DAIKIN

SiBE05-722EE

# Service Manual

# Inverter Pair
## Floor / Ceiling Suspended Dual Type
## FLK(X)S-BA Series

**[Applicable Models]**
- **Inverter Pair: Cooling Only**
- **Inverter Pair: Heat Pump**

# Inverter Pair Floor / Ceiling Suspended Dual Type FLK(X)S-BA Series

## ●Cooling Only

### Indoor Unit

FLKS25BAVMB
FLKS35BAVMB

### Outdoor Unit

| | |
|---|---|
| RKS25E2V1B | RKS25G2V1B |
| RKS35E2V1B | RKS35G2V1B |
| | RKS25G2V1B9 |
| | RKS35G2V1B9 |

## ●Heat Pump

### Indoor Unit

| | |
|---|---|
| FLXS25BAVMB | FLXS35BAVMB9 |
| FLXS35BAVMB | |

### Outdoor Unit

| | | | |
|---|---|---|---|
| RXS25E2V1B | RXS25G2V1B | RXS25J2V1B | RXS25L2V1B |
| RXS35E2V1B | RXS35G2V1B | RXS35J2V1B | RXS35L2V1B |
| | RXS25G2V1B9 | RXS25K3V1B | RXS25L3V1B |
| | RXS35G2V1B9 | RXS35K2V1B | RXS35L3V1B |

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# 1. Safety Cautions

Be sure to read the following safety cautions before conducting repair work.
After the repair work is complete, be sure to conduct a test operation to ensure that the equipment operates normally, and explain the cautions for operating the product to the customer.

**Caution Items**

The caution items are classified into ⚠ **Warning** and ⚠ **Caution**. The ⚠ **Warning** items are especially important since death or serious injury can result if they are not followed closely. The ⚠ **Caution** items can also lead to serious accidents under some conditions if they are not followed. Therefore, be sure to observe all the safety caution items described below.

**Pictograms**

△ This symbol indicates an item for which caution must be exercised.
The pictogram shows the item to which attention must be paid.

◯ This symbol indicates a prohibited action.
The prohibited item or action is shown in the illustration or near the symbol.

● This symbol indicates an action that must be taken, or an instruction.
The instruction is shown in the illustration or near the symbol.

## 1.1 Warnings and Cautions Regarding Safety of Workers

| ⚠ Warning | |
|---|---|
| **Do not store equipment in a room with fire sources (e.g., naked flames, gas appliances, electric heaters).** | |
| **Be sure to disconnect the power cable from the socket before disassembling equipment for repair.**<br>Working on equipment that is connected to the power supply may cause an electrical shock.<br>If it is necessary to supply power to the equipment to conduct the repair or inspect the circuits, do not touch any electrically charged sections of the equipment. | |
| **If refrigerant gas is discharged during repair work, do not touch the discharged refrigerant gas.**<br>Refrigerant gas may cause frostbite. | |
| **When disconnecting the suction or discharge pipe of the compressor at the welded section, evacuate the refrigerant gas completely at a well-ventilated place first.**<br>If there is gas remaining inside the compressor, the refrigerant gas or refrigerating machine oil discharges when the pipe is disconnected, and it may cause injury. | |
| **If refrigerant gas leaks during repair work, ventilate the area.**<br>Refrigerant gas may generate toxic gases when it contacts flames. | |
| **Be sure to discharge the capacitor completely before conducting repair work.**<br>The step-up capacitor supplies high-voltage electricity to the electrical components of the outdoor unit.<br>A charged capacitor may cause an electrical shock. | |

| Warning | |
|---|---|
| **Do not turn the air conditioner on or off by plugging in or unplugging the power cable.**<br>Plugging in or unplugging the power cable to operate the equipment may cause an electrical shock or fire. | |
| **Be sure to wear a safety helmet, gloves, and a safety belt when working in a high place (more than 2 m).**<br>Insufficient safety measures may cause a fall. | |
| **In case of R-32 / R-410A refrigerant models, be sure to use pipes, flare nuts and tools intended for the exclusive use with the R-32 / R-410A refrigerant.**<br>The use of materials for R-22 refrigerant models may cause a serious accident, such as a damage of refrigerant cycle or equipment failure. | |
| **Do not mix air or gas other than the specified refrigerant (R-32 / R-410A / R-22) in the refrigerant system.**<br>If air enters the refrigerant system, an excessively high pressure results, causing equipment damage and injury. | |

| Caution | |
|---|---|
| **Do not repair electrical components with wet hands.**<br>Working on the equipment with wet hands may cause an electrical shock. | |
| **Do not clean the air conditioner with water.**<br>Washing the unit with water may cause an electrical shock. | |
| **Be sure to provide an earth / grounding when repairing the equipment in a humid or wet place, to avoid electrical shocks.** | |
| **Be sure to turn off the power switch and unplug the power cable when cleaning the equipment.**<br>The internal fan rotates at a high speed, and may cause injury. | |
| **Be sure to conduct repair work with appropriate tools.**<br>The use of inappropriate tools may cause injury. | |
| **Be sure to check that the refrigerating cycle section has cooled down enough before conducting repair work.**<br>Working on the unit when the refrigerating cycle section is hot may cause burns. | |

| Caution | |
|---|---|
| **Conduct welding work in a well-ventilated place.**<br>Using a welder in an enclosed room may cause oxygen deficiency. | |

## 1.2 Warnings and Cautions Regarding Safety of Users

| Warning | |
|---|---|
| **Do not store the equipment in a room with fire sources (e.g., naked flames, gas appliances, electric heaters).** | |
| **Be sure to use parts listed in the service parts list of the applicable model and appropriate tools to conduct repair work. Never attempt to modify the equipment.**<br>The use of inappropriate parts or tools may cause an electrical shock, excessive heat generation or fire. | |
| **If the power cable and lead wires are scratched or have deteriorated, be sure to replace them.**<br>Damaged cable and wires may cause an electrical shock, excessive heat generation or fire. | |
| **Do not use a joined power cable or extension cable, or share the same power outlet with other electrical appliances, since it may cause an electrical shock, excessive heat generation or fire.** | |
| **Be sure to use an exclusive power circuit for the equipment, and follow the local technical standards related to the electrical equipment, the internal wiring regulations, and the instruction manual for installation when conducting electrical work.**<br>Insufficient power circuit capacity and improper electrical work may cause an electrical shock or fire. | |
| **Be sure to use the specified cable for wiring between the indoor and outdoor units.**<br>Make the connections securely and route the cable properly so that there is no force pulling the cable at the connection terminals.<br>Improper connections may cause excessive heat generation or fire. | |
| **When wiring between the indoor and outdoor units, make sure that the terminal cover does not lift off or dismount because of the cable.**<br>If the cover is not mounted properly, the terminal connection section may cause an electrical shock, excessive heat generation or fire. | |
| **Do not damage or modify the power cable.**<br>Damaged or modified power cables may cause an electrical shock or fire.<br>Placing heavy items on the power cable, or heating or pulling the power cable may damage it. | |

| Warning | |
|---|---|
| **Do not mix air or gas other than the specified refrigerant (R-32 / R-410A / R-22) in the refrigerant system.**<br>If air enters the refrigerant system, an excessively high pressure results, causing equipment damage and injury. | |
| **If the refrigerant gas leaks, be sure to locate the leaking point and repair it before charging the refrigerant. After charging the refrigerant, make sure that there is no leak.**<br>If the leaking point cannot be located and the repair work must be stopped, be sure to pump-down, and close the service valve, to prevent refrigerant gas from leaking into the room. Refrigerant gas itself is harmless, but it may generate toxic gases when it contacts flames, such as those from fan type and other heaters, stoves and ranges. | |
| **When relocating the equipment, make sure that the new installation site has sufficient strength to withstand the weight of the equipment.**<br>If the installation site does not have sufficient strength or the installation work is not conducted securely, the equipment may fall and cause injury. | |
| **Check to make sure that the power cable plug is not dirty or loose, then insert the plug into a power outlet securely.**<br>If the plug is dusty or has a loose connection, it may cause an electrical shock or fire. | |
| **When replacing the coin battery in the remote controller, be sure to dispose of the old battery to prevent children from swallowing it.**<br>If a child swallows the coin battery, see a doctor immediately. | |

| Caution | |
|---|---|
| **Installation of a leakage breaker is necessary in some cases depending on the conditions of the installation site, to prevent electrical shocks.** | |
| **Do not install the equipment in a place where there is a possibility of combustible gas leaks.**<br>If combustible gas leaks and remains around the unit, it may cause a fire. | |
| **Check to see if parts and wires are mounted and connected properly, and if connections at the soldered or crimped terminals are secure.**<br>Improper installation and connections may cause excessive heat generation, fire or an electrical shock. | |
| **If the installation platform or frame has corroded, replace it.**<br>A corroded installation platform or frame may cause the unit to fall, resulting in injury. | |

| Caution | |
|---|---|
| **Check the earth / grounding, and repair it if the equipment is not properly earthed / grounded.**<br>Improper earth / grounding may cause an electrical shock. | |
| **Be sure to measure insulation resistance after the repair, and make sure that the resistance is 1 MΩ or higher.**<br>Faulty insulation may cause an electrical shock. | |
| **Be sure to check the drainage of the indoor unit after the repair.**<br>Faulty drainage may cause water to enter the room and wet the furniture and floor. | |
| **Do not tilt the unit when removing it.**<br>The water inside the unit may spill and wet the furniture and floor. | |

# 2. Icons Used

The following icons are used to attract the attention of the reader to specific information.

| Icon | Type of Information | Description |
|---|---|---|
| Warning | Warning | A **Warning** is used when there is danger of personal injury. |
| Caution | Caution | A **Caution** is used when there is danger that the reader, through incorrect manipulation, may damage equipment, lose data, get an unexpected result or have to restart (part of) a procedure. |
| Note: | Note | A **Note** provides information that is not indispensable, but may nevertheless be valuable to the reader, such as tips and tricks. |
| | Reference | A **Reference** guides the reader to other places in this binder or in this manual, where he/she will find additional information on a specific topic. |

# Part 1
# List of Functions

1. Functions.....2

# 1. Functions

| Category | Functions | FLKS25/35BAVMB RKS25/35E2V1B | FLXS25/35BAVMB RXS25/35E2V1B |
|---|---|---|---|
| Basic Functions | Inverter (with inverter power control) | ● | ● |
| | Operation limit for cooling (°CDB) | –10 ~ 46 ★ | –10 ~ 46 |
| | Operation limit for heating (°CWB) | — | –15 ~ 18 |
| | PAM control | ● | ● |
| | Standby electricity saving | — | — |
| Compressor | Oval scroll compressor | — | — |
| | Swing compressor | ● | ● |
| | Rotary compressor | — | — |
| | Reluctance DC motor | ● | ● |
| Comfortable Airflow | Power-airflow flap | — | — |
| | Power-airflow dual flaps | — | — |
| | Power-airflow diffuser | — | — |
| | Wide-angle louvers | — | — |
| | Auto-swing (up and down) | ● | ● |
| | Auto-swing (right and left) | — | — |
| | 3-D airflow | — | — |
| Comfort Control | Auto fan speed | ● | ● |
| | Indoor unit quiet operation | ● | ● |
| | NIGHT QUIET mode (automatic) | — | — |
| | OUTDOOR UNIT QUIET operation (manual) | ● | ● |
| | INTELLIGENT EYE operation | — | — |
| | Quick warming function (preheating control) | — | ● |
| | Hot-start function | — | ● |
| | Automatic defrosting | — | ● |
| Operation | Automatic operation | — | ● |
| | Program dry operation | ● | ● |
| | Fan only | ● | ● |
| Lifestyle Convenience | New POWERFUL operation (non-inverter) | — | — |
| | Inverter POWERFUL operation | ● | ● |
| | Priority-room setting | — | — |
| | COOL / HEAT mode lock | — | — |
| | HOME LEAVE operation | ● | ● |
| | ECONO operation | — | — |
| | Indoor unit **ON/OFF** button | ● | ● |
| | Signal receiving sign | ● | ● |
| | R/C with back light | — | — |
| | Temperature display | — | — |

| Category | Functions | FLKS25/35BAVMB RKS25/35E2V1B | FLXS25/35BAVMB RXS25/35E2V1B |
|---|---|---|---|
| Health & Cleanliness | Air-purifying filter | ● | ● |
| | Photocatalytic deodorizing filter | ● | ● |
| | Air-purifying filter with photocatalytic deodorizing function (option) | ● | ● |
| | Titanium apatite photocatalytic air-purifying filter | — | — |
| | Air filter (prefilter) | ● | ● |
| | Wipe-clean flat panel | — | — |
| | Washable grille | — | — |
| | MOLD PROOF operation | — | — |
| | Good-sleep cooling operation | — | — |
| Timer | WEEKLY TIMER operation | — | — |
| | 24-hour ON/OFF TIMER | ● | ● |
| | NIGHT SET mode | ● | ● |
| Worry Free (Reliability & Durability) | Auto-restart (after power failure) | ● | ● |
| | Self-diagnosis (digital, LED) display | ● | ● |
| | Wiring error check function | — | — |
| | Anti-corrosion treatment of outdoor heat exchanger | ● | ● |
| Flexibility | Multi-split/split type compatible indoor unit | ● | ● |
| | Flexible power supply correspondence | — | — |
| | Chargeless | 10 m | 10 m |
| | Either side drain (right or left) | — | — |
| | Power selection | — | — |
| Remote Control | 5-room centralized controller (option) | ● | ● |
| | Remote control adaptor (normal open pulse contact) (option) | ● | ● |
| | Remote control adaptor (normal open contact) (option) | ● | ● |
| | DIII-NET compatible (adaptor) (option) | ● | ● |
| Remote Controller | Wireless | ● | ● |
| | Wired (option) | — | — |

**Note:** ● : Available
— : Not available

★ : Lower limit can be extended by cutting jumper. (Facility use only) Refer to page 120 for details.

