SYSTEM AIR CONDITIONER

Basic : EH035EAV/EH052EAV/EH070EAV
Model : EH035CAV/EH052CAV/EH070CAV
Model Code : EH035CAV/EH052CAV/EH070CAV
UH035CAV/UH052CAV/UH070CAV

SERVICE *Manual*

AIR CONDITIONER

THE FEATURE OF PRODUCT

- **Built-in Duct Type**
- **High Performance & Energy Saving**
- **Long Piping(Length & Height)**
- **Long Ambient Operation(In Low Temp.)**
  : Up to 14˚F(Heating), Up to 23˚F(Cooling)
- **Eco-friendly Product**
  (Lead-Free, RoHS, WEEE)

Refer to the service manual in the GSPN(see the rear cover) for the more information.

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1. Precautions

1-1 Installing the air conditioner

- Users should not install the air conditioner by themselves.
  Ask the dealer or authorized company to install the air conditioner except the window-type air conditioner in U.S.A and Canada.
- If you don't install the air conditioner properly, it may cause a fire, a water leakage or an electric shock.
- You must install the air conditioner according to the national wiring regulations and safety regulations.
- Install the indoor unit higher than 2.5m from the floor to avoid the injury caused by the operation of the fan.
  (except the window-type air conditioner)
- The manufacturer is not responsible for any accidents or injury caused by an incorrect installation.
- When installing the built-in type air conditioner, keep all electric cables such as the power cable and the connection cord in pipes, ducts, or cable channels to protect them from the danger of impact or any other incidents.

1-2 Power supply and circuit breaker

- If the power cord of the air conditioner is damaged, it must be replaced by the manufacturer or a qualified person in order to avoid a hazard.
- The air conditioner must be plugged into an independent circuit if applicable or connect the power cable to the auxiliary circuit breaker.
  An all pole disconnection from the power supply must be incorporated in the fixed wiring with a contact opening of >3mm.
- Do not extend an electric cord to the air conditioner.
- The air conditioner must be plugged in after you complete the installation.

1-3 During operation

- Do not repair the air conditioner at your discretion.
  It is recommended to contact a service center directly.
- Never spill any kind of liquid on the air conditioner.
  If this happens, turn off the air conditioner and contact an authorized service center.
- Do not insert anything between the airflow blades to prevent damage of the inner fan and consequent injury.
  Keep children away from the air conditioner.
- Do not place any obstacles in front of the air conditioner.
- Do not spray any kind of liquid into the indoor unit. If this happens, turn off the air conditioner and contact a service center.
- Make sure that the air conditioner is well ventilated at all times:
  Do not place a cloth or other materials over it.
- Remove the batteries if you don't use the remote control for a long time. (If applicable)
- Use the remote control within 7 meters from the indoor unit. (If applicable)

1-4 Disposing of the unit

- Before throwing out the air conditioner, remove the batteries from the remote control.
- When you dispose of the air conditioner, consult your dealer. If pipes are removed incorrectly, refrigerant may blow out and cause air pollution. When it contacts with your skin, it can cause skin injury.
- The package of the air conditioner should be recycled or disposed of properly for environmental reasons.

1-5 Others

- Never store or load the air conditioner upside down or sideways to prevent the damage to the compressor.
- Young children or infirm persons should be always supervised when they use the air conditioner.
- Max current is measured according to IEC standard for safety.
- Current is measured according to ISO standard for energy efficiency.

2. Product Specifications

2-1 The Feature of Product

■ **Built-in Duct Type**
After installed, the air conditioner can be harmonized with a room interior.

■ **High Performance & Energy Saving**
With the advanced BLDC inverter technology, it makes a room cool with highly energy saving and arises the efficiency of air conditioner.

■ **Long Piping (Length & Height)**
It can give the benefit to the installers and aries the reliability of the air conditioner.
– EH035CAV : Max.65.6ft Long & 39.4ft Height
– EH052/070CAV : Max.98.4ft Long & 49.2ft Height

■ **Long Ambient Operation (In Low Temperature)**
It can arise the reliability and the capacity of the air conditioner, especially operated in low temperature.

■ **Eco-friendly Product (Lead-Free, RoHS, WEEE)**

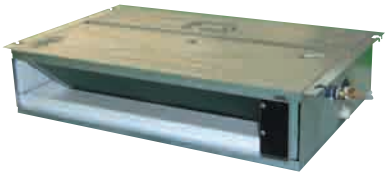
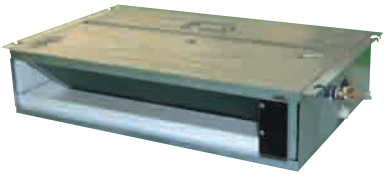
2-2 Product Specifications

Item				Model	EH035CAV	
					Indoor Unit	Outdoor Unit
Type					DUCT	
Performance	Cooling(Min/Std/Max)			Btu/h	3,300/12,000/14,300	
	Heating(Min/Std/Max)			Btu/h	3,100/13,600/18,000	
	Dehumidifying			l/h	1.6	
	Air Volume	Cooling		m^3/min (H/M/L)	10/8.5/7.0	32
		Heating			11/9.0/7.5	32
	Noise Level	Cooling		dB	32	47
		Heating			32	47
	Energy Efficiency Ratio	Cooling		Btu/Wh	10.43	
		Heating			11.52	
	Power Source			ph-V-Hz	1 - 208~230 - 60	
Power	Power Consumption (Min/Std/Max)	Cooling		W	270/1,150/1,550	
		Heating			250/1,180/1,600	
	Operating Current (Min/Std/Max)	Cooling		A	1.6/5.5/7.0	
		Heating			1.4/5.4/7.4	
	Power Factor	Cooling		%	94.31	
		Heating			93.72	
Size	Outer Dimension	Width x Height x Depth		mm	900x199x600	790x548x285
				inch	35.4x7.8x15.4	31.1x21.6x11.2
	Weight(Net)			lb	57.3	78.3
	Compressor	Type			Rotary,G4C090LUBER-SG	
		Motor	Type		Hermetic	
			Rated Output	W	853	
	Oil Type				POE	
	Blower	Type			Sirocco	Propeller
		Motor	Type		Resin/Steel	Resin/Steel
			Rated Output	W	47	40
Piping	Pipe O.D Size		Liquid	D(inch)xL(ft)	ø1/4"(6.35mm)x24.6(7.5m)	
			Gas	D(inch)xL(ft)	ø1/2"(12.7mm)x24.6(7.5m)	
	Connection Method				Flare	
	Between		Height	ft	Max 39.4	
			Weight	ft	Max 65.6	
Heat Exchanger					2 Row 12 Step	2 Row 24 Step
Refrigerant Control Unit					EEV	
Freezer Oil Capacity				gal	0.085	
Refrigerant to Change(R410A)				oz	35.27 (~49.2ft chargeless, 49.2~65.6ft 0.16oz/ft)	
Protection Device(OLP)					None	
Cooling Test Condition					Indoor Unit: DB81°F WB66°F Outdoor Unit: DB95°F WB75°F	
Heating Test Condition					Indoor Unit: DB68°F WB59°F Outdoor Unit: DB45°F WB43°F	

Product Specifications(cont.)

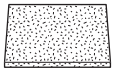
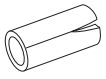
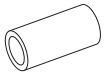
Item \ Model					EH052CAV		EH070CAV	
					Indoor Unit	Outdoor Unit	Indoor Unit	Outdoor Unit
Type					DUCT		DUCT	
Performance	Cooling(Min/Std/Max)			Btu/h	5,500/18,000/21,000		6,500/24,000/27,000	
	Heating(Min/Std/Max)			Btu/h	5,800/20,500/30,700		7,000/27,000/37,000	
	Dehumidifying			l/h	1.63		2.66	
	Air Volume	Cooling		m^3/min (H/M/L)	14.5	43	16.7	50
		Heating			16	43	19.5	50
	Noise Level	Cooling		dB	33	49	36	52
		Heating			33	49	36	52
	Energy Efficiency Ratio	Cooling		Btu/Wh	10.91		10.21	
		Heating			10.90		11.74	
	Power Source			ph-V-Hz	1 - 208~230 - 60			
Power	Power Consumption (Min/Std/Max)	Cooling		W	520/1,650/2,100		650/2,350/2,700	
		Heating			520/1,880/3,200		650/2,300/3,900	
	Operating Current (Min/Std/Max)	Cooling		A	2.3/7.0/9.2		3.0/10.5/12.0	
		Heating			2.6/8.2/14.5		3.0/10.5/18.0	
	Power Factor	Cooling		%	98.76		98.33	
		Heating			98.75		98.03	
Size	Outer Dimension	WidthxHeightxDepth		mm	1,100x199x600	880x638x310	1,100x199x600	880x798x310
				inch	43.3x7.8x23.6	34.6x25.1x12.2	43.3x7.8x23.6	34.6x31.4x12.2
	Weight(Net)			lb	68.3	110.2	68.3	125.7
	Compressor	Type			Rotary,G8T200FUAEW-SG		Rotary,G8T260FUAEW-SG	
		Motor	Type		BLDC		BLDC	
			Rated Output	W	2,000		2,470	
	Oil Type				POE			
	Blower	Type			Sirocco	Propeller	Sirocco	Propeller
		Motor	Type		Resin/Steel	Steel	Resin/Steel	Steel
			Rated Output	W	53	110	53	125
Piping	Pipe O.D Size		Liquid	D(inch)xL(ft)	ø1/4"(6.35mm)x24.6(7.5m)		ø1/4"(6.35mm)x24.6(7.5m)	
			Gas	D(inch)xL(ft)	ø1/2"(12.7mm)x24.6(7.5m)		ø5/8"(15.88mm)x24.6(7.5m)	
	Connection Method				Flare			
	Between		Height	ft	Max 49.2			
			Weight	ft	Max 98.4			
Heat Exchanger					3 Row 12 Step	2 Row 28 Step	3 Row 12 Step	2 Row 36 Step
Refrigerant Control Unit					EEV			
Freezer Oil Capacity				gal	0.185		0.185	
Refrigerant to Change(R410A)				oz	51.2(0.21oz/ft)		67.0(0.11oz/ft)	
Protection Device(OLP)					None			
Cooling Test Condition					Indoor Unit: DB81°F WB66°F Outdoor Unit: DB95°F WB75°F			
Heating Test Condition					Indoor Unit: DB68°F WB59°F Outdoor Unit: DB45°F WB43°F			

2-3 The Comparative Specifications of Product

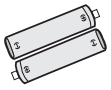
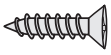
Item		EH070CAV	EH070EAV(Basic)
Design	Indoor Unit		
	Outdoor Unit		
Net Weight	Indoor Unit	68.3lb	74.96lb
	Outdoor Unit	125.7lb	163.1lb
Outer Dimension (W x H x D)	Indoor Unit	43.3x7.8x23.6 inch	43.3x7.8x23.6 inch
	Outdoor Unit	34.6x31.4x12.2inch	34.6x31.4x12.2inch
Noise Level	Indoor Unit	36dB↓	36dB↓
	Outdoor Unit	52dB↓	52dB↓

2-4 Accessory and Option Specifications

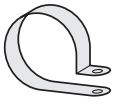
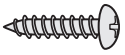
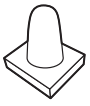
2-4-1 Accessories

Item	Descriptions	Code-No.	Q'TY	Remark
	Service Manual	DB98-27578A	1	Indoor Unit
	Owner's Manual	DB98-27565A	1	
	Installation Manual	DB98-27564A	1	
	Insulation	DB62-03440H	1	
		DB62-03439H	1	
	Insu Pipe Joint Out	DB62-03439J	2	
	Insu Pipe Joint In	DB72-00143D	1	
		DB72-00143E	1	
	Ass'y Holder Drain Pipe	DB90-02064A	1	
	Ass'y Drain Hose Joint	DB94-00758A	1	

■ Wireless Remote Controller Accessories

Item	Descriptions	Code-No.	Q'TY	Remark
	Wireless remote controller	DB93-00251G	1	
	Battery	DB47-90024A	2	
	Remote control holder	DB61-00204A	1	
	STS 2S-2x10 tapped screw	6002-000581	2	
	Owner's instructions	DB98-05156A	1	
	Installation manual	DB98-05184A	1	

■ Wired Remote Controller Accessories

Item	Descriptions	Code-No.	Q'TY	Remark
	Wired remote controller	DB93-01766C	1	
	Cable-tie	DB65-10088B	2	
	Cable clamp	DB65-10074E	5	
	M4x16 tapped screw	6002-000474	7	
	Indoor unit power drawing cable	DB39-00221A	1	
	Communication cable of the wired remote controller	DB39-00933A	1	
	Wire joint	DB39-90020A	1	
	Owner's instructions	DB98-15731A	1	
	Installation manual	DB98-15770A	1	

3. Alignment and Adjustments

3-1 Indoor Display Error and Check Method

■ Error detection and reoperation

- If error occurs during the operation, badness is indicated by LED flickering and all operation is stopped except LED.
- When reoperating by remote control and switch determine the error mode after normal operation.

■ Indoor unit LED lamp display at error detecting

Cause	LED lamp display					Follow-up Measures
	Concealed Type					
	Green	Red				
	Standard Type					
Power reset	◑	X	X	X	X	Refer to troubleshooting(12-2-1,2)
Error of temperature sensor in the indoor unit (Open/Short)	X	X	◑	X	X	Refer to troubleshooting(12-2-8)
Error of heat exchanger sensor in the indoor unit	◑	X	◑	X	X	Refer to troubleshooting(12-2-8)
Error of the outdoor temperature sensor Error of the condensor temperature sensor Error of the discharge temperature sensor	◑	X	X	◑	X	Refer to troubleshooting (12-2-6, 7, 8)
Indoor and outdoor unit time out Abnormal data reception more than 60 packet Indoor unit is not connected Communication error between the outdoor unit Main-Inverter Micom(After 1 minute of Main-Inverter detection)	X	X	◑	◑	X	1. Indoor unit error (Display is unrelated with operation) 2. Outdoor unit error (Display is unrelated with operation)

● : On, ◑ : Flickering, X : OFF

◆ If you turn off the air conditioner when the LED is flickering, the LED is also turned off.

■ LED Display

Error type	LED lamp display					Follow-up Measures
	Concealed Type					
	Green	Red				
	Standard Type					
[Self diagnosis]Power voltage detection between indoor and outdoor unit communication cable [Self diagnosis]Outdoor unit refrigerant leakage (Gas leak) [Self diagnosis]Outdoor fan restriction error						System Multi A/C Self Diagnosis
[Inverter]Inverter compressor operation failure						Refer to next page 461 error
[Inverter] DC peak error						Refer to next page 464 error
[Inverter]DC Link voltage 150V or less, 410V or more	◑	X	X	X	X	Refer to next page 466 error
[Inverter] Compressor rotation error						Refer to next page 467 error
[Inverter]Electric current error						Refer to next page 468 error
[Inverter]DC Link sensor error						Refer to next page 469 error
[Inverter]EEPROM READ/WRITE error						Refer to next page 471 error
[Inverter]Inverter zerocrossing error						Refer to next page 472 error
Setting the outdoor unit capacity option error						Refer to next page 556 error
Detection of the float switch	X	X	◑	X	X	Refer to next page 153 error
Error of setting option switches for optional accessories	◑	X	◑	X	X	Check DIP Switch at the Indoor PCB
EEPROM error	◑	X	X	◑	X	Exchange Indoor PCB
EEPROM option error	X	X	◑	◑	X	Reset Option Code

● : On, ◑ : Flickering, X: OFF

◆ If you turn off the air conditioner when the LED is flickering, the LED is also turned off.

3-1-1 Wired Remocon Error Display (COM2)

Display	Explanation	Follow-up Measures
101	Indoor unit Communication Error	Refer to troubleshooting(12-2-12)
102	Indoor/Outdoor unit Communication Time Out Error	
	60 Packet Over data	
201	Indoor unit is not connected	
203	Communication Error between Outdoor Main and Inverter Micom (Occurred after I minute detection in Main and Inverter)	
121	Indoor Temp. Sensor(OPEN/SHORT ERROR)	Indoor Sensor Error (Use same measures as Outdoor Sensor Error, troubleshooting 12-2-6)
122	Indoor Unit Eva in sensor(OPEN/SHORT ERROR)	
128	Indoor Unit Eva in sensor Separation	
221	Outdoor Temp. Sensor Error(OPEN/SHORT ERROR)	Outdoor Sensor Error (Refer to troubleshooting 12-2-6)
237	COND Temp. Sensor Error(OPEN/SHORT ERROR)	
260	Inverter Compressor Discharge Temp. sensor Error(OPEN/SHORT ERROR)	
153	Indoor Float S/W 2nd Detection	
460	Outdoor unit-Indoor unit Communication wire Voltage Detection	Refer to troubleshooting(12-2-12)
554	Outdoor unit Refrigerant Full Leakage(Gas Leak)	Recharge Gas
458	Outdoor door Fan Error	Refer to troubleshooting(12-2-3, 12-2-9)
461	[Inverter]Inverter Comp. Start Failure	Refer to troubleshooting(12-2-13)
464	[Inverter]DC PEAK Error	Refer to troubleshooting(12-2-11)
466	[Inverter]DC LINK Voltage 150V below, 410V Over	Refer to troubleshooting(12-2-15)
467	[Inverter]Comp. Rotation Error	Exchange PCB → Exchange Comp
468	[Inverter]Current Sensor Error	Exchange PCB
469	[Inverter]DC LINK Sensor Error	Refer to troubleshooting(12-2-10)
471	[Inverter]EEPROM READ/WRITE Error	Exchange Outdoor PCB
472	[Inverter]Inverter ZEROCROSSING Error	Exchange Outdoor PCB
556	Outdoor unit Capacity Setup Option Error	Reset Option Code
601	Wired Liquid Crystal ↔ Indoor unit Comm. Error	System Multi A/C Self Diagnosis
602	Master Wired Liquid Crystal ↔ Slave Liquid Crystal Comm. Error	
606	Wired Liquid Crystal COM1/COM2 Cross Error	
Er	Error of setting option for wired remote controller COM2	

3-2 Outdoor LED Error Display and Check Method

No.	LED Display			Cause	Follow-up Measures
	Yellow	Green	Red		
1	○	○	○	Power off/ VDD NG	No error
2	○	○	◎	IPM Over Current(O.C)	Refer to troubleshooting(12-2-11)
3	○	○	●	Abnormal Serial communication	If it lasts for 1 min, then turn into No.14 Display
	○	●	●		
4	○	◎	○	Compressor Starting error	Refer to troubleshooting(12-2-13)
5	○	◎	●	Normal Operation	It shows A/C operates well
6	○	●	○	Compressor Lock error	Refer to troubleshooting(12-2-14)
7	○	●	◎	DC-Link voltage under/over error	Refer to troubleshooting(12-2-15)
8	◎	○	◎	Outdoor temperature sensor error(Dual/Single)	Refer to troubleshooting(12-2-16)
9	◎	○	●	Discharge over temperature (Dual/Single)	Refer to troubleshooting(12-2-16)
10	◎	◎	○	Discharge temperature sensor error(Dual/Single)	Refer to troubleshooting(12-2-16)
11	◎	◎	●	Current sensor error	Exchange PCB
12	◎	●	○	Compressor Limit error	Exchange Comp
13	◎	●	◎	Coil temperature sensor error (Dual/Single)	Refer to troubleshooting(12-2-16)
14	◎	●	●	1min. Time out Communication	Refer to troubleshooting(12-2-12)
15	●	○	○	Fan error	Refer to troubleshooting(12-2-3,9)
16	●	○	◎	OTP error	Reset Option Code → Exchange PCB
17	●	○	●	Compressor rotation error	Exchange PCB → Exchange Comp
18	●	◎	○	Operation condition secession (Dual only)	Exchange PCB
19	●	◎	◎	DC-Link voltage sensor error	Refer to troubleshooting(12-2-10)
20	●	◎	●	I_Trip error / PFC Over current	Exchange Outdoor
21	●	●	○	GAS Leak error(Dual/Single)	Recharge Gas
22	●	●	◎	AC Line Zero Cross Signal out	Exchange PCB
23	●	●	●	Power ON reset(1sec)	It shows A/C operates well
24	◎	○	○	Capacity miss match	Reset Option Code
25	○	◎	◎	Test Operation at Cooling Mode	It shows only during the factory production
26	◎	◎	◎	Test Operation at Heating Mode	

● : LED ON, ○ : LED OFF, ◎ : LED BLINK

3-3 Setting Option Setup Method

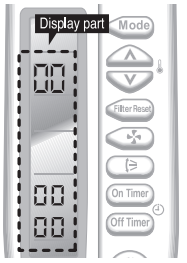
ex) Option No. : 085115-1d2340

Step 1 : **Enter the Option Setup mode.**

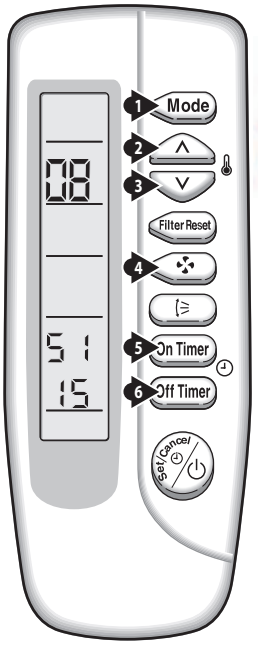
1st Take out the batteries of remote control.

2nd Press the temperature button simultaneously and insert the battery again.

3rd Make sure the remocon display shown as 00 00 00 .



Step 2 : **Enter the Option Setup mode and select your option according to the following procedure.**



✳ Setting is not required if you must 0 a value which has a 0 default.

1 The default value is 00 00 00 .
Otherwise, push the Mode button to 0 .
Every time you push the button, the display panel reads 1 or 0 repeatedly.

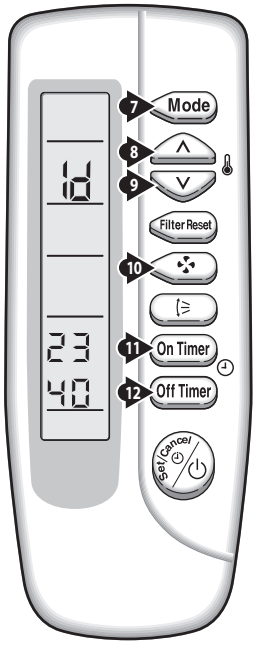
2 Push the ∧ button to set the display panel to 8 .
Every time you push the button, the display panel reads 0 ➡ 1 ➡ 2 ➡ 3 ➡ … 9 ➡ A ➡ b ➡ c ➡ d ➡ E ➡ F repeatedly.

3 Push the ∨ button to set the display panel to 5 .
Every time you push the button, the display panel reads 0 ➡ 1 ➡ 2 ➡ 3 ➡ … 9 ➡ A ➡ b ➡ c ➡ d ➡ E ➡ F repeatedly.

4 Push the fan button to set the display panel to 1 .
Every time you push the button, the display panel reads 0 ➡ 1 ➡ 2 ➡ 3 ➡ … 9 ➡ A ➡ b ➡ c ➡ d ➡ E ➡ F repeatedly.

5 Push the On Timer button to set the display panel to 1 .
Every time you push the button, the display panel reads 0 ➡ 1 ➡ 2 ➡ 3 ➡ … 9 ➡ A ➡ b ➡ c ➡ d ➡ E ➡ F repeatedly.

6 Push the Off Timer button to set the display panel to 5 .
Every time you push the button, the display panel reads 0 ➡ 1 ➡ 2 ➡ 3 ➡ … 9 ➡ A ➡ b ➡ c ➡ d ➡ E ➡ F repeatedly.



✳ Setting is not required if you must 0 a value which has a 0 default.

7

Press Mode button, then the default value is 00.

8

Push the ∧ button to set the display panel to d.
Every time you push the button, the display panel reads 0 ➡ 1 ➡ 2 ➡ 3 ➡ ... 9 ➡ A ➡ b ➡ c ➡ d ➡ E ➡ F repeatedly.

9

Push the ∨ button to set the display panel to 2.
Every time you push the button, the display panel reads 0 ➡ 1 ➡ 2 ➡ 3 ➡ ... 9 ➡ A ➡ b ➡ c ➡ d ➡ E ➡ F repeatedly.

10

Push the button to set the display panel to 3.
Every time you push the button, the display panel reads 0 ➡ 1 ➡ 2 ➡ 3 ➡ ... 9 ➡ A ➡ b ➡ c ➡ d ➡ E ➡ F repeatedly.

11

Push the On Timer button to set the display panel to 4.
Every time you push the button, the display panel reads 0 ➡ 1 ➡ 2 ➡ 3 ➡ ... 9 ➡ A ➡ b ➡ c ➡ d ➡ E ➡ F repeatedly.

12

Push the Off Timer button to set the display panel to 0.
Every time you push the button, the display panel reads 0 ➡ 1 ➡ 2 ➡ 3 ➡ ... 9 ➡ A ➡ b ➡ c ➡ d ➡ E ➡ F repeatedly.

Step 3 : Upon completion of the selection, check you made right selections.

Press the Mode Selection key, Mode to set the display part to 0 and check the display part.

➡ The display part shows 00.

Press the Mode Selection key, Mode set the display part to 1 and check the display part.

➡ The display part shows 01.

Step 4 : Pressing the ON/OFF button ( )

When pressing the operation ON/OFF key with the direction of remote control for unit, the sound ''Ding'' or ''Diriring'' is heard and the OPERATION ICON( ) lamp of the display is flickering at the same time, then the input of option is completed. (If the diriring sound isn't heard, try again pressing the ON/OFF button.)

Step 5 : Unit operation test-run

First, Remove the battery from the remote control.

Second, Re-insert the battery into the remote control.

Third, Press ON/OFF button( ) with the direction of remote control for set.

• Error Mode

1st If all lamps of indoor unit are flickering, Plug out, plug in power plug again and press ON/OFF key to retry.

2nd If the unit is not working properly or all lamps are continuously flickering after setting the option code, see if the correct option code is set up for its model.

■ OPTION ITEMS

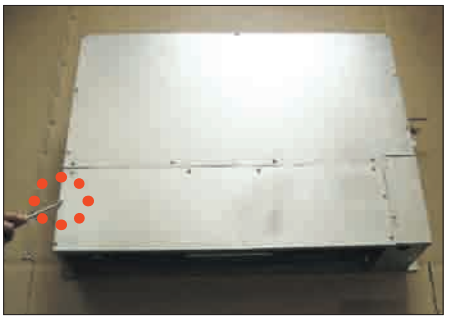
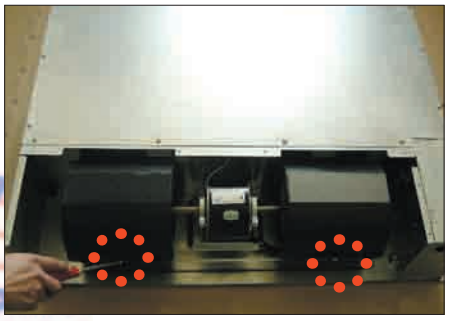
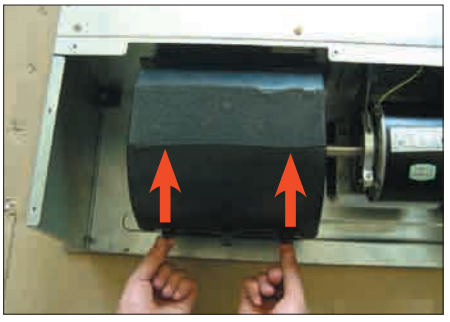
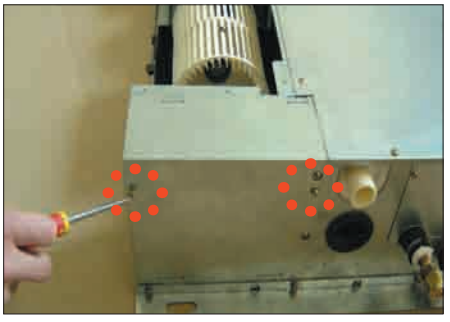
REMOCON / MODEL	SEG1	SEG2	SEG3	SEG4	SEG5	SEG6	SEG7	SEG8	SEG9	SEG10	SEG11	SEG12
EH035CAV	0	1	5	7	7	3	1	5	8	1	8	9
EH052CAV	0	1	5	7	7	3	1	9	8	1	4	E
EH070CAV	0	1	5	7	7	4	1	c	8	0	D	4

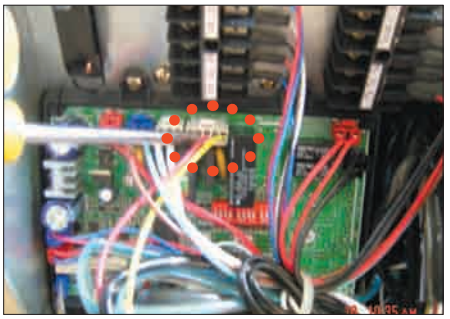
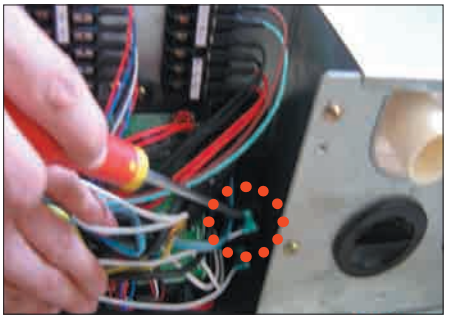
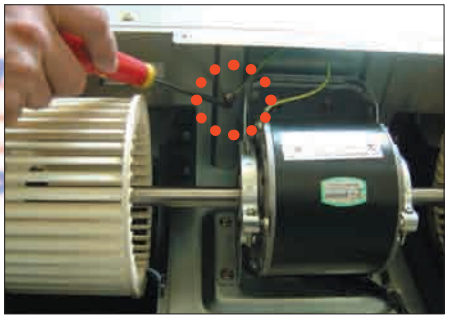
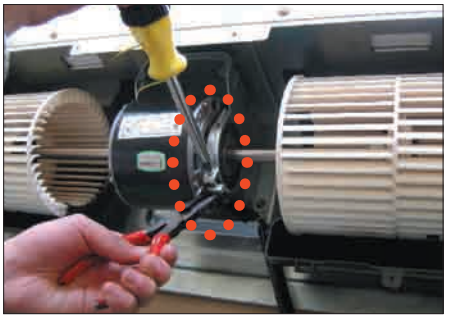
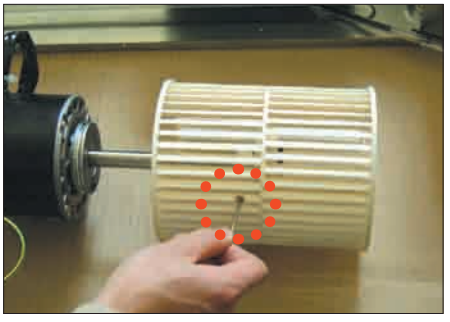
4. Disassembly and Reassembly

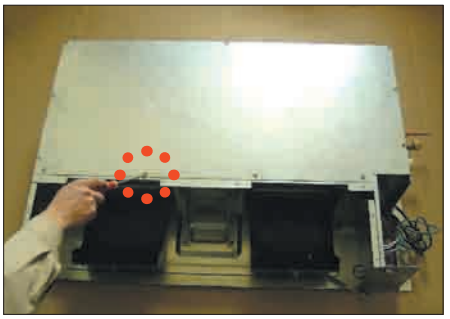
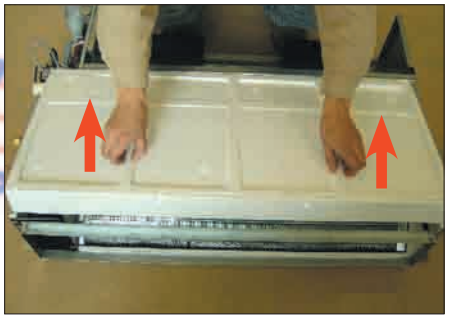
Stop operation of the air conditioner and remove the power cord before repairing the unit.

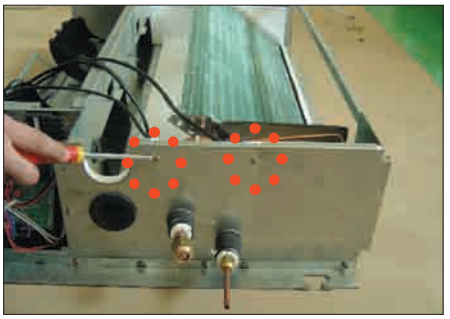
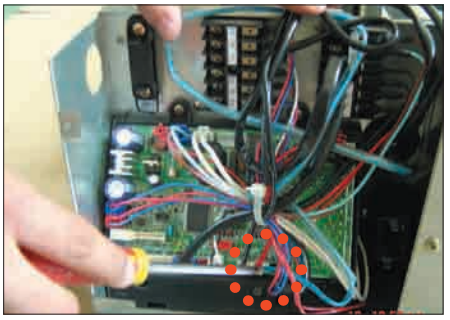
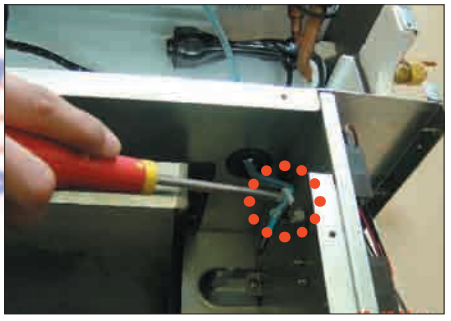
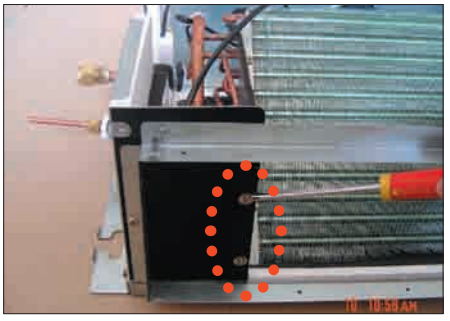
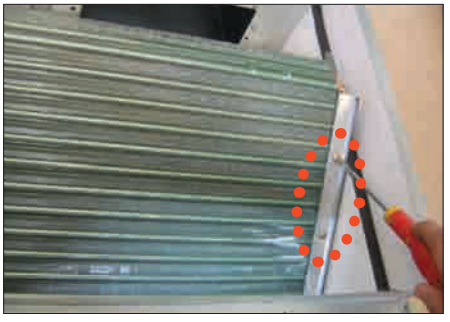
4-1 Indoor Unit

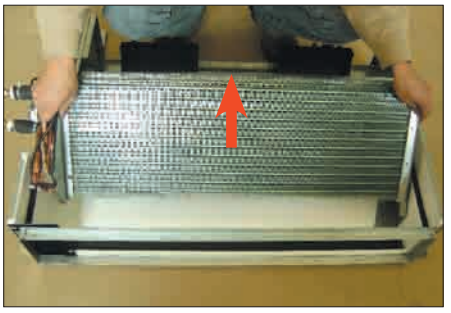
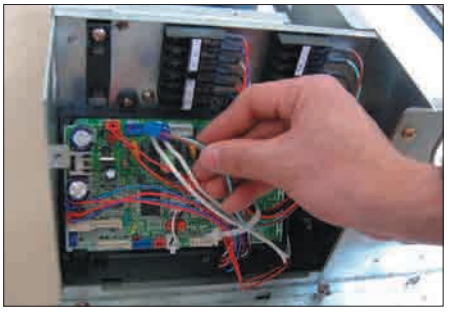
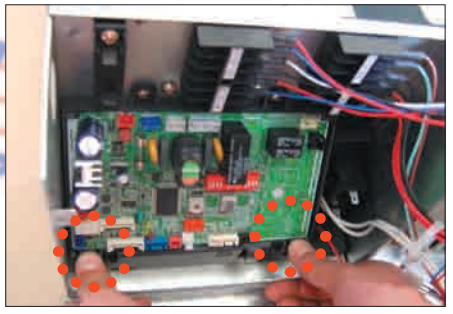
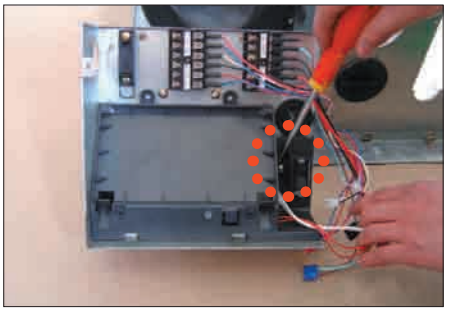
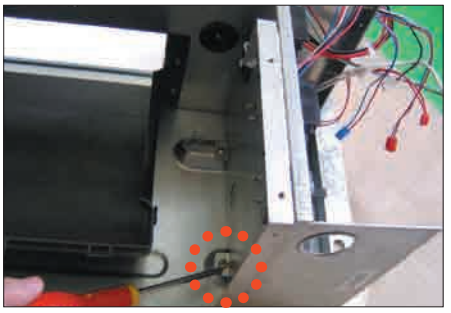
■ EH035CAV

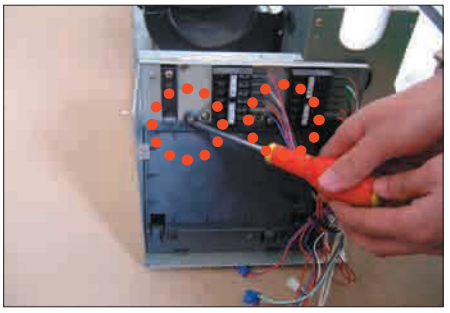
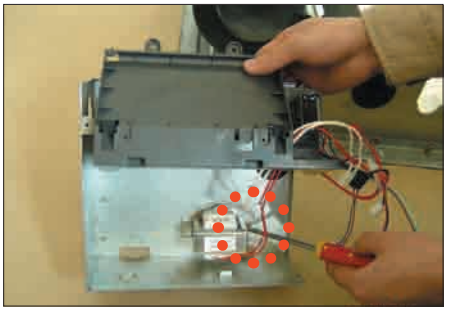
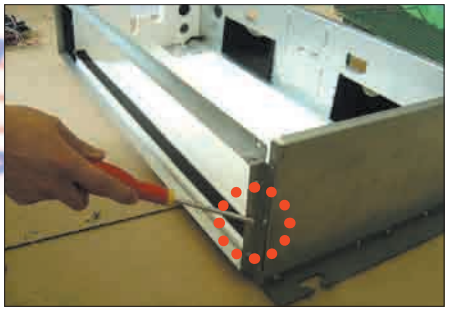
No	Parts	Procedure	Remark
1	Motor & Blower	1) Disassemble the Cabinet Top Motor. - Unscrew 8 screws	
		2) Disassemble 2 Cover Blower Uppers. - After unscrewing 2 screws	
		- Disassemble the Cover Blower Upper with pushing its hook.	
		3) Disassemble the Cover Control. - Unscrew 2 screws	

No	Parts	Procedure	Remark
		4) Disassemble Motor Wires connected to the inside of PCB and connected to the Capacitor.	
			
		5) Disassemble the Motor earth wire connected to the Partition. - Unscrew a screw	
		6) Disassemble the band Motor for fixing the Motor. - Unscrew 2 screws	
		7) After disassembling the Motor and Blower for the set, disassemble the Blower by use of 3mm wrench.	

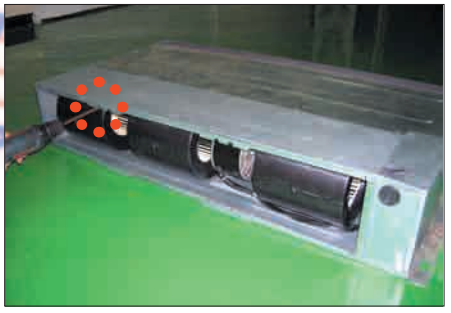
No	Parts	Procedure	Remark
2	Drain Pan	1) Disassemble the Cabinet Top Evap. - Unscrew 11 screws	
		2) Disassemble the Bracket Outlet Sub that fixes the Drain Pan equipped on the front of the set. - Unscrew 6 screws	
		3) Disassemble the Drain Cushion from the set.	

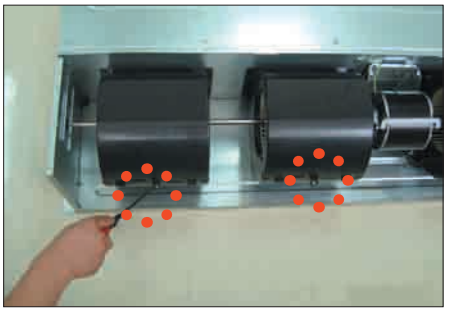
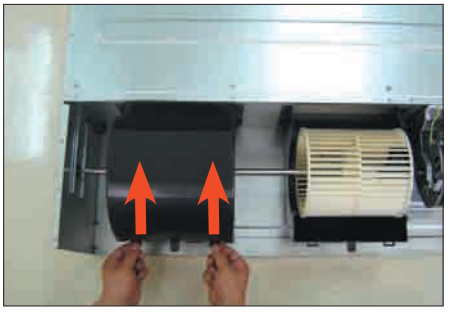
No	Parts	Procedure	Remark
3	Evaporator	✳ The Evaporator should be disassembled after disassembling the Cover Control 1-3) and the Drain Pan 2-1), 2-2), 2-3). 1) Disassemble the Cover Pipe that fixes the high/low pressure Pipe. - Unscrew 2 screws	
		2) Disassemble the refrigerant temperature sensor, Inlet air temperature sensor, and EEV wire that connected to the inside of PCB.	
			
		3) Disassemble the Support Evap. LF that fixes the Evaporator. - Unscrew 2 screws	
		4) Disassemble the Support Evap RH. - Unscrew 2 screws	

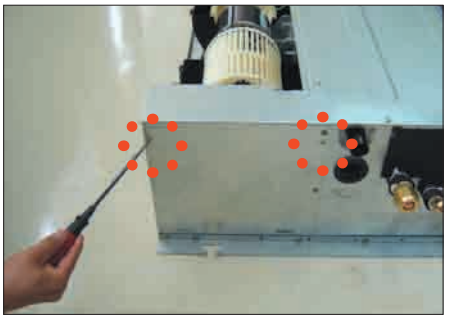
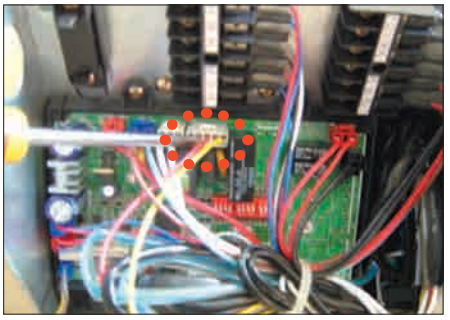
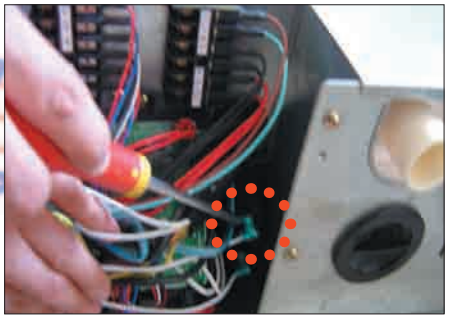
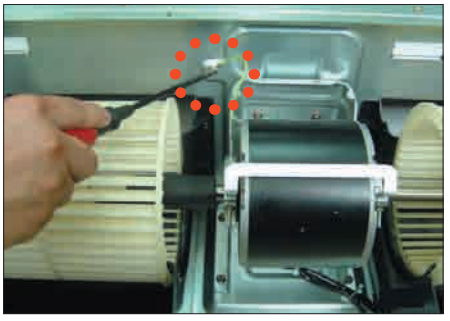
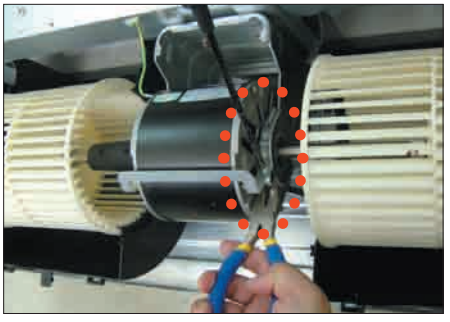
No	Parts	Procedure	Remark
		5) Disassemble the Evaporator form the set.	
4	Control In	✳ The Control In should be disassembled after disassembling the Cover Control 1-3). 1) Disassemble all Control Wires connected to the inside of PCB.	
		2) In case of disassembling the PCB separately, disassemble the PCB from the case with pushing the hook after unscrewing the screw. - Unscrew 1 screw	
		3) In case of disassembling the Capacitor separately, disassemble the Capacitor from the Case.	
		4) In case of disassembling the Case Control, disassemble the Case Control from the set after unscrewing the screw connected to the direction of Blower. - Disassemble if after disassembling the Cabinet Top Motor 1-1).	

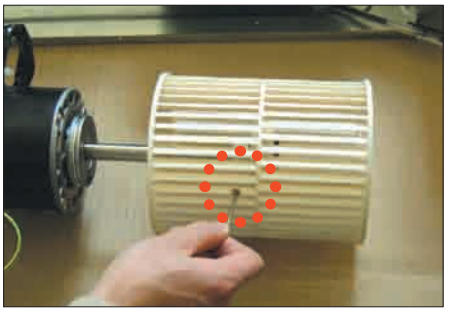
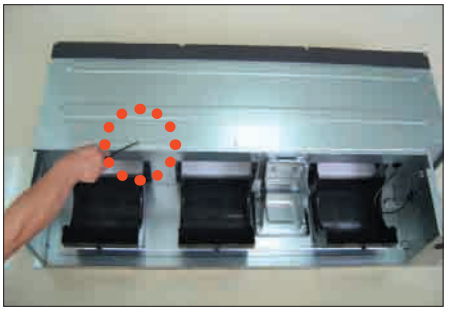
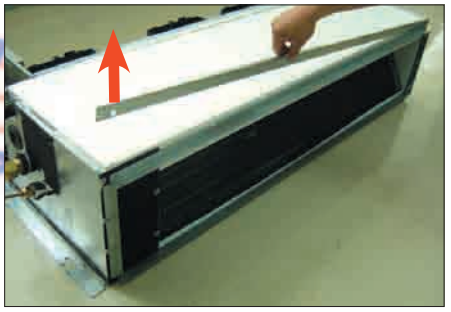
No	Parts	Procedure	Remark
		5) In case of disassembling the Trans Power, unscrew the screw fixing on the Case. ✳ Disassemble if after disassembling the case PCB 4-4).	 
5	Bracket Outlet	1) Disassemble the Bracket Outlet assembled on the Cabinet. - Unscrew 10 screws	

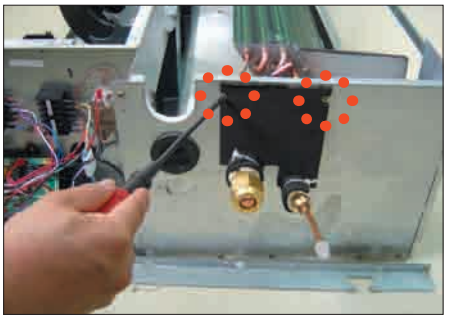
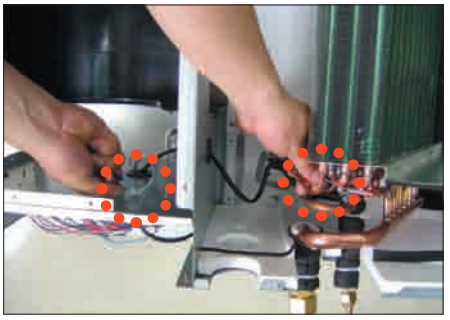
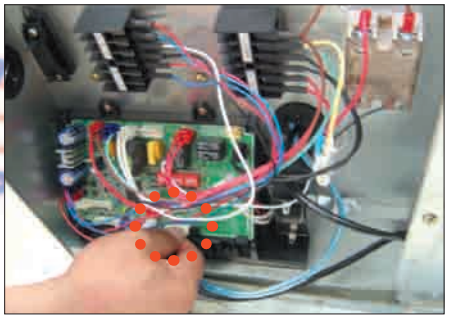
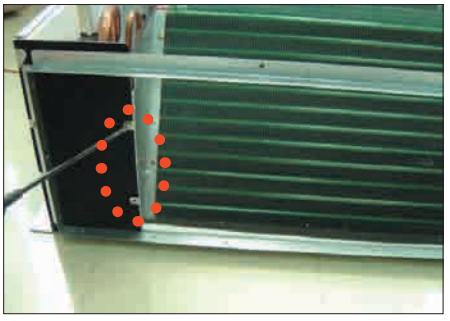
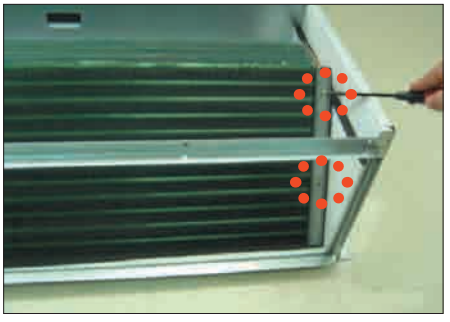
■ EH052CAV/EH070CAV

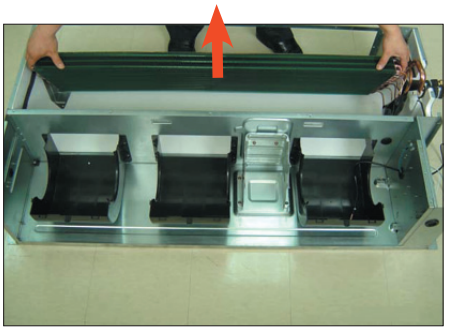
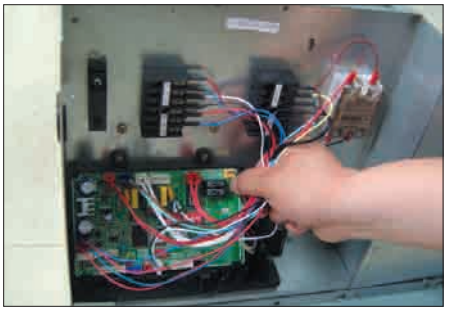
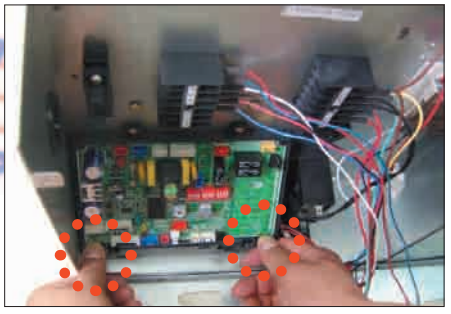
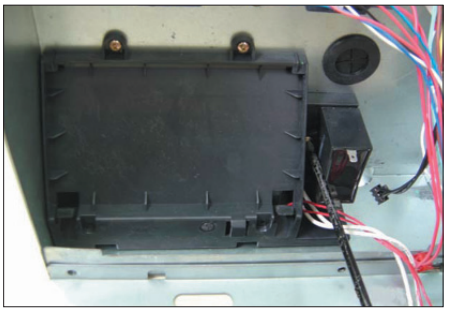
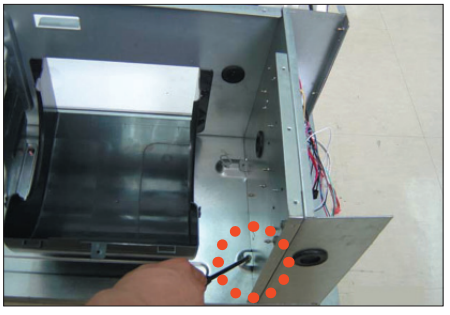
No	Parts	Procedure	Remark
1	Filter	1) Pull out the Filter as picture 1 or picture 2.	 
		2) If it is necessary, after disassembling 8 indicating screws, detach the Bracket Filter.	 

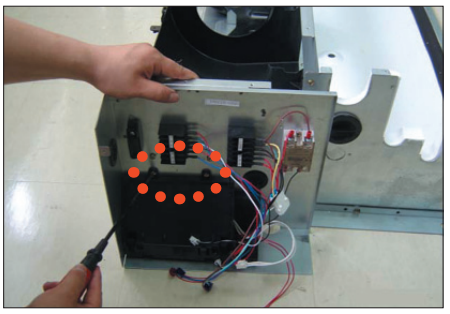
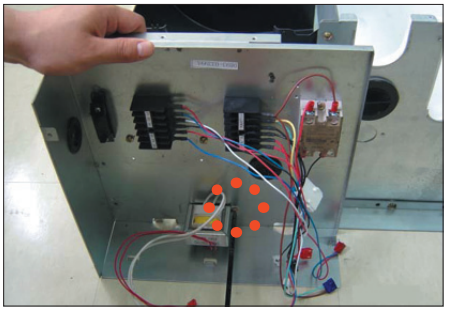
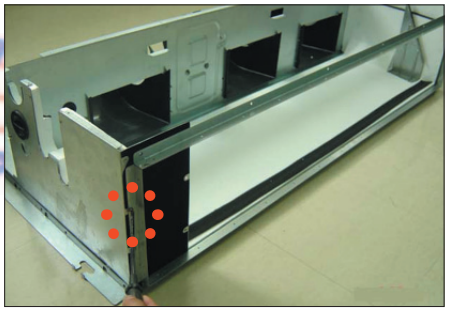
No	Parts	Procedure	Remark
		3) If the Cabinet-Top Motor is assembled on the side of the set, the procedure of disassembling the Filter is just as the above.	 
2	Blower & Motor	1) After disassembling 13 indicating screws, detach Ass'y Cabinet-Top Motor.	
		2) After disassembling 3 indicating screws, detach Ass'y Case Blower Upper.	
		– Press the pothook of the Case Blower and detach Ass'y Case Blower Upper.	

No	Parts	Procedure	Remark
		3) After disassembling 2 indicating screws, detach the Cover Control.	
		4) Detach the Motor Wire Connected to PCB and Capacitor.	
			
		5) After disassembling the indicating screws, detach the wire connected to the Partition.	
		6) After disassembling 2 indicating screws, detach the Ass'y Band Motor.	

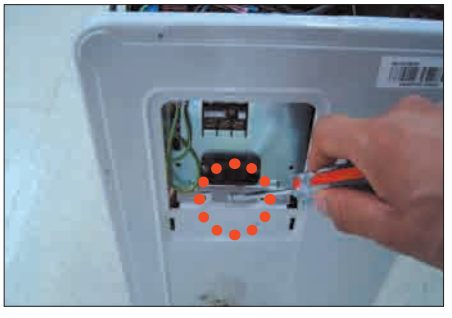
No	Parts	Procedure	Remark
		7) After disassembling the Motor and Blowers, detach the Blowers from the axis of the Motor by 3mm inner hexagon spanner.	
3	Drain Pan	1) After disassembling 15 indicating screws, detach Ass'y Cabinet-Top Evap.	
		2) After disassembling 6 indicating screws, detach the Bracket Outlet.	
		3) Detach the Drain Pan.	

No	Parts	Procedure	Remark
4	Evaporator	✳ After finished the procedures above, detach the Evaporator. 1) After disassembling 2 indicating screws, detach Ass'y Cover Pipe.	
		2) Detach the Sensor from the Control Box.(including 2 Sensors)	
			
		3) After disassembling 2 indicating screws, detach Ass'y Support Evap LF.	
		4) After disassembling 2 indicating screws, detach Ass'y Support Evap RH.	

