



Service Manual

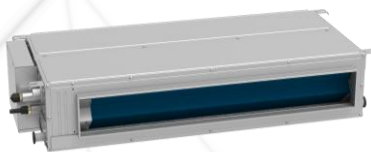
U-Match 5 SERIES UNIT SERVICE MANUAL

(GC201811-III)

Capacity: 3.5kW~16.0kW

Rate Frequency: 50/60Hz

Operation Range: -20°C~48°C







Foreword

Thank you for choosing Gree U-Match air conditioners. In order to correctly install and use our units, and for the satisfactory operation effect, please read this manual carefully.

This manual specifies safe operation requirements from perspectives of product introduction, control, troubleshooting and maintenance, as well as basic principles and implementation methods. Professional operators must abide by relevant national (local) safety requirements and technical specifications set forth in this manual during operations; otherwise, the air conditioning system may fail or be damaged, and personnel safety accident may also occur.

Safety Notice

| | |
|---|---|
|  | The air conditioner is charged with inflammable refrigerant R32. |
|  | Before using the air conditioner, please first read the instruction manual. |
|  | Before installing the air conditioner, please first read the instruction manual. |
|  | Before repairing the air conditioner, please first read the technical service manual. |

Compared with common refrigerant, R32 is an environmental-friendly refrigerant that has no harm to the ozone layer and weak greenhouse effect. Its GWP is 675. Because of its thermodynamic characteristics, R32 requires a smaller charging quantity to reach high energy efficiency. It is inflammable and odourless, but may cause explosion under certain circumstances.

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Safety Notice on Maintenance



PROHIBITED:

1. Do not pierce or burn.
2. Please note that refrigerant may be odorless.
3. The appliance shall be stored in a room without continuously operating ignition sources (For example: open flames, an operating gas appliance or an operating electric heater).
4. Indoor unit adopts special joints that can't be detached. The installation method is the same with the common joints. However, because the joint can't be detached, if it is badly connected and causes leakage, it needs to be cut and replaced by a new one through welding.
5. Using unsuitable parts or tools may lead to electric shock or fire hazard.
6. If refrigerant leaks during maintenance, please ventilate the room immediately. Heavy leakage may lead to breathing difficulty, severe injury or death.
7. Disconnect power before disassembling the appliance for maintenance.
8. The appliance should be maintained and cared by authorized technical personnel with necessary qualifications.



WARNING:

1. If the working place is more than 2m's high, please wear a safety helmet, gloves and a safety belt.
2. Never mix any other substances except the specified refrigerant into the refrigerant circuit.
3. When re-locating the appliance, check whether the new location is strong enough to withstand the weight of the appliance.
4. If there is refrigerant leak, please fix the leak before charging in the refrigerant. After refrigerant is charged, check for refrigerant leaks. If you cannot spot the leak, stop the maintenance work. Please evacuate the system and close the service valve to prevent refrigerant leaking into the room.
5. Prepare suitable tools and protectors.
6. If you need to carry out maintenance or check the electric circuit without cutting off the power, please be careful not to touch the electrical parts.



NOTICE:

1. If the appliance is maintained at a humid place, it should be grounded to avoid electric shock.
2. Never repair the unit with wet hands. Operating the unit with wet hands may lead to electric shock.
3. If the unit is not correctly grounded, please check and fix it.
4. Before cleaning the unit, please disconnect power to prevent the inner fan from starting up and running at high speed; otherwise personal injury may occur.
5. Measure the insulation resistance after maintenance. The resistance must be 1M or higher. Bad insulation may lead to electric shock.
6. Welding and cutting work must be done in a well-ventilated place.
7. Gas appliances, heaters and other fire sources should be kept away from the installation and maintenance site.
8. Maintenance should be done according to suggestions of the manufacturer.
9. Maintenance should be done only after the refrigerant is completely reclaimed from the unit.



OBSERVED:

1. After the maintenance work is done, check the drainage of indoor unit.
2. Do not tilt the unit, otherwise, water may spill out from the unit and make the floor and furniture wet.

3. Disassembly of the unit, handling of the refrigerant, oil and accessories should all be done according to applicable local rules and regulations.

Safety Notice on Operation



PROHIBITED:

1. Never try to modify the unit, otherwise, it may cause electric shock, overheat or fire hazard.
2. If the power cord or conducting wires are scratched, please replace them.
3. Never use connected or extended power cord or share the power socket with other appliances.
4. Prepare a specialized power circuit for the appliance.



WARNING:

1. If the power plug is dirty, please clean it before inserting it to the power socket. If the power plug is loose, please tighten it up.
2. Do not damage the power cord. A damaged or refitted power cord may lead to electric shock or fire hazard.
3. Check frequently whether the appliance is in good condition.



NOTICE:

1. After changing the batteries of remote control, please discard them to avoid being swallowed by children.
2. When the unit is working, do not remove the fan cover.
3. Do not use organic solvents to wipe the controller operating panel.
4. Before cleaning the unit, cut off the power supply.

1. Product Introduction

1.1 Lists of Units




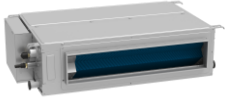


1.1.1 List of ODU


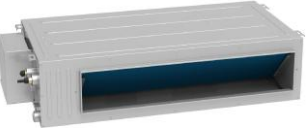
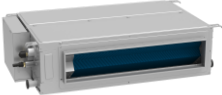



| Model | Power Supply | Finished Product Code | Appearance | |
|---------------|--------------------------------|-----------------------|---|---|
| | V/Ph/Hz | | | |
| GUD35W/NhA-T | 220-240V~50Hz 208-230V~60Hz | CF090W1310 |  | |
| GUD50W/NhA-T | | CF090W1210 | | |
| GUD71W/NhA-T | | CF090W1220 |  | |
| GUD85W/NhA-T | | CF090W1230 |  | |
| GUD100W/NhA-T | | CF090W1240 |  | |
| GUD125W/NhA-T | | CF090W1260 | | |
| GUD140W/NhA-T | | CF090W1280 | | |
| GUD100W/NhA-X | | 380-415V 3N~50/60Hz | CF090W1250 |  |
| GUD125W/NhA-X | | | CF090W1270 | |
| GUD140W/NhA-X | | | CF090W1290 | |
| GUD160W/NhA-X | 380-415V 3N~50/60Hz | CF090W1300 |  | |

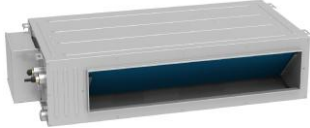


Note: 1 Ton = 12000Btu/h = 3.517kW


If one outdoor unit is to be connected with multiple indoor units, the indoor units must have the same cooling capacity and be of the same type.

1.1.2 List of IDUs

| Model | | Rated Cooling/ Heating Capacity (kw) | Power Supply | Finished Product Code | Appearance |
|------------------|-------------|--|--------------------------------|--------------------------|---|
| | | | V/Ph/Hz | | |
| Cassette Type | GUD35T/A-T | 3.5/4.0 | 220-240V~50Hz 208-230V~60Hz | ET010N1640 |  |
| | GUD50T/A-T | 5.0/5.5 | | ET010N1540 | |
| | GUD71T/A-T | 7.0/8.0 | | ET010N1420 |  |
| | GUD85T/A-T | 8.5/8.8 | | ET010N1430 | |
| | GUD100T/A-T | 10.0/12.0 | | ET010N1440 | |
| | GUD125T/A-T | 12.1/13.5 | | ET010N1450 | |
| | GUD140T/A-T | 13.4/15.5 | | ET010N1460 |  |
| | GUD160T/A-T | 14.5/17.0 | | ET010N1470 | |
| Duct Type | GUD35P/A-T | 3.5/4.0 | 220-240V~50Hz 208-230V~60Hz | CF022N1650 |  |
| | GUD50P/A-T | 5.0/5.5 | | CF022N1630 |  |
| | GUD71P/A-T | 7.0/8.0 | | CF022N1670 |  |
| | GUD85P/A-T | 8.5/8.8 | | CF022N1610 | |

| Model | | Rated Cooling/ Heating Capacity (kw) | Power Supply | Finished Product Code | Appearance |
|-----------|---------------|--|--------------------------------|--------------------------|---|
| | | | V/Ph/Hz | | |
| Duct Type | GUD100PH/A-T | 10.0/12.0 | 220-240V~50Hz 208-230V~60Hz | CF022N1590 |  |
| | GUD125PH/A-T | 12.1/13.5 | | CF022N1570 |  |
| | GUD140PH/A-T | 13.4/15.5 | | CF022N1550 | |
| | GUD160PH/A-T | 16.0/17.0 | | CF022N1530 | |
| | GUD35PS/A-T | 3.5/4.0 | | CF022N1640 |  |
| | GUD50PS/A-T | 5.0/5.5 | | CF022N1620 |  |
| | GUD71PS/A-T | 7.0/8.0 | | CF022N1660 |  |
| | GUD85PS/A-T | 8.5/8.8 | | CF022N1600 | |
| | GUD100PHS/A-T | 10.0/12.0 | | CF022N1580 |  |

| Model | | Rated Cooling/ Heating Capacity (kw) | Power Supply | Finished Product Code | Appearance |
|-----------------------|-------------------|--|--------------------------------|--------------------------|---|
| | | | V/Ph/Hz | | |
| Duct Type | GUD125PHS/A -T | 12.1/13.5 | 220-240V~50Hz 208-230V~60Hz | CF022N1560 |  |
| | GUD140PHS/A -T | 13.4/15.5 | | CF022N1540 | |
| | GUD160PHS/A -T | 16.0/17.0 | | CF022N1520 | |
| Floor Ceiling Type | GUD35ZD/A-T | 3.5/4.0 | 220-240V~50Hz 208-230V~60Hz | ED020N1720 |  |
| | GUD50ZD/A-T | 5.0/5.5 | | ED020N1730 | |
| | GUD71ZD/A-T | 7.0/8.0 | | ED020N1740 |  |
| | GUD85ZD/A-T | 8.5/8.8 | | ED020N1750 | |
| | GUD100ZD/A-T | 10.0/12.0 | | ED020N1680 | |

| Model | | Rated Cooling/ Heating Capacity (kw) | Power Supply | Finished Product Code | Appearance |
|--------------------------|--------------|--|--------------------------------|--------------------------|---|
| | | | V/Ph/Hz | | |
| Floor Ceiling Type | GUD125ZD/A-T | 12.1/13.5 | 220-240V~50Hz 208-230V~60Hz | ED020N1690 |  |
| | GUD140ZD/A-T | 13.4/15.5 | | ED020N1700 | |
| | GUD160ZD/A-T | 16.0/17.0 | | ED020N1710 | |

Note: The outdoor unit is generally suitable to any one of the three types of indoor units with no need of change (limited to cassette type, duct type and floor ceiling type).

1.2 Electrical Parameters

| Model | Power supply | Circuit breaker capacity | Min. sectional area of power cord |
|---------------|--------------------------------|-----------------------------|--------------------------------------|
| | V/Ph/Hz | A | mm ² |
| GUD35W/NhA-T | 220-240V~50Hz 208-230V~60Hz | 16 | 1.5 |
| GUD50W/NhA-T | | 16 | 1.5 |
| GUD71W/NhA-T | | 20 | 2.5 |
| GUD85W/NhA-T | | 25 | 2.5 |
| GUD100W/NhA-T | | 32 | 4.0 |
| GUD125W/NhA-T | | 32 | 4.0 |
| GUD140W/NhA-T | | 40 | 6.0 |
| GUD100W/NhA-X | 380-415V 3N~50/60Hz | 16 | 1.5 |
| GUD125W/NhA-X | | 16 | 1.5 |
| GUD140W/NhA-X | | 16 | 1.5 |
| GUD160W/NhA-X | | 16 | 1.5 |

| Model | Power Supply | Fuse Capacity | Circuit Breaker Capacity | Min. Sectional Area of Power Cord |
|-------------|--------------------------------|---------------|-----------------------------|--------------------------------------|
| | V/Ph/Hz | A | A | mm ² |
| Indoor unit | 220-240V~50Hz 208-230V~60Hz | 3.15 | 6 | 1.0 |

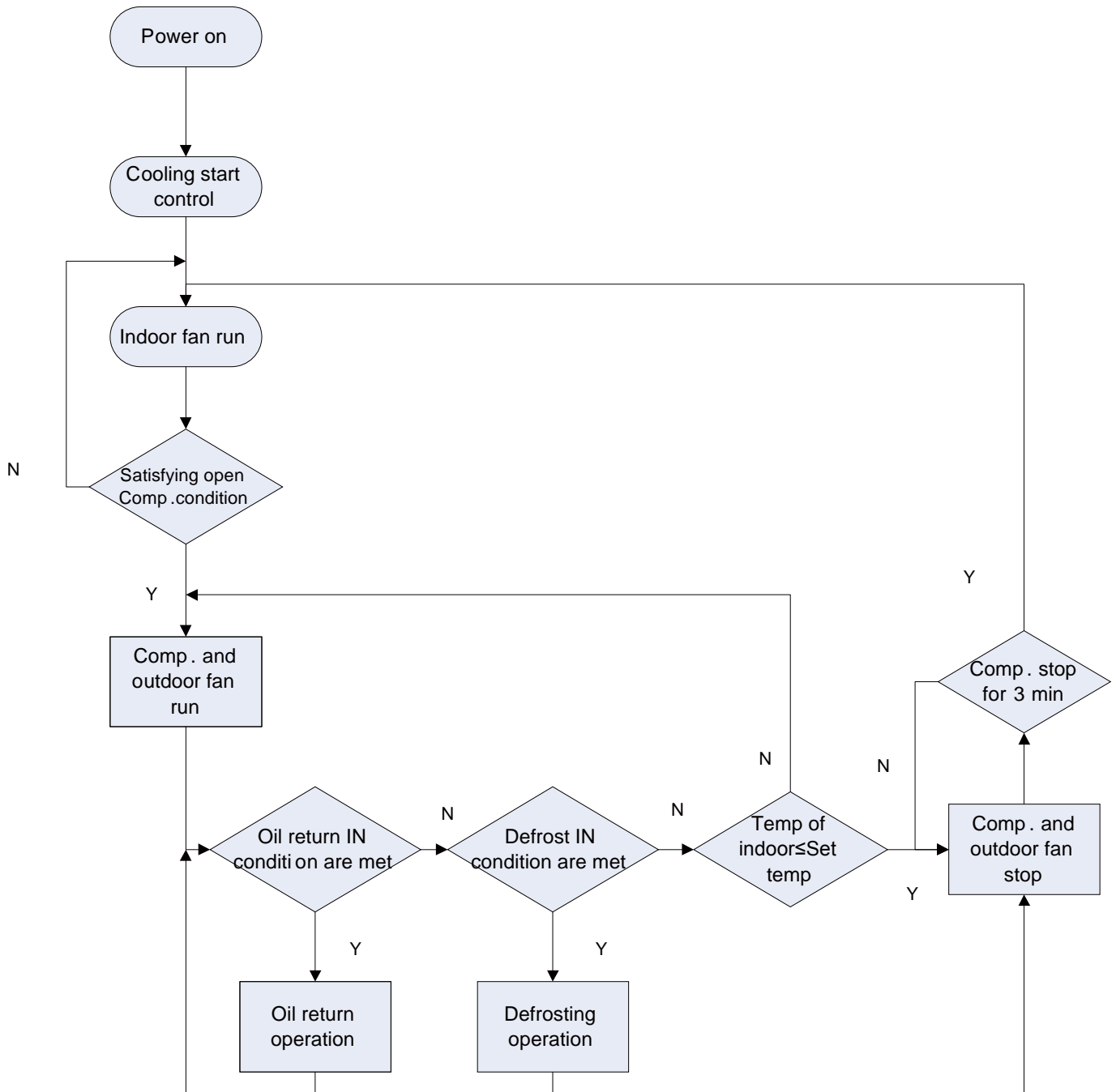
**NOTICE:**

- ① Fuse is located on the main board.
- ② Install a circuit breaker at every power terminal near the units (indoor and outdoor units) with at least 3mm contact gap. The units must be able to be plugged or unplugged.
- ③ Circuit breaker and power cord specifications listed in the above table are determined based on the maximum power input of the units.
- ④ Specifications of power cords listed in the above table are applicable in a working condition where ambient temperature is 40°C and multi-core copper cable (e.g. YJV copper cable, with insulated PE and PVC sheath) is protected by a conduit, and is resistant to 90°C in maximum (See IEC 60364-5-52). If working condition changes, please adjust the specifications according to national standards.
- ⑤ Specifications of circuit breaker are based on a working condition where the working temperature is 40°C. If working condition changes, please adjust the specifications according to national standards.
- ⑥ Adopt 2pc of 0.75mm² power cords to be the communication cords between indoor and outdoor units. The maximum length is 100m. Please select a proper length according to local conditions. Communication cords must not be twisted together. To be in compliance with EN 55014, it is necessary to use 8 meters long wire.
- ⑦ Adopt 2pc of 0.75mm² power cords to be the communication cords between wired control and indoor unit. The maximum length is 30m. Please select a proper length according to local conditions. Communication cords must not be twisted together. To be in compliance with EN 55014, it is necessary to use 7.5 meters long wire.
- ⑧ The wire gauge of communication cord should not be less than 0.75mm². It's recommended to use 0.75mm² power cords as the communication cords.

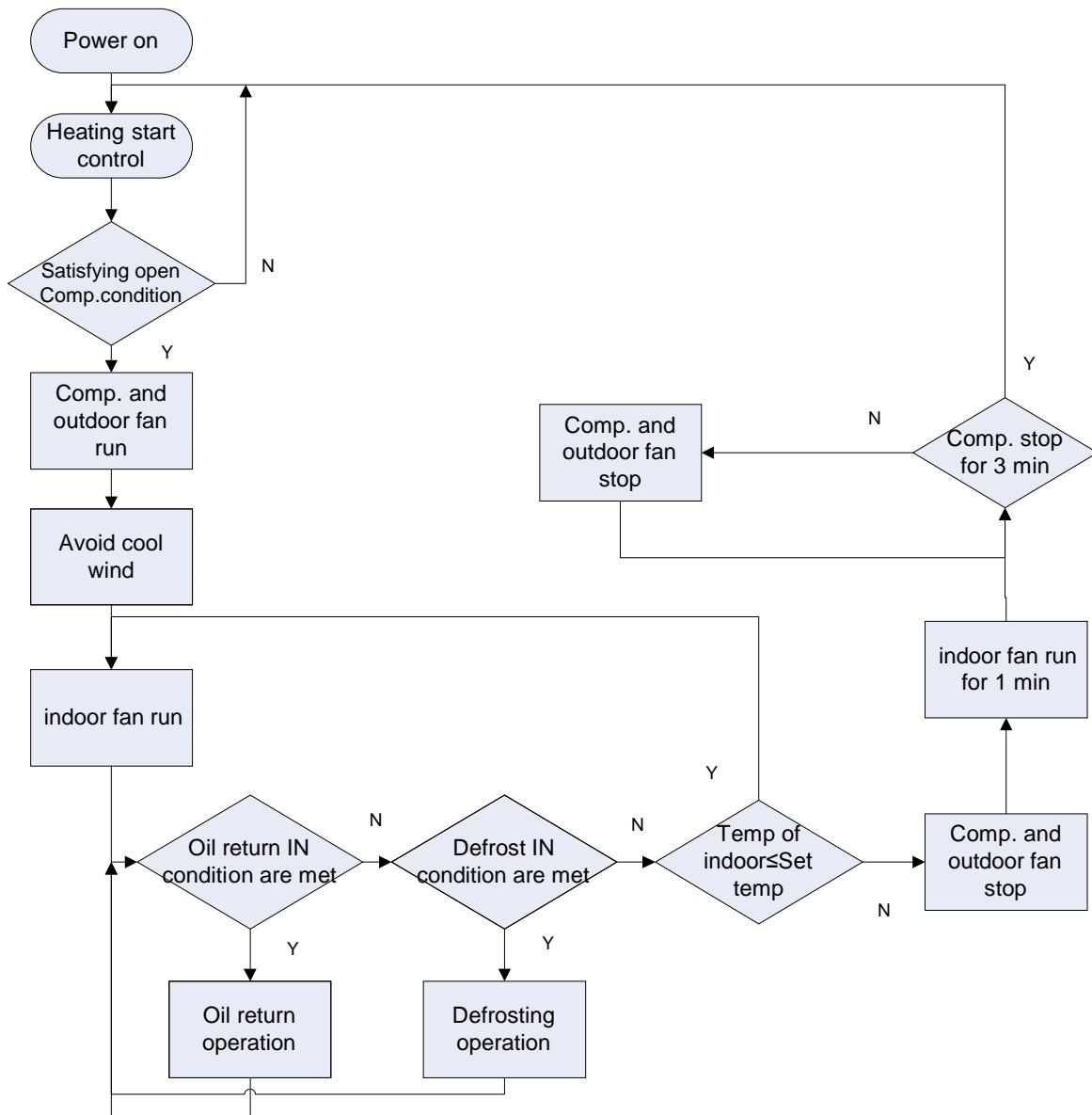
2. Control

2.1 Operation Mode

2.1.1 Cooling Mode



2.1.2 Heating Mode



2.2 Control Mode

2.2.1 Based Control

2.2.1.1 Compressor Control

When cooling or heating mode is turned on, indoor fan will run for a while before the compressor starts. Under different modes, the compressor can only be stopped after running for some time (special cases excluded). This is to protect the compressor from frequent start or stop. Once the compressor is stopped, it must not be restarted right away. Please wait for a few minutes.

2.2.1.2 EXV Control

When the unit is first started, the electronic expansion valve will reset control. During the process, the expansion valve will produce rattling sound. When cooling or heating mode is turned on, the valve will be open at a certain step before the compressor starts.

2.2.1.3 Outdoor Fan Control

This series air conditioner has two types of outdoor units: one with a single fan and the other with double fans. The outdoor fan can run at the highest level 10 and the lowest level 1. By controlling the speed of outdoor fan, the unit can achieve cooling at low temperature and heating at high temperature. In fan mode, outdoor fan will not work.

2.2.1.4 4-way Valve Control

After heating mode is turned on for a while, 4-way valve will be energized to change the direction of refrigerant flow so that the system can run in heating and the indoor unit will not blow cold air. Under other modes, the valve will not be energized.

To avoid the 4-way valve from incorrectly changing directions, when the unit stops in heating, due to a temperature point or other protection reasons, the 4-way valve will continue to function temporarily and lose power after a while.

There must be adequate differential pressure for the 4-way valve to change directions.

2.2.2 Special Control

2.2.2.1 Defrosting Control

ODU defrosting control in heating: Defrosting will start when the temperature sensed by outdoor tube temperature sensor reaches a preset value. During defrosting, the 4-way valve will switch to the cooling condition, and outdoor and indoor fans will both stop. When the temperature sensed by outdoor tube temperature sensor reaches the preset value of defrosting stop, system will quit defrosting. The 4-way valve will switch back to the heating condition, outdoor fan will start working first and indoor fan will resume its previous fan speed after performing cold air prevention.

2.2.2.2 Oil Return Control

If the unit is running at low frequency for a long time, system will enable oil return control. This is to lead oil in the pipeline back to the compressor so that the compressor will not be lack of oil. Generally, the oil return takes about 5min. The compressor running frequency will be raised to the preset oil return frequency.

2.2.2.3 Refrigerant Recovery Control

Enabling method: Remote control and wired control both use the same enabling method. That is, within 5min after power is connected, start cooling mode (turn on the unit) and set temperature at 16°C, then press “▲, ▼, ▲, ▼, ▲, ▼” (6 times of pressing) in 5s to enter the refrigerant recovery mode. If it is successfully enabled, the indoor unit will display the corresponding code E3.

After the refrigerant recovery mode is enabled, if remote control or wired control sends a signal or the refrigerant recovery mode has been enabled for 10min, system will exit from refrigerant recovery. If outdoor unit is shut down because of malfunction, refrigerant recovery will be stopped immediately.

Please note that refrigerant recovery mode cannot be enabled under the following conditions:

1. If temperature is shielded remotely, refrigerant recovery mode cannot be enabled. You need to first unlock the remote shield against temperature.
2. If temperature is higher than 16 degrees under energy-saving mode, refrigerant recovery mode cannot be enabled. You need to first turn off the energy-saving mode.

2.2.2.4 Forced Operation Control

This control is used to quickly check whether the unit can operate normally after installation. Wired control has to be used to enable this control. For cassette type unit, you can enable the control through the light board.

Enabling method through the light board of cassette type unit: After the unit is installed and connected to power, press TEST button on the light board to enter forced operation mode. Short-press TEST button (less than 2s), cooling mode will be activated. Long-press TEST button (more than 2s), heating mode will be activated.

Enabling method through wired control:

Under power-on status,

Forced cooling: press the “▼” button continuously for 5s to enter the forced test mode;

Forced heating: press the “▲” button continuously for 5s to enter the forced test mode.

During test mode, press any button to quit the test mode.

Note: Forced test mode can only be enabled when the unit is first turned on and not yet receives any remote control signal or button control signal.

2.2.3 Protection Control

2.2.3.1 High Pressure Protection Control

System will enable high pressure protection control if the high pressure switch is detected open for continuously a little time. Under high pressure protection, system will be shut down and display error code E1.

When high pressure protection occurs for the first time, system will restore operation if the high pressure switch is detected to be reclosed for continuously a little time. When high pressure protection occurs for the second time in a certain time period, system will not restore operation. You need to manually turn off the unit and clear the error before restarting up the unit. (If high pressure protection occurs frequently, please send for professional personnel to repair.)

2.2.3.2 Low Pressure Protection Control

System will enable low pressure protection control if the low pressure switch is detected open for continuously a little time. Under low pressure protection, system will be shut down and display error code E3. When low pressure protection occurs, system will restore operation if the low pressure switch is detected to be reclosed within a few minutes after shutdown. If low pressure protection occurs for several times in a period of time, system will not restore operation automatically. You need to manually turn off the unit before restarting up the unit.

2.2.3.3 High Temperature Prevention Control

Under heating mode, system will enable high temperature prevention control if the temperature sensed by indoor tube temperature sensor reaches a certain value. When high temperature prevention control is enabled, outdoor fan will slow down.

2.3 Functions

2.3.1 Setting of Filter Cleaning Reminder

When setting washing remind function, the timer area will display 2-bit number that means the pollution level, then press “▲” and “▼” buttons to select, and press “SWING/ENTER” button to confirm the setting. Conversion relation between the displayed pollution level and accumulative operating time are as the following list. After setting, when it reaches the washing time, “CLEAN” icon will flash and remind, if you press “▲” and “▼” buttons to adjust the level, and press “SWING/ENTER” button, then the accumulative time for filter washing remind will not be reset; if the time after adjustment is larger than the current

accumulative time, then “CLEAN” icon will stop flashing; if the time after adjustment is less than the current accumulative time, then “CLEAN” icon will continue to flash.

The only method for cancelling the remind function is to press “FUNCTION” button to switch to “CLEAN” icon, and set the timer area to be “00”, and then press “SWING/ENTER” button, then the accumulative time of filter washing remind is reset.


| Pollution Level | Accumulated Operating Time (hour) | Pollution Level | Accumulated Operating Time (hour) | Pollution Level | Accumulated Operating Time (hour) |
|-----------------|-----------------------------------|-----------------|-----------------------------------|-----------------|-----------------------------------|
| 10 | 5500 | 20 | 1400 | 30 | 100 |
| 11 | 6000 | 21 | 1800 | 31 | 200 |
| 12 | 6500 | 22 | 2200 | 32 | 300 |
| 13 | 7000 | 23 | 2600 | 33 | 400 |
| 14 | 7500 | 24 | 3000 | 34 | 500 |
| 15 | 8000 | 25 | 3400 | 35 | 600 |
| 16 | 8500 | 26 | 3800 | 36 | 700 |
| 17 | 9000 | 27 | 4200 | 37 | 800 |
| 18 | 9500 | 28 | 4600 | 38 | 900 |
| 19 | 10000 | 29 | 5000 | 39 | 1000 |

2.3.2 Low-temperature Drying Function

Under dry mode, when the setting temperature is 16° C, press “▼” button for twice, the setting temperature becomes 12° C, then the unit enters into low-temperature dry function.

When low-temperature dry function is turned on, directly press “▲” button or switch the mode can quit the function.

2.3.3 Child-lock Function

Without error, under ON or OFF status of unit, press “▲” and “▼” buttons simultaneously for 5 seconds can enter into child-lock function, the liquid crystal screen will display “”; press “▲” and “▼” buttons simultaneously again for 5 seconds can quit the child-lock function.

Under child-lock status, no response for pressing any buttons. The unit will memorize the child-lock status after power failure and re-energizing the unit.

2.3.4 Memory Function

Under power-off status, press “MODE” and “▲” button simultaneously for 5 seconds can turn on or turn off memory function. When memory function is set, “MEMORY” displays.


If memory function has not been set, when the unit is re-energized after power failure, the unit is power-off status. If the memory function is set in wired controller, when the wired controller is re-energized after power failure, it will resume to the operating status before power failure.

2.3.5 Door Control Function

When door control function is selected, the wired control will work when the room card is inserted and stop working when the room card is pulled out. When door control function senses the room card is not inserted.

The setting method please refer to Debugging Function (2.3.9).

Note:

- ① . In long-distance monitoring or centralized control, no matter the room card is inserted or not, the ON/OFF of unit can be controlled. If long-distance monitoring or centralized control information is received when the room card is not inserted, the icon  is cleared. When the card is reinserted, door control function is judged to be turned on. If long-distance monitoring or centralized control information is received when the room card is inserted, it will keep the original status.
- ② The unit can not be controlled by buttons when the card is not inserted.

2.3.6 Switch between Fahrenheit and Degree Celsius

Under power-off status, press “MODE” and “▼” buttons simultaneously for 5 seconds, display board will switch between degree Celsius and Fahrenheit.

2.3.7 Inquiry of Ambient Temperature

Under power-off or power-on status, press and hold “SWING/ENTER” button for 5 seconds to enter into ambient temperature inquiry interface, then timer area displays the ambient temperature type 01 or 02, and ambient temperature area displays the corresponding ambient temperature of corresponding type. In which, 01 refers to outdoor ambient temperature, 02 refers to indoor ambient temperature. Press “MODE” button can switch between type 01 and 02. Press buttons other than “MODE” or when the unit receives remote control signal, it will quit the inquiry status. If there is no any operation for 20 seconds, it will quit automatically.

Note:

When the outdoor ambient temperature sensor detects the same temperature for 12 hours, it will shield the display of outdoor ambient temperature sensor.

2.3.8 Inquiry of Historical Malfunction

Under off or on state of the unit, continuously press Function and ▼ buttons for 5s to view historical malfunction.

In enquiry state, set temperature displaying zone displays “00”. Press ▲ and ▼ buttons to view the 5 malfunctions happened recently. The timer displaying position displays the specific error code. The 5th displayed malfunction is the last malfunction.

2.3.9 Debugging Function

Under off state of the unit, press Function and Timer buttons at the same time for 5s to go to the debugging menu. Press Mode button to adjust the setting items and press ▲ or ▼ button to set the actual value.

2.3.9.1 Setting ambient temperature sensor (dual ambient temperature sensors function)

Under debugging state, press Mode button to adjust to “00” in temperature displaying zone. Timer zone displays setting state and press ▲ or ▼ button to adjust. There are 3 selections:

- (1) The ambient temperature at air return is set as indoor ambient temperature (timer zone displays 01)
- (2) The temperature at wired controller is set as indoor ambient temperature (timer zone displays 02)
- (3) Select the temperature sensor at air return in cooling, dry and fan mode; select the temperature sensor at wired controller in heating and auto mode.

2.3.9.2 Displaying setting of freeze protection error code

Under debugging state, press Mode button to adjust to “02” in temperature displaying zone. Timer zone displays setting state and press ▲ or ▼ button to adjust. There are 2 selections:

- (1) Displayed (LCD displays 01)
- (2) Not displayed (LCD displays 02)

It is defaulted to be not displayed for export unit and be displayed for domestic unit.

2.3.9.3 Setting refrigerant lacking protection function

Under debugging state, press Mode button to adjust to “04” in temperature displaying zone. Timer zone displays setting state and press ▲ or ▼ button to adjust. There are 2 selections:

- (1) With refrigerant lacking protection function (LCD displays 01)
- (2) Without refrigerant lacking protection function (LCD displays 02)

2.3.9.4 Selecting blowing residual heating of indoor unit

Under debugging state, press Mode button to adjust to “05” in temperature displaying zone. Timer zone displays setting state and press ▲ or ▼ button to adjust. There are 2 selections:

- (1) Mode 1 (LCD displays 00)
- (2) Mode 2 (LCD displays 01)

Note: Blowing residual heating of indoor unit

Mode 1: Unit stops when reaching temperature point and indoor fan motor does not stop in cooling mode; after unit stops when reaching temperature point in heating mode, duct type unit and floor ceiling unit blow residual heat for 60s and then stop indoor unit, while cassette type unit always operates in low fan speed and blows residual heat for 60s when there is malfunction.

Mode 2: After unit stops when reaching temperature point, the indoor fan motor stops operation with a 10s-delay no matter in cooling mode or in heating mode.

2.3.9.5 Mode selecting of compressor electric heating belt

Under debugging state, press Mode button to adjust to “06” in temperature displaying zone. Timer zone displays setting state and press ▲ or ▼ button to adjust. There are 2 selections:

- (1) Mode 1 (LCD displays 00)
- (2) Mode 2 (LCD displays 01)

Note:

Mode 1: Compressor electric heating belt starts when outdoor ambient temperature is below 35°C and stops when outdoor ambient temperature is above 37°C. When outdoor ambient temperature is within 35°C~ 37°C, the belt will keep its previous operation state.

Mode 2: Compressor electric heating belt starts when outdoor ambient temperature is below -2°C and stops when outdoor ambient temperature is above 0°C. When outdoor ambient temperature is within -2°C~0°C, the belt will keep its previous operation state.

2.3.9.6 Selecting low-power consumption mode

Under debugging state, press Mode button to adjust to “07” in temperature displaying zone. Timer zone displays setting state and press ▲ or ▼ button to adjust. There are 2 selections:

- (1) With low-power consumption mode (LCD displays 00)
- (2) Without low-power consumption mode (LCD displays 01)

2.3.9.7 Selecting door control function

Under debugging state, press Mode button to adjust to “08” in temperature displaying zone. Timer zone displays setting state and press ▲ or ▼ button to adjust. There are 2 selections:

- (1) Without door control function (LCD displays 00)
- (2) With door control function (LCD displays 01)

2.3.9.8 Selecting long-distance monitoring or centralized controller

Under debugging state, press Mode button to adjust to “10” in temperature displaying zone. Timer zone displays setting state and press ▲ or ▼ button to adjust. There are 2 selections:

- (1) Centralized controller (LCD displays 00)
- (2) Long-distance monitoring (LCD displays 01)

2.3.9.9 Selecting fan mode of indoor fan motor

Under debugging state, press Mode button to adjust to “11” in temperature displaying zone. Timer zone displays setting state and press ▲ or ▼ button to adjust.

a. There are 5 selections for low static pressure duct:

- (1) P3 (LCD displays 03)
- (2) P4 (LCD displays 04)
- (3) P5 (LCD displays 05)
- (4) P6 (LCD displays 06)
- (5) P7 (LCD displays 07)

Note: You can select P03, P04, P05, P06, P07 in fan mode of indoor fan motor, which means different fan mode combinations are corresponding to different static pressure. Ex-factory defaulted mode is P05. You can set the mode through wired controller. S01, S02, S03……S12, S13 means the rotation speed of indoor unit is from low to high.

Combination relationship of P03, P04, P05, P06, P07

| Static pressure selection | Super high speed | High speed | Medium high speed | Medium speed | Medium low speed | Low speed | Quiet R1 speed | Quiet R2 speed | Quiet R3 speed |
|---------------------------|------------------|------------|-------------------|--------------|------------------|-----------|----------------|----------------|----------------|
| P03 | S09 | S08 | S07 | S06 | S05 | S04 | S03 | S02 | S01 |
| P04 | S10 | S09 | S08 | S07 | S06 | S05 | S04 | S03 | S02 |
| P05 | S11 | S10 | S09 | S08 | S07 | S06 | S05 | S04 | S03 |
| P06 | S12 | S11 | S10 | S09 | S08 | S07 | S06 | S05 | S04 |
| P07 | S13 | S12 | S11 | S10 | S09 | S08 | S07 | S06 | S05 |

b. There are 9 selections for high static pressure duct:

- (1) P1 (LCD displays 01)
- (2) P2 (LCD displays 02)
- (3) P3 (LCD displays 03)
- (4) P4 (LCD displays 04)
- (5) P5 (LCD displays 05)
- (6) P6 (LCD displays 06)
- (7) P7 (LCD displays 07)
- (8) P8 (LCD displays 08)
- (9) P9 (LCD displays 09)

Note: You can select P01, P02, P03, P04, P05, P06, P07, P08, P09 in fan mode of indoor fan motor, which means different fan mode combinations are corresponding to different static pressure. Ex-factory defaulted mode is P05. You can set the mode through wired controller. S01, S02, S03……S12, S13 means the rotation speed of indoor unit is from low to high.

Combination relationship of P01, P02, P03, P04, P05, P06, P07, P08, P09

| Static pressure selection | Super high speed | High speed | Medium high speed | Medium speed | Medium low speed | Low speed | Quiet R1 speed | Quiet R2 speed | Quiet R3 speed |
|---------------------------|------------------|------------|-------------------|--------------|------------------|-----------|----------------|----------------|----------------|
| P1 | S05 | S03 | S02 | S02 | S01 | S01 | S01 | S01 | S01 |
| P2 | S06 | S04 | S03 | S03 | S02 | S02 | S02 | S02 | S02 |
| P3 | S07 | S05 | S04 | S04 | S03 | S03 | S03 | S03 | S03 |
| P4 | S08 | S06 | S05 | S05 | S04 | S04 | S04 | S04 | S04 |
| P5 | S09 | S07 | S06 | S06 | S05 | S05 | S05 | S05 | S05 |
| P6 | S10 | S08 | S07 | S07 | S06 | S06 | S06 | S06 | S06 |
| P7 | S11 | S09 | S08 | S08 | S07 | S07 | S07 | S07 | S07 |
| P8 | S12 | S10 | S09 | S09 | S08 | S08 | S08 | S08 | S08 |
| P9 | S13 | S11 | S10 | S10 | S09 | S09 | S09 | S09 | S09 |

2.3.9.10 Selecting compensation of temperature sensor at air return

Under debugging state, press Mode button to adjust to “12” in temperature displaying zone. Timer zone displays setting state and press ▲ or ▼ button to adjust. There are 16 selections:

- (1) Compensate 0℃ (LCD displays 00)
- (2) Compensate 1℃ (LCD displays 01)
- (3) Compensate 2℃ (LCD displays 02)
- (4) Compensate 3℃ (LCD displays 03)
- (5) Compensate 4℃ (LCD displays 04)
- (6) Compensate 5℃ (LCD displays 05)
- (7) Compensate 6℃ (LCD displays 06)
- (8) Compensate 7℃ (LCD displays 07)
- (9) Compensate 8℃ (LCD displays 08)
- (10) Compensate 9℃ (LCD displays 09)
- (11) Compensate 10℃ (LCD displays 10)
- (12) Compensate 11℃ (LCD displays 11)
- (13) Compensate 12℃ (LCD displays 12)
- (14) Compensate 13℃ (LCD displays 13)
- (15) Compensate 14℃ (LCD displays 14)
- (16) Compensate 15℃ (LCD displays 15)

Note: Indoor ambient temperature compensation can be set through the wired control (E.g.: If 02 is selected, it indicates the compensation temperature is 2℃. If the indoor ambient temperature detected by the temperature sensor at air return is 29℃, the ambient temperature after compensation is 29℃-2℃=27℃).

After finishing setting, press Enter/Cancel button to save and exit setting. After entering this interface, the system will exit this menu if there is no operation on the button within 20s. Normal off state interface will be displayed and present setting will not be saved.

2.3.9.11 Auto mode selection

Under debugging state, press Mode button to adjust to “16” in temperature displaying zone. Timer zone displays setting state and press ▲ or ▼ button to adjust. There are 2 selections:

- (1) Auto mode 1, the set temperature under auto mode can't be adjusted (LCD displays 01)
- (2) Auto mode 2, the set temperature can be adjusted under auto mode (LCD displays 02)

2.3.9.12 Defrost mode selection

Under debugging state, press Mode button to adjust to “17” in temperature displaying zone. Timer zone displays setting state and press ▲ or ▼ button to adjust. There are 2 selections:

- (1) Defrost mode 1 (LCD displays 01)
- (2) Defrost mode 2 (LCD displays 02)

2.3.9.13 Heat pump unit and cooling only unit selection

Under debugging state, press Mode button to adjust to “18” in temperature displaying zone. Timer zone displays setting state and press ▲ or ▼ button to adjust. There are 2 selections:

- (1) Heat pump type unit (LCD displays 00)
- (2) Cooling only unit (LCD displays 01)

After finishing setting, press Swing/Enter button to save and exit setting. After entering this interface, the system will exit this menu if there is no operation on the button within 20s. Normal off state interface will be displayed and present setting will not be saved.

2.3.10 Connect to Interface of Centralized Control

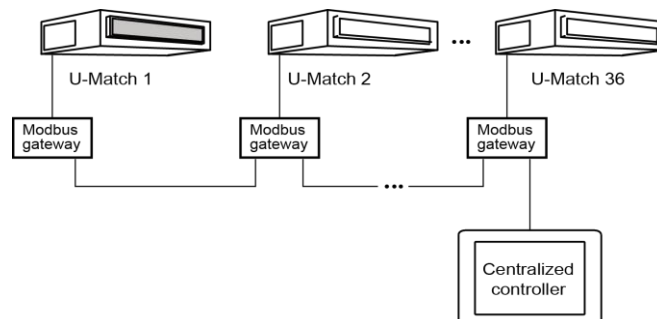
The indoor unit is with the interface of centralized controller. When centralized controller is connected, centralized control of unit can be realized when the wired controller is not connected;

(1) Interface instruction:

1) The printing of interface on the indoor unit PCB is COM_BMS, before connecting the centralized controller, a gateway model ME50-00/EG(M) is required, The following figure shows an example;

2) Electrical characteristic: none;

3) Working principle: centralized control the communication of indoor mainboard and realize the unit control;



(2) Function instructions:

In order to achieve this function, set the address mode and address through wired controller. Please refer to Point 3 for the setting method. The address mode is defaulted to be connecting to centralized controller mode and the defaulted address is 1;

When the centralized controller is connected, centralized control of the unit can be realized to control unit ON/OFF, operation mode, set fan speed/temperature and weekly timer.

(3) Setting method:

1) Centralized control for up to 16 indoor units.

Firstly, set the address mode of wired controller into centralized controller address mode. The setting method is:

Under off state of the unit, press Function and Timer buttons at the same time for 5s to go to the debugging menu. Press Mode button to adjust to "10" in temperature displaying zone. Timer zone displays setting state and press ▲ or ▼ button to adjust. There are 2 selections:

a. Centralized controller address mode (LCD displays 00)

b. Long-distance control address mode (LCD displays 01)

Choose the first selection and then press Enter/Cancel button to save and exit setting. Now, the address of wired controller is set to match the address of centralized controller. The unit will memorize this setting status. The setting value will be memorized after power failure.

Address setting of each unit: when the address mode is set to be centralized controller address mode. The address setting value range is 01~16. The setting method is:

Under off state of the unit, press Function and Mode buttons at the same time for 5s to enter setting interface of wired controller address. LCD displays address sequence. Press ▲ or ▼ button to adjust the address sequence and then press Enter/Cancel button to confirm. The setting value will be memorized after power failure.

When the address is set, the wired controller can be removed and connect the centralized controller to the indoor mainboard. Then connect the required units to realize centralized control of these units;

Note:

- ① When centralized controller is to be connected, set the address mode into centralized controller address mode through wired controller. Long-distance control address mode can not be set;
- ② The unit addresses in the same network must be different, otherwise, communication malfunction will occur and the unit can not work normally;
- ③ When centralized controller is to be connected, the unit address range is 1-16. Only 16 sets of unit in maximum can be connected
- ④ The code and model of wired controller is as below:

| Name | Product code | Remark |
|-------------------------------------|--------------|---|
| Centralized controller CE50-24/E | MC207025 | Only 16 sets of unit in maximum can be connected to this controller |

2) Centralized control for up to 36 indoor units.

Firstly, set the address mode of wired controller into Long-distance control address mode. The setting method is:

Under off state of the unit, press Function and Timer buttons at the same time for 5s to go to the debugging menu. Press Mode button to adjust to "10" in temperature displaying zone. Timer zone displays setting state and press ▲ or ▼ button to adjust. There are 2 selections:

a. Centralized controller address mode (LCD displays 00)

b. Long-distance control address mode (LCD displays 01)

Choose the second selection and then press Swing/Enter button to save and exit setting. Now, the address of wired controller is set to match the address of centralized controller. The unit will memorize this setting status. The setting value will be memorized after power failure.

Address setting of each unit: when the address mode is set to be Long-distance control address mode. The address setting value range is 01~36. The setting method is:

Under off state of the unit, press Function and Mode buttons at the same time for 5s to enter setting interface of wired controller address. LCD displays address sequence. Press ▲ or ▼ button to adjust the address sequence and then press Swing/Enter button to confirm. The setting value will be memorized after power failure.

When the address is set, the wired controller can be removed and connect the centralized controller to the indoor mainboard. Then connect the required units to realize centralized control of these units;

Note:

- ① The unit addresses in the same network must be different, otherwise, communication malfunction will occur and the unit can not work normally;
- ② When centralized controller is to be connected, the unit address range is 1-36. Only 36 sets of unit in maximum can be connected
- ③ The code and model of wired controller is as below:

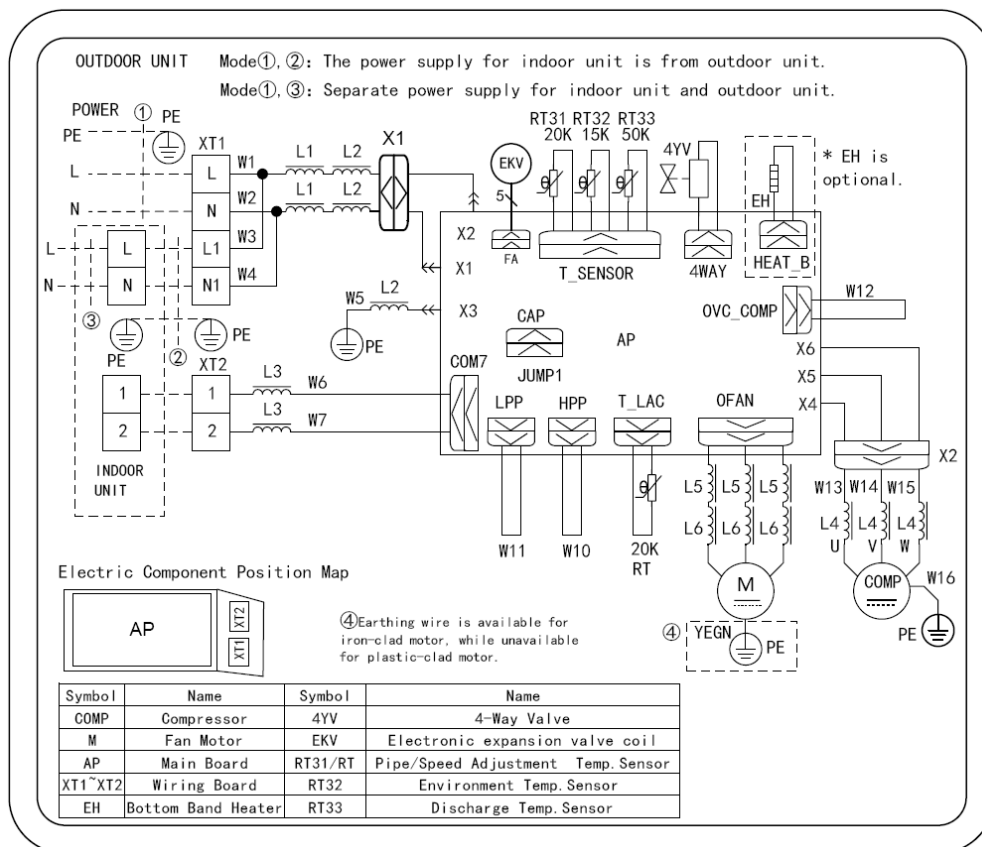
| Name | Product code | Remark |
|--|--------------|---|
| Centralized controller CE52-24/F(C) | MC207052 | Only 36 sets of unit in maximum can be connected to this controller |

3. Troubleshooting

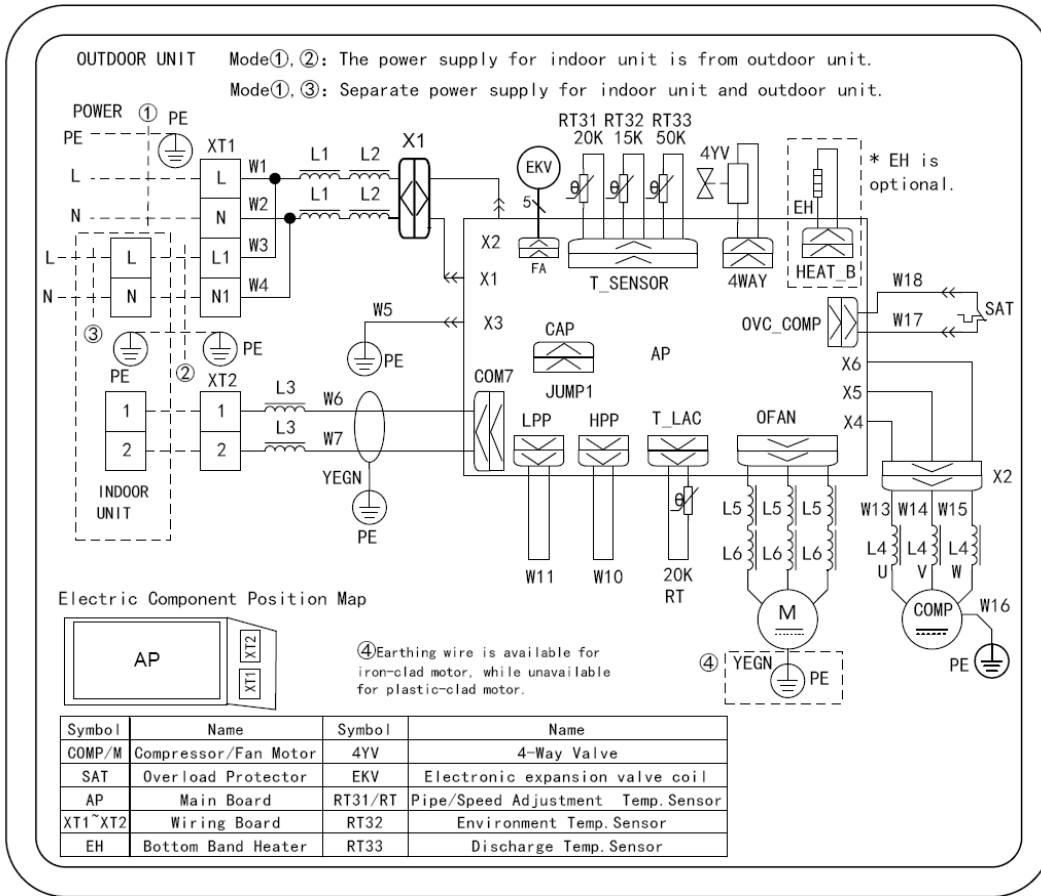
3.1 Wiring Diagrams

3.1.1 Wiring Diagrams of ODUs

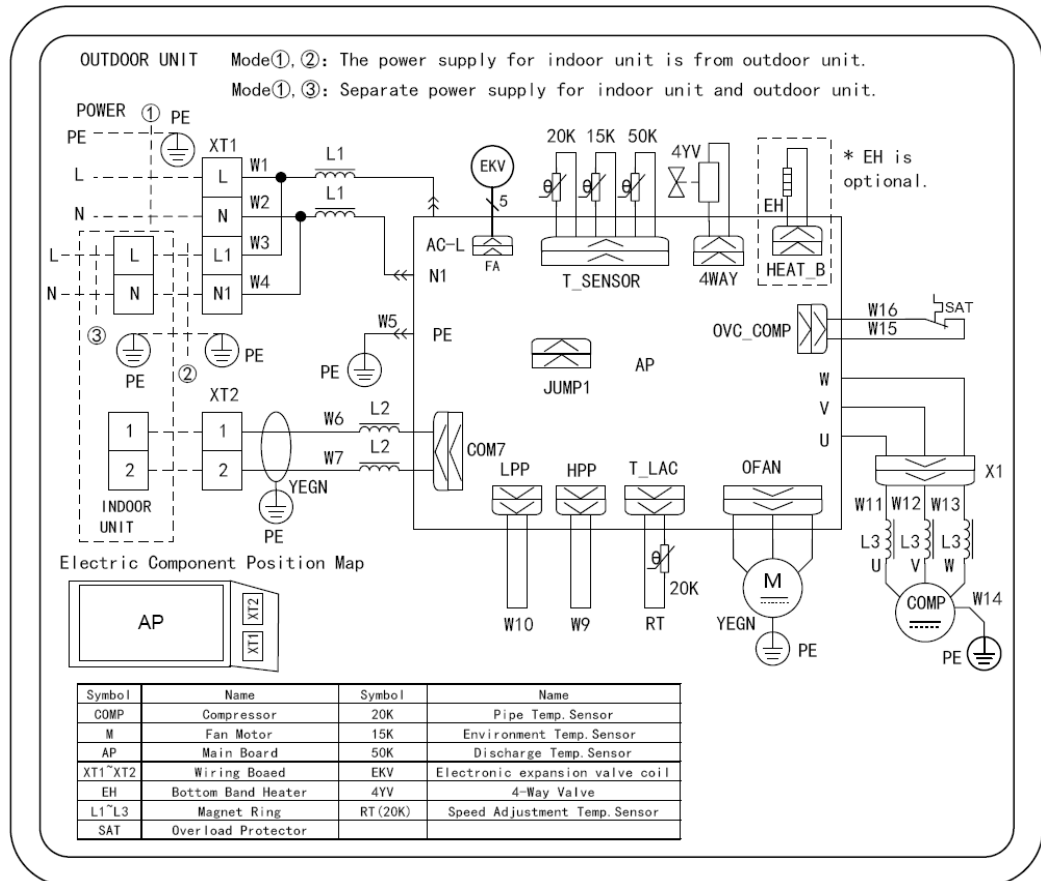
Model: GUD35W/NhA-T,



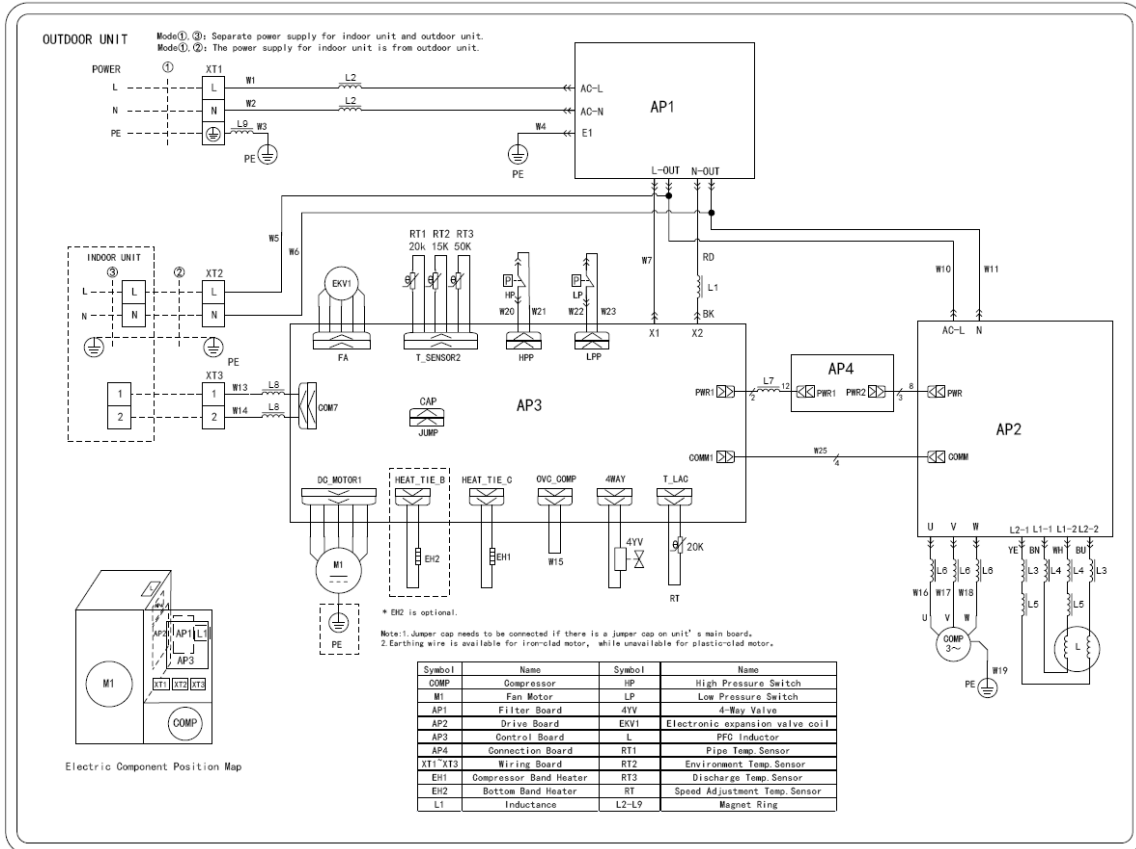
Model: GUD50W/NhA-T



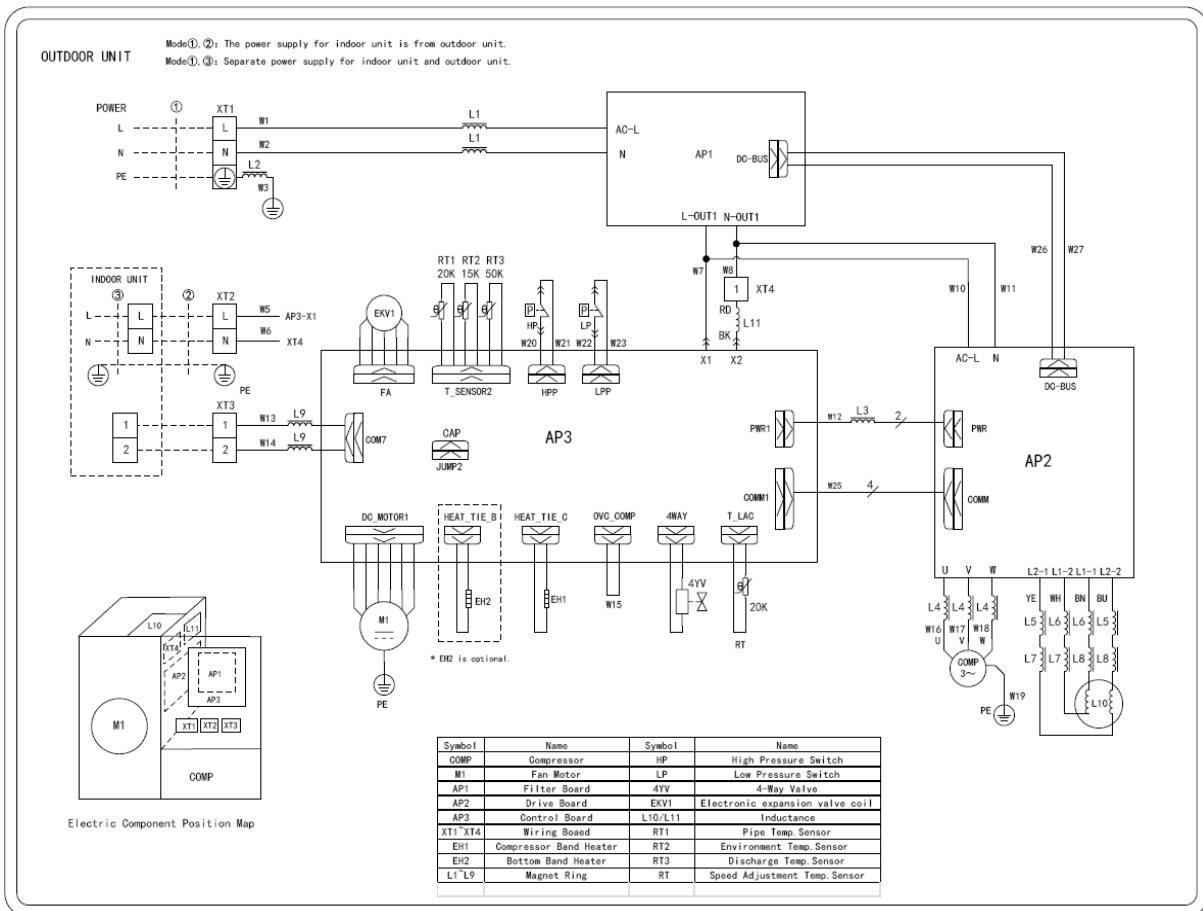
Model: GUD71W/NhA-T, GUD85W/NhA-T



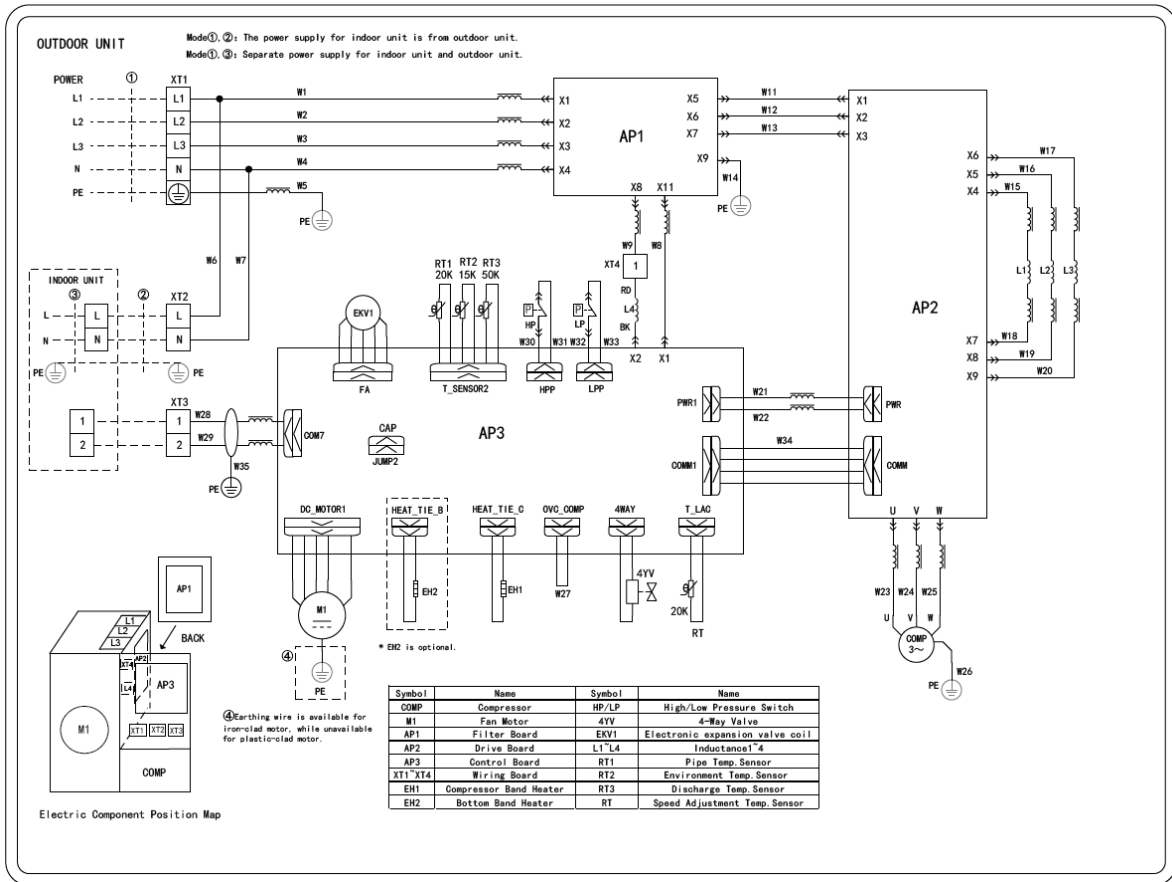
Model:GUD100W/NhA-T



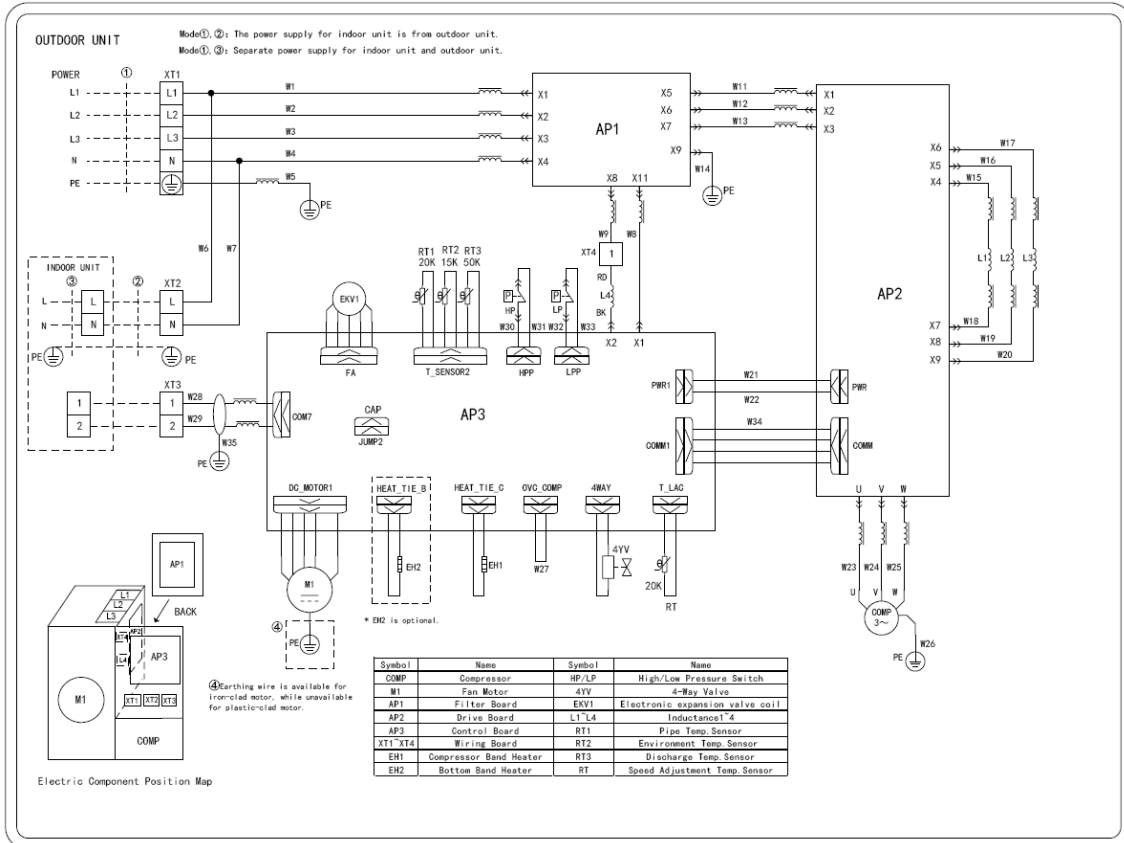
Model:GUD125W/NhA-T, GUD140W/NhA-T



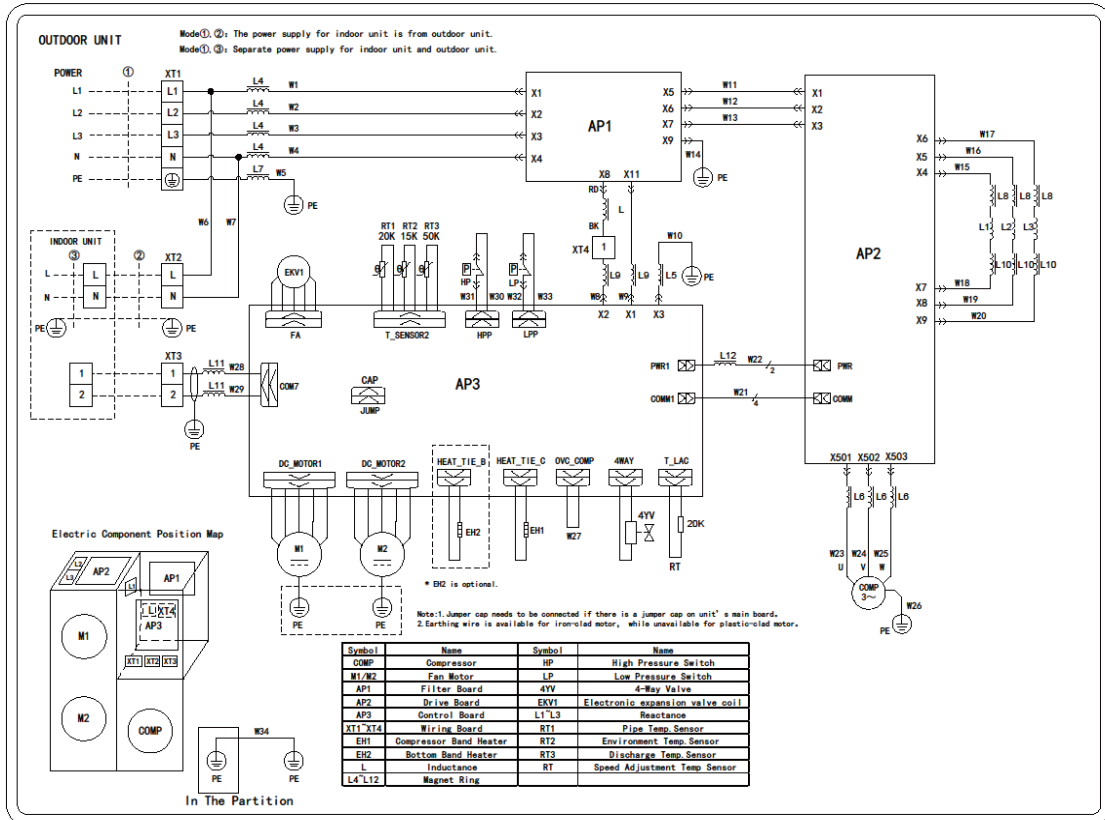
Model:GUD100W/NhA-X



Model:GUD125W/NhA-X,GUD140W/NhA-X

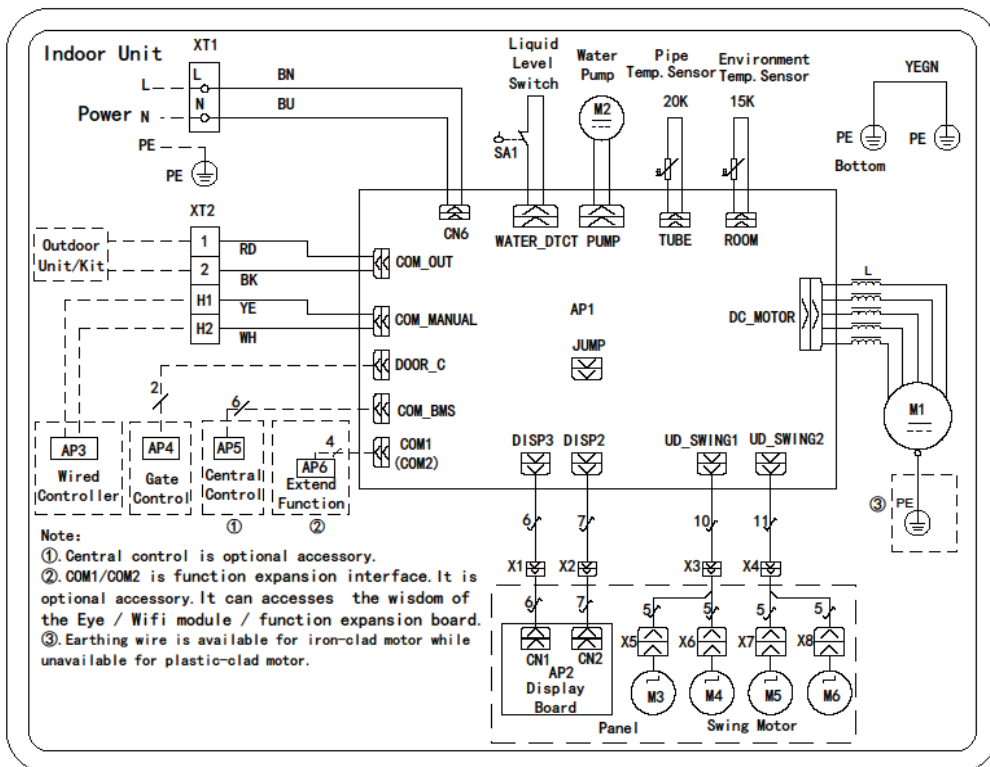


Model:GUD160W/NhA-X

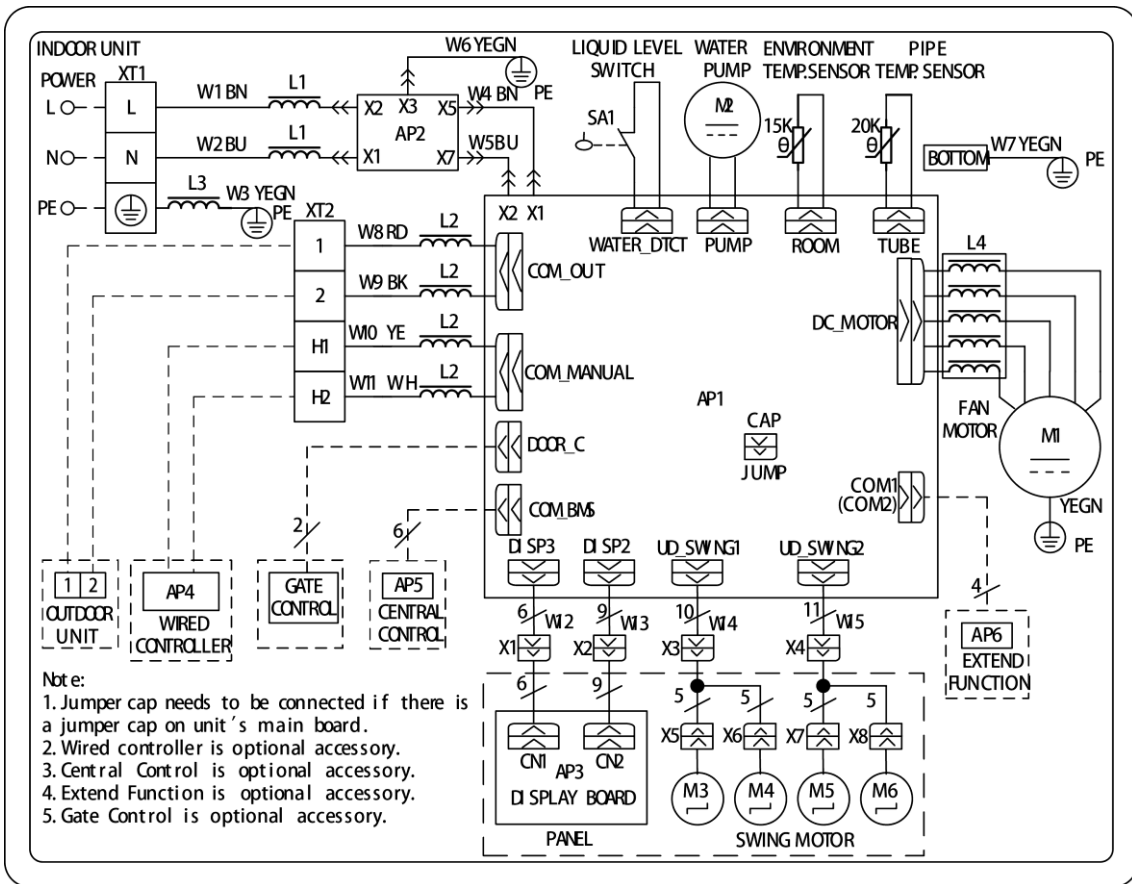


3.1.2 Wiring Diagrams of IDUs

Model: GUD35T/A-T, GUD50T/A-T

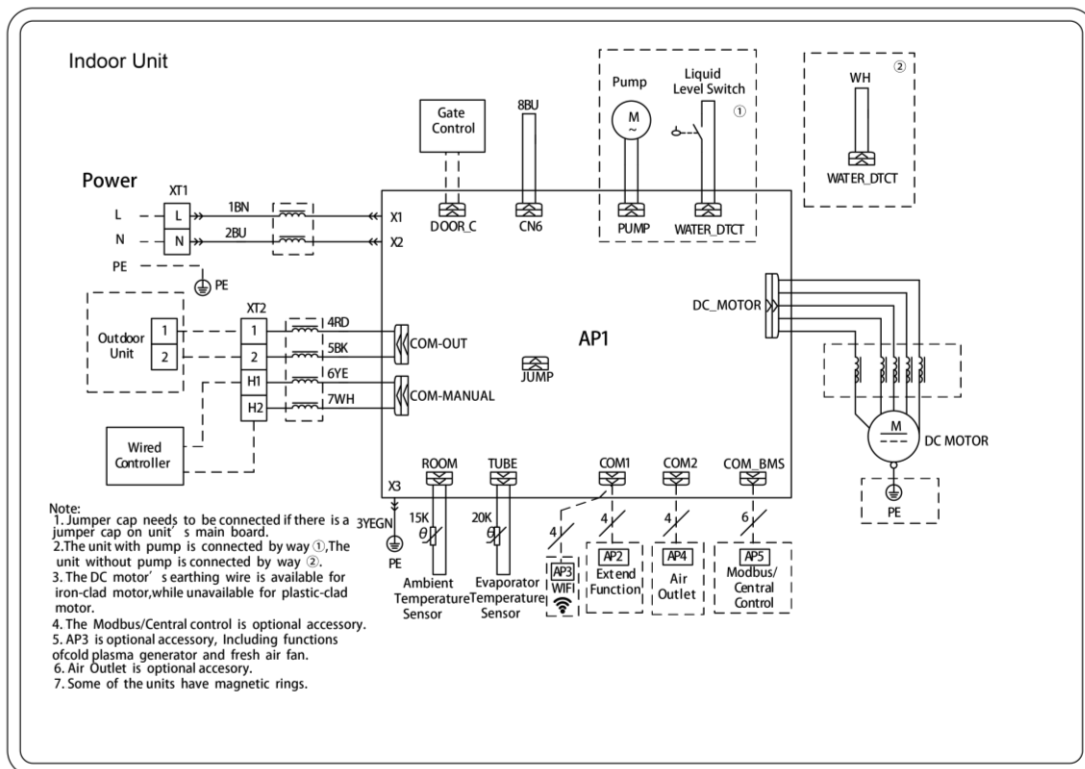


Model: GUD71T/A-T, GUD85T/A-T, GUD100T/A-T, GUD125T/A-T, GUD140T/A-T, GUD160T/A-T

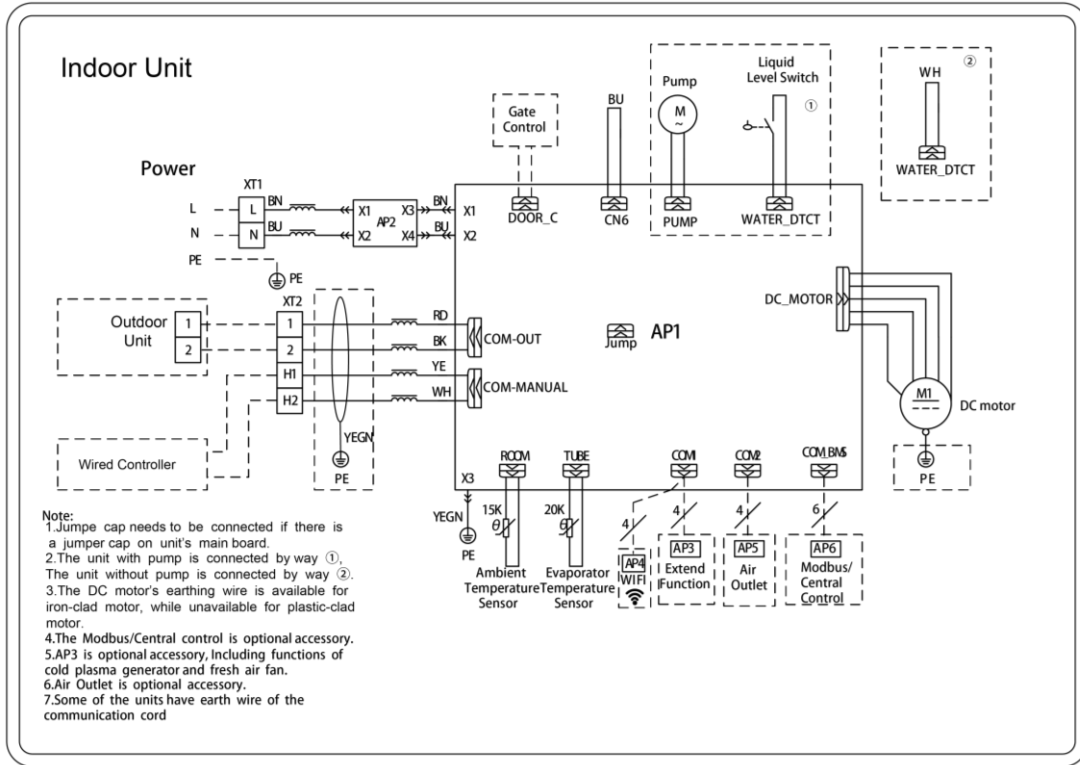


Duct Type

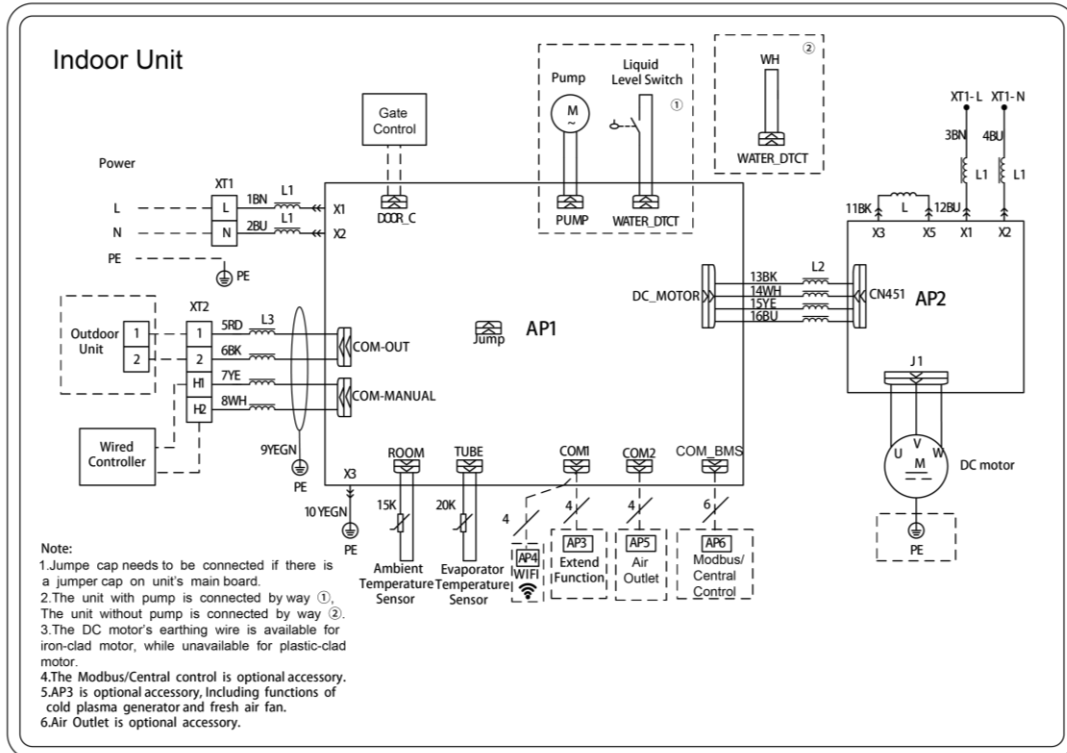
Model: GUD35P/A-T, GUD50P/A-T, GUD71P/A-T, GUD85P/A-T,
GUD35PS/A-T, GUD50PS/A-T, GUD71PS/A-T, GUD85PS/A-T