| Category | Functions | FLKS25/35BAVMB RKS25/35G2V1B | FLXS25/35BAVMB RXS25/35G2V1B | Category | Functions | FLKS25/35BAVMB RKS25/35G2V1B | FLXS25/35BAVMB RXS25/35G2V1B |
|---|---|---|---|---|---|---|---|
| Basic Functions | Inverter (with inverter power control) | ● | ● | Health & Cleanliness | Air-purifying filter | ● | ● |
| | Operation limit for cooling (°CDB) | –10 ~ 46 ★ | –10 ~ 46 ★ | | Photocatalytic deodorizing filter | ● | ● |
| | Operation limit for heating (°CWB) | — | –15 ~ 18 | | Air-purifying filter with photocatalytic deodorizing function (option) | ● | ● |
| | PAM control | ● | ● | | Titanium apatite photocatalytic air-purifying filter | — | — |
| | Standby electricity saving | — | — | | | | |
| Compressor | Oval scroll compressor | — | — | | Air filter (prefilter) | ● | ● |
| | Swing compressor | ● | ● | | Wipe-clean flat panel | — | — |
| | Rotary compressor | — | — | | Washable grille | — | — |
| | Reluctance DC motor | ● | ● | | MOLD PROOF operation | — | — |
| Comfortable Airflow | Power-airflow flap | — | — | | Good-sleep cooling operation | — | — |
| | Power-airflow dual flaps | — | — | Timer | WEEKLY TIMER operation | — | — |
| | | | | | 24-hour ON/OFF TIMER | ● | ● |
| | Power-airflow diffuser | — | — | | NIGHT SET mode | ● | ● |
| | Wide-angle louvers | — | — | Worry Free (Reliability & Durability) | Auto-restart (after power failure) | ● | ● |
| | Auto-swing (up and down) | ● | ● | | Self-diagnosis (digital, LED) display | ● | ● |
| | Auto-swing (right and left) | — | — | | Wiring error check function | — | — |
| | 3-D airflow | — | — | | Anti-corrosion treatment of outdoor heat exchanger | ● | ● |
| Comfort Control | Auto fan speed | ● | ● | | | | |
| | Indoor unit quiet operation | ● | ● | Flexibility | Multi-split/split type compatible indoor unit | ● | ● |
| | NIGHT QUIET mode (automatic) | — | — | | | | |
| | OUTDOOR UNIT QUIET operation (manual) | ● | ● | | Flexible power supply correspondence | — | — |
| | INTELLIGENT EYE operation | — | — | | Chargeless | 10 m | 10 m |
| | Quick warming function (preheating control) | — | ● | | Either side drain (right or left) | — | — |
| | Hot-start function | — | ● | | Power selection | — | — |
| | Automatic defrosting | — | ● | Remote Control | 5-room centralized controller (option) | ● | ● |
| Operation | Automatic operation | — | ● | | Remote control adaptor (normal open pulse contact) (option) | ● | ● |
| | Program dry operation | ● | ● | | | | |
| | Fan only | ● | ● | | Remote control adaptor (normal open contact) (option) | ● | ● |
| Lifestyle Convenience | New POWERFUL operation (non-inverter) | — | — | | | | |
| | Inverter POWERFUL operation | ● | ● | | DIII-NET compatible (adaptor) (option) | ● | ● |
| | Priority-room setting | — | — | Remote Controller | Wireless | ● | ● |
| | COOL / HEAT mode lock | — | — | | Wired (option) | — | — |
| | HOME LEAVE operation | ● | ● | | | | |
| | ECONO operation | — | — | | | | |
| | Indoor unit **ON/OFF** button | ● | ● | | | | |
| | Signal receiving sign | ● | ● | | | | |
| | R/C with back light | — | — | | | | |
| | Temperature display | — | — | | | | |

**Note:** ● : Available
— : Not available

★ : Lower limit can be extended by cutting jumper. (Facility use only) Refer to page 120 for details.

| Category | Functions | FLKS25/35BAVMB RKS25/35G2V1B9 | FLXS25/35BAVMB RXS25/35G2V1B9 | Category | Functions | FLKS25/35BAVMB RKS25/35G2V1B9 | FLXS25/35BAVMB RXS25/35G2V1B9 |
|---|---|---|---|---|---|---|---|
| Basic Functions | Inverter (with inverter power control) | ● | ● | Health & Cleanliness | Air-purifying filter | ● | ● |
| | Operation limit for cooling (°CDB) | –10 ~ 46 ★ | –10 ~ 46 ★ | | Photocatalytic deodorizing filter | ● | ● |
| | Operation limit for heating (°CWB) | — | –15 ~ 18 | | Air-purifying filter with photocatalytic deodorizing function (option) | ● | ● |
| | PAM control | ● | ● | | Titanium apatite photocatalytic air-purifying filter | — | — |
| | Standby electricity saving | — | — | | | | |
| Compressor | Oval scroll compressor | — | — | | Air filter (prefilter) | ● | ● |
| | Swing compressor | ● | ● | | Wipe-clean flat panel | — | — |
| | Rotary compressor | — | — | | Washable grille | — | — |
| | Reluctance DC motor | ● | ● | | MOLD PROOF operation | — | — |
| Comfortable Airflow | Power-airflow flap | — | — | | Good-sleep cooling operation | — | — |
| | Power-airflow dual flaps | — | — | Timer | WEEKLY TIMER operation | — | — |
| | | | | | 24-hour ON/OFF TIMER | ● | ● |
| | Power-airflow diffuser | — | — | | NIGHT SET mode | ● | ● |
| | Wide-angle louvers | — | — | Worry Free (Reliability & Durability) | Auto-restart (after power failure) | ● | ● |
| | Auto-swing (up and down) | ● | ● | | Self-diagnosis (digital, LED) display | ● | ● |
| | Auto-swing (right and left) | — | — | | Wiring error check function | — | — |
| | 3-D airflow | — | — | | Anti-corrosion treatment of outdoor heat exchanger | ● | ● |
| Comfort Control | Auto fan speed | ● | ● | | | | |
| | Indoor unit quiet operation | ● | ● | Flexibility | Multi-split/split type compatible indoor unit | ● | ● |
| | NIGHT QUIET mode (automatic) | — | — | | | | |
| | OUTDOOR UNIT QUIET operation (manual) | ● | ● | | Flexible power supply correspondence | — | — |
| | INTELLIGENT EYE operation | — | — | | Chargeless | 10 m | 10 m |
| | Quick warming function (preheating control) | — | ● | | Either side drain (right or left) | — | — |
| | Hot-start function | — | ● | | Power selection | — | — |
| | Automatic defrosting | — | ● | Remote Control | 5-room centralized controller (option) | ● | ● |
| Operation | Automatic operation | — | ● | | Remote control adaptor (normal open pulse contact) (option) | ● | ● |
| | Program dry operation | ● | ● | | | | |
| | Fan only | ● | ● | | Remote control adaptor (normal open contact) (option) | ● | ● |
| Lifestyle Convenience | New POWERFUL operation (non-inverter) | — | — | | | | |
| | Inverter POWERFUL operation | ● | ● | | DIII-NET compatible (adaptor) (option) | ● | ● |
| | Priority-room setting | — | — | Remote Controller | Wireless | ● | ● |
| | COOL / HEAT mode lock | — | — | | Wired (option) | — | — |
| | HOME LEAVE operation | ● | ● | | | | |
| | ECONO operation | — | — | | | | |
| | Indoor unit **ON/OFF** button | ● | ● | | | | |
| | Signal receiving sign | ● | ● | | | | |
| | R/C with back light | — | — | | | | |
| | Temperature display | — | — | | | | |

**Note:** ● : Available
— : Not available

★ : Lower limit can be extended by cutting jumper. (Facility use only) Refer to page 120 for details.

| Category | Functions | FLXS25/35BAVMB RXS25/35J2V1B | FLXS25/35BAVMB RXS25K3V1B RXS35K2V1B |
|---|---|---|---|
| Basic Functions | Inverter (with inverter power control) | ● | ● |
| | Operation limit for cooling (°CDB) | –10 ~ 46 ★ | –10 ~ 46 ★ |
| | Operation limit for heating (°CWB) | –15 ~ 18 | –15 ~ 18 |
| | PAM control | ● | ● |
| | Standby electricity saving | — | — |
| Compressor | Oval scroll compressor | — | — |
| | Swing compressor | ● | ● |
| | Rotary compressor | — | — |
| | Reluctance DC motor | ● | ● |
| Comfortable Airflow | Power-airflow flap | — | — |
| | Power-airflow dual flaps | — | — |
| | Power-airflow diffuser | — | — |
| | Wide-angle louvers | — | — |
| | Auto-swing (up and down) | ● | ● |
| | Auto-swing (right and left) | — | — |
| | 3-D airflow | — | — |
| Comfort Control | Auto fan speed | ● | ● |
| | Indoor unit quiet operation | ● | ● |
| | NIGHT QUIET mode (automatic) | — | — |
| | OUTDOOR UNIT QUIET operation (manual) | ● | ● |
| | INTELLIGENT EYE operation | — | — |
| | Quick warming function (preheating control) | ● | ● |
| | Hot-start function | ● | ● |
| | Automatic defrosting | ● | ● |
| Operation | Automatic operation | ● | ● |
| | Program dry operation | ● | ● |
| | Fan only | ● | ● |
| Lifestyle Convenience | New POWERFUL operation (non-inverter) | — | — |
| | Inverter POWERFUL operation | ● | ● |
| | Priority-room setting | — | — |
| | COOL / HEAT mode lock | — | — |
| | HOME LEAVE operation | ● | ● |
| | ECONO operation | — | — |
| | Indoor unit **ON/OFF** button | ● | ● |
| | Signal receiving sign | ● | ● |
| | R/C with back light | — | — |
| | Temperature display | — | — |

| Category | Functions | FLXS25/35BAVMB RXS25/35J2V1B | FLXS25/35BAVMB RXS25K3V1B RXS35K2V1B |
|---|---|---|---|
| Health & Cleanliness | Air-purifying filter | ● | ● |
| | Photocatalytic deodorizing filter | ● | ● |
| | Air-purifying filter with photocatalytic deodorizing function (option) | ● | ● |
| | Titanium apatite photocatalytic air-purifying filter | — | — |
| | Air filter (prefilter) | ● | ● |
| | Wipe-clean flat panel | — | — |
| | Washable grille | — | — |
| | MOLD PROOF operation | — | — |
| | Good-sleep cooling operation | — | — |
| Timer | WEEKLY TIMER operation | — | — |
| | 24-hour ON/OFF TIMER | ● | ● |
| | NIGHT SET mode | ● | ● |
| Worry Free (Reliability & Durability) | Auto-restart (after power failure) | ● | ● |
| | Self-diagnosis (digital, LED) display | ● | ● |
| | Wiring error check function | — | — |
| | Anti-corrosion treatment of outdoor heat exchanger | ● | ● |
| Flexibility | Multi-split/split type compatible indoor unit | ● | ● |
| | Flexible power supply correspondence | — | — |
| | Chargeless | 10 m | 10 m |
| | Either side drain (right or left) | — | — |
| | Power selection | — | — |
| Remote Control | 5-room centralized controller (option) | ● | ● |
| | Remote control adaptor (normal open pulse contact) (option) | ● | ● |
| | Remote control adaptor (normal open contact) (option) | ● | ● |
| | DIII-NET compatible (adaptor) (option) | ● | ● |
| Remote Controller | Wireless | ● | ● |
| | Wired (option) | — | — |

**Note:** ● : Available
— : Not available

★ : Lower limit can be extended by cutting jumper. (Facility use only) Refer to page 120 for details.

| Category | Functions | FLXS25BAVMB<br>FLXS35BAVMB9<br>RXS25/35L2V1B | FLXS25BAVMB<br>FLXS35BAVMB9<br>RXS25/35L3V1B |
|---|---|---|---|
| Basic Functions | Inverter (with inverter power control) | ● | ● |
| | Operation limit for cooling (°CDB) | –10 ~ 46 ★ | –10 ~ 46 ★ |
| | Operation limit for heating (°CWB) | –15 ~ 18 | –15 ~ 18 |
| | PAM control | ● | ● |
| | Standby electricity saving | — | — |
| Compressor | Oval scroll compressor | — | — |
| | Swing compressor | ● | ● |
| | Rotary compressor | — | — |
| | Reluctance DC motor | ● | ● |
| Comfortable Airflow | Power-airflow flap | — | — |
| | Power-airflow dual flaps | — | — |
| | Power-airflow diffuser | — | — |
| | Wide-angle louvers | — | — |
| | Auto-swing (up and down) | ● | ● |
| | Auto-swing (right and left) | — | — |
| | 3-D airflow | — | — |
| Comfort Control | Auto fan speed | ● | ● |
| | Indoor unit quiet operation | ● | ● |
| | NIGHT QUIET mode (automatic) | — | — |
| | OUTDOOR UNIT QUIET operation (manual) | ● | ● |
| | INTELLIGENT EYE operation | — | — |
| | Quick warming function (preheating control) | ● | ● |
| | Hot-start function | ● | ● |
| | Automatic defrosting | ● | ● |
| Operation | Automatic operation | ● | ● |
| | Program dry operation | ● | ● |
| | Fan only | ● | ● |
| Lifestyle Convenience | New POWERFUL operation (non-inverter) | — | — |
| | Inverter POWERFUL operation | ● | ● |
| | Priority-room setting | — | — |
| | COOL / HEAT mode lock | — | — |
| | HOME LEAVE operation | ● | ● |
| | ECONO operation | — | — |
| | Indoor unit **ON/OFF** button | ● | ● |
| | Signal receiving sign | ● | ● |
| | R/C with back light | — | — |
| | Temperature display | — | — |

| Category | Functions | FLXS25BAVMB<br>FLXS35BAVMB9<br>RXS25/35L2V1B | FLXS25BAVMB<br>FLXS35BAVMB9<br>RXS25/35L3V1B |
|---|---|---|---|
| Health & Cleanliness | Air-purifying filter | ● | ● |
| | Photocatalytic deodorizing filter | ● | ● |
| | Air-purifying filter with photocatalytic deodorizing function (option) | ● | ● |
| | Titanium apatite photocatalytic air-purifying filter | — | — |
| | Air filter (prefilter) | ● | ● |
| | Wipe-clean flat panel | — | — |
| | Washable grille | — | — |
| | MOLD PROOF operation | — | — |
| | Good-sleep cooling operation | — | — |
| Timer | WEEKLY TIMER operation | — | — |
| | 24-hour ON/OFF TIMER | ● | ● |
| | NIGHT SET mode | ● | ● |
| Worry Free (Reliability & Durability) | Auto-restart (after power failure) | ● | ● |
| | Self-diagnosis (digital, LED) display | ● | ● |
| | Wiring error check function | — | — |
| | Anti-corrosion treatment of outdoor heat exchanger | ● | ● |
| Flexibility | Multi-split/split type compatible indoor unit | ● | ● |
| | Flexible power supply correspondence | — | — |
| | Chargeless | 10 m | 10 m |
| | Either side drain (right or left) | — | — |
| | Power selection | — | — |
| Remote Control | 5-room centralized controller (option) | ● | ● |
| | Remote control adaptor (normal open pulse contact) (option) | ● | ● |
| | Remote control adaptor (normal open contact) (option) | ● | ● |
| | DIII-NET compatible (adaptor) (option) | ● | ● |
| Remote Controller | Wireless | ● | ● |
| | Wired (option) | — | — |

**Note:** ● : Available
— : Not available

★ : Lower limit can be extended by cutting jumper. (Facility use only)
Refer to page 120 for details.