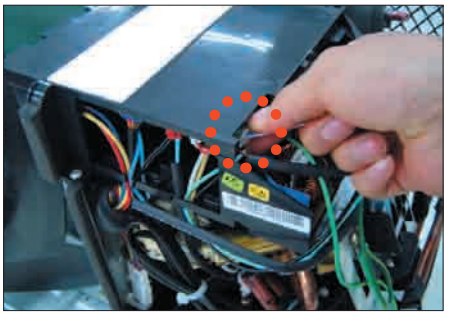
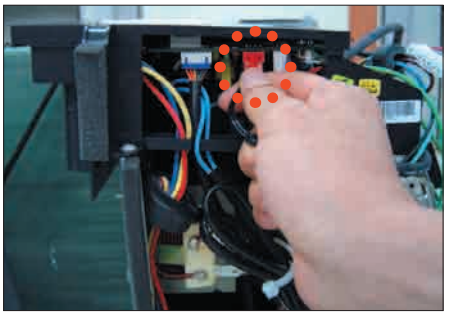
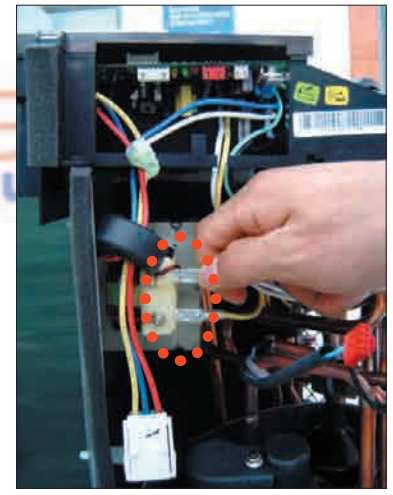
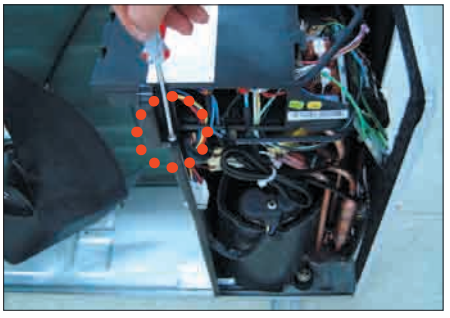
No	Parts	Procedure	Remark
		5) Detach the Evaporator from the set.	
5	Control In	✳ Detach the parts of Control In after disassembling the Cover Control. 1) Detach all the wires connected to the PCB.	
		2) If only the disassembly of PCB required, press the Pothook and detach the PCB from the set.	
		3) If only the disassembly of Capacitor is required, detach it from the set.	
		4) If only the disassembly of Case Control is required, detach it from the set after disassembling 2 indicating screws.	

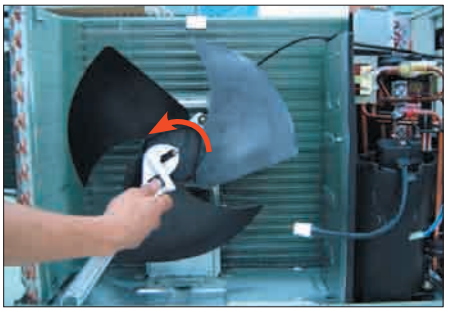
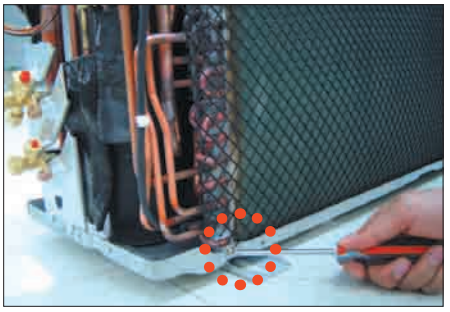
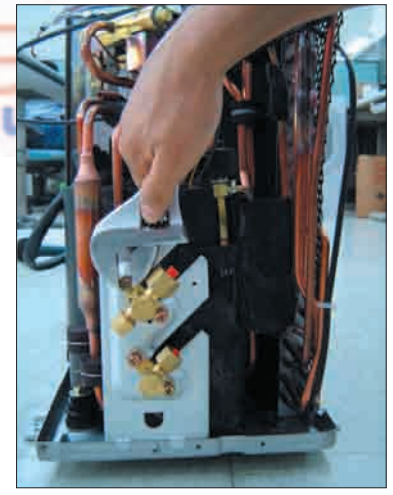
No	Parts	Procedure	Remark
		5) Detach the Transformer after disassembling 2 indicating screws. ✳ Work is possible after disassembling the Case PCB.	 
6	Ass'y Bracket Outlet	1) After disassembling 16 indicating screws, detach Ass'y Bracket Outlet.	

■ UH035CAV

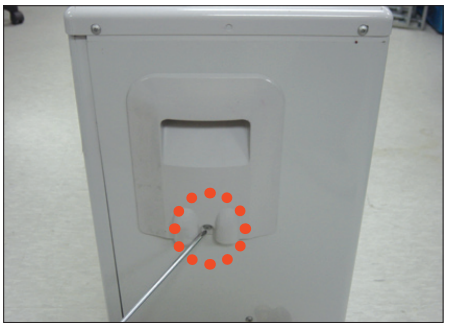
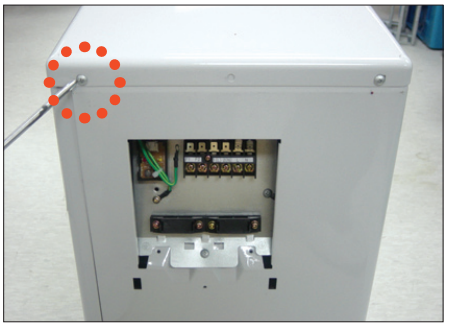
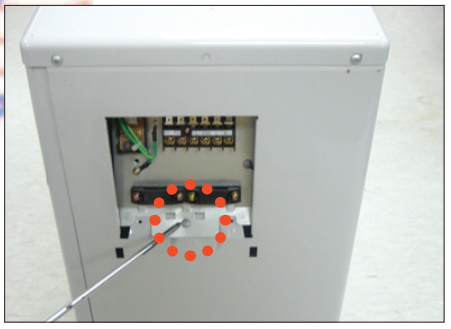
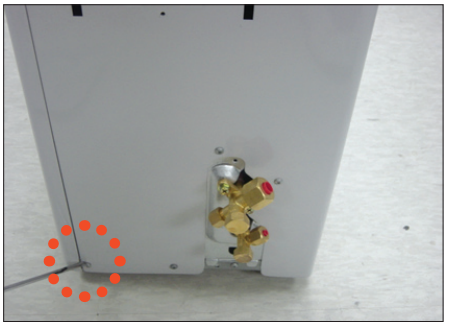
No	Parts	Procedure	Remark
1	Common Work	1) Loosen 1 fixing screw of the Cover-Side.	
		2) Loosen each 3 fixing screws on both right and left Cabinet Side edges and a fixing screw on the Cabinet Front lower to detach the Cabinet Front.	
		3) Detach the Cabinet Front like the picture on the right side.	
		4) Loosen 1 screw fixed to assemble Plate Control Out with Cabinet-Side RH.	

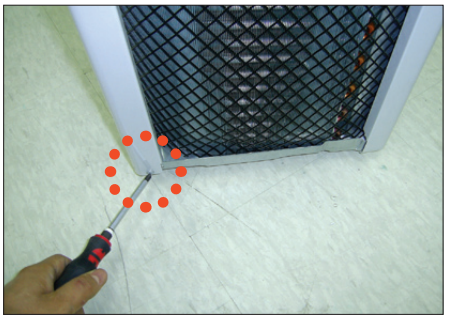
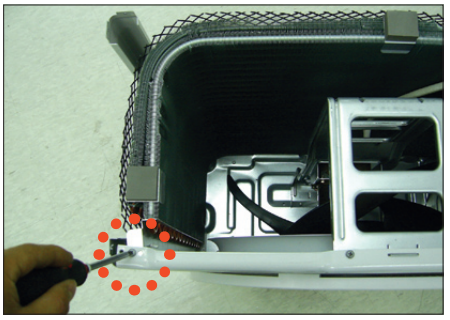
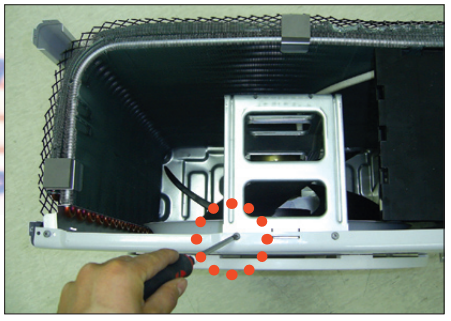
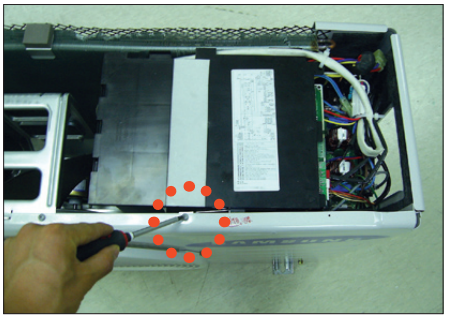
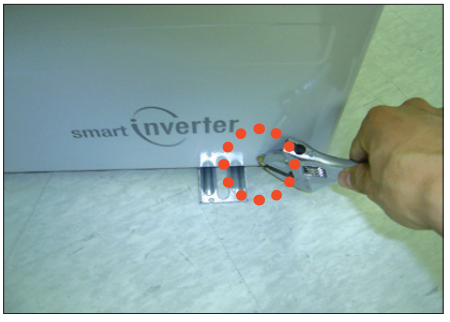
No	Parts	Procedure	Remark
		5) Loosen 2 fixing screws on the rear side of Cabinet-Side RH.	
		6) Loosen 3 screws fixed to assemble Bracket Valve with Cabinet-Side RH.	
		7) Loosen 2 fixing screws of Cabinet-Side LF.	

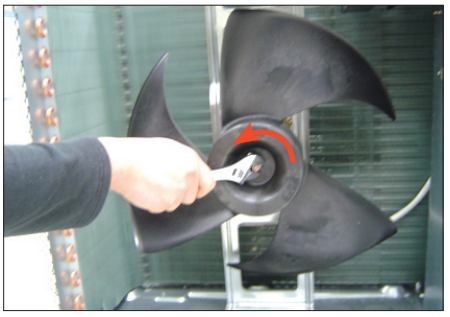
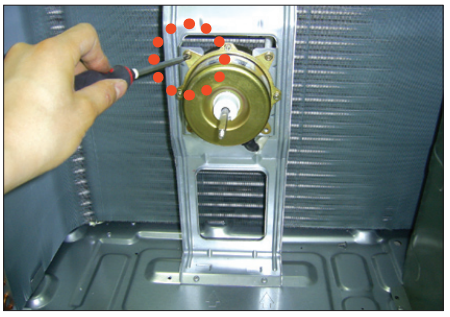
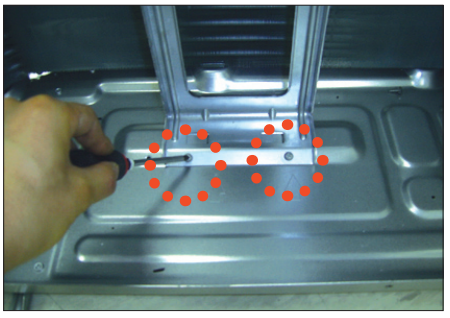
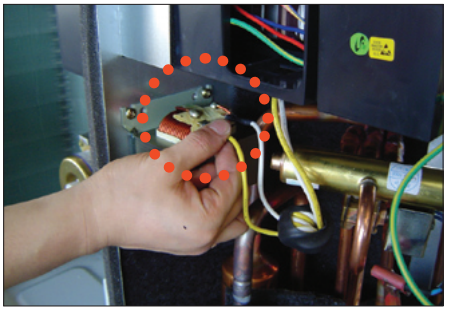
No	Parts	Procedure	Remark
2	Ass'y Control Out	1) Detach the Motor Wire from the PCB of Ass'y Control Out.	
		2) Detach several connectors from the PCB of Ass'y Control Out.	
		3) Detach 2 Connect Wires from Reactor.	
		4) Loosen 1 screw fixed to assemble Ass'y Control Out with Partition.	

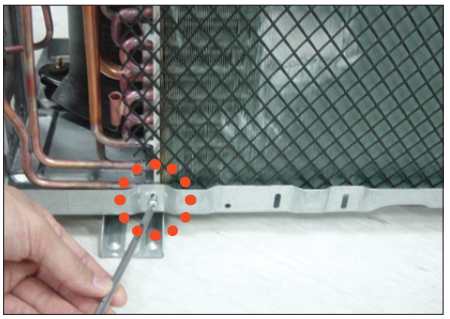
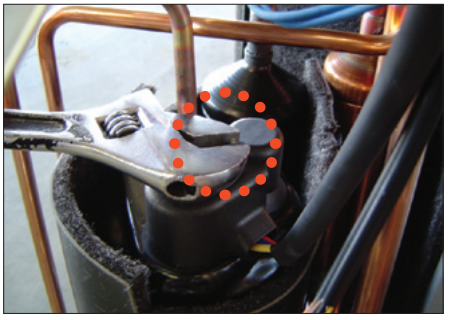
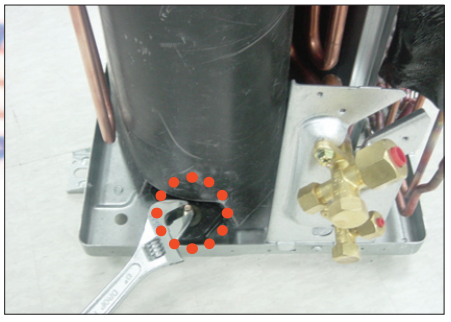
No	Parts	Procedure	Remark
3	Fan & Motor	1) Release the refrigerant at first. 2) Loosen fixing screw. 3) Disassemble the pipes in both inlet and outlet with welding torch. 4) Detach the Heat Exchanger.	
4	Heat Exchanger	1) Loosen 2 fixing screws on both sides. 2) Disassemble the pipes in both inlet and outlet with welding torch. 3) Detach the Heat Exchanger.	
5	Ass'y Valve 4-Way & Ass'y Valve EEV	1) Loosen 4 bolts fixed to assemble Valve Service with Bracket Valve like the picture on the right side. 2) Disassemble the pipes assembled the suction and discharge sides of the Compressor with welding torch.	
6	Compressor	1) Loosen the Nut of Terminal Cover. 2) Detach the Terminal Cover and detach the Connect Comp Wire from Compressor. 3) Disassemble the Felt Comp Sound. 4) Loosen the 3 bolts at the bottom of Compressor like the picture on the right side.	

■ UH052CAV

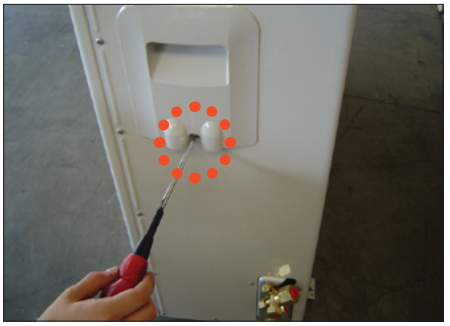
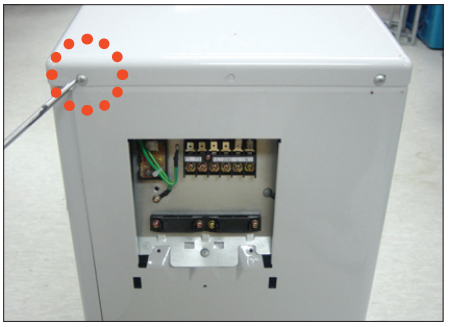
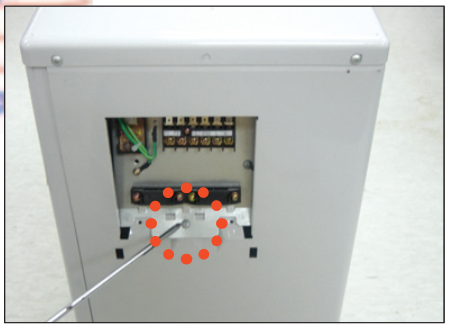
No	Parts	Procedure	Remark
1	Common Work	1) Loosen 1 fixing screw of the Cover-Control and detach the Cover Control.	
		2) Loosen fixing screws and detach the Cabinet-Upper.	
		3) Loosen 1 screw fixed to assemble Control Box with Cabinet-Side RH.	
		4) Loosen 6 fixing screws and detach the Cabinet-Side RH.	

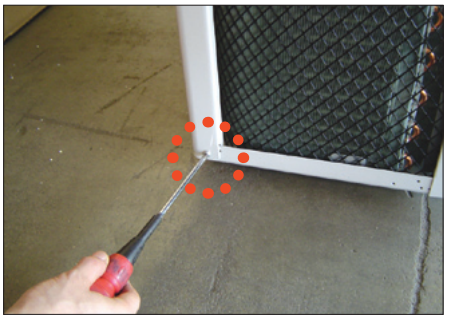
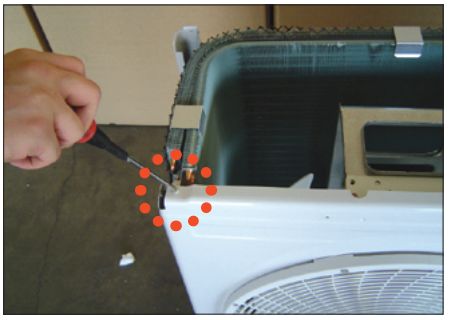
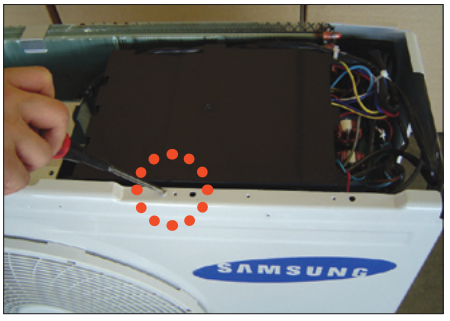
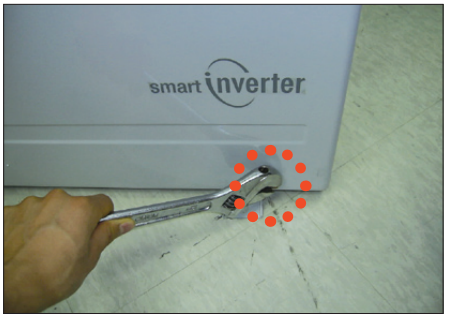
No	Parts	Procedure	Remark
		5) Loosen 2 screws fixed on the Guide Condenser.	
		6) Loosen fixing screws of the Cabinet Front.	
			
			
			

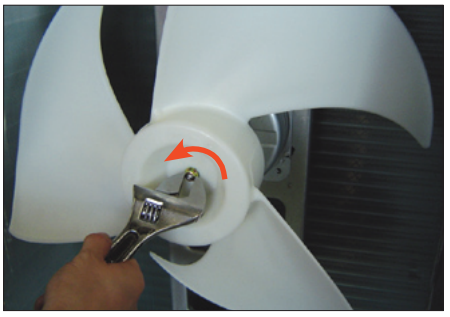
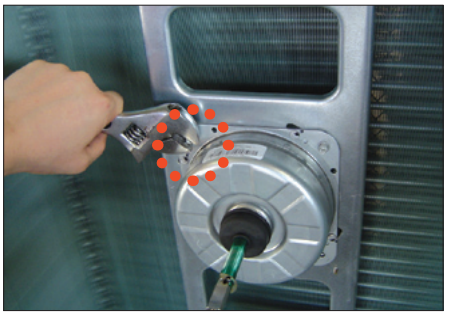
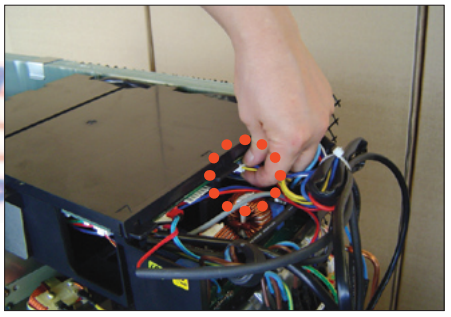
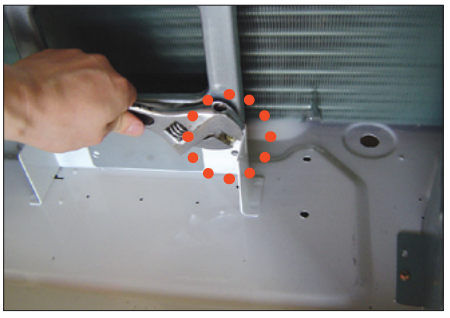
No	Parts	Procedure	Remark
2	Fan & Motor	1) Detach the Nut Flange like the picture on the right side. (Turn clockwise because the screw is left-handed.)	
		2) Detach the Fan Propeller. 3) Loosen 4 fixing screws to detach the Motor.	
		4) Disconnect the wire between Ass'y Control Out and Motor.	
		5) Loosen 2 fixing screws and detach the Bracket Motor.	
3	Ass'y Control Out	1) Detach several connectors from the Ass'y Control Out. 2) Detach several connectors from the PCB of Ass'y Control Out. 3) Pull up the Ass'y Control Out.	

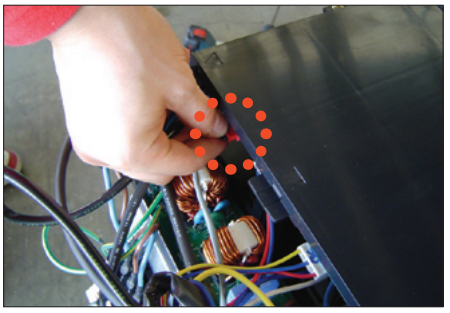
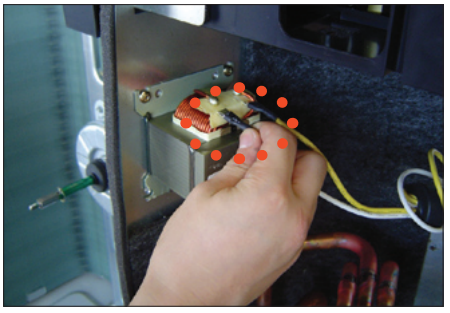
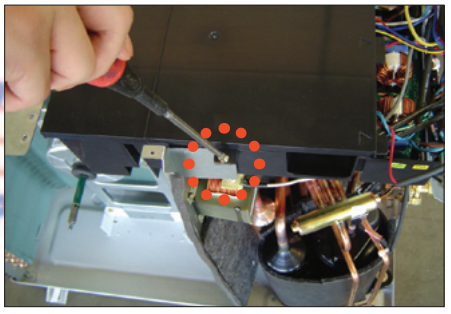
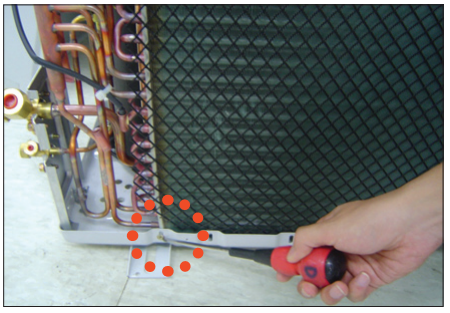
No	Parts	Procedure	Remark
4	Heat Exchanger	1) Release the refrigerant at first. 2) Loosen fixing screw. 3) Disassemble the pipes in both inlet and outlet with welding torch. 4) Detach the Heat Exchanger.	
5	Compressor	1) Loosen the fixing nut and detach the Compressor Lead Wire.	
		2) Disassemble the Felt Comp Sound. 3) Loosen the 3 bolts at the bottom of Compressor like the picture on the right side.	

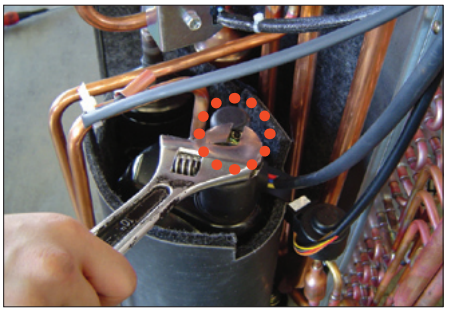
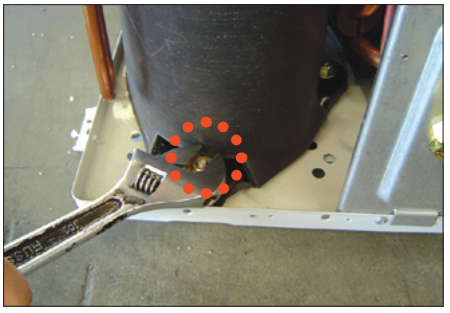
■ UH070CAV

No	Parts	Procedure	Remark
1	Common Work	1) Loosen 1 fixing screw of the Cover-Control and detach the Cover Control.	
		2) Loosen each 8 fixing screws and detach the Cabinet-Upper.	
		3) Loosen 1 screw fixed to assemble Control Box with Cabinet-Side RH.	
		4) Loosen fixing screws and detach the Cabinet-Side RH.	

No	Parts	Procedure	Remark
		5) Loosen 2 screws fixed on the Guide Condenser.	
		6) Loosen fixing screws of the Cabinet Front.	
			
			
			

No	Parts	Procedure	Remark
2	Fan & Motor	1) Detach the Nut Flange like the picture on the right side. (Turn clockwise because the screw is left-handed.)	
		2) Detach the Fan Propeller. 3) Loosen 4 fixing screws to detach the Motor.	
		4) Disconnect the wire between Ass'y Control Out and Motor.	
		5) Loosen 2 fixing bolts and detach the Bracket Motor.	

No	Parts	Procedure	Remark
3	Ass'y Control Out	1) Detach several connectors from the Ass'y Control Out. 2) Detach several connectors from the PCB of Ass'y Control Out. 3) Pull up the Ass'y Control Out.	  
4	Heat Exchanger	1) Release the refrigerant at first. 2) Loosen fixing screw on both sides. 3) Disassemble the pipes in both inlet and outlet with welding torch. 4) Detach the Heat Exchanger.	

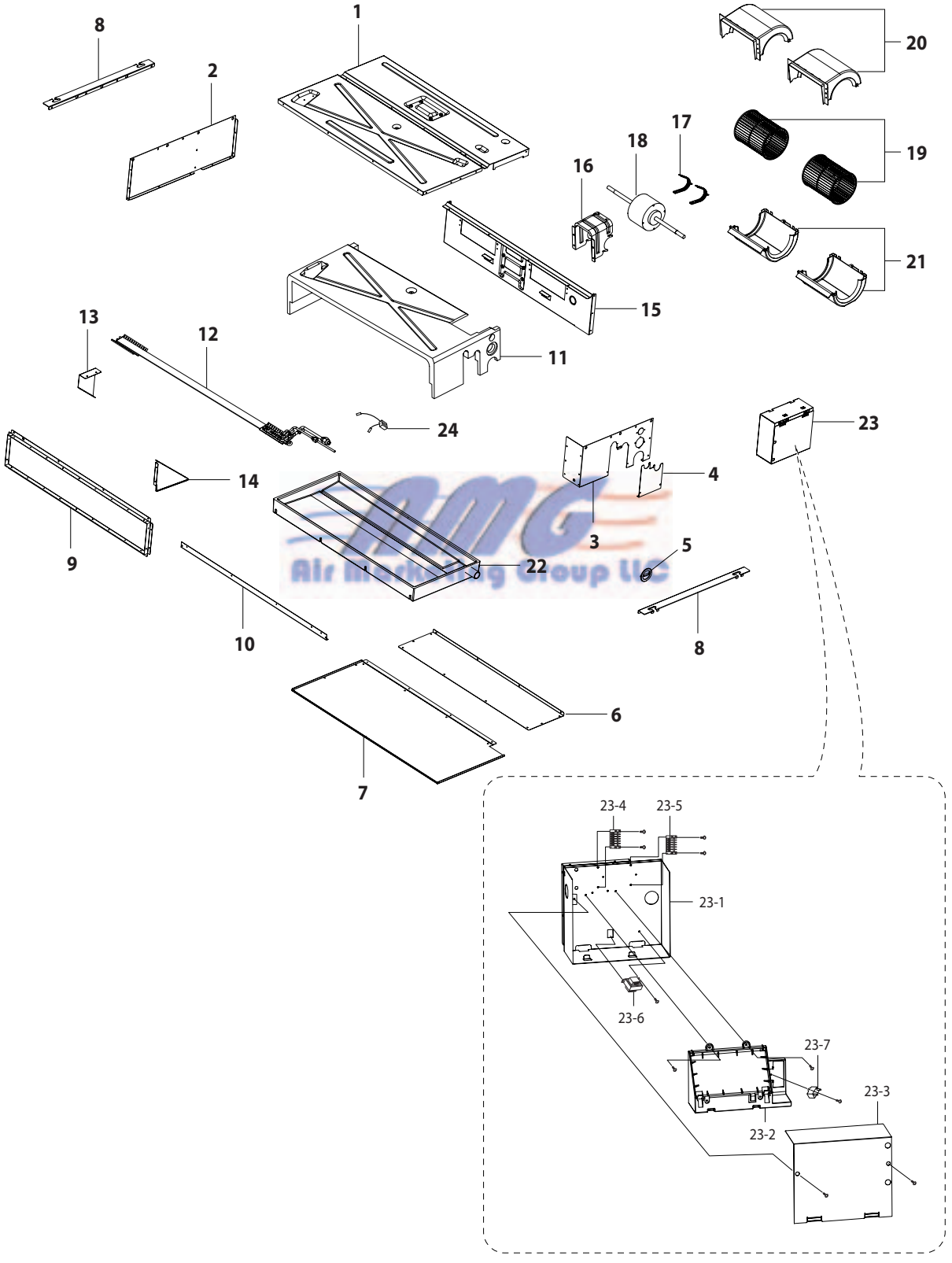
No	Parts	Procedure	Remark
5	Compressor	1) Loosen the fixing nut and detach the Compressor Lead Wire.	
		2) Disassemble the Felt Comp Sound. 3) Loosen the 3 bolts at the bottom of Compressor like the picture on the right side.	

MEMO

5. Exploded Views and Parts List

5-1 Indoor Unit

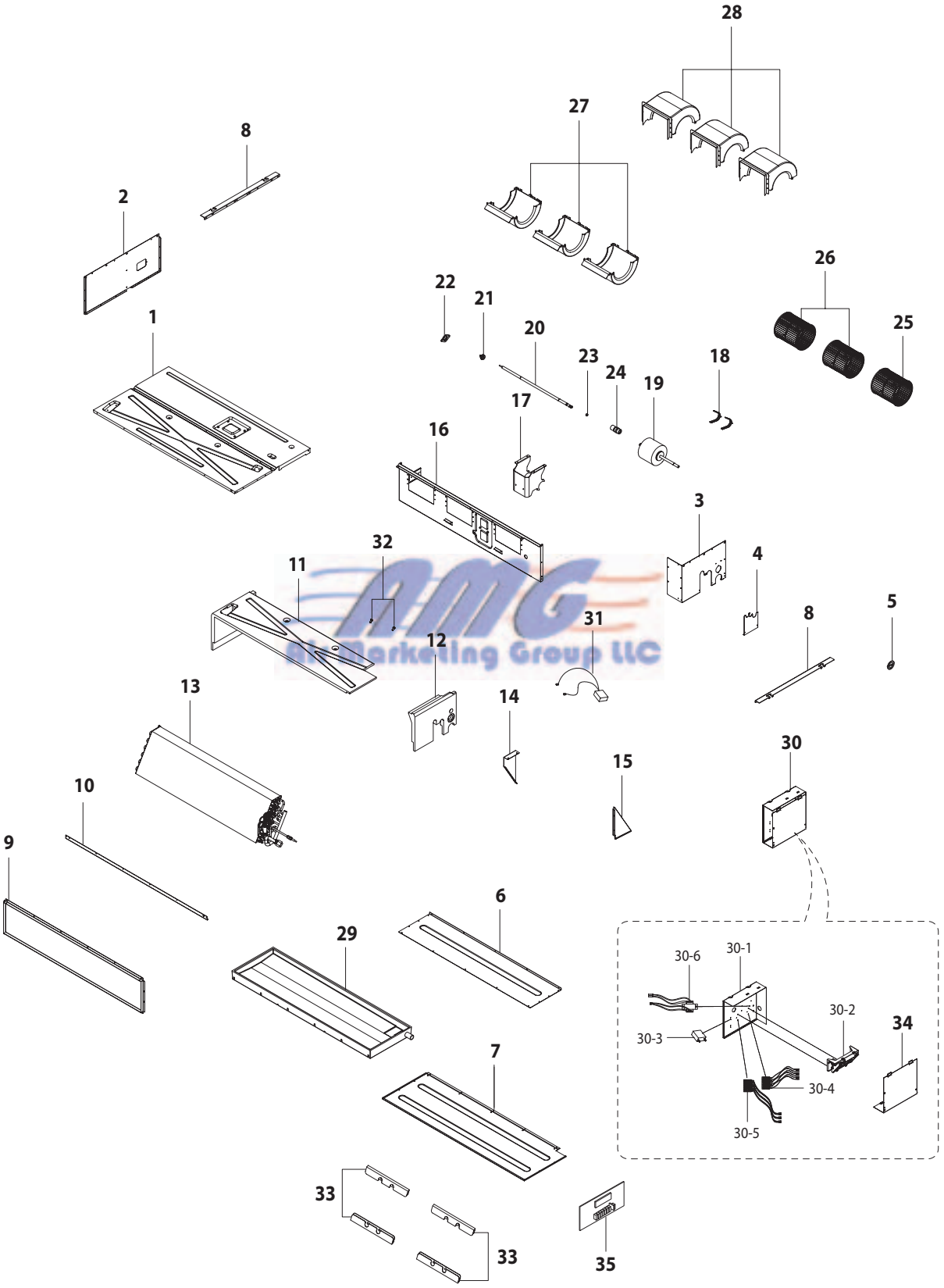
■ EH035CAV



■ **Parts List**

No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
1	DB90-02014A	ASS'Y CABINET BASE	ASS'Y	1	**SA**	
2	DB64-01324A	ASS'Y CABINET SIDE LF	ASS'Y	1	**SA**	
3	DB90-01951A	ASS'Y CABINET SIDE RH	ASS'Y	1	**SA**	
4	DB90-01938A	ASS'Y COVER PIPE	ASS'Y	1	**SA**	
5	DB90-01950A	ASS'Y COVER DRAIN PUMP	ABS T2.0	1	**SA**	
6	DB64-01326A	CABINET TOP MOTOR	SGCC-M, T0.8	1	**SA**	
7	DB90-02069A	ASS'Y CABINET TOP EVAP	ASS'Y	1	**SA**	
8	DB61-02274A	PLATE HANGER	SGCC-M T2.0	2	**SA**	
9	DB94-00712A	ASS'Y BRACKET OUTLET	ASS'Y	1	**SA**	
10	DB61-02277A	BRACKET OUTLET SUB	SGCC-M, T0.8	1	**SA**	
11	DB97-03385A	ASS'Y CUSHION BASE	ASS'Y	1	**SA**	
12	DB96-05289B	ASS'Y EVAP UNIT	ASS'Y	1	**SA**	
13	DB90-01978A	ASS'Y SUPPORT EVAP LF	ASS'Y	1	**SA**	
14	DB90-01946A	ASS'Y SUPPORT EVAP RH	ASS'Y	1	**SA**	
15	DB94-00768A	ASS'Y PARTITION	ASS'Y	1	**SA**	
16	DB61-02282A	BRACKET MOTOR	SGCC-M T2.0	1	**SA**	
17	DB99-00669A	ASS'Y BAND MOTOR	SINYA	1	SNA	
18	DB31-00377A	MOTOR FAN	SINYA, SSR	1	**SA**	
19	DB67-00565B	BLOWER	ASS'Y, ABS, TORSIONAL BUSH	2	**SA**	
20	DB90-01947A	ASS'Y CASE BLOWER UPPER	ASS'Y	2	**SA**	
21	DB90-01948A	ASS'Y CASE BLOWER BOTTOM	ASS'Y	2	**SA**	
22	DB94-01448A	ASS'Y DRAIN PAN	ASS'Y	1	SNA	
23	DB93-05227A	ASS'Y CONTROL IN	ASS'Y	1	**SA**	
23-1	DB90-01941B	ASS'Y CASE CONTROL	ASS'Y	1	**SA**	
23-2	DB61-02287B	CASE PCB	ABS T2.5, 5V	1	**SA**	
23-3	DB63-01237A	COVER CONTROL	SGCC-M T0.5	1	**SA**	
23-4	DB65-00105L	TERMINAL BLOCK 6P	6P, POWER	1	SNA	
23-5	DB65-00105M	TERMINAL BLOCK 6P	6P, COMMUNICATION	1	SNA	
23-6	DB26-00080A	TRANS POWER	TRANS POWER	1	SNA	
23-7	2301-001370	CAPACITOR	450V 2.5μF	1	**SA**	
24	DB32-00142A	ASS'Y THERMISTOR	ASS'Y	1	**SA**	

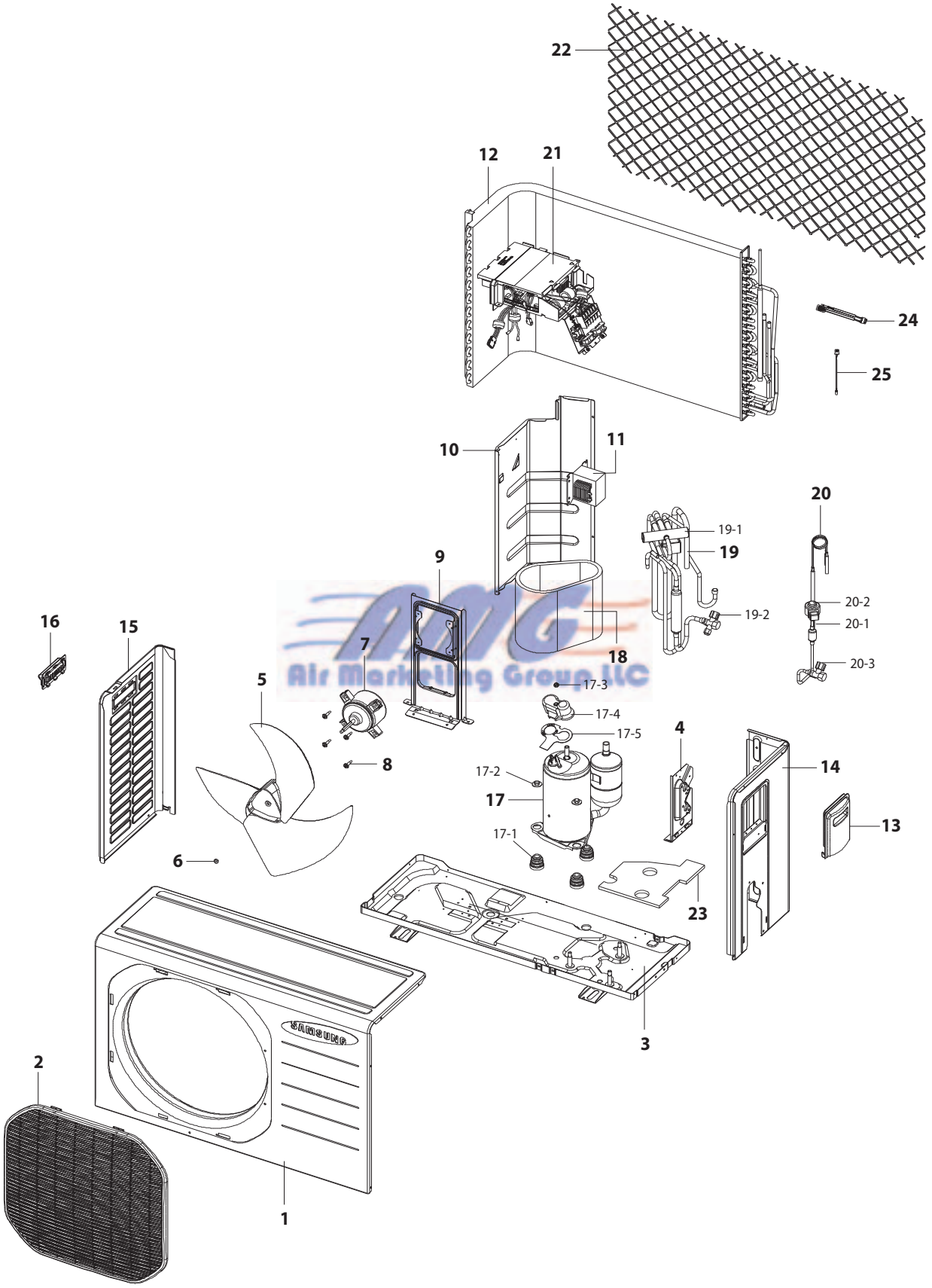
■ EH052CAV/EH070CAV



■ Parts List

No.	Code No.	Description	Specification	Q'TY		SA/SNA	Remark
				EH052CAV	EH070CAV		
1	DB90-02160A	ASS'Y CABI BASE	ASS'Y,SGCC-M,T0.8	1	1	SA	
2	DB64-01324B	CABI SIDE LF	SGCC-M,T0.8	1	1	SA	
3	DB90-01951A	ASS'Y CABI SIDE RH	ASS'Y,SGCC-M,T0.8	1	1	SA	
4	DB90-01938A	ASS'Y COVER PIPE	ASS'Y,SGCC-M,T0.5	1	1	SA	
5	DB90-01950A	ASS'Y COVER DRAIN PUMP	ASS'Y	1	1	SA	
6	DB64-01345A	CABI TOP MOTOR	SGCC-M,T0.8	1	1	SA	
7	DB90-02161A	ASS'Y CABI TOP EVAP	ASS'Y,SGCC-M,T0.8	1	1	SA	
8	DB61-02274A	PLATER HANGER	SGCC-M,T2.0	2	2	SA	
9	DB97-03796A	ASS'Y BRACKET OUTLET	ASS'Y,SGCC-M,T0.8	1	1	SA	
10	DB61-02322A	BRACKET OUTLET SUB	SGCC-M,T0.8	1	1	SA	
11	DB97-03792A	ASS'Y CUSHION BASE A	ASS'Y,EPS 25	1	1	SA	
12	DB97-03791A	ASS'Y CUSHION BASE B	ASS'Y,EPS 25	1	1	SA	
13	DB96-05115B	ASS'Y EVAP UNIT	ASS'Y	1	-	SA	
	DB96-05115C	ASS'Y EVAP UNIT	ASS'Y	-	1	SA	
14	DB90-01978A	ASS'Y SUPPORT EVAP LF	ASS'Y,SGCC-M,T0.8	1	1	SA	
15	DB90-01946A	ASS'Y SUPPORT EVAP RH	ASS'Y,SGCC-M,T0.8	1	1	SA	
16	DB94-00809A	ASS'Y PARTITION	ASS'Y,SGCC-M,T1.0	1	1	SA	
17	DB61-02282A	BRACKET MOTOR	SGCC-M,T2.0	1	1	SA	
18	DB97-03800A	ASS'Y BAND MOTOR	SINYA,ASS'Y	1	1	SA	
19	DB31-00314C	MOTOR	SINYA,60Hz	1	1	SA	
20	DB66-01007A	MOTOR SHAFT	SINYA	1	1	SA	
21	DB94-00759A	MOLD BEARING	ASS'Y	1	1	SA	
22	DB67-00581A	CAP BEARING	SGCC-M,T0.8	1	1	SA	
23	DB73-00285A	RUBBER SHAFT	CR V0	1	1	SA	
24	DB96-04902A	COUPLER	ASS'Y	1	1	SA	
25	DB67-00565B	BLOWER A	ASS'Y,ABS	1	1	SA	
26	DB67-00576B	BLOWER B	ASS'Y,ABS	2	2	SA	
27	DB90-01947A	ASS'Y CASE BLOWER UPPER	ASS'Y ABS	3	3	SA	
28	DB90-01948A	ASS'Y CASE BLOWER BOTTOM	ASS'Y ABS	3	3	SA	
29	DB94-01449A	ASS'Y DRAIN	ASS'Y	1	1	SA	
30	DB93-05227B	ASS'Y CONTROL PART	ASS'Y	1	1	SA	
30-1	DB90-01941A	ASS'Y CASE CONTROL	ASS'Y	1	1	SA	
30-2	DB61-02287B	CASE PCB	ABS V0,T2.5,-,-,-,-	1	1	SA	
30-3	2301-001379	CAPACITOR	450V,4u	1	1	SA	
30-4	DB65-00105L	TERMINAL BLOCK 6P	6P,POWER	1	1	SA	
30-5	DB65-00105M	TERMINAL BLOCK 6P	6P,COMMUNICATION	1	1	SA	
30-6	DB26-00080A	TRANS POWER	60Hz	1	1	SA	
31	DB32-00142A	ASS'Y THERMISTOR	ASS'Y	1	1	SA	
32	DB61-02349A	CLIP BRUSH	NYLON66,BLACK	2	2	SA	
33	DB61-02643A	BRACKET FILTER	SGCC-M	4	4	SA	
34	DB90-02101A	ASS'Y COVER CONTROL	ASS'Y	1	1	SA	
35	DB93-03213G	ASS'Y PCB	ASS'Y	1	1	SA	

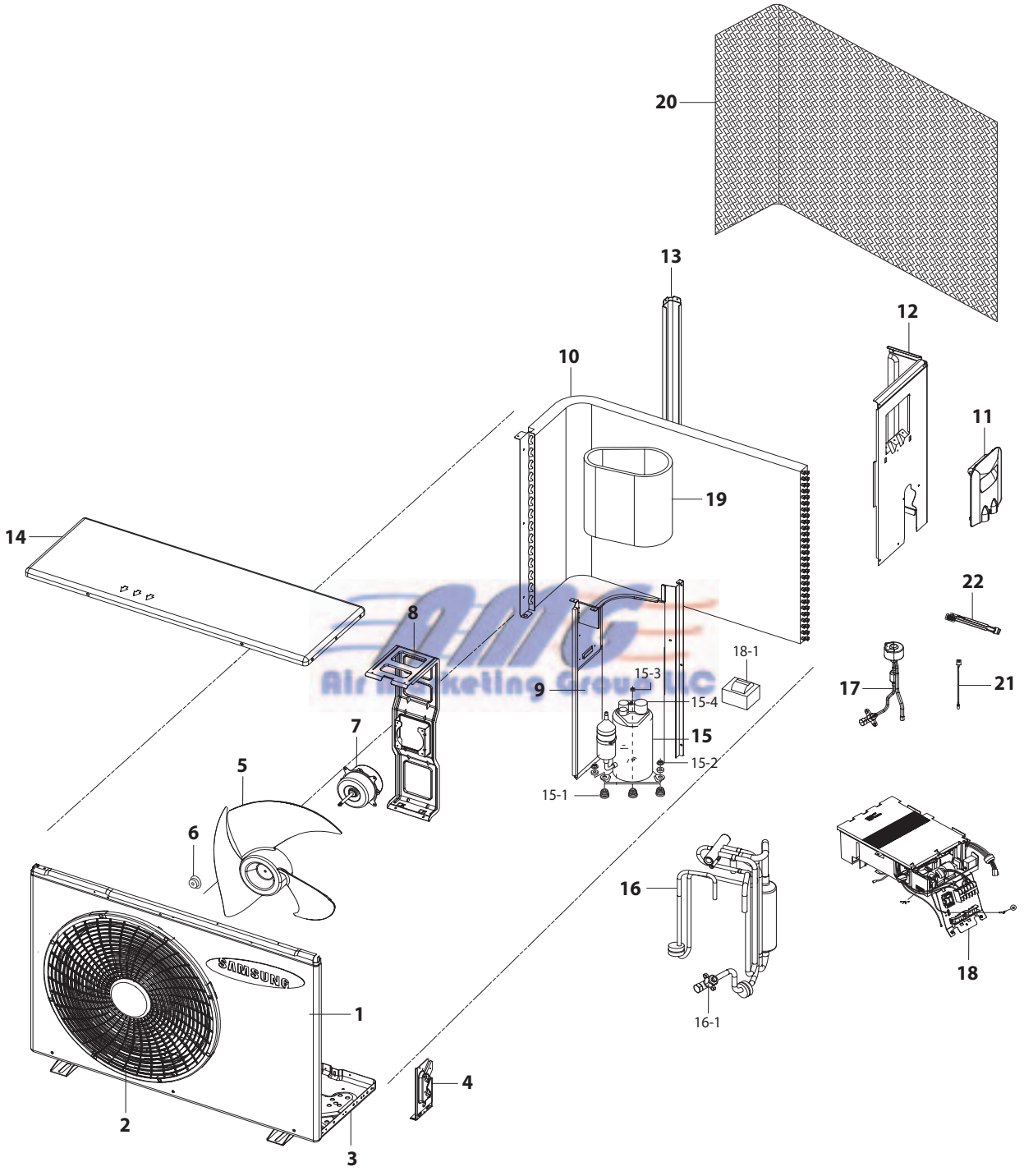
■ UH035CAV



■ Parts List

No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
1	DB90-01524E	ASS'Y CABI FRONT	ASS'Y, SC-90073T	1	SA	
2	DB63-00847B	GUARD FAN	SC-90073R	1	SA	
3	DB90-01295G	ASS'Y BASE OUT	ASS'Y, GALVANIZED STEEL	1	SA	
4	DB61-02066A	BRACKET VALVE	GALVANIZED STEEL	1	SA	
5	DB67-50063A	FAN-PROPELLER	ø405	1	SA	
6	6021-000281	NUT-HEXAGON	M6, CW	1	SA	
7	DB31-00238C	MOTOR FAN OUT	DC Motor, SIC-52FV-F726-3	1	SA	
8	DB60-00150A	SCREW SPECIAL MOTOR	M4, SWCH18AK	4	SA	
9	DB61-02065A	BRACKET MOTOR	SGCC-M	1	SA	
10	DB94-00863A	ASS'Y PARTITION	ASS'Y, SGCC-M	1	SA	
11	DB81-00534A	REACTOR	PPS,5mH	1	SA	
12	DB96-04480B	ASS'Y COND UNIT	ASS'Y	1	SA	
13	DB63-01459A	COVER SIDE	SC-90073R	1	SA	
14	DB90-01525E	ASS'Y CABINET SIDE RH	ASS'Y, SC-90073T	1	SA	
15	DB64-00982A	CABINET SIDE LF	SECC-P, SC-90073T	1	SA	
16	DB64-00992A	HANDLE LF	PP, SC-90073R	1	SA	
17	G4C090LUBER-SG	COMPRESSOR	ROTARY, BLDC	1	SA	
17-1	DB63-00763A	GROMMET ISOLATOR	NR	3	SA	
17-2	DB60-30028A	SCREW MACHINE	M8	3	SA	
17-3	6021-001142	NUT-FLANGE	M5	1	SA	
17-4	DB63-00816A	COVER TERMINAL	PBT (G/F 15%)	1	SA	
17-5	DB63-00817A	GASKET	EPDM	1	SA	
18	DB63-01435A	FELT COMP SOUND	FELT+EVAR	1	SA	
19	DB99-00726B	ASS'Y VALVE 4WAY	ASS'Y	1	SA	
19-1	DB62-02338A	4WAY VALVE	R410A, SANHUA	1	SNA	
19-2	DB62-02284A	VALVE SERVICE	R410A, SANHUA, 3/8"	1	SNA	
20	DB99-00727A	ASS'Y VALVE EEV	ASS'Y	1	SA	
20-1	DB62-03916A	VALVE EXPANSION BODY	FUJIKOKI, ø1.4	1	SNA	
20-2	DB62-03964A	VALVE EXPANSION COIL	FUJIKOKI	1	SNA	
20-3	DB62-02283A	VALVE SERVICE	R410A, SANHUA, 1/4"	1	SNA	
21	DB93-03453F	ASS'Y CONTROL OUT	ASS'Y	1	SA	
22	DB61-01861A	GUIDE SCREEN	P.E.H 100%	1	SA	
23	DB63-01479A	FELT COMP BASE	FELT	1	SA	
24	DB32-00083K	THERMISTOR OUT/DIS	ASS'Y	1	SA	
25	DB32-00081D	THERMISTOR COND	ASS'Y	1	SA	

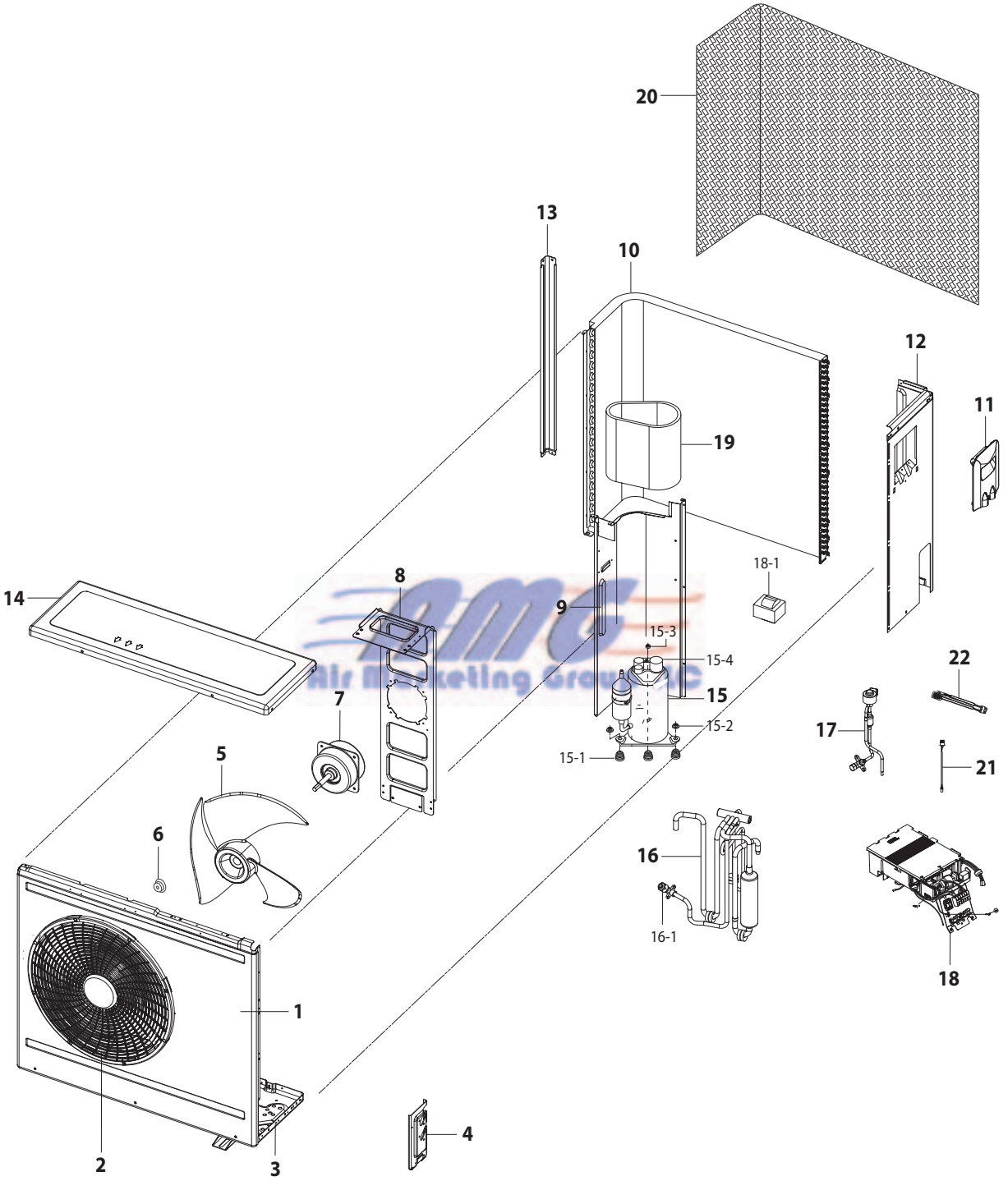
■ UH052CAV



■ Parts List

No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
1	DB90-01772D	ASS'Y CABI-FRONT	ASS'Y	1	SA	
2	DB63-00831B	GUARD FAN	ABS	1	SA	
3	DB90-02203B	ASS'Y BASE OUT	ASS'Y	1	SA	
4	DB61-02066A	BRACKET VALVE	GALVANIZED STEEL	1	SA	
5	DB67-00243A	FAN-PROPELLER	AS+G/F20%,ø420	1	SA	
6	6001-001683	NUT-FLANGE	M6,CCW	1	SA	
7	DB31-00264F	MOTOR FAN OUT	208-230V/60Hz	1	SA	
8	DB61-02533B	ASS'Y BRACKET MOTOR	ASS'Y	1	SA	
9	DB94-00873A	ASS'Y PARTITION	ASS'Y	1	SA	
10	DB96-05485A	ASS'Y COND UNIT	ASS'Y	1	SA	
11	DB90-02627A	ASS'Y-COVER CONTROL	ASS'Y	1	SA	
12	DB90-01350P	ASS'Y CABINET-SIDE RH	SC-90073T	1	SA	
13	DB63-00343A	GUARD COND	SC-90073T	1	SA	
14	DB90-01881A	ASS'Y-CABI UPPER	ASS'Y	1	SA	
15	G8T200FUAEW-SG	COMPRESSOR	ROTARY	1	SA	
15-1	DB73-00067A	GROMMET ISOLATOR	NR	3	SA	
15-2	DB60-30028A	NUT-WASHER	M8	3	SA	
15-3	DB60-30018A	NUT-FLANGE	M5	1	SA	
15-4	DB63-10165D	COVER-TERMINAL	PBT	1	SA	
16	DB99-00711A	ASS'Y-4WAY V/V	ASS'Y	1	SA	
16-1	DB62-02285A	VALVE SERVICE	1/2"	1	SNA	
17	DB99-00708A	ASS'Y VALVE EEV	ASS'Y	1	SA	
18	DB93-03665H	ASS'Y CONTROL-OUT	ASS'Y	1	SA	
18-1	DB81-00534A	REACTOR	5mH,20A	1	SA	
19	DB63-01223B	CLOTH-COMP SOUND	FELT+EVAR	1	SA	
20	DB61-00821B	GUIDE-SCREEN	P.E.H	1	SA	
21	DB32-00081D	SENSOR TEMP-COND	ASS'Y	1	SA	
22	DB32-00083G	THERMISTOR-OUT/DISCHARGE	ASS'Y	1	SA	

