVER COVER
5-6	PPLTNA169JBWZ	AL		MOUNTING ANGLE B
5-7	PPLTNA187JBWZ	AN		MOUNTING ANGLE A
5-9	HPNL-B629JBRF	AZ		OPEN PANEL
5-10	LHLD-B510JBFZ	AE		PIPE HOLDER
5-11	LX-BZA075JBE0	AA		SPECIAL SCREW
5-12	MLoV-A662JBFA	AV		HORIZONTAL LOUVER (H-louver)
5-13	NBRG-A026JBFA	AB		LOUVER BUSHING
5-14	NBRG-A038JBFA	AC		BEARING C
5-15	PCOV-C939JBWZ	AH		CONTROL BOX COVER
5-16	PFILMA329JBEA	AT		TOP GRILLE
5-17	PSTB-A020JBFA	AL		STABILIZER L
5-18	TLABCE379JBRZ	AD		WIRING DIAGRAM
5-24	TSPC-M808JBRA	AK	N	NAME LABEL [CLC6101i-W 65 HE]
5-24	TSPC-M761JBRA	AK	N	NAME LABEL [CLC6101i-W 50 HE]
5-24	TSPC-M762JBRA	AK	N	NAME LABEL [CLC6001i-W 35 E]
5-24	TSPC-M763JBRA	AK	N	NAME LABEL [CLC6001i-W 25 E]
5-31	PCAS-A127JBFA	AG		LED CASE
5-32	PCoV-C719JBFA	AE		LIGHT GUIDE COVER
5-33	PPLT-B169JBFA	AE		LIGHT GUIDE
5-34	PSHE-A435JBEA	AD		PCI-LED SHEET
5-35	FSGY-F030JBKZ	AQ		PCI LED UNIT
5-39	PCAP-A184JBEZ	AE		LOUVER CAP
5-40	QW-VZH538JBZZ	AF		LEAD WIRE-PCI LED
6-1	CPADBA348JBKZ	AL	N	PACKING PAD R ASS'Y
6-2	SPADBB017JBEZ	AG		PAD L
6-3	SPAKCE885JBEZ	AQ		PACKING CASE
6-4	TLABMH362JBRZ	AH	N	PRODUCT LABEL [CLC6101i-W 65 HE]
6-4	TLABMH302JBRZ	AH	N	PRODUCT LABEL [CLC6101i-W 50 HE]
6-4	TLABMH303JBRZ	AH	N	PRODUCT LABEL [CLC6001i-W 35 E]
6-4	TLABMH304JBRZ	AH	N	PRODUCT LABEL [CLC6001i-W 25 E]
6-8	TLAB-J793JBRZ	AC		CAUTION LABEL
6-9	TLAB-H257JBRA	AD		FIRE LABEL

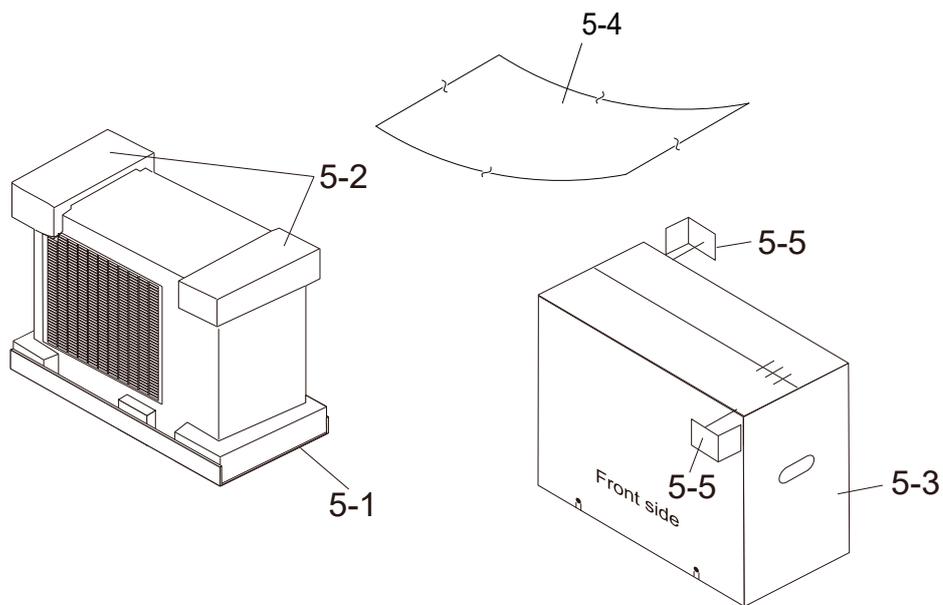
[3] OUTDOOR UNIT (CLC6101i_CLC6001i)



MODEL: CLC6101i 50 HE, CLC6101i 65 HE CLC6001i 25 E, CLC6001i 35 E				
REF. No.	PARTS CODE	PRICE RANK	NEW MARK	DESCRIPTION
CABINET AND UNIT PARTS				
1-1-1	PFPFPE338JBEZ	AD		CUSHION
1-1-3	LANGKA124JBPZ	AR		FAN MOTOR ANGLE
1-1-4	CMOTLB656JBEZ	BC		FAN MOTOR
1-2	NFANPA159JBEZ	AT		PROPELLER FAN
1-3	CCAB-A731JBKZ	BF		FRONT PANEL ASS'Y
1-3-1	GGADPA046JBFB	AQ		FAN GUARD
1-3-2	GCAB-A615JBTD	AY		FRONT PANEL
1-3-3	PCOV-C870JBRB	AG		CENTER DISC
1-3-4	LHLD-B469JBFB	AC		DISC HOLDER
1-3-5	GCAB-A613JBFD	AS		FRONT COVER UP
1-3-6	GCAB-A614JBFD	AS		FRONT COVER DOWN
1-3-7	PSEL-C048JBEZ	AC		F.PANEL INSULATOR
1-3-8	PSEL-C049JBEZ	AC		F.PANEL INSULATOR
1-3-9	PSEL-D146JBEZ	AF		SEAL
1-3-10	PSEL-E714JBEZ	AD		BULKHEAD INSULATOR
1-4	PCOV-C871JBFA	AU		RING
1-5	CSKR-A628JBKZ	AR		BULKHEAD ASS'Y
1-6	CFTA-A400JBKZ	AK		SIDE COVER ASS'Y
1-7	CCOV-A414JBKZ	AF		COVER ASS'Y
1-8	PPLT-B202JBTD	AS		SIDE COVER R
1-9	LHLD-A699JBFA	AF		HOLDER BASE
1-10	LHLD-A573JBFA	AC		CORD CLAMP
1-11-1	JHNDPA037JBFD	AE		HANDLE
1-11-2	PPLT-B026JBTD	AP		SIDE COVER L
1-11-3	PSEL-E998JBEZ	AC		SIDE COVER L SEAL
1-12	DCAB-A238JBKZ	AV		TOP COVER ASS'Y
1-12-1	PSEL-E814JBEZ	AC		INSULATOR
1-12-2	PSEL-E813JBEZ	AC		INSULATOR
1-13	LHLD-B385JBFA	AE		THERMISTOR HOLDER
1-14	MSPR-A026JBE0	AB		SPRING
1-15	MSPR-A027JBE0	AB		THERMISTOR SPRING
1-16	MSPR-A207JBEZ	AF		SPRING
1-17	TLABBA320JBRA	AF		BOSCH LABEL
1-18	TSPC-M740JBRZ	AK	N	NAME LABEL[CLC6101i 65 HE]
1-18	TSPC-M766JBRZ	AK	N	NAME LABEL[CLC6101i 50 HE]
1-18	TSPC-M786JBRZ	AK	N	NAME LABEL[CLC6001i 35 E]
1-18	TSPC-M785JBRZ	AK	N	NAME LABEL[CLC6001i 25 E]
1-19	PSEL-E278JBEZ	AC		SEAL
1-20	PSEL-E255JBEZ	AC		BASE PAN SEAL B
1-21	PSEL-E806JBEZ	AC		SIDE COVER INSULATOR
1-22	PSEL-E881JBEZ	AC		END PLATE SEAL
1-23	PSEL-E943JBEZ	AD		THERMISTOR SEAL
1-24	PSPF-B569JBEZ	AD		COMPRESSOR COVER TOP
1-25	PSPF-B333JBEZ	AN		COMPRESSOR COVER
CONTROL UNIT PARTS				
2-1	TLABCE354JBRZ	AC		WIRING DIAGRAM
2-2	PCOV-B716JBWZ	AR		COVER
2-3	LHLD-B195JBFA	AQ		HOLDER

REF. No.	PARTS CODE	PRICE RANK	NEW MARK	DESCRIPTION
2-4	DSGY-H778JBKZ	CA	N	CONTROL BOARD UNIT[CLC6101i 65 HE]
2-4	DSGY-H779JBKZ	CA	N	CONTROL BOARD UNIT[CLC6001i 35 E]
2-4	DSGY-H780JBKZ	CA	N	CONTROL BOARD UNIT[CLC6101i 50 HE]
2-4	DSGY-H781JBKZ	CA	N	CONTROL BOARD UNIT[CLC6001i 25 E]
2-5	RFIL-A149JBEZ	AF		FERRITE CORE
2-6	LHLD-B196JBFA	AG		HOLDER
2-7	DBOX-A086JBYZ	AT		CONTROL BOX ASS'Y
2-8	QW-VZH384JBZZ	AD		EARTH WIRE
2-9	PDAI-A270JBWZ	AU		TERMINAL HOLDER
2-10	QTANZA135JBZZ	AQ		TERMINAL BOARD
2-11	PFPFPE565JBEZ	AC		CUSHION
2-12	PSEL-C684JBEZ	AB		SEAL
2-13	PSEL-C345JBEZ	AL		SEAL
2-14	PSEL-C686JBEZ	AC		SEAL
2-15	PSEL-E461JBEZ	AC		SEAL
2-16	PSEL-E462JBEZ	AC		SEAL
2-17	PSEL-C767JBEZ	AB		SEAL
2-18	PSEL-C769JBEZ	AB		SEAL
2-19	PSEL-E912JBEZ	AC		SEAL
2-20	PSEL-E913JBEZ	AC		SEAL
2-21	RCILZA091JBZZ	AZ	N	REACTOR
2-22	RH-HXA238JBZZ	AX		THERMISTOR
2-23	QW-IZA207JBZZ	AN		LEAD WIRE
CYCLE PARTS				
3-1-1	PCMPRA814JBEZ	BW		COMPRESSOR
3-1-2	PCOV-C854JBEZ	AP		TERMINAL COVER
3-1-3	PGUM-A292JBEZ	AP		TERMINAL GASKET
3-2	DCON-B017JBPZ	CF		CONDENSER
3-3	DVLV-B786JBKZ	BK	N	REVERSE VALVE ASS'Y
3-3-1	CCIL-A211JBKZ	AS		COIL ASS'Y
3-3-2	PFPFPF483JBEZ	AE		SUCTION INSULATOR
3-4	DVLV-B729JBKZ	BB		EXPAN.VALVE ASS'Y
3-4	DVLV-B752JBKZ	BB		EXPAN.VALVE ASS'Y
3-4-1	PGUMSA476JBEZ	AD		DAMPER RUBBER
3-5	RMOTSA073JBZZ	AV		VALVE MOTOR
3-6-1	PDAI-A246JBPZ	AM		FLARE COUPLING BASE
3-6-2	DVLV-B547JBKZ	AP		2WAY VALVE UNIT
3-6-3	DVLV-B620JBKZ	AS		3WAY VALVE UNIT
3-7	PCAP-A006JBF0	AC		NUT BONNET
3-8	PCAP-A007JBF0	AB		NUT BONNET
3-9	GLEG-A162JBEZ	AF		COMPRESSOR CUSHION
3-10	CPIPCC350JBKZ	AV		HEAT TUBE ASS'Y
3-11	CCHS-B716JBKZ	BB		BASE PAN ASS'Y
3-11	CCHS-B736JBKZ	BA		BASE PAN ASS'Y
3-11-1	CCHS-B715JBTD	BA		BASE PAN ASS'Y
3-11-1	CCHS-B733JBTD	BA		BASE PAN ASS'Y
3-11-2	PFPFPF480JBEZ	AC		BASE PAN INSU. A
3-11-3	PFPFPF481JBEZ	AC		BASE PAN INSU. C
3-11-4	PFPFPF482JBEZ	AC		BASE PAN INSU. B
3-11-5	PGUM-A219JBEZ	AG		TUBE HOLDER RUBBER
3-11-6	PSEL-E979JBEZ	AC		BASE PAN SEAL B
3-12	PFPFPF501JBEZ	AD		COMPRESSOR INSU. A

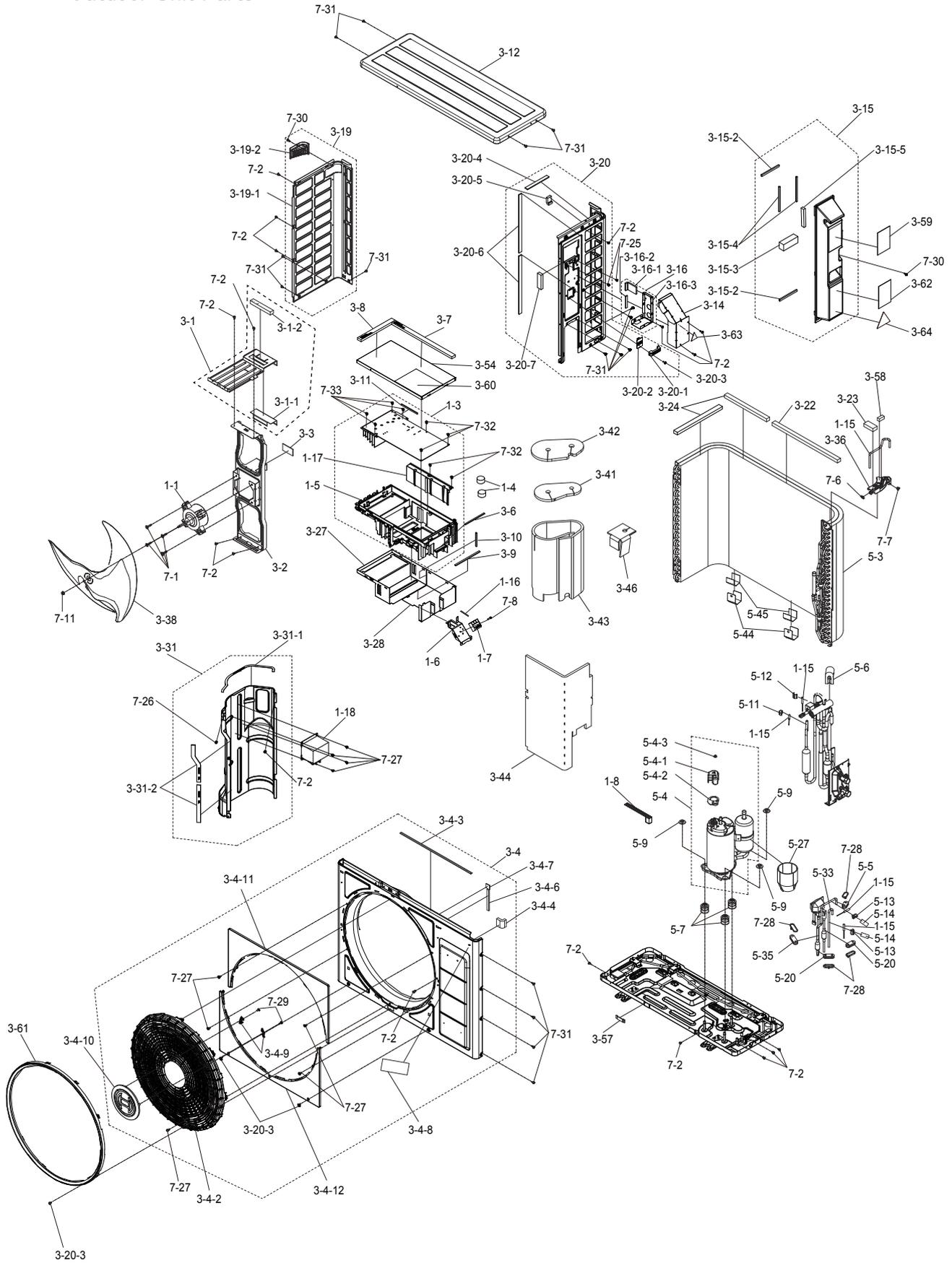
REF. No.	PARTS CODE	PRICE RANK	NEW MARK	DESCRIPTION
3-13	PFPFPF502JBEZ	AD		COMPRESSOR INSU. B
3-14	PSEL-E942JBEZ	AE		CONDENSER SEAL
3-16	PGUM-A298JBEZ	AG		DAMPER RUBBER
3-17	PSEL-E938JBEZ	AF		BASE PAN SEAL
SCREW AND NUT				
4-1	LX-BZA493JBEZ	AE		SPECIAL SCREW
4-2	LX-BZA570JBEZ	AC		SPECIAL SCREW
4-3	LX-NZA428JBEZ	AC		SPECIAL NUT
4-4	XCPS730P10XS0	AD		TAPPING SCREW
4-5	XQTS740P08000	AA		TAPPING SCREW
4-6	XCPS740P30000	AC		TAPPING SCREW
4-7	XCPS740P06000	AC		TAPPING SCREW
4-9	LX-BZA495JBEZ	AE		SPECIAL SCREW
4-10	LX-BZA498JBEZ	AC		SPECIAL SCREW
4-11	LX-BZA555JBEZ	AC		SPECIAL SCREW
4-12	XETS740P14000	AB		SCREW
4-13	LX-NZA476JBEZ	AC		FRANGE NUT
4-14	XNFS760-50000	AB		NUT
4-15	LX-WZA057JBEZ	AC		WASHER 22
4-16	LX-NZA505JBEZ	AF		FLARE NUT
4-17	LX-BZA494JBEZ	AE		SPECIAL SCREW
4-18	LX-NZA468JBEZ	AH		BONNET
4-19	LX-NZA502JBEZ	AG		FLARE NUT
4-20	LX-NZA500JBEZ	AH		BONNET
4-21	LX-NZA501JBEZ	AH		SERVICE NUT