# Part 2
# Specifications

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# 1. Specifications

## 1.1 Cooling Only

**50 Hz, 220 - 230 - 240 V**

| Model | Indoor Unit | | FLKS25BAVMB | FLKS35BAVMB |
|---|---|---|---|---|
| | Outdoor Unit | | RKS25E2V1B | RKS35E2V1B |
| Capacity Rated (Min. ~ Max.) | | kW | 2.5 (1.2 ~ 3.0) | 3.5 (1.2 ~ 3.8) |
| | | Btu/h | 8,500 (4,100 ~ 10,200) | 11,900 (4,100 ~ 13,000) |
| | | kcal/h | 2,150 (1,030 ~ 2,580) | 3,010 (1,030 ~ 3,270) |
| Moisture Removal | | L/h | 1.2 | 1.9 |
| Running Current (Rated) | | A | 3.7 - 3.6 - 3.4 | 5.3 - 5.1 - 4.9 |
| Power Consumption Rated (Min. ~ Max.) | | W | 650 (300 ~ 860) | 1,130 (300 ~ 1,260) |
| Power Factor | | % | 79.9 - 78.5 - 79.7 | 96.9 - 96.3 - 96.1 |
| COP Rated (Min. ~ Max.) | | W/W | 3.85 (4.00 ~ 3.49) | 3.10 (4.00 ~ 3.02) |
| Piping Connections | Liquid | mm | ϕ 6.4 | ϕ 6.4 |
| | Gas | mm | ϕ 9.5 | ϕ 9.5 |
| | Drain | mm | ϕ 18.0 | ϕ 18.0 |
| Heat Insulation | | | Both Liquid and Gas Pipes | Both Liquid and Gas Pipes |
| Max. Interunit Piping Length | | m | 20 | 20 |
| Max. Interunit Height Difference | | m | 15 | 15 |
| Chargeless | | m | 10 | 10 |
| Amount of Additional Charge of Refrigerant | | g/m | 20 | 20 |
| **Indoor Unit** | | | **FLKS25BAVMB** | **FLKS35BAVMB** |
| Front Panel Color | | | Almond White | Almond White |
| Airflow Rate | H | m³/min (cfm) | 7.6 (268) | 8.6 (304) |
| | M | | 6.8 (240) | 7.6 (268) |
| | L | | 6.0 (212) | 6.6 (233) |
| | SL | | 5.2 (184) | 5.6 (198) |
| Fan | Type | | Sirocco Fan | Sirocco Fan |
| | Motor Output | W | 34 | 34 |
| | Speed | Steps | 5 Steps, Quiet, Auto | 5 Steps, Quiet, Auto |
| Air Direction Control | | | Right, Left, Horizontal, Downward | Right, Left, Horizontal, Downward |
| Air Filter | | | Removable / Washable / Mildew Proof | Removable / Washable / Mildew Proof |
| Running Current (Rated) | | A | 0.33 - 0.32 - 0.31 | 0.38 - 0.36 - 0.35 |
| Power Consumption (Rated) | | W | 70 - 70 - 70 | 78 - 78 - 78 |
| Power Factor | | % | 96.4 - 95.1 - 94.1 | 93.3 - 94.2 - 92.9 |
| Temperature Control | | | Microcomputer Control | Microcomputer Control |
| Dimensions (H × W × D) | | mm | 490 × 1,050 × 200 | 490 × 1,050 × 200 |
| Packaged Dimensions (H × W × D) | | mm | 280 × 1,100 × 566 | 280 × 1,100 × 566 |
| Weight (Mass) | | kg | 16 | 16 |
| Gross Weight (Gross Mass) | | kg | 22 | 22 |
| Sound Pressure Level | H / M / L / SL | dB(A) | 37 / 34 / 31 / 28 | 38 / 35 / 32 / 29 |
| Sound Power Level | | dB | 53 | 54 |
| **Outdoor Unit** | | | **RKS25E2V1B** | **RKS35E2V1B** |
| Casing Color | | | Ivory White | Ivory White |
| Compressor | Type | | Hermetically Sealed Swing Type | Hermetically Sealed Swing Type |
| | Model | | 1YC23NXD | 1YC23NXD |
| | Motor Output | W | 600 | 600 |
| Refrigerant Oil | Type | | FVC50K | FVC50K |
| | Charge | L | 0.375 | 0.375 |
| Refrigerant | Type | | R-410A | R-410A |
| | Charge | kg | 1.0 | 1.0 |
| Airflow Rate | H | m³/min (cfm) | 33.5 (1,183) | 33.5 (1,183) |
| | L | | 23.4 (826) | 23.4 (826) |
| Fan | Type | | Propeller | Propeller |
| | Motor Output | W | 23 | 23 |
| Running Current (Rated) | | A | 3.37 - 3.28 - 3.09 | 4.92 - 4.74 - 4.55 |
| Power Consumption (Rated) | | W | 580 - 580 - 580 | 1,052 - 1,052 - 1,052 |
| Power Factor | | % | 78.2 - 76.9 - 78.2 | 97.2 - 96.5 - 96.3 |
| Starting Current | | A | 3.7 | 5.3 |
| Dimensions (H × W × D) | | mm | 550 × 765 × 285 | 550 × 765 × 285 |
| Packaged Dimensions (H × W × D) | | mm | 617 × 882 × 363 | 617 × 882 × 363 |
| Weight (Mass) | | kg | 32 | 32 |
| Gross Weight (Gross Mass) | | kg | 38 | 38 |
| Sound Pressure Level | H / L | dB(A) | 46 / 43 | 47 / 44 |
| Sound Power Level | H | dB | 61 | 62 |
| Drawing No. | | | 3D055004A | 3D055005A |

**Note:** ■ The data are based on the conditions shown in the table below.

| Cooling | Piping Length |
|---|---|
| Indoor ; 27°CDB / 19°CWB<br>Outdoor ; 35°CDB / 24°CWB | 7.5 m |

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = m³/min × 35.3 |

## 50 Hz, 220 - 230 - 240 V

| Model | Indoor Unit | | FLKS25BAVMB | FLKS35BAVMB |
|---|---|---|---|---|
| | Outdoor Unit | | RKS25G2V1B | RKS35G2V1B |
| Capacity Rated (Min. ~ Max.) | | kW | 2.5 (1.2 ~ 3.0) | 3.5 (1.2 ~ 3.8) |
| | | Btu/h | 8,500 (4,100 ~ 10,200) | 11,900 (4,100 ~ 13,000) |
| | | kcal/h | 2,150 (1,030 ~ 2,580) | 3,010 (1,030 ~ 3,270) |
| Moisture Removal | | L/h | 1.2 | 1.9 |
| Running Current (Rated) | | A | 3.7 - 3.6 - 3.4 | 5.3 - 5.1 - 4.9 |
| Power Consumption Rated (Min. ~ Max.) | | W | 650 (300 ~ 860) | 1,130 (300 ~ 1,260) |
| Power Factor | | % | 79.9 - 78.5 - 79.7 | 96.9 - 96.3 - 96.1 |
| COP Rated (Min. ~ Max.) | | W/W | 3.85 (4.00 ~ 3.49) | 3.10 (4.00 ~ 3.02) |
| Piping Connections | Liquid | mm | ϕ 6.4 | ϕ 6.4 |
| | Gas | mm | ϕ 9.5 | ϕ 9.5 |
| | Drain | mm | ϕ 18.0 | ϕ 18.0 |
| Heat Insulation | | | Both Liquid and Gas Pipes | Both Liquid and Gas Pipes |
| Max. Interunit Piping Length | | m | 20 | 20 |
| Max. Interunit Height Difference | | m | 15 | 15 |
| Chargeless | | m | 10 | 10 |
| Amount of Additional Charge of Refrigerant | | g/m | 20 | 20 |
| **Indoor Unit** | | | **FLKS25BAVMB** | **FLKS35BAVMB** |
| Front Panel Color | | | Almond White | Almond White |
| Airflow Rate | H | m³/min (cfm) | 7.6 (268) | 8.6 (304) |
| | M | | 6.8 (240) | 7.6 (268) |
| | L | | 6.0 (212) | 6.6 (233) |
| | SL | | 5.2 (184) | 5.6 (198) |
| Fan | Type | | Sirocco Fan | Sirocco Fan |
| | Motor Output | W | 34 | 34 |
| | Speed | Steps | 5 Steps, Quiet, Auto | 5 Steps, Quiet, Auto |
| Air Direction Control | | | Right, Left, Horizontal, Downward | Right, Left, Horizontal, Downward |
| Air Filter | | | Removable / Washable / Mildew Proof | Removable / Washable / Mildew Proof |
| Running Current (Rated) | | A | 0.33 - 0.32 - 0.31 | 0.38 - 0.36 - 0.35 |
| Power Consumption (Rated) | | W | 70 - 70 - 70 | 78 - 78 - 78 |
| Power Factor | | % | 96.4 - 95.1 - 94.1 | 93.3 - 94.2 - 92.9 |
| Temperature Control | | | Microcomputer Control | Microcomputer Control |
| Dimensions (H × W × D) | | mm | 490 × 1,050 × 200 | 490 × 1,050 × 200 |
| Packaged Dimensions (H × W × D) | | mm | 280 × 1,100 × 566 | 280 × 1,100 × 566 |
| Weight (Mass) | | kg | 16 | 16 |
| Gross Weight (Gross Mass) | | kg | 22 | 22 |
| Sound Pressure Level | H / M / L / SL | dB(A) | 37 / 34 / 31 / 28 | 38 / 35 / 32 / 29 |
| Sound Power Level | | dB | 53 | 54 |
| **Outdoor Unit** | | | **RKS25G2V1B** | **RKS35G2V1B** |
| Casing Color | | | Ivory White | Ivory White |
| Compressor | Type | | Hermetically Sealed Swing Type | Hermetically Sealed Swing Type |
| | Model | | 1YC23AFXD | 1YC23AFXD |
| | Motor Output | W | 600 | 600 |
| Refrigerant Oil | Type | | FVC50K | FVC50K |
| | Charge | L | 0.375 | 0.375 |
| Refrigerant | Type | | R-410A | R-410A |
| | Charge | kg | 1.0 | 1.2 |
| Airflow Rate | H | m³/min (cfm) | 33.5 (1,183) | 36.0 (1,272) |
| | SL | | 31.4 (1,109) | 31.4 (1,109) |
| Fan | Type | | Propeller | Propeller |
| | Motor Output | W | 50 | 50 |
| Running Current (Rated) | | A | 3.37 - 3.28 - 3.09 | 4.92 - 4.74 - 4.55 |
| Power Consumption (Rated) | | W | 580 - 580 - 580 | 1,052 - 1,052 - 1,052 |
| Power Factor | | % | 78.2 - 76.9 - 78.2 | 97.2 - 96.5 - 96.3 |
| Starting Current | | A | 3.2 | 4.4 |
| Dimensions (H × W × D) | | mm | 550 × 765 × 285 | 550 × 765 × 285 |
| Packaged Dimensions (H × W × D) | | mm | 612 × 906 × 364 | 612 × 906 × 364 |
| Weight (Mass) | | kg | 34 | 34 |
| Gross Weight (Gross Mass) | | kg | 40 | 40 |
| Sound Pressure Level | H / SL | dB(A) | 46 / 43 | 48 / 44 |
| Sound Power Level | H | dB | 61 | 63 |
| Drawing No. | | | 3D059861 | 3D059862 |

**Note:** ■ The data are based on the conditions shown in the table below.

| Cooling | Piping Length |
|---|---|
| Indoor ; 27°CDB / 19°CWB<br>Outdoor ; 35°CDB / 24°CWB | 5 m |