■ UH070CAV

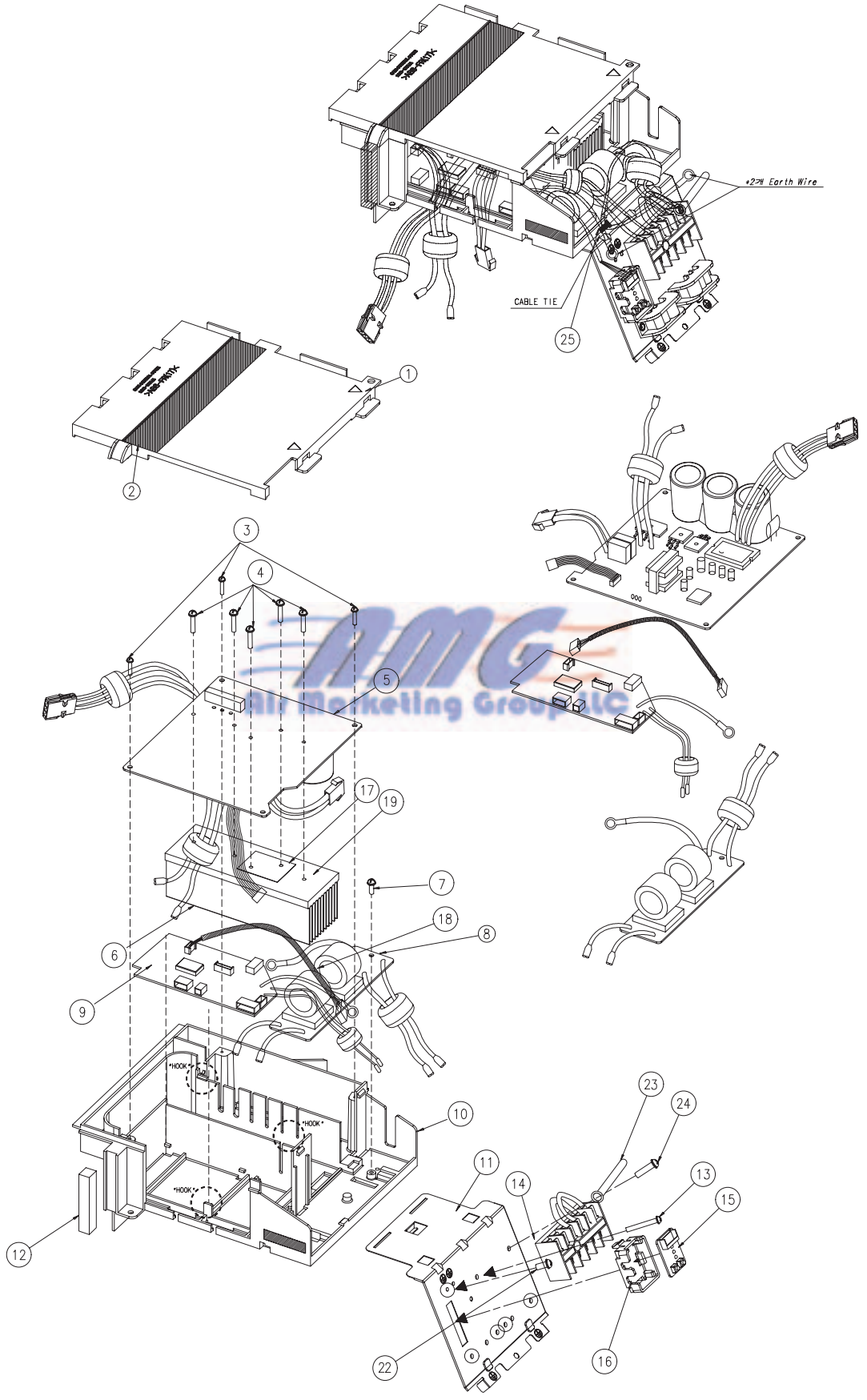


■ Parts List

No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
1	DB90-00565M	ASS'Y CABI-FRONT	ASS'Y	1	**SA**	
2	DB63-00831B	GUARD FAN	ABS	1	**SA**	
3	DB90-01336F	ASS'Y BASE OUT	ASS'Y	1	**SA**	
4	DB61-01593A	BRACKET VALVE	GALVANIZED STEEL	1	**SA**	
5	DB67-00438A	FAN-PROPELLER	AS+G/F20%,Ø460	1	**SA**	
6	DB60-30004A	NUT-FLANGE	M6,CCW	1	**SA**	
7	DB31-00233A	MOTOR FAN OUT	208-230V/60Hz	1	**SA**	
8	DB90-00967D	ASS'Y BRACKET MOTOR	ASS'Y	1	**SA**	
9	DB94-00869A	ASS'Y PARTITION	ASS'Y	1	**SA**	
10	DB96-05447A	ASS'Y COND-UNIT	ASS'Y	1	**SA**	
11	DB90-02627A	ASS'Y-COVER CONTROL	ASS'Y	1	**SA**	
12	DB90-02296B	ASS'Y CABINET-SIDE RH	SC-90073T	1	**SA**	
13	DB63-30027C	GUARD COND	SC-90073T	1	**SA**	
14	DB90-00569G	ASS'Y-CABI UPPER	ASS'Y	1	**SA**	
15	G8T260FUAEW-SG	COMPRESSOR	ROTARY	1	**SA**	
15-1	DB63-00815A	GROMMET-MOUNT	NR	3	SNA	
15-2	DB60-30028A	NUT-WASHER	M8	3	**SA**	
15-3	6021-001142	NUT-FLANGE	M5	1	**SA**	
15-4	DB63-10165D	COVER-TERMINAL	PBT	1	**SA**	
16	DB99-00710B	ASS'Y-4WAY V/V	ASS'Y	1	**SA**	
16-1	DB62-02342A	VALVE SERVICE	5/8"	1	SNA	
17	DB99-00709A	ASS'Y VALVE EEV	ASS'Y	1	**SA**	
18	DB93-03665J	ASS'Y CONTROL OUT	ASS'Y	1	**SA**	
18-1	DB81-00534A	REACTOR	5mH,20A	1	**SA**	
19	DB63-01223B	CLOTH-COMP SOUND	FELT+EVAR	1	**SA**	
20	DB61-00821A	GUIDE-SCREEN	P.E.H	1	**SA**	
21	DB32-00081D	SENSOR TEMP-COND	ASS'Y	1	**SA**	
22	DB32-00083J	THERMISTOR-OUT/DISCHARGE	ASS'Y	1	**SA**	

5-3 Ass'y Control Out

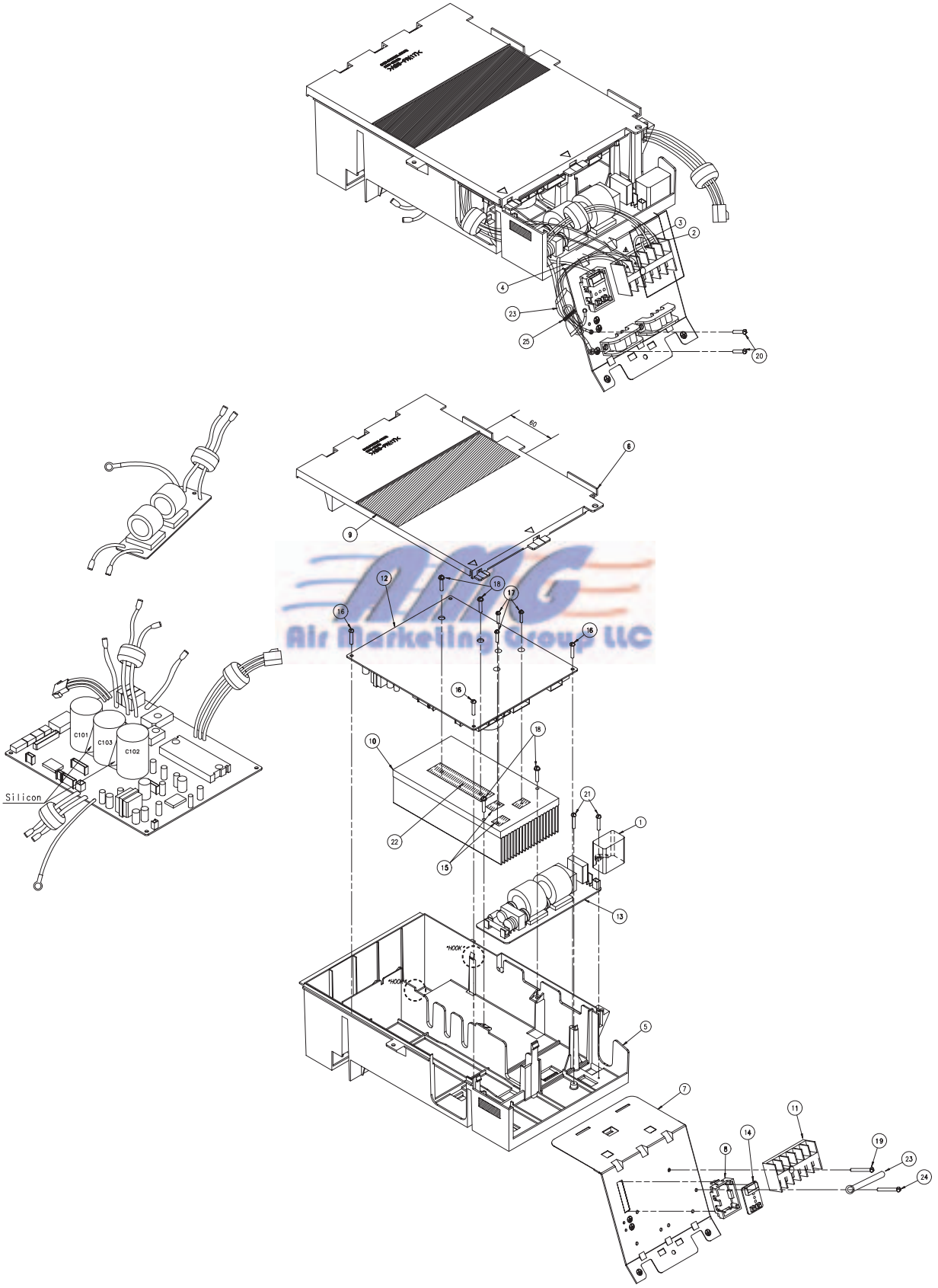
■ UH035CAV : DB93-03453F



■ Parts List

No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
1	DB61-02514B	CASE CONTROL COVER	ABS 5V, T2.0	1	**SA**	
2	DB62-02541Z	SEAL CASE CONTROL COVER	FOAM LEX T2(WHITE)	1	**SA**	
3	6002-000630	SCREW TAPPING	M3xL8 PH+ ZPC(YEL)	3	SNA	
4	DB91-00306A	ASS'Y SCREW-MACHINE	M3x16 WSP PH+	5	SNA	
5	DB93-03454A	ASS'Y PCB INV	FR4 160x140	1	**SA**	
6	DB62-03155A	HEAT SINK	140x50x45mm, 11FIN	1	**SA**	
7	6002-000536	SCREW TAPPING	PH,+,2S,M4,L10	1	SNA	
8	DB93-02968B	ASS'Y PCB EMI	FR-1 139x40	1	**SA**	
9	DB93-03470A	ASS' PCB MAIN	FR4 125x67	1	**SA**	
10	DB61-02513B	CASE CONTROL BASE	ABS 5V, T2.0	1	**SA**	
11	DB61-02535A	PLATE CONTROL OUT	SGCC-M T0.6	1	**SA**	
12	DB62-02332P	SEAL CASE CONTROL BASE	FOAM PU(BLACK)	1	SNA	
13	6002-000555	SCREW TAPPING	M4xL25 PH+ ZPC(YEL)	1	SNA	
14	DB65-00179C	TERMINAL BLOCK	DAF-6P	1	**SA**	
15	DB93-03662A	ASS'Y PCB DISPLAY	FR-1 35x25	1	**SA**	
16	DB61-02543A	CASE DISPLAY PCB	ABS V0, T2.0	1	**SA**	
17	DB81-00547B	INSULATOR	MICA	1	SNA	
18	DB93-04550F	C/W-DISP(5P)	-	1	**SA**	
19	DB98-24813A	ASS'Y-THERMAL GREASE	2g	1	SNA	
20	DB39-00604W	LEAD CONNECTOR-N	SKYBLU	1	SNA	
21	DB39-00604X	LEAD CONNECTOR-L	BRN	1	SNA	
22	6009-001001	SCREW SPECIAL	SCREW EARTH	1	SNA	
23	DB61-00206A	HOLDER WIRE CLAMP	SGCC-M, T0.5	1	SNA	
24	6002-001149	SCREW TAPPING	M4x10 2S PH+	1	SNA	
25	DB65-10088D	CABLE TIE	NYLON66	1	SNA	

■ **UH052CAV : DB93-03665H**
UH070CAV : DB93-03665J



■ Parts List

No.	Code No.	Description	Specification	Q'TY		SA/SNA	Remark
				UH052CAV	UH070CAV		
1	2301-001379	C-FILM,LEAD-OTHER	4uF,450V	1	1	**SA**	
2	DB39-00604W	LEAD CONNECTOR-N	SKYBLU	1	1	SNA	
3	DB39-00604X	LEAD CONNECTOR-L	BRN	1	1	SNA	
4	DB93-04550F	CONNECT WIRE	5P,MAIN TO DISPLAY	1	1	SNA	
5	DB61-02511B	CASE CONTROL-BASE	ABS 5V,T2.0	1	1	SNA	
6	DB61-02512B	CASE CONTROL-COVER	ABS 5V,T2.0	1	1	SNA	
7	DB61-02534A	PLATE-CONTROL OUT	SGCC-M,T0.6	1	1	SNA	
8	DB61-02543A	CASE-DISPLAY PCB	ABS V0,T2.0	1	1	SNA	
9	DB62-01925D	INSULATION-CONTROL BOX TOP	FOAM-LEX,T2,WHT	1	1	SNA	
10	DB62-03874A	HEAT SINK	100mm,185mm,50mm,AL	1	1	SNA	
11	DB65-00179C	TERMINAL BLOCK	DAF-6P	1	1	SNA	
12	DB93-03545H	ASS'Y PCB MAIN	PCB-2L	1	-	**SA**	
	DB93-03545J	ASS'Y PCB MAIN	PCB-2L	-	1	**SA**	
13	DB93-03546A	ASS'Y PCB SUB-EMI	PCB-2L	1	-	**SA**	
	DB93-03546D	ASS'Y PCB SUB-EMI	PCB-2L	-	1	**SA**	
14	DB93-03662A	ASS'Y PCB DISPLAY	PCB-1L	1	1	**SA**	
15	DB98-17991A	ASS'Y-INSULATOR MICA	MICA	2	2	SNA	
16	6002-000630	SCREW-TAPPING	PH,+,M3,L8	3	3	SNA	
17	DB91-00306A	ASS'Y-SCREW MACHINE	PH,+,M3,L16	3	3	SNA	
18	DB91-00307A	ASS'Y-SCREW MACHINE	PH,+,M4,L16	4	4	SNA	
19	6002-000555	SCREW-TAPPING	PH,+,M4,L25	1	1	SNA	
20	6009-001001	SCREW-SPECIAL	TH,+,M4,L8	1	1	SNA	
21	6002-000536	SCREW-TAPPING	PH,+,M4,L10	2	2	SNA	
22	DB98-24813A	ASS'Y-THERMAL GREASE	INV,RADIANT HEAT	0.002	0.002	SNA	
23	DB61-00206A	HOLDER-WIRE	SGCC-M,T0.5	1	1	SNA	
24	6002-001149	SCREW-TAPPING	PH,+,M4,L10	1	1	SNA	
25	DB65-10088D	CABLE-TIE	NY-66	1	1	SNA	

6. Electrical Parts List

■ INDOOR MAIN PCB : DB93-03213G

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
BD71	0402-001298	DIODE-BRIDGE	DF06S,600V,1A,SMD-4,TP	1	SNA	
C10	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C101	2401-002216	C-AL	2200uF,20%,35V,GP,TP,16x25,7.5	1	SNA	
C102	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C103	2401-000711	C-AL	2200uF,20%,25V,GP,TP,16x25,7.5	1	SNA	
C104	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C105	2401-000037	C-AL	470uF,20%,16V,GP,TP,8x11.5,5	1	SNA	
C12	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C201	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C202	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C203	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C204	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C205	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C301	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,1608	1	SNA	
C302	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C303	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C304	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C305	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C306	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C307	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C311	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,1608	1	SNA	
C312	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C313	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C314	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C315	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C316	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C401	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C402	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C403	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C413	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C441	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C504	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C505	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C506	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C801	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C802	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C806	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C807	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C808	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C815	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	

■ INDOOR MAIN PCB : DB93-03213G(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
C816	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C817	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C818	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C819	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C901	2203-000444	C-CER,CHIP	1nF,10%,50V,X7R,2012	1	SNA	
C902	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C911	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C912	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C913	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C914	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
CD312	0406-001204	DIODE-TVS	SMBJ5.0CA,6.4/-/7.07V,600W,SMB	1	SNA	
CD334	0406-001204	DIODE-TVS	SMBJ5.0CA,6.4/-/7.07V,600W,SMB	1	SNA	
CN10	3711-004182	CONNECTOR-HEADER	BOX,10P,1R,2mm,STRAIGHT,SN,NTR	1	SNA	
CN11	3711-000880	HEADER-BOARD TO CABLE	BOX,3P,1R,2.5mm,STRAIGHT,SN,RED	1	SNA	
CN31	3711-000177	HEADER-BOARD TO CABLE	1WALL,2P,1R,3.96mm,STRAIGHT,SN,RED	1	SNA	
CN32	3711-000178	HEADER-BOARD TO CABLE	1WALL,2P,1R,3.96mm,STRAIGHT,SN,WHT	1	SNA	
CN33	3711-000176	HEADER-BOARD TO CABLE	1WALL,2P,1R,3.96mm,STRAIGHT,SN,BLU	1	SNA	
CN41	3711-000940	HEADER-BOARD TO CABLE	BOX,4P,1R,2.5mm,STRAIGHT,SN,WHT	1	SNA	
CN51	3711-000794	HEADER-BOARD TO CABLE	BOX,2P,1R,2.5mm,STRAIGHT,SN	1	SNA	
CN71	3711-003404	HEADER-BOARD TO CABLE	1WALL,2P,1R,7.92mm,STRAIGHT,SN,BLU	1	SNA	
CN72	3711-000203	HEADER-BOARD TO CABLE	1WALL,2P/3P,1R,7.92mm,STRAIGHT,SN,WHT	1	SNA	
CN74	3711-003406	HEADER-BOARD TO CABLE	1WALL,2P,1R,7.92mm,STRAIGHT,SN,YEL	1	SNA	
CN75	3711-003405	HEADER-BOARD TO CABLE	1WALL,2P,1R,7.92mm,STRAIGHT,SN,BLK	1	SNA	
CN77	3711-003407	HEADER-BOARD TO CABLE	1WALL,2P,1R,7.92mm,STRAIGHT,SN,RED	1	SNA	
CN78	3711-000262	HEADER-BOARD TO CABLE	1WALL,3P,1R,7.92mm,STRAIGHT,SN,WHT	1	SNA	
CN81	3711-000939	HEADER-BOARD TO CABLE	BOX,4P,1R,2.5mm,STRAIGHT,SN	1	SNA	
CN83	3711-000796	HEADER-BOARD TO CABLE	BOX,2P,1R,2.5mm,STRAIGHT,SN,RED	1	SNA	
CN91	3711-003845	HEADER-BOARD TO CABLE	BOX,11P,1R,2mm,STRAIGHT,SN,WHT	1	SNA	
D105	0402-000137	DIODE-RECTIFIER	1N4007,1kV,1A,DO-41,TP	1	SNA	
D904	0401-000133	DIODE-SWITCHING	RLS4148,75V,150mA,LL-34,TP	1	SNA	
D905	0401-000133	DIODE-SWITCHING	RLS4148,75V,150mA,LL-34,TP	1	SNA	
D906	0401-000133	DIODE-SWITCHING	RLS4148,75V,150mA,LL-34,TP	1	SNA	
D907	0401-000133	DIODE-SWITCHING	RLS4148,75V,150mA,LL-34,TP	1	SNA	
D912	0401-000133	DIODE-SWITCHING	RLS4148,75V,150mA,LL-34,TP	1	SNA	
D913	0401-000133	DIODE-SWITCHING	RLS4148,75V,150mA,LL-34,TP	1	SNA	
D914	0401-000133	DIODE-SWITCHING	RLS4148,75V,150mA,LL-34,TP	1	SNA	
D915	0401-000133	DIODE-SWITCHING	RLS4148,75V,150mA,LL-34,TP	1	SNA	
D916	0401-000133	DIODE-SWITCHING	RLS4148,75V,150mA,LL-34,TP	1	SNA	
D917	0401-000133	DIODE-SWITCHING	RLS4148,75V,150mA,LL-34,TP	1	SNA	
D918	0401-000133	DIODE-SWITCHING	RLS4148,75V,150mA,LL-34,TP	1	SNA	

■ INDOOR MAIN PCB : DB93-03213G(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
D919	0401-000133	DIODE-SWITCHING	RLS4148,75V,150mA,LL-34,TP	1	SNA	
D920	0401-000133	DIODE-SWITCHING	RLS4148,75V,150mA,LL-34,TP	1	SNA	
D921	0401-000133	DIODE-SWITCHING	RLS4148,75V,150mA,LL-34,TP	1	SNA	
D922	0401-000133	DIODE-SWITCHING	RLS4148,75V,150mA,LL-34,TP	1	SNA	
D923	0401-000133	DIODE-SWITCHING	RLS4148,75V,150mA,LL-34,TP	1	SNA	
D924	0401-000133	DIODE-SWITCHING	RLS4148,75V,150mA,LL-34,TP	1	SNA	
D925	0401-000133	DIODE-SWITCHING	RLS4148,75V,150mA,LL-34,TP	1	SNA	
D926	0401-000133	DIODE-SWITCHING	RLS4148,75V,150mA,LL-34,TP	1	SNA	
D927	0401-000133	DIODE-SWITCHING	RLS4148,75V,150mA,LL-34,TP	1	SNA	
F701	3601-000263	FUSE-CARTRIDGE	250V,3.15A,TIME-LAG,GLASS,5x20mm	1	SNA	
F701_1	DB61-00924A	HOLDER-FUSE	-,FH-51B,-,-,-,-,SSEC	1	SNA	
F702	3601-001308	FUSE	250V,1.6A,TIME-LAG,PLASTIC,8.4x7.6mm	1	SNA	
FT71	DB27-00032A	COIL CHOKE	-,-,14mH MIN AT 1KHz(1V),-,-,-,2.5A,Φ19x11x13, -,20x28x20,-,Φ0.5,480PCS/PACK,-,	1	SNA	
IC01	1203-000243	IC-POSI.FIXED REG.	7812,TO-220,3P,-,PLASTIC,11.5/12.5V, 16W,0TO+125C,1A,-,ST,-	1	SNA	
IC02	1203-000274	IC-POSI.FIXED REG.	7805,TO-220,3P,-,PLASTIC,4.8/5	1	SNA	
IC03	1203-003334	IC-RESET	S-801,SOT-23,5P,2.9x1.6mm,PLASTIC, 3.716/4.284V,256mW,-,2.5mA,-,TP	1	SNA	
IC04	DB09-00395B	IC MICOM	MB90F823,-,80 P,5 V,24 MHz,STM-0519-BS, 24,16,QFP,QFP,14x20 mm,16,-40~85	1	SNA	
IC05	0506-000175	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1	SNA	
IC06	0506-000175	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1	SNA	
IC07	0506-000175	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1	SNA	
IC08	0506-000175	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1	SNA	
IC09	0506-000175	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1	SNA	
IC18	1006-001325	IC-BUS TRANSCEIVER	1487,SO,8P,4.9x3.8 mm,SINGLE,ST,PLASTIC, 5V,-40to+85CC,520mW,1,1,1.5/5.25V,-	1	SNA	
IC19	1006-001325	IC-BUS TRANSCEIVER	1487,SO,8P,4.9x3.8 mm,SINGLE,ST,PLASTIC, 5V,-40to+85CC,520mW,1,1,1.5/5.25V,-	1	SNA	
IC20	0801-000393	IC-CMOS LOGIC	74HC86,OR GATE,SOP,14P,150MIL,QUAD,ST, -,2.0/6.0V,0.26V,-40to+85C,180mW,4.2V,1uA	1	SNA	
IC51	1103-001175	IC-EEPROM	93LC56,128x16,SOP,8P,5x4mm,2.5/6.0V, -40to+85C	1	SNA	
LED11	0601-001373	LED	ROUND,RED,3mm,630nm	1	SNA	
LED12	0601-001375	LED	ROUND,GRN,3mm,570nm,3.8x5.3mm	1	SNA	
LED13	0601-001377	LED	ROUND,YEL,3mm,585nm,3.8x5.3mm	1	SNA	
PCB	DB41-00364A	PBA LOGIC BOARD	miniDVM_slimduct_chi,-,FR-4 ,T-1.6,-,-, 220~240V,50/60Hz	1	SA	
Q201	0501-000534	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	1	SNA	
Q202	0501-000534	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	1	SNA	

■ INDOOR MAIN PCB : DB93-03213G(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
Q441	0501-000534	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	1	SNA	
Q601	0501-000534	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	1	SNA	
Q602	0501-000534	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	1	SNA	
Q603	0501-002296	TR-SMALL SIGNAL	MMST2907A,PNP,200mW,SMT3,TP,100-300	1	SNA	
Q901	0504-000001	TR-DIGITAL	DTA114EKA,PNP,200mW,10K/10K,SOT-23,TP	1	SNA	
Q902	0504-000001	TR-DIGITAL	DTA114EKA,PNP,200mW,10K/10K,SOT-23,TP	1	SNA	
Q904	0504-000001	TR-DIGITAL	DTA114EKA,PNP,200mW,10K/10K,SOT-23,TP	1	SNA	
Q905	0504-000001	TR-DIGITAL	DTA114EKA,PNP,200mW,10K/10K,SOT-23,TP	1	SNA	
Q906	0504-000001	TR-DIGITAL	DTA114EKA,PNP,200mW,10K/10K,SOT-23,TP	1	SNA	
Q907	0504-000001	TR-DIGITAL	DTA114EKA,PNP,200mW,10K/10K,SOT-23,TP	1	SNA	
Q908	0504-000001	TR-DIGITAL	DTA114EKA,PNP,200mW,10K/10K,SOT-23,TP	1	SNA	
Q909	0504-000001	TR-DIGITAL	DTA114EKA,PNP,200mW,10K/10K,SOT-23,TP	1	SNA	
Q910	0504-000001	TR-DIGITAL	DTA114EKA,PNP,200mW,10K/10K,SOT-23,TP	1	SNA	
R10	2007-000023	R-CHIP	120ohm,5%,1/8W,TP,2012	1	SNA	
R11	2007-000023	R-CHIP	120ohm,5%,1/8W,TP,2012	1	SNA	
R12	2007-000023	R-CHIP	120ohm,5%,1/8W,TP,2012	1	SNA	
R201	2007-000468	R-CHIP	1Kohm,5%,1/8W,TP,2012	1	SNA	
R202	2007-000686	R-CHIP	3.3Kohm,5%,1/8W,TP,2012	1	SNA	
R204	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R205	2007-000468	R-CHIP	1Kohm,5%,1/8W,TP,2012	1	SNA	
R206	2007-000468	R-CHIP	1Kohm,5%,1/8W,TP,2012	1	SNA	
R207	2007-000468	R-CHIP	1Kohm,5%,1/8W,TP,2012	1	SNA	
R302	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R304	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R305	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R306	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R307	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R312	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R313	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R350	2007-000468	R-CHIP	1Kohm,5%,1/8W,TP,2012	1	SNA	
R401	2007-001067	R-CHIP	6.8Kohm,1%,1/8W,TP,2012	1	SNA	
R402	2007-001067	R-CHIP	6.8Kohm,1%,1/8W,TP,2012	1	SNA	
R403	2007-001067	R-CHIP	6.8Kohm,1%,1/8W,TP,2012	1	SNA	
R404	2007-000766	R-CHIP	330ohm,5%,1/8W,TP,2012	1	SNA	
R405	2007-000766	R-CHIP	330ohm,5%,1/8W,TP,2012	1	SNA	
R406	2007-000766	R-CHIP	330ohm,5%,1/8W,TP,2012	1	SNA	
R413	2007-000613	R-CHIP	24Kohm,1%,1/8W,TP,2012	1	SNA	
R416	2007-000766	R-CHIP	330ohm,5%,1/8W,TP,2012	1	SNA	
R440	2007-001071	R-CHIP	6.8Kohm,5%,1/8W,TP,2012	1	SNA	

■ INDOOR MAIN PCB : DB93-03213G(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
R441	2007-000468	R-CHIP	1Kohm,5%,1/8W,TP,2012	1	SNA	
R443	2007-000468	R-CHIP	1Kohm,5%,1/8W,TP,2012	1	SNA	
R502	2007-000766	R-CHIP	330ohm,5%,1/8W,TP,2012	1	SNA	
R503	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R509	2007-000766	R-CHIP	330ohm,5%,1/8W,TP,2012	1	SNA	
R511	2007-000938	R-CHIP	47Kohm,1%,1/8W,TP,2012	1	SNA	
R512	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R513	2007-000938	R-CHIP	47Kohm,1%,1/8W,TP,2012	1	SNA	
R601	2007-000468	R-CHIP	1Kohm,5%,1/8W,TP,2012	1	SNA	
R602	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R603	2007-000468	R-CHIP	1Kohm,5%,1/8W,TP,2012	1	SNA	
R604	2007-000931	R-CHIP	470ohm,5%,1/8W,TP,2012	1	SNA	
R605	2007-000931	R-CHIP	470ohm,5%,1/8W,TP,2012	1	SNA	
R607	2007-000468	R-CHIP	1Kohm,5%,1/8W,TP,2012	1	SNA	
R608	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R609	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R610	2007-000686	R-CHIP	3.3Kohm,5%,1/8W,TP,2012	1	SNA	
R611	2007-000872	R-CHIP	4.7Kohm,5%,1/8W,TP,2012	1	SNA	
R612	2007-000872	R-CHIP	4.7Kohm,5%,1/8W,TP,2012	1	SNA	
R613	2007-000872	R-CHIP	4.7Kohm,5%,1/8W,TP,2012	1	SNA	
R803	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R804	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R805	2007-000477	R-CHIP	1Mohm,5%,1/8W,TP,2012	1	SNA	
R901	2007-000766	R-CHIP	330ohm,5%,1/8W,TP,2012	1	SNA	
R902	2007-000468	R-CHIP	1Kohm,5%,1/8W,TP,2012	1	SNA	
R903	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R911	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R912	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R913	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R914	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
RY01	3501-001248	RELAY-MINIATURE	12V,-,11.7mA,DPDT,4mS,4mS	1	SNA	
RY70	3501-001154	RELAY-MINIATURE	12Vdc,200mW,3000mA,1FormA,10mS,10mS	1	SA	
RY71	3501-001154	RELAY-MINIATURE	12Vdc,200mW,3000mA,1FormA,10mS,10mS	1	SA	
RY74	3501-001154	RELAY-MINIATURE	12Vdc,200mW,3000mA,1FormA,10mS,10mS	1	SA	
SS71	3502-001026	SSR	DC 12V,12V,3A,1mS,-	1	SNA	
SW02	3406-001098	SWITCH-ROTARY	240V AC,25A,6P(10C),L14mm	1	SNA	
SW04	DB34-00009A	SWITCH-DIGITAL	PT65 103,ROTARY DIP,-,DC24V Max, 0.4VA,50mOhm Max,-,BULK, 10mmx10mm,straight,-,-,-	1	SA	
SW05	3407-000121	SWITCH-DIP	24V,300mA,SLIDE,STANDARD	1	SNA	

■ INDOOR MAIN PCB : DB93-03213G(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
SW06	3407-000121	SWITCH-DIP	24V,300mA,SLIDE,STANDARD	1	SNA	
SW07	3407-000121	SWITCH-DIP	24V,300mA,SLIDE,STANDARD	1	SNA	
VA71	1405-000154	VARISTOR	460Vdc,2500A,17.5x7.5mm,TP	1	SNA	
VA75	1405-000154	VARISTOR	460Vdc,2500A,17.5x7.5mm,TP	1	SNA	
X301	2802-001179	RESONATOR-CERAMIC	4MHz,0.5%,BK,8x3x5.5mm	1	SNA	
X701	2301-001220	C-FILM,LEAD-PPF	100nF,10%,275V,BK,18x6x12,15	1	SNA	
X702	2301-001220	C-FILM,LEAD-PPF	100nF,10%,275V,BK,18x6x12,15	1	SNA	
-	DB62-03085A	HEAT SINK	-,A6063,25,15,15,-,-,SSEC	1	SNA	
-	DB68-02809A	LABEL BAR CODE	-,-,-,-,W170,L115,-,-,-,FOR PACKING CASE	1	SNA	

■ OUTDOOR MAIN PCB : DB93-03454A(UH035CAV)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
AC_L	3712-001139	CONNECTOR-TERMINAL	TAB,MALE,-,6.35x0.8mm	1	SNA	
AC_N	3712-001139	CONNECTOR-TERMINAL	TAB,MALE,-,6.35x0.8mm	1	SNA	
BD01	DB98-16586A	ASS'Y-DIODE	-,	1	SNA	
C001	2301-000141	C-FILM,LEAD-PEF	10nF,10%,630V,TP,16x11x7.5mm,5	1	SNA	
C101	DB98-21655A	ASS'Y-CAP	KFR-35(25)GW,KMH400VS470	1	SNA	
C102	DB98-21655A	ASS'Y-CAP	KFR-35(25)GW,KMH400VS470	1	SNA	
C103	DB98-21655A	ASS'Y-CAP	KFR-35(25)GW,KMH400VS470	1	SNA	
C104	2401-000470	C-AL	10uF,20%,450V,GP,TP,13x20mm,5m	1	SNA	
C105	2201-000322	C-CERAMIC,DISC	2.2NF,10%,2KV,Y5P,TP,13x5mm,10	1	SNA	
C106	2201-000322	C-CERAMIC,DISC	2.2NF,10%,2KV,Y5P,TP,13x5mm,10	1	SNA	
C107	2401-001552	C-AL	47uF,20%,35V,GP,TP,6.3x11,2.5	1	SNA	
C108	2203-001414	C-CER,CHIP	330nF,10%,50V,X7R,2012	1	SNA	
C109	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C110	2401-000832	C-AL	220uF,20%,25V,GP,TP,8x11.5,5	1	SNA	
C112	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C113	2203-005261	C-CER,CHIP	1000nF,10%,25V,X7R,3216	1	SNA	
C114	2401-000832	C-AL	220uF,20%,25V,GP,TP,8x11.5,5	1	SNA	
C116	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C118	2401-002300	C-AL	47uF,20%,50V,GP,TP,6.3x11,5	1	SNA	
C119	2401-000832	C-AL	220uF,20%,25V,GP,TP,8x11.5,5	1	SNA	
C121	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C122	2203-000477	C-CER,CHIP	1000NF,+80-20%,16V,Y5V,TP,2012	1	SNA	
C123	2401-000303	C-AL	100uF,20%,25V,GP,TP,6.3x11,5	1	SNA	
C201	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,1608	1	SNA	
C202	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C203	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,1608	1	SNA	
C401	2203-006325	C-CER,CHIP	1.2nF,5%,25V,SL,TP,1608	1	SNA	
C402	2203-002041	C-CER,CHIP	0.47nF,10%,50V,X7R,1608	1	SNA	
C403	2203-006325	C-CER,CHIP	1.2nF,5%,25V,SL,TP,1608	1	SNA	
C404	2203-002041	C-CER,CHIP	0.47nF,10%,50V,X7R,1608	1	SNA	
C405	2203-006325	C-CER,CHIP	1.2nF,5%,25V,SL,TP,1608	1	SNA	
C406	2203-002041	C-CER,CHIP	0.47nF,10%,50V,X7R,1608	1	SNA	
C407	2203-002041	C-CER,CHIP	0.47nF,10%,50V,X7R,1608	1	SNA	
C408	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C409	2401-002300	C-AL	47uF,20%,50V,GP,TP,6.3x11,5	1	SNA	
C410	2401-002300	C-AL	47uF,20%,50V,GP,TP,6.3x11,5	1	SNA	
C411	2401-002300	C-AL	47uF,20%,50V,GP,TP,6.3x11,5	1	SNA	
C412	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C413	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C414	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	

■ OUTDOOR MAIN PCB : DB93-03454A(UH035CAV)(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
C415	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C416	2401-002598	C-AL	220uF,20%,50V,GP,TP,10x16,5	1	SNA	
C417	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C418	2306-000123	C-FILM,LEAD-PPF	100nF,5%,630V,BK,26x16.5x8.5,2	1	SNA	
C419	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C421	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,1608	1	SNA	
C437	2401-001552	C-AL	47uF,20%,35V,GP,TP,6.3x11,2.5	1	SNA	
C451	2203-002002	C-CER,CHIP	33pF,5%,50V,NPO,BK,1608,-	1	SNA	
C452	2203-000888	C-CER,CHIP	4.7nF,10%,50V,X7R,1608	1	SNA	
C453	2203-006325	C-CER,CHIP	1.2nF,5%,25V,SL,TP,1608	1	SNA	
C454	2203-006496	C-CER,CHIP	2.2nF,10%,50V,X7R,1608	1	SNA	
C455	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C462	2203-006496	C-CER,CHIP	2.2nF,10%,50V,X7R,1608	1	SNA	
C471	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C501	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C503	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C506	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C507	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C508	2401-001552	C-AL	47uF,20%,35V,GP,TP,6.3x11,2.5	1	SNA	
C509	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C517	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C520	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C521	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,1608	1	SNA	
C522	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C523	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C524	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C525	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C526	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C602	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C603	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C702	2401-003036	C-AL	100uF,20%,16V,GP,TP,5x11mm,5mm	1	SNA	
C802	2203-000609	C-CER,CHIP	22nF,10%,50V,X7R,TP,2012	1	SNA	
C803	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C900	2203-006104	C-CER,CHIP	1000nF,10%,50V,X7R,3225	1	SNA	
C901	2201-000322	C-CERAMIC,DISC	2.2NF,10%,2KV,Y5P,TP,13x5mm,10	1	SNA	
C902	2401-000480	C-AL	10uF,20%,50V,GP,TP,5x11,5	1	SNA	
C905	2401-002598	C-AL	220uF,20%,50V,GP,TP,10x16,5	1	SNA	
C906	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C907	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
CN01	3711-005654	HEADER-BOARD TO CABLE	1WALL,7P,1R,3.96mm,ANGLE,SN,WHT	1	SNA	

■ OUTDOOR MAIN PCB : DB93-03454A(UH035CAV)(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
CN55	3711-003873	HEADER-BOARD TO CABLE	BOX,7P,1R,2mm,STRAIGHT,SN,NTR	1	SNA	
D101	DB98-16591A	ASS'Y-DIODE RECTIFIER	-,	1	SNA	
D102	0402-000351	DIODE-RECTIFIER	1N4937,600V,1A,DO-41,TP	1	SNA	
D103	0402-001427	DIODE-RECTIFIER	ES1D,200V,1A,DO-214AC,TP	1	SNA	
D104	0402-001427	DIODE-RECTIFIER	ES1D,200V,1A,DO-214AC,TP	1	SNA	
D105	0402-001427	DIODE-RECTIFIER	ES1D,200V,1A,DO-214AC,TP	1	SNA	
D106	0402-001427	DIODE-RECTIFIER	ES1D,200V,1A,DO-214AC,TP	1	SNA	
D201	0407-000123	DIODE-ARRAY	DAN202K,80V,100mA,CA2-3,SOT-23,TP	1	SNA	
D401	0402-000351	DIODE-RECTIFIER	1N4937,600V,1A,DO-41,TP	1	SNA	
D402	0402-000351	DIODE-RECTIFIER	1N4937,600V,1A,DO-41,TP	1	SNA	
D403	0402-000351	DIODE-RECTIFIER	1N4937,600V,1A,DO-41,TP	1	SNA	
D451	0407-000123	DIODE-ARRAY	DAN202K,80V,100mA,CA2-3,SOT-23,TP	1	SNA	
EEPROM-DATA	DB91-00466A	S/W FIRMWARE	BAC_12K,IT_PJT,1.0,Europe,-,-,EEPROM	1	SNA	
IC01	DB09-00453A	IC MICOM	MB90F823,-,80 P,5 V,24 MHz,STM-0573-OA,-,24,16, QFP,QFP,14x20 mm,16,-40 ~ 85	1	SNA	
IC02	1203-003334	IC-RESET	S-801,SOT-23,5P,2.9x1.6mm,PLASTIC,3.716/4.284V, 256mW,-,2.5mA,-,TP	1	SNA	
IC11	1203-003527	IC-PWM CONTROLLER	TOP243,DIP,7P,9.83x6.6mm,PLASTIC,-0.3/700V, 25W,-40to+150C,1.44A,-,-	1	SNA	
IC12	0604-001172	PHOTO-COUPLER	TR,100-300,200mW,SOP,TP	1	SNA	
IC13	1203-002948	IC-POSI.ADJUST REG.	TL431ACD,SOP,8P,4.9x3.9mm,PLASTIC,36V,1.5W, 0TO+70C,150mA,2.44/2.55V,TP	1	SNA	
IC16	DB95-00594A	ASS'Y-VOLTAGE REGULATOR	MH080FXEA4,KIA78M05,KA78M05	1	SNA	
IC19	DB95-00594A	ASS'Y-VOLTAGE REGULATOR	MH080FXEA4,KIA78M05,KA78M05	1	SNA	
IC21	1202-000104	IC-VOLTAGE COMP.	393,SOP,8P,150MIL,DUAL,36V,CMO	1	SNA	
IC41	1201-000166	IC-OP AMP	LM358,SOP,ST,8P,150MIL,DUAL,100V/MV,PLASTIC, 32V,500MW,0TO+70C,70DB,0.6V/US,5NA,-	1	SNA	
IC42	1202-000104	IC-VOLTAGE COMP.	393,SOP,8P,150MIL,DUAL,36V,CMO	1	SNA	
IC55	0506-000175	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1	SNA	
IC61	0604-001172	PHOTO-COUPLER	TR,100-300,200mW,SOP,TP	1	SNA	
IC62	0604-001172	PHOTO-COUPLER	TR,100-300,200mW,SOP,TP	1	SNA	
IC701	1103-001175	IC-EEPROM	93LC56,128x16,SOP,8P,5x4mm,2.5/6.0V,-40to+85C	1	SNA	
IC81	DB98-20678A	ASS'Y-PHOTOCOUPLER	KFR-35(25)GW/GPI,TLP351	1	SNA	
IPM	DB95-00599A	ASS'Y-IPM	KFR-35GW/GPI,INVERTER	1	SNA	
LED1	DB98-16601A	ASS'Y-LED RED	-,	1	SNA	
LED2	DB98-16600A	ASS'Y-LED GREEN	-,	1	SNA	
LED3	DB98-16602A	ASS'Y-LED YEL	-,	1	SNA	
PCB	DB41-00412A	PCB MAIN-OUTDOOR INV	BAC-INV,FR4,2,-,1.6T,140x160,-,1,-,BLDC-INV	1	SNA	
PT02	DB26-00049A	TRANS PULSE	PT_50,MH080FXEA4,10,65.5,8~14,EI2218,FERRITE, AC90-275V,-25˚C~+105˚C,BULK,GND 2P	1	SNA	
Q801	0504-000127	TR-DIGITAL	FJV3102RMTF,NPN,200mW,10K/10K,SOT-23,TP	1	SNA	

■ OUTDOOR MAIN PCB : DB93-03454A(UH035CAV)(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
Q803	0508-001132	TR-IGBT	-,600V,40A,2.6V,1200UJ,160W,TO-3P	1	SNA	
Q901	DB13-00003A	IC DRIVER GATE	-,SOT-23,-,-,1P,1P,0.2mm,2.93x1.3mm	1	SNA	
Q902	0504-000127	TR-DIGITAL	FJV3102RMTF,NPN,200mW,10K/10K,SOT-23,TP	1	SNA	
R001	2006-001080	R-CEMENT(S)	200ohm,5%,5W,CB,BK,13x9x25.5mm	1	SNA	
R101	2003-000855	R-METAL OXIDE(S)	47Kohm,5%,3W,AA,TP,6x16mm	1	SNA	
R102	2007-001074	R-CHIP	6.8ohm,5%,1/8W,TP,2012	1	SNA	
R103	2007-000468	R-CHIP	1Kohm,5%,1/8W,TP,2012	1	SNA	
R104	2007-000686	R-CHIP	3.3Kohm,5%,1/8W,TP,2012	1	SNA	
R105	2007-001222	R-CHIP	9.09Kohm,1%,1/8W,TP,2012	1	SNA	
R106	2007-000263	R-CHIP	1.82Kohm,1%,1/8W,TP,2012	1	SNA	
R107	2003-000708	R-METAL OXIDE(S)	47ohm,5%,1W,AA,TP,3.3x9mm	1	SNA	
R110	2007-008023	R-CHIP	100Kohm,5%,1W,TP,6432	1	SNA	
R111	2007-008023	R-CHIP	100Kohm,5%,1W,TP,6432	1	SNA	
R112	2007-008023	R-CHIP	100Kohm,5%,1W,TP,6432	1	SNA	
R113	2007-000924	R-CHIP	470Kohm,1%,1/4W,TP,3216	1	SNA	
R114	2007-000924	R-CHIP	470Kohm,1%,1/4W,TP,3216	1	SNA	
R115	2007-000924	R-CHIP	470Kohm,1%,1/4W,TP,3216	1	SNA	
R116	2007-000385	R-CHIP	14.3Kohm,1%,1/4W,TP,3216	1	SNA	
R201	2007-002667	R-CHIP	90.9Kohm,1%,1/4W,TP,3216	1	SNA	
R202	2007-002667	R-CHIP	90.9Kohm,1%,1/4W,TP,3216	1	SNA	
R203	2007-002667	R-CHIP	90.9Kohm,1%,1/4W,TP,3216	1	SNA	
R204	2007-002667	R-CHIP	90.9Kohm,1%,1/4W,TP,3216	1	SNA	
R205	2007-000263	R-CHIP	1.82Kohm,1%,1/8W,TP,2012	1	SNA	
R206	2007-000263	R-CHIP	1.82Kohm,1%,1/8W,TP,2012	1	SNA	
R207	2007-000080	R-CHIP	2Kohm,5%,1/10W,TP,1608	1	SNA	
R208	2007-000080	R-CHIP	2Kohm,5%,1/10W,TP,1608	1	SNA	
R407	2007-000781	R-CHIP	33ohm,5%,1/8W,TP,2012	1	SNA	
R408	2007-000781	R-CHIP	33ohm,5%,1/8W,TP,2012	1	SNA	
R409	2007-000781	R-CHIP	33ohm,5%,1/8W,TP,2012	1	SNA	
R413	2007-000082	R-CHIP	3.3Kohm,5%,1/10W,TP,1608	1	SNA	
R415	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1	SNA	
R418	2006-001013	R-CEMENT	0.02ohm,5%,7W,CA,BK,35x9.5x9.5mm	1	SNA	
R419	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	1	SNA	
R420	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	1	SNA	
R421	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	1	SNA	
R422	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	1	SNA	
R423	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	1	SNA	
R424	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	1	SNA	
R425	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	1	SNA	
R426	2007-008261	R-CHIP	150Kohm,1%,1/2W,TP,5025	1	SNA	

■ OUTDOOR MAIN PCB : DB93-03454A(UH035CAV)(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
R427	2007-008261	R-CHIP	150Kohm,1%,1/2W,TP,5025	1	SNA	
R428	2007-008261	R-CHIP	150Kohm,1%,1/2W,TP,5025	1	SNA	
R429	2007-001652	R-CHIP	1.6Kohm,1%,1/8W,TP,2012	1	SNA	
R430	2007-007154	R-CHIP	51ohm,1%,1/8W,TP,2012	1	SNA	
R431	2007-008261	R-CHIP	150Kohm,1%,1/2W,TP,5025	1	SNA	
R432	2007-008261	R-CHIP	150Kohm,1%,1/2W,TP,5025	1	SNA	
R433	2007-008261	R-CHIP	150Kohm,1%,1/2W,TP,5025	1	SNA	
R451	2007-009114	R-CHIP	110Kohm,1%,1/2W,TP,5025	1	SNA	
R452	2007-009114	R-CHIP	110Kohm,1%,1/2W,TP,5025	1	SNA	
R453	2007-000516	R-CHIP	2.7Kohm,1%,1/10W,TP,1608	1	SNA	
R454	2007-009114	R-CHIP	110Kohm,1%,1/2W,TP,5025	1	SNA	
R459	2007-000097	R-CHIP	47Kohm,5%,1/10W,TP,1608	1	SNA	
R460	2007-000093	R-CHIP	20Kohm,5%,1/10W,TP,1608	1	SNA	
R461	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1	SNA	
R462	2007-000986	R-CHIP	5.6ohm,5%,1/8W,TP,2012	1	SNA	
R463	2007-000986	R-CHIP	5.6ohm,5%,1/8W,TP,2012	1	SNA	
R464	2007-000986	R-CHIP	5.6ohm,5%,1/8W,TP,2012	1	SNA	
R471	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	1	SNA	
R472	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	1	SNA	
R509	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R510	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R515	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	SNA	
R516	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	SNA	
R517	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	SNA	
R536	2007-000109	R-CHIP	1Mohm,5%,1/10W,TP,1608	1	SNA	
R537	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	SNA	
R538	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	SNA	
R539	2007-000493	R-CHIP	2.2Kohm,5%,1/8W,TP,2012	1	SNA	
R540	2007-000493	R-CHIP	2.2Kohm,5%,1/8W,TP,2012	1	SNA	
R541	2007-000493	R-CHIP	2.2Kohm,5%,1/8W,TP,2012	1	SNA	
R542	2007-000964	R-CHIP	5.1Kohm,5%,1/8W,TP,2012	1	SNA	
R543	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	SNA	
R554	2007-000077	R-CHIP	470ohm,5%,1/10W,TP,1608	1	SNA	
R601	2007-000468	R-CHIP	1Kohm,5%,1/8W,TP,2012	1	SNA	
R602	2007-000766	R-CHIP	330ohm,5%,1/8W,TP,2012	1	SNA	
R603	2007-000766	R-CHIP	330ohm,5%,1/8W,TP,2012	1	SNA	
R604	2007-000468	R-CHIP	1Kohm,5%,1/8W,TP,2012	1	SNA	
R805	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R806	2007-000950	R-CHIP	47ohm,5%,1/4W,TP,3216	1	SNA	
R807	2007-000553	R-CHIP	20ohm,5%,1/4W,TP,3216	1	SNA	

■ OUTDOOR MAIN PCB : DB93-03454A(UH035CAV)(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
R808	2007-000931	R-CHIP	470ohm,5%,1/8W,TP,2012	1	SNA	
R901	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R902	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R906	2007-001071	R-CHIP	6.8Kohm,5%,1/8W,TP,2012	1	SNA	
R908	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
RY501	3501-001154	RELAY-MINIATURE	12Vdc,200mW,3000mA,1FormA,10mS,10mS	1	SNA	
RY503	3501-001169	RELAY-POWER	12VDC,0.9W,20000mA,SPST,20mS,10mS	1	SA	
WIRE-4WAY	DB39-00649E	CONNECT WIRE	AS18BPBX,-,-,-,-,-,#18,MG620023,-,-,230V/50Hz,-,-, #1015 18 AWG,-,4way valve	1	SNA	
WIRE-COMP	DB39-00608H	CONNECT WIRE-COMP	SH12BPB,#1015 16 AWG,AWG,3,290/280/270, red/blue/yellow,16,MG620877,-,-,250V,-,29	1	SNA	
WIRE-PCB	DB39-01194B	CONNECT WIRE	AS12(09)BPB,#1007 26 AWG,-,7P,150,WHT,-, SMH200-07 WHT,YBH200-07WHT,BK,230V/50Hz	1	SNA	
WIRE-REACTOR	DB39-00998F	CBF LEAD WIRE	-,AS12(09)BPBX,-,200,260,-,600V,AWG#16, WHIT & YEL,-,-,CORE TR29G5A	1	SNA	
XTAL01	2802-001179	RESONATOR-CERAMIC	4MHz,0.5%,BK,8x3x5.5mm	1	SNA	
ZD200	0403-000282	DIODE-ZENER	MMBZ5232B,5%,225mW,SOT-23,TP	1	SNA	
ZD201	0403-000282	DIODE-ZENER	MMBZ5232B,5%,225mW,SOT-23,TP	1	SNA	
ZD23	0403-000282	DIODE-ZENER	MMBZ5232B,5%,225mW,SOT-23,TP	1	SNA	