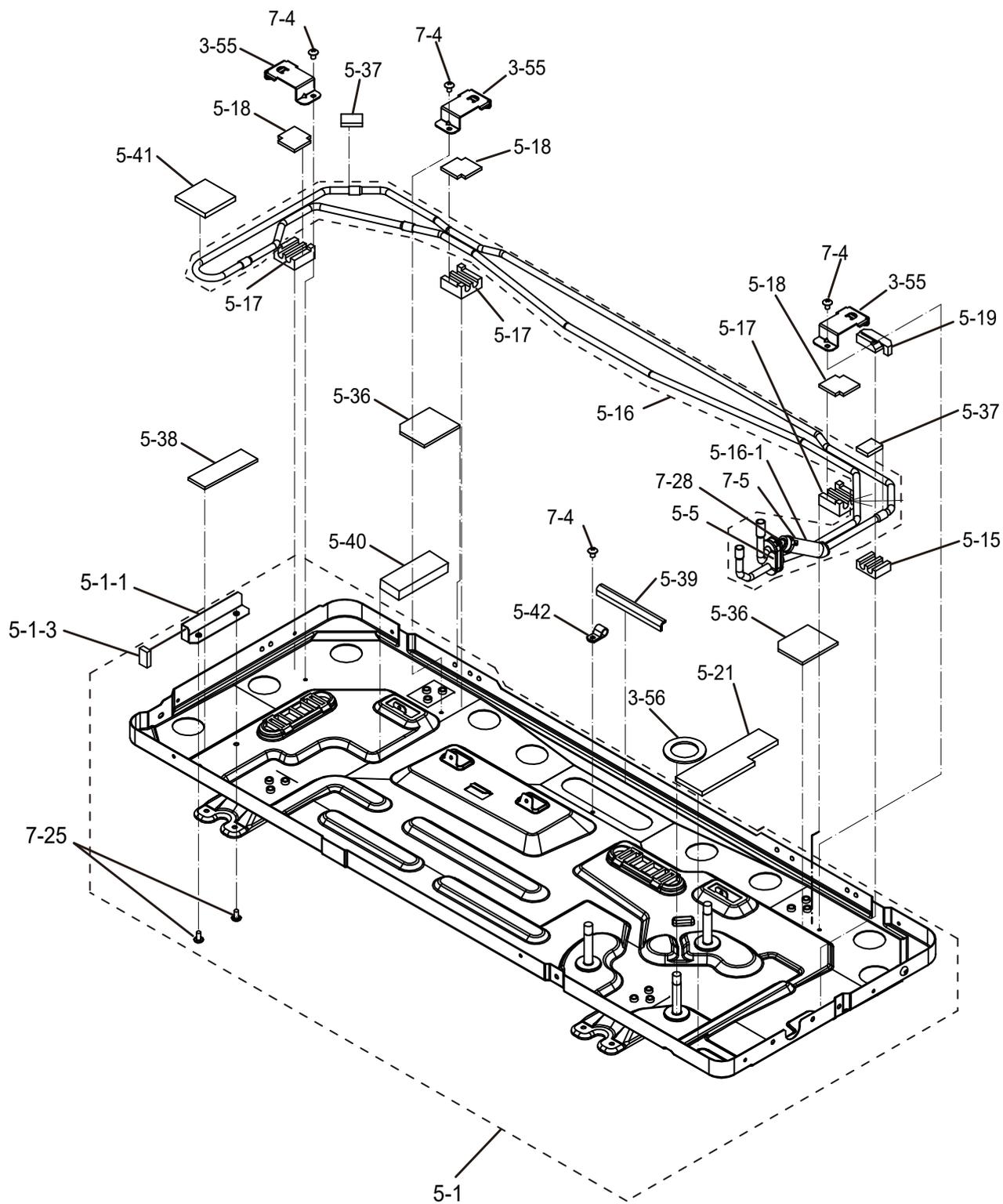


REF. No.	PARTS CODE	PRICE RANK	NEW MARK	DESCRIPTION
PACKING PARTS				
5-1	CPADBA340JBKZ	AT		BOTTOM PAD ASS'Y
5-2	CPADBA032JBKZ	AL		PACKING PAD ASS'Y
5-3	SPAKCE852JBEZ	AW		PACKING CASE
5-4	SPADP0300YDE0	AB		BAG
5-5	TLABMH261JBRZ	AH	N	PRODUCT LABEL[CLC6101i 65 HE]
5-5	TLABMH307JBRZ	AH	N	PRODUCT LABEL[CLC6101i 50 HE]
5-5	TLABMH335JBRZ	AH	N	PRODUCT LABEL[CLC6001i 35 E]
5-5	TLABMH334JBRZ	AH	N	PRODUCT LABEL[CLC6001i 25 E]
ACCESSORY PARTS				
6-1	TINS-B856JBRZ	AD	N	PRODUCT FICHE
6-2	TLAB-J733JBEZ	AM	N	ENERGY LABEL[CLC6101i 65 HE]
6-2	TLAB-J741JBEZ	AM	N	ENERGY LABEL[CLC6101i 50 HE]
6-2	TLAB-J757JBEZ	AM	N	ENERGY LABEL[CLC6001i 35 E]
6-2	TLAB-J755JBEZ	AM	N	ENERGY LABEL[CLC6001i 25 E]

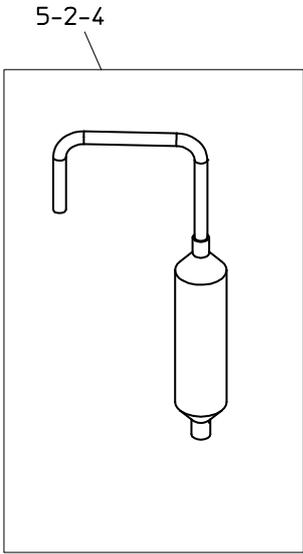
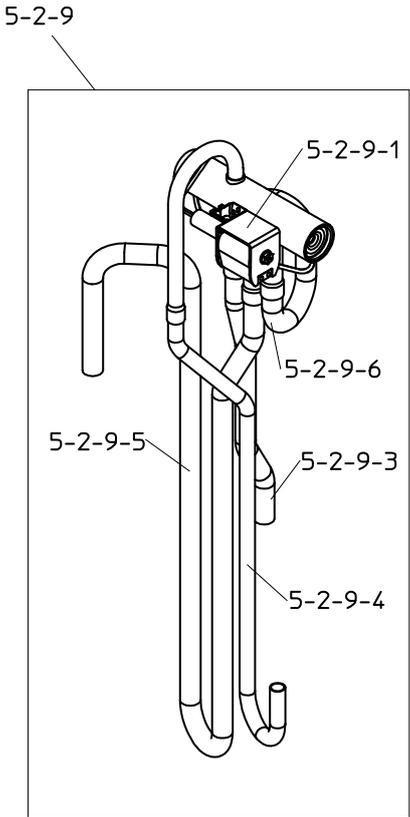
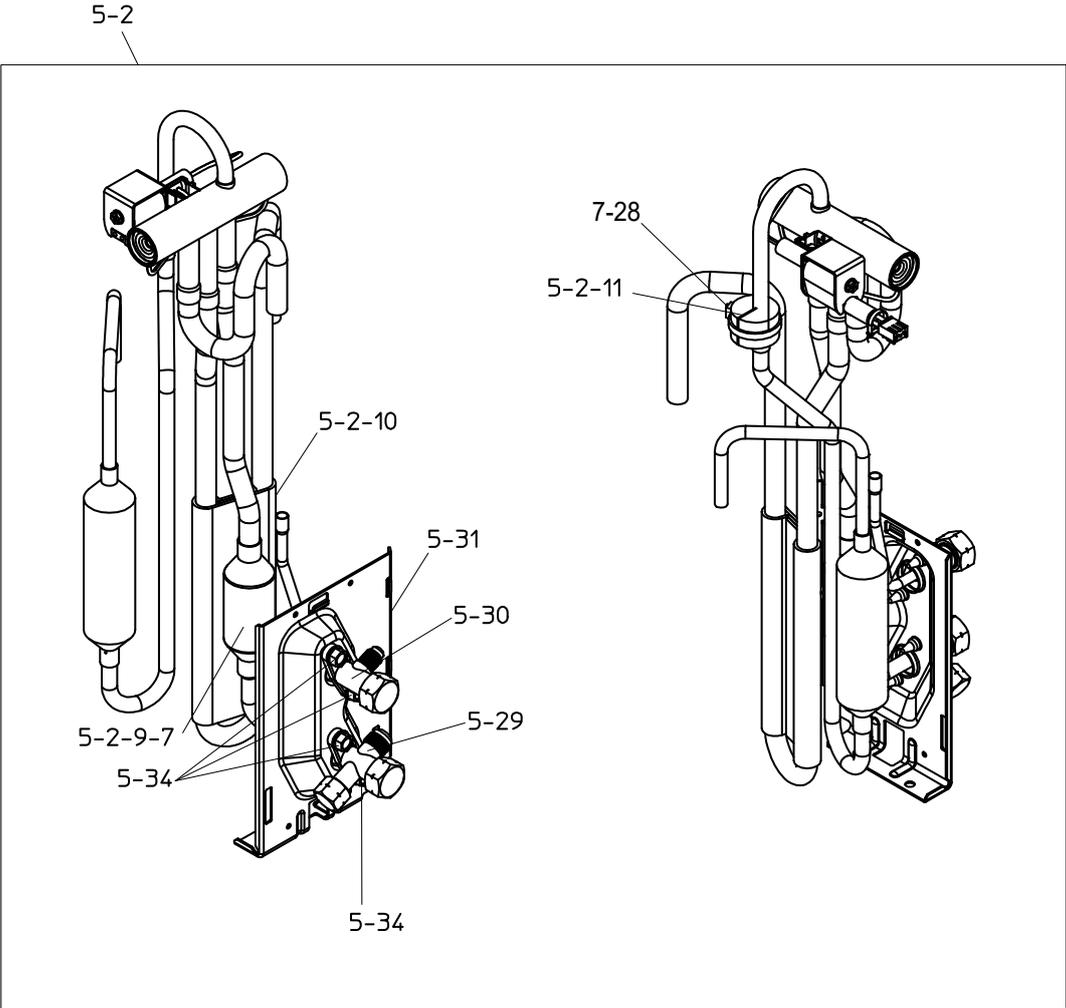
[4] OUTDOOR UNIT (CLC8101i_CLC8001i)

Outdoor Unit Parts

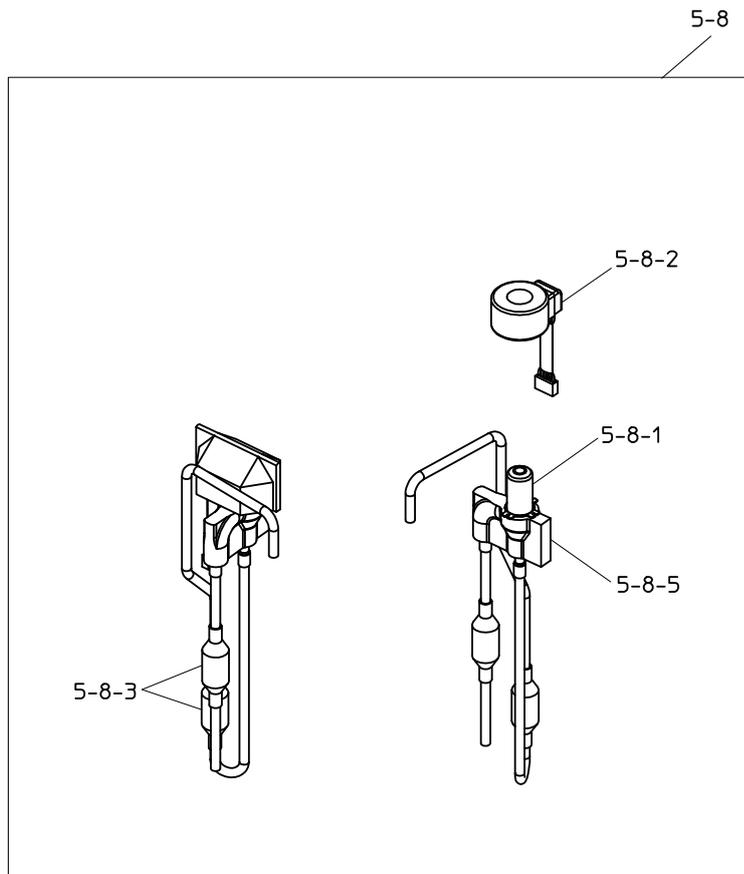




Reverse Value Ass'y



Expansion Value Ass'y

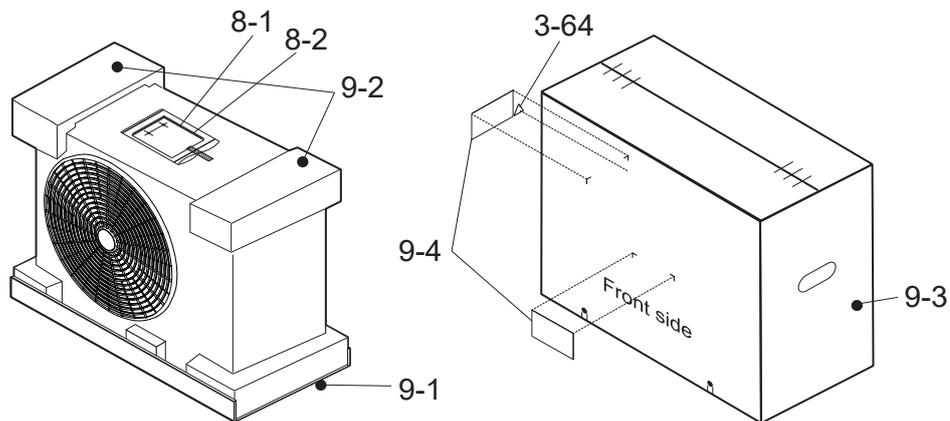


MODEL: CLC8101i 65 HE				
REF. No.	PARTS CODE	PRICE RANK	NEW MARK	DESCRIPTION
[1] OUTDOOR CONTROL UNIT PARTS				
1-1	CMOTLB633JBEZ	BM		FAN MOTOR
1-3	DSGY-H751JBKZ	CB	N	SERVICE CONTROL BOARD UNIT
1-4	RFIL-A150JBEZ	AH		FERRITE CORE
1-5	LHLD-B522JBFZ	AK		HOLDER
1-6	PDAI-A354JBWZ	AF		TERMINAL HOLDER
1-7	QTANZA135JBZZ	AQ		TERMINAL BOARD
1-8	QW-IZA193JBZZ	AN		COMPRESSOR CORD
1-15	RH-HXA234JBZZ	BA		THERMISTOR
1-16	QW-VZH491JBZZ	AD		EARTH WIRE
1-17	PSPA-A251JBFZ	AH		PWB SPACER
1-18	RCILZA077JBZZ	BD		REACTOR
[2] OUTDOOR MECHANICAL PARTS				
3-1	DANG-A063JBKZ	AR		FAN MOTOR ANGLE ASS'Y
3-1-1	PSEL-E609JBEZ	AC		SEAL
3-1-2	PSEL-E610JBEZ	AB		SEAL
3-2	LANGKA365JBTA	AW		FAN MOTOR ANGLE
3-3	PSEL-E620JBEZ	AB		SEAL
3-4	CCAB-A733JBKZ	BR		FRONT CABINET ASS'Y
3-4-2	CCOV-A416JBKZ	BA		FAN GUARD ASS'Y
3-4-3	PSEL-E612JBEZ	AB		SEAL
3-4-4	PSEL-E613JBEZ	AB		SEAL
3-4-6	PSEL-E614JBEZ	AB		SEAL
3-4-7	PSEL-E615JBEZ	AB		SEAL
3-4-8	TLABBA325JBRA	AK		BOSCH LABEL
3-4-9	LHLD-B498JBFB	AE		DISC HOLDER
3-4-10	PCOV-C910JBRB	AT		CENTER DISC
3-4-11	CCOV-A418JBKZ	AS		COVER UP ASS'Y
3-4-12	PCOV-C913JBFA	AR		FRONT COVER DOWN
3-6	PSEL-E756JBEZ	AB		SEAL
3-7	PSEL-E618JBEZ	AC		SEAL
3-8	PSEL-E619JBEZ	AB		SEAL
3-9	PSEL-E639JBEZ	AB		SEAL
3-10	PSEL-E640JBEZ	AB		SEAL
3-11	PSEL-E636JBEZ	AB		SEAL
3-12	GCAB-A602JBTD	BA		TOP PLATE
3-14	PCOV-C489JBTA	AN		TERMINAL COVER
3-15	CFTA-A402JBKZ	AQ		SIDE COVER ASS'Y
3-15-2	PSEL-E611JBEZ	AB		SEAL
3-15-3	PSEL-E624JBEZ	AC		SEAL
3-15-4	PSEL-E637JBEZ	AB		SEAL
3-15-5	PSEL-E711JBEZ	AC		SEAL
3-16	CHLD-A234JBKZ	AM		CABLE HOLDER K
3-16-1	PSEL-E710JBEZ	AC		HOLDER SEAL A
3-16-2	PSEL-E712JBEZ	AB		HOLDER SEAL B
3-16-3	LHLD-B397JBTD	AK		CABLE HOLDER
3-19	CPLT-A341JBKZ	BA		SIDE COVER L ASS'Y
3-19-1	PPLT-B145JBTD	AY		SIDE COVER L
3-19-2	JHNDPA042JBFD	AE		GRIP
3-20	CPLT-A342JBKZ	BA		SIDE COVER R ASS'Y

