



**SAMSUNG**

# SYSTEM AIR CONDITIONER

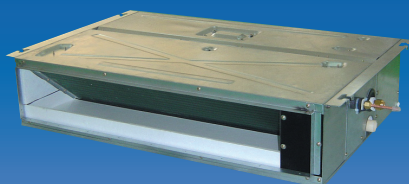
Basic : DH24BTA

Model : EH035EAV/EH052EAV/EH070EAV

Model Code : EH035EAV/EH052EAV/EH070EAV  
UH035EAV/UH052EAV/UH070EAV

# ***SERVICE*** Manual

## AIR CONDITIONER



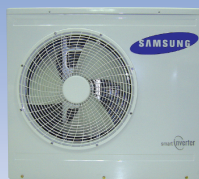
EH035EAV/EH052EAV/EH070EAV



UH035EAV



UH052EAV



UH070EAV

## THE FEATURE OF PRODUCT

- Built-in Duct Type
- High Performance & Energy Saving
- Long Piping(Length & Height)
- Long Ambient Operation(In Low Temp.)  
: Up to -10°C(Heating), Up to -5°C(Cooling)
- Eco-friendly Product  
(Lead-Free, RoHS, WEEE)

For more information, Please access to our service web site(<http://itself.sec.samsung.co.kr>)

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# 1. Precautions

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## 1-1 Installing the air conditioner

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- 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

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- 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

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- 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

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- 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

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- 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.

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## 2. Product Specifications

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### 2-1 The Feature of Product

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#### ■ 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 arises the reliability of the air conditioner.

– EH035EAV : Max.20m Long & 12m Height

– EH052/070EAV : Max.30m Long & 15m 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)

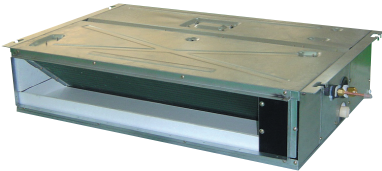
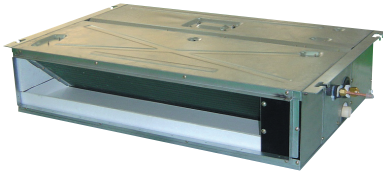
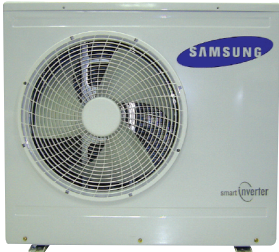
## 2-2 Product Specifications

| Item                         |                                    |                   |                   | Model           | EH035EAV                                                 |                                       |                |             |  |
|------------------------------|------------------------------------|-------------------|-------------------|-----------------|----------------------------------------------------------|---------------------------------------|----------------|-------------|--|
|                              |                                    |                   |                   |                 | Indoor Unit                                              |                                       | Outdoor Unit   |             |  |
| Type                         |                                    |                   |                   |                 | DUCT                                                     |                                       |                |             |  |
| Performance                  | Cooling(Min/Std/Max)               |                   | kW                |                 | 0.98/3.5/4.2                                             |                                       |                |             |  |
|                              | Heating(Min/Std/Max)               |                   | kW                |                 | 0.98/4.0/5.8                                             |                                       |                |             |  |
|                              | Dehumidifying                      |                   | l/h               |                 | 1.6                                                      |                                       |                |             |  |
|                              | Air Volumn                         | Cooling           | m³/min<br>(H/M/L) | 10/8.0/6.5      |                                                          | 32                                    |                |             |  |
|                              |                                    | Heating           |                   | 11/9.0/7.0      |                                                          | 32                                    |                |             |  |
|                              | Noise                              | Cooling           | dB                | 35              |                                                          | 53                                    |                |             |  |
|                              |                                    | Heating           |                   | 35              |                                                          | 53                                    |                |             |  |
|                              | Energy Efficiency Ratio            | Cooling           | W/W               | 3.21            |                                                          |                                       |                |             |  |
|                              |                                    | Heating           |                   | 3.61            |                                                          |                                       |                |             |  |
| Power                        |                                    |                   | ph-V-Hz           |                 | 1-220/240-50                                             |                                       |                |             |  |
| Power                        | Power Consumption<br>(min/Std/Max) | Cooling           | W                 | 250/1,060/1,490 |                                                          |                                       |                |             |  |
|                              |                                    | Heating           |                   | 230/1,080/1,590 |                                                          |                                       |                |             |  |
|                              | Operating Current<br>(min/Std/Max) | Cooling           | A                 | 1.7/5.1/6.9     |                                                          |                                       |                |             |  |
|                              |                                    | Heating           |                   | 1.5/5.2/7.1     |                                                          |                                       |                |             |  |
|                              | Power Factor                       | Cooling           | %                 | 91              |                                                          |                                       |                |             |  |
|                              |                                    | Heating           |                   | 91              |                                                          |                                       |                |             |  |
| Size                         | Outer Dimension                    | WidthxHeightxDpth |                   | mm              | 900x199x600                                              |                                       | 790x548x285    |             |  |
|                              |                                    |                   |                   | inch            | 35.4x7.8x15.4                                            |                                       | 31.1x21.6x11.2 |             |  |
|                              | Weight(Net)                        |                   | kg                |                 | 26                                                       |                                       | 35.5           |             |  |
|                              | Compressor                         | Type              |                   |                 | Rotary,G4C090LU2ER                                       |                                       |                |             |  |
|                              |                                    | Motor             | Type              |                 |                                                          | Hermetic                              |                |             |  |
|                              |                                    |                   | Rated Output      |                 |                                                          | 853                                   |                |             |  |
|                              | Oil Type                           |                   |                   |                 | POE                                                      |                                       |                |             |  |
|                              | Blower                             | Type              |                   |                 | Sirocco                                                  |                                       | Propeller      |             |  |
|                              |                                    | Motor             | Type              |                 |                                                          | Resin/Steel                           |                | Resin/Steel |  |
|                              |                                    |                   | Rated Output      |                 |                                                          | 30                                    |                | 40          |  |
| Piping                       | Pipe O.D Size                      |                   | Liquid            | mm(inch)xL(m)   |                                                          | ø6.35(1/4")x7.5                       |                |             |  |
|                              |                                    |                   | Gas               | mm(inch)xL(m)   |                                                          | ø12.7(1/2")x7.5                       |                |             |  |
|                              | Connection Method                  |                   |                   |                 | Flare                                                    |                                       |                |             |  |
|                              | Between                            |                   | Height            | m               |                                                          | Max.12                                |                |             |  |
|                              |                                    |                   | Weight            | m               |                                                          | Max.20                                |                |             |  |
| Heat Exchanger               |                                    |                   |                   |                 | 2 Row 12 Step                                            |                                       | 2 Row 24 Step  |             |  |
| Refrigerant Control Unit     |                                    |                   |                   |                 | EEV                                                      |                                       |                |             |  |
| Freezer Oil Capacity         |                                    |                   |                   | cc              |                                                          | 320                                   |                |             |  |
| Refrigerant to Change(R410A) |                                    |                   |                   | g               |                                                          | 1,000 (~15m chargeless, 15~20m 15g/m) |                |             |  |
| Protection Device(OLP)       |                                    |                   |                   |                 | None                                                     |                                       |                |             |  |
| Cooling Test Condition       |                                    |                   |                   |                 | Indoor Unit: DB27 WB19° C Outdoor Unit: DB35° C WB24° C  |                                       |                |             |  |
| Heating Test Condition       |                                    |                   |                   |                 | Indoor Unit: DB20° C WB15° C Outdoor Unit: DB7° C WB6° C |                                       |                |             |  |

## Product Specifications(cont.)

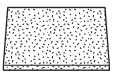
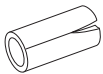
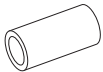
| Item                         |                                    |                   |                   | Model           | EH052EAV                                           |                 | EH070EAV      |                  |  |
|------------------------------|------------------------------------|-------------------|-------------------|-----------------|----------------------------------------------------|-----------------|---------------|------------------|--|
|                              |                                    |                   |                   |                 | Indoor Unit                                        | Outdoor Unit    | Indoor Unit   | Outdoor Unit     |  |
| Type                         |                                    |                   |                   |                 | DUCT                                               |                 | DUCT          |                  |  |
| Performance                  | Cooling(Min/Std/Max)               |                   | kW                | 1.7/5.0/6.0     |                                                    | 2.2/7.1/8.0     |               |                  |  |
|                              | Heating(Min/Std/Max)               |                   | kW                | 1.5/6.0/9.0     |                                                    | 1.9/8.0/11.0    |               |                  |  |
|                              | Dehumidifying                      |                   | l/h               | 1.63            |                                                    | 2.66            |               |                  |  |
|                              | Air Volumn                         | Cooling           | m³/min<br>(H/M/L) | 14.5            | 43                                                 | 16.7            | 50            |                  |  |
|                              |                                    | Heating           |                   | 16              | 43                                                 | 19.5            | 50            |                  |  |
|                              | Noise                              | Cooling           | dB                | 40/35           | 58                                                 | 42/40           | 60            |                  |  |
|                              |                                    | Heating           |                   | 40/35           | 58                                                 | 42/40           | 60            |                  |  |
|                              | Energy Efficiency Ratio            | Cooling           | W/W               | 3.23            |                                                    | 3.21            |               |                  |  |
|                              |                                    | Heating           |                   | 3.61            |                                                    | 3.72            |               |                  |  |
| Power                        |                                    |                   | ph-V-Hz           | 1-220/240-50    |                                                    |                 |               |                  |  |
| Power                        | Power Consumption<br>(min/Std/Max) | Cooling           | W                 | 500/1,550/1,950 |                                                    | 600/2,210/2,600 |               |                  |  |
|                              |                                    | Heating           |                   | 500/1,660/3,000 |                                                    | 550/2,150/3,600 |               |                  |  |
|                              | Operating Current<br>(min/Std/Max) | Cooling           | A                 | 2.7/7.0/9.0     |                                                    | 3.0/10.0/11.0   |               |                  |  |
|                              |                                    | Heating           |                   | 2.5/7.5/14.0    |                                                    | 2.8/10.0/16.5   |               |                  |  |
|                              | Power Factor                       | Cooling           | %                 | 95.9            |                                                    | 96.9            |               |                  |  |
|                              |                                    | Heating           |                   | 96.0            |                                                    | 96.8            |               |                  |  |
| Size                         | Outer Dimension                    | WidthxHeightxDpth |                   | 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)                        |                   | kg                | 31              | 50                                                 | 31              | 57            |                  |  |
|                              | Compressor                         | Type              |                   | G8T200FU1EW     |                                                    | G8T260FU1EW     |               |                  |  |
|                              |                                    | 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                 | 50              | 100                                                | 500             | 100           |                  |  |
| Piping                       | Pipe O.D Size                      |                   | Liquid            | mm(inch)xL(m)   |                                                    | ø6.35(1/4")x7.5 |               | ø6.35(1/4")x7.5  |  |
|                              |                                    |                   | Gas               | mm(inch)xL(m)   |                                                    | ø12.7(1/2")x7.5 |               | ø15.88(5/8")x7.5 |  |
|                              | Connection Method                  |                   |                   | Flare           |                                                    |                 |               |                  |  |
|                              | Between                            |                   | Height            | m               |                                                    | Max.15          |               |                  |  |
| Weight                       |                                    |                   | m                 |                 | Max.30                                             |                 |               |                  |  |
| 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         |                                    |                   | cc                | 700             |                                                    | 700             |               |                  |  |
| Refrigerant to Change(R410A) |                                    |                   | g                 | 1,450(20g/m)    |                                                    | 1,900(10g/m)    |               |                  |  |
| Protection Device(OLP)       |                                    |                   |                   |                 | None                                               |                 |               |                  |  |
| Cooling Test Condition       |                                    |                   |                   |                 | Indoor Unit: DB27℃ WB19℃ Outdoor Unit: DB35℃ WB24℃ |                 |               |                  |  |
| Heating Test Condition       |                                    |                   |                   |                 | Indoor Unit: DB20℃ WB15℃ Outdoor Unit: DB7℃ WB6℃   |                 |               |                  |  |

## 2-3 The Comparative Specifications of Product

| Item                     |              | EH070EAV                                                                           | DH24BT(Basic)                                                                        |
|--------------------------|--------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Design                   | Indoor Unit  |   |   |
|                          | Outdoor Unit |  |  |
| Net Weight               | Indoor Unit  | 31.0kg                                                                             | 34.0kg                                                                               |
|                          | Outdoor Unit | 57.0kg                                                                             | 74.0kg                                                                               |
| Outer Dimension (WxHtxD) | Indoor Unit  | 1,100x199x600mm                                                                    | 1,100x199x600mm                                                                      |
|                          | Outdoor Unit | 880x798x310mm                                                                      | 880x798x310mm                                                                        |
| Noise                    | Indoor Unit  | 42dB↓                                                                              | 42dB↓                                                                                |
|                          | Outdoor Unit | 60dB↓                                                                              | 59dB↓                                                                                |

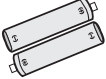
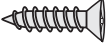
## 2-4 Accessory and Option Specifications

### 2-4-1 Accessories

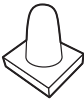
| Item                                                                                | Descriptions            | Code-No.    | Q'TY | Remark      |
|-------------------------------------------------------------------------------------|-------------------------|-------------|------|-------------|
|    | Wired remote controller | DB97-01904G | 1    | Indoor Unit |
|    | Owner's Manual          | DB98-25806A | 1    |             |
|    | Installation Manual     | DB98-25807A | 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

| Error type                                                                                                                                                                                                                        | LED lamp display                                                                    |                                                                                   |                                                                                     |                                                                                      |                                                                                     | Remark                                                                                                                              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                   | Concealed Type                                                                      |                                                                                   |    |    |  |                                                                                                                                     |
|                                                                                                                                                                                                                                   | Green                                                                               | Red                                                                               |                                                                                     |                                                                                      |                                                                                     |                                                                                                                                     |
|                                                                                                                                                                                                                                   | Standard Type                                                                       |                                                                                   |                                                                                     |                                                                                      |                                                                                     |                                                                                                                                     |
|                                                                                                                                                                                                                                   |    |  |                                                                                     |                                                                                      |                                                                                     |                                                                                                                                     |
| Power reset                                                                                                                                                                                                                       |    | X                                                                                 | X                                                                                   | X                                                                                    | X                                                                                   |                                                                                                                                     |
| Error of temperature sensor in the indoor unit (Open/Short)                                                                                                                                                                       | X                                                                                   | X                                                                                 |    | X                                                                                    | X                                                                                   |                                                                                                                                     |
| Error of heat exchanger sensor in the indoor unit                                                                                                                                                                                 |  | X                                                                                 |  | X                                                                                    | X                                                                                   |                                                                                                                                     |
| Error of the outdoor temperature sensor<br>Error of the condensor temperature sensor<br>Error of the discharge temperature sensor                                                                                                 |  | X                                                                                 | X                                                                                   |   | X                                                                                   |                                                                                                                                     |
| Indoor and outdoor unit time out<br>Abnormal data reception more than 60 packet<br>Indoor unit is not connected<br>Communication error between the outdoor unit<br>Main-Inverter Micom(After 1 minute of Main-Inverter detection) | X                                                                                   | X                                                                                 |  |  | X                                                                                   | 1. Indoor unit error<br>(Display is unrelated with operation)<br><br>2. Outdoor unit error<br>(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                                                                    |                                                                                     |                                                                                     |                                                                                      |                                                                                       | Remark |
|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|                                                                                             | 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                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |        |
| [Inverter]Inverter compressor operation failure                                             |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |        |
| [Inverter] DC peak error                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |        |
| [Inverter]DC Link voltage 150V or less, 410V or more                                        | X                                                                                   | X                                                                                   |    |    |    |        |
| [Inverter] Compressor rotation error                                                        |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |        |
| [Inverter]Electric current error                                                            |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |        |
| [Inverter]DC Link sensor error                                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |        |
| [Inverter]EEPROM READ/WRITE error                                                           |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |        |
| [Inverter]Inverter zerocrossing error                                                       |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |        |
| Setting the outdoor unit capacity option error                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |        |
| Detection of the float switch                                                               | X                                                                                   | X                                                                                   | X                                                                                   |  |  |        |
| Error of setting option switches for optional accessories                                   | X                                                                                   | X                                                                                   |  | X                                                                                    |  |        |
| EEPROM error                                                                                |  | X                                                                                   |  |  | X                                                                                     |        |
| EEPROM option error                                                                         |  |  |  |  |  |        |

● : 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                                                                                                             | Remark                                |
|---------|-------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| 101     | Indoor unit Communication Error                                                                                         | Communication Error                   |
| 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<br>(Occurred after 1 minute detection in Main and Inverter) | Indoor Sensor Error                   |
| 121     | Indoor Temp. Sensor (OPEN/SHORT ERROR)                                                                                  |                                       |
| 122     | Indoor Unit Eva in sensor (OPEN/SHORT ERROR)                                                                            |                                       |
| 128     | Indoor Unit Eva in sensor Separation                                                                                    | Outdoor Sensor Error                  |
| 221     | Outdoor Temp. Sensor Error (OPEN/SHORT ERROR)                                                                           |                                       |
| 237     | COND Temp. Sensor Error (OPEN/SHORT ERROR)                                                                              |                                       |
| 260     | Inverter Compressor Discharge Temp. sensor Error (OPEN/SHORT ERROR)                                                     | Self Diagnosys Error                  |
| 153     | Indoor Float S/W 2 <sup>nd</sup> Detection                                                                              |                                       |
| 460     | Outdoor unit-Indoor unit Communication wire Voltage Detection                                                           |                                       |
| 554     | Outdoor unit Refrigerant Full Leakage (Gas Leak)                                                                        |                                       |
| 458     | Outdoor door Fan Error                                                                                                  | Outdoor Unit Protection Control Error |
| 461     | [Inverter] Inverter Comp. Start Failure                                                                                 |                                       |
| 464     | [Inverter] DC PEAK Error                                                                                                |                                       |
| 466     | [Inverter] DC LINK Voltage 150V below, 410V Over                                                                        |                                       |
| 467     | [Inverter] Comp. Rotation Error                                                                                         |                                       |
| 468     | [Inverter] Current Sensor Error                                                                                         |                                       |
| 469     | [Inverter] DC LINK Sensor Error                                                                                         |                                       |
| 471     | [Inverter] EEPROM READ/WRITE Error                                                                                      |                                       |
| 472     | [Inverter] Inverter ZEROCROSSING Error                                                                                  |                                       |
| 556     | Outdoor unit Capacity Setup Option Error                                                                                |                                       |
| 601     | Wired Liquid Crystal ↔ Indoor unit Comm. Error                                                                          | Wired Remote Control Error            |
| 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 |       |     | Explanation                                     |
|-----|-------------|-------|-----|-------------------------------------------------|
|     | Yellow      | Green | Red |                                                 |
| 1   | ○           | ○     | ○   | Power off/ VDD NG                               |
| 2   | ○           | ○     | ◎   | IPM Over Current(O.C)                           |
| 3   | ○           | ○     | ●   | Abnormal Serial communication                   |
|     | ○           | ●     | ●   |                                                 |
| 4   | ○           | ◎     | ○   | Compressor Starting error                       |
| 5   | ○           | ◎     | ●   | Normal Operation                                |
| 6   | ○           | ●     | ○   | Compressor Lock error                           |
| 7   | ○           | ●     | ◎   | DC-Link voltage under/over error                |
| 8   | ◎           | ○     | ◎   | Outdoor temperature sensor error(Dual/Single)   |
| 9   | ◎           | ○     | ●   | Discharge over temperature(Dual/Single)         |
| 10  | ◎           | ◎     | ○   | Discharge temperature sensor error(Dual/Single) |
| 11  | ◎           | ◎     | ●   | Current sensor error                            |
| 12  | ◎           | ●     | ○   | Compressor Limit error                          |
| 13  | ◎           | ●     | ◎   | Coil temperature sensor error(Dual/Single)      |
| 14  | ◎           | ●     | ●   | 1min. Time out Communication                    |
| 15  | ●           | ○     | ○   | Fan error                                       |
| 16  | ●           | ○     | ◎   | OTP error                                       |
| 17  | ●           | ○     | ●   | Compressor rotation error                       |
| 18  | ●           | ◎     | ○   | Operation condition secession(Dual only)        |
| 19  | ●           | ◎     | ◎   | DC-Link voltage sensor error                    |
| 20  | ●           | ◎     | ●   | I_Trip error / PFC Over current                 |
| 21  | ●           | ●     | ○   | GAS Leak error(Dual/Single)                     |
| 22  | ●           | ●     | ◎   | AC Line Zero Cross Signal out                   |
| 23  | ●           | ●     | ●   | Power ON reset(1sec)                            |
| 24  | ◎           | ○     | ○   | Capacity miss match                             |
| 25  | ○           | ◎     | ◎   | Test Operation at Cooling Mode                  |
| 26  | ◎           | ◎     | ◎   | Test Operation at Heating Mode                  |

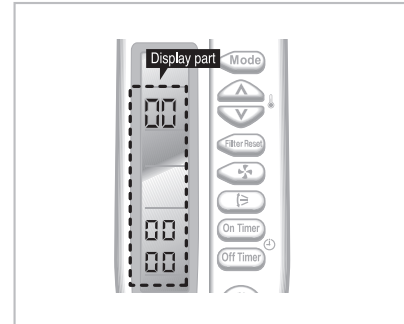
● : LED ON, ○ : LED OFF, ◎ : LED BLINK

### 3-3 Setting Option Setup Method

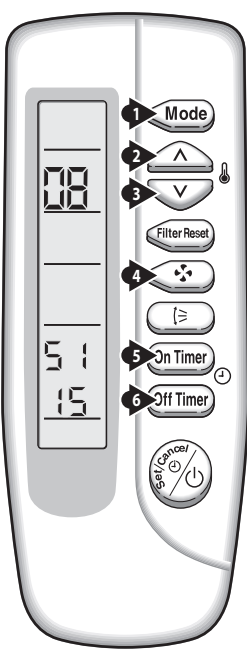
ex) Option No. : 085 115- 1d2340

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

- 1<sup>st</sup> Take out the batteries of remote control.
- 2<sup>nd</sup> Press the temperature  button simultaneously and insert the battery again.
- 3<sup>rd</sup> Make sure the remote display shown as .



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



\* Setting is not required if you must  a value which has a  default.

- 1  
The default value is .  
Otherwise, push the  button to .  
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  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  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  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.



**7** Press button, then the default value is

**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 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 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.

\* Setting is not required if you must a value which has a default.

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

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

→ The display part shows .

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

→ The display part shows .

**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**

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

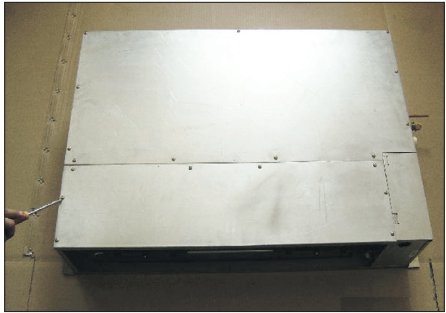
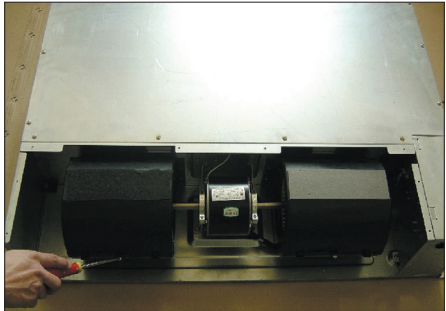
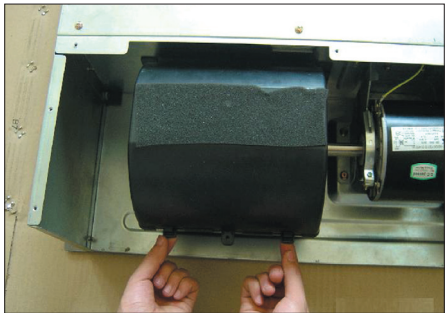
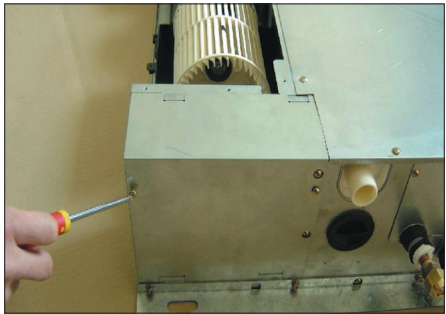
| REMOCON<br>MODEL | SEG1 | SEG2 | SEG3 | SEG4 | SEG5 | SEG6 | SEG7 | SEG8 | SEG9 | SEG10 | SEG11 | SEG12 |
|------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| EH035EAV         | 0    | 1    | 5    | 7    | 7    | 3    | 1    | 5    | 8    | 1     | d     | b     |
| EH052EAV         | 0    | 1    | 5    | 7    | 7    | 3    | 1    | 9    | 8    | 1     | 3     | 9     |
| EH070EAV         | 0    | 1    | 5    | 7    | 7    | 4    | 1    | c    | 8    | 2     | 7     | 8     |

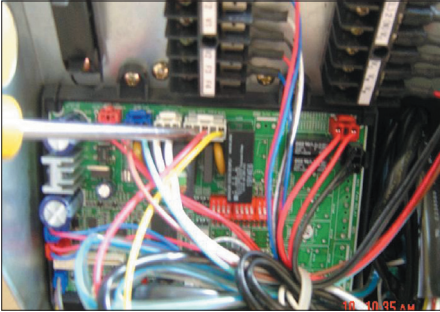
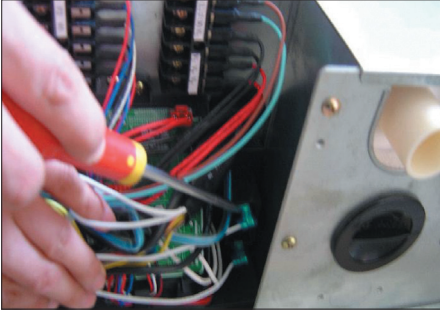
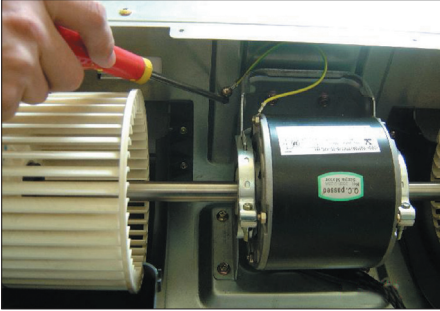
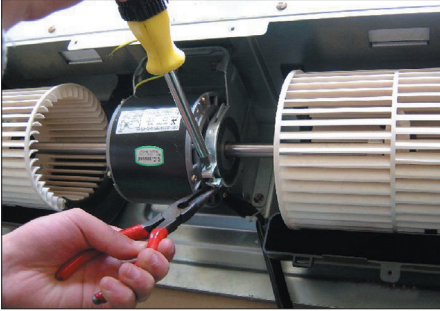
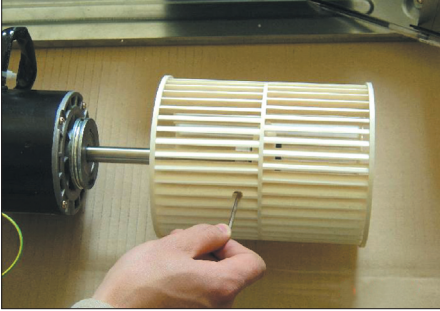
## 4. Disassembly and Reassembly

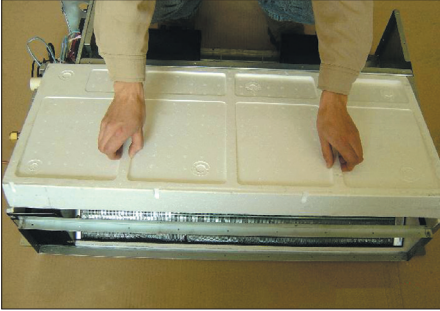
Stop operation of the air conditioner and remove the power cord before repairing the unit.

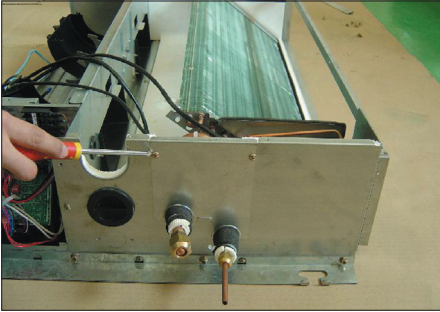
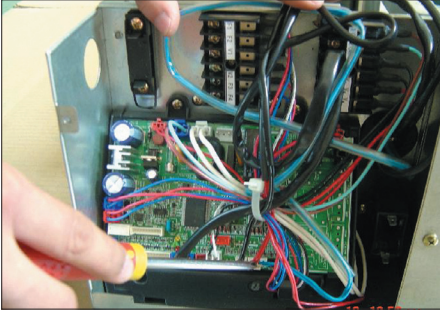
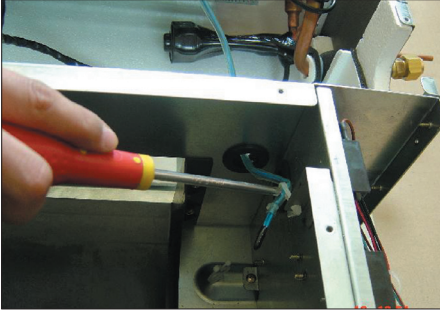
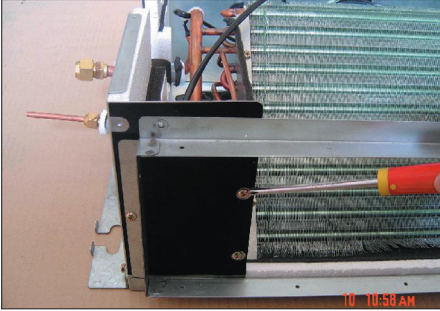
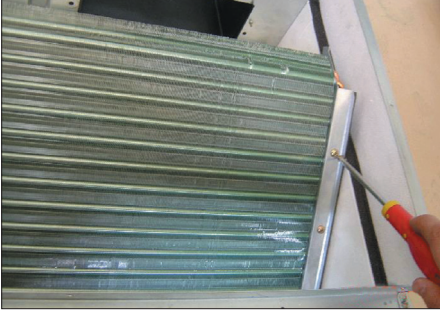
### 4-1 Indoor Unit

#### ■ EH035EAV

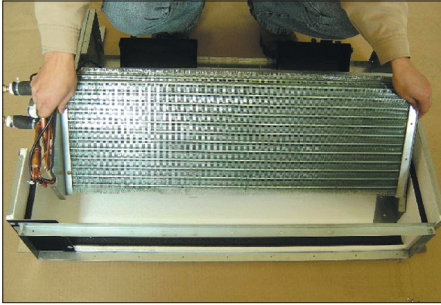
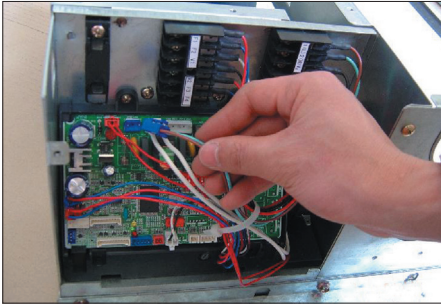
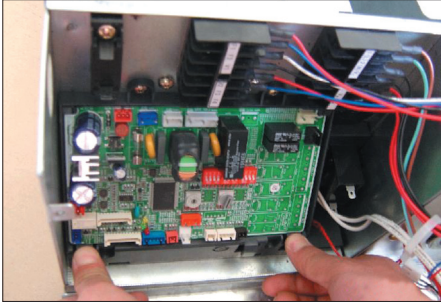
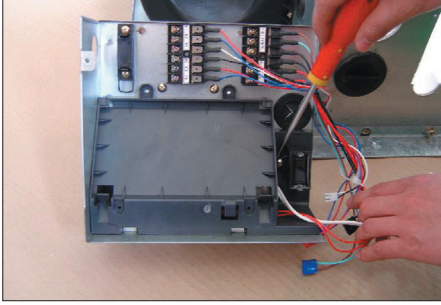
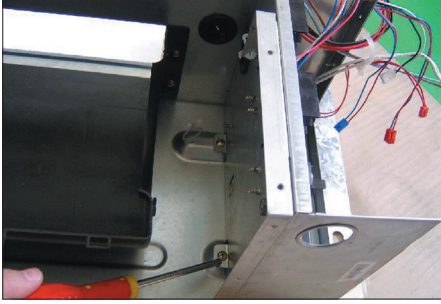
| No | Parts          | Procedure                                                                                                                                                                                                                                                                           |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

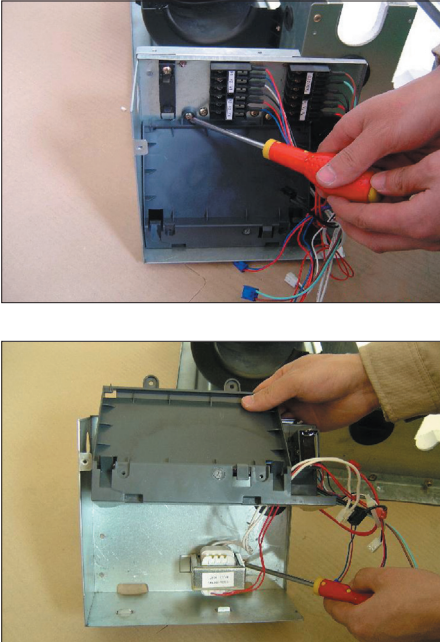
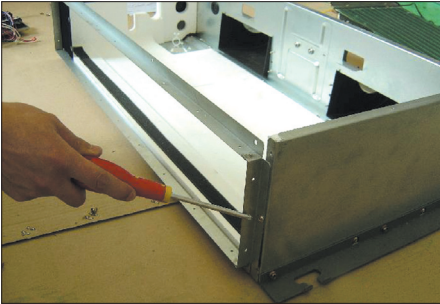
| No | Parts | Procedure                                                                                                                                                                                                                                                                                    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

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

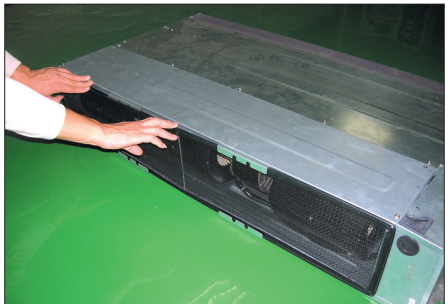
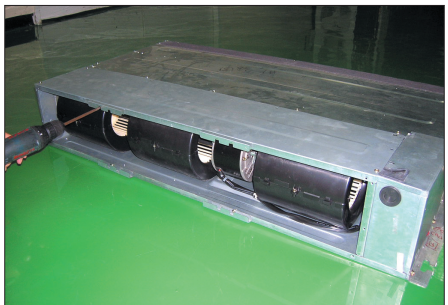
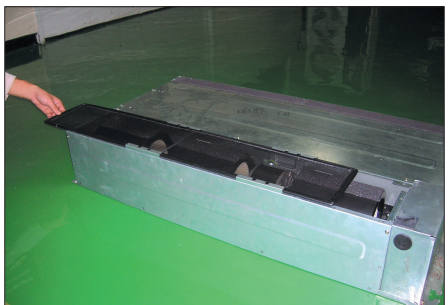
| No | Parts      | Procedure                                                                                                                                                                                                                                                                               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