■ OUTDOOR MAIN PCB : DB93-03545H(UH052CAV)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
BD01	DB98-16586A	ASS'Y-DIODE	-,-	1	SNA	
C/W 4 WAY	DB39-00649E	CONNECT WIRE	AS18BPBX,-,-,-,-,-,#18,MG620023,-,-,230V/50Hz,-,-, #1015 18 AWG,-,4way valve	1	SNA	
C/W AC FAN	DB39-01193B	CONNECT WIRE	AS24(18)BPB,#1015 16 AWG,-,3P,115,WHT,#14,-,-, BK,230V/50Hz,3.96mm,80,UL1015 AWG#	1	SNA	
C/W COMP	DB39-00746D	CONNECT WIRE-COMP	UH052EAV,#1015 14 AWG,-,3P,425,-,AWG 14,-,-,BK, 230V/50Hz,3.96mm,400,UL1015 AWG#1	1	SNA	
C/W REACTOR	DB39-00747E	CONNECT WIRE	AS18BPBX,-,-,2P,-,-,14,179974-1,-,-,230V/50Hz,-,-, #1015 14 AWG,-,C/W Reactor	1	SNA	
C008	2301-000141	C-FILM,LEAD-PEF	10nF,10%,630V,TP,16x11x7.5mm,5	1	SNA	
C101	2401-003740	C-AL	560uF,20%,400V,WT,BK,35x50mm,10	1	SNA	
C102	2401-003740	C-AL	560uF,20%,400V,WT,BK,35x50mm,10	1	SNA	
C103	2401-003740	C-AL	560uF,20%,400V,WT,BK,35x50mm,10	1	SNA	
C104	2401-000470	C-AL	10uF,20%,450V,GP,TP,13x20mm,5m	1	SNA	
C105	2201-000322	C-CERAMIC,DISC	2.2nF,10%,2kV,Y5P,TP,13x5mm,10	1	SNA	
C106	2201-000322	C-CERAMIC,DISC	2.2nF,10%,2kV,Y5P,TP,13x5mm,10	1	SNA	
C107	2401-001552	C-AL	47uF,20%,35V,GP,TP,6.3x11,2.5	1	SNA	
C108	2203-001414	C-CER,CHIP	330nF,10%,50V,X7R,2012	1	SNA	
C109	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C110	2401-000832	C-AL	220uF,20%,25V,GP,TP,8x11.5,5	1	SNA	
C112	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C113	2203-005261	C-CER,CHIP	1000nF,10%,25V,X7R,3216	1	SNA	
C114	2401-000832	C-AL	220uF,20%,25V,GP,TP,8x11.5,5	1	SNA	
C116	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C117	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C118	2401-002300	C-AL	47uF,20%,50V,GP,TP,6.3x11,5	1	SNA	
C119	2401-000832	C-AL	220uF,20%,25V,GP,TP,8x11.5,5	1	SNA	
C121	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C122	2203-005261	C-CER,CHIP	1000nF,10%,25V,X7R,3216	1	SNA	
C123	2401-000303	C-AL	100uF,20%,25V,GP,TP,6.3x11,5	1	SNA	
C201	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C202	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C203	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C204	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C205	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C301	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C302	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C303	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C304	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C305	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	

■ OUTDOOR MAIN PCB : DB93-03545H(UH052CAV)(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
C306	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C307	2201-000154	C-CERAMIC,DISC	10nF,+80-20%,2kV,Y5P,TP,20x5mm,7.5	1	SNA	
C308	2201-000154	C-CERAMIC,DISC	10nF,+80-20%,2kV,Y5P,TP,20x5mm,7.5	1	SNA	
C401	2401-002300	C-AL	47uF,20%,50V,GP,TP,6.3x11,5	1	SNA	
C402	2401-002300	C-AL	47uF,20%,50V,GP,TP,6.3x11,5	1	SNA	
C403	2401-002300	C-AL	47uF,20%,50V,GP,TP,6.3x11,5	1	SNA	
C404	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C405	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C406	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C407	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C408	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C409	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C410	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C411	2203-000126	C-CER,CHIP	1.2nF,10%,50V,X7R,TP,2012	1	SNA	
C412	2203-000126	C-CER,CHIP	1.2nF,10%,50V,X7R,TP,2012	1	SNA	
C413	2203-000126	C-CER,CHIP	1.2nF,10%,50V,X7R,TP,2012	1	SNA	
C414	2203-000126	C-CER,CHIP	1.2nF,10%,50V,X7R,TP,2012	1	SNA	
C415	2203-000126	C-CER,CHIP	1.2nF,10%,50V,X7R,TP,2012	1	SNA	
C416	2203-000126	C-CER,CHIP	1.2nF,10%,50V,X7R,TP,2012	1	SNA	
C417	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C418	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C419	2203-000609	C-CER,CHIP	22nF,10%,50V,X7R,TP,2012	1	SNA	
C420	2203-000609	C-CER,CHIP	22nF,10%,50V,X7R,TP,2012	1	SNA	
C421	2401-002274	C-AL	220uF,20%,35V,WT,TP,10x12.5,5	1	SNA	
C422	2306-000123	C-FILM,LEAD-PPF	100nF,5%,630V,BK,26x16.5x8.5,2	1	SNA	
C423	2203-000495	C-CER,CHIP	2.2nF,10%,50V,X7R,2012	1	SNA	
C424	2203-000891	C-CER,CHIP	4.7nF,10%,50V,X7R,2012	1	SNA	
C425	2203-000495	C-CER,CHIP	2.2nF,10%,50V,X7R,2012	1	SNA	
C426	2203-000818	C-CER,CHIP	0.033nF,5%,50V,C0G,2012	1	SNA	
C427	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C428	2401-001552	C-AL	47uF,20%,35V,GP,TP,6.3x11,2.5	1	SNA	
C429	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C430	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C501	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C502	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C503	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C504	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C505	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C506	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	

■ OUTDOOR MAIN PCB : DB93-03545H(UH052CAV)(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
C507	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C508	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C509	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C510	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C511	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C512	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C513	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C517	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C518	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C519	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C520	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C521	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C522	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C523	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C524	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C602	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C603	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C701	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C702	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C703	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C704	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C705	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C706	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C707	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C708	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C709	2401-003036	C-AL	100uF,20%,16V,GP,TP,5X11mm,5mm	1	SNA	
C710	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C711	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C713	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C714	2401-001552	C-AL	47uF,20%,35V,GP,TP,6.3x11,2.5	1	SNA	
C715	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C721	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C722	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C801	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C802	2203-005261	C-CER,CHIP	1000nF,10%,25V,X7R,3216	1	SNA	
C803	2306-000123	C-FILM,LEAD-PPF	100nF,5%,630V,BK,26x16.5x8.5,2	1	SNA	
C805	2401-000832	C-AL	220uF,20%,25V,GP,TP,8x11.5,5	1	SNA	
C900	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C901	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C902	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	

■ OUTDOOR MAIN PCB : DB93-03545H(UH052CAV)(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
C907	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C908	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
CD31	0406-001109	DIODE-TVS	SAC5.0,7.6/-/-V,500W,DO-15	1	SNA	
CD32	0406-001109	DIODE-TVS	SAC5.0,7.6/-/-V,500W,DO-15	1	SNA	
CN30	3711-001031	HEADER-BOARD TO CABLE	BOX,6P,1R,2.5mm,ANGLE,SN,WHT	1	SNA	
CN50	DB98-22299A	ASS'Y-HOOK WHT	INVERTER,SMAW250A-04 WHT	1	SNA	
CN51	DB98-22298A	ASS'Y-HOOK RED	INVERTER,SMAW250A-O4 RED	1	SNA	
CN61	3711-004484	HEADER-BOARD TO CABLE	BOX,5P,1R,2mm,STRAIGHT,SN,NTR	1	SNA	
D101	DB98-16591A	ASS'Y-DIODE RECTIFIER	-,-	1	SNA	
D102	0402-000351	DIODE-RECTIFIER	1N4937,600V,1A,DO-41,TP	1	SNA	
D103	0402-001427	DIODE-RECTIFIER	ES1D,200V,1A,DO-214AC,TP	1	SNA	
D104	0402-001427	DIODE-RECTIFIER	ES1D,200V,1A,DO-214AC,TP	1	SNA	
D105	0402-001427	DIODE-RECTIFIER	ES1D,200V,1A,DO-214AC,TP	1	SNA	
D106	0402-001427	DIODE-RECTIFIER	ES1D,200V,1A,DO-214AC,TP	1	SNA	
D201	0407-000123	DIODE-ARRAY	DAN202K,80V,100mA,CA2-3,SOT-23,TP	1	SNA	
D401	0402-000351	DIODE-RECTIFIER	1N4937,600V,1A,DO-41,TP	1	SNA	
D402	0402-000351	DIODE-RECTIFIER	1N4937,600V,1A,DO-41,TP	1	SNA	
D403	0402-000351	DIODE-RECTIFIER	1N4937,600V,1A,DO-41,TP	1	SNA	
D451	0407-000123	DIODE-ARRAY	DAN202K,80V,100mA,CA2-3,SOT-23,TP	1	SNA	
EEPROM-DATA	DB91-00467A	SOFTWARE PACK-EEPROM	EEPROM,UH052EAV,-,EUROPE,CEILING,HEX,18K	1	SNA	
IC11	1203-003527	IC-PWM CONTROLLER	TOP243,DIP,7P,9.83x6.6mm,PLASTIC,-0.3/700V, 25W,-40to+150C,1.44A,-,-	1	SNA	
IC12	0604-001172	PHOTO-COUPLER	TR,100-300,200mW,SOP,TP	1	SNA	
IC13	1203-002948	IC-POSI.ADJUST REG.	TL431ACD,SOP,8P,4.9x3.9mm,PLASTIC,36V,1.5W, 0TO+70C,150mA,2.44/2.55V,TP	1	SNA	
IC16	DB95-00594A	ASS'Y-VOLTAGE REGULATOR	MH080FXEA4,KIA78M05,KA78M05	1	SNA	
IC19	DB95-00594A	ASS'Y-VOLTAGE REGULATOR	MH080FXEA4,KIA78M05,KA78M05	1	SNA	
IC20	1006-001325	IC-BUS TRANSCEIVER	1487,SO,8P,4.9x3.8 mm,SINGLE,ST,PLASTIC,5V, -40to+85CC,520mW,1,1,1.5/5.25V,-	1	SNA	
IC21	1202-000104	IC-VOLTAGE COMP.	393,SOP,8P,150MIL,DUAL,36V,CMO	1	SNA	
IC30	0801-000393	IC-CMOS LOGIC	74HC86,OR GATE,SOP,14P,150MIL,QUAD,ST,-, 2.0/6.0V,0.26V,-40to+85C,180mW,4.2V,1uA	1	SNA	
IC31	0604-001003	PHOTO-COUPLER	TR,50-150%,200mW,DIP-4,ST	1	SNA	
IC41	1201-000166	IC-OP AMP	LM358,SOP,ST,8P,150MIL,DUAL,100V/MV,PLASTIC, 32V,500mW,0TO+70C,70DB,0.6V/US,5NA,-	1	SNA	
IC42	1202-000104	IC-VOLTAGE COMP.	393,SOP,8P,150MIL,DUAL,36V,CMO	1	SNA	
IC50	DB09-00461A	IC MICOM	MB90F823,-,80 P,5 V,24 MHz,STM-0580-OA,24,16, QFP,QFP,14x20 mm,16,-40~85	1	SNA	
IC51	0506-000175	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1	SNA	
IC52	0506-000175	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1	SNA	
IC53	0506-000175	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1	SNA	

■ OUTDOOR MAIN PCB : DB93-03545H(UH052CAV)(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
IC54	0506-000175	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1	SNA	
IC55	0506-000175	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1	SNA	
IC59	1203-003334	IC-RESET	S-801,SOT-23,5P,2.9x1.6mm,PLASTIC,3.716/4.284V, 256mW,-,2.5mA,-,TP	1	SNA	
IC61	0604-001172	PHOTO-COUPLER	TR,100-300,200mW,SOP,TP	1	SNA	
IC62	0604-001172	PHOTO-COUPLER	TR,100-300,200mW,SOP,TP	1	SNA	
IC70	DB09-00453A	IC MICOM	MB90F823,-,80 P,5 V,24 MHz,STM-0573-OA,-,24,16, QFP,QFP,14x20 mm,16,-40~85	1	SNA	
IC701	1103-001175	IC-EEPROM	93LC56,128x16,SOP,8P,5x4mm,2.5/6.0V,-40to+85C	1	SNA	
IC702	1203-003334	IC-RESET	S-801,SOT-23,5P,2.9x1.6mm,PLASTIC,3.716/4.284V, 256mW,-,2.5mA,-,TP	1	SNA	
IC72	0506-000175	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1	SNA	
IC81	DB95-00595A	ASS'Y-PHOTO COUPLER	MH080FXEA4,-	1	SNA	
IPM	DB95-00954A	ASS'Y-IPM	MH052FXEA2,PS21267-P	1	SNA	
L/W COMM 485	DB39-01017D	CONNECT WIRE	COMM(485),#1015 18 AWG,-,2P,300,RED/BLU,22, 179974-1,-,-,230V/50Hz,3.96mm,-,-,-,-	1	SNA	
L/W EARTH	DB39-00514H	CONNECT WIRE-EARTH	AS24BPB,#1015 16 AWG,-,-,420,GRN,16,-,-,BK, 230V/50Hz,2.5mm,400,-,-,-	1	SNA	
L/W POWER L	DB39-00765R	WIRE HARNESS	AS24BPB,#1015 16 AWG,-,1P,150,BRN,#16, ST730620-3,-,BK,230V/50Hz,3.96mm,100,UL101	1	SNA	
L/W POWER R	DB39-00765S	HARNESS POWER-N	AS24(18)BPB,#1015 AWG 14,-,-,150,BRN,#14, ST730574-3,-,TP,230V/50Hz,2.5mm,120,UL1	1	SNA	
LED1	DB98-16601A	ASS'Y-LED RED	-,-	1	SNA	
LED2	DB98-16600A	ASS'Y-LED GREEN	-,-	1	SNA	
LED3	DB98-16602A	ASS'Y-LED YEL	-,-	1	SNA	
PCB	DB41-00432A	PCB MAIN-BOARD	AS18BPB,FR-4,2,1.0,1.6T,220*180,-,-,-,2MICOM 485	1	SNA	
PT02	DB26-00049A	TRANS PULSE	PT_50,MH080FXEA4,10,65.5,8~14,EI2218,FERRITE, AC90-275V,-25~+105,BULK,GND 2P	1	SNA	
Q801	0504-000127	TR-DIGITAL	FJV3102RMTF,NPN,200mW,10K/10K,SOT-23,TP	1	SNA	
Q803	0508-001154	TR-IGBT	-,600V,80A,-,195W,TO-3P	1	SNA	
Q904	0504-000001	TR-DIGITAL	DTA114EKA,PNP,200mW,10K/10K,SOT-23,TP	1	SNA	
Q905	0504-000001	TR-DIGITAL	DTA114EKA,PNP,200mW,10K/10K,SOT-23,TP	1	SNA	
Q906	0504-000001	TR-DIGITAL	DTA114EKA,PNP,200mW,10K/10K,SOT-23,TP	1	SNA	
Q907	0504-000001	TR-DIGITAL	DTA114EKA,PNP,200mW,10K/10K,SOT-23,TP	1	SNA	
R001	2006-001080	R-CEMENT(S)	200ohm,5%,5W,CB,BK,13x9x25.5mm	1	SNA	
R101	2003-000855	R-METAL OXIDE(S)	47Kohm,5%,3W,AA,TP,6x16mm	1	SNA	
R102	2007-001074	R-CHIP	6.8ohm,5%,1/8W,TP,2012	1	SNA	
R103	2007-000468	R-CHIP	1Kohm,5%,1/8W,TP,2012	1	SNA	
R104	2007-000686	R-CHIP	3.3Kohm,5%,1/8W,TP,2012	1	SNA	
R105	2007-001222	R-CHIP	9.09Kohm,1%,1/8W,TP,2012	1	SNA	
R106	2007-000263	R-CHIP	1.82Kohm,1%,1/8W,TP,2012	1	SNA	

■ OUTDOOR MAIN PCB : DB93-03545H(UH052CAV)(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
R107	2003-000708	R-METAL OXIDE(S)	47ohm,5%,1W,AA,TP,3.3x9mm	1	SNA	
R112	2007-000924	R-CHIP	470Kohm,1%,1/4W,TP,3216	1	SNA	
R113	2007-000924	R-CHIP	470Kohm,1%,1/4W,TP,3216	1	SNA	
R114	2007-000924	R-CHIP	470Kohm,1%,1/4W,TP,3216	1	SNA	
R115	2007-000385	R-CHIP	14.3Kohm,1%,1/4W,TP,3216	1	SNA	
R116	2007-008261	R-CHIP	150Kohm,1%,1/2W,TP,5025	1	SNA	
R117	2007-008261	R-CHIP	150Kohm,1%,1/2W,TP,5025	1	SNA	
R118	2007-008261	R-CHIP	150Kohm,1%,1/2W,TP,5025	1	SNA	
R201	2007-002667	R-CHIP	90.9Kohm,1%,1/4W,TP,3216	1	SNA	
R202	2007-002667	R-CHIP	90.9Kohm,1%,1/4W,TP,3216	1	SNA	
R203	2007-000263	R-CHIP	1.82Kohm,1%,1/8W,TP,2012	1	SNA	
R204	2007-000263	R-CHIP	1.82Kohm,1%,1/8W,TP,2012	1	SNA	
R205	2007-000671	R-CHIP	2Kohm,5%,1/8W,TP,2012	1	SNA	
R206	2007-002667	R-CHIP	90.9Kohm,1%,1/4W,TP,3216	1	SNA	
R207	2007-002667	R-CHIP	90.9Kohm,1%,1/4W,TP,3216	1	SNA	
R208	2007-000671	R-CHIP	2Kohm,5%,1/8W,TP,2012	1	SNA	
R301	2007-000023	R-CHIP	120ohm,5%,1/8W,TP,2012	1	SNA	
R302	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R303	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R304	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R305	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R306	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R307	2007-000656	R-CHIP	27Kohm,5%,1/4W,TP,3216	1	SNA	
R308	2007-000656	R-CHIP	27Kohm,5%,1/4W,TP,3216	1	SNA	
R311	2007-000656	R-CHIP	27Kohm,5%,1/4W,TP,3216	1	SNA	
R312	2007-000656	R-CHIP	27Kohm,5%,1/4W,TP,3216	1	SNA	
R315	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R401	2007-000290	R-CHIP	100ohm,5%,1/8W,TP,2012	1	SNA	
R402	2007-000290	R-CHIP	100ohm,5%,1/8W,TP,2012	1	SNA	
R403	2007-000290	R-CHIP	100ohm,5%,1/8W,TP,2012	1	SNA	
R404	2007-000290	R-CHIP	100ohm,5%,1/8W,TP,2012	1	SNA	
R405	2007-000290	R-CHIP	100ohm,5%,1/8W,TP,2012	1	SNA	
R406	2007-000290	R-CHIP	100ohm,5%,1/8W,TP,2012	1	SNA	
R407	2007-000872	R-CHIP	4.7Kohm,5%,1/8W,TP,2012	1	SNA	
R408	2007-000781	R-CHIP	33ohm,5%,1/8W,TP,2012	1	SNA	
R409	2007-000781	R-CHIP	33ohm,5%,1/8W,TP,2012	1	SNA	
R410	2007-000781	R-CHIP	33ohm,5%,1/8W,TP,2012	1	SNA	
R412	2007-000928	R-CHIP	470ohm,1%,1/8W,TP,2012	1	SNA	
R413	2007-008261	R-CHIP	150Kohm,1%,1/2W,TP,5025	1	SNA	

■ OUTDOOR MAIN PCB : DB93-03545H(UH052CAV)(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
R414	2007-008261	R-CHIP	150Kohm,1%,1/2W,TP,5025	1	SNA	
R415	2007-008261	R-CHIP	150Kohm,1%,1/2W,TP,5025	1	SNA	
R416	2007-000254	R-CHIP	1.62Kohm,1%,1/8W,TP,2012	1	SNA	
R417	2007-008562	R-CHIP	30.1ohm,1%,1/8W,TP,2012	1	SNA	
R418	2007-009114	R-CHIP	110Kohm,1%,1/2W,TP,5025	1	SNA	
R419	2007-009114	R-CHIP	110Kohm,1%,1/2W,TP,5025	1	SNA	
R420	2007-000515	R-CHIP	2.7Kohm,1%,1/8W,TP,2012	1	SNA	
R421	DB95-00769A	ASS'Y-R CEMENT	AS18BPBX,10mohm,15W	1	SNA	
R422	2007-000938	R-CHIP	47Kohm,1%,1/8W,TP,2012	1	SNA	
R423	2007-000546	R-CHIP	20Kohm,5%,1/8W,TP,2012	1	SNA	
R424	2007-000868	R-CHIP	4.7Kohm,1%,1/8W,TP,2012	1	SNA	
R425	2007-000290	R-CHIP	100ohm,5%,1/8W,TP,2012	1	SNA	
R426	2007-000290	R-CHIP	100ohm,5%,1/8W,TP,2012	1	SNA	
R427	2007-000468	R-CHIP	1Kohm,5%,1/8W,TP,2012	1	SNA	
R429	2007-008261	R-CHIP	150Kohm,1%,1/2W,TP,5025	1	SNA	
R430	2007-008261	R-CHIP	150Kohm,1%,1/2W,TP,5025	1	SNA	
R431	2007-008261	R-CHIP	150Kohm,1%,1/2W,TP,5025	1	SNA	
R432	2007-009114	R-CHIP	110Kohm,1%,1/2W,TP,5025	1	SNA	
R500	2007-000455	R-CHIP	18Kohm,1%,1/10W,TP,1608	1	SNA	
R501	2007-000455	R-CHIP	18Kohm,1%,1/10W,TP,1608	1	SNA	
R502	2007-000455	R-CHIP	18Kohm,1%,1/10W,TP,1608	1	SNA	
R503	2007-000614	R-CHIP	24Kohm,1%,1/10W,TP,1608	1	SNA	
R504	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R505	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R506	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R507	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R508	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R509	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	SNA	
R510	2007-000109	R-CHIP	1Mohm,5%,1/10W,TP,1608	1	SNA	
R511	2007-000965	R-CHIP	5.1Kohm,5%,1/10W,TP,1608	1	SNA	
R512	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	SNA	
R513	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R514	2007-000614	R-CHIP	24Kohm,1%,1/10W,TP,1608	1	SNA	
R515	2007-000455	R-CHIP	18Kohm,1%,1/10W,TP,1608	1	SNA	
R516	2007-000455	R-CHIP	18Kohm,1%,1/10W,TP,1608	1	SNA	
R517	2007-000455	R-CHIP	18Kohm,1%,1/10W,TP,1608	1	SNA	
R518	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R519	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R520	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	

■ OUTDOOR MAIN PCB : DB93-03545H(UH052CAV)(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
R521	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R522	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R523	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R524	2007-000455	R-CHIP	18Kohm,1%,1/10W,TP,1608	1	SNA	
R525	2007-000455	R-CHIP	18Kohm,1%,1/10W,TP,1608	1	SNA	
R526	2007-000455	R-CHIP	18Kohm,1%,1/10W,TP,1608	1	SNA	
R527	2007-000455	R-CHIP	18Kohm,1%,1/10W,TP,1608	1	SNA	
R601	2007-000468	R-CHIP	1Kohm,5%,1/8W,TP,2012	1	SNA	
R602	2007-000766	R-CHIP	330ohm,5%,1/8W,TP,2012	1	SNA	
R603	2007-000766	R-CHIP	330ohm,5%,1/8W,TP,2012	1	SNA	
R604	2007-000468	R-CHIP	1Kohm,5%,1/8W,TP,2012	1	SNA	
R701	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R702	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R703	2007-000109	R-CHIP	1Mohm,5%,1/10W,TP,1608	1	SNA	
R704	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	SNA	
R705	2007-000965	R-CHIP	5.1Kohm,5%,1/10W,TP,1608	1	SNA	
R706	2007-000511	R-CHIP	2.4Kohm,5%,1/8W,TP,2012	1	SNA	
R707	2007-000511	R-CHIP	2.4Kohm,5%,1/8W,TP,2012	1	SNA	
R708	2007-000511	R-CHIP	2.4Kohm,5%,1/8W,TP,2012	1	SNA	
R709	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	SNA	
R710	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	SNA	
R711	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	SNA	
R712	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	SNA	
R713	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	SNA	
R721	2007-000763	R-CHIP	330ohm,1%,1/10W,TP,1608	1	SNA	
R722	2007-000613	R-CHIP	24Kohm,1%,1/8W,TP,2012	1	SNA	
R723	2007-000614	R-CHIP	24Kohm,1%,1/10W,TP,1608	1	SNA	
R724	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R805	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R806	2007-000950	R-CHIP	47ohm,5%,1/4W,TP,3216	1	SNA	
R807	2007-000553	R-CHIP	20ohm,5%,1/4W,TP,3216	1	SNA	
R808	2007-000931	R-CHIP	470ohm,5%,1/8W,TP,2012	1	SNA	
R900	2007-001318	R-CHIP	1Kohm,5%,1/4W,TP,3216	1	SNA	
R901	2007-001318	R-CHIP	1Kohm,5%,1/4W,TP,3216	1	SNA	
R902	2007-001318	R-CHIP	1Kohm,5%,1/4W,TP,3216	1	SNA	
R903	2007-001318	R-CHIP	1Kohm,5%,1/4W,TP,3216	1	SNA	
R904	2007-001318	R-CHIP	1Kohm,5%,1/4W,TP,3216	1	SNA	
R905	2007-001318	R-CHIP	1Kohm,5%,1/4W,TP,3216	1	SNA	
R906	2007-001318	R-CHIP	1Kohm,5%,1/4W,TP,3216	1	SNA	

■ OUTDOOR MAIN PCB : DB93-03545H(UH052CAV)(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
R907	2007-001177	R-CHIP	8.2Kohm,5%,1/8W,TP,2012	1	SNA	
R908	2007-001177	R-CHIP	8.2Kohm,5%,1/8W,TP,2012	1	SNA	
R909	2007-001177	R-CHIP	8.2Kohm,5%,1/8W,TP,2012	1	SNA	
R910	2007-000964	R-CHIP	5.1Kohm,5%,1/8W,TP,2012	1	SNA	
R911	2007-000964	R-CHIP	5.1Kohm,5%,1/8W,TP,2012	1	SNA	
R912	2007-000964	R-CHIP	5.1Kohm,5%,1/8W,TP,2012	1	SNA	
R916	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R917	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
RY01	3501-001169	RELAY-POWER	12VDC,0.9W,20000mA,SPST,20mS,10mS	1	SA	
RY03	3501-001238	RELAY-POWER	DC12V,3A 250V AC,-,-,10mS,10mS	1	SNA	
RY04	3501-001238	RELAY-POWER	DC12V,3A 250V AC,-,-,10mS,10mS	1	SNA	
RY05	3501-001238	RELAY-POWER	DC12V,3A 250V AC,-,-,10mS,10mS	1	SNA	
RY31	3501-001248	RELAY-MINIATURE	12V,-,11.7mA,DPDT,4mS,4mS	1	SNA	
XTAL01	2802-001179	RESONATOR-CERAMIC	4MHz,0.5%,BK,8x3x5.5mm	1	SNA	
XTAL51	2802-001179	RESONATOR-CERAMIC	4MHz,0.5%,BK,8x3x5.5mm	1	SNA	
ZD21	0403-000282	DIODE-ZENER	MMBZ5232B,5%,225mW,SOT-23,TP	1	SNA	
ZD22	0403-000282	DIODE-ZENER	MMBZ5232B,5%,225mW,SOT-23,TP	1	SNA	
ZD72	0403-000282	DIODE-ZENER	MMBZ5232B,5%,225mW,SOT-23,TP	1	SNA	

■ OUTDOOR MAIN PCB : DB93-03545J(UH070CAV)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
BD01	DB98-16586A	ASS'Y-DIODE	-,-	1	SNA	
C/W 4 WAY	DB39-00649E	CONNECT WIRE	AS18BPBX,-,-,-,-,-,#18,MG620023,-,-,230V/50Hz,-,-, #1015 18 AWG,-,4way valve	1	SNA	
C/W COMP	DB39-00746C	CONNECT WIRE-COMP	AS24(18)BPB,#1015 14 AWG,-,3P,425,-,AWG 14,-,-, BK,230V/50Hz,3.96mm,400,UL1015 AW	1	SNA	
C/W REACTOR	DB39-00747E	CONNECT WIRE	AS18BPBX,-,-,2P,-,-,14,179974-1,-,-,230V/50Hz,-,-, #1015 14 AWG,-,C/W Reactor	1	SNA	
C008	2301-000141	C-FILM,LEAD-PEF	10nF,10%,630V,TP,16x11x7.5mm,5	1	SNA	
C101	2401-003740	C-AL	560uF,20%,400V,WT,BK,35x50mm,10	1	SNA	
C102	2401-003740	C-AL	560uF,20%,400V,WT,BK,35x50mm,10	1	SNA	
C103	2401-003740	C-AL	560uF,20%,400V,WT,BK,35x50mm,10	1	SNA	
C104	2401-000470	C-AL	10uF,20%,450V,GP,TP,13x20mm,5m	1	SNA	
C105	2201-000322	C-CERAMIC,DISC	2.2nF,10%,2kV,Y5P,TP,13x5mm,10	1	SNA	
C106	2201-000322	C-CERAMIC,DISC	2.2nF,10%,2kV,Y5P,TP,13x5mm,10	1	SNA	
C107	2401-001552	C-AL	47uF,20%,35V,GP,TP,6.3x11,2.5	1	SNA	
C108	2203-001414	C-CER,CHIP	330nF,10%,50V,X7R,2012	1	SNA	
C109	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C110	2401-000832	C-AL	220uF,20%,25V,GP,TP,8x11.5,5	1	SNA	
C112	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C113	2203-005261	C-CER,CHIP	1000nF,10%,25V,X7R,3216	1	SNA	
C114	2401-000832	C-AL	220uF,20%,25V,GP,TP,8x11.5,5	1	SNA	
C116	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C117	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C118	2401-002300	C-AL	47uF,20%,50V,GP,TP,6.3x11,5	1	SNA	
C119	2401-000832	C-AL	220uF,20%,25V,GP,TP,8x11.5,5	1	SNA	
C121	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C122	2203-005261	C-CER,CHIP	1000nF,10%,25V,X7R,3216	1	SNA	
C123	2401-000303	C-AL	100uF,20%,25V,GP,TP,6.3x11,5	1	SNA	
C201	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C202	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C203	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C204	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C205	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C301	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C302	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C303	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C304	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C305	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C306	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C307	2201-000154	C-CERAMIC,DISC	10nF,+80-20%,2kV,Y5P,TP,20x5mm,7.5	1	SNA	

■ OUTDOOR MAIN PCB : DB93-03545J(UH070CAV)(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
C308	2201-000154	C-CERAMIC,DISC	10nF,+80-20%,2kV,Y5P,TP,20x5mm,7.5	1	SNA	
C309	2201-000154	C-CERAMIC,DISC	10nF,+80-20%,2kV,Y5P,TP,20x5mm,7.5	1	SNA	
C310	2201-000154	C-CERAMIC,DISC	10nF,+80-20%,2kV,Y5P,TP,20x5mm,7.5	1	SNA	
C401	2401-002300	C-AL	47uF,20%,50V,GP,TP,6.3x11,5	1	SNA	
C402	2401-002300	C-AL	47uF,20%,50V,GP,TP,6.3x11,5	1	SNA	
C403	2401-002300	C-AL	47uF,20%,50V,GP,TP,6.3x11,5	1	SNA	
C404	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C405	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C406	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C407	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C408	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C409	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C410	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C411	2203-000126	C-CER,CHIP	1.2nF,10%,50V,X7R,TP,2012	1	SNA	
C412	2203-000126	C-CER,CHIP	1.2nF,10%,50V,X7R,TP,2012	1	SNA	
C413	2203-000126	C-CER,CHIP	1.2nF,10%,50V,X7R,TP,2012	1	SNA	
C414	2203-000126	C-CER,CHIP	1.2nF,10%,50V,X7R,TP,2012	1	SNA	
C415	2203-000126	C-CER,CHIP	1.2nF,10%,50V,X7R,TP,2012	1	SNA	
C416	2203-000126	C-CER,CHIP	1.2nF,10%,50V,X7R,TP,2012	1	SNA	
C417	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C418	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C419	2203-000609	C-CER,CHIP	22nF,10%,50V,X7R,TP,2012	1	SNA	
C420	2203-000609	C-CER,CHIP	22nF,10%,50V,X7R,TP,2012	1	SNA	
C421	2401-002274	C-AL	220uF,20%,35V,WT,TP,10x12.5,5	1	SNA	
C422	2306-000123	C-FILM,LEAD-PPF	100nF,5%,630V,BK,26x16.5x8.5,2	1	SNA	
C423	2203-000495	C-CER,CHIP	2.2nF,10%,50V,X7R,2012	1	SNA	
C424	2203-000891	C-CER,CHIP	4.7nF,10%,50V,X7R,2012	1	SNA	
C425	2203-000495	C-CER,CHIP	2.2nF,10%,50V,X7R,2012	1	SNA	
C426	2203-000818	C-CER,CHIP	0.033nF,5%,50V,C0G,2012	1	SNA	
C427	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C428	2401-001552	C-AL	47uF,20%,35V,GP,TP,6.3x11,2.5	1	SNA	
C429	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C430	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C501	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C502	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C503	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C504	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C505	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C506	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	

■ OUTDOOR MAIN PCB : DB93-03545J(UH070CAV)(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
C507	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C508	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C509	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C510	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C511	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C512	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C513	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C517	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C518	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C519	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C520	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C521	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C522	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C523	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C524	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C602	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C603	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C701	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C702	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C703	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C704	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C705	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C706	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C707	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C708	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C709	2401-003036	C-AL	100uF,20%,16V,GP,TP,5x11mm,5mm	1	SNA	
C710	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C711	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C713	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C714	2401-001552	C-AL	47uF,20%,35V,GP,TP,6.3x11,2.5	1	SNA	
C715	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C721	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C722	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C801	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C802	2203-005261	C-CER,CHIP	1000nF,10%,25V,X7R,3216	1	SNA	
C803	2306-000123	C-FILM,LEAD-PPF	100nF,5%,630V,BK,26x16.5x8.5,2	1	SNA	
C805	2401-000832	C-AL	220uF,20%,25V,GP,TP,8x11.5,5	1	SNA	
C900	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C901	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	

■ OUTDOOR MAIN PCB : DB93-03545J(UH070CAV)(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
C902	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C907	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C908	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
CD31	0406-001109	DIODE-TVS	SAC5.0,7.6/-/-V,500W,DO-15	1	SNA	
CD32	0406-001109	DIODE-TVS	SAC5.0,7.6/-/-V,500W,DO-15	1	SNA	
CN30	3711-001031	HEADER-BOARD TO CABLE	BOX,6P,1R,2.5mm,ANGLE,SN,WHT	1	SNA	
CN40	3711-003381	CONNECTOR-HEADER	1WALL,5P,1R,3.96mm,ANGLE,SN	1	SNA	
CN50	DB98-22299A	ASS'Y-HOOK WHT	INVERTER,SMAW250A-04 WHT	1	SNA	
CN51	DB98-22298A	ASS'Y-HOOK RED	INVERTER,SMAW250A-O4 RED	1	SNA	
CN61	3711-004484	HEADER-BOARD TO CABLE	BOX,5P,1R,2mm,STRAIGHT,SN,NTR	1	SNA	
D101	DB98-16591A	ASS'Y-DIODE RECTIFIER	-,-	1	SNA	
D102	0402-000351	DIODE-RECTIFIER	1N4937,600V,1A,DO-41,TP	1	SNA	
D103	0402-001427	DIODE-RECTIFIER	ES1D,200V,1A,DO-214AC,TP	1	SNA	
D104	0402-001427	DIODE-RECTIFIER	ES1D,200V,1A,DO-214AC,TP	1	SNA	
D105	0402-001427	DIODE-RECTIFIER	ES1D,200V,1A,DO-214AC,TP	1	SNA	
D106	0402-001427	DIODE-RECTIFIER	ES1D,200V,1A,DO-214AC,TP	1	SNA	
D201	0407-000123	DIODE-ARRAY	DAN202K,80V,100mA,CA2-3,SOT-23,TP	1	SNA	
D401	0402-000351	DIODE-RECTIFIER	1N4937,600V,1A,DO-41,TP	1	SNA	
D402	0402-000351	DIODE-RECTIFIER	1N4937,600V,1A,DO-41,TP	1	SNA	
D403	0402-000351	DIODE-RECTIFIER	1N4937,600V,1A,DO-41,TP	1	SNA	
D451	0407-000123	DIODE-ARRAY	DAN202K,80V,100mA,CA2-3,SOT-23,TP	1	SNA	
EEPROM-DATA	DB91-00468A	S/W FIRMWARE-EEPROM	EEPROM,UH070EAV,24K,EUROPE,-,HEX,-	1	SNA	
IC11	1203-003527	IC-PWM CONTROLLER	TOP243,DIP,7P,9.83x6.6mm,PLASTIC,-0.3/700V, 25W,-40to+150C,1.44A,-,-	1	SNA	
IC12	0604-001172	PHOTO-COUPLER	TR,100-300,200mW,SOP,TP	1	SNA	
IC13	1203-002948	IC-POSI.ADJUST REG.	TL431ACD,SOP,8P,4.9x3.9mm,PLASTIC,36V,1.5W, 0TO+70C,150mA,2.44/2.55V,TP	1	SNA	
IC16	DB95-00594A	ASS'Y-VOLTAGE REGULATOR	MH080FXEA4,KIA78M05,KA78M05	1	SNA	
IC19	DB95-00594A	ASS'Y-VOLTAGE REGULATOR	MH080FXEA4,KIA78M05,KA78M05	1	SNA	
IC20	1006-001325	IC-BUS TRANSCEIVER	1487,SO,8P,4.9x3.8 mm,SINGLE,ST,PLASTIC,5V, -40to+85CC,520mW,1,1,1.5/5.25V,-	1	SNA	
IC21	1202-000104	IC-VOLTAGE COMP.	393,SOP,8P,150MIL,DUAL,36V,CMO	1	SNA	
IC30	0801-000393	IC-CMOS LOGIC	74HC86,OR GATE,SOP,14P,150MIL,QUAD,ST,-, 2.0/6.0V,0.26V,-40to+85C,180mW,4.2V,1uA,	1	SNA	
IC31	0604-001003	PHOTO-COUPLER	TR,50-150%,200mW,DIP-4,ST	1	SNA	
IC41	1201-000166	IC-OP AMP	LM358,SOP,ST,8P,150MIL,DUAL,100V/MV,PLASTIC, 32V,500MW,0TO+70C,70DB,0.6V/US,5NA,-	1	SNA	
IC42	1202-000104	IC-VOLTAGE COMP.	393,SOP,8P,150MIL,DUAL,36V,CMO	1	SNA	
IC50	DB09-00461A	IC MICOM	MB90F823,-,80 P,5 V,24 MHz,STM-0580-OA,24,16, QFP,QFP,14x20 mm,16,-40~85	1	SNA	
IC51	0506-000175	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1	SNA	

■ OUTDOOR MAIN PCB : DB93-03545J(UH070CAV)(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
IC52	0506-000175	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1	SNA	
IC53	0506-000175	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1	SNA	
IC54	0506-000175	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1	SNA	
IC55	0506-000175	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1	SNA	
IC59	1203-003334	IC-RESET	S-801,SOT-23,5P,2.9x1.6mm,PLASTIC,3.716/4.284V, 256mW,-,2.5mA,-,TP	1	SNA	
IC61	0604-001172	PHOTO-COUPLER	TR,100-300,200mW,SOP,TP	1	SNA	
IC62	0604-001172	PHOTO-COUPLER	TR,100-300,200mW,SOP,TP	1	SNA	
IC70	DB09-00453A	IC MICOM	MB90F823,-,80 P,5 V,24 MHz,STM-0573-OA,-,24,16, QFP,QFP,14x20 mm,16,-40~85	1	SNA	
IC701	1103-001175	IC-EEPROM	93LC56,128x16,SOP,8P,5x4mm,2.5/6.0V,-40to+85C	1	SNA	
IC702	1203-003334	IC-RESET	S-801,SOT-23,5P,2.9x1.6mm,PLASTIC,3.716/4.284V, 256mW,-,2.5mA,-,TP	1	SNA	
IC72	0506-000175	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1	SNA	
IC81	DB95-00595A	ASS'Y-PHOTO COUPLER	MH080FXEA4,-	1	SNA	
IPM	DB95-00954A	ASS'Y-IPM	MH052FXEA2,PS21267-P	1	SNA	
L/W COMM 485	DB39-01017G	CONNECT WIRE-485	AS24BPA,#1015 20 AWG,-,-,320,-,-,-,-,-,230V/50Hz, 2.5mm,300,UL 1015,-,-	1	SNA	
L/W EARTH	DB39-00514H	CONNECT WIRE-EARTH	AS24BPB,#1015 16 AWG,-,-,420,GRN,16,-,-,BK, 230V/50Hz,2.5mm,400,-,-,-	1	SNA	
L/W POWER L	DB39-00765R	WIRE HARNESS	AS24BPB,#1015 16 AWG,-,1P,150,BRN,#16, ST730620-3,-,BK,230V/50Hz,3.96mm,100,UL101	1	SNA	
L/W POWER R	DB39-00765S	HARNESS POWER-N	AS24(18)BPB,#1015 AWG 14,-,-,150,BRN,#14, ST730574-3,-,TP,230V/50Hz,2.5mm,120,UL1	1	SNA	
LED1	DB98-16601A	ASSY-LED RED	-,-	1	SNA	
LED2	DB98-16600A	ASS'Y-LED GREEN	-,-	1	SNA	
LED3	DB98-16602A	ASS'Y-LED YEL	-,-	1	SNA	
PCB	DB41-00432A	PCB MAIN-BOARD	AS18BPB,FR-4,2,1.0,1.6T,220*180,-,-,-,2MICOM 485	1	SNA	
PT02	DB26-00049A	TRANS PULSE	PT_50,MH080FXEA4,10,65.5,8~14,EI2218,FERRITE, AC90-275V,-25~+105,BULK,GND 2P	1	SNA	
Q801	0504-000127	TR-DIGITAL	FJV3102RMTF,NPN,200mW,10K/10K,SOT-23,TP	1	SNA	
Q803	0508-001154	TR-IGBT	-,600V,80A,-,195W,TO-3P	1	SNA	
Q904	0504-000001	TR-DIGITAL	DTA114EKA,PNP,200mW,10K/10K,SOT-23,TP	1	SNA	
Q905	0504-000001	TR-DIGITAL	DTA114EKA,PNP,200mW,10K/10K,SOT-23,TP	1	SNA	
Q906	0504-000001	TR-DIGITAL	DTA114EKA,PNP,200mW,10K/10K,SOT-23,TP	1	SNA	
Q907	0504-000001	TR-DIGITAL	DTA114EKA,PNP,200mW,10K/10K,SOT-23,TP	1	SNA	
R001	2006-001080	R-CEMENT(S)	200ohm,5%,5W,CB,BK,13x9x25.5mm	1	SNA	
R101	2003-000855	R-METAL OXIDE(S)	47Kohm,5%,3W,AA,TP,6x16mm	1	SNA	
R102	2007-001074	R-CHIP	6.8ohm,5%,1/8W,TP,2012	1	SNA	
R103	2007-000468	R-CHIP	1Kohm,5%,1/8W,TP,2012	1	SNA	
R104	2007-000686	R-CHIP	3.3Kohm,5%,1/8W,TP,2012	1	SNA	

■ OUTDOOR MAIN PCB : DB93-03545J(UH070CAV)(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
R105	2007-001222	R-CHIP	9.09Kohm,1%,1/8W,TP,2012	1	SNA	
R106	2007-000263	R-CHIP	1.82Kohm,1%,1/8W,TP,2012	1	SNA	
R107	2003-000708	R-METAL OXIDE(S)	47ohm,5%,1W,AA,TP,3.3x9mm	1	SNA	
R112	2007-000924	R-CHIP	470Kohm,1%,1/4W,TP,3216	1	SNA	
R113	2007-000924	R-CHIP	470Kohm,1%,1/4W,TP,3216	1	SNA	
R114	2007-000924	R-CHIP	470Kohm,1%,1/4W,TP,3216	1	SNA	
R115	2007-000385	R-CHIP	14.3Kohm,1%,1/4W,TP,3216	1	SNA	
R116	2007-008261	R-CHIP	150Kohm,1%,1/2W,TP,5025	1	SNA	
R117	2007-008261	R-CHIP	150Kohm,1%,1/2W,TP,5025	1	SNA	
R118	2007-008261	R-CHIP	150Kohm,1%,1/2W,TP,5025	1	SNA	
R201	2007-002667	R-CHIP	90.9Kohm,1%,1/4W,TP,3216	1	SNA	
R202	2007-002667	R-CHIP	90.9Kohm,1%,1/4W,TP,3216	1	SNA	
R203	2007-000263	R-CHIP	1.82Kohm,1%,1/8W,TP,2012	1	SNA	
R204	2007-000263	R-CHIP	1.82Kohm,1%,1/8W,TP,2012	1	SNA	
R205	2007-000671	R-CHIP	2Kohm,5%,1/8W,TP,2012	1	SNA	
R206	2007-002667	R-CHIP	90.9Kohm,1%,1/4W,TP,3216	1	SNA	
R207	2007-002667	R-CHIP	90.9Kohm,1%,1/4W,TP,3216	1	SNA	
R208	2007-000671	R-CHIP	2Kohm,5%,1/8W,TP,2012	1	SNA	
R301	2007-000023	R-CHIP	120ohm,5%,1/8W,TP,2012	1	SNA	
R302	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R303	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R304	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R305	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R306	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R307	2007-000656	R-CHIP	27Kohm,5%,1/4W,TP,3216	1	SNA	
R308	2007-000656	R-CHIP	27Kohm,5%,1/4W,TP,3216	1	SNA	
R311	2007-000656	R-CHIP	27Kohm,5%,1/4W,TP,3216	1	SNA	
R312	2007-000656	R-CHIP	27Kohm,5%,1/4W,TP,3216	1	SNA	
R315	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R401	2007-000290	R-CHIP	100ohm,5%,1/8W,TP,2012	1	SNA	
R402	2007-000290	R-CHIP	100ohm,5%,1/8W,TP,2012	1	SNA	
R403	2007-000290	R-CHIP	100ohm,5%,1/8W,TP,2012	1	SNA	
R404	2007-000290	R-CHIP	100ohm,5%,1/8W,TP,2012	1	SNA	
R405	2007-000290	R-CHIP	100ohm,5%,1/8W,TP,2012	1	SNA	
R406	2007-000290	R-CHIP	100ohm,5%,1/8W,TP,2012	1	SNA	
R407	2007-000872	R-CHIP	4.7Kohm,5%,1/8W,TP,2012	1	SNA	
R408	2007-000781	R-CHIP	33ohm,5%,1/8W,TP,2012	1	SNA	
R409	2007-000781	R-CHIP	33ohm,5%,1/8W,TP,2012	1	SNA	
R410	2007-000781	R-CHIP	33ohm,5%,1/8W,TP,2012	1	SNA	

■ OUTDOOR MAIN PCB : DB93-03545J(UH070CAV)(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
R412	2007-000928	R-CHIP	470ohm,1%,1/8W,TP,2012	1	SNA	
R413	2007-008261	R-CHIP	150Kohm,1%,1/2W,TP,5025	1	SNA	
R414	2007-008261	R-CHIP	150Kohm,1%,1/2W,TP,5025	1	SNA	
R415	2007-008261	R-CHIP	150Kohm,1%,1/2W,TP,5025	1	SNA	
R416	2007-000254	R-CHIP	1.62Kohm,1%,1/8W,TP,2012	1	SNA	
R417	2007-008562	R-CHIP	30.1ohm,1%,1/8W,TP,2012	1	SNA	
R418	2007-009114	R-CHIP	110Kohm,1%,1/2W,TP,5025	1	SNA	
R419	2007-009114	R-CHIP	110Kohm,1%,1/2W,TP,5025	1	SNA	
R420	2007-000515	R-CHIP	2.7Kohm,1%,1/8W,TP,2012	1	SNA	
R421	DB95-00769A	ASS'Y-R CEMENT	AS18BPBX,10mohm,15W	1	SNA	
R422	2007-000938	R-CHIP	47Kohm,1%,1/8W,TP,2012	1	SNA	
R423	2007-000546	R-CHIP	20Kohm,5%,1/8W,TP,2012	1	SNA	
R424	2007-000868	R-CHIP	4.7Kohm,1%,1/8W,TP,2012	1	SNA	
R425	2007-000290	R-CHIP	100ohm,5%,1/8W,TP,2012	1	SNA	
R426	2007-000290	R-CHIP	100ohm,5%,1/8W,TP,2012	1	SNA	
R427	2007-000468	R-CHIP	1Kohm,5%,1/8W,TP,2012	1	SNA	
R429	2007-008261	R-CHIP	150Kohm,1%,1/2W,TP,5025	1	SNA	
R430	2007-008261	R-CHIP	150Kohm,1%,1/2W,TP,5025	1	SNA	
R431	2007-008261	R-CHIP	150Kohm,1%,1/2W,TP,5025	1	SNA	
R432	2007-009114	R-CHIP	110Kohm,1%,1/2W,TP,5025	1	SNA	
R500	2007-000455	R-CHIP	18Kohm,1%,1/10W,TP,1608	1	SNA	
R501	2007-000455	R-CHIP	18Kohm,1%,1/10W,TP,1608	1	SNA	
R502	2007-000455	R-CHIP	18Kohm,1%,1/10W,TP,1608	1	SNA	
R503	2007-000614	R-CHIP	24Kohm,1%,1/10W,TP,1608	1	SNA	
R504	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R505	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R506	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R507	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R508	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R509	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	SNA	
R510	2007-000109	R-CHIP	1Mohm,5%,1/10W,TP,1608	1	SNA	
R511	2007-000965	R-CHIP	5.1Kohm,5%,1/10W,TP,1608	1	SNA	
R512	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	SNA	
R513	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R514	2007-000614	R-CHIP	24Kohm,1%,1/10W,TP,1608	1	SNA	
R515	2007-000455	R-CHIP	18Kohm,1%,1/10W,TP,1608	1	SNA	
R516	2007-000455	R-CHIP	18Kohm,1%,1/10W,TP,1608	1	SNA	
R517	2007-000455	R-CHIP	18Kohm,1%,1/10W,TP,1608	1	SNA	
R518	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	

■ OUTDOOR MAIN PCB : DB93-03545J(UH070CAV)(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
R519	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R520	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R521	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R522	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R523	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R524	2007-000455	R-CHIP	18Kohm,1%,1/10W,TP,1608	1	SNA	
R525	2007-000455	R-CHIP	18Kohm,1%,1/10W,TP,1608	1	SNA	
R526	2007-000455	R-CHIP	18Kohm,1%,1/10W,TP,1608	1	SNA	
R527	2007-000455	R-CHIP	18Kohm,1%,1/10W,TP,1608	1	SNA	
R601	2007-000468	R-CHIP	1Kohm,5%,1/8W,TP,2012	1	SNA	
R602	2007-000766	R-CHIP	330ohm,5%,1/8W,TP,2012	1	SNA	
R603	2007-000766	R-CHIP	330ohm,5%,1/8W,TP,2012	1	SNA	
R604	2007-000468	R-CHIP	1Kohm,5%,1/8W,TP,2012	1	SNA	
R701	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R702	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R703	2007-000109	R-CHIP	1Mohm,5%,1/10W,TP,1608	1	SNA	
R704	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	SNA	
R705	2007-000965	R-CHIP	5.1Kohm,5%,1/10W,TP,1608	1	SNA	
R706	2007-000511	R-CHIP	2.4Kohm,5%,1/8W,TP,2012	1	SNA	
R707	2007-000511	R-CHIP	2.4Kohm,5%,1/8W,TP,2012	1	SNA	
R708	2007-000511	R-CHIP	2.4Kohm,5%,1/8W,TP,2012	1	SNA	
R709	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	SNA	
R710	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	SNA	
R711	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	SNA	
R712	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	SNA	
R713	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	SNA	
R721	2007-000763	R-CHIP	330ohm,1%,1/10W,TP,1608	1	SNA	
R722	2007-000613	R-CHIP	24Kohm,1%,1/8W,TP,2012	1	SNA	
R723	2007-000614	R-CHIP	24Kohm,1%,1/10W,TP,1608	1	SNA	
R724	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R805	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R806	2007-000950	R-CHIP	47ohm,5%,1/4W,TP,3216	1	SNA	
R807	2007-000553	R-CHIP	20ohm,5%,1/4W,TP,3216	1	SNA	
R808	2007-000931	R-CHIP	470ohm,5%,1/8W,TP,2012	1	SNA	
R900	2007-001318	R-CHIP	1Kohm,5%,1/4W,TP,3216	1	SNA	
R901	2007-001318	R-CHIP	1Kohm,5%,1/4W,TP,3216	1	SNA	
R902	2007-001318	R-CHIP	1Kohm,5%,1/4W,TP,3216	1	SNA	
R903	2007-001318	R-CHIP	1Kohm,5%,1/4W,TP,3216	1	SNA	
R904	2007-001318	R-CHIP	1Kohm,5%,1/4W,TP,3216	1	SNA	

■ OUTDOOR MAIN PCB : DB93-03545J(UH070CAV)(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
R905	2007-001318	R-CHIP	1Kohm,5%,1/4W,TP,3216	1	SNA	
R906	2007-001318	R-CHIP	1Kohm,5%,1/4W,TP,3216	1	SNA	
R907	2007-001177	R-CHIP	8.2Kohm,5%,1/8W,TP,2012	1	SNA	
R908	2007-001177	R-CHIP	8.2Kohm,5%,1/8W,TP,2012	1	SNA	
R909	2007-001177	R-CHIP	8.2Kohm,5%,1/8W,TP,2012	1	SNA	
R910	2007-000964	R-CHIP	5.1Kohm,5%,1/8W,TP,2012	1	SNA	
R911	2007-000964	R-CHIP	5.1Kohm,5%,1/8W,TP,2012	1	SNA	
R912	2007-000964	R-CHIP	5.1Kohm,5%,1/8W,TP,2012	1	SNA	
R916	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R917	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
RY01	3501-001169	RELAY-POWER	12VDC,0.9W,20000mA,SPST,20mS,10S	1	SA	
RY03	3501-001238	RELAY-POWER	DC12V,3A 250V AC,-,-,10mS,10mS	1	SNA	
RY04	3501-001238	RELAY-POWER	DC12V,3A 250V AC,-,-,10mS,10mS	1	SNA	
RY05	3501-001238	RELAY-POWER	DC12V,3A 250V AC,-,-,10mS,10mS	1	SNA	
RY31	3501-001248	RELAY-MINIATURE	12V,-,11.7mA,DPDT,4mS,4mS	1	SNA	
XTAL01	2802-001179	RESONATOR-CERAMIC	4MHz,0.5%,BK,8x3x5.5mm	1	SNA	
XTAL51	2802-001179	RESONATOR-CERAMIC	4MHz,0.5%,BK,8x3x5.5mm	1	SNA	
ZD21	0403-000282	DIODE-ZENER	MMBZ5232B,5%,225mW,SOT-23,TP	1	SNA	
ZD22	0403-000282	DIODE-ZENER	MMBZ5232B,5%,225mW,SOT-23,TP	1	SNA	
ZD72	0403-000282	DIODE-ZENER	MMBZ5232B,5%,225mW,SOT-23,TP	1	SNA	