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = m³/min × 35.3 |

## 50 Hz, 220 - 230 - 240 V

| Model | Indoor Unit | | FLKS25BAVMB | FLKS35BAVMB |
|---|---|---|---|---|
| | Outdoor Unit | | RKS25G2V1B9 | RKS35G2V1B9 |
| Capacity Rated (Min. ~ Max.) | | kW | 2.5 (1.2 ~ 3.0) | 3.5 (1.2 ~ 3.8) |
| | | Btu/h | 8,500 (4,100 ~ 10,200) | 11,900 (4,100 ~ 13,000) |
| | | kcal/h | 2,150 (1,030 ~ 2,580) | 3,010 (1,030 ~ 3,270) |
| Moisture Removal | | L/h | 1.2 | 1.9 |
| Running Current (Rated) | | A | 3.7 - 3.6 - 3.4 | 5.3 - 5.1 - 4.9 |
| Power Consumption Rated (Min. ~ Max.) | | W | 650 (300 ~ 860) | 1,130 (300 ~ 1,260) |
| Power Factor | | % | 79.9 - 78.5 - 79.7 | 96.9 - 96.3 - 96.1 |
| COP Rated (Min. ~ Max.) | | W/W | 3.85 (4.00 ~ 3.49) | 3.10 (4.00 ~ 3.02) |
| Piping Connections | Liquid | mm | ϕ 6.4 | ϕ 6.4 |
| | Gas | mm | ϕ 9.5 | ϕ 9.5 |
| | Drain | mm | ϕ 18.0 | ϕ 18.0 |
| Heat Insulation | | | Both Liquid and Gas Pipes | Both Liquid and Gas Pipes |
| Max. Interunit Piping Length | | m | 20 | 20 |
| Max. Interunit Height Difference | | m | 15 | 15 |
| Chargeless | | m | 10 | 10 |
| Amount of Additional Charge of Refrigerant | | g/m | 20 | 20 |
| **Indoor Unit** | | | **FLKS25BAVMB** | **FLKS35BAVMB** |
| Front Panel Color | | | Almond White | Almond White |
| Airflow Rate | H | m³/min (cfm) | 7.6 (268) | 8.6 (304) |
| | M | | 6.8 (240) | 7.6 (268) |
| | L | | 6.0 (212) | 6.6 (233) |
| | SL | | 5.2 (184) | 5.6 (198) |
| Fan | Type | | Sirocco Fan | Sirocco Fan |
| | Motor Output | W | 34 | 34 |
| | Speed | Steps | 5 Steps, Quiet, Auto | 5 Steps, Quiet, Auto |
| Air Direction Control | | | Right, Left, Horizontal, Downward | Right, Left, Horizontal, Downward |
| Air Filter | | | Removable / Washable / Mildew Proof | Removable / Washable / Mildew Proof |
| Running Current (Rated) | | A | 0.33 - 0.32 - 0.31 | 0.38 - 0.36 - 0.35 |
| Power Consumption (Rated) | | W | 70 - 70 - 70 | 78 - 78 - 78 |
| Power Factor | | % | 96.4 - 95.1 - 94.1 | 93.3 - 94.2 - 92.9 |
| Temperature Control | | | Microcomputer Control | Microcomputer Control |
| Dimensions (H × W × D) | | mm | 490 × 1,050 × 200 | 490 × 1,050 × 200 |
| Packaged Dimensions (H × W × D) | | mm | 280 × 1,100 × 566 | 280 × 1,100 × 566 |
| Weight (Mass) | | kg | 16 | 16 |
| Gross Weight (Gross Mass) | | kg | 22 | 22 |
| Sound Pressure Level | H / M / L / SL | dB(A) | 37 / 34 / 31 / 28 | 38 / 35 / 32 / 29 |
| Sound Power Level | | dB | 53 | 54 |
| **Outdoor Unit** | | | **RKS25G2V1B9** | **RKS35G2V1B9** |
| Casing Color | | | Ivory White | Ivory White |
| Compressor | Type | | Hermetically Sealed Swing Type | Hermetically Sealed Swing Type |
| | Model | | 1YC23AEXD | 1YC23AEXD |
| | Motor Output | W | 600 | 600 |
| Refrigerant Oil | Type | | FVC50K | FVC50K |
| | Charge | L | 0.375 | 0.375 |
| Refrigerant | Type | | R-410A | R-410A |
| | Charge | kg | 1.0 | 1.2 |
| Airflow Rate | H | m³/min (cfm) | 33.5 (1,183) | 36.0 (1,271) |
| | SL | | 30.1 (1,063) | 30.1 (1,063) |
| Fan | Type | | Propeller | Propeller |
| | Motor Output | W | 23 | 23 |
| Running Current (Rated) | | A | 3.37 - 3.28 - 3.09 | 4.92 - 4.74 - 4.55 |
| Power Consumption (Rated) | | W | 580 - 580 - 580 | 1,052 - 1,052 - 1,052 |
| Power Factor | | % | 78.2 - 76.9 - 78.2 | 97.2 - 96.5 - 96.3 |
| Starting Current | | A | 3.7 | 5.3 |
| Dimensions (H × W × D) | | mm | 550 × 765 × 285 | 550 × 765 × 285 |
| Packaged Dimensions (H × W × D) | | mm | 612 × 906 × 364 | 612 × 906 × 364 |
| Weight (Mass) | | kg | 34 | 34 |
| Gross Weight (Gross Mass) | | kg | 38 | 38 |
| Sound Pressure Level | H / SL | dB(A) | 46 / 43 | 48 / 44 |
| Sound Power Level | H | dB | 61 | 63 |
| Drawing No. | | | 3D065726A | 3D065725A |

**Note:** ■ The data are based on the conditions shown in the table below.

| Cooling | Piping Length |
|---|---|
| Indoor ; 27°CDB / 19°CWB<br>Outdoor ; 35°CDB / 24°CWB | 5 m |

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = m³/min × 35.3 |

# 1.2 Heat Pump

**50 Hz, 220 - 230 - 240 V**

| Model | Indoor Unit | | FLXS25BAVMB | | FLXS35BAVMB | |
|---|---|---|---|---|---|---|
| | Outdoor Unit | | RXS25E2V1B | | RXS35E2V1B | |
| | | | Cooling | Heating | Cooling | Heating |
| Capacity Rated (Min. ~ Max.) | | kW | 2.5 (1.2 ~ 3.0) | 3.4 (1.2 ~ 4.5) | 3.5 (1.2 ~ 3.8) | 4.0 (1.2 ~ 5.0) |
| | | Btu/h | 8,500 (4,100 ~ 10,200) | 11,600 (4,100 ~ 15,400) | 11,900 (4,100 ~ 13,000) | 13,600 (4,100 ~ 17,100) |
| | | kcal/h | 2,150 (1,030 ~ 2,580) | 2,920 (1,030 ~ 3,870) | 3,010 (1,030 ~ 3,270) | 3,440 (1,030 ~ 4,300) |
| Moisture Removal | | L/h | 1.2 | — | 1.9 | — |
| Running Current (Rated) | | A | 3.7 - 3.6 - 3.4 | 4.7 - 4.5 - 4.3 | 5.3 - 5.1 - 4.9 | 5.8 - 5.5 - 5.3 |
| Power Consumption Rated (Min. ~ Max.) | | W | 650 (300 ~ 860) | 980 (290 ~ 1,490) | 1,130 (300 ~ 1,260) | 1,230 (290 ~ 1,850) |
| Power Factor | | % | 79.9 - 78.5 - 79.7 | 94.8 - 94.7 - 95.0 | 96.9 - 96.3 - 96.1 | 96.4 - 97.2 - 96.7 |
| COP Rated (Min. ~ Max.) | | W/W | 3.85 (4.00 ~ 3.49) | 3.47 (4.14 ~ 3.02) | 3.10 (4.00 ~ 3.02) | 3.25 (4.14 ~ 2.70) |
| Piping Connections | Liquid | mm | ϕ 6.4 | | ϕ 6.4 | |
| | Gas | mm | ϕ 9.5 | | ϕ 9.5 | |
| | Drain | mm | ϕ 18.0 | | ϕ 18.0 | |
| Heat Insulation | | | Both Liquid and Gas Pipes | | Both Liquid and Gas Pipes | |
| Max. Interunit Piping Length | | m | 20 | | 20 | |
| Max. Interunit Height Difference | | m | 15 | | 15 | |
| Chargeless | | m | 10 | | 10 | |
| Amount of Additional Charge of Refrigerant | | g/m | 20 | | 20 | |
| **Indoor Unit** | | | **FLXS25BAVMB** | | **FLXS35BAVMB** | |
| Front Panel Color | | | Almond White | | Almond White | |
| Airflow Rate | H | m³/min (cfm) | 7.6 (268) | 9.2 (325) | 8.6 (304) | 9.8 (346) |
| | M | | 6.8 (240) | 8.3 (293) | 7.6 (268) | 8.9 (314) |
| | L | | 6.0 (212) | 7.4 (261) | 6.6 (233) | 8.0 (282) |
| | SL | | 5.2 (184) | 6.6 (233) | 5.6 (198) | 7.2 (254) |
| Fan | Type | | Sirocco Fan | | Sirocco Fan | |
| | Motor Output | W | 34 | | 34 | |
| | Speed | Steps | 5 Steps, Quiet, Auto | | 5 Steps, Quiet, Auto | |
| Air Direction Control | | | Right, Left, Horizontal, Downward | | Right, Left, Horizontal, Downward | |
| Air Filter | | | Removable / Washable / Mildew Proof | | Removable / Washable / Mildew Proof | |
| Running Current (Rated) | | A | 0.33 - 0.32 - 0.31 | 0.36 - 0.34 - 0.33 | 0.38 - 0.36 - 0.35 | 0.38 - 0.36 - 0.35 |
| Power Consumption (Rated) | | W | 70 - 70 - 70 | 74 - 74 - 74 | 78 - 78 - 78 | 78 - 78 - 78 |
| Power Factor | | % | 96.4 - 95.1 - 94.1 | 93.4 - 94.6 - 93.4 | 93.3 - 94.2 - 92.9 | 93.3 - 94.2 - 92.9 |
| Temperature Control | | | Microcomputer Control | | Microcomputer Control | |
| Dimensions (H × W × D) | | mm | 490 × 1,050 × 200 | | 490 × 1,050 × 200 | |
| Packaged Dimensions (H × W × D) | | mm | 280 × 1,100 × 566 | | 280 × 1,100 × 566 | |
| Weight (Mass) | | kg | 16 | | 16 | |
| Gross Weight (Gross Mass) | | kg | 22 | | 22 | |
| Sound Pressure Level | H / M / L / SL | dB(A) | 37 / 34 / 31 / 28 | 37 / 34 / 31 / 29 | 38 / 35 / 32 / 29 | 39 / 36 / 33 / 30 |
| Sound Power Level | | dB | 53 | 53 | 54 | 55 |
| **Outdoor Unit** | | | **RXS25E2V1B** | | **RXS35E2V1B** | |
| Casing Color | | | Ivory White | | Ivory White | |
| Compressor | Type | | Hermetically Sealed Swing Type | | Hermetically Sealed Swing Type | |
| | Model | | 1YC23NXD | | 1YC23NXD | |
| | Motor Output | W | 600 | | 600 | |
| Refrigerant Oil | Model | | FVC50K | | FVC50K | |
| | Charge | L | 0.375 | | 0.375 | |
| Refrigerant | Model | | R-410A | | R-410A | |
| | Charge | kg | 1.0 | | 1.0 | |
| Airflow Rate | H | m³/min (cfm) | 33.5 (1,183) | 30.2 (1,066) | 33.5 (1,183) | 30.2 (1,066) |
| | L | | 23.4 (826) | 28.3 (999) | 23.4 (826) | 28.3 (999) |
| Fan | Type | | Propeller | | Propeller | |
| | Motor Output | W | 23 | | 23 | |
| Running Current (Rated) | | A | 3.37 - 3.28 - 3.09 | 4.34 - 4.16 - 3.97 | 4.92 - 4.74 - 4.55 | 5.42 - 5.14 - 4.95 |
| Power Consumption (Rated) | | W | 580 - 580 - 580 | 906 - 906 - 906 | 1,052 - 1,052 - 1,052 | 1,152 - 1,152 - 1,152 |
| Power Factor | | % | 78.2 - 76.9 - 78.2 | 94.9 - 94.7 - 95.1 | 97.2 - 96.5 - 96.3 | 96.6 - 97.4 - 97.0 |
| Starting Current | | A | 4.7 | | 5.8 | |
| Dimensions (H × W × D) | | mm | 550 × 765 × 285 | | 550 × 765 × 285 | |
| Packaged Dimensions (H × W × D) | | mm | 617 × 882 × 363 | | 617 × 882 × 363 | |
| Weight (Mass) | | kg | 32 | | 32 | |
| Gross Weight (Gross Mass) | | kg | 38 | | 38 | |
| Sound Pressure Level | H / L | dB(A) | 46 / 43 | 47 / 44 | 47 / 44 | 48 / 45 |
| Sound Power Level | H | dB | 61 | 62 | 62 | 63 |
| Drawing No. | | | 3D055002A | | 3D055003A | |

**Note:** ■ The data are based on the conditions shown in the table below.

| Cooling | Heating | Piping Length |
|---|---|---|
| Indoor ; 27°CDB / 19°CWB<br>Outdoor ; 35°CDB / 24°CWB | Indoor ; 20°CDB<br>Outdoor ; 7°CDB / 6°CWB | 7.5 m |