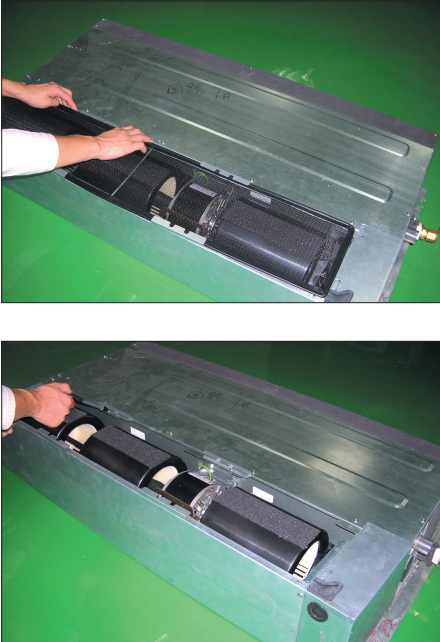
| No | Parts      | Procedure                                                                                                                                                                                                                                                                               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

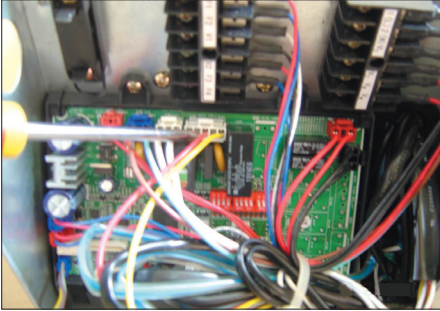
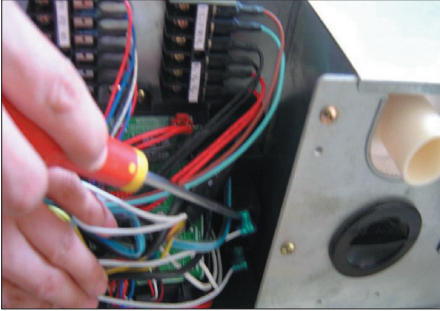
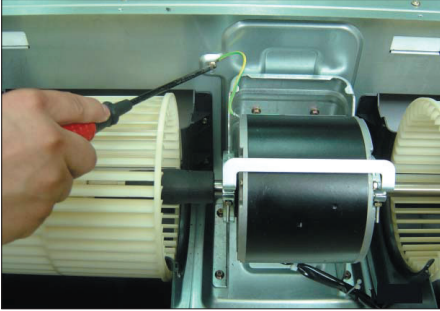
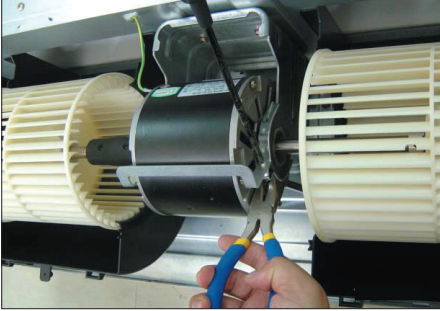
| No | Parts          | Procedure                                                                                                                                     | Remark                                                                               |
|----|----------------|--------------------------------------------------------------------------------------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

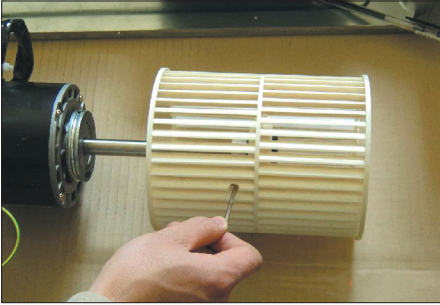
# EH052EAV/EH070EAV

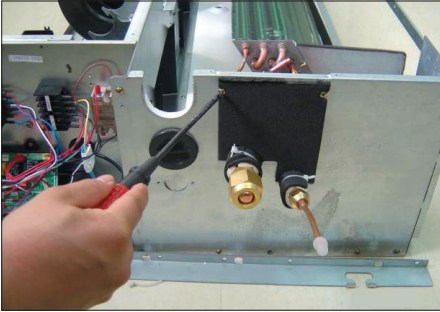
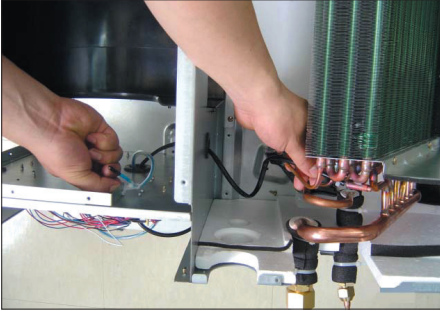
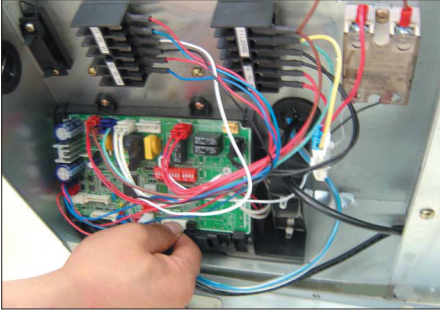
| No | Parts  | Procedure                                                                                                                                                  | Remark                                                                                                                         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



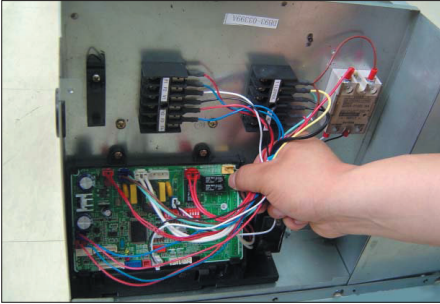
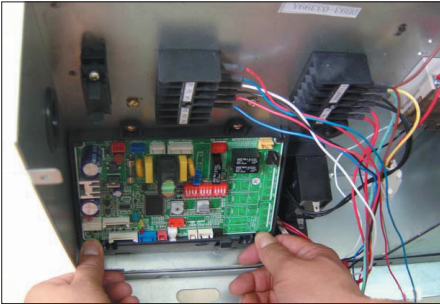
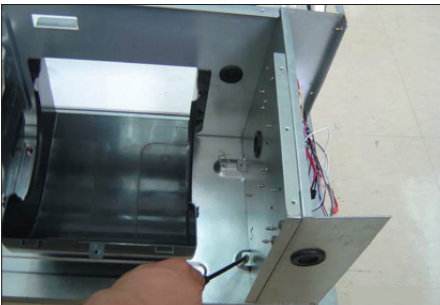
| No | Parts          | Procedure                                                                                                                                                                                                                                                | Remark                                                                               |
|----|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|    |                | <p>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.</p>                                                                                                                  |    |
| 2  | Blower & Motor | <p>1) After disassembling 13 indicating screws, detach Ass'y Cabinet-Top Motor.</p> <p>2) After disassembling 3 indicating screws, detach Ass'y Case Blower Upper.</p> <p>– Press the pothook of the Case Blower and detach Ass'y Case Blower Upper.</p> |  |

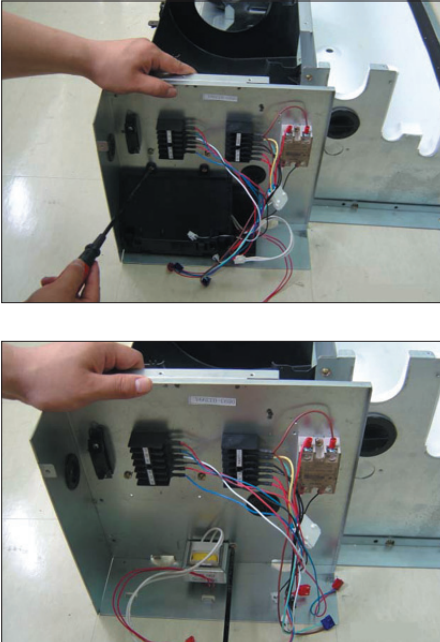
| No | Parts | Procedure                                                                                                                                                                                                                                                                                    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

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

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

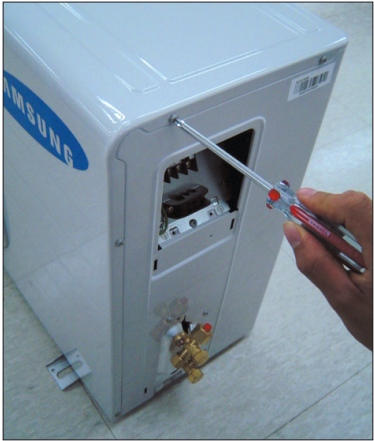
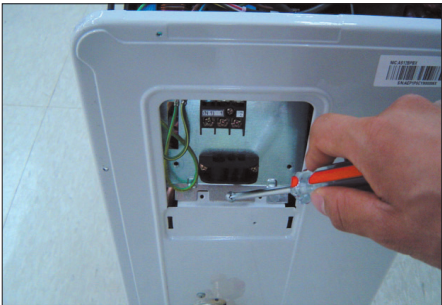


| No | Parts      | Procedure                                                                                                                                                                                                                                                                               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

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

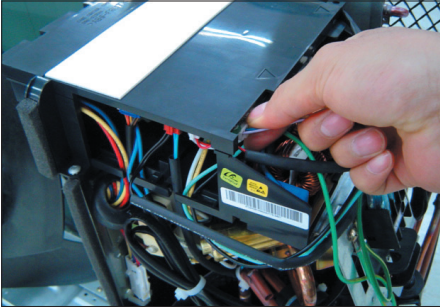
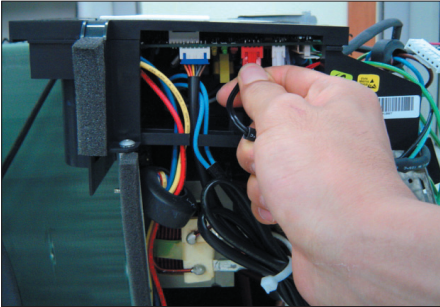
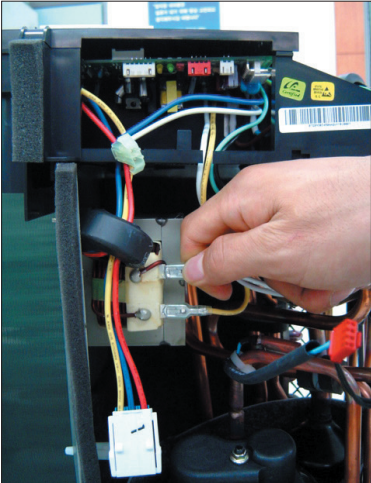
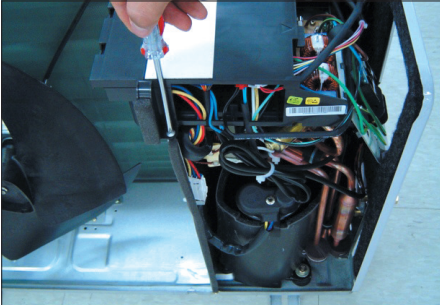
## 4-2 Outdoor Unit

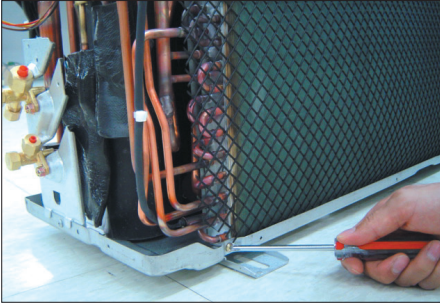
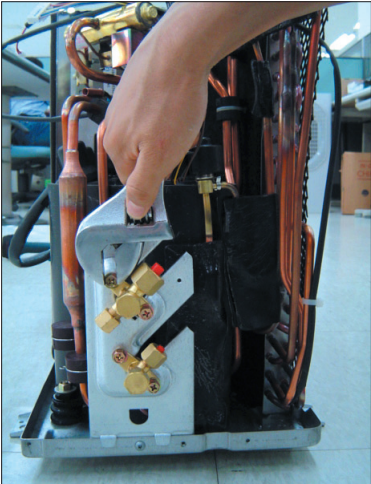
### ■ UH035EAV

| No | Parts       | Procedure                                                                                                                                                                                                                                                                                                                                                               | Remark                                                                                                                                                                                                                                                                                                                                           |
|----|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | Common Work | <p>1) Loosen 1 fixing screw of the Cover-Side.</p> <p>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.</p> <p>3) Detach the Cabinet Front like the picture on the right side.</p> <p>4) Loosen 1 screw fixed to assemble Plate Control Out with Cabinet-Side RH.</p> |     |

| 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.                            |  |

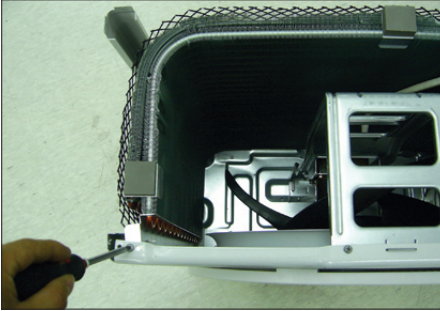
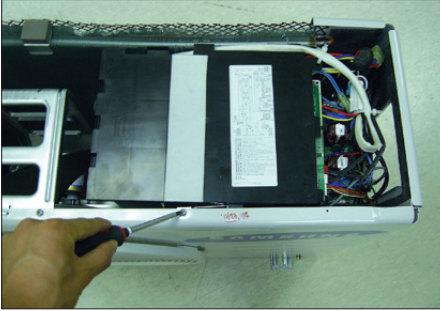


| No | Parts             | Procedure                                                                                                                                                                                                                                                             | Remark   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

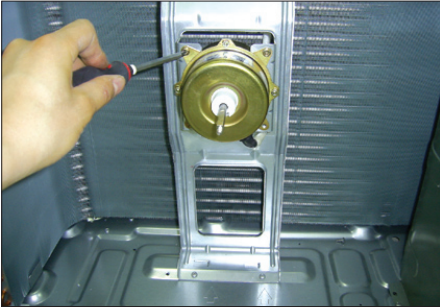
| No | Parts                                     | Procedure                                                                                                                                                                                                                                                                                                                  | Remark                                                                               |
|----|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 3  | Fan<br>&<br>Motor                         | <ol style="list-style-type: none"> <li>1) Release the refrigerant at first.</li> <li>2) Loosen fixing screw.</li> <li>3) Disassemble the pipes in both inlet and outlet with welding torch.</li> <li>4) Detach the Heat Exchanger.</li> </ol>                                                                              |    |
| 4  | Heat Exchanger                            | <ol style="list-style-type: none"> <li>1) Loosen 2 fixing screws on both sides.</li> <li>2) Disassemble the pipes in both inlet and outlet with welding torch.</li> <li>3) Detach the Heat Exchanger.</li> </ol>                                                                                                           |    |
| 5  | Ass'y Valve 4-Way<br>&<br>Ass'y Valve EEV | <ol style="list-style-type: none"> <li>1) Loosen 4 bolts fixed to assemble Valve Service with Bracket Valve like the picture on the right side.</li> <li>2) Disassemble the pipes assembled the suction and discharge sides of the Compressor with welding torch.</li> </ol>                                               |  |
| 6  | Compressor                                | <ol style="list-style-type: none"> <li>1) Loosen the Nut of Terminal Cover.</li> <li>2) Detach the Terminal Cover and detach the Connect Comp Wire from Compressor.</li> <li>3) Disassemble the Felt Comp Sound.</li> <li>4) Loosen the 3 bolts at the bottom of Compressor like the picture on the right side.</li> </ol> |  |

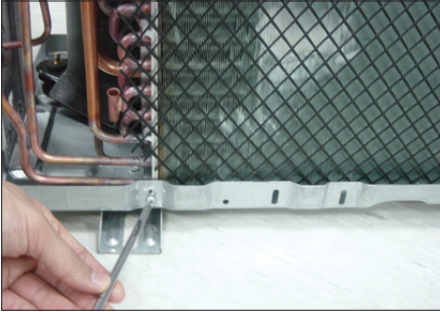
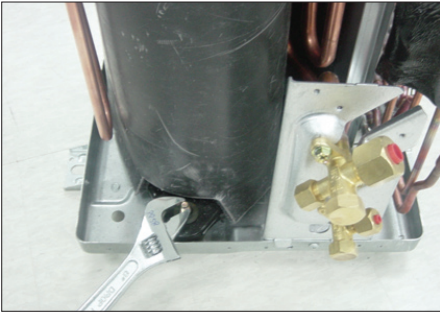
## ■ UH052EAV

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

| No | Parts | Procedure                                                                                                    | Remark                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----|-------|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |       | <p>5) Loosen 2 screws fixed on the Guide Condenser.</p> <p>6) Loosen fixing screws of the Cabinet Front.</p> |      |



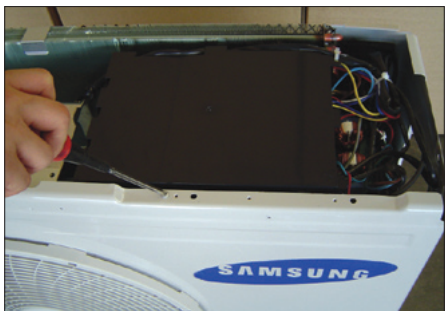
| No | Parts             | Procedure                                                                                                                                                                                                                                                                        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

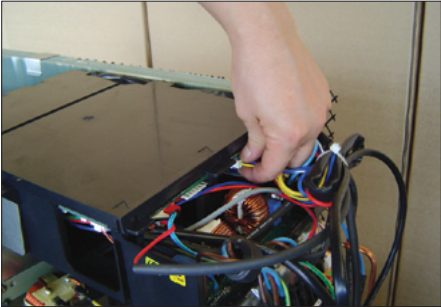
| No | Parts          | Procedure                                                                                                                                                                                                                                                   | Remark                                                                                                                                                                     |
|----|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4  | Heat Exchanger | <ol style="list-style-type: none"> <li>1) Release the refrigerant at first.</li> <li>2) Loosen fixing screw.</li> <li>3) Disassemble the pipes in both inlet and outlet with welding torch.</li> <li>4) Detach the Heat Exchanger.</li> </ol>               |                                                                                          |
| 5  | Compressor     | <ol style="list-style-type: none"> <li>1) Loosen the fixing nut and detach the Compressor Lead Wire.</li> <li>2) Disassemble the Felt Comp Sound.</li> <li>3) Loosen the 3 bolts at the bottom of Compressor like the picture on the right side.</li> </ol> | <br> |

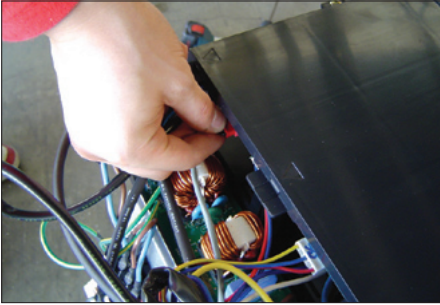
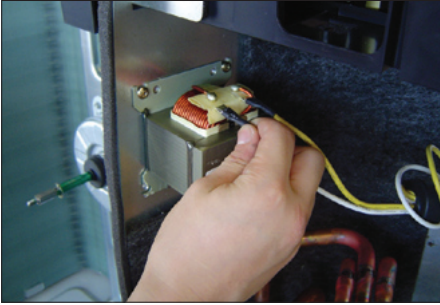
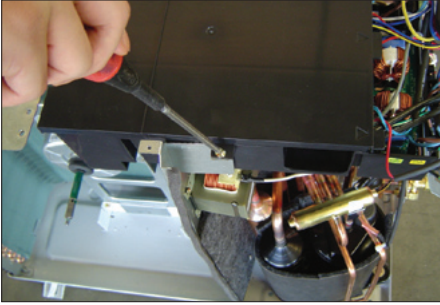
## ■ UH070EAV

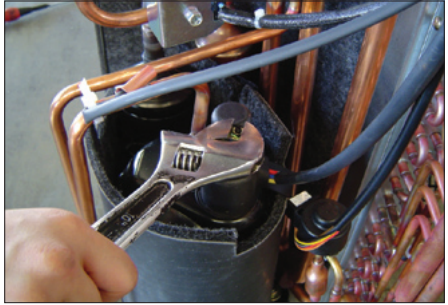
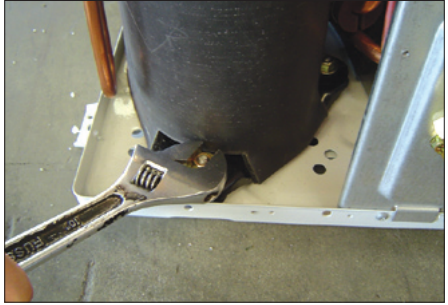
| No | Parts       | Procedure                                                                                                                                                                                                                                                                              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



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

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

| No | Parts             | Procedure                                                                                                                                                                                                                                                   | Remark                                                                                                                                                                                                                                                    |
|----|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3  | Ass'y Control Out | <ol style="list-style-type: none"> <li>1) Detach several connectors from the Ass'y Control Out.</li> <li>2) Detach several connectors from the PCB of Ass'y Control Out.</li> <li>3) Pull up the Ass'y Control Out.</li> </ol>                              |    |
| 4  | Heat Exchanger    | <ol style="list-style-type: none"> <li>1) Release the refrigerant at first.</li> <li>2) Loosen fixing screw on both sides.</li> <li>3) Disassemble the pipes in both inlet and outlet with welding torch.</li> <li>4) Detach the Heat Exchanger.</li> </ol> |                                                                                                                                                                       |

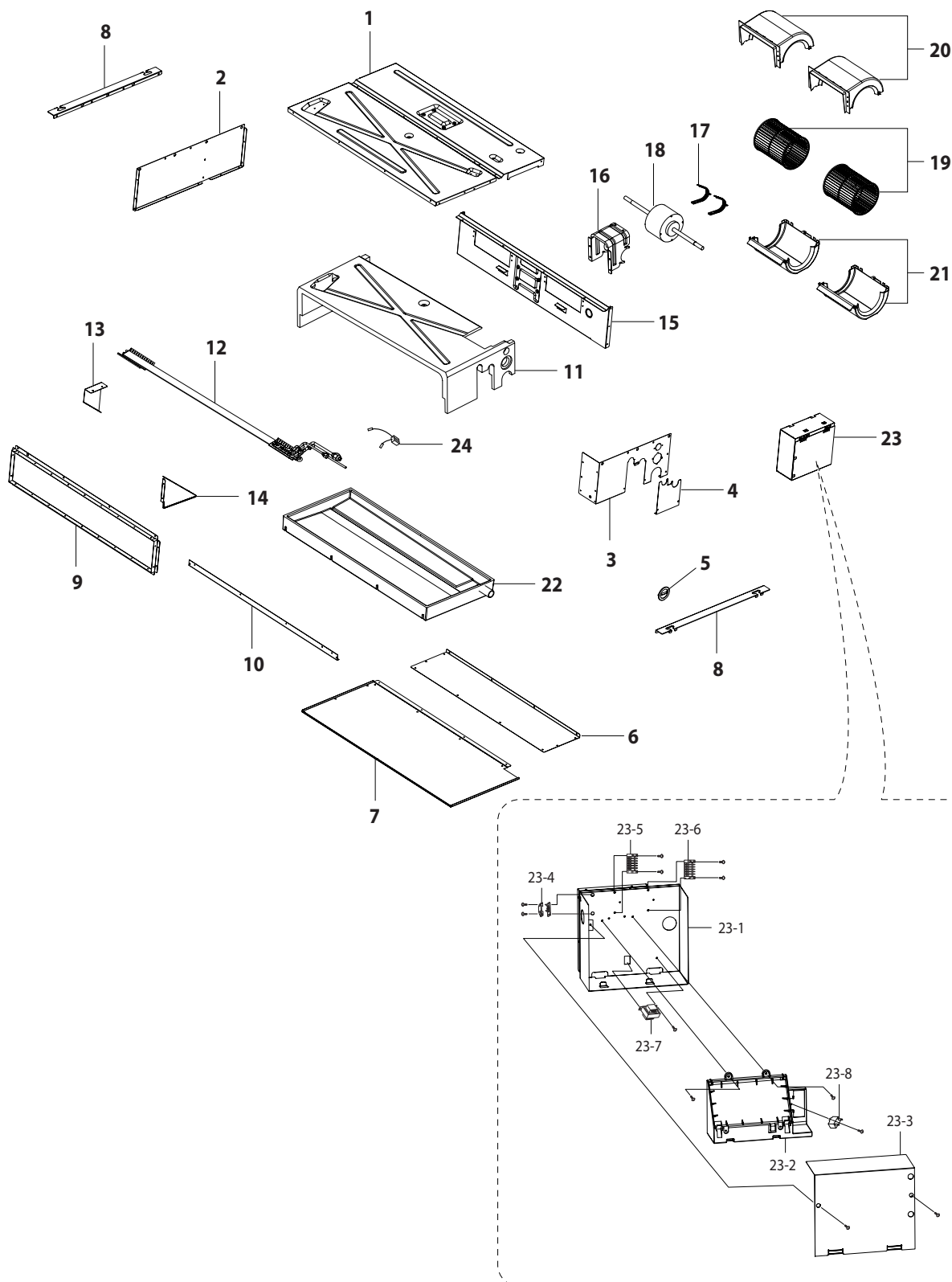
| No | Parts      | Procedure                                                                                                                                                                                                                                               | Remark                                                                                                                                                                   |
|----|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5  | Compressor | <ol style="list-style-type: none"><li>1) Loosen the fixing nut and detach the Compressor Lead Wire.</li><li>2) Disassemble the Felt Comp Sound.</li><li>3) Loosen the 3 bolts at the bottom of Compressor like the picture on the right side.</li></ol> | <br> |

# MEMO

## 5. Exploded Views and Parts List

### 5-1 Indoor Unit

#### ■ EH035EAV

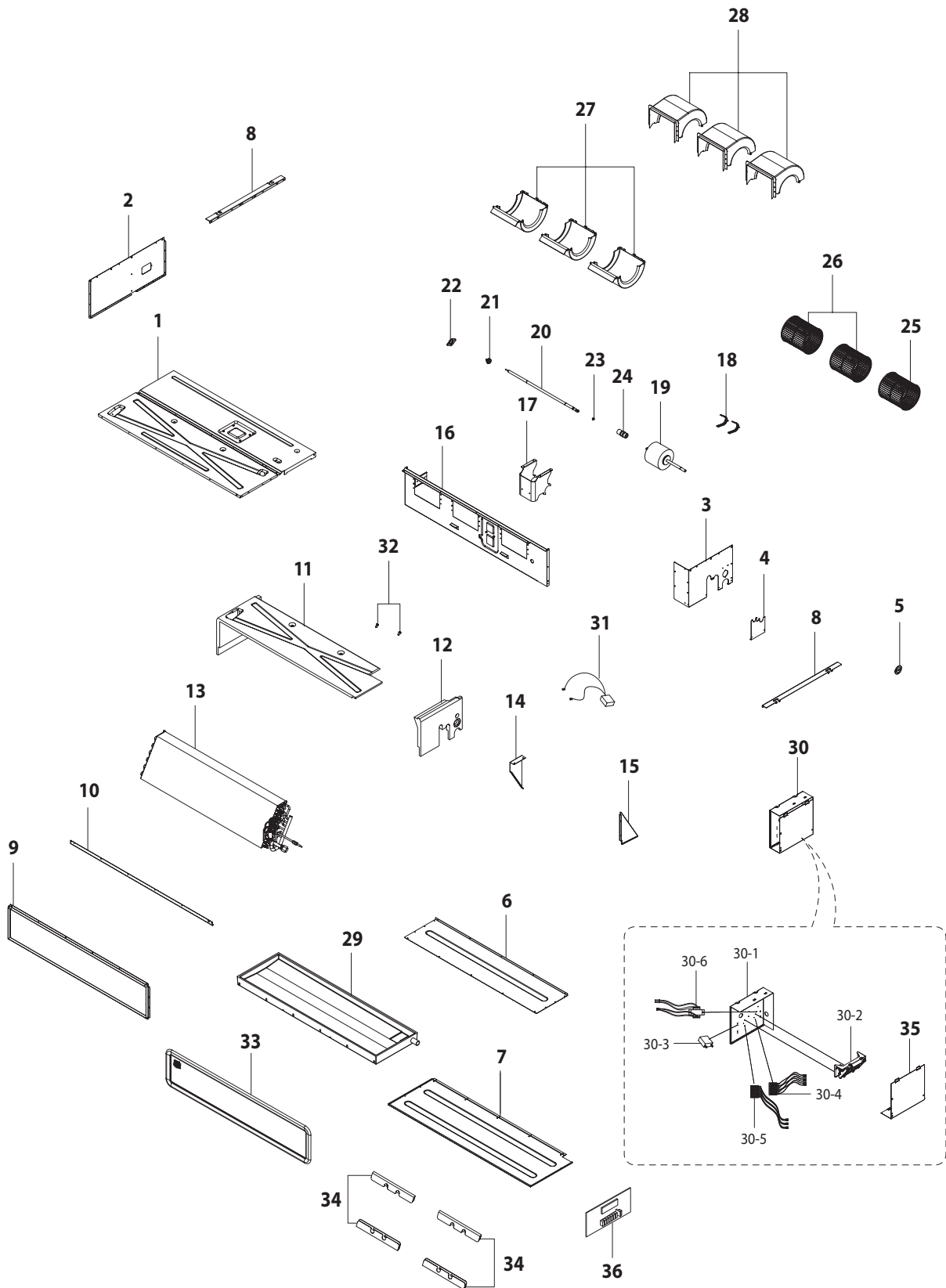




## ■ Parts List

| 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   | DB31-00312A | MOTOR FAN                | SINYA, SSR, PID            | 1    | SA     |        |
| 19   | DB67-00565A | 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   | DB94-00716A | ASS'Y DRAIN PAN          | ASS'Y                      | 1    | SNA    |        |
| 23   | DB93-03321C | ASS'Y CONTROL IN         | ASS'Y                      | 1    | SA     |        |
| 23-1 | DB90-01941A | ASS'Y CASE CONTROL       | ASS'Y                      | 1    | SA     |        |
| 23-2 | DB61-02287A | CASE PCB                 | ABS T2.5                   | 1    | SA     |        |
| 23-3 | DB63-01237A | COVER CONTROL            | SGCC-M T0.5                | 1    | SA     |        |
| 23-4 | DB61-40291A | HOLDER WIRE              | PP BLACK                   | 1    | SNA    |        |
| 23-5 | DB65-00105L | TERMINAL BLOCK 6P        | 6P, POWER                  | 1    | SNA    |        |
| 23-6 | DB65-00105M | TERMINAL BLOCK 6P        | 6P, COMMUNICATION          | 1    | SNA    |        |
| 23-7 | DB26-10070G | TRANS POWER              | 230V, 50HZ                 | 1    | SNA    |        |
| 23-8 | 2301-001370 | CAPACITOR                | 450V 2.5μF                 | 1    | SA     |        |
| 24   | DB32-00142A | ASS'Y THERMISTOR         | ASS'Y                      | 1    | SA     |        |
|      |             |                          |                            |      |        |        |

■ EH052EAV/EH070EAV

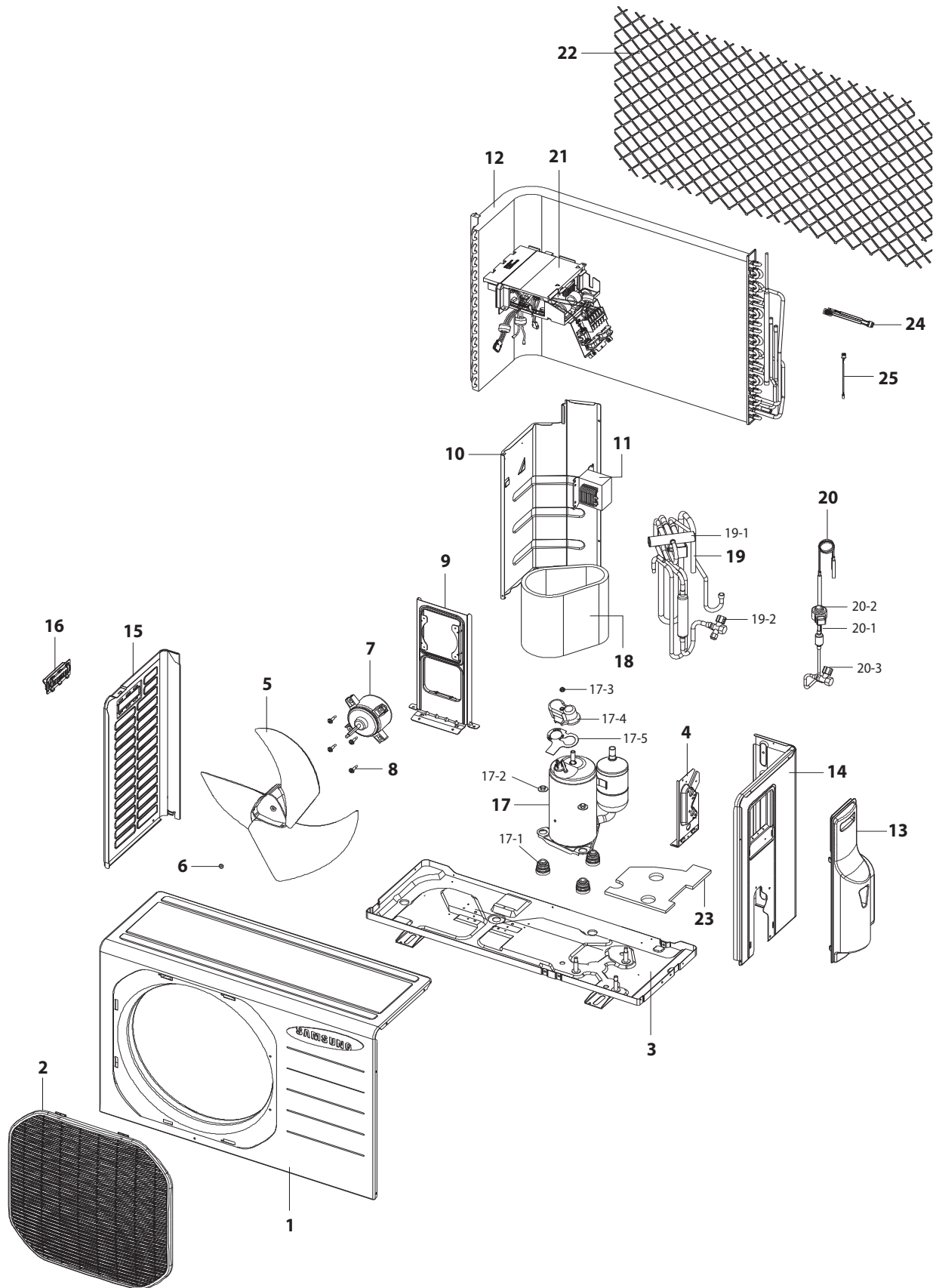


## ■ Parts List

| No.  | Code No.    | Description              | Specification            | Q'TY     |          | SA/SNA | Remark |
|------|-------------|--------------------------|--------------------------|----------|----------|--------|--------|
|      |             |                          |                          | EH052EAV | EH070EAV |        |        |
| 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   | DB31-00314A | MOTOR                    | SINYA,50Hz,YSK140-60-4PG | 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   | DB67-00565A | BLOWER A                 | ASS'Y,ABS                | 1        | 1        | SA     |        |
| 26   | DB67-00576A | 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   | DB94-01007A | ASS'Y DRAIN              | ASS'Y                    | 1        | 1        | SA     |        |
| 30   | DB93-03321B | ASS'Y CONTROL PART       | ASS'Y                    | 1        | 1        | SA     |        |
| 30-1 | DB90-01941A | ASS'Y CASE CONTROL       | ASS'Y                    | 1        | 1        | SA     |        |
| 30-2 | DB61-02287A | 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 | DB26-10070G | 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   | DB63-01299C | FILTER                   | MSWG1,T1,192,1005        | 1        | 1        | SA     |        |
| 34   | DB61-02643A | BRACKET FILTER           | SGCC-M                   | 4        | 4        | SA     |        |
| 35   | DB90-02101A | ASS'Y COVER CONTROL      | ASS'Y                    | 1        | 1        | SA     |        |
| 36   | DB93-03213G | ASS'Y PCB                | ASS'Y                    | 1        | 1        | SA     |        |