REF. No.	PARTS CODE	PRICE RANK	NEW MARK	DESCRIPTION
3-20-1	LHLD-0079SRFZ	AC		CORD CLAMP
3-20-2	LHLD-A492JBFZ	AD		CORD CLAMP BASE
3-20-3	XCTS740P14000	AB		TAPPING SCREW
3-20-4	PSEL-E662JBEZ	AB		SEAL
3-20-5	PSEL-E616JBEZ	AB		SEAL
3-20-6	PSEL-E617JBEZ	AB		SEAL
3-20-7	PSEL-E997JBEZ	AB		SEAL
3-22	PFPFPF098JBEZ	AD		SEAL
3-23	PSEL-E663JBEZ	AB		SEAL
3-24	PFPFPF282JBEZ	AC		SEAL
3-27	PBOX-A618JBWZ	AM		CONTROL BOX L
3-28	PBOX-A619JBWZ	AK		CONTROL BOX R
3-31	CSKR-A612JBKZ	BB		BULKHEAD ASS'Y
3-31-1	PSEL-E669JBEZ	AB		SEAL
3-31-2	PSEL-E623JBEZ	AB		SEAL
3-36	LHLD-B371JBFZ	AE		THERMISTOR HOLDER
3-38	NFANPA160JBEZ	AV		PROPELLER FAN
3-41	PSPF-B526JBEZ	AM		COMPRESSOR COVER
3-42	PSPF-B527JBEZ	AP		COMPRESSOR COVER
3-43	PSPF-B525JBEZ	AM		COMPRESSOR COVER
3-44	PSPF-B528JBEZ	AZ		COMPRESSOR COVER
3-46	PSPF-B499JBEZ	AD		COVER
3-54	PCOV-C317JBWZ	AL		COVER
3-55	LANGKA369JBTA	AG		BASE PAN ANGLE
3-56	PGUMSA457JBEZ	AC		RUBBER WASHER
3-57	PSEL-E650JBEZ	AB		SEAL
3-58	PSEL-E664JBEZ	AB		SEAL
3-59	TSPC-M730JBRZ	AF	N	NAME LABEL
3-60	TLABCE368JBRZ	AC		WIRING DIAGRAM
3-61	PCOV-C917JBFA	AS		RING
3-62	TLAB-J731JBRZ	AD	N	F-GAS LABEL
3-63	TLAB-J577JBRZ	AC		DANGEROUS LABEL
3-64	TLAB-J444JBRA	AC		FIRE LABEL
[3] OUTDOOR CYCLE PARTS				
5-1	CCHS-B720JBKZ	BH		BASE PAN ASS'Y
5-1-1	LSUB-A046JBTA	AY		SHELTER
5-1-3	PSEL-E661JBEZ	AB		SEAL
5-2	CVLV-B529JBKZ	BS		REVERSE VALVE ASSY
5-2-4	CPIPCC411JBKZ	AY		DISCHARGE TUBE ASSY
5-2-9	DVLV-B755JBKZ	BM		REVERSE VALVE ASS'Y
5-2-9-1	CCIL-A204JBKZ	AY		COIL ASS'Y
5-2-9-3	PPIPCM441JBWZ	AQ		LEAD TUBE
5-2-9-4	PPIPCM626JBWZ	AQ		DISCHARGE TUBE B
5-2-9-5	PPIPCN768JBWZ	AW		SUCTION TUBE B
5-2-9-6	PPIPCM442JBWZ	AP		LEAD TUBE CON-IN
5-2-9-7	PMUF-A087JBEZ	AN		MUFFLER
5-2-10	PGUMSA470JBEZ	AH		DAMPER RUBBER
5-2-11	PGUM-A276JBEZ	AF		DAMPER RUBBER
5-3	DCON-A890JBPZ	CN		CONDENSER ASSY
5-4	FCMPRA479JBKZ	CB		COMPRESSOR ASS'Y
5-4-1	PCOV-C854JBEZ	AP		TERMINAL COVER
5-4-2	PGUM-A292JBEZ	AP		TERMINAL GASKET

REF. No.	PARTS CODE	PRICE RANK	NEW MARK	DESCRIPTION
5-4-3	LX-NZA476JBEZ	AC		SPECIAL NUT
5-5	PGUM-A264JBEZ	AE		DAMPER RUBBER
5-6	PGUMSA428JBEZ	AF		DAMPER RUBBER
5-7	GLEG-A191JBEZ	AB		COMPRESSOR CUSHION
5-8	DVLV-B740JBKZ	BF		EXPAN.VALVE ASS'Y
5-8-1	PVLVRA060JBEZ	AX		VALVE BASE
5-8-2	RMOTSA073JBZZ	AV		VALVE MOTOR
5-8-3	PSRN-A102JBEZ	AF		STRAINER
5-8-5	PGUMSA421JBEZ	AE		DAMPER RUBBER
5-9	LX-NZA313JBEZ	AE		SPECIAL NUT
5-11	MSPR-A208JBEZ	AD		SPRING
5-12	MSPR-A212JBEZ	AE		THERMISTOR SPRING
5-13	MSPR-A195JBEZ	AF		THERMISTOR SPRING
5-14	PSEL-E607JBEZ	AD		THERMISTOR SEAL
5-15	PGUM-A203JBEZ	AD		TUBE HOLDER RUBBER
5-16	CPIPCC175JBKZ	BA		HEAT TUBE ASS'Y
5-16-1	PFPPFF210JBEZ	AE		INSULATOR
5-17	PGUM-A268JBEZ	AE		TUBE HOLDER RUBBER
5-18	PGUM-A269JBEZ	AE		HOLDER RUBBER
5-19	PGUM-A270JBEZ	AG		HOLDER RUBBER
5-20	PGUM-A271JBEZ	AE		DAMPER RUBBER
5-21	PGUM-A272JBEZ	AK		DAMPER RUBBER
5-27	PFPPFF216JBEZ	AE		INSULATOR
5-29	DVLV-B532JBKZ	AW		3WAY VALVE UNIT
5-30	DVLV-B556JBKZ	AW		2WAY VALVE UNIT
5-31	PDAI-A334JBTD	AN		FLARE COUPLING BASE
5-33	PPIPCN156JBWZ	AE		LEAD TUBE
5-34	LX-BZA488JBEZ	AC		SPECIAL SCREW
5-35	PGUM-A144JBEZ	AD		DAMPER RUBBER
5-36	PFPPFF306JBEZ	AB		BASE PAN INSU. A
5-37	PFPPFF307JBEZ	AB		SEAL
5-38	PFPPFF308JBEZ	AB		BASE PAN INSU. B
5-39	PFPPFF309JBEZ	AB		BASE PAN INSU. C
5-40	PSEL-E427JBEZ	AB		MOTOR ANG SEAL
5-41	PGUMSA392JBEZ	AD		DAMPER RUBBER
5-42	LHLDWA057JBEZ	AF		WIRE HOLDER
5-44	LANGKA385JBTA	AK		ANGLE
5-45	PSEL-E801JBEZ	AB		SEAL
[4] OUTDOOR SCREWS AND NUTS				
7-1	LX-BZA485JBEZ	AD		SPECIAL SCREW
7-2	LX-BZA182JBE0	AB		SPECIAL SCREW
7-4	XCTWW40P06000	AA		TAPPING SCREW
7-5	LBND-0037QBEO	AB		UNITY BAND
7-6	LBND-A047JBE0	AB		WIRE FIXING BAND
7-7	LBND-A077JBE0	AC		WIRE FIXING BAND
7-8	XCPS740P25000	AD		TAPPING SCREW
7-11	LX-NZA412JBEZ	AC		SPECIAL NUT
7-25	LX-CZA013JBE0	AH		SPECIAL SCREW
7-26	LX-BZA284JBEZ	AB		SPECIAL SCREW
7-27	LX-BZA351JBEZ	AD		SPECIAL SCREW
7-28	LBND-A072JBE0	AC		WIRE FIXING BAND
7-29	XTTS740P12000	AC		TAPPING SCREW

REF. No.	PARTS CODE	PRICE RANK	NEW MARK	DESCRIPTION
7-30	LX-BZA447JBEZ	AC		HEX SCREW 4-10
7-31	LX-BZA571JBEZ	AB		HEX SCREW 4-10
3-20-3	XCTS740P14000	AB		TAPPING SCREW
7-32	XCPS730P10XS0	AD		TAPPING SCREW
7-33	XCPS730P14XS0	AB		TAPPING SCREW

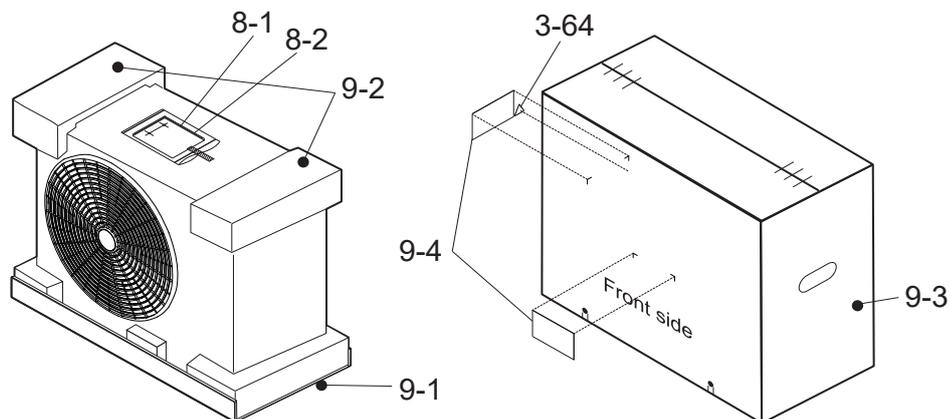


REF. No.	PARTS CODE	PRICE RANK	NEW MARK	DESCRIPTION
[5] OUTDOOR ACCESSORY PARTS				
8-1	TINS-B854JBRZ	AF	N	PRODUCT FICHE SHEET
8-2	TLAB-J732JBEZ	AM	N	EU ENERGY LABEL
[6] OUTDOOR PACKING PARTS				
9-1	CPADBA336JBKZ	AT		BOTTOM PAD ASS'Y
9-2	CPADBA270JBKZ	AP		TOP PAD K
9-3	SPAKCE858JBEZ	AW		PACKING CASE
9-4	TLABMH242JBRZ	AG	N	MODEL CODE LABEL

MODEL: CLC8001i 25 E CLC8001i 35 E				
REF. No.	PARTS CODE	PRICE RANK	NEW MARK	DESCRIPTION
[1] OUTDOOR CONTROL UNIT PARTS				
1-1	CMOTLB633JBEZ	BM		FAN MOTOR
1-3	DSGY-H752JBKZ	CB	N	SERVICE CONTROL BOARD UNIT
1-3	DSGY-H753JBKZ	CB	N	SERVICE CONTROL BOARD UNIT
1-4	RFIL-A150JBEZ	AH		FERRITE CORE
1-5	LHLD-B522JBFZ	AK		HOLDER
1-6	PDAI-A354JBWZ	AF		TERMINAL HOLDER
1-7	QTANZA135JBZZ	AQ		TERMINAL BOARD
1-8	QW-IZA193JBZZ	AN		COMPRESSOR CORD
1-15	RH-HXA234JBZZ	BA		THERMISTOR
1-16	QW-VZH491JBZZ	AD		EARTH WIRE
1-17	PSPA-A251JBFZ	AH		PWB SPACER
1-18	RCILZA077JBZZ	BD		REACTOR
[2] OUTDOOR MECHANICAL PARTS				
3-1	DANG-A063JBKZ	AR		FAN MOTOR ANGLE ASS'Y
3-1-1	PSEL-E609JBEZ	AC		SEAL
3-1-2	PSEL-E610JBEZ	AB		SEAL
3-2	LANGKA365JBTA	AW		FAN MOTOR ANGLE
3-3	PSEL-E620JBEZ	AB		SEAL
3-4	CCAB-A733JBKZ	BR		FRONT CABINET ASS'Y
3-4-2	CCOV-A416JBKZ	BA		FAN GUARD ASS'Y
3-4-3	PSEL-E612JBEZ	AB		SEAL
3-4-4	PSEL-E613JBEZ	AB		SEAL
3-4-6	PSEL-E614JBEZ	AB		SEAL
3-4-7	PSEL-E615JBEZ	AB		SEAL
3-4-8	TLABBA325JBRA	AK		BOSCH LABEL
3-4-9	LHLD-B498JBFB	AE		DISC HOLDER
3-4-10	PCOV-C910JBRB	AT		CENTER DISC
3-4-11	CCOV-A418JBKZ	AS		COVER UP ASS'Y
3-4-12	PCOV-C913JBFA	AR		FRONT COVER DOWN
3-6	PSEL-E756JBEZ	AB		SEAL
3-7	PSEL-E618JBEZ	AC		SEAL
3-8	PSEL-E619JBEZ	AB		SEAL
3-9	PSEL-E639JBEZ	AB		SEAL
3-10	PSEL-E640JBEZ	AB		SEAL
3-11	PSEL-E636JBEZ	AB		SEAL
3-12	GCAB-A602JBTD	BA		TOP PLATE
3-14	PCOV-C489JBTA	AN		TERMINAL COVER
3-15	CFTA-A402JBKZ	AQ		SIDE COVER ASS'Y
3-15-2	PSEL-E611JBEZ	AB		SEAL
3-15-3	PSEL-E624JBEZ	AC		SEAL
3-15-4	PSEL-E637JBEZ	AB		SEAL
3-15-5	PSEL-E711JBEZ	AC		SEAL
3-16	CHLD-A234JBKZ	AM		CABLE HOLDER K
3-16-1	PSEL-E710JBEZ	AC		HOLDER SEAL A
3-16-2	PSEL-E712JBEZ	AB		HOLDER SEAL B
3-16-3	LHLD-B397JBTD	AK		CABLE HOLDER
3-19	CPLT-A341JBKZ	BA		SIDE COVER L ASS'Y
3-19-1	PPLT-B145JBTD	AY		SIDE COVER L

REF. No.	PARTS CODE	PRICE RANK	NEW MARK	DESCRIPTION
3-19-2	JHNDPA042JBFD	AE		GRIP
3-20	CPLT-A342JBKZ	BA		SIDE COVER R ASS'Y
3-20-1	LHLD-0079SRFZ	AC		CORD CLAMP
3-20-2	LHLD-A492JBFZ	AD		CORD CLAMP BASE
3-20-3	XCTS740P14000	AB		TAPPING SCREW
3-20-4	PSEL-E662JBEZ	AB		SEAL
3-20-5	PSEL-E616JBEZ	AB		SEAL
3-20-6	PSEL-E617JBEZ	AB		SEAL
3-20-7	PSEL-E997JBEZ	AB		SEAL
3-22	PFPFPF098JBEZ	AD		SEAL
3-23	PSEL-E663JBEZ	AB		SEAL
3-24	PFPFPF282JBEZ	AC		SEAL
3-27	PBOX-A618JBWZ	AM		CONTROL BOX L
3-28	PBOX-A619JBWZ	AK		CONTROL BOX R
3-31	CSKR-A612JBKZ	BB		BULKHEAD ASS'Y
3-31-1	PSEL-E669JBEZ	AB		SEAL
3-31-2	PSEL-E623JBEZ	AB		SEAL
3-36	LHLD-B371JBFZ	AE		THERMISTOR HOLDER
3-38	NFANPA160JBEZ	AV		PROPELLER FAN
3-41	PSPF-B526JBEZ	AM		COMPRESSOR COVER
3-42	PSPF-B527JBEZ	AP		COMPRESSOR COVER
3-43	PSPF-B525JBEZ	AM		COMPRESSOR COVER
3-44	PSPF-B528JBEZ	AZ		COMPRESSOR COVER
3-46	PSPF-B499JBEZ	AD		COVER
3-54	PCOV-C317JBWZ	AL		COVER
3-56	PGUMSA457JBEZ	AC		RUBBER WASHER
3-57	PSEL-E650JBEZ	AB		SEAL
3-58	PSEL-E664JBEZ	AB		SEAL
3-59	TSPC-M781JBRZ	AF		NAME LABEL [CLC8001i 35 E]
3-59	TSPC-M783JBRZ	AF		NAME LABEL [CLC8001i 25 E]
3-60	TLABCE368JBRZ	AC		WIRING DIAGRAM
3-61	PCOV-C917JBFA	AS		RING
3-62	TLAB-J731JBRZ	AD		F-GAS LABEL
3-63	TLAB-J577JBRZ	AC		DANGEROUS LABEL
3-64	TLAB-J444JBRA	AC		FIRE LABEL
[3] OUTDOOR CYCLE PARTS				
5-1	CCHS-B724JBKZ	BH		BASE PAN ASS'Y
5-2	CVLV-B532JBKZ	BV		REVERSE VALVE ASSY
5-2-4	CPIPCC411JBKZ	AY		DISCHARGE TUBE ASSY
5-2-9	DVLV-B755JBKZ	BM		REVERSE VALVE ASS'Y
5-2-9-1	CCIL-A204JBKZ	AY		COIL ASS'Y
5-2-9-3	PPIPCM441JBWZ	AQ		LEAD TUBE
5-2-9-4	PPIPCM626JBWZ	AQ		DISCHARGE TUBE B
5-2-9-5	PPIPCN768JBWZ	AW		SUCTION TUBE B
5-2-9-6	PPIPCM442JBWZ	AP		LEAD TUBE CON-IN
5-2-9-7	PMUF-A087JBEZ	AN		MUFFLER
5-2-10	PGUMSA470JBEZ	AH		DAMPER RUBBER
5-2-11	PGUM-A276JBEZ	AF		DAMPER RUBBER
5-3	DCON-A890JBPZ	CN		CONDENSER ASSY
5-4	FCMPRA479JBKZ	CB		COMPRESSOR ASS'Y
5-4-1	PCOV-C854JBEZ	AP		TERMINAL COVER

REF. No.	PARTS CODE	PRICE RANK	NEW MARK	DESCRIPTION
5-4-2	PGUM-A292JBEZ	AP		TERMINAL GASKET
5-4-3	LX-NZA476JBEZ	AC		SPECIAL NUT
5-5	PGUM-A264JBEZ	AE		DAMPER RUBBER
5-6	PGUMSA428JBEZ	AF		DAMPER RUBBER
5-7	GLEG-A191JBEZ	AB		COMPRESSOR CUSHION
5-8	DVLV-B751JBKZ	BF		EXPAN.VALVE ASS'Y
5-8-1	PVLVRA060JBEZ	AX		VALVE BASE
5-8-2	RMOTSA073JBZZ	AV		VALVE MOTOR
5-8-3	PSRN-A102JBEZ	AF		STRAINER
5-8-5	PGUMSA421JBEZ	AE		DAMPER RUBBER
5-9	LX-NZA313JBEZ	AE		SPECIAL NUT
5-11	MSPR-A208JBEZ	AD		SPRING
5-12	MSPR-A212JBEZ	AE		THERMISTOR SPRING
5-13	MSPR-A195JBEZ	AF		THERMISTOR SPRING
5-14	PSEL-E607JBEZ	AD		THERMISTOR SEAL
5-20	PGUM-A271JBEZ	AE		DAMPER RUBBER
5-29	DVLV-B532JBKZ	AW		3WAY VALVE UNIT
5-30	DVLV-B556JBKZ	AW		2WAY VALVE UNIT
5-31	PDAI-A334JBTD	AN		FLARE COUPLING BASE
5-33	PPIPCN156JBWZ	AE		LEAD TUBE
5-34	LX-BZA488JBEZ	AC		SPECIAL SCREW
5-35	PGUM-A144JBEZ	AD		DAMPER RUBBER
5-43	LANGKA366JBTA	AG		BASE PAN ANGLE
[4] OUTDOOR SCREWS AND NUTS				
7-1	LX-BZA485JBEZ	AD		SPECIAL SCREW
7-2	LX-BZA182JBE0	AB		SPECIAL SCREW
7-5	LBND-0037QBE0	AB		UNITY BAND
7-6	LBND-A047JBE0	AB		WIRE FIXING BAND
7-7	LBND-A077JBE0	AC		WIRE FIXING BAND
7-8	XCPS740P25000	AD		TAPPING SCREW
7-11	LX-NZA412JBEZ	AC		SPECIAL NUT
7-25	LX-CZA013JBE0	AH		SPECIAL SCREW
7-26	LX-BZA284JBEZ	AB		SPECIAL SCREW
7-27	LX-BZA351JBEZ	AD		SPECIAL SCREW
7-28	LBND-A072JBE0	AC		WIRE FIXING BAND
7-29	XTTS740P12000	AC		TAPPING SCREW
7-30	LX-BZA447JBEZ	AC		HEX SCREW 4-10
7-31	LX-BZA571JBEZ	AB		HEX SCREW 4-10
3-20-3	XCTS740P14000	AB		TAPPING SCREW
7-32	XCPS730P10XS0	AD		TAPPING SCREW
7-33	XCPS730P14XS0	AB		TAPPING SCREW