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = m³/min × 35.3 |

## 50 Hz, 220 - 230 - 240 V

| Model | Indoor Unit | | FLXS25BAVMB | | FLXS35BAVMB | |
|---|---|---|---|---|---|---|
| | Outdoor Unit | | RXS25G2V1B | | RXS35G2V1B | |
| | | | Cooling | Heating | Cooling | Heating |
| Capacity Rated (Min. ~ Max.) | | kW | 2.5 (1.2 ~ 3.0) | 3.4 (1.2 ~ 4.5) | 3.5 (1.2 ~ 3.8) | 4.0 (1.2 ~ 5.0) |
| | | Btu/h | 8,500 (4,100 ~ 10,200) | 11,600 (4,100 ~ 15,400) | 11,900 (4,100 ~ 13,000) | 13,600 (4,100 ~17,100) |
| | | kcal/h | 2,150 (1,030 ~ 2,580) | 2,920 (1,030 ~ 3,870) | 3,010 (1,030 ~ 3,270) | 3,440 (1,030 ~ 4,300) |
| Moisture Removal | | L/h | 1.2 | — | 1.9 | — |
| Running Current (Rated) | | A | 3.7 - 3.6 - 3.4 | 4.7 - 4.5 - 4.3 | 5.3 - 5.1 - 4.9 | 5.8 - 5.5 - 5.3 |
| Power Consumption Rated (Min. ~ Max.) | | W | 650 (300 ~ 860) | 980 (290 ~ 1,490) | 1,130 (300 ~ 1,260) | 1,230 (290 ~ 1,850) |
| Power Factor | | % | 79.9 - 78.5 - 79.7 | 94.8 - 94.7 - 95.0 | 96.9 - 96.3 - 96.1 | 96.4 - 97.2 - 96.7 |
| COP Rated (Min. ~ Max.) | | W/W | 3.85 (4.00 ~ 3.49) | 3.47 (4.14 ~ 3.02) | 3.10 (4.00 ~ 3.02) | 3.25 (4.14 ~ 2.70) |
| Piping Connections | Liquid | mm | ϕ 6.4 | | ϕ 6.4 | |
| | Gas | mm | ϕ 9.5 | | ϕ 9.5 | |
| | Drain | mm | ϕ 18.0 | | ϕ 18.0 | |
| Heat Insulation | | | Both Liquid and Gas Pipes | | Both Liquid and Gas Pipes | |
| Max. Interunit Piping Length | | m | 20 | | 20 | |
| Max. Interunit Height Difference | | m | 15 | | 15 | |
| Chargeless | | m | 10 | | 10 | |
| Amount of Additional Charge of Refrigerant | | g/m | 20 | | 20 | |
| **Indoor Unit** | | | **FLXS25BAVMB** | | **FLXS35BAVMB** | |
| Front Panel Color | | | Almond White | | Almond White | |
| Airflow Rate | H | m³/min (cfm) | 7.6 (268) | 9.2 (325) | 8.6 (304) | 9.8 (346) |
| | M | | 6.8 (240) | 8.3 (293) | 7.6 (268) | 8.9 (314) |
| | L | | 6.0 (212) | 7.4 (261) | 6.6 (233) | 8.0 (282) |
| | SL | | 5.2 (184) | 6.6 (233) | 5.6 (198) | 7.2 (254) |
| Fan | Type | | Sirocco Fan | | Sirocco Fan | |
| | Motor Output | W | 34 | | 34 | |
| | Speed | Steps | 5 Steps, Quiet, Auto | | 5 Steps, Quiet, Auto | |
| Air Direction Control | | | Right, Left, Horizontal, Downward | | Right, Left, Horizontal, Downward | |
| Air Filter | | | Removable / Washable / Mildew Proof | | Removable / Washable / Mildew Proof | |
| Running Current (Rated) | | A | 0.33 - 0.32 - 0.31 | 0.36 - 0.34 - 0.33 | 0.38 - 0.36 - 0.35 | 0.38 - 0.36 - 0.35 |
| Power Consumption (Rated) | | W | 70 - 70 - 70 | 74 - 74 - 74 | 78 - 78 - 78 | 78 - 78 - 78 |
| Power Factor | | % | 96.4 - 95.1 - 94.1 | 93.4 - 94.6 - 93.4 | 93.3 - 94.2 - 92.9 | 93.3 - 94.2 - 92.9 |
| Temperature Control | | | Microcomputer Control | | Microcomputer Control | |
| Dimensions (H × W × D) | | mm | 490 × 1,050 × 200 | | 490 × 1,050 × 200 | |
| Packaged Dimensions (H × W × D) | | mm | 280 × 1,100 × 566 | | 280 × 1,100 × 566 | |
| Weight (Mass) | | kg | 16 | | 16 | |
| Gross Weight (Gross Mass) | | kg | 22 | | 22 | |
| Sound Pressure Level | H / M / L / SL | dB(A) | 37 / 34 / 31 / 28 | 37 / 34 / 31 / 29 | 38 / 35 / 32 / 29 | 39 / 36 / 33 / 30 |
| Sound Power Level | | dB | 53 | 53 | 54 | 55 |
| **Outdoor Unit** | | | **RXS25G2V1B** | | **RXS35G2V1B** | |
| Casing Color | | | Ivory White | | Ivory White | |
| Compressor | Type | | Hermetically Sealed Swing Type | | Hermetically Sealed Swing Type | |
| | Model | | 1YC23AFXD | | 1YC23AFXD | |
| | Motor Output | W | 600 | | 600 | |
| Refrigerant Oil | Model | | FVC50K | | FVC50K | |
| | Charge | L | 0.375 | | 0.375 | |
| Refrigerant | Model | | R-410A | | R-410A | |
| | Charge | kg | 1.0 | | 1.2 | |
| Airflow Rate | H | m³/min (cfm) | 33.5 (1,183) | 30.2 (1,066) | 36.0 (1,272) | 30.2 (1,066) |
| | SL | | 31.4 (1,109) | 22.6 (798) | 31.4 (1,109) | 22.6 (798) |
| Fan | Type | | Propeller | | Propeller | |
| | Motor Output | W | 50 | | 50 | |
| Running Current (Rated) | | A | 3.37 - 3.28 - 3.09 | 4.34 - 4.16 - 3.97 | 4.92 - 4.74 - 4.55 | 5.42 - 5.14 - 4.95 |
| Power Consumption (Rated) | | W | 580 - 580 - 580 | 906 - 906 - 906 | 1,052 - 1,052 - 1,052 | 1,152 - 1,152 - 1,152 |
| Power Factor | | % | 78.2 - 76.9 - 78.2 | 94.9 - 94.7 - 95.1 | 97.2 - 96.5 - 96.3 | 96.6 - 97.4 - 97.0 |
| Starting Current | | A | 4.3 | | 4.8 | |
| Dimensions (H × W × D) | | mm | 550 × 765 × 285 | | 550 × 765 × 285 | |
| Packaged Dimensions (H × W × D) | | mm | 612 × 906 × 364 | | 612 × 906 × 364 | |
| Weight (Mass) | | kg | 34 | | 34 | |
| Gross Weight (Gross Mass) | | kg | 40 | | 40 | |
| Sound Pressure Level | H / SL | dB(A) | 46 / 43 | 47 / 44 | 48 / 44 | 48 / 45 |
| Sound Power Level | H | dB | 61 | 62 | 63 | 63 |
| Drawing No. | | | 3D059828 | | 3D059829 | |

**Note:** ■ The data are based on the conditions shown in the table below.

| Cooling | Heating | Piping Length |
|---|---|---|
| Indoor ; 27°CDB / 19°CWB<br>Outdoor ; 35°CDB / 24°CWB | Indoor ; 20°CDB<br>Outdoor ; 7°CDB / 6°CWB | 5 m |

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = m³/min × 35.3 |

## 50 Hz, 220 - 230 - 240 V

| Model | Indoor Unit | | FLXS25BAVMB | | FLXS35BAVMB | |
|---|---|---|---|---|---|---|
| | Outdoor Unit | | RXS25G2V1B9 | | RXS35G2V1B9 | |
| | | | Cooling | Heating | Cooling | Heating |
| Capacity Rated (Min. ~ Max.) | | kW | 2.5 (1.2 ~ 3.0) | 3.4 (1.2 ~ 4.5) | 3.5 (1.2 ~ 3.8) | 4.0 (1.4 ~ 5.0) |
| | | Btu/h | 8,500 (4,100 ~ 10,200) | 11,600 (4,100 ~ 15,400) | 11,900 (4,100 ~ 13,000) | 13,600 (4,100 ~ 17,100) |
| | | kcal/h | 2,150 (1,030 ~ 2,580) | 2,920 (1,030 ~ 3,870) | 3,010 (1,030 ~ 3,270) | 3,440 (1,030 ~ 4,300) |
| Moisture Removal | | L/h | 1.2 | — | 1.9 | — |
| Running Current (Rated) | | A | 3.7 - 3.6 - 3.4 | 4.7 - 4.5 - 4.3 | 5.3 - 5.1 - 4.9 | 5.8 - 5.5 - 5.3 |
| Power Consumption Rated (Min. ~ Max.) | | W | 650 (300 ~ 860) | 980 (290 ~ 1,490) | 1,130 (300 ~ 1,260) | 1,230 (290 ~ 1,850) |
| Power Factor | | % | 79.9 - 78.5 - 79.7 | 94.8 - 94.7 - 95.0 | 96.9 - 96.3 - 96.1 | 96.4 - 97.2 - 96.7 |
| COP Rated (Min. ~ Max.) | | W/W | 3.85 (4.00 ~ 3.49) | 3.47 (4.14 ~ 3.02) | 3.10 (4.00 ~ 3.02) | 3.25 (4.14 ~ 2.70) |
| Piping Connections | Liquid | mm | ϕ 6.4 | | ϕ 6.4 | |
| | Gas | mm | ϕ 9.5 | | ϕ 9.5 | |
| | Drain | mm | ϕ 18.0 | | ϕ 18.0 | |
| Heat Insulation | | | Both Liquid and Gas Pipes | | Both Liquid and Gas Pipes | |
| Max. Interunit Piping Length | | m | 20 | | 20 | |
| Max. Interunit Height Difference | | m | 15 | | 15 | |
| Chargeless | | m | 10 | | 10 | |
| Amount of Additional Charge of Refrigerant | | g/m | 20 | | 20 | |
| **Indoor Unit** | | | **FLXS25BAVMB** | | **FLXS35BAVMB** | |
| Front Panel Color | | | Almond White | | Almond White | |
| Airflow Rate | H | m³/min (cfm) | 7.6 (268) | 9.2 (325) | 8.6 (304) | 9.8 (346) |
| | M | | 6.8 (240) | 8.3 (293) | 7.6 (268) | 8.9 (314) |
| | L | | 6.0 (212) | 7.4 (261) | 6.6 (233) | 8.0 (282) |
| | SL | | 5.2 (184) | 6.6 (233) | 5.6 (198) | 7.2 (254) |
| Fan | Type | | Sirocco Fan | | Sirocco Fan | |
| | Motor Output | W | 34 | | 34 | |
| | Speed | Steps | 5 Steps, Quiet, Auto | | 5 Steps, Quiet, Auto | |
| Air Direction Control | | | Right, Left, Horizontal, Downward | | Right, Left, Horizontal, Downward | |
| Air Filter | | | Removable / Washable / Mildew Proof | | Removable / Washable / Mildew Proof | |
| Running Current (Rated) | | A | 0.33 - 0.32 - 0.31 | 0.36 - 0.34 - 0.33 | 0.38 - 0.36 - 0.35 | 0.38 - 0.36 - 0.35 |
| Power Consumption (Rated) | | W | 70 - 70 - 70 | 74 - 74 - 74 | 78 - 78 - 78 | 78 - 78 - 78 |
| Power Factor | | % | 96.4 - 95.1 - 94.1 | 93.4 - 94.6 - 93.4 | 93.3 - 94.2 - 92.9 | 93.3 - 94.2 - 92.9 |
| Temperature Control | | | Microcomputer Control | | Microcomputer Control | |
| Dimensions (H × W × D) | | mm | 490 × 1,050 × 200 | | 490 × 1,050 × 200 | |
| Packaged Dimensions (H × W × D) | | mm | 280 × 1,100 × 566 | | 280 × 1,100 × 566 | |
| Weight (Mass) | | kg | 16 | | 16 | |
| Gross Weight (Gross Mass) | | kg | 22 | | 22 | |
| Sound Pressure Level | H / M / L / SL | dB(A) | 37 / 34 / 31 / 28 | 37 / 34 / 31 / 29 | 38 / 35 / 32 / 29 | 39 / 36 / 33 / 30 |
| Sound Power Level | | dB | 53 | 53 | 54 | 55 |
| **Outdoor Unit** | | | **RXS25G2V1B9** | | **RXS35G2V1B9** | |
| Casing Color | | | Ivory White | | Ivory White | |
| Compressor | Type | | Hermetically Sealed Swing Type | | Hermetically Sealed Swing Type | |
| | Model | | 1YC23AEXD | | 1YC23AEXD | |
| | Motor Output | W | 600 | | 600 | |
| Refrigerant Oil | Model | | FVC50K | | FVC50K | |
| | Charge | L | 0.375 | | 0.375 | |
| Refrigerant | Model | | R-410A | | R-410A | |
| | Charge | kg | 1.0 | | 1.2 | |
| Airflow Rate | H | m³/min (cfm) | 33.5 (1,183) | 28.3 (999) | 36.0 (1,271) | 28.3 (999) |
| | SL | | 30.1 (1,063) | 25.6 (904) | 30.1 (1,063) | 25.6 (904) |
| Fan | Type | | Propeller | | Propeller | |
| | Motor Output | W | 23 | | 23 | |
| Running Current (Rated) | | A | 3.37 - 3.28 - 3.09 | 4.34 - 4.16 - 3.97 | 4.92 - 4.74 - 4.55 | 5.42 - 5.14 - 4.95 |
| Power Consumption (Rated) | | W | 580 - 580 - 580 | 906 - 906 - 906 | 1,052 - 1,052 - 1,052 | 1,152 - 1,152 - 1,152 |
| Power Factor | | % | 78.2 - 76.9 - 78.2 | 94.9 - 94.7 - 95.1 | 97.2 - 96.5 - 96.3 | 96.6 - 97.4 - 97.0 |
| Starting Current | | A | 4.7 | | 5.8 | |
| Dimensions (H × W × D) | | mm | 550 × 765 × 285 | | 550 × 765 × 285 | |
| Packaged Dimensions (H × W × D) | | mm | 612 × 906 × 364 | | 612 × 906 × 364 | |
| Weight (Mass) | | kg | 34 | | 34 | |
| Gross Weight (Gross Mass) | | kg | 38 | | 38 | |
| Sound Pressure Level | H / SL | dB(A) | 46 / 43 | 47 / 44 | 48 / 44 | 48 / 45 |
| Sound Power Level | H | dB | 61 | 62 | 63 | 63 |
| Drawing No. | | | 3D065720A | | 3D065721A | |

**Note:** ■ The data are based on the conditions shown in the table below.

| Cooling | Heating | Piping Length |
|---|---|---|
| Indoor ; 27°CDB / 19°CWB<br>Outdoor ; 35°CDB / 24°CWB | Indoor ; 20°CDB<br>Outdoor ; 7°CDB / 6°CWB | 5 m |