## 5-2 Outdoor Unit

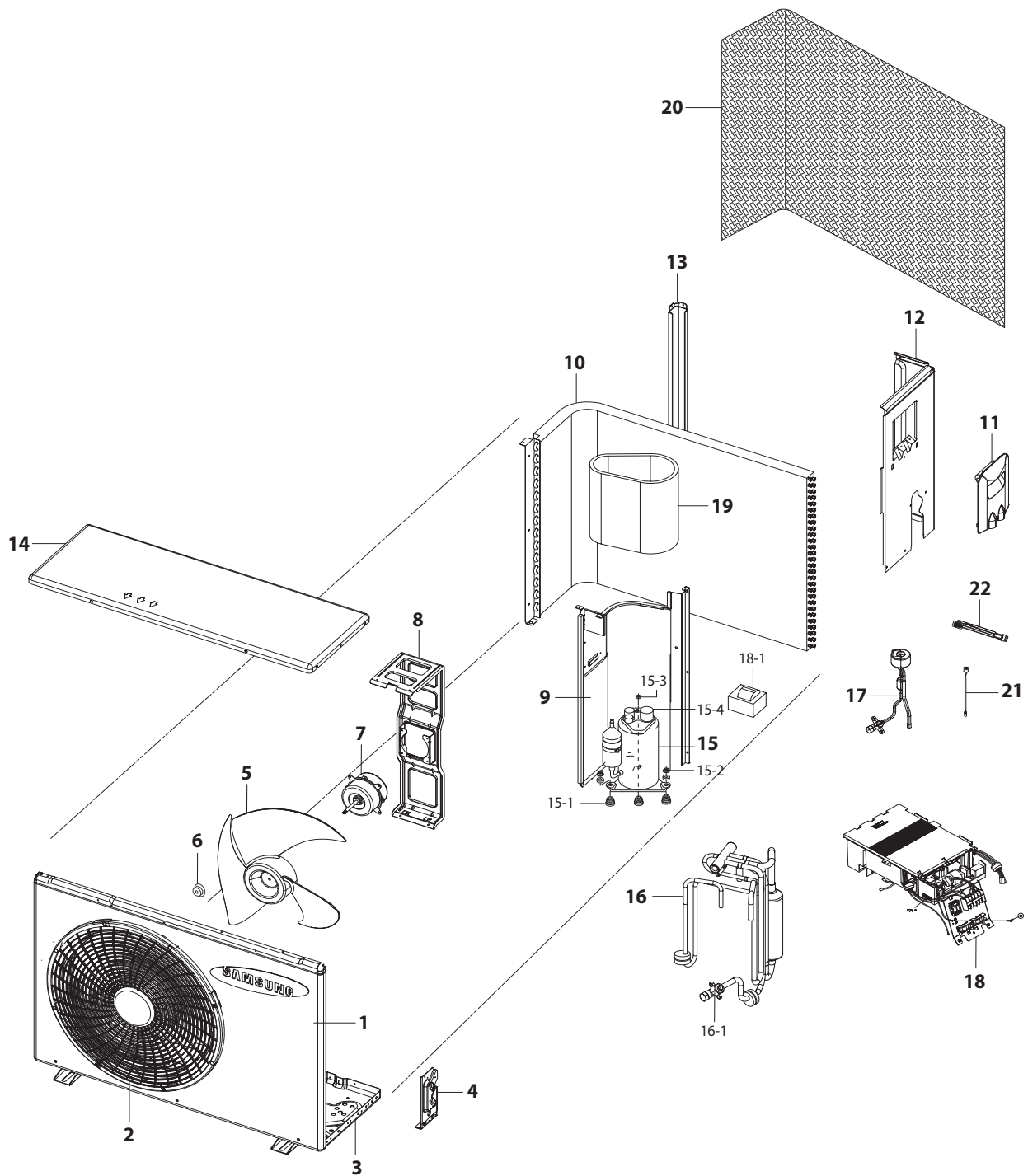
### ■ UH035EAV



## ■ 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    | DB63-00847A | GUARD FAN             | HIPS, 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    | DB67-00397A | FAN-PROPELLER         | AS+G/F20%, ø400           | 1    | SA     |        |
| 6    | 6021-000281 | NUT-HEXAGON           | M6, CW                    | 1    | SA     |        |
| 7    | DB31-00238A | MOTOR FAN OUT         | DC Motor, SIC-52FV-F726-1 | 1    | SA     |        |
| 8    | DB60-00150A | SCREW SPECIAL MOTOR   | M4, SWCH18AK              | 4    | SA     |        |
| 9    | DB61-01644A | 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   | DB63-00843C | COVER SIDE            | PP V0, 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   | G4C090LU2ER | COMPRESSOR            | ROTARY, BLDC              | 1    | SA     |        |
| 17-1 | DB73-00070A | GROMMET ISOLATOR      | NR                        | 3    | SA     |        |
| 17-2 | DB60-30028A | SCREW MACHINE         | M8                        | 3    | SA     |        |
| 17-3 | DB60-30018A | NUT-FLANGE            | M5                        | 1    | SA     |        |
| 17-4 | DB63-10165D | COVER TERMINAL        | PBT (G/F 15%)             | 1    | SA     |        |
| 17-5 | DB63-20003A | 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   | DB93-03453A | 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     |        |

■ UH052EAV

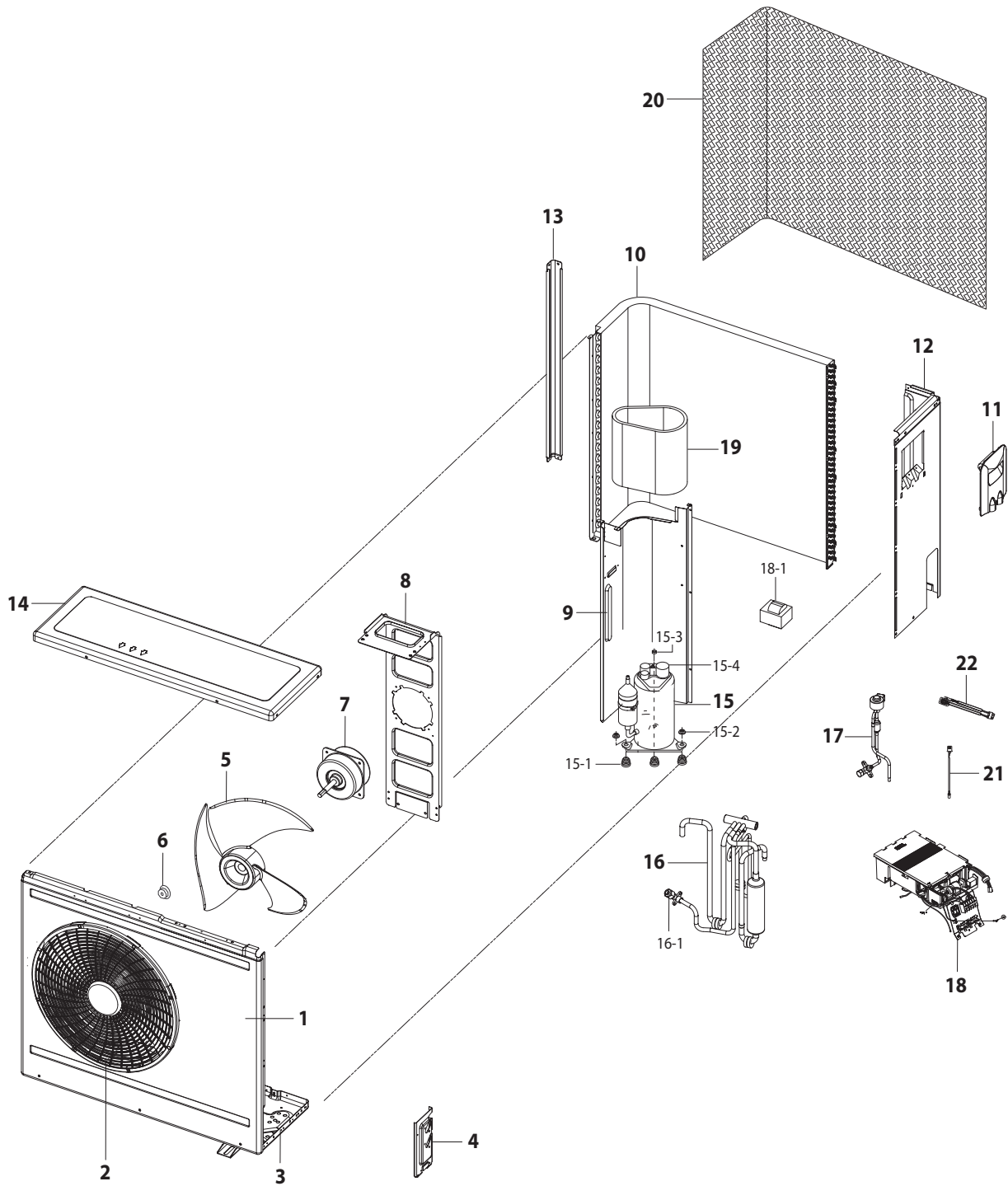




## ■ Parts List

| No.  | Code No.    | Description              | Specification    | Q'TY | SA/SNA | Remark |
|------|-------------|--------------------------|------------------|------|--------|--------|
| 1    | DB90-01772C | ASS'Y CABI-FRONT         | ASS'Y            | 1    | SA     |        |
| 2    | DB63-00831A | 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    | DB60-30004A | NUT-FLANGE               | M6,CCW           | 1    | SA     |        |
| 7    | DB31-00264B | MOTOR FAN OUT            | 230V/50Hz        | 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   | DB90-40176B | ASS'Y-COVER CONTROL      | ASS'Y            | 1    | SA     |        |
| 12   | DB90-01350J | 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   | G8T200FU1EW | 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   | DB93-03665D | 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 | GUARD-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     |        |

■ UH070EAV

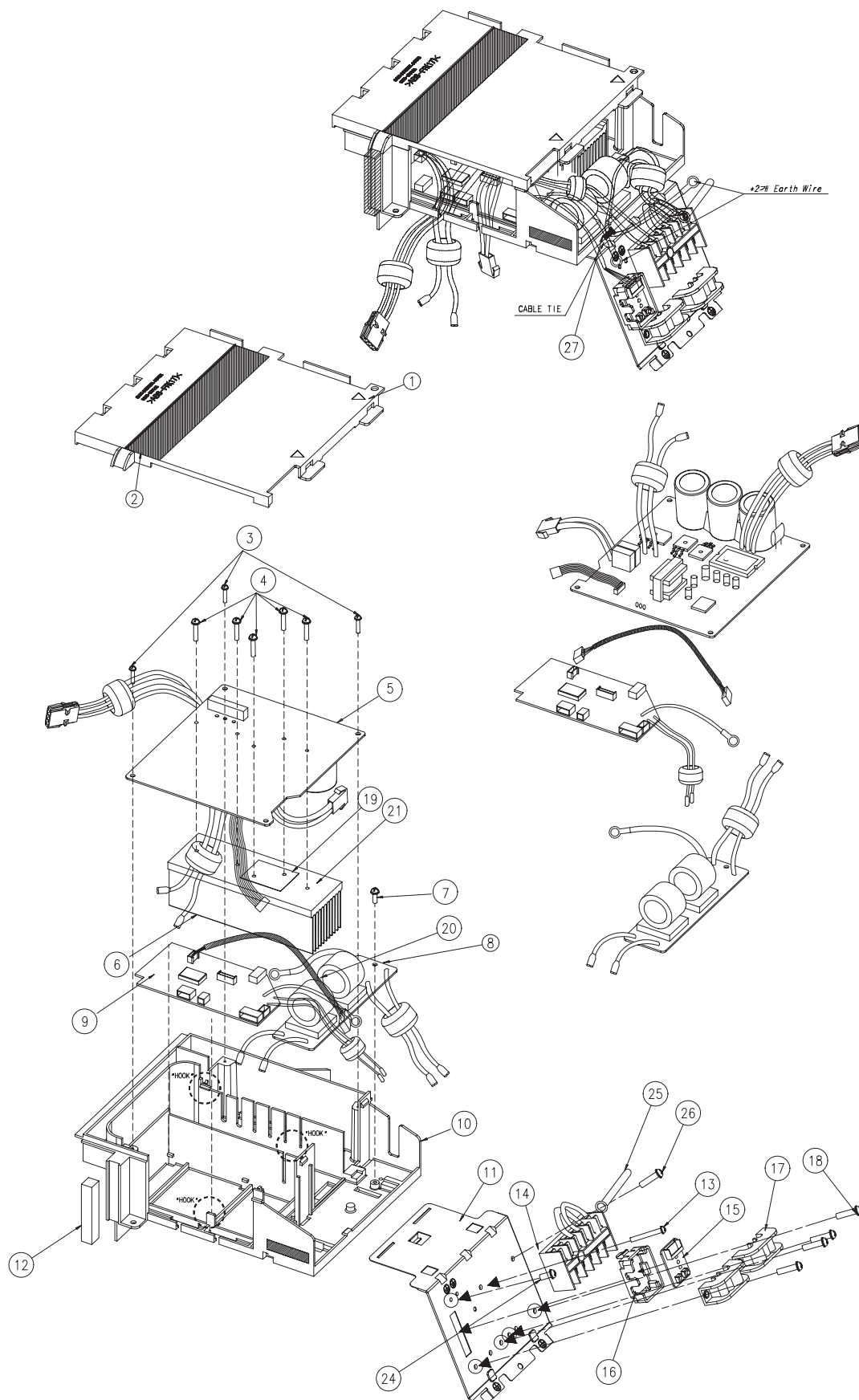


## ■ Parts List

| No.  | Code No.    | Description              | Specification    | Q'TY | SA/SNA | Remark |
|------|-------------|--------------------------|------------------|------|--------|--------|
| 1    | DB90-00565M | ASS'Y CABI-FRONT         | ASS'Y            | 1    | SA     |        |
| 2    | DB63-00831A | 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    | DB31-00268A | MOTOR FAN OUT            | 230V/50Hz        | 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   | DB90-40176B | ASS'Y-COVER CONTROL      | ASS'Y            | 1    | SA     |        |
| 12   | DB90-02296A | 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   | G8T260FU1EW | COMPRESSOR               | ROTARY           | 1    | SA     |        |
| 15-1 | DB73-00067A | GROMMET-MOUNT            | NR               | 3    | SNA    |        |
| 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   | DB99-00710B | 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   | DB93-03665E | 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 | GUARD-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

■ UH035EAV : DB93-03453A

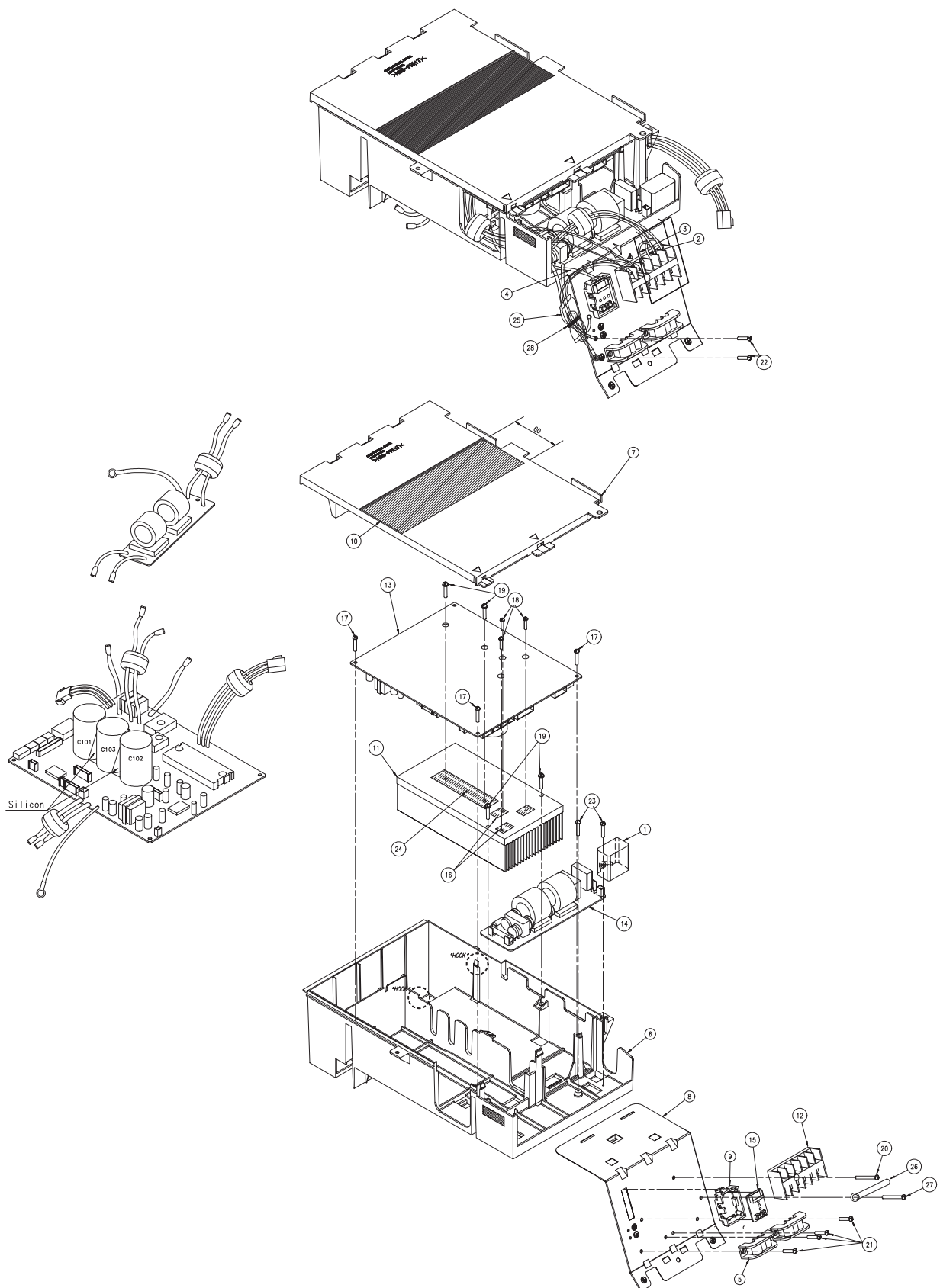


## ■ Parts List

| No. | Code No.    | Description             | Specification       | Q'TY | SA/SNA | Remark |
|-----|-------------|-------------------------|---------------------|------|--------|--------|
| 1   | DB61-02514A | CASE CONTROL COVER      | ABS V0, 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'Y PCB MAIN          | FR4 125x67          | 1    | SA     |        |
| 10  | DB61-02513A | CASE CONTROL BASE       | ABS V0, 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  | DB61-00171A | HOLDER WIRE CLAMP       | ABS                 | 2    | SA     |        |
| 18  | 6001-001054 | SCREW TAPPING           | M4xL10 TH+ ZPC(YEL) | 4    | SNA    |        |
| 19  | DB81-00547B | INSULATOR               | MICA                | 1    | SNA    |        |
| 20  | DB39-01198A | C/W-DISP(5P)            | -                   | 1    | SA     |        |
| 21  | DB98-24813A | ASS'Y-THERMAL GREASE    | 2g                  | 1    | SNA    |        |
| 22  | DB39-00604W | LEAD CONNECTOR-N        | SKYBLU              | 1    | SNA    |        |
| 23  | DB39-00604X | LEAD CONNECTOR-L        | BRN                 | 1    | SNA    |        |
| 24  | 6009-001001 | SCREW SPECIAL           | SCREW EARTH         | 1    | SNA    |        |
| 25  | DB61-00206A | HOLDER WIRE CLAMP       | SGCC-M, T0.5        | 1    | SNA    |        |
| 26  | 6002-001149 | SCREW TAPPING           | M4x10 2S PH+        | 1    | SNA    |        |
| 27  | DB65-10088D | CABLE TIE               | NYLON66             | 1    | SNA    |        |

## Ass'y Control Out(cont.)

■ UH052EAV : DB93-03665D  
UH070EAV : DB93-03665E





## ■ Parts List

| No. | Code No.    | Description                | Specification       | Q'TY     |          | SA/SNA | Remark |
|-----|-------------|----------------------------|---------------------|----------|----------|--------|--------|
|     |             |                            |                     | UH052EAV | UH070EAV |        |        |
| 1   | 2301-001369 | C-FILM,LEAD-OTHER          | 3uF,450V            | 1        | -        | SA     |        |
|     | 2301-001379 | C-FILM,LEAD-OTHER          | 4uF,450V            | -        | 1        | SA     |        |
| 2   | DB39-00604W | LEAD CONNECTOR-N           | SKYBLU              | 1        | 1        | SNA    |        |
| 3   | DB39-00604X | LEAD CONNECTOR-L           | BRN                 | 1        | 1        | SNA    |        |
| 4   | DB39-01198A | CONNECT WIRE               | 5P,MAIN TO DISPLAY  | 1        | 1        | SNA    |        |
| 5   | DB61-00171A | HOLDER-WIRE CLAMP          | ABS,BLK             | 1        | 1        | SA     |        |
| 6   | DB61-02511A | CASE CONTROL-BASE          | ABS V0,T2.0         | 1        | 1        | SNA    |        |
| 7   | DB61-02512A | CASE CONTROL-COVER         | ABS V0,T2.0         | 1        | 1        | SNA    |        |
| 8   | DB61-02534A | PLATE-CONTROL OUT          | SGCC-M,T0.6         | 1        | 1        | SNA    |        |
| 9   | DB61-02543A | CASE-DISPLAY PCB           | ABS V0,T2.0         | 1        | 1        | SNA    |        |
| 10  | DB62-01925D | INSULATION-CONTROL BOX TOP | FOAM-LEX,T2,WHT     | 1        | 1        | SNA    |        |
| 11  | DB62-03874A | HEAT SINK                  | 100mm,185mm,50mm,AL | 1        | 1        | SNA    |        |
| 12  | DB65-00179C | TERMINAL BLOCK             | DAF-6P              | 1        | 1        | SNA    |        |
| 13  | DB93-03545D | ASS'Y PCB MAIN             | PCB-2L              | 1        | -        | SA     |        |
|     | DB93-03545E | ASS'Y PCB MAIN             | PCB-2L              | -        | 1        | SA     |        |
| 14  | DB93-03546A | ASS'Y PCB SUB-EMI          | PCB-2L              | 1        | -        | SA     |        |
|     | DB93-03546D | ASS'Y PCB SUB-EMI          | PCB-2L              | -        | 1        | SA     |        |
| 15  | DB93-03662A | ASS'Y PCB DISPLAY          | PCB-1L              | 1        | 1        | SA     |        |
| 16  | DB98-17991A | ASS'Y-INSULATOR MICA       | MICA                | 2        | 2        | SNA    |        |
| 17  | 6002-000630 | SCREW-TAPPING              | PH,+,M3,L8          | 3        | 3        | SNA    |        |
| 18  | DB91-00306A | ASS'Y-SCREW MACHINE        | PH,+,M3,L16         | 3        | 3        | SNA    |        |
| 19  | DB91-00307A | ASS'Y-SCREW MACHINE        | PH,+,M4,L16         | 4        | 4        | SNA    |        |
| 20  | 6002-000555 | SCREW-TAPPING              | PH,+,M4,L25         | 1        | 1        | SNA    |        |
| 21  | 6001-001054 | SCREW-MACHINE              | TH,+,M4,L10         | 4        | 4        | SNA    |        |
| 22  | 6009-001001 | SCREW-SPECIAL              | TH,+,M4,L8          | 1        | 1        | SNA    |        |
| 23  | 6002-000536 | SCREW-TAPPING              | PH,+,M4,L10         | 2        | 2        | SNA    |        |
| 24  | DB98-24813A | ASS'Y-THERMAL GREASE       | INV,RADIANT HEAT    | 0.002    | 0.002    | SNA    |        |
| 26  | DB61-00206A | HOLDER-WIRE                | SGCC-M,T0.5         | 1        | 1        | SNA    |        |
| 27  | 6002-001149 | SCREW-TAPPING              | PH,+,M4,L10         | 1        | 1        | SNA    |        |
| 28  | 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,<br>-,20x28x20,-,Φ0.5,480PCS/PACK,-,    | 1    | SNA    |        |
| IC01         | 1203-000243 | IC-POS.FIXED REG.  | 7812,TO-220,3P,-,PLASTIC,11.5/12.5V,<br>16W,0TO+125C,1A,-,ST,-                      | 1    | SNA    |        |
| IC02         | 1203-000274 | IC-POS.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,<br>3.716/4.284V,256mW,-,2.5mA,-,TP               | 1    | SNA    |        |
| IC04         | DB09-00395B | IC MICOM           | MB90F823,-,80 P5 V,24 MHz,STM-0519-BS,<br>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,<br>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,<br>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,<br>-,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,<br>-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,-,-,<br>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,<br>0.4VA,50mOhm Max,-,BULK,<br>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(UH035EAV)

| 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(UH035EAV)(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(UH035EAV)(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  | DB46-00016A | 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,<br>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,<br>256mW,-,2.5mA,-,TP                | 1    | SNA    |        |
| IC11         | 1203-003527 | IC-PWM CONTROLLER       | TOP243,DIP,7P,9.83x6.6mm,PLASTIC,-0.3/700V,<br>25W,-40to+150C,1.44A,-,-              | 1    | SNA    |        |
| IC12         | 0604-001172 | PHOTO-COUPLER           | TR,100-300,200mW,SOP,TP                                                              | 1    | SNA    |        |
| IC13         | 1203-002948 | IC-POS. ADJUST REG.     | TL431ACD,SOP,8P,4.9x3.9mm,PLASTIC,36V,1.5W,<br>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,<br>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,<br>AC90-275V,-25°C~+105°C,BULK,GND 2P  | 1    | SNA    |        |
| Q801         | 0504-000127 | TR-DIGITAL              | FJV3102RMTE,NPN,200mW,10K/10K,SOT-23,TP                                              | 1    | SNA    |        |

## **OUTDOOR MAIN PCB : DB93-03454A(UH035EAV)(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(UH035EAV)(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(UH035EAV)(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,-,-,<br>#1015 18 AWG,-,4way valve      | 1    | SNA    |        |
| WIRE-COMP    | DB39-00608H | CONNECT WIRE-COMP | SH12BPB,#1015 16 AWG,AWG,3,290/280/270,<br>red/blue/yellow,16,MG620877,-,-,250V,-,29 | 1    | SNA    |        |
| WIRE-PCB     | DB39-01194B | CONNECT WIRE      | AS12(09)BPB,#1007 26 AWG,-,7P,150,WHT,-,<br>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,<br>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    |        |

[illegible]



# **OUTDOOR MAIN PCB : DB93-03545D(UH052EAV)(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 : DB93-03545D(UH052EAV)(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 : DB93-03545D(UH052EAV)(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-04 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  | DB46-00014B | 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,<br>25W,-40to+150C,1.44A,-,-              | 1    | SNA    |        |
| IC12         | 0604-001172 | PHOTO-COUPLER           | TR,100-300,200mW,SOP,TP                                                              | 1    | SNA    |        |
| IC13         | 1203-002948 | IC-POS. ADJUST REG.     | TL431ACD,SOP,8P,4.9x3.9mm,PLASTIC,36V,1.5W,<br>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,SOP,8P,4.9x3.8 mm,SINGLE,ST,PLASTIC,5V,<br>-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,-,<br>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,<br>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 P5 V,24 MHz,STM-0580-OA,24,16,<br>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 : DB93-03545D(UH052EAV)(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,<br>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,<br>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,<br>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          | DB95-00631A | ASS'Y-IPM           | MH052FXEA2,PS21867-P                                                                 | 1    | SNA    |        |
| L/W COMM 485 | DB39-01017D | CONNECT WIRE        | COMM(485),#1015 18 AWG,-,2P,300,RED/BLU,22,<br>179974-1,-,230V/50Hz,3.96mm,-,-,-     | 1    | SNA    |        |
| L/W EARTH    | DB39-00514H | CONNECT WIRE-EARTH  | AS24BPB,#1015 16 AWG,-,420,GRN,16,-,-,BK,<br>230V/50Hz,2.5mm,400,-,-,-               | 1    | SNA    |        |
| L/W POWER L  | DB39-00765R | WIRE HARNESS        | AS24BPB,#1015 16 AWG,-,1P,150,BRN,#16,<br>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,<br>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,<br>AC90-275V,-25~-+105,BULK,GND 2P     | 1    | SNA    |        |
| Q801         | 0504-000127 | TR-DIGITAL          | FJV3102RMTE,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 : DB93-03545D(UH052EAV)(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 : DB93-03545D(UH052EAV)(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 : DB93-03545D(UH052EAV)(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 : DB93-03545D(UH052EAV)(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 : DB93-03545E(UH070EAV)

| 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,-----,<br>#1015 18 AWG,-----, 4way valve              | 1    | SNA    |        |
| C/W COMP     | DB39-00746C | CONNECT WIRE-COMP | AS24(18)BPB, #1015 14 AWG,-----, 3P425,-----, AWG 14,-----,<br>BK, 230V/50Hz, 3.96mm, 400, UL1015 AW | 1    | SNA    |        |
| C/W REACTOR  | DB39-00747E | CONNECT WIRE      | AS18BPBX,-----, 2P,-----, 14, 179974-1,-----, 230V/50Hz,-----,<br>#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 : DB93-03545E(UH070EAV)(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 : DB93-03545E(UH070EAV)(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 : DB93-03545E(UH070EAV)(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-04 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  | DB46-00015C | 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,<br>25W,-40to+150C,1.44A,-,-              | 1    | SNA    |        |
| IC12         | 0604-001172 | PHOTO-COUPLER           | TR,100-300,200mW,SOP,TP                                                              | 1    | SNA    |        |
| IC13         | 1203-002948 | IC-POS1.ADJUST REG.     | TL431ACD,SOP,8P,4.9x3.9mm,PLASTIC,36V,1.5W,<br>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,<br>-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,-,<br>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,<br>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,<br>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 : DB93-03545E(UH070EAV)(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,<br>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,<br>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,<br>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          | DB95-00631A | ASS'Y-IPM           | MH052FXEA2,PS21867-P                                                                 | 1    | SNA    |        |
| L/W COMM 485 | DB39-01017G | CONNECT WIRE-485    | AS24BPA,#1015 20 AWG,-,320,-,-,-,-,230V/50Hz,<br>2.5mm,300,UL 1015,-,-               | 1    | SNA    |        |
| L/W EARTH    | DB39-00514H | CONNECT WIRE-EARTH  | AS24BPB,#1015 16 AWG,-,420,GRN,16,-,-,BK,<br>230V/50Hz,2.5mm,400,-,-,-               | 1    | SNA    |        |
| L/W POWER L  | DB39-00765R | WIRE HARNESS        | AS24BPB,#1015 16 AWG,-,1P,150,BRN,#16,<br>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,<br>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,<br>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 : DB93-03545E(UH070EAV)(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 : DB93-03545E(UH070EAV)(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 : DB93-03545E(UH070EAV)(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 : DB93-03545E(UH070EAV)(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(UH035EAV)(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-04 RED           | 1    | SNA    |        |

## ■ OUTDOOR SUB PCB : DB93-03470A(UH035EAV)(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,<br>-40to+85CC,520mW,1,1,1.5/5.25V,-     | 1    | SNA    |        |
| IC30         | 0801-000393 | IC-CMOS LOGIC         | 74HC86,OR GATE,SOP,14P,150MIL,QUAD,ST,-,<br>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    |        |
| IC50         | DB09-00461A | IC MICOM              | MB90F823,-,80 P,5 V,24 MHz,STM-0580-OA,24,16,<br>QFP,QFP,14x20 mm,16,-40~85         | 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    |        |
| 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,<br>256mW,-,2.5mA,-,TP               | 1    | SNA    |        |
| 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(UH035EAV)(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,<br>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(UH035EAV)

| 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(UH052EAV)

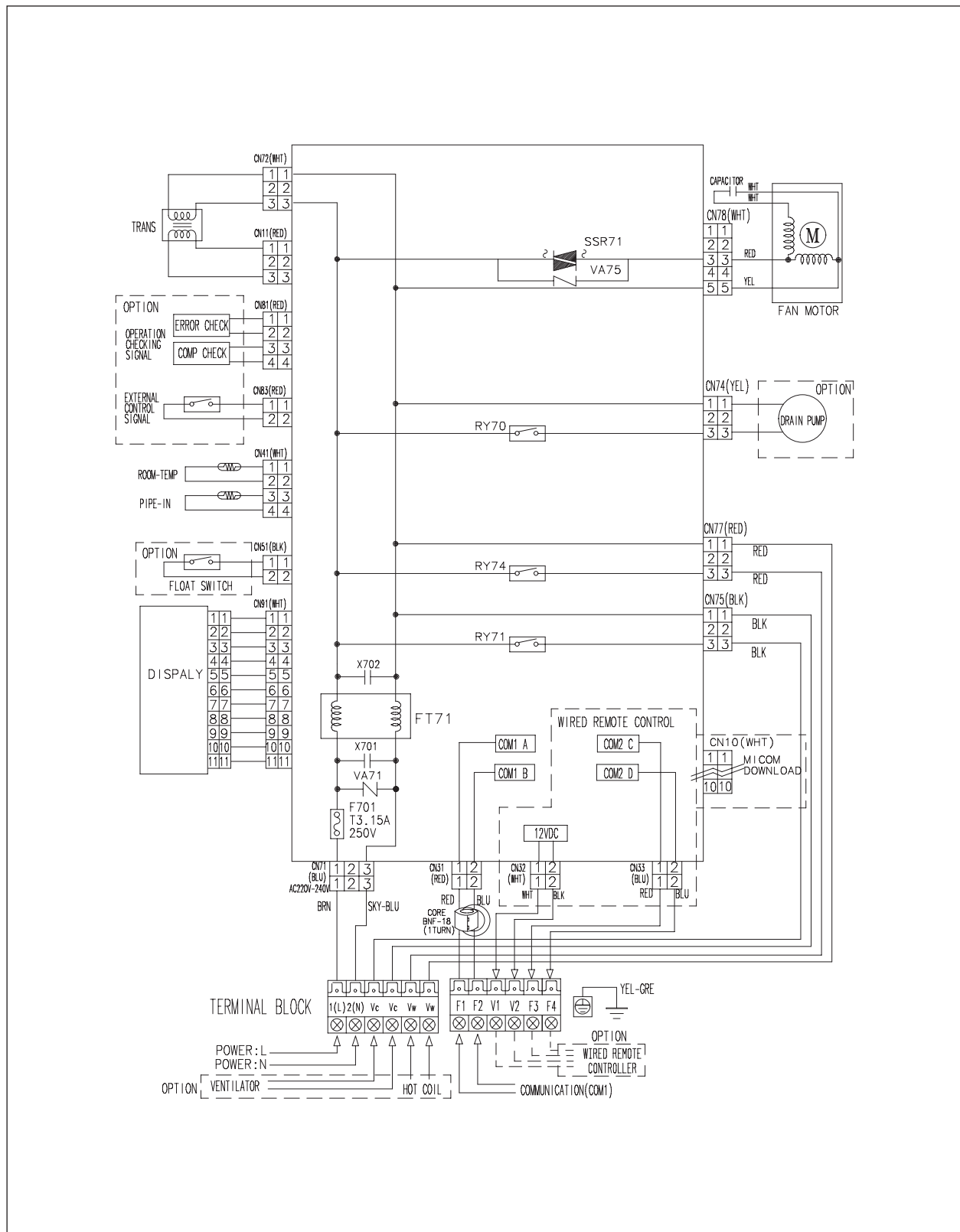
| Location No. | Code No.    | Description            | Specification                                                                        | Q'TY | SA/SNA | Remark |
|--------------|-------------|------------------------|--------------------------------------------------------------------------------------|------|--------|--------|
| 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,<br>18.0A,Φ31x20 x15,-,42x30mm,5mm,2.0mm,Di  | 1    | SNA    |        |
| FT01         | DB27-00037A | COIL CHOKE             | SSC3120030B,AS18BPB,3.0mH,10%,-,200mohm,<br>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,<br>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(UH070EAV)

| 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,<br>18.0A,Ø31x20 x15,-,42x30mm,5mm,2.0mm,Di  | 1    | SNA    |        |
| FT01         | DB27-00037A | COIL CHOKE             | SSC3120030B,AS18BPB,3.0mH,10%,-,200mohm,<br>18.0A,Ø31x20 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,<br>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