REF. No.	PARTS CODE	PRICE RANK	NEW MARK	DESCRIPTION
[5] OUTDOOR ACCESSORY PARTS				
8-1	TINS-B854JBRZ	AF	N	PRODUCT FICHE SHEET
8-2	TLAB-J748JBEZ	AF	N	EU ENERGY LABEL [CLC8001i 35 E]
8-2	TLAB-J750JBEZ	AF	N	EU ENERGY LABEL [CLC8001i 25 E]
[6] OUTDOOR PACKING PARTS				
9-1	CPADBA336JBKZ	AT		BOTTOM PAD ASS'Y
9-2	CPADBA270JBKZ	AP		TOP PAD K
9-3	SPAKCE858JBEZ	AW		PACKING CASE
9-4	TLABMH330JBRZ	AG	N	MODEL CODE LABEL [CLC8001i 35 E]
9-4	TLABMH332JBRZ	AG	N	MODEL CODE LABEL [CLC8001i 25 E]

Failure diagnosis flowchart

Table of contents

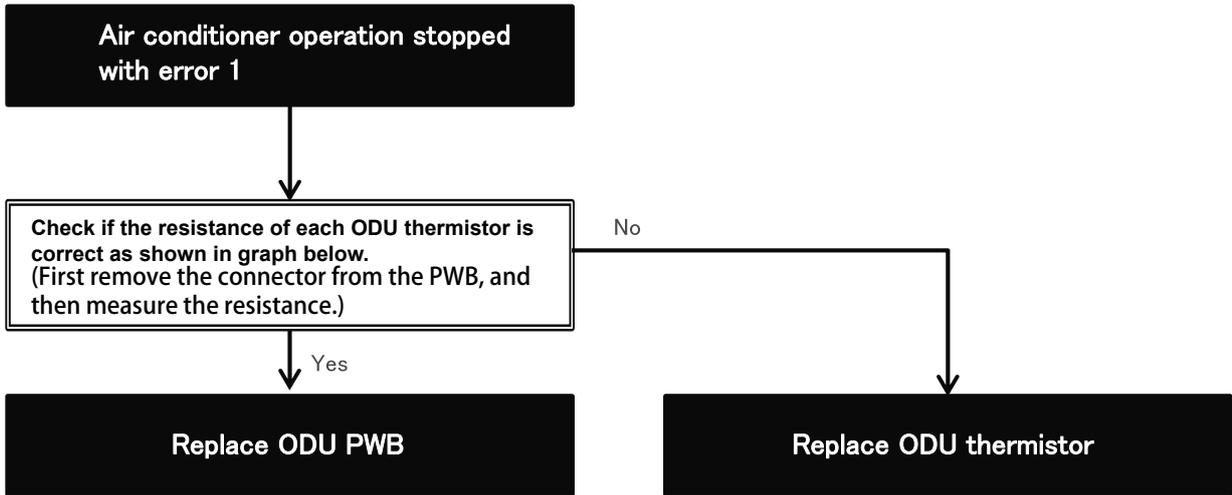
Error code	Contents
1	Short circuit of ODU thermistor
2	Overheat error (Compressor or cycle)
5	Open circuit of ODU thermistor
6	DC current error
7	AC current error
9	Cycle error
11	ODU fan motor error
13	Compressor rotation error
14	PAM error
17	Serial open circuit error
18	Serial short circuit error
19	Indoor unit fan error
24-0	WLAN module communication error
24-1	WLAN router connection error
26-1	Indoor room temperature thermistor error
26-2	Indoor pipe temperature thermistor error

Error Code 1	<h2 style="margin: 0;">Short circuit of ODU thermistor</h2>	1-0 Heat exchanger thermistor short-circuit(Orange) 1-1 Outside air temperature thermistor short-circuit(Green) 1-2 Suction thermistor short-circuit(Black) 1-3 2-way valve thermistor short-circuit(Yellow) 1-4 Heat sink thermistor short-circuit
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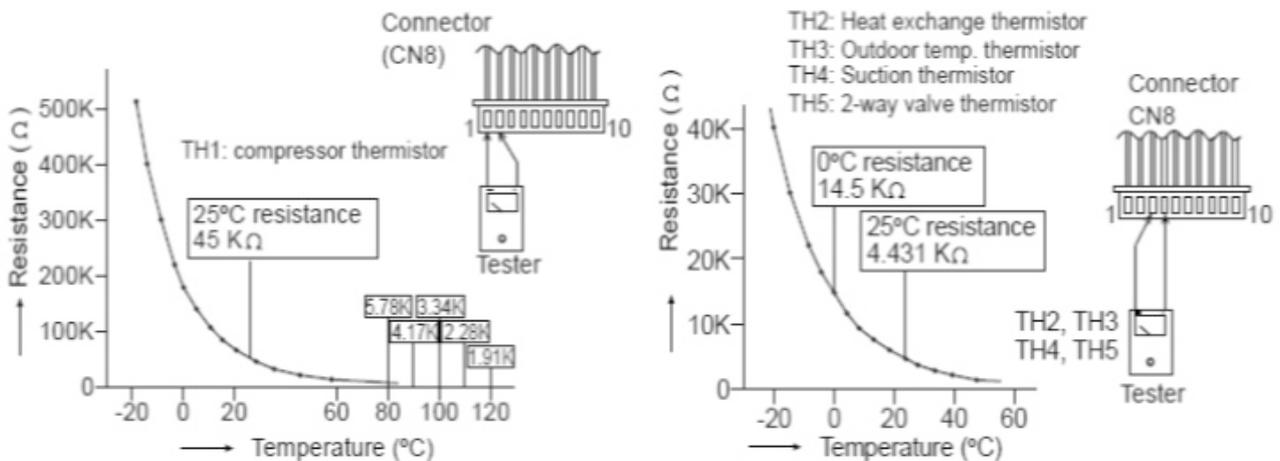
☆ Check the thermistor short-circuit.

◇ Main cause

- The lead wire sheath of the ODU thermistor has been damaged due to edge or long-time friction by vibration, and the wire touches the pipe, etc.

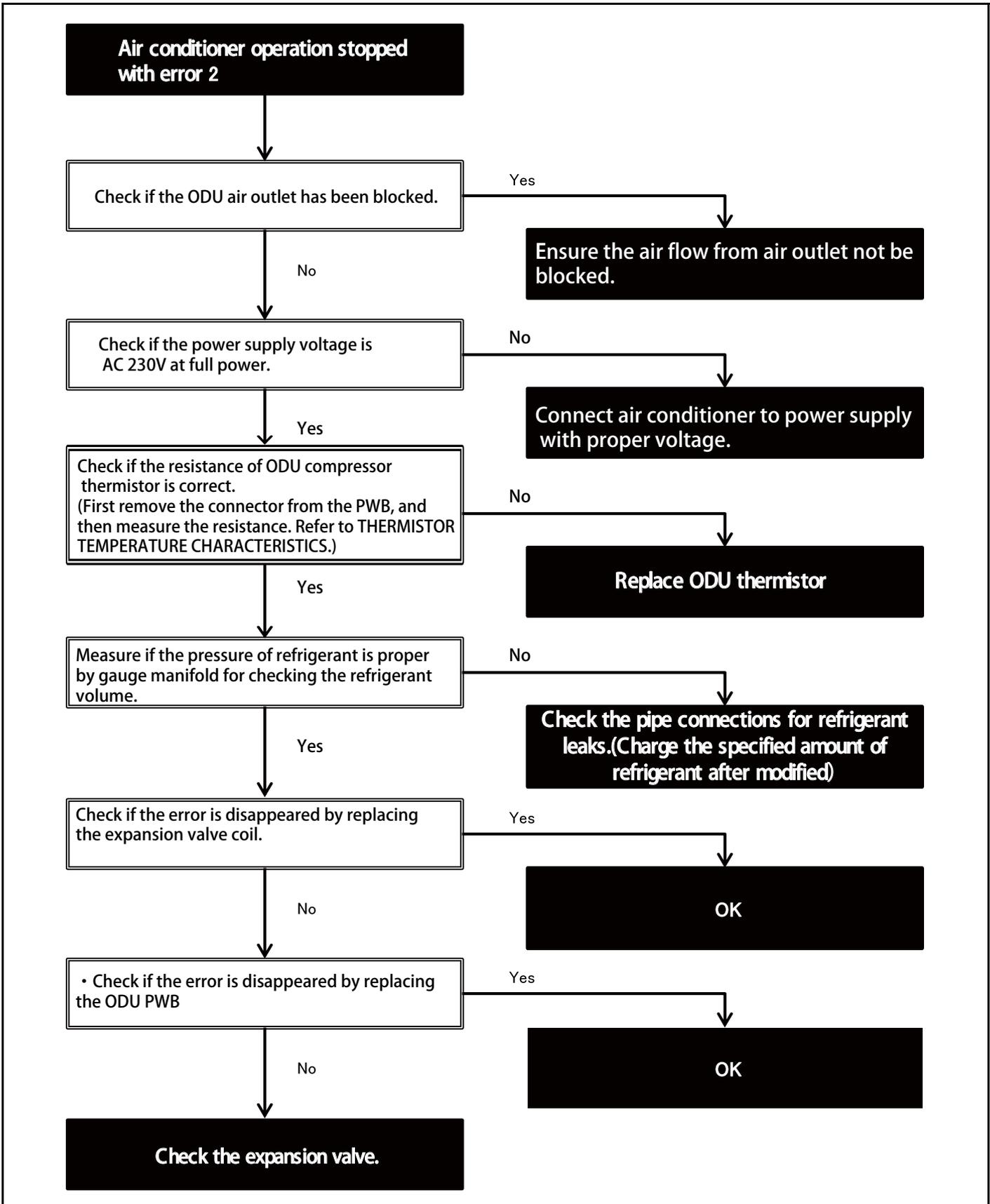


R-T characteristics of ODU thermistor



Error Code 2	Overheat error (Compressor or cycle)	2-0 Compressor high temperature error 2-1 Compressor discharge overheat 2-2 Outdoor unit pipe overheat 2-3 Indoor unit pipe overheat 2-5 IPM high temperature error
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☆ Check the failure of compressor
 ◇ Main cause
 • Temperature of compressor or cycle parts becomes too high.

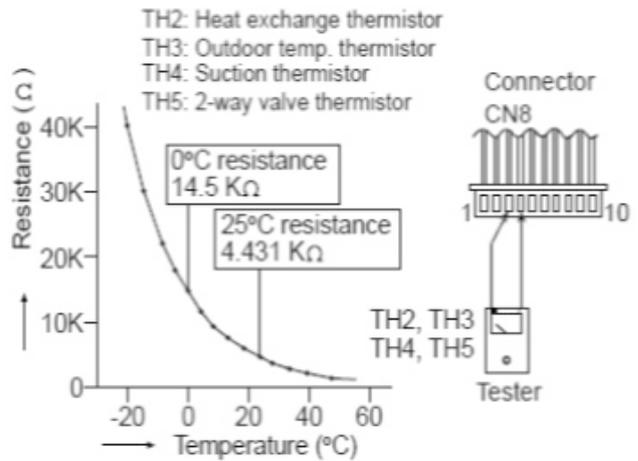
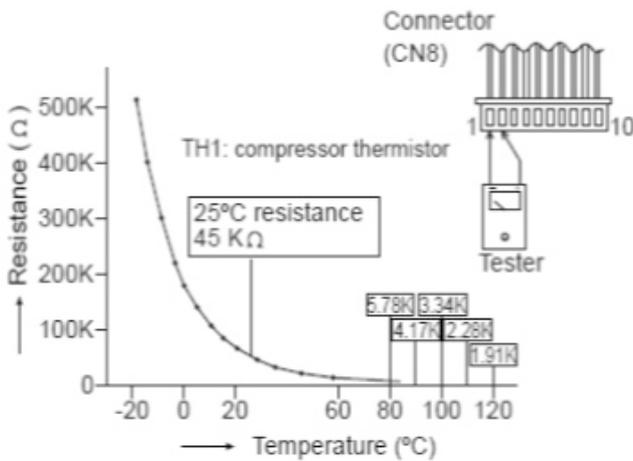
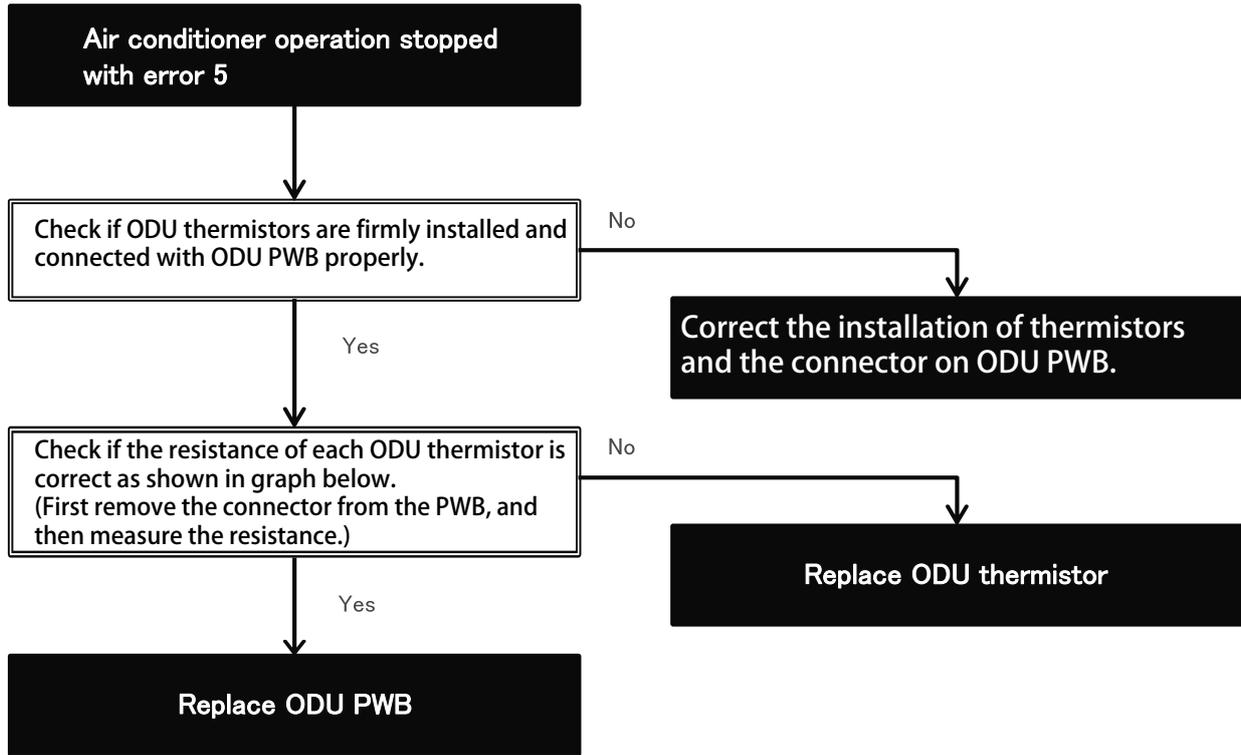


Error Code 5	<h2 style="margin: 0;">Open circuit of ODU thermistor</h2>	5-0 Heat exchanger thermistor open-circuit(Orange) 5-1 Outside air temperature thermistor open-circuit(Green) 5-2 Suction thermistor open-circuit(Black) 5-3 2-way valve thermistor open-circuit(Yellow) 5-4 Compressor thermistor open-circuit(Red) 5-5 Heat sink thermistor open-circuit
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☆ Check the thermistor open-circuit.