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = m³/min × 35.3 |

## 50 Hz, 220 - 230 - 240 V

| Model | Indoor Unit | | FLXS25BAVMB | | FLXS35BAVMB | |
|---|---|---|---|---|---|---|
| | Outdoor Unit | | RXS25J2V1B | | RXS35J2V1B | |
| | | | Cooling | Heating | Cooling | Heating |
| Capacity Rated (Min. ~ Max.) | | kW | 2.5 (1.2 ~ 3.0) | 3.4 (1.2 ~ 4.5) | 3.5 (1.2 ~ 3.8) | 4.0 (1.4 ~ 5.0) |
| | | Btu/h | 8,500 (4,100 ~ 10,200) | 11,600 (4,100 ~ 15,400) | 11,900 (4,100 ~ 13,000) | 13,600 (4,100 ~ 17,100) |
| | | kcal/h | 2,150 (1,030 ~ 2,580) | 2,920 (1,030 ~ 3,870) | 3,010 (1,030 ~ 3,270) | 3,440 (1,030 ~ 4,300) |
| Moisture Removal | | L/h | 1.2 | — | 1.9 | — |
| Running Current (Rated) | | A | 3.7 - 3.6 - 3.4 | 4.7 - 4.5 - 4.3 | 5.3 - 5.1 - 4.9 | 5.8 - 5.5 - 5.3 |
| Power Consumption Rated (Min. ~ Max.) | | W | 650 (300 ~ 860) | 980 (290 ~ 1,490) | 1,130 (300 ~ 1,260) | 1,230 (290 ~ 1,850) |
| Power Factor | | % | 79.9 - 78.5 - 79.7 | 94.8 - 94.7 - 95.0 | 96.9 - 96.3 - 96.1 | 96.4 - 97.2 - 96.7 |
| COP Rated (Min. ~ Max.) | | W/W | 3.85 (4.00 ~ 3.49) | 3.47 (4.14 ~ 3.02) | 3.10 (4.00 ~ 3.02) | 3.25 (4.14 ~ 2.70) |
| Piping Connections | Liquid | mm | ϕ 6.4 | | ϕ 6.4 | |
| | Gas | mm | ϕ 9.5 | | ϕ 9.5 | |
| | Drain | mm | ϕ 18.0 | | ϕ 18.0 | |
| Heat Insulation | | | Both Liquid and Gas Pipes | | Both Liquid and Gas Pipes | |
| Max. Interunit Piping Length | | m | 20 | | 20 | |
| Max. Interunit Height Difference | | m | 15 | | 15 | |
| Chargeless | | m | 10 | | 10 | |
| Amount of Additional Charge of Refrigerant | | g/m | 20 | | 20 | |
| **Indoor Unit** | | | **FLXS25BAVMB** | | **FLXS35BAVMB** | |
| Front Panel Color | | | Almond White | | Almond White | |
| Airflow Rate | H | m³/min (cfm) | 7.6 (268) | 9.2 (325) | 8.6 (304) | 9.8 (346) |
| | M | | 6.8 (240) | 8.3 (293) | 7.6 (268) | 8.9 (314) |
| | L | | 6.0 (212) | 7.4 (261) | 6.6 (233) | 8.0 (282) |
| | SL | | 5.2 (184) | 6.6 (233) | 5.6 (198) | 7.2 (254) |
| Fan | Type | | Sirocco Fan | | Sirocco Fan | |
| | Motor Output | W | 34 | | 34 | |
| | Speed | Steps | 5 Steps, Quiet, Auto | | 5 Steps, Quiet, Auto | |
| Air Direction Control | | | Right, Left, Horizontal, Downward | | Right, Left, Horizontal, Downward | |
| Air Filter | | | Removable / Washable / Mildew Proof | | Removable / Washable / Mildew Proof | |
| Running Current (Rated) | | A | 0.33 - 0.32 - 0.31 | 0.36 - 0.34 - 0.33 | 0.38 - 0.36 - 0.35 | 0.38 - 0.36 - 0.35 |
| Power Consumption (Rated) | | W | 70 - 70 - 70 | 74 - 74 - 74 | 78 - 78 - 78 | 78 - 78 - 78 |
| Power Factor | | % | 96.4 - 95.1 - 94.1 | 93.4 - 94.6 - 93.4 | 93.3 - 94.2 - 92.9 | 93.3 - 94.2 - 92.9 |
| Temperature Control | | | Microcomputer Control | | Microcomputer Control | |
| Dimensions (H × W × D) | | mm | 490 × 1,050 × 200 | | 490 × 1,050 × 200 | |
| Packaged Dimensions (H × W × D) | | mm | 280 × 1,100 × 566 | | 280 × 1,100 × 566 | |
| Weight (Mass) | | kg | 16 | | 16 | |
| Gross Weight (Gross Mass) | | kg | 22 | | 22 | |
| Sound Pressure Level | H / M / L / SL | dB(A) | 37 / 34 / 31 / 28 | 37 / 34 / 31 / 29 | 38 / 35 / 32 / 29 | 39 / 36 / 33 / 30 |
| Sound Power Level | | dB | 53 | 53 | 54 | 55 |
| **Outdoor Unit** | | | **RXS25J2V1B** | | **RXS35J2V1B** | |
| Casing Color | | | Ivory White | | Ivory White | |
| Compressor | Type | | Hermetically Sealed Swing Type | | Hermetically Sealed Swing Type | |
| | Model | | 1YC23AEXD | | 1YC23AEXD | |
| | Motor Output | W | 600 | | 600 | |
| Refrigerant Oil | Model | | FVC50K | | FVC50K | |
| | Charge | L | 0.375 | | 0.375 | |
| Refrigerant | Model | | R-410A | | R-410A | |
| | Charge | kg | 1.0 | | 1.2 | |
| Airflow Rate | H | m³/min (cfm) | 33.5 (1,183) | 28.3 (999) | 36.0 (1,271) | 28.3 (999) |
| | SL | | 30.1 (1,063) | 25.6 (904) | 30.1 (1,063) | 25.6 (904) |
| Fan | Type | | Propeller | | Propeller | |
| | Motor Output | W | 23 | | 23 | |
| Running Current (Rated) | | A | 3.37 - 3.28 - 3.09 | 4.34 - 4.16 - 3.97 | 4.92 - 4.74 - 4.55 | 5.42 - 5.14 - 4.95 |
| Power Consumption (Rated) | | W | 580 - 580 - 580 | 906 - 906 - 906 | 1,052 - 1,052 - 1,052 | 1,152 - 1,152 - 1,152 |
| Power Factor | | % | 78.2 - 76.9 - 78.2 | 94.9 - 94.7 - 95.1 | 97.2 - 96.5 - 96.3 | 96.6 - 97.4 - 97.0 |
| Starting Current | | A | 4.7 | | 5.8 | |
| Dimensions (H × W × D) | | mm | 550 × 765 × 285 | | 550 × 765 × 285 | |
| Packaged Dimensions (H × W × D) | | mm | 612 × 906 × 364 | | 612 × 906 × 364 | |
| Weight (Mass) | | kg | 34 | | 34 | |
| Gross Weight (Gross Mass) | | kg | 38 | | 38 | |
| Sound Pressure Level | H / SL | dB(A) | 46 / 43 | 47 / 44 | 48 / 44 | 48 / 45 |
| Sound Power Level | H | dB | 61 | 62 | 63 | 63 |
| Drawing No. | | | 3D059564 | | 3D059567 | |

**Note:** ■ The data are based on the conditions shown in the table below.

| Cooling | Heating | Piping Length |
|---|---|---|
| Indoor ; 27°CDB / 19°CWB<br>Outdoor ; 35°CDB / 24°CWB | Indoor ; 20°CDB<br>Outdoor ; 7°CDB / 6°CWB | 5 m |

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = m³/min × 35.3 |

## 50 Hz, 220 - 230 - 240 V

| Model | Indoor Unit | | FLXS25BAVMB | | FLXS35BAVMB | |
|---|---|---|---|---|---|---|
| | Outdoor Unit | | RXS25K3V1B | | RXS35K2V1B | |
| | | | Cooling | Heating | Cooling | Heating |
| Capacity Rated (Min. ~ Max.) | | kW | 2.5 (1.2 ~ 3.0) | 3.4 (1.2 ~ 4.5) | 3.5 (1.2 ~ 3.8) | 4.0 (1.4 ~ 5.0) |
| | | Btu/h | 8,500 (4,100 ~ 10,200) | 11,600 (4,100 ~ 15,400) | 11,900 (4,100 ~ 13,000) | 13,600 (4,100 ~ 17,100) |
| | | kcal/h | 2,150 (1,030 ~ 2,580) | 2,920 (1,030 ~ 3,870) | 3,010 (1,030 ~ 3,270) | 3,440 (1,030 ~ 4,300) |
| Moisture Removal | | L/h | 1.2 | — | 1.9 | — |
| Running Current (Rated) | | A | 3.7 - 3.6 - 3.4 | 4.7 - 4.5 - 4.3 | 5.3 - 5.1 - 4.9 | 5.8 - 5.5 - 5.3 |
| Power Consumption Rated (Min. ~ Max.) | | W | 650 (300 ~ 860) | 980 (290 ~ 1,490) | 1,130 (300 ~ 1,260) | 1,230 (290 ~ 1,850) |
| Power Factor | | % | 79.9 - 78.5 - 79.7 | 94.8 - 94.7 - 95.0 | 96.9 - 96.3 - 96.1 | 96.4 - 97.2 - 96.7 |
| COP Rated (Min. ~ Max.) | | W/W | 3.85 (4.00 ~ 3.49) | 3.47 (4.14 ~ 3.02) | 3.10 (4.00 ~ 3.02) | 3.25 (4.14 ~ 2.70) |
| Piping Connections | Liquid | mm | ϕ 6.4 | | ϕ 6.4 | |
| | Gas | mm | ϕ 9.5 | | ϕ 9.5 | |
| | Drain | mm | ϕ 18.0 | | ϕ 18.0 | |
| Heat Insulation | | | Both Liquid and Gas Pipes | | Both Liquid and Gas Pipes | |
| Max. Interunit Piping Length | | m | 20 | | 20 | |
| Max. Interunit Height Difference | | m | 15 | | 15 | |
| Chargeless | | m | 10 | | 10 | |
| Amount of Additional Charge of Refrigerant | | g/m | 20 | | 20 | |
| **Indoor Unit** | | | **FLXS25BAVMB** | | **FLXS35BAVMB** | |
| Front Panel Color | | | Almond White | | Almond White | |
| Airflow Rate | H | m³/min (cfm) | 7.6 (268) | 9.2 (325) | 8.6 (304) | 9.8 (346) |
| | M | | 6.8 (240) | 8.3 (293) | 7.6 (268) | 8.9 (314) |
| | L | | 6.0 (212) | 7.4 (261) | 6.6 (233) | 8.0 (282) |
| | SL | | 5.2 (184) | 6.6 (233) | 5.6 (198) | 7.2 (254) |
| Fan | Type | | Sirocco Fan | | Sirocco Fan | |
| | Motor Output | W | 34 | | 34 | |
| | Speed | Steps | 5 Steps, Quiet, Auto | | 5 Steps, Quiet, Auto | |
| Air Direction Control | | | Right, Left, Horizontal, Downward | | Right, Left, Horizontal, Downward | |
| Air Filter | | | Removable / Washable / Mildew Proof | | Removable / Washable / Mildew Proof | |
| Running Current (Rated) | | A | 0.33 - 0.32 - 0.31 | 0.36 - 0.34 - 0.33 | 0.38 - 0.36 - 0.35 | 0.38 - 0.36 - 0.35 |
| Power Consumption (Rated) | | W | 70 - 70 - 70 | 74 - 74 - 74 | 78 - 78 - 78 | 78 - 78 - 78 |
| Power Factor | | % | 96.4 - 95.1 - 94.1 | 93.4 - 94.6 - 93.4 | 93.3 - 94.2 - 92.9 | 93.3 - 94.2 - 92.9 |
| Temperature Control | | | Microcomputer Control | | Microcomputer Control | |
| Dimensions (H × W × D) | | mm | 490 × 1,050 × 200 | | 490 × 1,050 × 200 | |
| Packaged Dimensions (H × W × D) | | mm | 280 × 1,100 × 566 | | 280 × 1,100 × 566 | |
| Weight (Mass) | | kg | 16 | | 16 | |
| Gross Weight (Gross Mass) | | kg | 22 | | 22 | |
| Sound Pressure Level | H / M / L / SL | dB(A) | 37 / 34 / 31 / 28 | 37 / 34 / 31 / 29 | 38 / 35 / 32 / 29 | 39 / 36 / 33 / 30 |
| Sound Power Level | | dB | 51 | 51 | 53 | 54 |
| **Outdoor Unit** | | | **RXS25K3V1B** | | **RXS35K2V1B** | |
| Casing Color | | | Ivory White | | Ivory White | |
| Compressor | Type | | Hermetically Sealed Swing Type | | Hermetically Sealed Swing Type | |
| | Model | | 1YC23AEXD | | 1YC23AEXD | |
| | Motor Output | W | 600 | | 600 | |
| Refrigerant Oil | Model | | FVC50K | | FVC50K | |
| | Charge | L | 0.375 | | 0.375 | |
| Refrigerant | Model | | R-410A | | R-410A | |
| | Charge | kg | 1.0 | | 1.2 | |
| Airflow Rate | H | m³/min (cfm) | 33.5 (1,183) | 28.3 (999) | 36.0 (1,271) | 28.3 (999) |
| | SL | | 30.1 (1,063) | 25.6 (904) | 30.1 (1,063) | 25.6 (904) |
| Fan | Type | | Propeller | | Propeller | |
| | Motor Output | W | 23 | | 23 | |
| Running Current (Rated) | | A | 3.37 - 3.28 - 3.09 | 4.34 - 4.16 - 3.97 | 4.92 - 4.74 - 4.55 | 5.42 - 5.14 - 4.95 |
| Power Consumption (Rated) | | W | 580 - 580 - 580 | 906 - 906 - 906 | 1,052 - 1,052 - 1,052 | 1,152 - 1,152 - 1,152 |
| Power Factor | | % | 78.2 - 76.9 - 78.2 | 94.9 - 94.7 - 95.1 | 97.2 - 96.5 - 96.3 | 96.6 - 97.4 - 97.0 |
| Starting Current | | A | 4.7 | | 5.8 | |
| Dimensions (H × W × D) | | mm | 550 × 765 × 285 | | 550 × 765 × 285 | |
| Packaged Dimensions (H × W × D) | | mm | 612 × 906 × 364 | | 612 × 906 × 364 | |
| Weight (Mass) | | kg | 34 | | 34 | |
| Gross Weight (Gross Mass) | | kg | 38 | | 38 | |
| Sound Pressure Level | H / SL | dB(A) | 46 / 43 | 47 / 44 | 48 / 44 | 48 / 45 |
| Sound Power Level | H | dB | 62 | 63 | 63 | 63 |
| Drawing No. | | | 3D081090 | | 3D081091 | |

**Note:** ■ The data are based on the conditions shown in the table below.

| Cooling | Heating | Piping Length |
|---|---|---|
| Indoor ; 27°CDB / 19°CWB<br>Outdoor ; 35°CDB / 24°CWB | Indoor ; 20°CDB<br>Outdoor ; 7°CDB / 6°CWB | 5 m |