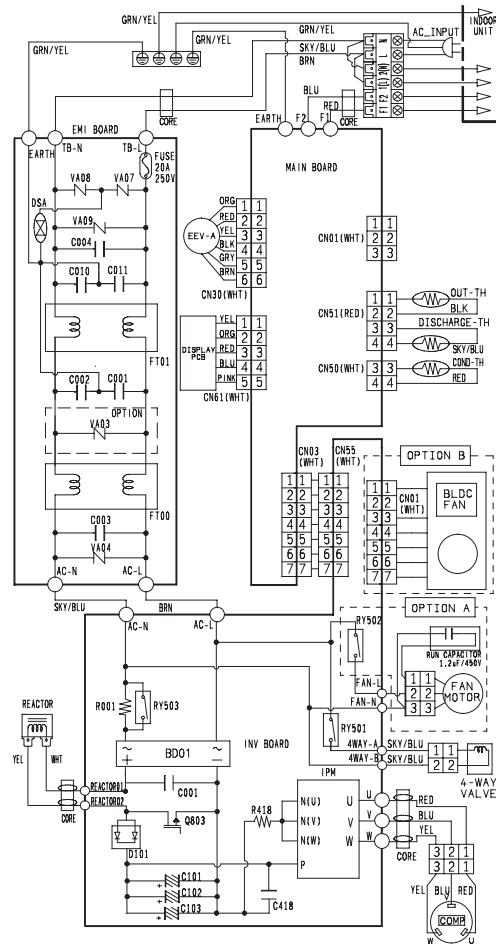
### 7-1 Indoor Unit



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## 7-2 Outdoor Unit

### ■ UH035EAV



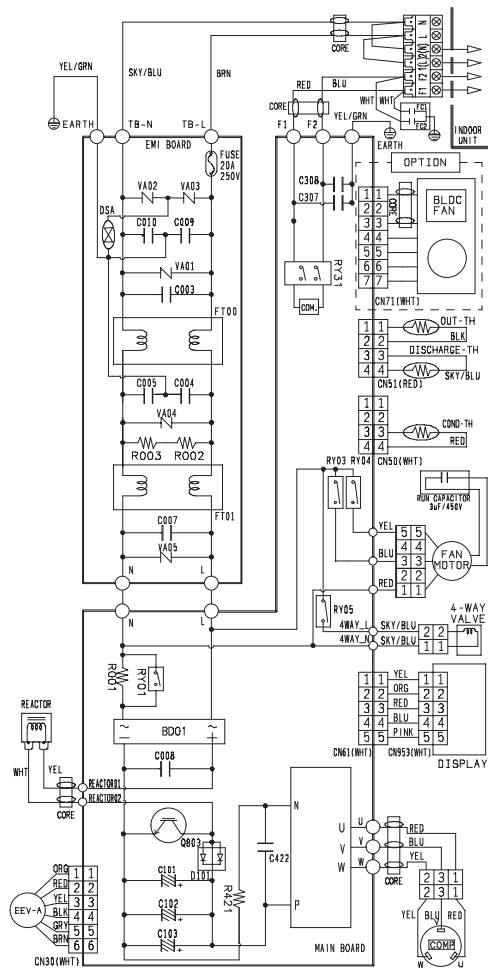
| LED PATTERN | DESCRIPTION                      |
|-------------|----------------------------------|
| YEL GRN RED | Power Off / Vdd Error            |
| YEL GRN RED | Comp Peak Current (O.C.)         |
| YEL GRN RED | Abnormal Communication           |
| YEL GRN RED | Comp Starting Error          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

● LED ON  
 ○ LED BLINKING  
 × LED OFF

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

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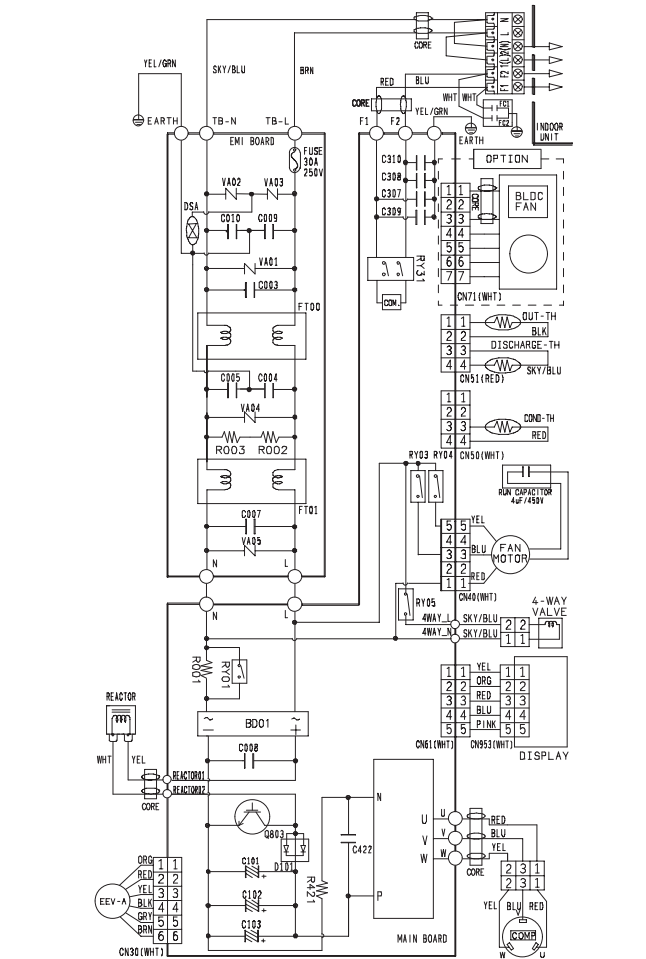
UH052EAV



| 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

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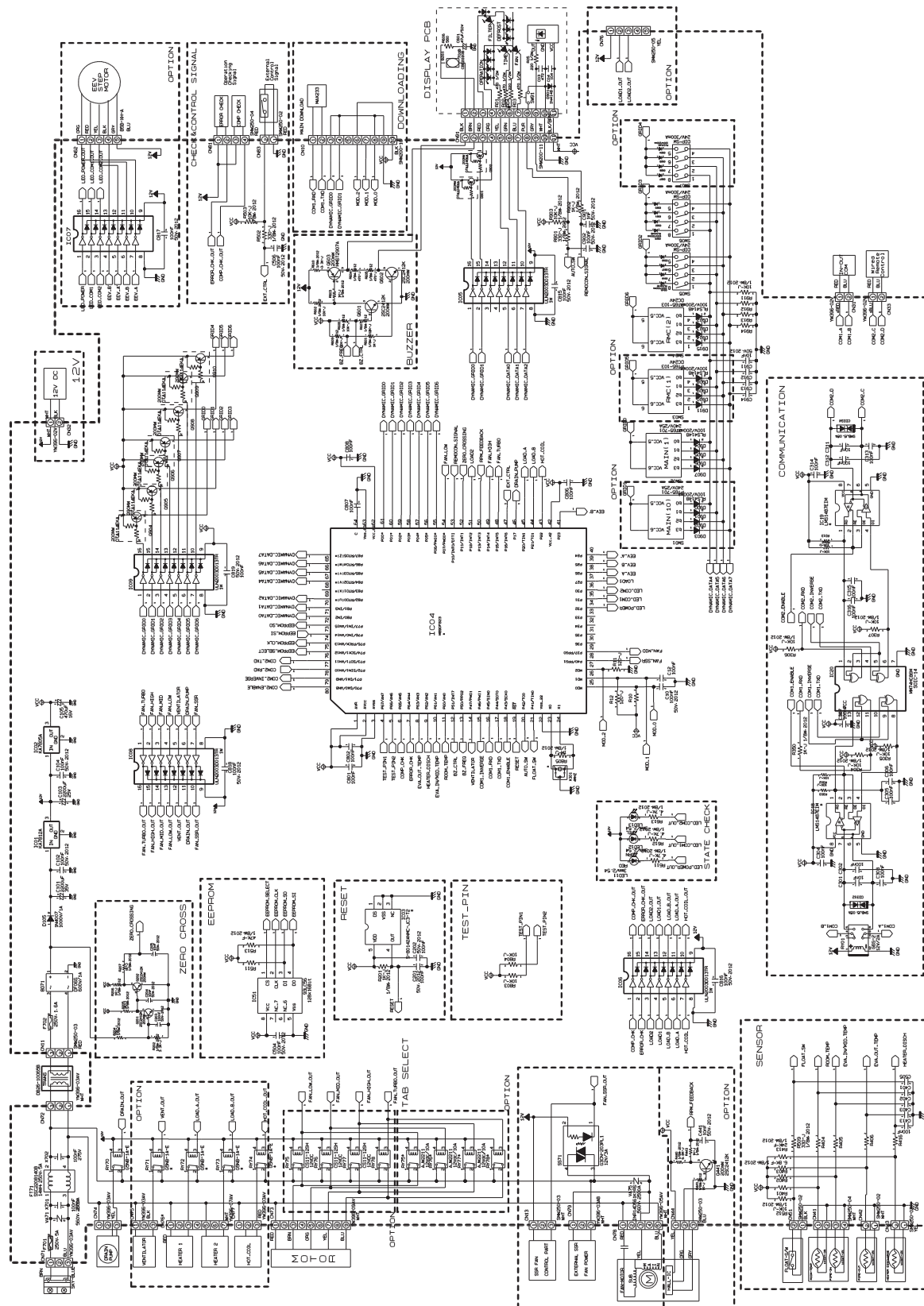
|     | LED | PATTERN | DESCRIPTION                                                        |
|-----|-----|---------|--------------------------------------------------------------------|
| YEL | GRN | RED     |                                                                    |
|     | ○   | ○       | Power Off / VDD_NG                                                 |
|     | ○   | ○       | IPM Over Current(O.C)                                              |
|     | ○   | ●       | Abnormal Serial communication<br>(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                                                  |
|     | ◎   | ◎       | Cool temp sensor error(Dual/Single)                                |
|     | ◎   | ●       | Imin, Time out Comm.<br>(Display Board: Onboard; Indoor<->Outdoor) |
|     | ●   | ○       | Fan error                                                          |
|     | ○   | ○       | OTP error                                                          |
|     | ●   | ●       | Comp rotation error                                                |
|     | ◎   | ◎       | Operation condition secession(Dual only)                           |
|     | ●   | ◎       | DC-Link voltage sensor error                                       |
|     | ◎   | ◎       | l-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

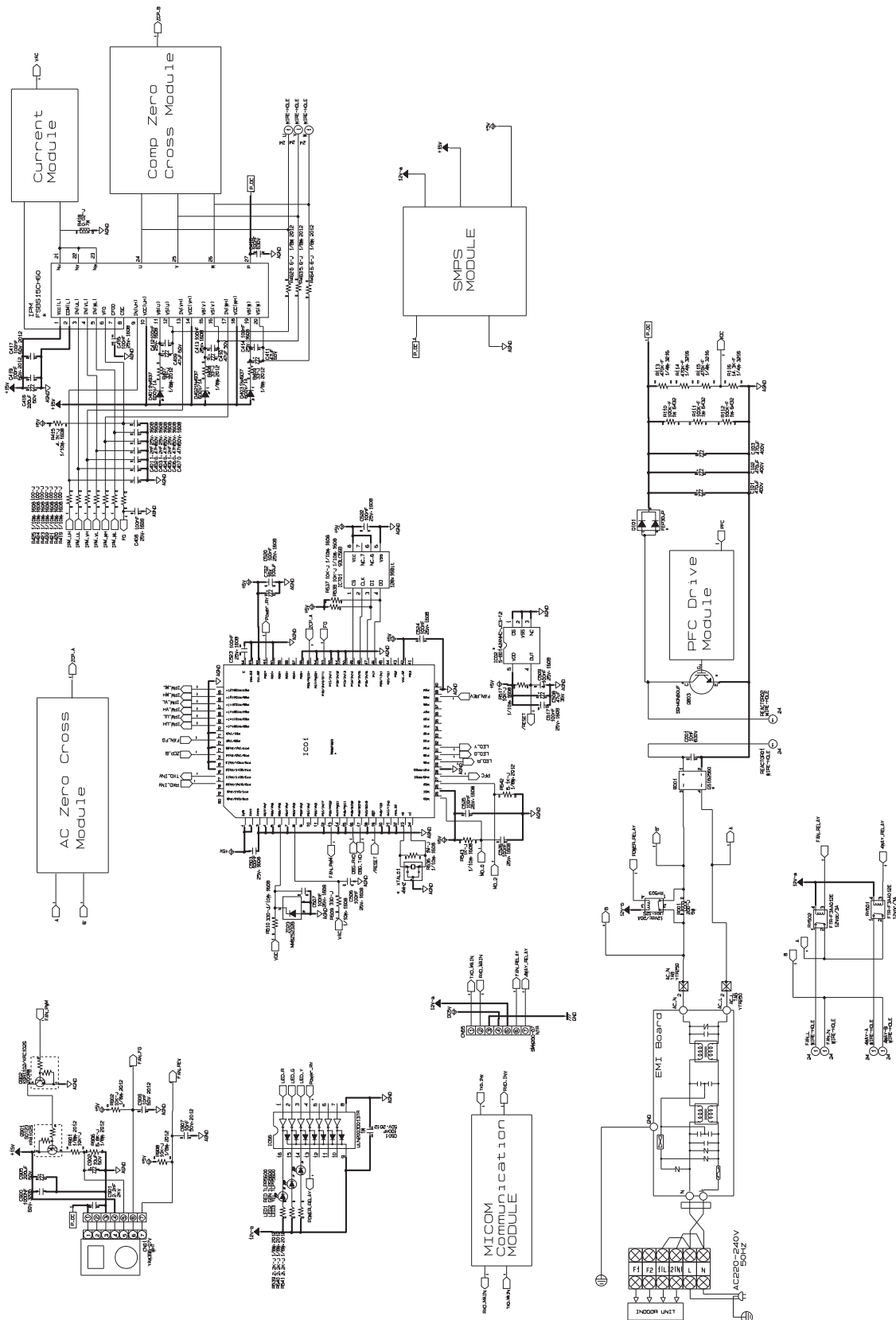


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## 8-2 Outdoor Unit

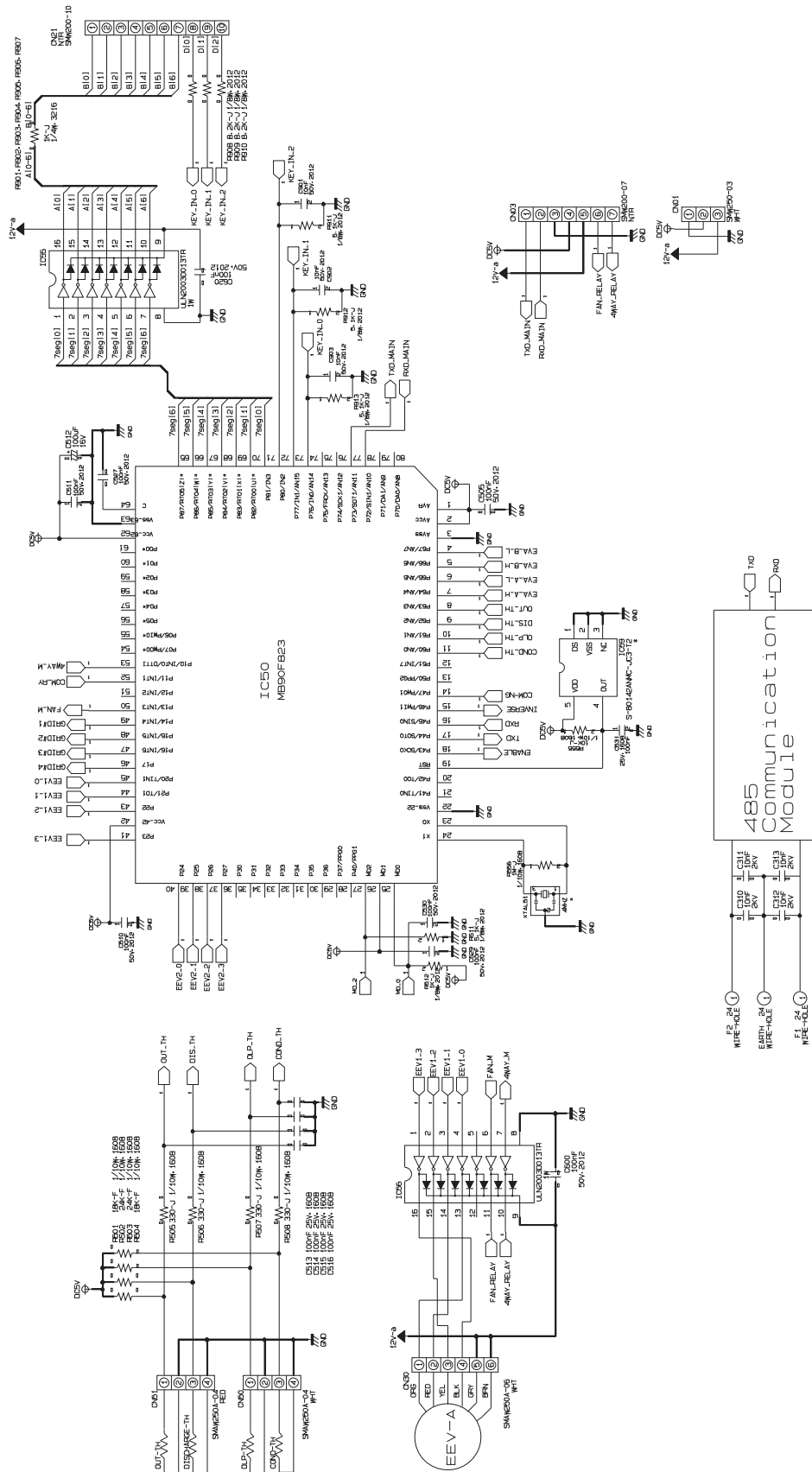
### 8-2-1 UH035EAV

#### ■ Inverter



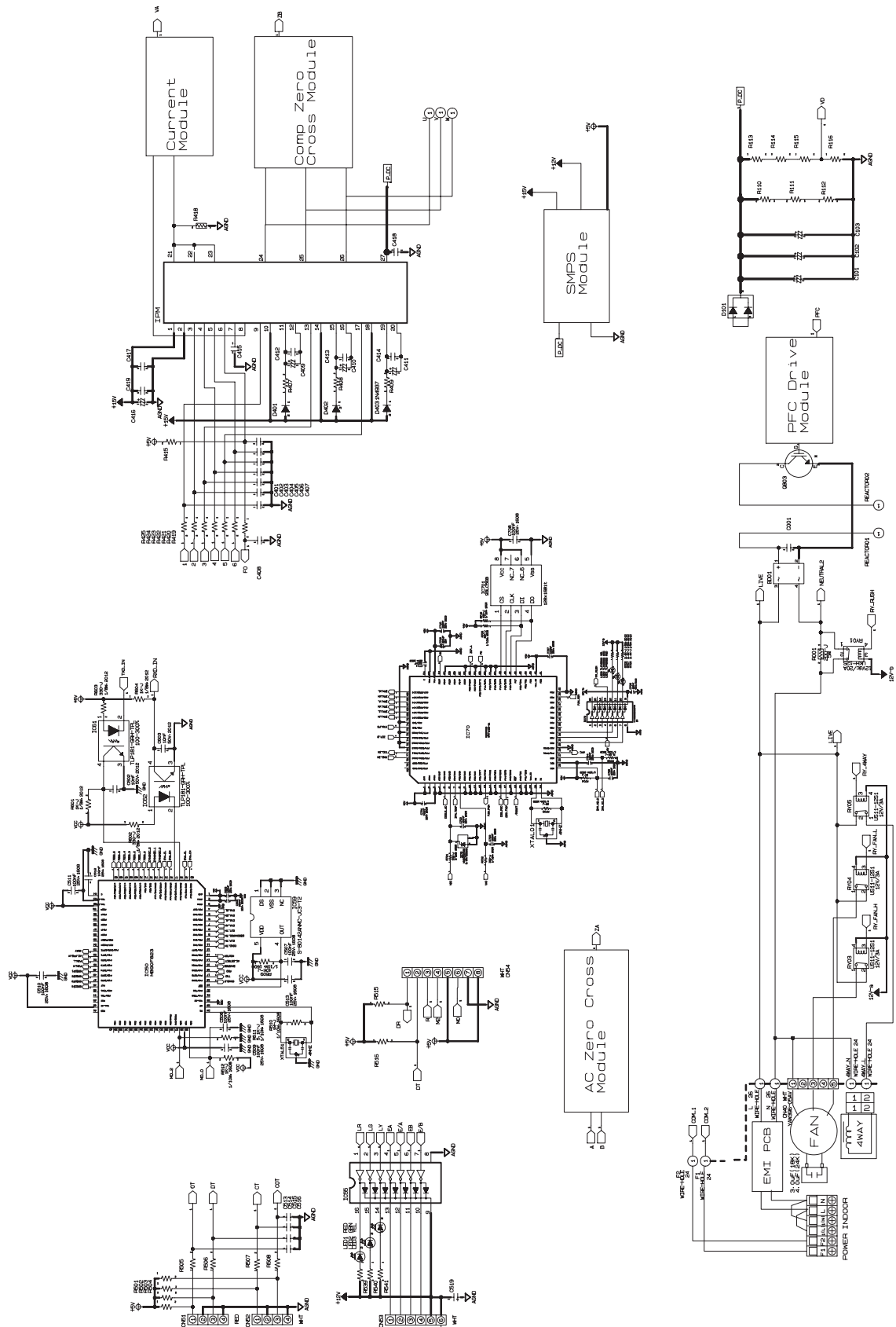
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## ■ Main



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## 8-2-2 UH052EAV/UH070EAV



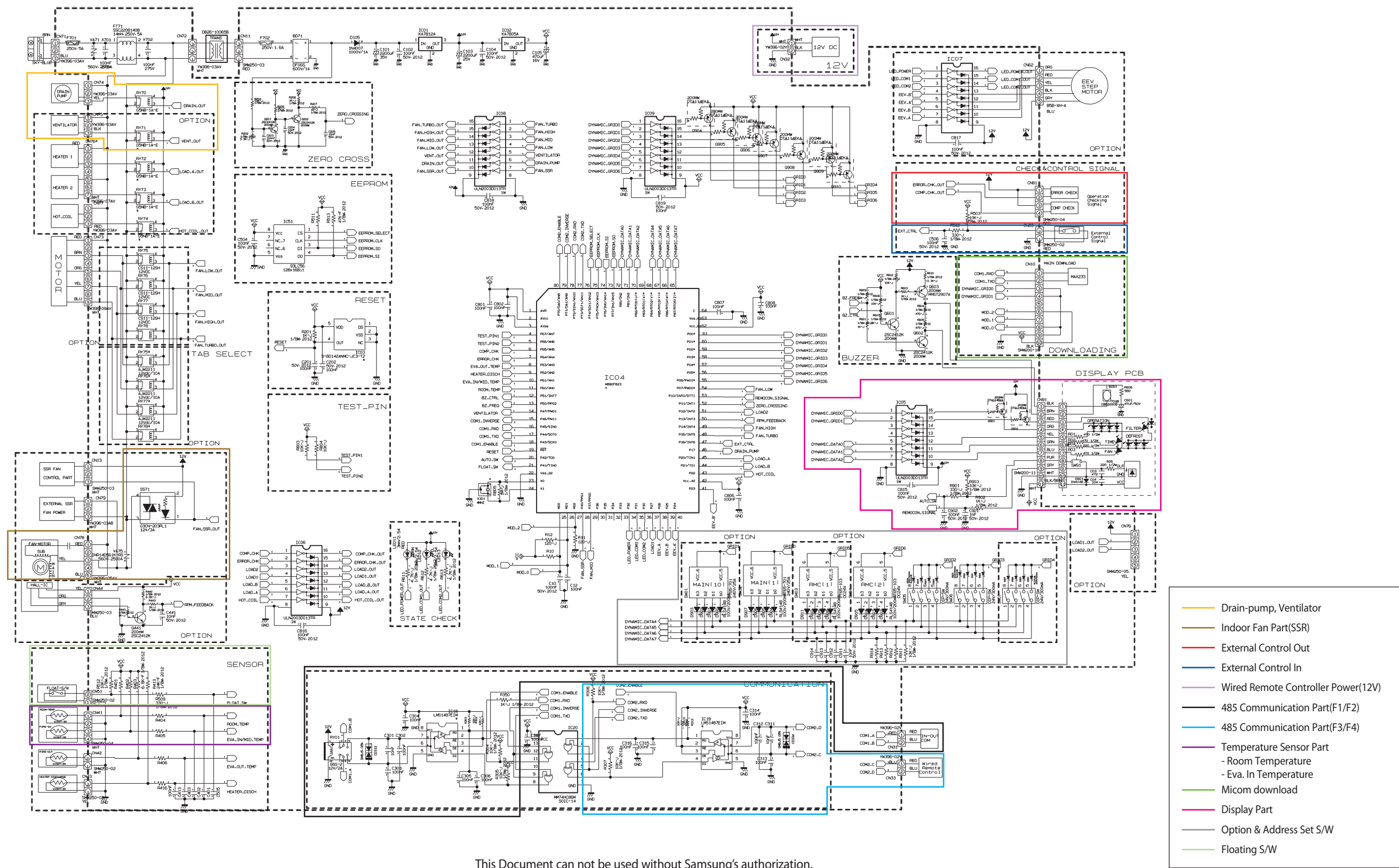
This Document can not be used without Samsung's authorization.

# MEMO

# 9. Circuit Descriptions

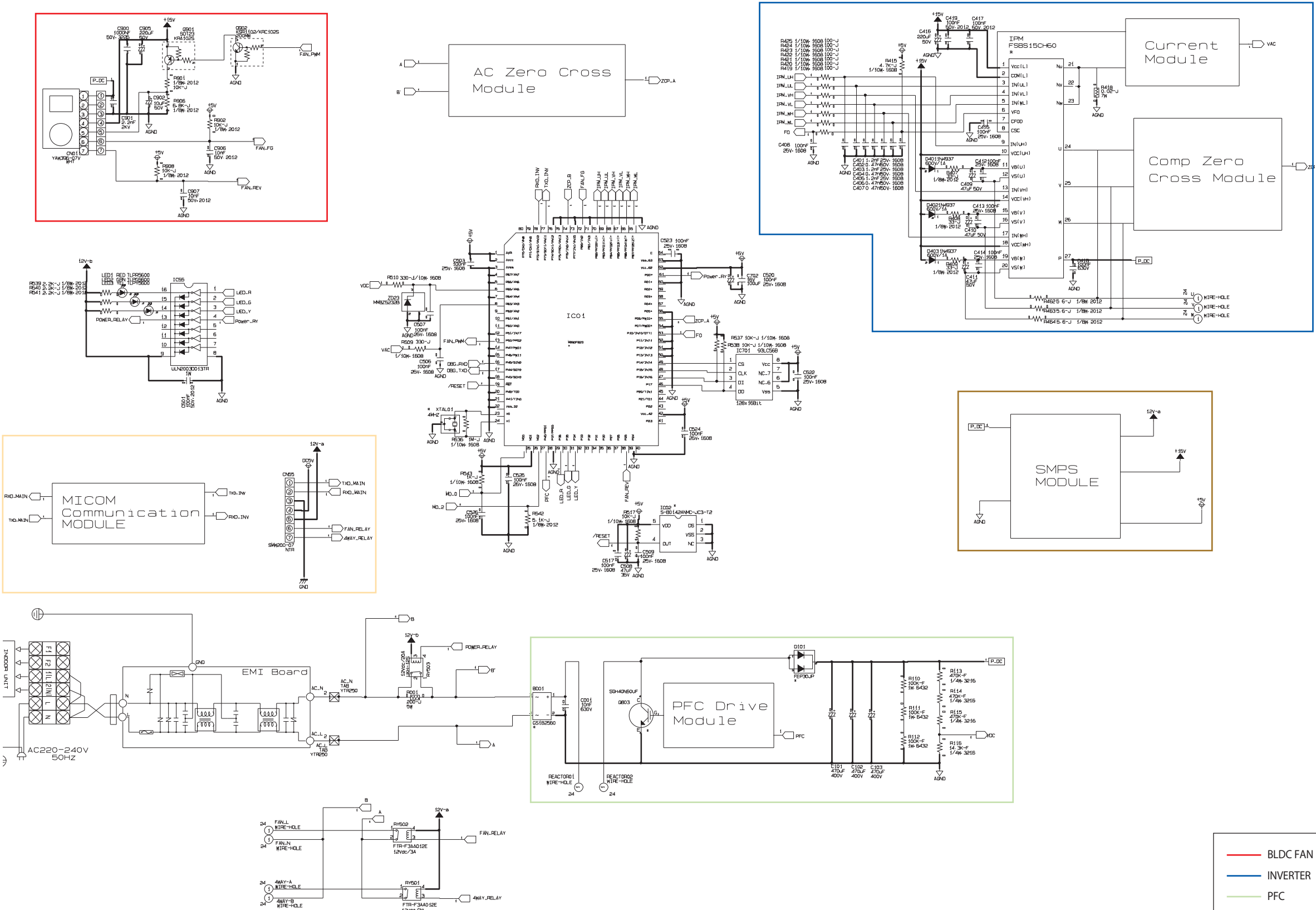
## 9-1 PCB Circuit Descriptions

### 9-1-1 Indoor Unit



9-1-2 Outdoor Unit(UH035EAV)

■ Inverter

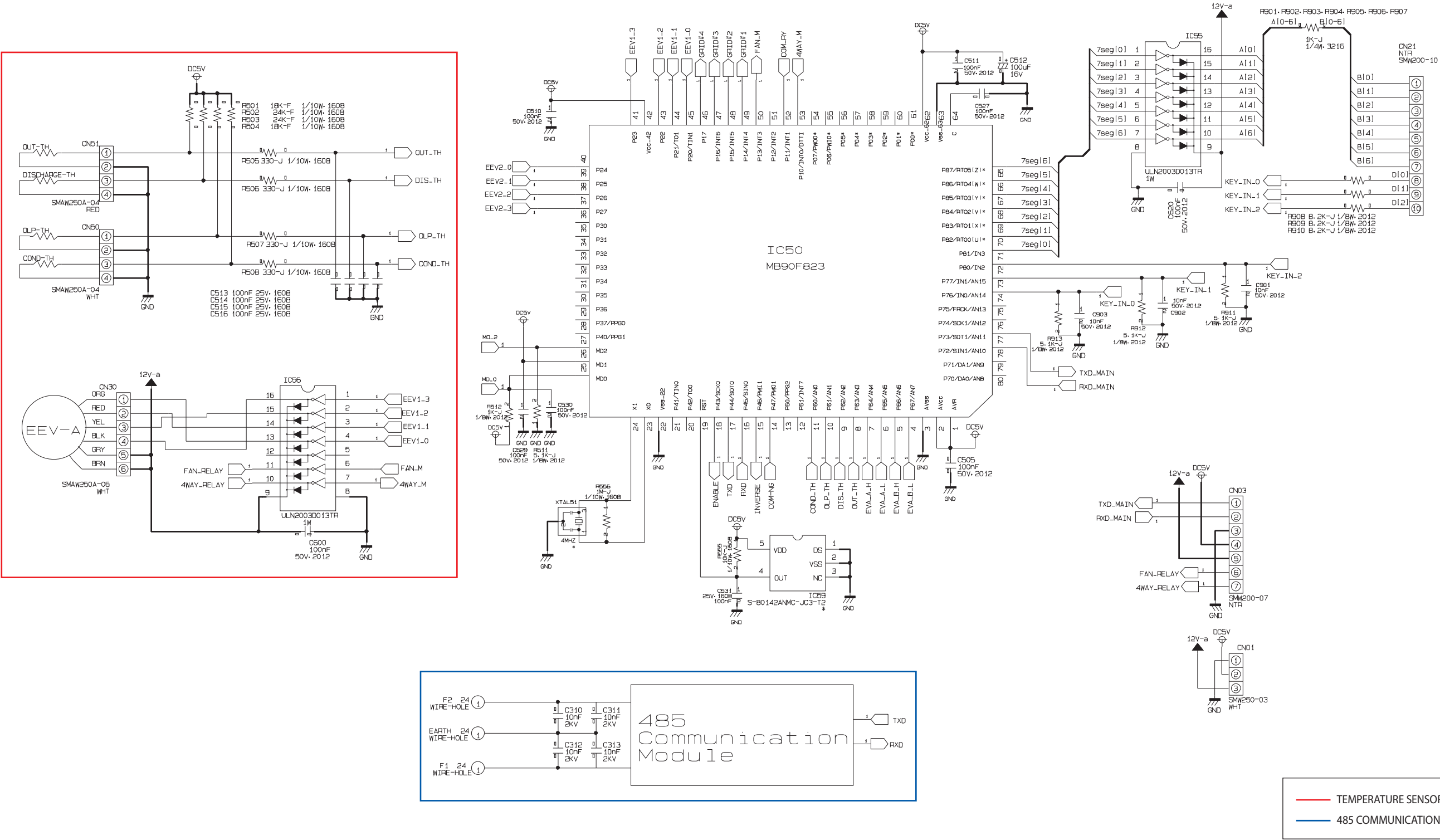


- BLDC FAN
- INVERTER
- PFC
- SMPS
- MICOM COMMUNICATION

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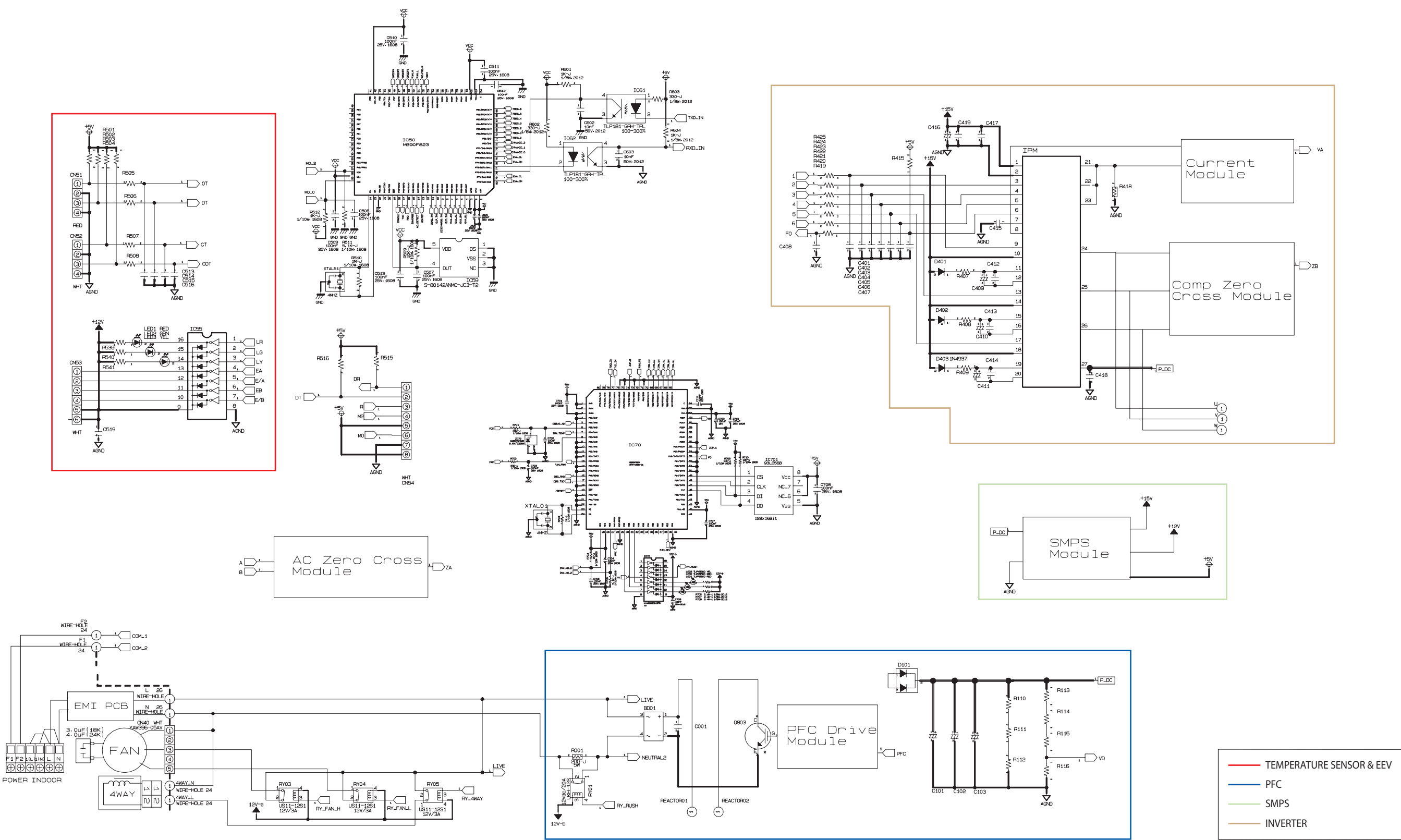