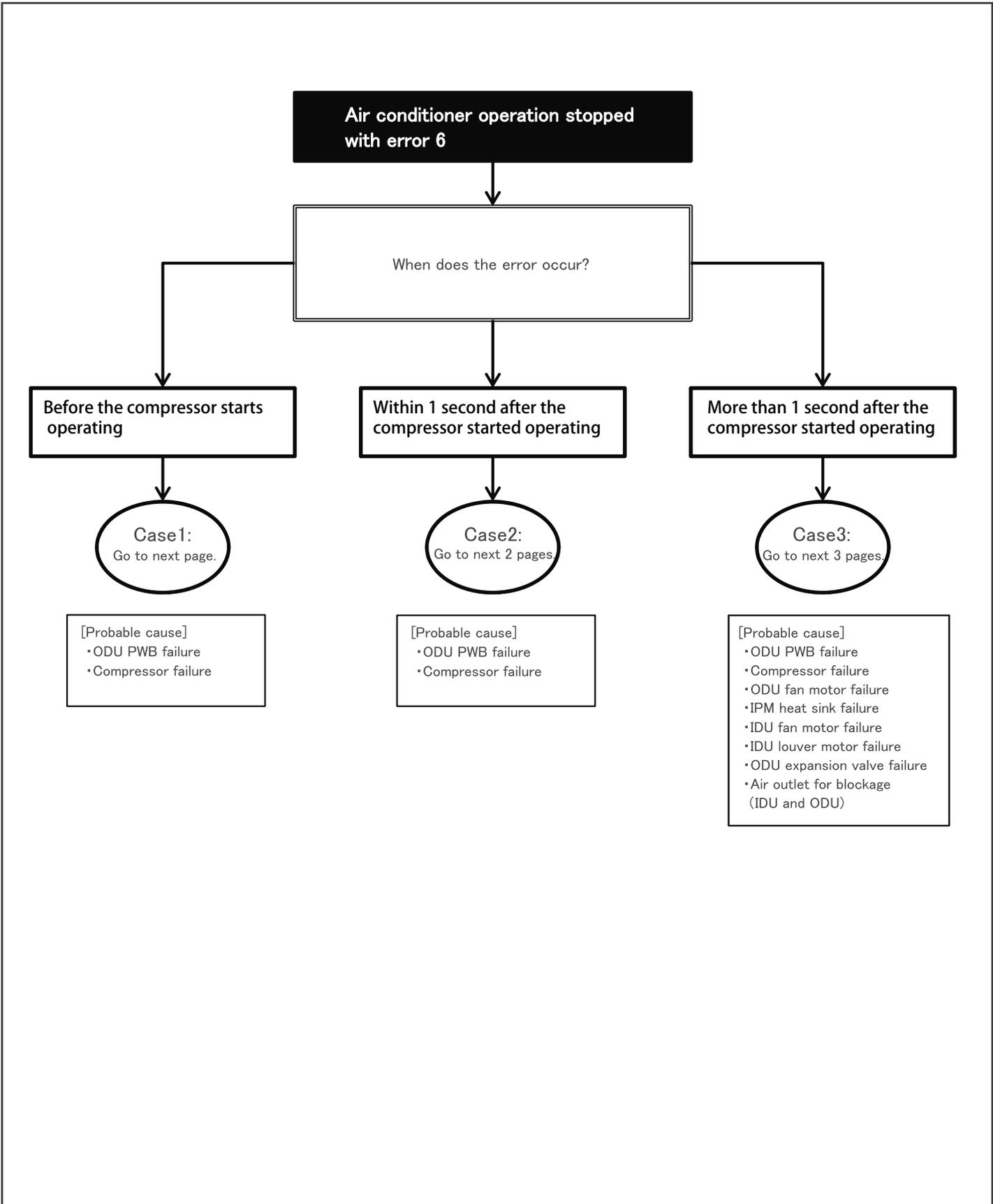
◇ Main cause

- The lead wire of ODU thermistor has broken due to the edge or vibration.
- The attachment of connector has broken by inside tension due to unsuitable wiring process.



Error Code 6	<h2 style="margin: 0;">DC current error (1/4)</h2>	6-0 DC current error
---	--	----------------------

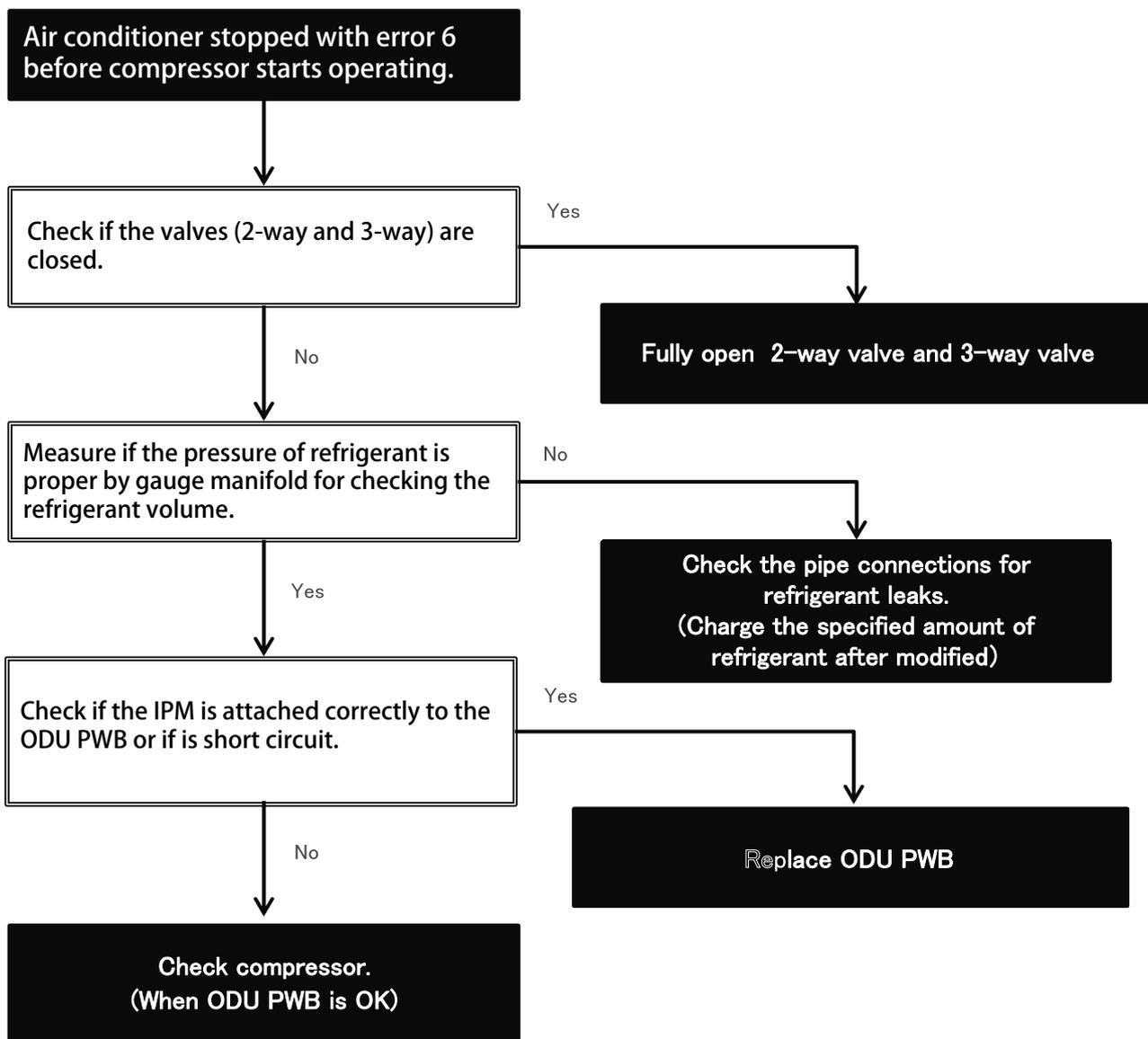
☆ Check the cause due to compressor or PWB.



Error Code	DC current error (2/4)	6-0 DC current error
6		

☆ Check the cause due to compressor or PWB.

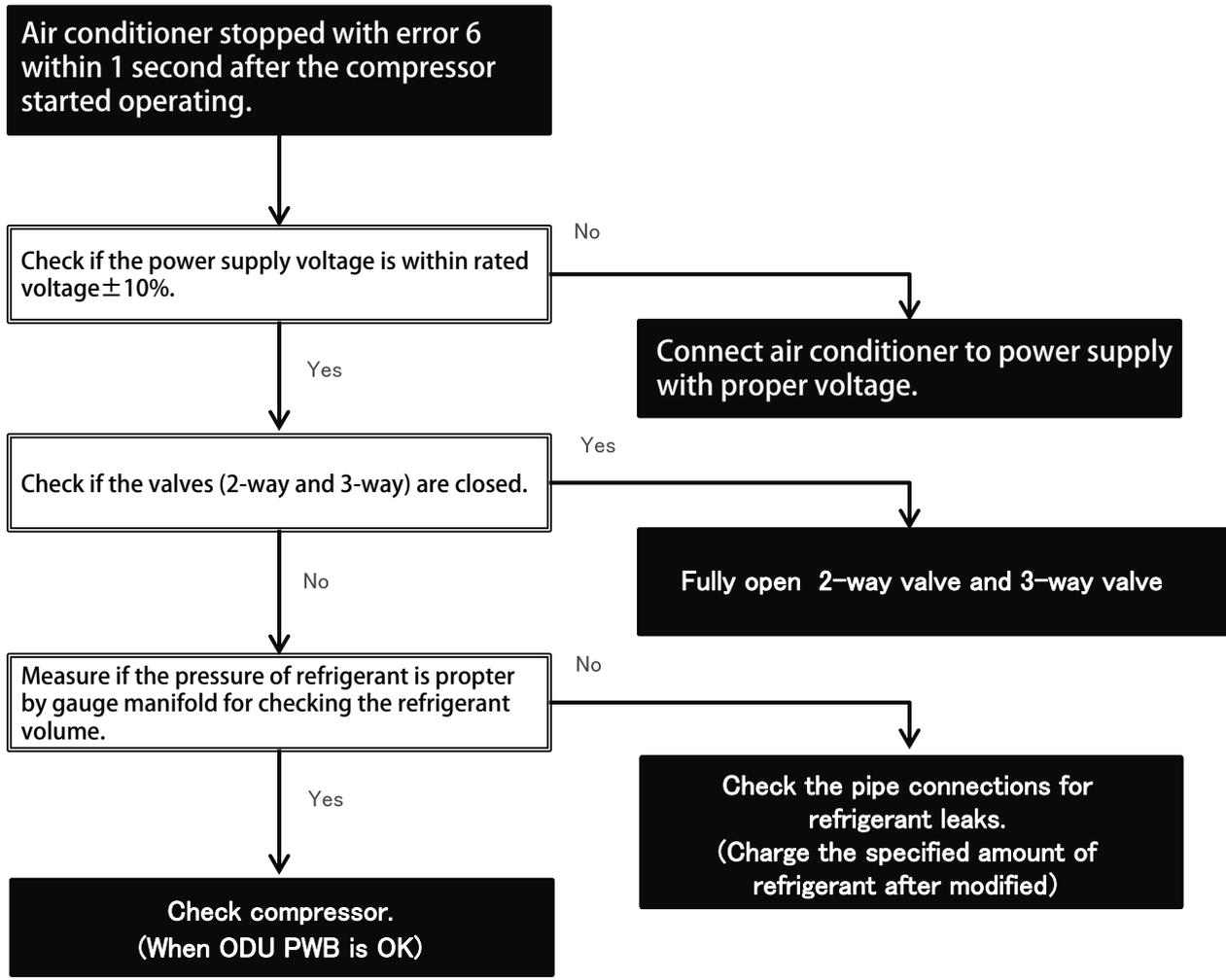
【Case 1】



Error Code	DC current error (3/4)	6-0 DC current error
6		

☆ Check the cause due to compressor or PWB.

【Case2】

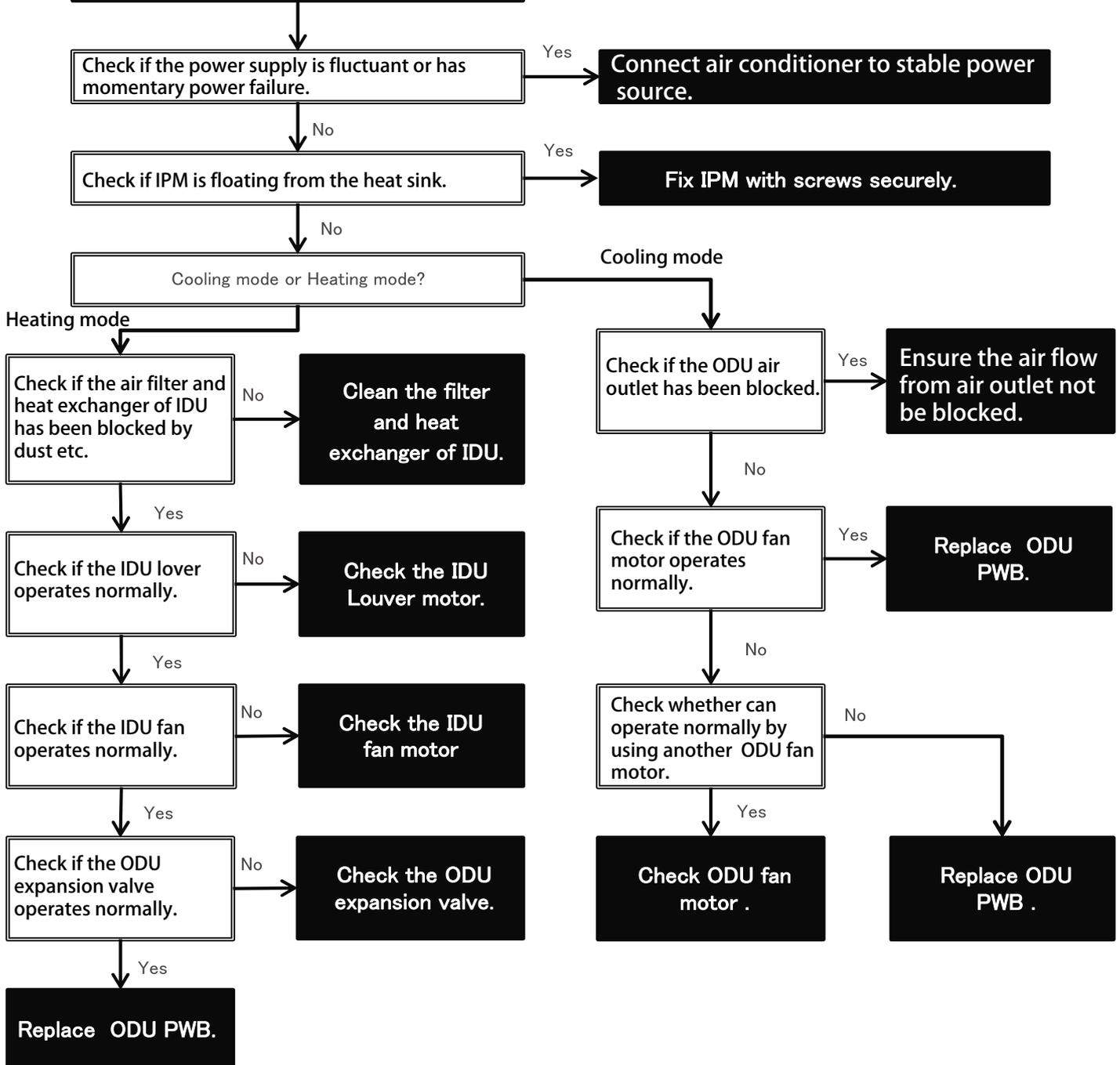


Error Code	<h1>DC current error (4/4)</h1>	6-0 DC current error
<h2>6</h2>		

☆ Check the cause due to compressor or PWB.

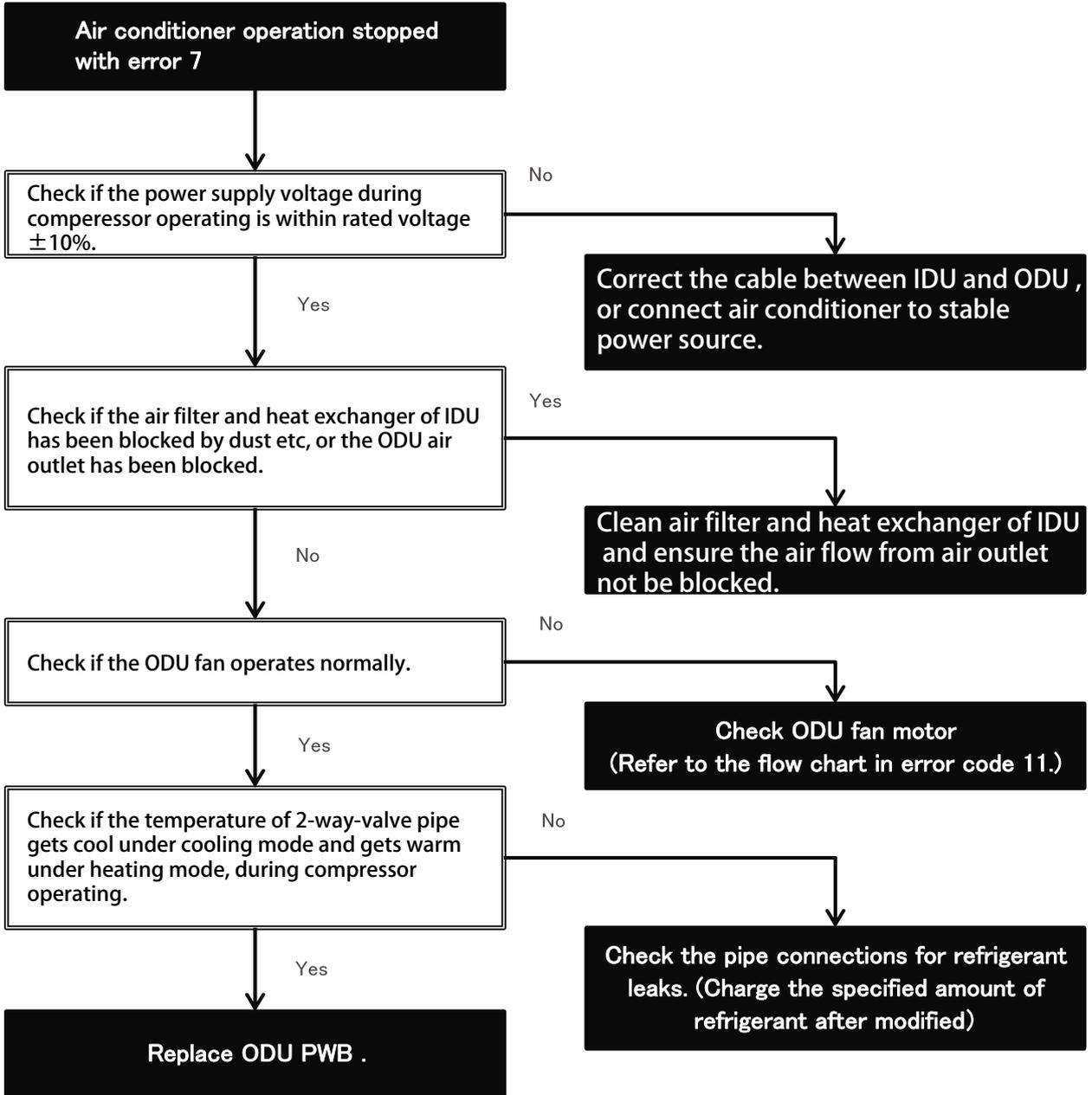
【Case3】

Air conditioner stopped with error 6 when more than 1 second after the compressor started operating