Model: GUD100PH/A-T, GUD125PH/A-T, GUD140PH/A-T
 GUD100PHS/A-T, GUD125PHS/A-T, GUD140PHS/A-T

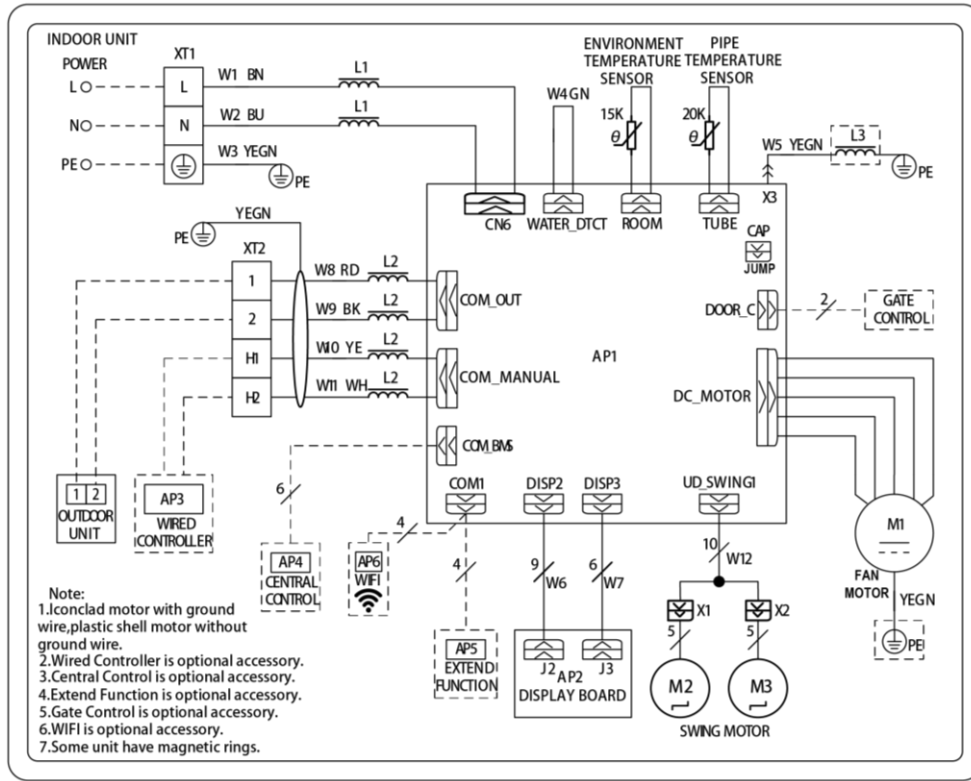


Model: GUD160PH/A-T, GUD160PHS/A-T



Floor Ceiling Type

Model: GUD35ZD/A-T, GUD50ZD/A-T, GUD71ZD/A-T, GUD85ZD/A-T, GUD100ZD/A-T, GUD125ZD/A-T, GUD140ZD/A-T, GUD160ZD/A-T



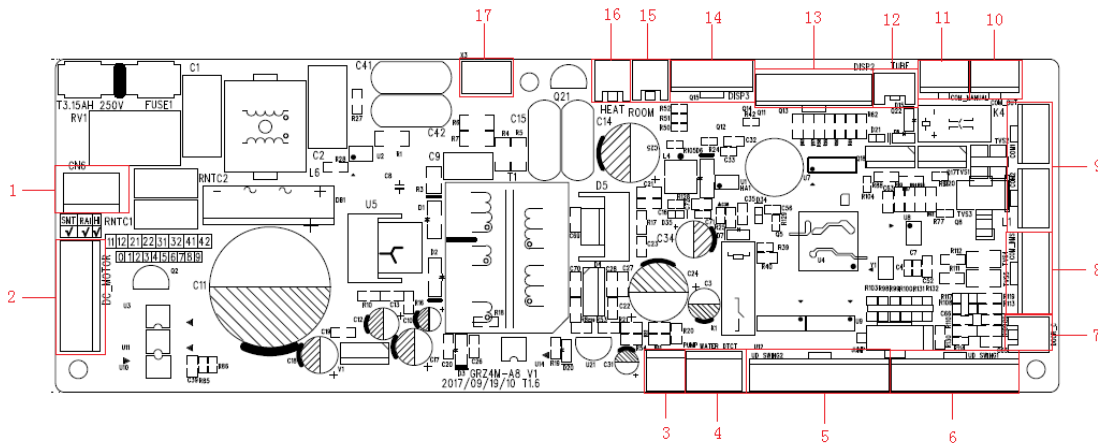
3.2 PCB Layout

3.2.1 Interface

Indoor unit:

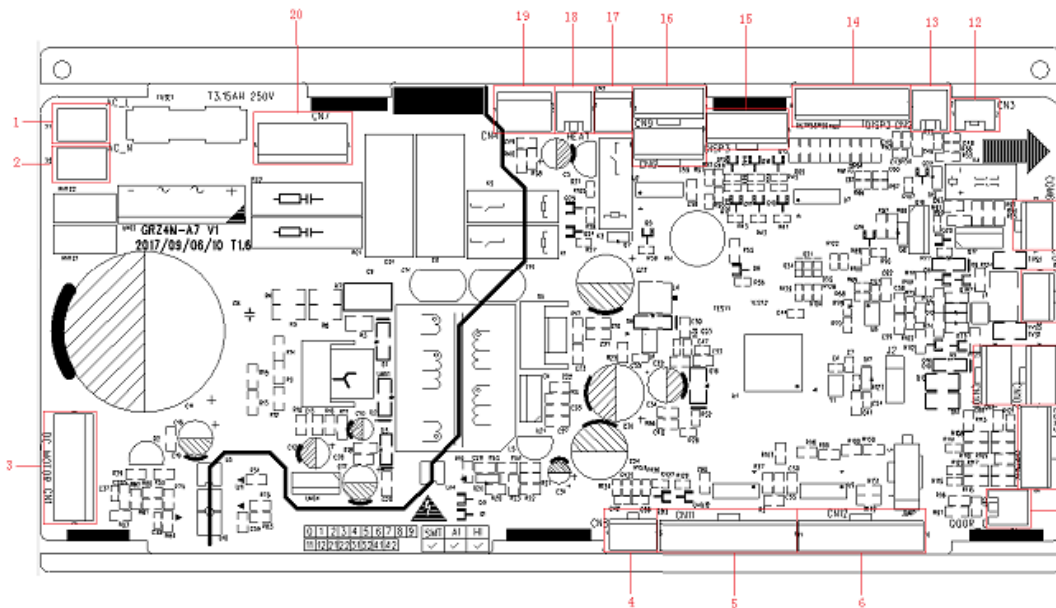
Model: GUD35T/A-T, GUD50T/A-T:

GUD35ZD/A-T, GUD50ZD/A-T, GUD71ZD/A-T, GUD85ZD/A-T, GUD100ZD/A-T, GUD125ZD/A-T, GUD140ZD/A-T, GUD160ZD/A-T;



| No. | Printing | Interface | No. | Printing | Interface |
|-----|------------|---------------------------------------|-----|------------|-------------------------------|
| 1 | CN6 | Power supply | 2 | DC_MOTOR | DC motor output |
| 3 | PUMP | DC water pump | 4 | WATER_DTCT | Water level switch |
| 5 | UD_SWING2 | Vertical swing output 2 | 6 | UD_SWING1 | Vertical swing output 1 |
| 7 | DOOR_C | Access control interface | 8 | COM_BMS | MODBUS gateway interface |
| 9 | COM1,COM2 | Accessories communication interface | 10 | COM_OUT | ODU communication interface |
| 11 | COM_MANAUL | Wired control communication interface | 12 | TUBE | Evaporator temperature sensor |
| 13 | DISP2 | Light board interface 2 | 14 | DISP3 | Light board interface 3 |
| 15 | ROOM | Ambient temperature sensor interface | 16 | HEAT | Electric heating interface |
| 17 | X3 | Ground wire | | | |

Model: GUD71T/A-T, GUD85T/A-T, GUD100T/A-T, GUD125T/A-T, GUD140T/A-T, GUD160T/A-T:



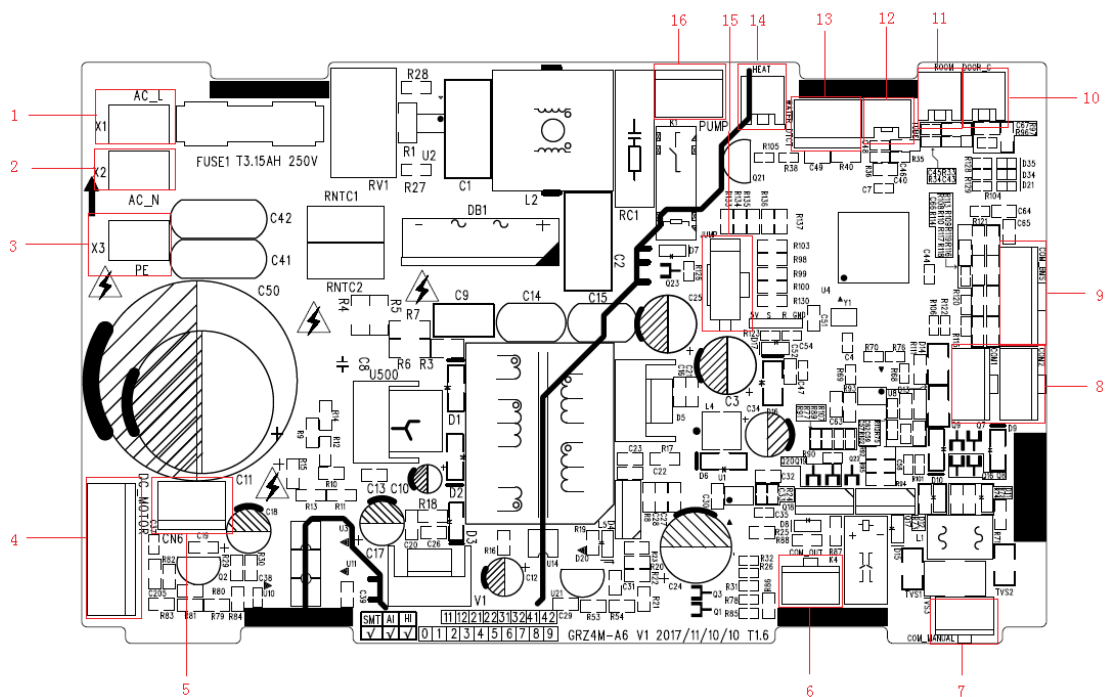
| No. | Printing | Interface | No. | Printing | Interface |
|-----|------------|---------------------------|-----|------------|--------------------------------|
| 1 | AC-L | Live wire input | 2 | AC-N | Neutral wire input |
| 3 | DC_MOTOR | DC motor output | 4 | SS | Limit switch sensing interface |
| 5 | UD_SWING2 | Vertical swing output 2 | 6 | UD_SWING1 | Vertical swing output 1 |
| 7 | DOOR_C | Access control interface | 8 | COM_BMS | MODBUS gateway interface |
| 9 | COM1, COM2 | Accessories communication | 10 | COM_MANUAL | Wired control communication |

| No. | Printing | Interface | No. | Printing | Interface |
|-----|------------|--------------------------------------|-----|--------------------------|--|
| | | interface | | | interface |
| 11 | COM_OUT | ODU communication interface | 12 | TUBE | Indoor tube temperature sensor interface |
| 13 | ROOM | Ambient temperature sensor interface | 14 | DISP2 | Light board interface 2 |
| 15 | DISP3 | Light board interface 3 | 16 | SWING_OUT1 SWING_OUT2 | Air outlet lifting output 1 Air outlet lifting output 2 |
| 17 | PUMP | DC water pump interface | 18 | HEAT | Electric heating interface |
| 19 | WATER_DTCT | Water level switch | 20 | CN7 | Air return lifting output |

Model:

GUD35P/A-T, GUD50P/A-T, GUD71P/A-T, GUD85P/A-T, GUD100PH/A-T, GUD125PH/A-T, GUD140PH/A-T, GUD160PH/A-T;

GUD35PS/A-T, GUD50PS/A-T, GUD71PS/A-T, GUD85PS/A-T, GUD100PHS/A-T, GUD125PHS/A-T, GUD140PHS/A-T, GUD160PHS/A-T

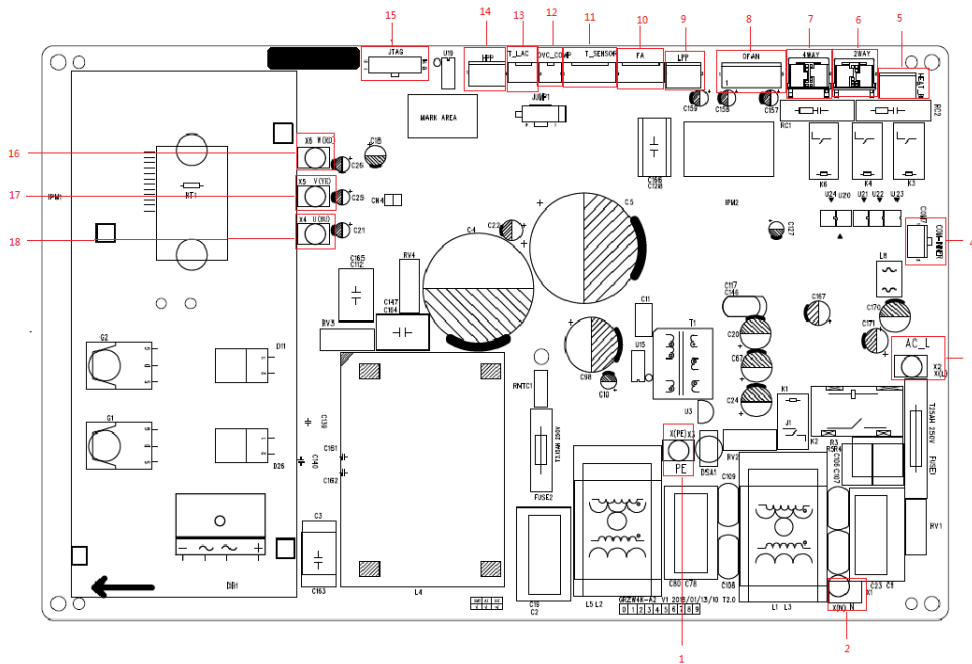


| No. | Printing | Interface | No. | Printing | Interface |
|-----|----------|----------------------|-----|----------|--------------------|
| 1 | AC-L | Live wire input | 2 | AC-N | Neutral wire input |
| 3 | PE | Ground wire | 4 | DC-MOTOR | DC motor output |
| 5 | CN6 | Motor type selection | 6 | COM-OUT | ODU communication |

| No. | Printing | Interface | No. | Printing | Interface |
|-----|------------|---|-----|------------|--|
| | | interface | | | interface |
| 7 | COM-MANUAL | Wired control communication interface | 8 | COM1, COM2 | Accessories communication interface |
| 9 | COM_BMS | MODBUS gateway interface | 10 | DOOR_C | Access control sensing interface |
| 11 | ROOM | Room ambient temperature sensor interface | 12 | TUBE | Indoor tube temperature sensor interface |
| 13 | WATER_DTCT | Water overflow detection | 14 | HEAT | Auxiliary heating interface (reserved) |
| 15 | JUMP | Jumper cap | 16 | PUMP | Water pump interface |

Model: GUD35W/NhA-T, GUD50W/NhA-T

Mainboard

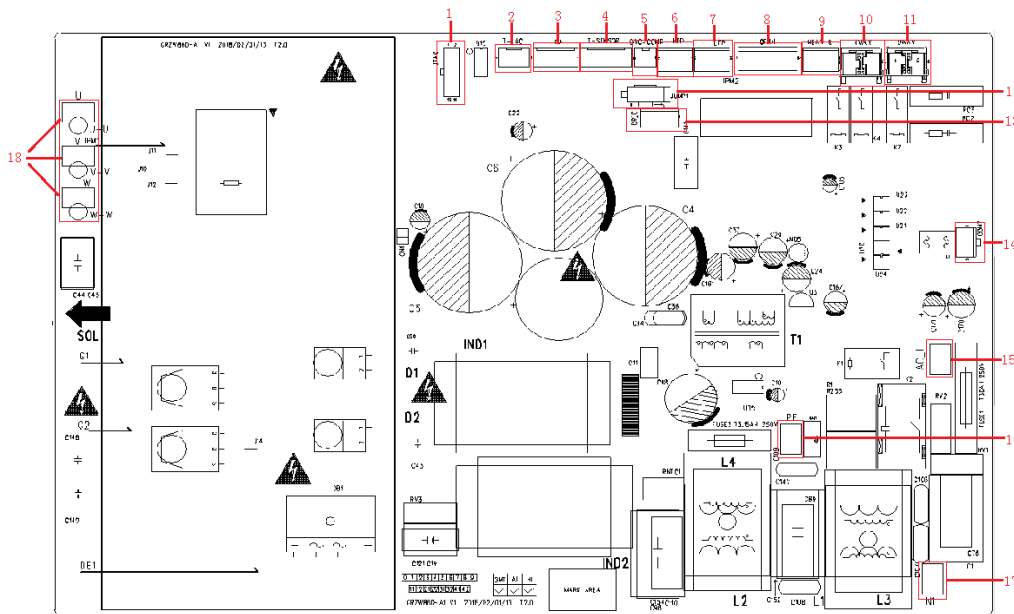


| No. | Printing | Interface | No. | Printing | Interface |
|-----|----------|--|-----|----------|---|
| 1 | X3 | Ground wire | 2 | X1 | Neutral wire |
| 3 | X2 | Live wire | 4 | COM7 | IDU communication interface |
| 5 | HEAT_B | Chassis electric heating | 6 | 2WAY | 2-way valve |
| 7 | 4WAY | 4-way valve | 8 | OFAN | External drive DC fan |
| 9 | LPP | System low pressure protection interface | 10 | FA | Solenoid expansion valve |
| 11 | T_SENSOR | Temperature sensor group | 12 | OVC_COMP | Compressor overload detection |
| 13 | T_LAC | Low temperature cooling temperature sensor | 14 | HPP | System high pressure protection interface |

| No. | Printing | Interface | No. | Printing | Interface |
|-----|----------|-----------------------------|-----|----------|-----------------------------|
| 15 | JTAG | Programming | 16 | X6 | Inverter compressor W phase |
| 17 | X5 | Inverter compressor V phase | 18 | X4 | Inverter compressor U phase |

Model: GUD71W/NhA-T, GUD85W/NhA-T

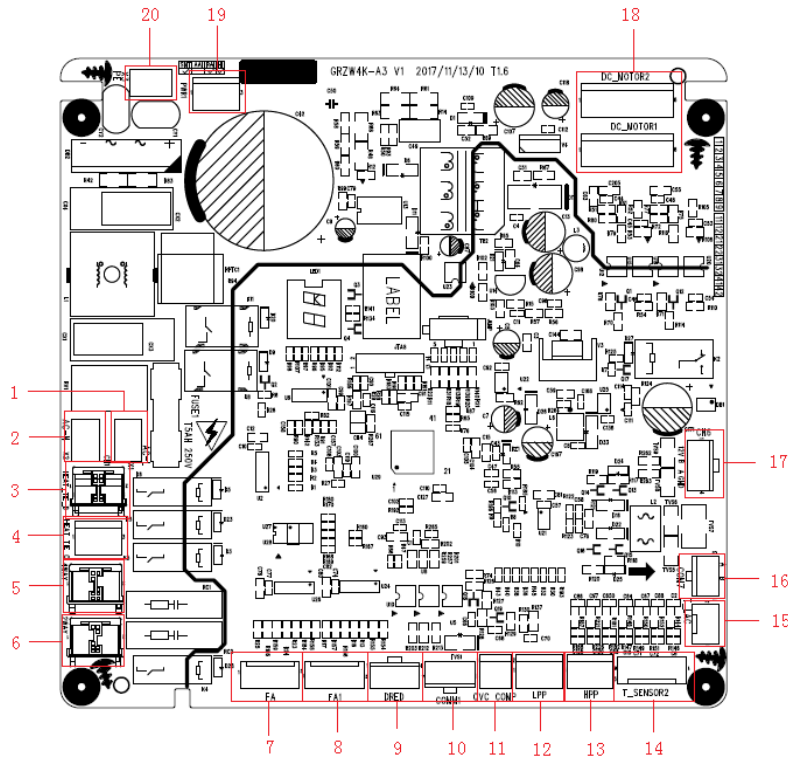
Mainboard



| No. | Printing | Interface | No. | Printing | Interface |
|-----|----------|---|-----|----------|-------------------------------------|
| 1 | JTAG | Programming interface | 10 | 2WAY | 2-way valve |
| 2 | T-LAC | Low temperature cooling temperature sensing interface | 11 | HEAT-B | Chassis electric heating |
| 3 | FA | Electronic expansion valve | 12 | JUMP1 | Jumper cap |
| 4 | T-SENSOR | Temperature sensor | 13 | DRED | DRED |
| 5 | OVC-COMP | Compressor overload detection | 14 | COM7 | IDU and ODU communication interface |
| 6 | HPP | High pressure switch | 15 | AC-L | AC input live wire |
| 7 | LPP | Low pressure switch | 16 | N1 | AC input neutral wire |
| 8 | OFAN | DC fan interface | 17 | PE | AC input ground wire |
| 9 | 4WAY | 4-way valve | 18 | U/V/W | Compressor interface |

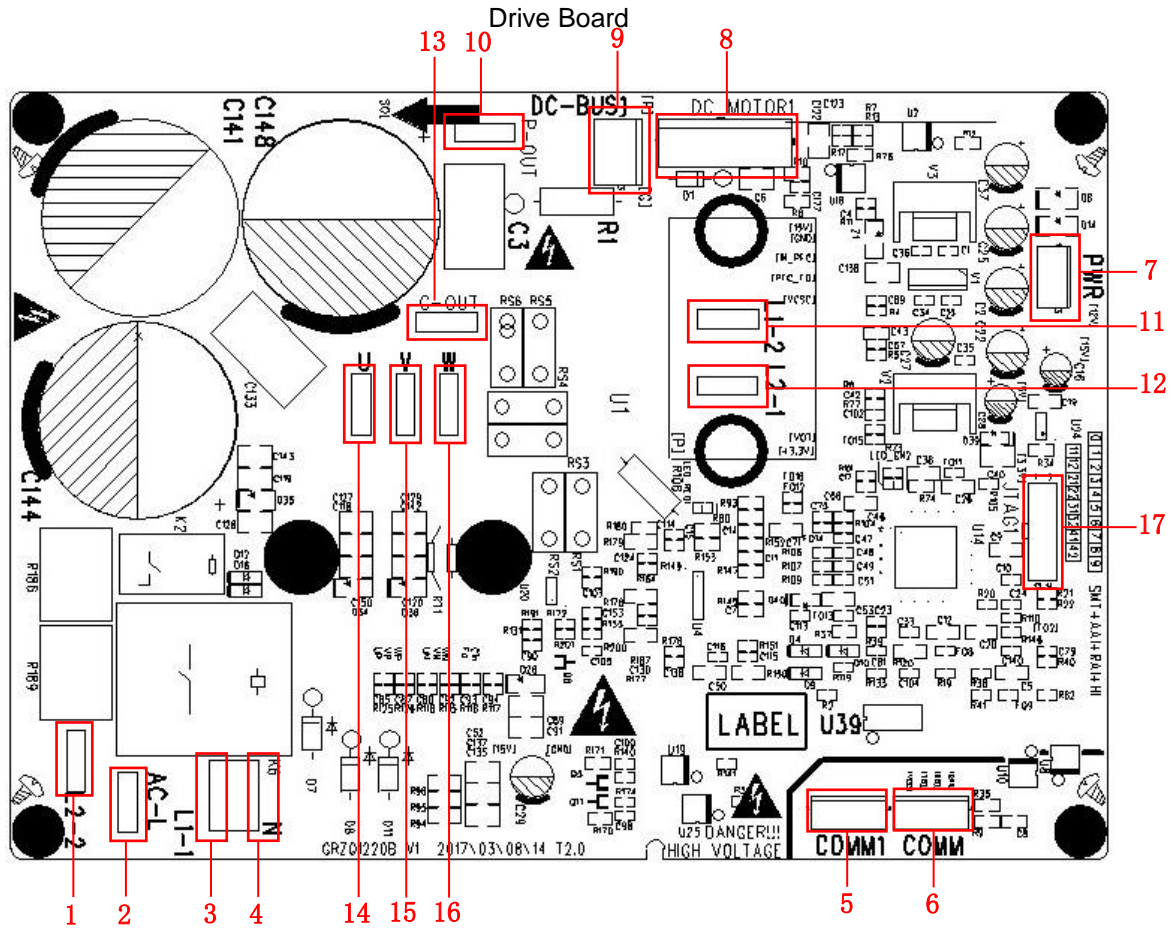
Model: GUD100W/NhA-T, GUD125W/NhA-T, GUD140W/NhA-T, GUD100W/NhA-X, GUD125W/NhA-X, GUD140W/NhA-X, GUD160W/NhA-X:

Mainboard

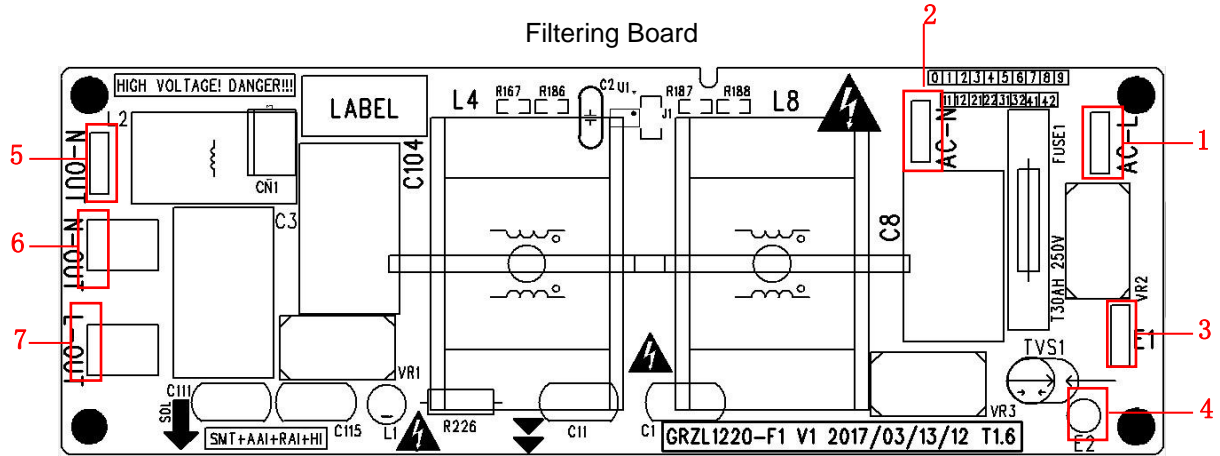


| No. | Printing | Interface | No. | Printing | Interface |
|-----|------------|---|-----|------------------------|--|
| 1 | AC-L | Live wire input | 2 | AC-N | Neutral wire input |
| 3 | HEAT_TIE_B | Chassis electric heating belt | 4 | HEAT_TIE_C | Compressor electric heating belt |
| 5 | 4WAY | 4-way valve | 6 | 2WAY | 2-way valve |
| 7 | FA | Electronic expansion valve interface | 8 | FA1 | Electronic expansion valve 1 interface Refrigerant heat dissipation |
| 9 | DRED | DRED communication interface | 10 | COMM1 | Drive communication interface |
| 11 | OVC_COMP | Compressor overload protection interface | 12 | LPP | System low pressure protection interface |
| 13 | HPP | System high pressure protection interface | 14 | T_SENSOR2 | 2. Outdoor tube temperature sensor interface 4. Outdoor ambient temperature sensor interface 6. Discharge temperature sensor interface |
| 15 | T_LAC | Low temperature cooling temperature sensing | 16 | COM7 | Unit communication interface |
| 17 | CN6 | GPRS communication interface | 18 | DC_MOTOR1 DC_MOTOR2 | DC motor output |
| 19 | PWR1 | 310V DC power supply interface | 20 | PE | Ground wire interface |

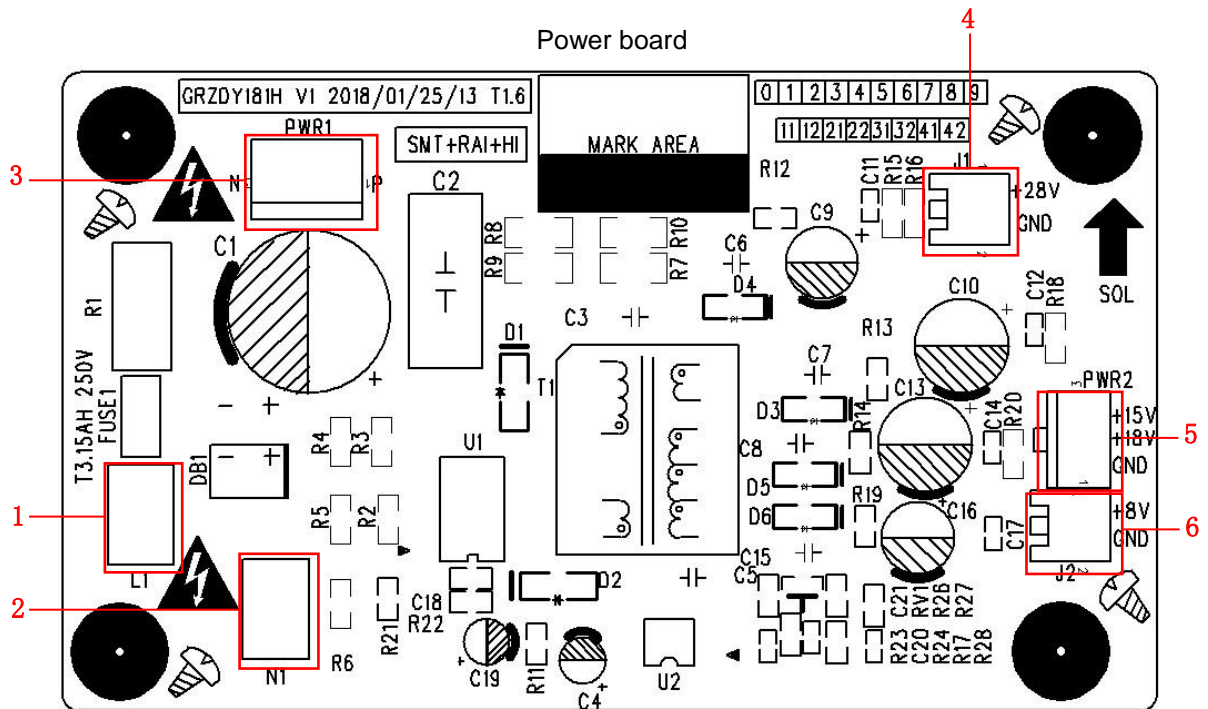
Model: GUD100W/NhA-T



| No. | Printing | Interface | No. | Printing | Interface |
|-----|-----------|---|-----|----------|-------------------------------------|
| 1 | L2-2 | PFC induction wire (blue) | 10 | P-OUT | Reserved |
| 2 | AC-L | Live wire | 11 | L1-2 | PFC induction wire (white) |
| 3 | L1-1 | PFC induction wire (brown) | 12 | L2-1 | PFC induction wire (yellow) |
| 4 | N | Neutral wire | 13 | G-OUT | Reserved |
| 5 | COMM1 | Communication terminal, same with COMM | 14 | U | Compressor U phase terminal |
| 6 | COMM | Communication terminal, same with COMM1 | 15 | V | Compressor V phase terminal |
| 7 | PWR | Drive power supply terminal | 16 | W | Compressor W phase terminal |
| 8 | DC-MOTOR1 | DC fan terminal | 17 | JTAG1 | Programming interface (for testing) |
| 9 | DC-BUS1 | Power discharge terminal (for testing) | | | |



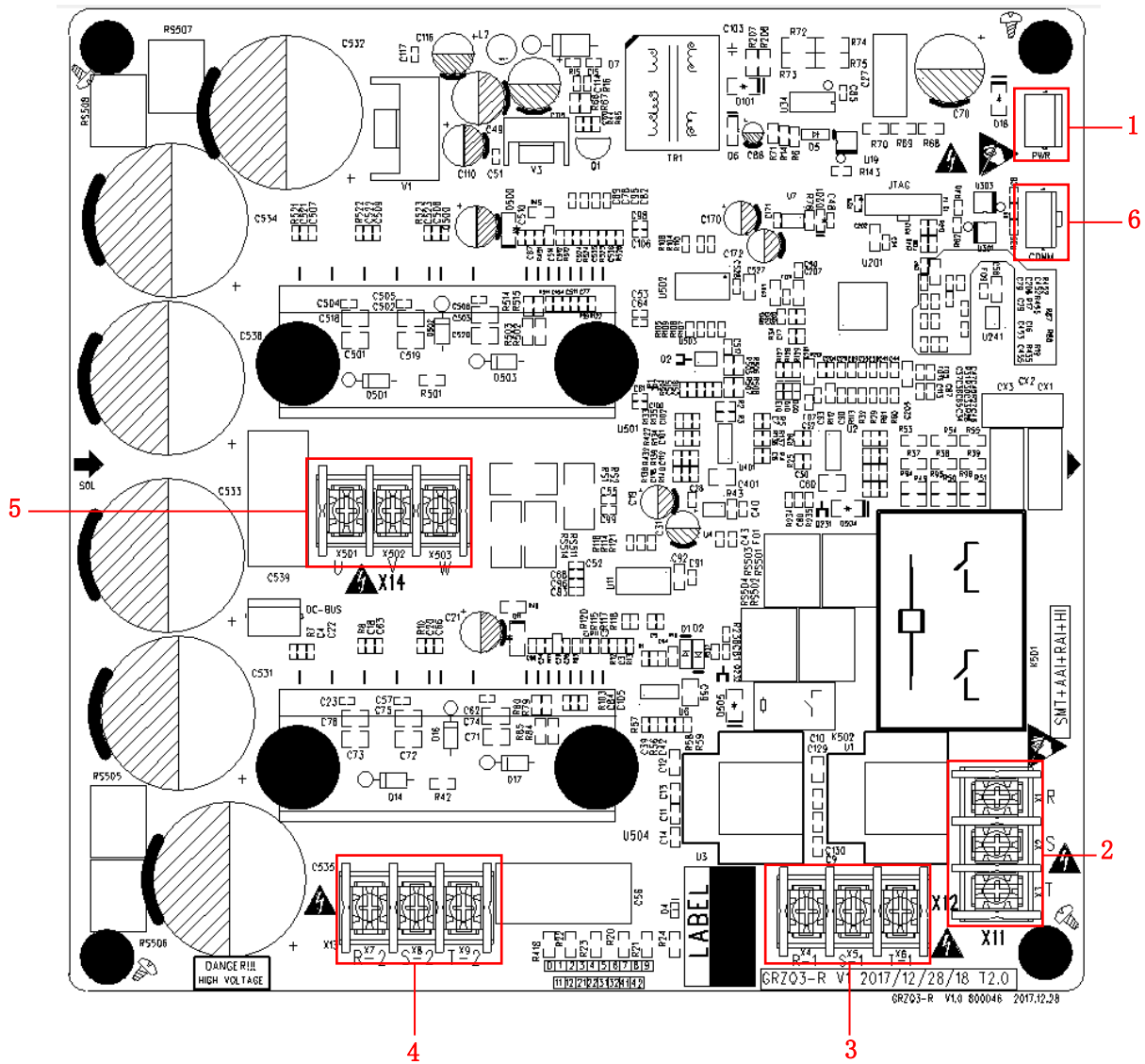
| No. | Printing | Interface | No. | Printing | Interface |
|-----|----------|---|-----|----------|---|
| 1 | AC-L | Power input live wire terminal | 5 | N-OUT | Power output neutral wire terminal (reserved) |
| 2 | AC-N | Power input neutral wire terminal | 6 | N-OUT | Power output neutral wire terminal |
| 3 | E1 | Filtering board ground wire terminal | 7 | L-OUT | Power output live wire terminal |
| 4 | E2 | Filtering board grounding hole (reserved) | | | |



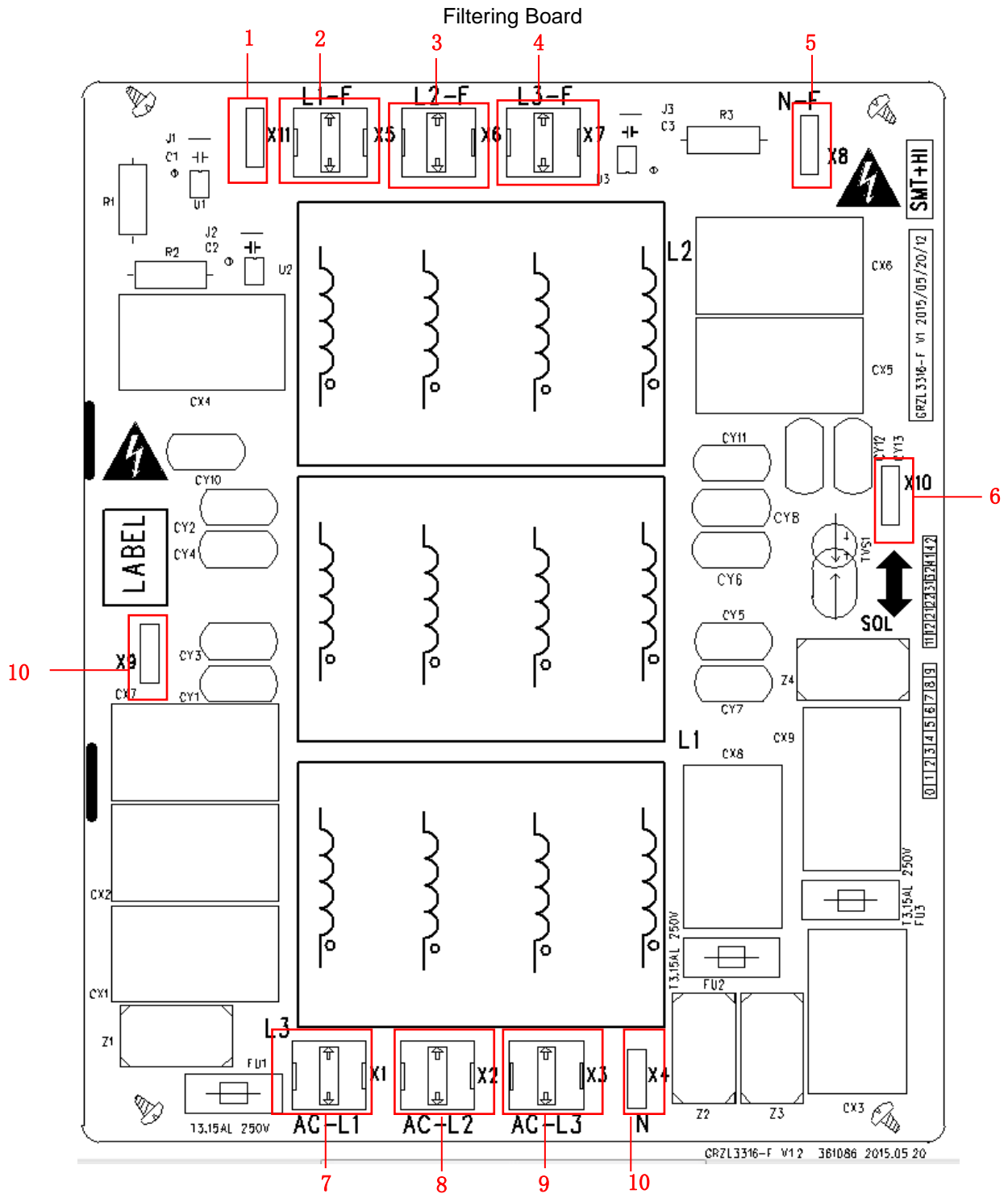
| No. | Printing | Interface | No. | Printing | Interface |
|-----|----------|--|-----|----------|-----------------------------|
| 1 | L1 | Power live wire terminal (reserved) | 4 | J1 | +28V terminal (reserved) |
| 2 | N1 | Power neutral wire terminal (reserved) | 5 | PWR2 | Drive power supply terminal |
| 3 | PWR1 | DC busbar terminal | 6 | J2 | +8V terminal (reserved) |

Model: GUD100W/NhA-X, GUD125W/NhA-X, GUD140W/NhA-X, GUD160W/NhA-X

Drive Board



| No. | Printing | Interface |
|-----|----------------|--|
| 1 | PWR | Power supply busbar input terminal |
| 2 | X1/ X2/X3 | Mainboard power supply 3-phase input terminal |
| 3 | X4/ X5/X6 | Electric reactor 3-phase connection terminal (input terminal) |
| 4 | X7/ X8/X9 | Electric reactor 3-phase connection terminal (output terminal) |
| 5 | X501/X502/X503 | Compressor 3-phase connection terminal |
| 6 | COMM | Communication interface |

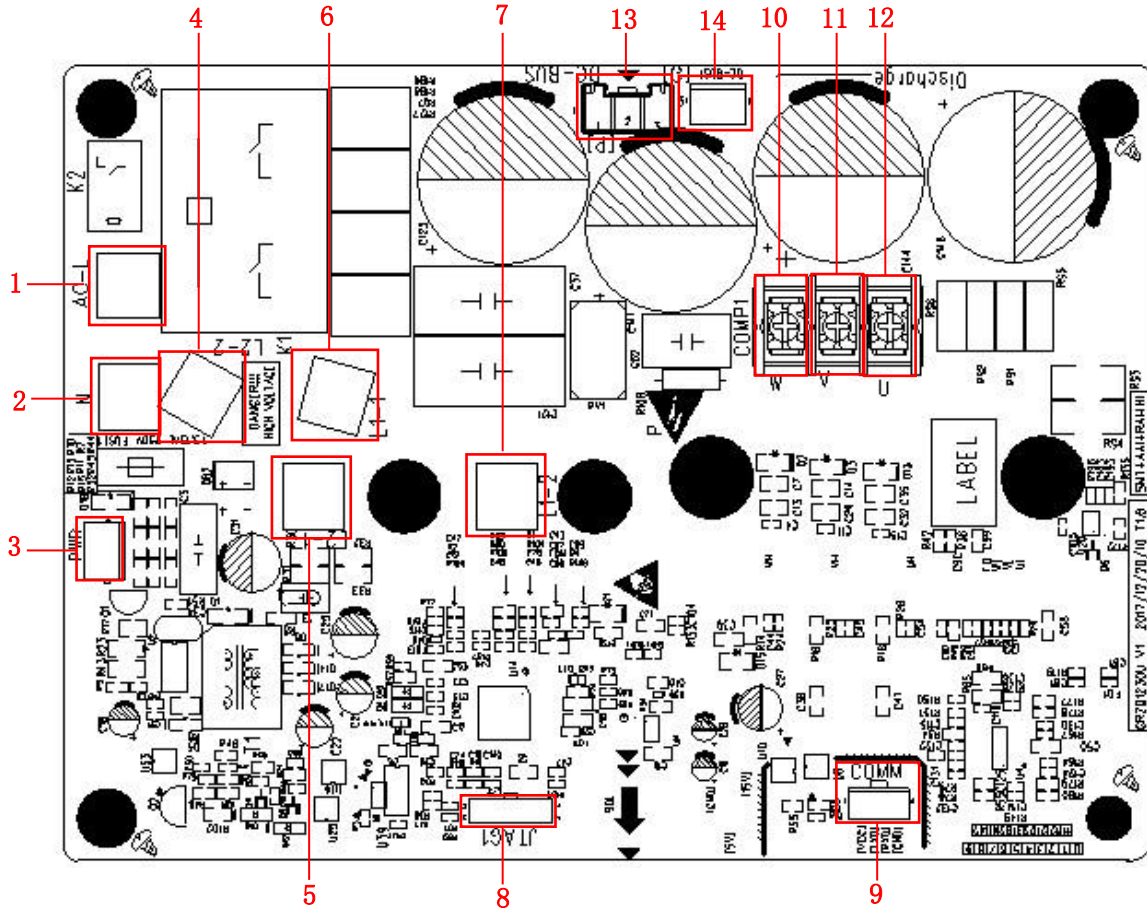


| No. | Printing | Interface | No. | Printing | Interface |
|-----|----------|---|-----|----------|-----------------------------|
| 1 | X11 | Power output live wire AC-L1 (connect to master control board AC-L) | 7 | X3 | Unit power input wire AC-L3 |
| 2 | X5 | Power output wire L1-F (connect to drive board L1-F) | 8 | X2 | Unit power input wire AC-L2 |
| 3 | X6 | Power output wire L2-F (connect to drive board L2-F) | 9 | X1 | Unit power input wire AC-L1 |
| 4 | X7 | Power output wire L3-F (connect to drive board L3-F) | 10 | X9 | Ground wire |
| 5 | X8 | Power output wire N-F (connect to | 11 | X4 | Unit power input |

| No. | Printing | Interface | No. | Printing | Interface |
|-----|----------|-------------------------|-----|----------|----------------|
| | | master control board N) | | | neutral wire N |
| 6 | X10 | Ground wire E, reserved | | | |

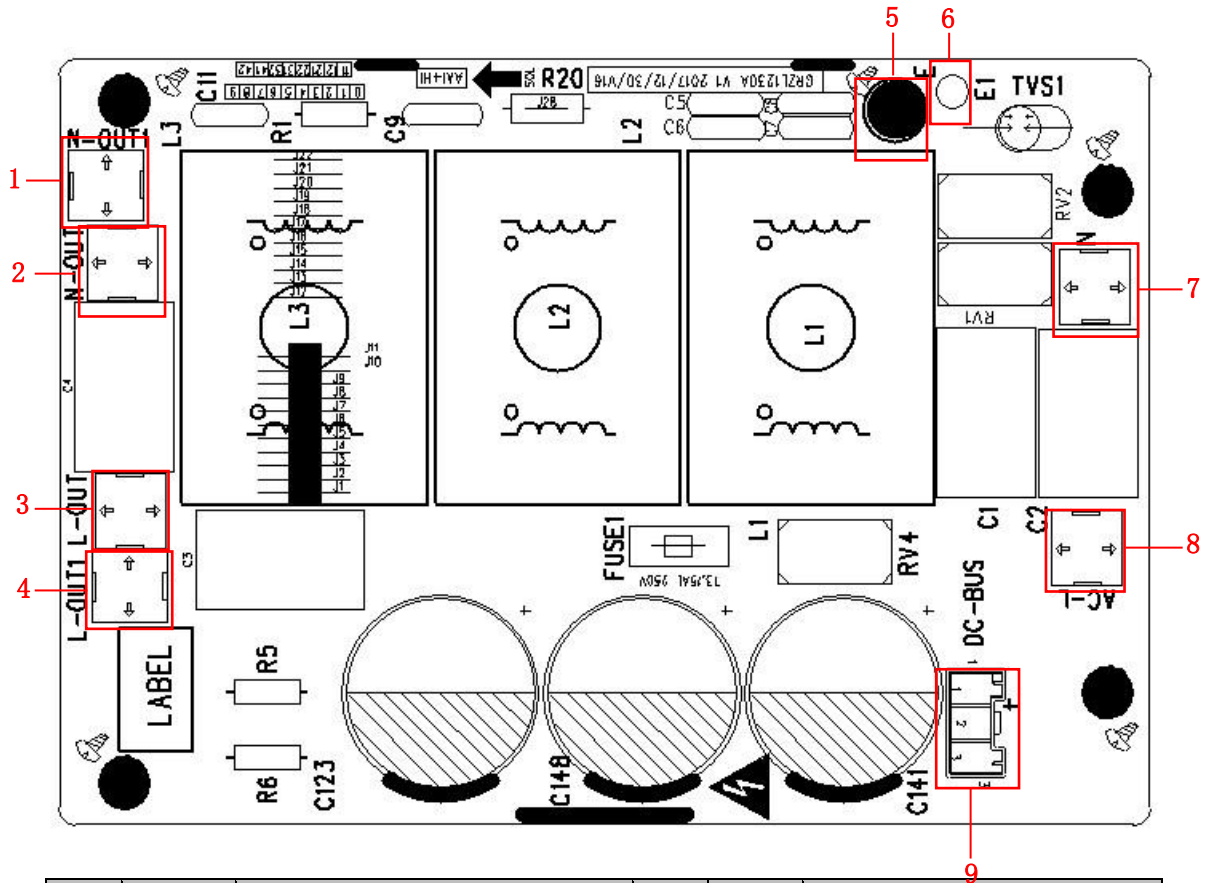
Model: GUD125W/NhA-T, GUD140W/NhA-T

Drive Board:



| No. | Printing | Interface | No. | Printing | Interface |
|-----|----------|------------------------------------|-----|----------|--|
| 1 | AC-L | Live wire | 8 | JTAG1 | Programming interface (for testing) |
| 2 | N | Neutral wire | 9 | COMM | Communication interface |
| 3 | PWR | Drive power supply busbar terminal | 10 | W | Compressor W phase |
| 4 | L2-2 | PFC induction wire (white) | 11 | V | Compressor V phase |
| 5 | L2-1 | PFC induction wire (white) | 12 | U | Compressor U phase |
| 6 | L1-1 | PFC induction wire (white) | 13 | DC-BUS | DC busbar terminal |
| 7 | L1-2 | PFC induction wire (white) | 14 | DC-BUS1 | Power discharge terminal (for testing) |

Filtering Board



| No. | Printing | Interface | No. | Printing | Interface |
|-----|----------|--|-----|----------|---|
| 1 | N-OUT1 | Power output neutral wire terminal (for U-MATCH) | 6 | E1 | Filtering board grounding hole (reserved) |
| 2 | N-OUT | Power output neutral wire terminal (reserved for other models) | 7 | N | Power input neutral wire terminal |
| 3 | L-OUT | Power output live wire terminal (reserved for other models) | 8 | AC-L | Power input live wire terminal |
| 4 | L-OUT1 | Power output live wire terminal (for U-MATCH) | 9 | DC-BUS | DC busbar terminal |
| 5 | E | Filtering board grounding hole | | | |

3.2.2 IPM,PFC Testing Method

3.2.2.1 Method of Testing IPM Module

(1) Preparation before test: prepare a universal meter and turn to its diode option, and then remove the wires U, V, W of the compressor after it is powered off for one minute.

(2) Testing Steps

Step 1: put the black probe on the place P and the red one on the wiring terminal U, V, W respectively as shown in the following figure to measure the voltage between UP, VP and WP.

Step 2: put the red probe on the place N and the black one on the wiring terminal U, V, W respectively as shown in the following figure to measure the voltage between NU, NV and NW.

(3) If the measured voltages between UP, VP, WP, NU, NV, NW are all among 0.3V-0.7V, then it indicates the IPM module is normal; If any measured value is 0, it indicates the IPM is damaged.

3.2.2.2 Method of Testing PFC Module Short Circuit: (only for GUD100W/NhA-T, GUD125W/NhA-T, GUD140W/NhA-T)

(1) Preparation before test: prepare a universal meter and turn to its diode option, and then remove the wires L1-2, L2-1 after it is powered off for one minute.

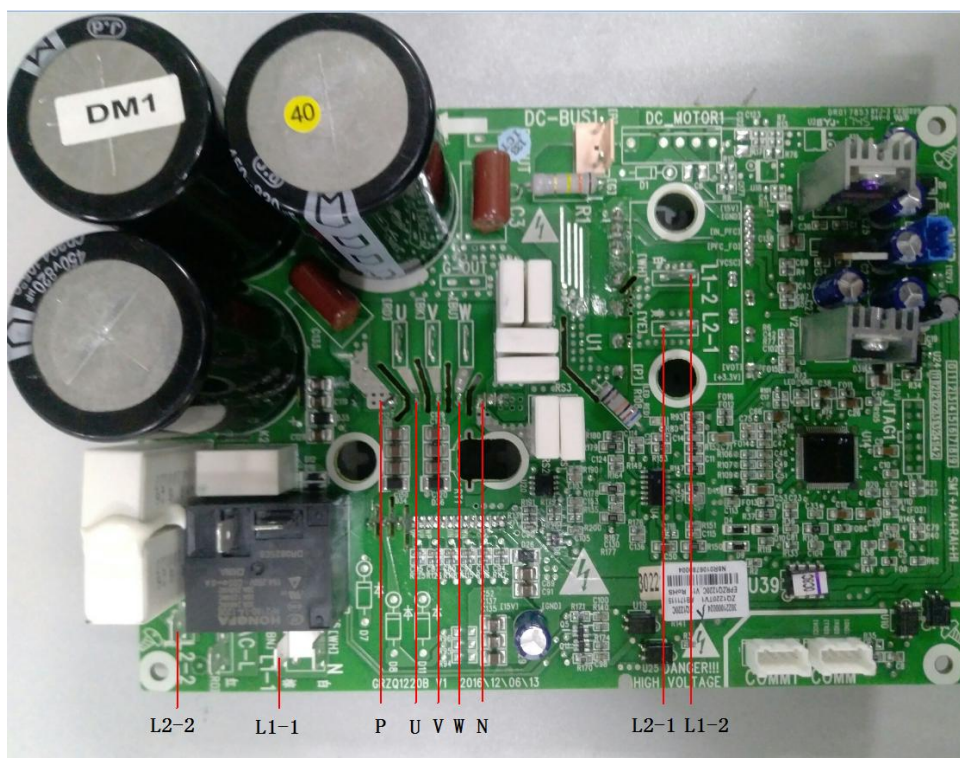
(2) Testing Steps:

Step 1: put the black probe on the place P and the red one on the wiring terminal L1-2, L2-1 respectively as shown in the following figure to measure the voltage between L1-2P and L2-1 P.

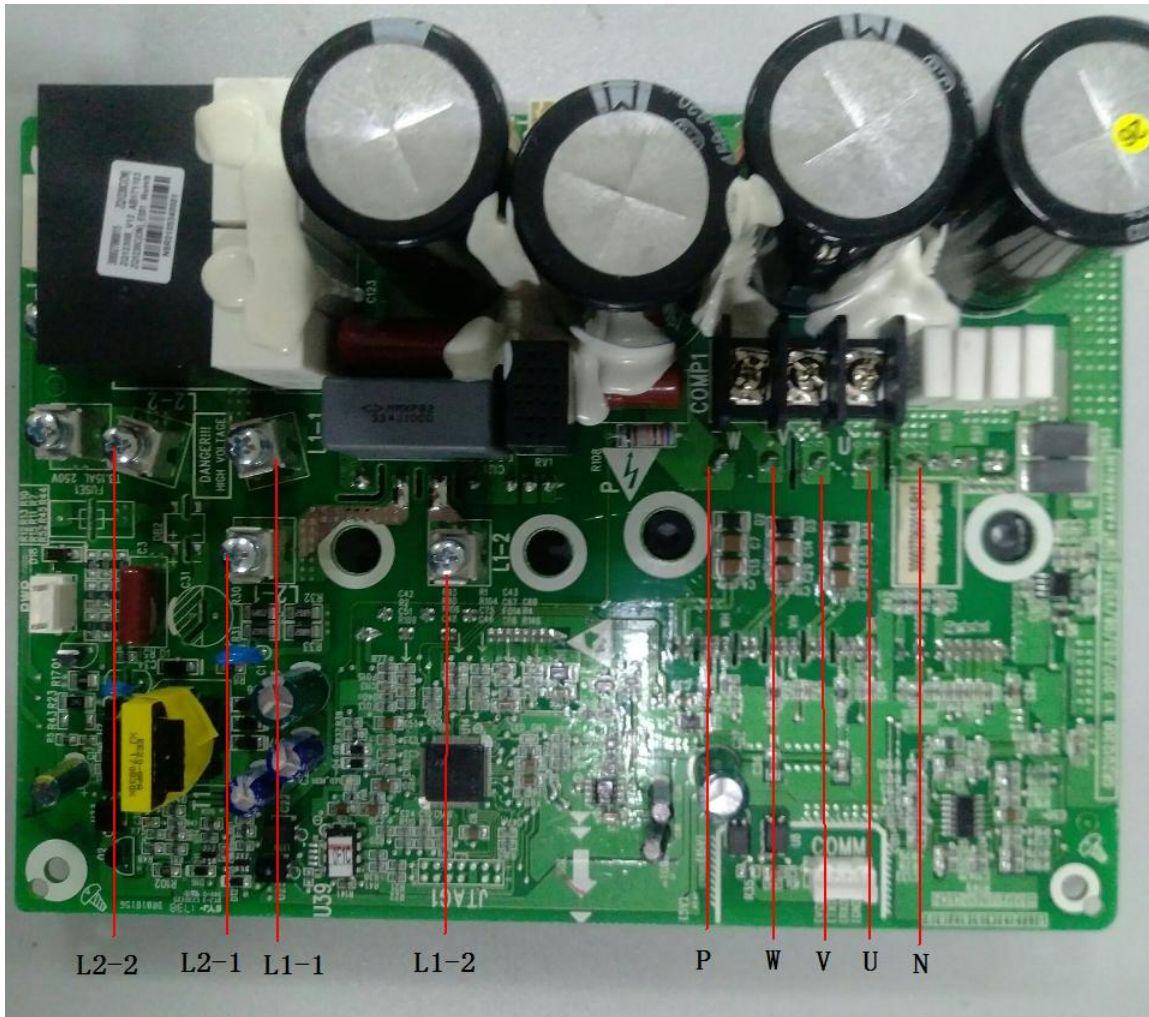
Step 2: put the red probe on the place N and the black one on the wiring terminal L1-2, L2-1 respectively as shown in the following figure to measure the voltage between N L1-2 and NL2-1.

(3) If the measured voltages between L1-2P ,L2-1 P, N L1-2 , NL2-1 are all among 0.3V-0.7V, then it indicates the PFC module is normal; If any measured value is 0, it indicates the PFC is damaged.

◆ GUD100W/NhA-T



◆ GUD125W/NhA-T , GUD140W/NhA-T

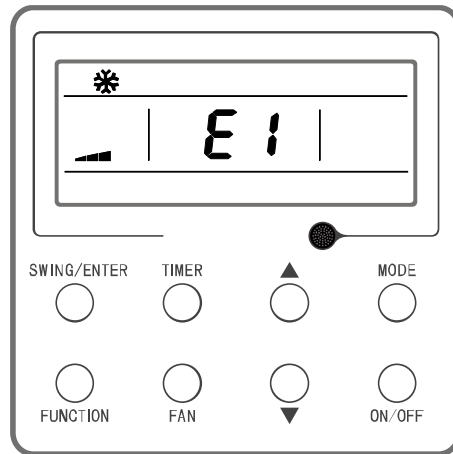


3.3 Error Code

| Number | Error code | Error |
|--------|------------|---|
| 1 | E1 | Compressor high pressure protection |
| 2 | E2 | Indoor anti-freeze protection |
| 3 | E3 | Compressor low pressure protection, refrigerant lack protection and refrigerant collecting mode |
| 4 | E4 | Compressor air discharge high-temperature protection |
| 5 | E6 | Communication error |
| 6 | E8 | Indoor fan error |
| 7 | E9 | Water-full protection |
| 8 | F0 | Indoor ambient temperature sensor error |
| 9 | F1 | Evaporator temperature sensor error |
| 10 | F2 | Condenser temperature sensor error |
| 11 | F3 | Outdoor ambient temperature sensor error |
| 12 | F4 | Discharge temperature sensor error |

| Number | Error code | Error |
|--------|------------|--|
| 13 | F5 | Wired control temperature sensor error |
| 14 | C5 | IDU jumper cap error |
| 15 | EE | IDU or ODU memory chip error |
| 16 | PF | Electric box sensor error |
| 17 | H3 | Compressor overload protection |
| 18 | H4 | Overload |
| 19 | H5 | IPM protection |
| 20 | H6 | DC fan error |
| 21 | H7 | Driver out-of-step protection |
| 22 | HC | Pfc protection |
| 23 | Lc | Startup failure |
| 24 | Ld | Compressor phase-sequence protection |
| 25 | LF | Power protection |
| 26 | Lp | IDU and ODU unmatched |
| 27 | U7 | 4-way valve switch-over error |
| 28 | P0 | Driver reset protection |
| 29 | P5 | Over-current protection |
| 30 | P6 | Master control and driver communication error |
| 31 | P7 | Driver module sensor error |
| 32 | P8 | Driver module high temperature protection |
| 33 | P9 | Zero-crossing protection |
| 34 | PA | AC current protection |
| 35 | Pc | Driver current error |
| 36 | Pd | Sensor connection protection |
| 37 | PE | Temperature drift protection |
| 38 | PL | Bus low-voltage protection |
| 39 | PH | Bus high-voltage protection |
| 40 | PU | Charge loop error |
| 41 | PP | Input voltage error |
| 42 | ee | Drive memory chip error |
| 43 | C4 | ODU jumper cap error |
| 44 | dJ | Phase-loss and anti-phase protection |
| 45 | oE | ODU error, for specific error please see the status of ODU indicator |
| 46 | EL | Emergency stop (fire alarm) |

If malfunction occurs during operation, LCD temperature display zone will show the failure information. If several malfunctions occur at the same time, their corresponding error codes will be shown in turn. When malfunction occurs, please shut off the unit and send for professional personnel to repair. For example, E1 (as shown below) indicates high pressure protection.



3.4 Troubleshooting

3.4.1 “E1” Compressor High Pressure Protection

Error display: ODU mainboard, IDU wired control and IDU receiver light board will display

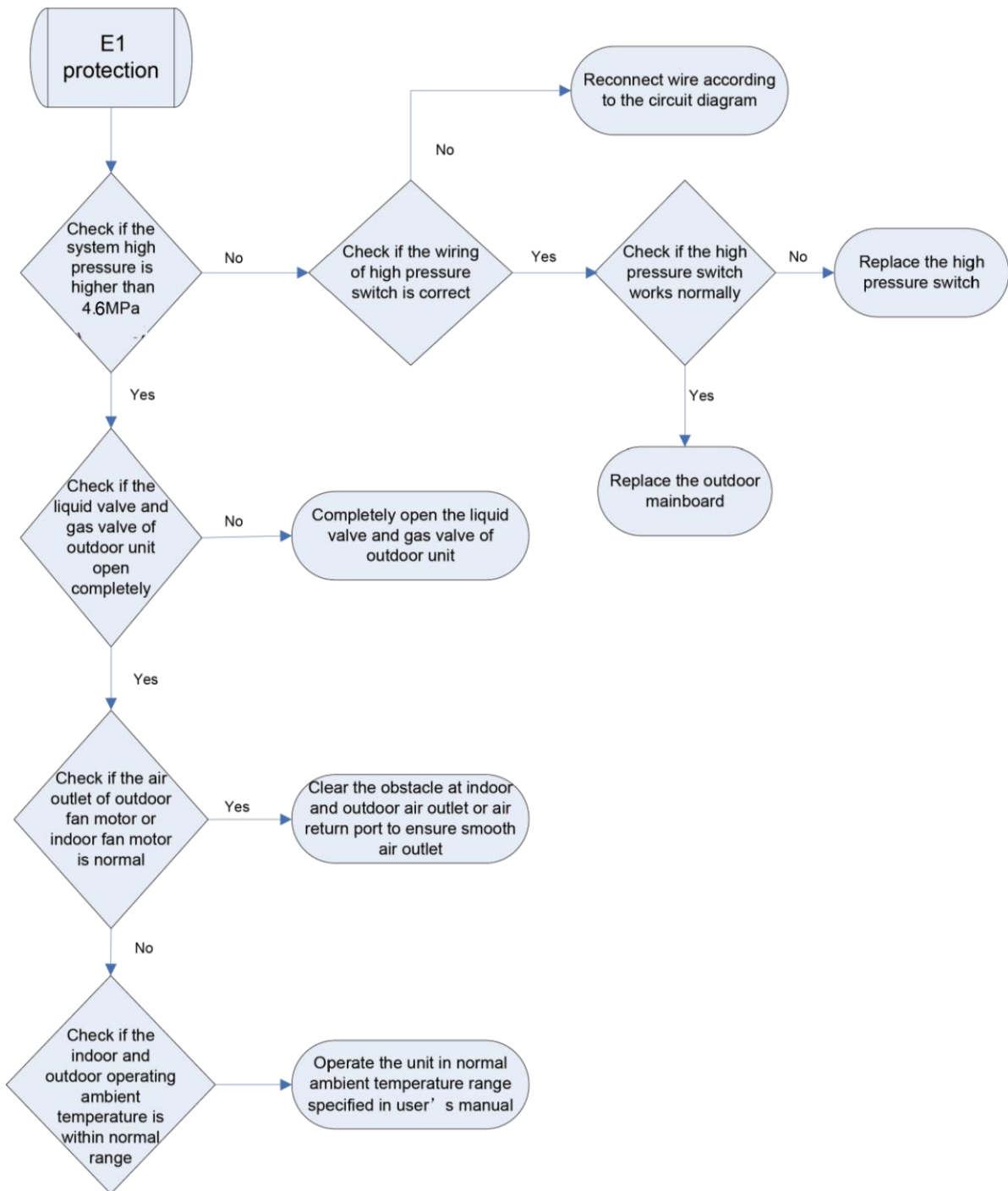
Error judgment condition and method:

It is judged through the action of high pressure switch. If the high pressure switch is cut off, it is judged that high pressure is too high and the system stops operation for protection.

Possible reason:

- Cut-off valve of ODU is not fully opened;
- High pressure switch is abnormal;
- Outdoor or indoor fan is not working properly;
- IDU filter or air duct is blocked (heating mode);
- Ambient temperature is too high;
- Refrigerant charging amount is too much;
- System pipeline is blocked

Troubleshooting:



3.4.2 “E2” Indoor Anti-freezing Protection

Error display: IDU wired control and IDU receiver light board will display

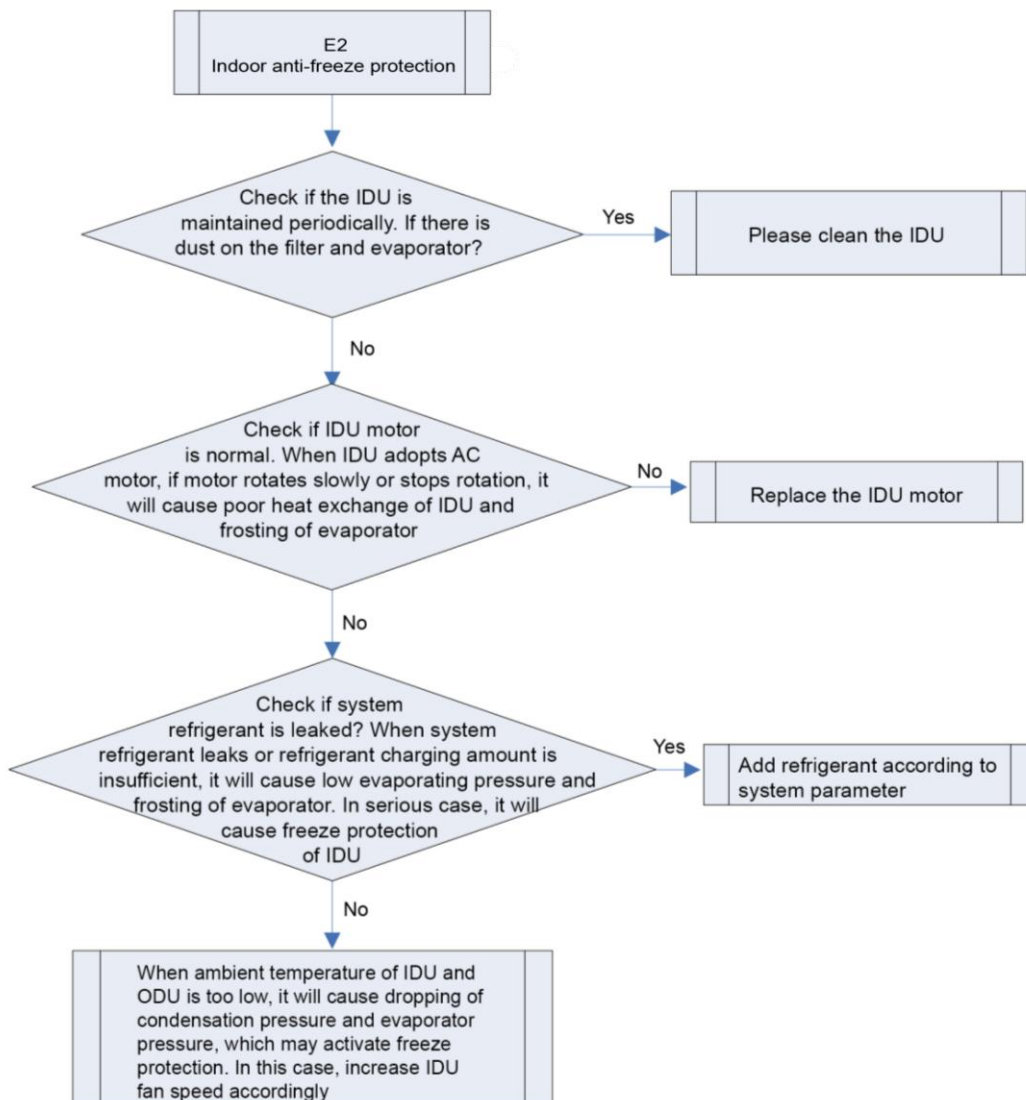
Error judgment condition and method:

Check IDU pipe temperature. When pipe temperature is too low, freeze protection will be activated to prevent freezing damage of evaporator.

Possible reason:

- IDU filter and evaporator are dirty
- IDU motor is blocked
- Refrigerant amount is insufficient
- Ambient temperature of IDU and ODU is too low

Troubleshooting:



3.4.3 “E3” Compressor Low-pressure Protection, Refrigerant Shortage Protection, Refrigerant Recovery Mode

Error display: ODU mainboard, IDU wired control and IDU receiver light board will display

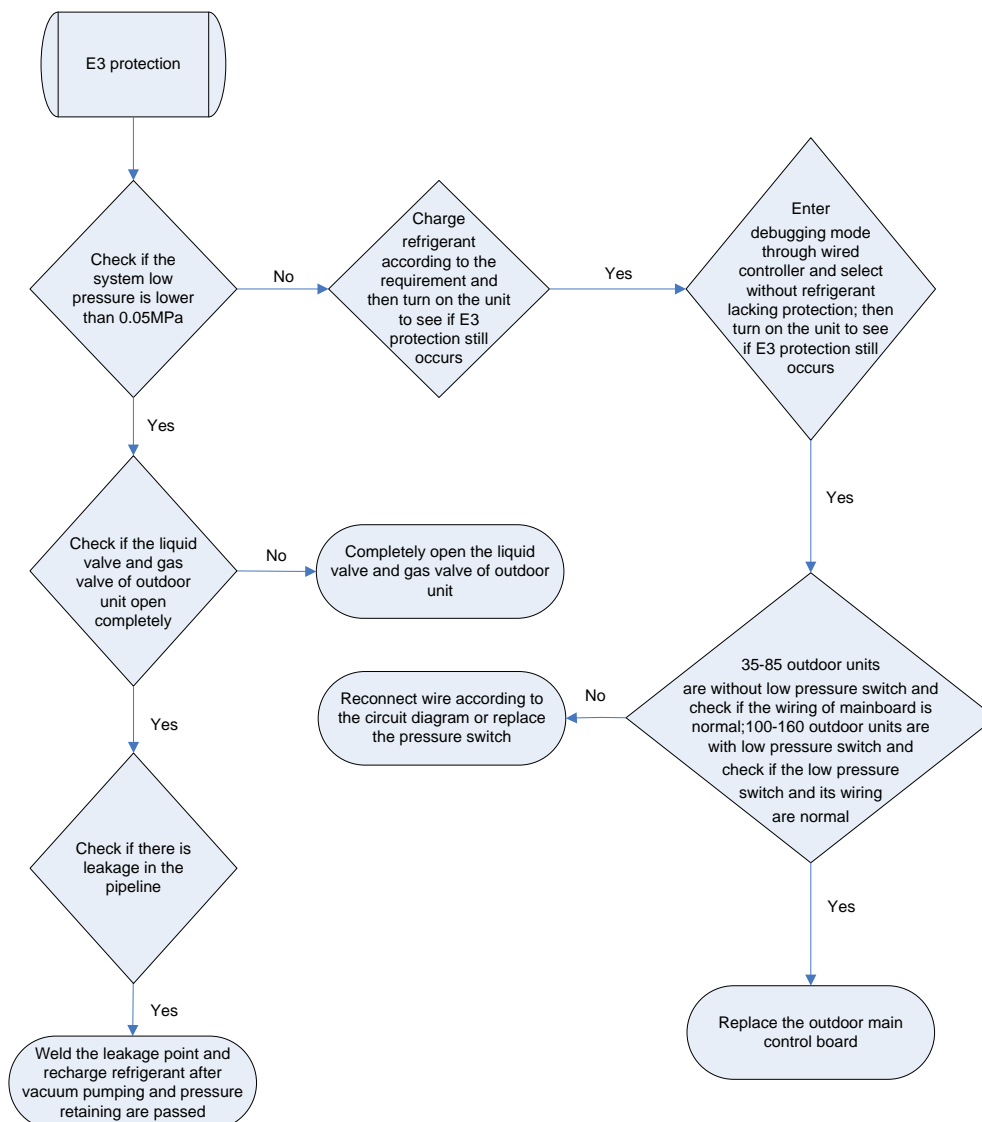
Error judgment condition and method:

It is judged through the action of low pressure switch. If the low pressure switch is cut off, it is judged that low pressure is too low and the system stops operation for protection.