■ Main





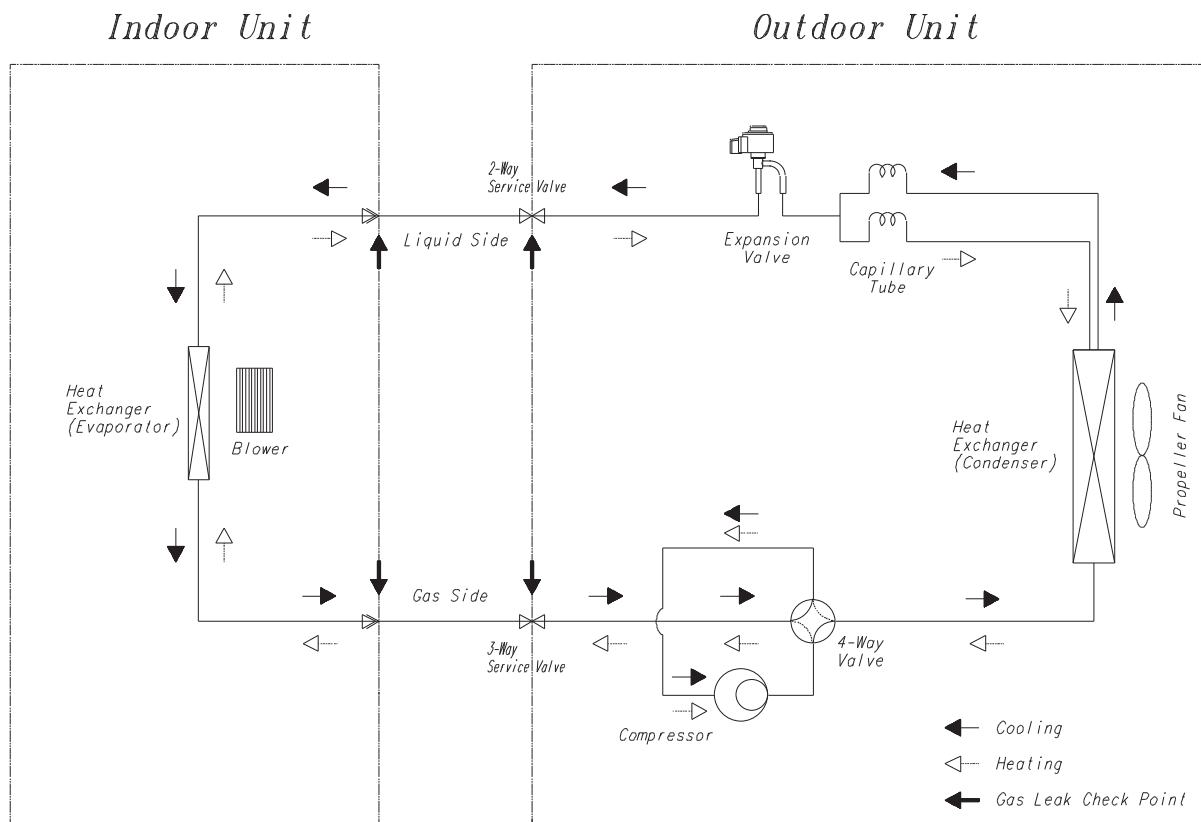
9-1-3 Outdoor Unit(UH052EAV/UH070EAV)



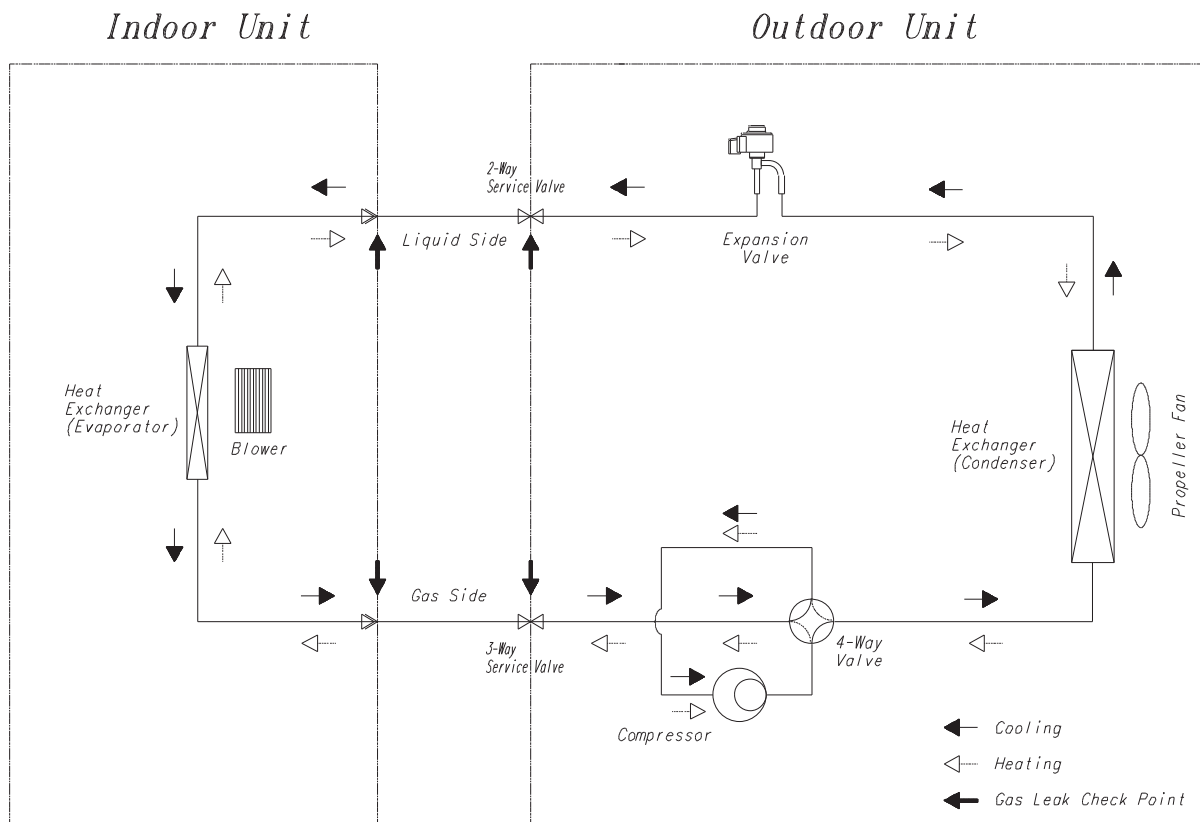
This Document can not be used without Samsung's authorization.

## 9-2 Refrigerating Cycle Diagram

### ■ EH035EAV/UH035EAV



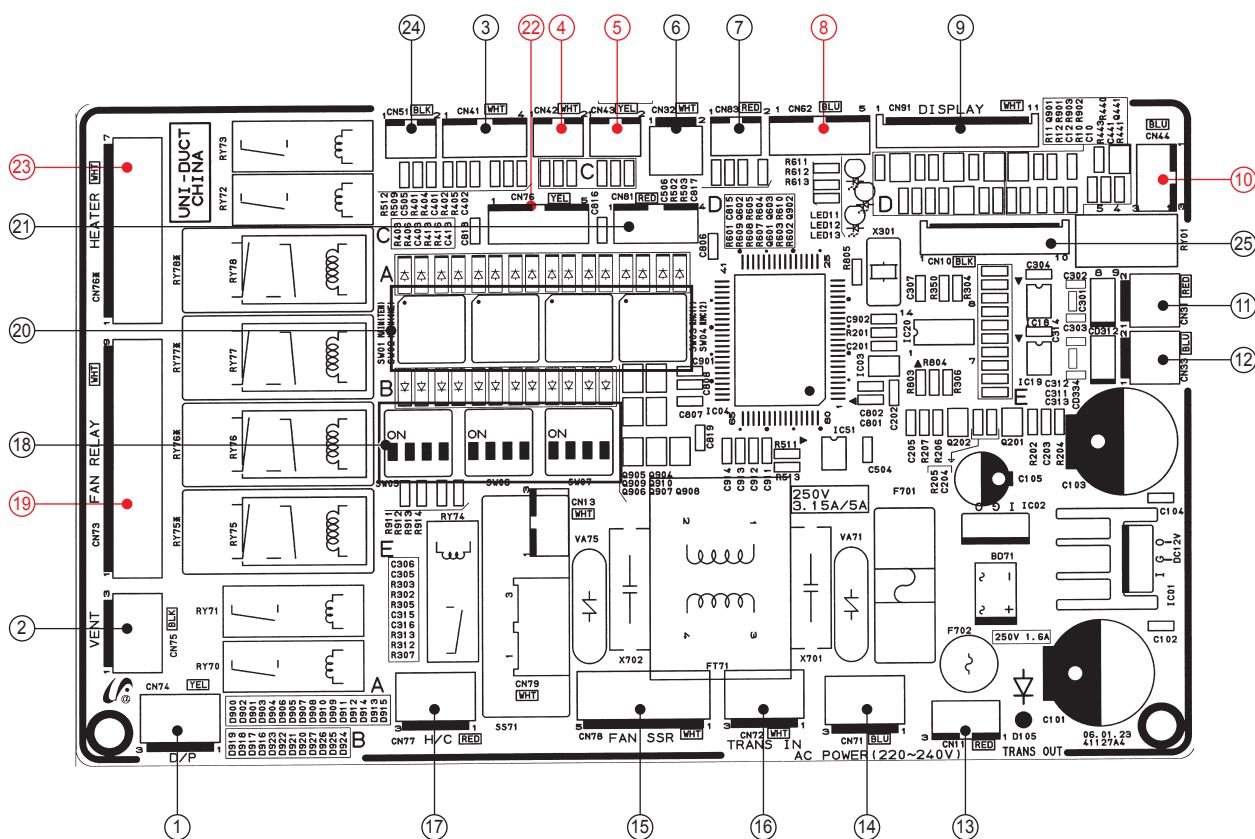
# ■ EH052EAV/UH052EAV, EH070EAV/UH070EAV



## 10. PCB Diagram

### 10-1 Indoor PCB

⚠ The red number connector is not used.

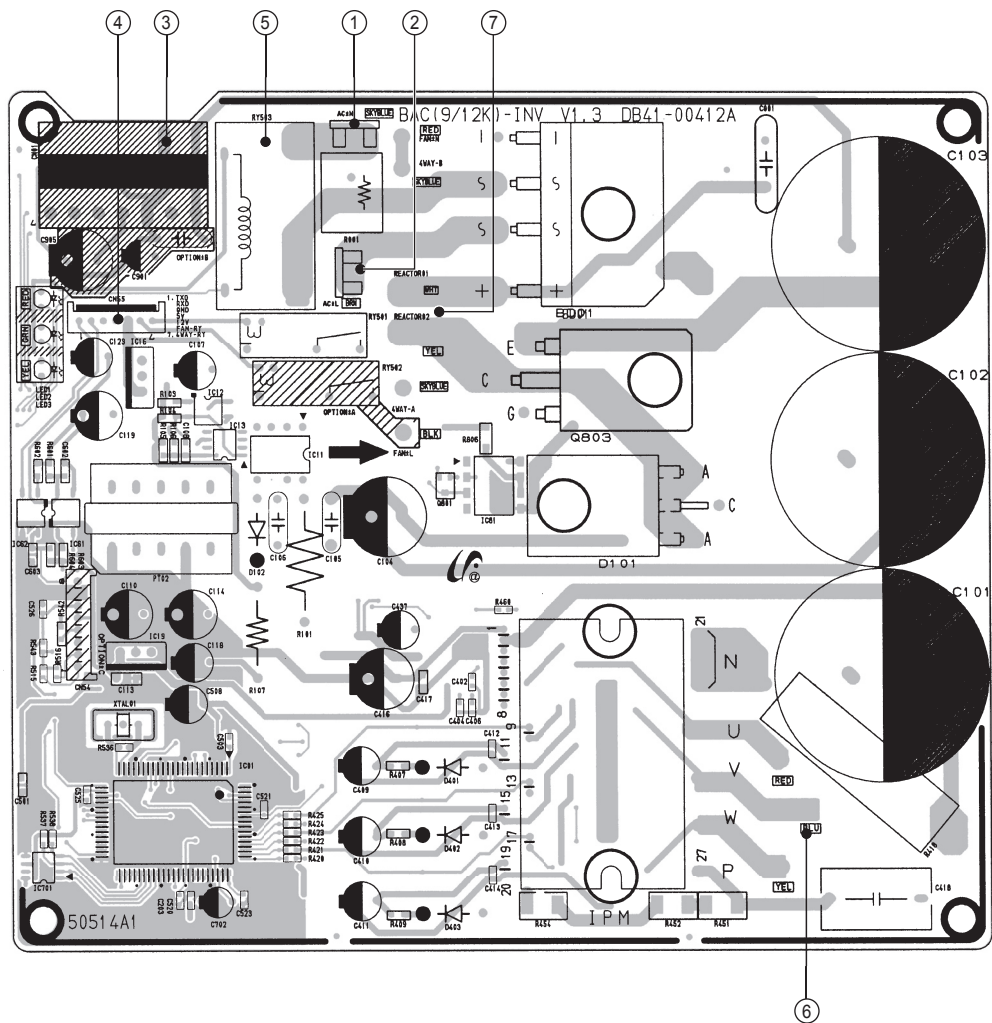


|   |                                                            |   |                                                            |
|---|------------------------------------------------------------|---|------------------------------------------------------------|
| ① | Drain pump : YW396-03AV(YEL)                               | 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

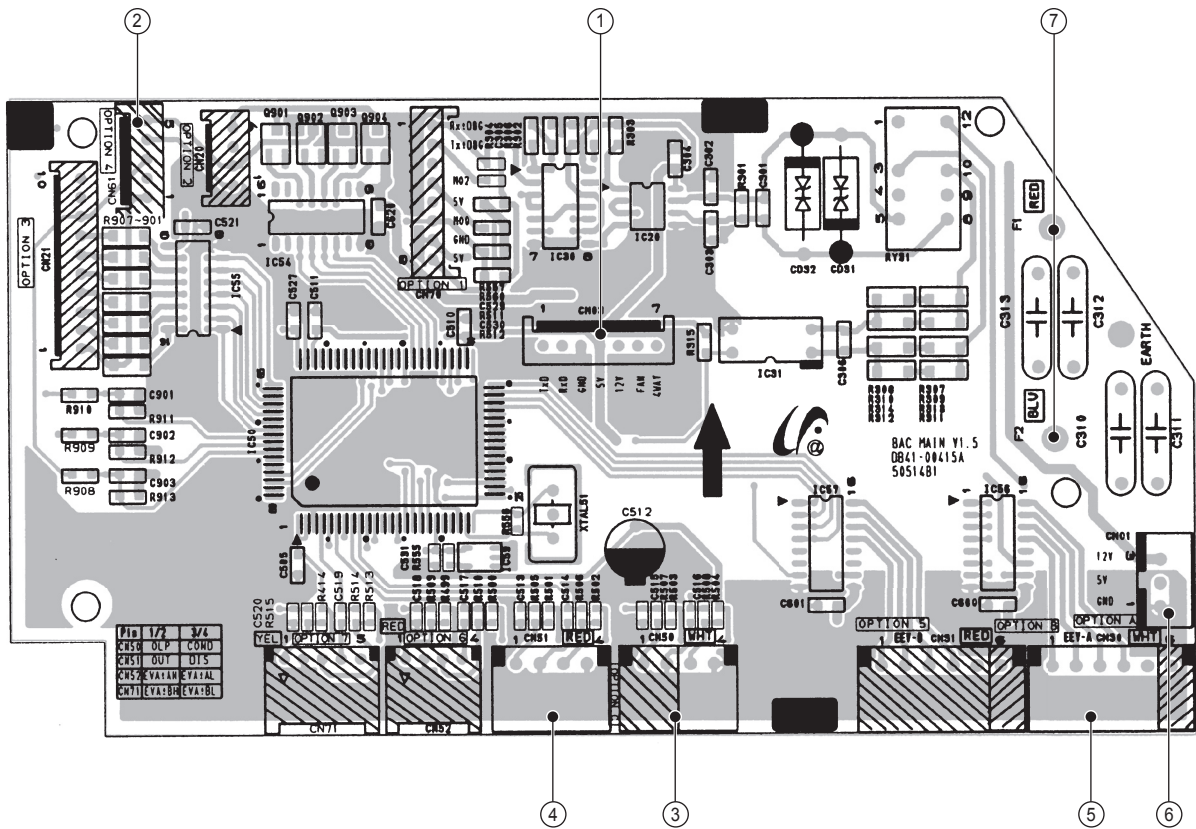
### 10-2-1 UH035EAV

#### ■ 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) |   |                        |

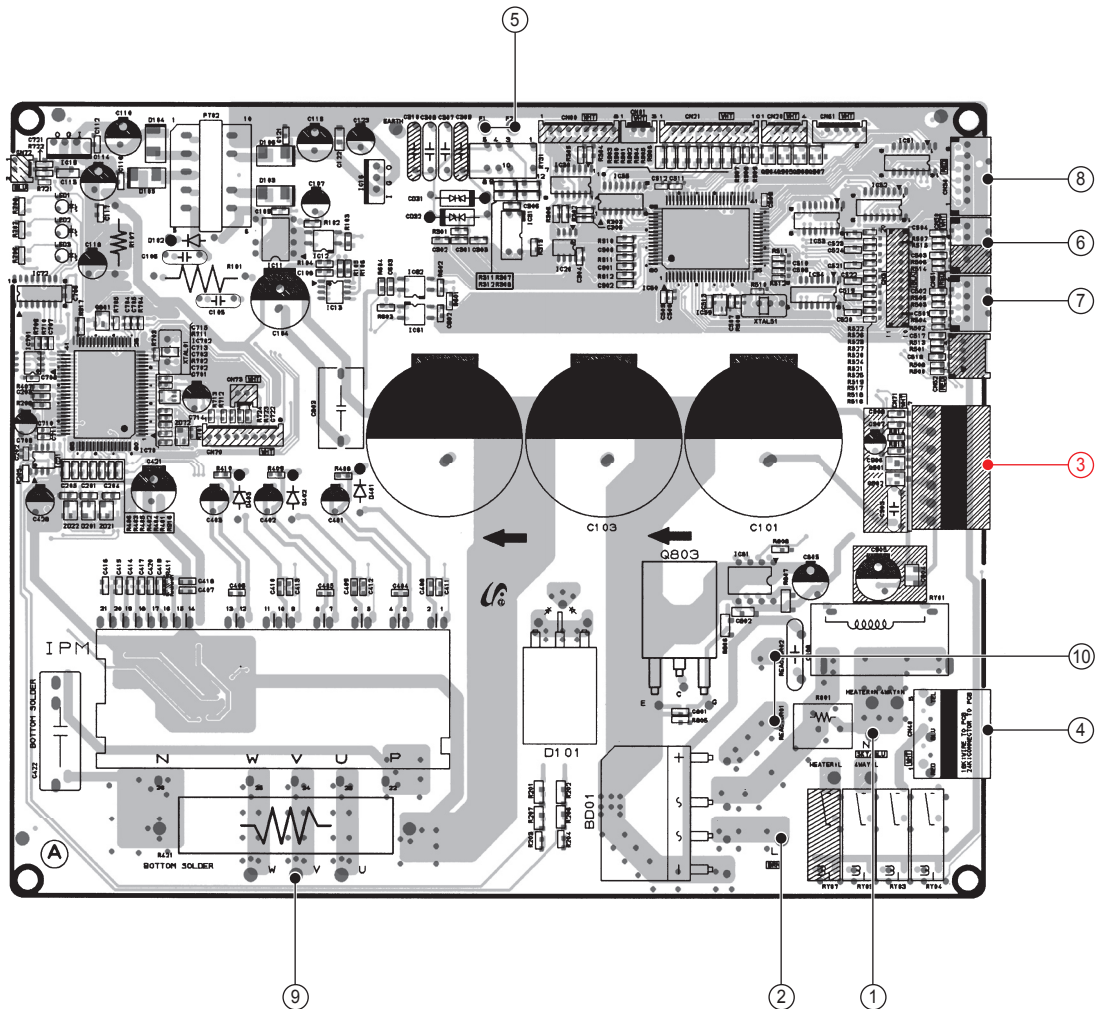
## ■ Main PCB



|   |                                                         |
|---|---------------------------------------------------------|
| 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 UH052EAV/UH070EAV

**A** The red number connector 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      |



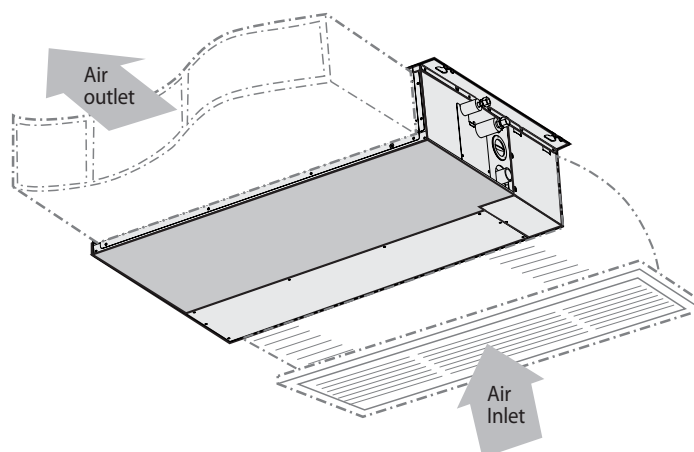
## 11. Operating Instructions

### 11-1 Name of Each Part

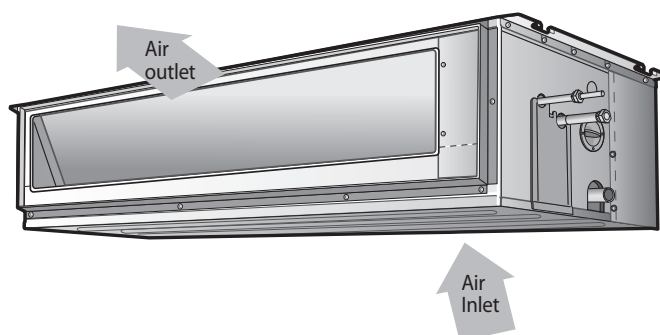
#### 11-1-1 Indoor Unit

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

##### ■ EH035EAV



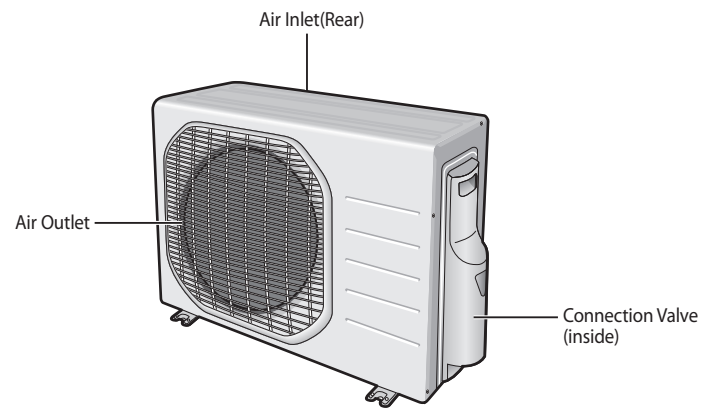
##### ■ EH052EAV/EH070EAV



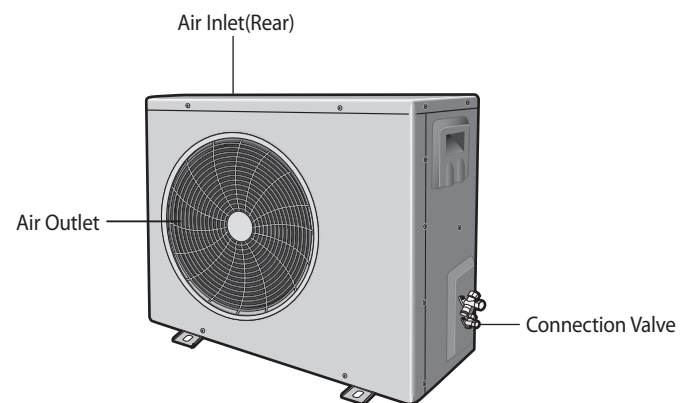


## 11-1-2 Outdoor Unit

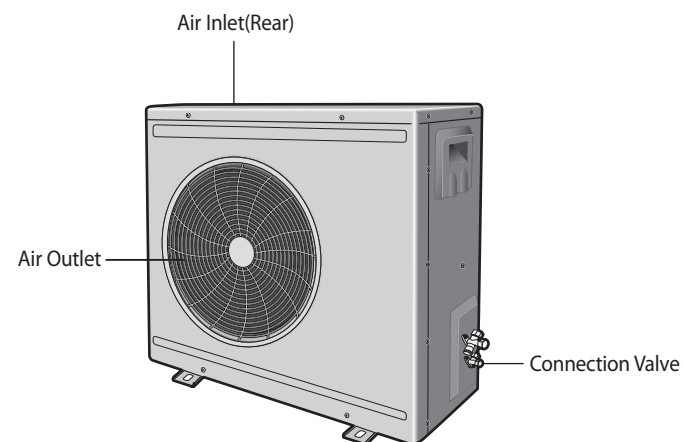
### ■ UH035EAV



### ■ UH052EAV

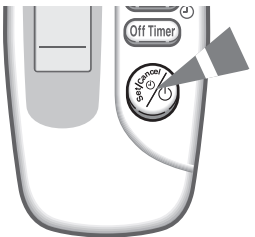
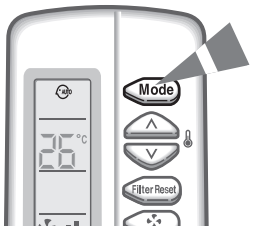
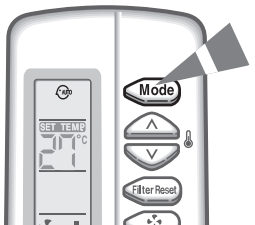
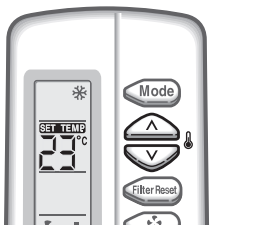


### ■ UH070EAV

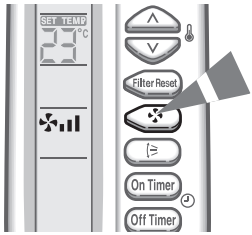
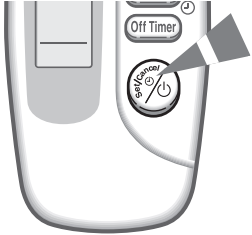
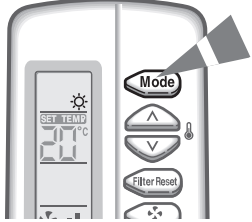
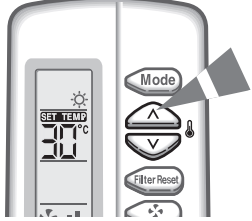
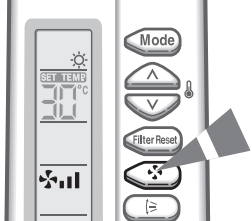


## 11-2 Main Function

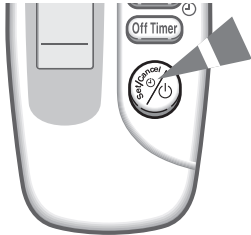
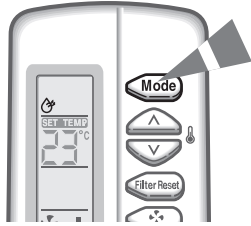
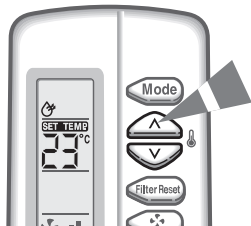
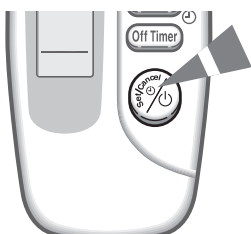
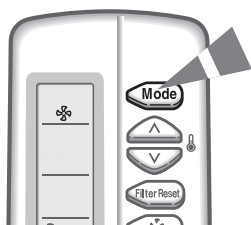
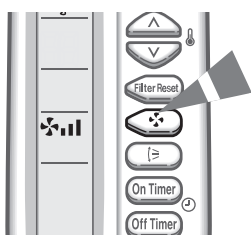
### 11-2-1 Basic Function

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

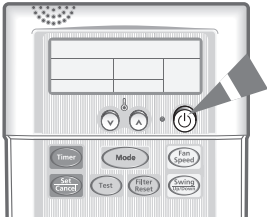
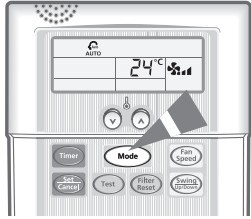
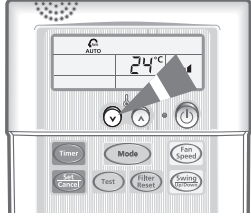
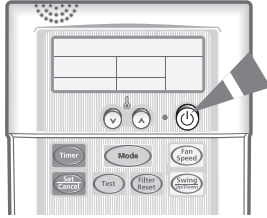
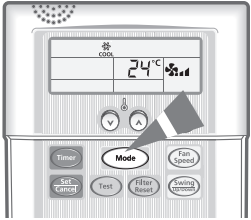
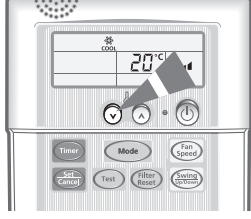
## Basic Function(cont.)