■ OUTDOOR SUB PCB : DB93-03470A(UH035CAV)(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
C301	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C302	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C303	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C304	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C305	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C306	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C310	2201-000154	C-CERAMIC,DISC	10nF,+80-20%,2kV,Y5P,TP,20x5mm,7.5	1	SNA	
C311	2201-000154	C-CERAMIC,DISC	10nF,+80-20%,2kV,Y5P,TP,20x5mm,7.5	1	SNA	
C312	2201-000154	C-CERAMIC,DISC	10nF,+80-20%,2kV,Y5P,TP,20x5mm,7.5	1	SNA	
C313	2201-000154	C-CERAMIC,DISC	10nF,+80-20%,2kV,Y5P,TP,20x5mm,7.5	1	SNA	
C505	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C510	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C511	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C512	2401-000287	C-AL	100uF,20%,16V,WT,TP,6.3x11,5	1	SNA	
C513	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C514	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C515	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C516	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C517	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C518	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C519	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C520	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C521	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C527	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C529	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C530	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C531	2203-000189	C-CER,CHIP	100nF,+80-20%,25V,Y5V,1608	1	SNA	
C600	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C601	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C620	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,2012	1	SNA	
C901	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C902	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
C903	2203-001562	C-CER,CHIP	10nF,+80-20%,50V,Y5V,2012	1	SNA	
CD31	0406-001109	DIODE-TVS	SAC5.0,7.6/-/-V,500W,DO-15	1	SNA	
CD32	0406-001109	DIODE-TVS	SAC5.0,7.6/-/-V,500W,DO-15	1	SNA	
CN01	3711-000024	HEADER-BOARD TO CABLE	BOX,3P,1R,2.5mm,STRAIGHT,SN,WHT	1	SNA	
CN03	3711-003873	HEADER-BOARD TO CABLE	BOX,7P,1R,2mm,STRAIGHT,SN,NTR	1	SNA	
CN30	DB98-24921A	ASS'Y-HOOK WHT	UH035EAV,SMAW250A-06 WHT	1	SNA	
CN50	DB98-22299A	ASS'Y-HOOK WHT	INVERTER,SMAW250A-04 WHT	1	SNA	
CN51	DB98-22298A	ASS'Y-HOOK RED	INVERTER,SMAW250A-O4 RED	1	SNA	

■ OUTDOOR SUB PCB : DB93-03470A(UH035CAV)(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
CN61	3711-004484	HEADER-BOARD TO CABLE	BOX,5P,1R,2mm,STRAIGHT,SN,NTR	1	SNA	
IC20	1006-001325	IC-BUS TRANSCEIVER	1487,SO,8P,4.9x3.8 mm,SINGLE,ST,PLASTIC,5V,	1	SNA	
			-40to+85CC,520mW,1,1,1.5/5.25V,-			
IC30	0801-000393	IC-CMOS LOGIC	74HC86,OR GATE,SOP,14P,150MIL,QUAD,ST,-,	1	SNA	
			2.0/6.0V,0.26V,-40to+85C,180mW,4.2V,1uA			
IC31	0604-001003	PHOTO-COUPLER	TR,50-150%,200mW,DIP-4,ST	1	SNA	
IC50	DB09-00461A	IC MICOM	MB90F823,-,80 P,5 V,24 MHz,STM-0580-OA,24,16,	1	SNA	
			QFP,QFP,14x20 mm,16,-40~85			
IC54	0506-000175	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1	SNA	
IC55	0506-000175	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1	SNA	
IC56	0506-000175	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1	SNA	
IC57	0506-000175	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1	SNA	
IC59	1203-003334	IC-RESET	S-801,SOT-23,5P,2.9x1.6mm,PLASTIC,3.716/4.284V,	1	SNA	
			256mW,-,2.5mA,-,TP			
PCB	DB41-00415A	PCB SUB-MAIN	BAC-INV,FR4,2,485,1.6T,80*50,-,-,-,MICOM+485	1	SNA	
Q901	0504-000001	TR-DIGITAL	DTA114EKA,PNP,200mW,10K/10K,SOT-23,TP	1	SNA	
Q902	0504-000001	TR-DIGITAL	DTA114EKA,PNP,200mW,10K/10K,SOT-23,TP	1	SNA	
Q903	0504-000001	TR-DIGITAL	DTA114EKA,PNP,200mW,10K/10K,SOT-23,TP	1	SNA	
Q904	0504-000001	TR-DIGITAL	DTA114EKA,PNP,200mW,10K/10K,SOT-23,TP	1	SNA	
R301	2007-000023	R-CHIP	120ohm,5%,1/8W,TP,2012	1	SNA	
R302	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R303	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R304	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R306	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R307	2007-000944	R-CHIP	47Kohm,5%,1/4W,TP,3216	1	SNA	
R308	2007-000944	R-CHIP	47Kohm,5%,1/4W,TP,3216	1	SNA	
R309	2007-000944	R-CHIP	47Kohm,5%,1/4W,TP,3216	1	SNA	
R310	2007-000944	R-CHIP	47Kohm,5%,1/4W,TP,3216	1	SNA	
R311	2007-000944	R-CHIP	47Kohm,5%,1/4W,TP,3216	1	SNA	
R312	2007-000944	R-CHIP	47Kohm,5%,1/4W,TP,3216	1	SNA	
R313	2007-000944	R-CHIP	47Kohm,5%,1/4W,TP,3216	1	SNA	
R314	2007-000944	R-CHIP	47Kohm,5%,1/4W,TP,3216	1	SNA	
R315	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	1	SNA	
R414	2007-000455	R-CHIP	18Kohm,1%,1/10W,TP,1608	1	SNA	
R499	2007-000455	R-CHIP	18Kohm,1%,1/10W,TP,1608	1	SNA	
R500	2007-000455	R-CHIP	18Kohm,1%,1/10W,TP,1608	1	SNA	
R501	2007-000455	R-CHIP	18Kohm,1%,1/10W,TP,1608	1	SNA	
R502	2007-000614	R-CHIP	24Kohm,1%,1/10W,TP,1608	1	SNA	
R503	2007-000614	R-CHIP	24Kohm,1%,1/10W,TP,1608	1	SNA	
R504	2007-000455	R-CHIP	18Kohm,1%,1/10W,TP,1608	1	SNA	

■ OUTDOOR SUB PCB : DB93-03470A(UH035CAV)(cont.)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
R505	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R506	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R507	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R508	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	SNA	
R509	2007-000763	R-CHIP	330ohm,1%,1/10W,TP,1608	1	SNA	
R510	2007-000763	R-CHIP	330ohm,1%,1/10W,TP,1608	1	SNA	
R511	2007-000964	R-CHIP	5.1Kohm,5%,1/8W,TP,2012	1	SNA	
R512	2007-000468	R-CHIP	1Kohm,5%,1/8W,TP,2012	1	SNA	
R513	2007-000455	R-CHIP	18Kohm,1%,1/10W,TP,1608	1	SNA	
R514	2007-000763	R-CHIP	330ohm,1%,1/10W,TP,1608	1	SNA	
R515	2007-000763	R-CHIP	330ohm,1%,1/10W,TP,1608	1	SNA	
R555	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	SNA	
R556	2007-000109	R-CHIP	1Mohm,5%,1/10W,TP,1608	1	SNA	
R557	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	SNA	
R560	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	SNA	
R901	2007-001318	R-CHIP	1Kohm,5%,1/4W,TP,3216	1	SNA	
R902	2007-001318	R-CHIP	1Kohm,5%,1/4W,TP,3216	1	SNA	
R903	2007-001318	R-CHIP	1Kohm,5%,1/4W,TP,3216	1	SNA	
R904	2007-001318	R-CHIP	1Kohm,5%,1/4W,TP,3216	1	SNA	
R905	2007-001318	R-CHIP	1Kohm,5%,1/4W,TP,3216	1	SNA	
R906	2007-001318	R-CHIP	1Kohm,5%,1/4W,TP,3216	1	SNA	
R907	2007-001318	R-CHIP	1Kohm,5%,1/4W,TP,3216	1	SNA	
R908	2007-001177	R-CHIP	8.2Kohm,5%,1/8W,TP,2012	1	SNA	
R909	2007-001177	R-CHIP	8.2Kohm,5%,1/8W,TP,2012	1	SNA	
R910	2007-001177	R-CHIP	8.2Kohm,5%,1/8W,TP,2012	1	SNA	
R911	2007-000964	R-CHIP	5.1Kohm,5%,1/8W,TP,2012	1	SNA	
R912	2007-000964	R-CHIP	5.1Kohm,5%,1/8W,TP,2012	1	SNA	
R913	2007-000964	R-CHIP	5.1Kohm,5%,1/8W,TP,2012	1	SNA	
RY31	3501-001248	RELAY-MINIATURE	12V,-,11.7mA,DPDT,4mS,4mS	1	SNA	
WIRE-COMM 485	DB39-01017F	CONNECT WIRE-COMM	KH035EAV,UL1015,AWG #22,2,180,RED/BLUE,22, 179974-1,-,TP,230V/50Hz,3.96mm,180,AWG	1	SNA	
WIRE-EARTH	DB39-00514F	CBF LEAD WIRE-EARTH	-,KFR-35(25)GW/GPI,-,200,-,-,-,GRN/YEL,-,-,-	1	SNA	
XTAL51	2802-001179	RESONATOR-CERAMIC	4MHz,0.5%,BK,8x3x5.5mm	1	SNA	

■ OUTDOOR DISPLAY PCB : DB93-03662A

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
D901	0401-000005	DIODE-SWITCHING	1N4148,75V,150mA,DO-35,TP	1	SNA	
D902	0401-000005	DIODE-SWITCHING	1N4148,75V,150mA,DO-35,TP	1	SNA	
LED91	0601-000402	LED	ROUND,YEL,3mm,585nm,-	1	SNA	
LED92	0601-000552	LED	ROUND,GRN,3mm,570nm	1	SNA	
LED93	0601-001373	LED	ROUND,RED,3mm,630nm	1	SNA	
K1	3404-000165	SWITCH-TACT	12V,50mA,160gf,6x6mm,SPST	1	SNA	
K2	3404-000165	SWITCH-TACT	12V,50mA,160gf,6x6mm,SPST	1	SNA	
CN953	3711-004068	HEADER-BOARD TO CABLE	BOX,5P,1R,2mm,ANGLE,SN,WHT	1	SNA	
PCB	DB41-00447A	PCB DISPLAY	AS24BPB,FR-1,1,00,1.6T,45,Q,15,-,-	1	SNA	

■ EMI PCB : DB93-02968B(UH035CAV)

Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
C001	2201-000540	C-CERAMIC,DISC	KFR-35GW/GPI,4.7nF,2kV	1	SNA	
C002	2201-000540	C-CERAMIC,DISC	KFR-35GW/GPI,4.7nF,2kV	1	SNA	
C003	2301-001285	C-FILM,LEAD-PPF	680nF,10%,275V,BK,31x11x21mm,27.5	1	SNA	
C004	2301-001285	C-FILM,LEAD-PPF	680nF,10%,275V,BK,31x11x21mm,27.5	1	SNA	
C010	2201-000540	C-CERAMIC,DISC	KFR-35GW/GPI,4.7nF,2kV	1	SNA	
C011	2201-000540	C-CERAMIC,DISC	KFR-35GW/GPI,4.7nF,2kV	1	SNA	
DSA	DB47-00016A	POSISTOR	DSA-332mA,2pF MAX,100Mohm,ASM-3500	1	SNA	
F001	3602-001038	FUSE-CLIP	250V,30A,10mohm	1	SNA	
FT00	DB98-17990A	ASSY-EMI FILTER	LS615044,SH12BWH	1	SNA	
FT01	DB98-17990A	ASSY-EMI FILTER	LS615044,SH12BWH	1	SNA	
FUSE	3601-001159	FUSE	250V,20A,SLOW-BLOW,CERAMIC	1	SNA	
VA04	1405-000154	VARISTOR	560V,2500A,17.5x7.5mm,TP	1	SNA	
VA07	1405-000154	VARISTOR	560V,2500A,17.5x7.5mm,TP	1	SNA	
VA08	1405-000154	VARISTOR	560V,2500A,17.5x7.5mm,TP	1	SNA	
VA09	1405-000154	VARISTOR	560V,2500A,17.5x7.5mm,TP	1	SNA	
C/W POWER	DB39-00998C	WIRE-POWER	UL1015 AWG #16	1	SNA	
L/W AC_L	DB39-00961T	WIRE-AC_L	UL1015 AWG #16, BRN	1	SNA	
L/W AC_N	DB39-00961U	WIRE-AC_N	UL1015 AWG #16, SKYBLU	1	SNA	
L/W EARTH	DB39-00514F	WIRE_EARTH	UL1015 AWG #16, GRN/YEL 280mm	1	SNA	

■ EMI PCB : DB93-03546A(UH052CAV)

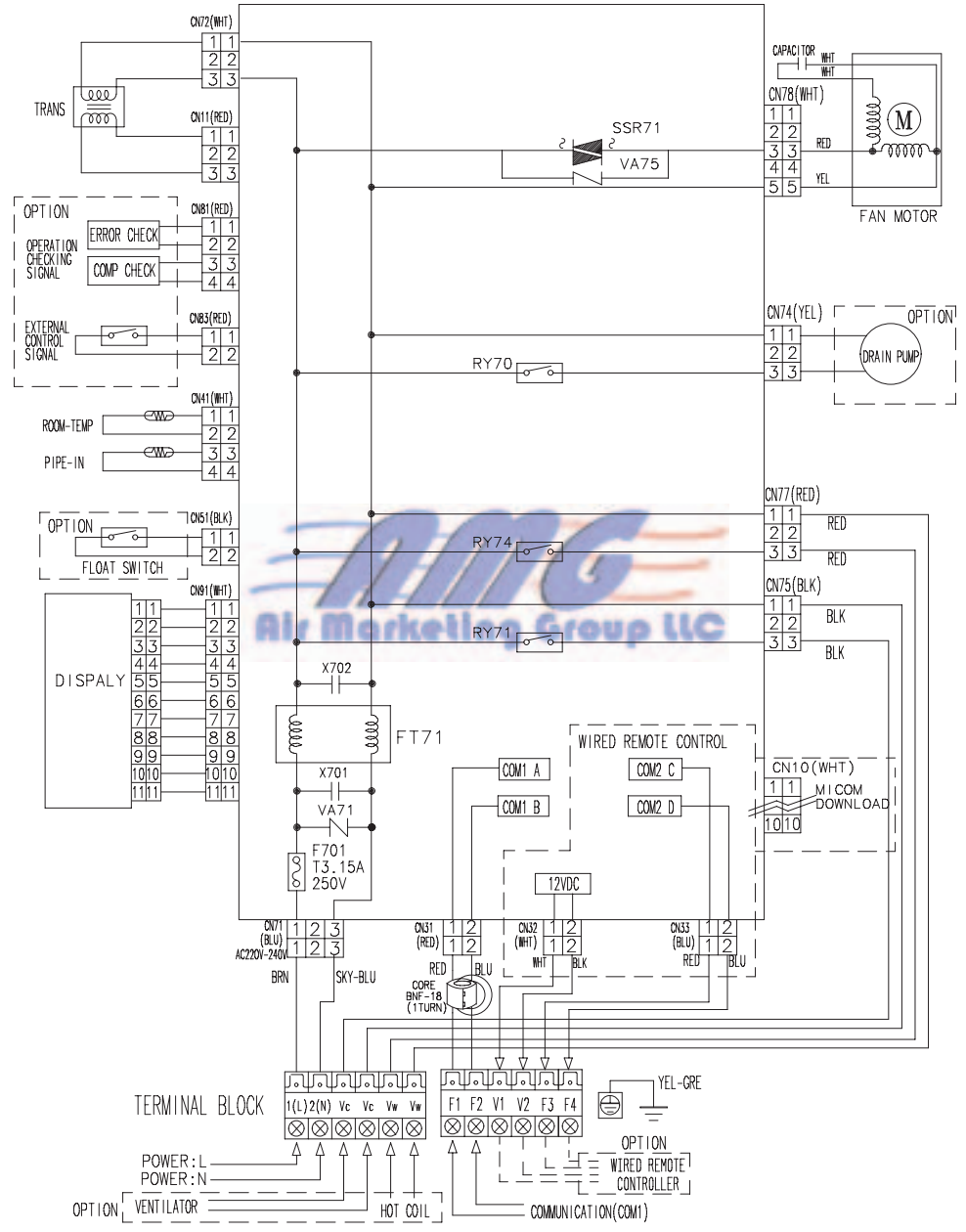
Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
C003	2301-001285	C-FILM,LEAD-PPF	680nF,10%,275V,BK,31x11x21mm,27.5	1	SNA	
C004	2201-000540	C-CERAMIC,DISC	4.7nF,20%,2KV,Y5U,BK,12x5mm,10	1	SNA	
C005	2201-000540	C-CERAMIC,DISC	4.7nF,20%,2KV,Y5U,BK,12x5mm,10	1	SNA	
C007	2301-001285	C-FILM,LEAD-PPF	680nF,10%,275V,BK,31x11x21mm,27.5	1	SNA	
C009	2201-000540	C-CERAMIC,DISC	4.7nF,20%,2KV,Y5U,BK,12x5mm,10	1	SNA	
C010	2201-000540	C-CERAMIC,DISC	4.7nF,20%,2KV,Y5U,BK,12x5mm,10	1	SNA	
DSA	DB47-00016A	POSISTOR	DSA-332mA,2pF MAX,100Mohm,ASM-3500	1	SA	
FT00	DB27-00037A	COIL CHOKE	SSC3120030B,AS18BPB,3.0mH,10%,-,200mohm, 18.0A,Φ31x20 x15,-,42c30mm,5mm,2.0mm,Di	1	SNA	
FT01	DB27-00037A	COIL CHOKE	SSC3120030B,AS18BPB,3.0mH,10%,-,200mohm, 18.0A,Φ31x20 x15,-,42x30mm,5mm,2.0mm,Di	1	SNA	
FUSE	3602-001038	FUSE-CLIP	250V,30A,10mohm	1	SNA	
FUSE_1	3601-001198	FUSE-CARTRIDGE	250V,20A,SLOW-BLOW,CERAMIC,6.35x31.3mm	1	SNA	
L	3712-001139	CONNECTOR-TERMINAL	TAB,MALE,-,6.35x0.8mm	1	SNA	
L/W EARTH	DB39-00514G	CONNECT WIRE-EARTH	AS24(18)BPB,#1015 16 AWG,UL1015,1P,150, GRN YEL,16,ST710095-2,-,BK,230V/50Hz,3.96	1	SNA	
L/W POWER AC	DB39-00998D	CBF LEAD WIRE-AC POWER	-,AS24(18)BPB,2,180,-,-,-,BRN,-,-,-	1	SNA	
N	3712-001139	CONNECTOR-TERMINAL	TAB,MALE,-,6.35x0.8mm	1	SNA	
PCB	DB41-00433A	PCB SUB-EMI BOARD	AS18BPB,FR-4,2,1.0,1.6T,-,-,-,-,-	1	SNA	
R002	2001-001150	R-CARBON(S)	470Kohm,5%,1/2W,AA,TP,2.4x6.4mm	1	SNA	
R003	2001-001150	R-CARBON(S)	470Kohm,5%,1/2W,AA,TP,2.4x6.4mm	1	SNA	
VA01	1405-000154	VARISTOR	460Vdc,2500A,17.5x7.5mm,TP	1	SNA	
VA02	1405-000154	VARISTOR	460Vdc,2500A,17.5x7.5mm,TP	1	SNA	
VA03	1405-000154	VARISTOR	460Vdc,2500A,17.5x7.5mm,TP	1	SNA	
VA04	1405-000154	VARISTOR	460Vdc,2500A,17.5x7.5mm,TP	1	SNA	
VA05	1405-000154	VARISTOR	460Vdc,2500A,17.5x7.5mm,TP	1	SNA	

■ EMI PCB : DB93-03546D(UH070CAV)

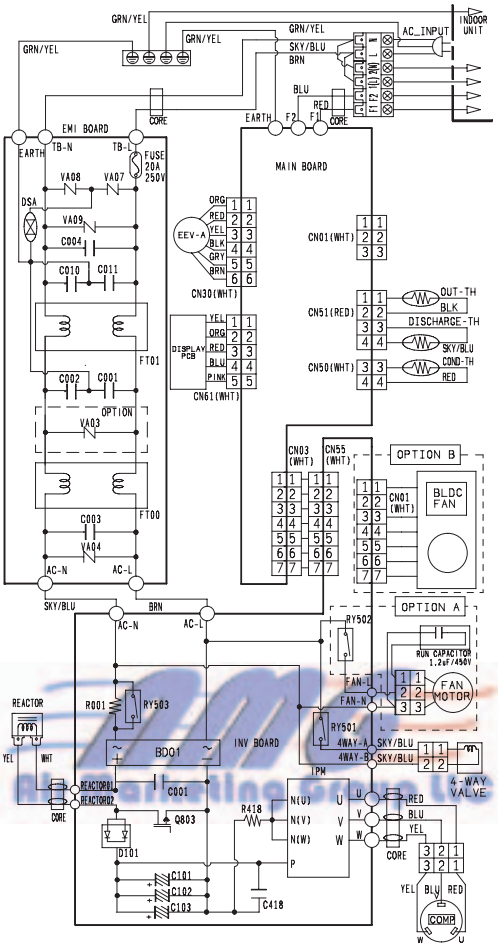
Location No.	Code No.	Description	Specification	Q'TY	SA/SNA	Remark
C003	2301-001285	C-FILM,LEAD-PPF	680nF,10%,275V,BK,31x11x21mm,27.5	1	SNA	
C004	2201-000540	C-CERAMIC,DISC	4.7nF,20%,2KV,Y5U,BK,12x5mm,10	1	SNA	
C005	2201-000540	C-CERAMIC,DISC	4.7nF,20%,2KV,Y5U,BK,12x5mm,10	1	SNA	
C007	2301-001285	C-FILM,LEAD-PPF	680nF,10%,275V,BK,31x11x21mm,27.5	1	SNA	
C009	2201-000540	C-CERAMIC,DISC	4.7nF,20%,2KV,Y5U,BK,12x5mm,10	1	SNA	
C010	2201-000540	C-CERAMIC,DISC	4.7nF,20%,2KV,Y5U,BK,12x5mm,10	1	SNA	
DSA	DB47-00016A	POSISTOR	DSA-332mA,2pF MAX,100Mohm,ASM-3500	1	SA	
FT00	DB27-00037A	COIL CHOKE	SSC3120030B,AS18BPB,3.0mH,10%,-,200mohm, 18.0A,Φ31x20 x15,-,42x30mm,5mm,2.0mm,Di	1	SNA	
FT01	DB27-00037A	COIL CHOKE	SSC3120030B,AS18BPB,3.0mH,10%,-,200mohm, 18.0A,Φ31x20 x15,-,42x30mm,5mm,2.0mm,Di	1	SNA	
FUSE	3602-001038	FUSE-CLIP	250V,30A,10mohm	1	SNA	
FUSE_1	3601-001381	FUSE-CARTRIDGE	250Vac,30Aac,FAST-ACTING,CERAMIC,31.8x6.35	1	SNA	
L	3712-001139	CONNECTOR-TERMINAL	TAB,MALE,-,6.35x0.8mm	1	SNA	
L/W EARTH	DB39-00514G	CONNECT WIRE-EARTH	AS24(18)BPB,#1015 16 AWG,UL1015,1P,150, GRN YEL,16,ST710095-2,-,BK,230V/50Hz,3.96	1	SNA	
L/W POWER AC	DB39-00998G	CBF LEAD WIRE-AC POWER	-,UH070EAV,-,200,-,-,-,BRN,-,-,-	1	SNA	
N	3712-001139	CONNECTOR-TERMINAL	TAB,MALE,-,6.35x0.8mm	1	SNA	
PCB	DB41-00433A	PCB SUB-EMI BOARD	AS18BPB,FR-4,2,1.0,1.6T,-,-,-,-,-	1	SNA	
R002	2001-001150	R-CARBON(S)	470Kohm,5%,1/2W,AA,TP,2.4x6.4mm	1	SNA	
R003	2001-001150	R-CARBON(S)	470Kohm,5%,1/2W,AA,TP,2.4x6.4mm	1	SNA	
VA01	1405-000154	VARISTOR	460Vdc,2500A,17.5x7.5mm,TP	1	SNA	
VA02	1405-000154	VARISTOR	460Vdc,2500A,17.5x7.5mm,TP	1	SNA	
VA03	1405-000154	VARISTOR	460Vdc,2500A,17.5x7.5mm,TP	1	SNA	
VA04	1405-000154	VARISTOR	460Vdc,2500A,17.5x7.5mm,TP	1	SNA	
VA05	1405-000154	VARISTOR	460Vdc,2500A,17.5x7.5mm,TP	1	SNA	

7. Wiring Diagram

7-1 Indoor Unit



■ UH035CAV

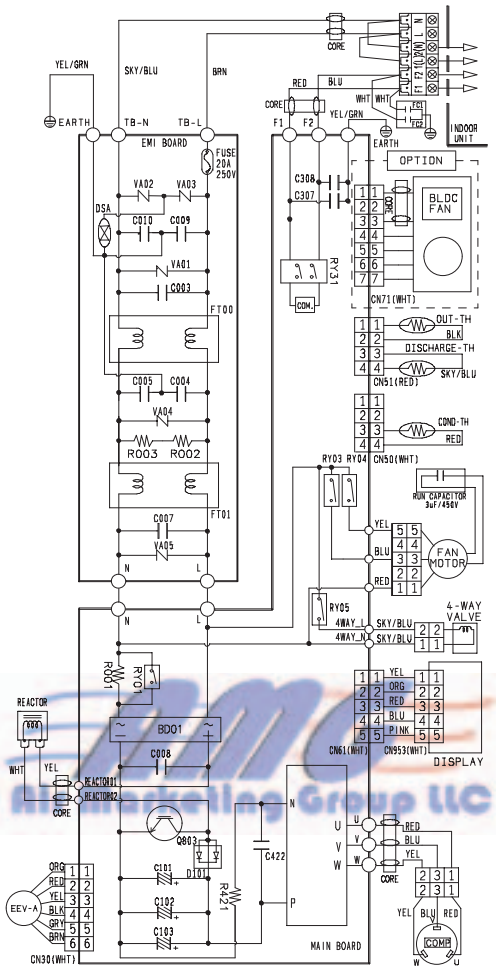


LED PATTERN			DESCRIPTION
YEL	GRN	RED	
×	×	×	Power Off / Vdd Error
×	×	◎	Comp Peak Current (O.C.)
×	×	●	Abnormal Communication
×	●	●	
×	◎	×	Comp Starting Error
×	◎	●	Normal Operation
×	●	◎	DC-link voltage Over/Under Error
×	●	×	Comp Lock Error
◎	×	×	Capacity Miss Match
◎	×	◎	Outdoor Sensor Error
◎	×	●	Discharge Over Temp
◎	◎	×	Discharge Sensor Error
●	×	×	FAN Error
◎	◎	●	Current Sensor Error
◎	●	×	Comp Vm Limit Error
◎	●	◎	Cond Sensor Error
◎	●	●	1min. Time out Comm
●	×	◎	Option Error(EEPROM)
●	×	●	Comp Rotation Error
●	◎	◎	DC-LINK Voltage Sensor Error
●	●	×	GAS Leak Error
●	●	◎	AC Zero-Crossing Error
●	◎	●	Unit/PFC Over Current Trip
●	◎	×	Operation condition secession
●	●	●	Power ON Reset(1sec)
×	◎	◎	Test Operation at Cooling Mode
◎	◎	◎	Test Operation at Heating Mode

● LED ON
◎ LED BLINKING
× LED OFF

OPTION		FAN TYPE
OPTION A	OPTION B	
○	×	AC FAN ONLY
×	○	BLDC FAN ONLY

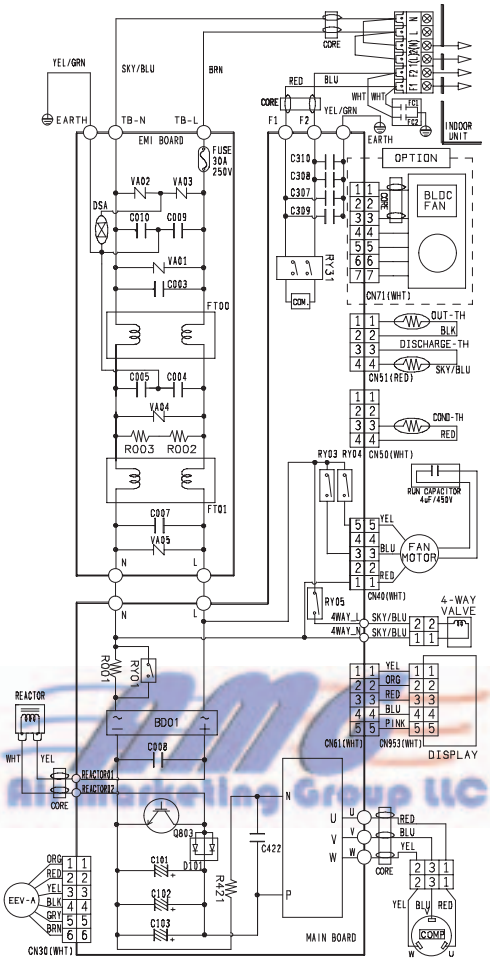
■ UH052CAV



LED PATTERN			DESCRIPTION
YEL	GRN	RED	
○	○	○	Power Off / VDD NG
○	○	◎	IPM Over Current(O.C)
○	○	●	Abnormal Serial communication
○	●	●	(Display Board:Indoor<->Outdoor)
○	◎	●	Normal Operation
○	◎	○	Comp Starting error
○	●	○	Comp Lock error
○	●	◎	DC-Link voltage under/over error
◎	○	◎	Outdoor temp sensor error(Dual/Single)
◎	○	●	Discharge over temperature(Dual/Single)
◎	◎	○	Discharge temp sensor error(Dual/Single)
◎	◎	●	current sensor error
◎	●	◎	Comp Ylimit error
◎	●	◎	Coil temp sensor error(Dual/Single)
◎	●	●	1min. Time out Comm. (Display Board:Onboard:Indoor<->Outdoor)
●	○	○	Fan error
●	○		OTP error
●	○	●	Comp rotation error
●	◎	○	Operation condition secession(Dual only)
●	◎	◎	DC-Link voltage sensor error
●	◎	●	I-Trip error / PFC Over current
●	●	○	GAS Leak error(Dual/Single)
●	●	◎	AC Line Zero Cross Signal out
●	●	●	Power ON reset(1sec)
◎	○	○	capacity miss match
○	◎	◎	Test Operation Cooling Mode
◎	◎	◎	Test Operation Heating Mode

● LED ON
○ LED OFF
◎ LED BLINKING

■ UH070CAV

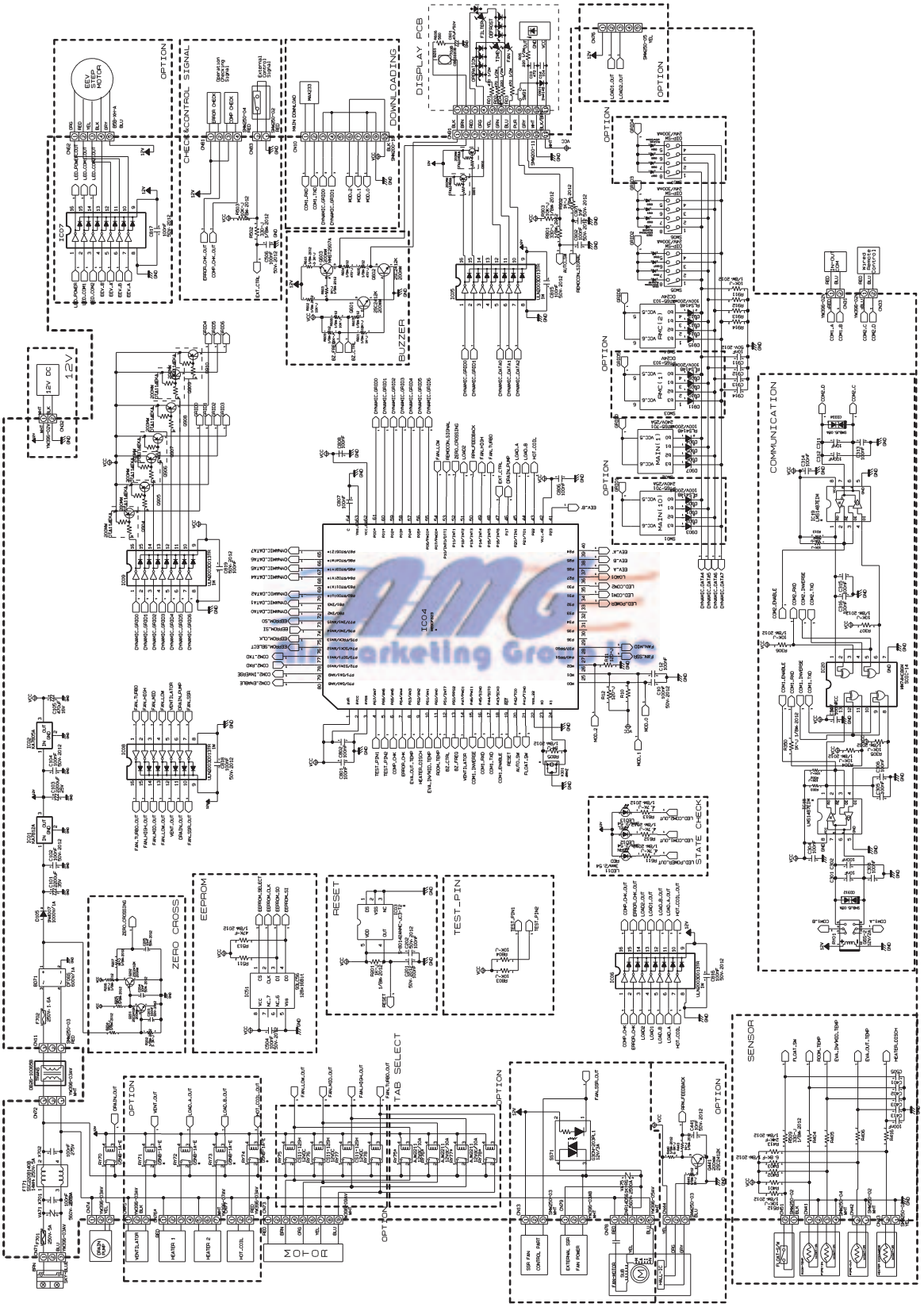


LED PATTERN			DESCRIPTION
YEL	GRN	RED	
○	○	○	Power Off / VDD NG
○	○	◎	IPM Over Current(O,C)
○	○	●	Abnormal Serial communication
○	●	●	(Display Board:Indoor<->Outdoor)
○	◎	●	Normal Operation
○	◎	○	Comp Starting error
○	●	○	Comp Lock error
○	●	◎	DC-Link voltage under/over error
◎	○	◎	Outdoor temp sensor error(Dual/Single)
◎	○	●	Discharge over temperature(Dual/Single)
◎	◎	○	Discharge temp sensor error(Dual/Single)
◎	◎	●	current sensor error
◎	●	◎	Comp Vlimit error
◎	●	◎	Coil temp sensor error(Dual/Single)
◎	●	●	1min. Time out Comm.
			(Display Board:Onboard:Indoor<->Outdoor)
●	○	○	Fan error
●	○		OTP error
●	○	●	Comp rotation error
●	◎	○	Operation condition secession(Dual only)
●	◎	◎	DC-Link voltage sensor error
●	◎	●	I-Trip error / PFC Over current
●	●	○	GAS Leak error(Dual/Single)
●	●	◎	AC Line Zero Cross Signal out
●	●	●	Power ON reset(1sec)
◎	○	○	capacity miss match
○	◎	◎	Test Operation Cooling Mode
◎	◎	◎	Test Operation Heating Mode

● LED ON
○ LED OFF
◎ LED BLINKING

8. Schematic Diagram

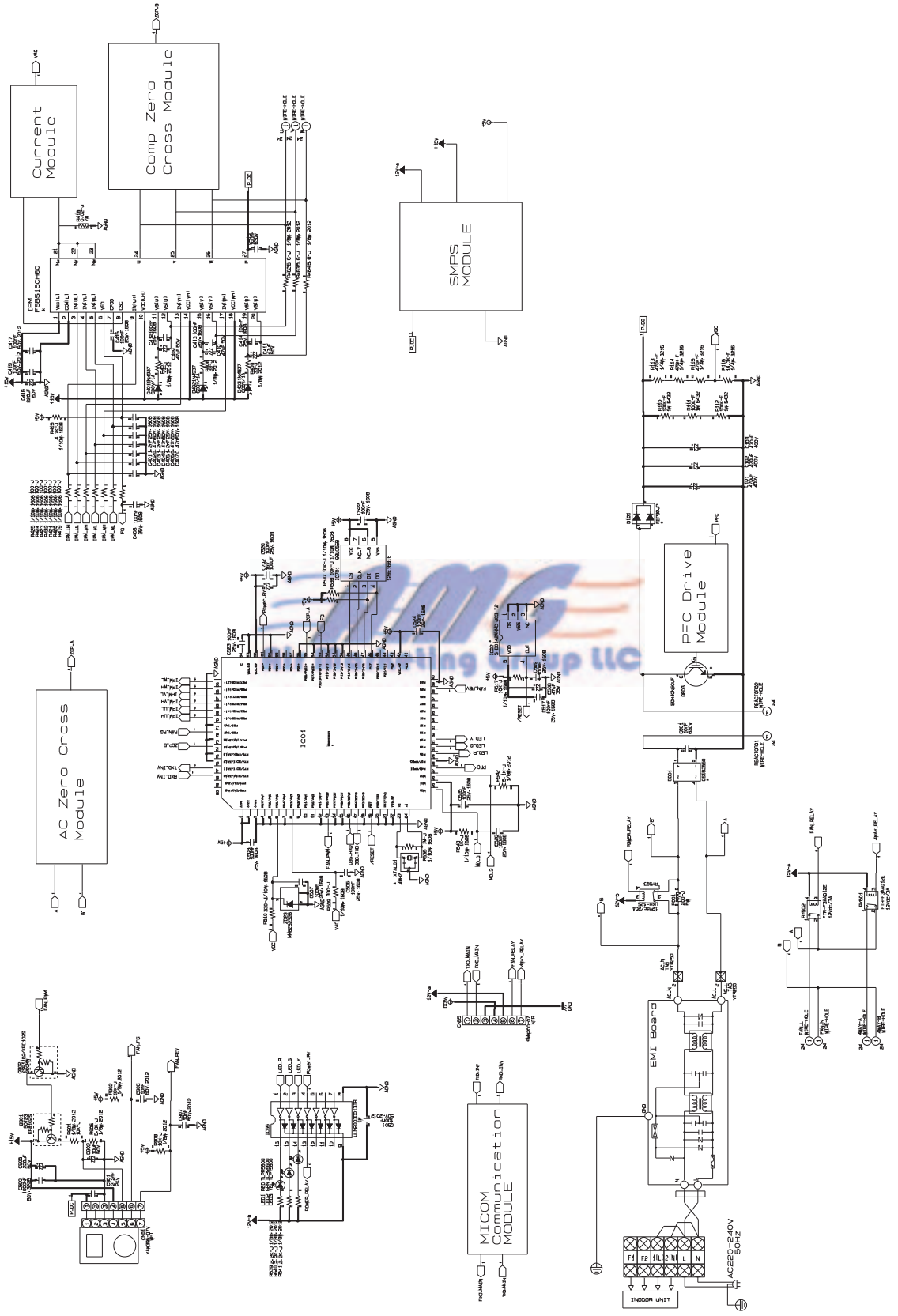
8-1 Indoor Unit



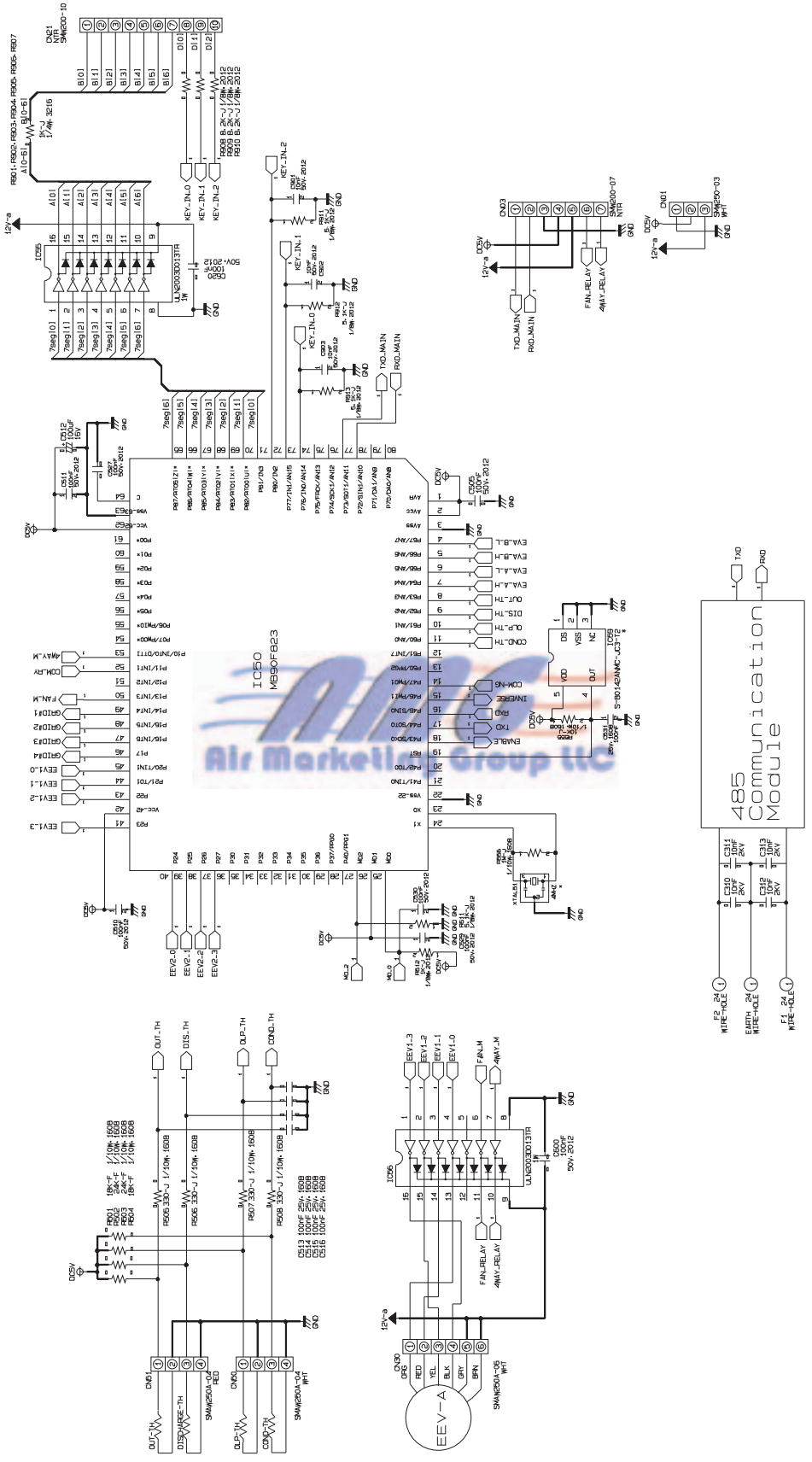
8-2 Outdoor Unit

8-2-1 UH035CAV

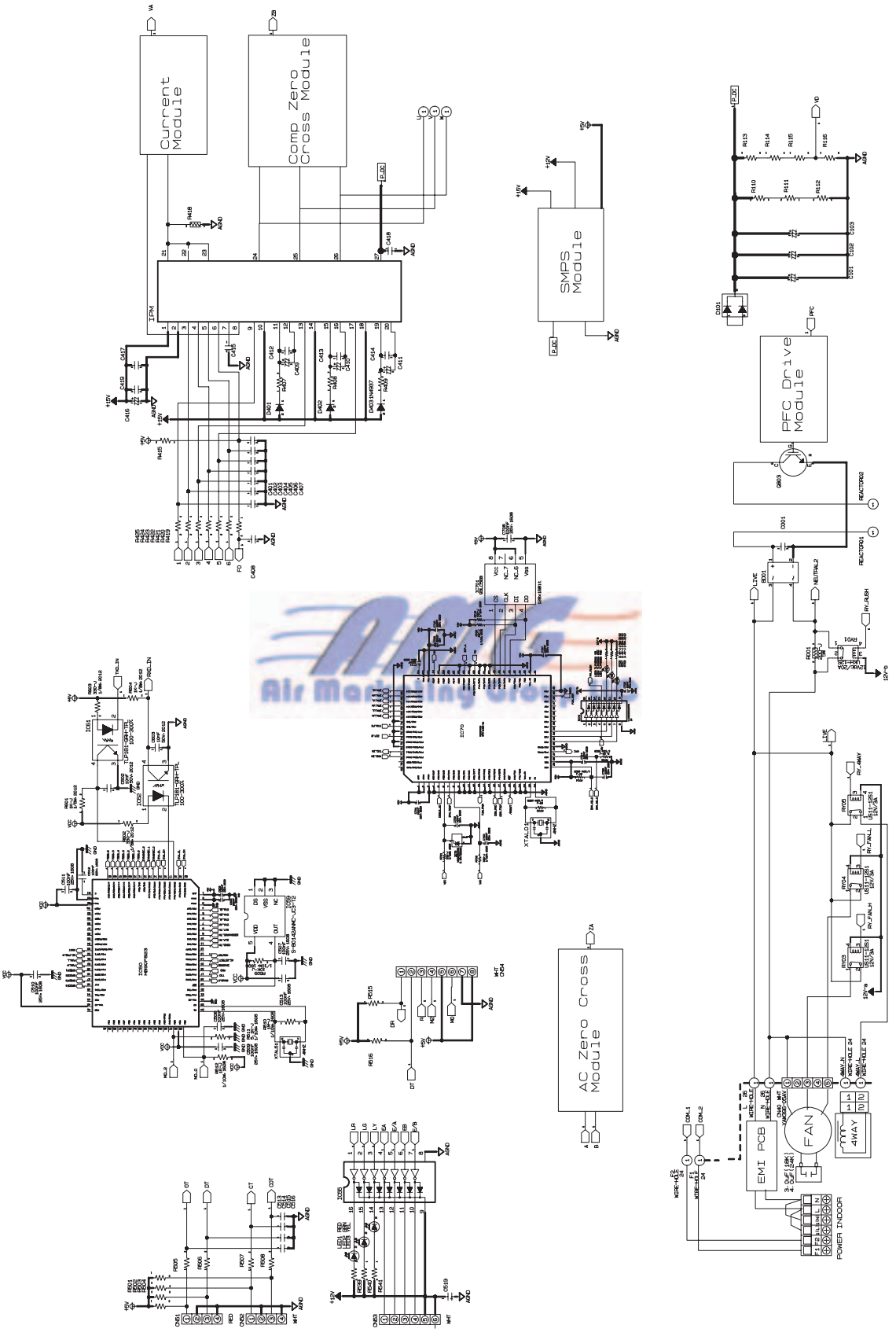
■ Inverter



■ Main



8-2-2 UH052CAV/UH070CAV

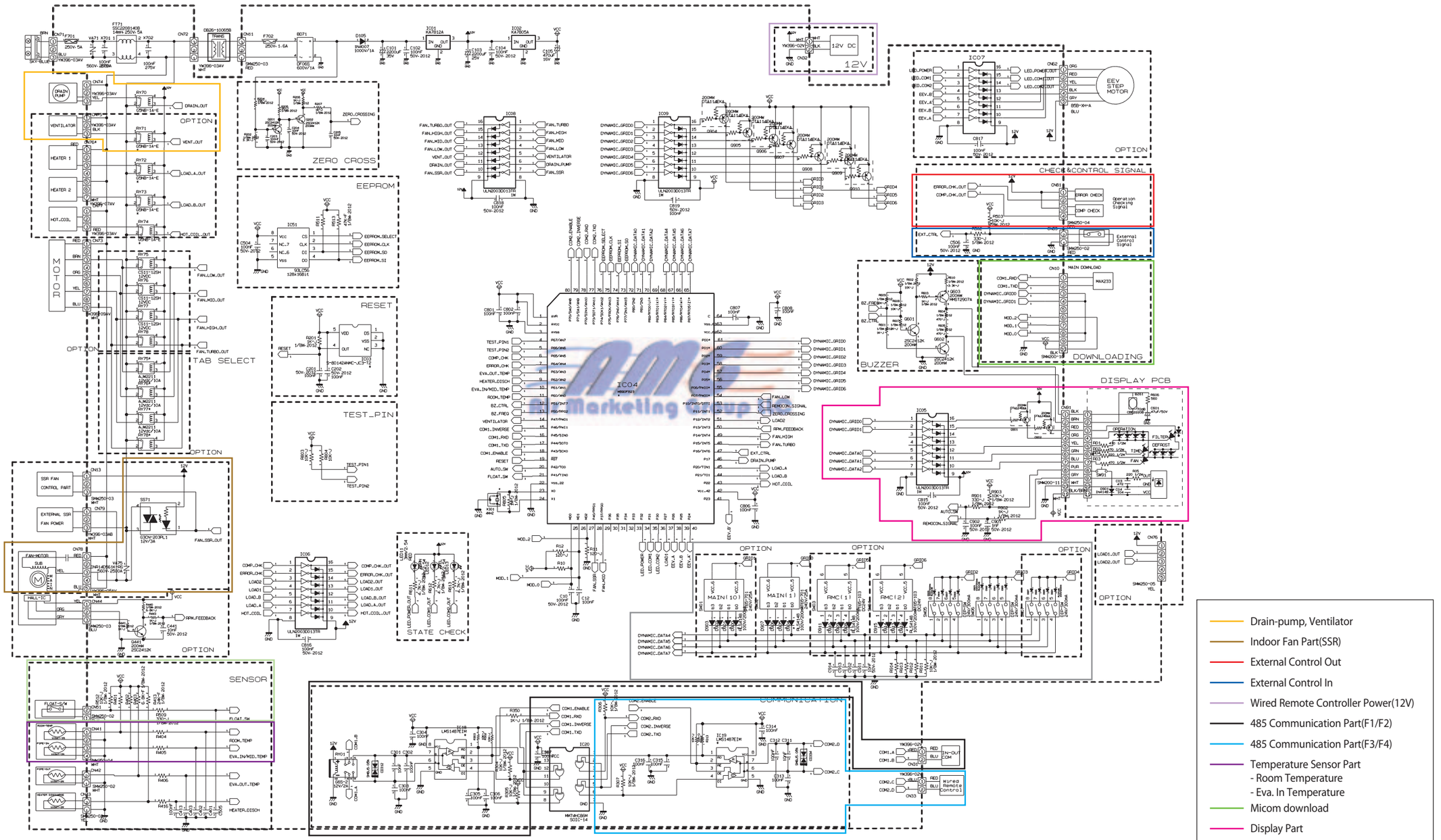


MEMO

9. Circuit Descriptions

9-1 PCB Circuit Descriptions

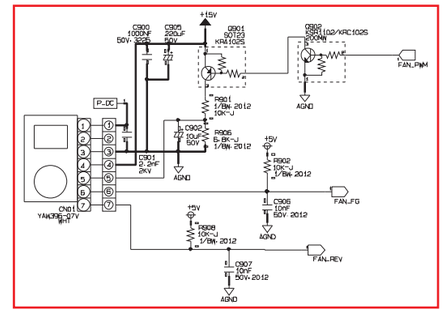
9-1-1 Indoor Unit

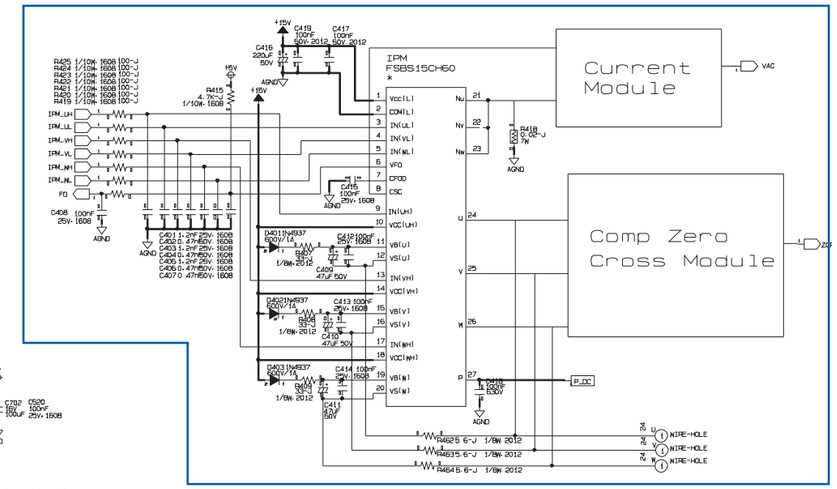


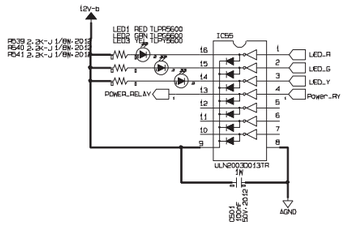
Circuit Descriptions

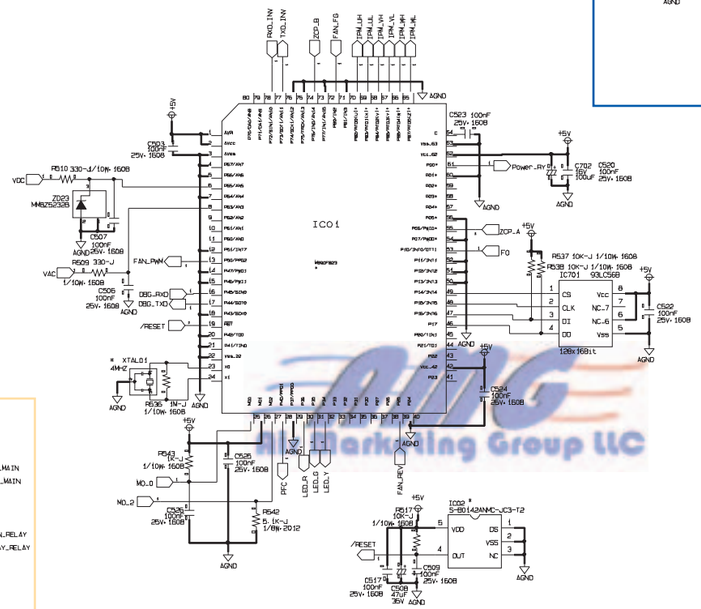
9-1-2 Outdoor Unit(UH035CAV)