Possible reason :

- Cut-off valve of ODU is not fully opened;
- Low pressure sensor is abnormal;
- Outdoor or indoor fan is not working properly;
- IDU filter or air duct is blocked (cooling mode);
- Ambient temperature is too low;
- Refrigerant charging amount is insufficient;
- System pipeline is blocked;

Troubleshooting:



3.4.4 “E4” Compressor Air Discharge High-temperature Protection

Error display: ODU mainboard, IDU wired control and IDU receiver light board will display

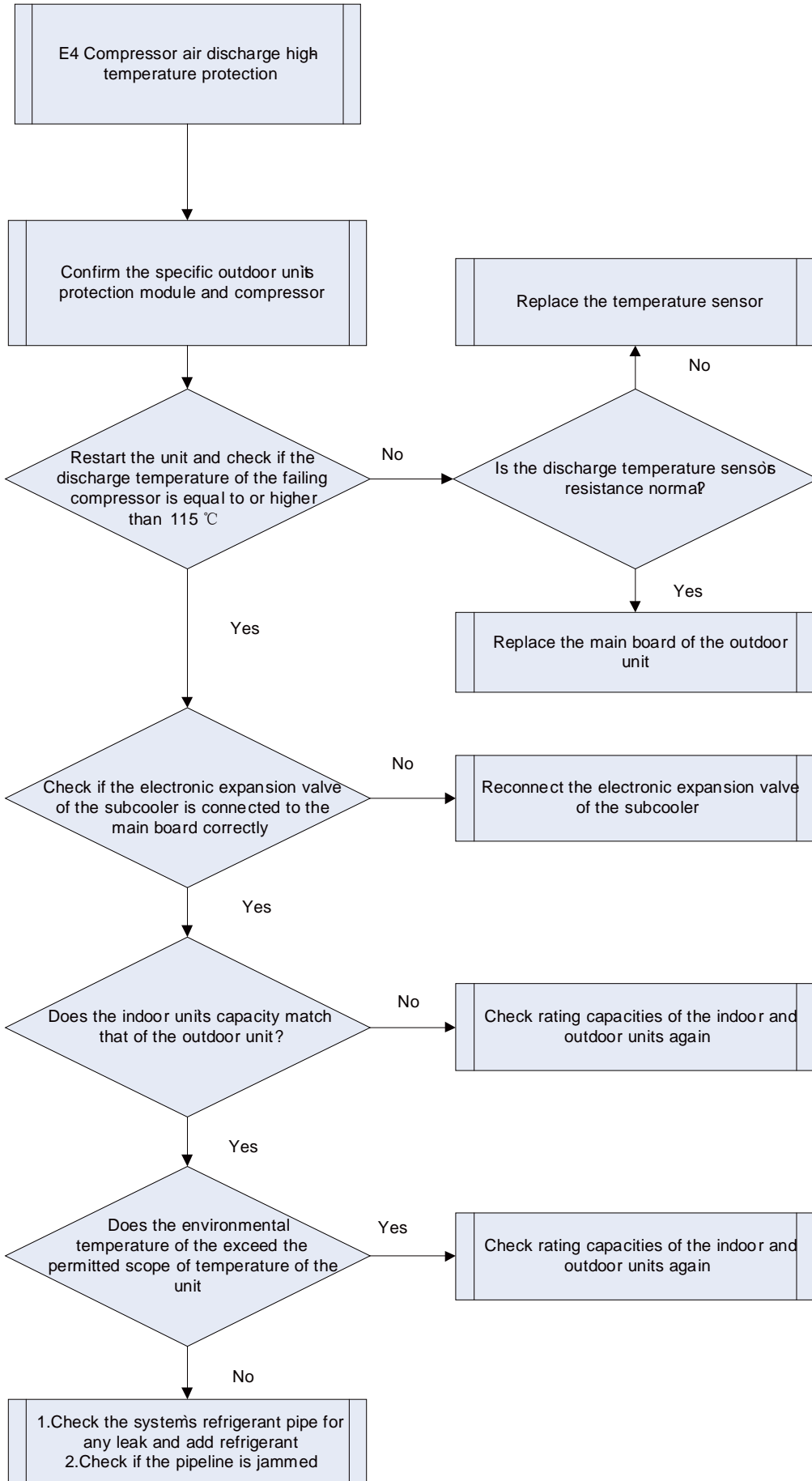
Error judgment condition and method:

Test the compressor discharge temperature through compressor discharge pipe and shell top temperature sensor. If the tested temperature value is higher than 115°C, the unit will stop for protection

Possible reason :

- Cut-off valve of ODU is not fully opened;
- Electronic expansion valve is abnormal;
- Outdoor or indoor fan is not working properly;
- IDU filter or air duct is blocked (cooling mode);
- Ambient temperature exceeds allowable operation range;
- Refrigerant charging amount is insufficient;
- System pipeline is blocked;

Troubleshooting:



3.4.5 “E6” Communication Error

Error display: ODU mainboard, IDU wired control and IDU receiver light board will display

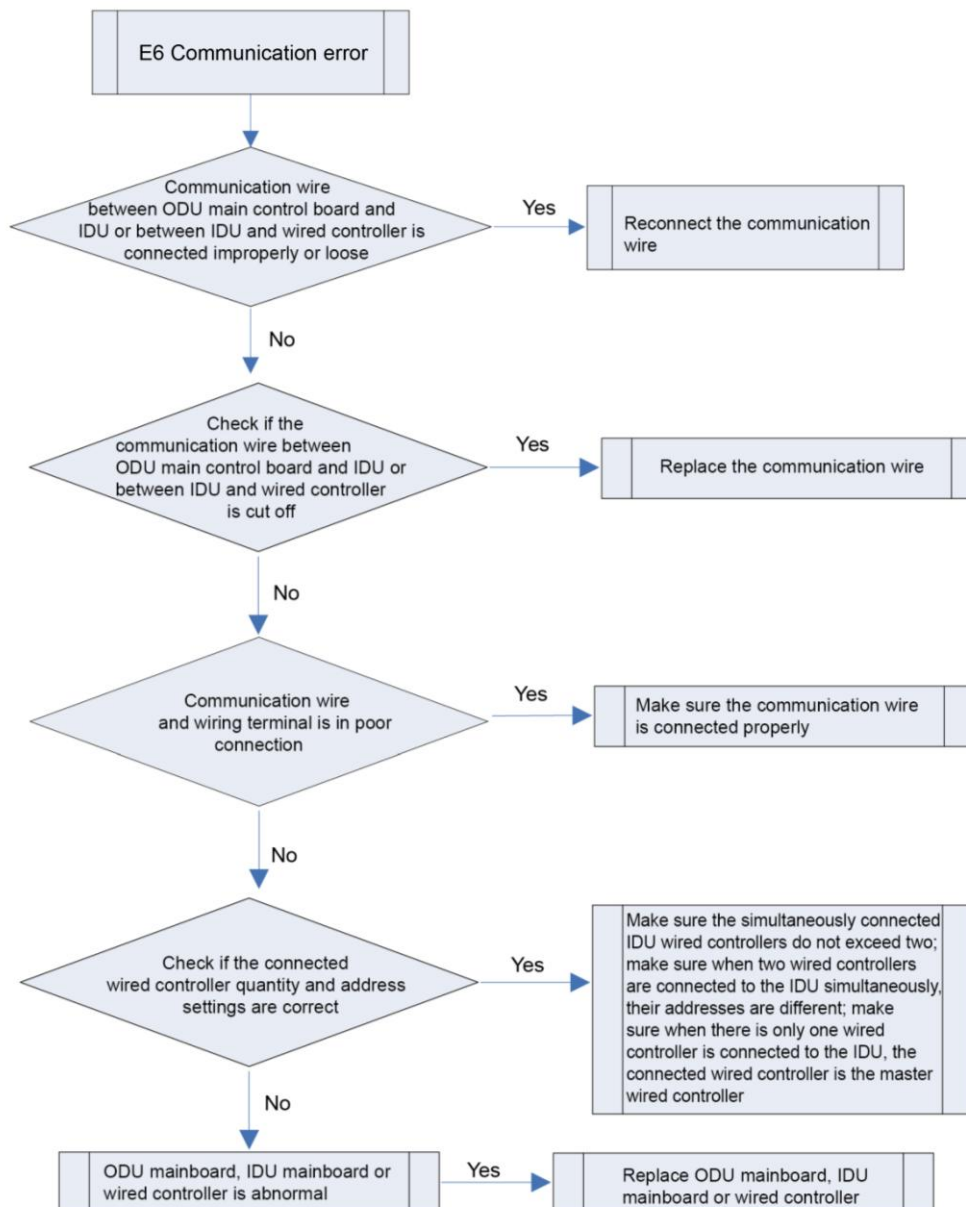
Error judgment condition and method:

If no communication between ODU and IDU or between IDU and wired controller in continuously 120s, this error will be reported.

Possible reason:

- Communication wire is connected improperly or loose.
- Communication wire is cut off
- Communication wire is in poor connection
- Connected wired controller quantity or address setting is improper
- Controller is abnormal

Troubleshooting:



3.4.6 “E8” Indoor Fan Error

Error display: IDU wired control and IDU receiver light board will display

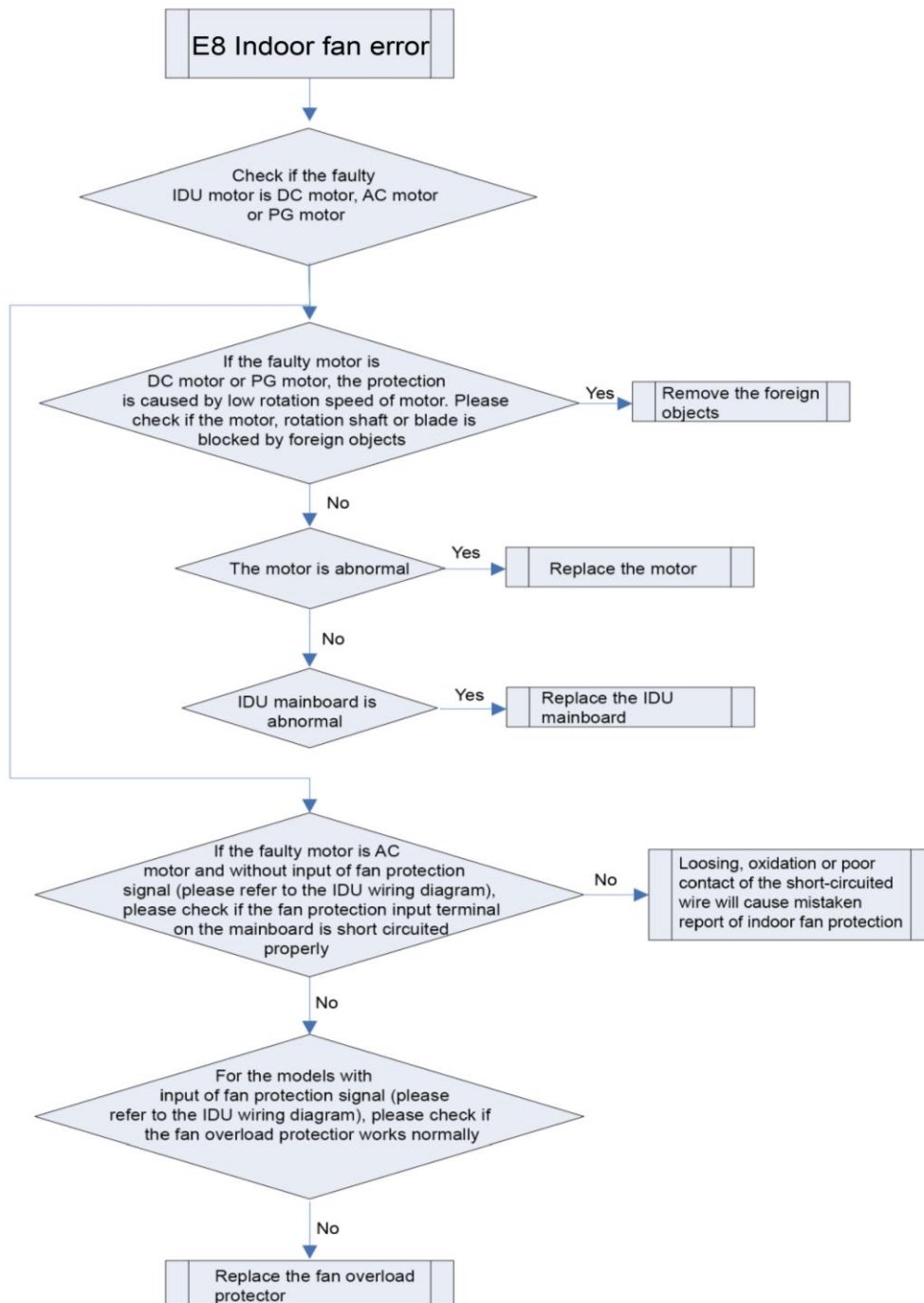
Error judgment condition and method:

Check if the rotation speed of IDU is too slow, or it stops rotation, or protection signal of outdoor fan is transferred. If yes, it is judged that indoor fan protection occurs

Possible reason:

- Motor stops operation or it is blocked
- IDU mainboard is abnormal;

Troubleshooting:



3.4.7 “E9” Water Overflow Protection

Error display: IDU wired control and IDU receiver light board will display

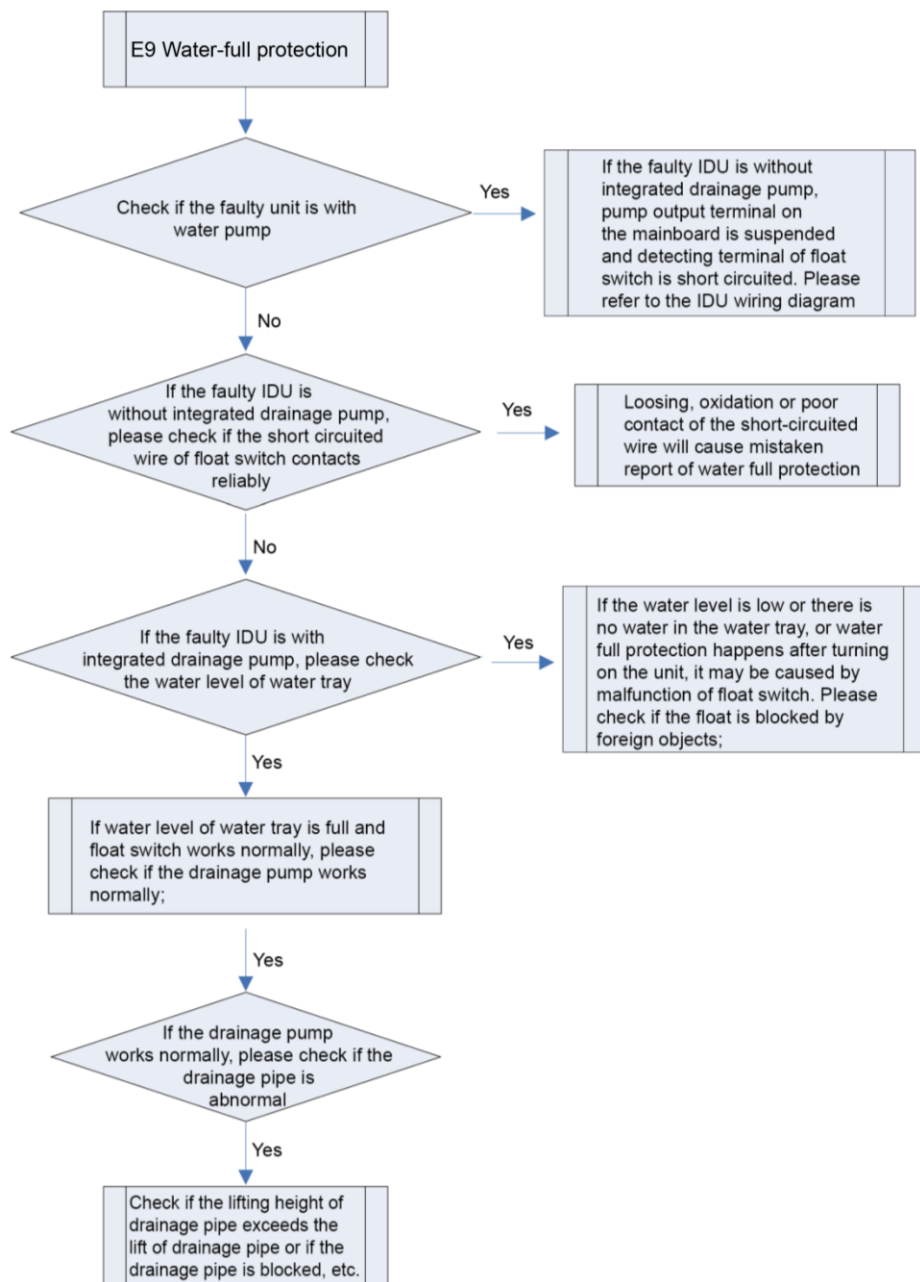
Error judgment condition and method:

Check the status of IDU float switch. When water level is too high, float switch is activated, so water full protection happens.

Possible reason:

- IDU is installed improperly
- Drainage pump is broken
- Float switch operates abnormally
- IDU mainboard is abnormal;

Troubleshooting:



3.4.8 “F0” Indoor Ambient Temperature Sensor Error

Error display: IDU wired control and IDU receiver light board will display

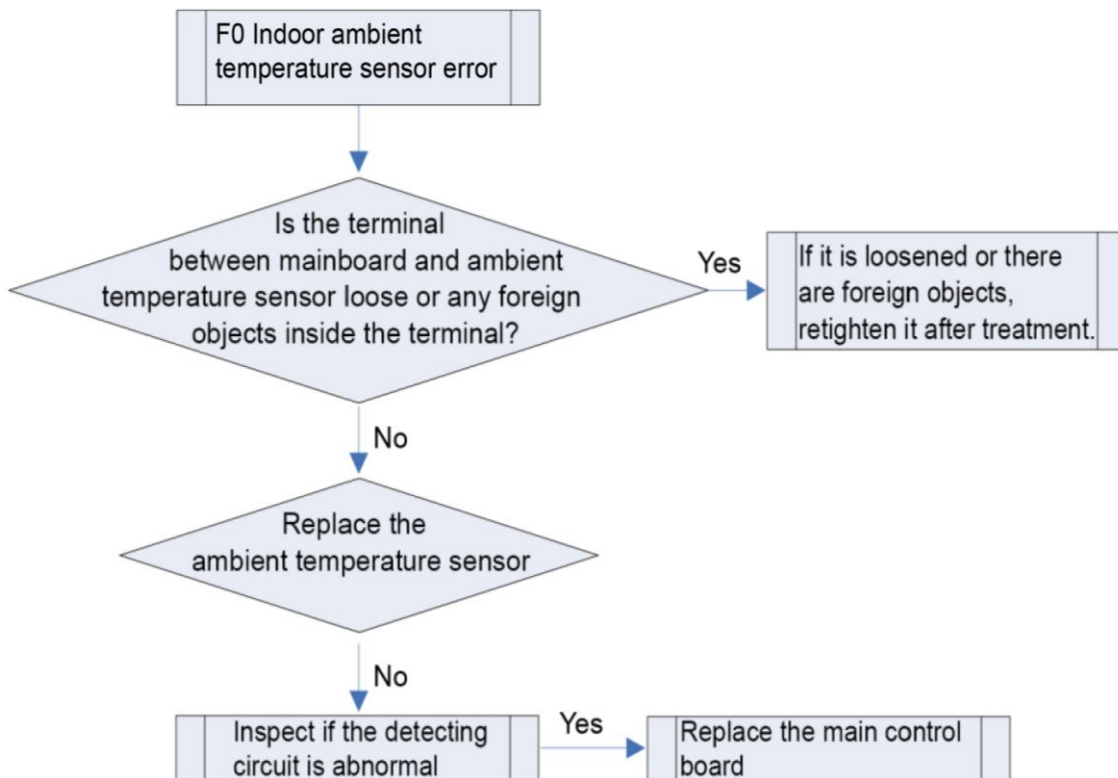
Error judgment condition and method:

Sample the AD value of temperature sensor through temperature sensor detecting circuit and judge the range of AD value, If the sampling AD value exceeds upper limit and lower limit in 5 seconds continuously, report the error.

Possible reason:

- Poor contact between ambient temperature sensor and terminal in mainboard interface
- Ambient temperature sensor is abnormal
- Detecting circuit is abnormal

Troubleshooting:



3.4.9 “F1” Evaporator Temperature Sensor Error

Error display: IDU wired control and IDU receiver light board will display

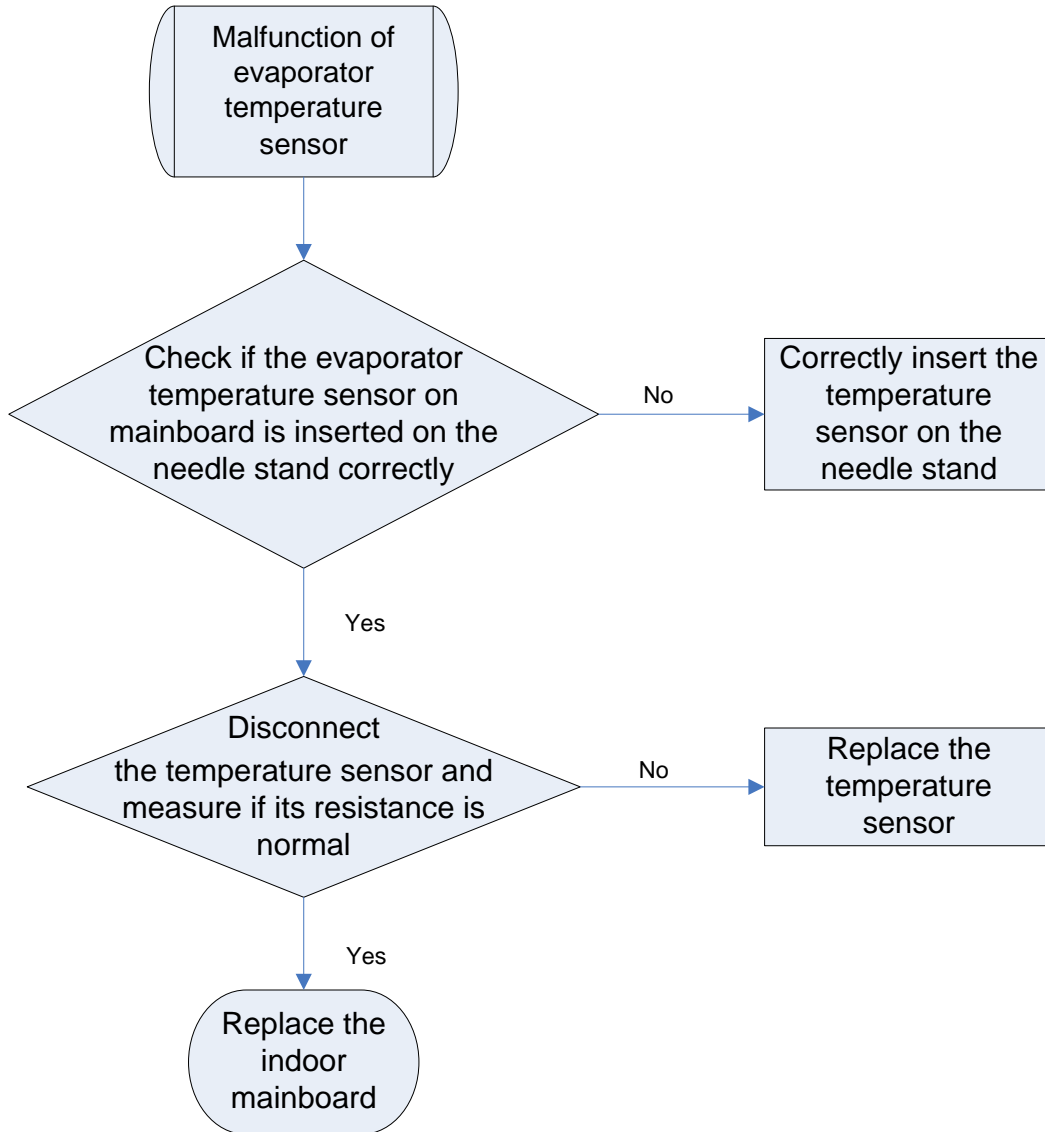
Error judgment condition and method:

Sample the AD value of temperature sensor through temperature sensor detecting circuit and judge the range of AD value, If the sampling AD value exceeds upper limit and lower limit in 5 seconds continuously, report the error.

Possible reason:

- Poor contact between temperature sensor and terminal in mainboard interface
- Temperature sensor is abnormal
- Detecting circuit is abnormal

Troubleshooting:



Note: Please refer to Appendix 1 for the relation between temperature and resistance of temperature sensor.

3.4.10 “F2” Condenser Temperature Sensor Error

Error display: ODU mainboard, IDU wired control and IDU receiver light board will display:

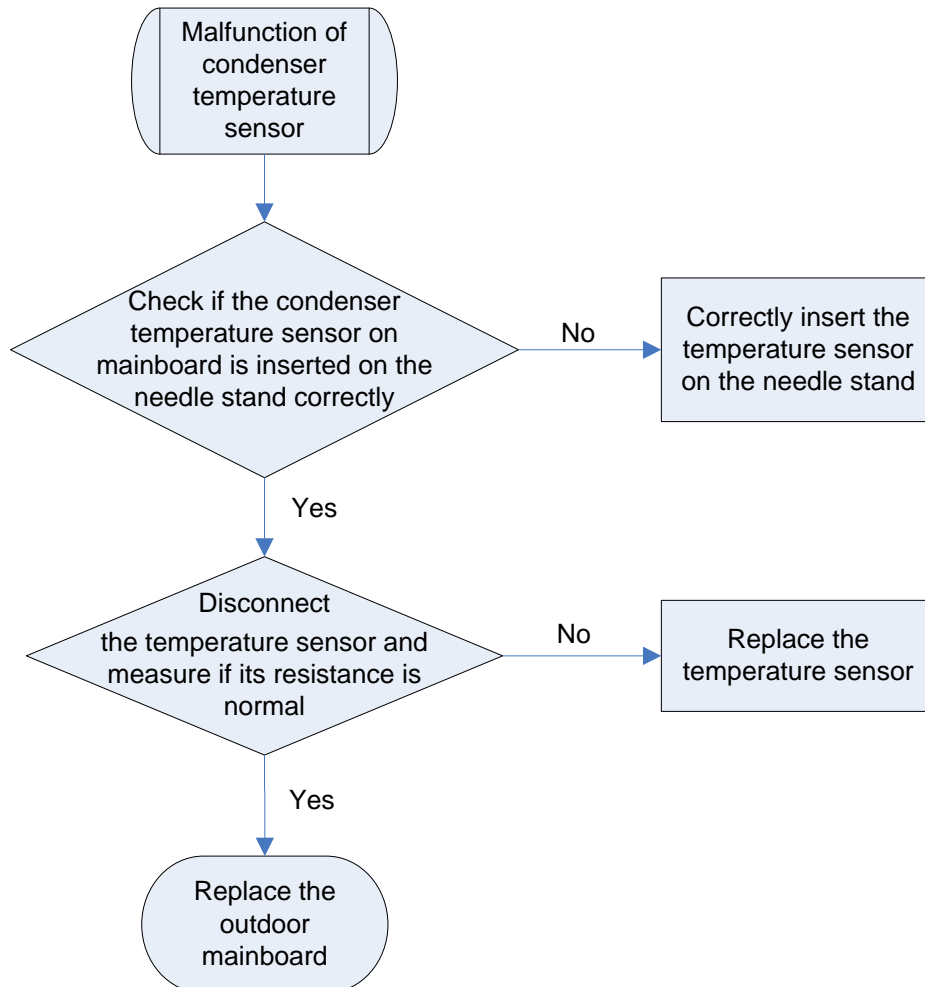
Error judgment condition and method:

Sample the AD value of temperature sensor through temperature sensor detecting circuit and judge the range of AD value, If the sampling AD value exceeds upper limit and lower limit in 5 seconds continuously, report the error.

Possible reason:

- Poor contact between temperature sensor and terminal in mainboard interface
- Temperature sensor is abnormal
- Detecting circuit is abnormal

Troubleshooting:



Note: Please refer to Appendix 1 for the relation between temperature and resistance of temperature sensor.

3.4.11 “F3” Outdoor Ambient Temperature Sensor Error

Error display: ODU mainboard, IDU wired control and IDU receiver light board will display:

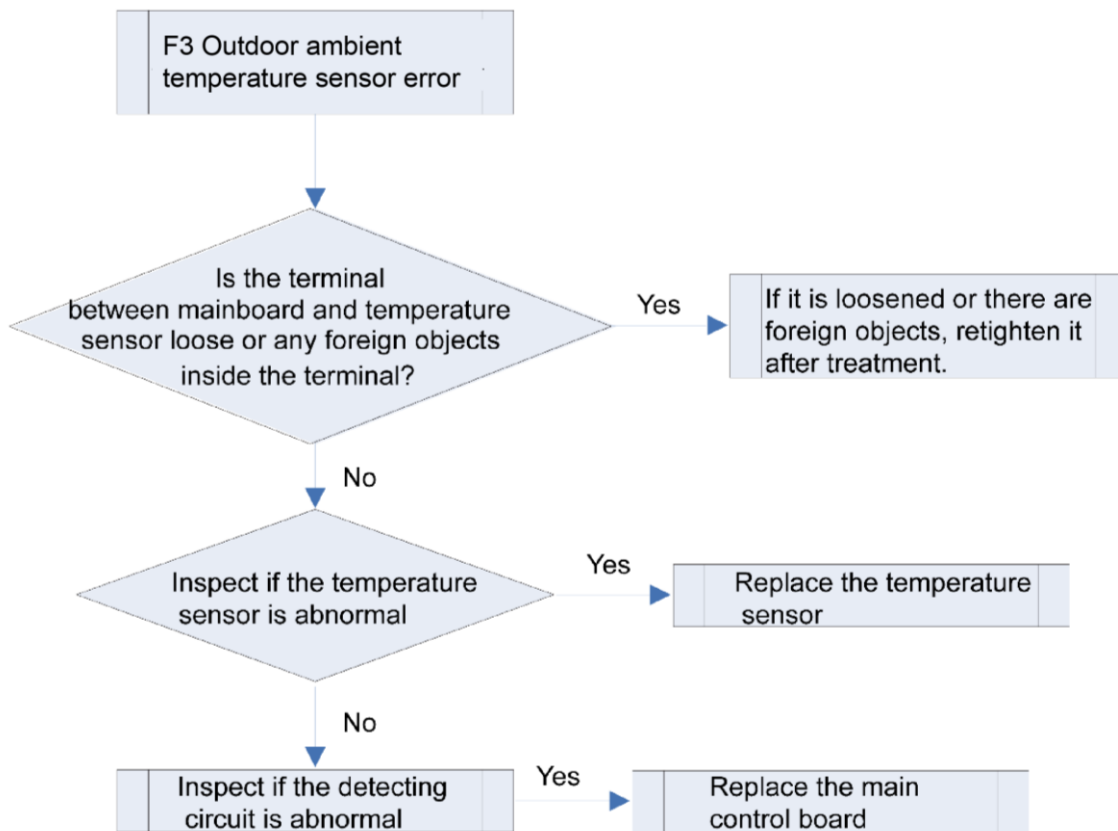
Error judgment condition and method:

Sample the AD value of temperature sensor through temperature sensor detecting circuit and judge the range of AD value, If the sampling AD value exceeds upper limit and lower limit in 5 seconds continuously, report the error.

Possible reason:

- Poor contact between ambient temperature sensor and terminal in mainboard interface
- Ambient temperature sensor is abnormal
- Detecting circuit is abnormal

Troubleshooting:



Note: Please refer to Appendix 1 for the relation between temperature and resistance of temperature sensor.

3.4.12 “F4” Discharge Temperature Sensor Error

Error display: ODU mainboard, IDU wired control and IDU receiver light board will display

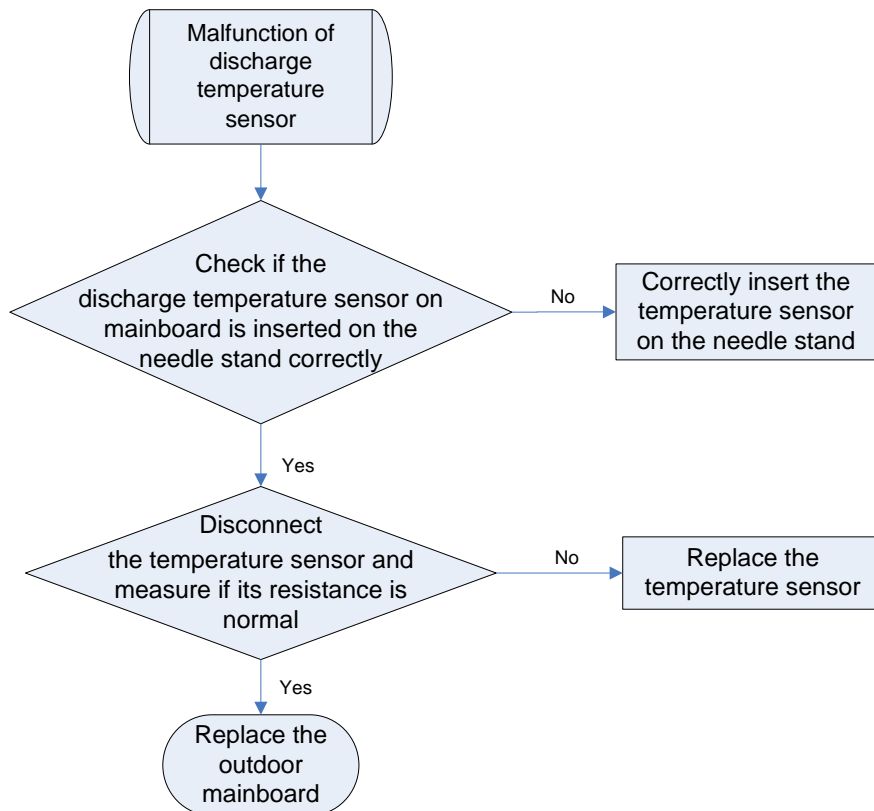
Error judgment condition and method:

Sample the AD value of temperature sensor through temperature sensor detecting circuit and judge the range of AD value, If the sampling AD value exceeds upper limit and lower limit in 5 seconds continuously, report the error.

Possible reason:

- Poor contact between temperature sensor and terminal in mainboard interface
- Temperature sensor is abnormal
- Detecting circuit is abnormal

Troubleshooting:



Note: Please refer to Appendix 1 for the relation between temperature and resistance of temperature sensor.

3.4.13 “F5” Wired Control Temperature Sensor Error

Error display: IDU wired control and IDU receiver light board will display

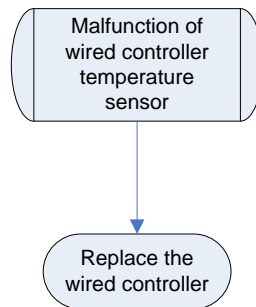
Error judgment condition and method:

Sample the AD value of temperature sensor through temperature sensor detecting circuit and judge the range of AD value, If the sampling AD value exceeds upper limit and lower limit in 5 seconds continuously, report the error.

Possible reason:

- Poor contact between temperature sensor and terminal in mainboard interface
- Temperature sensor is abnormal
- Detecting circuit is abnormal

Troubleshooting:



3.4.14 “C5” IDU Jumper Cap Error

Error display: IDU wired control and IDU receiver light board will display

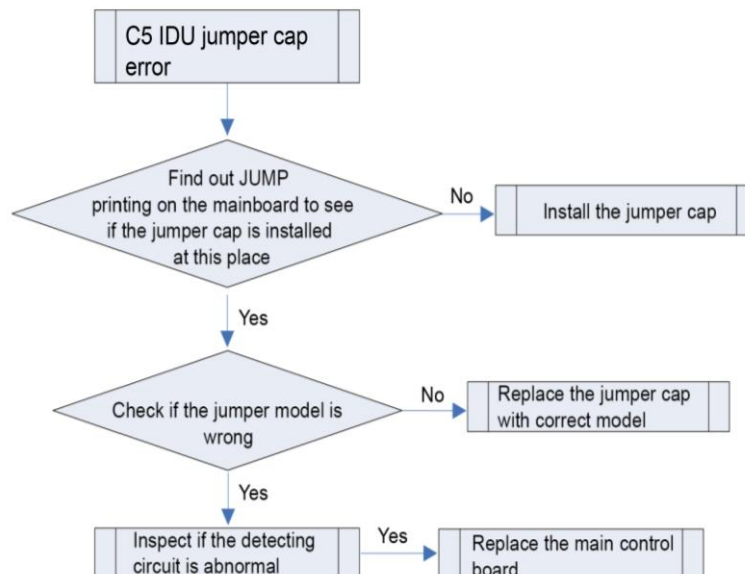
Error judgment condition and method:

If jumper cap model doesn't match with mainboard, this error will be reported.

Possible reason:

- Jumper cap is not installed.
- Jumper cap model is wrong.
- Detecting circuit is abnormal.

Troubleshooting:



3.4.15 “EE” IDU or ODU Memory Chip Error

Error display: IDU wired control, IDU and ODU receiver light board will display

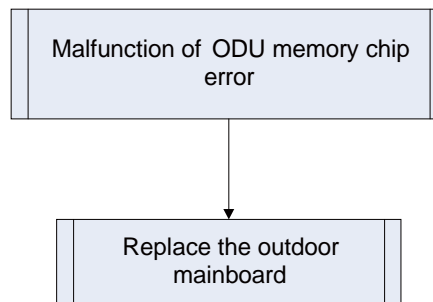
Error judgment condition and method:

If ODU mainboard cannot read the memory chip, this error will be reported.

Possible reason:

- Memory chip on the ODU mainboard is damaged.
- Memory chip is weakly welded.
- Memory chip lead is short-circuited.

Troubleshooting:



3.4.16 “PF” Electric Box Sensor Error

Error display: ODU mainboard, IDU wired controller

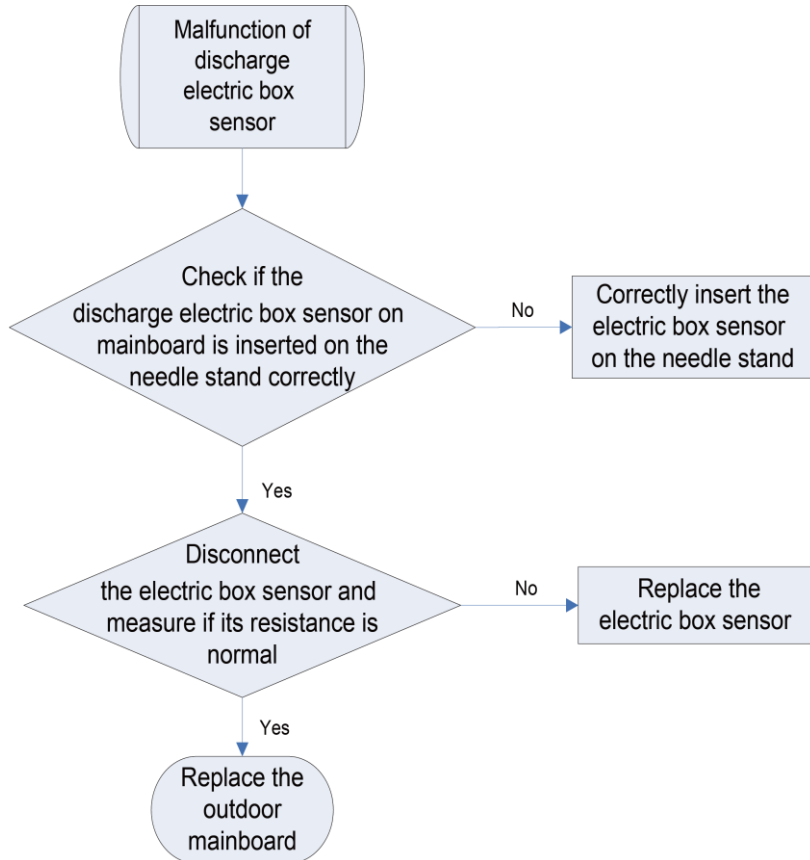
Error judgment condition and method:

Sample the AD value of temperature sensor through temperature sensor detecting circuit and judge the range of AD value, If the sampling AD value exceeds upper limit and lower limit in 5 seconds continuously, report the error.

Possible reason:

- Poor contact between temperature sensor and terminal in mainboard interface
- Temperature sensor is abnormal
- Detecting circuit is abnormal

Troubleshooting:



Note: Please refer to Appendix 1 for the relation between temperature and resistance of temperature sensor.

3.4.17 “H3” Compressor Overload Protection

Error display: ODU mainboard, IDU wired control and IDU receiver light board will display

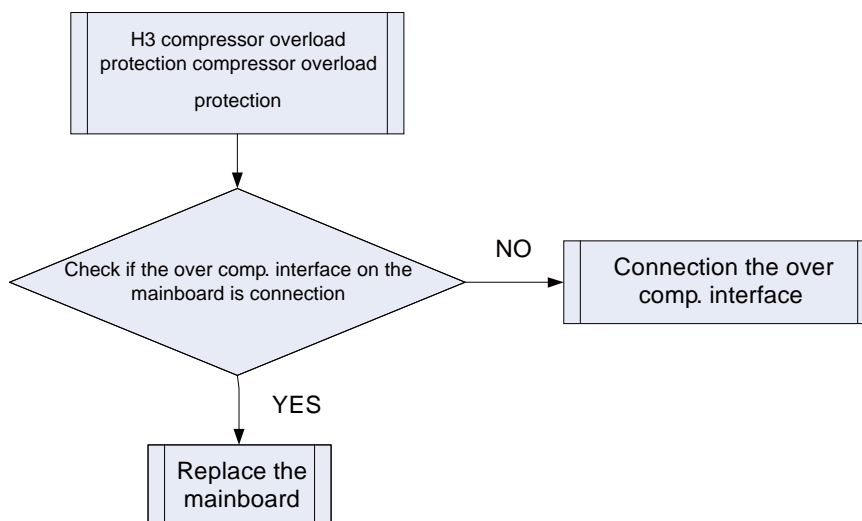
Error judgment condition and method:

When the mainboard’s interface ovc-comp is broken off for 3s, error H3 will be reported.

Possible reason:

- The interface ovc-comp is not short-circuited.
- ODU mainboard is damaged.

Troubleshooting:



3.4.18 “H4” Overload

Error display: ODU mainboard, IDU wired control and IDU receiver light board will display

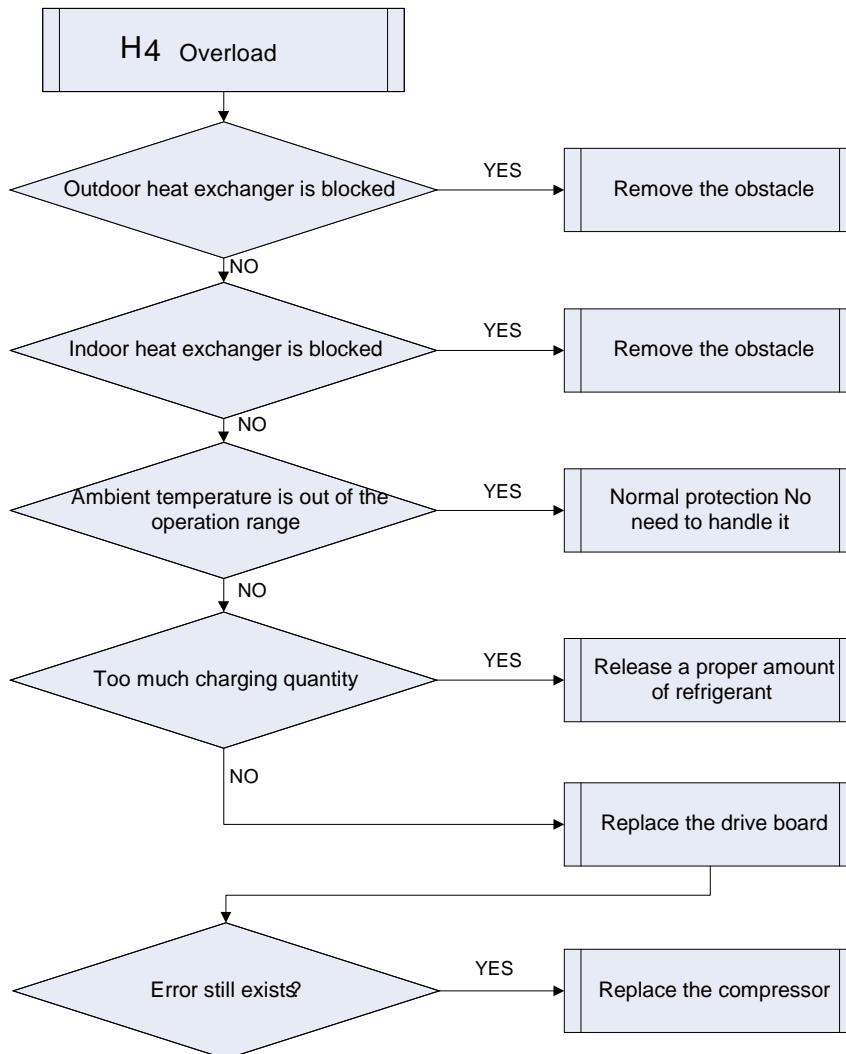
Error judgment condition and method:

When tube temperature is higher than the protection value, system will report overload protection.

Possible reason:

- Cooling ODU heat exchanger is blocked or heat exchange is bad.
- Heating IDU heat exchanger is blocked or heat exchange is bad.
- Operating temperature is too high.
- System charging quantity is too much.

Troubleshooting:



3.4.19 “H5” IPM Protection

Error display: ODU mainboard, IDU wired control and IDU receiver light board will display

Error judgment condition and method:

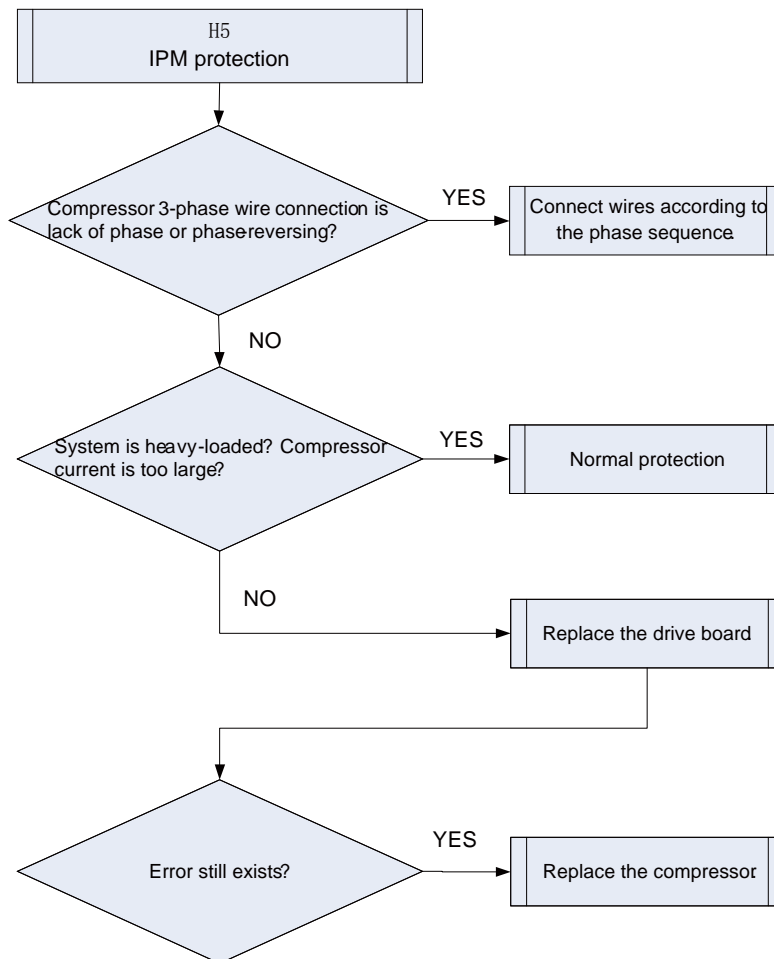
When power is connected and drive chip received IPM lead F0 that is of low level, than it is IPM module malfunction. System will shut down for protection.

Possible reason:

- Compressor 3-phase wire connection is lack of phase or phase-reversed.

- System is overloaded and compressor current is too large.
- Drive board IPM module is damaged.
- Drive board IPM module's 15V power supply is lower than 13.5V.
- Drive board 6-line PWM signal and the corresponding element are abnormal.
- Drive board compressor current sampling circuit element is damaged or drive chip current sampling AD terminal is abnormal.
- Compressor is damaged.

Troubleshooting:



3.4.20 "H6" DC Fan Error

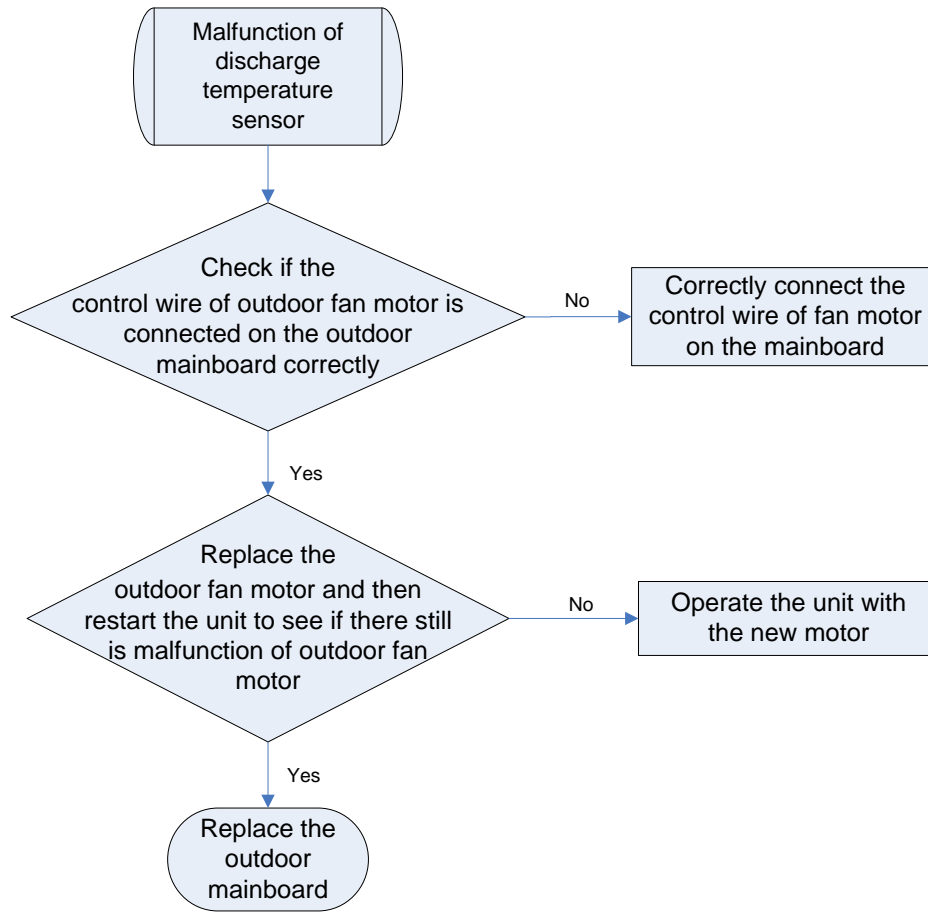
Error display: ODU mainboard, IDU wired control and IDU receiver light board will display

Error judgment condition and method:

Mainboard doesn't receive the signal of outdoor fan within 30s after the outdoor fan starts up.

Possible reason:

- Outdoor fan wiring terminal is not correctly connected to the mainboard.
- Outdoor fan is damaged.
- If it is a new unit or a new motor has been replaced in the unit and the wire connection is correct, then probably it is the program that goes wrong.

Troubleshooting:**3.4.21 “H7” Driver Out-of-Step Protection**

Error display: ODU mainboard, IDU wired control and IDU receiver light board will display

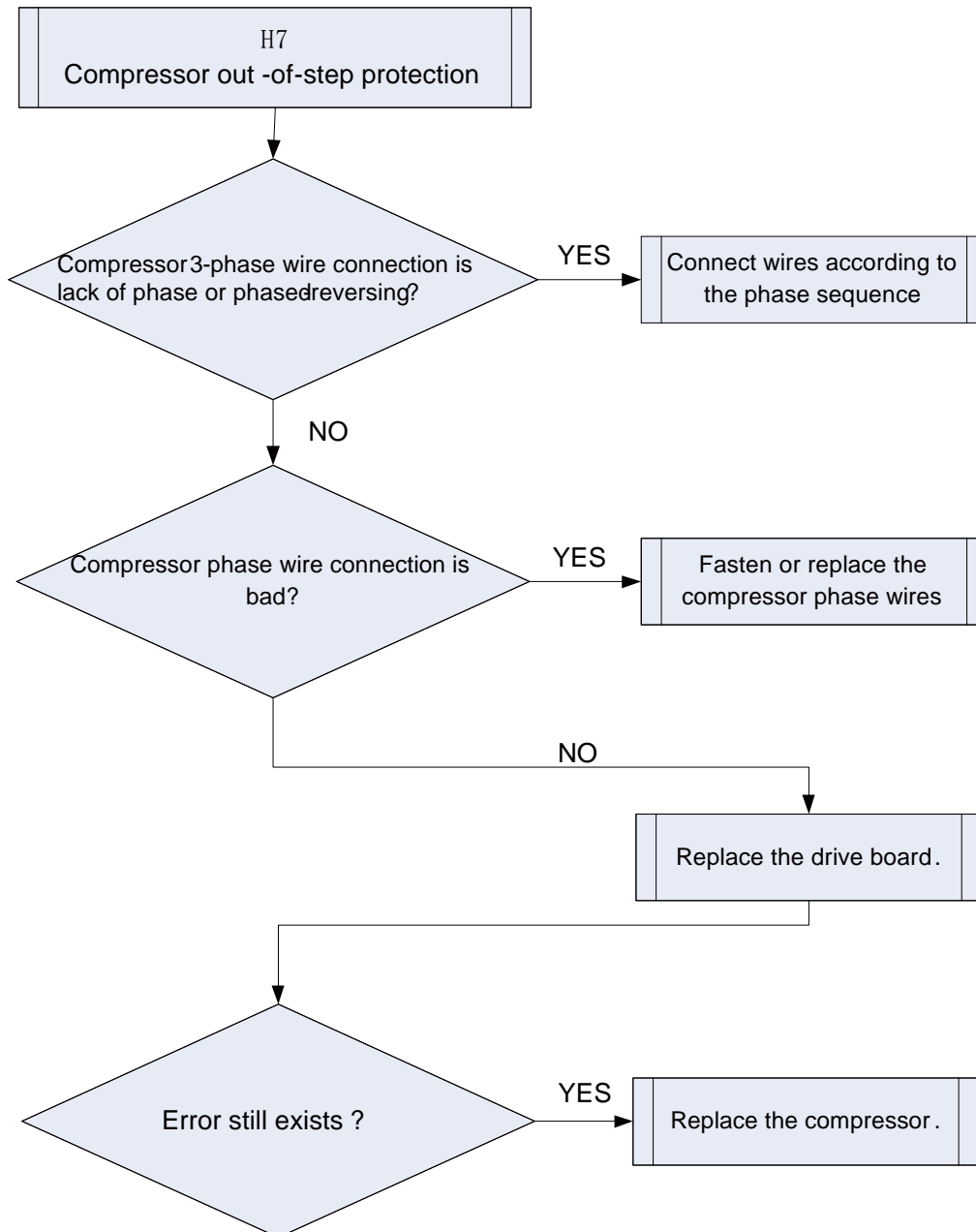
Error judgment condition and method:

During operation, it can't detect the rotor position and stops output. Or the actual running speed differs too much from the set running speed. In each case, compressor runs out of step and system stops for protection.

Possible reason:

- Compressor 3-phase wire connection is lack of phase or phased-reversed.
- Compressor phase wire connection is bad.
- System is blocked, short of refrigerant or compressor oil.
- Drive board IPM module is damaged.
- Drive board compressor current sampling circuit element is damaged or drive chip current sampling AD terminal is abnormal.
- Compressor is damaged.

Troubleshooting:



3.4.22 “HC” PFC Protection

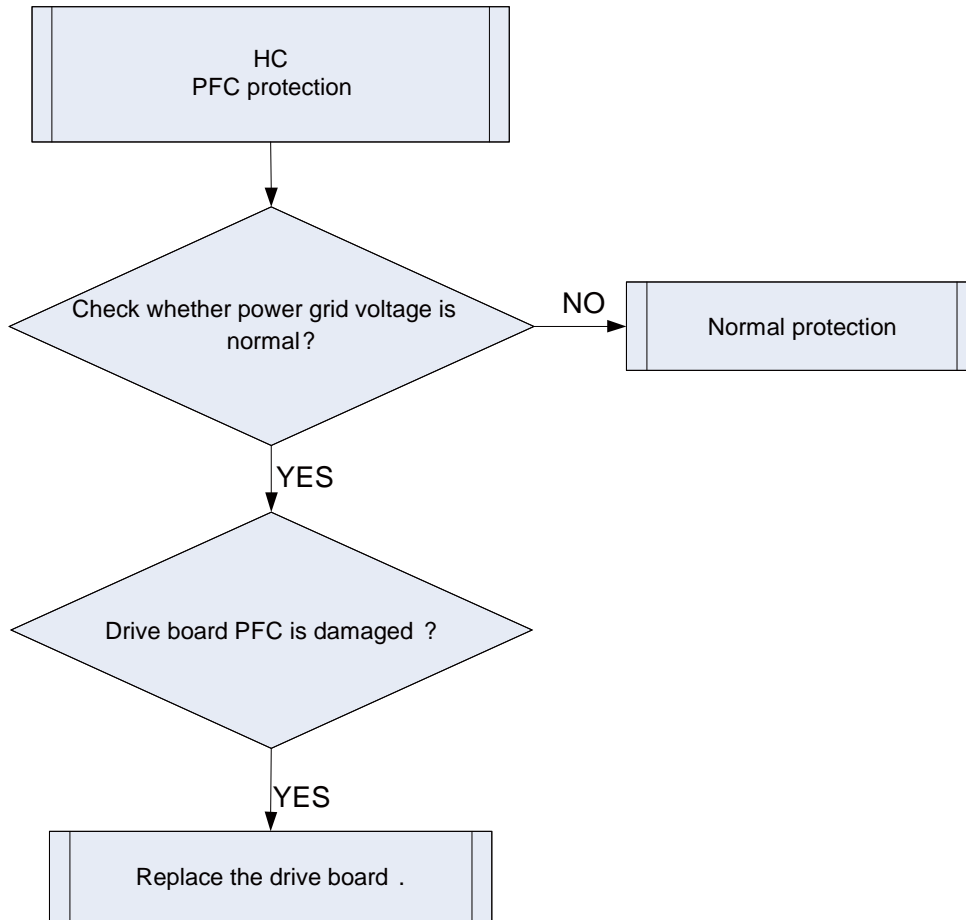
Error display: ODU mainboard, IDU wired control and IDU receiver light board will display

Error judgment condition and method:

After power is connected, and drive chip received IPM lead F0 that is of low level, than it is IPM module malfunction. System will shut down for protection.

Possible reason:

- Power grid voltage is abnormal.
- Drive board PFC module is damaged.
- Drive board IPM module's 15V power supply is lower than 13.5V.
- Drive board PWM signal for PFC and the corresponding element are abnormal.
- Drive board PFC current sampling circuit element is damaged or drive chip current sampling AD terminal is abnormal.

Troubleshooting:**3.4.23 “Lc” Startup Failure**

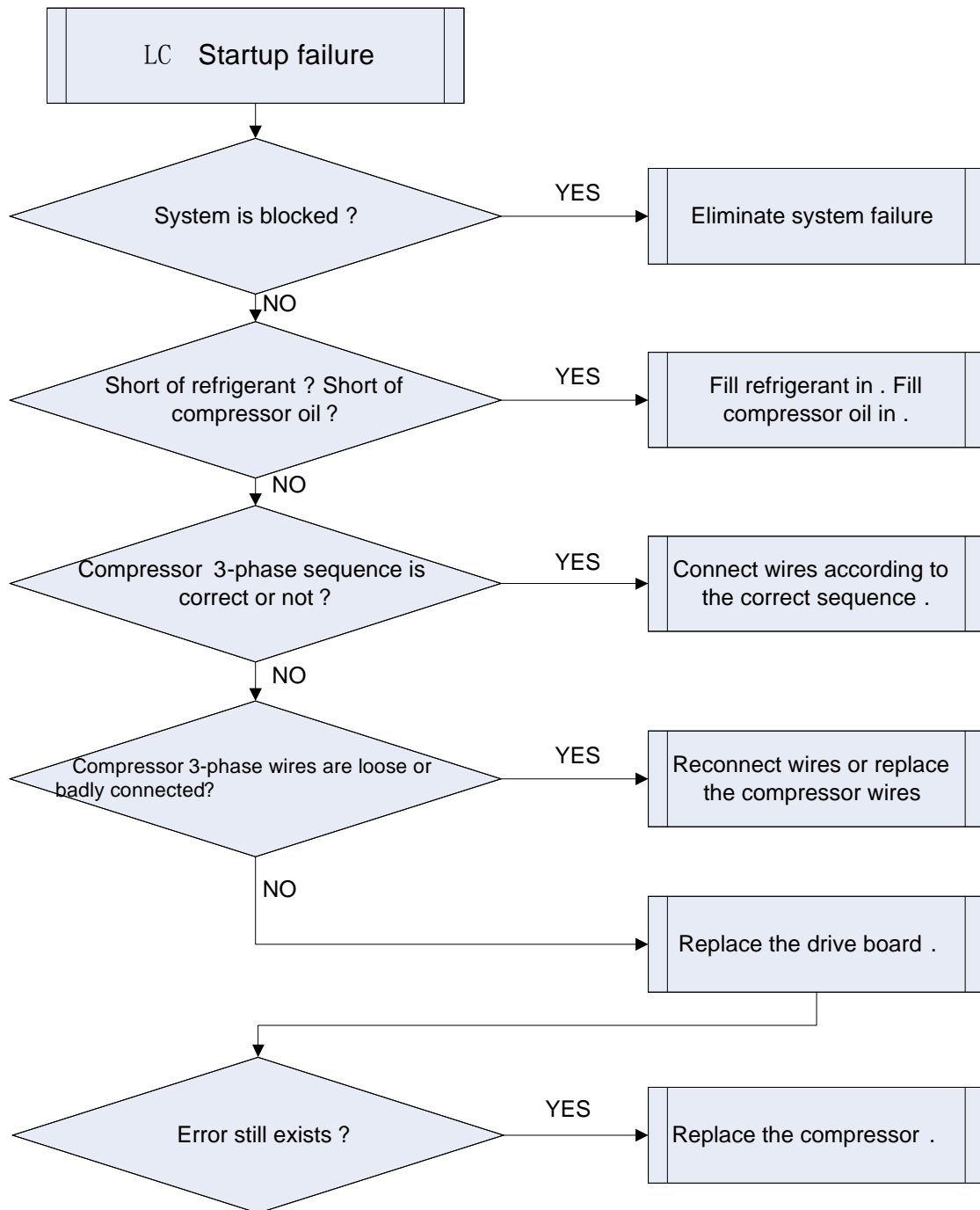
Error display: ODU mainboard, IDU wired controller and IDU receive light board will display

Error judgment condition and method:

Check the error code on nixie tube of ODU main control board. If PJ is displayed, it indicates inverter compressor startup failure

Possible reason:

- Poor contact of compressor UVW wire;
- Compressor is broken;
- Compressor drive board is broken;

Troubleshooting:**3.4.24 “Lp” IDU and ODU Unmatched**

Error display: ODU mainboard, IDU wired control and IDU receiver light board will display

Error judgment condition and method: /

Possible reason:

■ Models of indoor unit and outdoor unit do not match with each other

Troubleshooting:

Turn off the unit and replace with a matched indoor or outdoor unit.

3.4.25 “U7” 4-Way Valve Switch-Over Error

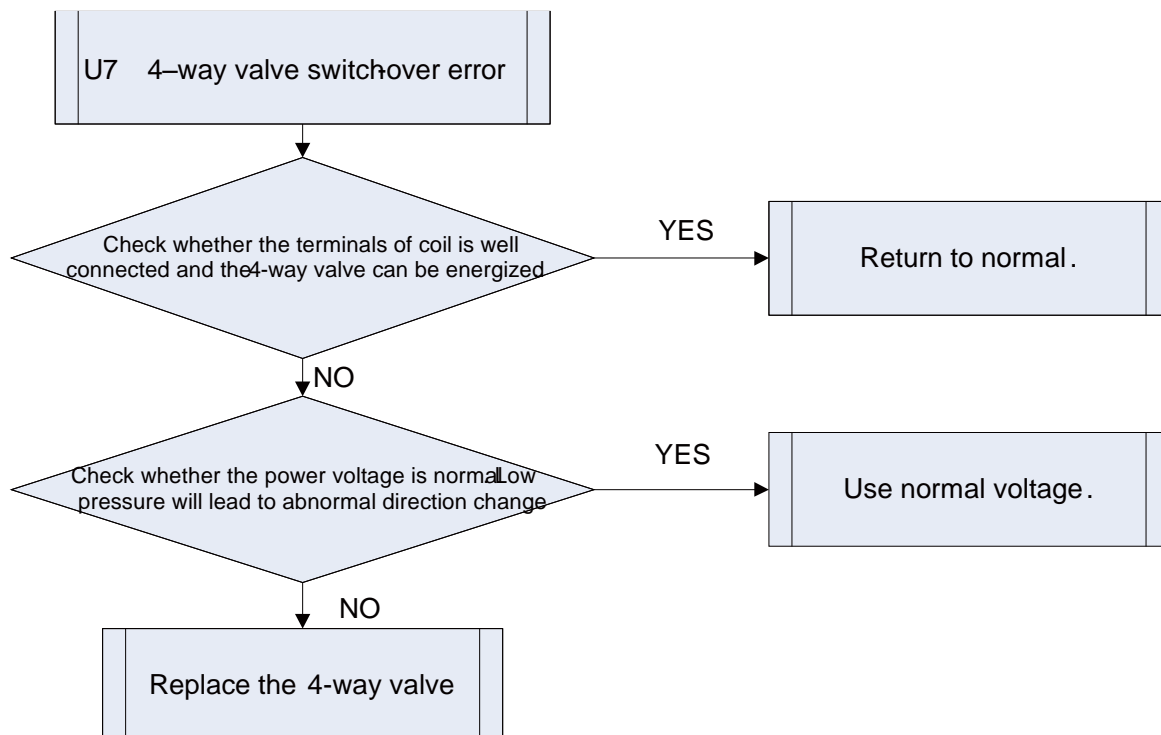
Error display: ODU mainboard, IDU wired control and IDU receiver light board will display

Error judgment condition and method:

Possible reason:

- Voltage is abnormal. For example, low voltage will cause abnormal direction change of the 4-way valve.
- Pilot valve holder hole or the capillary tube is blocked, which has caused small flow or no flow.
- Capillary tube is blocked when connecting to the pilot valve or main valve.
- Coil is not power-connected, or is open-circuited. Voltage is low, or the contact between turns or terminals is bad.
- The stainless steel cover of pilot valve is damaged, or the steel core is stuck, or the spring is not elastic.
- Insert block is bent or not elastic, so the little slide cannot get in place.
- When adding refrigerant, the little slide is over-running and can't spring back.

Troubleshooting:



3.4.26 “P0” Driver Reset Protection

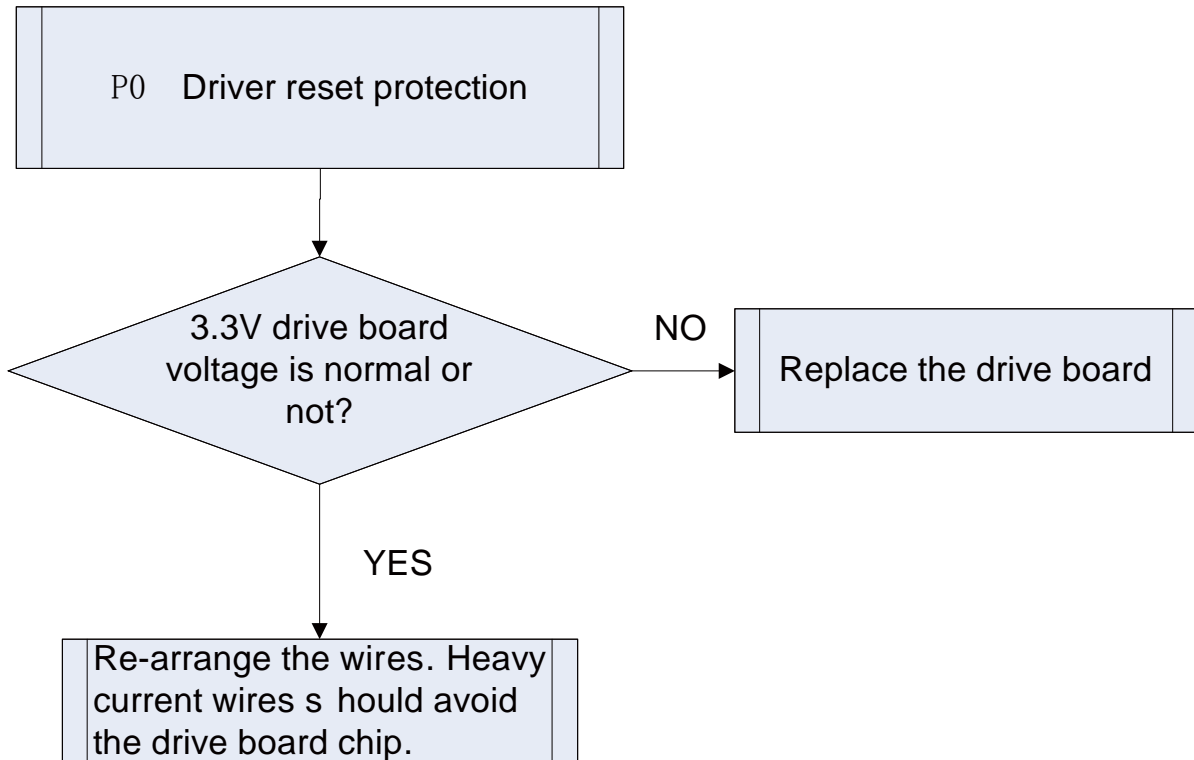
Error display: ODU mainboard, IDU wired control and IDU receiver light board will display

Error judgment condition and method:

Drive board chip resets and starts initialization. After the drive board is energized for 5s, it detects that the chip resets again. In this case, it can be judged as drive chip reset protection.

Possible reason:

- 3.3V drive chip supply voltage drop.
- TRST lead of JTAG programming is interrupted.

Troubleshooting:**3.4.27 “P5” Over-Current Protection**

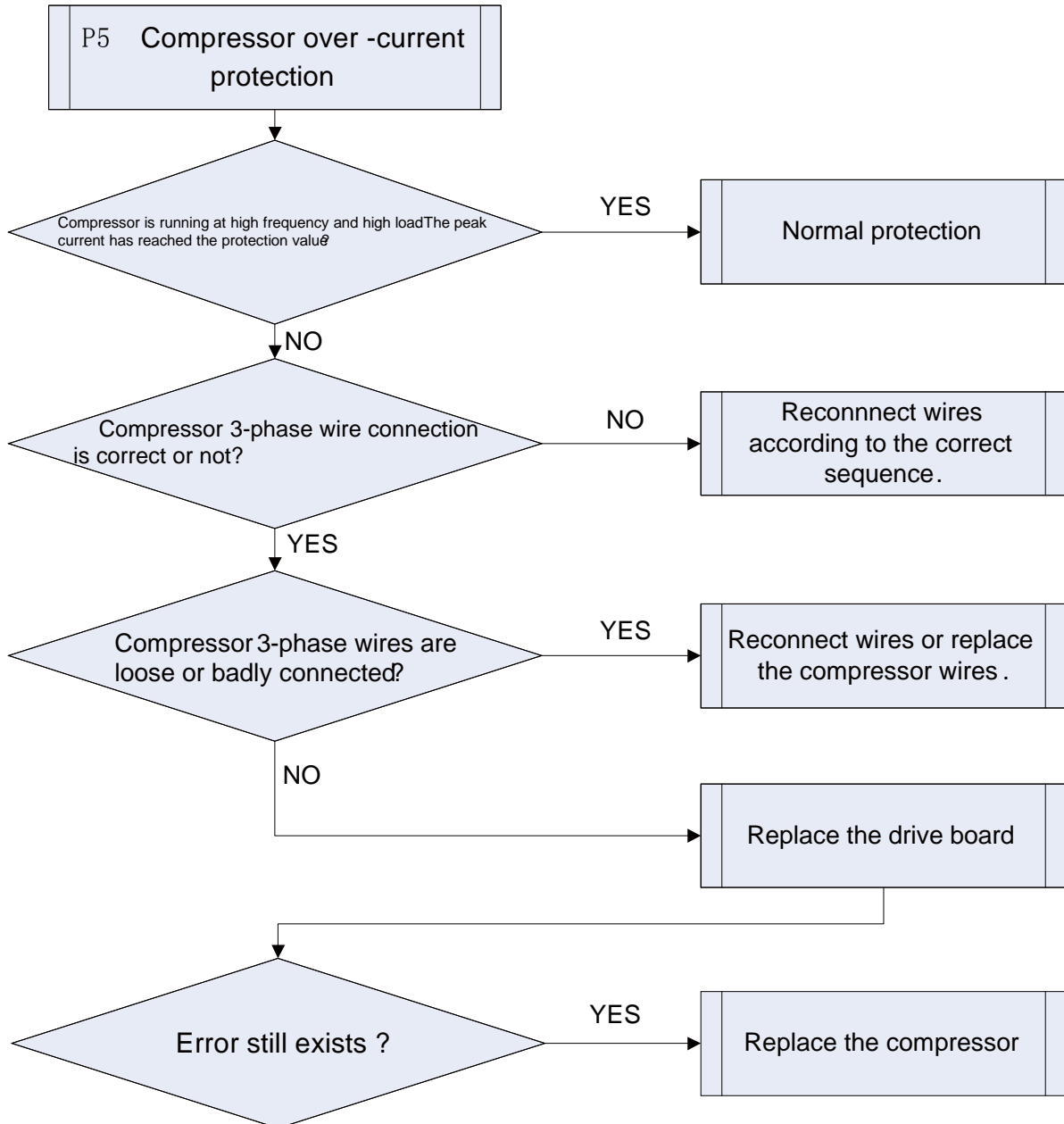
Error display: ODU mainboard, IDU wired control and IDU receiver light board will display

Error judgment condition and method:

If compressor's instant current value is higher than the set current protection value, then it can be judged that compressor over-current occurs and system will shut down for protection.

Possible reason:

- System load is too much and compressor current is too large.
- Compressor 3-phase wire connection is lack of phase or phase-reversed.
- Compressor phase wire is loose or has bad contact.
- Drive board current sampling circuit element is damaged or drive chip current sampling AD terminal is abnormal.
- Compressor is damaged.

Troubleshooting:**3.4.28 “P6” Master Control and Driver Communication Error**

Error display: ODU mainboard, IDU wired control and IDU receiver light board will display

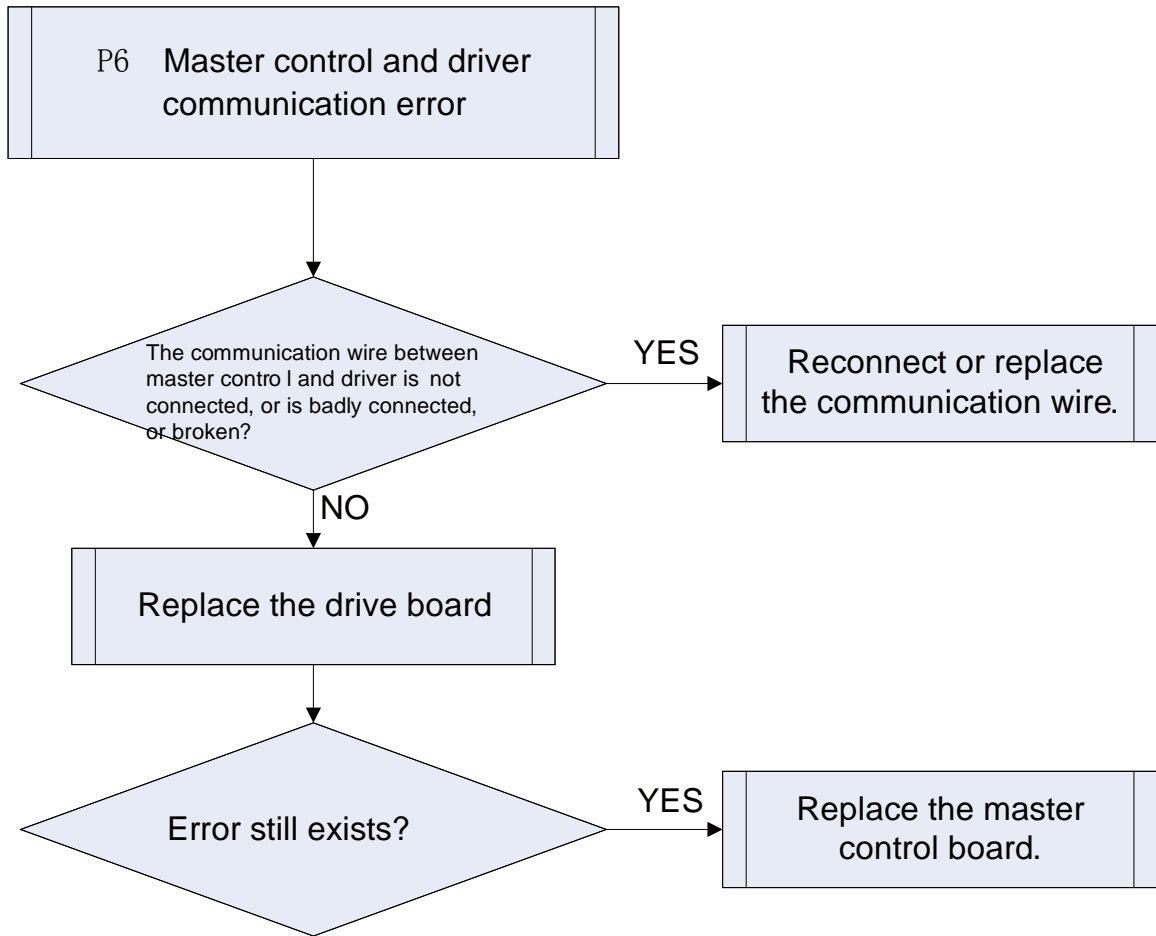
Error judgment condition and method:

If there is no other malfunction and the communication between master control and driver is cut off for 30s, then it can be judged that the communication between master control and driver is faulted. System will shut down for protection.