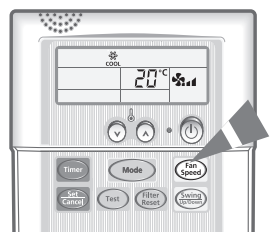
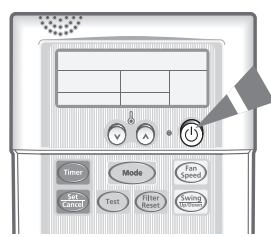
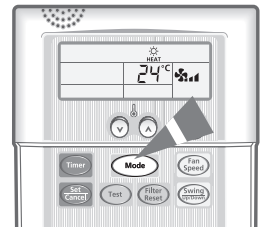
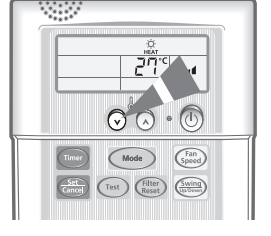
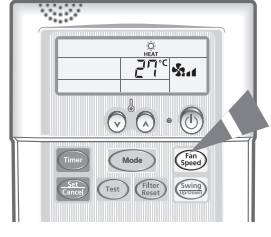
| Mode                                                     | Explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Remark                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                          | <p>4. Select the fan speed by pressing the  button one or more times until the intended value is displayed :</p> <p> Automatic(rotated :  →  → )</p> <p> Low</p> <p> Medium</p> <p> High</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                            |
| <b>Heating Your Room</b><br>(Except cooling only models) | <p>1. If necessary, press  (On/Off) button.</p> <p>2. To select the HEAT mode, press the  button until  is displayed at the top of the wireless remote controller.</p> <p>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.</p> <p>4. Select the fan speed by pressing the  button one or more times until the intended value is displayed :</p> <p> Automatic(rotated :  →  → )</p> <p> Low</p> <p> Medium</p> <p> High</p> | <br><br><br> |

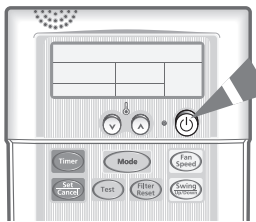
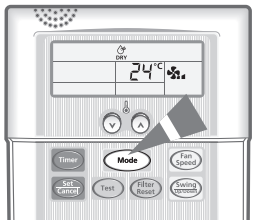
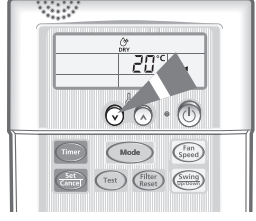
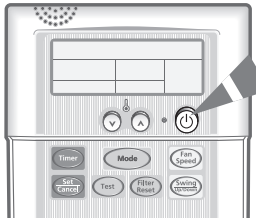
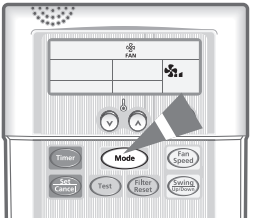
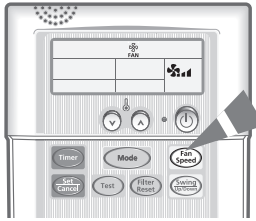
**Basic Function(cont.)**

| Mode                            | Explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Remark                                                                                                                                                                                                                                                                  |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Removing Excess Humidity</b> | <p>1. If necessary, press  (On/Off) button.</p> <p>2. To select the DRY mode, press the  button until  is displayed at the top of the wireless remote controller.</p> <p>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.</p>                                                                                                                                                                                                                                        | <br><br>      |
| <b>Airing Room</b>              | <p>1. If necessary, press  (On/Off) button.</p> <p>2. To select the FAN mode, press the  button until  is displayed at the top of the wireless remote controller.</p> <p>3. Select the fan speed by pressing the  button one or more times until the intended value is displayed:</p> <p> Low</p> <p> Medium</p> <p> High</p> | <br><br> |

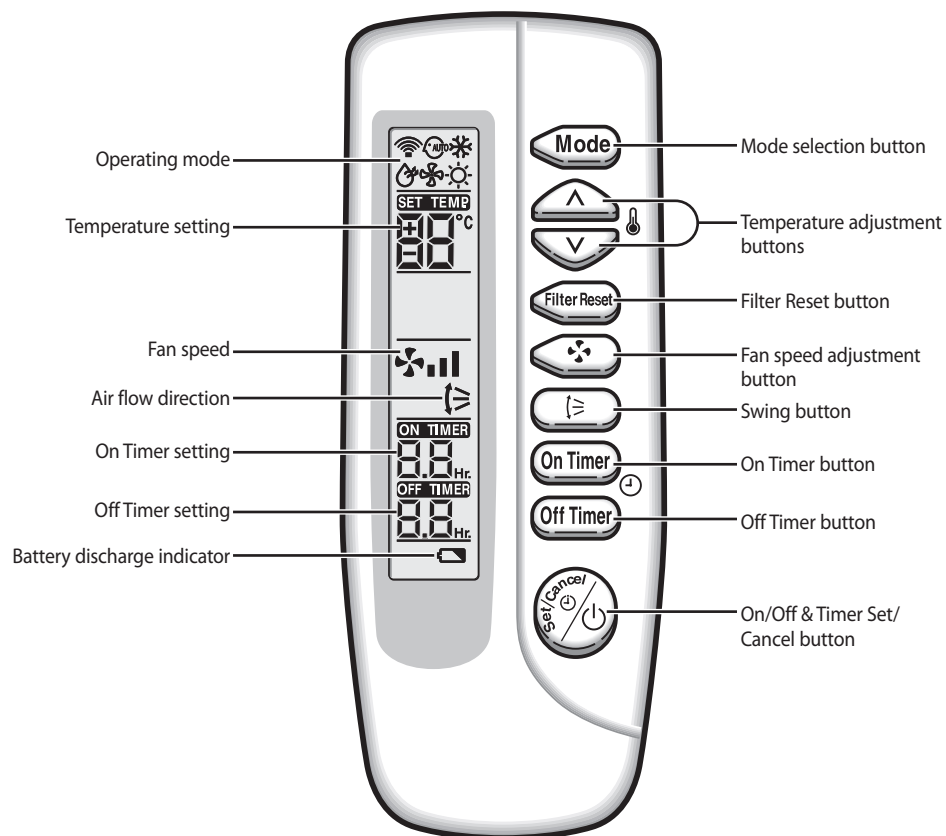
## 11-2-2 Wired Remote Controller

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

| Mode                            | Explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Remark                                                                                                                                                                                                                                                                  |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Removing Excess Humidity</b> | <p>1. If necessary, press  (ON/OFF) button.</p> <p>2. To select the DRY mode, press the  button until  is displayed at the top of the wired remote controller.</p> <p>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.</p>                                                                                                                                                    | <br><br>      |
| <b>Airing Your Room</b>         | <p>1. If necessary, press  (ON/OFF) button.</p> <p>2. To select the FAN mode, press the  button until  is displayed at the top of the wired remote controller.</p> <p>3. Select the fan speed by pressing the  button one or more times until the intended value is displayed:</p> <p>  Low<br/>  Medium<br/>  High </p> | <br><br> |

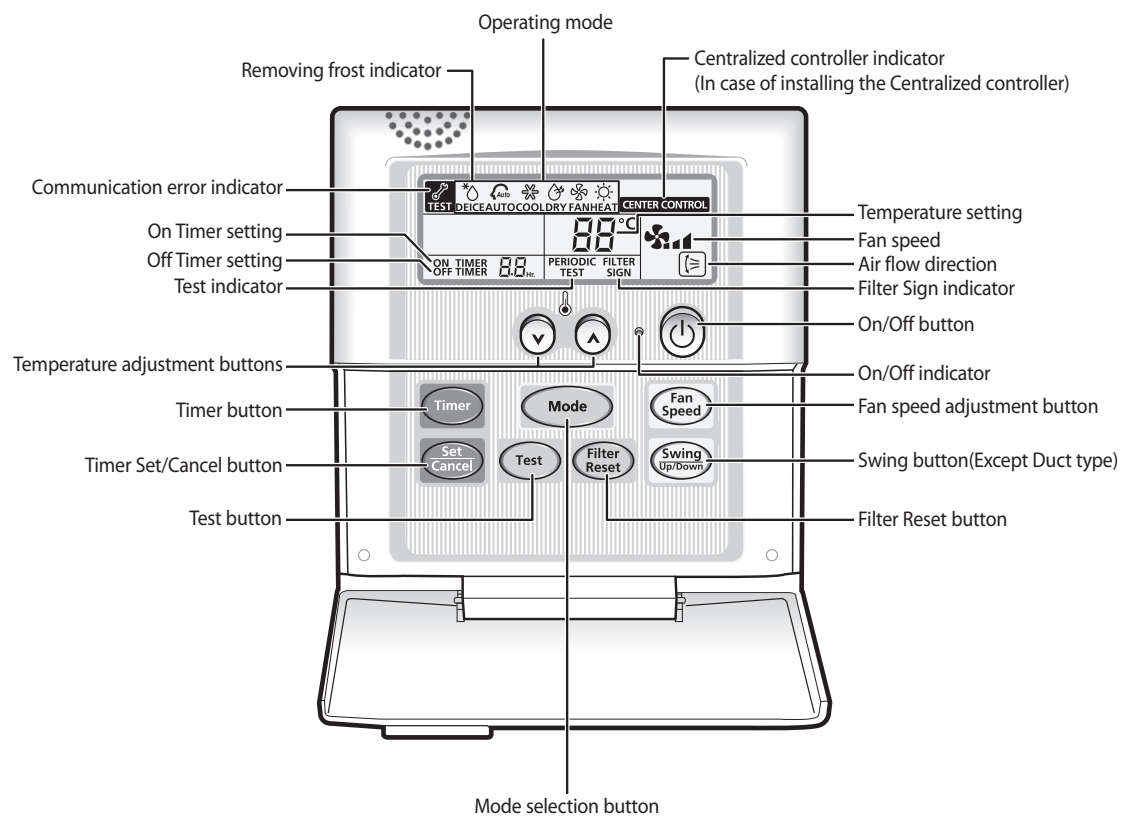
## 11-3 Wireless Remote Control-Buttons and Display



**Note :** • After cleaning the air filter, press the  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  $\pm 10\%$  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.<br><b>[In case of heat pump model]</b><br>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  | <b>[In case of heat pump model]</b><br>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  | <b>[In case of heat pump model]</b><br>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  | <b>[In case of heat pump model]</b><br>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                                                                                                     |

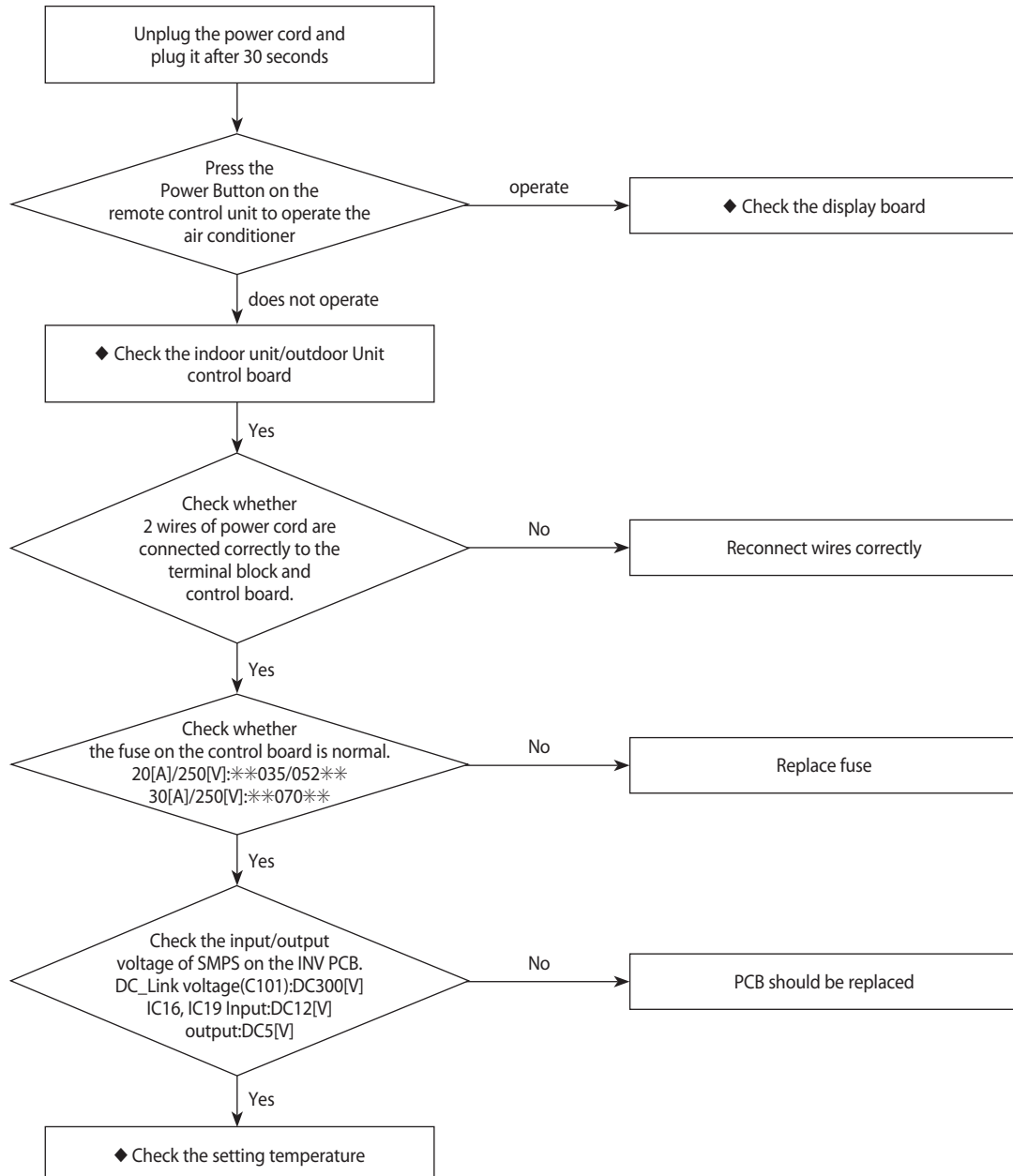
## 12-2 Fault Diagnosis by Symptom

### 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

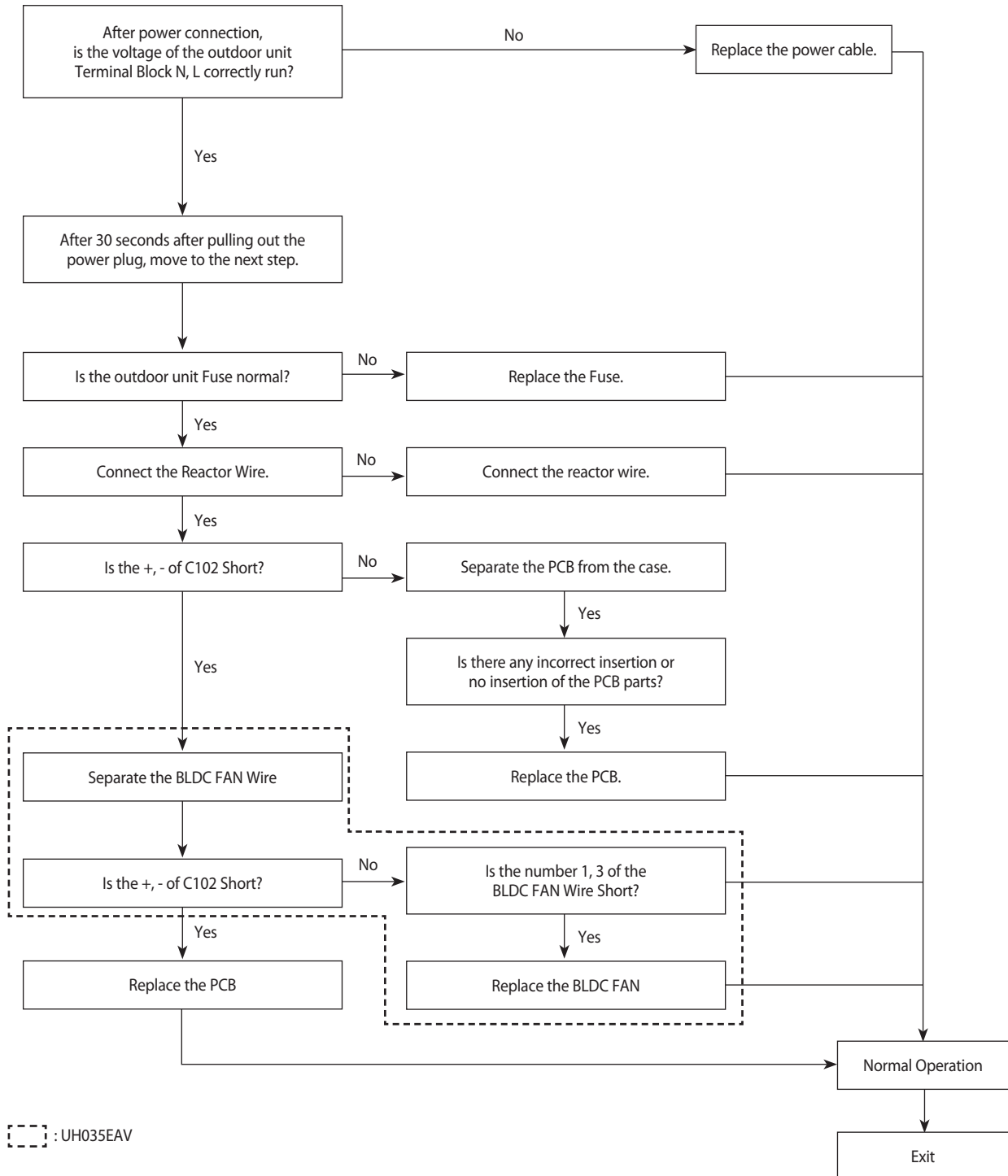


## 12-2-2 The Outdoor unit power supply error

### 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



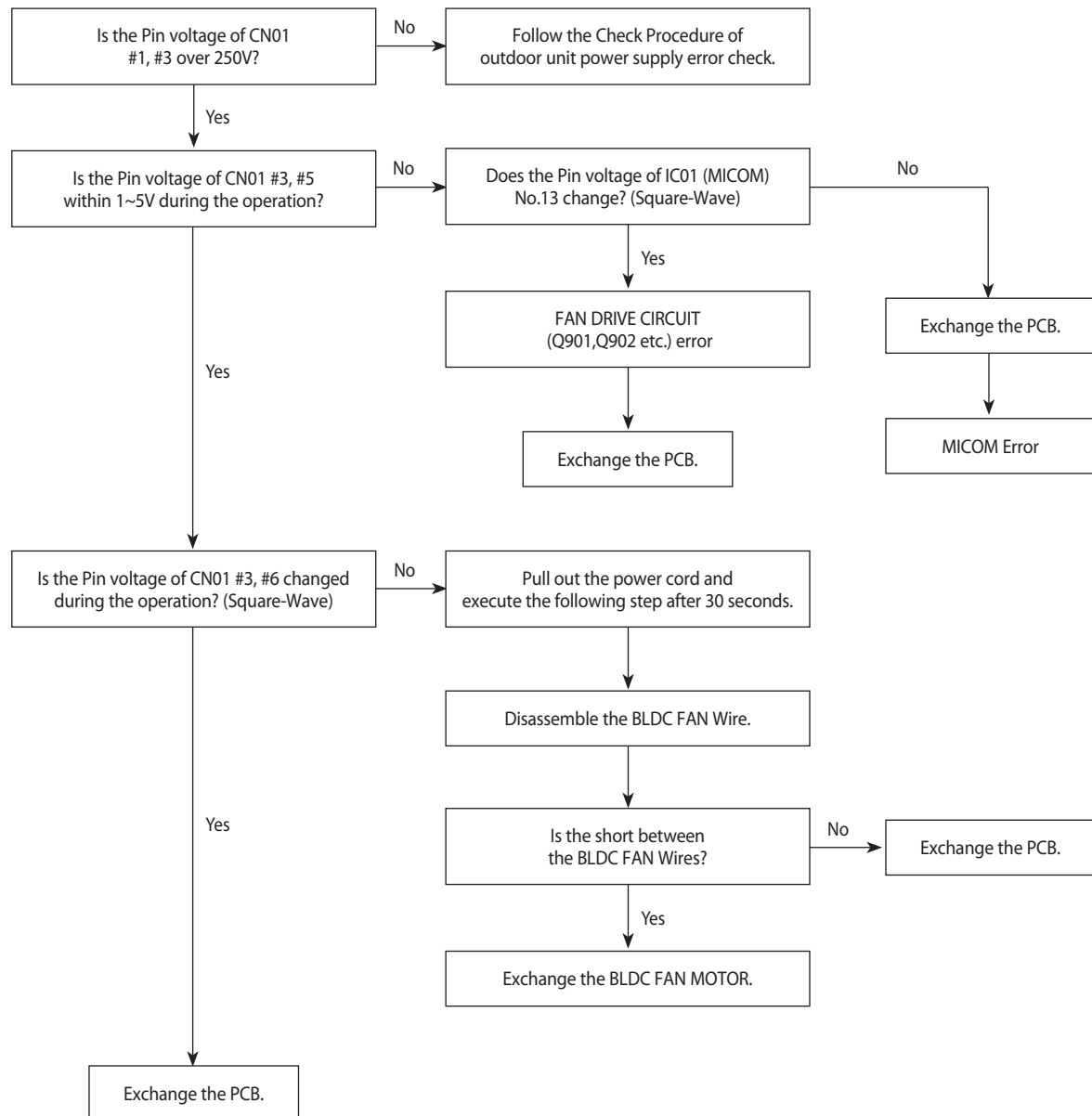
[ ] : UH035EAV

### 12-2-3 The Outdoor unit Fan error (only UH035EAV)

#### 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

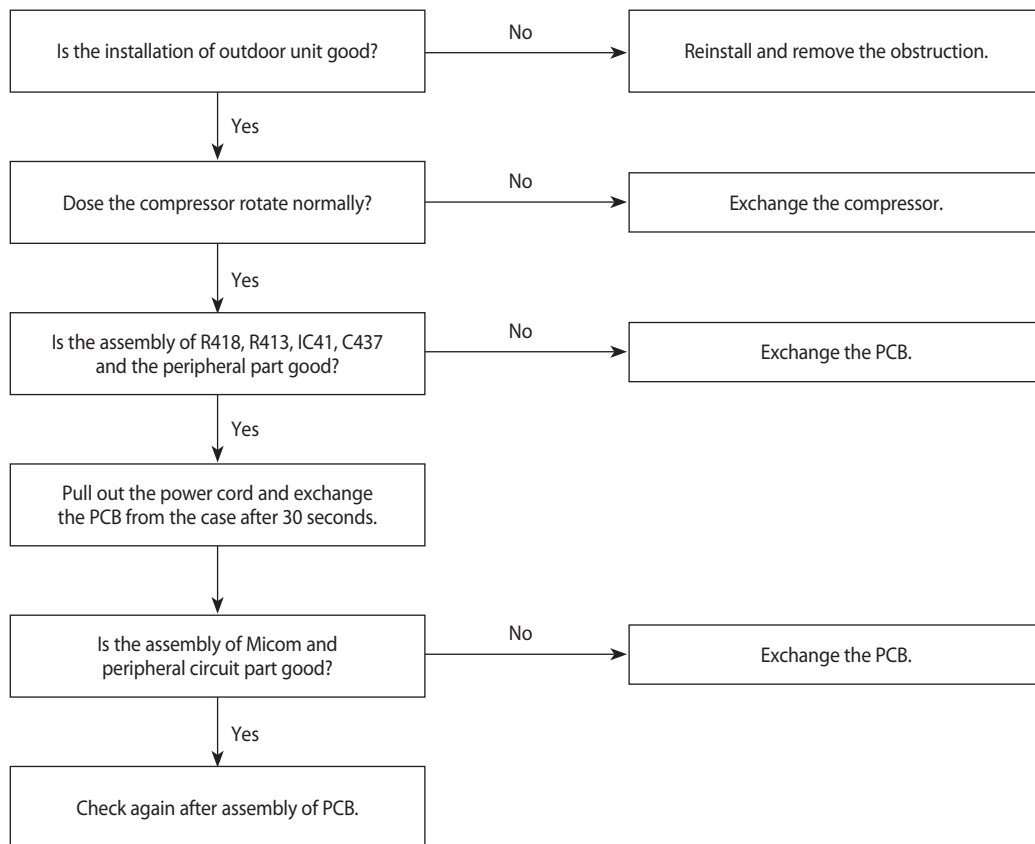


## 12-2-4 Total current Trip error

### 1. Checklist :

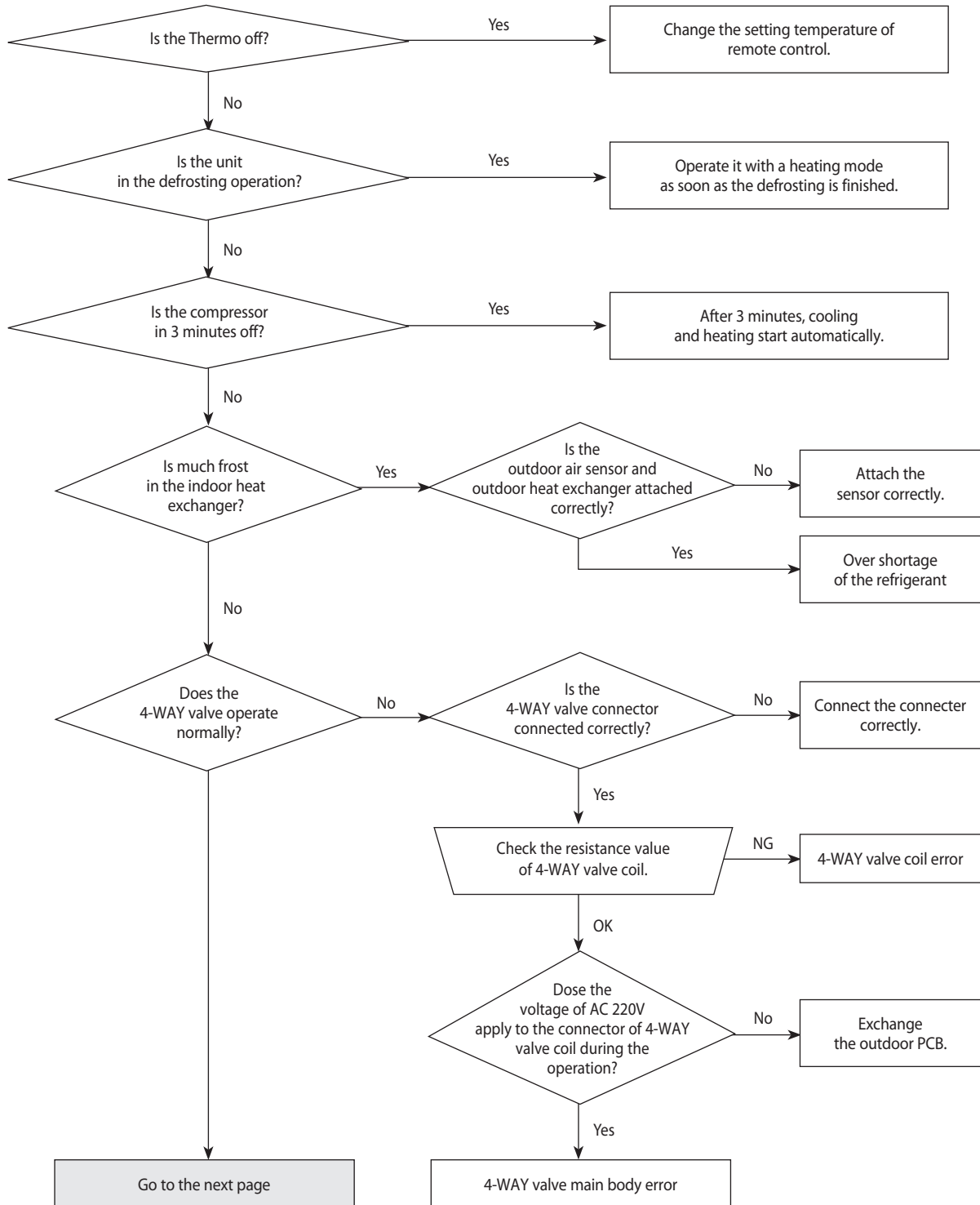
- 1) Is the input power voltage proper?
- 2) Is the refrigerant charged properly?
- 3) Does the compressor rotate normally? (Reverse rotation, Locking etc.)
- 4) Does the outdoor fan operate normally? (Fan propeller loss, Motor error etc.)
- 5) Is the installation condition of outdoor unit good? (Piping,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

### 2. Troubleshooting procedure

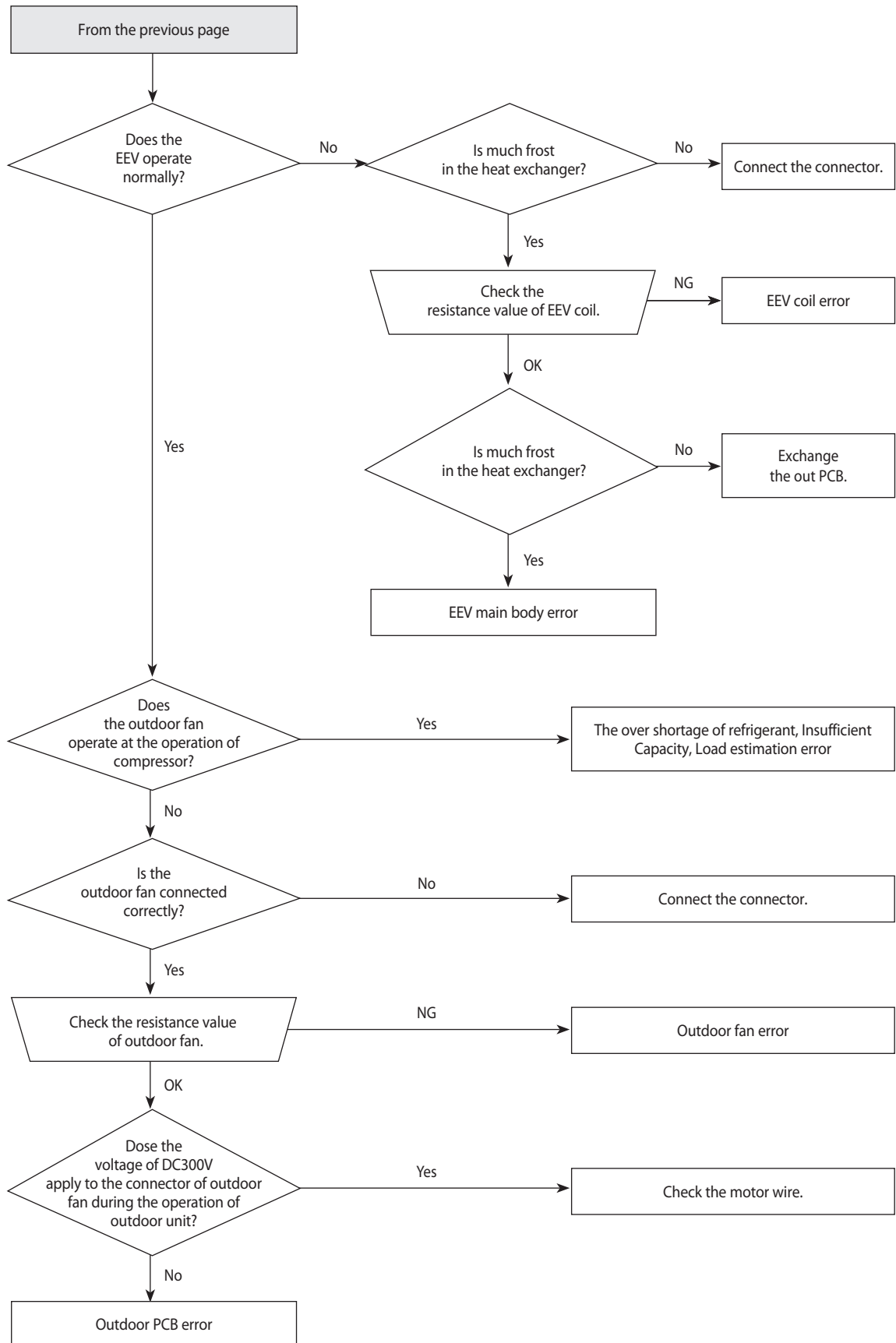


## 12-2-5 In case of heating at the cooling mode or cooling at the heating mode

### 1. Troubleshooting procedure



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



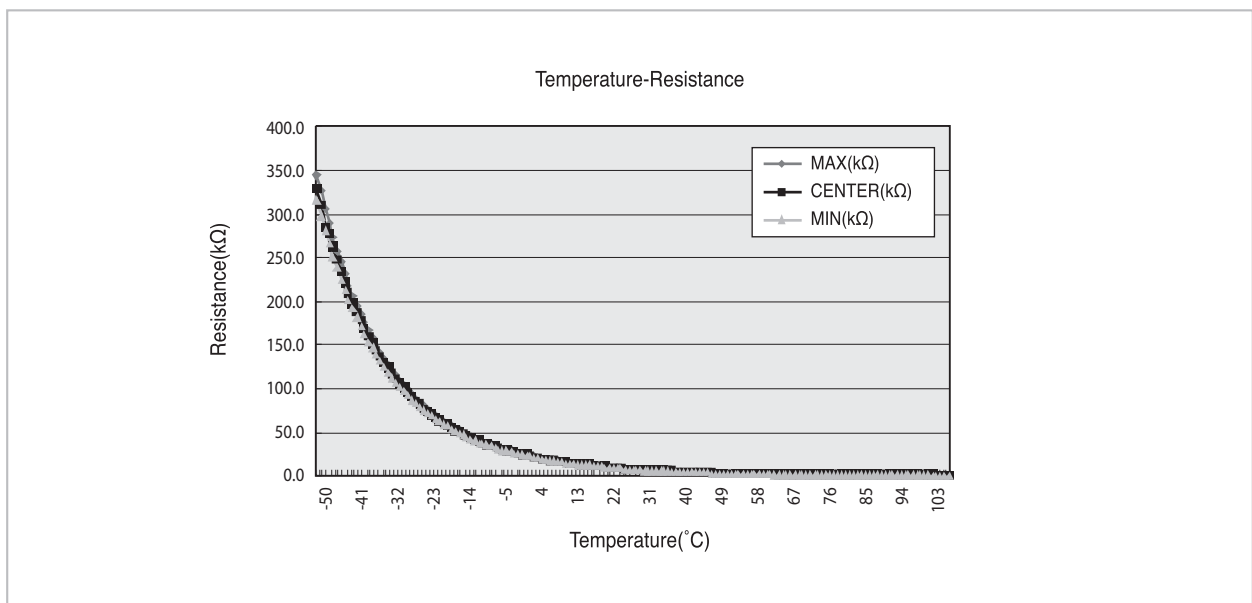
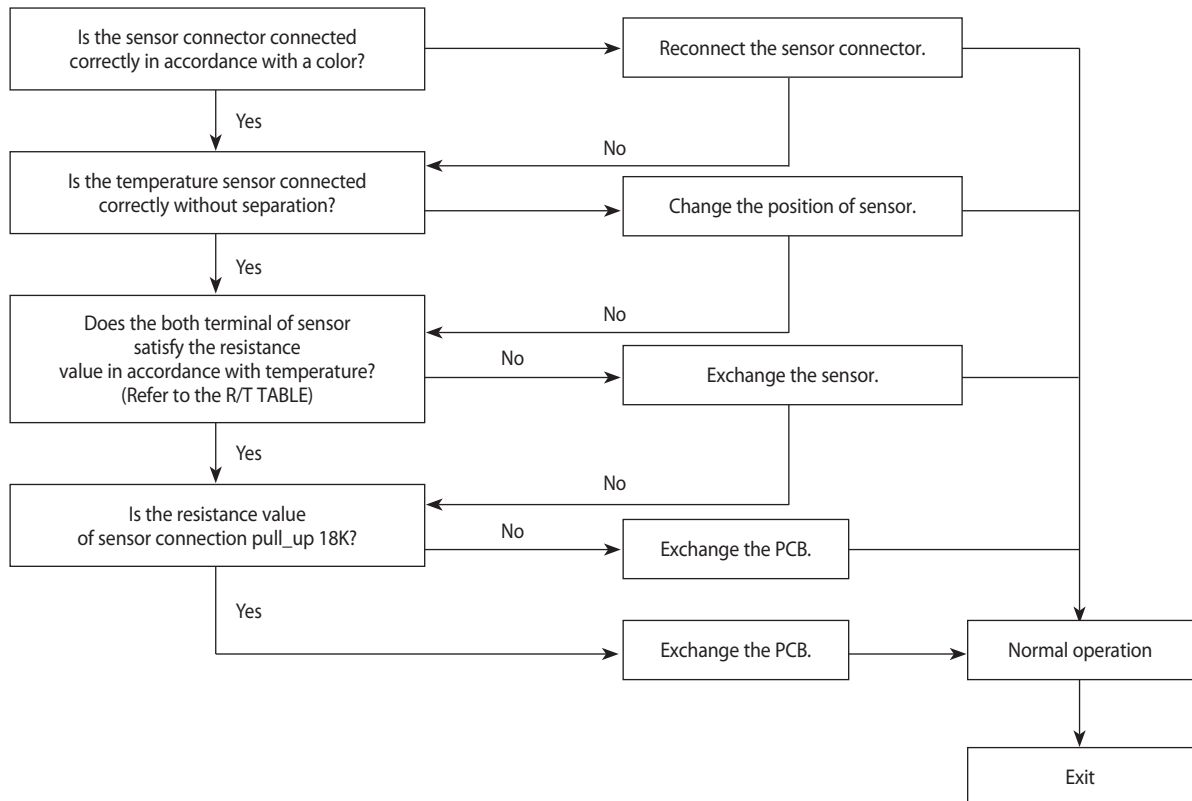