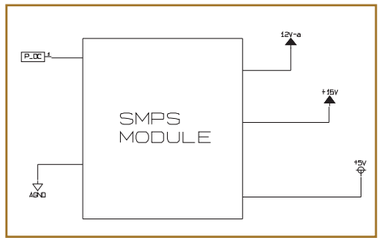
■ Inverter

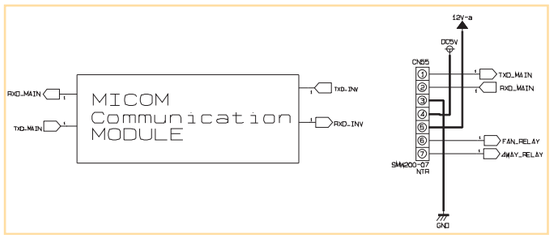


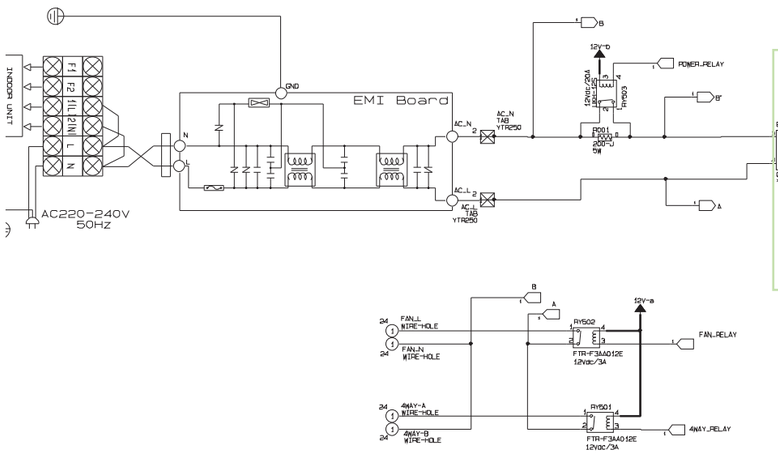


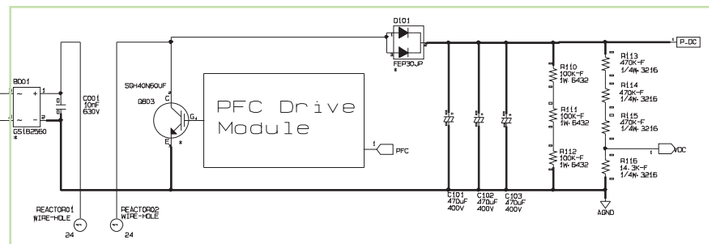






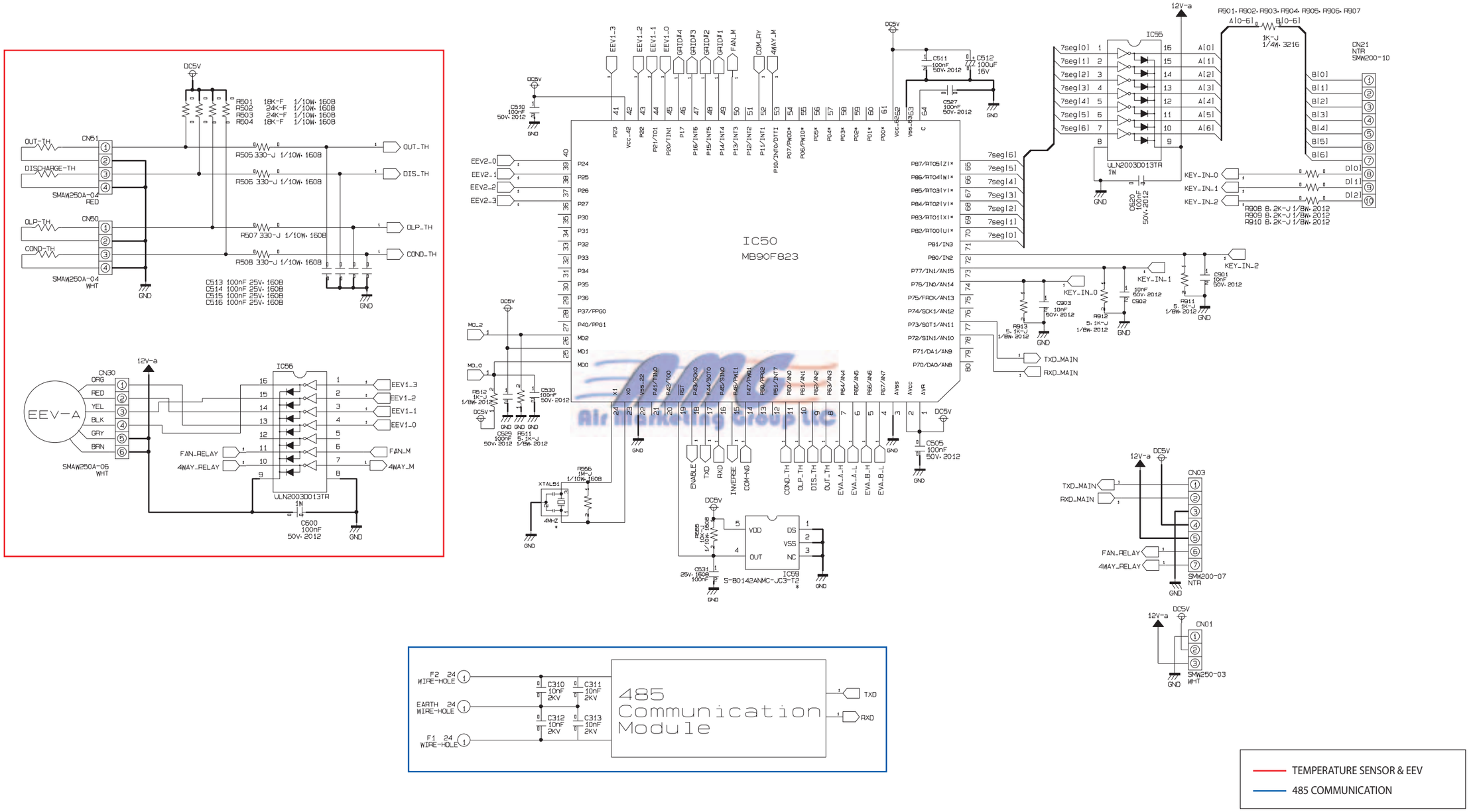






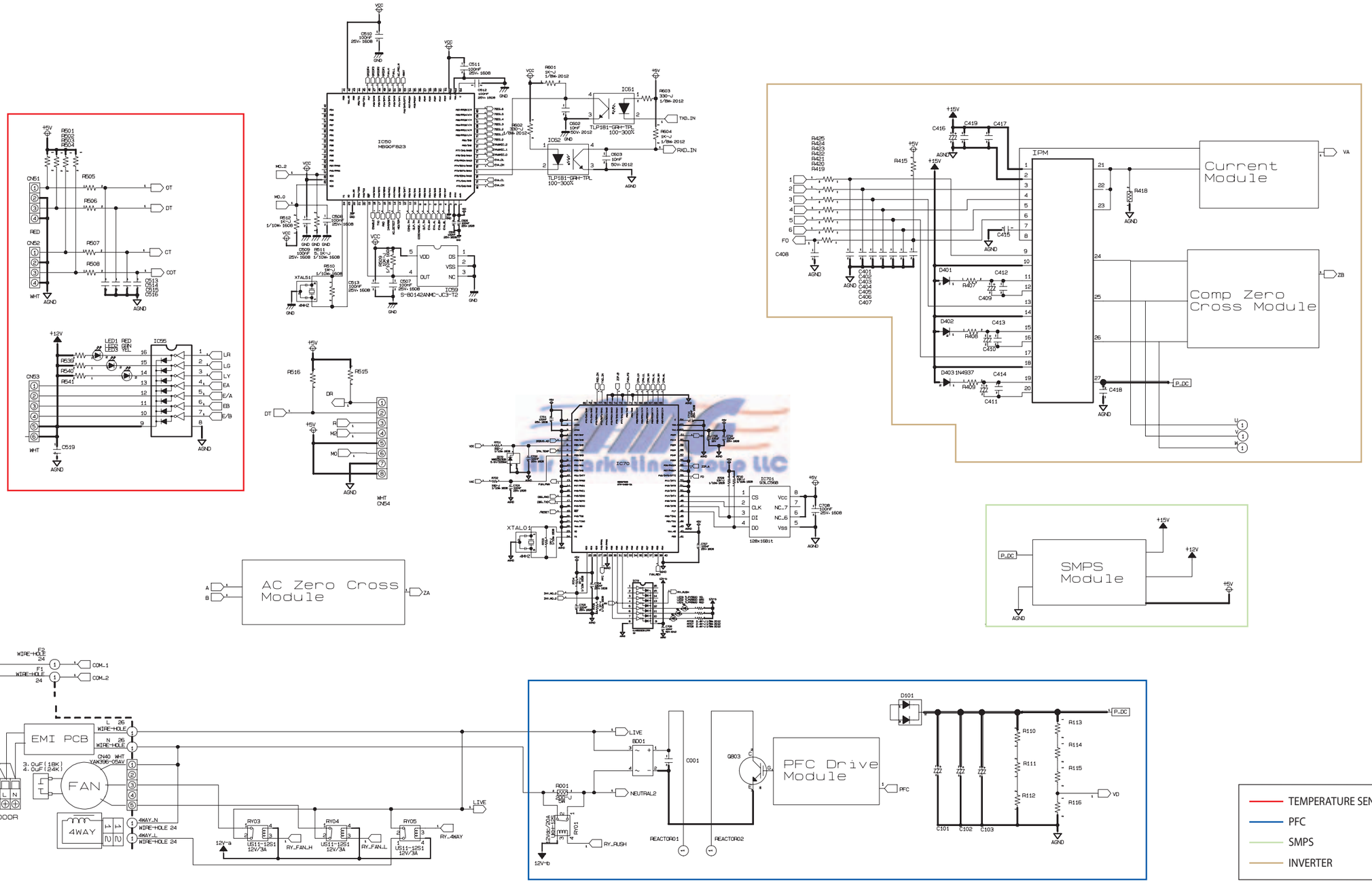
Circuit Descriptions

■ Main



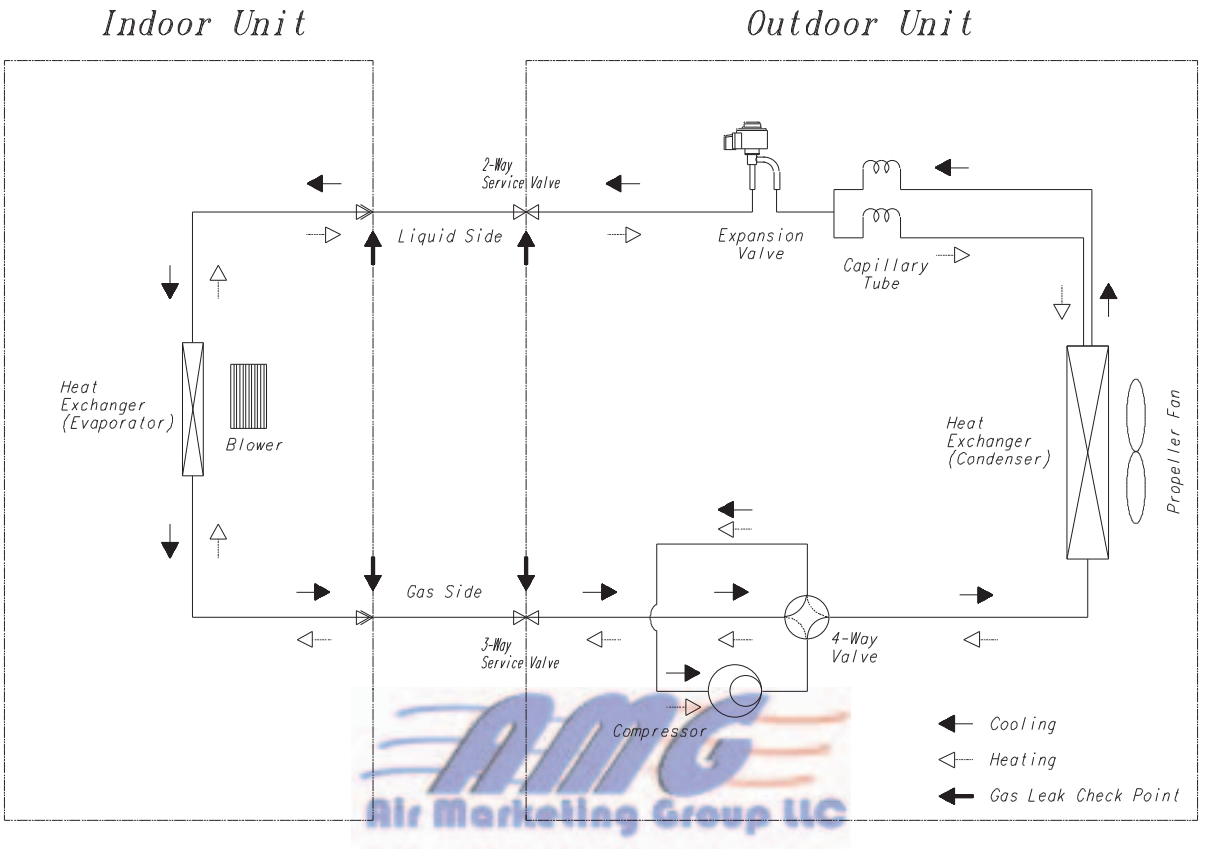
Circuit Descriptions

9-1-3 Outdoor Unit(UH052CAV/UH070CAV)

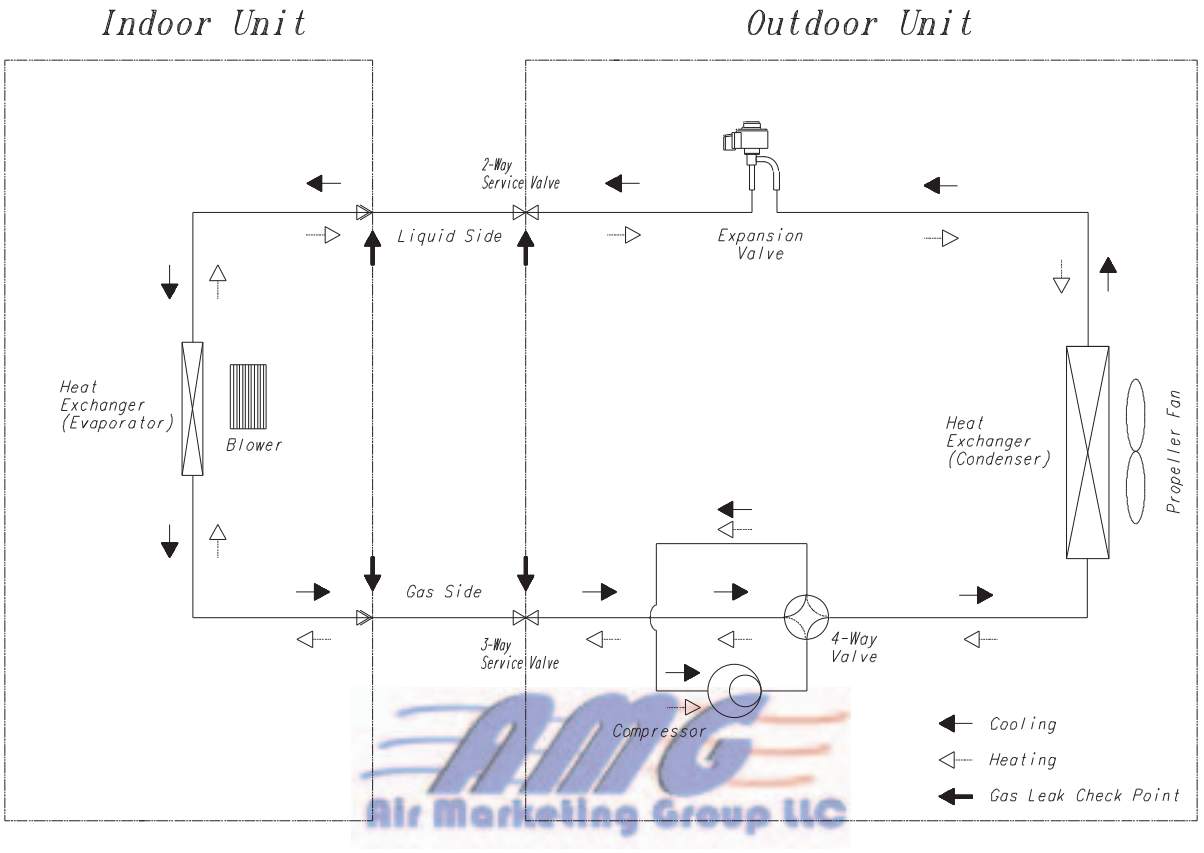


9-2 Refrigerating Cycle Diagram

■ EH035CAV/UH035CAV



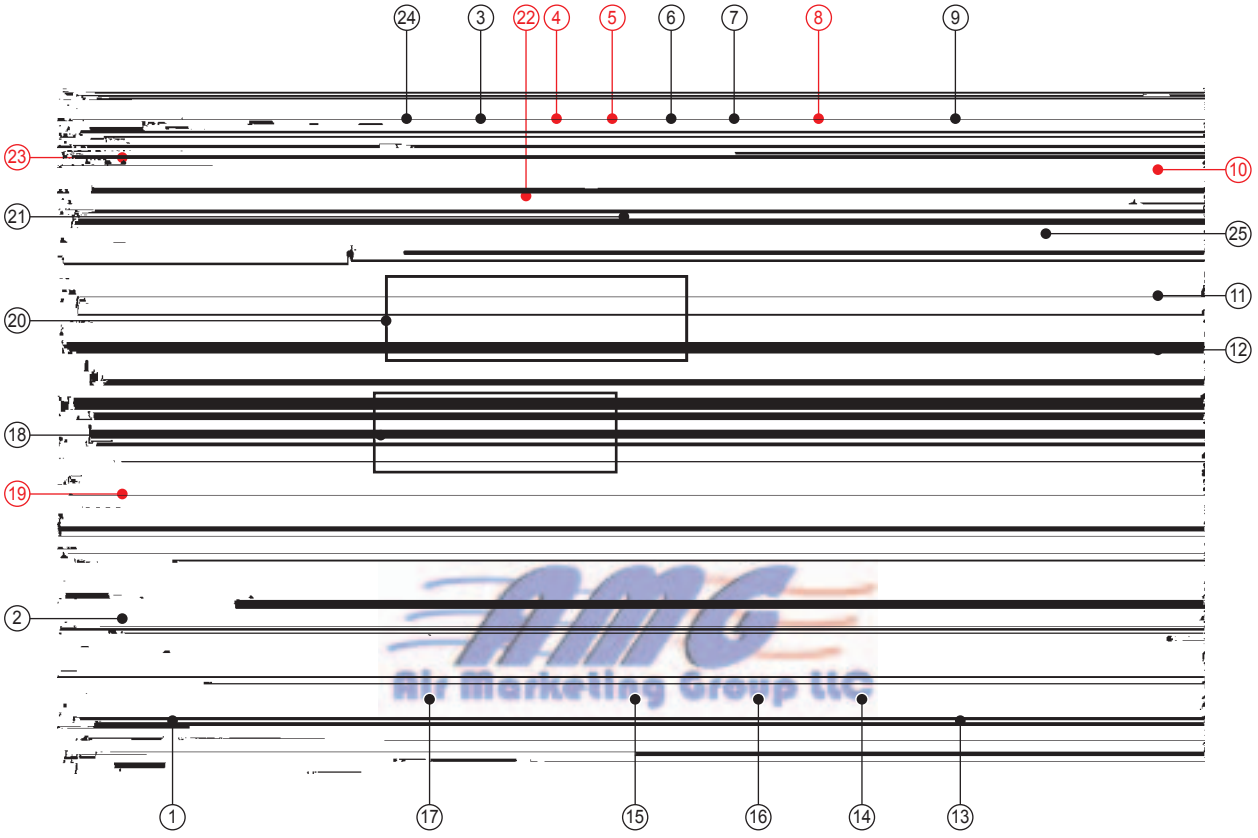
■ EH052CAV/UH052CAV, EH070CAV/UH070CAV



10. PCB Diagram

10-1 Indoor PCB

⚠ The red number connecter is not used.

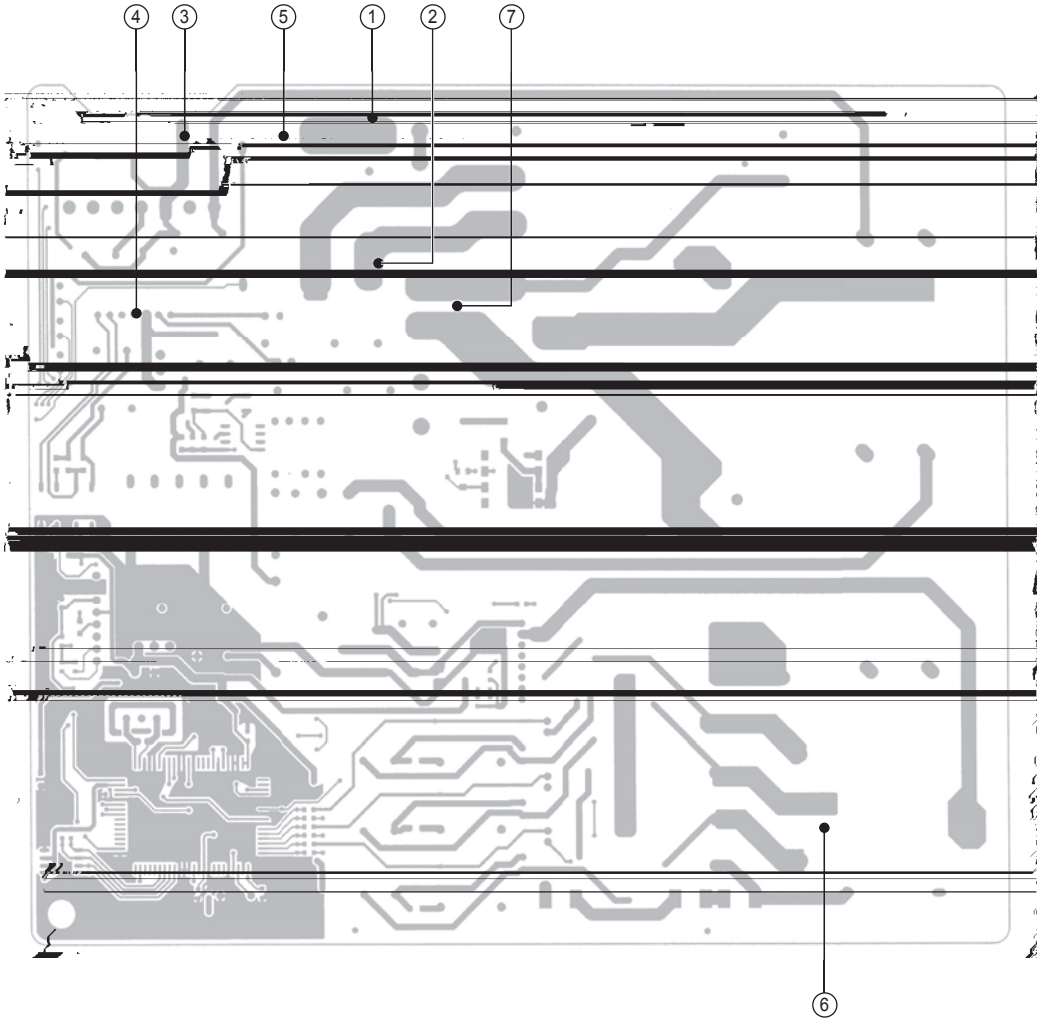


①	Drain pump : YW396-03AV(YEL)	⑭	AC Power : YW396-03AV(BLU)
②	Ventilator : YW396-03AV(BLK)	⑮	Fan Motor(SSR) : YW396-05AV(WHT)
③	Room/Eva-in temp. Sensor : SMW250-04(WHT)	⑯	Trans-in : YW396-03AV(WHT)
④	Eva-out temp. Sensor : SMW250-02(WHT)	⑰	Hot water Coil : YW396-03AV(RED)
⑤	Electrical Heater Sensor : SMW250-02(YEL)	⑱	Indoor Option S/W
⑥	DC12V OUT(Wired Remote Controller Power) : YW396-02AV(WHT)	⑲	Fan Motor(TAP) : YW396-09AV(WHT)
⑦	External control IN(ON/OFF Control) : SMW250-02(RED)	⑳	Indoor Address S/W(Main, RMC)
⑧	EEV : SMW250-05(BLU)	㉑	External control OUT(ERROR, COMP. Status) : SMW250-04(RED)
⑨	Display : SMW200-09(WHT)	㉒	External Option SUB PCB Connector : SMW250-05(YEL)
⑩	HALL-IC(RPM Feedback : SMW250-03(BLU)	㉓	Electric Heater : SMW250-02(RED)
⑪	COM1(F1/F2) : YW396-02AV(RED)	㉔	Floating Switch : SMW250-02(BLK)
⑫	COM2(F3/F4) :YW396-02AV(BLU)	㉕	MICOM Download : SMW200-10(WHT)
⑬	Trans-out : SMW250-03(RED)		

10-2 Outdoor PCB

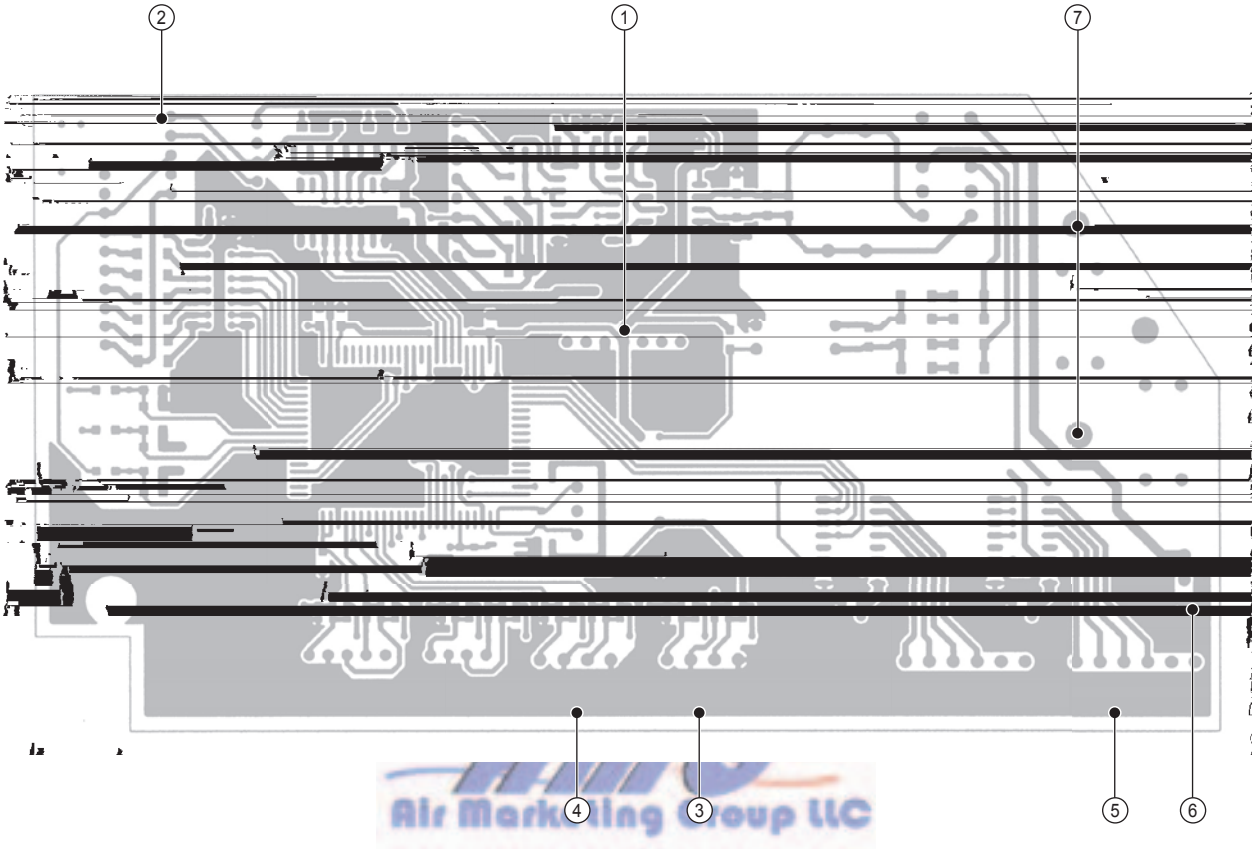
10-2-1 UH035CAV

■ Inverter



①	Power N	⑤	Power Relay
②	Power L	⑥	Comp. Connector Wire
③	BLDC Fan : YAW396-07V (WHT)	⑦	Reactor Connector Wire
④	Main PCB Connector : SMW200-07(WHT)		

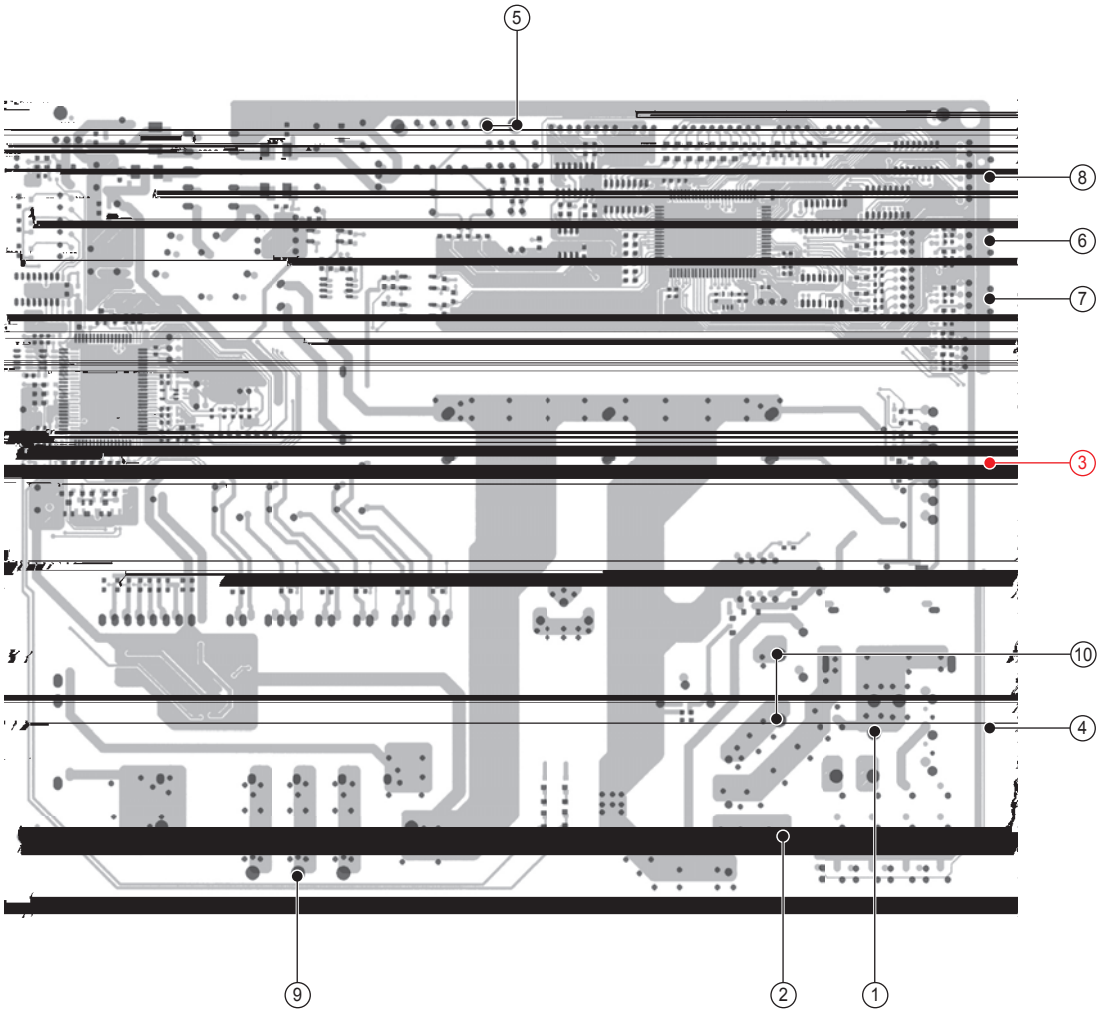
■ Main PCB



①	Inverter PCB Connector : SMW200-07(WHT)
②	Display PCB Connector : SMW200-07(WHT)
③	OLP/Cond. Temperature Sensor : SMAW250A-04(WHT)
④	Outdoor/Discharge Temperature Sensor : SMAW250A-04(RED)
⑤	EEV Connector : SMAW250A-06(WHT)
⑥	DC5V Connector : SMW250-03(WHT)
⑦	Communication

10-2-2 UH052CAV/UH070CAV

⚠ The red number connecter is not used.



①	Power N	⑥	COND/OLP Temperature Sensor
②	Power L	⑦	DIS/OUT Temperature Sensor
③	BLDC FAN	⑧	EEV Connector
④	AC FAN	⑨	Comp. Connector Wire
⑤	Communication 485	⑩	Reactor Connector Wire

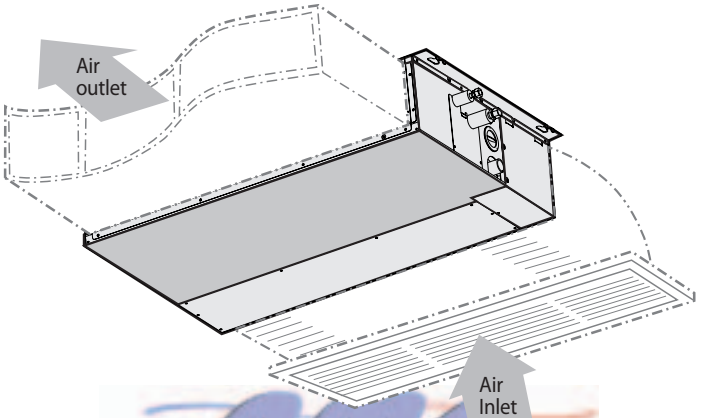
11. Operating Instructions

11-1 Name of Each Part

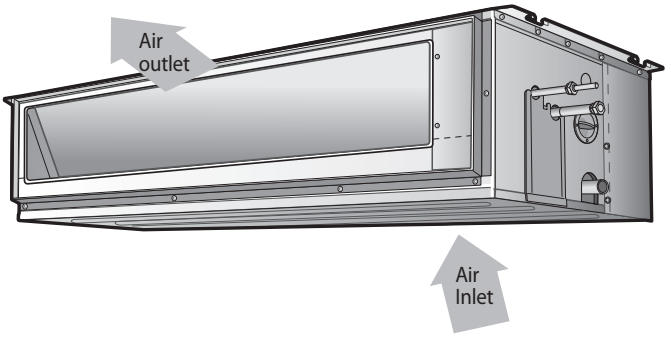
11-1-1 Indoor Unit

The figures are shwon in this instruction may differ from yours depending on the model.

■ **EH035CAV**

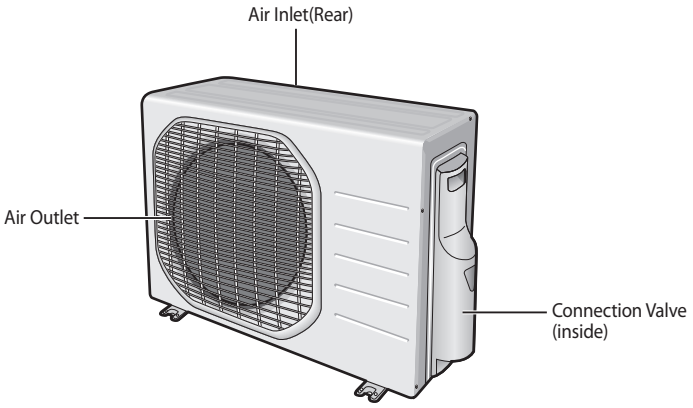


■ **EH052CAV/EH070CAV**

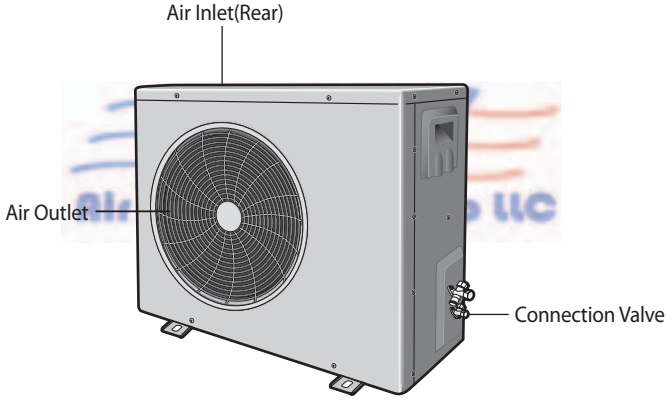


11-1-2 Outdoor Unit

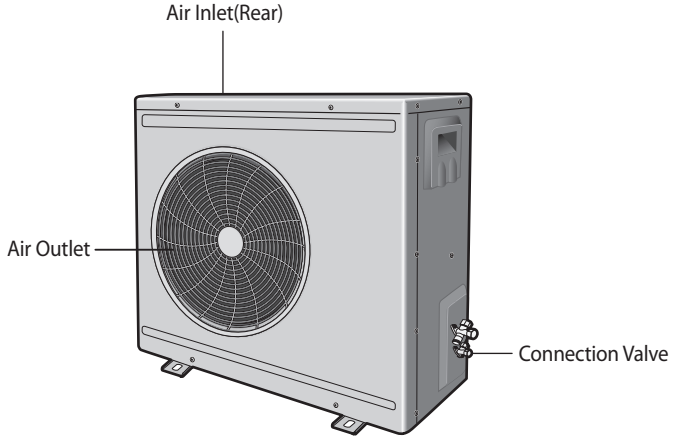
■ UH035CAV



■ UH052CAV

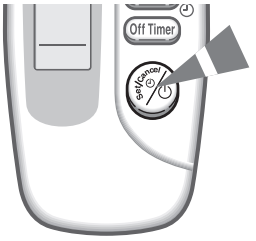
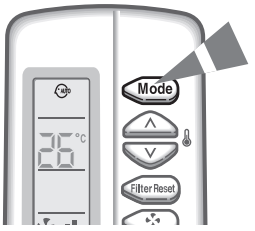
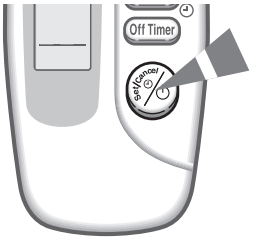
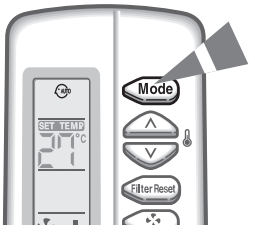
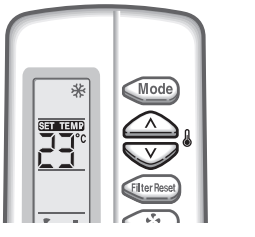


■ UH070CAV

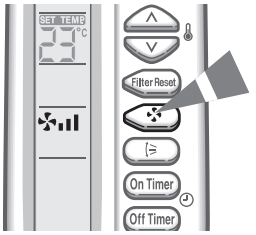
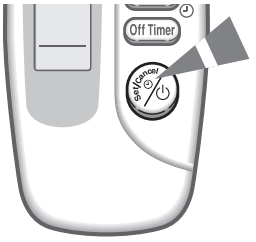
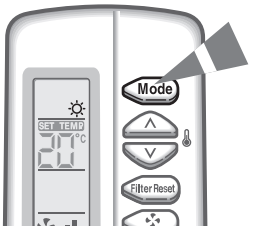
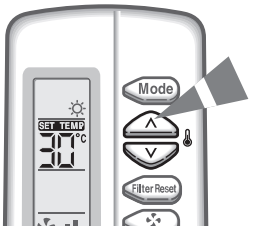
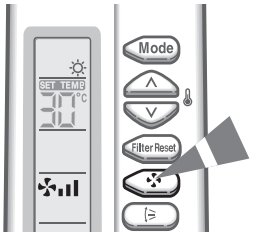


11-2 Main Function

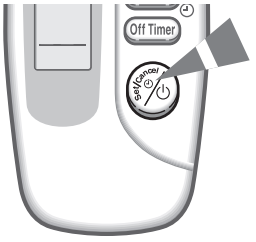
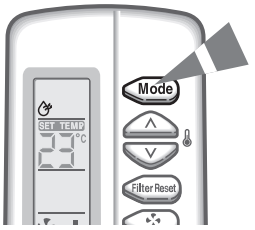
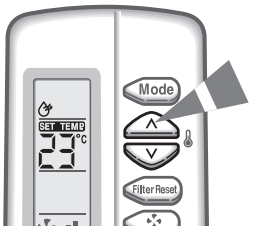
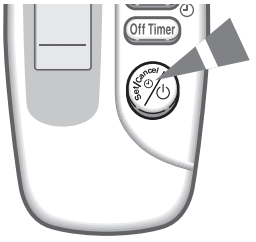
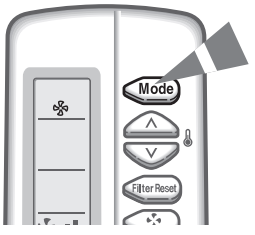
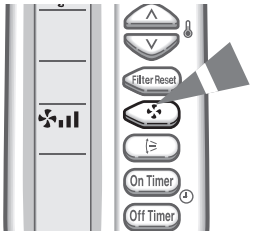
11-2-1 Basic Function

Mode	Explanation	Remark
Selecting the Automatic Operating Mode	1. If necessary, press (On/Off) button.	
	2. To select the AUTO mode, press the Mode button until AUTO is displayed at the top of the wireless remote controller.	
	3. To adjust the temperature, press the buttons one or more times until the required temperature is displayed. Possible temperatures are between 18˚C and 30˚C inclusive.	
Cooling Your Room	1. If necessary, press (On/Off) button.	
	2. To select the COOL mode, press the Mode button until ❄ is displayed at the top of the wireless remote controller.	
	3. To adjust the temperature, press the buttons one or more times until the required temperature is displayed. Possible temperatures are between 18˚C and 30˚C inclusive.	

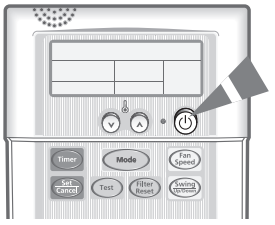
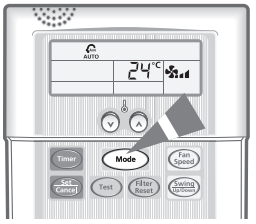
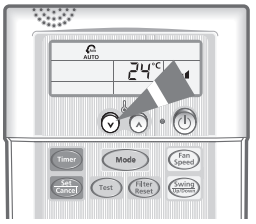
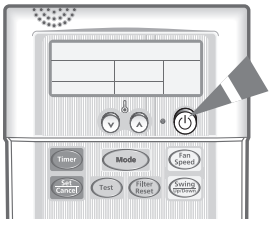
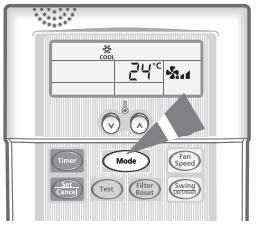
Basic Function(cont.)

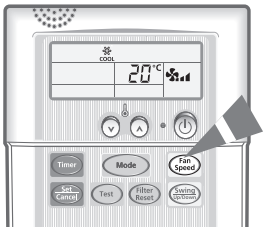
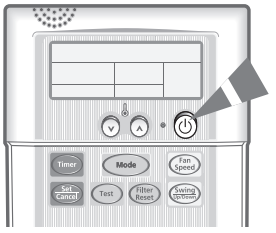
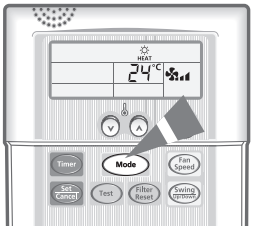
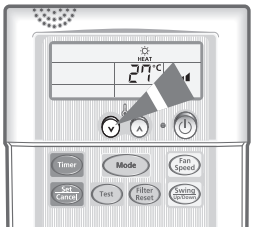
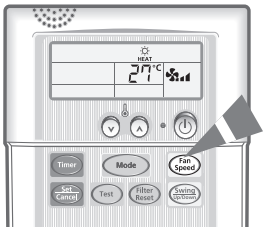
Mode	Explanation	Remark
	4. Select the fan speed by pressing the button one or more times until the intended value is displayed : Automatic(rotated : → → →) Low Medium High	
Heating Your Room (Except cooling only models)	1. If necessary, press (On/Off) button.	
	2. To select the HEAT mode, press the Mode button until is displayed at the top of the wireless remote controller.	
	3. To adjust the temperature, press the buttons one or more times until the required temperature is displayed. Possible temperatures are between 16˚C and 30˚C inclusive.	
	4. Select the fan speed by pressing the button one or more times until the intended value is displayed : Automatic(rotated : → → →) Low Medium High	

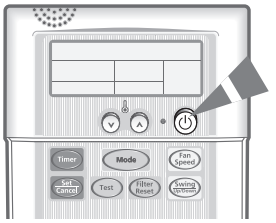
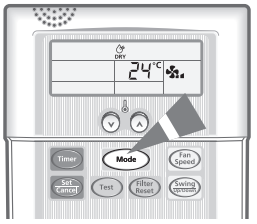
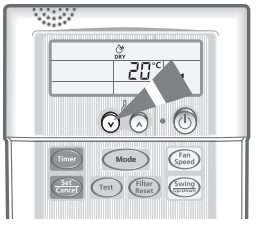
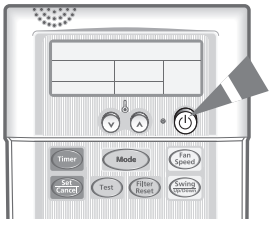
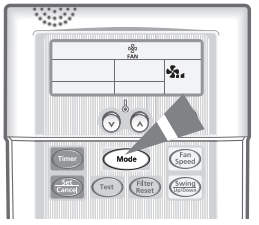
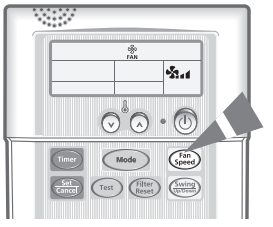
Basic Function(cont.)

Mode	Explanation	Remark
Removing Excess Humidity	1. If necessary, press (On/Off) button.	
	2. To select the DRY mode, press the Mode button until is displayed at the top of the wireless remote controller.	
	3. To adjust the temperature, press the buttons one or more times until the required temperature is displayed. Possible temperatures are between 18˚C and 30˚C inclusive.	
Airing Room	1. If necessary, press (On/Off) button.	
	2. To select the FAN mode, press the Mode button until is displayed at the top of the wireless remote controller.	
	3. Select the fan speed by pressing the button one or more times until the intended value is displayed: Low Medium High	

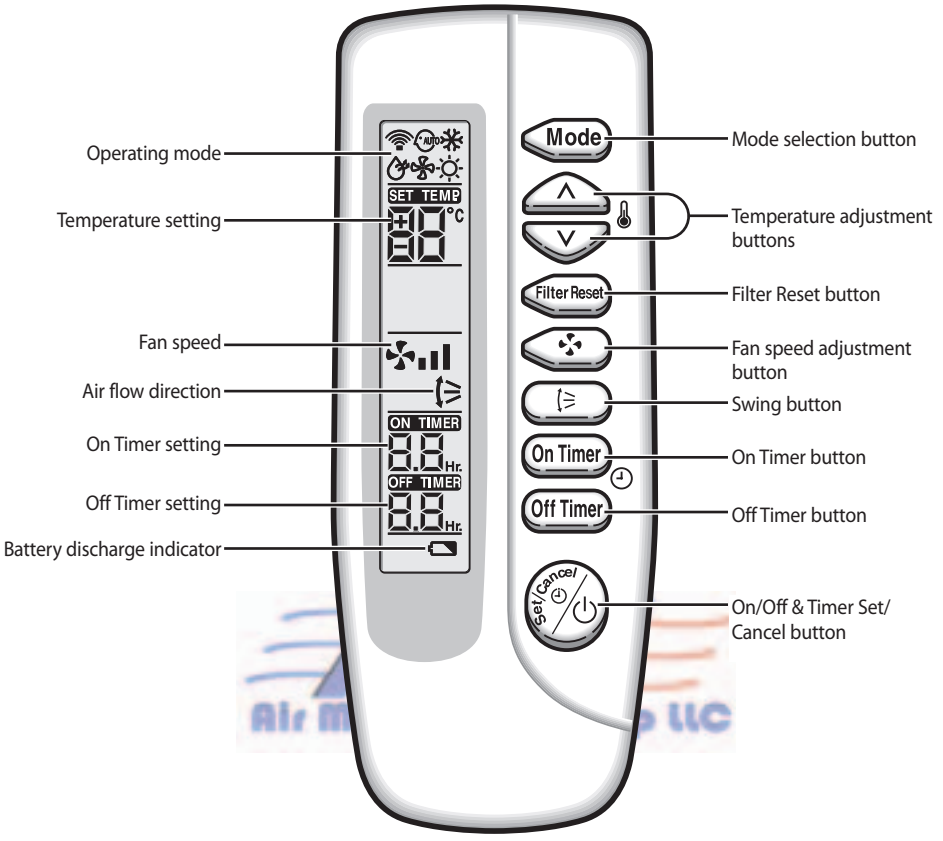
11-2-2 Wired Remote Controller

Mode	Explanation	Remark
Selecting the Automatic Operating Mode	1. If necessary, press (ON/OFF) button.	
	2. To select the AUTO mode, press the Mode button until AUTO is displayed at the top of the wired remote controller.	
	3. To adjust the temperature, press the ∨ ∧ buttons one or more times until the required temperature is displayed. Possible temperatures are between 18˚C and 30˚C inclusive.	
Cooling Your Room	1. If necessary, press (ON/OFF) button.	
	2. To select the COOL mode, press the Mode button until COOL is displayed at the top of the wired remote controller.	
	3. To adjust the temperature, press the ∨ ∧ buttons one or more times until the required temperature is displayed. Possible temperatures are between 18˚C and 30˚C inclusive.	

Mode	Explanation	Remark
Cooling Your Room	4. Select the fan speed by pressing the Fan Speed button one or more times until the intended value is displayed : Automatic(rotated : → → →) Low Medium High	
Heating Your Room (Except cooling only models)	1. If necessary, press (On/Off) button.	
	2. To select the HEAT mode, press the Mode button until HEAT is displayed at the top of the wireless remote controller.	
	3. To adjust the temperature, press the buttons one or more times until the required temperature is displayed. Possible temperatures are between 16˚C and 30˚C inclusive.	
	4. Select the fan speed by pressing the Fan Speed button one or more times until the intended value is displayed : Automatic(rotated : → → →) Low Medium High	

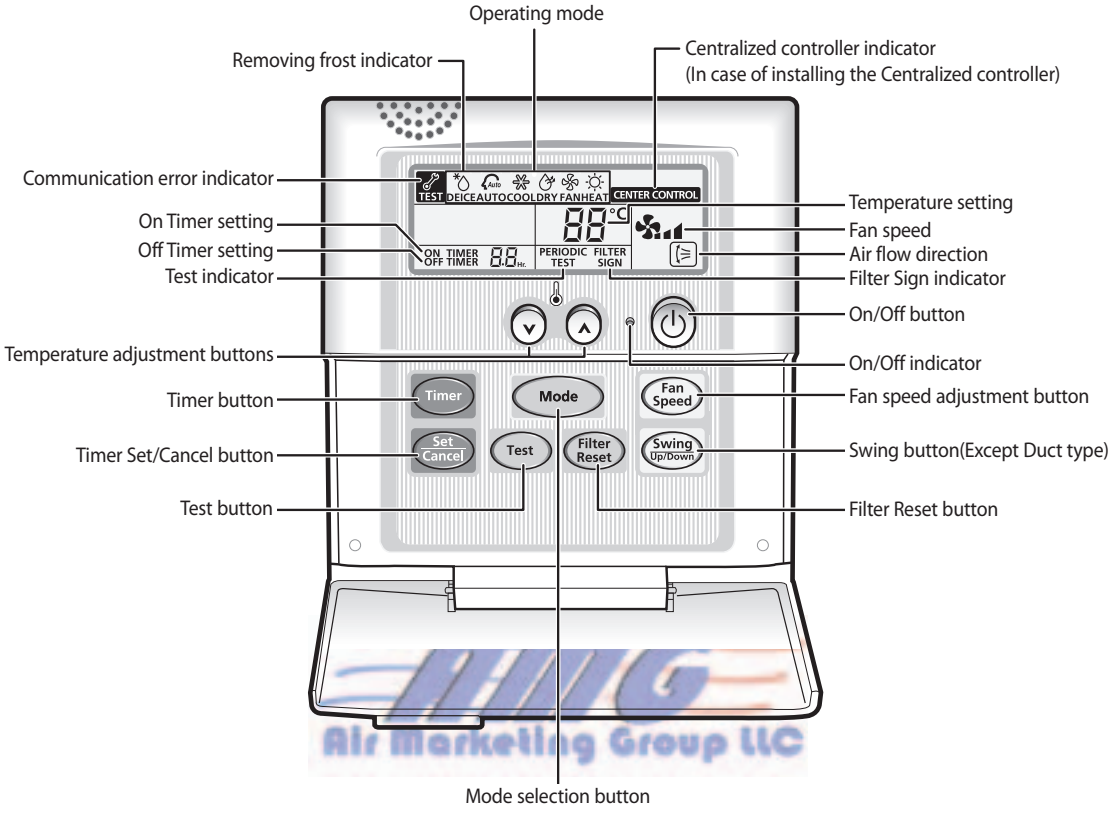
Mode	Explanation	Remark
Removing Excess Humidity	1. If necessary, press (ON/OFF) button.	
	2. To select the DRY mode, press the Mode button until DRY is displayed at the top of the wired remote controller.	
	3. To adjust the temperature, press the ∨ ∧ buttons one or more times until the required temperature is displayed. Possible temperatures are between 18˚C and 30˚C inclusive.	
Airing Your Room	1. If necessary, press (ON/OFF) button.	
	2. To select the FAN mode, press the Mode button until FAN is displayed at the top of the wired remote controller.	
	3. Select the fan speed by pressing the Fan Speed button one or more times until the intended value is displayed: Low Medium High	

11-3 Wireless Remote Control-Buttons and Display



Note : • After cleaning the air filter, press the Filter Reset button.

11-4 Wired Remote Controller-Buttons and Display



Note : • The (Test) button is for your installation specialist. You must not press it.

• After cleaning the air filter, press the (Filter Reset) button. Then the wired remote controller will display the Filter Sign indicator when the time to clean the air filter.

12. Troubleshooting

12-1 Items to be checked first

1. The input voltage should be rating voltage ±10% range.
   The air conditioner may not operate properly if the voltage is out of this range.

2. Is the link cable linking the indoor unit and the outdoor unit linked properly?
   The indoor unit and the outdoor unit shall be linked by 4 cables.
   Check the terminals if the indoor unit and outdoor unit are properly linked by the same number of cables.
   Otherwise the air conditioner may not operate properly.

3. When a problem occurs due to the contents illustrated in the table below it is a symptom not related to the malfunction of the air conditioner.