Possible reason:

- Communication wire between master control and driver is not well connected, or has bad contact, or is broken.
- The switch power of drive board is abnormal, therefore, the 3.3V power voltage is abnormal.
- Communication circuit of the drive board or the master control board is abnormal.

Troubleshooting:



3.4.29 “P7” Driver Module Sensor Error

Error display: ODU mainboard, IDU wired control and IDU receiver light board will display

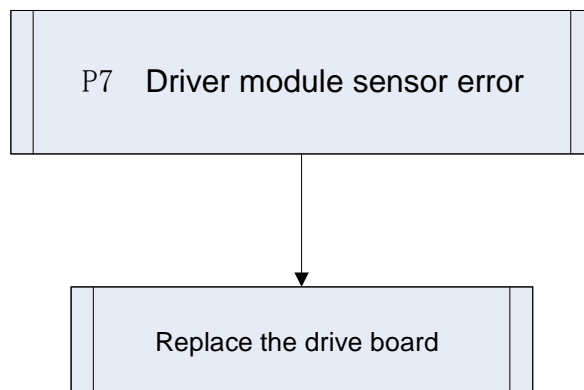
Error judgment condition and method:

If IPM or PFC module temperature is lower than the set protection value, then it can be judged that driver module sensor error occurs and system will shut down for protection.

Possible reason:

- Module temperature sensor is short-circuited or broken-circuited.
- Drive board current sampling circuit element is damaged or drive chip current sampling AD terminal is abnormal.

Troubleshooting:



3.4.30 “P8” Driver Module High Temperature Protection

Error display: ODU mainboard, IDU wired control and IDU receiver light board will display

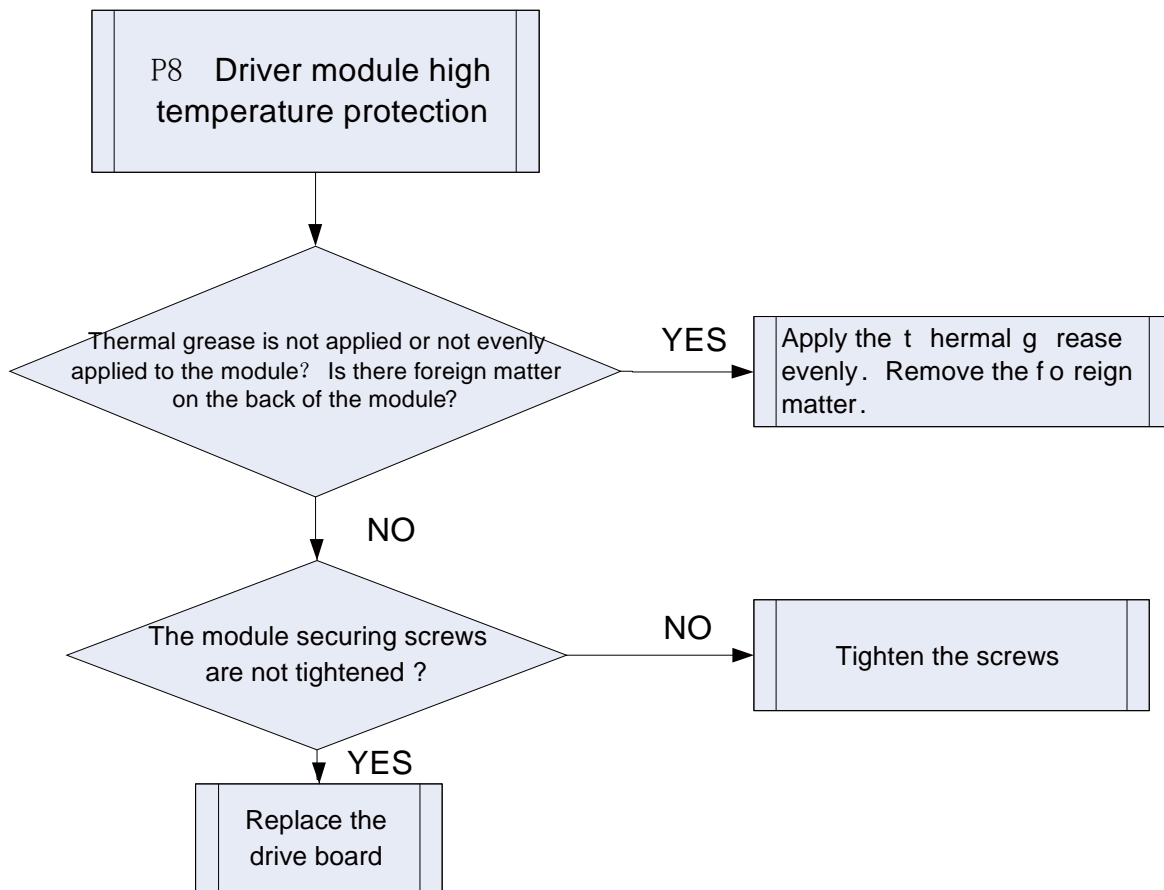
Error judgment condition and method:

If IPM module temperature or PFC module temperature exceeds the set protection value, then it can be judged that driver module temperature is too high and system will shut down for protection.

Possible reason:

- Thermal grease is not applied or not evenly applied to the module, or there is other substance on the back of the module.
- The module securing screws are not tightened up.
- Drive board temperature sampling circuit element is damaged or drive chip temperature sampling AD terminal is abnormal.

Troubleshooting:



3.4.31 “PA” AC Current Protection

Error display: ODU mainboard, IDU wired control and IDU receiver light board will display

Error judgment condition and method:

If input current value exceeds the set protection value, then it can be judged that AC current protection occurs and system will shut down for protection.

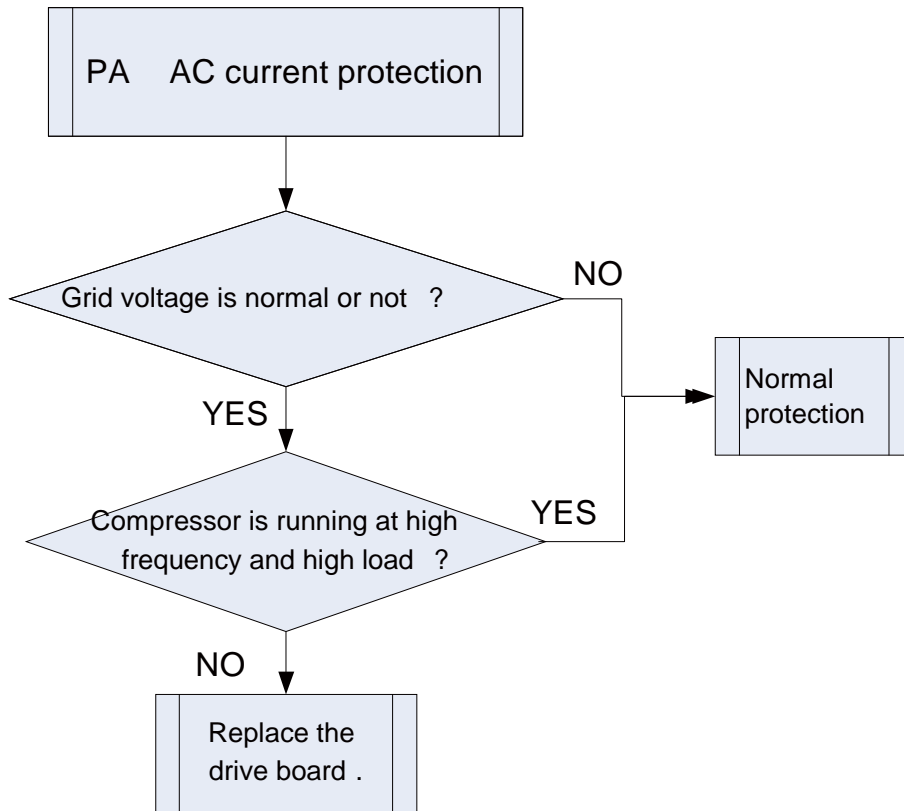
Possible reason:

- System is heavy-loaded and compressor current is too large.
- Grid voltage is abnormal.

■PFC module is damaged.

■Drive board PFC current sampling circuit element is damaged or drive chip PFC current sampling AD terminal is abnormal.

Troubleshooting:



3.4.32 "Pc" Driver Current Error

Error display: ODU mainboard, IDU wired control and IDU receiver light board will display

Error judgment condition and method:

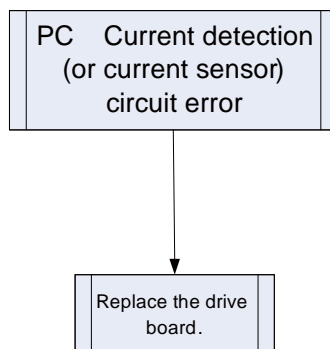
After power charging, if offset voltage average is detected to exceed 12.5% of 1.65V in 1s, then it can be judged that current detection (or current sensor) circuit is faulted. System will shut down for protection.

Possible reason:

■Current detection (or current sensor) sampling circuit element is abnormal.

■Drive chip compressor current sampling AD terminal is badly welded or short-circuited.

Troubleshooting:



3.4.33 “Pd” Sensor Connection Protection

Error display: ODU mainboard, IDU wired controller and IDU receive light board will display

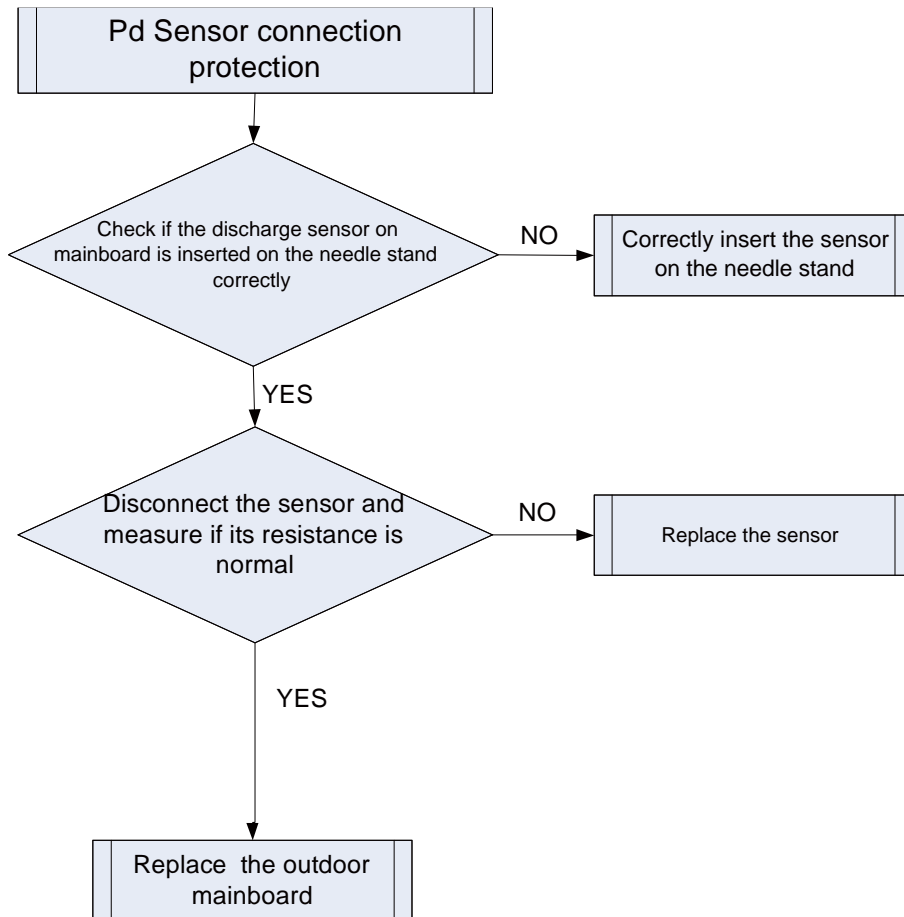
Error judgment condition and method:

Sample the AD value of sensor through sensor detecting circuit and judge the range of AD value, If the sampling AD value exceeds upper limit and lower limit in 5 seconds continuously, report the error.

Possible reason:

- Poor contact between sensor and terminal in mainboard interface
- sensor is abnormal
- Detecting circuit is abnormal

Troubleshooting:



3.4.34 “PL” Bus Low-Voltage Protection

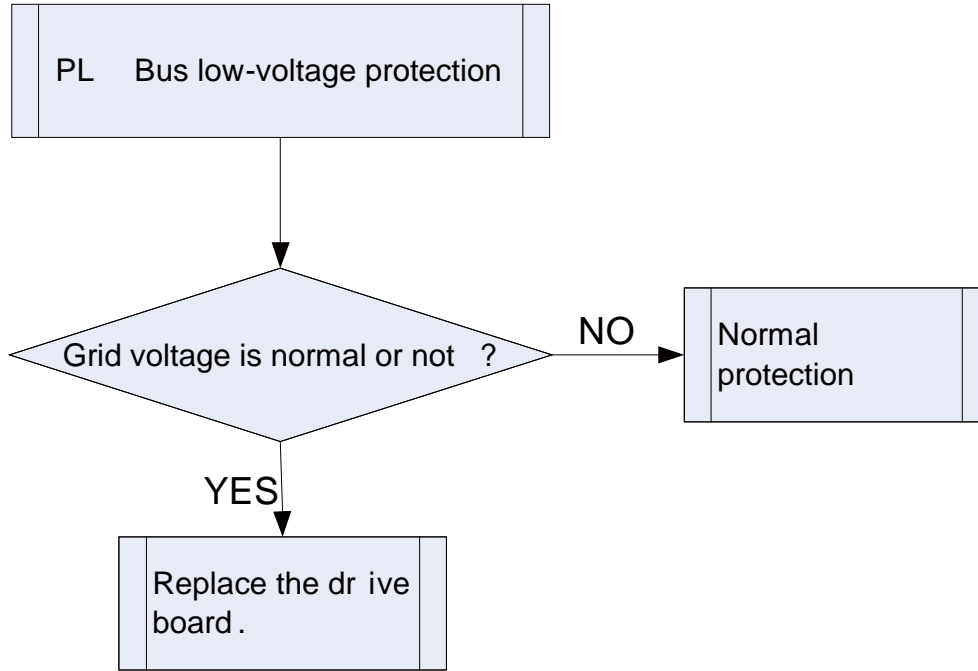
Error display: ODU mainboard, IDU wired control and IDU receiver light board will display

Error judgment condition and method:

When compressor is running and there is no other malfunction, if busbar voltage is lower than the set value for low voltage protection, then it can be judged that bus low-voltage protection occurs. System will shut down for protection.

Possible reason:

- Voltage of power grid is abnormal.
- Drive board busbar voltage sampling circuit element is damaged or drive board busbar voltage sampling AD terminal is abnormal.

Troubleshooting:**3.4.35 “PH” Bus High-Voltage Protection**

Error display: ODU mainboard, IDU wired control and IDU receiver light board will display

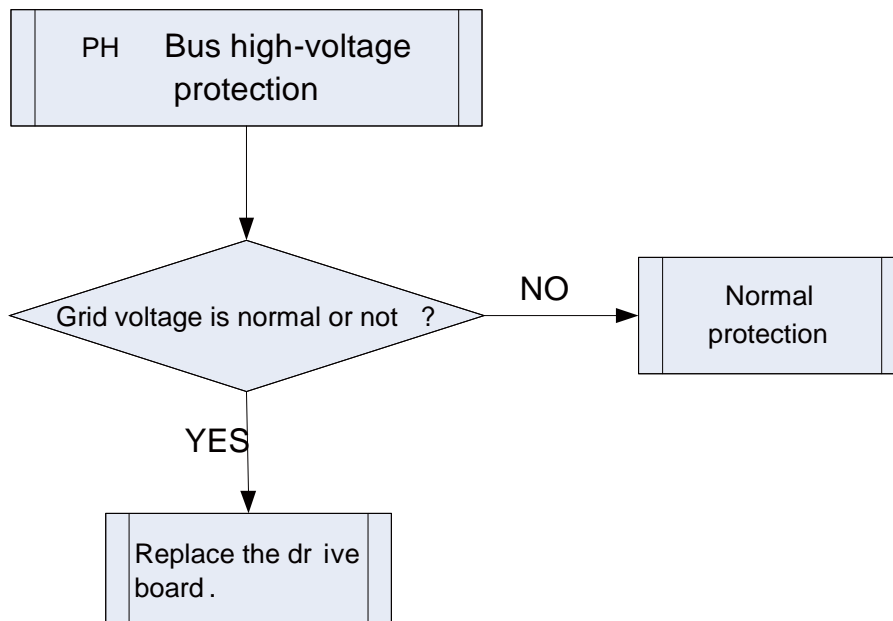
Error judgment condition and method:

If there is no other malfunction and the busbar voltage is higher than the set value for high voltage protection, then it can be judged that bus high-voltage protection occurs. System will shut down for protection.

Possible reason:

- Voltage of power grid is abnormal.
- Drive board busbar voltage sampling circuit element is damaged or drive board busbar voltage sampling AD terminal is abnormal.

Troubleshooting:



3.4.36 “PU” Charge Loop Error

Error display: ODU mainboard, IDU wired control and IDU receiver light board will display

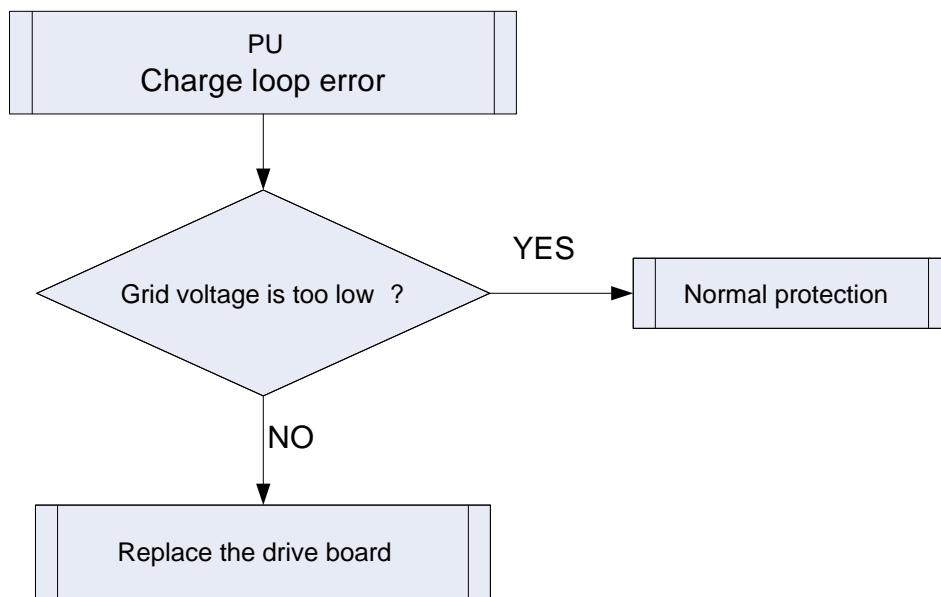
Error judgment condition and method:

When the charge loop starts to get charged and the busbar voltage cannot reach the set value in a certain period of time, then it can be judged that charge loop error exists. System will shut down for protection.

Possible reason:

- Voltage of power grid is abnormal. Voltage is too low.
- Drive board charge loop element is abnormal.
- Drive board busbar voltage sampling circuit element is damaged or drive chip busbar voltage sampling AD terminal is abnormal.

Troubleshooting:



3.4.37 “ee” Drive Memory Chip Error

Error display: ODU mainboard, IDU wired control and IDU receiver light board will display

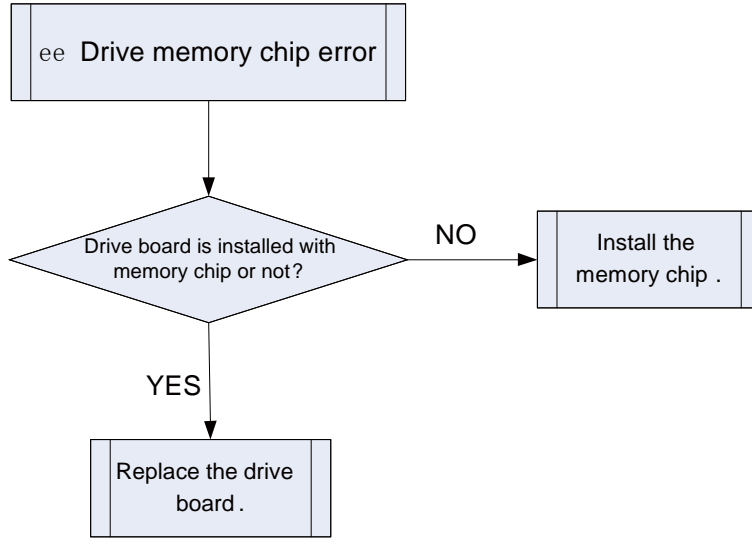
Error judgment condition and method:

If power is connected but the drive board with memory chip cannot detect the memory chip or read the memory chip data correctly, then it can be judged that drive memory chip error exists.

Possible reason:

- The drive board that needs memory chip is not installed with the memory chip.
- The lead or connector of memory chip is badly welded or short-circuited.

Troubleshooting



3.4.38 “c4” ODU Jumper Cap Error

Error display: ODU mainboard, IDU wired control and IDU receiver light board will display

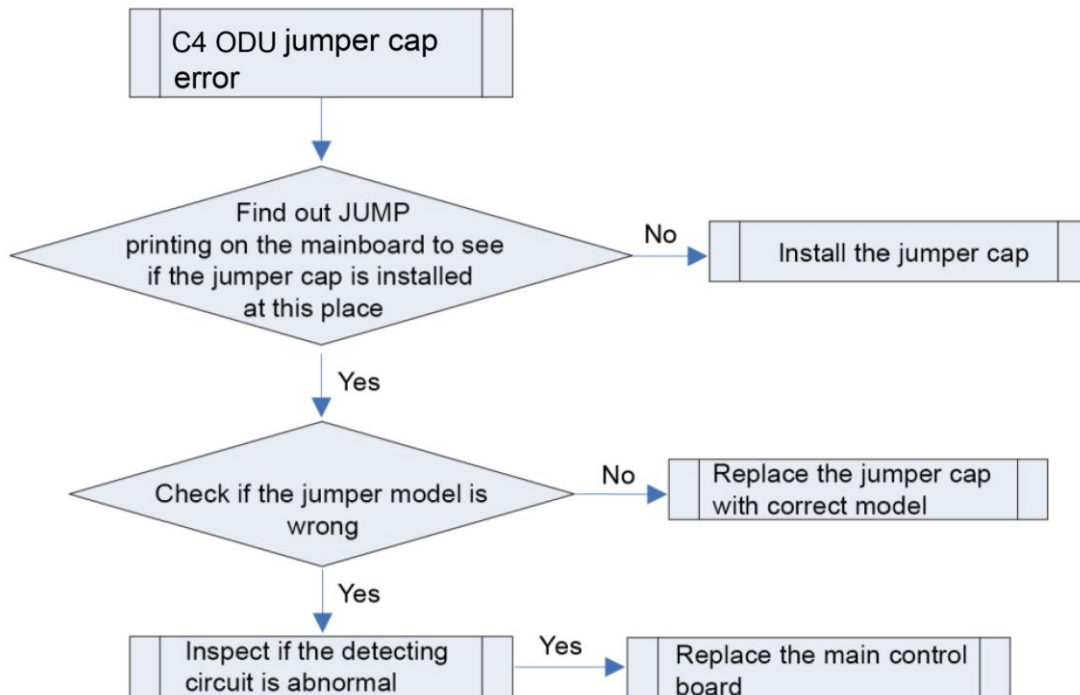
Error judgment condition and method:

If jumper cap model doesn't match with mainboard, report the error

Possible reason:

- Jumper cap is not installed
- Jumper cap model is wrong
- Detecting circuit is abnormal

Troubleshooting:



3.4.39 “EL” Emergency Stop (Fire Alarm)

If fire alarm terminal is enabled after the IDU mainboard connects to function expansion panel, error EL will be reported.

3.5 Failures Not Caused by Errors

(1) If your air conditioner fails to function normally, please first check the following items before maintenance:

| Problem | Cause | Corrective measure |
|--------------------------------|---|--|
| The air conditioner can't run. | If you turn off the unit and then immediately turn it on, in order to protect the compressor and avoid system overload, compressor will delay running for 3min. | Please wait for a while. |
| | Wire connection is wrong. | Connect wires according to the wiring diagram. |
| | Fuse or circuit breaker is broken. | Replace the fuse or switch on the circuit breaker. |
| | Power failure | Restart after power is resumed. |
| | Power plug is loose | Re-insert the power plug. |
| | Remote control has low battery. | Replace the batteries. |
| Bad cooling or heating effect. | Air inlet and outlet of indoor or outdoor units have been blocked. | Clear the obstacles and keep the room for indoor and outdoor units well ventilated. |
| | Improper temperature setting | Reset a proper temperature. |
| | Fan speed is too low. | Reset a proper fan speed. |
| | Air flow direction is not right. | Change the direction of air louvers. |
| | Doors or windows are open. | Close them. |
| | Exposed under direct sunshine | Put on curtains or louvers in front of the windows. |
| | Too many heat sources in the room. | Remove unnecessary heat sources. |
| | Filter is blocked or dirty. | Send for a professional to clean the filter. |
| | Air inlets or outlets of the units are blocked. | Clear away obstacles that are blocking the air inlets and outlets of indoor and outdoor units. |

(2) The following situations are not operation failures.

| Phenomenon | Time of occurrence | Cause |
|---|---|--|
| Mist comes from the air conditioner. | During operation | If the unit is running under high humidity, the wet air in the room will be quickly cooled down. |
| The air conditioner generates some noise. | System switches to heating mode after defrosting. | Defrosting process will generate some water, which will turn to water vapor. |
| | The air conditioner is buzzing at the beginning of operation. | Temperature control will be buzzing when it starts working. The noise will become weak 1min later. |
| Dust comes from the air conditioner. | When the unit is turned on, it purrs. | When the system is just started, the refrigerant is not stable. About 30s later, the purr of the unit becomes low. |
| | About 20s after the unit first enables the heating mode or there is refrigerant brushing sound when defrosting under heating. | It's the sound of 4-way valve switching direction. The sound will disappear after the valve changes its direction. |
| | There is hissing sound when the unit is started or stopped and a slight hissing sound during and after operation. | It's the sound of gaseous refrigerant that stops flowing and the sound of drainage system. |
| | There is a sound of crunching during and after operation. | Because of temperature change, front panel and other components may be swelled up and cause abrasion sound. |
| | There is a hissing sound when the unit is turned on or suddenly stopped during operation or after defrosting. | Because refrigerant suddenly stops flowing or changes the flow direction. |
| | The unit starts operation after being unused for a long time. | Dust inside the indoor unit comes out together with the air. |
| | The air conditioner generates some smell. | During operation |

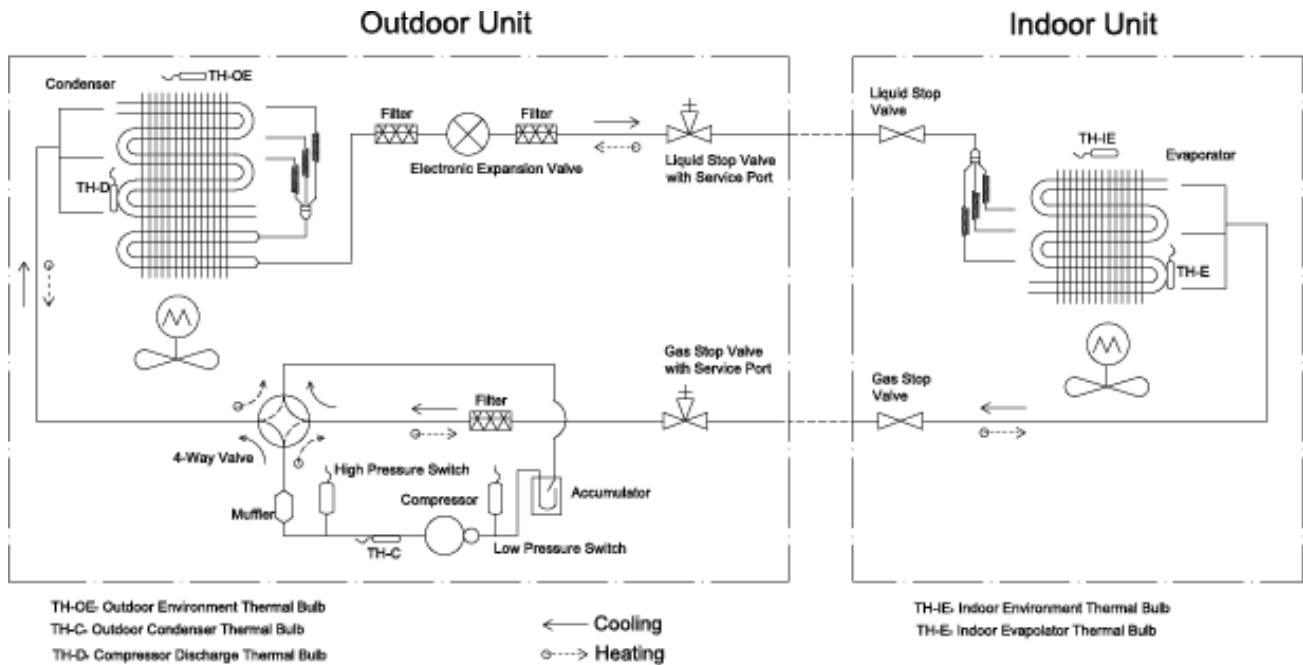


NOTICE:

Check the above items and adopt the corresponding corrective measures. If the air conditioner continues to function poorly, please stop the air conditioner immediately and contact Gree's authorized local service center. Ask our professional service staff to check and repair the unit.

4. Maintenance

4.1 System Diagram



Note:

1. It is just a schematic diagram and some parts may differ from the real objects inside the unit.
2. The throttling device for units 09K and 12K is the capillary rather than the electronic expansion valve.

4.2 Connection Pipe Vacuum Pumping



NOTICE

Make sure the outlet of vacuum pump is away from fire source and is well-ventilated.

- (1) Remove the caps of the liquid valve, gas valve and also the service port.
- (2) Connect the hose at the low pressure side of the manifold valve assembly to the service port of the unit's gas valve, and meanwhile the gas and liquid valves should be kept closed in case of refrigerant leak.
- (3) Connect the hose used for evacuation to the vacuum pump.
- (4) Open the switch at the lower pressure side of the manifold valve assembly and start the vacuum pump. Meanwhile, the switch at the high pressure side of the manifold valve assembly should be kept closed, otherwise evacuation would fail.
- (5) The evacuation duration depends on the unit's capacity, generally.

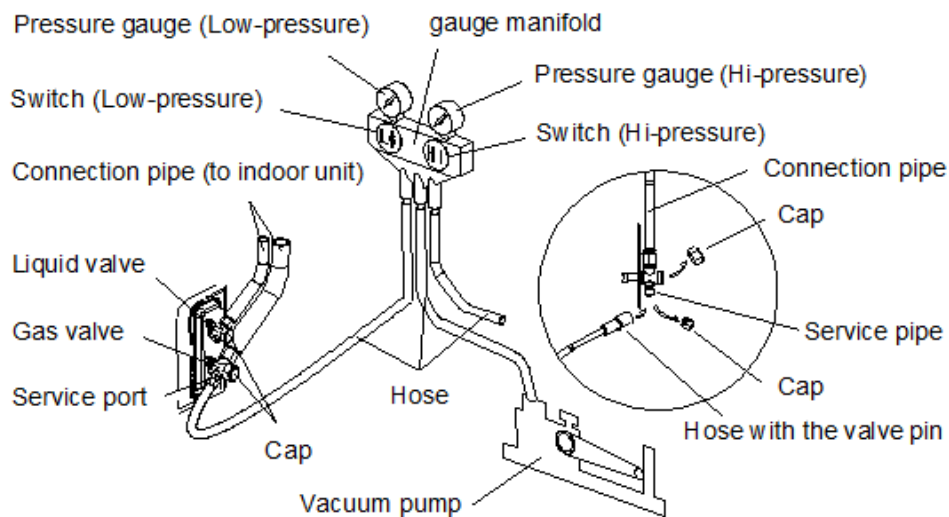
| Model | Time(min) |
|---|-----------|
| GUD35W/NhA-T | 15 |
| GUD50W/NhA-T | 20 |
| GUD71W/NhA-T, GUD85W/NhA-T, GUD100W/NhA-T, GUD100W/NhA-X | 30 |
| GUD125W/NhA-T, GUD140W/NhA-T, GUD125W/NhA-X, GUD140W/NhA-X, GUD160W/NhA-X | 45 |

And verify if the pressure gauge at the low pressure side of the manifold valve assembly reads -1.0Mp (-75cmHg), if not, it indicates there is leak somewhere. Then, close the switch fully and then stop the vacuum pump.

(6) Wait for 10min to see if the system pressure can remain unchanged. During this time, the reading of the pressure gauge at the low pressure side can not be larger than 0.005Mp (0.38cmHg).

(7) Slightly open the liquid valve and let some refrigerant go to the connection pipe to balance the pressure inside and outside of the connection pipe, so that air will not come into the connection pipe when removing the hose. Notice that the gas and liquid valve can be opened fully only after the manifold valve assembly is removed.

(8) Place back the caps of the liquid valve, gas valve and also the service port.



Notice:

For large-size units, there are maintenance ports for liquid valve and gas valve. During evacuation, you may connect the two hoses of the branch valve assembly to the maintenance ports to speed up the evacuation.

Refrigerant should be reclaimed into the appropriate storage tank. System should use oxygen-free nitrogen purging to ensure safety. This process may need to repeat several times. Do not use compressed air or oxygen in this process.

4.3 Refrigerant Charging

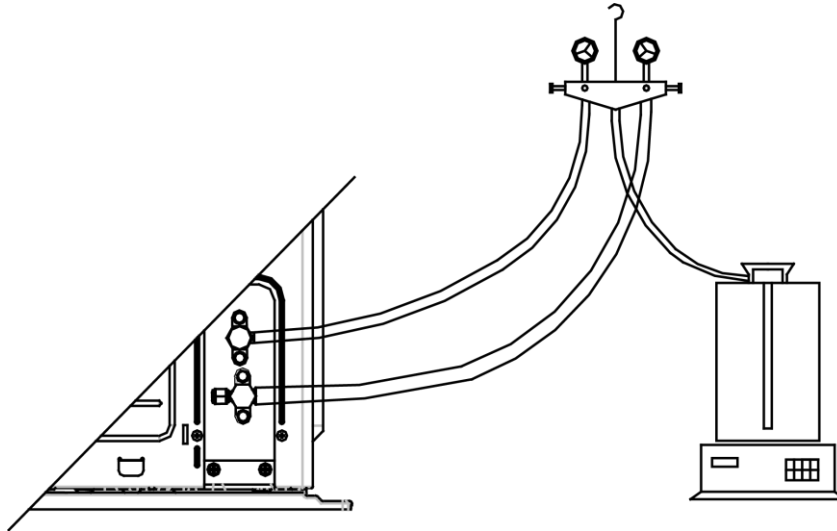
Pre-charging

Step 1: Connect the high pressure gauge line to the valve of liquid pipe and connect the low pressure gauge line to the valve of gas pipe. Connect the middle gauge line to the vacuum pump. Power on the vacuum pump and perform vacuum drying.

Step 2: After vacuum drying, close the high and low pressure gauge valves. Then remove the middle gauge line from the connector of vacuum pump. Then connect to the refrigerant tank.

Step 3: Loosen the middle gauge line from the connector of pressure gauge to a proper extent and slightly open the valve of refrigerant tank. Evacuate the middle gauge line. Then tighten up the connector again and completely open the valve of refrigerant tank at the same time.

Step 4: Keep the refrigerant tank erect and put it on an electronic scale. Record the current weight as m_1 .



Step 5: Open the high pressure gauge valve (Keep the low pressure gauge valve closed). Then charge refrigerant into the system. Meanwhile, record the weight of refrigerant tank as m_2 .

Step 6: $m_1 - m_2 = m$. If m equals to the required charging quantity M , close the valve of refrigerant tank at once. Then move to step 8.

Step 7: If you can't continue to charge refrigerant into the system and the quantity of charged refrigerant is less than the required charging quantity, then record the current quantity of charged refrigerant:

$$m = m_1 - m_2$$

$$m' = M - m$$

The remaining charging quantity is: $m' = M - m$

Step 8: After charging, remove the pressure gauge.

Refrigerant charging when unit is turned on:

Step 1: Close the valve of refrigerant tank. First remove the pressure gauge lines and connect the outdoor unit to the indoor unit. Then reconnect the pressure gauge lines. Connect the low pressure gauge line to the other joint of gas valve and connect the high pressure gauge line to the liquid valve. Connect the middle gauge line to the vacuum pump. Power on the vacuum pump and perform vacuum drying.

Step 2: After vacuum drying, close the high and low pressure gauge valves. Then remove the middle gauge line from the connector of vacuum pump. Then connect to the refrigerant tank.

Step 3: Loosen the middle gauge line from the connector of pressure gauge to a proper extent and slightly open the valve of refrigerant tank. Evacuate the middle gauge line. Then tighten up the connector again and completely open the valve of refrigerant tank at the same time.

Step 4: Turn on the air conditioner and let it run for a while.

Step 5: Open the low pressure gauge valve (Keep the high pressure gauge valve closed). Then charge in the remaining charging quantity m' .

Step 6: After all required refrigerant is charged in, close the valve of refrigerant tank.

Step 7: Remove the pressure gauge to finish the refrigerant charging work.

Procedure of refrigerant charging

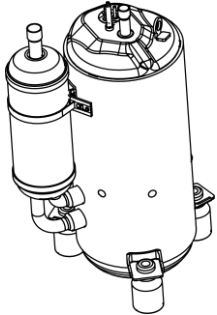
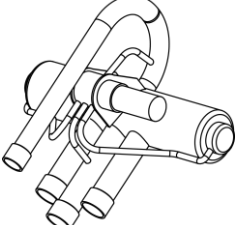
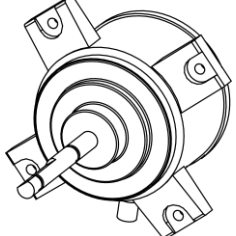

Following is the supplementary requirement for refrigerant charging on the basis of normal procedure:


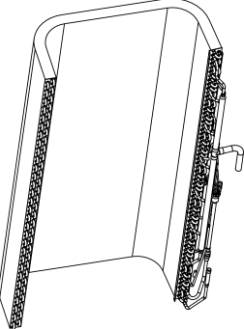
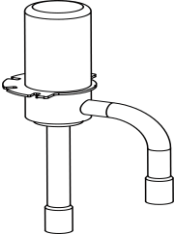
- 1) Make sure that when charging refrigerant into the system, no other types of refrigerant will be mixed. The pipeline for refrigerant charging should be as short as possible to reduce the amount of refrigerant left in it.
- 2) The refrigerant tank should stand erect.
- 3) Make sure the refrigerating system is already grounded before refrigerant charging.
- 4) When charging is completed (or not yet completed), stick a label on the system.
- 5) Before re-charging refrigerant into the system, use oxygen-free nitrogen to perform pressure test. When charging is completed, perform leak test before trial running. Before leaving the workplace, perform a leak test again.

4.4 Maintenance of Major Components

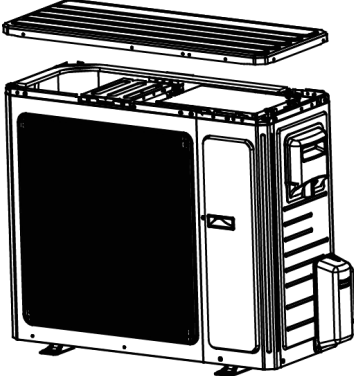
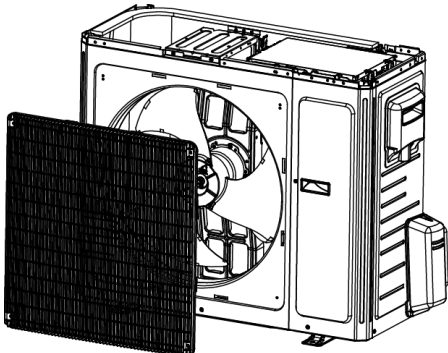
4.5 Removal of Major Components

4.5.1 Removal of ODU Major Components

| Picture | Name | Function |
|---|-------------|---|
|  | Compressor | Through compression, the low pressure refrigerant occupies a less space. As its pressure and temperature both rise, it becomes high pressure and high temperature refrigerant. It is the power drive of the system. |
|  | 4-way valve | It is used to change directions, the flow of refrigerant in cooling/heating. |
|  | Motor | The power drive of the fan. It enables the fan to run so as to provide smooth currents of air for forced convection and heat exchange of condenser and evaporator. |
|  | Fan | It is used to provide smooth currents of air for forced convection and heat exchange of condenser and evaporator. |

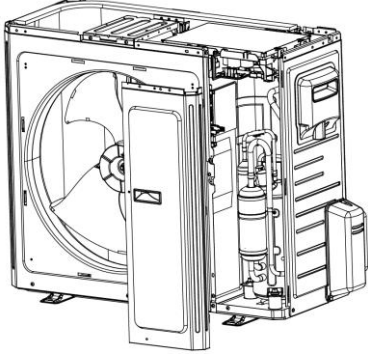
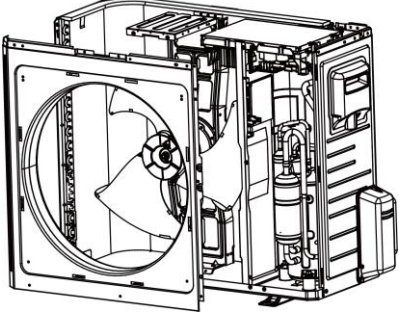
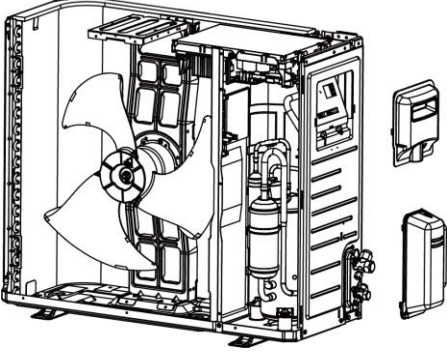
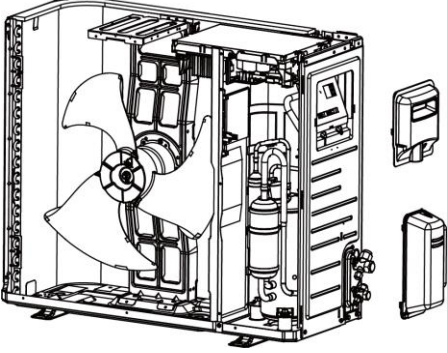
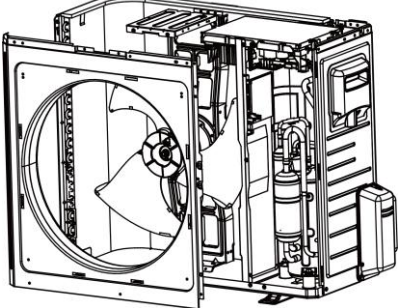
| Picture | Name | Function |
|--|-----------------------------------|--|
|  | <p>Gas liquid separator</p> | <p>Installed at the suction side of compressor, it can separate the liquefied refrigerant from the gaseous refrigerant to make sure that only gaseous refrigerant will be sucked into the compressor. If liquefied refrigerant gets inside the compressor, ineffective compressor or slugging phenomenon will occur.</p> |
|  | <p>Condenser</p> | <p>It is used to transfer partial heat of the hot flow to the cold flow so that the flow temperature can reach the specified index. It is an energy exchanging device.</p> |
|  | <p>Electronic expansion valve</p> | <p>It is used to lower the pressure and temperature of liquefied refrigerant and adjust the flow of refrigerant entering the evaporator.</p> |

Model: GUD35W/NhA-T, GUD50W/NhA-T, GUD71W/NhA-T, GUD85W/NhA-T

| Removal of front panel | | |
|---|--|--|
| <p>Note: Before removing the front panel, make sure power is cut off.</p> | | |
| Step | Picture | Work instruction |
| <p>1.Remove the upper cover plate.</p> |  | <ul style="list-style-type: none"> ●Unscrew the screws of the upper cover plate with a screwdriver. |
| <p>2. Remove the front grill.</p> |  | <ul style="list-style-type: none"> ●Unscrew the screws of the front grill with a screwdriver. |

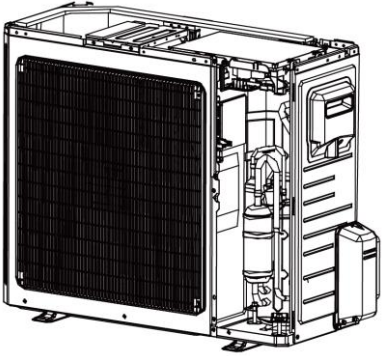
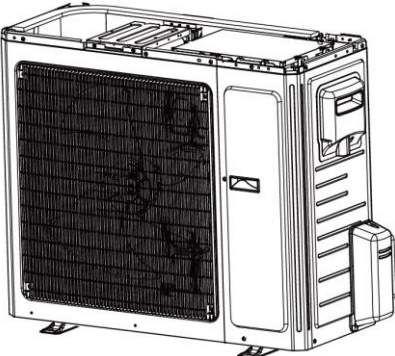
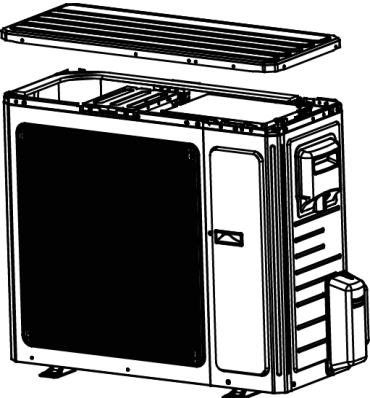
Removal of front panel

Note: Before removing the front panel, make sure power is cut off.

| Step | Picture | Work instruction |
|---------------------------------|--|--|
| 3. Remove the front side plate. |  | <ul style="list-style-type: none"> •Unscrew the screws of the front side plate with a screwdriver. |
| 4. Remove the front panel. |  | <ul style="list-style-type: none"> •Unscrew the screws that connect the front panel to the middle insulating board and screws around the front panel. |
| 5. Remove the right side plate. |  | <ul style="list-style-type: none"> •Unscrew the screws that connect the right side plate to the electric box and the screws around the right side plate. |
| 6. Install the right side plate |  | <ul style="list-style-type: none"> •Screw up the screws around the right side plate. Be careful to handle well the clasps at the bottom of the right side plate. |
| 7. Install the front panel. |  | <ul style="list-style-type: none"> •Install the front panel by mounting on 6 clasps on its both sides. Please note that there is one screw on the lower right side. |

Removal of front panel

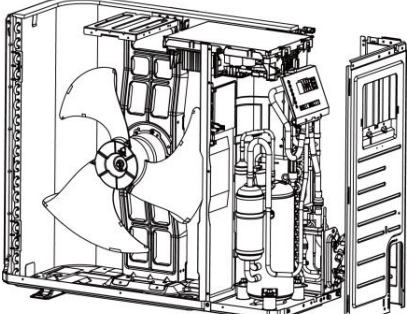
Note: Before removing the front panel, make sure power is cut off.

| Step | Picture | Work instruction |
|------------------------------------|---|---|
| 8. Install the grill. |  | <ul style="list-style-type: none"> ● Attach the grill back in place and tighten up the screws. |
| 9. Install the front side plate. |  | <ul style="list-style-type: none"> ● Tighten up the screws around the front side plate. |
| 10. Install the upper cover plate. |  | <ul style="list-style-type: none"> ● Tighten up the screws around the upper cover plate. |

Model: GUD35W/NhA-T, GUD50W/NhA-T, GUD71W/NhA-T, GUD85W/NhA-T

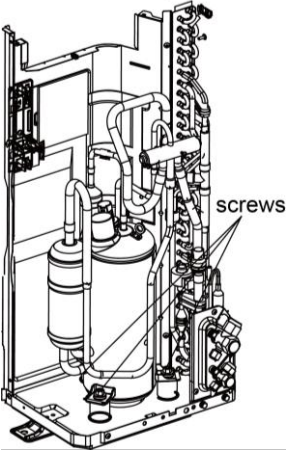
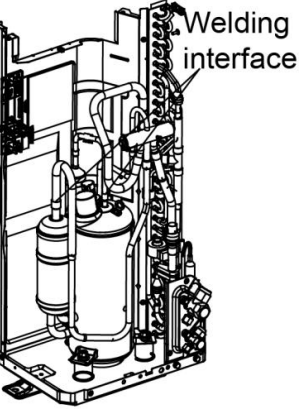
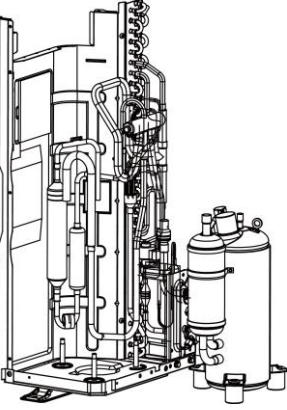
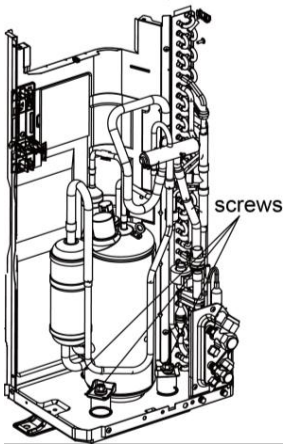
Removal of compressor

Note: Before removing the compressor, make sure there is no refrigerant in the pipeline and power is cut off.

| Step | Picture | Work instruction |
|------------------|---|---|
| 1. Remove wires. |  | <ul style="list-style-type: none"> ● Loosen the securing screws of the wires with a screwdriver. ● Remove the wires. <p>Note: When removing the wires, mark the wire terminals corresponding to their color so as to avoid misconnection.</p> |

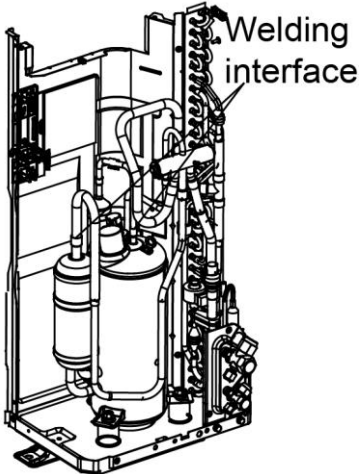
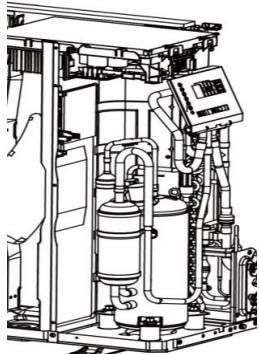
Removal of compressor

Note: Before removing the compressor, make sure there is no refrigerant in the pipeline and power is cut off.

| Step | Picture | Work instruction |
|--|---|---|
| <p>2. Loosen the securing screws at the foot of compressor.</p> |  | <ul style="list-style-type: none"> ●Use a wrench to twist off the screws at the foot of compressor. |
| <p>3. Break off the pipes that connecting to the compressor.</p> |  | <ul style="list-style-type: none"> ●Weld the pipes that are connected to the compressor. ●Then remove the pipes. <p>Note: When welding the pipes, do not let the flame burn the other components.</p> |
| <p>4. Remove the compressor from the chassis.</p> |  | <ul style="list-style-type: none"> ●Take out the compressor and replace it. <p>Note: When replacing the compressor, avoid touching the nearby pipeline and components.</p> |
| <p>5. Fix the new compressor back onto the chassis.</p> |  | <ul style="list-style-type: none"> ●After replacing the compressor, tighten up the screws at the foot of compressor. |

Removal of compressor

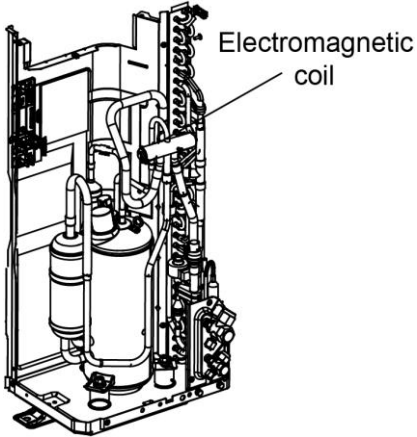
Note: Before removing the compressor, make sure there is no refrigerant in the pipeline and power is cut off.

| Step | Picture | Work instruction |
|--|--|--|
| <p>6. Connect the compressor suction port and exhaust port with the pipes.</p> |  | <ul style="list-style-type: none"> ●Weld the compressor connection pipes and connect them to the compressor. <p>Note: When replacing the compressor, avoid touching the nearby pipeline and components.</p> |
| <p>7. Connect the compressor wires.</p> |  | <ul style="list-style-type: none"> ●Connect the compressor wires to the wire terminals on the top of compressor. <p>Note: When connecting the wires, be sure to match the colors with the corresponding wire terminals.</p> |

Model: GUD35W/NhA-T, GUD50W/NhA-T, GUD71W/NhA-T, GUD85W/NhA-T

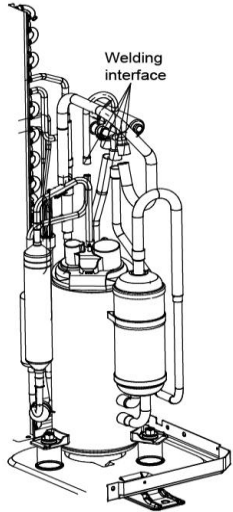
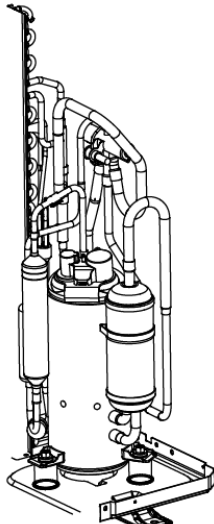
Removal of 4-way valve

Note: Before removing the 4-way valve, make sure refrigerant is fully discharged from the unit and power is cut off.

| Step | Picture | Work instruction |
|---|---|---|
| <p>1. Take off the electromagnetic coil of the 4-way valve.</p> |  | <ul style="list-style-type: none"> ●Carefully unscrew the screws of electromagnetic coil with a screwdriver. |

Removal of 4-way valve

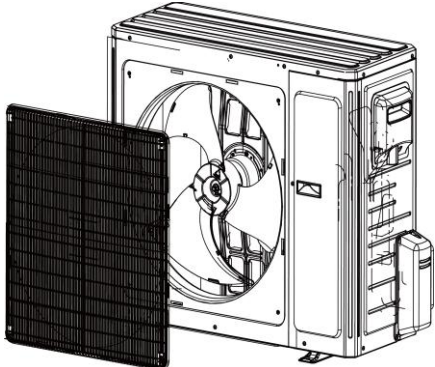
Note: Before removing the 4-way valve, make sure refrigerant is fully discharged from the unit and power is cut off.

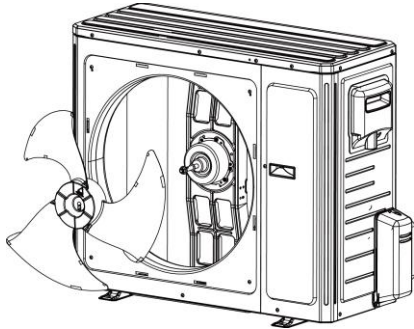
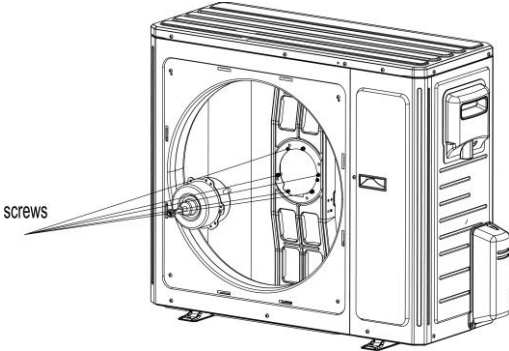
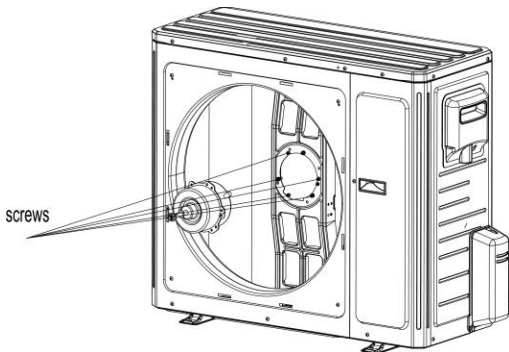
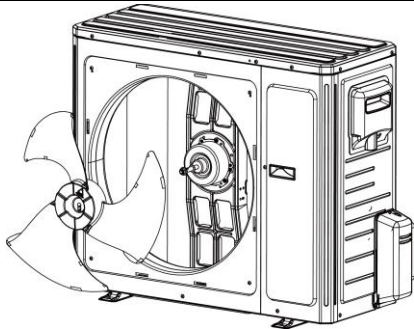
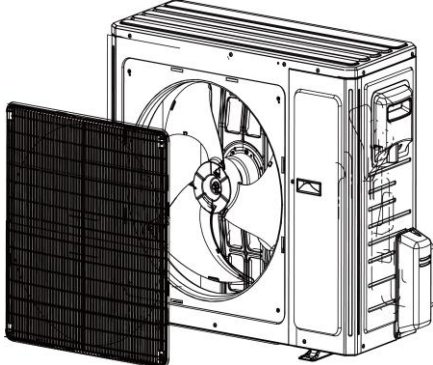
| Step | Picture | Work instruction |
|---|--|---|
| <p>2. Break off the connection pipes from the 4-way valve.</p> |  | <ul style="list-style-type: none"> ●Use a soldering gun to loosen the 4 joints on the 4-way valve and then remove the connection pipes. <p>Note: When welding the pipes, the 4-way valve should be wrapped with wet cloth for cooling. Do not let the flame burn the other components.</p> |
| <p>3. Replace the 4-way valve and connect it to the connection pipes.</p> |  | <ul style="list-style-type: none"> ●Replace the 4-way valve and then use a soldering gun to weld the 4 joints of the 4-way valve. ●Tighten up the screws of electromagnetic coil with a screwdriver. <p>Note: When welding the pipes, the 4-way valve should be wrapped with wet cloth for cooling. Do not let the flame burn the other components.</p> |

Model: GUD35W/NhA-T, GUD50W/NhA-T, GUD71W/NhA-T, GUD85W/NhA-T

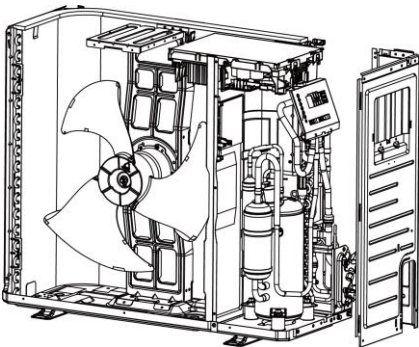
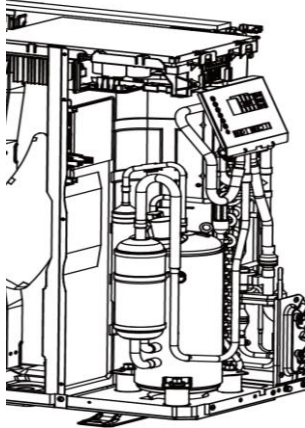
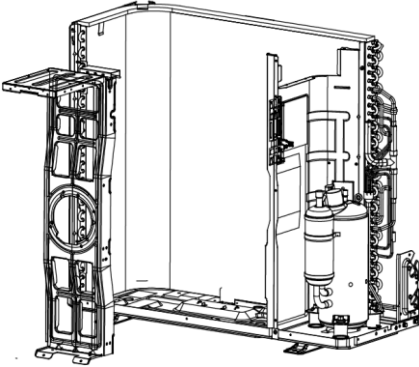
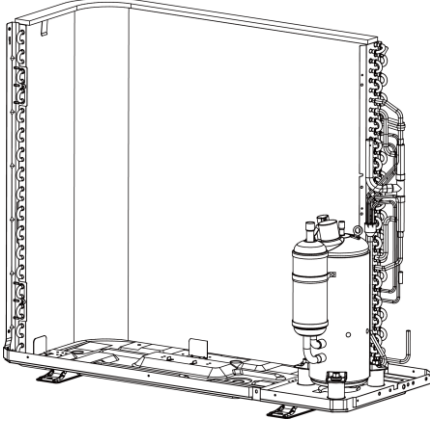
Removal of fan and motor

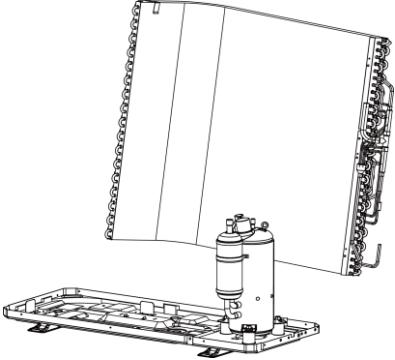
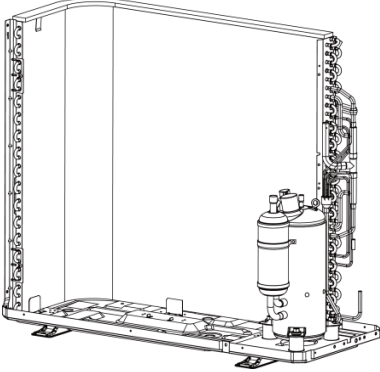
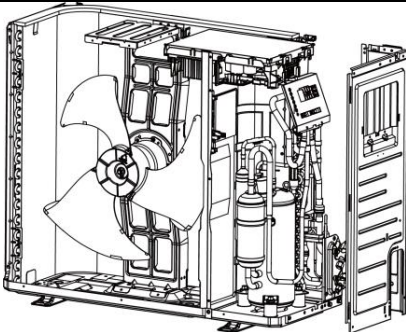
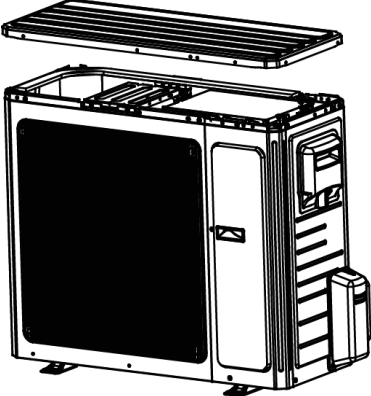
Note: Before removing the fan, make sure power is cut off.

| Step | Picture | Work instruction |
|-----------------------------|---|---|
| <p>1. Remove the grill.</p> |  | <ul style="list-style-type: none"> ●Use a screwdriver to unscrew the two screws on the upper left and lower right corners. |

| Removal of fan and motor | | |
|--|--|--|
| Note: Before removing the fan, make sure power is cut off. | | |
| Step | Picture | Work instruction |
| 2. Remove the fan. |  | <ul style="list-style-type: none"> •Use a wrench to remove the specialized nut and gasket of the fan. <p>Note: Please keep the nut and gasket safe after removing them from the fan.</p> |
| 3. Remove motor. |  | <ul style="list-style-type: none"> •Use a screwdriver to unscrew the bolt of motor. <p>Note: Motor wire should be first removed from the electric box.</p> |
| 4. Install the motor. |  | <ul style="list-style-type: none"> •Replace with a new motor. Then tighten up the screw bolt. |
| 5. Install the fan. |  | <ul style="list-style-type: none"> •Install the fan in place. Put on the gasket and use a wrench to secure the screw nut. <p>Note: After installing the fan, turn the fan by hand to see if it can run normally. If not, please check for the reason.</p> |
| 6. Install the grill. |  | <ul style="list-style-type: none"> •After replacing the motor, use a screwdriver to tighten up the screw bolt that secures the motor. |

Model: GUD35W/NhA-T, GUD50W/NhA-T, GUD71W/NhA-T, GUD85W/NhA-T

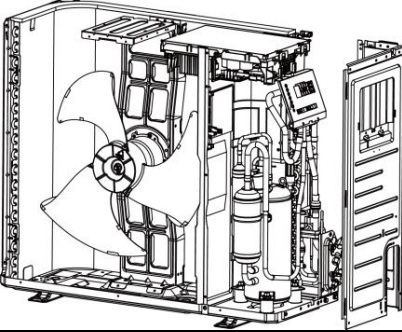
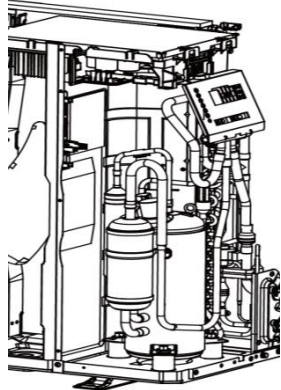
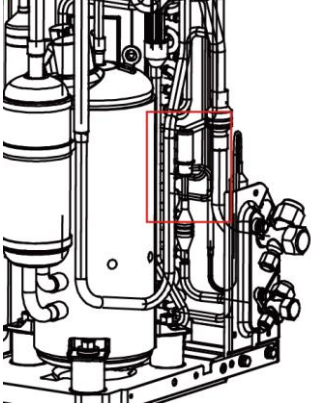
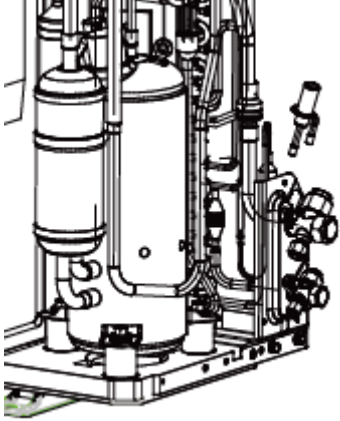
| Removal of condenser | | |
|--|--|--|
| Note: Before removing the condenser, make sure there is no refrigerant in the pipeline and power is cut off. | | |
| Step | Picture | Work instruction |
| 1. Remove the panels. |  | <ul style="list-style-type: none"> ●Remove the upper, lower and front panels. |
| 2. Remove the electric box. |  | <ul style="list-style-type: none"> ●Loosen the wire clamp at the bottom of the electric box. ●Unscrew the screws of electric box. ●The connection wires inside and outside the electric box should be removed. |
| 3. Remove motor support. |  | <ul style="list-style-type: none"> ●When removing the motor support, be careful to protect the components. |
| 4. Remove the condenser. |  | <ul style="list-style-type: none"> ●Heat up the welding points of connection pipes through gas welding until the pipes break off. Note: When welding the pipes, do not let the flame burn the other components. The welding points of condenser are steel and copper welding points. Be sure to maintain the welding quality. |

| Removal of condenser | | |
|--|---|---|
| Note: Before removing the condenser, make sure there is no refrigerant in the pipeline and power is cut off. | | |
| Step | Picture | Work instruction |
| 5. Take out the condenser. |  | <ul style="list-style-type: none"> Loosen the securing screws of condenser support. Take off the plate type heat exchanger and the support as a whole. |
| 6. Install the new condenser. |  | <ul style="list-style-type: none"> Secure the screws of condenser and support. Then fix them together on the chassis. Install the condenser by referring to the positions of entering and leaving pipes. Weld the connection pipes. Nitrogen welding: the pressure of nitrogen is $0.5 \pm 0.1 \text{ kgf/cm}^2$ (relative pressure). Note: When welding the pipes, do not let the flame burn the other components. |
| 7. Secure the electric box and arrange the wires according to the requirement. |  | <ul style="list-style-type: none"> Put the electric box in place and tighten up the screws of electric box. Arrange and secure the wires as original. |
| 8. Check and open the upper and side panels. |  | <ul style="list-style-type: none"> Check whether each component and connection wire is well connected. If everything is OK, place back the upper, left and right side panels. |

Model: GUD35W/NhA-T, GUD50W/NhA-T, GUD71W/NhA-T, GUD85W/NhA-T

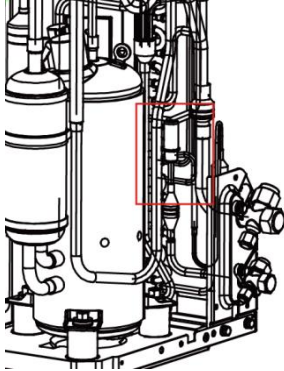
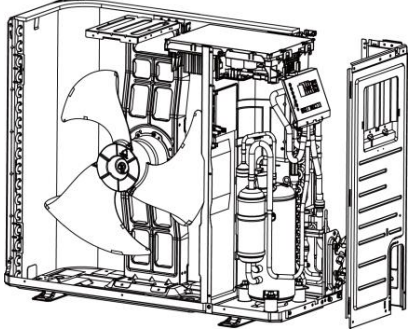
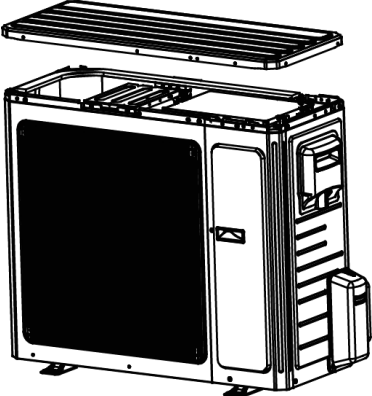
Removal of electronic expansion valve

Note: Before removing the electronic expansion valve, make sure there is no refrigerant in the pipeline and power is cut off.