## 12-2-6 Outdoor temperature sensor error

### 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

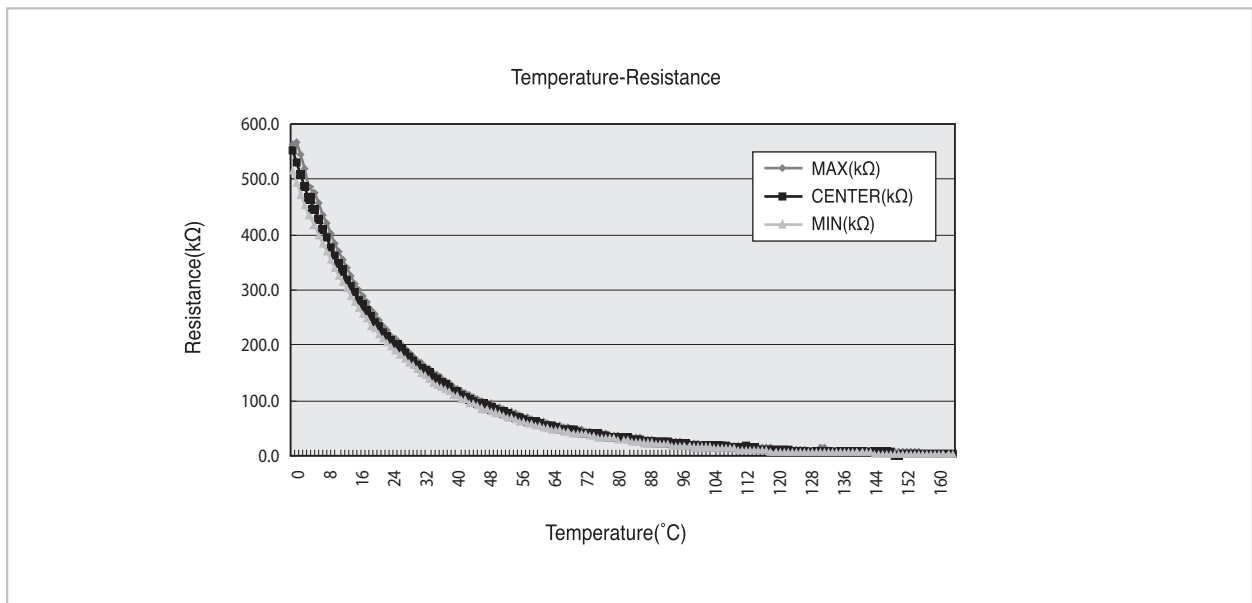
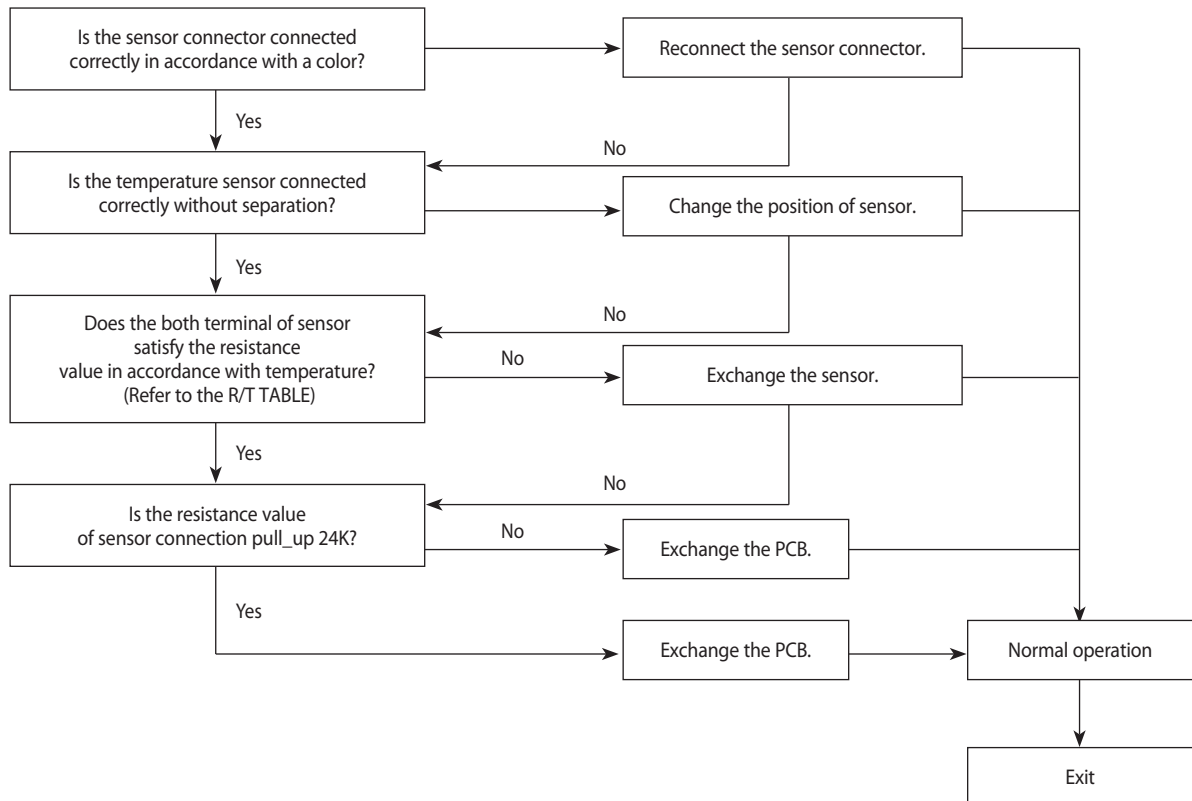


## 12-2-7 Discharge temperature sensor error

### 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

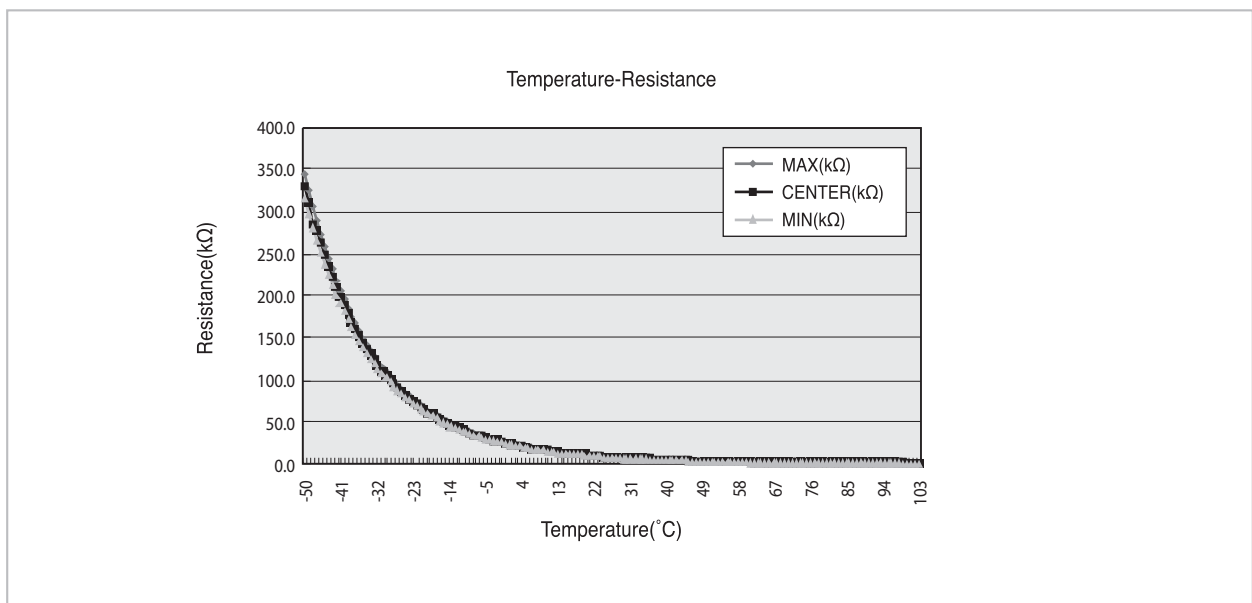
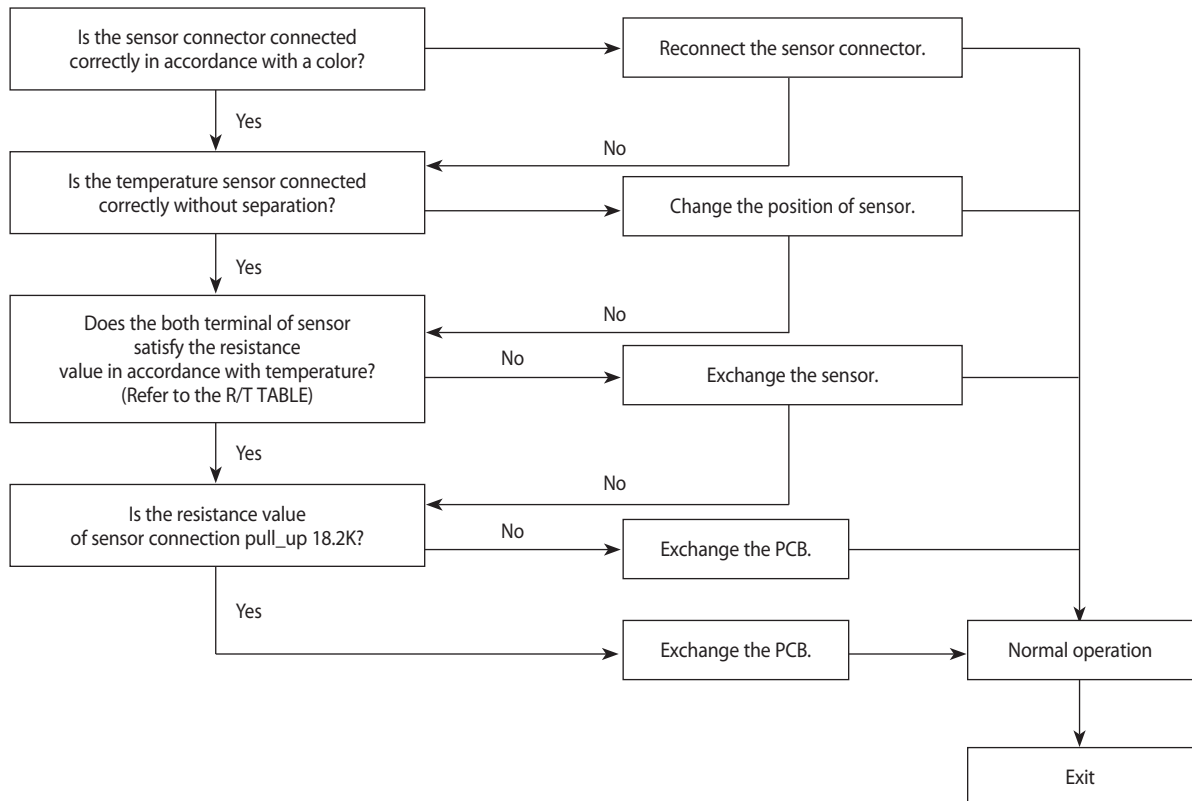


## 12-2-8 Coil temperature sensor error

### 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 18.2K?

### 2. Troubleshooting procedure

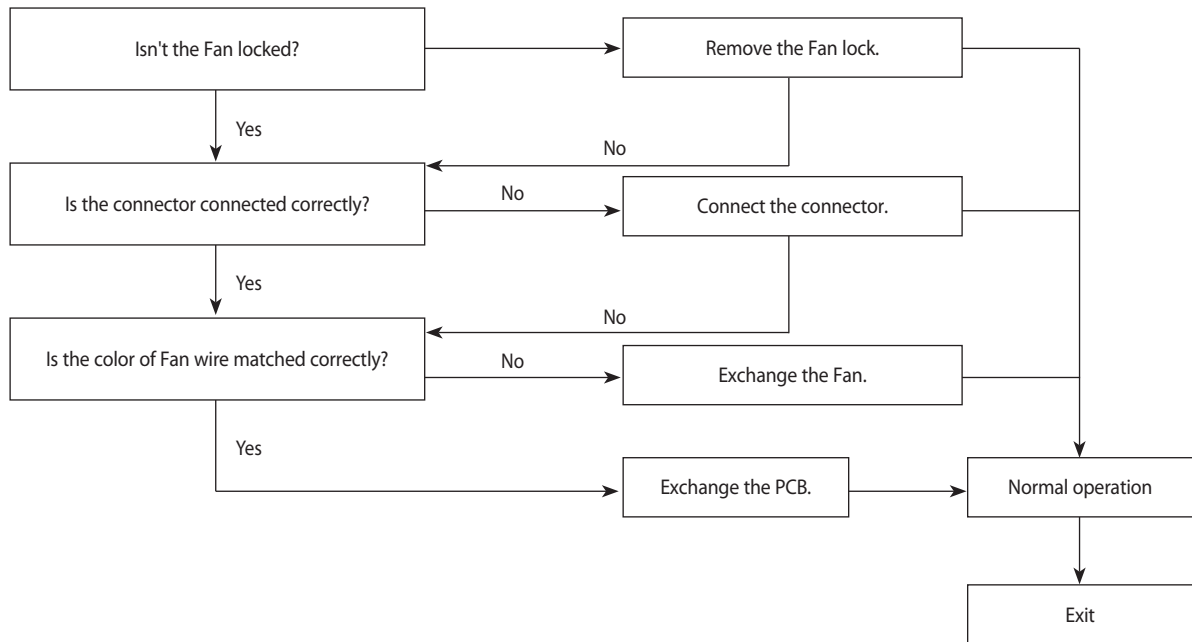


## 12-2-9 Fan error

### 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



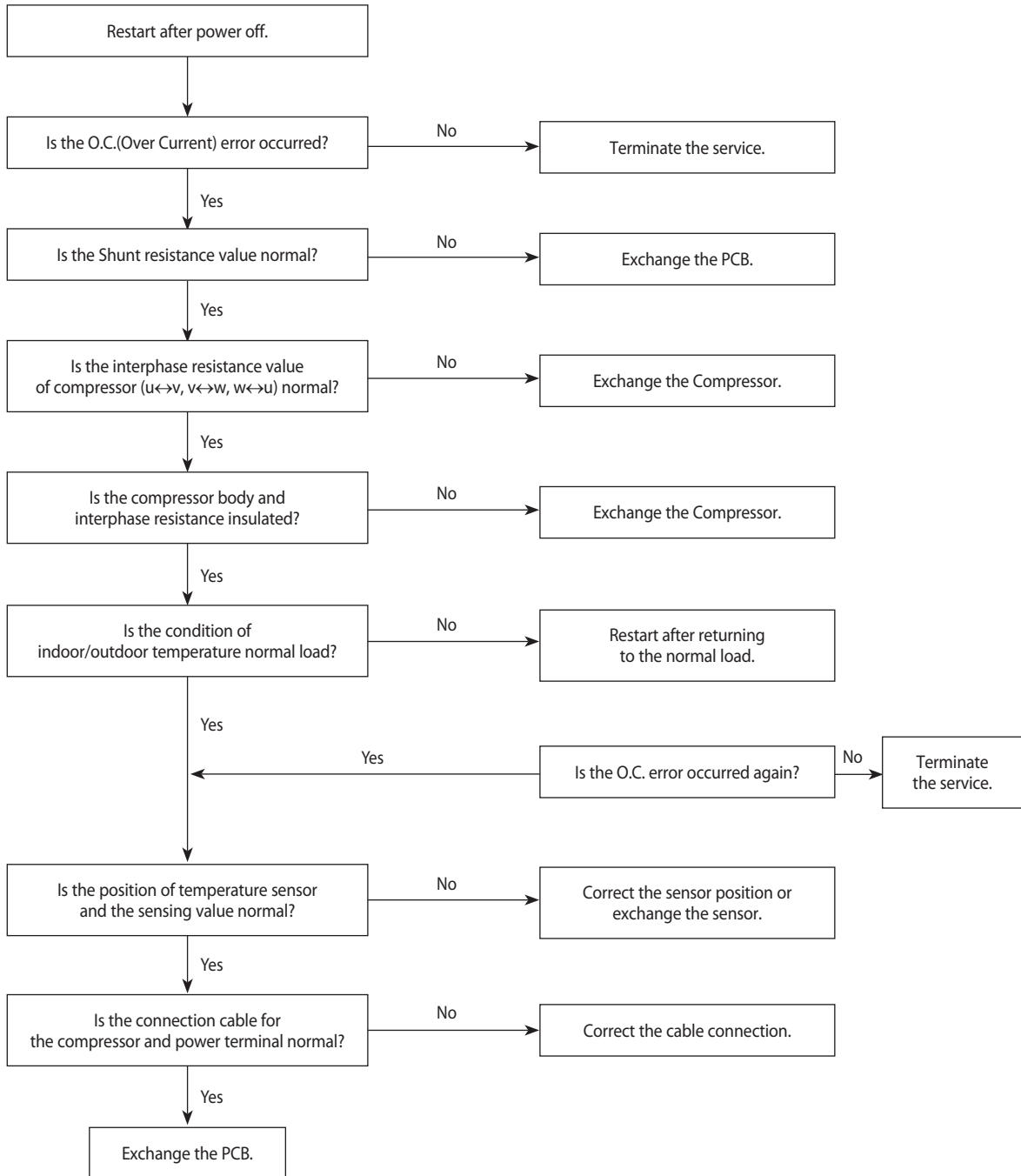


## 12-2-11 O.C.(Over Current) error

### 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

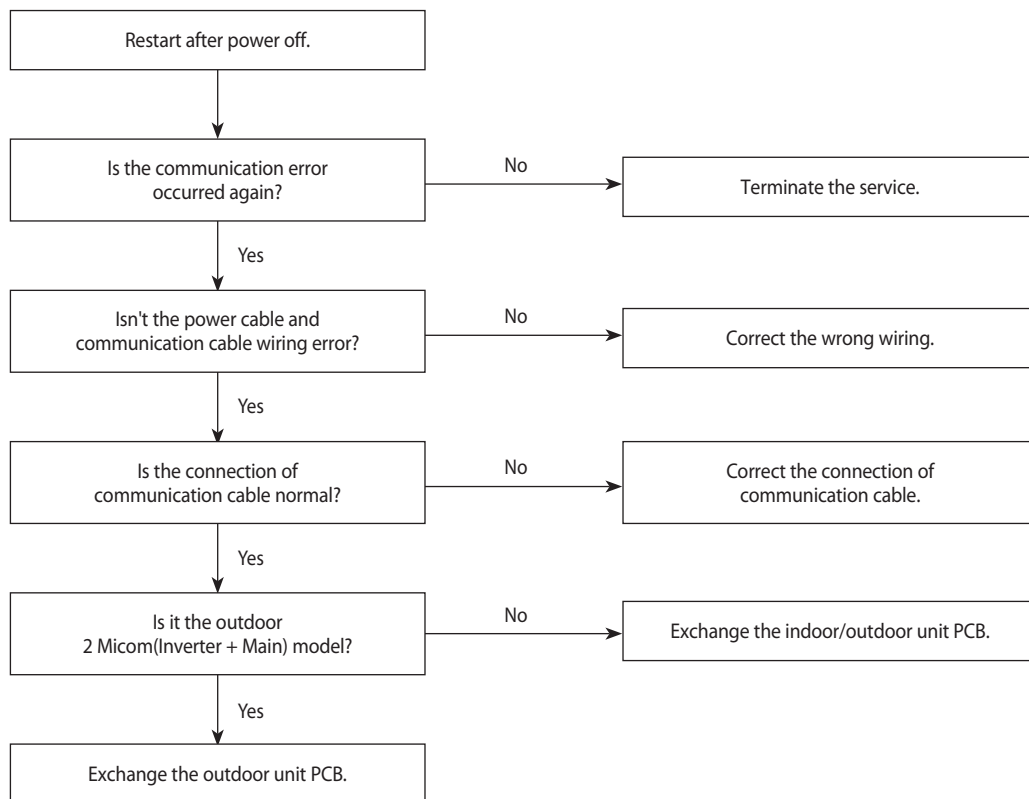


## 12-2-12 Communication error

### 1. Checklist :

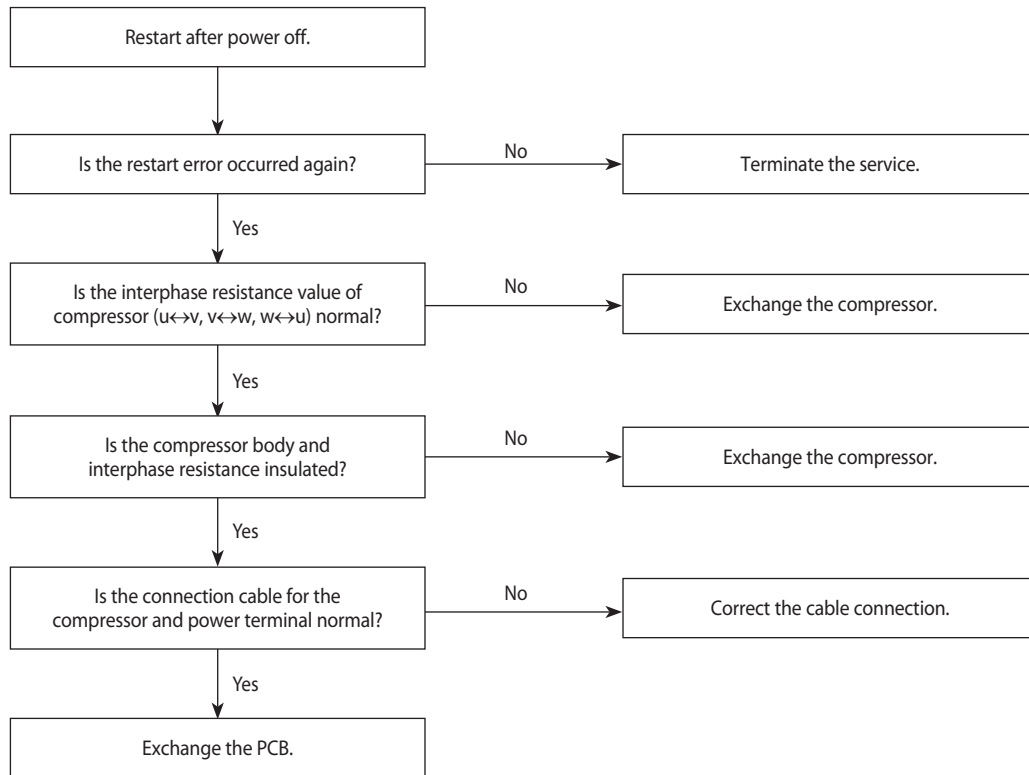
- 1) Is the communication cable between the indoor unit and outdoor unit connected correctly?
- 2) Isn't the power cable and communication cable wiring error?

### 2. Troubleshooting procedure



## 12-2-13 Compressor start error

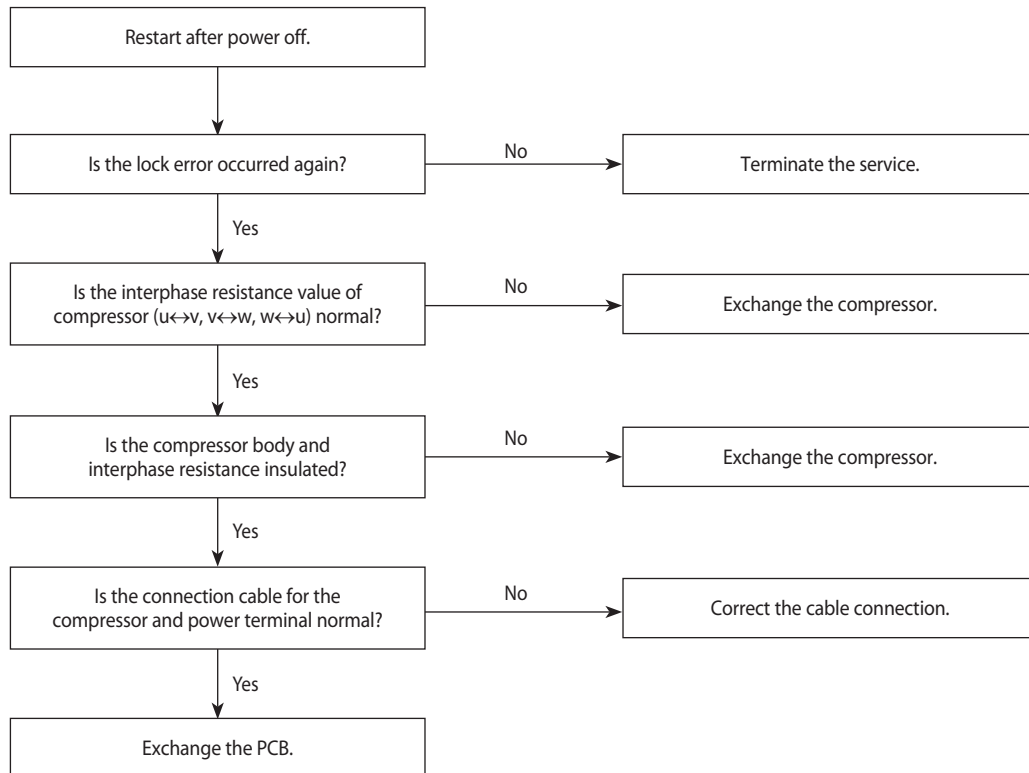
1. Checklist :
  - 1) Is the connection of cable for the compressor and power?
  - 2) Is the interphase resistance of compressor normal?
2. Troubleshooting procedure





## 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

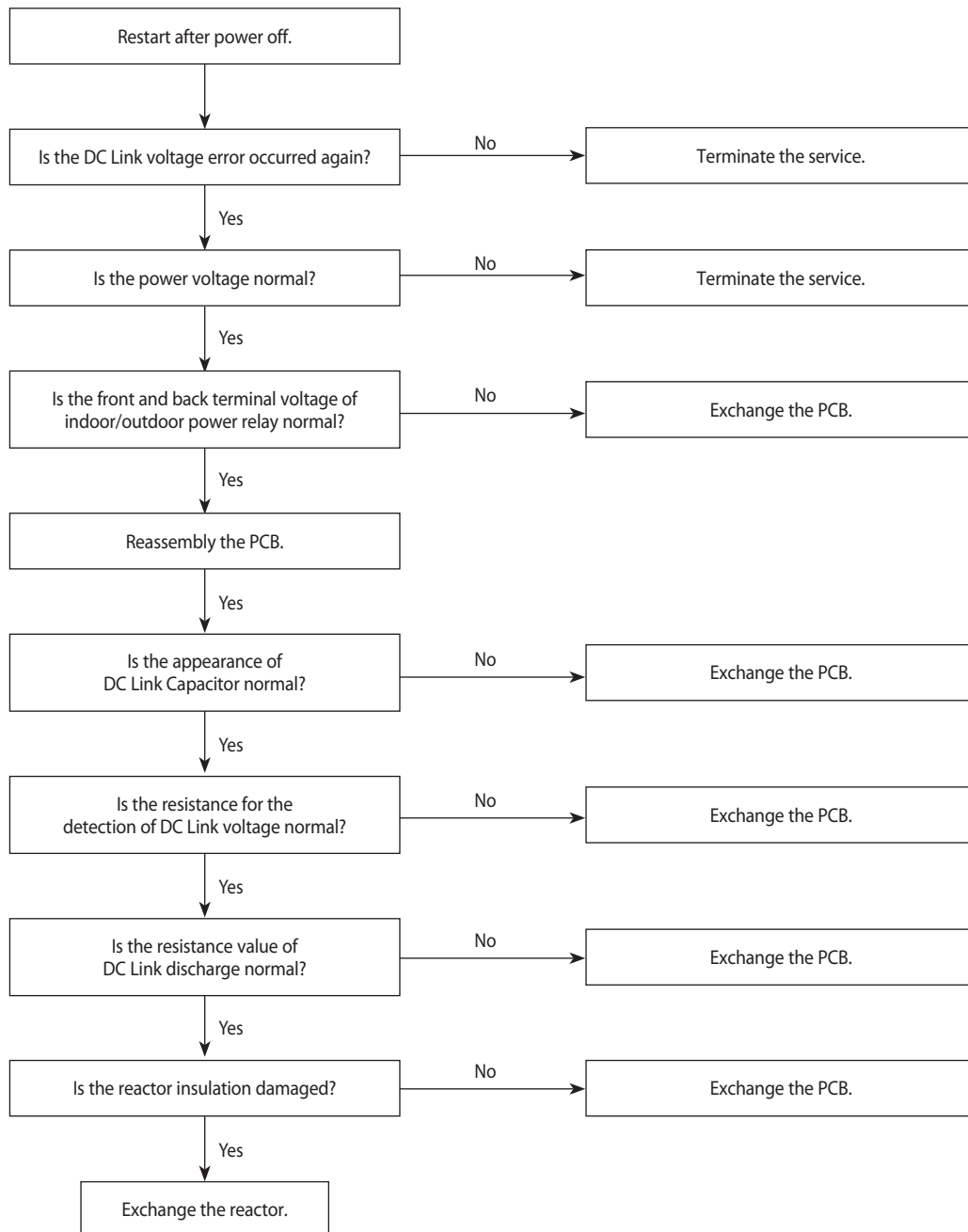


## 12-2-15 DC Link Over voltage/ Low voltage error

### 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?                                                                                           | <ul style="list-style-type: none"><li>• Over current</li><li>• Indoor Fan Motor Short</li><li>• AC Part Pattern Short of the MAIN PCB</li></ul> |
| 2  | Supply power.<br>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?                                                                            | <ul style="list-style-type: none"><li>• Power Cord is fault, Fuse open. Wrong Power Cable Wiring, AC Part is faulty.</li></ul>                  |
|    |                                                                                                 | 2) Is the voltage between both terminals of the C104 on the 2 <sup>nd</sup> side of the transformer DC12V $\pm 0.5V$ ? | <ul style="list-style-type: none"><li>• Switching Trans or Power Circuit is faulty</li></ul>                                                    |
|    |                                                                                                 | 3) Is the voltage between both terminals of OUT and GND of IC19(KA7805) DC5V $\pm 0.5V$ ?                              | <ul style="list-style-type: none"><li>• Power Circuit is faulty, Load Short</li></ul>                                                           |
| 3  | Press the ON/OFF button.<br>(Only **035**)<br>1. FAN Speed [High]<br>2. Continuous Operation    | 1) Is the voltage over AC180V being imposed on terminal #3 and #5 of the fan motor connector(CN72)?                    | <ul style="list-style-type: none"><li>• Fan Motor of the indoor is faulty</li></ul>                                                             |
|    |                                                                                                 | 2) The fan motor of the indoor unit doesn't run.                                                                       | <ul style="list-style-type: none"><li>• Fan Motor Connector(CN72) is faulty</li></ul>                                                           |
|    |                                                                                                 | 3) The power voltage between terminal #3 and #5 of the connector(CN72) is 0V.                                          | <ul style="list-style-type: none"><li>• ASS'Y Main PCB is faulty</li><li>• Connection is faulty</li></ul>                                       |

## 12-3-4 Outdoor Detailed Inspection Procedure

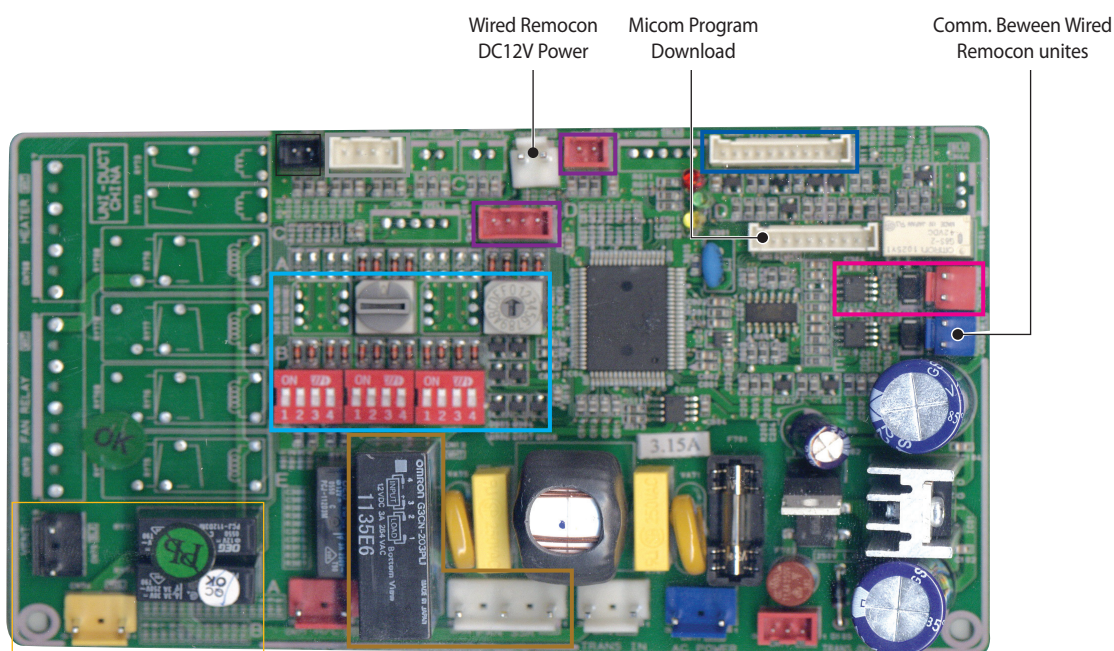
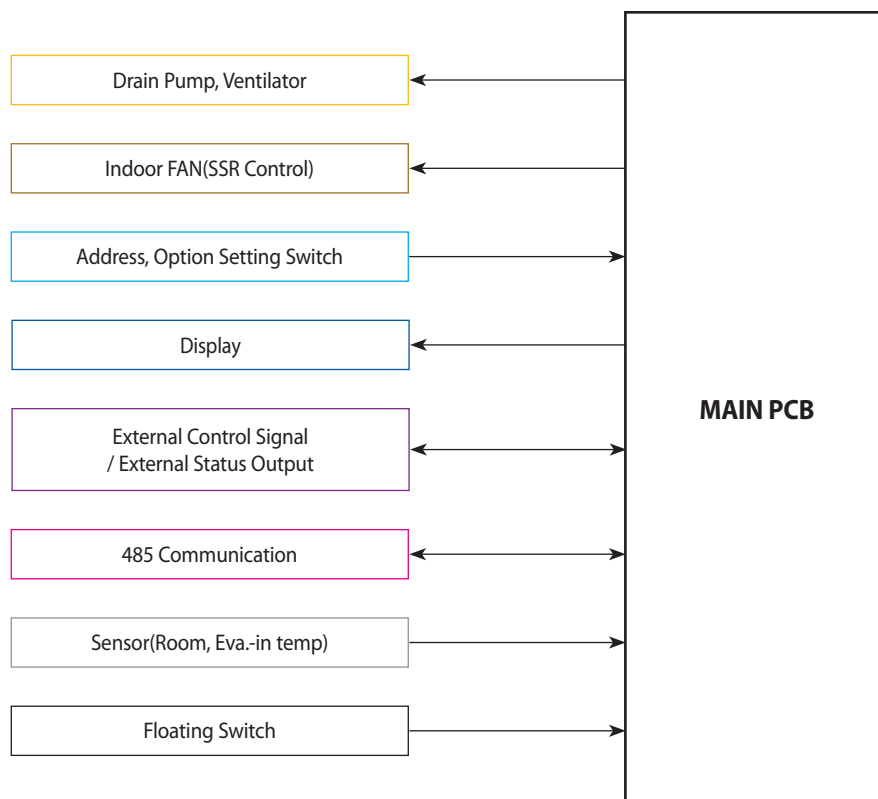
| No | Procedure                                                                        | Inspection Method                                                                                                                                                                                                                               | Cause                                                                                                                                                                                             |
|----|----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | Wait 30 seconds over after disconnecting the power cable. Check the outdoor PCB. | 1) Is C101(**035**), C103(**052/070**) discharged?<br>2) Is the resistance of both terminals of C101(**035**), C103(**052/070**) opened?<br>3) Is the fuse of EMI PCB normal?<br>4) Is the reactor wire connected?                              | <ul style="list-style-type: none"> <li>• Over Current</li> <li>• Inner short of PCB</li> <li>• BLDC FAN Motor Error(**035**)</li> </ul>                                                           |
| 2  | Check the outdoor unit PCB.                                                      | 1) Is R001 200ohm?<br>2) Does RY503(**035**), RY01(**052/070**) operate normally?<br>**035**-(IC55 & 8: 0V, 4: 5V)<br>**052/070**-(IC72 & 8: 0V, 4: 5V)<br>3) Is the fuse normal?                                                               | <ul style="list-style-type: none"> <li>• Outdoor PCB Error</li> <li>• Relay(RY503- **035**, RY01- **052/070**) Error</li> <li>• IC55 Error(**035**)</li> <li>• IC72 Error(**052/070**)</li> </ul> |
| 3  | Check the LED lighting after power supply.                                       | 1) Normal: Red: Light On, Green: Flickering, Yellow: Light Off?<br>2) Is the voltage of C101(**035**), C103(**052/070**) 250V over?<br>3) Is the input of IC19 8V, and the output 5V?<br>4) Recheck after disassembling BLDC FAN Wire (**035**) | <ul style="list-style-type: none"> <li>• Inner short of outdoor PCB</li> <li>• Wrong assembly of outdoor PCB</li> <li>• BLDC FAN Error(**035**)</li> </ul>                                        |
| 4  | Check the condition of indoor & outdoor connection cable.                        | 1) Is the green LED light on once per second?<br>2) Is the indoor & outdoor connection cable connected in order?<br>3) Is the grounding wire connected to the both of indoor & outdoor unit?                                                    | <ul style="list-style-type: none"> <li>• Wrong connection of Indoor/Outdoor wiring</li> <li>• Wrong assembly of outdoor communication circuit</li> </ul>                                          |
| 5  | Check the Comp Wire.                                                             | 1) Is it connected red, blue, and yellow in order in counter clockwise.<br>2) Are the valve and its installation condition good?<br>3) Is the installation condition of outdoor unit?                                                           | <ul style="list-style-type: none"> <li>• Wrong assembly</li> <li>• Installation condition is bad.</li> </ul>                                                                                      |
| 6  | Check the BLDC Fan. (**035**)                                                    | 1) Is CN01 1, 3 over 250V?<br>2) Is CN01 3, 5 within 1V~5V?<br>3) Is the voltage of CN01 6 changed?<br>4) Is the resistance of BLDC Motor 1, 3 opened after power off?                                                                          | <ul style="list-style-type: none"> <li>• Outdoor PCB Error</li> <li>• BLDC Motor Error</li> </ul>                                                                                                 |