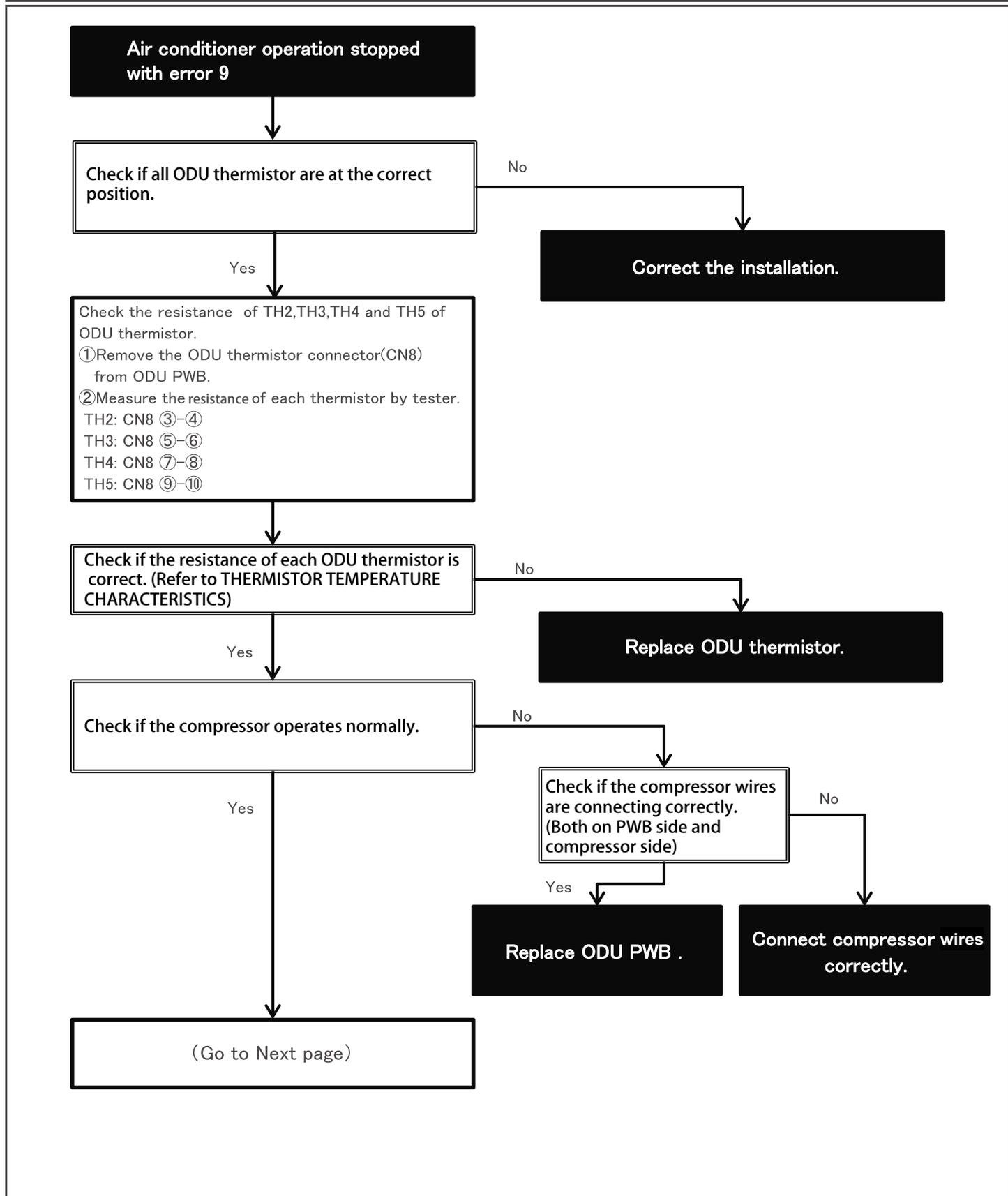
Error Code 7	<h2 style="margin: 0;">AC current error</h2>	7-0 AC over current error 7-1 AC current error when compressor OFF 7-2 AC maximum current error 7-3 AC current deficiency error
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☆ Check the cause due to PWB or another parts.



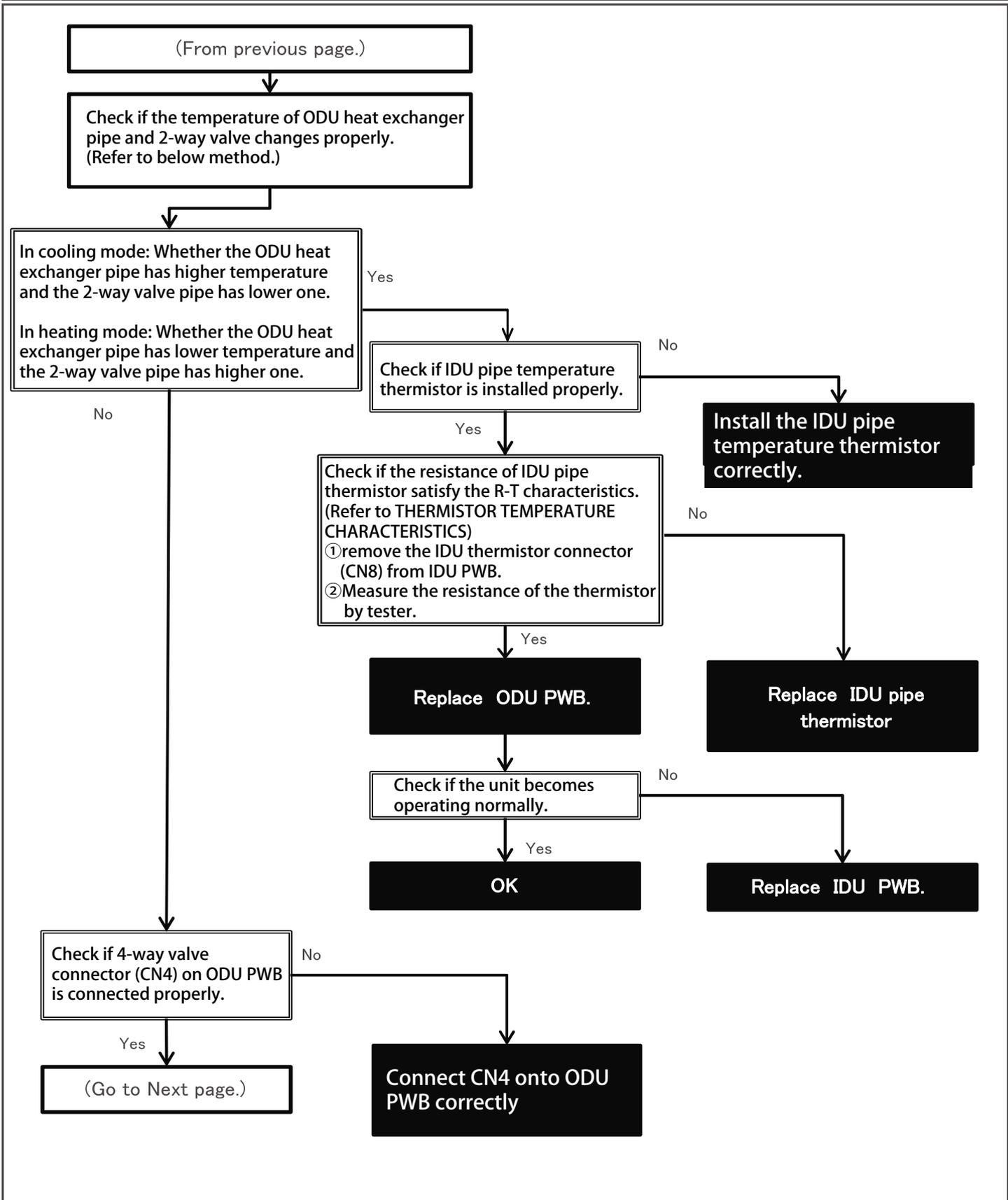
Error Code	Cycle error (1/3)	9-0 4-way valve error 9-4 gas leak error
-------------------	--------------------------	---

☆ Check the cause due to PWB or another parts.



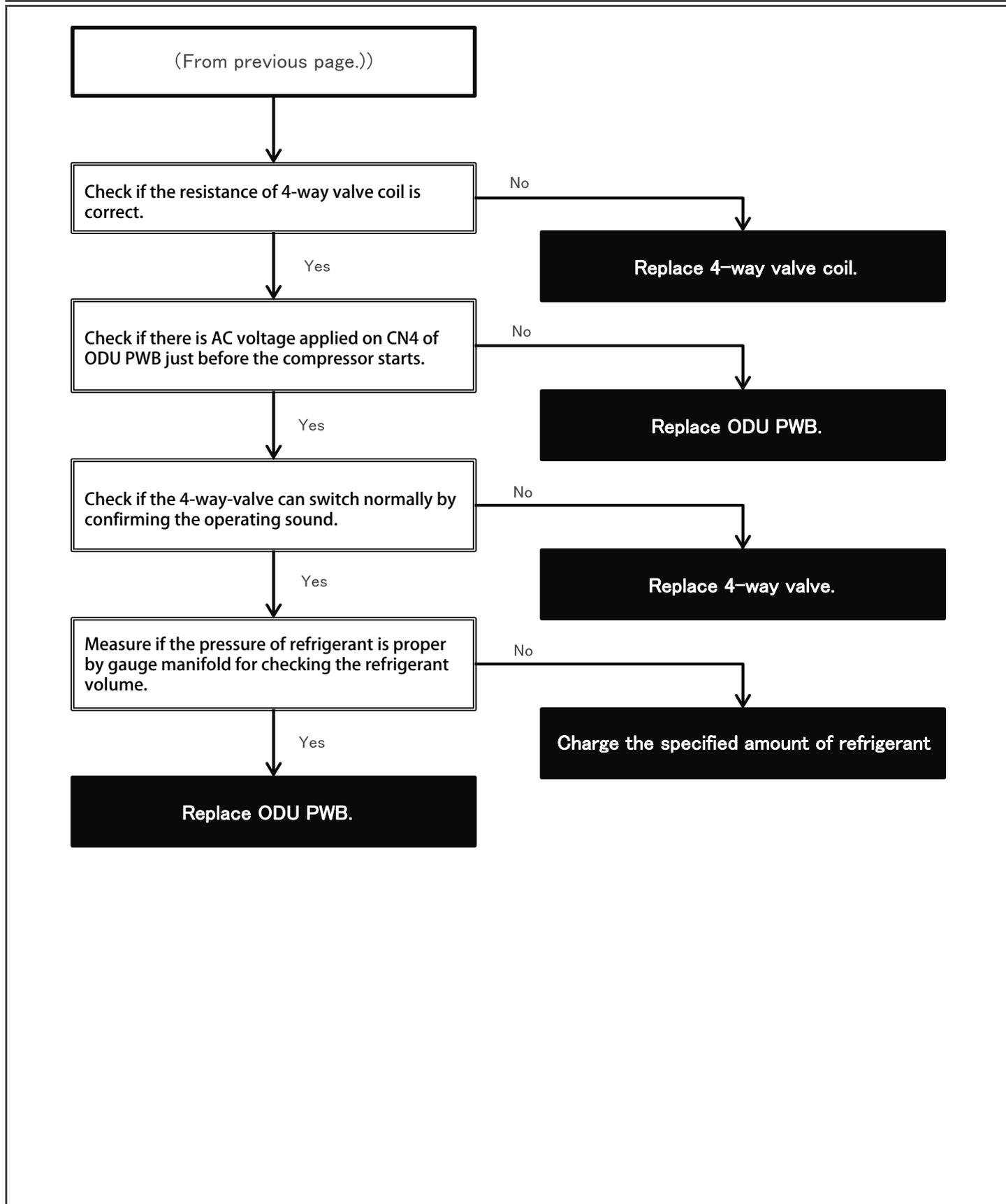
Error Code	9 Cycle error (2/3)	9-0 4-way valve error 9-4 gas leak error
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☆ Check the cause due to PWB or another parts.



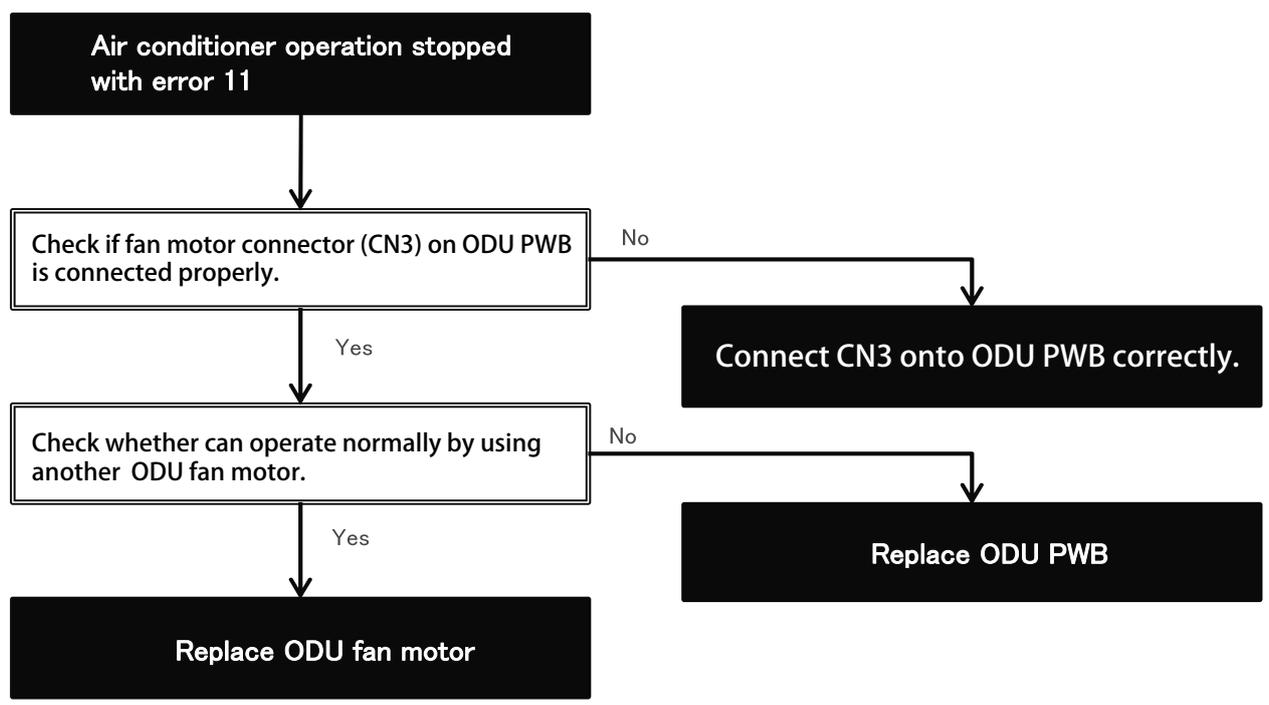
Error Code 9	Cycle error (3/3)	9-0 4-way valve error 9-4 gas leak error
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☆ Check the cause due to PWB or another parts.



Error Code	<h1>ODU fan motor error</h1>	11-1 DC fan driver IC error 11-2 DC fan lock error 11-3 Detection error of negative rotation before compressor start 11-4 Detection error of inverter current 11-5 open connector error
11		

☆ Check the cause due to PWB or DC fan motor.

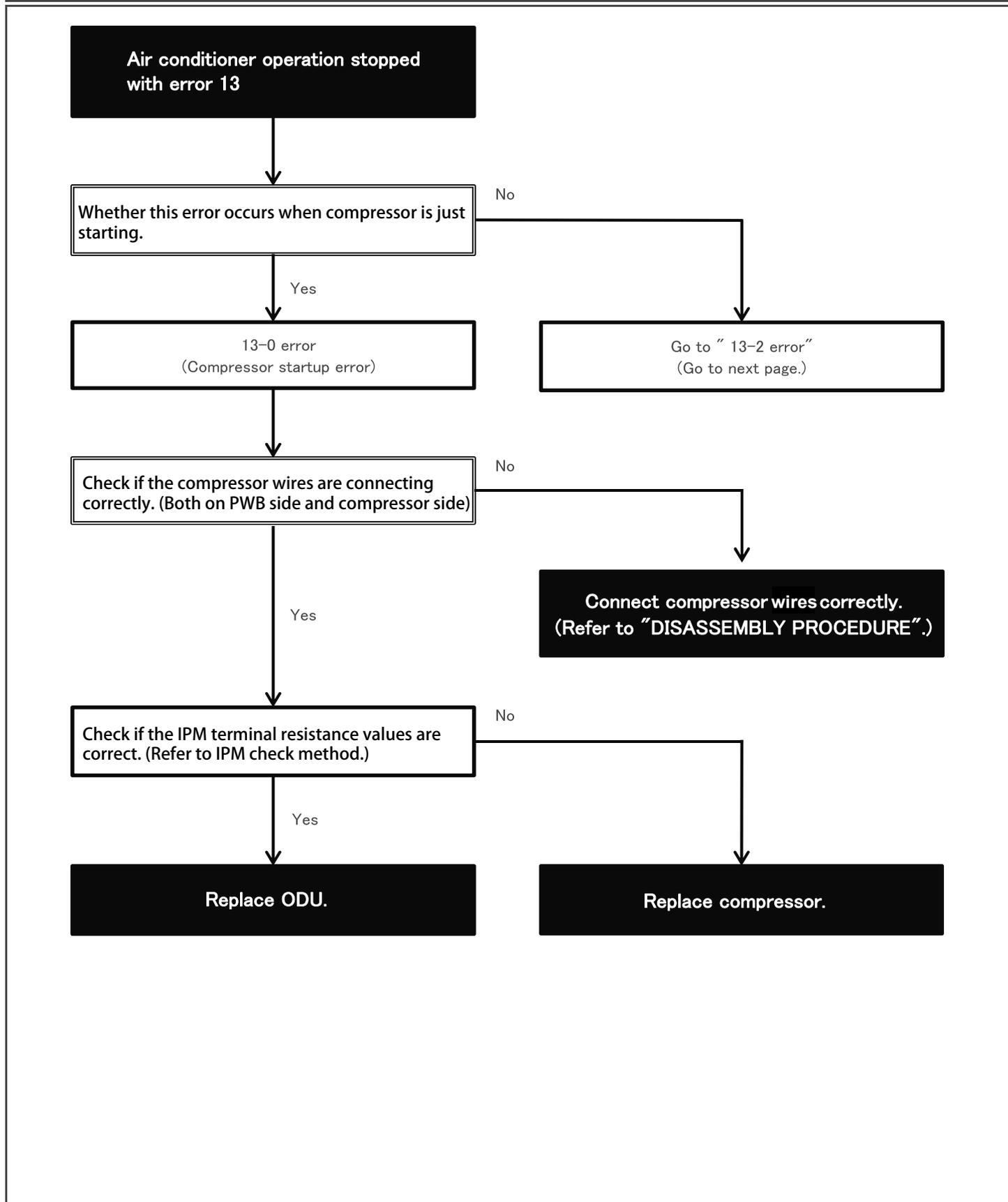


Error Code 13	Compressor rotation error (1/2)	13-0 Compressor startup error 13-2 Compressor rotation error
---	--	---

☆ Check the cause due to compressor.