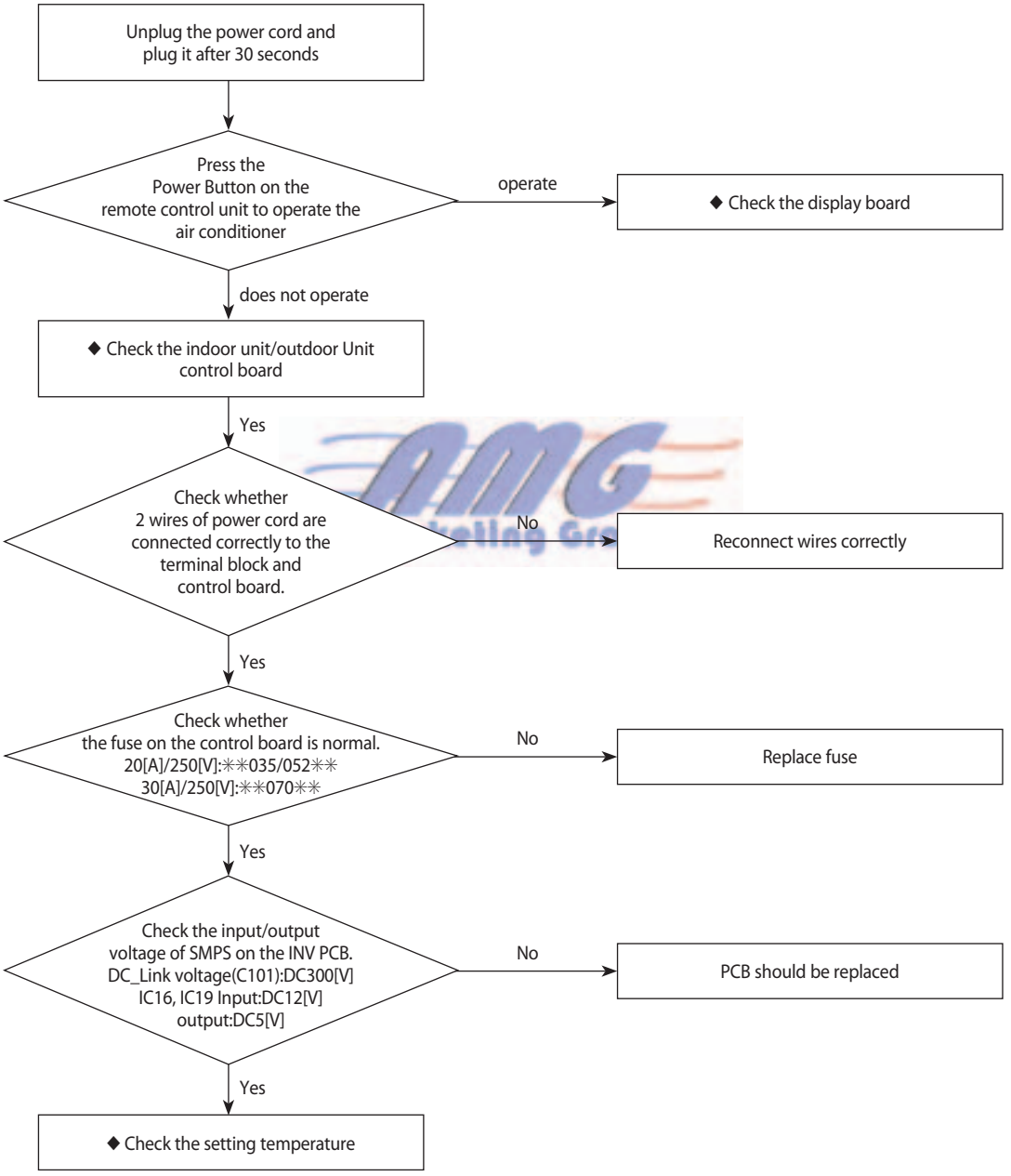
No	Operation of air conditioner	Explanation
1	In a COOL operation mode, the compressor does not operate at a room temperature higher than the setting temperature that the INDOOR FAN should operate. **[In case of heat pump model]** In a HEAT operation mode, the compressor does not operate at a room temperature lower than the setting temperature that indoor fan should operate.	In happens after a delay of 3 minutes when the compressor is reoperated. The same phenomenon occurs when a power is on. As a phenomenon that the compressor is reoperated after a delay of 3 minutes, the indoor fan is adjusted automatically with reference to a temperature of the air blew.
2	Compressor stops operation intermittently in DRY( ) mode.	Compressor operation is controlled automatically in DRY mode depending on the room temperature and humidity.
3	**[In case of heat pump model]** Compressor of the outdoor unit is operating although it is turned off in a HEAT mode.	When the unit is turned off while de-ice is activated, the compressor continues operation for up to 9 minutes(maximum) until the deice is completed.
4	**[In case of heat pump model]** The compressor and indoor fan stop intermittently in HEAT mode.	The compressor and indoor fan stop intermittently if room temperature exceeds a setting temperature in order to protect the compressor from overheated air in a HEAT mode.
5	**[In case of heat pump model]** Indoor fan and outdoor fan stop operation intermittently in a HEAT mode.	The compressor operates in a reverse cycle to remove exterior ice in a HEAT mode, and indoor fan and outdoor fan do not operate intermittently for within 20% of the total heater operation

12-2 Fault Diagnosis by Symptom

12-2-1 No Power (completely dead)-Initial diagnosis

1. Checklist :
   1) Is input voltage normal?
   2) Is AC power linked correctly?
   3) Is input voltage of DC regulator IC KA7805 (IC16, IC19) normal? (11VDC-12.5VDC) - Outdoor Controller
   4) Is output voltage of DC regulator IC KA7805 (IC16, IC19) normal? (4.5VDC-5.5VDC) - Outdoor Controller

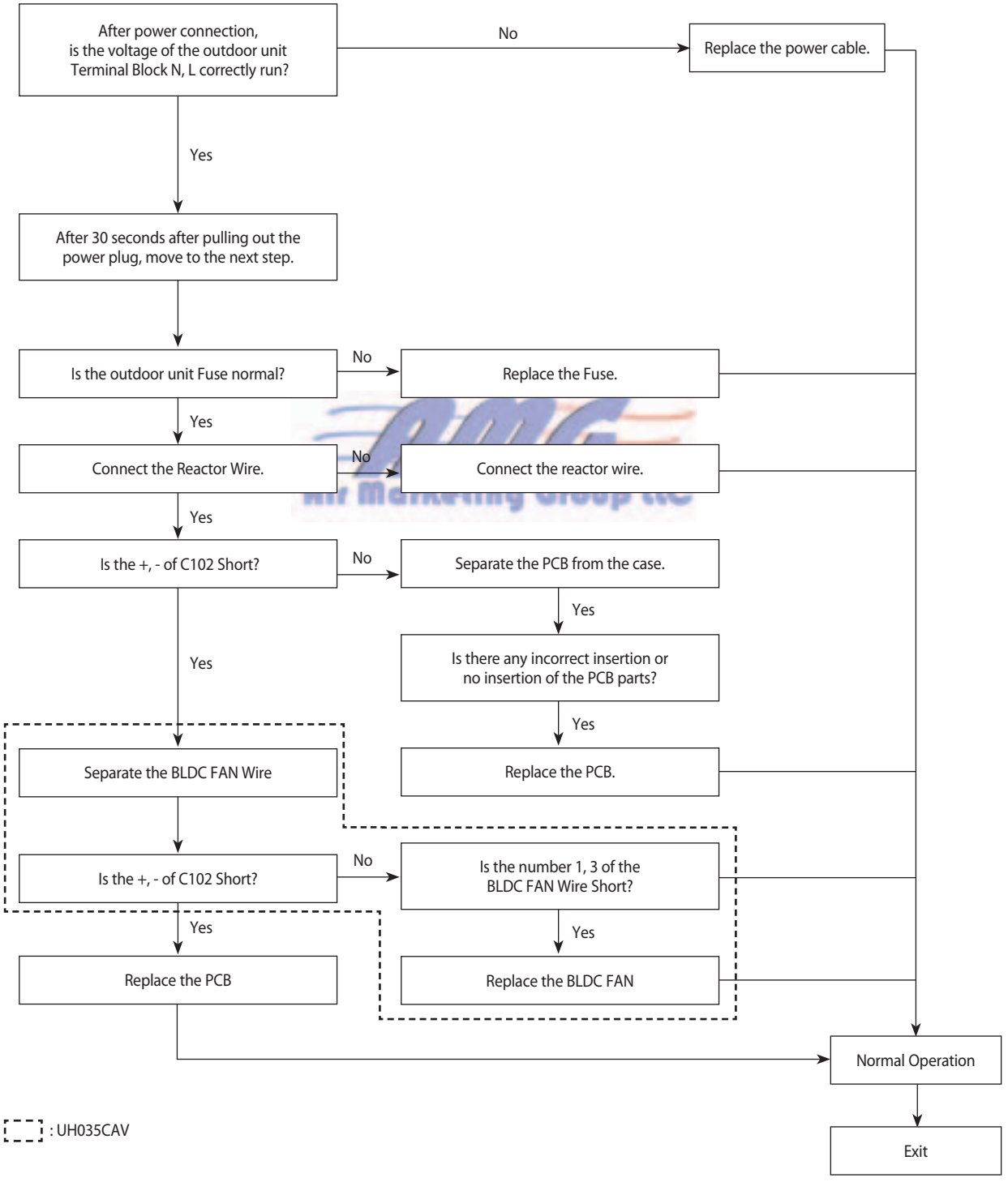
2. Troubleshooting procedure



12-2-2 The Outdoor unit power supply error

1. Checklist :
   1) Are the input power voltage and power connection correct?
   2) Is there any Fuse Short of the indoor?outdoor unit?
   3) Is the Reactor Wire of the outdoor unit correctly connected?

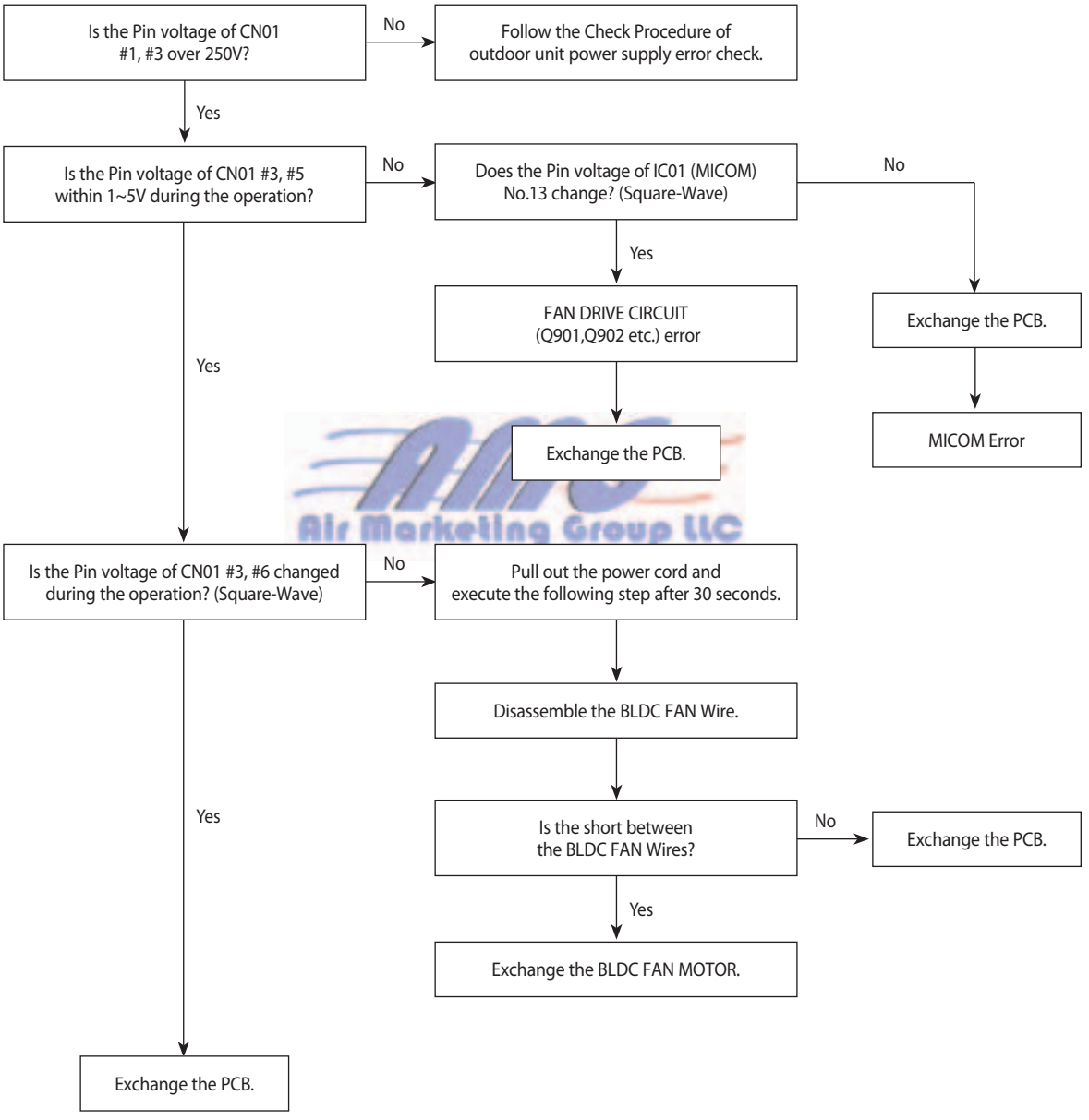
2. Troubleshooting procedure



12-2-3 The Outdoor unit Fan error (only UH035CAV)

1. Checklist :
   1) Are the input power voltage and the power connection correct?
   2) Is the motor wire connected to the outdoor PCB correctly?
   3) Is there no assembly error or none-assembly in the terminal of motor wire connector?
   4) Is there no obstacle at the surrounding of motor and propeller?

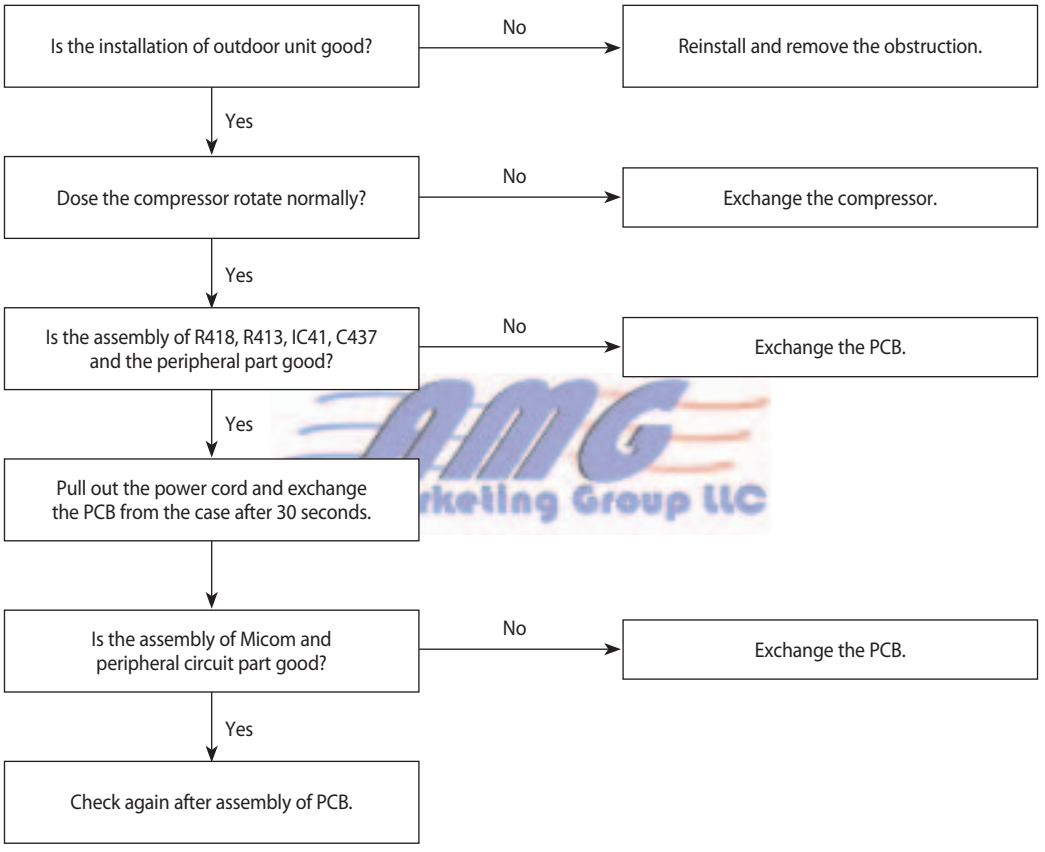
2. Troubleshooting procedure



12-2-4 Total current Trip error

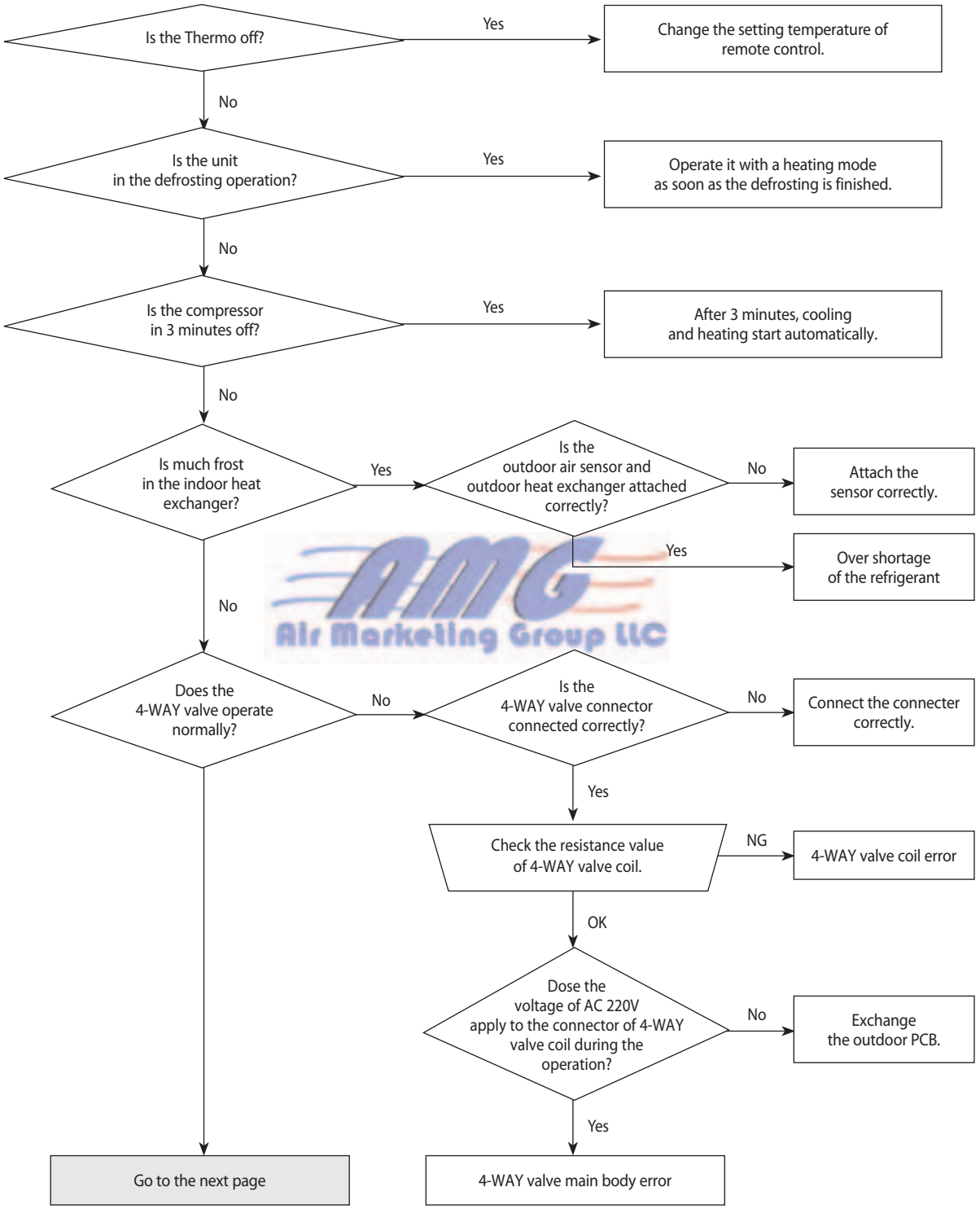
1. Checklist :
   1) Is the input power voltage proper?
   2) Is the refrigerant charged properly?
   3) Does the compressor rotate normally? (Reverse rotation, Locking etc.)
   4) Dose the outdoor fan operate normally? (Fan propeller loss, Motor error etc.)
   5) Is the installation condition of outdoor unit good? (Piping, Space etc.)
   6) Is there no ventilation obstruction at the surrounding of outdoor? (Outdoor unit cover, Fan front obstruction etc.)

2. Troubleshooting procedure

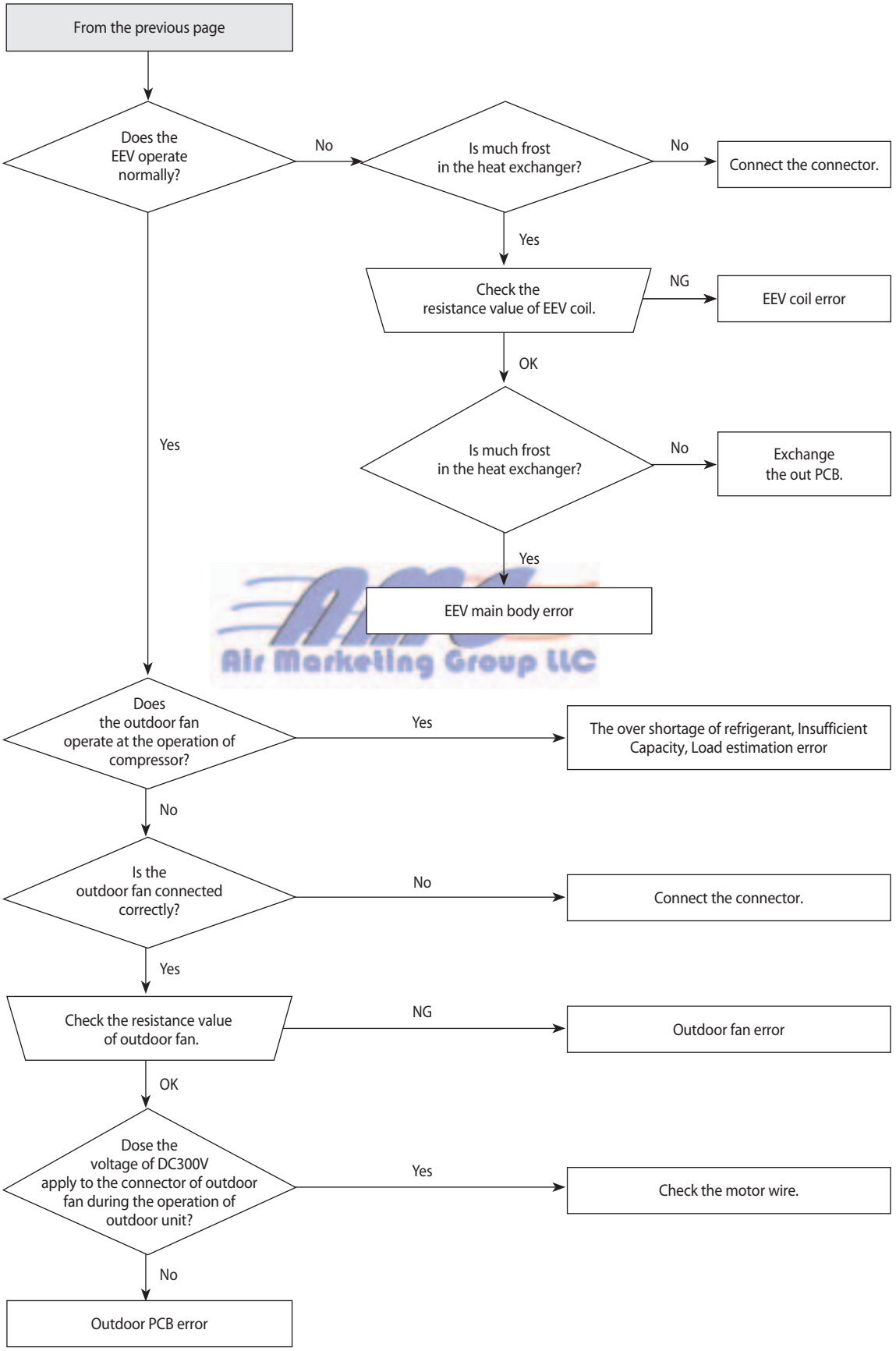


12-2-5 In case of heating at the cooling mode or cooling at the heating mode

1. Troubleshooting procedure



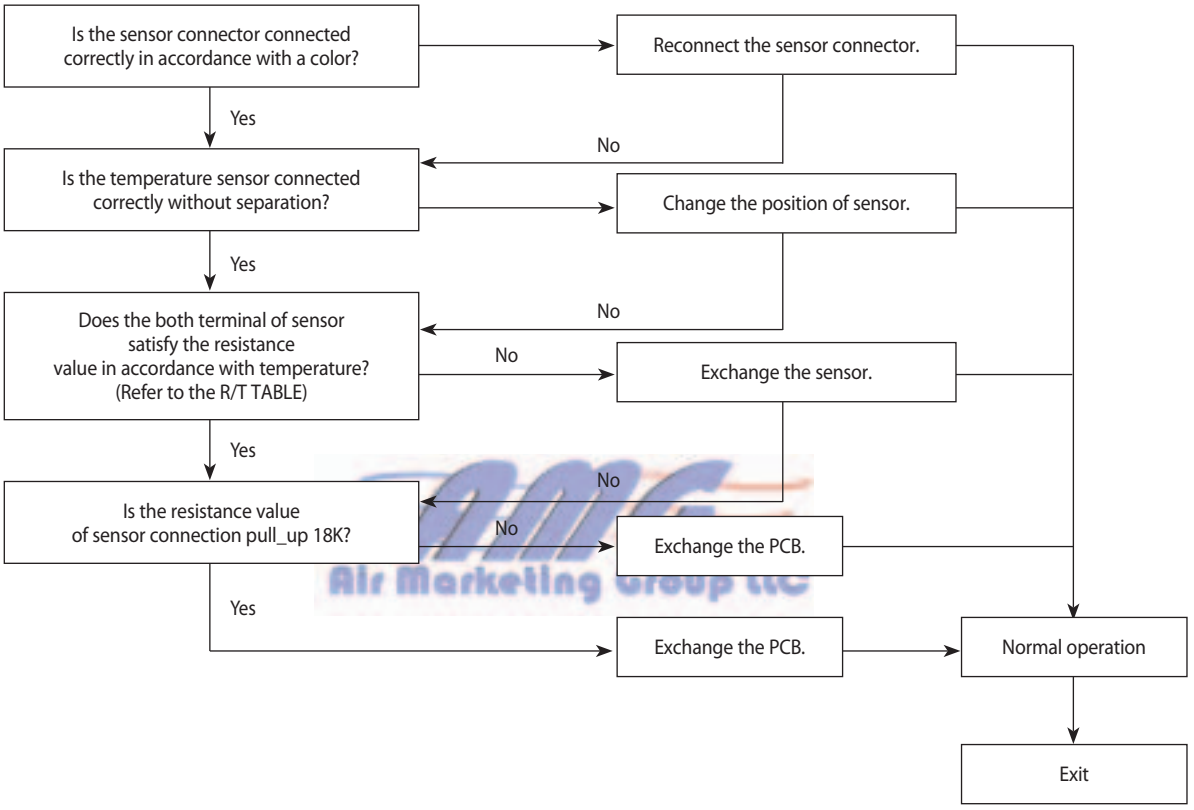
In case of heating at the cooling mode or cooling at the heating mode(cont.)

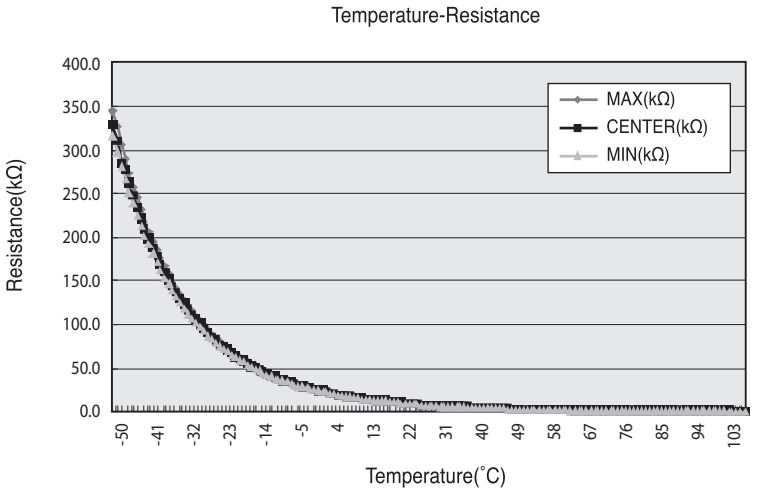


12-2-6 Outdoor temperature sensor error

1. Checklist :
   1) Is the sensor connector connected correctly?
   2) Is the sensor placed correctly?
   3) Does the both terminal of sensor satisfy the resistance value in accordance with temperature?
   4) Is the resistance value of sensor connection pull_up correct?

2. Troubleshooting procedure

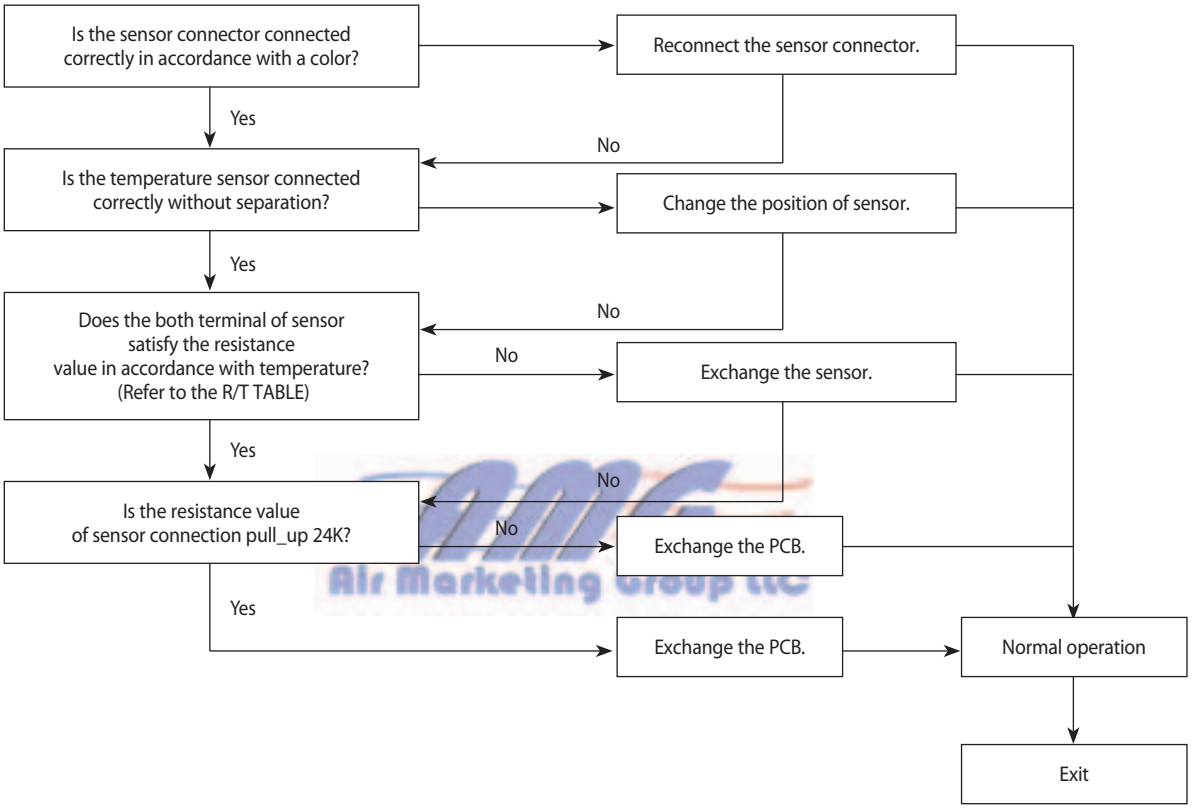


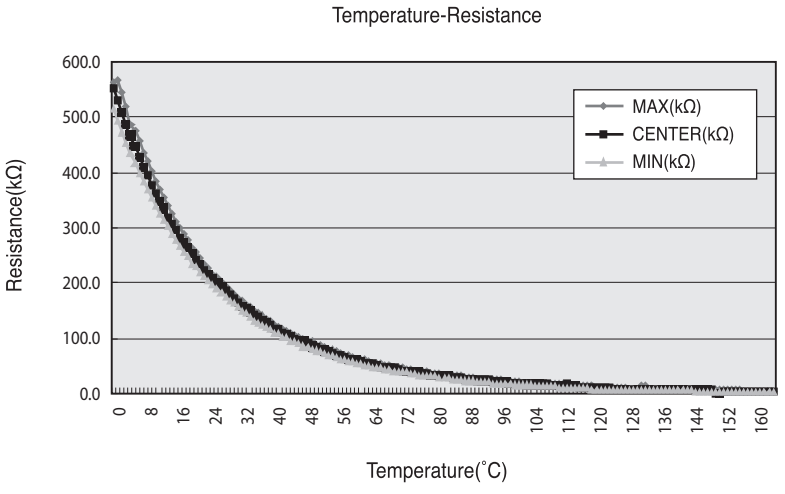


12-2-7 Discharge temperature sensor error

1. Checklist :
   1) Is the sensor connector connected correctly?
   2) Is the sensor placed correctly?
   3) Does the both terminal of sensor satisfy the resistance value in accordance with temperature?
   4) Is the resistance value of sensor connection pull_up correct?

2. Troubleshooting procedure

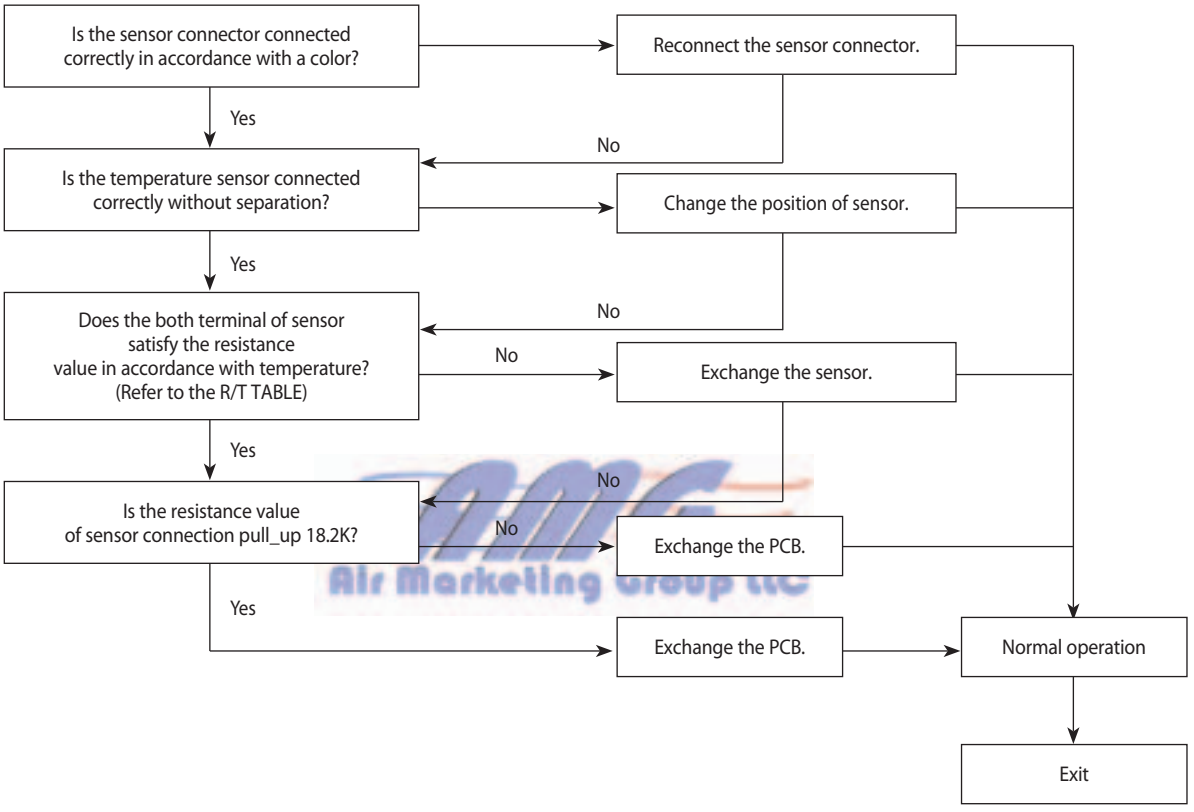


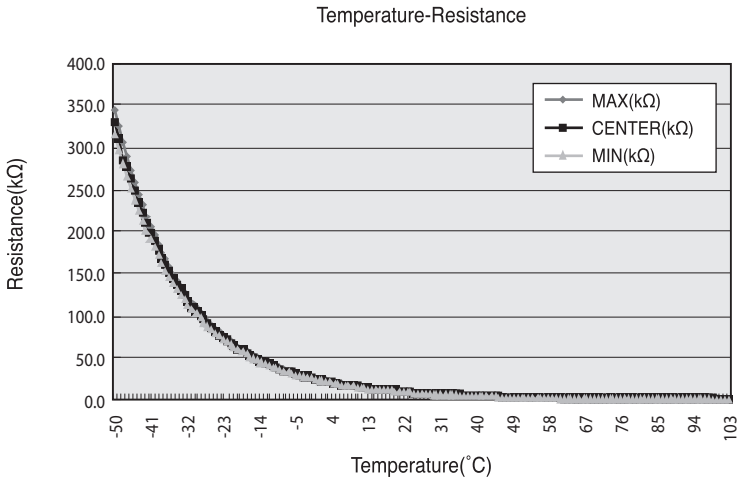


12-2-8 Coil temperature sensor error

1. Checklist :
   1) Is the sensor connector connected correctly?
   2) Is the sensor placed correctly?
   3) Does the both terminal of sensor satisfy the resistance value in accordance with temperature?
   4) Is the resistance value of sensor connection pull_up correct?

2. Troubleshooting procedure

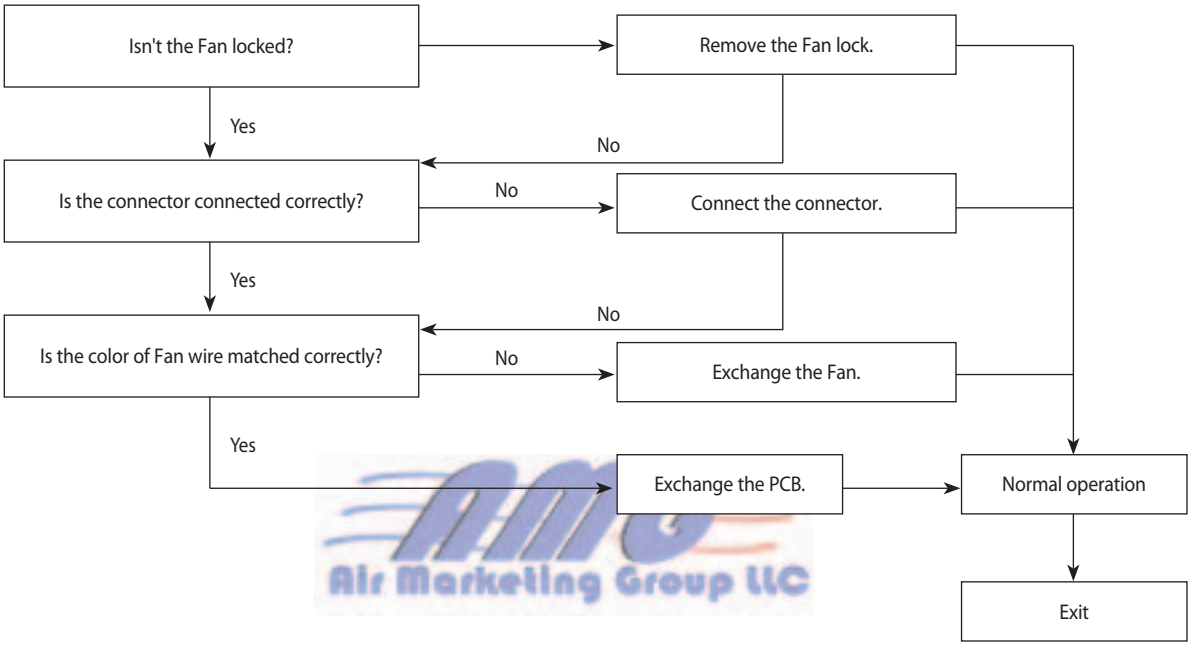




12-2-9 Fan error

1. Checklist :
   1) Isn't the fan locked?
   2) Is the sensor placed correctly?
   3) Does the both terminal of sensor satisfy the resistance value in accordance with temperature?
   4) Is the resistance value of sensor connection pull_up correct?

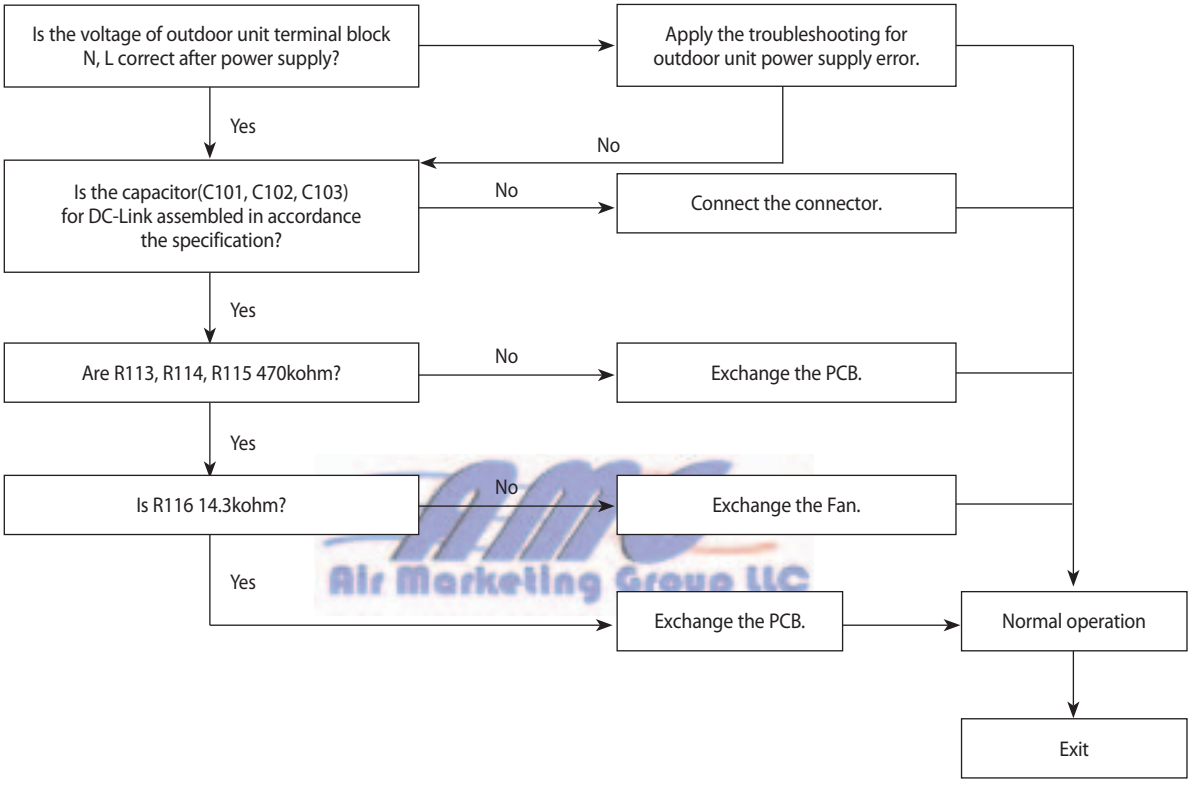
2. Troubleshooting procedure



12-2-10 DC-Link voltage sensor error

1. Checklist :
   1) Is the voltage of outdoor unit terminal block N, L correct after power supply?
   2) Is the capacitor(C101, C102, C103) for DC-Link assembled in accordance the specification?
   3) Are R113, R114, R115 470 Kohm?
   4) Is R116 14.3Kohm?

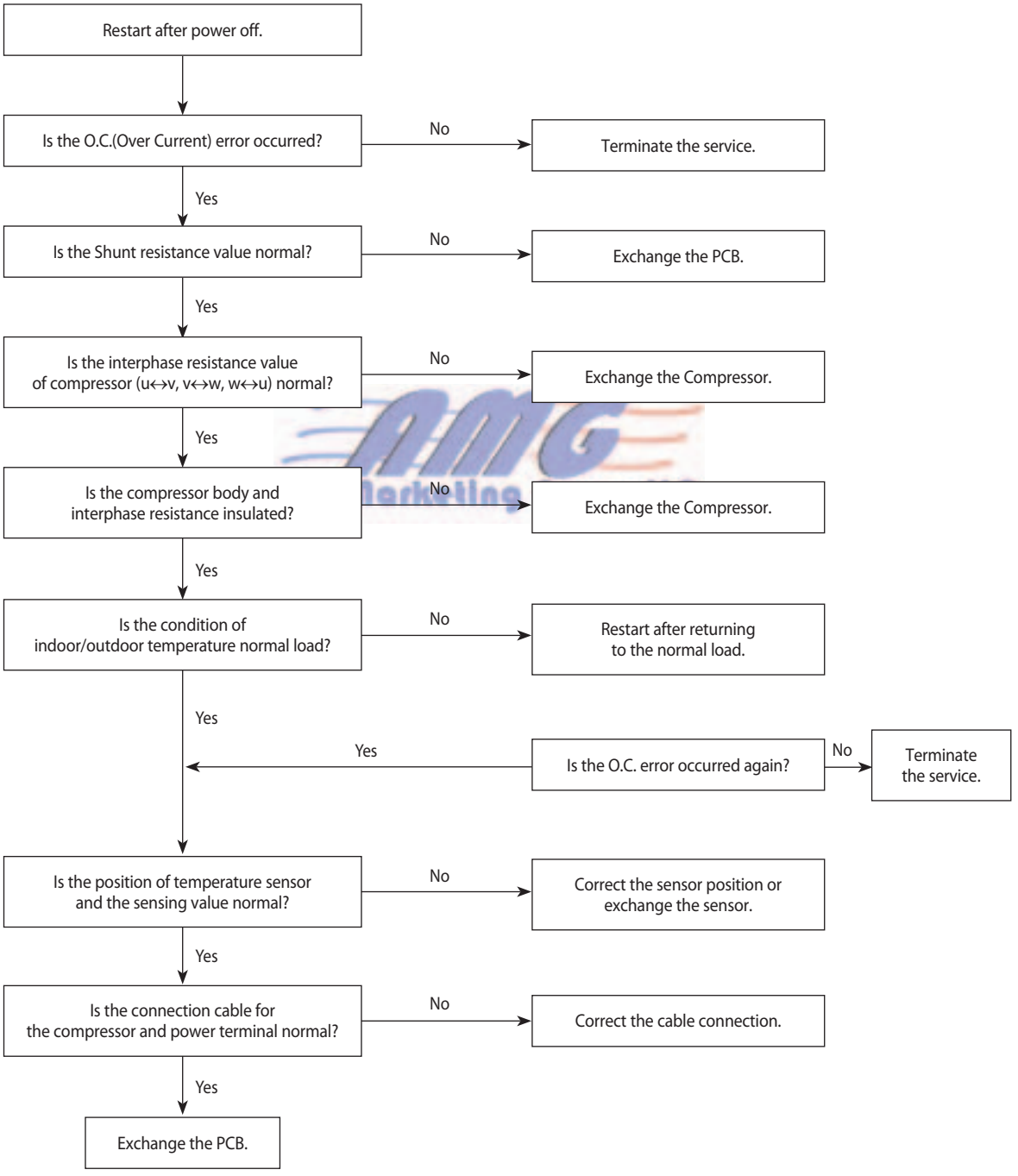
2. Troubleshooting procedure



12-2-11 O.C.(Over Current) error

1. Checklist :
   1) Is the Shunt resistance value correct?
   2) Is the condition of surrounding temperature abnormal overload?
   3) Is there any problem as like the temperature sensor separation or measurement value error?
   4) Is the interphase resistance of compressor normal?

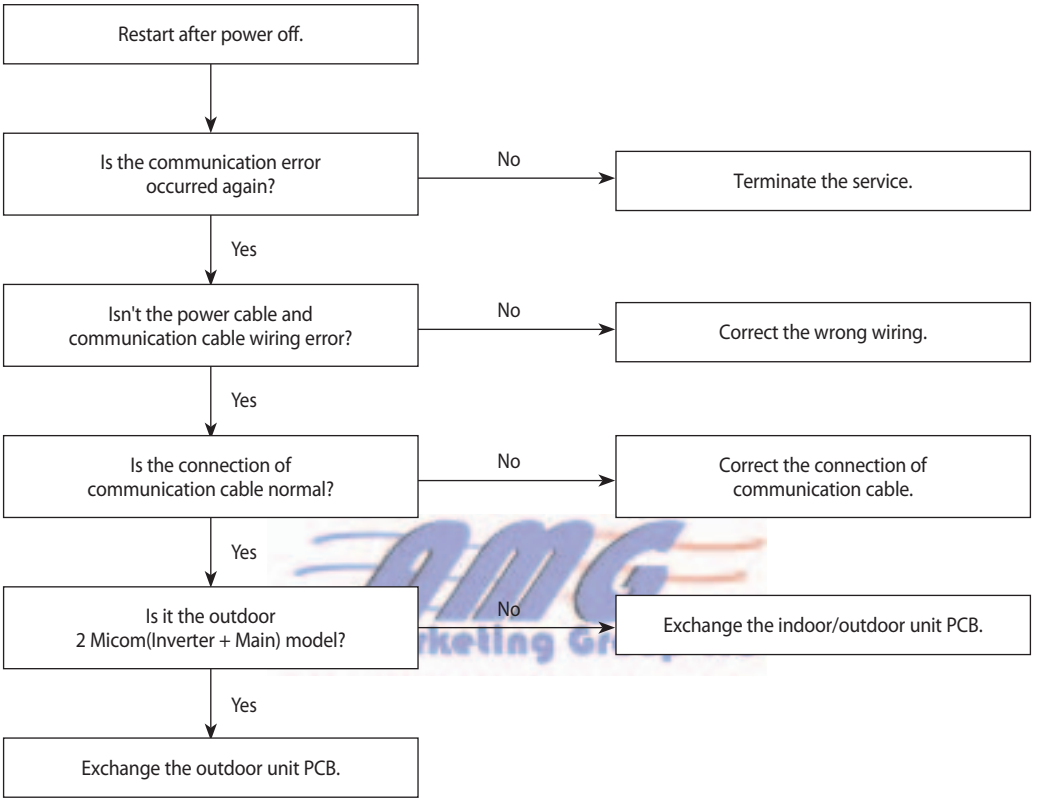
2. Troubleshooting procedure



12-2-12 Communication error

1. Checklist :
   1) Is the communication cable between the indoor unit and outdoor unit connected correctly?
   2) Isn't the power cable and communication cable wiring error?

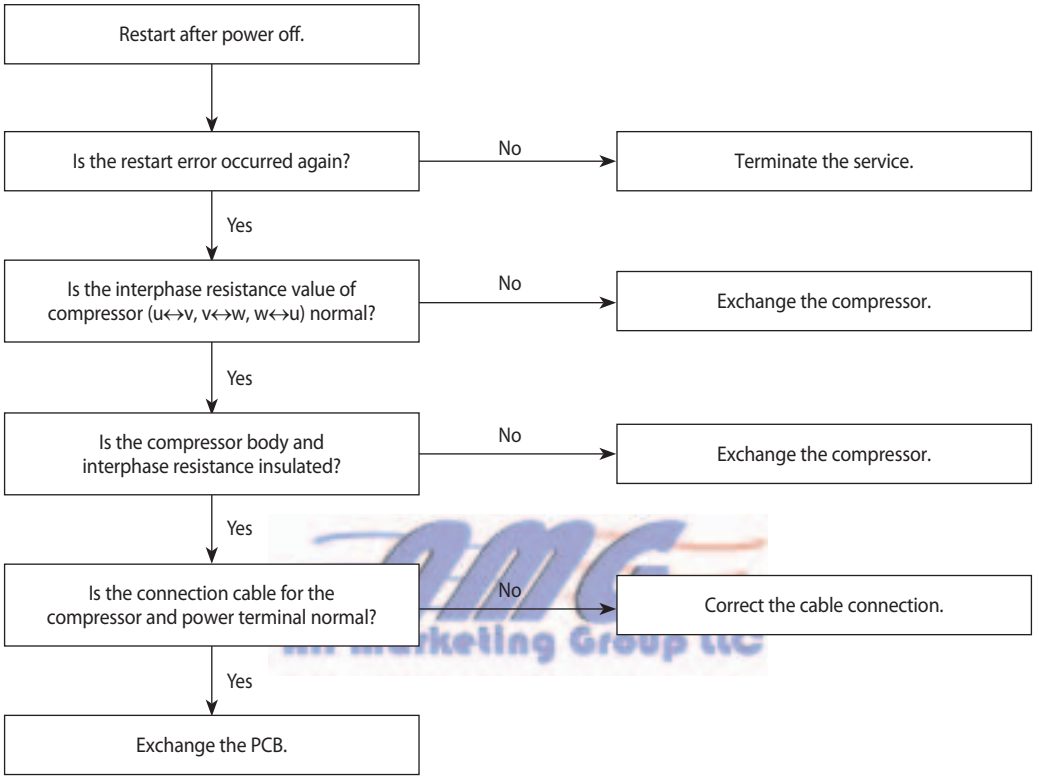
2. Troubleshooting procedure



12-2-13 Compressor start error

1. Checklist :
   1) Is the connection of cable for the compressor and power?
   2) Is the interphase resistance of compressor normal?

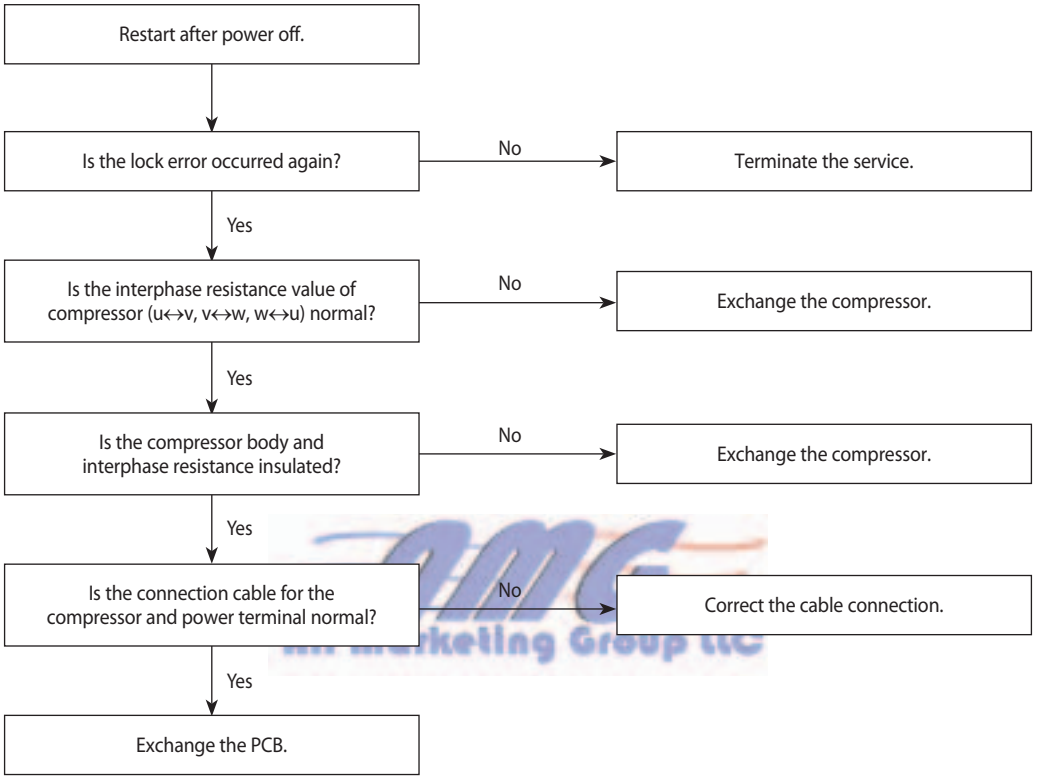
2. Troubleshooting procedure



12-2-14 Compressor lock error

1. Checklist :
   1) Is the connection of cable for the compressor and power?
   2) Is the interphase resistance of compressor normal?