## 12-4 Main Part Inspection Method

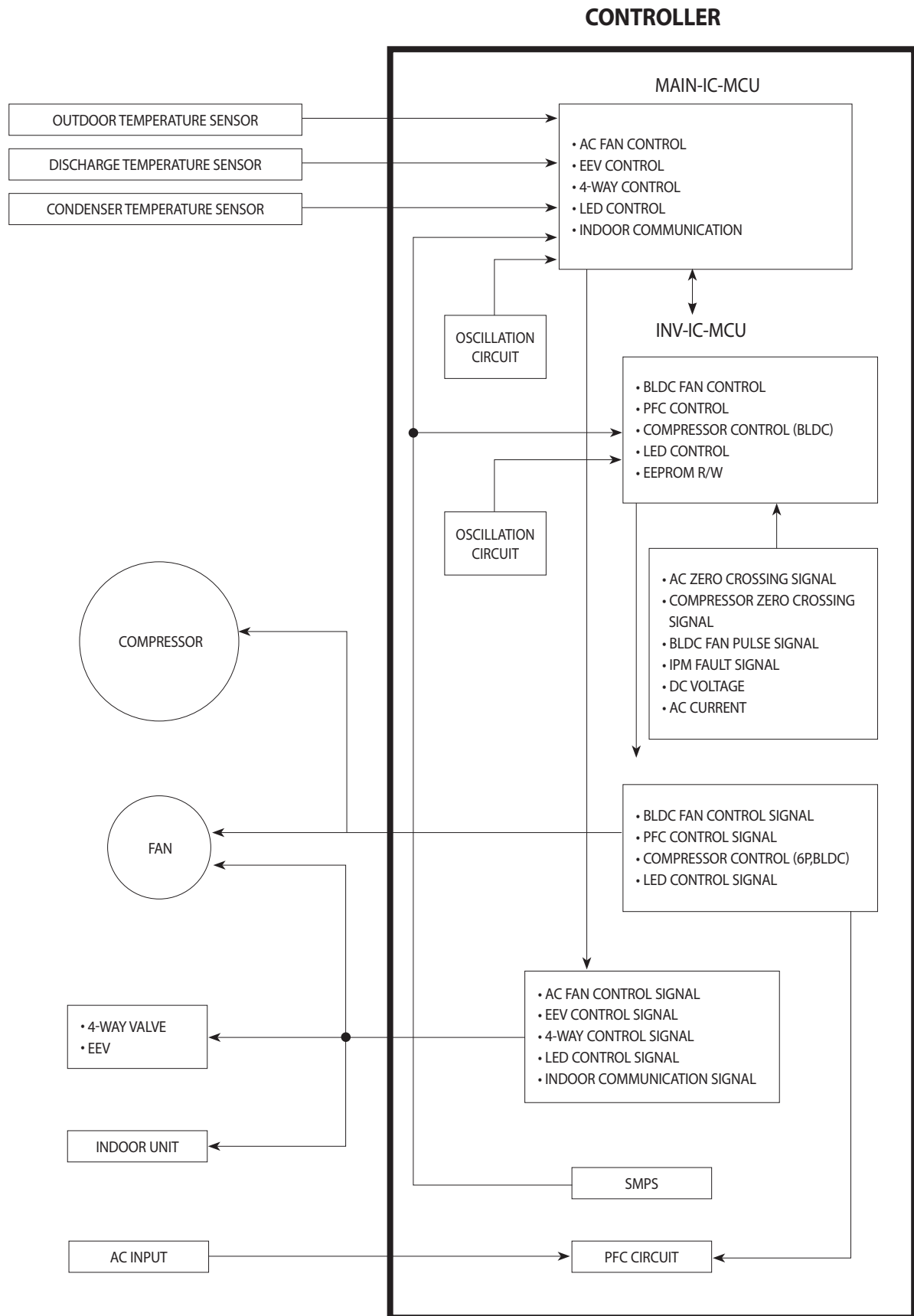
| Part                    | Breakdown Inspection Method                                                       |                                                                           |                                       |        |
|-------------------------|-----------------------------------------------------------------------------------|----------------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

## 13. Block Diagram

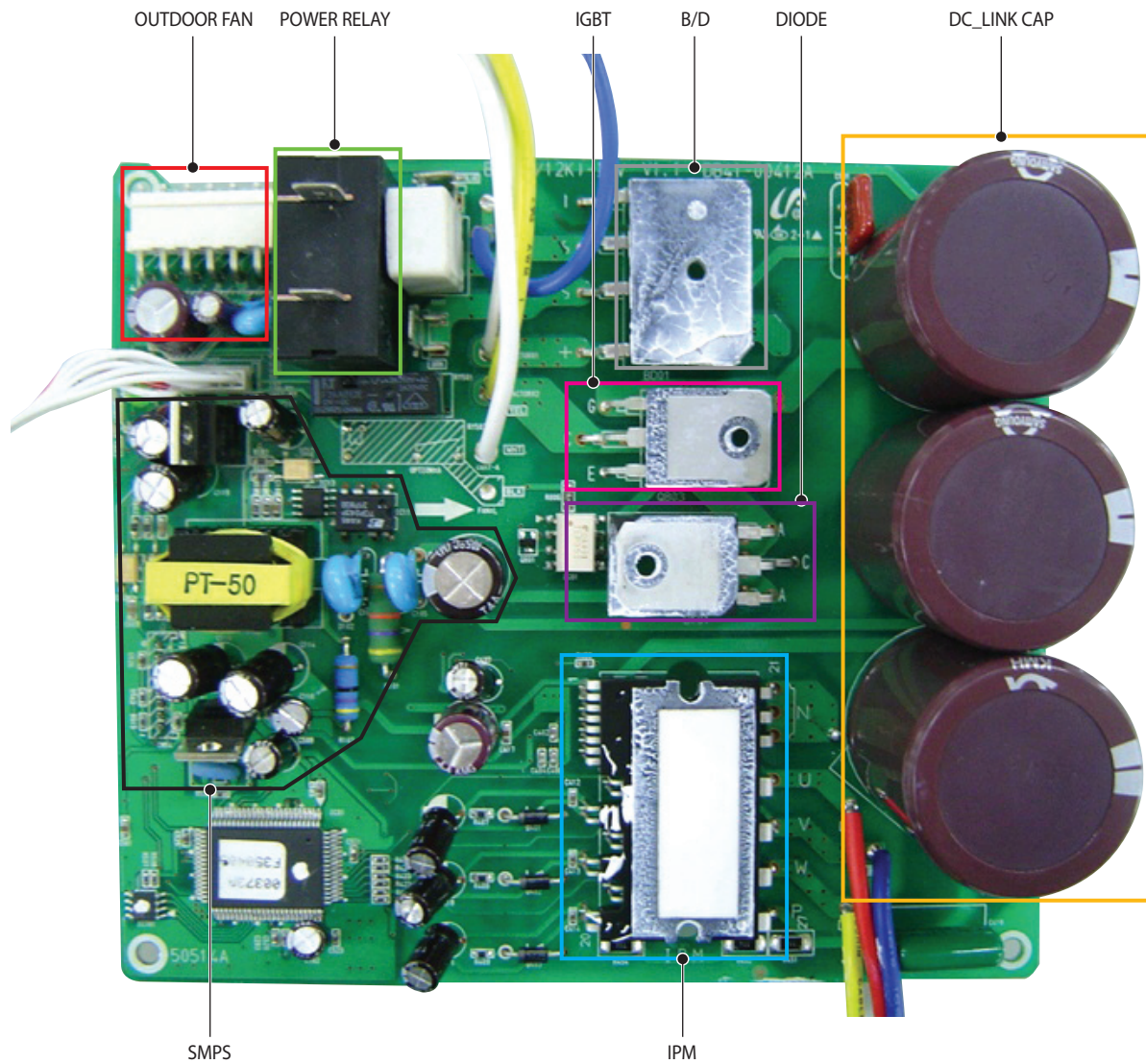
### 13-1 Indoor Unit



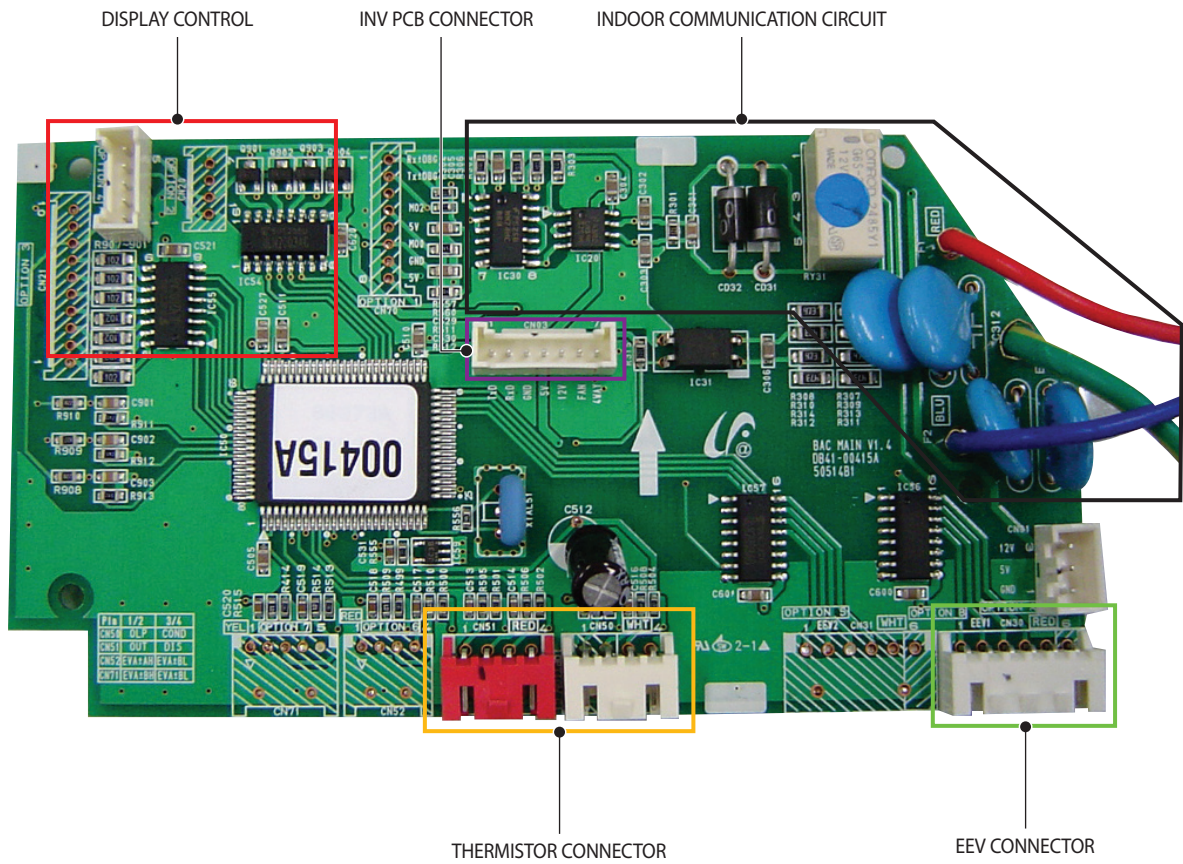
## 13-2 Outdoor Unit



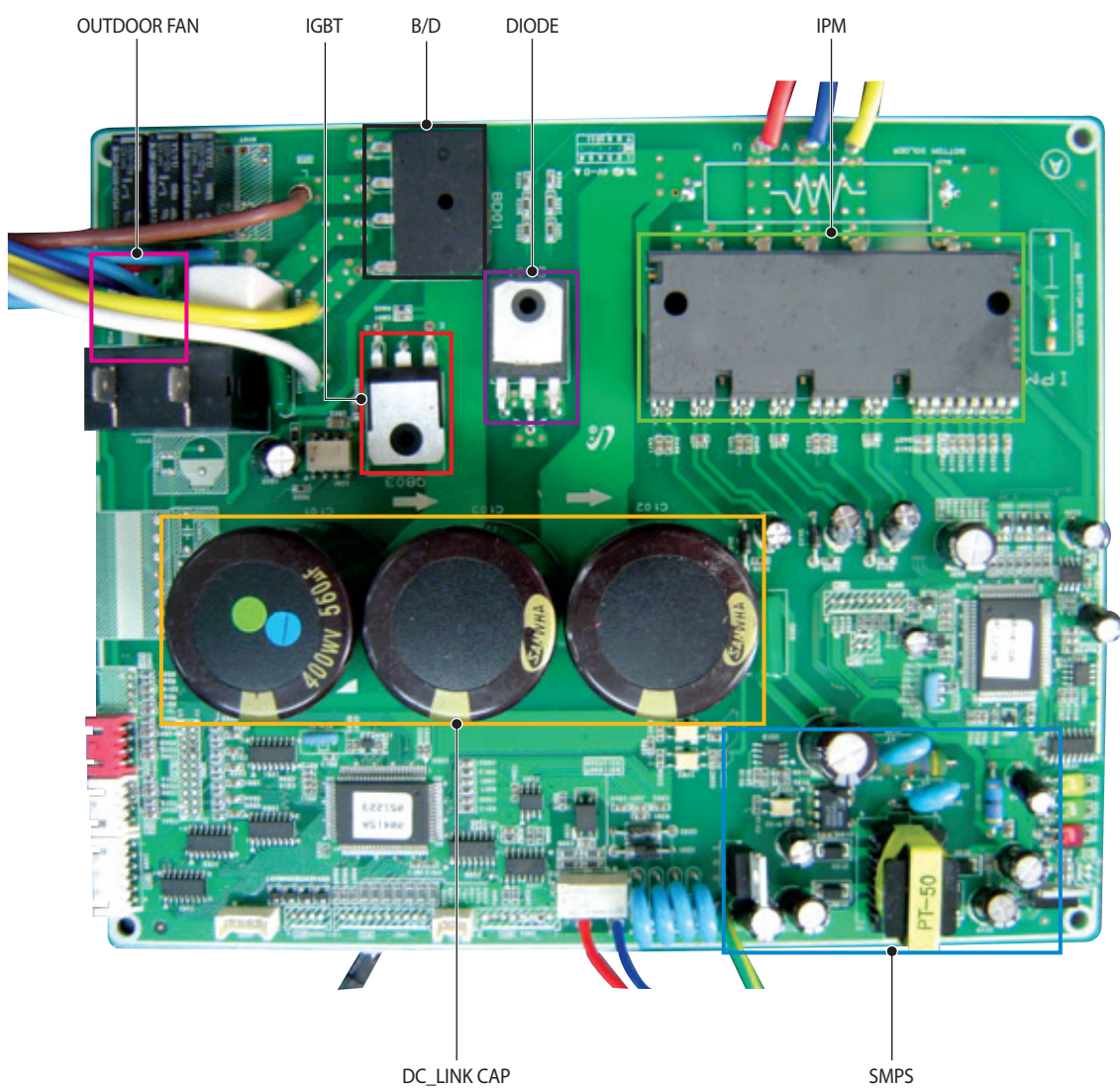


**13-2-1 UH035EAV****■ Inverter PCB**

## ■ Main PCB

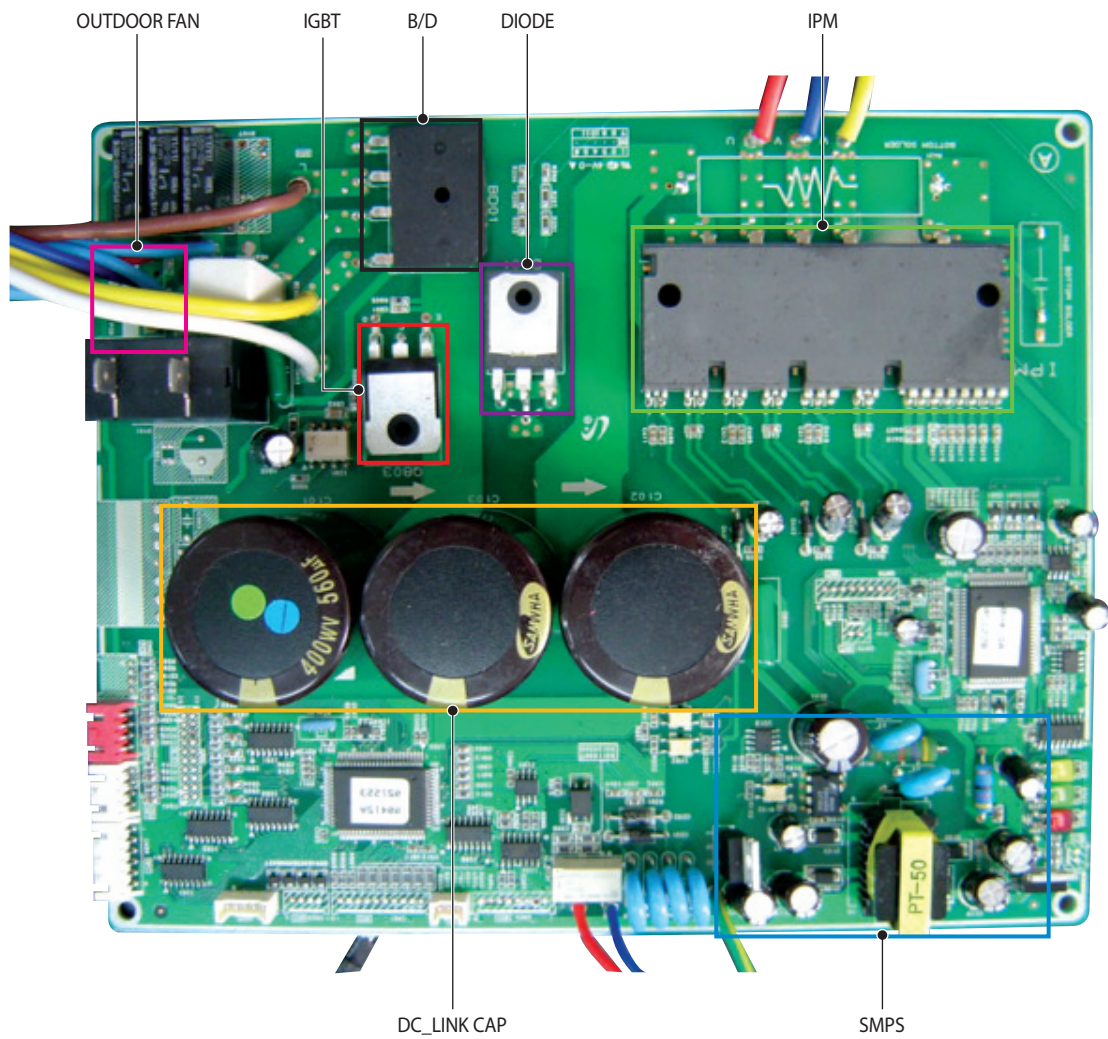


## 13-2-2 UH052EAV





### 13-2-3 UH070EAV

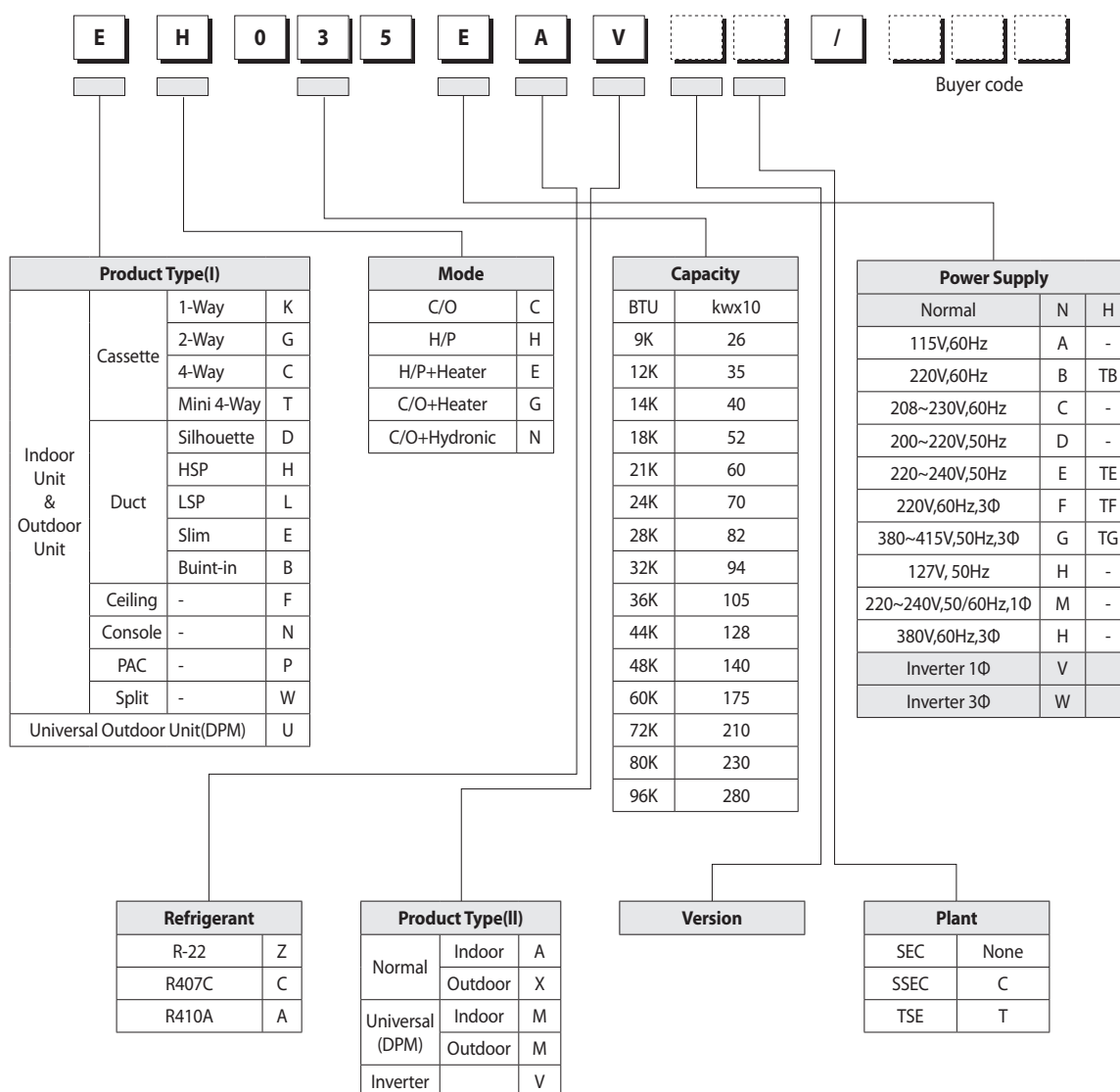


## 14. Reference Sheet

### 14-1 Index for Model Name

\* Project model code for New Built-in Product.

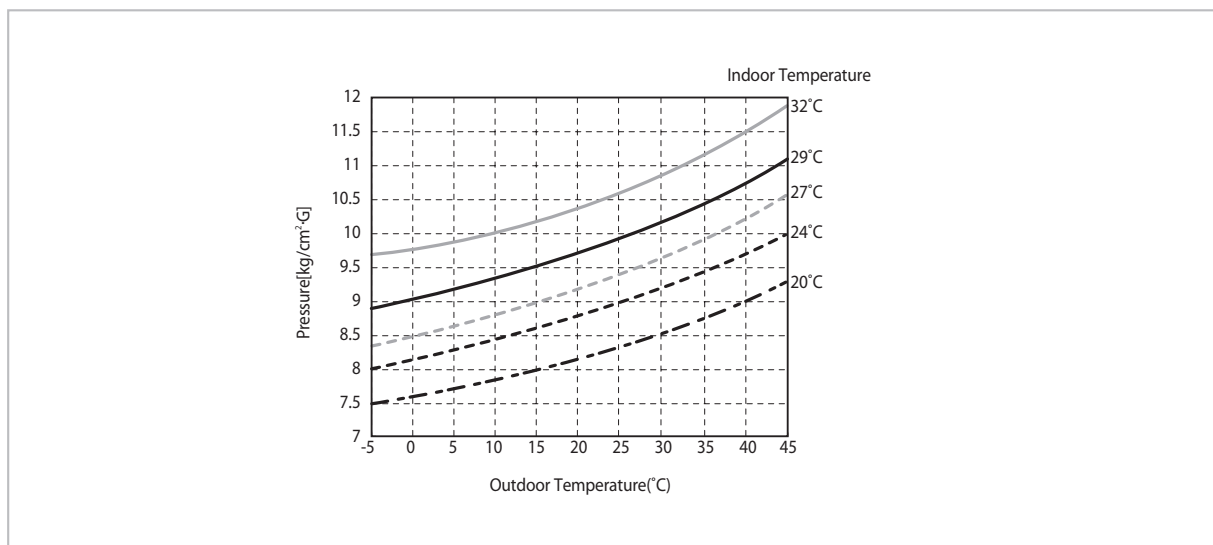
Model Code



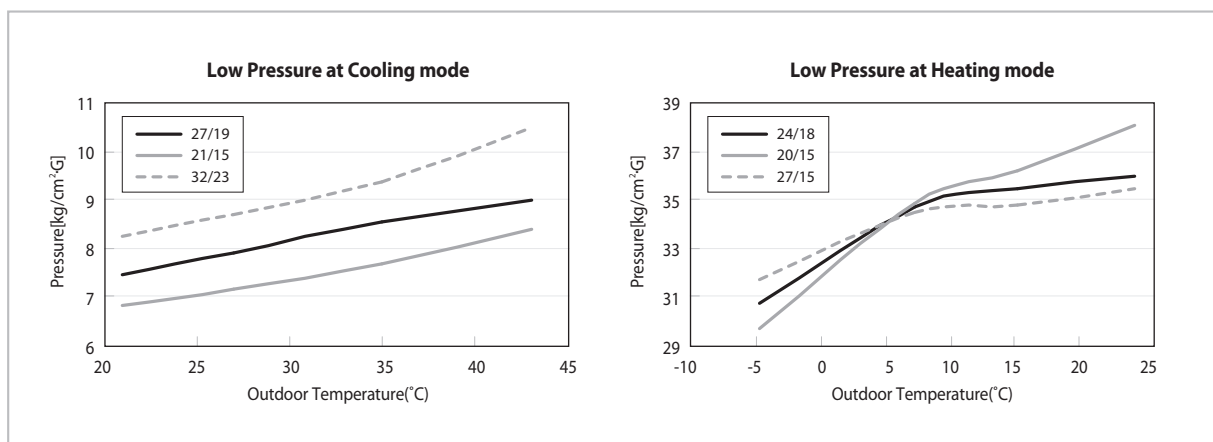
## 14-2 Low Refrigerant Pressure Distribution

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

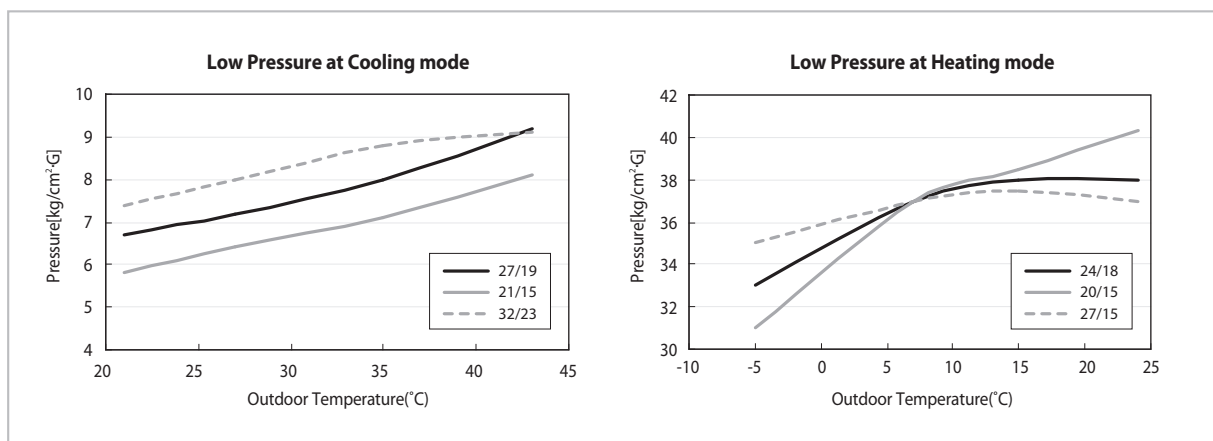
■\*\*035\*\*



■\*\*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       | $3.9302 \times 10^{-4}$ | 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     | <b>The cooling is weak.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                | 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     | <b>The cooling is good generally. But, it gets weak when it is considerably hot.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                | 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     | <b>The cooling is weak. Does it need refrigerant charging?</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                | 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     | <b>It fails to do cooling.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                | 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     | <b>It floods the floor.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                | 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     | <b>Water drips at the drain connection (service valve) of the outdoor unit.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                | 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     | <b>It leaks even though a drain pump is used.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                | 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     | <b>Whenever the air conditioner is turned on, it irritates my eyes and gives me a headache.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                | 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     | <b>Whenever the air conditioner is turned on, it stinks.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                | 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     | <b>Whenever the air conditioner is turned on, it smells sour.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                | 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     | <b>Whenever the air conditioner is turned on, it smells musty.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                | 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     | <b>Whenever the air conditioner is turned on, it sends out bad smells such as stale smells.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                | 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     | <b>It sends out bad smells.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Operation      | 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                | Q     | <b>It won't start.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                | A     | There is a power failure or it is plugged out. Also, check if the power distribution panel is switched off.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                | Q     | <b>It goes off during operation.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                | 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     | <b>It generally works properly. But, when it's considerably hot, it goes off during operation.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                | 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     | <b>The remote controller won't operate.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Operation      | 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     | <b>Who installs the air conditioner? (Relocation/Re-installation)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                | 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.)<br>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.<br>When you move in, make sure to contact Samsung Electronics Service Center or Authorized Service Agent in advance to streamline the process. |
|                | Q     | <b>Is it possible to install the outdoor unit outside?</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                | A     | It is possible to install it at a designated place in the apartment or on the rooftop nearby.<br>But, it's illegal hanging an angle iron case with the outdoor unit in it outside the apartment.<br>Also, it is illegal obstructing passers-by with the outdoor unit installed outside.                                                                                                                                                                                                                                                                                                       |
|                | Q     | <b>What can be done to install the outdoor unit facing the road because it is a commercial building?</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                | 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     | <b>What about installing a windscreen during installation not to blow hot air directly to passers-by?</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                | 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.                                                                                                                                                                                                                                                                                                                                                     |

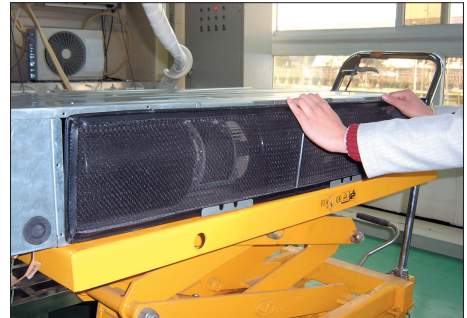
## 14-5 Cleaning/Filter Change

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

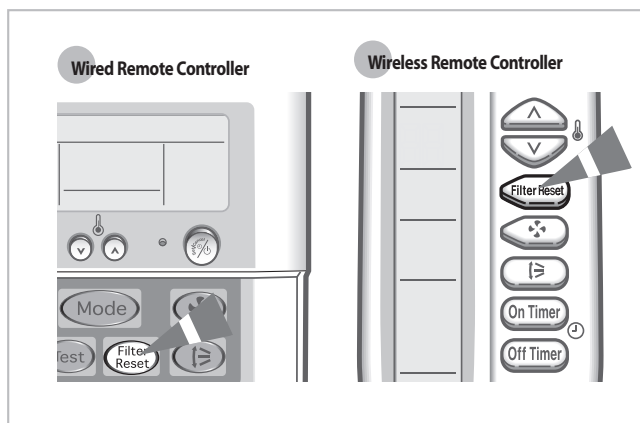


• Before cleaning your air conditioner, check if you have turned off the circuit breaker.

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

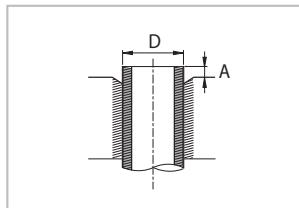
You shall cut the pipe with a pipe cutter and grind all the burrs of the cut surface.

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  $-0.1\text{MPa}(-76\text{cmHg})$  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.



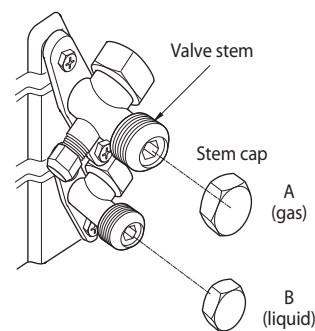
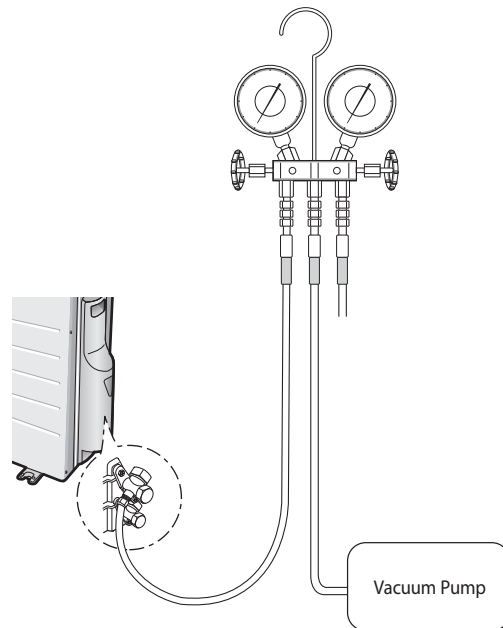
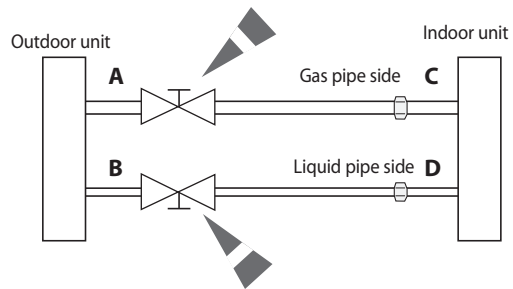
- 5) Set valve cork of both liquid side and gas side of packed valve to the open position.



- 6) Mount the valve stem nuts and the service port cap to the valve, and tighten them at the torque of  $183\text{kgf}\cdot\text{cm}$  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.



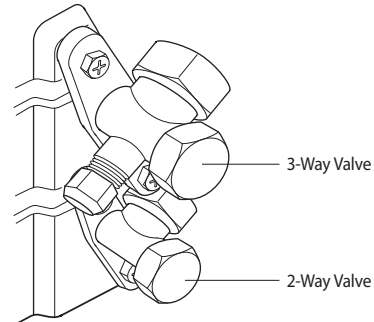
- 5) When the pressure gauge indicates "0" turn the 3-Way valve clockwise to close.



- 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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