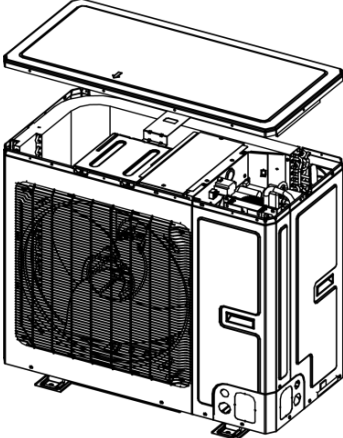
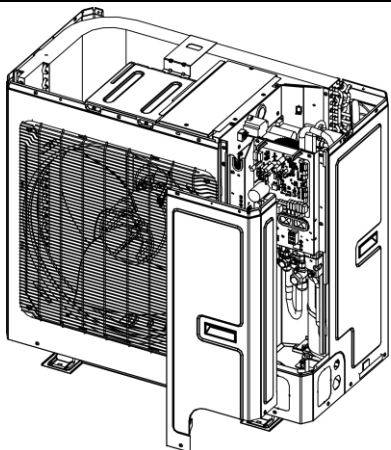
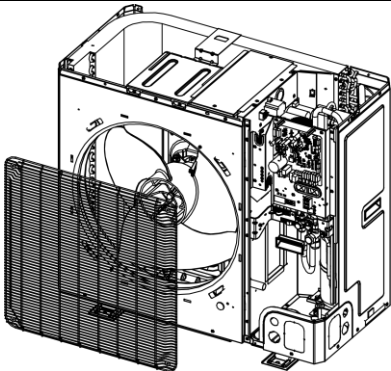
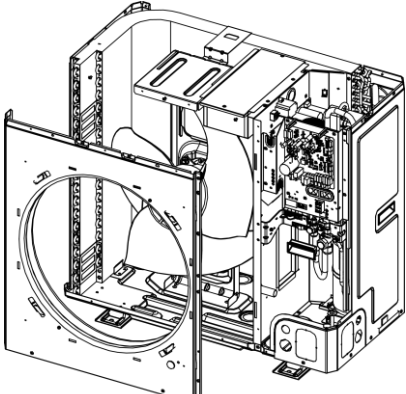
| Step | Picture | Work instruction |
|---|---|---|
| <p>1. Loosen the wire clamp at the bottom of the electric box and the screws of electric box.</p> |  | <ul style="list-style-type: none"> ●Remove the upper, lower and front panels. ●Loosen the wire clamp at the bottom of the electric box. ●Unscrew the screws of electric box. |
| <p>2. Remove the electric box.</p> |  | <ul style="list-style-type: none"> ●The connection wires inside and outside the electric box should be removed. ●When removing the electric box, be careful to protect the components. |
| <p>3. Remove the electronic expansion valve.</p> |  | <ul style="list-style-type: none"> ●Take off the coil of electronic expansion valve. ●Loosen the connection pipe of electronic expansion valve by welding. Then remove the connection pipe. <p>Note: When welding the pipe, do not let the flame bunt the other components.</p> |
| <p>4. Take out the electronic expansion valve.</p> |  | <ul style="list-style-type: none"> ●Take out the electronic expansion valve |

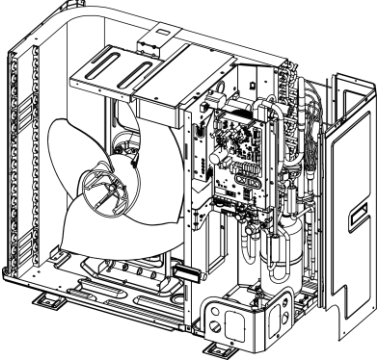
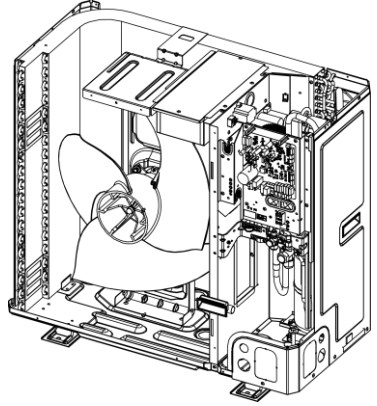
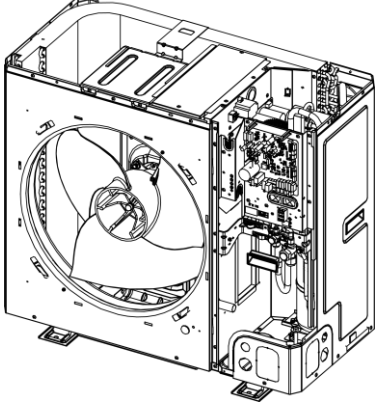
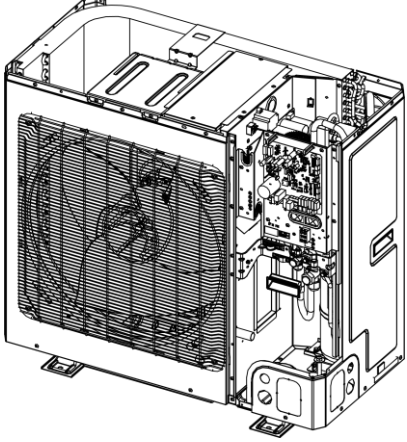
Removal of electronic expansion valve

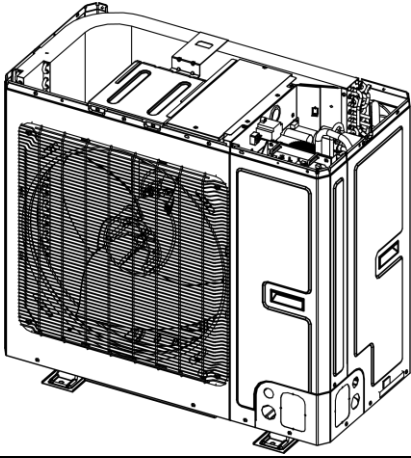
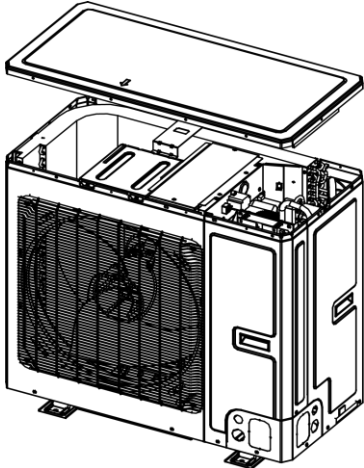
Note: Before removing the electronic expansion valve, make sure there is no refrigerant in the pipeline and power is cut off.

| Step | Picture | Work instruction |
|--|---|--|
| <p>5. Install the new electronic expansion valve.</p> |  | <ul style="list-style-type: none"> ●Weld the connection pipe of electronic expansion valve. ●When welding the electronic expansion valve, the valve should be wrapped with wet cloth. ●Nitrogen welding: the pressure of nitrogen is $0.5 \pm 0.1 \text{ kgf/cm}^2$ (relative pressure). Note: When welding the pipes, do not let the flame burn the other components. ●Install the coil of electronic expansion valve. |
| <p>6. Secure the electric box and arrange the wires as required.</p> |  | <ul style="list-style-type: none"> ●Put the electric box back in place and tighten up the screws. ●Arrange the wires as original. |
| <p>7. Check and install the panels.</p> |  | <ul style="list-style-type: none"> ●Check whether each component and connection wire is well connected. ●If everything is OK, install the upper, left and right panels. Tighten up the screws. |

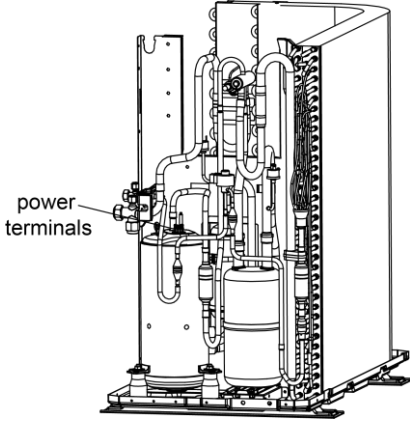
Model: GUD100W/NhA-T, GUD125W/NhA-T, GUD140W/NhA-T,
 GUD100W/NhA-X, GUD125W/NhA-X, GUD140W/NhA-X

| Removal of front panel | | |
|--|--|--|
| Note: Before removing the front panel, make sure power is cut off. | | |
| Step | Picture | Work instruction |
| 1. Remove the upper cover plate. |  | <ul style="list-style-type: none"> ●Unscrew the screws of the upper cover plate with a screwdriver. |
| 2. Remove the front side plate. |  | <ul style="list-style-type: none"> ●Unscrew the screws of the upper and front side plate with a screwdriver. |
| 3. Remove the front grill. |  | <ul style="list-style-type: none"> ●Unscrew the screws of the front grill with a screwdriver. |
| 4. Remove the front panel. |  | <ul style="list-style-type: none"> ●Unscrew the screws that connect the front panel to the middle insulating board and screws around the front panel. |

| Removal of front panel | | |
|--|--|--|
| Note: Before removing the front panel, make sure power is cut off. | | |
| Step | Picture | Work instruction |
| 5. Remove the right side plate. |  | <ul style="list-style-type: none"> ●Unscrew the screws that connect the right side plate to the electric box and the screws around the right side plate. |
| 6. Install the right side plate |  | <ul style="list-style-type: none"> ●Screw up the screws around the right side plate. Be careful to handle well the clasps at the bottom of the right side plate. |
| 7. Install the front panel. |  | <ul style="list-style-type: none"> ●Install the front panel by mounting on 6 clasps on its both sides. Please note that there is one screw on the lower right side. |
| 8. Install the grill. |  | <ul style="list-style-type: none"> ●Attach the grill back in place and tighten up the screws. |

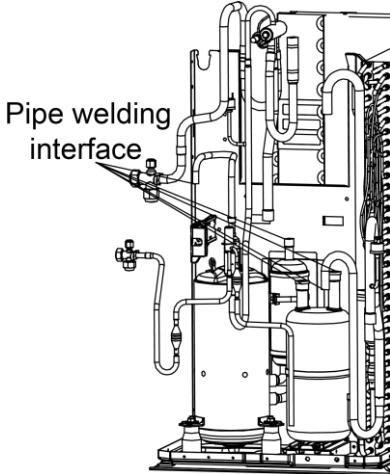
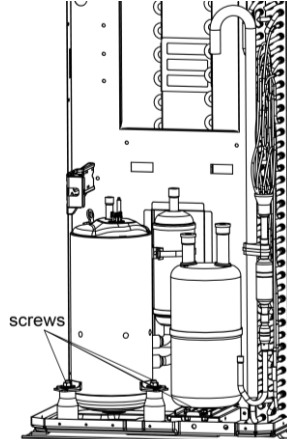
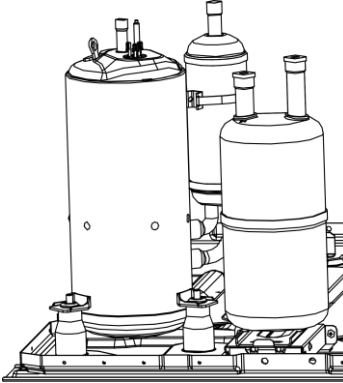
| Removal of front panel | | |
|--|--|---|
| Note: Before removing the front panel, make sure power is cut off. | | |
| Step | Picture | Work instruction |
| 9. Install the front side plate. |  | <ul style="list-style-type: none"> ●Fix the clasps on both sides of the plate and tighten up the screws. |
| 10. Install the upper cover plate. |  | <ul style="list-style-type: none"> ●Tighten up the screws around the upper cover plate. |

Model: GUD100W/NhA-T, GUD125W/NhA-T, GUD140W/NhA-T,
 GUD100W/NhA-X, GUD125W/NhA-X, GUD140W/NhA-X

| Removal of compressor/gas liquid separator | | |
|--|---|---|
| Note: Before removing the compressor/gas liquid separator, make sure there is no refrigerant in the pipeline and power is cut off. | | |
| Step | Picture | Work instruction |
| 1. Remove wires. |  | <ul style="list-style-type: none"> ●Loosen the securing screws of the wires with a screwdriver. ●Remove the wires. <p>Note: When removing the wires, mark the wire terminals corresponding to their color so as to avoid misconnection.</p> |

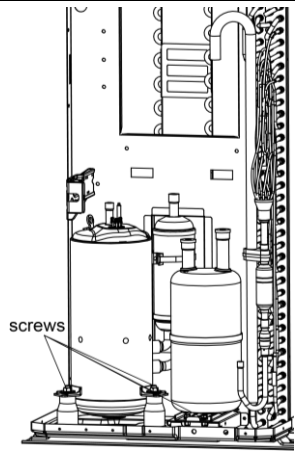
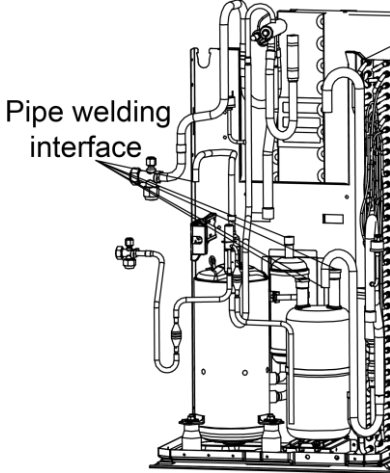
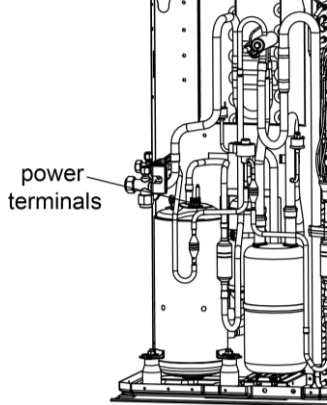
Removal of compressor/gas liquid separator

Note: Before removing the compressor/gas liquid separator, make sure there is no refrigerant in the pipeline and power is cut off.

| Step | Picture | Work instruction |
|---|---|--|
| <p>2 Break off the pipes that connecting to the compressor/gas liquid separator.</p> |  <p>Pipe welding interface</p> | <ul style="list-style-type: none"> ●Weld the pipes that are connected to the compressor/gas liquid separator. ●Then remove the pipes. <p>Note: When welding the pipes, do not let the flame burn the other components.</p> |
| <p>3. Loosen the compressor's base connectors / gas liquid separator's base nuts.</p> |  <p>screws</p> | <ul style="list-style-type: none"> ●Use a wrench to twist off the compressor/gas liquid separator's base nuts. |
| <p>4. Remove the compressor/gas liquid separator from the chassis.</p> |  | <ul style="list-style-type: none"> ●Take away the compressor/gas liquid separator and replace with a new one. <p>Note: When replacing the compressor/gas liquid separator, avoid touching the nearby pipeline and components.</p> |

Removal of compressor/gas liquid separator

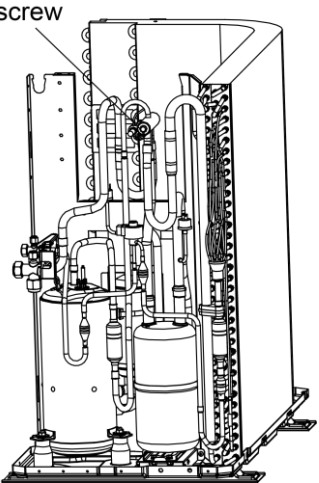
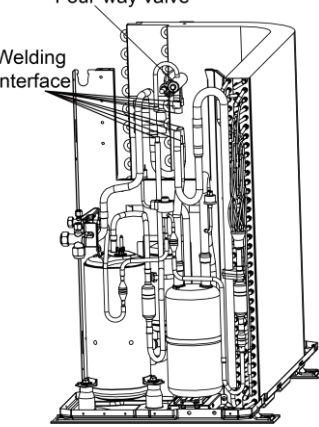
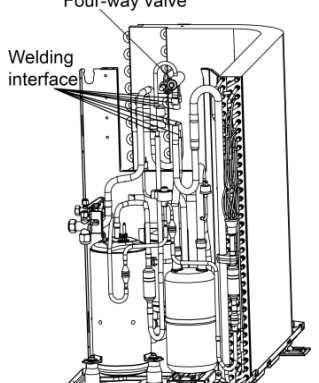
Note: Before removing the compressor/gas liquid separator, make sure there is no refrigerant in the pipeline and power is cut off.

| Step | Picture | Work instruction |
|--|---|--|
| <p>5. Install the new compressor/gas liquid separator onto the chassis.</p> |  | <ul style="list-style-type: none"> ●After replacing the compressor/gas liquid separator, tighten up the base screw nuts. |
| <p>6. Connect the welding interfaces of compressor/gas liquid separator to the pipeline.</p> |  | <ul style="list-style-type: none"> ●Weld the connection pipes of compressor so as to connect them to the compressor. <p>Note: When replacing the compressor, avoid touching the nearby pipeline and components.</p> |
| <p>7. Connect the compressor wires.</p> |  | <ul style="list-style-type: none"> ●Connect the compressor wires to the wire terminals on the top of compressor. <p>Note: When connecting the wires, be sure to match the colors with the corresponding wire terminals.</p> |

Model: GUD100W/NhA-T, GUD125W/NhA-T, GUD140W/NhA-T,
 GUD100W/NhA-X, GUD125W/NhA-X, GUD140W/NhA-X

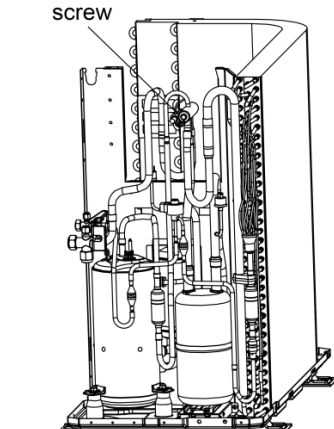
Removal of 4-way valve

Note: Before removing the 4-way valve, make sure refrigerant is fully discharged from the unit and power is cut off.

| Step | Picture | Work instruction |
|---|---|--|
| <p>1. Take off the coil of the 4-way valve.</p> |  | <ul style="list-style-type: none"> Carefully unscrew the screws of electromagnetic coil with a screwdriver. |
| <p>2. Break off the connection pipes from the 4-way valve.</p> |  | <ul style="list-style-type: none"> Use a soldering gun to loosen the 4 joints on the 4-way valve and then remove the connection pipes. <p>Note: When welding the pipes, the 4-way valve should be wrapped with wet cloth for cooling. Do not let the flame burn the other components.</p> |
| <p>3. Replace the 4-way valve and connect it to the connection pipes.</p> |  | <ul style="list-style-type: none"> Replace the 4-way valve and then use a soldering gun to weld the 4 joints of the 4-way valve. <p>Note: When welding the pipes, the 4-way valve should be wrapped with wet cloth for cooling. Do not let the flame burn the other components.</p> |

Removal of 4-way valve

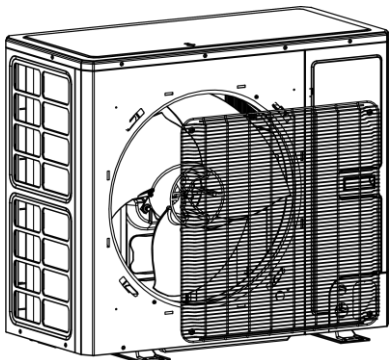
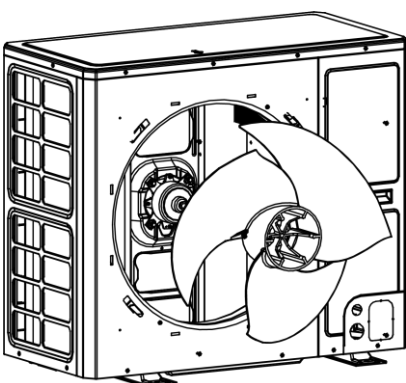
Note: Before removing the 4-way valve, make sure refrigerant is fully discharged from the unit and power is cut off.

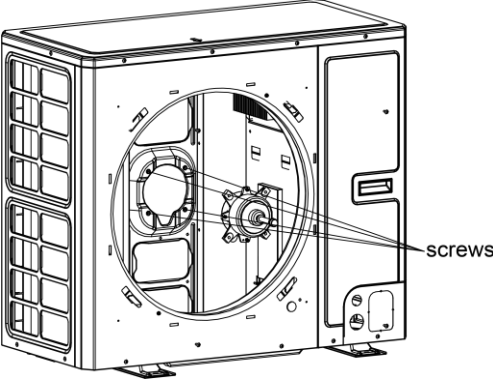
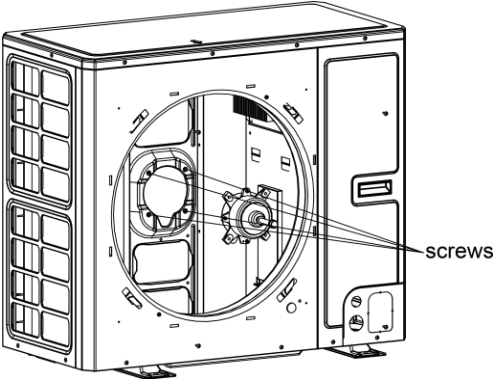
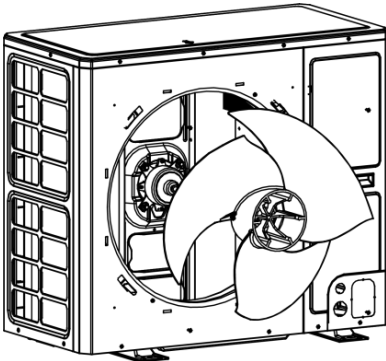
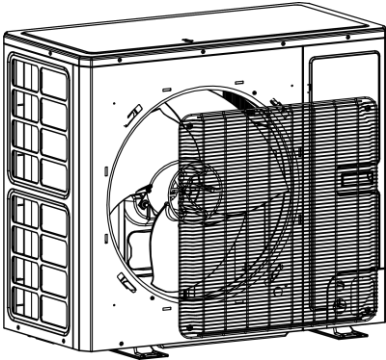
| Step | Picture | Work instruction |
|-------------------------------------|---|--|
| 4. Install the coil of 4-way valve. |  | <ul style="list-style-type: none"> ●Tighten the screws of the coil of 4-way valve with a screwdriver. |

Model: GUD100W/NhA-T, GUD125W/NhA-T, GUD140W/NhA-T,
GUD100W/NhA-X, GUD125W/NhA-X, GUD140W/NhA-X

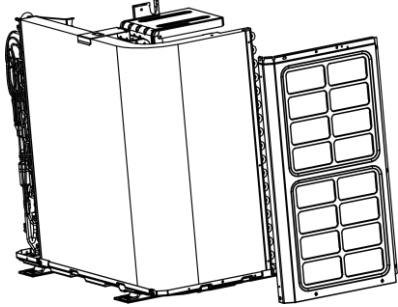
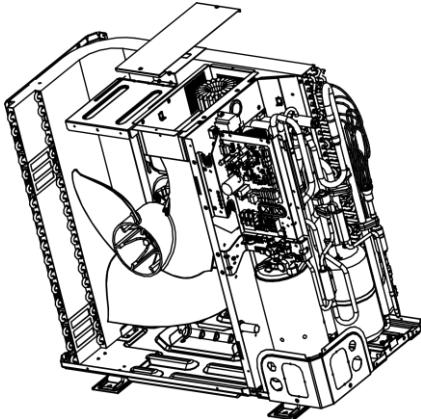
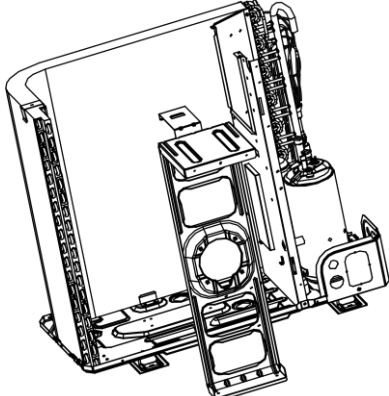
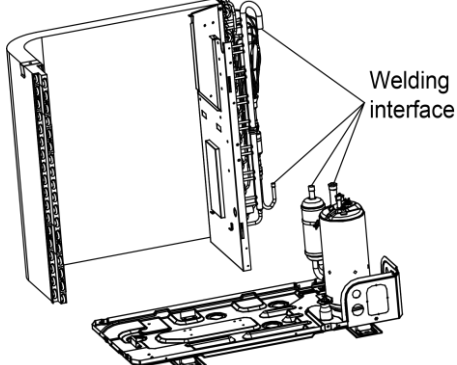
Removal of fan and motor

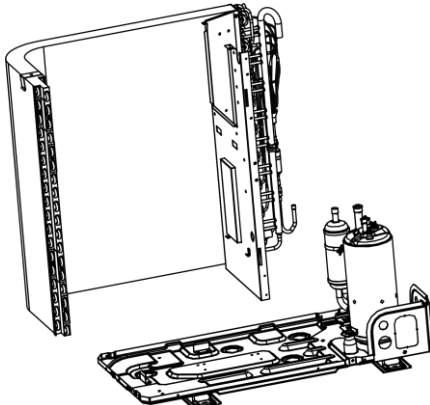
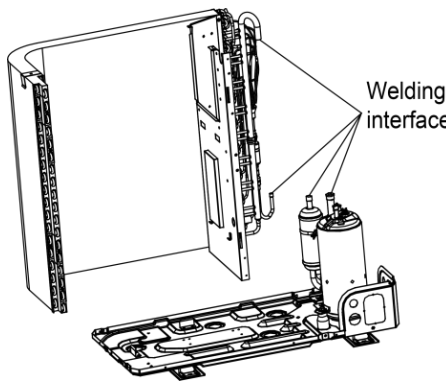
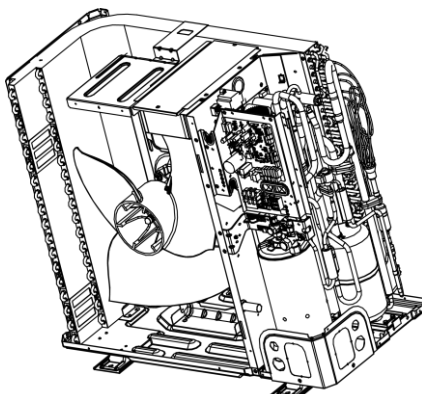
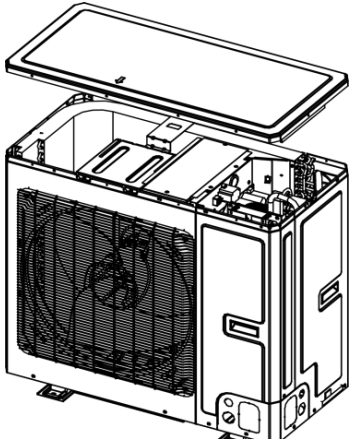
Note: Before removing the fan, make sure power is cut off.

| Step | Picture | Work instruction |
|----------------------|---|---|
| 1. Remove the grill. |  | <ul style="list-style-type: none"> ●Use a screwdriver to unscrew the two screws on the upper left and lower right corners. |
| 2. Remove the fan. |  | <ul style="list-style-type: none"> ●Use a wrench to remove the specialized nut and gasket of the fan. <p>Note: Please keep the nut and gasket safe after removing them from the fan.</p> |

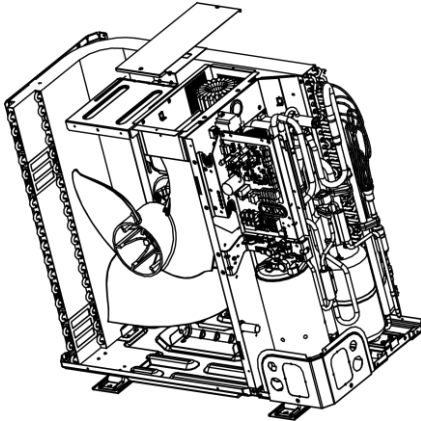
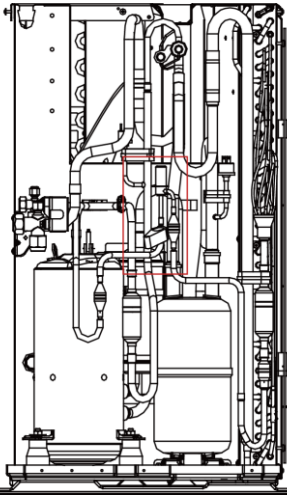
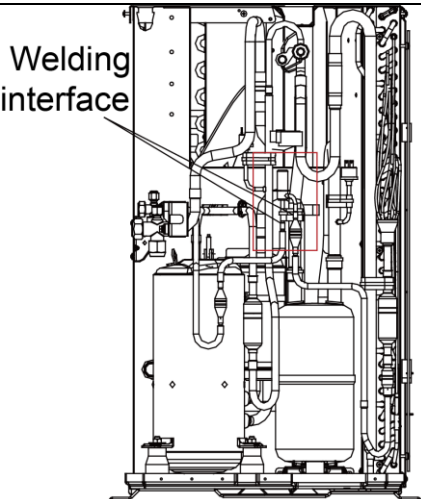
| Removal of fan and motor | | |
|--|---|--|
| Note: Before removing the fan, make sure power is cut off. | | |
| Step | Picture | Work instruction |
| 3. Remove motor. |  | <ul style="list-style-type: none"> ●Use a screwdriver to unscrew the bolt of motor. <p>Note: Motor wire should be first removed from the electric box.</p> |
| 4. Install the motor. |  | <ul style="list-style-type: none"> ●Replace with a new motor. <p>Then tighten up the screw bolt.</p> |
| 5. Install the fan. |  | <ul style="list-style-type: none"> ●Install the fan in place. Put on the gasket and use a wrench to secure the screw nut. <p>Note: After installing the fan, turn the fan by hand to see if it can run normally. If not, please check for the reason.</p> |
| 6. Install the grill. |  | <ul style="list-style-type: none"> ●After replacing the motor, use a screwdriver to tighten up the screw bolt that secures the motor. Arrange the wires according to the wiring diagram. |

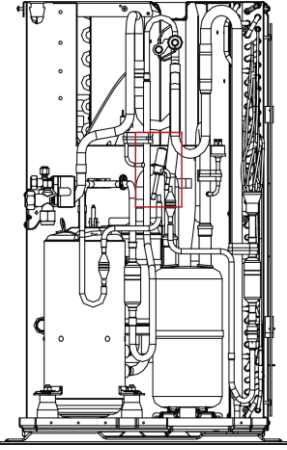
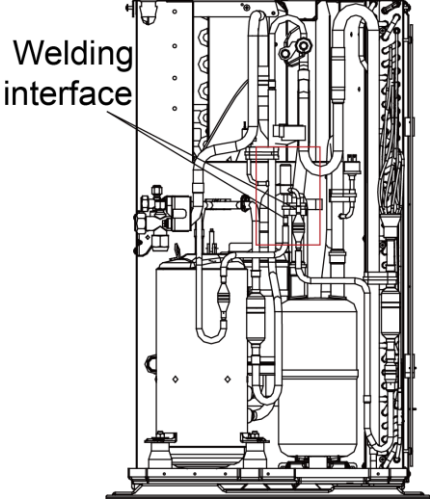
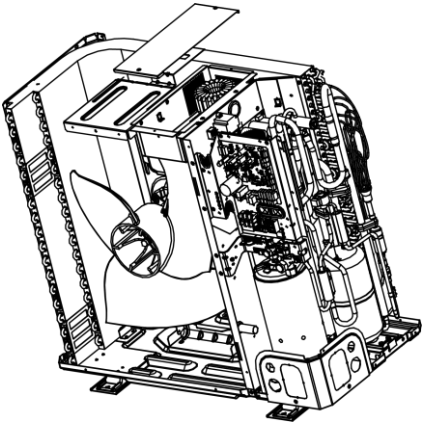
Model: GUD100W/NhA-T, GUD125W/NhA-T, GUD140W/NhA-T,
 GUD100W/NhA-X, GUD125W/NhA-X, GUD140W/NhA-X

| Removal of condenser | | |
|--|---|--|
| Note: Before removing the condenser, make sure there is no refrigerant in the pipeline and power is cut off. | | |
| Step | Picture | Work instruction |
| 1. Remove the panels. |  | <ul style="list-style-type: none"> ●Remove the upper, lower and front panels. |
| 2. Remove the electric box. |  | <ul style="list-style-type: none"> ●Loosen the wire clamp at the bottom of the electric box. ●Unscrew the screws of electric box. ●The connection wires inside and outside the electric box should be removed. |
| 3. Remove motor support. |  | <ul style="list-style-type: none"> ●When removing the motor support, be careful to protect the components. |
| 4. Remove the condenser. |  | <ul style="list-style-type: none"> ●Heat up the welding points of connection pipes through gas welding until the pipes break off. Note: When welding the pipes, do not let the flame burn the other components. The welding points of condenser are steel and copper welding points. Be sure to maintain the welding quality. |

| Removal of condenser | | |
|--|---|---|
| Note: Before removing the condenser, make sure there is no refrigerant in the pipeline and power is cut off. | | |
| Step | Picture | Work instruction |
| 5. Take out the condenser. |  | <ul style="list-style-type: none"> Loosen the securing screws of condenser support. Take off the plate type heat exchanger and the support as a whole. |
| 6. Install the new condenser. |  | <ul style="list-style-type: none"> Secure the screws of condenser and support. Then fix them together on the chassis. Install the condenser by referring to the positions of entering and leaving pipes. Weld the connection pipes. Nitrogen welding: the pressure of nitrogen is $0.5 \pm 0.1 \text{ kgf/cm}^2$ (relative pressure). Note: When welding the pipes, do not let the flame burn the other components. |
| 7. Secure the electric box and arrange the wires according to the requirement. |  | <ul style="list-style-type: none"> Put the electric box in place and tighten up the screws of electric box. Arrange and secure the wires as original. |
| 8. Check and open the upper and side panels. |  | <ul style="list-style-type: none"> Check whether each component and connection wire is well connected. If everything is OK, place back the upper, left and right side panels. |

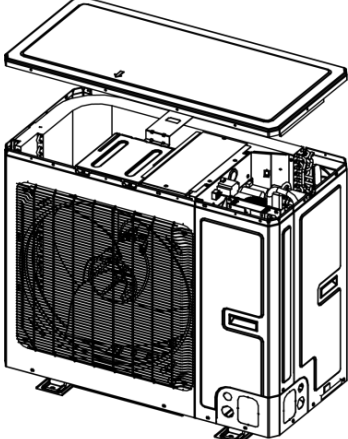
Model: GUD100W/NhA-T, GUD125W/NhA-T, GUD140W/NhA-T,
 GUD100W/NhA-X, GUD125W/NhA-X, GUD140W/NhA-X

| Removal of electronic expansion valve | | |
|---|---|--|
| Note: Before removing the electronic expansion valve, make sure there is no refrigerant in the pipeline and power is cut off. | | |
| Step | Picture | Work instruction |
| 1. Remove the electric box. |  | <ul style="list-style-type: none"> ●Remove the upper, lower and front panels. ●Loosen the wire clamp at the bottom of the electric box ●Unscrew the screws of electric box. ●The connection wires inside and outside the electric box should be removed. ●When removing the electric box, be careful to protect the components. |
| 2. Remove the fixed block. |  | <ul style="list-style-type: none"> ●Remove the fixed block between the electronic expansion valve and the pipe. |
| 3. Remove the electronic expansion valve. |  | <ul style="list-style-type: none"> ●Take off the coil of electronic expansion valve. ●Loosen the connection pipe of electronic expansion valve by welding. Then remove the connection pipe. <p>Note: When welding the pipe, do not let the flame bunt the other components.</p> |

| Removal of electronic expansion valve | | |
|---|---|--|
| Note: Before removing the electronic expansion valve, make sure there is no refrigerant in the pipeline and power is cut off. | | |
| Step | Picture | Work instruction |
| 4. Take out the electronic expansion valve. |  | <ul style="list-style-type: none"> ●Take out the electronic expansion valve. |
| 5. Install the new electronic expansion valve. |  | <ul style="list-style-type: none"> ●Weld the connection pipe of electronic expansion valve. ●When welding the electronic expansion valve, the valve should be wrapped with wet cloth. ●Nitrogen welding: the pressure of nitrogen is $0.5 \pm 0.1 \text{ kgf/cm}^2$ (relative pressure). Note: When welding the pipes, do not let the flame burn the other components. ●Install the coil of electronic expansion valve. |
| 6. Secure the electric box and arrange the wires as required. |  | <ul style="list-style-type: none"> ●Put the electric box back in place and tighten up the screws. ●Arrange the wires as original. |

Removal of electronic expansion valve

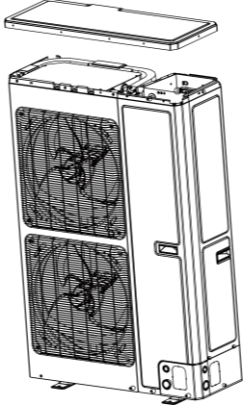
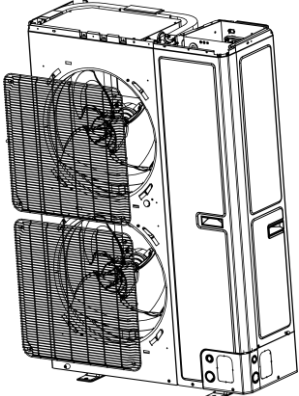
Note: Before removing the electronic expansion valve, make sure there is no refrigerant in the pipeline and power is cut off.

| Step | Picture | Work instruction |
|--|---|--|
| <p>7. Check and open the upper and front panels.</p> |  | <ul style="list-style-type: none"> ●Check whether each component and connection wire is well connected. ●If everything is OK, install the upper, left and right panels. Tighten up the screws. |

Model: GUD160W/NhA-X

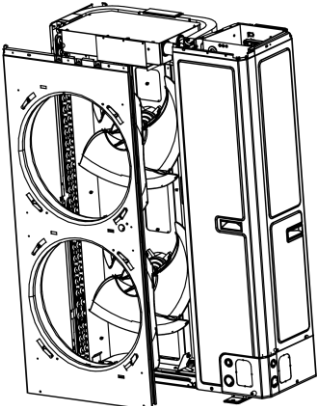
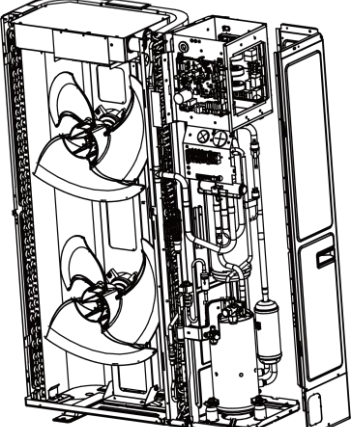
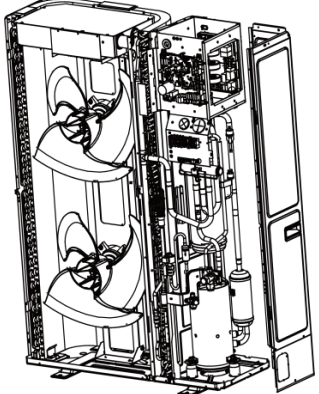

Removal of front panel

Note: Before removing the front panel, make sure power is cut off.

| Step | Picture | Work instruction |
|---|---|--|
| <p>1. Remove the upper cover plate.</p> |  | <ul style="list-style-type: none"> ●Unscrew the screws of the upper cover plate with a screwdriver. |
| <p>2. Remove the front grill.</p> |  | <ul style="list-style-type: none"> ●Unscrew the screws of the front grill with a screwdriver. |

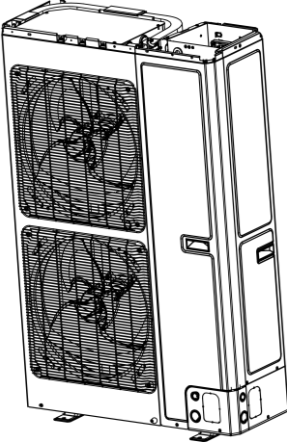
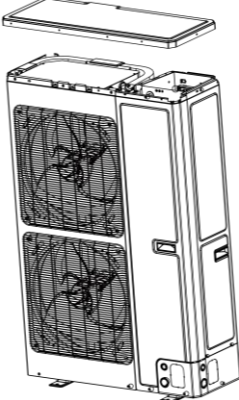
Removal of front panel

Note: Before removing the front panel, make sure power is cut off.

| Step | Picture | Work instruction |
|--|---|--|
| <p>3. Remove the front panel.</p> |  | <ul style="list-style-type: none"> ●Unscrew the screws that connect the front panel to the middle insulating board and screws around the front panel. |
| <p>4. Remove the right side plate.</p> |  | <ul style="list-style-type: none"> ●Unscrew the screws that connect the right side plate to the electric box and the screws around the right side plate. |
| <p>5. Install the right side plate</p> |  | <ul style="list-style-type: none"> ●Screw up the screws around the right side plate. Be careful to handle well the clasps at the bottom of the right side plate. |
| <p>6. Install the front panel.</p> |  | <ul style="list-style-type: none"> ●Install the front panel by mounting on 6 clasps on its both sides. Please note that there is one screw on the lower right side. |

Removal of front panel

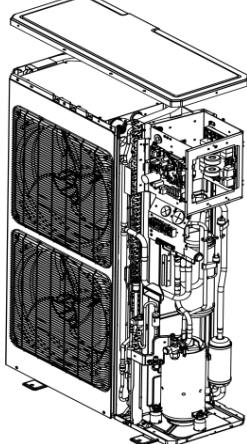
Note: Before removing the front panel, make sure power is cut off.

| Step | Picture | Work instruction |
|-----------------------------------|--|---|
| 7. Install the grill. |  | <ul style="list-style-type: none"> ● Attach the grill back in place and tighten up the screws. |
| 8. Install the upper cover plate. |  | <ul style="list-style-type: none"> ● Tighten up the screws around the upper cover plate. |

Model: GUD160W/NhA-X

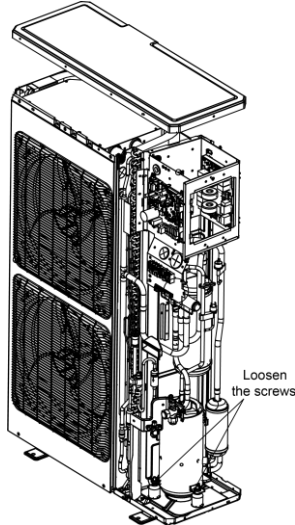
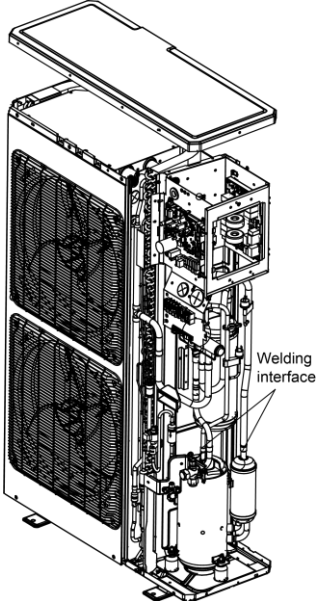
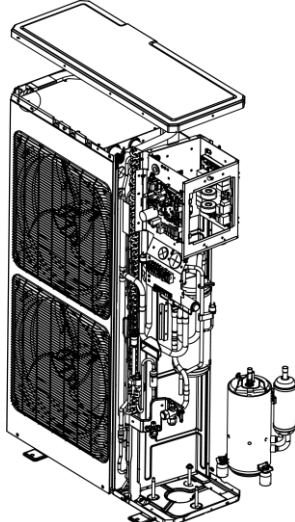
Disassembly of compressor

Note: Before removing the compressor, make sure there is no refrigerant in the pipeline and power is cut off.

| Step | Picture | Work instruction |
|------------------|---|---|
| 1. Remove wires. |  | <ul style="list-style-type: none"> ● Loosen the securing screws of the wires with a screwdriver. ● Remove the wires. <p>Note: When removing the wires, mark the wire terminals corresponding to their color so as to avoid misconnection.</p> |

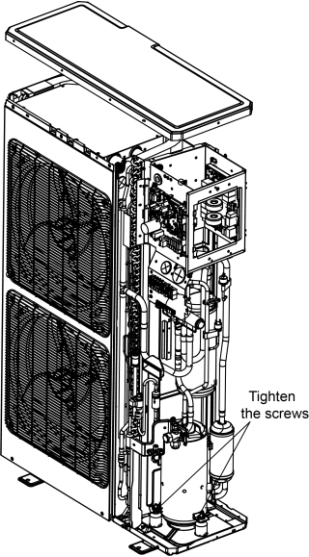
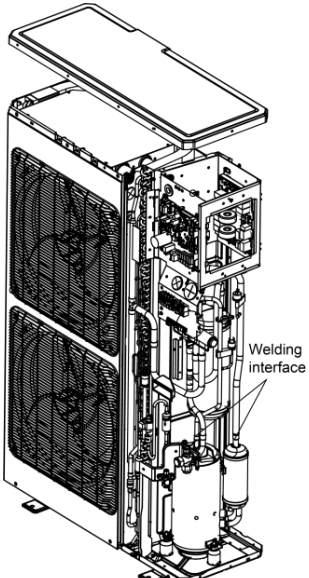
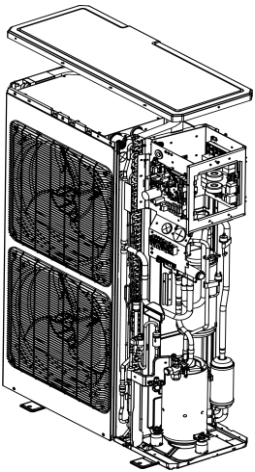
Disassembly of compressor

Note: Before removing the compressor, make sure there is no refrigerant in the pipeline and power is cut off.

| Step | Picture | Work instruction |
|--|---|---|
| <p>2. Loosen the securing screws at the foot of compressor.</p> |  | <ul style="list-style-type: none"> ●Use a wrench to twist off the screw nuts at the foot of compressor. |
| <p>3. Break off the pipes that connecting to the compressor.</p> |  | <ul style="list-style-type: none"> ●Weld the pipes that are connected to the compressor. ●Then remove the pipes. <p>Note: When welding the pipes, do not let the flame burn the other components.</p> |
| <p>4. Remove the compressor from the chassis.</p> |  | <ul style="list-style-type: none"> ●Take out the compressor and replace it. <p>Note: When replacing the compressor, avoid touching the nearby pipeline and components.</p> |

Disassembly of compressor

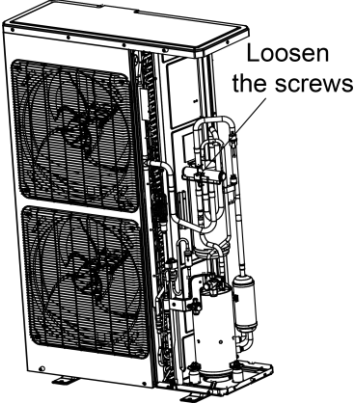
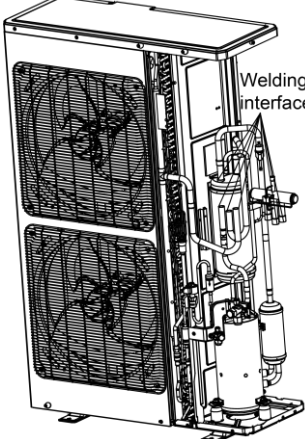
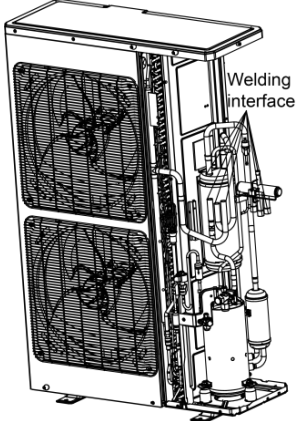
Note: Before removing the compressor, make sure there is no refrigerant in the pipeline and power is cut off.

| Step | Picture | Work instruction |
|--|---|--|
| <p>5. Fix the new compressor back onto the chassis.</p> |  | <ul style="list-style-type: none"> ●After replacing the compressor, tighten up the screws at the foot of compressor. |
| <p>6. Connect the compressor suction port and exhaust port with the pipes.</p> |  | <ul style="list-style-type: none"> ●Weld the compressor connection pipes and connect them to the compressor. <p>Note: When replacing the compressor, avoid touching the nearby pipeline and components.</p> |
| <p>7. Connect the compressor wires.</p> |  | <ul style="list-style-type: none"> ●Connect the compressor wires to the wire terminals on the top of compressor. <p>Note: When connecting the wires, be sure to match the colors with the corresponding wire terminals.</p> |

Model: GUD160W/NhA-X

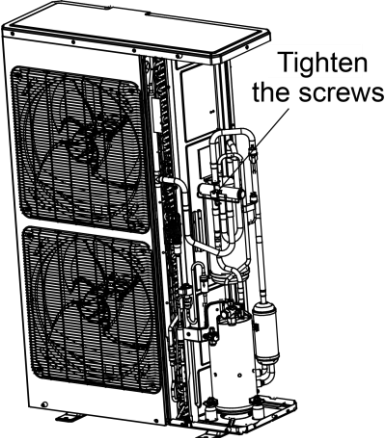
Removal of 4-way valve

Note: Before removing the 4-way valve, make sure refrigerant is fully discharged from the unit and power is cut off.

| Step | Picture | Work instruction |
|---|---|--|
| <p>1. Take off the coil of the 4-way valve.</p> |  | <ul style="list-style-type: none"> Carefully unscrew the screws of electromagnetic coil with a screwdriver. |
| <p>2. Break off the connection pipes from the 4-way valve.</p> |  | <ul style="list-style-type: none"> Use a soldering gun to loosen the 4 joints on the 4-way valve and then remove the connection pipes. <p>Note: When welding the pipes, the 4-way valve should be wrapped with wet cloth for cooling. Do not let the flame burn the other components.</p> |
| <p>3. Replace the 4-way valve and connect it to the connection pipes.</p> |  | <ul style="list-style-type: none"> Replace the 4-way valve and then use a soldering gun to weld the 4 joints of the 4-way valve. <p>Note: When welding the pipes, the 4-way valve should be wrapped with wet cloth for cooling. Do not let the flame burn the other components.</p> |

Removal of 4-way valve

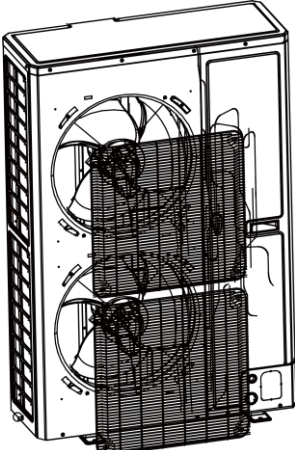
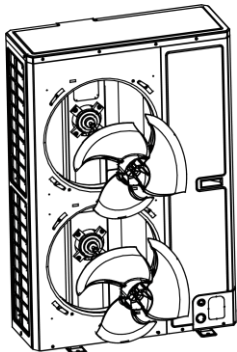
Note: Before removing the 4-way valve, make sure refrigerant is fully discharged from the unit and power is cut off.

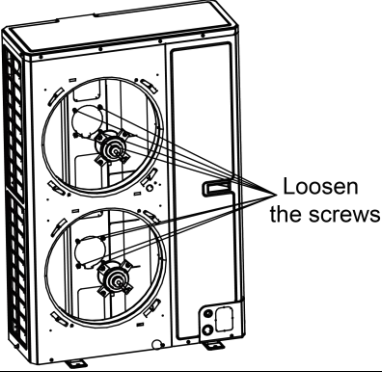
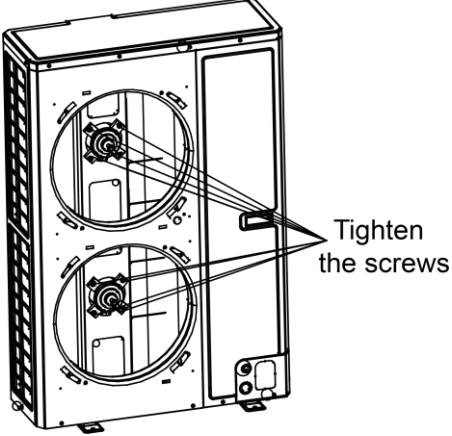
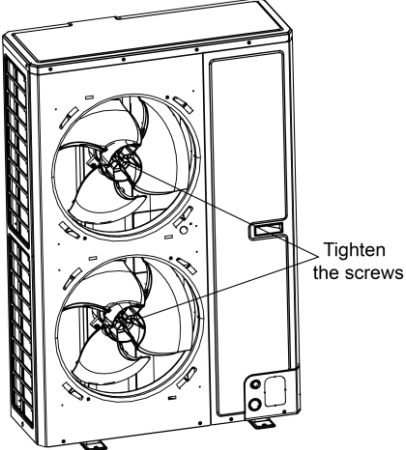
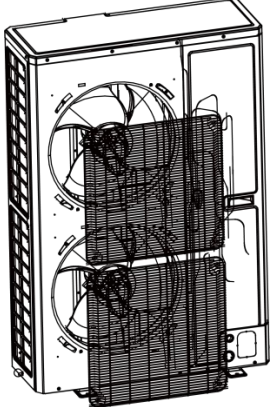
| Step | Picture | Work instruction |
|-------------------------------------|---|--|
| 4. Install the coil of 4-way valve. |  | <ul style="list-style-type: none"> ●Tighten the screws of the coil of 4-way valve with a screwdriver. |

Model: GUD160W/NhA-X

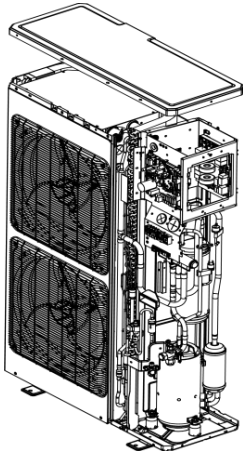
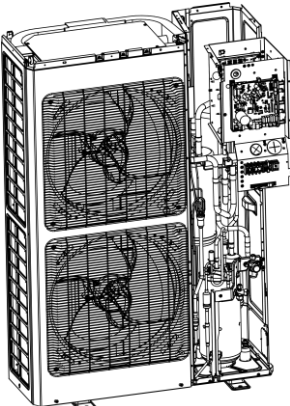
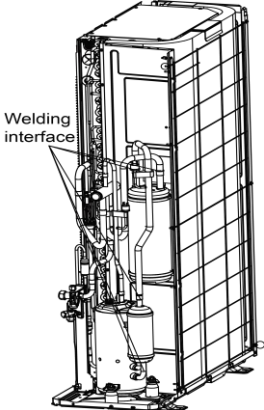
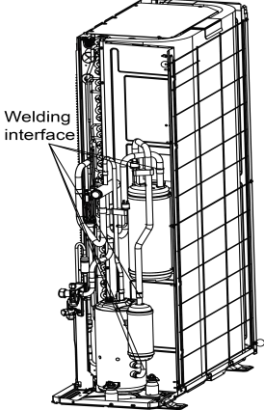
Removal of fan and motor

Note: Before removing the fan, make sure power is cut off.

| Step | Picture | Work instruction |
|----------------------|---|---|
| 1. Remove the grill. |  | <ul style="list-style-type: none"> ●Use a screwdriver to unscrew the two screws on the upper left and lower right corners. |
| 2. Remove the fan. |  | <ul style="list-style-type: none"> ●Use a wrench to remove the specialized nut and gasket of the fan. <p>Note: Please keep the nut and gasket safe after removing them from the fan.</p> |

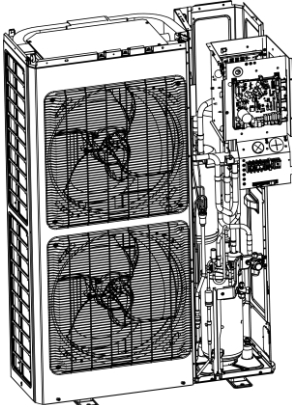
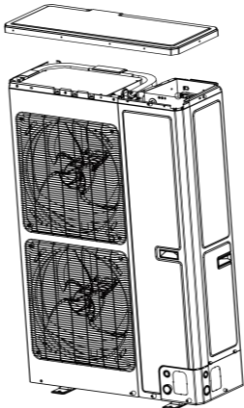
| Removal of fan and motor | | |
|--|---|--|
| Note: Before removing the fan, make sure power is cut off. | | |
| Step | Picture | Work instruction |
| 3. Remove motor. |  | <ul style="list-style-type: none"> ●Use a screwdriver to unscrew the bolt of motor. <p>Note: Motor wire should be first removed from the electric box.</p> |
| 4. Install the motor. |  | <ul style="list-style-type: none"> ●Replace with a new motor. Then tighten up the screw bolt. |
| 5. Install the fan. |  | <ul style="list-style-type: none"> ●Install the fan in place. Put on the gasket and use a wrench to secure the screw nut. <p>Note: After installing the fan, turn the fan by hand to see if it can run normally. If not, please check for the reason.</p> |
| 6. Install the grill. |  | <ul style="list-style-type: none"> ●After replacing the motor, use a screwdriver to tighten up the screw bolt that secures the motor. |

Model: GUD160W/NhA-X

| Removal of gas liquid separator | | |
|---|---|---|
| Note: Before removing the gas liquid separator, make sure there is no refrigerant in the pipeline and power is cut off. | | |
| Step | Picture | Work instruction |
| 1. Loosen the wire clamp at the bottom of the electric box and the screws of electric box. |  | <ul style="list-style-type: none"> Remove the upper, lower and front panels. Loosen the wire clamp at the bottom of the electric box. Unscrew the screws of electric box. |
| 2. Remove the electric box. |  | <ul style="list-style-type: none"> The connection wires inside and outside the electric box should be removed. When removing the electric box, be careful to protect the components. |
| 4. Remove the compressor/gas liquid separator from the chassis. |  | <ul style="list-style-type: none"> Take away the compressor/gas liquid separator and replace with a new one. <p>Note: When replacing the compressor/gas liquid separator, avoid touching the nearby pipeline and components.</p> |
| 4. Install the new gas liquid separator |  | <ul style="list-style-type: none"> Install the gas liquid separator by referring to the positions of entering and leaving pipes. Weld the 2 welding interfaces. Nitrogen welding: the pressure of nitrogen is $0.5 \pm 0.1 \text{ kgf/ c m}^2$ (relative pressure). Note: When welding the pipes, do not let the flame burn the other components. Tighten the screws of gas liquid separator. |

Removal of gas liquid separator

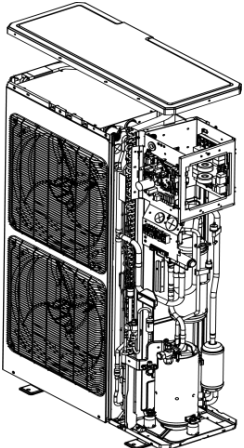
Note: Before removing the gas liquid separator, make sure there is no refrigerant in the pipeline and power is cut off.

| Step | Picture | Work instruction |
|--|--|--|
| | | |
| <p>5. Secure the electric box and arrange the wires as required.</p> |  | <ul style="list-style-type: none"> ●Put the electric box back in place and tighten up the screws. ●Arrange the wires as original. |
| <p>6. Check and open the upper and side panels.</p> |  | <ul style="list-style-type: none"> ●Check whether each component and connection wire is well connected. ●If everything is OK, install the upper, left and right panels. Tighten up the screws. |

Model: GUD160W/NhA-X

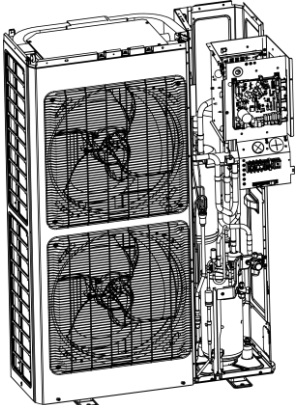
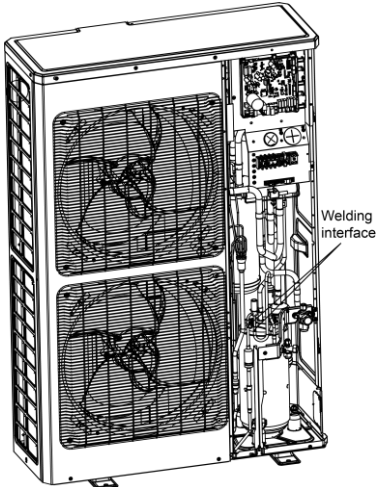
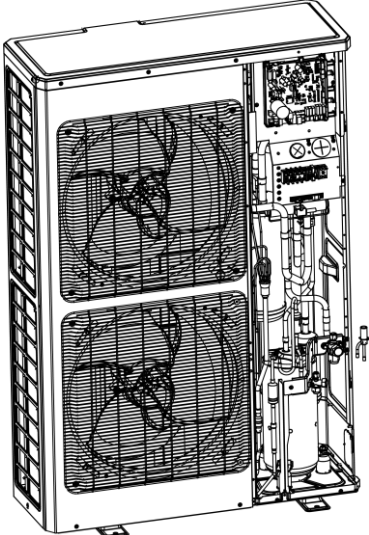
Removal of electronic expansion valve

Note: Before removing the electronic expansion valve, make sure there is no refrigerant in the pipeline and power is cut off.

| Step | Picture | Work instruction |
|---|---|---|
| <p>1. Loosen the wire clamp at the bottom of the electric box and the screws of electric box.</p> |  | <ul style="list-style-type: none"> ●Remove the upper, lower and front panels. ●Loosen the wire clamp at the bottom of the electric box. ●Unscrew the screws of electric box. |

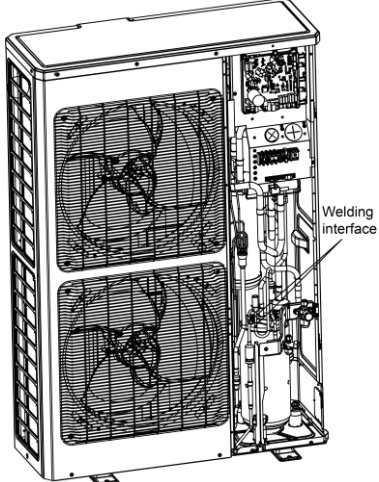
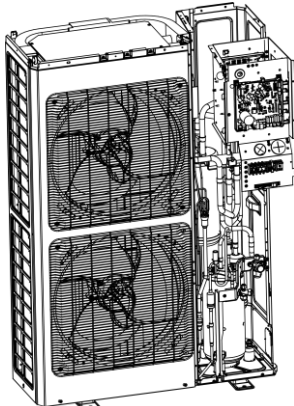
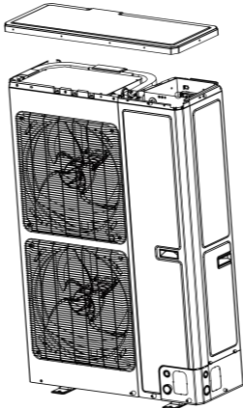
Removal of electronic expansion valve

Note: Before removing the electronic expansion valve, make sure there is no refrigerant in the pipeline and power is cut off.

| Step | Picture | Work instruction |
|--|---|---|
| <p>2. Remove the electric box.</p> |  | <ul style="list-style-type: none"> ●The connection wires inside and outside the electric box should be removed. ●When removing the electric box, be careful to protect the components. |
| <p>3. Remove the electronic expansion valve.</p> |  | <ul style="list-style-type: none"> ●Take off the coil of electronic expansion valve. ●Loosen the connection pipe of electronic expansion valve by welding. Then remove the connection pipe. <p>Note: When welding the pipe, do not let the flame bunt the other components.</p> |
| <p>4. Take out the electronic expansion valve.</p> |  | <ul style="list-style-type: none"> ●Take out the electronic expansion valve. |

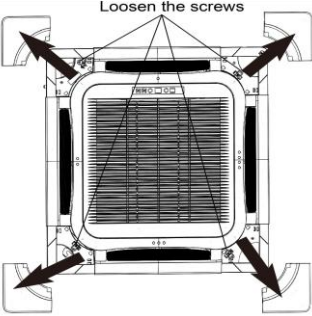
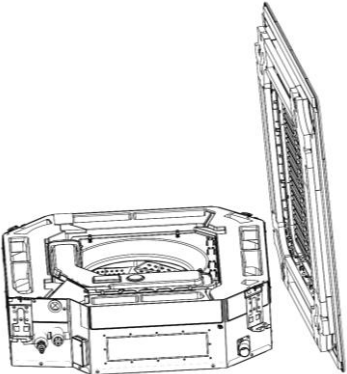
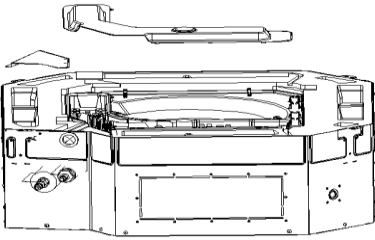
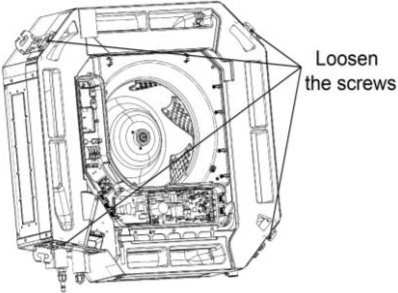
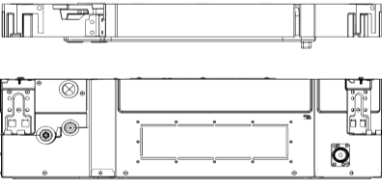
Removal of electronic expansion valve

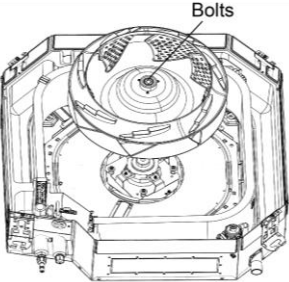
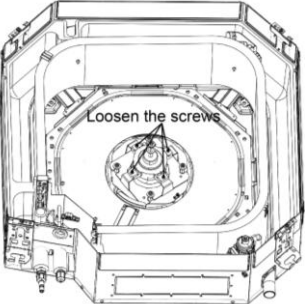
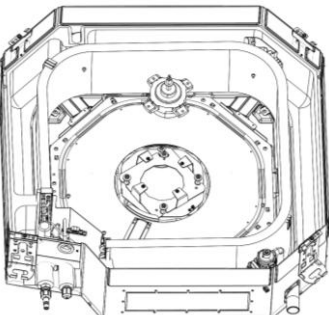
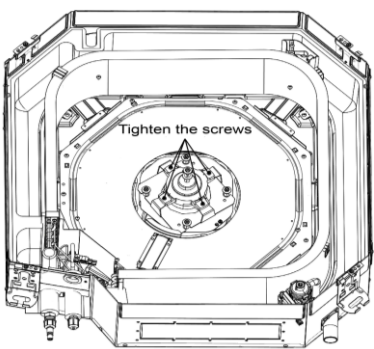
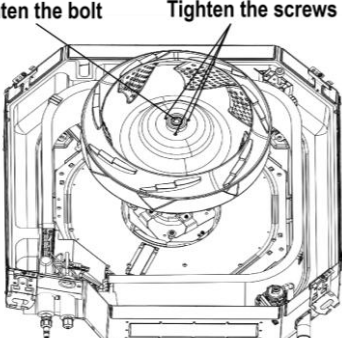
Note: Before removing the electronic expansion valve, make sure there is no refrigerant in the pipeline and power is cut off.

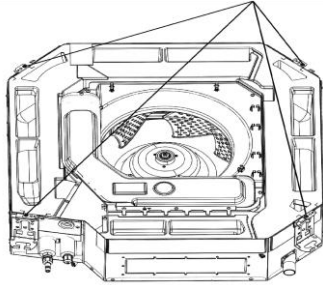
| Step | Picture | Work instruction |
|--|---|---|
| <p>5. Install the new electronic expansion valve.</p> |  | <ul style="list-style-type: none"> ●Weld the connection pipe of electronic expansion valve. ●When welding the electronic expansion valve, the valve should be wrapped with wet cloth. ●Nitrogen welding: the pressure of nitrogen is $0.5\pm 0.1\text{kgf/cm}^2$ (relative pressure). Note: When welding the pipes, do not let the flame burn the other components. ●Install the coil of electronic expansion valve. |
| <p>6. Secure the electric box and arrange the wires as required.</p> |  | <ul style="list-style-type: none"> ●Put the electric box back in place and tighten up the screws. ●Arrange the wires as original. |
| <p>7. Check and open the upper and side panels.</p> |  | <ul style="list-style-type: none"> ●Check whether each component and connection wire is well connected. ●If everything is OK, install the upper, left and right panels. Tighten up the screws. |

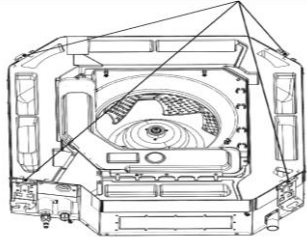
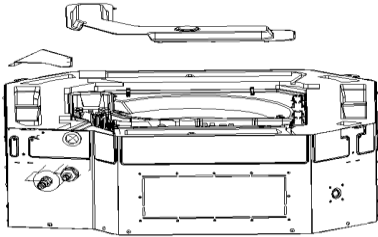
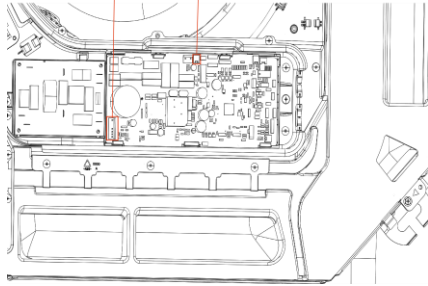
4.5.2 Removal of IDU Major Components

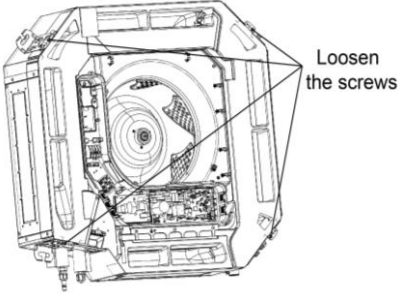
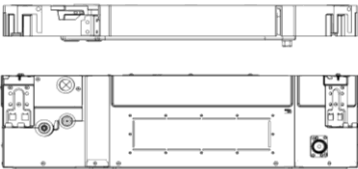
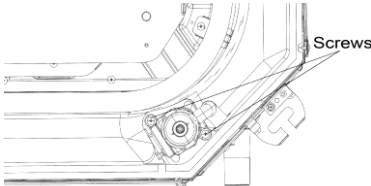
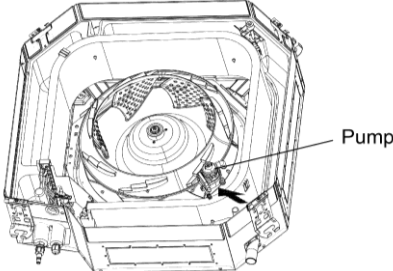
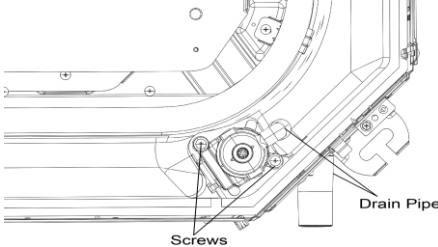
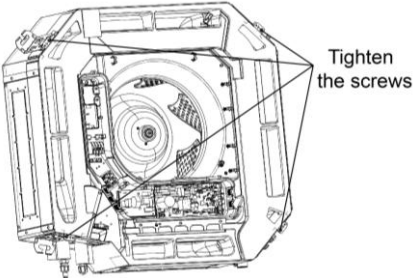
4.5.2.1 Cassette Type Unit

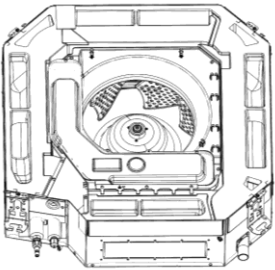
| Removal of fan and motor | | |
|--|---|---|
| Note: Before removing the motor, power must be cut off. | | |
| Step | Picture | Work instruction |
| 1. Remove the front panel. |  | <ul style="list-style-type: none"> ● Turn off the power supply of indoor unit. ● Push the 4 corner plates in the directions shown by the arrows. ● Loosen the screws and remove the front panel. |
| |  | |
| 2. Remove the cover of electric box and the clamp of power cord. |  | <ul style="list-style-type: none"> ● Remove the motor wire and water pump of the electric box. |
| 4. Remove the water tray. |  | <ul style="list-style-type: none"> ● Loosen the screws in the 4 corners and then remove the water tray. |
| |  | |

| Removal of fan and motor | | |
|---|---|---|
| Note: Before removing the motor, power must be cut off. | | |
| Step | Picture | Work instruction |
| 5. Remove the fan. |  <p style="text-align: center;">Bolts</p> | <ul style="list-style-type: none"> ●Use a screwdriver to remove the clamping band of motor. Then remove the fan. |
| 6. Remove motor. |  <p style="text-align: center;">Loosen the screws</p> | <ul style="list-style-type: none"> ●Use a screwdriver to unscrew the 4 screws of motor. Then remove the motor. |
| |  | |
| 7. Replace and install the motor. |  <p style="text-align: center;">Tighten the screws</p> | <ul style="list-style-type: none"> ●Remove the motor from motor support and then replace with a new motor. ●Tighten the 4 screws of motor with a screwdriver. |
| 8. Install the fan. |  <p style="text-align: center;">Tighten the bolt Tighten the screws</p> | <ul style="list-style-type: none"> ●Direct the hole of fan to the motor shaft and then mount on the fan. ●Tighten the clamping band of motor with a wrench. |

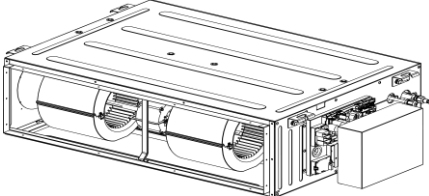
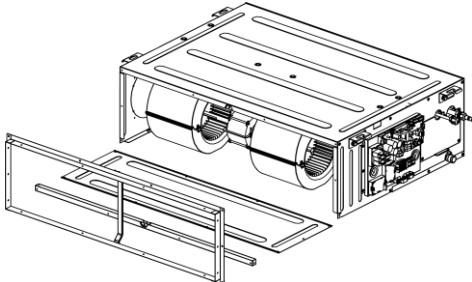
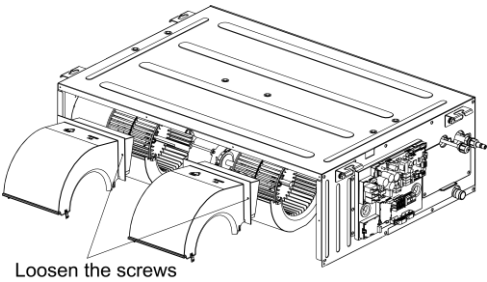
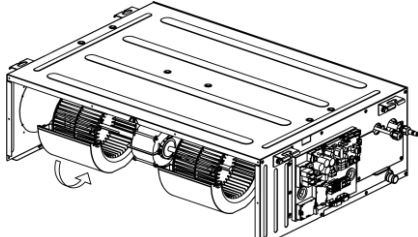
| Removal of fan and motor | | |
|---|---|---|
| Note: Before removing the motor, power must be cut off. | | |
| Step | Picture | Work instruction |
| 9. Install the water tray. | <p>Tighten the screws</p>  | <ul style="list-style-type: none"> ●Direct the 4 corners of water tray to the 4 corners of the unit and then press them. Use a screwdriver to tighten the screws in the 4 corners. ●Connect the power cord and water pump wire. ●Place back the cover of electric box and the clamp of power cord. Then tighten the screws with a screwdriver. |

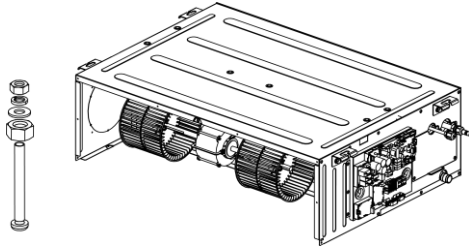
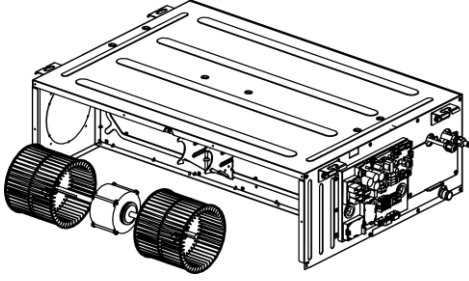
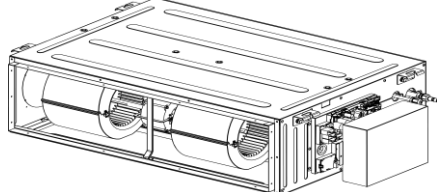
| Removal and installation of drain pump | | |
|---|---|---|
| Step | Picture | Work instruction |
| 1. After removing the front panel as instructed above, loosen the screws of the water tray. | <p>Loosen the screws</p>  | <ul style="list-style-type: none"> ●Use a screwdriver to loosen the screws of water tray. |
| 2. Remove the cover of electric box and the clamp of power cord. |  | <ul style="list-style-type: none"> ●Twist off the screws and open the cover of electric box and the clamp of power cord. |
| 3. Remove the motor wire and water pump wire. | <p>Motor wiring port Pump wiring port</p>  | <ul style="list-style-type: none"> ●Remove the motor wire and water pump wire in the electric box. |

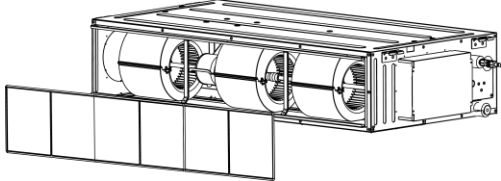
| Removal and installation of drain pump | | |
|---|---|---|
| Step | Picture | Work instruction |
| 2. Remove the water tray. |  | <ul style="list-style-type: none"> Loosen the screws in the 4 corners and then remove the water tray. |
| |  | |
| 3. Remove the drain pipe and loosen the screws of water pump. |  | <ul style="list-style-type: none"> Take out the drain pipe and use a screwdriver to loosen the screws of water pump. |
| 4. Remove and replace the pump. |  | <ul style="list-style-type: none"> Remove the pump and replace with a new one. |
| 5. Connect the drain pipe and tighten the screws of water pump. |  | <ul style="list-style-type: none"> Connect the drain pipe and tighten the screws of water pump. |
| 6. Install the water tray and tighten the screws. |  | <ul style="list-style-type: none"> Direct the 4 corners of the water tray to the 4 corners of the unit and press them. Then use a screwdriver to tighten the screws. |

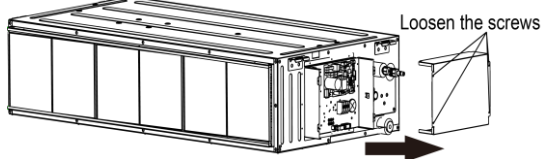
| Removal and installation of drain pump | | |
|---|---|---|
| Step | Picture | Work instruction |
| 7. Connect the water pump wire and power cord, and then put back the cover of electric box and the clamp of power cord. |  | <ul style="list-style-type: none"> ●Connect the water pump wire and motor wire according to the wiring diagram. ●Put back the cover of electric box and the clamp of power cord. Then tighten the screws. |

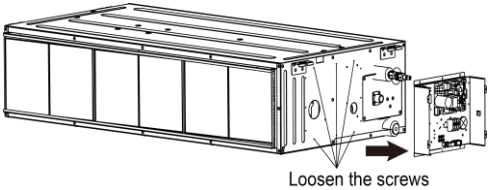
4.5.2.2 Duct Type Unit

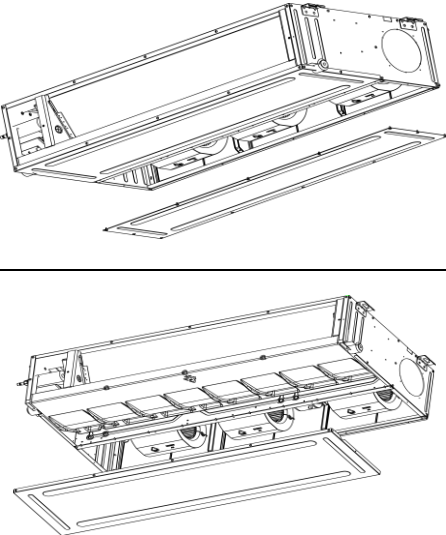
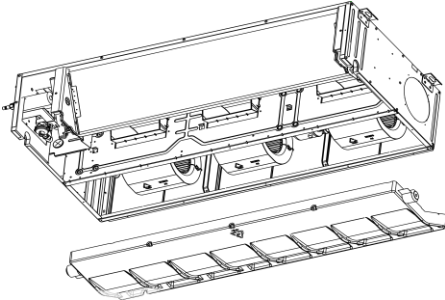
| Removal of fan and motor | | |
|--|--|--|
| Note: Before removing the motor, make sure power is cut off. | | |
| Step | Picture | Work instruction |
| 1. Remove the cover of electric box. |  | <ul style="list-style-type: none"> ●Turn off the power supply of indoor unit. Use a screwdriver to remove the cover of electric box. Disconnect the motor wire inside the electric box. |
| 2. Remove air return plate, the longitudinal component and air return frame. |  | <ul style="list-style-type: none"> ●Use a hex wrench to loosen the screws of fan. ●Order of removal: air return plate, air return frame, longitudinal component, cross beam |
| 3. Remove the upper volute. |  Loosen the screws | <ul style="list-style-type: none"> ●Loosen the screws of upper volute and then pull out the upper volute. |
| 4. Remove the lower volute. |  | <ul style="list-style-type: none"> ●Loosen the screws of lower volute and then rotate in the direction shown by the arrow. |

| Removal of fan and motor | | |
|---|--|--|
| Note: Before removing the motor, make sure power is cut off. | | |
| Step | Picture | Work instruction |
| 5. Remove the motor and fan. |  | <ul style="list-style-type: none"> ●Use a screwdriver to remove the clamping band of motor. Then remove the motor and fan as a whole. |
| 6. Replace the motor. |  | <ul style="list-style-type: none"> ●Remove the motor from the motor support. ●Use a hex wrench to loosen the screws of fan. ●Remove the fan from the motor. ●Replace with a new motor. |
| 7. Re-install the device in a reverse order of the removal procedure. |  | <ul style="list-style-type: none"> ●Re-install the device in a reverse order of the removal procedure. Then connect power and test it. |

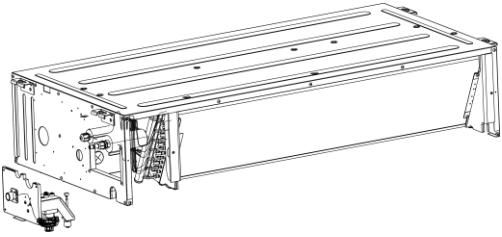
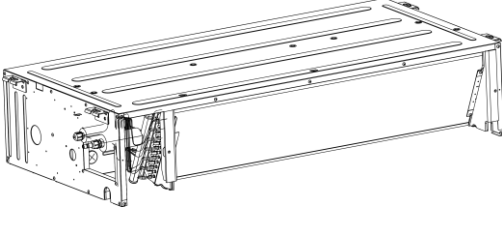
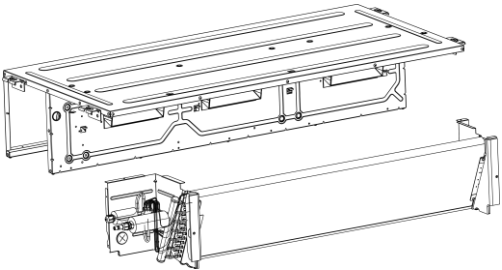
| Removal of air return filter | | |
|---|---|---|
| Note: Before removal, make sure power is cut off. During the removal procedure, take good care of all the components. Do not place the filter near any heat source. | | |
| Step | Picture | Work instruction |
| Remove air return filter. |  | <ul style="list-style-type: none"> ●Press the air return filters on the guide way sponge. There are 2 or 3 air return filters. |

| Removal of the cover of electric box and the electric box | | |
|---|---|--|
| Note: Before removal, make sure power is cut off. During the removal procedure, take good care of all the components, especially the electric components. Do not hit or beat. | | |
| Step | Picture | Work instruction |
| 1. Remove the cover of electric box. |  | <ul style="list-style-type: none"> ●Loosen the screws as shown by the circle and the box. Remove the box in the direction shown by the arrow. |

| | | |
|------------------------------------|---|---|
| <p>2. Remove the electric box.</p> |  | <ul style="list-style-type: none"> Loosen the securing screws and remove the electric box. |
|------------------------------------|---|---|

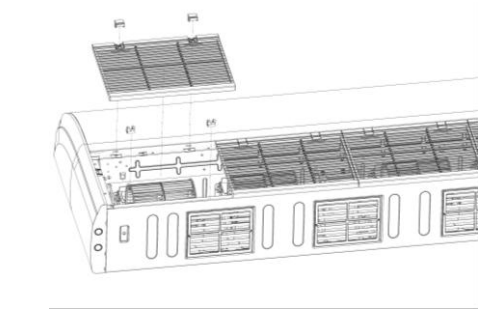
| Removal of water tray | | |
|--|---|--|
| <p>Note: Before removal, make sure power is cut off. During the removal procedure, take good care of all the components.</p> | | |
| Step | Picture | Work instruction |
| <p>1.Remove the cover plate.</p> |  | <ul style="list-style-type: none"> Loosen the screws of cover plate and then remove the cover plate. (As shown in the picture, the circle indicates 6 screws of the cover plate.) |
| <p>2. Remove the water tray.</p> |  | <ul style="list-style-type: none"> Loosen the screws of water trap. Pull it up and remove it. The removed water tray is as shown in the picture. |

| Removal of evaporator | | |
|--|---------|------------------|
| <p>Note: Make sure power is cut off. Take good care of the copper pipe and aluminum fins. If the removal takes a long time, please put the copper pipe under pressure.</p> | | |
| Step | Picture | Work instruction |
| | | |

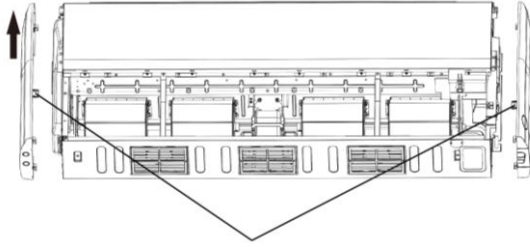
| Removal of evaporator | | |
|---|---|---|
| Note: Make sure power is cut off. Take good care of the copper pipe and aluminum fins. If the removal takes a long time, please put the copper pipe under pressure. | | |
| Step | Picture | Work instruction |
| 1. Remove the screws on the side plate of evaporator. |  | <ul style="list-style-type: none"> Remove the screws of evaporator and the screws that connect the upper cover plate to the left and right side plates. |
| 2. Remove the sealing plate the connects to the evaporator valve and the screws that connect to the flange. |  | <ul style="list-style-type: none"> Remove the screws of the sealing plate of valve. Then remove the sealing plate of valve. Remove the screws that connect the evaporator to the flange. |
| 3. Remove the evaporator. |  | <ul style="list-style-type: none"> Take off the evaporator. The removed evaporator is as shown in the picture. |

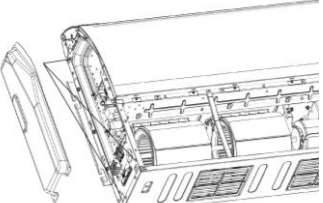
4.5.2.3 Floor Ceiling Unit

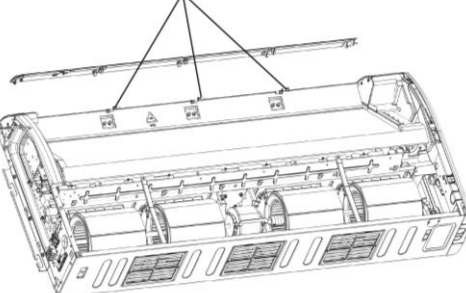
Take model GUD160ZD/A-T as an example.

| Removal of front grill | | |
|---|--|---|
| Note: Before removal, make sure power is cut off. During the removal procedure, take good care of all the components. Do not place the filter near any heat source. | | |
| Step | Picture | Work instruction |
| Remove the sub-assembly of front grill. |  | <ul style="list-style-type: none"> Twist off the 2 hooks of the grill and the screws of the hooks. Open the grill and remove 2 lower clamps. Then remove the grill. |