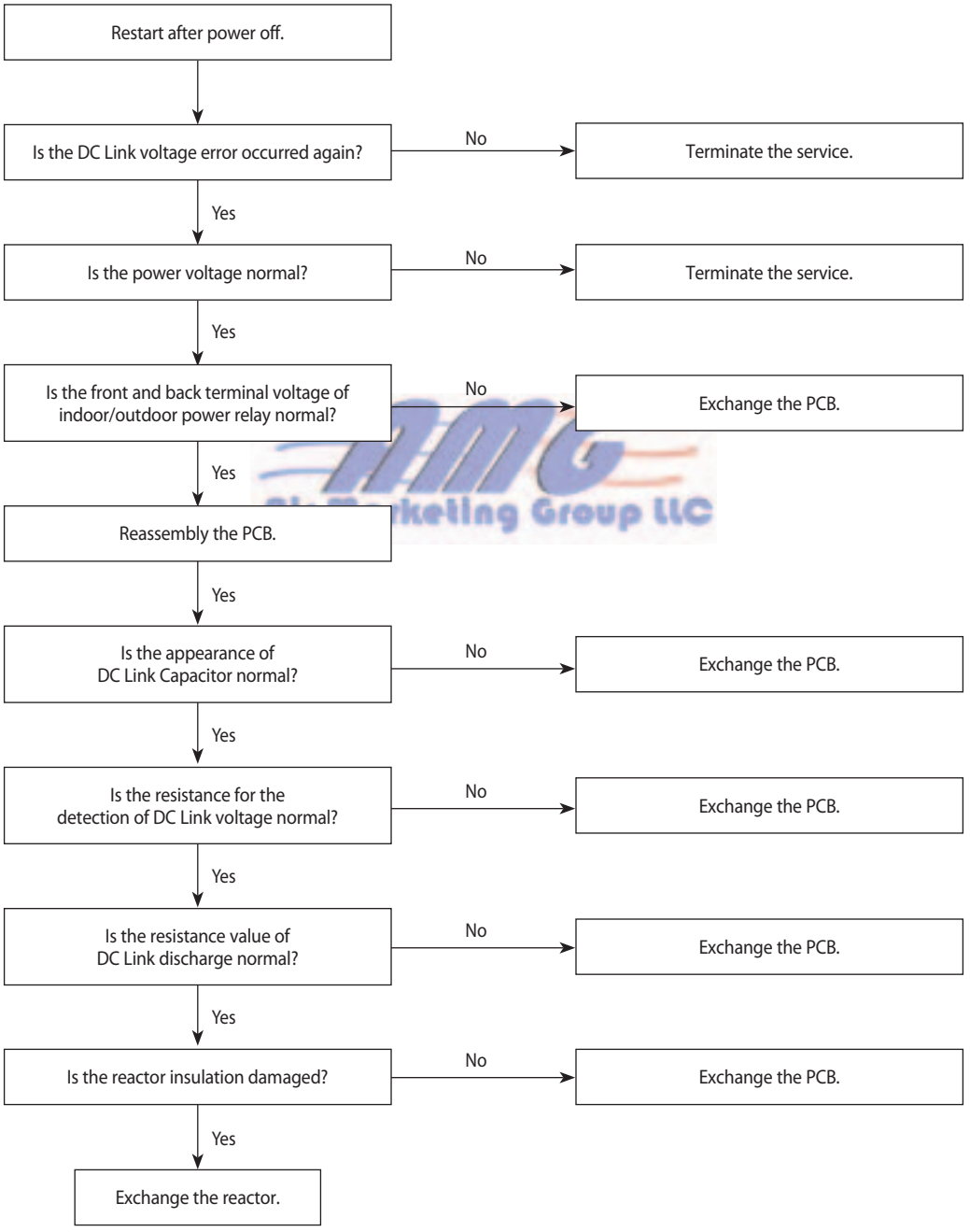
2. Troubleshooting procedure



12-2-15 DC Link Over voltage/ Low voltage error

1. Checklist :
   1) Is the power voltage normal?
   2) Is the voltage of front and back terminal of indoor(outdoor) power relay normal?
   3) Is the resistance value for DC Link voltage detection NORMAL?
   4) Is the resistance value of DC Link discharge normal?
   5) Is the appearance of DC Link Capacitor normal?

2. Troubleshooting procedure



12-2-16 The others

1. AC Line Zero Cross Signal OUT
   – Check the assembly condition of peripheral part of IC21, ZD201, ZD200(✳✳035✳✳) / ZD21, ZD22(✳✳052/070✳✳) and D201 on the PCB.

2. Capacity miss match
   – Check again the indoor unit option code.

12-3 PCB Inspection Method

12-3-1 Pre-inspection Notices

1. Check if you pulled out the AC power plug when you eliminate the PCB or front panel.
2. Don't hold the PCB side not impose excessive force on it to eliminate the PCB.
3. Don't pull the lead wire but hold the whole housing to connect or disconnect a connector to the PCB.
4. In case of outdoor PCB disassembly, check first the complete discharge of condenser C101(✳✳035✳✳), C103(✳✳052/070✳✳) after 30 seconds power off.

12-3-2 Inspection Procedure

1. Check connector connection and peeling of PCB or bronze coating pattern when you think the PCB is broken.
2. The PCB is composed of the 3 parts.
   - Indoor Main PCB Part : MICOM and surrounding circuit, relay, room fan motor driving circuit and control circuit, sensor driving circuit, power circuit of DC12V and DC5V, and buzzer driving circuit.
   - Display part : LED lamp, Switch, Remocon module
   - Outdoor Main PCB part : MICOM and surrounding circuit. IPM and PFC circuit and control circuit.
   - EMI PCB Part : Line filter and Noise Capacitor, Varistor

12-3-3 Indoor Detailed Inspection Procedure

No	Procedure	Inspection Method	Cause
1	Plug out and pull the PCB out of the electronic box. Check the PCB fuse.	1) Is the fuse disconnected?	• Over current • Indoor Fan Motor Short • AC Part Pattern Short of the MAIN PCB
2	Supply power. If the operating lamp twinkles at this time, the above 1)~3) have no relation.	Checking the power voltage.	
		1) Is the DB71 input voltage AC200V~AC240V?	• Power Cord is fault, Fuse open. Wrong Power Cable Wiring, AC Part is faulty.
		2) Is the voltage between both terminals of the C104 on the 2nd side of the transformer DC12V ±0.5V?	• Switching Trans or Power Circuit is faulty
		3) Is the voltage between both terminals of OUT and GND of IC19(KA7805) DC5V ±0.5V?	• Power Circuit is faulty, Load Short
3	Press the ON/OFF button. (Only ✳✳035✳✳) 1. FAN Speed [High] 2. Continuous Operation	1) Is the voltage over AC180V being imposed on terminal #3 and #5 of the fan motor connector(CN72)?	• Fan Motor of the indoor is faulty
		2) The fan motor of the indoor unit doesn't run.	• Fan Motor Connector(CN72) is faulty
		3) The power voltage between terminal #3 and #5 of the connector(CN72) is 0V.	• ASS'Y Main PCB is faulty • Connection is faulty

12-3-4 Outdoor Detailed Inspection Procedure

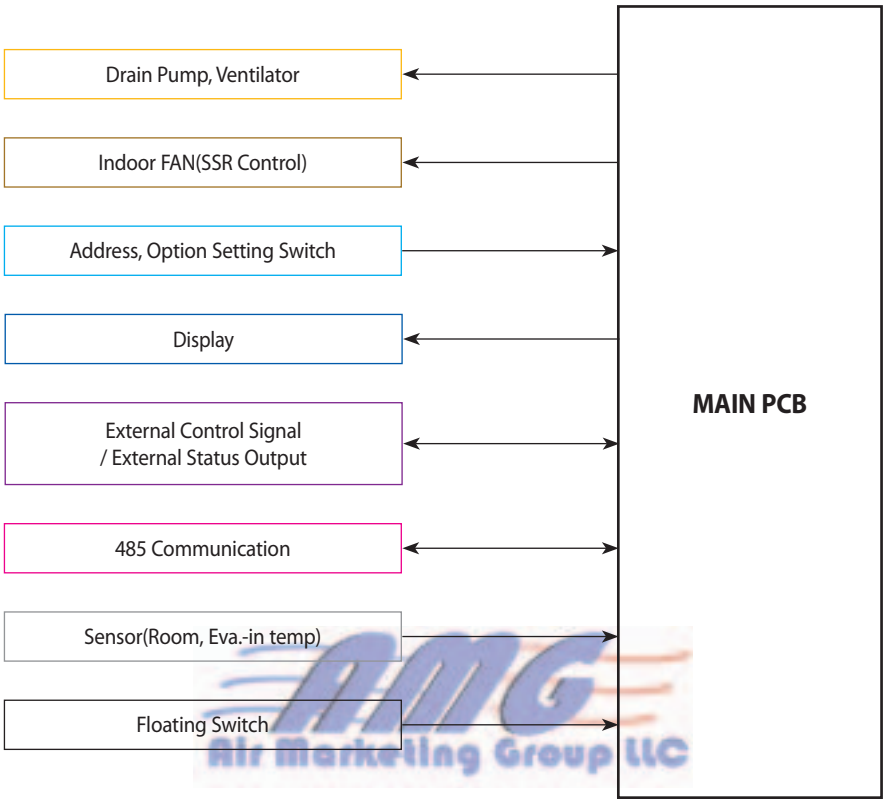
No	Procedure	Inspection Method	Cause
1	Wait 30 seconds over after disconnecting the power cable Check the outdoor PCB.	1) Is C101(✳✳035✳✳), C103(✳✳052/070✳✳) discharged? 2) Is the resistance of both terminals of C101(✳✳035✳✳), C103(✳✳052/070✳✳) opened? 3) Is the fuse of EMI PCB normal? 4) Is the reactor wire connected?	• Over Current • Inner short of PCB • BLDC FAN Motor Error(✳✳035✳✳)
2	Check the outdoor unit PCB.	1) Is R001 200ohm? 2) Does RY503(✳✳035✳✳), RY01(✳✳052/070✳✳) operate normally? ✳✳035✳✳–(IC55 & 8: 0V, 4: 5V) ✳✳052/070✳✳–(IC72 & 8: 0V, 4: 5V) 3) Is the fuse normal?	• Outdoor PCB Error • Relay(RY503–✳✳035✳✳, RY01–✳✳052/070✳✳) Error • IC55 Error(✳✳035✳✳) • IC72 Error(✳✳052/070✳✳)
3	Check the LED lighting after power supply.	1) Normal: Red: Light On, Green: Flickering, Yellow: Light Off? 2) Is the voltage of C101(✳✳035✳✳), C103(✳✳052/070✳✳) 250V over? 3) Is the input of IC19 8V, and the output 5V? 4) Recheck after disassembling BLDC FAN Wire (✳✳035✳✳)	• Inner short of outdoor PCB • Wrong assembly of outdoor PCB • BLDC FAN Error(✳✳035✳✳)
4	Check the condition of indoor & outdoor connection cable.	1) Is the green LED light on once per second? 2) Is the indoor & outdoor connection cable connected in order? 3) Is the grounding wire connected to the both of indoor & outdoor unit?	• Wrong connection of Indoor/Outdoor wiring • Wrong assembly of outdoor communication circuit
5	Check the Comp Wire.	1) Is it connected red, blue, and yellow in order in counter clockwise. 2) Are the valve and its installation condition good? 3) Is the installation condition of outdoor unit?	• Wrong assembly • Installation condition is bad.
6	Check the BLDC Fan. (✳✳035✳✳)	1) Is CN01 1, 3 over 250V? 2) Is CN01 3, 5 within 1V~5V? 3) Is the voltage of CN01 6 changed? 4) Is the resistance of BLDC Motor 1, 3 opened after power off?	• Outdoor PCB Error • BLDC Motor Error

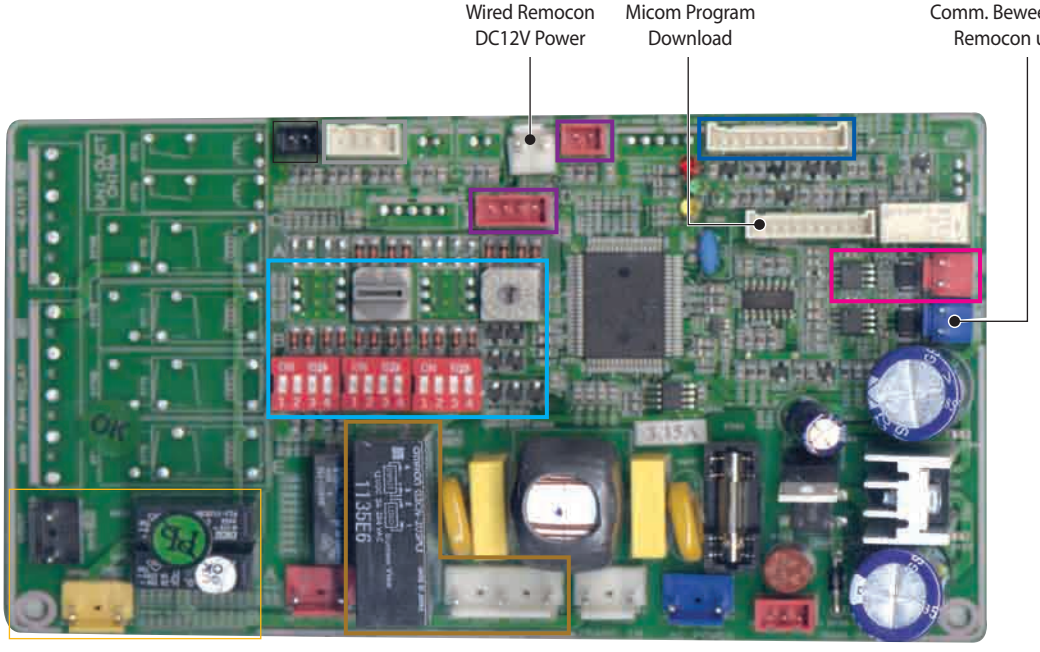
12-4 Main Part Inspection Method

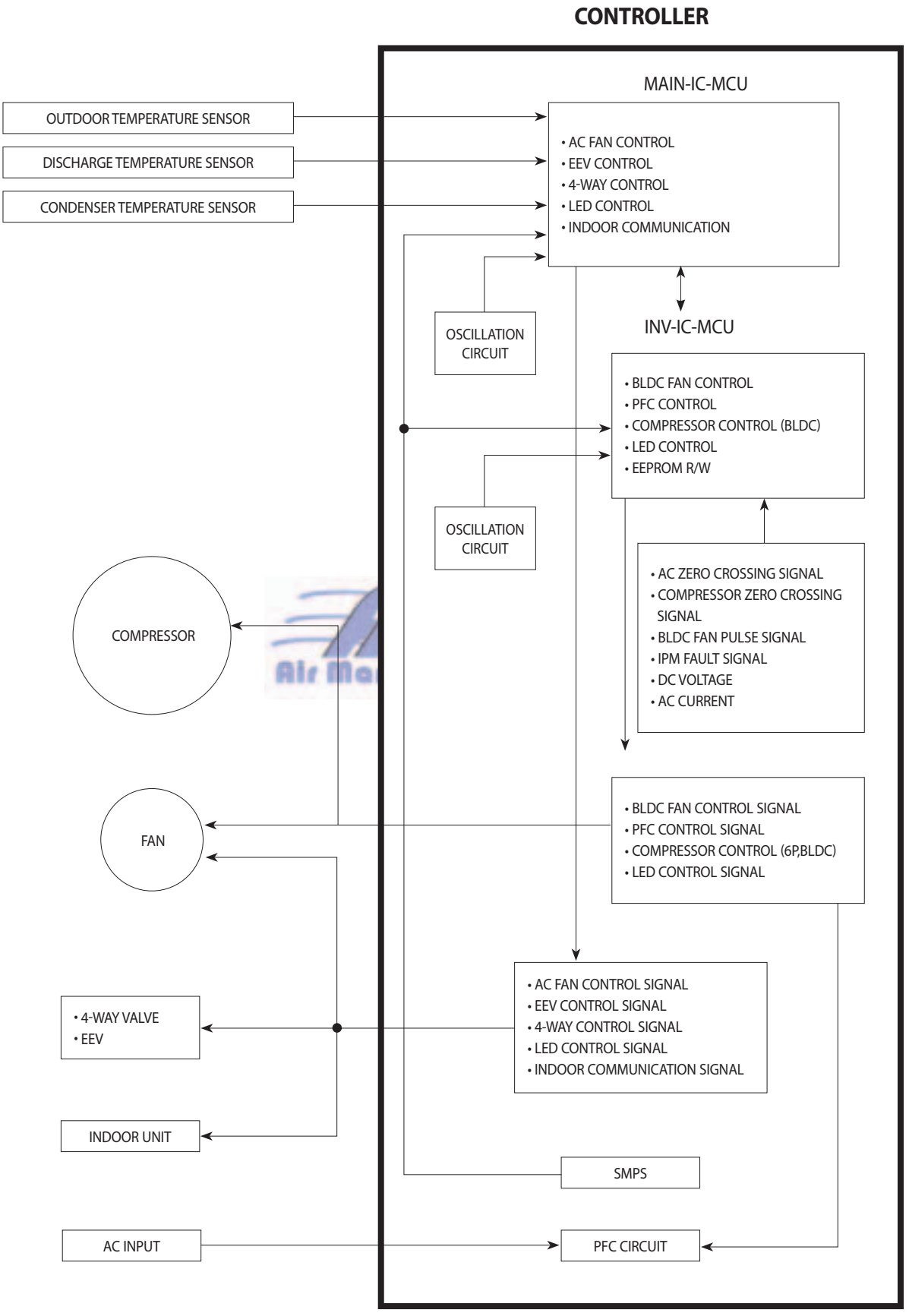
<table>
<tr><th>Part</th><th colspan="2">Breakdown Inspection Method</th></tr>
<tr><td rowspan="3">Room Temperature Sensor</td><td colspan="2">Measure resistance with a tester</td></tr>
<tr><td>Normal</td><td>At the normal temperature 37kΩ~ 8.3kΩ(-7˚C~+30˚C) *Refer to Table 12-3-4.</td></tr>
<tr><td>Abnormal</td><td>∞, 0Ω . . . Open or Short</td></tr>
<tr><td rowspan="3">Room Fan Motor</td><td colspan="2">Measure the resistance between terminals of the connector (CN73) with a tester.</td></tr>
<tr><td>Normal</td><td>At the normal temperature (10˚C ~ 30˚C)
<table>
<tr><th>Compare terminal</th><th>Resistance</th><th>Remark</th></tr>
<tr><td>Yellow, Red</td><td>166Ω(✳✳035✳✳), 47Ω(✳✳052/070✳✳) ± 10%</td><td>Main</td></tr>
<tr><td>White, Red</td><td>144Ω(✳✳035✳✳), 59Ω(✳✳052/070✳✳) ± 10%</td><td>Sub</td></tr>
</table></td></tr>
<tr><td>Abnormal</td><td>∞, 0Ω . . . Open or Short</td></tr>
<tr><td rowspan="3">Stepping Motor</td><td colspan="2">Measure the resistance between the red wire and each terminal wire with a tester.</td></tr>
<tr><td>Normal</td><td>About 300Ω at the normal temperature (20˚C ~ 30˚C)</td></tr>
<tr><td>Abnormal</td><td>∞, 0Ω . . . Open or Short</td></tr>
</table>

13. Block Diagram

13-1 Indoor Unit

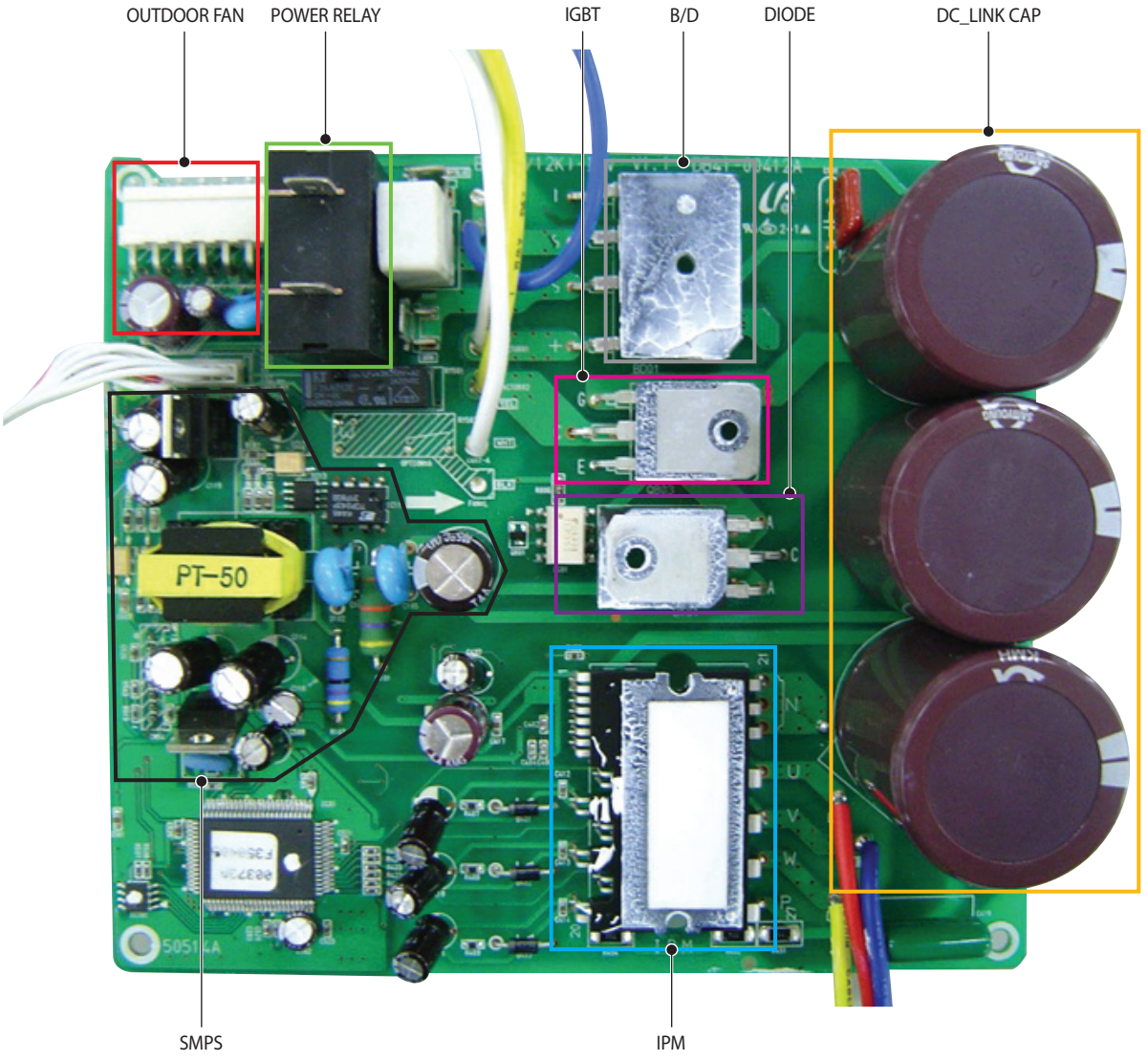




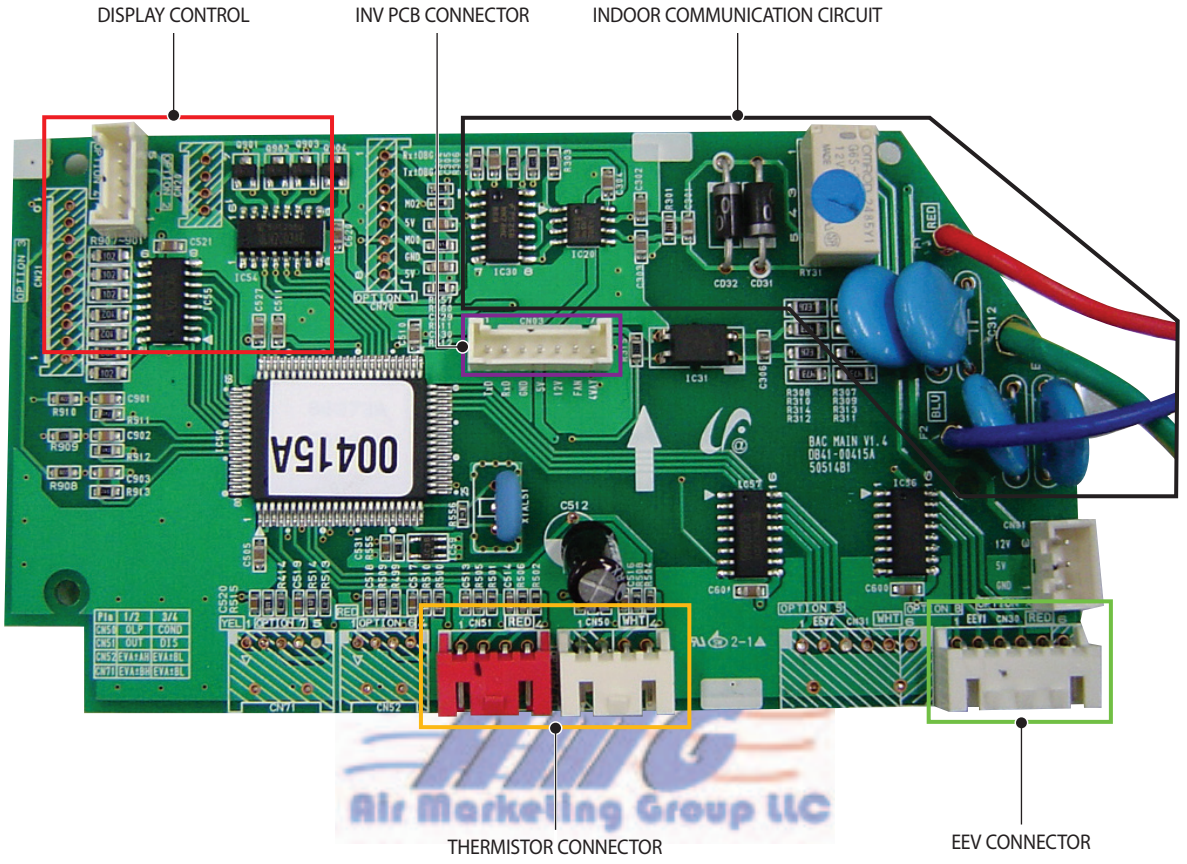


13-2-1 UH035CAV

■ Inverter PCB



■ Main PCB



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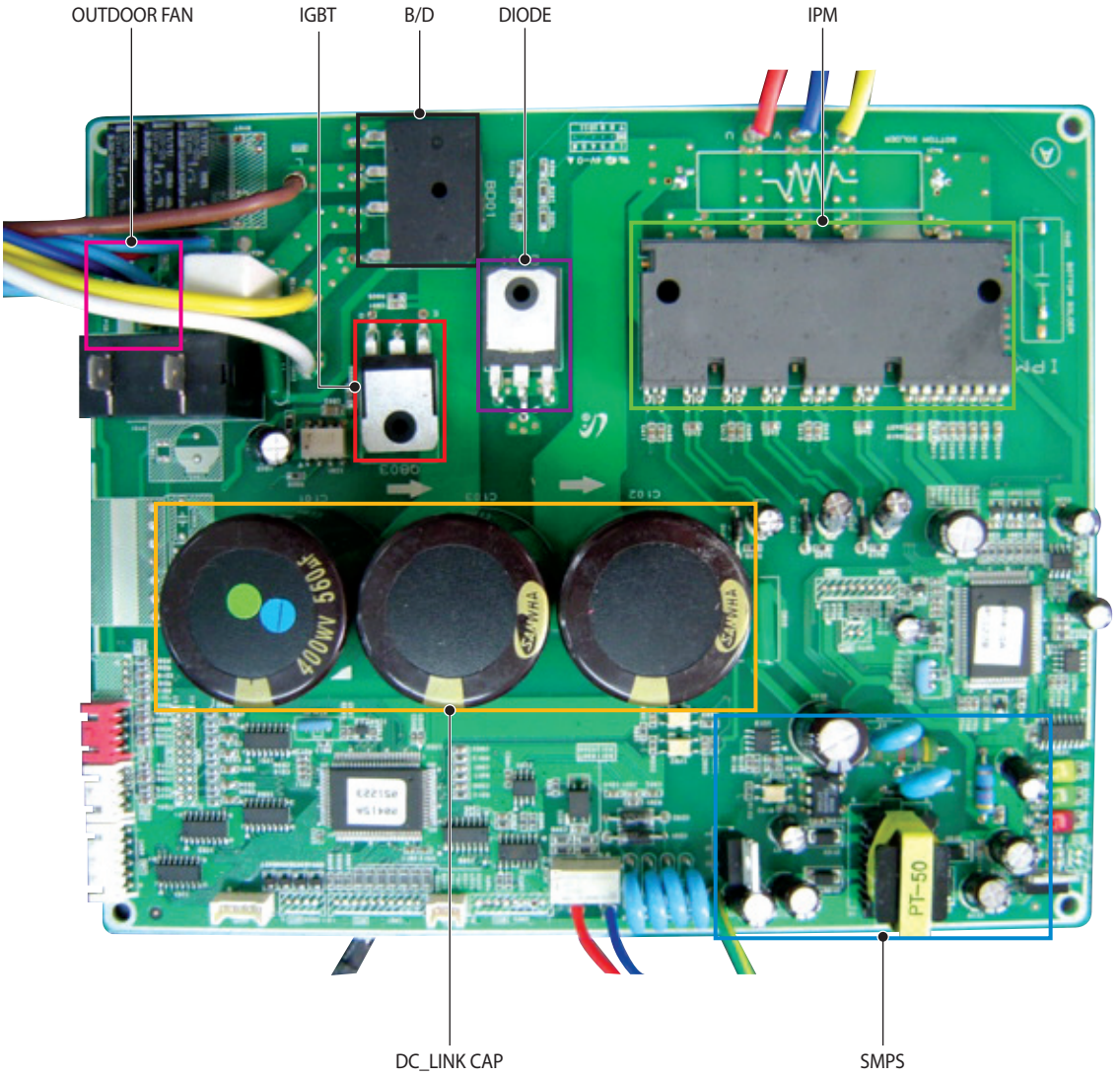

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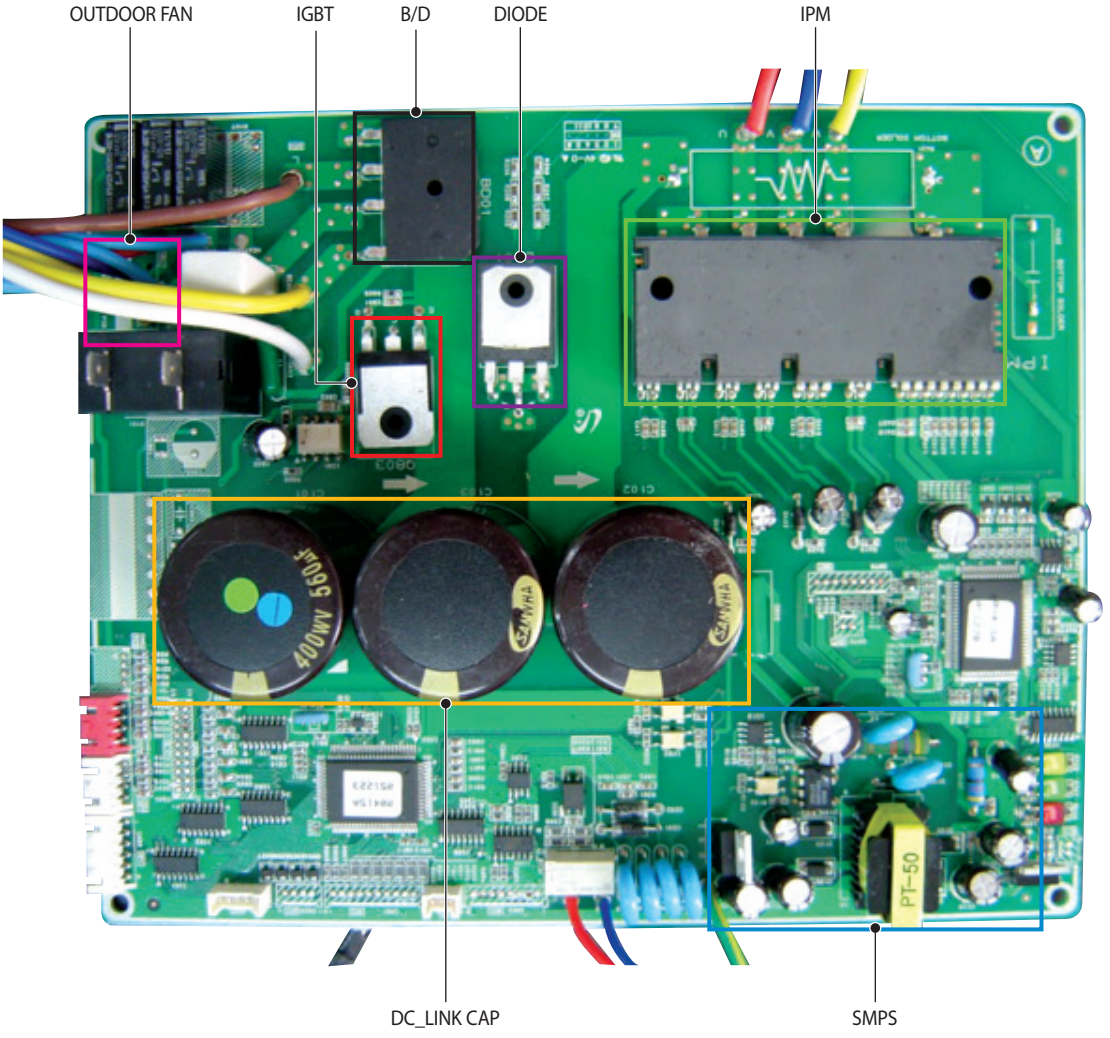


14. Reference Sheet

14-1 Index for Model Name

✳ Project model code for New Built-in Product.

Model Code

Product Type(I)			
Indoor Unit & Outdoor Unit	Cassette	1-Way	K
		2-Way	G
		4-Way	C
		Mini 4-Way	T
	Duct	Silhouette	D
		HSP	H
		LSP	L
		Slim	E
		Buint-in	B
	Ceiling	-	F
	Console	-	N
	PAC	-	P
	Split	-	W
Universal Outdoor Unit(DPM)			U

Mode	
C/O	C
H/P	H
H/P+Heater	E
C/O+Heater	G
C/O+Hydronic	N

Capacity	
BTU	kwx10
9K	26
12K	35
14K	40
18K	52
21K	60
24K	70
28K	82
32K	94
36K	105
44K	128
48K	140
60K	175
72K	210
80K	230
96K	280

Power Supply		
Normal	N	H
115V,60Hz	A	-
220V,60Hz	B	TB
208~230V,60Hz	C	-
200~220V,50Hz	D	-
220~240V,50Hz	E	TE
220V,60Hz,3Φ	F	TF
380~415V,50Hz,3Φ	G	TG
127V, 50Hz	H	-
220~240V,50/60Hz,1Φ	M	-
380V,60Hz,3Φ	H	-
Inverter 1Φ	V	
Inverter 3Φ	W	

Refrigerant	
R-22	Z
R407C	C
R410A	A

Product Type(II)		
Normal	Indoor	A
	Outdoor	X
Universal (DPM)	Indoor	M
	Outdoor	M
Inverter		V

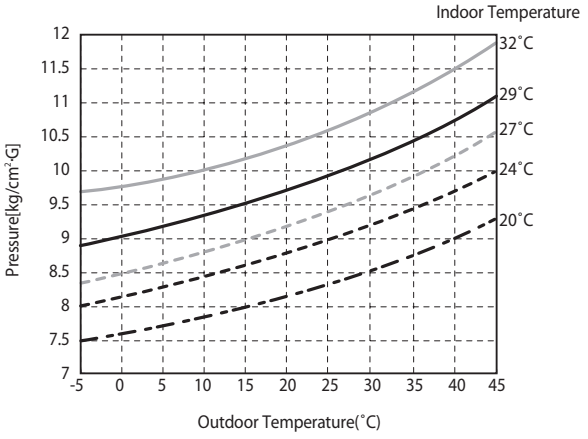
Version

Plant	
SEC	None
SSEC	C
TSE	T

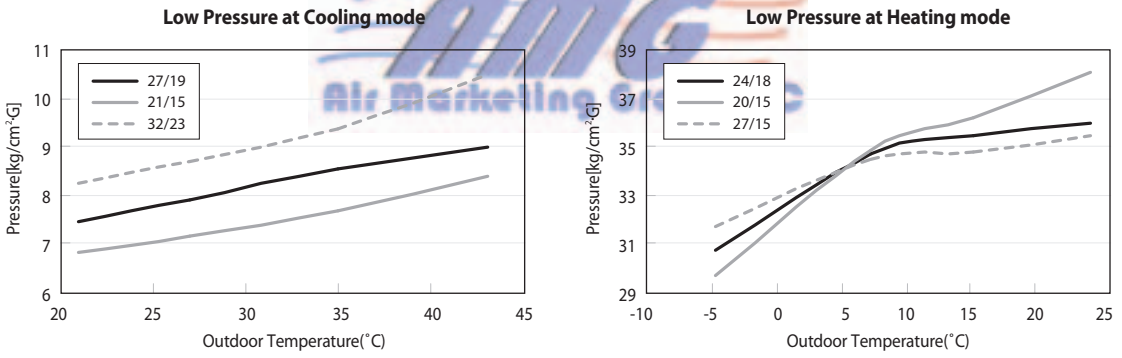
14-2 Low Refrigerant Pressure Distribution

Note : • Please measure the refrigerant pressure after the air conditioner operates on testing cooling mode during more than 15 minutes.

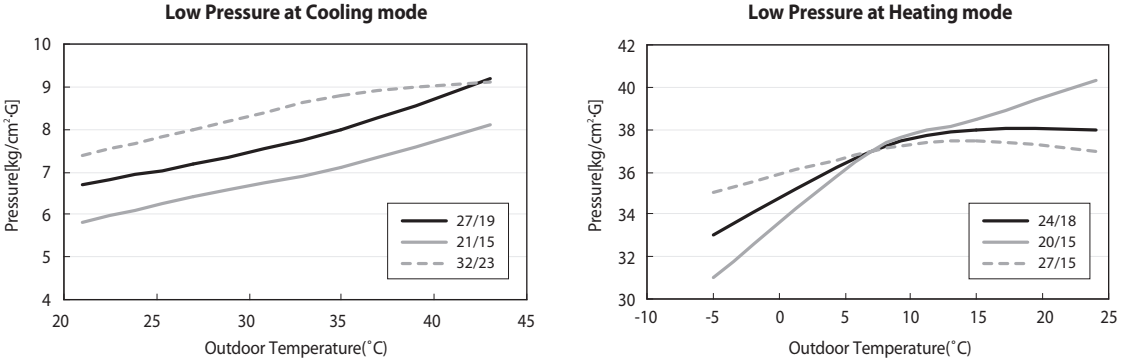
■ ✳✳**035**✳✳



■ ✳✳**052**✳✳



■ ✳✳**070**✳✳



14-3 Pressure & Capacity mark

■ Power/Heat

W	cal/s	kcal/h	Btu/h	HP	kg·m/s	lb·m/s
1	0.23885	0.85985	3.4121	0.001341	0.10197	0.73756
4.1868	1	3.6	14.286	0.0056146	0.42693	3.088
1.163	0.27778	1	3.9683	0.0015596	0.11859	0.85778
0.29307	0.06999	0.252	1	$3.9302x10^{-4}$	0.029885	0.21616
745.7	178.11	641.19	2,544.4	1	76.04	550
9.8067	2.3423	8.4322	33.462	0.013151	1	7.233
1.3558	0.32383	1.1658	4.6262	0.0018182	0.13826	1

14-4 Q & A for Non-trouble

Classification	Class	Description
Cooling	Q	**The cooling is weak.**
	A	When it is hot outside, its cooling capacity decreases due to the increase of the ambient temperature. When the dust filter gets blocked or warm outside air gets in, the cooling capacity will decrease. So, make sure to clean the dust filter frequently, prevent heat loss by closing the doors and insulate the cooling area by using curtains, blinds, shades or window tinting.
	Q	**The cooling is good generally. But, it gets weak when it is considerably hot.**
	A	It occurs when the outdoor unit is exposed to direct sun light and heat-up air is not ventilated well.So, set up a sunblind over the outdoor unit and keep stuff away from the unit to increase the ventilation. When the cooling capacity decreases during a heat wave, clean the heat exchanger of the outdoor unit or spray some cold water to the heat exchanger to increase the cooling capability.
	Q	**The cooling is weak. Does it need refrigerant charging?**
	A	It is not correct charging refrigerant regularly. Except that you have moved in several times or the connection pipes are broken, the refrigerant does not run low. So, when refrigerant is additionally charged, it could be costly and cause a product's failure. When the refrigerant leaks, all of it will escape in a short time resulting in cooling failure and no water coming out of the drain hose. So, if water comes out from the drain hose, it indicates the normal operation of the product and it does not need refrigerant charging.
	Q	**It fails to do cooling.**
	A	When the air conditioner is set to Ventilation or the desired temperature is set higher than the current temperature, it fails to do cooling. In this case, select Cooling or set the desired temperature lower.
Leakage	Q	**It floods the floor.**
	A	Place the drain hose properly. When it is not placed properly, the drain water would flow back flooding the floor. So, straighten out the drain hose for the water to be drained well.
	Q	**Water drips at the drain connection (service valve) of the outdoor unit.**
	A	When a glass bottle is taken out of the refrigerator, moisture gets condensed on its surface due to the temperature differences. The same principle applies to the air conditioner. When cold refrigerant goes through the copper tube, moisture gets condensed on the surface of the tube and the connection areas. To prevent the water condensation, the pipes are insulated. But, the connection areas of the outdoor unit are not insulated for the purpose of maintenance or repair, and water gets condensed due to the temperature differences and drips down. Generally, it evaporates right away. But, when it drips much during muggy days, put a water pan on the floor.
	Q	**It leaks even though a drain pump is used.**
	A	It occurs when the drain pump is plugged out or it is out of order. Check the power of the drain pump and the position of the drain hose, and when the pump is faulty, contact the drain pump manufacturer. Samsung Electronics do not manufacture drain pumps. So, we are not able to correct the drain pump problems.
Smells	Q	**Whenever the air conditioner is turned on, it irritates my eyes and gives me a headache.**
	A	There are no components in the air conditioner irritating the eyes and sending out chemical smells. But, when the air conditioner is turned on, other smell sources are sucked into the air conditioner and get out of it. So, find and root out the smell sources. Generally, it occurs at a interior renovated place, a pharmacy, a gasoline handling place, a tire shop, a second-hand book shop or an electronic component handling place; when its chemical or musty smells are sucked in and sent out, it can be misled that the air conditioner generates them. So, find and root out the problem or refresh the room frequently.

Classification	Class	Description
Smells	**Q**	**Whenever the air conditioner is turned on, it stinks.**
	A	There are no components in the air conditioner sending out chemical smells. But, when the air conditioner is turned on, other smell sources are sucked into the air conditioner and get out of it. So, find and root out the smell sources. Generally, when the drain hose is taken out to the washing room or there are sources of smells such as a diaper bin, a shoe shelf or a socks bin, bad smells generate. Also, it occurs where glass cleaners or air fresheners are used; when they are sucked in interacting with dusts and moistures inside, bad smells generate. These kinds of organic materials noxious to human bodies. So, we recommend against the use of them.
	Q	**Whenever the air conditioner is turned on, it smells sour.**
	A	When the room is papered recently, its paste smells would be sucked inside. Also, when the air conditioner is installed in the study room of young boys loving sweat-generating activities such as the basketball, excessive sweats evaporate and get sucked into the air conditioner resulting in bad smells. So, find and root out the problem or refresh the room frequently.
	Q	**Whenever the air conditioner is turned on, it smells musty.**
	A	It is due to the improper keeping of the product after its use. When keeping the product, dry up the inside with the operation of Ventilation to prevent must. When the product is kept without drying up the inside with Ventilation, mold would grow inside resulting in must. So, open the windows and switch on the Ventilation function to get rid of the saturated smell inside.
	Q	**Whenever the air conditioner is turned on, it sends out bad smells such as stale smells.**
	A	It occurs generally when there are pet animals in the house. Their smells stay at the same place. But, when the air conditioner is turned on, the air gets circulated resulting in the circulation of the smells. So, find and root out the problem or refresh the room frequently.
	Q	**It sends out bad smells.**
	A	When the air filter is filthy, it could send out bad smells. So, clean the filter and ventilate the room with the windows open while operating the Ventilation function.
Operation	**Q**	**It won't start.**
	A	There is a power failure or it is plugged out. Also, check if the power distribution panel is switched off.
	Q	**It goes off during operation.**
	A	When the hot air does not escape properly, it goes off during operation. It occurs when it does not ventilate properly because the outdoor unit is covered, the back of the outdoor unit is blocked by a cardboard or a plywood panel, and the front of the outdoor unit is blocked by the closed window or other obstacles. Clear the above obstacles from the outdoor unit.
	Q	**It generally works properly. But, when it's considerably hot, it goes off during operation.**
	A	It occurs when the outdoor unit is exposed to direct sunlight and the hot air does not escape properly. Set up a sun blind over the outdoor unit and clear the neighboring obstacles from the outdoor unit to provide good ventilation. When it goes off frequently during a heat wave, it would prevent the turn-off and increase the cooling capacity cleaning the outdoor unit or spraying some water to the heat exchanger.
	Q	**The remote controller won't operate.**
	A	When the batteries run out or the transmitter or receiver of the remote controller is blocked by obstacles, change the batteries or keep the obstacles away from the controlling area. Also, the remote controller may not work under intensive light from a 3-wave length lamp or a neon sign due to the EMI. In this case, take the remote controller closer to the receiver.

Q & A for Non-trouble(cont.)

Classification	Class	Description
Installation	**Q**	**Who installs the air conditioner? (Relocation/Re-installation)**
	A	When relocating or re-installing the air conditioner, make sure to contact Samsung Electronics Service Center or Authorized Service Agent and have them to do the job. (If not, it could cause personal injury or product damage.) The cost for the relocation/re-installation of the air conditioner is subject to the customer's expense. There is a cost table. But, our service engineer needs to visit to total up the cost correctly. When you move in, make sure to contact Samsung Electronics Service Center or Authorized Service Agent in advance to streamline the process.
	Q	**Is it possible to install the outdoor unit outside?**
	A	It is possible to install it at a designated place in the apartment or on the rooftop nearby. But, it's illegal hanging an angle iron case with the outdoor unit in it outside the apartment. Also, it is illegal obstructing passers-by with the outdoor unit installed outside.
	Q	**What can be done to install the outdoor unit facing the road because it is a commercial building?**
	A	The following is an excerpt from Building Code going into effect from JUNE 1st 2005. "The exhaust pipe of a cooling or ventilation facility installed in a building adjacent to the streets of commercial or residential areas shall be installed higher than 2 m to prevent the exhaust air from blowing directly to passers-by and the current facilities shall be corrected by MAY 31st 2005." So, please install it higher than 2 m or not to blow the hot exhausting air directly to passers-by.
	Q	**What about installing a windscreen during installation not to blow hot air directly to passers-by?**
	A	When the hot air from the front of the outdoor unit is blocked, the product's performance will be affected and it will fail to operate properly. So, keep it at least 300mm away from its surrounding walls and give it good ventilation.

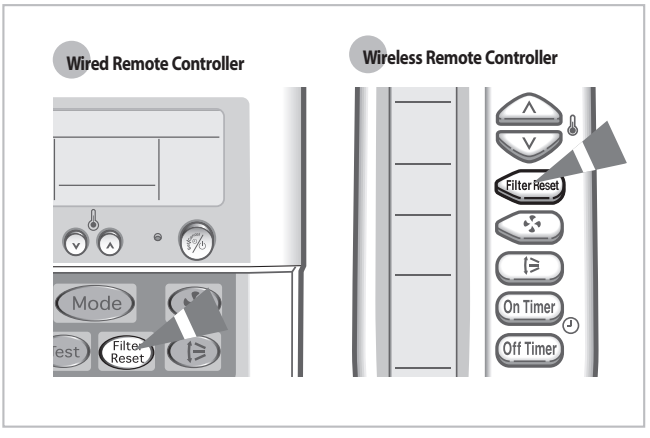
14-5 Cleaning/Filter Change

For the best use of your air conditioner, you must clean it every 2 weeks to remove the dust accumulated on the air filter.

⚠ • Before cleaning your air conditioner, check if you have turned off the circuit breaker.

1. Bend air filter wire and push upward.
2. Pull out the air filter two ways like pictures.
3. Remove all dust on air filter with a vacuum cleaner or a brush. In case of serious dust accumulation, put the air filter in warm detergent water and shake it vertically.
4. Dry the air filter.
5. When you have finished, insert the filter into the unit.
6. Clean the outdoor unit with a vacuum cleaner or a brush once a month.

Note : • After cleaning the air conditioner, press the Filter Reset button.



14-6 Installation

14-6-1 Before Installation

Keep the air conditioner outlet and inlet free from its surroundings.
In case of installation, keep the symmetry and fix it to prevent vibration.
The pipe length shall meet the standard as far as possible.

14-6-2 Installation Procedure

■ Location

Install the product in an area to guarantee the best cooling effect, convenience of piping and electric work, and inexistence of vibration or wind.

■ Wall Drilling

Drill the wall downward in a diameter of 60 to 65mm.

■ Fixing Indoor Unit & Outdoor Unit

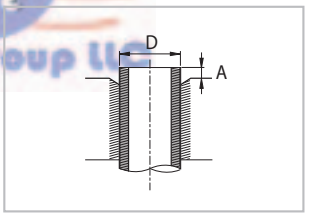
Fix the air conditioner indoor unit securely to the wall. Secure the outdoor unit in a suitable position.

■ Pipe Spooling & Connecting

You shall cut the pipe with a pipe cutter and grind all the burrs of the cut surface.
Pipe expansion may continue until the pipe surface becomes uneven or torn apart.
Be sure to use a torque wrench to tighten pipes or flare nuts.

<Torque & Depth>

Outer Diameter(D)	Torque(kgf·cm)	Depth(A)
6.35mm(1/4")	140~170	1.3mm
9.52mm(3/8")	250~280	1.8mm
12.70mm(1/2")	380~420	2.0mm
15.88mm(5/8")	440~480	2.2mm
19.05mm(3/4")	990~1,210	2.2mm



■ Leak Test

Put an inert gas like nitrogen in the outdoor unit pipe and put soap bubbles or other test liquids on the pipe surface for the leak test.

■ Drain Hose Connecting

Install the drain hose downward to drain water naturally. Be sure to pour water into the hose to check if it drains well.

■ Testing Drainage

Pure water into the drain pan in the indoor unit, and confirm that the water flows out the drain hose.

■ Electric & Earth Work

Electric and earth work shall meet the "Electric Facility Technology Standard" and the "Internal Wire Regulation" of the Electric Business Laws.

■ Inspection & Trial Run

Upon completion of the tests, you shall make a trial run while you explain the main functions of the air conditioner to finish the installation.

14-7 Installation Diagram of Indoor Unit and Outdoor Unit

14-7-1 Air-Purge Procedure

1) Connect each assembly pipe to the appropriate valve on the outdoor unit and tighten the flare nut.

2) Connect the charging hose of low pressure side of manifold gauge to the packed valve having a service port as shown at the figure.

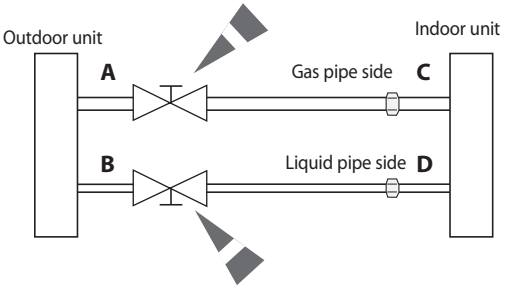
3) Open the valve of the low pressure side of manifold gauge counter-clockwise.

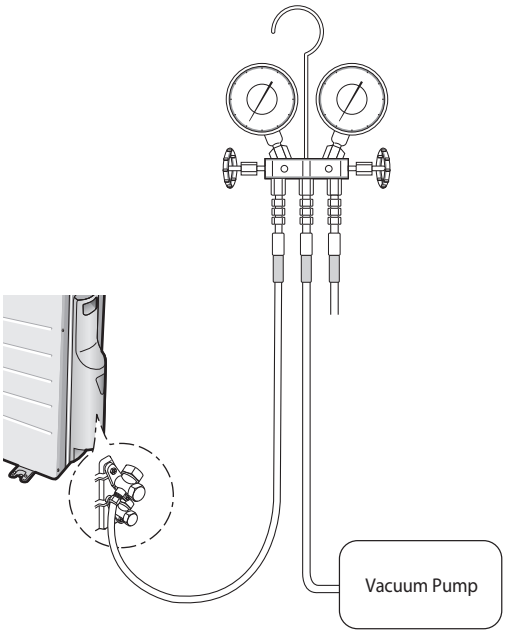
4) Purge the air from the system using vacuum pump for about 10 minutes.
   - Make sure that pressure gauge show -0.1MPa(-76cmHg) after about 10 minutes.
   - This procedure is very important in order to avoid gas leak.
   - Turn off the vacuum pump.
   - Close the valve of the low pressure side of manifold gauge clockwise.
   - Remove the hose of the low pressure side of manifold gauge.

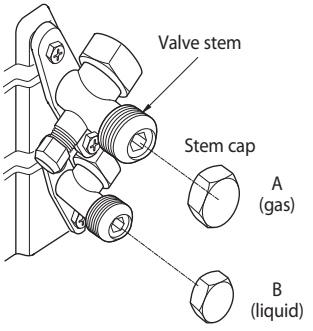
5) Set valve cork of both liquid side and gas side of packed valve to the open position.

6) Mount the valve stem nuts and the service port cap to the valve, and tighten them at the torque of 183kgf·cm with a torque wrench.

7) Check for gas leakage.
   - At this time, especially check for gas leakage from the 3-Way valve's stem nuts, and from the service port cap.







14-7-2 "Pump down" Procedure

Pump down will be carried out when an evaporator is replaced or when the unit is relocated in another area.

1) Remove the caps from the 3-Way valve and the 3-Way valve.

2) Turn the 3-Way valve clockwise to close and connect a pressure gauge (low pressure side) to the service valve, and open the 3-Way valve again.

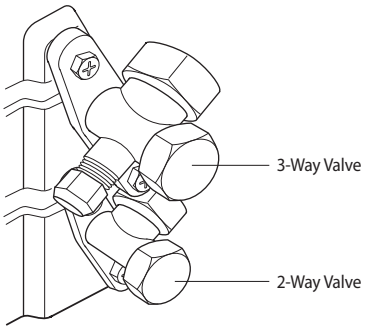
3) Set the unit to cool operation mode. (Check if the compressor is operating.)

4) Turn the 3-Way valve clockwise to close.

5) When the pressure gauge indicates "0" turn the 3-Way valve clockwise to close.

6) Stop operation of the air conditioner.

7) Close the cap of each valve.



Remarks

Relocation of the air conditioner

- Refer to this procedure when the unit is relocated.
- Carry out the pump down procedure (refer to the details of 'pump down').
- Remove the power cord.
- Disconnect the assembly cable from the indoor and outdoor units.
- Remove the flare nut connecting the indoor unit and the pipe.
- At this time, cover the pipe of the indoor unit and the other pipe using a cap or vinyl plug to avoid foreign material entering.
- Disconnect the pipe connected to the outdoor unit.
  At this time, cover the valve of the outdoor unit and the other pipe using a cap or vinyl plug to avoid foreign material entering.
- Make sure you do not bend the connection pipes in the middle and store together with the cables.
- Move the indoor and outdoor units to a new location.
- Remove the mounting plate for the indoor unit and move it to a new location.

MEMO

MEMO

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Europe	http://europe.samsungportal.com
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