◇ Main Cause

- Temperature of compressor becomes too high.



Error Code

13

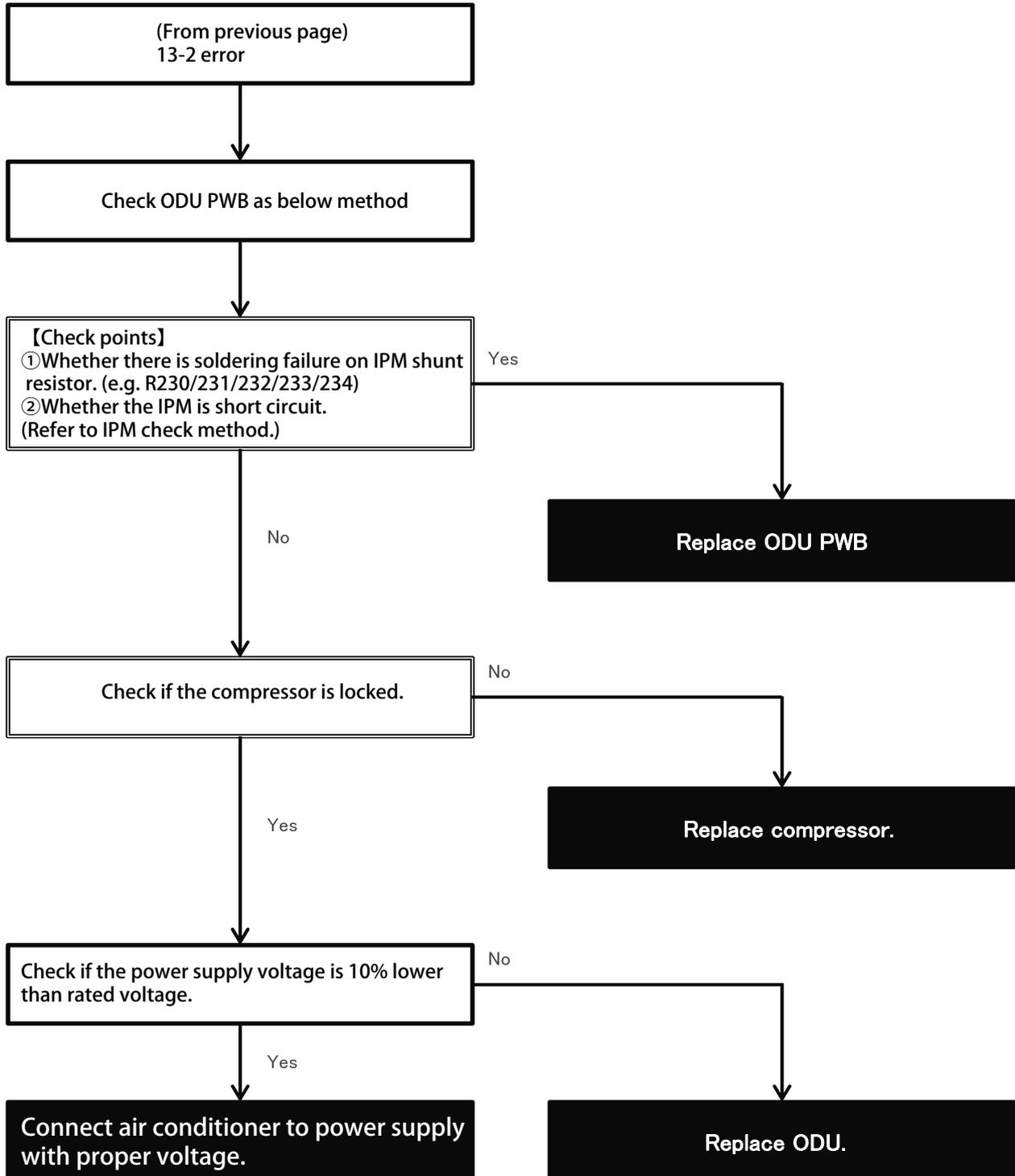
Compressor rotation error (2/2)

13-0 Compressor startup error
13-2 Compressor rotation error

☆ Check the cause due to compressor.

◇ Main cause

- Temperature of compressor becomes too high.



Error Code

14

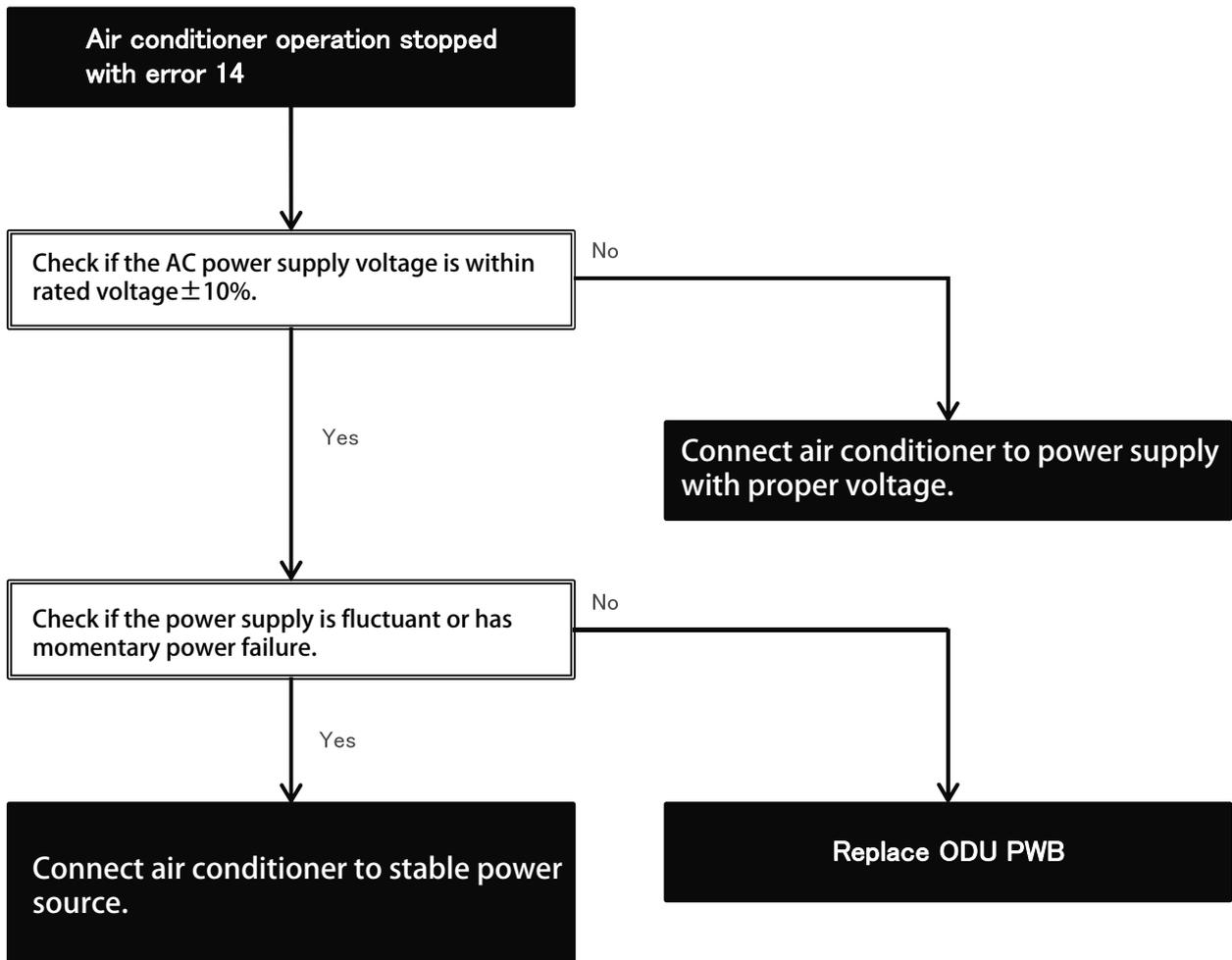
PAM error

14-0 PAM over voltage error
 14-1 PAM clock error
 14-2 Abnormal AC power supply voltage or DC low voltage error

☆ Check AC power supply.

◇ Main cause

- AC power supply voltage is abnormal. (Not within rated voltage $\pm 10\%$)
- Big fluctuation of AC power supply voltage
- Instantaneous voltage drop



Error Code

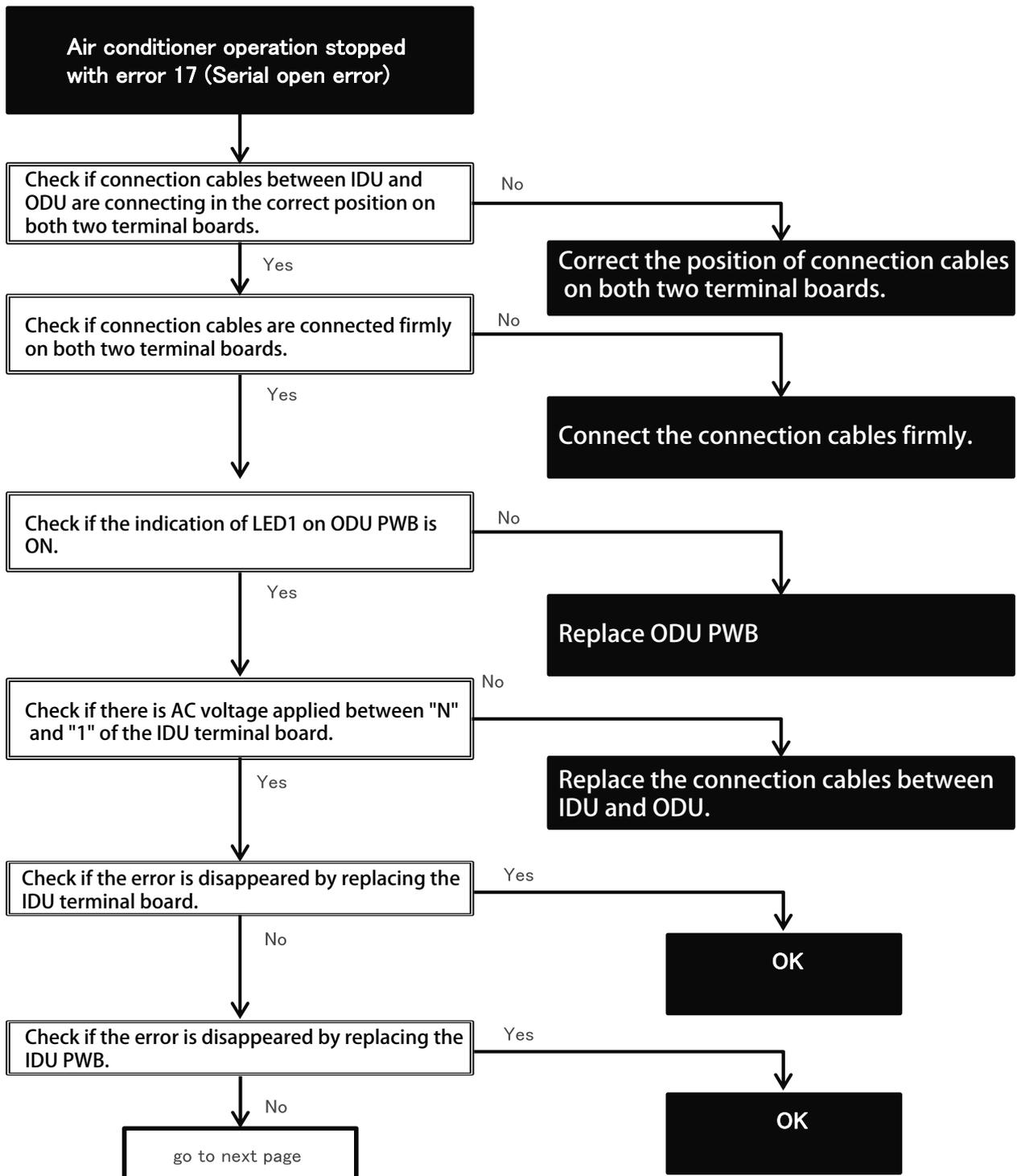
17

Serial open error (1/2)

17-0 Serial open error

☆ Determine why serial communication is not possible.

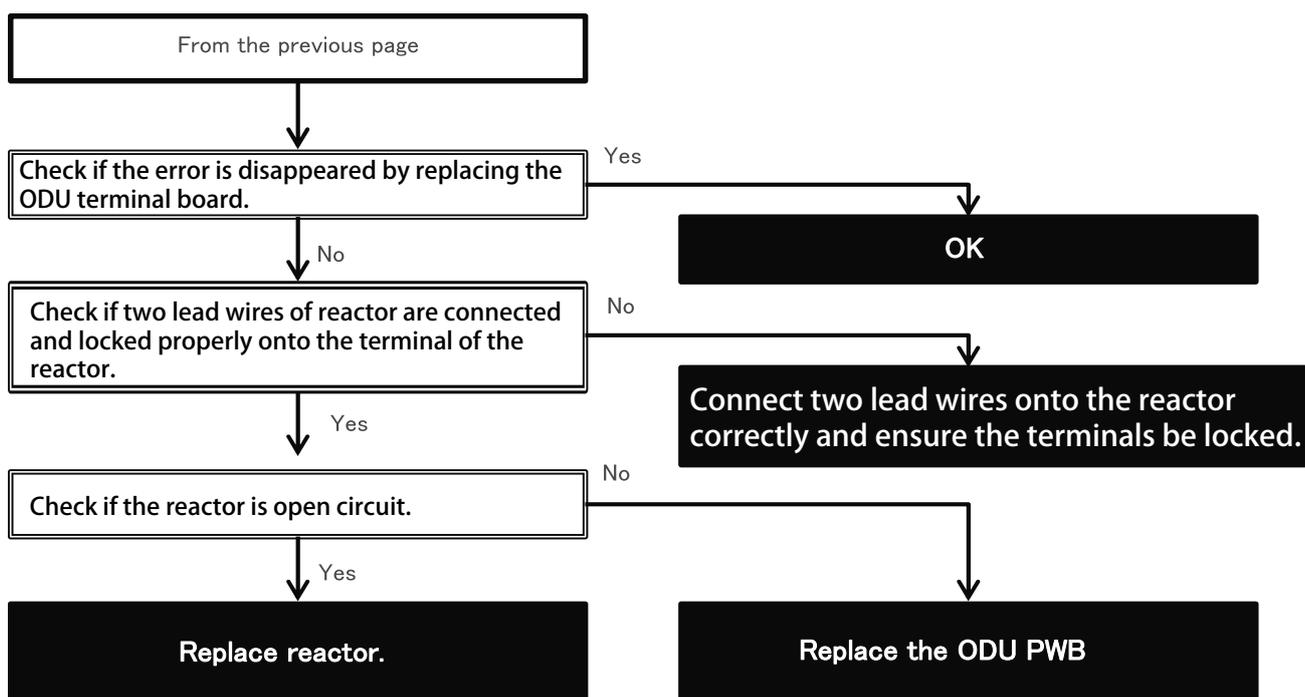
- Defective PWB of IDU (Serial circuit failure, power supply circuit operation failure, etc.)
- Defective PWB of ODU (Serial circuit failure, power supply circuit operation failure, etc.)
- Poor connection of the wiring between the units connecting the IDU and the ODU
- Defective terminal board of IDU / ODU.
- Poor connection of electrical components mounted other than the PWB (outdoor unit reactor, etc.)



Error Code 17	Serial open error(2/2)	17-0 Serial open error
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☆ Determine why serial communication is not possible.

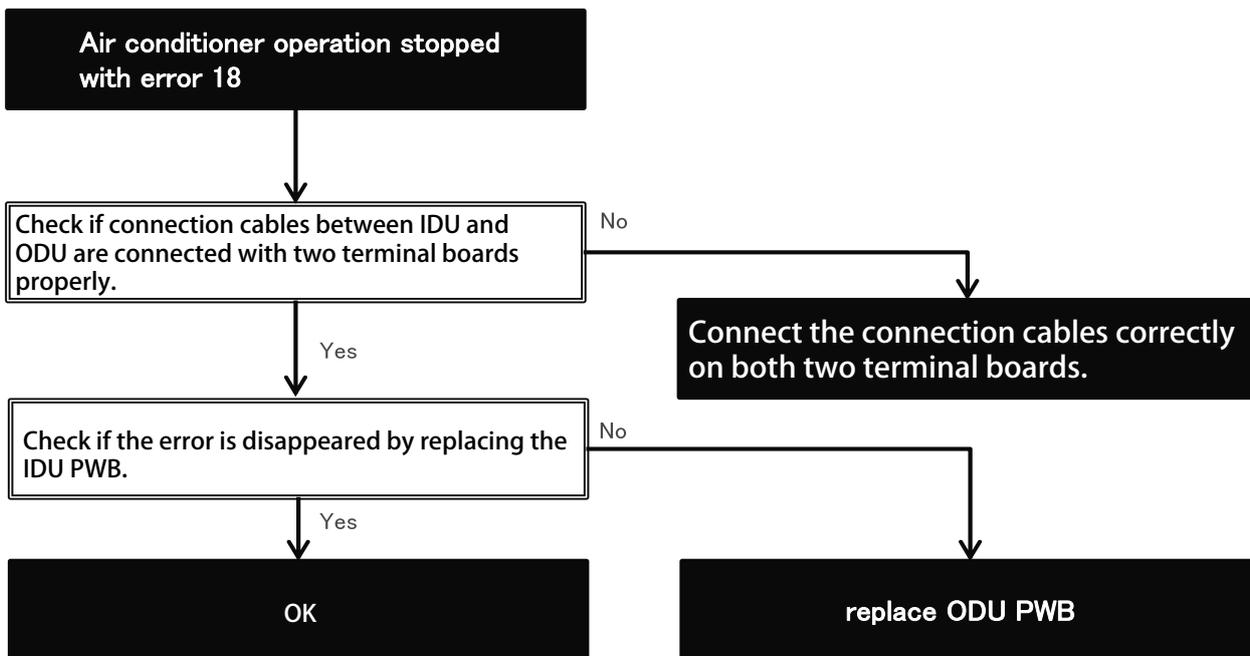
- Defective PWB of IDU (Serial circuit failure, power supply circuit operation failure, etc.)
- Defective PWB of ODU (Serial circuit failure, power supply circuit operation failure, etc.)
- Poor connection of the wiring between the units connecting the IDU and the ODU
- Defective terminal board of IDU / ODU.
- Poor connection of electrical components mounted other than the PWB (outdoor unit reactor, etc.)