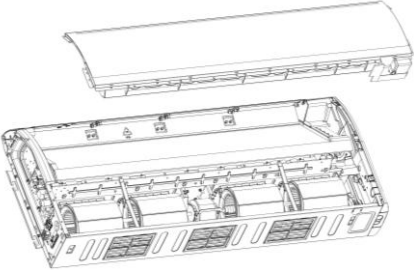
| Remove the right and left decorative boards | | |
|---|---------|------------------|
| Note: Before removal, make sure power is cut off. During the removal procedure, take good care of all the components. Do not scratch the appearance components. | | |
| Step | Picture | Work instruction |

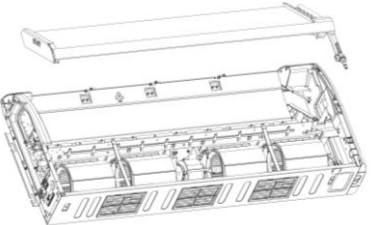
| | | |
|--|--|--|
| <p>Remove the left and right panels.</p> |  | <ul style="list-style-type: none"> •Use a screwdriver to loosen the screws, as shown in the picture. Then pull the right and left panels upward. (Lines in the picture indicate the positions of screws.) |
|--|--|--|


| Removal of electric box assembly | | |
|--|---|---|
| <p>Note: Before removal, make sure power is cut off. During the removal procedure, take good care of all the components, especially the components in electric box. Protect it from water and collision.</p> | | |
| Step | Picture | Work instruction |
| <p>Remove the electric box.</p> |  | <ul style="list-style-type: none"> •Unscrew 34 screws as shown in the left picture and then remove the electric box. |

| Removal of air guide louver | | |
|---|--|--|
| <p>Note: Before removal, make sure power is cut off. During the removal procedure, take good care of all the components, especially the connectors of air guide louver.</p> | | |
| Step | Picture | Work instruction |
| <p>Remove the air guide louver assembly.</p> |  | <ul style="list-style-type: none"> •Remove the air guide louver from its supporting assembly. Then take off the connectors from the swing motor. (As shown in the picture, the lines indicate the supporting assembly.) |

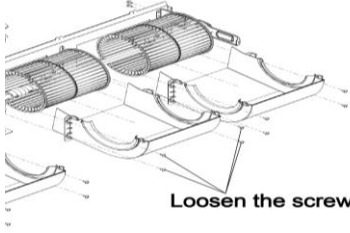
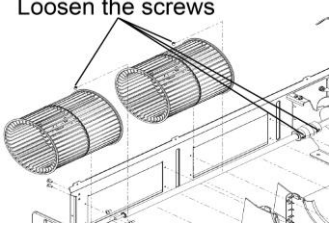
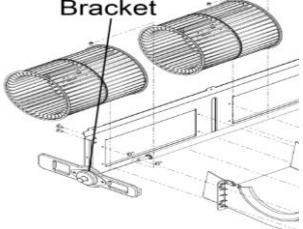
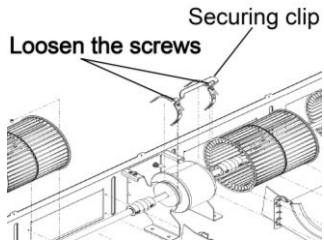
| Removal of water tray | | |
|--|---------|------------------|
| <p>Note: Before removal, make sure power is cut off. During the removal procedure, take good care of all the components.</p> | | |
| Step | Picture | Work instruction |

| | | |
|-------------------------------|--|---|
| <p>Remove the water tray.</p> |  | <ul style="list-style-type: none"> ●Remove the water tray. |
|-------------------------------|--|---|

| Removal of evaporator | | |
|---|---|--|
| <p>Note: Make sure power is cut off. Take good care of the copper pipe and aluminum fins. If the removal takes a long time, seal the copper pipe.</p> | | |
| Step | Picture | Work instruction |
| <p>Remove the evaporator assembly.</p> |  | <ul style="list-style-type: none"> ●Twist off the 6 screws of the evaporator, 3 screws of the plate board of water releasing flume, and 2 screws of the water tray. Then remove the evaporator. |

| Removal of display panel and fan assembly | | |
|--|--|--|
| <p>Note: Before removal, make sure power is cut off. During the removal procedure, take good care of all the components.</p> | | |
| Step | Picture | Work instruction |
| <p>Remove the display panel and fan assembly.</p> |  | <ul style="list-style-type: none"> ●First remove the display panel, next the bracket and then the swing motor mounting plate. |

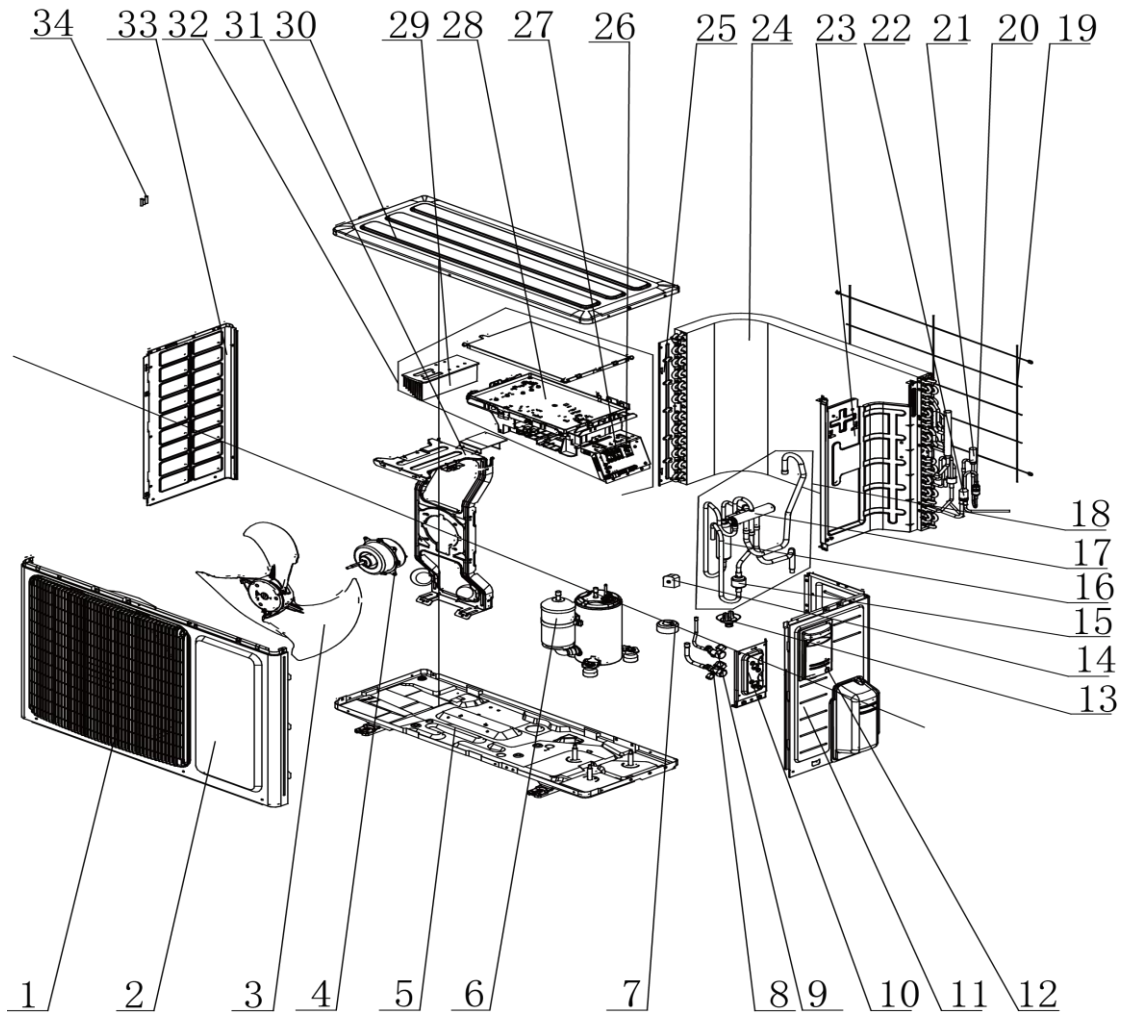
| Removal of fan and motor | | |
|--|---------|------------------|
| <p>Note: Before removal, make sure power is cut off. During the removal procedure, take good care of all the components, especially the screws of fan.</p> | | |
| Step | Picture | Work instruction |

| Removal of fan and motor | | |
|---|---|---|
| Note: Before removal, make sure power is cut off. During the removal procedure, take good care of all the components, especially the screws of fan. | | |
| Step | Picture | Work instruction |
| 1. Remove the volutes. |  <p>Loosen the screws</p> | <ul style="list-style-type: none"> ● Press the retaining ring at the joint of front and rear volutes. Then pull up the front volute. Then loosen the screws of the rear volute. Lift up the retaining ring of the rear volute and take it off. (As shown in the picture, the lines indicate the screws on both sides of the volutes. |
| 2. Remove the fan. |  <p>Loosen the screws</p> | <ul style="list-style-type: none"> ● Loosen the 2 screws of the coupler. Take out the shaft and axial flow fan. Loosen the screws of axial flow fan and remove the axial flow fan. |
| 3. Remove the bearing fixed plate. |  <p>Bracket</p> | <ul style="list-style-type: none"> ● Twist off the screws and nuts of bracket. Then remove the bracket. |
| 4. Remove the motor |  <p>Securing clip</p> <p>Loosen the screws</p> | <ul style="list-style-type: none"> ● Loosen the 2 screws of the motor securing clip. Remove the motor securing clip and its assembly. |

4.6 Explosive View and Lists of Parts

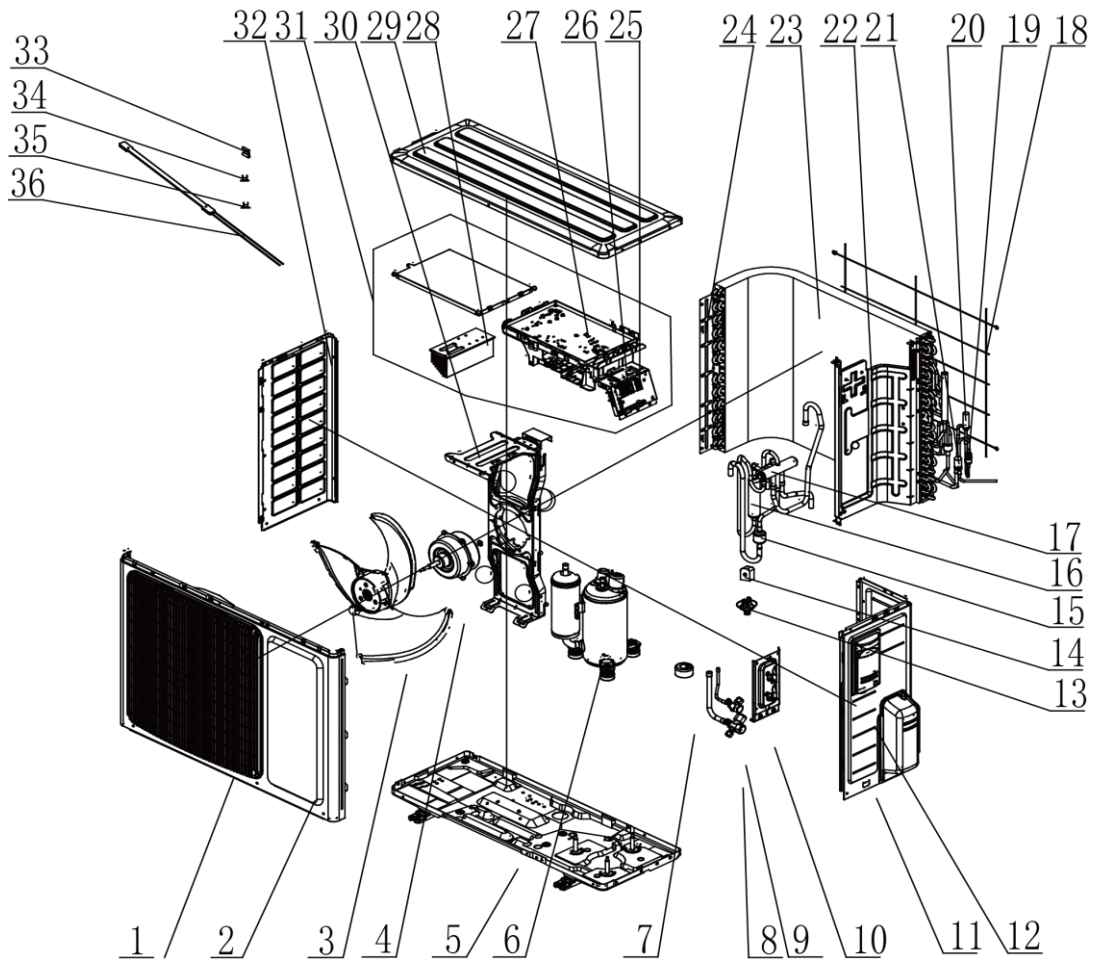
4.6.1 ODU Explosive View and Lists of Parts

GUD35W/NhA-T(Product Code:CF090W1310)



| No. | Material name | Finished Product Code | Quantity |
|-----|-------------------------------|-----------------------|----------|
| 1 | Front Grill | 22413046 | 1 |
| 2 | Cabinet | 01433034P | 1 |
| 3 | Axial Flow Fan | 10333011 | 1 |
| 4 | Fan Motor | 1501308511 | 1 |
| 5 | Base Plate Sub-assay | 17000060107 | 1 |
| 6 | Compressor and Fittings | 9001060093 | 1 |
| 7 | Electric Expand Valve Fitting | 4300034401 | 1 |
| 8 | Cut off Valve | 71302395 | 1 |
| 9 | Cut off Valve | 7130239 | 1 |
| 10 | Valve Support Sub-assay | 01713115P | 1 |
| 11 | Right Side Plate | 0130324403P | 1 |
| 12 | Big Handle | 2623343106 | 1 |
| 13 | Drainage Joint | 26113009 | 1 |
| 14 | 4 Way Valve Coil | 4300040087 | 1 |
| 15 | Silencer | 7245013 | 1 |
| 16 | Silencer 1 | 7243050 | 1 |
| 17 | 4-way Valve | 430004032 | 1 |
| 18 | 4-way Valve Assay | 30152060099 | 1 |
| 19 | Rear Grill | 1473060 | 1 |
| 20 | Strainer | 7225088 | 1 |
| 21 | Electronic Expansion Valve | 7133821 | 1 |
| 22 | Strainer | 721302608 | 1 |
| 23 | Clapboard Sub-assay | 1233168 | 1 |
| 24 | Condenser Assay | 11002060290 | 1 |
| 25 | Condenser Support Plate | 1795028 | 1 |
| 26 | Terminal Board | 42200000000701 | 1 |
| 27 | Terminal Board | 42200000002402 | 1 |
| 28 | Main Board | 300027060151 | 1 |
| 29 | Radiator | 49013060 | 1 |
| 30 | Coping | 012049000006P | 1 |
| 31 | Motor Support Sub-Assay | 1703180 | 1 |
| 32 | Electric Box Assay | 100002061298 | 1 |
| 33 | Left Side Plate | 01303169P | 1 |
| 34 | Temperature Sensor | 3900028020G | 1 |

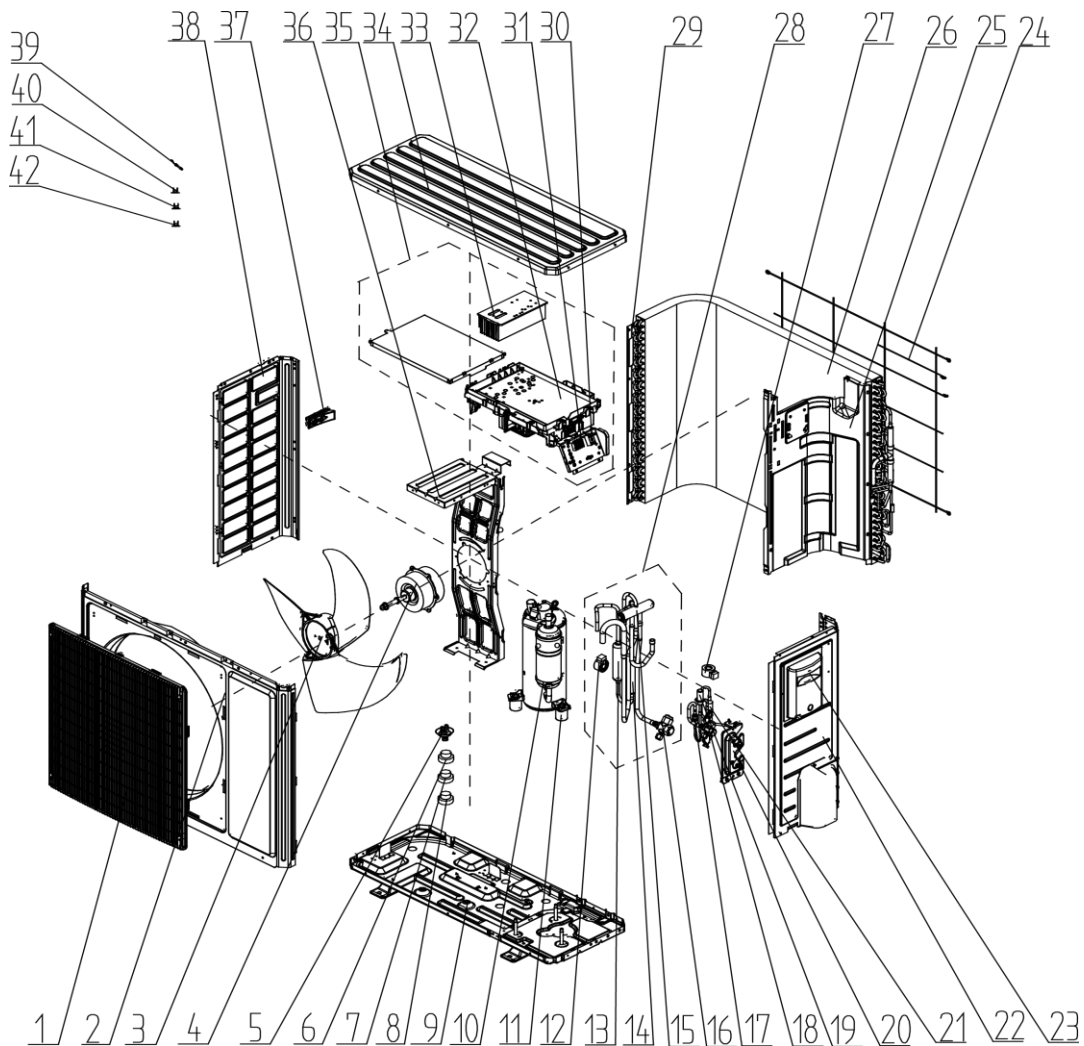
GUD50W/NhA-T(Product Code: CF090W1210)



| No. | Material name | Finished Product Code | Quantity |
|-----|-------------------------------|-----------------------|----------|
| 1 | Front Grill | 22413046 | 1 |
| 2 | Cabinet | 01433034 | 1 |
| 3 | Axial Flow Fan | 10333014 | 1 |
| 4 | Fan Motor | 1501371701 | 1 |
| 5 | Base Plate Sub-assy | 017000060100 | 1 |
| 6 | Compressor and Fittings | 009001060006 | 1 |
| 7 | Electric Expand Valve Fitting | 4300034401 | 1 |
| 8 | Cut off Valve | 071302392 | 1 |
| 9 | Cut off Valve | 07130239 | 1 |
| 10 | Valve Support Sub-assy | 01713115 | 1 |
| 11 | Right Side Plate | 0130324403 | 1 |
| 12 | Big Handle | 2623343106 | 1 |
| 13 | Drainage Joint | 26113009 | 1 |
| 14 | 4 Way Valve Coil | 4300040087 | 1 |
| 15 | Silencer | 07245013 | 1 |
| 16 | Silencer 1 | 07243050 | 1 |
| 17 | 4-way Valve | 430004032 | 1 |
| 18 | Rear Grill | 01473060 | 1 |
| 19 | Strainer | 07225088 | 1 |

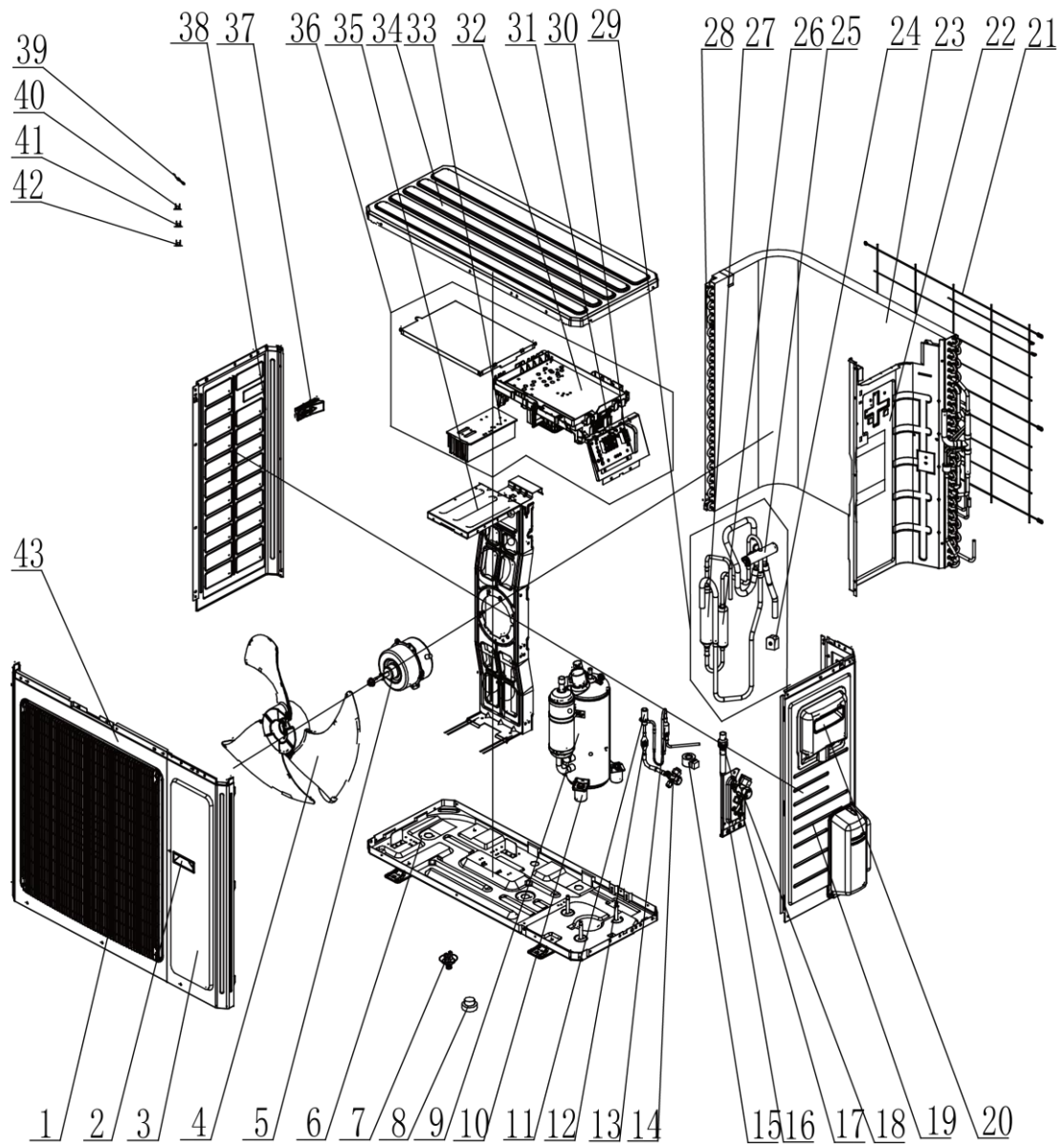
| No. | Material name | Finished Product Code | Quantity |
|-----|---|-----------------------|----------|
| 20 | Electronic Expansion Valve | 07133821 | 1 |
| 21 | Strainer | 0721302608 | 1 |
| 22 | Clapboard Sub-assay | 01233168 | 1 |
| 23 | Condenser Assay | 011002060290 | 1 |
| 24 | Condenser Support Plate | 01795028 | 1 |
| 25 | Terminal Board | 422000000007 | 1 |
| 26 | Terminal Board | 42200000002402 | 1 |
| 27 | Main Board | 300027060151 | 1 |
| 28 | Radiator | 49013060 | 1 |
| 29 | Coping | 012049000006 | 1 |
| 30 | Motor Support Sub-assay | 0170339802 | 1 |
| 31 | Electric Box Assay | 100002061297 | 1 |
| 32 | Left Side Plate | 01303169 | 1 |
| 33 | Temperature Sensor | 3900007201 | 1 |
| 34 | Compressor Overload Protector(External) | 00183051 | 1 |
| 35 | Compressor Overload Protector(External) | 00183032 | 1 |

GUD71W/NhA-T (Product Code: CF090W1220)



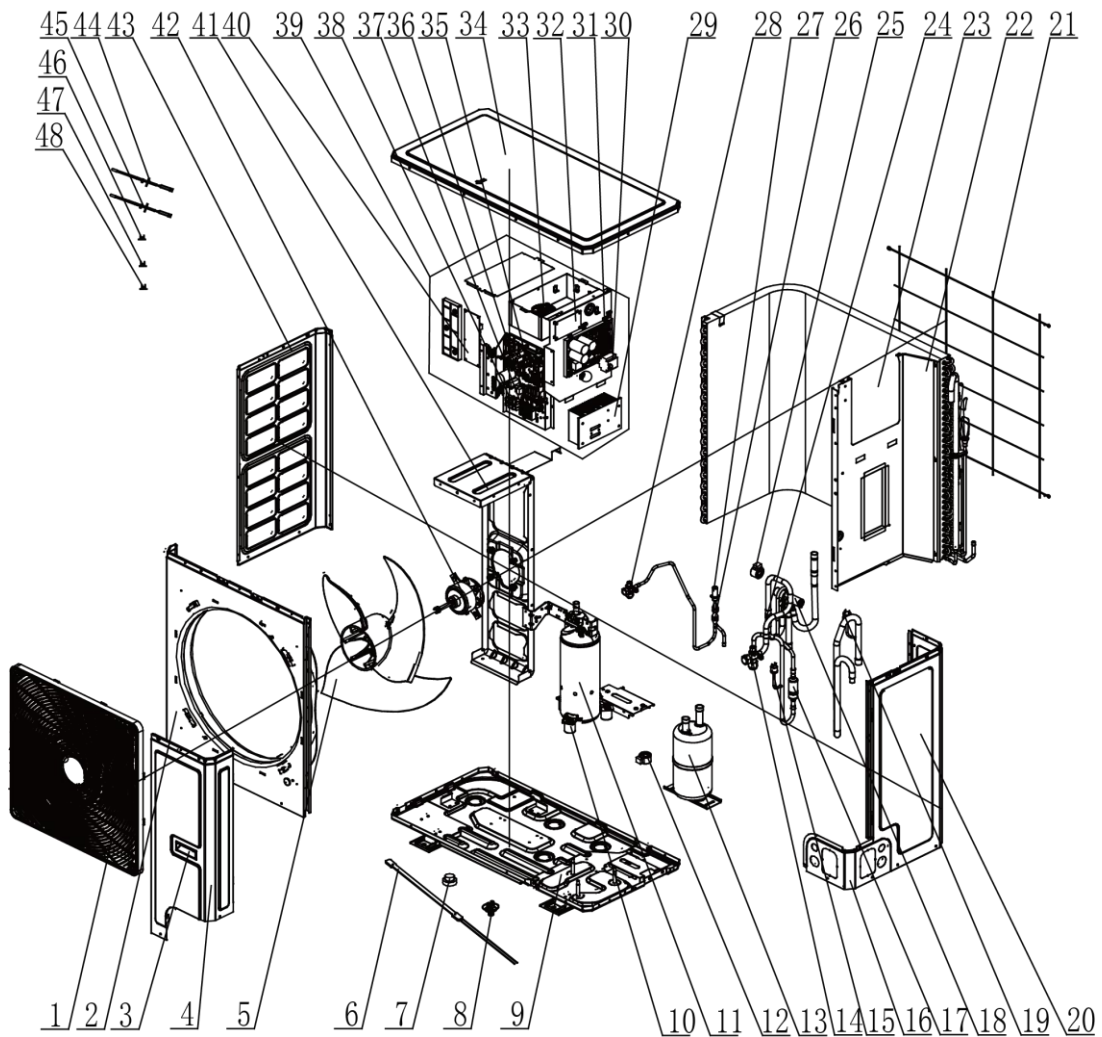
| No. | Material name | Finished Product Code | Quantity |
|-----|---|-----------------------|----------|
| 1 | Front Grill | 22415010 | 1 |
| 2 | Front Panel | 01535013 | 1 |
| 3 | Axial Flow Fan | 10335008 | 1 |
| 4 | Fan Motor | 1501506402 | 1 |
| 5 | Drainage Joint | 06123401 | 1 |
| 6 | Drainage hole Cap | 76713033 | 1 |
| 7 | Drainage hole Cap | 76713068 | 1 |
| 8 | Drainage hole Cap | 06813401 | 1 |
| 9 | Base Plate Sub-assay | 01205816 | 1 |
| 10 | Compressor and Fittings | 00900100019501 | 1 |
| 11 | Compressor Gasket | 009012000004 | 3 |
| 12 | 4 Way Valve Coil | 4300040087 | 1 |
| 13 | Silencer1 | 07243050 | 1 |
| 14 | Silencer2 | 07243049 | 1 |
| 15 | 4-way Valve | 430004032 | 1 |
| 16 | Cut off Valve | 07133844 | 1 |
| 17 | Strainer | 0721302608 | 1 |
| 18 | Cut off Valve | 071302391 | 1 |
| 19 | Electronic Expansion Valve | 072009000004 | 1 |
| 20 | Valve Support Sub-assay | 01705046 | 1 |
| 21 | Strainer | 07225088 | 1 |
| 22 | Right Side Plate | 0130509001 | 1 |
| 23 | Handle | 2623525404 | 1 |
| 24 | Rear Grill | 01475020 | 1 |
| 25 | Clapboard Sub-assay | 01235081 | 1 |
| 26 | Condenser Assay | 011002000177 | 1 |
| 27 | Electric Expand Valve Fitting | 43000344 | 1 |
| 28 | 4-way Valve Assay | 030152060086 | 1 |
| 29 | Condenser Support Plate | 01795031 | 1 |
| 30 | Terminal Board | 422000000007 | 1 |
| 31 | Terminal Board | 42200000002402 | 1 |
| 32 | Main Board | 300027060157 | 1 |
| 33 | Radiator | 4901521502 | 1 |
| 34 | Top Cover Sub-assay | 000051000017 | 1 |
| 35 | Electric Box Assay | 100002061278 | 1 |
| 36 | Motor Support Sub-assay | 01705067 | 1 |
| 37 | Handle | 26233053 | 1 |
| 38 | Left Side Plate | 01305093 | 1 |
| 39 | Temperature Sensor | 3900007201 | 1 |
| 40 | Compressor Overload Protector(External) | 00180030 | 1 |
| 41 | Compressor Overload Protector(External) | 00183032 | 1 |
| 42 | Compressor Overload Protector(External) | 00183031 | 1 |

GUD85W/NhA-T(Product Code: CF090W1230)



| No. | Material name | Finished Product Code | Quantity |
|-----|---|-----------------------|----------|
| 1 | Front Grill | 22415011 | 1 |
| 2 | Left Handle | 26235401 | 1 |
| 3 | Front Side Plate | 01305086 | 1 |
| 4 | Axial Flow Fan | 10335014 | 1 |
| 5 | Fan Motor | 15010400000102 | 1 |
| 6 | Base Plate Sub-assay | 0280319601 | 1 |
| 7 | Drainage Joint | 06123401 | 1 |
| 8 | Drainage hole Cap | 06813401 | 3 |
| 9 | Compressor and Fittings | 00900100019501 | 1 |
| 10 | Compressor Gasket | 009012000004 | 3 |
| 11 | Electronic Expansion Valve | 072009000004 | 1 |
| 12 | Strainer | 07215201 | 1 |
| 13 | Strainer | 07225088 | 1 |
| 14 | Cut off Valve | 071302391 | 1 |
| 15 | Electric Expand Valve Fitting | 43000344 | 1 |
| 16 | Valve Support Sub-assay | 0171501201 | 1 |
| 17 | Strainer | 0721304401 | 1 |
| 18 | Cut off Valve | 07133157 | 1 |
| 19 | Right Side Plate | 0130504401 | 1 |
| 20 | Big Handle | 26235001 | 1 |
| 21 | Rear Grill | 01475013 | 1 |
| 22 | Clapboard Sub-assay | 01235091 | 1 |
| 23 | Condenser Assay | 01100200162 | 1 |
| 24 | Magnet Coil | 4300040045 | 1 |
| 25 | 4-way Valve | 4300008201 | 1 |
| 26 | Silencer1 | 07243050 | 1 |
| 27 | Silencer | 07245101 | 1 |
| 28 | Condenser Support Plate | 01175092 | 1 |
| 29 | 4-way Valve Assay | 030152000329 | 1 |
| 30 | Terminal Board | 422000000007 | 1 |
| 31 | Terminal Board | 42200000002402 | 1 |
| 32 | Main Board | 300027060157 | 1 |
| 33 | Radiator | 4901521502 | 1 |
| 34 | Coping | 01255020 | 1 |
| 35 | Electric Box Assay | 100002061294 | 1 |
| 36 | Motor Support Sub-assay | 017012000017 | 1 |
| 37 | Handle | 26233053 | 1 |
| 38 | Left Side Plate | 01305043 | 1 |
| 39 | Temperature Sensor | 3900007201 | 1 |
| 40 | Compressor Overload Protector(External) | 00183031 | 1 |
| 41 | Compressor Overload Protector(External) | 00183032 | 1 |
| 42 | Compressor Overload Protector(External) | 00180030 | 1 |
| 43 | Cabinet | 01435004 | 1 |

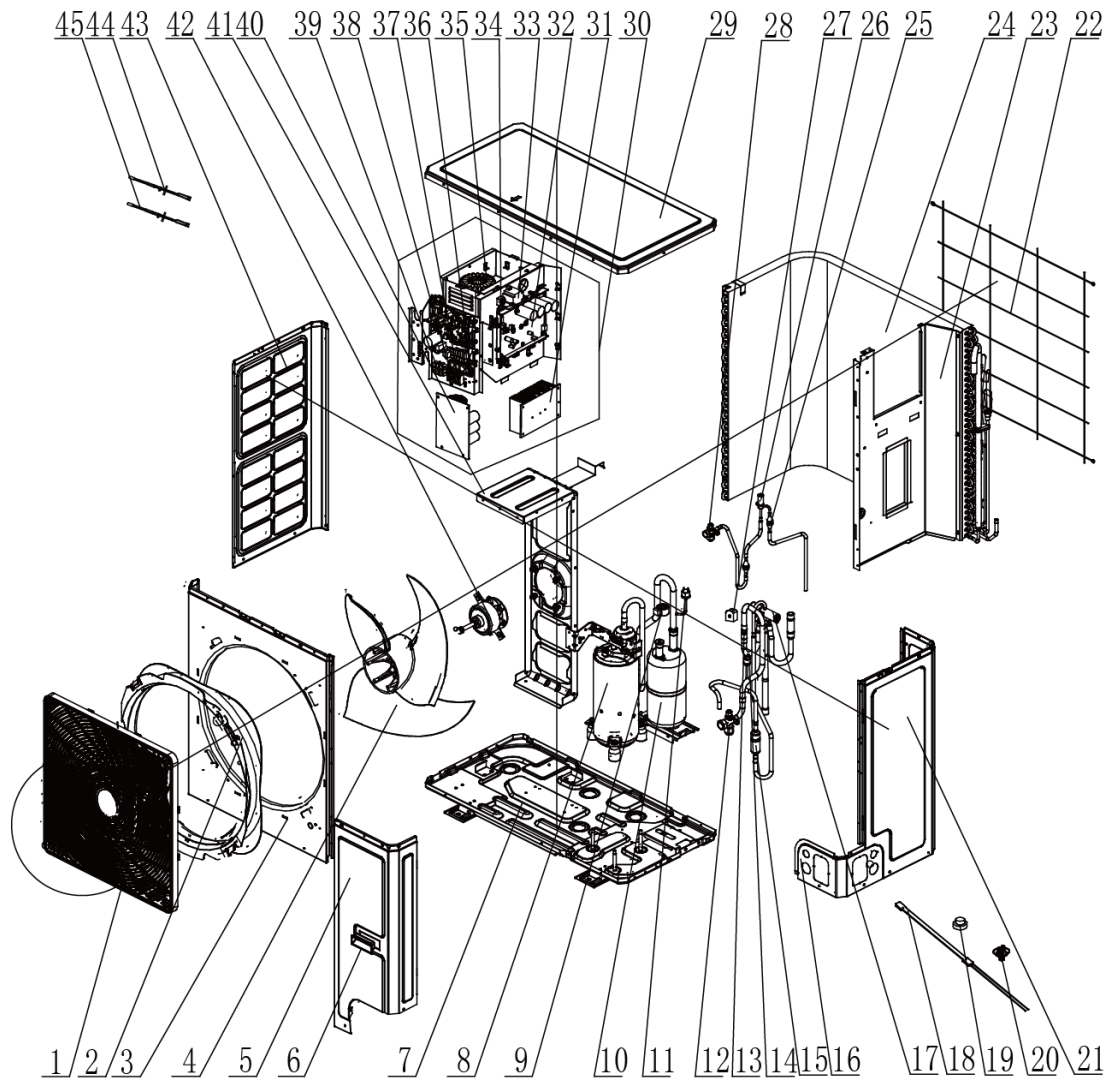
GUD100W/NhA-T(Product Code: CF090W1240)



| No. | Material name | Finished Product Code | Quantity |
|-----|--------------------------------|-----------------------|----------|
| 1 | Front Grill | 01572800003 | 1 |
| 2 | Cabinet | 012022000003 | 1 |
| 3 | Handle | 26904100016 | 2 |
| 4 | Front Side Plate | 012050000007 | 1 |
| 5 | Axial Flow Fan | 1043410000801 | 1 |
| 6 | Electric Heater (Compressor) | 7651873215 | 1 |
| 7 | Drainage hole Cap | 76715005 | 3 |
| 8 | Drainage Joint | 26113009 | 1 |
| 9 | Base Plate Sub-assay | 017000060073 | 1 |
| 10 | Filter Board | 300020000004 | 1 |
| 10 | Compressor and Fittings | 009001000231 | 1 |
| 11 | Compressor Gasket | 009012000004 | 1 |
| 12 | Electric Expand Valve Fitting | 43000344 | 1 |
| 13 | Gas-liquid Separator | 07423902 | 1 |
| 14 | Cut off Valve | 07334100016 | 1 |
| 15 | Pressure Protect Switch | 4602000603 | 1 |
| 16 | Connection Board | 01344100070 | 1 |

| No. | Material name | Finished Product Code | Quantity |
|-----|---|-----------------------|----------|
| 17 | Silencer | 07245012 | 1 |
| 18 | 4-way Valve | 4300008201 | 1 |
| 19 | Pressure Protect Switch | 46020007 | 1 |
| 20 | Rear Side Plate | 012076000021 | 1 |
| 21 | Rear Grill | 01574100014 | 1 |
| 22 | Clapboard Sub-assay | 017021060074 | 1 |
| 23 | Condenser Assay | 011002060190 | 1 |
| 24 | Filter | 07224803 | 1 |
| 25 | 4-way Valve Coil | 4300040087 | 1 |
| 26 | Strainer | 0721304401 | 2 |
| 27 | Electronic Expansion Valve | 072009000018 | 1 |
| 28 | Cut off Valve | 071302391 | 1 |
| 29 | Radiator | 430034000048 | 1 |
| 30 | Inductance | 43128000014 | 1 |
| 31 | Main Board | 30221000024 | 1 |
| 32 | Power Switch | 300012060010 | 1 |
| 33 | PFC Inductance | 43120011 | 1 |
| 34 | Coping | 01264100052 | 1 |
| 35 | Main Board | 300027060156 | 1 |
| 36 | Terminal Board | 422000000007 | 1 |
| 37 | Terminal Board | 42000100000101 | 1 |
| 38 | Terminal Board | 42200000001501 | 1 |
| 39 | Electric Box Assay | 100002061299 | 1 |
| 41 | Motor Support | 012048000023 | 1 |
| 42 | Fan Motor | 150104060013 | 1 |
| 43 | Left Side Plate | 012055000007 | 1 |
| 44 | Temperature Sensor | 3900007201 | 1 |
| 45 | Temperature Sensor | 39008000049G | 1 |
| 46 | Compressor Overload Protector(External) | 00183032 | 1 |
| 47 | Compressor Overload Protector(External) | 00183031 | 1 |
| 48 | Compressor Overload Protector(External) | 00180030 | 1 |

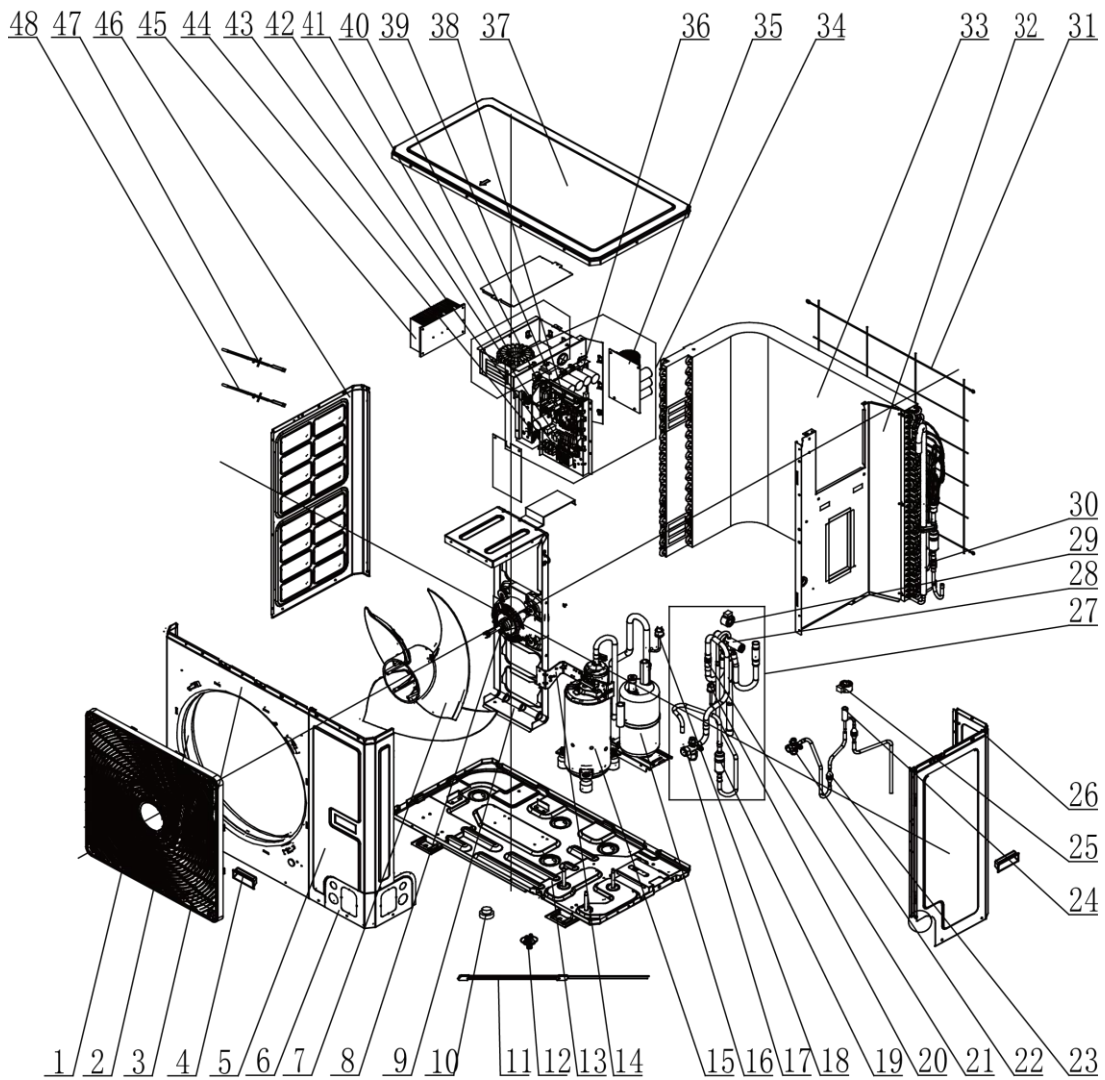
GUD125W/NhA-T(Product Code: CF090W1260)



| No. | Material name | Finished Product Code | Quantity |
|-----|-------------------------------|-----------------------|----------|
| 1 | Front Grill | 01572800003 | 1 |
| 2 | Diversion Circle | 10474100003 | 1 |
| 3 | Cabinet | 012022000003 | 1 |
| 4 | Axial Flow Fan | 1043410000801 | 1 |
| 5 | Front Side Plate | 012050000007 | 1 |
| 6 | Handle | 26904100016 | 2 |
| 7 | Base Plate Sub-assembly | 01700006008901 | 1 |
| 8 | Compressor and Fittings | 009001060077 | 1 |
| 9 | Electric Expand Valve Fitting | 43000344 | 1 |
| 10 | Gas-liquid Separator | 07423902 | 1 |
| 11 | Pressure Protect Switch | 46020007 | 1 |
| 12 | Cut off Valve | 07334100016 | 1 |
| 13 | Filter | 07224803 | 1 |
| 14 | Pressure Protect Switch | 4602000603 | 1 |
| 15 | Silencer | 07245012 | 1 |
| 16 | Connection Board | 01344100070 | 1 |

| No. | Material name | Finished Product Code | Quantity |
|-----|--------------------------------|-----------------------|----------|
| 17 | 4-way Valve | 4300008201 | 1 |
| 18 | Electric Heater (Compressor) | 7651521238 | 1 |
| 19 | Drainage hole Cap | 76715005 | 3 |
| 20 | Drainage Joint | 26113009 | 1 |
| 21 | Rear Side Plate | 012076000021 | 1 |
| 22 | Rear Grill | 01574100014 | 1 |
| 23 | Clapboard Sub-assay | 017021060074 | 1 |
| 24 | Condenser Assay | 011002060190 | 1 |
| 25 | Strainer | 0721304401 | 2 |
| 26 | Electronic Expansion Valve | 43005017 | 1 |
| 27 | Magnet Coil | 4300040045 | 1 |
| 28 | Cut off Valve | 071302391 | 1 |
| 29 | Coping | 01264100052 | 1 |
| 30 | Electric Box Assay | 100002061303 | 1 |
| 31 | Radiator | 49018000013 | 1 |
| 32 | Main Board | 300027060292 | 1 |
| 33 | Inductance | 4312800001401 | 1 |
| 34 | Terminal Board | 42011147 | 1 |
| 35 | PFC Inductance | 43120122 | 1 |
| 36 | Main Board | 300027060156 | 1 |
| 37 | Terminal Board | 422000000007 | 1 |
| 38 | Terminal Board | 42000100000101 | 1 |
| 39 | Terminal Board | 42200000001501 | 1 |
| 40 | Filter Board | 300020000003 | 1 |
| 41 | Motor Support | 012048000023 | 1 |
| 42 | Fan Motor | 150104060013 | 1 |
| 43 | Left Side Plate | 012055000007 | 1 |
| 44 | Temperature Sensor | 3900007201 | 1 |
| 45 | Temperature Sensor | 39008000049G | 1 |

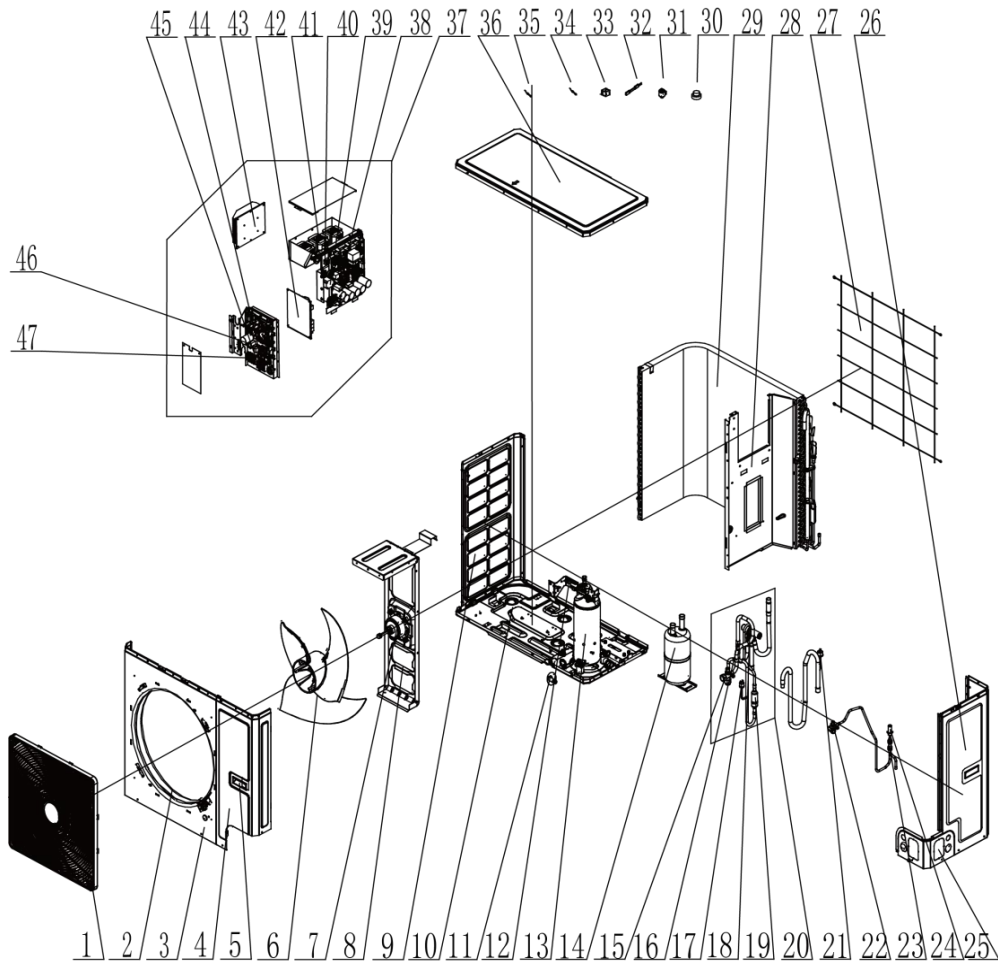
GUD140W/NhA-T (Product Code: CF090W1280)



| No. | Material name | Finished Product Code | Quantity |
|-----|-------------------------------|-----------------------|----------|
| 1 | Front Grill | 01572800003 | 1 |
| 2 | Diversion Circle | 10474100003 | 1 |
| 3 | Cabinet | 012022000003P | 1 |
| 4 | Handle | 26904100016 | 1 |
| 5 | Front Side Plate | 012050000007 | 1 |
| 6 | Connection Board | 01344100070P | 1 |
| 7 | Axial Flow Fan | 1043410000801 | 1 |
| 8 | Fan Motor | 150104060013 | 1 |
| 9 | Motor Support Sub-assay | 017012060039 | 1 |
| 10 | Drainage hole Cap | 76715005 | 1 |
| 11 | Electrical Heater(Compressor) | 7651521238 | 1 |
| 12 | Drainage Joint | 26113009 | 1 |
| 13 | Base Plate Sub-assay | 017000060089 | 1 |
| 14 | Valve Support Sub-assay | 017104000008 | 1 |
| 15 | Compressor and Fittings | 009001060077 | 1 |
| 16 | Gas-liquid Separator | 07423902 | 1 |

| No. | Material name | Finished Product Code | Quantity |
|-----|-------------------------------|-----------------------|----------|
| 17 | Cut off Valve | 07334100016 | 1 |
| 18 | Pressure Protect Switch | 46020007 | 1 |
| 19 | Silencer | 07245012 | 1 |
| 20 | Pressure Protect Switch | 4602000603 | 1 |
| 21 | Filter | 07224803 | 1 |
| 22 | Cut off Valve | 071302391 | 1 |
| 23 | Strainer | 0721304401 | 2 |
| 24 | Electronic Expansion Valve | 43005017 | 1 |
| 25 | Electric Expand Valve Fitting | 43000344 | 1 |
| 26 | Rear Side Plate | 012076000021 | 1 |
| 27 | 4-way Valve Assay | 030152060078 | 1 |
| 28 | 4-way Valve | 4300008201 | 1 |
| 29 | Magnet Coil | 4300040045 | 1 |
| 30 | Strainer | 0721212101 | 1 |
| 31 | Rear Grill | 01574100014 | 1 |
| 32 | Clapboard Sub-assay | 017021060074 | 1 |
| 33 | Condenser Assay | 01100200031501 | 1 |
| 34 | Electric Box Assay | 100002061303 | 1 |
| 35 | Filter Board | 300020000003 | 1 |
| 36 | Main Board | 300027060292 | 1 |
| 37 | Coping | 01264100052 | 1 |
| 38 | Main Board | 300027060156 | 1 |
| 39 | Inductance | 4312800001401 | 1 |
| 40 | Terminal Board | 42011147 | 1 |
| 41 | Inductance | 43120122 | 1 |
| 42 | Terminal board | 42000100000101 | 1 |
| 43 | Terminal Board | 422000000007 | 1 |
| 44 | Terminal Board | 42200000001501 | 1 |
| 45 | Radiator | 49018000013 | 1 |
| 46 | Left Side Plate | 012055000007P | 1 |
| 47 | Temperature Sensor | 39008000049G | 1 |
| 48 | Temperature Sensor | 3900007201 | 1 |

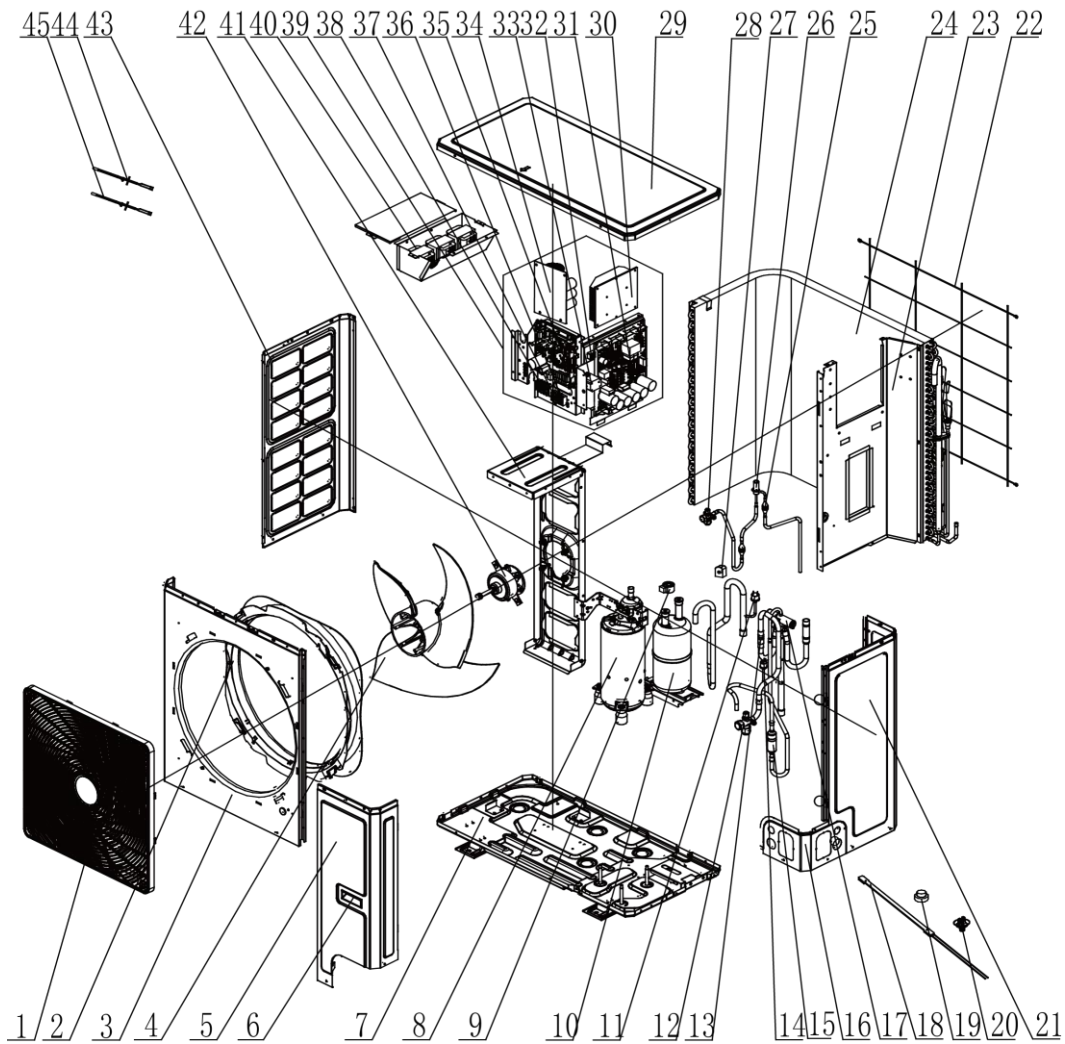
GUD100W/NhA-X(Product Code: CF090W1250)



| No. | Material name | Finished Product Code | Quantity |
|-----|-------------------------|-----------------------|----------|
| 1 | Front Grill | 1572800003 | 1 |
| 2 | Diversion Circle | 10474100003 | 1 |
| 3 | Cabinet | 012022000003 | 1 |
| 4 | Front Side Plate | 012050000007 | 1 |
| 5 | Handle | 26904100016 | 1 |
| 6 | Axial Flow Fan | 1043410000801 | 1 |
| 7 | Fan Motor | 150104060013 | 1 |
| 8 | Motor Support Sub-assay | 01701206003901 | 1 |
| 9 | Left Side Plate | 012055000007 | 1 |
| 10 | Base Plate Sub-assay | 017000060073 | 1 |
| 11 | Drainage Joint | 26113009 | 1 |
| 12 | Valve Support Sub-assay | 017104000008 | 1 |
| 13 | Compressor and Fittings | 009001060078 | 1 |
| 14 | Gas-liquid Separator | 07423902 | 1 |
| 15 | Cut off Valve | 07334100016 | 1 |
| 16 | Strainer | 0721304401 | 1 |
| 17 | Pressure Protect Switch | 4602000603 | 1 |

| No. | Material name | Finished Product Code | Quantity |
|-----|-------------------------------|-----------------------|----------|
| 18 | 4-way Valve | 4300008201 | 1 |
| 19 | Silencer | 07245012 | 1 |
| 20 | 4-way Valve Assay | 030152060080 | 1 |
| 21 | Pressure Protect Switch | 46020007 | 1 |
| 22 | Cut off Valve | 071302391 | 1 |
| 23 | Strainer | 0721304401 | 1 |
| 24 | Electronic Expansion Valve | 072009000018 | 1 |
| 25 | Connection Board | 01344100070 | 1 |
| 26 | Rear Side Plate | 012076000021 | 1 |
| 27 | Rear Grill | 01574100014 | 1 |
| 28 | Clapboard Sub-assay | 017021060074 | 1 |
| 29 | Condenser Assay | 011002060190 | 1 |
| 30 | Drainage hole Cap | 76715005 | 1 |
| 31 | Electric Expand Valve Fitting | 43000344 | 1 |
| 32 | Electrical Heater(Compressor) | 7651873215 | 1 |
| 33 | 4-way Valve Coil | 4300040087 | 1 |
| 34 | Temperature Sensor | 39008000049G | 1 |
| 35 | Temperature Sensor | 3900007201 | 1 |
| 36 | Coping | 01264100052 | 1 |
| 37 | Electric Box Assay | 100002061296 | 1 |
| 38 | Main Board | 300027060156 | 1 |
| 39 | Inductance | 43128000014 | 1 |
| 40 | Terminal Board | 42011147 | 1 |
| 41 | Reactor | 43130192 | 1 |
| 42 | Filter Board | 30223000044 | 1 |
| 43 | Radiator | 49018000087 | 1 |
| 44 | Terminal board | 42000100000101 | 1 |
| 45 | Terminal Board | 422000000007 | 1 |
| 46 | Main Board | 300027000436 | 1 |
| 47 | Terminal Board | 422000060009 | 1 |

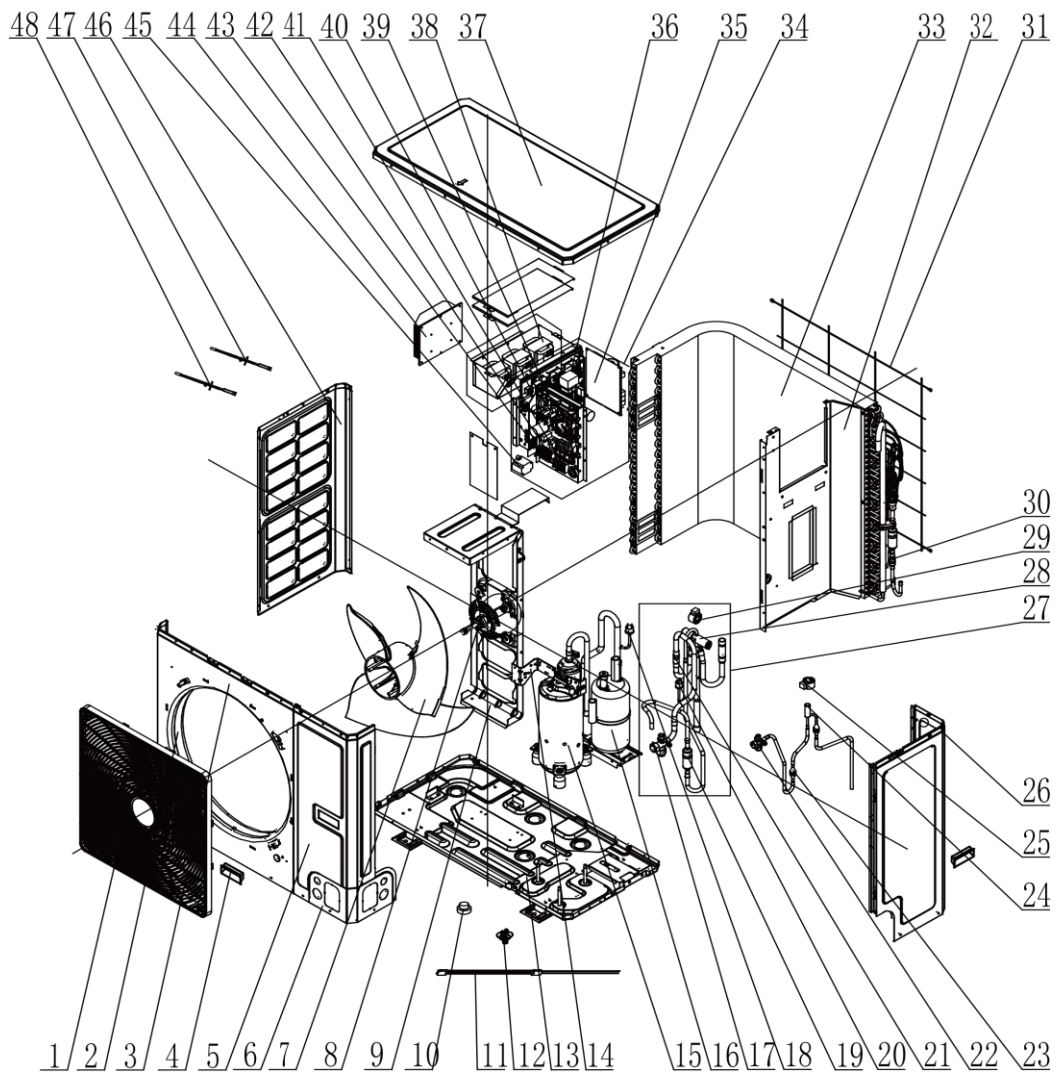
GUD125W/NhA-X(Product Code: CF090W1270)



| No. | Material name | Finished Product Code | Quantity |
|-----|-------------------------------|-----------------------|----------|
| 1 | Front Grill | 01572800003 | 1 |
| 2 | Diversion Circle | 10474100003 | 1 |
| 3 | Cabinet | 012022000003 | 1 |
| 4 | Axial Flow Fan | 1043410000801 | 1 |
| 5 | Front Side Plate | 012050000007 | 1 |
| 6 | Handle | 26904100016 | 1 |
| 7 | Base Plate Sub-assay | 01700006008901 | 1 |
| 8 | Compressor and Fittings | 009001060059 | 1 |
| 9 | Electric Expand Valve Fitting | 43000344 | 1 |
| 10 | Gas-liquid Separator | 07423902 | 1 |
| 11 | Pressure Protect Switch | 46020007 | 1 |
| 12 | Cut off Valve | 07334100016 | 1 |
| 13 | Strainer | 0721304401 | 1 |
| 14 | Pressure Protect Switch | 4602000603 | 1 |
| 15 | Silencer | 07245012 | 1 |
| 16 | Connection Board | 01344100070 | 1 |

| No. | Material name | Finished Product Code | Quantity |
|-----|----------------------------------|-----------------------|----------|
| 17 | 4-way Valve | 4300008201 | 1 |
| 18 | Electrical Heater(Compressor) | 7651521238 | 1 |
| 19 | Drainage hole Cap | 76715005 | 1 |
| 20 | Drainage Joint | 26113009 | 1 |
| 21 | Rear Side Plate | 012076000021 | 1 |
| 22 | Rear Grill | 01574100014 | 1 |
| 23 | Clapboard Sub-assay | 017021060074 | 1 |
| 24 | Condenser Assay | 011002060190 | 1 |
| 25 | Strainer | 721304401 | 2 |
| 26 | Electronic Expansion Valve | 43005017 | 1 |
| 27 | Electric Expand Valve Fitting | 43000344 | 1 |
| 28 | Cut off Valve | 71302391 | 1 |
| 29 | Coping | 01264100052 | 1 |
| 30 | Radiator | 49018000087 | 1 |
| 31 | Main Board | 300027000644 | 1 |
| 32 | Terminal board | 42011147 | 1 |
| 33 | Inductance | 43128000014 | 1 |
| 34 | Filter Board | 30223000044 | 1 |
| 35 | Main Board | 300027060156 | 1 |
| 36 | Terminal Board | 422000000007 | 1 |
| 37 | Terminal Board | 42000100000101 | 1 |
| 38 | Terminal Board | 422000060009 | 1 |
| 39 | Electric Box Assay | 100002061295 | 1 |
| 40 | Reactor | 43130192 | 1 |
| 41 | Motor Support | 012048000023 | 1 |
| 42 | Fan Motor | 150104060013 | 1 |
| 43 | Left Side Plate | 012055000007 | 1 |
| 44 | Temperature Sensor | 39008000049G | 1 |
| 45 | Temperature Sensor | 3900007201 | 1 |

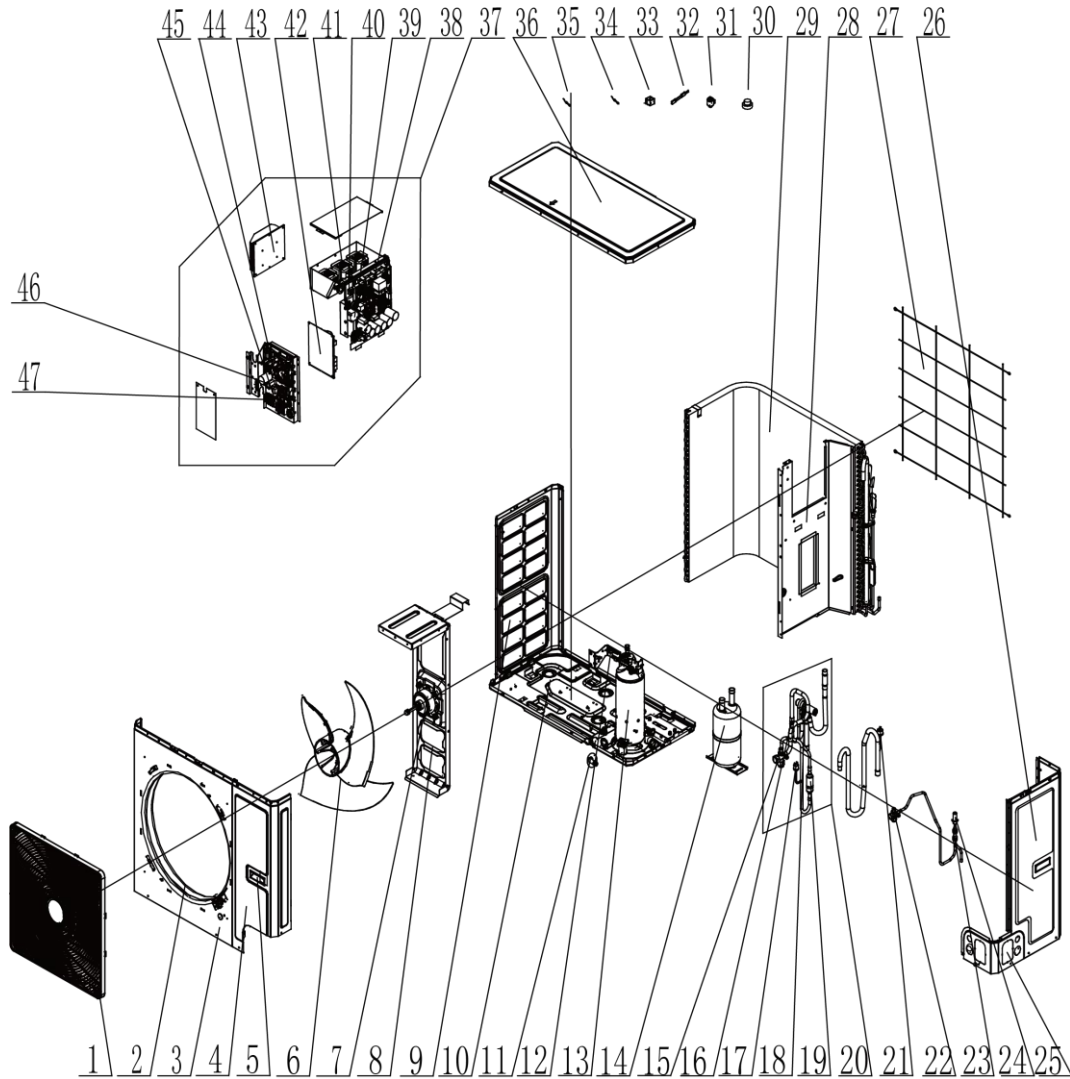
GUD140W/NhA-X(Product Code: CF090W1290)



| No. | Material name | Finished Product Code | Quantity |
|-----|-------------------------------|-----------------------|----------|
| 1 | Front Grill | 01572800003 | 1 |
| 2 | Diversion Circle | 10474100003 | 1 |
| 3 | Cabinet | 012022000003 | 1 |
| 4 | Handle | 26904100016 | 1 |
| 5 | Front Side Plate | 012050000007 | 1 |
| 6 | Connection Board | 01344100070 | 1 |
| 7 | Axial Flow Fan | 1043410000801 | 1 |
| 8 | Fan Motor | 150104060013 | 1 |
| 9 | Motor Support Sub-assay | 017012060039 | 1 |
| 10 | Drainage Hole Cap | 76715005 | 3 |
| 11 | Electrical Heater(Compressor) | 7651521238 | 1 |
| 12 | Drainage Joint | 26113009 | 1 |
| 13 | Base Plate Sub-assay | 017000060089 | 1 |
| 14 | Valve Support Sub-assay | 017104000008 | 1 |
| 15 | Compressor and Fittings | 009001060059 | 1 |
| 16 | Gas-liquid Separator | 07423902 | 1 |

| No. | Material name | Finished Product Code | Quantity |
|-----|-------------------------------|-----------------------|----------|
| 17 | Cut off Valve | 07334100016 | 1 |
| 18 | Pressure Protect Switch | 46020007 | 1 |
| 19 | Silencer | 07245012 | 1 |
| 20 | Pressure Protect Switch | 4602000603 | 1 |
| 21 | Filter | 07224803 | 1 |
| 22 | Cut off Valve | 071302391 | 1 |
| 23 | Strainer | 0721304401 | 2 |
| 24 | Electronic Expansion Valve | 43005017 | 1 |
| 25 | Electric Expand Valve Fitting | 43000344 | 1 |
| 26 | Rear Side Plate | 012076000021 | 1 |
| 27 | 4-way Valve Assay | 030152060078 | 1 |
| 28 | 4-way Valve | 4300008201 | 1 |
| 29 | Magnet Coil | 4300040045 | 1 |
| 30 | Strainer | 0721212101 | 1 |
| 31 | Rear Grill | 01574100014 | 1 |
| 32 | Clapboard Sub-assay | 017021060074 | 1 |
| 33 | Condenser Assay | 01100200031501 | 1 |
| 34 | Electric Box Assay | 100002061295 | 1 |
| 35 | Filter Board | 30223000044 | 1 |
| 36 | Main Board | 300027060156 | 1 |
| 37 | Coping | 01264100052 | 1 |
| 38 | Reactor | 43130192 | 1 |
| 39 | Main Board | 300027000644 | 1 |
| 40 | Terminal Board | 42011147 | 1 |
| 41 | Terminal Board | 422000000007 | 1 |
| 42 | Terminal Board | 42000100000101 | 1 |
| 43 | Terminal Board | 422000060009 | 1 |
| 44 | Radiator | 49018000087 | 1 |
| 45 | Inductance | 43128000014 | 1 |
| 46 | Left Side Plate | 012055000007 | 1 |
| 47 | Temperature Sensor | 39008000049G | 1 |
| 48 | Temperature Sensor | 3900007201 | 1 |

GUD160W/NhA-X(Product Code: CF090W1300)

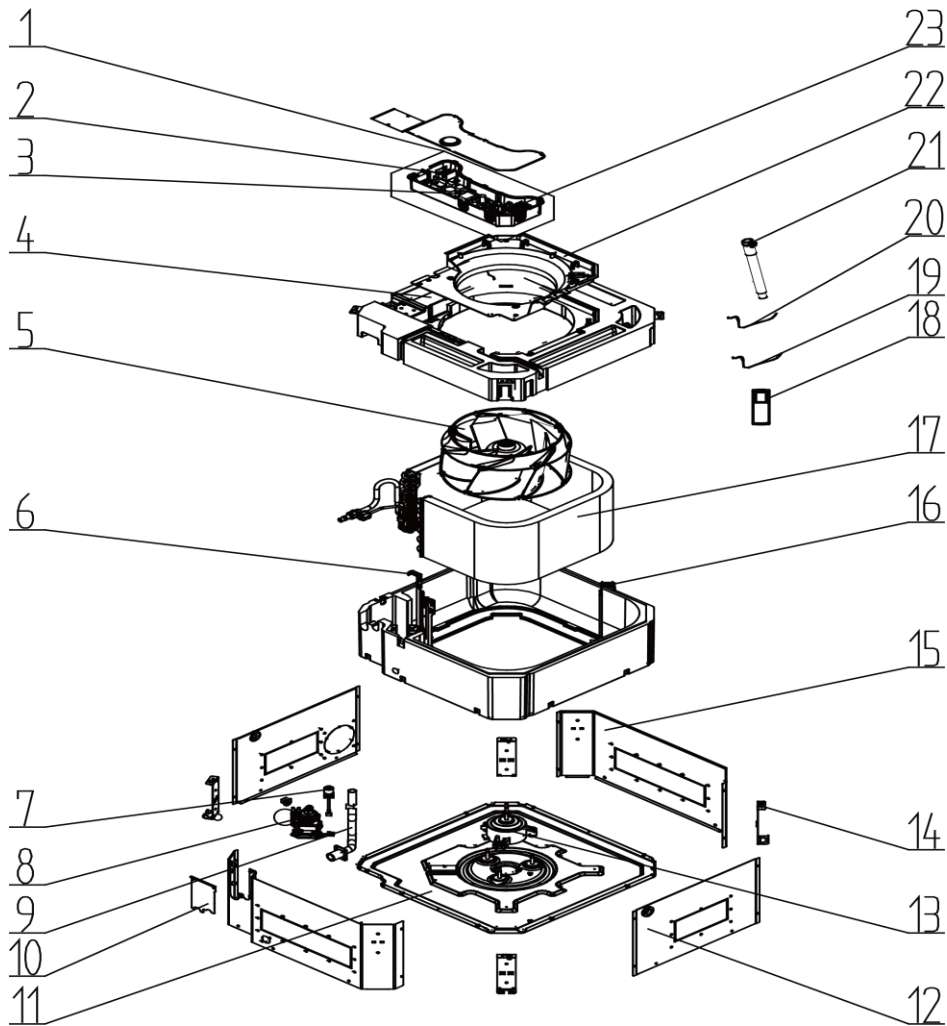


| No. | Material name | Finished Product Code | Quantity |
|-----|-------------------------------|-----------------------|----------|
| 1 | Front Grill | 01575200002 | 2 |
| 2 | Cabinet | 01514100002 | 1 |
| 3 | Diversion Circle | 10474100001 | 2 |
| 4 | Axial Flow Fan | 1043410000301 | 1 |
| 5 | Handle | 26235253 | 1 |
| 6 | Front Side Plate | 01314100012 | 1 |
| 7 | Brushless DC Motor | 1570410001305 | 1 |
| 8 | Brushless DC Motor | 1570410001306 | 1 |
| 9 | Electric Expand Valve Fitting | 43000344 | |
| 10 | Electronic Expansion Valve | 43005017 | 1 |
| 11 | Strainer | 0741410000601 | 2 |
| 12 | Base Plate Sub-assay | 017000000342 | 1 |
| 13 | Cut off Valve | 07330000002 | 1 |
| 14 | Compressor and Fittings | 009001060059 | 1 |
| 15 | Magnet Coil | 4300040045 | 1 |

| No. | Material name | Finished Product Code | Quantity |
|-----|----------------------------------|-----------------------|----------|
| 16 | Cut off Valve | 07334100016 | 1 |
| 17 | Filter | 07224803 | 1 |
| 18 | 4-way Valve | 43000338 | 1 |
| 19 | Pressure Protect Switch | 4602000603 | 1 |
| 20 | 4-way Valve Assay | 030152060082 | 1 |
| 21 | Rear Side Plate Sub-assay | 017051000057 | 1 |
| 22 | Rear Grill | 01574100004 | 1 |
| 23 | Clapboard Sub-assay | 017021060075 | 1 |
| 24 | Strainer | 0721212101 | 1 |
| 25 | Condenser Assay | 000100060046 | 1 |
| 26 | Pressure Protect Switch | 46020007 | 1 |
| 27 | Gas-liquid Separator | 0722501603 | 1 |
| 28 | Electric Box Assay | 100002062084 | 1 |
| 29 | Inductance | 43128000014 | 1 |
| 30 | Filter Board | 30223000044 | 1 |
| 31 | Terminal Board | 42011147 | 1 |
| 32 | Terminal Board | 422000000007 | 1 |
| 33 | Main Board | 300027060156 | 1 |
| 34 | Terminal Board | 42000100000101 | 1 |
| 35 | Terminal Board | 422000060009 | 1 |
| 36 | Coping | 01264100008 | 1 |
| 37 | Radiator | 49018000127 | 1 |
| 38 | Main Board | 300027000644 | 1 |
| 39 | Reactor | 43130192 | 1 |
| 40 | Electric Box Assay | 100002061300 | 1 |
| 41 | Motor Support Sub-assay | 017012000126 | 1 |
| 42 | Left Side Plate | 01314100013 | 1 |
| 43 | Electrical Heater(Compressor) | 765152128 | 1 |
| 44 | Drainage Joint | 06123401 | 1 |
| 45 | Drainage Hole Cap | 06813401 | 3 |
| 46 | Temperature Sensor | 3900007201 | 1 |
| 47 | Temperature Sensor | 3900028025G | 1 |