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = m³/min × 35.3 |

## 50 Hz, 220 - 230 - 240 V

| Model | Indoor Unit | | FLXS25BAVMB | | FLXS35BAVMB9 | |
|---|---|---|---|---|---|---|
| | Outdoor Unit | | RXS25L2V1B | | RXS35L2V1B | |
| | | | Cooling | Heating | Cooling | Heating |
| Capacity Rated (Min. ~ Max.) | | kW | 2.5 (1.2 ~ 3.0) | 3.4 (1.2 ~ 4.5) | 3.5 (1.2 ~ 3.8) | 4.0 (1.4 ~ 5.0) |
| | | Btu/h | 8,500 (4,100 ~ 10,200) | 11,600 (4,100 ~ 15,400) | 11,900 (4,100 ~ 13,000) | 13,600 (4,100 ~ 17,100) |
| | | kcal/h | 2,150 (1,030 ~ 2,580) | 2,920 (1,030 ~ 3,870) | 3,010 (1,030 ~ 3,270) | 3,440 (1,030 ~ 4,300) |
| Moisture Removal | | L/h | 1.2 | — | 1.9 | — |
| Running Current (Rated) | | A | 3.7 - 3.6 - 3.4 | 4.7 - 4.5 - 4.3 | 5.3 - 5.1 - 4.9 | 5.6 - 5.3 - 5.1 |
| Power Consumption Rated (Min. ~ Max.) | | W | 650 (300 ~ 860) | 960 (290 ~ 1,490) | 1,130 (300 ~ 1,260) | 1,120 (290 ~ 1,850) |
| Power Factor | | % | 79.9 - 78.5 - 79.7 | 94.8 - 94.7 - 95.0 | 96.9 - 96.3 - 96.1 | 94.7 - 94.8 - 94.7 |
| COP Rated (Min. ~ Max.) | | W/W | 3.85 (4.00 ~ 3.49) | 3.54 (4.14 ~ 3.04) | 3.10 (4.00 ~ 3.02) | 3.57 (4.14 ~ 2.70) |
| Piping Connections | Liquid | mm | ϕ 6.4 | | ϕ 6.4 | |
| | Gas | mm | ϕ 9.5 | | ϕ 9.5 | |
| | Drain | mm | ϕ 18.0 | | ϕ 18.0 | |
| Heat Insulation | | | Both Liquid and Gas Pipes | | Both Liquid and Gas Pipes | |
| Max. Interunit Piping Length | | m | 20 | | 20 | |
| Max. Interunit Height Difference | | m | 15 | | 15 | |
| Chargeless | | m | 10 | | 10 | |
| Amount of Additional Charge of Refrigerant | | g/m | 20 | | 20 | |
| **Indoor Unit** | | | **FLXS25BAVMB** | | **FLXS35BAVMB9** | |
| Front Panel Color | | | Almond White | | Almond White | |
| Airflow Rate | H | m³/min (cfm) | 7.6 (268) | 9.2 (325) | 8.6 (304) | 12.8 (452) |
| | M | | 6.8 (240) | 8.3 (293) | 7.6 (268) | 10.4 (367) |
| | L | | 6.0 (212) | 7.4 (261) | 6.6 (233) | 8.0 (282) |
| | SL | | 5.2 (184) | 6.6 (233) | 5.6 (198) | 7.2 (254) |
| Fan | Type | | Sirocco Fan | | Sirocco Fan | |
| | Motor Output | W | 34 | | 34 | |
| | Speed | Steps | 5 Steps, Quiet, Auto | | 5 Steps, Quiet, Auto | |
| Air Direction Control | | | Right, Left, Horizontal, Downward | | Right, Left, Horizontal, Downward | |
| Air Filter | | | Removable / Washable / Mildew Proof | | Removable / Washable / Mildew Proof | |
| Running Current (Rated) | | A | 0.33 - 0.32 - 0.31 | 0.36 - 0.34 - 0.33 | 0.38 - 0.36 - 0.35 | 0.38 - 0.36 - 0.35 |
| Power Consumption (Rated) | | W | 70 - 70 - 70 | 74 - 74 - 74 | 78 - 78 - 78 | 78 - 78 - 78 |
| Power Factor | | % | 96.4 - 95.1 - 94.1 | 93.4 - 94.6 - 93.4 | 93.3 - 94.2 - 92.9 | 93.3 - 94.2 - 92.9 |
| Temperature Control | | | Microcomputer Control | | Microcomputer Control | |
| Dimensions (H × W × D) | | mm | 490 × 1,050 × 200 | | 490 × 1,050 × 200 | |
| Packaged Dimensions (H × W × D) | | mm | 280 × 1,100 × 566 | | 280 × 1,100 × 566 | |
| Weight (Mass) | | kg | 16 | | 16 | |
| Gross Weight (Gross Mass) | | kg | 22 | | 22 | |
| Sound Pressure Level | H / M / L / SL | dB(A) | 37 / 34 / 31 / 28 | 37 / 34 / 31 / 29 | 38 / 35 / 32 / 29 | 46 / 36 / 33 / 30 |
| Sound Power Level | | dB | 51 | 51 | 53 | 59 |
| **Outdoor Unit** | | | **RXS25L2V1B** | | **RXS35L2V1B** | |
| Casing Color | | | Ivory White | | Ivory White | |
| Compressor | Type | | Hermetically Sealed Swing Type | | Hermetically Sealed Swing Type | |
| | Model | | 1YC23APXD | | 1YC23APXD | |
| | Motor Output | W | 600 | | 600 | |
| Refrigerant Oil | Model | | FVC50K | | FVC50K | |
| | Charge | L | 0.375 | | 0.375 | |
| Refrigerant | Model | | R-410A | | R-410A | |
| | Charge | kg | 1.0 | | 1.2 | |
| Airflow Rate | H | m³/min (cfm) | 33.5 (1,183) | 28.3 (999) | 36.0 (1,271) | 28.3 (999) |
| | SL | | 30.1 (1,063) | 25.6 (904) | 30.1 (1,063) | 25.6 (904) |
| Fan | Type | | Propeller | | Propeller | |
| | Motor Output | W | 23 | | 23 | |
| Running Current (Rated) | | A | 3.37 - 3.28 - 3.09 | 4.34 - 4.16 - 3.97 | 4.92 - 4.74 - 4.55 | 5.19 - 4.96 - 4.75 |
| Power Consumption (Rated) | | W | 580 - 580 - 580 | 906 - 906 - 906 | 1,052 - 1,052 - 1,052 | 1,102 - 1,102 - 1,102 |
| Power Factor | | % | 78.2 - 76.9 - 78.2 | 94.9 - 94.7 - 95.1 | 97.2 - 96.5 - 96.3 | 96.6 - 97.4 - 97.0 |
| Starting Current | | A | 4.7 | | 5.8 | |
| Dimensions (H × W × D) | | mm | 550 × 765 × 285 | | 550 × 765 × 285 | |
| Packaged Dimensions (H × W × D) | | mm | 612 × 906 × 364 | | 612 × 906 × 364 | |
| Weight (Mass) | | kg | 34 | | 34 | |
| Gross Weight (Gross Mass) | | kg | 38 | | 38 | |
| Sound Pressure Level | H / SL | dB(A) | 46 / 43 | 47 / 44 | 48 / 44 | 48 / 45 |
| Sound Power Level | H | dB | 59 | 59 | 61 | 61 |
| Drawing No. | | | 3D086497 | | C: 3D085637B | |

**Note:** ■ The data are based on the conditions shown in the table below.

| Cooling | Heating | Piping Length |
|---|---|---|
| Indoor ; 27°CDB / 19°CWB<br>Outdoor ; 35°CDB / 24°CWB | Indoor ; 20°CDB<br>Outdoor ; 7°CDB / 6°CWB | 5 m |

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = m³/min × 35.3 |

## 50 Hz, 220 - 230 - 240 V

| Model | Indoor Unit | | FLXS25BAVMB | | FLXS35BAVMB9 | |
|---|---|---|---|---|---|---|
| | Outdoor Unit | | RXS25L3V1B | | RXS35L3V1B | |
| | | | Cooling | Heating | Cooling | Heating |
| Capacity Rated (Min. ~ Max.) | | kW | 2.5 (1.2 ~ 3.0) | 3.4 (1.2 ~ 4.5) | 3.5 | 4.0 (1.4 ~ 5.0) |
| | | Btu/h | 8,500 (4,100 ~ 10,200) | 11,600 (4,100 ~ 15,400) | 11,900 (4,100 ~ 13,000) | 13,600 (4,100 ~ 17,100) |
| | | kcal/h | 2,150 (1,030 ~ 2,580) | 2,920 (1,030 ~ 3,870) | 3,010 (1,030 ~ 3,270) | 3,440 (1,030 ~ 4,300) |
| Moisture Removal | | L/h | 1.2 | — | 1.9 | — |
| Running Current (Rated) | | A | 3.80 - 3.70 - 3.49 | 4.70 - 4.50 - 4.30 | 5.70 - 5.49 - 5.27 | 5.60 - 5.30 - 5.10 |
| Power Consumption Rated (Min. ~ Max.) | | W | 668 (300 ~ 860) | 960 (290 ~ 1,490) | 1,215 (300 ~ 1,260) | 1,120 (290 ~ 1,850) |
| Power Factor | | % | 79.9 - 78.5 - 79.7 | 94.8 - 94.7 - 95.0 | 96.9 - 96.3 - 96.1 | 94.7 - 94.8 - 94.7 |
| COP Rated (Min. ~ Max.) | | W/W | 3.74 (4.00 ~ 3.49) | 3.54 (4.14 ~ 3.04) | 2.88 | 3.57 (4.14 ~ 2.70) |
| Piping Connections | Liquid | mm | ϕ 6.4 | | ϕ 6.4 | |
| | Gas | mm | ϕ 9.5 | | ϕ 9.5 | |
| | Drain | mm | ϕ 18.0 | | ϕ 18.0 | |
| Heat Insulation | | | Both Liquid and Gas Pipes | | Both Liquid and Gas Pipes | |
| Max. Interunit Piping Length | | m | 20 | | 20 | |
| Max. Interunit Height Difference | | m | 15 | | 15 | |
| Chargeless | | m | 10 | | 10 | |
| Amount of Additional Charge of Refrigerant | | g/m | 20 | | 20 | |
| **Indoor Unit** | | | **FLXS25BAVMB** | | **FLXS35BAVMB9** | |
| Front Panel Color | | | Almond White | | Almond White | |
| Airflow Rate | H | m³/min (cfm) | 7.6 (268) | 9.2 (325) | 8.6 (304) | 12.8 (452) |
| | M | | 6.8 (240) | 8.3 (293) | 7.6 (268) | 10.4 (367) |
| | L | | 6.0 (212) | 7.4 (261) | 6.6 (233) | 8.0 (282) |
| | SL | | 5.2 (184) | 6.6 (233) | 5.6 (198) | 7.2 (254) |
| Fan | Type | | Sirocco Fan | | Sirocco Fan | |
| | Motor Output | W | 34 | | 34 | |
| | Speed | Steps | 5 Steps, Quiet, Auto | | 5 Steps, Quiet, Auto | |
| Air Direction Control | | | Right, Left, Horizontal, Downward | | Right, Left, Horizontal, Downward | |
| Air Filter | | | Removable / Washable / Mildew Proof | | Removable / Washable / Mildew Proof | |
| Running Current (Rated) | | A | 0.33 - 0.32 - 0.31 | 0.36 - 0.34 - 0.33 | 0.38 - 0.36 - 0.35 | 0.38 - 0.36 - 0.35 |
| Power Consumption (Rated) | | W | 70 - 70 - 70 | 74 - 74 - 74 | 78 - 78 - 78 | 78 - 78 - 78 |
| Power Factor | | % | 96.4 - 95.1 - 94.1 | 93.4 - 94.6 - 93.4 | 93.3 - 94.2 - 92.9 | 93.3 - 94.2 - 92.9 |
| Temperature Control | | | Microcomputer Control | | Microcomputer Control | |
| Dimensions (H × W × D) | | mm | 490 × 1,050 × 200 | | 490 × 1,050 × 200 | |
| Packaged Dimensions (H × W × D) | | mm | 280 × 1,100 × 566 | | 280 × 1,100 × 566 | |
| Weight (Mass) | | kg | 16 | | 16 | |
| Gross Weight (Gross Mass) | | kg | 22 | | 22 | |
| Sound Pressure Level | H / M / L / SL | dB(A) | 37 / 34 / 31 / 28 | 37 / 34 / 31 / 29 | 38 / 35 / 32 / 29 | 46 / 36 / 33 / 30 |
| Sound Power Level | | dB | 51 | 51 | 53 | 59 |
| **Outdoor Unit** | | | **RXS25L3V1B** | | **RXS35L3V1B** | |
| Casing Color | | | Ivory White | | Ivory White | |
| Compressor | Type | | Hermetically Sealed Swing Type | | Hermetically Sealed Swing Type | |
| | Model | | 1YC23AWXD | | 1YC23AWXD | |
| | Motor Output | W | 600 | | 600 | |
| Refrigerant Oil | Model | | FVC50K | | FVC50K | |
| | Charge | L | 0.375 | | 0.375 | |
| Refrigerant | Model | | R-410A | | R-410A | |
| | Charge | kg | 1.0 | | 1.2 | |
| Airflow Rate | H | m³/min (cfm) | 33.5 (1,183) | 28.3 (999) | 36.0 (1,271) | 28.3 (999) |
| | SL | | 30.1 (1,063) | 25.6 (904) | 30.1 (1,063) | 25.6 (904) |
| Fan | Type | | Propeller | | Propeller | |
| | Motor Output | W | 50 | | 50 | |
| Running Current (Rated) | | A | 3.47 - 3.38 - 3.18 | 4.34 - 4.16 - 3.97 | 5.32 - 5.13 - 4.92 | 5.19 - 4.96 - 4.75 |
| Power Consumption (Rated) | | W | 598 - 598 - 598 | 906 - 906 - 906 | 1,137 - 1,137 - 1,137 | 1,102 - 1,102 - 1,102 |
| Power Factor | | % | 78.3 - 76.9 - 78.3 | 94.9 - 94.7 - 95.1 | 97.2 - 96.4 - 96.3 | 96.6 - 97.4 - 97.0 |
| Starting Current | | A | 3.3 | | 4.3 | |
| Dimensions (H × W × D) | | mm | 550 × 765 × 285 | | 550 × 765 × 285 | |
| Packaged Dimensions (H × W × D) | | mm | 612 × 906 × 364 | | 612 × 906 × 364 | |
| Weight (Mass) | | kg | 34 | | 34 | |
| Gross Weight (Gross Mass) | | kg | 37 | | 37 | |
| Sound Pressure Level | H / SL | dB(A) | 46 / 43 | 47 / 44 | 48 / 44 | 48 / 45 |
| Sound Power Level | H | dB | 59 | 59 | 61 | 61 |
| Drawing No. | | | 3D092068B | | C: 3D092030B | |