Error Code 18	<h2 style="text-align: center;">Serial short error</h2>	18-0 Serial short 18-1 Incorrect wiring
------------------------------------	---	--

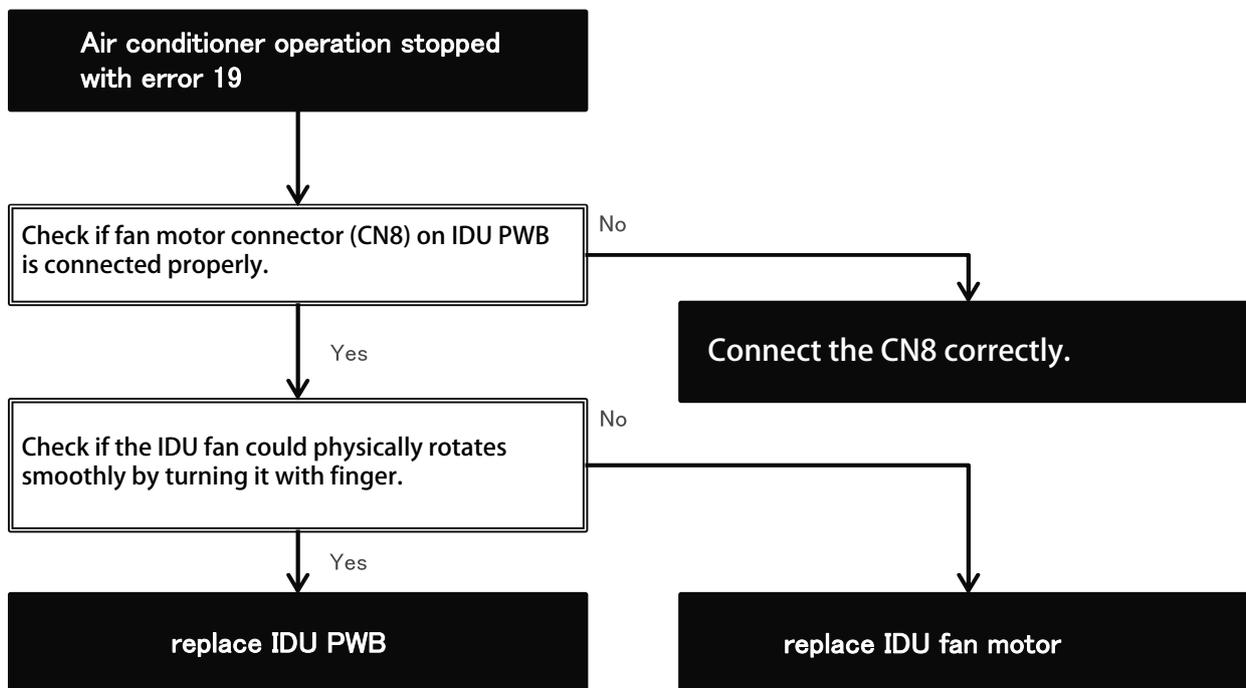
☆ Determine if the units connecting cable is incorrectly inserted or the control board is defective.

- ◇ Main causes of serial shorts
- Incorrect insertion of units connecting cable
 - Indoor unit serial circuit failure
 - Outdoor unit serial circuit failure



Error Code 19	Indoor fan error	19-0 Indoor fan error
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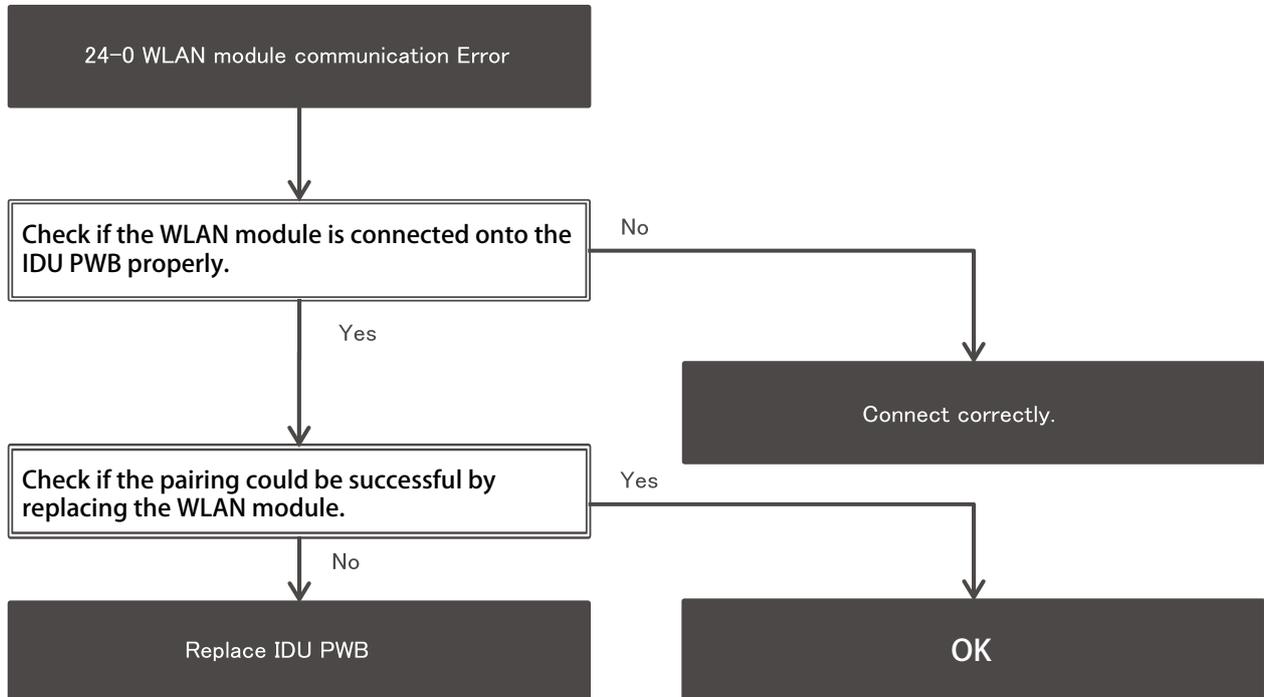
☆ Determine whether the cause is the indoor fan motor or the IDU PWB.



Error Code

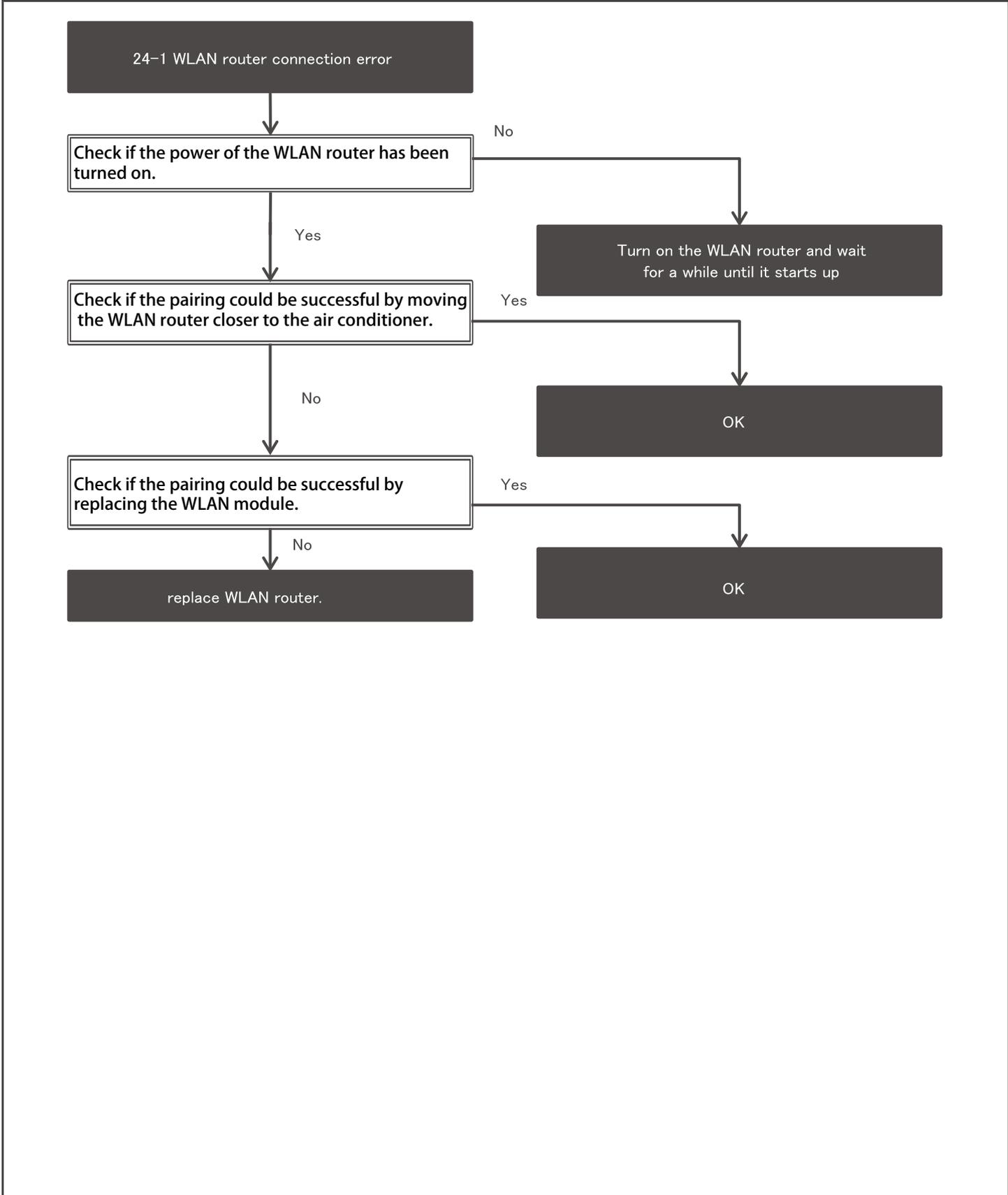
**WLAN module
communication error****24-0**

☆ Determine whether the cause is a connector or a board
(WLAN module, main board).



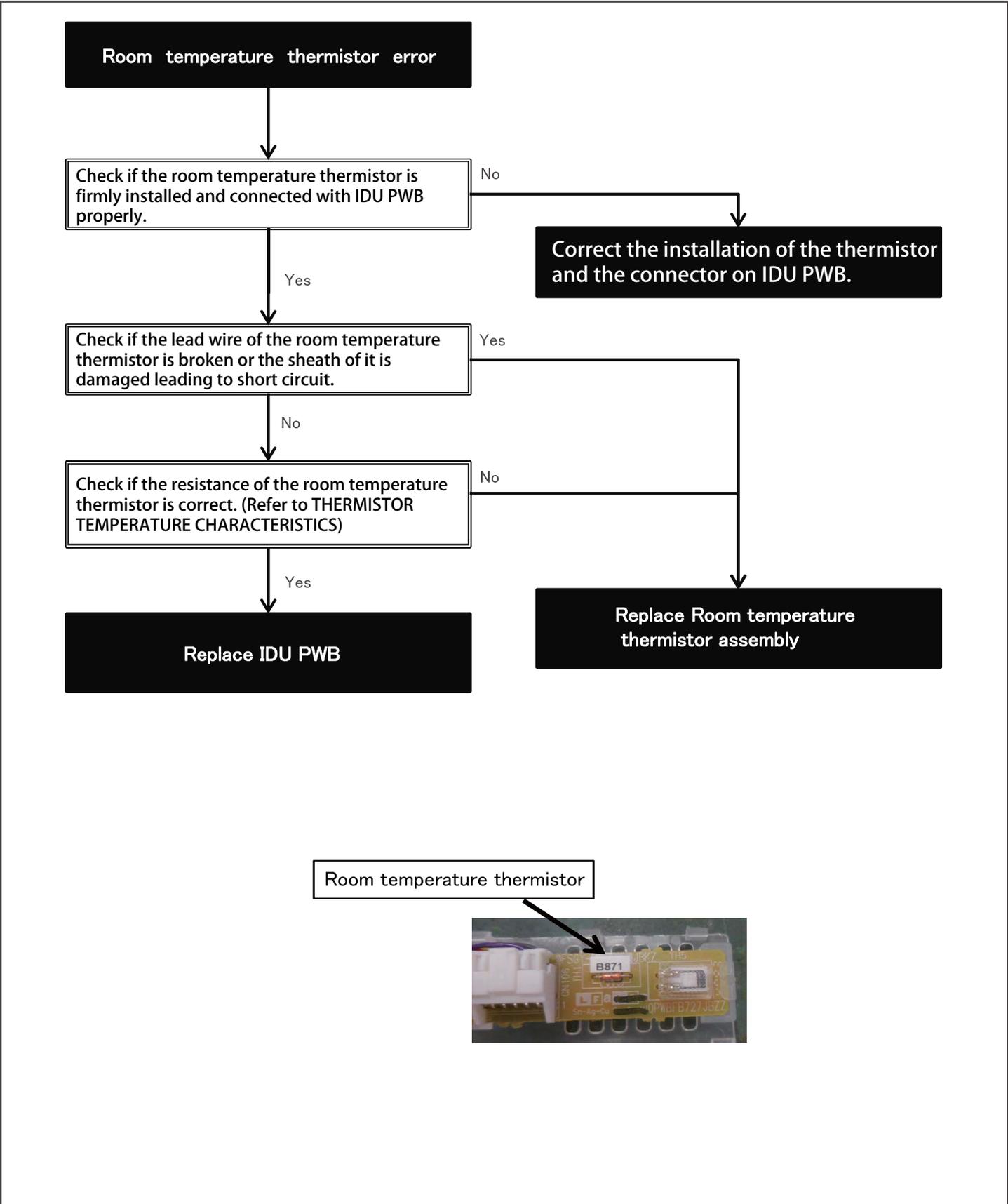
Error Code 24-1	WLAN router connection error
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☆ Determine whether the cause is a WLAN module or a WLAN router.

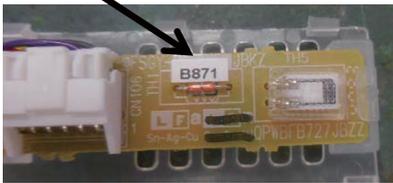


<p>Error Code 26-1</p>	<p>Indoor unit room temperature thermistor open short error</p>	<p>26-1 Room temperature thermistor error 26-2 Pipe thermistor error</p>
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☆ Determine whether the cause is room temperature thermistor or IDU PWB.

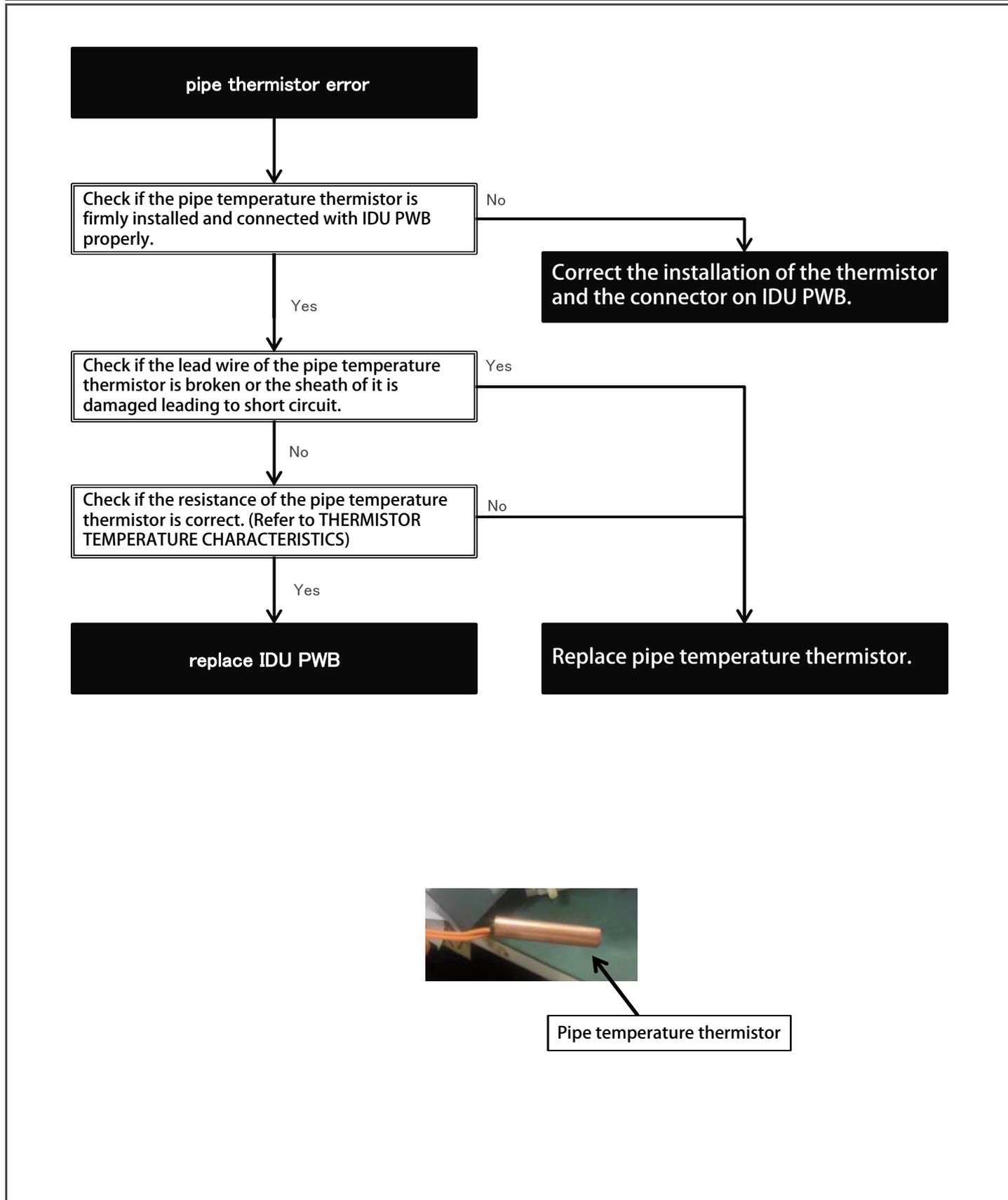


Room temperature thermistor



Error Code 26-2	Indoor unit pipe thermistor open short error	26-1 Room temperature thermistor error 26-2 Pipe thermistor error
--------------------------------------	---	--

☆ Determine whether the cause is pipe thermistor or IDU PWB.



Pipe temperature thermistor