4.6.2 IDU Explosive View and Lists of Parts

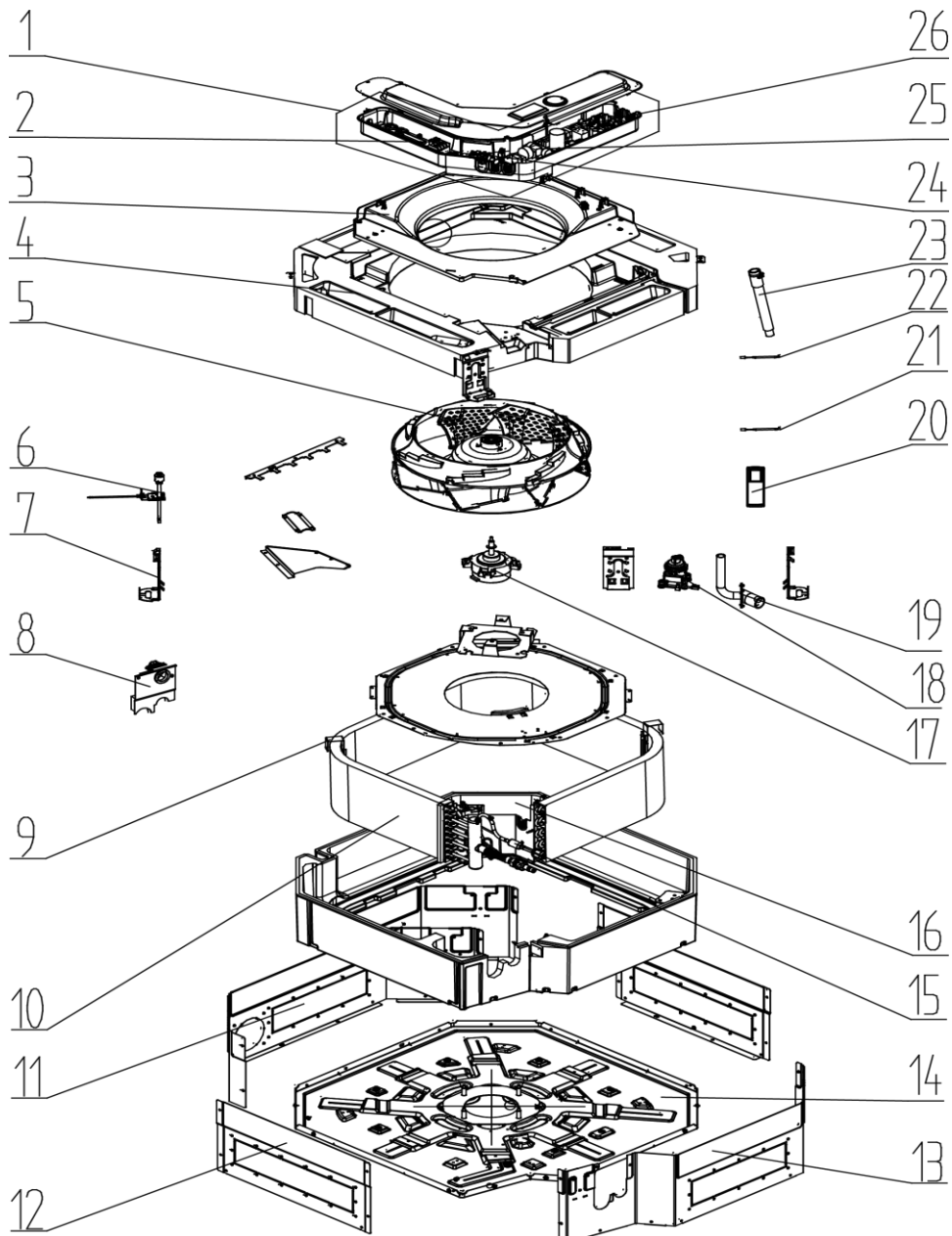
GUD35T/A-T(Product Code:ET010N1640), **GUD50T/A-T**(Product Code:ET010N1540)



| No. | Material name | Finished Product Code | Quantity |
|-----|---------------------------|-----------------------|----------|
| 1 | Electric Box Assy | 100002003276 | 1 |
| 2 | Terminal Board | 42011106 | 1 |
| 3 | Main Board | 300002060226 | 1 |
| 4 | Water Tray Assy | 000069060065 | 1 |
| 5 | Centifugal Fan | 103003060008 | 1 |
| 6 | Connection Sheet Sub-Assy | 017025060047 | 1 |
| 7 | Water Level Switch | 43002400000502 | 1 |
| 8 | Water Pump | 43138000058 | 1 |
| 9 | Drain Pipe | 200070060005 | 1 |
| 10 | Sealplate | 012034060119 | 1 |
| 11 | Seat Board Sub-Assy | 017080060023 | 1 |
| 12 | Side Plate | 012010060177 | 1 |
| 13 | Brushless DC Motor | 150104060012 | 1 |

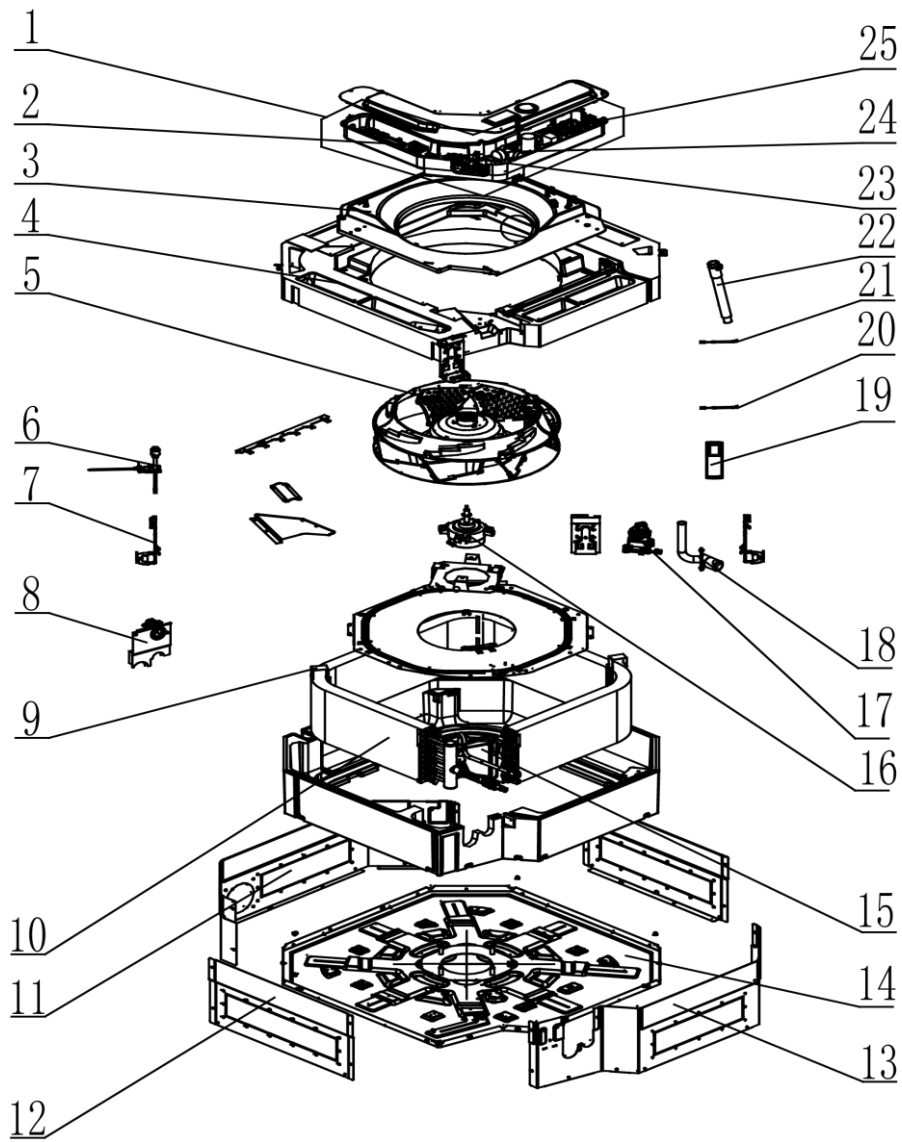
| No. | Material name | Finished Product Code | Quantity |
|-----|------------------------|-----------------------|----------|
| 14 | Mounting Rack Sub-Assy | 017044060011 | 4 |
| 15 | Side Plate | 012010060175 | 1 |
| 16 | Support | 012060061048 | 1 |
| 17 | Evaporator Assy | 011001060299 | 1 |
| 18 | Remote Control | 305001060024 | 1 |
| 19 | Room Sensor | 39000191 | 1 |
| 20 | Temperature Sensor | 3900005911 | 1 |
| 21 | Drain Hose Sub-Assy | 05232702 | 1 |
| 22 | Flow Guide Loop | 200150060003 | 1 |
| 23 | Terminal Board | 42018000551 | 1 |

GUD71T/A-T(Product Code: ET010N1420), **GUD85T/A-T**(Product Code: ET010N1430)



| No. | Material name | Finished Product Code | Quantity |
|-----|-------------------------|-----------------------|----------|
| 1 | Electric Box Assay | 100002061280 | 1 |
| 2 | Terminal Board | 42018000551 | 1 |
| 3 | Diversion Circle | 26909400067 | 1 |
| 4 | Water Tray Assay | 000069060008 | 1 |
| 5 | Centrifugal Fan | 10429400004 | 1 |
| 6 | Liquid Level Switch | 4502021601 | 1 |
| 7 | Body Installing Plate | 01332701 | 4 |
| 8 | Seal Plate Assay | 01499400003 | 1 |
| 9 | Fixed Mount1 | 01849400020 | 3 |
| 10 | Evaporator Assay | 01100100025401 | 1 |
| 11 | Side Plate 1 | 01319400049 | 1 |
| 12 | Side Plate 3 | 01319400051 | 2 |
| 13 | Side Plate 2 | 01319400050 | 1 |
| 14 | Seat Board Sub-assay | 02229400011 | 1 |
| 15 | Strainer | 07213050 | 1 |
| 16 | Support | 01809400052 | 1 |
| 17 | Brushless DC Motor | 1570410000701 | 1 |
| 18 | Water Pump | 43138000058 | 1 |
| 19 | Drainage Pipe Sub-assay | 26909400055 | 1 |
| 20 | Remote Controller | 305001060024 | 1 |
| 21 | Temperature Sensor | 390000453 | 1 |
| 22 | Temperature Sensor | 39000286 | 1 |
| 23 | Drain Hose Sub-assay | 05232702 | 1 |
| 24 | Terminal board | 42000100000202 | 1 |
| 25 | Filter Board | 30221000021 | 1 |
| 26 | Main Board | 300002060224 | 1 |

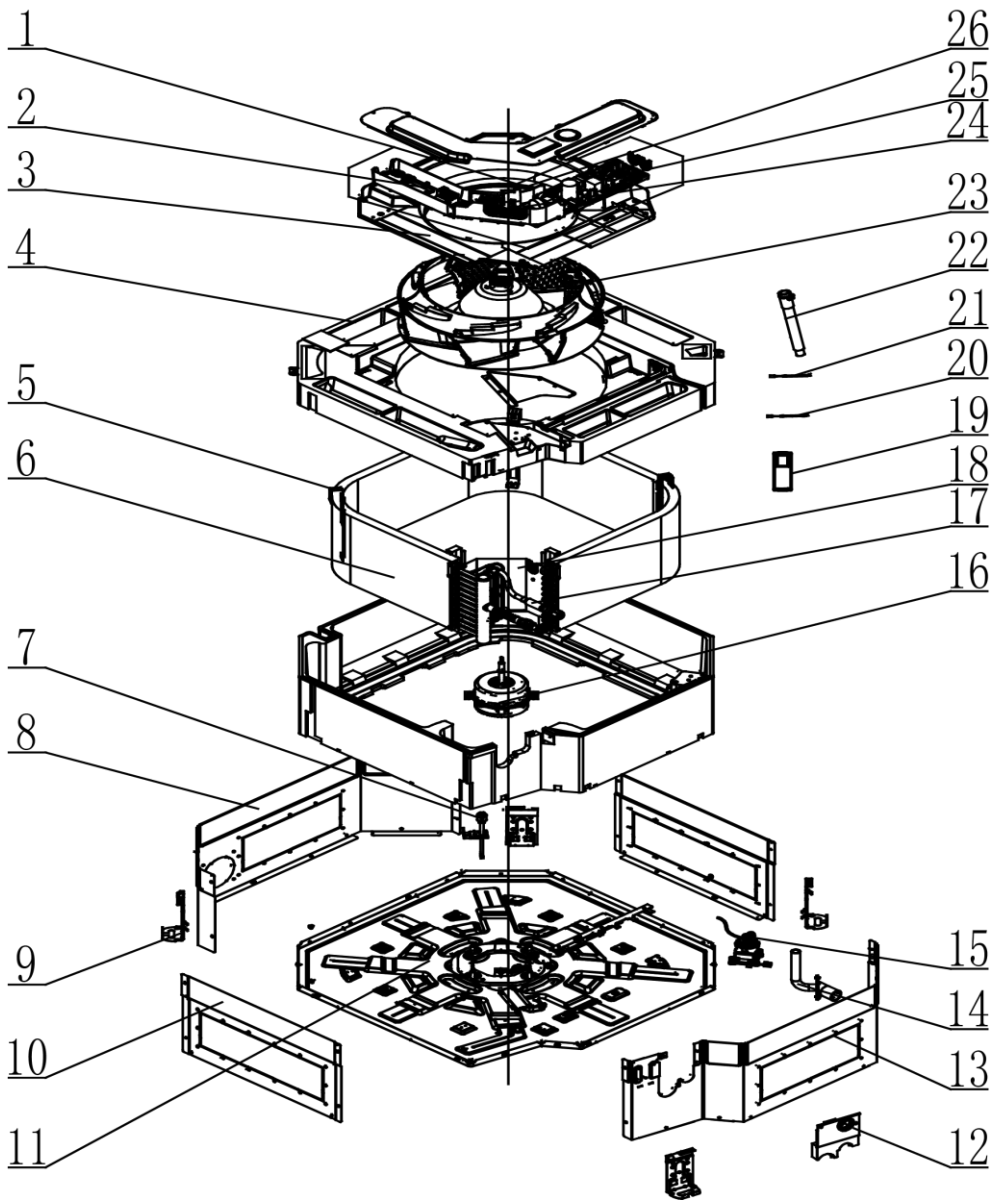
GUD100T/A-T(Product Code: ET010N1440)



| No. | Material name | Finished Product Code | Quantity |
|-----|-----------------------|-----------------------|--------------|
| 1 | Electric Box Assay | 100002061280 | 1 |
| 2 | Terminal Board | 42018000551 | 1 |
| 3 | Diversion Circle | 126909400067 | 1 |
| 4 | Water Tray Assay | 000069060008 | 1 |
| 5 | Centrifugal Fan | 10429400004 | 126909400067 |
| 6 | Liquid Level Switch | 4502021601 | 1 |
| 7 | Body Installing Plate | 01332701 | 4 |
| 8 | Seal Plate Assay | 01499400003 | 1 |
| 9 | Fixed Mount1 | 012078060022 | 3 |
| 10 | Evaporator Assay | 011001060201 | 1 |
| 11 | Side Plate 1 | 01319400049 | 1 |
| 12 | Side Plate 3 | 01319400051 | 2 |
| 13 | Side Plate 2 | 01319400050 | 1 |
| 14 | Seat Board Sub-assay | 02229400011 | 1 |
| 15 | Support | 012060060787 | 1 |

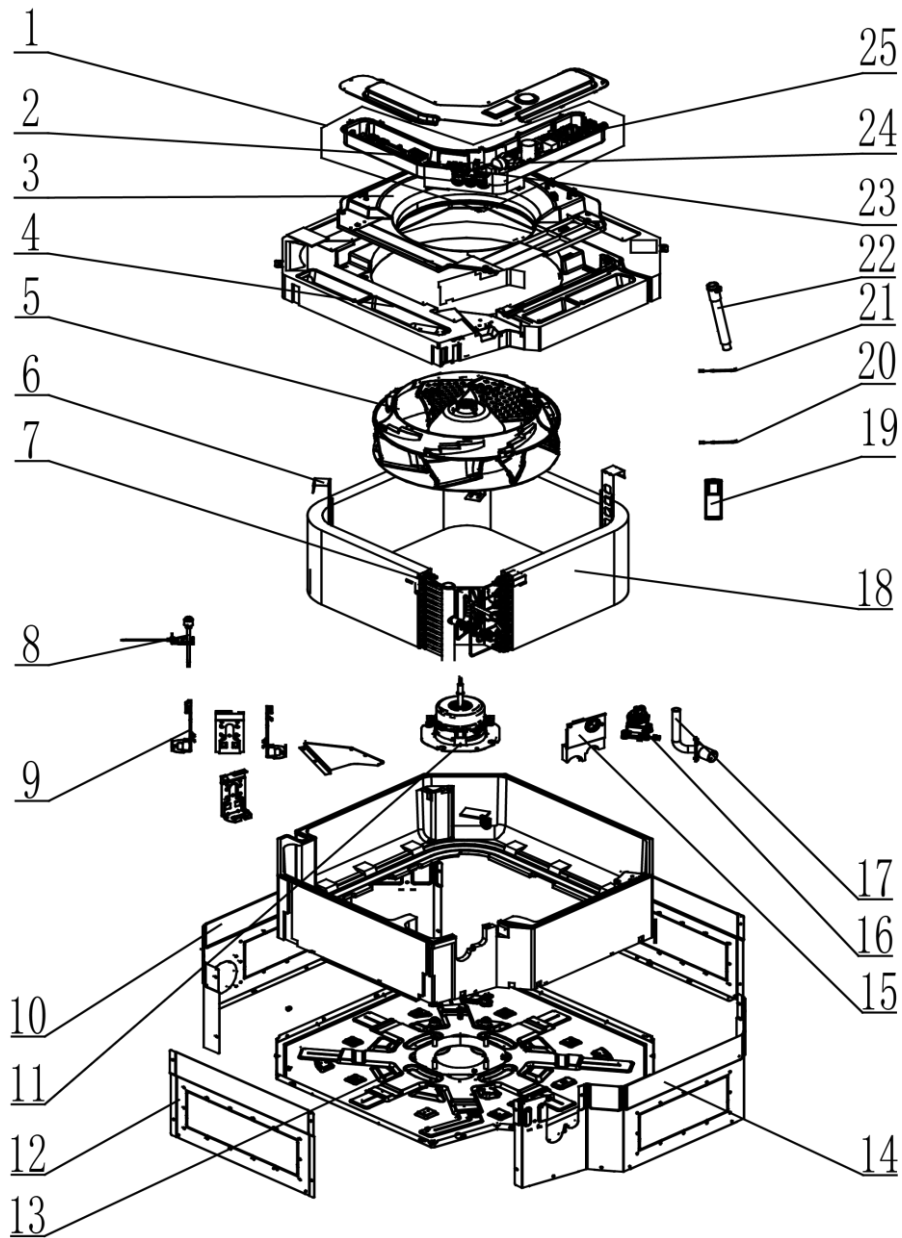
| No. | Material name | Finished Product Code | Quantity |
|-----|-------------------------|-----------------------|----------|
| 16 | Brushless DC Motor | 1570410000701 | 1 |
| 17 | Water Pump | 43138000058 | 1 |
| 18 | Drainage Pipe Sub-assay | 26909400055 | 1 |
| 19 | Remote Controller | 305001060024 | 1 |
| 20 | Temperature Sensor | 390000453 | 1 |
| 21 | Temperature Sensor | 39000286 | 1 |
| 22 | Drain Hose Sub-assay | 05232702 | 1 |
| 23 | Terminal board | 42000100000202 | 1 |
| 24 | Filter Board | 30221000021 | 1 |
| 25 | Main Board | 300002060224 | 1 |

GUD125T/A-T(Product Code: ET010N1450)



| No. | Material name | Finished Product Code | Quantity |
|-----|-------------------------|-----------------------|----------|
| 1 | Electric Box Assay | 100002061280 | 1 |
| 2 | Terminal Board | 42018000551 | 1 |
| 3 | Diversion Circle | 10479400002 | 1 |
| 4 | Water Tray Assay | 000069060008 | 1 |
| 5 | Fixed Mount1 | 01849400007 | 3 |
| 6 | Evaporator Assay | 011001000225 | 1 |
| 7 | Liquid Level Switch | 4502021601 | 1 |
| 8 | Side Plate 1 | 01319400025 | 1 |
| 9 | Body Installing Plate | 01332701 | 4 |
| 10 | Side Plate 3 | 01319400036 | 2 |
| 11 | Seat Board Sub-assay | 02229400011 | 1 |
| 12 | Seal Plate Assay | 01499400001 | 1 |
| 13 | Side Plate 2 | 01319400026 | 1 |
| 14 | Drainage Pipe Sub-assay | 26909400055 | 1 |
| 15 | Water Pump | 43138000058 | 1 |
| 16 | Brushless DC Motor | 15709400009 | 1 |
| 17 | Strainer | 07415210 | 1 |
| 18 | Connection Sheet Assay | 01349400025 | 1 |
| 19 | Remote Controller | 305001060024 | 1 |
| 20 | Temperature Sensor | 390000453 | 1 |
| 21 | Temperature Sensor | 39000286 | 1 |
| 22 | Drain Hose Sub-assay | 05339400001 | 1 |
| 23 | Centrifugal Fan | 10429400003 | 1 |
| 24 | Filter Board | 30221000021 | 1 |
| 25 | Main Board | 300002060224 | 1 |
| 26 | Terminal board | 42000100000202 | 1 |

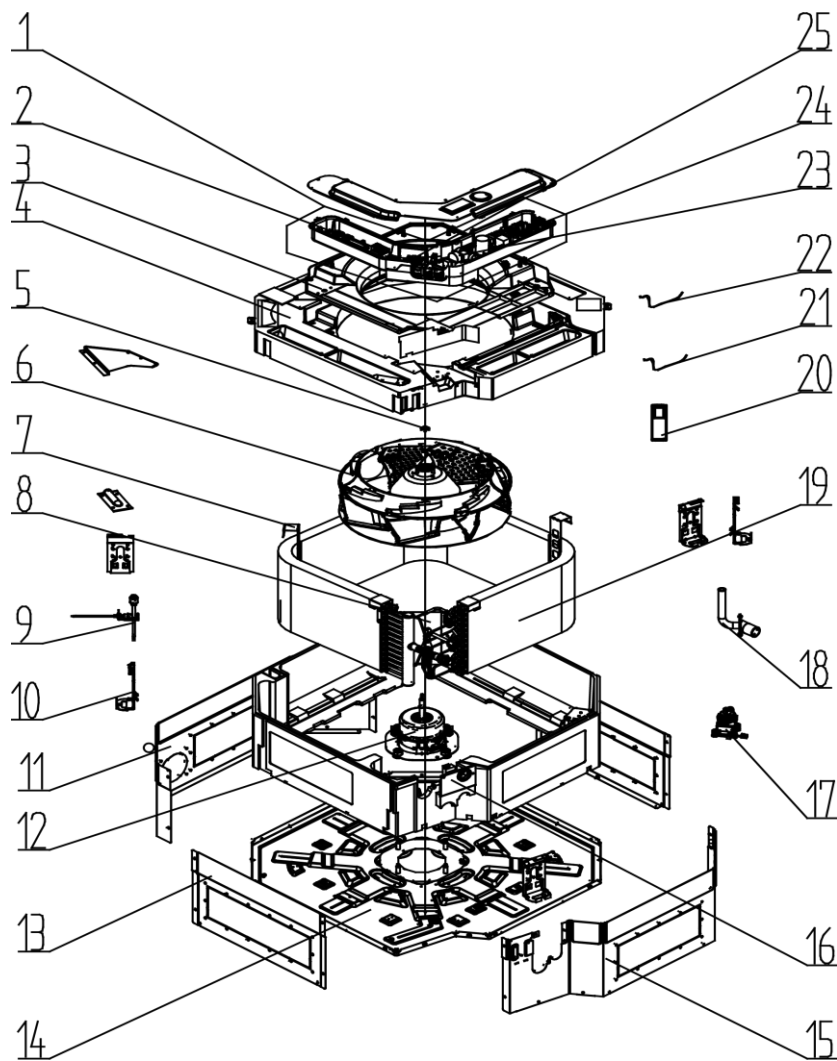
GUD140T/A-T(Product Code: ET010N1460)



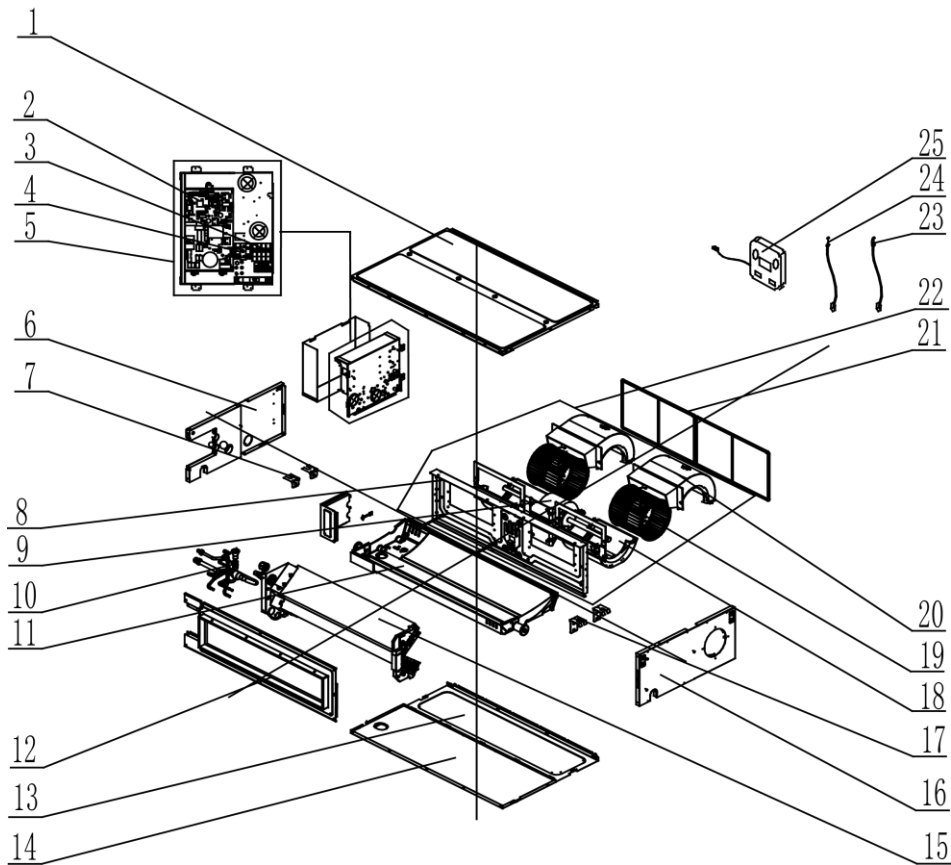
| No. | Material name | Finished Product Code | Quantity |
|-----|-----------------------|-----------------------|----------|
| 1 | Electric Box Assy | 10002061280 | 1 |
| 2 | Terminal Board | 42018000551 | 1 |
| 3 | Diversion Circle | 10479400002 | 1 |
| 4 | Water Tray Assy | 000069060008 | 1 |
| 5 | Centrifugal | 10429400003 | 1 |
| 6 | Evaporator Support | 1849406 | 3 |
| 7 | Connection Sheet Assy | 01249400012 | 1 |
| 8 | Liquid Level Switch | 4502021601 | 1 |
| 9 | Body Installing Plate | 01332701 | 4 |
| 10 | Side Plate 1 | 01319400025 | 1 |
| 11 | Brushless DC Motor | 15709400009 | 1 |
| 12 | Side Plate 3 | 01319400036 | 2 |

| No. | Material name | Finished Product Code | Quantity |
|-----|-------------------------|-----------------------|----------|
| 13 | Seat Board Sub-assay | 02229400011 | 1 |
| 14 | Side Plate 2 | 01319400026 | 1 |
| 15 | Seal Plate Assay | 01499400001 | 1 |
| 16 | Water Pump | 43138000058 | 1 |
| 17 | Drainage Pipe Sub-assay | 26909400055 | 1 |
| 18 | Evaporator Assay | 011001060193 | 1 |
| 19 | Remote Controller | 305001060024 | 1 |
| 20 | Temperature Sensor | 390000453 | 1 |
| 21 | Temperature Sensor | 39000286 | 1 |
| 22 | Drain Hose Sub-assay | 05339400001 | 1 |
| 23 | Terminal board | 42000100000202 | 1 |
| 24 | Filter Board | 30221000021 | 1 |
| 25 | Main Board | 300002060224 | 1 |

GUD160T/A-T(Product Code: ET010N1470)



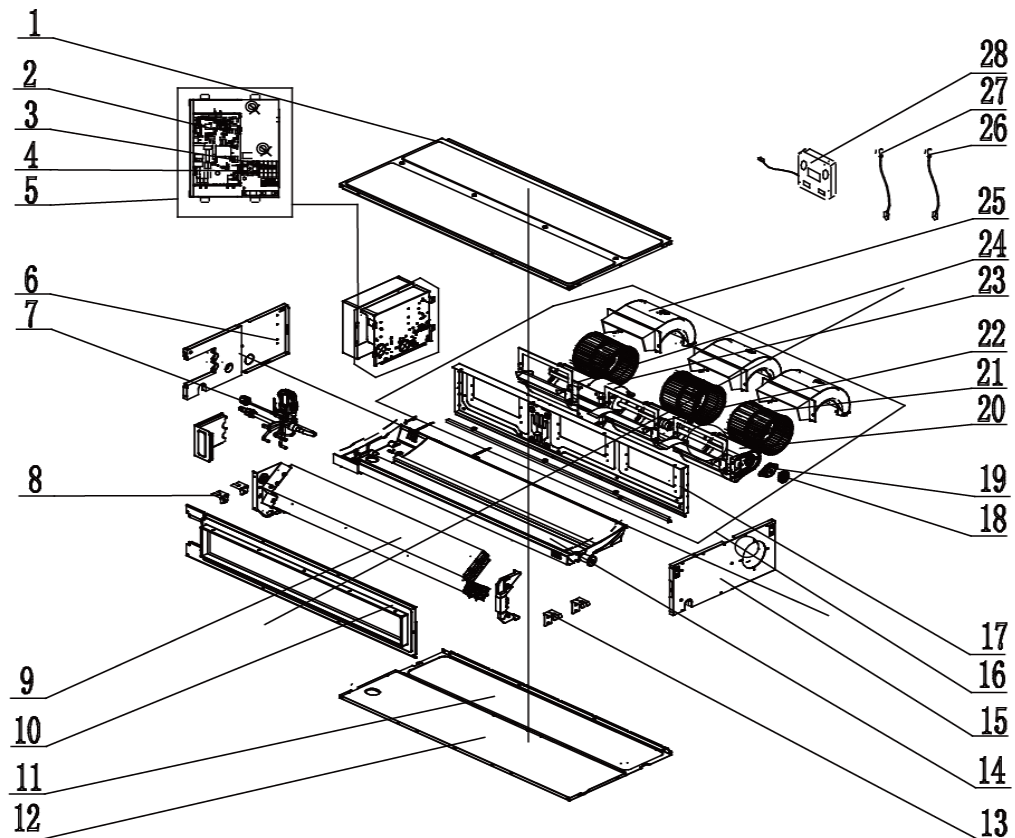
| No. | Material name | Finished Product Code | Quantity |
|-----|--|-----------------------|----------|
| 1 | Electric Box Assay | 100002061280 | 1 |
| 2 | Terminal Board | 4201800002601 | 1 |
| 3 | Diversion Circle | 10479400002 | 1 |
| 4 | Water Tray Assay | 01289400026 | 1 |
| 5 | Fan Fixer | 10312701 | 1 |
| 6 | Centrifugal Fan | 10429400003 | 1 |
| 7 | Evaporator Support | 01849406 | 1 |
| 8 | Connected Board Assay of Evaporator | 01249400012 | 1 |
| 9 | Water Level Switch | 4502021601 | 1 |
| 10 | Body Installing Plate | 01332701 | 1 |
| 11 | Side Plate 1 | 01319400025 | 1 |
| 12 | Brushless DC Motor | 15709400009 | 1 |
| 13 | Side Plate 3 | 01319400036 | 2 |
| 14 | Base Plate Assay | 02229400021 | 1 |
| 15 | Side Plate 2 | 01319400026 | 1 |
| 16 | Seal plate Assay | 01499400001 | 1 |
| 17 | Water Pump | 43138000058 | 1 |
| 18 | Drainage Pipe Sub-assay | 26909400055 | 1 |
| 19 | Evaporator Assay | 011001060200 | 1 |
| 20 | Remote Controller | 305001060024 | 1 |
| 21 | Temperature Sensor | 39000286 | 1 |
| 22 | Temperature Sensor | 390000453 | 1 |
| 23 | Filter Board | 30221000021 | 1 |
| 24 | Main Board | 300002060224 | 1 |
| 25 | Terminal Board | 4200010000202 | 1 |

GUD35P/A-T(Product Code: CF022N1650)

| No. | Material name | Finished Product Code | Quantity |
|-----|---------------------------------|-----------------------|----------|
| 1 | Top Cover Board Assay | 000132000019 | 1 |
| 2 | Main Board | 300002060223 | 1 |
| 3 | Terminal Board | 42018000551 | 1 |
| 4 | Terminal Board | 42011106 | 1 |
| 5 | Electric Box Assay | 100002002911 | 1 |
| 6 | Left Side Plate Assay | 01314100076 | 1 |
| 7 | Hook 2 | 01344100034 | 2 |
| 8 | Blower Mounting Plate Sub-assay | 01325200034 | 1 |
| 9 | Brushless DC Motor | 1570410000102 | 1 |
| 10 | Strainer | 0721200102 | 1 |
| 11 | Water Tray Assay | 01285200020 | 1 |
| 12 | Air Outlet Frame Assay | 01374100057 | 1 |
| 13 | Cover Plate (Air return) | 01265200057 | 1 |
| 14 | Bottom Cover Plate Assay | 01264100102 | 1 |
| 15 | Evaporator Assay | 011001000473 | 1 |
| 16 | Right Side Plate Assay | 01315200053 | 1 |
| 17 | Hook | 02112446 | 2 |
| 18 | Propeller Housing (Lower) | 26905200019 | 2 |
| 19 | Centrifugal Fan | 10425200003 | 2 |
| 20 | Propeller Housing (Upper) | 26905200018 | 2 |
| 21 | Filter Sub-assay | 111001000082 | 2 |

| No. | Material name | Finished Product Code | Quantity |
|-----|----------------------------|-----------------------|----------|
| 22 | Centrifugal Fan Assy | 15404100031 | 1 |
| 23 | Temperature Sensor | 390000597 | 1 |
| 24 | Ambient Temperature Sensor | 39000191 | 1 |
| 25 | Display Board | 300001000204 | 1 |

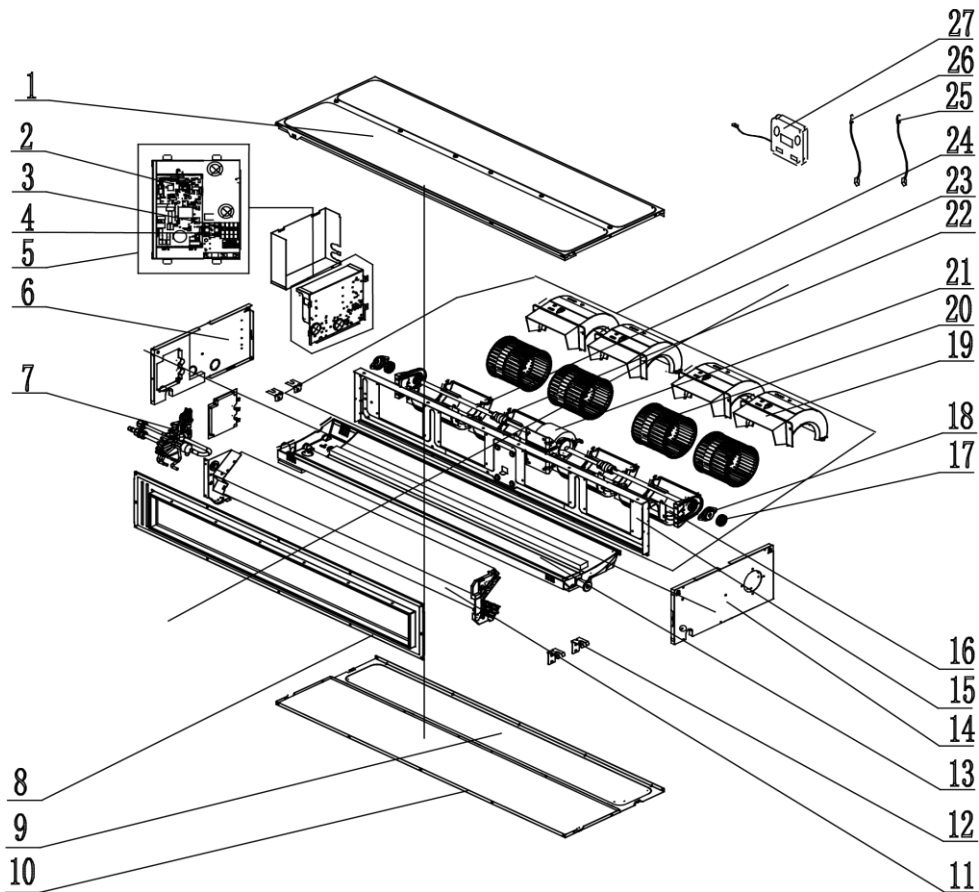
GUD50P/A-T(Product Code: CF022N1630)



| No. | Material name | Finished Product Code | Quantity |
|-----|-------------------------|-----------------------|----------|
| 1 | Top Cover Board Assy | 000132000020 | 1 |
| 2 | Main Board | 300002060223 | 1 |
| 3 | Terminal Board | 42018000551 | 1 |
| 4 | Terminal Board | 42011106 | 1 |
| 5 | Electric Box Assy | 100002002911 | 1 |
| 6 | Left Side Plate Assy | 01314100076 | 1 |
| 7 | Strainer | 0721200102 | 1 |
| 8 | Hook 2 | 01344100034 | 2 |
| 9 | Evaporator Assy | 011001060229 | 1 |
| 10 | Air Outlet Frame Assy | 01374100058 | 1 |
| 11 | Cover Of Air-in | 01265200073 | 1 |
| 12 | Bottom Cover Plate Assy | 01264100103 | 1 |
| 13 | Hook | 02112446 | 2 |
| 14 | Water Tray Assy | 01285200022 | 1 |
| 15 | Right Side Plate Assy | 01315200053 | 1 |

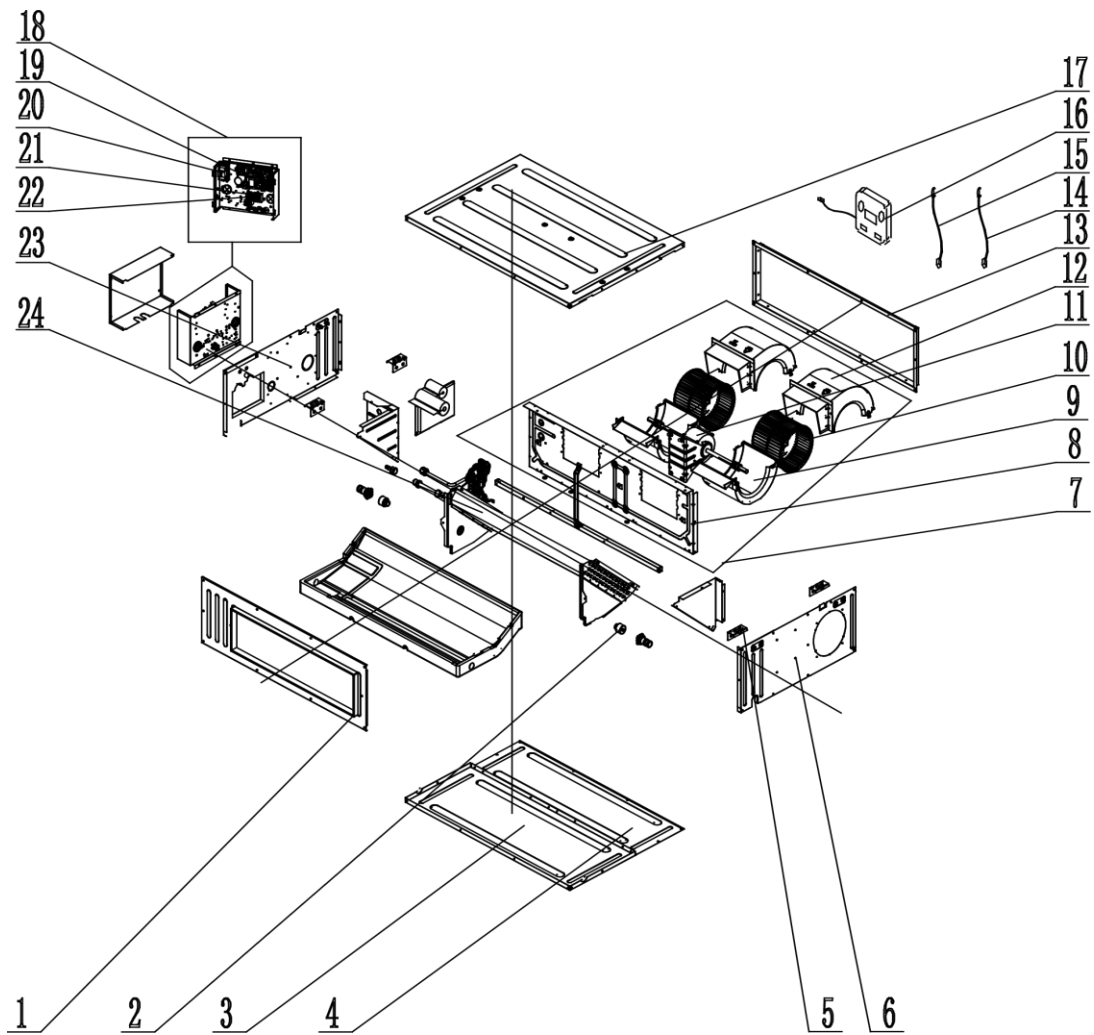
| No. | Material name | Finished Product Code | Quantity |
|-----|---------------------------------|-----------------------|----------|
| 16 | Centrifugal Fan Assay | 15404100032 | 1 |
| 17 | Blower Mounting Plate Sub-assay | 01325200035 | 1 |
| 18 | Bearing Holder Sub-assay | 26151139 | 1 |
| 19 | Support Of Motor Bearing | 02285200001 | 1 |
| 20 | Propeller Housing (Lower) | 26905200019 | 3 |
| 21 | Centrifugal Fan | 15404100032 | 1 |
| 22 | Joint Slack | 73018731 | 1 |
| 23 | Brushless DC Motor | 1570410000102 | 1 |
| 24 | Rotary Axis Sub-assay | 73018761 | 1 |
| 25 | Propeller Housing (Upper) | 26905200018 | 3 |
| 26 | Temperature Sensor | 390000597 | 1 |
| 27 | Room Sensor | 39000191 | 1 |
| 28 | Display Board | 300001000204 | 1 |

GUD71P/A-T(Product Code: CF022N1670), **GUD85P/A-T**(Product Code: CF022N1610)



| No. | Material name | Finished Product Code | Quantity |
|-----|---------------------------------|-----------------------|----------|
| 1 | Top Cover Board Assay | 0126520015101 | 1 |
| 2 | Main Board | 300002060223 | 1 |
| 3 | Terminal Board | 42018000551 | 1 |
| 4 | Terminal Board | 42011106 | 1 |
| 5 | Electric Box Assay | 100002002911 | 1 |
| 6 | Left Side Plate Assay | 01315200170 | 1 |
| 7 | Strainer | 0721200102 | 1 |
| 8 | Air Outlet Frame Assay | 000141000021 | 1 |
| 9 | Cover Of Air-in | 01265200158 | 1 |
| 10 | Bottom Cover Plate Assay | 01265200152 | 1 |
| 11 | Evaporator Assay | 011001060080 | 1 |
| 12 | Hook 2 | 01344100034 | 4 |
| 13 | Water Tray Assay | 000069000103 | 1 |
| 14 | Right Side Plate Assay | 01315200169 | 1 |
| 15 | Blower Mounting Plate Sub-assay | 01325200095 | 1 |
| 16 | Propeller Housing (Lower) | 26905200123 | 4 |
| 17 | Bearing Holder Sub-assay | 26151139 | 1 |
| 18 | Support Of Motor Bearing | 02285200001 | 1 |
| 19 | Propeller Housing (Upper) | 26905200122 | 4 |
| 20 | Centrifugal Fan | 000052060004 | 1 |
| 21 | Brushless DC Motor | 15704100001 | 1 |
| 22 | Joint Slack | 73018731 | 2 |
| 23 | Rotary Axis Sub-assay | 73018761 | 2 |
| 24 | Centrifugal Fan Assay | 000052060004 | 1 |
| 25 | Temperature Sensor | 390000597 | 1 |
| 26 | Ambient Temperature Sensor | 39000191 | 1 |
| 27 | Display Board | 300001000204 | 1 |

GUD100PH/A-T(Product Code: CF022N1590)

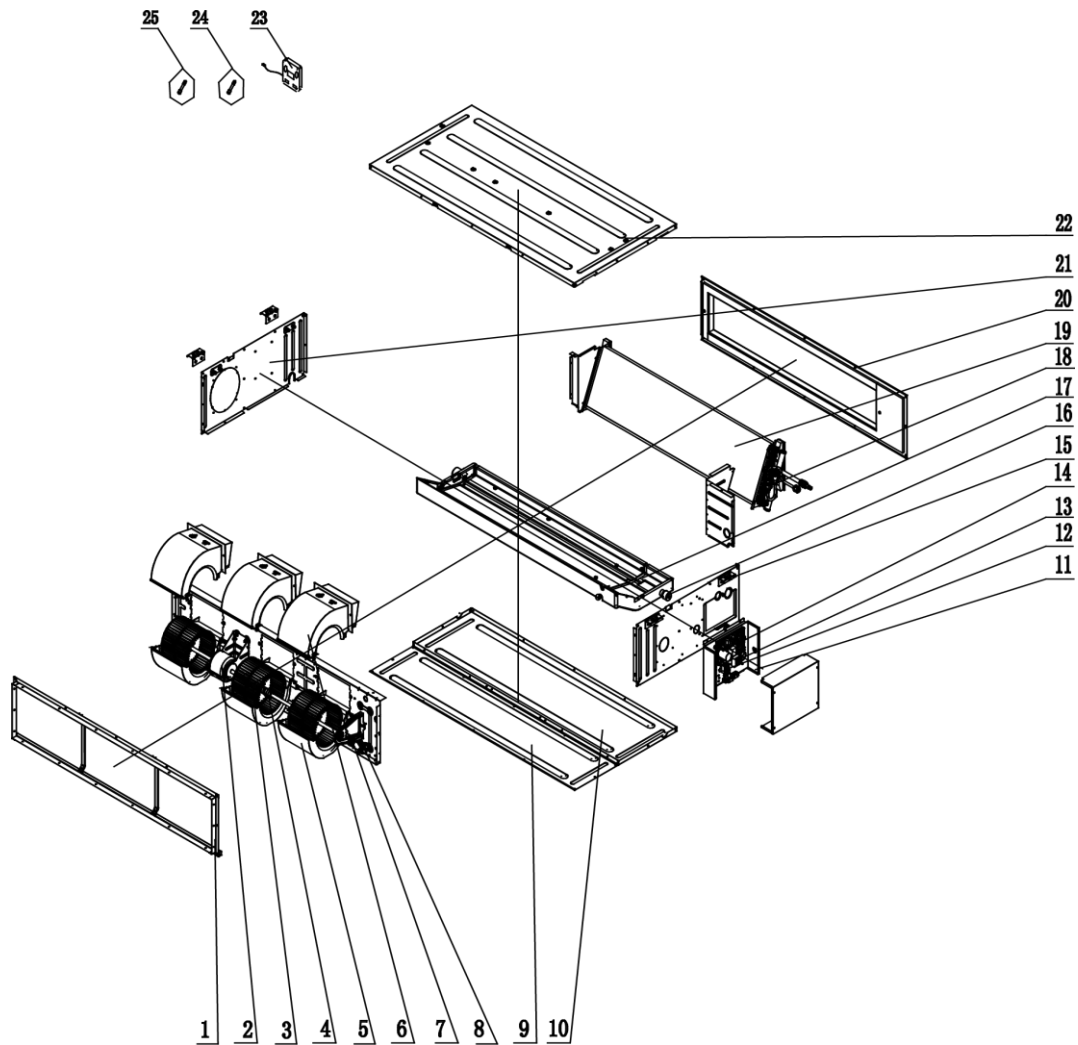


| No. | Material name | Finished Product Code | Quantity |
|-----|--------------------------------|-----------------------|----------|
| 1 | Air Outlet Frame Assy | 01375200026 | 1 |
| 2 | Choke Plug of Drain Pipe | 76815214 | 1 |
| 3 | Bottom Cover Plate | 01265200131 | 1 |
| 4 | Cover Of Air-in | 01265200132 | 1 |
| 5 | Hook | 02112466 | 4 |
| 6 | Right Side Plate Assy | 01315200124 | 1 |
| 7 | Centrifugal Fan Assy | 000052060069 | 1 |
| 8 | Blower Mounting Plate Sub-assy | 01325200079 | 1 |
| 9 | Propeller Housing (Lower) | 26905200079 | 2 |
| 10 | Centrifugal Fan | 000052060069 | 1 |
| 11 | Brushless DC Motor | 15705200016 | 1 |
| 12 | Propeller Housing (Upper) | 26905200078 | 2 |
| 13 | Air Outlet Frame Assy | 01375200026 | 1 |
| 14 | Temperature Sensor | 390001921 | 1 |
| 15 | Ambient Temperature Sensor | 3900012123 | 1 |
| 16 | Display Board | 300001000204 | 1 |
| 17 | Top Cover Board Assy | 01265200130 | 1 |

| No. | Material name | Finished Product Code | Quantity |
|-----|-----------------------|-----------------------|----------|
| 18 | Electric Box Assay | 100002061152 | 1 |
| 19 | Main Board | 300002060227 | 1 |
| 20 | Filter Board | 300020000017 | 1 |
| 21 | Terminal Board | 42018000551 | 1 |
| 22 | Terminal Board | 42000100000101 | 1 |
| 23 | Left Side Plate Assay | 01315200147 | 1 |
| 24 | Evaporator Assay | 011001060100 | 1 |

GUD125PH/A-T(Product Code: CF022N1570),

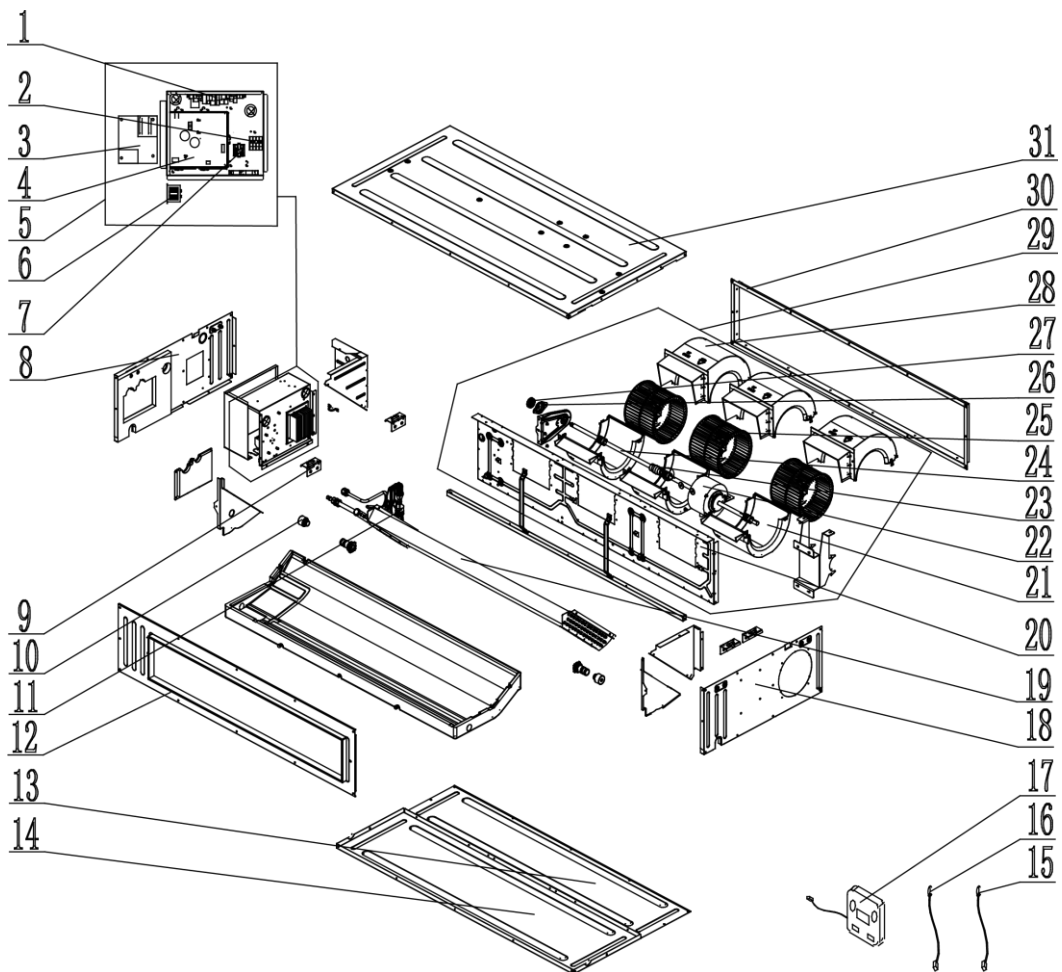
GUD140PH/A-T(Product Code: CF022N1550)



| No. | Material name | Finished Product Code | Quantity |
|-----|----------------------------|-----------------------|----------|
| 1 | Return Air Frame Sub-assay | 017026000003 | 1 |
| 2 | Brushless DC Motor | 1570940000603 | 1 |
| 3 | Centrifugal Fan | 10455200003 | 3 |
| 4 | Joint Slack | 73018731 | 1 |
| 5 | Propeller Housing | 26905200079 | 3 |
| 6 | Propeller Housing | 26905200078 | 3 |
| 7 | Bearing Holder Sub-assay | 26151139 | 1 |

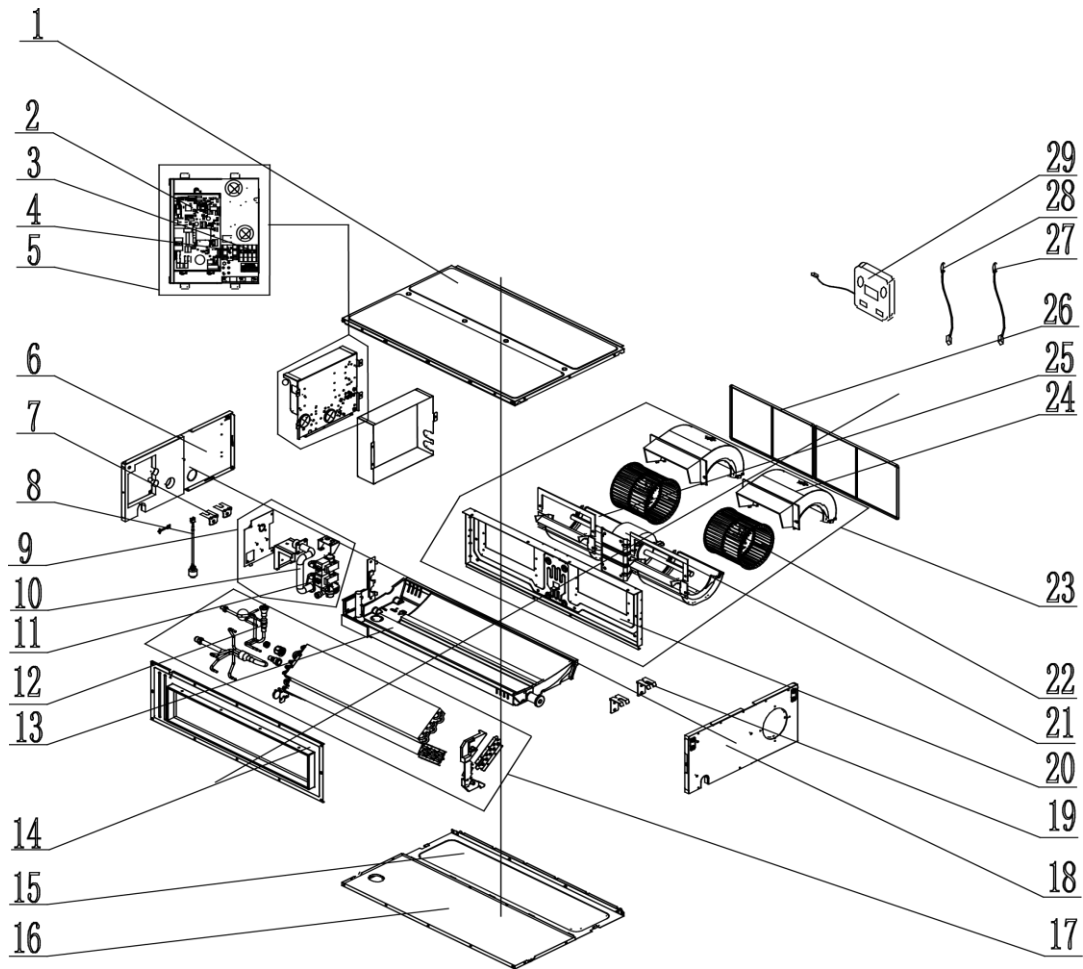
| No. | Material name | Finished Product Code | Quantity |
|-----|----------------------------|-----------------------|----------|
| 8 | Support Of Motor Bearing | 02285200001 | 1 |
| 9 | Cover Plate(Air return) | 01265200123 | 1 |
| 10 | Bottom Cover Plate | 01265200125 | 1 |
| 11 | Electric Box Assay | 100002061152 | 1 |
| 12 | Terminal Board | 42000100000101 | 1 |
| 13 | Terminal Board | 42018000551 | 1 |
| 14 | Main Board | 300002060227 | 1 |
| 15 | Hook | 02112466 | 4 |
| 16 | Choke Plug of Drain Pipe | 76815214 | 1 |
| 17 | Foam Sub-assay | 12505200021 | |
| 18 | Strainer | 0741520000201 | 1 |
| 19 | Evaporator Assay | 011001060191 | 1 |
| 20 | Air Outlet Frame Assay | 01375200023 | 1 |
| 21 | Right Side Plate Assay | 01315200124 | 1 |
| 22 | Top Cover Board Assay | 01265200122 | 1 |
| 23 | Display Board | 300001000204 | 1 |
| 24 | Temperature Sensor | 390001921 | 1 |
| 25 | Ambient Temperature Sensor | 3900012123 | 1 |

GUD160PH/A-T(Product Code: CF022N1530)



| No. | Material name | Finished Product Code | Quantity |
|-----|---------------------------------|-----------------------|----------|
| 1 | Main Board | 300002060223 | 1 |
| 2 | Terminal Board | 4201800002601 | 1 |
| 3 | Radiator | 49018000068 | 1 |
| 4 | Main Board | 30221000033 | 1 |
| 5 | Electric Box Assay | 100002061236 | 1 |
| 6 | Reactor | 43138000047 | 1 |
| 7 | Terminal Board | 42000100000101 | 1 |
| 8 | Left Side Plate Assay | 01314100118 | 1 |
| 9 | Hook | 02112466 | 4 |
| 10 | Choke Plug of Drain Pipe | 76815214 | 1 |
| 11 | Strainer | 07415210 | 1 |
| 12 | Air Outlet Frame Assay | 01375200023 | 1 |
| 13 | Cover Plate(Air return) | 01265200123 | 1 |
| 14 | Bottom Cover Plate | 01265200125 | 1 |
| 15 | Temperature Sensor | 390001921 | 1 |
| 16 | Ambient Temperature Sensor | 3900012123 | 1 |
| 17 | Display Board | 300001000204 | 1 |
| 18 | Right Side Plate Assay | 01315200148 | 1 |
| 19 | Evaporator Assay | 011001060187 | 1 |
| 20 | Blower Mounting Plate Sub-assay | 01325200076 | 1 |
| 21 | Propeller Housing(Lower) | 26905200079 | 3 |
| 22 | Brushless DC Motor | 1570940000801 | 1 |
| 23 | Joint Slack | 73018731 | 1 |
| 24 | Rotary Axis Sub-assay | 73018000117 | 1 |
| 25 | Centrifugal Fan | 10455200003 | 3 |
| 26 | Support Of Motor Bearing | 02285200001 | 1 |
| 27 | Bearing Holder Sub-assay | 26151139 | 1 |
| 28 | Propeller Housing(Upper) | 26905200078 | 3 |
| 29 | Centrifugal Fan Assay | 000052000029 | 1 |
| 30 | Return Air Frame Sub-assay | 01375200029 | 1 |
| 31 | Top Cover Board Assay | 01264100105 | 1 |

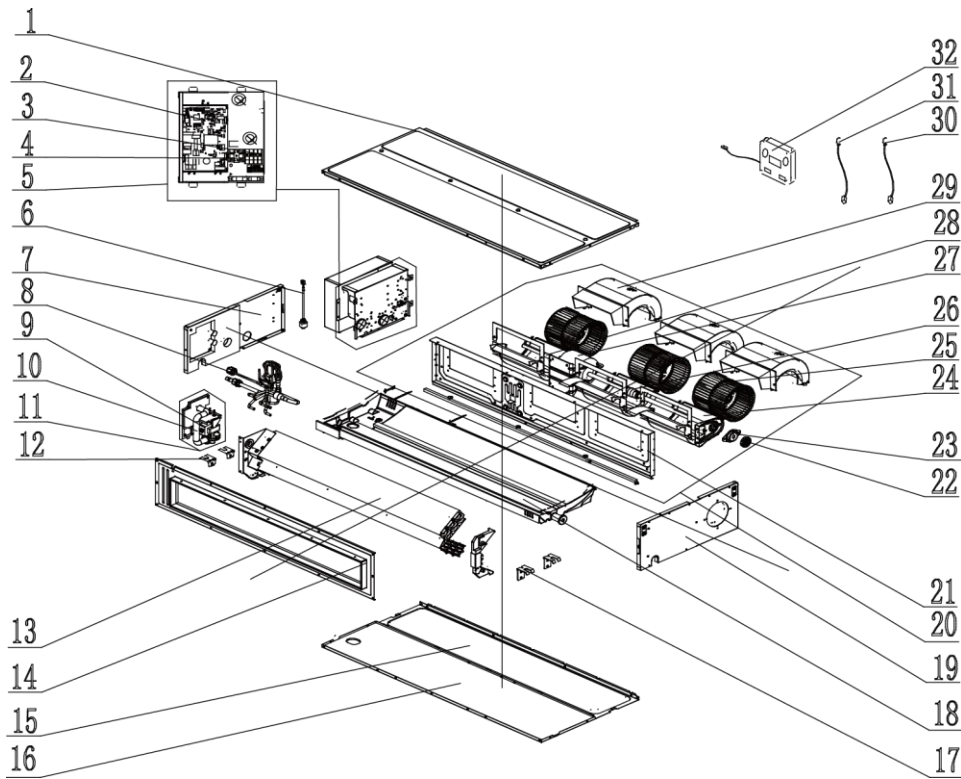
GUD35PS/A-T(Product Code: CF022N1640)



| No. | Material name | Finished Product Code | Quantity |
|-----|----------------------------|-----------------------|----------|
| 1 | Top Cover Board Assy | 000132000019 | 1 |
| 2 | Main Board | 300002060223 | 1 |
| 3 | Terminal Board | 42018000551 | 1 |
| 4 | Terminal Board | 42011106 | 1 |
| 5 | Electric Box Assy | 100002002911 | 1 |
| 6 | Left Side Plate Assy | 000080000022 | 1 |
| 7 | Hook 2 | 01344100034 | 2 |
| 8 | Liquid Level Switch | 430024000005 | 1 |
| 9 | Water Pump Assy | 000104060009 | 1 |
| 10 | Drainage Pipe (Rubber) | 760022000001 | 1 |
| 11 | Water Pump | 812007060016 | 1 |
| 12 | Strainer | 0721200102 | 1 |
| 13 | Water Tray Assy | 01285200020 | 1 |
| 14 | Air Outlet Frame Assy | 01374100057 | 1 |
| 15 | Cover Plate (Air return) | 01265200057 | 1 |
| 16 | Bottom Cover Plate Assy | 01264100102 | 1 |
| 17 | Evaporator Assy | 011001000473 | 1 |
| 18 | Right Side Plate Assy | 01315200053 | 1 |

| No. | Material name | Finished Product Code | Quantity |
|-----|---------------------------------|-----------------------|----------|
| 19 | Hook | 02112446 | 2 |
| 20 | Blower Mounting Plate Sub-assay | 01325200034 | 1 |
| 21 | Brushless DC Motor | 1570410000102 | 1 |
| 22 | Centrifugal Fan | 10425200003 | 2 |
| 23 | Centrifugal Fan Assay | 15404100031 | 1 |
| 24 | Propeller Housing (Upper) | 26905200018 | 2 |
| 25 | Propeller Housing (Lower) | 26905200019 | 2 |
| 26 | Filter Sub-assay | 111001000082 | 2 |
| 27 | Temperature Sensor | 390000597 | 1 |
| 28 | Ambient Temperature Sensor | 39000191 | 1 |
| 29 | Display Board | 300001000204 | 1 |

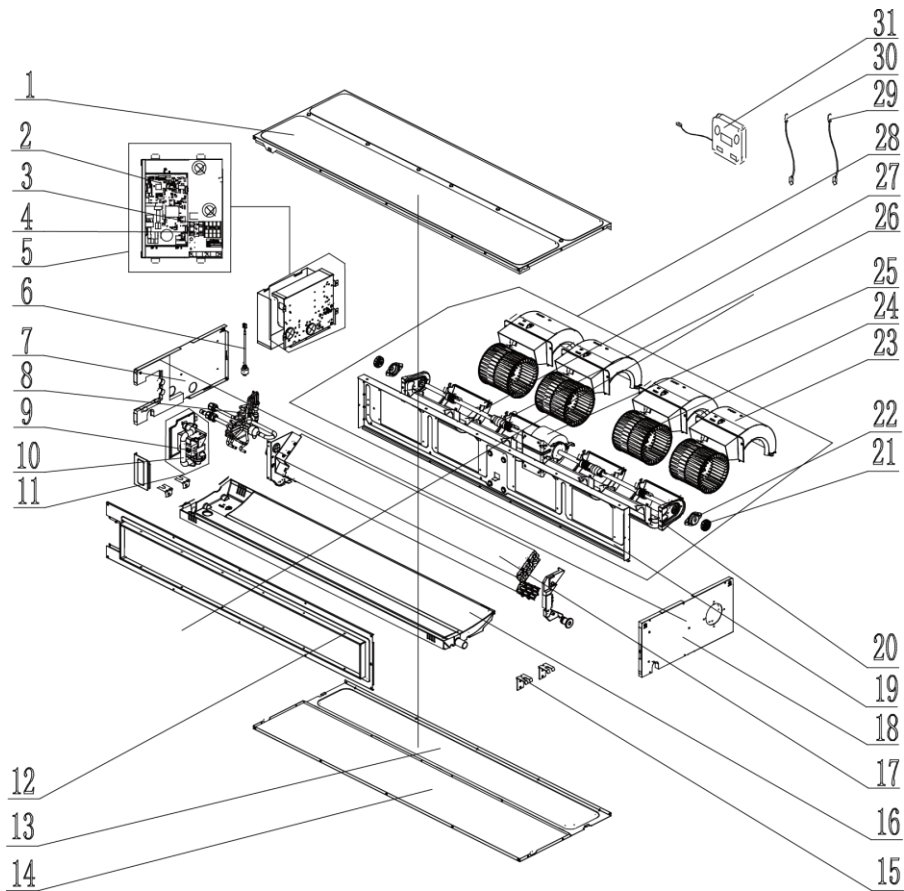
GUD50PS/A-T(Product Code: CF022N1620)



| No. | Material name | Finished Product Code | Quantity |
|-----|--------------------------|-----------------------|----------|
| 1 | Top Cover Board Assay | 000132000020 | 1 |
| 2 | Main Board | 300002060223 | 1 |
| 3 | Terminal Board | 42018000551 | 1 |
| 4 | Terminal Board | 42011106 | 1 |
| 5 | Electric Box Assay | 100002002911 | 1 |
| 6 | Liquid Level Switch | 430024000005 | 1 |
| 7 | Left Side Plate Assay | 000080000022 | 1 |
| 8 | Strainer | 0721200102 | 1 |
| 9 | Water Pump | 812007060016 | 1 |
| 10 | Drainage Pipe (Rubber) | 760022000001 | 1 |

| No. | Material name | Finished Product Code | Quantity |
|-----|---------------------------------|-----------------------|----------|
| 11 | Water Pump Assay | 000104060009 | 1 |
| 12 | Hook 2 | 01344100034 | 2 |
| 13 | Evaporator Assay | 011001060229 | 1 |
| 14 | Air Outlet Frame Assay | 01374100058 | 1 |
| 15 | Cover Of Air-in | 01265200073 | 1 |
| 16 | Bottom Cover Plate Assay | 01264100103 | 1 |
| 17 | Hook | 02112446 | 2 |
| 18 | Water Tray Assay | 01285200022 | 1 |
| 19 | Right Side Plate Assay | 01315200053 | 1 |
| 20 | Centrifugal Fan Assay | 15404100032 | 1 |
| 21 | Blower Mounting Plate Sub-assay | 01325200035 | 1 |
| 22 | Bearing Holder Sub-assay | 26151139 | 1 |
| 23 | Support Of Motor Bearing | 02285200001 | 1 |
| 24 | Propeller Housing (Lower) | 26905200019 | 3 |
| 25 | Centrifugal Fan | 15404100032 | 1 |
| 26 | Joint Slack | 73018731 | 1 |
| 27 | Brushless DC Motor | 1570410000102 | 1 |
| 28 | Rotary Axis Sub-assay | 73018761 | 1 |
| 29 | Propeller Housing (Upper) | 26905200018 | 3 |
| 30 | Temperature Sensor | 390000597 | 1 |
| 31 | Room Sensor | 39000191 | 1 |
| 32 | Display Board | 300001000204 | 1 |

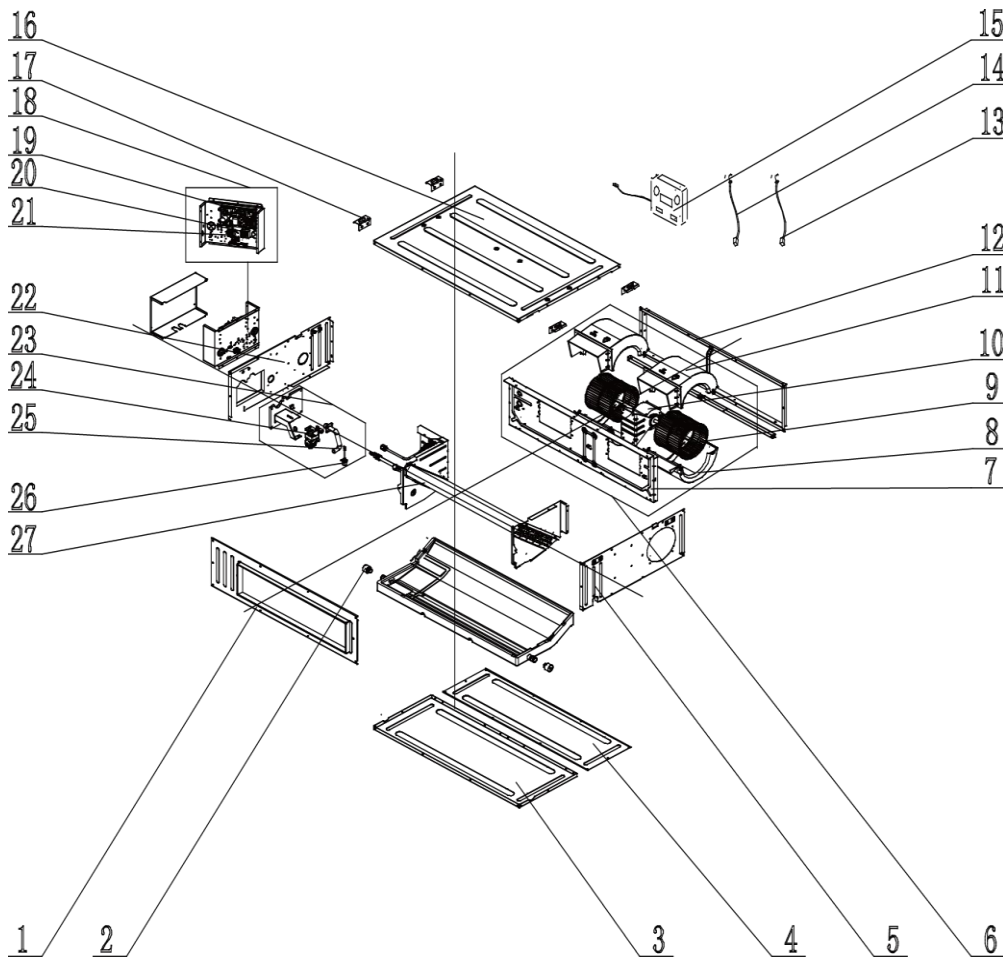
GUD71PS/A-T(Product Code: CF022N1660),**GUD85PS/A-T**(Product Code: CF022N1600)



| No. | Material name | Finished Product Code | Quantity |
|-----|---------------------------------|-----------------------|----------|
| 1 | Top Cover Board Assay | 0126520015101 | 1 |
| 2 | Main Board | 300002060223 | 1 |
| 3 | Terminal Board | 42018000551 | 1 |
| 4 | Terminal Board | 42011106 | 1 |
| 5 | Electric Box Assay | 100002002911 | 1 |
| 6 | Liquid Level Switch | 430024000005 | 1 |
| 7 | Left Side Plate Assay | 000080000025 | 1 |
| 8 | Strainer | 0721200102 | 1 |
| 9 | Water Pump | 812007060016 | 1 |
| 10 | Drainage Pipe (Rubber) | 760022000001 | 1 |
| 11 | Water Pump Assay | 000104060009 | 1 |
| 12 | Air Outlet Frame Assay | 000141000021 | 1 |
| 13 | Cover Of Air-in | 01265200158 | 1 |
| 14 | Bottom Cover Plate Assay | 01265200152 | 1 |
| 15 | Hook 2 | 01344100034 | 4 |
| 16 | Water Tray Assay | 000069000103 | 1 |
| 17 | Evaporator Assay | 011001060080 | 1 |
| 18 | Right Side Plate Assay | 01315200169 | 1 |
| 19 | Blower Mounting Plate Sub-assay | 01325200095 | 1 |
| 20 | Propeller Housing (Lower) | 26905200123 | 4 |
| 21 | Bearing Holder Sub-assay | 26151139 | 1 |

| No. | Material name | Finished Product Code | Quantity |
|-----|-----------------------------|-----------------------|----------|
| 22 | Support Of Motor Bearing | 02285200001 | 1 |
| 23 | Propeller Housing (Upper) | 26905200122 | 4 |
| 24 | Centrifugal Fan | 000052060004 | 1 |
| 25 | Brushless DC Motor | 15704100001 | 1 |
| 26 | Joint Slack | 7301873173018731 | 2 |
| 27 | Rotary Axis Sub-assay | 73018761 | 2 |
| 28 | Centrifugal Fan Assay | 000052060004 | 1 |
| 29 | Temperature Sensor | 390000597 | 1 |
| 30 | Ambient Temperature Sensor | 39000191 | 1 |
| 31 | Display Board | 300001000204 | 1 |

GUD100PHS/A-T(Product Code: CF022N1580)

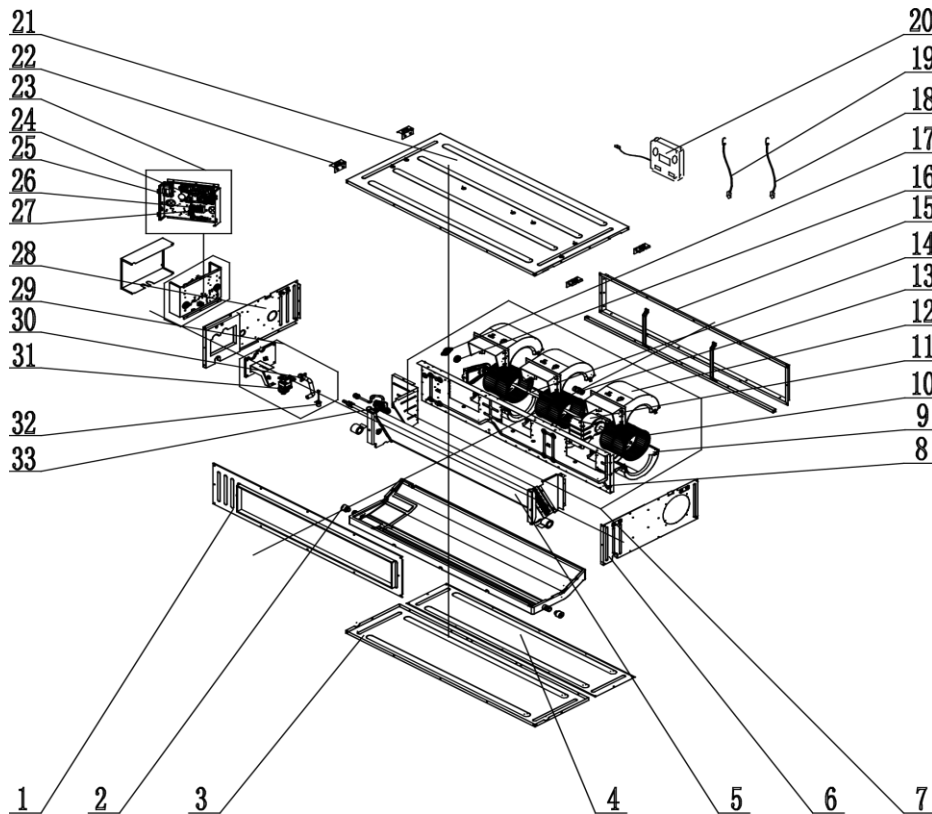


| No. | Material name | Finished Product Code | Quantity |
|-----|---------------------------------|-----------------------|----------|
| 1 | Air Outlet Frame Assay | 01375200026 | 1 |
| 2 | Choke Plug of Drain Pipe | 76815214 | 2 |
| 3 | Bottom Cover Plate | 01265200131 | 1 |
| 4 | Cover Of Air-in | 01265200132 | 1 |
| 5 | Right Side Plate Assay | 01315200124 | 1 |
| 6 | Centrifugal Fan Assay | 000052060069 | 1 |
| 7 | Blower Mounting Plate Sub-assay | 01325200079 | 1 |
| 8 | Propeller Housing(Lower) | 26905200079 | 2 |

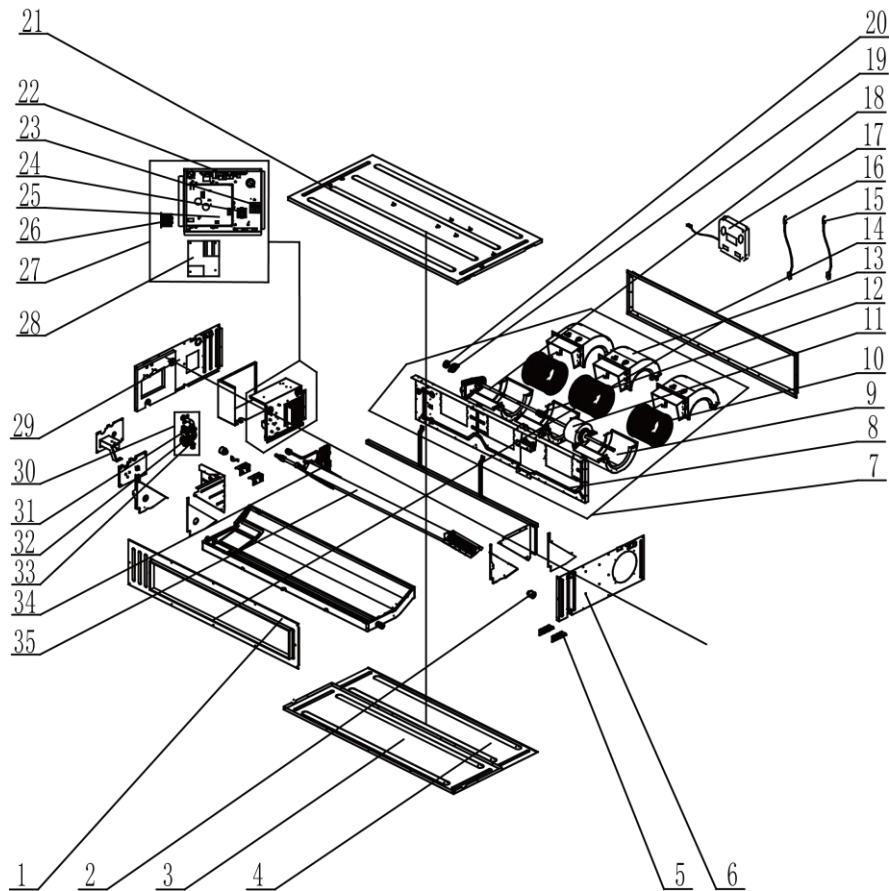
| No. | Material name | Finished Product Code | Quantity |
|-----|----------------------------|-----------------------|----------|
| 9 | Centrifugal Fan | 000052060069 | 1 |
| 10 | Brushless DC Motor | 15705200016 | 1 |
| 11 | Propeller Housing(Upper) | 26905200078 | 2 |
| 12 | Return Air Frame Sub-assay | 017026000002 | 1 |
| 13 | Ambient Temperature Sensor | 390001921 | 1 |
| 14 | Temperature Sensor | 3900012123 | 1 |
| 15 | Display Board | 300001000204 | 1 |
| 16 | Top Cover Board Assay | 01265200130 | 1 |
| 17 | Hook | 02112466 | 4 |
| 18 | Electric Box Assay | 100002061152 | 1 |
| 19 | Main Board | 300002060227 | 1 |
| 20 | Terminal Board | 42018000551 | 1 |
| 21 | Terminal Board | 42000100000101 | 1 |
| 22 | Left Side Plate Assay | 01315200147 | 1 |
| 23 | Water Pump Assay | 000104060007 | 1 |
| 24 | Water Pump | 81200706001601 | 1 |
| 25 | Pump Drainpipe | 200070060004 | 1 |
| 26 | Liquid Level Switch | 430024000005 | 1 |
| 27 | Evaporator Assay | 011001060100 | 1 |

GUD125PHS/A-T(Product Code: CF022N1560),

GUD140PHS/A-T(Product Code: CF022N1540)



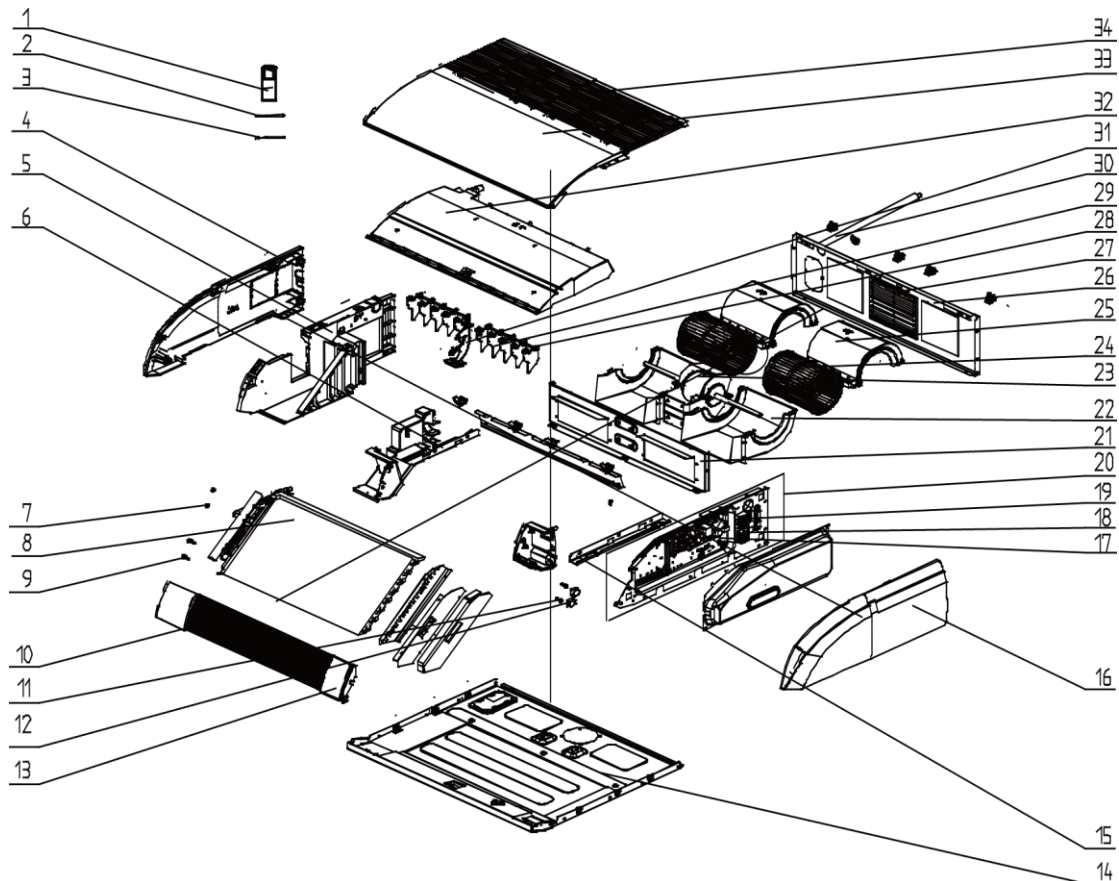
| No. | Material name | Finished Product Code | Quantity |
|-----|---------------------------------|-----------------------|----------|
| 1 | Air Outlet Frame Assay | 01375200023 | 1 |
| 2 | Choke Plug of Drain Pipe | 76815214 | 2 |
| 3 | Bottom Cover Plate | 01265200125 | 1 |
| 4 | Cover Plate(Air return) | 01265200123 | 1 |
| 5 | Evaporator Assay | 011001060191 | 1 |
| 6 | Right Side Plate Assay | 01315200124 | 1 |
| 7 | Centrifugal Fan Assay | 000052060096 | 1 |
| 8 | Blower Mounting Plate Sub-assay | 01325200076 | 1 |
| 9 | Propeller Housing(Lower) | 26905200079 | 3 |
| 10 | Centrifugal Fan | 10455200003 | 3 |
| 11 | Brushless DC Motor | 1570940000603 | 1 |
| 12 | Propeller Housing(Upper) | 26905200078 | 3 |
| 13 | Joint Slack | 73018731 | 1 |
| 14 | Rotary Axis Sub-assay | 73018000117 | 1 |
| 15 | Return Air Frame Sub-assay | 017026000003 | 1 |
| 16 | Bearing Holder Sub-assay | 26151139 | 1 |
| 17 | Support Of Motor Bearing | 02285200001 | 1 |
| 18 | Temperature Sensor | 390001921 | 1 |
| 19 | Ambient Temperature Sensor | 3900012123 | 1 |
| 20 | Display Board | 300001000204 | 1 |
| 21 | Top Cover Board Assay | 01265200122 | 1 |
| 22 | Hook | 02112466 | 4 |
| 23 | Electric Box Assay | 100002061152 | 1 |
| 24 | Main Board | 300002060227 | 1 |
| 25 | Filter Board | 300020000017 | 1 |
| 26 | Terminal Board | 42000100000101 | 1 |
| 27 | Terminal Board | 42018000551 | 1 |
| 28 | Left Side Plate Assay | 01315200125 | 1 |
| 29 | Water Pump Assay | 000104060007 | 1 |
| 30 | Pump Drainpipe | 200070060004 | 1 |
| 31 | Water Pump | 81200706001601 | 1 |
| 32 | Liquid Level Switch | 430024000005 | 1 |
| 33 | Strainer | 0741520000201 | 1 |

GUD160PHS/A-T(Product Code: CF022N1520)

| No. | Material name | Finished Product Code | Quantity |
|-----|---------------------------------|-----------------------|----------|
| 1 | Air Outlet Frame Assay | 01375200023 | 1 |
| 2 | Choke Plug of Drain Pipe | 76815214 | 2 |
| 3 | Bottom Cover Plate | 01265200125 | 1 |
| 4 | Cover Plate(Air return) | 01265200123 | 1 |
| 5 | Hook | 02112466 | 4 |
| 6 | Right Side Plate Assay | 01315200148 | 1 |
| 7 | Centrifugal Fan Assay | 000052000029 | 1 |
| 8 | Blower Mounting Plate Sub-assay | 01325200076 | 1 |
| 9 | Propeller Housing(Lower) | 26905200079 | 3 |
| 10 | Centrifugal Fan | 10455200003 | 3 |
| 11 | Brushless DC Motor | 1570940000801 | 1 |
| 12 | Joint Slack | 73018731 | 1 |
| 13 | Propeller Housing(Upper) | 26905200078 | 3 |
| 14 | Return Air Frame Sub-assay | 01375200029 | 1 |
| 15 | Temperature Sensor | 390001921 | 1 |
| 16 | Ambient Temperature Sensor | 3900012123 | 1 |
| 17 | Display Board | 300001000204 | 1 |
| 18 | Rotary Axis Sub-assay | 73018000117 | 1 |
| 19 | Support Of Motor Bearing | 02285200001 | 1 |
| 20 | Bearing Holder Sub-assay | 26151139 | 1 |

| No. | Material name | Finished Product Code | Quantity |
|-----|-----------------------|-----------------------|----------|
| 21 | Top Cover Board Assay | 01264100105 | 1 |
| 22 | Main Board | 300002060223 | 1 |
| 23 | Terminal Board | 4201800002601 | 1 |
| 24 | Terminal Board | 42000100000101 | 1 |
| 25 | Main Board | 30221000033 | 1 |
| 26 | Reactor | 43138000047 | 1 |
| 27 | Electric Box Assay | 100002061236 | 1 |
| 28 | Radiator | 49018000068 | 1 |
| 29 | Left Side Plate Assay | 01314100118 | 1 |
| 30 | Water Pump Assay | 000104060001 | 1 |
| 31 | Pump Drainpipe | 200070060004 | 1 |
| 32 | Water Pump | 4313822001 | 1 |
| 33 | Liquid Level Switch | 430024000005 | 1 |
| 34 | Strainer | 07415210 | 1 |
| 35 | Evaporator Assay | 011001060187 | 1 |

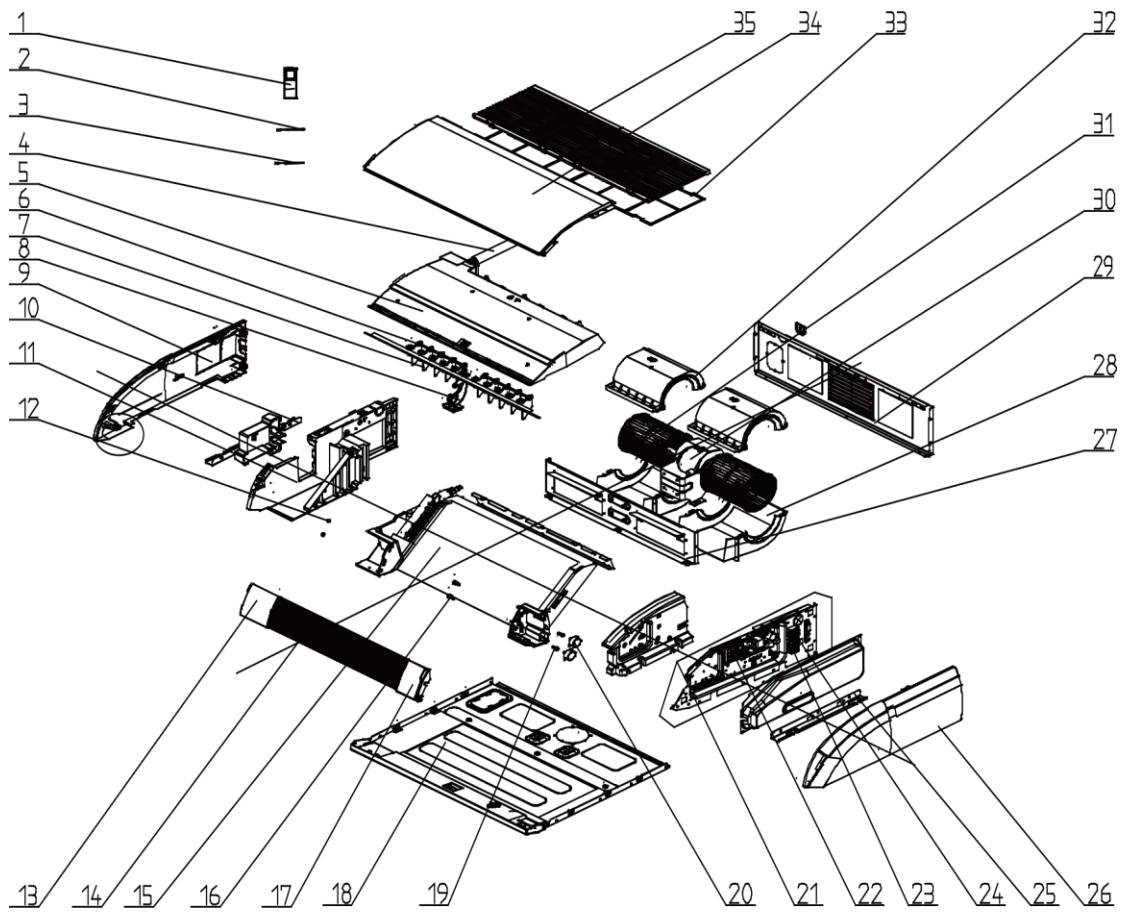
GUD35ZD/A-T(Product Code: ED020N1720)



| No. | Material name | Finished Product Code | Quantity |
|-----|----------------------------|-----------------------|----------|
| 1 | Remote Controller | 305001060024 | 1 |
| 2 | Ambient Temperature Sensor | 3900012123 | 1 |
| 3 | Temperature Sensor | 390001923 | 1 |
| 4 | Right Cover Plate | 26909400071 | 1 |

| No. | Material name | Finished Product Code | Quantity |
|-----|--------------------------------------|-----------------------|----------|
| 5 | Right Side Plate | 26909400074 | 1 |
| 6 | Installation Supporting Frame(right) | 01809402 | 1 |
| 7 | Axial Bush | 10542704 | 2 |
| 8 | Evaporator Assay | 011001060235 | 1 |
| 9 | Rotating Shaft 3 | 26909430 | 2 |
| 10 | Guide Louver | 200004000046 | 2 |
| 11 | Crankshaft | 200023000001 | 2 |
| 12 | Stepping Motor | 1521240215 | 2 |
| 13 | Display Board | 30294000009 | 1 |
| 14 | Base Plate Assay | 011007000032 | 1 |
| 15 | Installation Supporting Frame(Left) | 01809401 | 1 |
| 16 | Left Cover Plate | 26909400070 | 1 |
| 17 | Main Board | 300002060226 | 1 |
| 18 | Terminal Board | 42018000551 | 1 |
| 19 | Terminal Board | 42000100000202 | 1 |
| 20 | Electric Box Assay | 100002003030 | 1 |
| 21 | Clapboard Sub-assay | 017021000088 | 1 |
| 22 | Propeller Housing(Lower) | 200230000001 | 2 |
| 23 | Brushless DC Motor | 15706000037 | 1 |
| 24 | Centrifugal Fan | 103003000001 | 2 |
| 25 | Propeller Housing(Upper) | 200230000002 | 2 |
| 26 | Rear Side Plate Sub-assay | 017051000046 | 1 |
| 27 | Filter Sub-assay | 111001000001 | 1 |
| 28 | Swing Lever | 10582009 | 2 |
| 29 | Air Louver | 200007000001 | 10 |
| 30 | Drainage Pipe Sub-assay | 05235434 | 1 |
| 31 | Supporter(Guide Louver) | 26909400076 | 1 |
| 32 | Water Tray | 200063000024 | 1 |
| 33 | Top Cover | 012148000046 | 1 |
| 34 | Front Grill Sub-assay | 200226000004 | 2 |

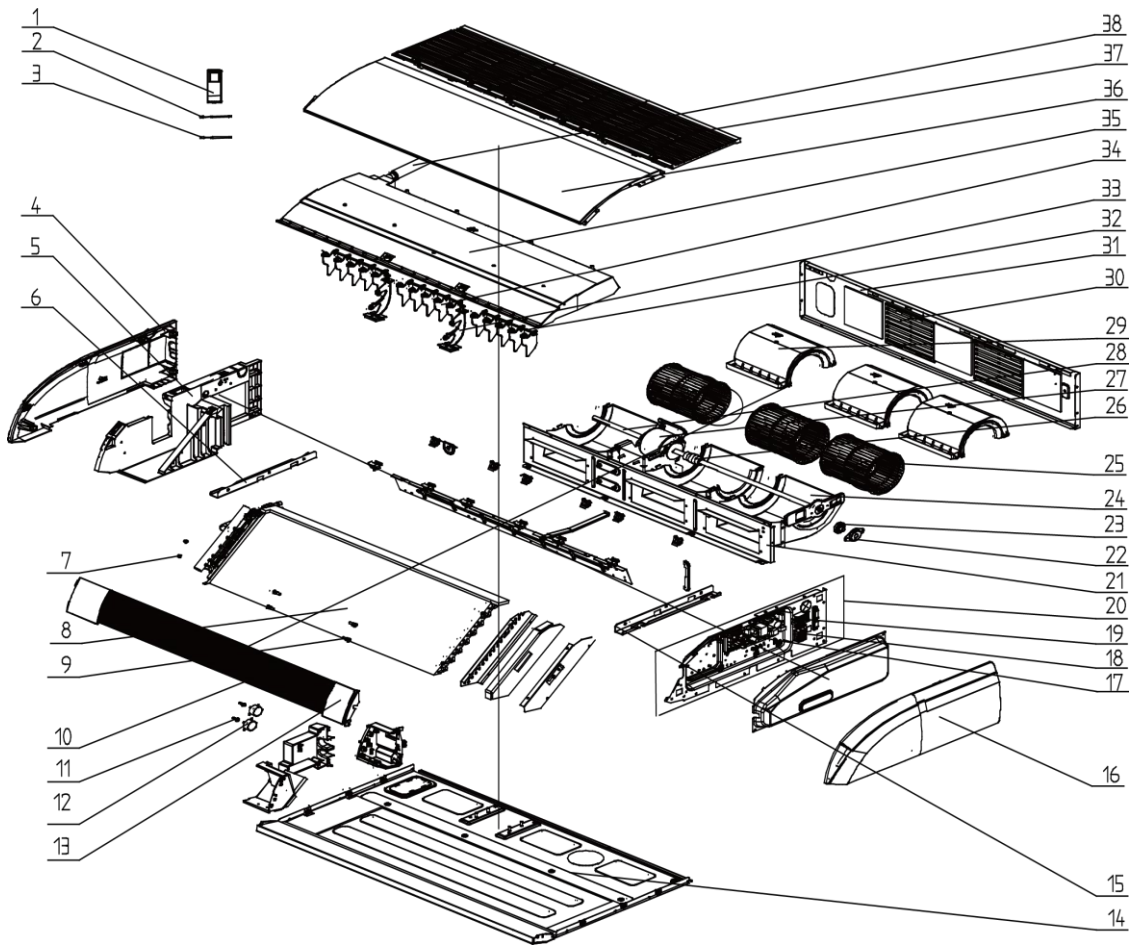
GUD50ZD/A-T(Product Code: ED020N1730)



| No. | Material name | Finished Product Code | Quantity |
|-----|--------------------------------------|-----------------------|----------|
| 1 | Remote Controller | 305001060024 | 1 |
| 2 | Temperature Sensor | 390001923 | 1 |
| 3 | Ambient Temperature Sensor | 3900012123 | 1 |
| 4 | Drainage Pipe Sub-assay | 05235434 | 1 |
| 5 | Water Tray | 200063000024 | 1 |
| 6 | Swing Lever | 10582009 | 2 |
| 7 | Air Louver | 200007000001 | 10 |
| 8 | Supporter(Guide Louver) | 26909400076 | 1 |
| 9 | Right Cover Plate | 26909400071 | 1 |
| 10 | Installation Supporting Frame(Right) | 01809402 | 1 |
| 11 | Right Side Plate | 26909400074 | 1 |
| 12 | Axial Bush | 10542704 | 2 |
| 13 | Front Panel | 200003000001 | 1 |
| 14 | Guide Louver | 200004000046 | 2 |
| 15 | Evaporator Assay | 011001000487 | 1 |
| 16 | Rotating Shaft 3 | 26909430 | 2 |
| 17 | Display Board | 30294000009 | 1 |

| No. | Material name | Finished Product Code | Quantity |
|-----|-------------------------------------|-----------------------|----------|
| 18 | Base Plate Assay | 011007000032 | 1 |
| 19 | Crankshaft | 200023000001 | 2 |
| 20 | Stepping Motor | 1521240215 | 2 |
| 21 | Electric Box Assay | 100002003030 | 1 |
| 22 | Main Board | 300002060226 | 1 |
| 23 | Terminal Board | 42018000551 | 1 |
| 24 | Terminal Board | 42000100000202 | 1 |
| 25 | Installation Supporting Frame(Left) | 01809401 | 1 |
| 26 | Left Cover Plate | 26909400070 | 1 |
| 27 | Clapboard Sub-assay | 017021000088 | 1 |
| 28 | Propeller Housing(Lower) | 200230000001 | 2 |
| 29 | Rear Side Plate Sub-assay | 017051000046 | 1 |
| 30 | Brushless DC Motor | 15706000037 | 1 |
| 31 | Centrifugal Fan | 103003000001 | 2 |
| 32 | Propeller Housing(Upper) | 200230000002 | 2 |
| 33 | Filter Sub-assay | 111001000001 | 1 |
| 34 | Top Cover | 012148000046 | 1 |
| 35 | Front Grill | 200226000004 | 2 |

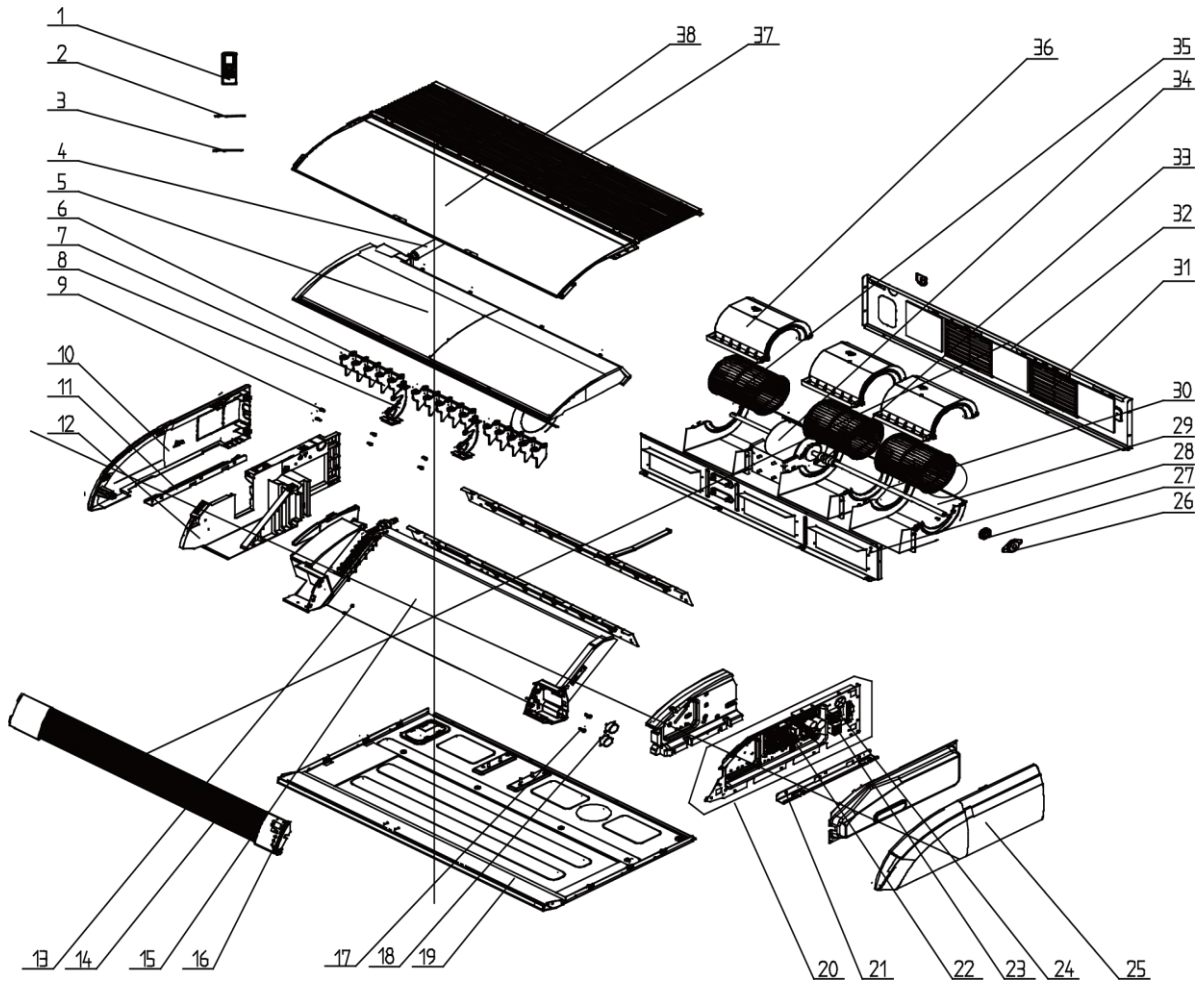
GUD71ZD/A-T(Product Code: ED020N1740), **GUD85ZD/A-T**(Product Code: ED020N1750)



| No. | Material name | Finished Product Code | Remarks |
|-----|--------------------------------------|-----------------------|---------|
| 1 | Remote Controller | 305001060024 | 1 |
| 2 | Ambient Temperature Sensor | 3900012123 | 1 |
| 3 | Temperature Sensor | 390001923 | 1 |
| 4 | Right Cover Plate | 26909400071 | 1 |
| 5 | Right Side Plate | 26909400074 | 1 |
| 6 | Installation Supporting Frame(right) | 01809402 | 1 |
| 7 | Axial Bush | 10542704 | 2 |
| 8 | Evaporator Assay | 011001000202 | 1 |
| 9 | Rotating Shaft 3 | 26909430 | 4 |
| 10 | Guide Louver | 200004500422 | 2 |
| 11 | Crankshaft | 200023000001 | 2 |
| 12 | Stepping Motor | 1521240215 | 2 |
| 13 | Display Board | 30294000009 | 1 |
| 14 | Base Plate Assay | 011007000038 | 1 |
| 15 | Installation Supporting Frame(Left) | 01809401 | 1 |
| 16 | Left Cover Plate | 26909400070 | 1 |
| 17 | Main Board | 300002060226 | 1 |
| 18 | Terminal Board | 42018000551 | 1 |
| 19 | Terminal board | 42018000551 | 1 |

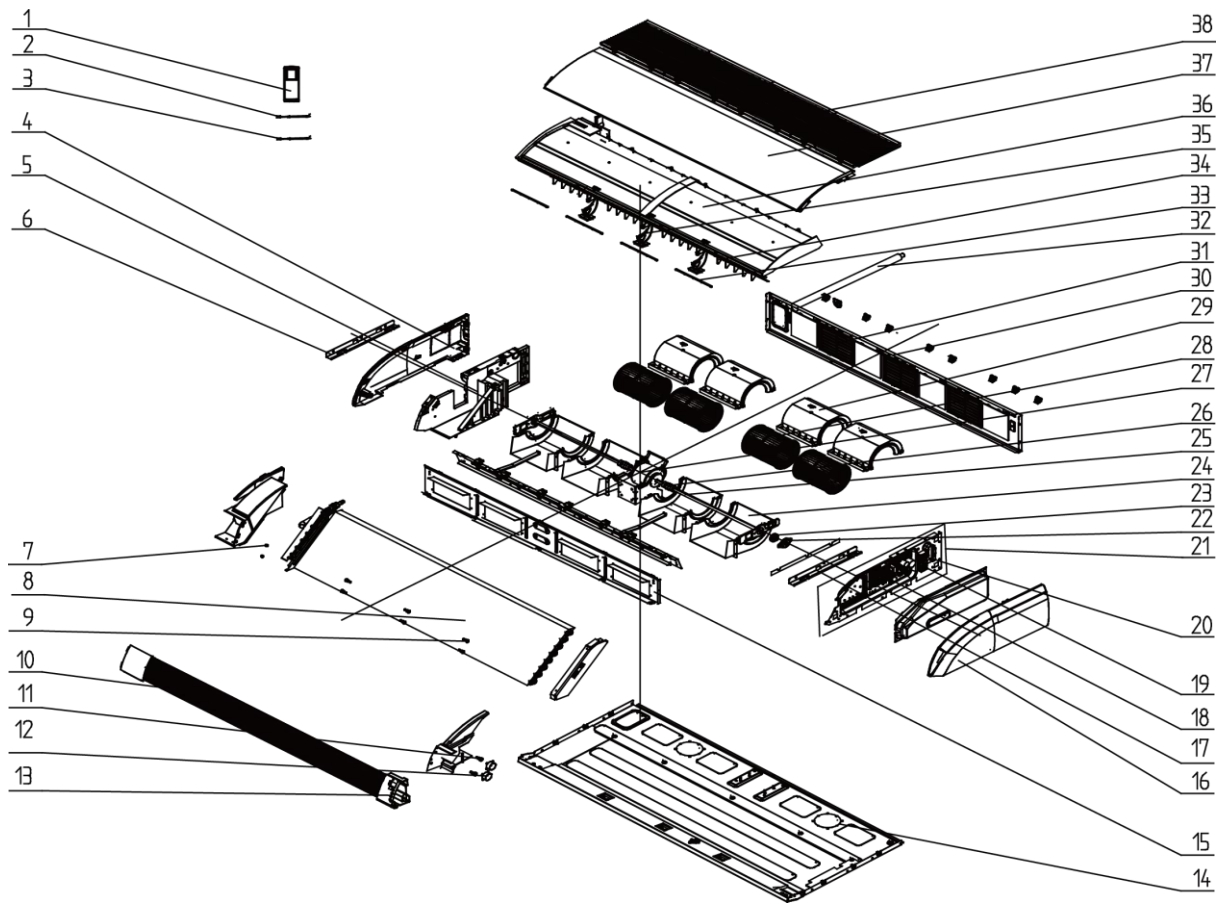
| No. | Material name | Finished Product Code | Remarks |
|-----|---------------------------|-----------------------|---------|
| 20 | Electric Box Assay | 100002003030 | 1 |
| 21 | Clapboard Sub-Assay | 01249400018 | 1 |
| 22 | Support Of Motor Bearing | 01792408 | 1 |
| 23 | O-Gasket of Bearing | 76512404 | 1 |
| 24 | Propeller Housing(Lower) | 200230000001 | 3 |
| 25 | Centrifugal Fan | 103003000001 | 3 |
| 26 | Joint Slack | 73018731 | 1 |
| 27 | Brushless DC Motor | 1570520000501 | 1 |
| 28 | Roller Wheel | 700004500433 | 1 |
| 29 | Propeller Housing(Upper) | 200230000002 | 3 |
| 30 | Filter Sub-Assay | 111001000001 | 2 |
| 31 | Rear Side Plate Sub-Assay | 017051000005 | 1 |
| 32 | Swing Lever | 10582009 | 3 |
| 33 | Supporter(Guide Louver) | 26909400076 | 2 |
| 34 | Air Louver | 200007000001 | 15 |
| 35 | Water Tray | 200063000003 | 1 |
| 36 | Top Cover | 01269400012 | 1 |
| 37 | Front Grill | 26909400072 | 1 |
| 38 | Drainage Pipe Sub-Assay | 05235434 | 1 |

GUD100ZD/A-T(Product Code: ED020N1680)



| No. | Material name | Finished Product Code | Quantity |
|-----|--------------------------------------|-----------------------|----------|
| 1 | Remote Controller | 305001060024 | 1 |
| 2 | Temperature Sensor | 390001921 | 1 |
| 3 | Ambient Temperature Sensor | 3900012123 | 1 |
| 4 | Drainage Pipe Sub-Assay | 05235434 | 1 |
| 5 | Water Tray | 200063000003 | 1 |
| 6 | Swing Lever | 10582009 | 3 |
| 7 | Air Louver | 200007000001 | 15 |
| 8 | Supporter | 26909400076 | 2 |
| 9 | Rotating Shaft 3 | 26909430 | 4 |
| 10 | Right Cover Plate | 26909400071 | 1 |
| 11 | Installation Supporting Frame(Right) | 01809402 | 1 |
| 12 | Right Side Plate | 26909400074 | 1 |
| 13 | Axial Bush | 10542704 | 2 |
| 14 | Guide Louver | 200004500422 | 2 |
| 15 | Evaporator Assay | 011001000136 | 1 |
| 16 | Display Board | 30294000009 | 1 |
| 17 | Crankshaft | 200023000001 | 2 |
| 18 | Stepping Motor | 1521240206 | 2 |
| 19 | Base Plate Assay | 011007000038 | 1 |

| No. | Material name | Finished Product Code | Quantity |
|-----|-------------------------------------|-----------------------|----------|
| 20 | Electric Box Assay | 100002003030 | 1 |
| 21 | Installation Supporting Frame(Left) | 01809401 | 1 |
| 22 | Main Board | 300002060226 | 1 |
| 23 | Terminal Board | 42018000551 | 1 |
| 24 | Terminal Board | 42000100000202 | 1 |
| 25 | Left Cover Plate | 26909400070 | 1 |
| 26 | Support Of Motor Bearing | 01792408 | 1 |
| 27 | O-Gasket of Bearing | 76512404 | 1 |
| 28 | Clapboard Assay | 000075000040 | 1 |
| 29 | Propeller Housing(Lower) | 200230000001 | 3 |
| 30 | Rotary Axis | 700004500433 | 1 |
| 31 | Filter Sub-Assay(Rear Side Plate) | 111001000001 | 2 |
| 32 | Rear Side Plate Sub-Assay | 017051000005 | 1 |
| 33 | Joint Slack | 73018731 | 1 |
| 34 | Fan Motor | 1570520000501 | 1 |
| 35 | Centrifugal Fan | 103003000001 | 3 |
| 36 | Propeller Housing(Upper) | 200230000002 | 3 |
| 37 | Front Grill Sub-Assay | 26909400066 | 3 |
| 38 | Top Cover | 01269400012 | 1 |

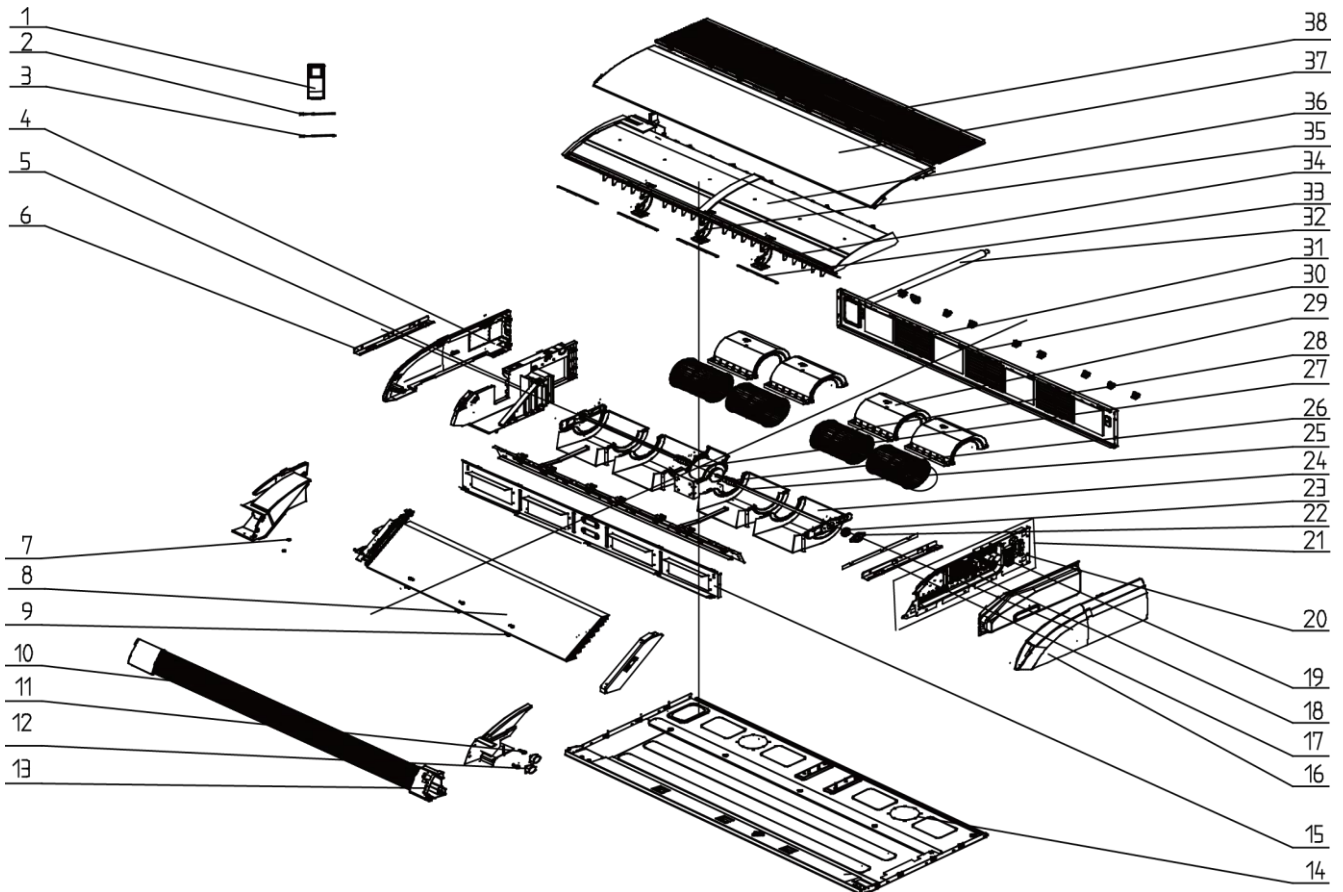
GUD125ZD/A-T(Product Code: ED020N1690)

| No. | Material name | Finished Product Code | Quantity |
|-----|--------------------------------------|-----------------------|----------|
| 1 | Remote Controller | 305001060024 | 1 |
| 2 | Ambient Temperature Sensor | 3900012123 | 1 |
| 3 | Tube Sensor | 3900020720G | 1 |
| 4 | Right Cover Plate | 26909400071 | 11 |
| 5 | Right Side Plate | 26909400074 | 1 |
| 6 | Installation Supporting Frame(right) | 01809402 | 1 |
| 7 | Axial Bush | 10542704 | 2 |
| 8 | Evaporator Assy | 011001060178 | 1 |
| 9 | Rotating Shaft 3 | 26909430 | 6 |
| 10 | Guide Louver | 200004500426 | 2 |
| 11 | Crankshaft | 200023000001 | 2 |
| 12 | Stepping Motor | 1521240206 | 2 |
| 13 | Display Board | 30294000009 | 1 |
| 14 | Base Plate Assy | 011007060032 | 1 |
| 15 | Clapboard Sub-Assay | 01249400019 | 1 |
| 16 | Left Cover Plate | 26909400070 | 1 |
| 17 | Installation Supporting Frame(Left) | 01809401 | 1 |
| 18 | Main Board | 300002060226 | 1 |
| 19 | Terminal Board | 42018000551 | 1 |
| 20 | Terminal Board | 4200010000202 | 1 |

| No. | Material name | Finished Product Code | Quantity |
|-----|---------------------------|-----------------------|----------|
| 21 | Electric Box Assay | 100002003030 | 1 |
| 22 | Support Of Motor Bearing | 01792408 | 2 |
| 23 | O-Gasket of Bearing | 76512404 | 1 |
| 24 | Propeller Housing(Lower) | 200230000001 | 4 |
| 25 | Roller Wheel | 700004000001 | 2 |
| 26 | Joint Slack | 73018731 | 2 |
| 27 | Brushless DC Motor | 15709400005 | 1 |
| 28 | Centrifugal Fan | 103003000001 | 4 |
| 29 | Propeller Housing(Upper) | 200230000002 | 4 |
| 30 | Rear Side Plate Sub-Assay | 017051000006 | 1 |
| 31 | Filter Sub-Assay | 111001000001 | 3 |
| 32 | Drainage Pipe Sub-Assay | 05235434 | 1 |
| 33 | Swing Lever | 10582009 | 4 |
| 34 | Air Louver | 200007000001 | 20 |
| 35 | Supporter(Guide Louver) | 26909400076 | 3 |
| 36 | Water Tray | 200063000002 | 1 |
| 37 | Top Cover | 01269400013P | 1 |
| 38 | Front Grill Sub-assay | 26909400066 | 4 |

GUD140ZD/A-T(Product Code: ED020N1700),

GUD160ZD/A-T(Product Code: ED020N1710)



| No. | Material name | Finished Product Code | Remarks |
|-----|--------------------------------------|-----------------------|---------|
| 1 | Remote Controller | 305001060024 | 1 |
| 2 | Ambient Temperature Sensor | 3900012123 | 1 |
| 3 | Tube Sensor | 3900020720G | 1 |
| 4 | Right Cover Plate | 26909400071 | 1 |
| 5 | Right Side Plate | 26909400074 | 1 |
| 6 | Installation Supporting Frame(right) | 01809402 | 1 |
| 7 | Axial Bush | 10542704 | 2 |
| 8 | Evaporator Assay | 011001060183 | 1 |
| 9 | Rotating Shaft 3 | 26909430 | 6 |
| 10 | Guide Louver | 200004500426 | 2 |
| 11 | Crankshaft | 200023000001 | 2 |
| 12 | Stepping Motor | 1521240206 | 2 |
| 13 | Display Board | 30294000009 | 1 |
| 14 | Base Plate Assay | 011007060032 | 1 |
| 15 | Clapboard Sub-Assay | 01249400019 | 1 |
| 16 | Left Cover Plate | 26909400070 | 1 |
| 17 | Installation Supporting Frame(Left) | 01809401 | 1 |
| 18 | Main Board | 300002060226 | 1 |
| 19 | Terminal Board | 42018000551 | 1 |
| 20 | Terminal Board | 42000100000202 | 1 |
| 21 | Electric Box Assay | 100002003030 | 1 |
| 22 | Support Of Motor Bearing | 01792408 | 2 |
| 23 | O-Gasket of Bearing | 76512404 | 1 |
| 24 | Propeller Housing(Lower) | 200230000001 | 4 |
| 25 | Roller Wheel | 700004000001 | 2 |
| 26 | Joint Slack | 73018731 | 2 |
| 27 | Brushless DC Motor | 15709400005 | 1 |
| 28 | Centrifugal Fan | 103003000001 | 4 |
| 29 | Propeller Housing(Upper) | 200230000002 | 4 |
| 30 | Rear Side Plate Sub-Assay | 017051000006 | 1 |
| 31 | Filter Sub-Assay | 111001000001 | 3 |
| 32 | Drainage Pipe Sub-Assay | 05235434 | 1 |
| 33 | Swing Lever | 10582009 | 4 |
| 34 | Air Louver | 200007000001 | 20 |
| 35 | Supporter(Guide Louver) | 26909400076 | 3 |
| 36 | Water Tray | 200063000002 | 1 |
| 37 | Top Cover | 01269400013P | 1 |
| 38 | Front Grill Sub-assay | 26909400066 | 4 |

Appendices

1. Resistance/temperature lists of temperature sensors

1.1 Voltage list of 15 kΩ temperature sensors (including ODU and IDU temperature sensors)

| Temperature (°C) | Resistance (kΩ) | Voltage (V) | Temperature (°C) | Resistance (kΩ) | Voltage (V) |
|------------------|-----------------|-------------|------------------|-----------------|-------------|
| -20 | 144 | 0.311 | 71 | 2.523 | 2.825 |
| -19 | 138.1 | 0.323 | 72 | 2.439 | 2.838 |
| -18 | 128.6 | 0.345 | 73 | 2.358 | 2.852 |
| -17 | 121.6 | 0.362 | 74 | 2.28 | 2.865 |
| -16 | 115 | 0.381 | 75 | 2.205 | 2.877 |
| -15 | 108.7 | 0.4 | 76 | 2.133 | 2.889 |
| -14 | 102.9 | 0.42 | 77 | 2.064 | 2.901 |
| -13 | 97.4 | 0.44 | 78 | 1.997 | 2.912 |
| -12 | 92.22 | 0.462 | 79 | 1.933 | 2.923 |
| -11 | 87.35 | 0.484 | 80 | 1.871 | 2.934 |
| -10 | 82.75 | 0.506 | 81 | 1.811 | 2.945 |
| -9 | 78.43 | 0.53 | 82 | 1.754 | 2.955 |
| -8 | 74.35 | 0.554 | 83 | 1.699 | 2.964 |
| -7 | 70.5 | 0.579 | 84 | 1.645 | 2.974 |
| -6 | 66.88 | 0.605 | 85 | 1.594 | 2.983 |
| -5 | 63.46 | 0.631 | 86 | 1.544 | 2.992 |
| -4 | 60.23 | 0.658 | 87 | 1.497 | 3.001 |
| -3 | 57.18 | 0.686 | 88 | 1.451 | 3.009 |
| -2 | 54.31 | 0.714 | 89 | 1.408 | 3.017 |
| -1 | 51.59 | 0.743 | 90 | 1.363 | 3.025 |
| 0 | 49.02 | 0.773 | 91 | 1.322 | 3.033 |
| 1 | 46.8 | 0.801 | 92 | 1.282 | 3.04 |
| 2 | 44.31 | 0.835 | 93 | 1.244 | 3.047 |
| 3 | 42.14 | 0.866 | 94 | 1.207 | 3.054 |
| 4 | 40.09 | 0.899 | 95 | 1.171 | 3.061 |
| 5 | 38.15 | 0.931 | 96 | 1.136 | 3.068 |
| 6 | 36.32 | 0.965 | 97 | 1.103 | 3.074 |
| 7 | 34.58 | 0.998 | 98 | 1.071 | 3.08 |
| 8 | 32.94 | 1.033 | 99 | 1.039 | 3.086 |
| 9 | 31.38 | 1.067 | 100 | 1.009 | 3.092 |
| 10 | 29.9 | 1.102 | 101 | 0.98 | 3.098 |

| Temperature (°C) | Resistance (kΩ) | Voltage (V) | Temperature (°C) | Resistance (kΩ) | Voltage (V) |
|------------------|-----------------|-------------|------------------|-----------------|-------------|
| 11 | 28.51 | 1.138 | 102 | 0.952 | 3.103 |
| 12 | 27.18 | 1.174 | 103 | 0.925 | 3.108 |
| 13 | 25.92 | 1.21 | 104 | 0.898 | 3.114 |
| 14 | 24.73 | 1.246 | 105 | 0.873 | 3.119 |
| 15 | 23.6 | 1.282 | 106 | 0.848 | 3.123 |
| 16 | 22.53 | 1.319 | 107 | 0.825 | 3.128 |
| 17 | 21.51 | 1.356 | 108 | 0.802 | 3.133 |
| 18 | 20.54 | 1.393 | 109 | 0.779 | 3.137 |
| 19 | 19.63 | 1.429 | 110 | 0.758 | 3.141 |
| 20 | 18.75 | 1.467 | 111 | 0.737 | 3.145 |
| 21 | 17.93 | 1.503 | 112 | 0.717 | 3.15 |
| 22 | 17.14 | 1.54 | 113 | 0.697 | 3.153 |
| 23 | 16.39 | 1.577 | 114 | 0.678 | 3.157 |
| 24 | 15.68 | 1.613 | 115 | 0.66 | 3.161 |
| 25 | 15 | 1.65 | 116 | 0.642 | 3.165 |
| 26 | 14.36 | 1.686 | 117 | 0.625 | 3.168 |
| 27 | 13.74 | 1.722 | 118 | 0.608 | 3.171 |
| 28 | 13.16 | 1.758 | 119 | 0.592 | 3.175 |
| 29 | 12.6 | 1.793 | 120 | 0.577 | 3.178 |
| 30 | 12.07 | 1.829 | 121 | 0.561 | 3.181 |
| 31 | 11.57 | 1.863 | 122 | 0.547 | 3.184 |
| 32 | 11.09 | 1.897 | 123 | 0.532 | 3.187 |
| 33 | 10.63 | 1.931 | 124 | 0.519 | 3.19 |
| 34 | 10.2 | 1.964 | 125 | 0.505 | 3.192 |
| 35 | 9.779 | 1.998 | 126 | 0.492 | 3.195 |
| 36 | 9.382 | 2.03 | 127 | 0.48 | 3.198 |
| 37 | 9.003 | 2.062 | 128 | 0.467 | 3.2 |
| 38 | 8.642 | 2.094 | 129 | 0.456 | 3.203 |
| 39 | 5.997 | 2.125 | 130 | 0.444 | 3.205 |
| 41 | 7.653 | 2.185 | 131 | 0.433 | 3.207 |
| 42 | 7.352 | 2.215 | 132 | 0.422 | 3.21 |
| 43 | 7.065 | 2.243 | 133 | 0.412 | 3.212 |
| 44 | 6.791 | 2.272 | 134 | 0.401 | 3.214 |
| 45 | 6.529 | 2.299 | 135 | 0.391 | 3.216 |
| 46 | 6.278 | 2.326 | 136 | 0.382 | 3.218 |
| 47 | 6.038 | 2.353 | 137 | 0.372 | 3.22 |
| 48 | 5.809 | 2.379 | 138 | 0.363 | 3.222 |
| 49 | 5.589 | 2.404 | 139 | 0.355 | 3.224 |
| 50 | 5.379 | 2.429 | 140 | 0.346 | 3.226 |
| 51 | 5.179 | 2.453 | 141 | 0.338 | 3.227 |
| 52 | 4.986 | 2.477 | 142 | 0.33 | 3.229 |
| 53 | 4.802 | 2.5 | 143 | 0.322 | 3.231 |
| 54 | 4.625 | 2.522 | 144 | 0.314 | 3.232 |

| Temperature (°C) | Resistance (kΩ) | Voltage (V) | Temperature (°C) | Resistance (kΩ) | Voltage (V) |
|------------------|-----------------|-------------|------------------|-----------------|-------------|
| 55 | 4.456 | 2.544 | 145 | 0.307 | 3.234 |
| 56 | 4.294 | 2.566 | 146 | 0.299 | 3.235 |
| 57 | 4.139 | 2.586 | 147 | 0.292 | 3.237 |
| 58 | 3.99 | 2.607 | 148 | 0.286 | 3.238 |
| 59 | 3.848 | 2.626 | 149 | 0.279 | 3.24 |
| 60 | 3.711 | 2.646 | 150 | 0.273 | 3.241 |
| 61 | 3.579 | 2.664 | 151 | 0.266 | 3.242 |
| 62 | 3.454 | 2.682 | 152 | 0.261 | 3.244 |
| 63 | 3.333 | 2.7 | 153 | 0.254 | 3.245 |
| 64 | 3.217 | 2.717 | 154 | 0.248 | 3.246 |
| 65 | 3.105 | 2.734 | 155 | 0.243 | 3.247 |
| 66 | 2.998 | 2.75 | 156 | 0.237 | 3.249 |
| 67 | 2.898 | 2.766 | 157 | 0.232 | 3.25 |
| 68 | 2.797 | 2.781 | 158 | 0.227 | 3.251 |
| 69 | 2.702 | 2.796 | 159 | 0.222 | 3.252 |
| 70 | 2.611 | 2.811 | 160 | 0.217 | 3.253 |

1.2 Voltage list of 20 kΩ pipeline temperature sensors (including temperature sensors for defroster, IDU and ODU pipes)

| Temperature (°C) | Resistance (kΩ) | Voltage (V) | Temperature (°C) | Resistance (kΩ) | Voltage (V) |
|------------------|-----------------|-------------|------------------|-----------------|-------------|
| -30 | 361.8 | 0.173 | 66 | 3.998 | 2.75 |
| -29 | 339.8 | 0.183 | 67 | 3.861 | 2.766 |
| -28 | 319.2 | 0.195 | 68 | 3.729 | 2.781 |
| -27 | 300 | 0.206 | 69 | 3.603 | 2.796 |
| -26 | 282.2 | 0.218 | 70 | 3.481 | 2.811 |
| -25 | 265.5 | 0.231 | 71 | 3.364 | 2.825 |
| -24 | 249.9 | 0.245 | 72 | 3.252 | 2.838 |
| -23 | 235.3 | 0.259 | 73 | 3.144 | 2.852 |
| -22 | 221.6 | 0.273 | 74 | 3.04 | 2.865 |
| -21 | 208.9 | 0.288 | 75 | 2.94 | 2.877 |
| -20 | 196.9 | 0.304 | 76 | 2.844 | 2.889 |
| -19 | 181.4 | 0.328 | 77 | 2.752 | 2.901 |
| -18 | 171.4 | 0.345 | 78 | 2.663 | 2.912 |
| -17 | 162.1 | 0.362 | 79 | 2.577 | 2.923 |
| -16 | 153.3 | 0.381 | 80 | 2.495 | 2.934 |
| -15 | 145 | 0.4 | 81 | 2.415 | 2.944 |
| -14 | 137.2 | 0.42 | 82 | 2.339 | 2.954 |
| -13 | 129.9 | 0.44 | 83 | 2.265 | 2.964 |
| -12 | 123 | 0.462 | 84 | 2.194 | 2.974 |
| -11 | 116.5 | 0.484 | 85 | 2.125 | 2.983 |

| Temperature (°C) | Resistance (kΩ) | Voltage (V) | Temperature (°C) | Resistance (kΩ) | Voltage (V) |
|------------------|-----------------|-------------|------------------|-----------------|-------------|
| -10 | 110.3 | 0.507 | 86 | 2.059 | 2.992 |
| -9 | 104.6 | 0.53 | 87 | 1.996 | 3.001 |
| -8 | 99.13 | 0.554 | 88 | 1.934 | 3.009 |
| -7 | 94 | 0.579 | 89 | 1.875 | 3.017 |
| -6 | 89.17 | 0.605 | 90 | 1.818 | 3.025 |
| -5 | 84.61 | 0.631 | 91 | 1.763 | 3.033 |
| -4 | 80.31 | 0.658 | 92 | 1.71 | 3.04 |
| -3 | 76.24 | 0.686 | 93 | 1.658 | 3.047 |
| -2 | 72.41 | 0.714 | 94 | 1.609 | 3.054 |
| -1 | 68.79 | 0.743 | 95 | 1.561 | 3.061 |
| 0 | 65.37 | 0.773 | 96 | 1.515 | 3.068 |
| 1 | 62.13 | 0.804 | 97 | 1.47 | 3.074 |
| 2 | 59.08 | 0.835 | 98 | 1.427 | 3.08 |
| 3 | 56.19 | 0.866 | 99 | 1.386 | 3.086 |
| 4 | 53.46 | 0.898 | 100 | 1.346 | 3.092 |
| 5 | 50.87 | 0.931 | 101 | 1.307 | 3.098 |
| 6 | 48.42 | 0.965 | 102 | 1.269 | 3.103 |
| 7 | 46.11 | 0.998 | 103 | 1.233 | 3.108 |
| 8 | 43.92 | 1.033 | 104 | 1.198 | 3.114 |
| 9 | 41.84 | 1.067 | 105 | 1.164 | 3.119 |
| 10 | 39.87 | 1.102 | 106 | 1.131 | 3.123 |
| 11 | 38.01 | 1.138 | 107 | 1.099 | 3.128 |
| 12 | 36.24 | 1.174 | 108 | 1.069 | 3.133 |
| 13 | 34.57 | 1.209 | 109 | 1.039 | 3.137 |
| 14 | 32.98 | 1.246 | 110 | 1.01 | 3.141 |
| 15 | 31.47 | 1.282 | 111 | 0.9825 | 3.145 |
| 16 | 30.04 | 1.319 | 112 | 0.9556 | 3.15 |
| 17 | 28.68 | 1.356 | 113 | 0.9295 | 3.153 |
| 18 | 27.39 | 1.393 | 114 | 0.9043 | 3.157 |
| 19 | 26.17 | 1.429 | 115 | 0.8799 | 3.161 |
| 20 | 25.01 | 1.466 | 116 | 0.8562 | 3.165 |
| 21 | 23.9 | 1.503 | 117 | 0.8333 | 3.168 |
| 22 | 22.85 | 1.54 | 118 | 0.8111 | 3.171 |
| 23 | 21.85 | 1.577 | 119 | 0.7895 | 3.175 |
| 24 | 20.9 | 1.614 | 120 | 0.7687 | 3.178 |
| 25 | 20 | 1.65 | 121 | 0.7485 | 3.181 |
| 26 | 19.14 | 1.686 | 122 | 0.7289 | 3.184 |
| 27 | 18.32 | 1.722 | 123 | 0.7099 | 3.187 |
| 28 | 17.55 | 1.758 | 124 | 0.6915 | 3.19 |
| 29 | 16.8 | 1.793 | 125 | 0.6736 | 3.192 |
| 30 | 16.1 | 1.828 | 126 | 0.6563 | 3.195 |
| 31 | 15.43 | 1.863 | 127 | 0.6395 | 3.198 |
| 32 | 14.79 | 1.897 | 128 | 0.6232 | 3.2 |

| Temperature (°C) | Resistance (kΩ) | Voltage (V) | Temperature (°C) | Resistance (kΩ) | Voltage (V) |
|------------------|-----------------|-------------|------------------|-----------------|-------------|
| 33 | 14.18 | 1.931 | 129 | 0.6074 | 3.203 |
| 34 | 13.59 | 1.965 | 130 | 0.5921 | 3.205 |
| 35 | 13.04 | 1.998 | 131 | 0.5772 | 3.207 |
| 36 | 12.51 | 2.03 | 132 | 0.5627 | 3.21 |
| 37 | 12 | 2.063 | 133 | 0.5487 | 3.212 |
| 38 | 11.52 | 2.094 | 134 | 0.5351 | 3.214 |
| 39 | 11.06 | 2.125 | 135 | 0.5219 | 3.216 |
| 40 | 10.62 | 2.155 | 136 | 0.509 | 3.218 |
| 41 | 10.2 | 2.185 | 137 | 0.4966 | 3.22 |
| 42 | 9.803 | 2.215 | 138 | 0.4845 | 3.222 |
| 43 | 9.42 | 2.243 | 139 | 0.4727 | 3.224 |
| 44 | 9.054 | 2.272 | 140 | 0.4613 | 3.226 |
| 45 | 8.705 | 2.299 | 141 | 0.4502 | 3.227 |
| 46 | 8.37 | 2.326 | 142 | 0.4394 | 3.229 |
| 47 | 8.051 | 2.353 | 143 | 0.4289 | 3.231 |
| 48 | 7.745 | 2.379 | 144 | 0.4187 | 3.232 |
| 49 | 7.453 | 2.404 | 145 | 0.4088 | 3.234 |
| 50 | 7.173 | 2.429 | 146 | 0.3992 | 3.235 |
| 51 | 6.905 | 2.453 | 147 | 0.3899 | 3.237 |
| 52 | 6.648 | 2.477 | 148 | 0.3808 | 3.238 |
| 53 | 6.403 | 2.5 | 149 | 0.3719 | 3.24 |
| 54 | 6.167 | 2.522 | 150 | 0.3633 | 3.241 |
| 55 | 5.942 | 2.544 | 151 | 0.3549 | 3.242 |
| 56 | 5.726 | 2.565 | 152 | 0.3468 | 3.244 |
| 57 | 5.519 | 2.586 | 153 | 0.3389 | 3.245 |
| 58 | 5.32 | 2.607 | 154 | 0.3312 | 3.246 |
| 59 | 5.13 | 2.626 | 155 | 0.3237 | 3.247 |
| 60 | 4.948 | 2.646 | 156 | 0.3164 | 3.249 |
| 61 | 4.773 | 2.664 | 157 | 0.3093 | 3.25 |
| 62 | 4.605 | 2.682 | 158 | 0.3024 | 3.251 |
| 63 | 4.443 | 2.7 | 159 | 0.2956 | 3.252 |
| 64 | 4.289 | 2.717 | 160 | 0.2891 | 3.253 |
| 65 | 4.14 | 2.734 | | | |

1.3 Voltage list of 50 kΩ discharge temperature sensors (including discharge air temperature sensor)

| Temperature (°C) | Resistance (kΩ) | Voltage (V) | Temperature (°C) | Resistance (kΩ) | Voltage (V) |
|------------------|-----------------|-------------|------------------|-----------------|-------------|
| -30 | 911.56 | 0.036 | 61 | 11.736 | 1.518 |
| -29 | 853.66 | 0.038 | 62 | 11.322 | 1.548 |
| -28 | 799.98 | 0.041 | 63 | 10.925 | 1.577 |
| -27 | 750.18 | 0.043 | 64 | 10.544 | 1.606 |
| -26 | 703.92 | 0.046 | 65 | 10.178 | 1.635 |
| -25 | 660.93 | 0.049 | 66 | 9.8269 | 1.664 |
| -24 | 620.94 | 0.052 | 67 | 9.4896 | 1.693 |
| -23 | 583.72 | 0.056 | 68 | 9.1655 | 1.722 |
| -22 | 549.04 | 0.059 | 69 | 8.9542 | 1.741 |
| -21 | 516.71 | 0.063 | 70 | 8.5551 | 1.778 |
| -20 | 486.55 | 0.066 | 71 | 5.9676 | 1.806 |
| -19 | 458.4 | 0.07 | 72 | 7.9913 | 1.834 |
| -18 | 432.1 | 0.075 | 73 | 7.7257 | 1.862 |
| -17 | 407.51 | 0.079 | 74 | 7.4702 | 1.889 |
| -16 | 384.51 | 0.084 | 75 | 7.2245 | 1.916 |
| -15 | 362.99 | 0.088 | 76 | 6.9882 | 1.943 |
| -14 | 342.83 | 0.094 | 77 | 6.7608 | 1.969 |
| -13 | 323.94 | 0.099 | 78 | 6.542 | 1.995 |
| -12 | 306.23 | 0.104 | 79 | 6.3315 | 2.021 |
| -11 | 289.61 | 0.11 | 80 | 6.1288 | 2.046 |
| -10 | 274.02 | 0.116 | 81 | 5.9336 | 2.071 |
| -9 | 259.37 | 0.123 | 82 | 5.7457 | 2.096 |
| -8 | 245.61 | 0.129 | 83 | 5.5647 | 2.12 |
| -7 | 232.67 | 0.136 | 84 | 5.3903 | 2.144 |
| -6 | 220.5 | 0.143 | 85 | 5.2223 | 2.168 |
| -5 | 209.05 | 0.151 | 86 | 5.0605 | 2.191 |
| -4 | 195.97 | 0.158 | 87 | 4.9044 | 2.214 |
| -3 | 188.12 | 0.167 | 88 | 4.7541 | 2.237 |
| -2 | 178.65 | 0.175 | 89 | 4.6091 | 2.259 |
| -1 | 169.68 | 0.184 | 90 | 4.4693 | 2.281 |
| 0 | 161.02 | 0.193 | 91 | 4.3345 | 2.302 |
| 1 | 153 | 0.202 | 92 | 4.2044 | 2.323 |
| 2 | 145.42 | 0.212 | 93 | 4.0789 | 2.344 |
| 3 | 135.96 | 0.223 | 94 | 3.9579 | 2.364 |
| 4 | 131.5 | 0.233 | 95 | 3.841 | 2.384 |
| 5 | 126.17 | 0.242 | 96 | 3.7283 | 2.404 |
| 6 | 119.08 | 0.256 | 97 | 3.6194 | 2.423 |
| 7 | 113.37 | 0.267 | 98 | 3.5143 | 2.442 |

| Temperature (°C) | Resistance (kΩ) | Voltage (V) | Temperature (°C) | Resistance (kΩ) | Voltage (V) |
|------------------|-----------------|-------------|------------------|-----------------|-------------|
| 8 | 107.96 | 0.28 | 99 | 3.4128 | 2.46 |
| 9 | 102.85 | 0.292 | 100 | 3.3147 | 2.478 |
| 10 | 98.006 | 0.306 | 101 | 3.22 | 2.496 |
| 11 | 93.42 | 0.319 | 102 | 3.1285 | 2.514 |
| 12 | 89.075 | 0.333 | 103 | 3.0401 | 2.531 |
| 13 | 84.956 | 0.348 | 104 | 2.9547 | 2.547 |
| 14 | 81.052 | 0.362 | 105 | 2.8721 | 2.564 |
| 15 | 77.349 | 0.378 | 106 | 2.7922 | 2.58 |
| 16 | 73.896 | 0.393 | 107 | 2.715 | 2.595 |
| 17 | 70.503 | 0.41 | 108 | 2.6404 | 2.611 |
| 18 | 67.338 | 0.427 | 109 | 2.5682 | 2.626 |
| 19 | 64.333 | 0.444 | 110 | 2.4983 | 2.64 |
| 20 | 61.478 | 0.462 | 111 | 2.4308 | 2.655 |
| 21 | 58.766 | 0.48 | 112 | 2.3654 | 2.669 |
| 22 | 56.189 | 0.499 | 113 | 2.3021 | 2.682 |
| 23 | 53.738 | 0.518 | 114 | 2.2409 | 2.696 |
| 24 | 51.408 | 0.537 | 115 | 2.1816 | 2.709 |
| 25 | 49.191 | 0.558 | 116 | 2.1242 | 2.722 |
| 26 | 47.082 | 0.578 | 117 | 2.0686 | 2.734 |
| 27 | 45.074 | 0.599 | 118 | 2.0148 | 2.747 |
| 28 | 43.163 | 0.621 | 119 | 1.9626 | 2.759 |
| 29 | 41.313 | 0.643 | 120 | 1.9123 | 2.77 |
| 30 | 39.61 | 0.665 | 121 | 1.8652 | 2.781 |
| 31 | 37.958 | 0.688 | 122 | 1.8158 | 2.793 |
| 32 | 36.384 | 0.711 | 123 | 1.7698 | 2.804 |
| 33 | 34.883 | 0.735 | 124 | 1.7253 | 2.814 |
| 34 | 33.453 | 0.759 | 125 | 1.6821 | 2.825 |
| 35 | 32.088 | 0.784 | 126 | 1.6402 | 2.835 |
| 36 | 30.787 | 0.809 | 127 | 1.5996 | 2.845 |
| 37 | 29.544 | 0.835 | 128 | 1.5602 | 2.855 |
| 38 | 28.359 | 0.86 | 129 | 1.522 | 2.864 |
| 39 | 27.227 | 0.886 | 130 | 1.485 | 2.873 |
| 40 | 26.147 | 0.913 | 131 | 1.449 | 2.882 |
| 41 | 25.114 | 0.94 | 132 | 1.4141 | 2.891 |
| 42 | 24.128 | 0.967 | 133 | 1.3803 | 2.9 |
| 43 | 23.186 | 0.994 | 134 | 1.3474 | 2.908 |
| 44 | 22.286 | 1.022 | 135 | 1.3155 | 2.916 |
| 45 | 21.425 | 1.05 | 136 | 1.2846 | 2.924 |
| 46 | 20.601 | 1.078 | 137 | 1.2545 | 2.932 |
| 47 | 19.814 | 1.107 | 138 | 1.2233 | 2.94 |
| 48 | 19.061 | 1.136 | 139 | 1.1969 | 2.947 |
| 49 | 18.34 | 1.164 | 140 | 1.1694 | 2.955 |
| 50 | 17.651 | 1.193 | 141 | 1.1476 | 2.96 |

| Temperature (°C) | Resistance (kΩ) | Voltage (V) | Temperature (°C) | Resistance (kΩ) | Voltage (V) |
|------------------|-----------------|-------------|------------------|-----------------|-------------|
| 51 | 16.99 | 1.223 | 142 | 1.1166 | 2.969 |
| 52 | 16.358 | 1.252 | 143 | 1.0913 | 2.975 |
| 53 | 15.753 | 1.281 | 144 | 1.0667 | 2.982 |
| 54 | 15.173 | 1.311 | 145 | 1.0429 | 2.988 |
| 55 | 14.618 | 1.34 | 146 | 1.0197 | 2.995 |
| 56 | 14.085 | 1.37 | 147 | 0.9971 | 3.001 |
| 57 | 13.575 | 1.4 | 148 | 0.9752 | 3.007 |
| 58 | 13.086 | 1.429 | 149 | 0.9538 | 3.013 |
| 59 | 12.617 | 1.459 | 150 | 0.9331 | 3.018 |
| 60 | 12.368 | 1.475 | | | |

2. Temperature/Pressure List of Refrigerant

| R32 | | | | | | | |
|----------|-------------|--|----------|-------------|--|----------|-------------|
| Pressure | Temperature | | Pressure | Temperature | | Pressure | Temperature |
| Kpa | °C | | Kpa | °C | | Kpa | °C |
| 100 | -51.909 | | 1250 | 14.153 | | 2400 | 38.688 |
| 150 | -43.635 | | 1300 | 15.52 | | 2450 | 39.529 |
| 200 | -37.323 | | 1350 | 16.847 | | 2500 | 40.358 |
| 250 | -32.15 | | 1400 | 18.138 | | 2550 | 41.173 |
| 300 | -27.731 | | 1450 | 19.395 | | 2600 | 41.977 |
| 350 | -23.85 | | 1500 | 20.619 | | 2650 | 42.769 |
| 400 | -20.378 | | 1550 | 21.813 | | 2700 | 43.55 |
| 450 | -17.225 | | 1600 | 22.978 | | 2750 | 44.32 |
| 500 | -14.331 | | 1650 | 24.116 | | 2800 | 45.079 |
| 550 | -11.65 | | 1700 | 25.229 | | 2850 | 45.828 |
| 600 | -9.1503 | | 1750 | 26.317 | | 2900 | 46.567 |
| 650 | -6.8046 | | 1800 | 27.382 | | 2950 | 47.296 |
| 700 | -4.5925 | | 1850 | 28.425 | | 3000 | 48.015 |
| 750 | -2.4975 | | 1900 | 29.447 | | 3050 | 48.726 |
| 800 | -0.50613 | | 1950 | 30.448 | | 3100 | 49.428 |
| 850 | 1.393 | | 2000 | 31.431 | | 3150 | 50.121 |
| 900 | 3.2092 | | 2050 | 32.395 | | 3200 | 50.806 |
| 950 | 4.9506 | | 2100 | 33.341 | | 3250 | 51.482 |
| 1000 | 6.624 | | 2150 | 34.271 | | 3300 | 52.15 |
| 1050 | 8.2352 | | 2200 | 35.184 | | 3350 | 52.811 |
| 1100 | 9.7896 | | 2250 | 36.082 | | 3400 | 53.464 |
| 1150 | 11.291 | | 2300 | 36.965 | | 3450 | 54.11 |
| 1200 | 12.745 | | 2350 | 37.834 | | 3500 | 54.748 |

3. Refrigerant Notice/Concentration

This air conditioner uses R32 refrigerant. The construction area for installation, operation and storage of the air conditioner must be larger than the minimum construction area. The minimum area for installation is determined by:

- (1) Refrigerant charging quantity for the entire system (ex-factory charging quantity + additional charging quantity);
- (2) Checking out in the applicable tables:
 - 1) For indoor unit, confirm the model of indoor unit and check the corresponding table.
 - 2) For outdoor unit that is installed or placed indoors, select the corresponding table according to the height of the room

| Height of the room | Select the applicable table |
|--------------------|-----------------------------|
| < 1.8m | Floor standing type |
| ≥1.8m | Wall mounted type |

- (3) Refer to the following table to check out the minimum construction area

| Ceiling type | | Wall mounted type | | Floor standing type | |
|---------------|------------------------|-------------------|-------------------------|---------------------|-------------------------|
| Weight (kg) | Area(m ²) | Weight (kg) | Area (m ²) | Weight (kg) | Area (m ²) |
| < 1.224 | — | < 1.224 | — | < 1.224 | — |
| 1.224 | 0.956 | 1.224 | 1.43 | 1.224 | 12.9 |
| 1.4 | 1.25 | 1.4 | 1.87 | 1.4 | 16.8 |
| 1.6 | 1.63 | 1.6 | 2.44 | 1.6 | 22.0 |
| 1.8 | 2.07 | 1.8 | 3.09 | 1.8 | 27.8 |
| 2.0 | 2.55 | 2.0 | 3.81 | 2.0 | 34.3 |
| 2.2 | 3.09 | 2.2 | 4.61 | 2.2 | 41.5 |
| 2.4 | 3.68 | 2.4 | 5.49 | 2.4 | 49.4 |
| 2.6 | 4.31 | 2.6 | 6.44 | 2.6 | 58.0 |
| 2.8 | 5.00 | 2.8 | 7.47 | 2.8 | 67.3 |
| 3.0 | 5.74 | 3.0 | 8.58 | 3.0 | 77.2 |
| 3.2 | 6.54 | 3.2 | 9.76 | 3.2 | 87.9 |
| 3.4 | 7.38 | 3.4 | 11.0 | 3.4 | 99.2 |
| 3.6 | 8.27 | 3.6 | 12.4 | 3.6 | 111 |
| 3.8 | 9.22 | 3.8 | 13.8 | 3.8 | 124 |
| 4.0 | 10.2 | 4.0 | 15.3 | 4.0 | 137 |
| 4.2 | 11.3 | 4.2 | 16.8 | 4.2 | 151 |
| 4.4 | 12.4 | 4.4 | 18.5 | 4.4 | 166 |
| 4.6 | 13.5 | 4.6 | 20.2 | 4.6 | 182 |
| 4.8 | 14.7 | 4.8 | 22.0 | 4.8 | 198 |
| 5.0 | 16.0 | 5.0 | 23.8 | 5.0 | 215 |
| 5.2 | 17.3 | 5.2 | 25.8 | 5.2 | 232 |
| 5.4 | 18.6 | 5.4 | 27.8 | 5.4 | 250 |
| 5.6 | 20.0 | 5.6 | 29.9 | 5.6 | 269 |
| 5.8 | 21.5 | 5.8 | 32.1 | 5.8 | 289 |
| 6.0 | 23.0 | 6.0 | 34.3 | 6.0 | 309 |
| 6.2 | 24.5 | 6.2 | 36.6 | 6.2 | 330 |
| 6.4 | 26.1 | 6.4 | 39.1 | 6.4 | 351 |
| 6.6 | 27.8 | 6.6 | 41.5 | 6.6 | 374 |
| 6.8 | 29.5 | 6.8 | 44.1 | 6.8 | 397 |

| | | | | | | | |
|-----|------|--|-----|------|--|-----|-----|
| 7.0 | 31.3 | | 7.0 | 46.7 | | 7.0 | 420 |
| 7.2 | 33.1 | | 7.2 | 49.4 | | 7.2 | 445 |
| 7.4 | 34.9 | | 7.4 | 52.2 | | 7.4 | 470 |
| 7.6 | 36.9 | | 7.6 | 55.1 | | 7.6 | 496 |
| 7.8 | 38.8 | | 7.8 | 58.0 | | 7.8 | 522 |
| 8.0 | 10.8 | | 8.0 | 61.0 | | 8.0 | 549 |

4. Operation Tools

The following tools will be used: 1) Liquid-level gauge; 2) Screwdriver; 3) Electric driven rotary hammer; 4) Drill; 5) Pipe expander; 6) Torque wrench; 7) Open-end wrench; 8) Pipe cutter; 9) Leak detector; 10) Vacuum pump; 11) Pressure gauge; 12) Universal meter; 13) Hexagon wrench; 14) Tapeline.



GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI 519070

Add: West Jinji Rd, Qianshan Zhuhai, Guangdong, China

Tel: (+86-756)8522218

Fax: (+86-756)8669426

E-mail: gree@gree.com.cn www.gree.com

JF00303775