**Note:** ■ The data are based on the conditions shown in the table below.

| Cooling | Heating | Piping Length |
|---|---|---|
| Indoor ; 27°CDB / 19°CWB<br>Outdoor ; 35°CDB / 24°CWB | Indoor ; 20°CDB<br>Outdoor ; 7°CDB / 6°CWB | 5 m |

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = m³/min × 35.3 |

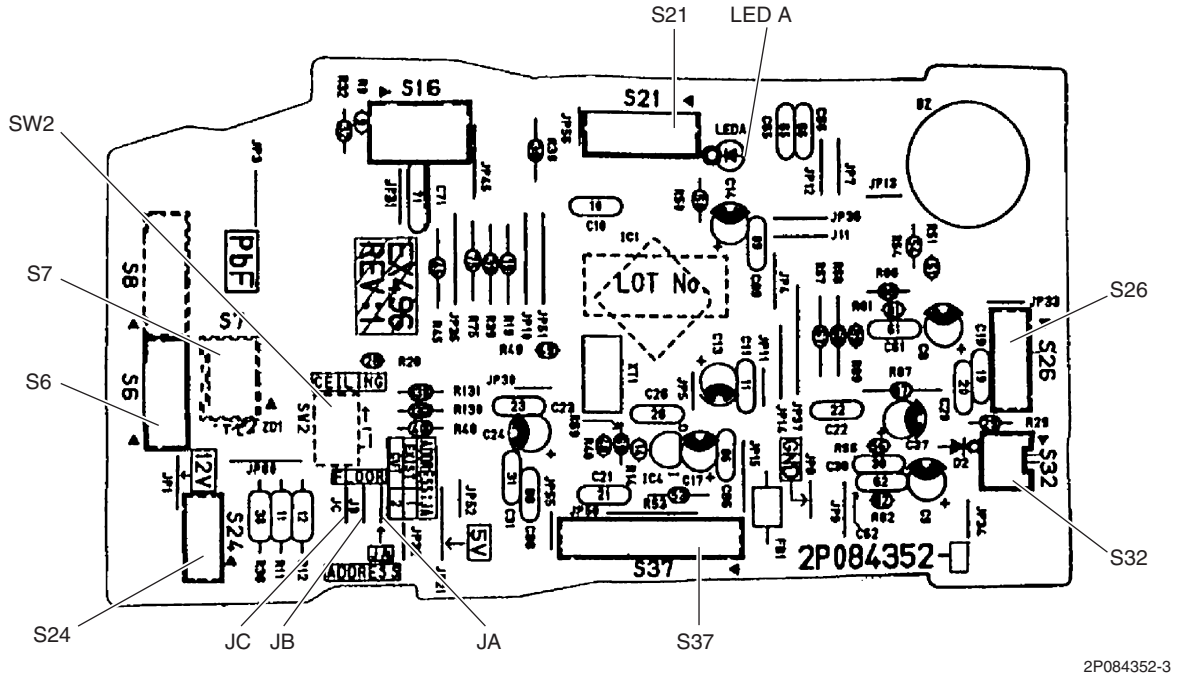
# Part 3
# Printed Circuit Board Connector Wiring Diagram

1. Indoor Unit.....19
2. Outdoor Unit.....21
   2.1 RK(X)S25/35E2V1B.....21
   2.2 RK(X)S25/35G2V1B.....23
   2.3 RK(X)S25/35G2V1B9, RXS25/35J2V1B, RXS25K3V1B, RXS35K2V1B, RXS25/35L2V1B.....25
   2.4 RXS25/35L3V1B.....27

# 1. Indoor Unit

**Control PCB (PCB1)**

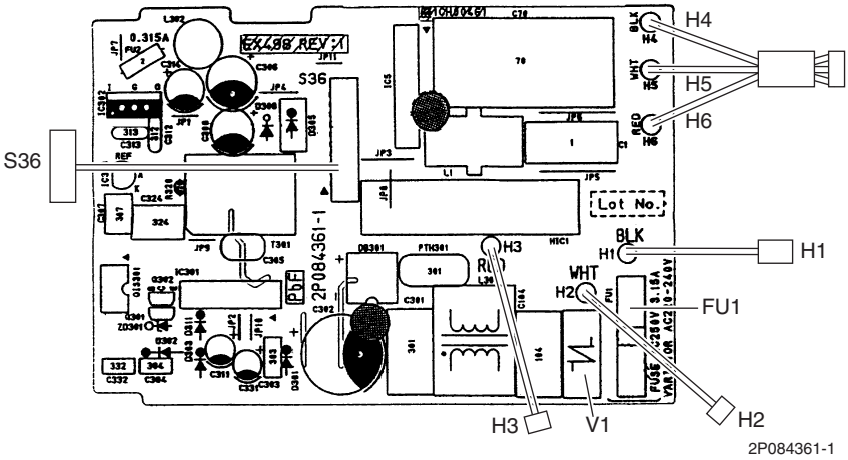
| | | |
|---|---|---|
| 1) | S6 | Connector for swing motor (horizontal swing) |
| 2) | S7 | Connector for AC fan motor |
| 3) | S21 | Connector for centralized control (HA) |
| 4) | S24 | Connector for display PCB |
| 5) | S26 | Connector for signal receiver PCB |
| 6) | S32 | Connector for indoor heat exchanger thermistor |
| 7) | S37 | Connector for power supply PCB |
| 8) | JA | Address setting jumper<br>∗ Refer to page 119 for details. |
| 9) | JB | Fan speed setting when compressor stops for thermostat OFF<br>∗ Refer to page 121 for details. |
| 10 | JC | Power failure recovery function<br>∗ Refer to page 121 for details. |
| 11) | SW2 | Select switch for installation (ceiling or floor)<br>∗ Refer to page 121 for details. |
| 12) | LED A | LED for service monitor (green) |




**Caution** **Replace the PCB if you accidentally cut a wrong jumper.**
Jumpers are necessary for the electronic circuit. Improper operation may occur if you cut any of them.

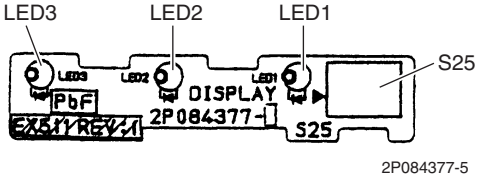
**Power Supply PCB (PCB2)**

1) S36 Connector for control PCB
2) H1, H2, H3 Connector for terminal board
3) H4, H5, H6 Connector for AC fan motor
4) V1 Varistor
5) FU1 Fuse (3.15 A, 250 V)



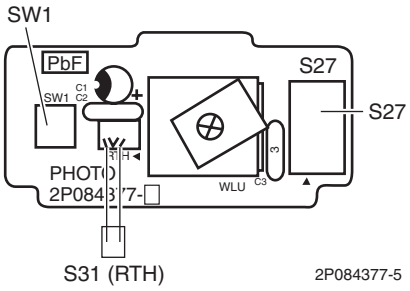

**Display PCB (PCB3)**

1) S25 Connector for control PCB
2) LED1 (H1P) LED for operation (green)
3) LED2 (H2P) LED for timer (yellow)
4) LED3 (H3P) LED for HOME LEAVE operation (red)




**Signal Receiver PCB (PCB4)**

1) S27 Connector for control PCB
2) S31 (RTH) Connector for room temperature thermistor
3) SW1 (S1W) Forced cooling operation ON/OFF button
∗ Refer to page 116 for details.



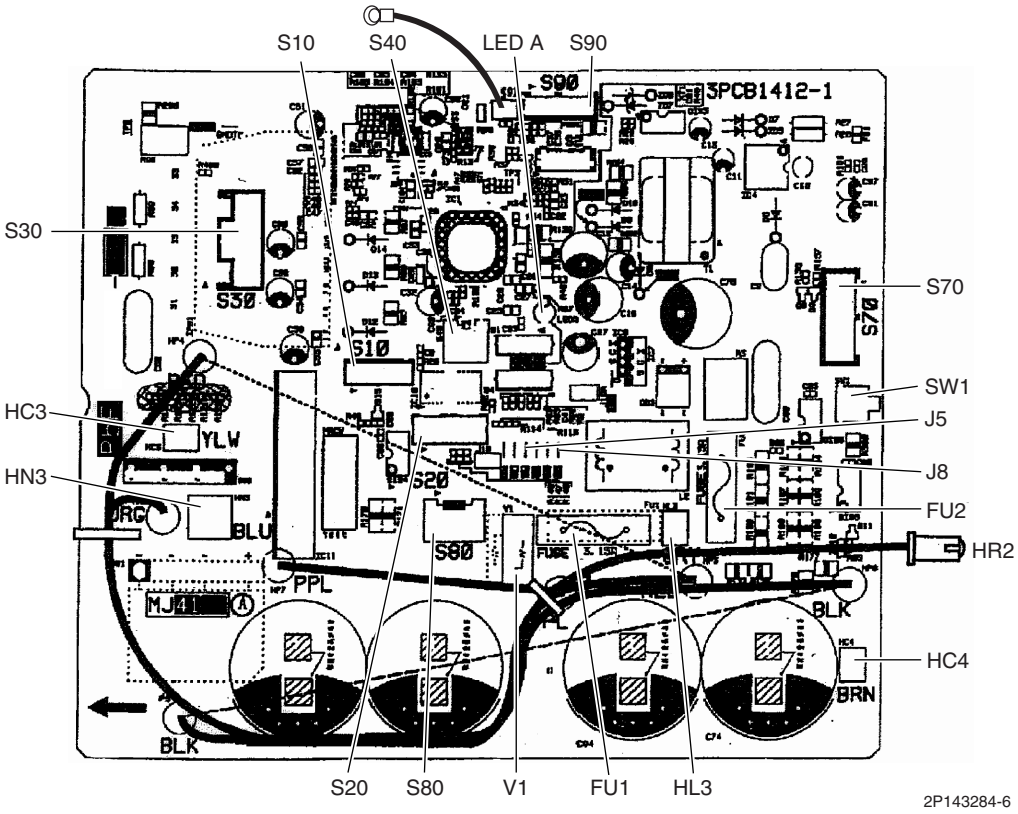

**Note:** The symbols in the parenthesis are the names on the appropriate wiring diagram.

# 2. Outdoor Unit

## 2.1 RK(X)S25/35E2V1B

**Main PCB (PCB2)**

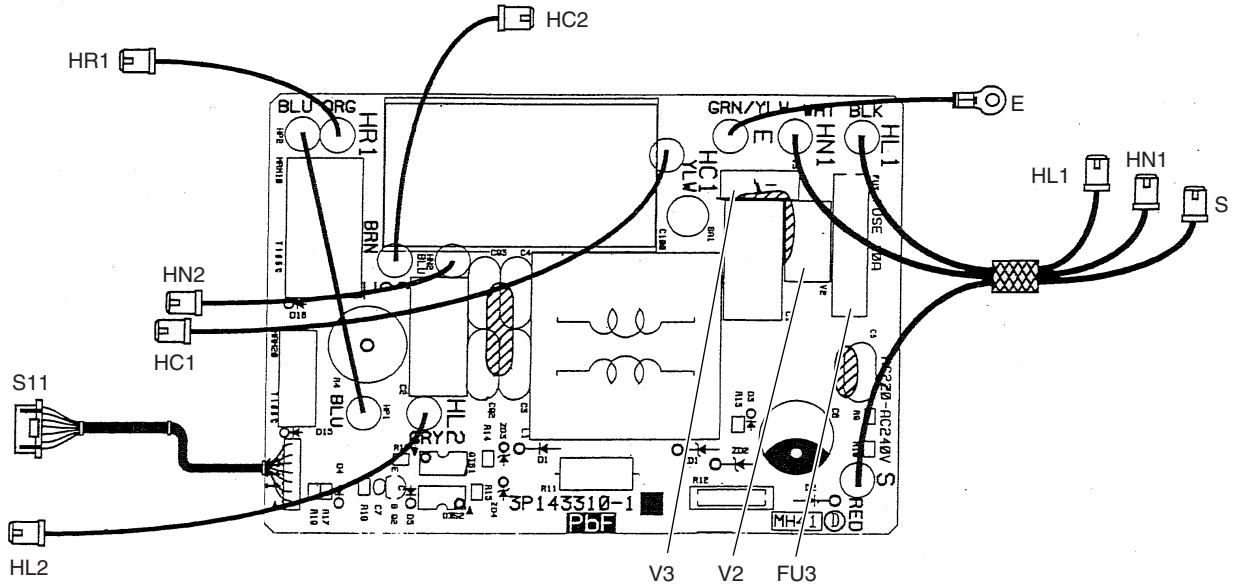
| | | |
|---|---|---|
| 1) | S10 | Connector for filter PCB |
| 2) | S20 | Connector for electronic expansion valve coil |
| 3) | S30 | Connector for compressor |
| 4) | S40 | Connector for overload protector |
| 5) | S70 | Connector for fan motor |
| 6) | S80 | Connector for four way valve coil |
| 7) | S90 | Connector for thermistors<br>(outdoor temperature, outdoor heat exchanger, discharge pipe) |
| 8) | HC3, HC4<br>HL3, HN3 | Connector for filter PCB |
| 9) | HR2 | Connector for reactor |
| 10) | FU1, FU2 | Fuse (3.15 A, 250 V) |
| 11) | LED A | LED for service monitor (green) |
| 12) | V1 | Varistor |
| 13) | J5 | Jumper for improvement of defrost performance<br>∗ Refer to page 121 for details. |
| 14) | J8 | Jumper for facility setting<br>∗ Refer to page 120 for details. |
| 15) | SW1 | Forced cooling operation ON/OFF button<br>∗ Refer to page 116 for details. |




**Caution** **Replace the PCB if you accidentally cut a wrong jumper.**
Jumpers are necessary for the electronic circuit. Improper operation may occur if you cut any of them.

## Filter PCB (PCB1)

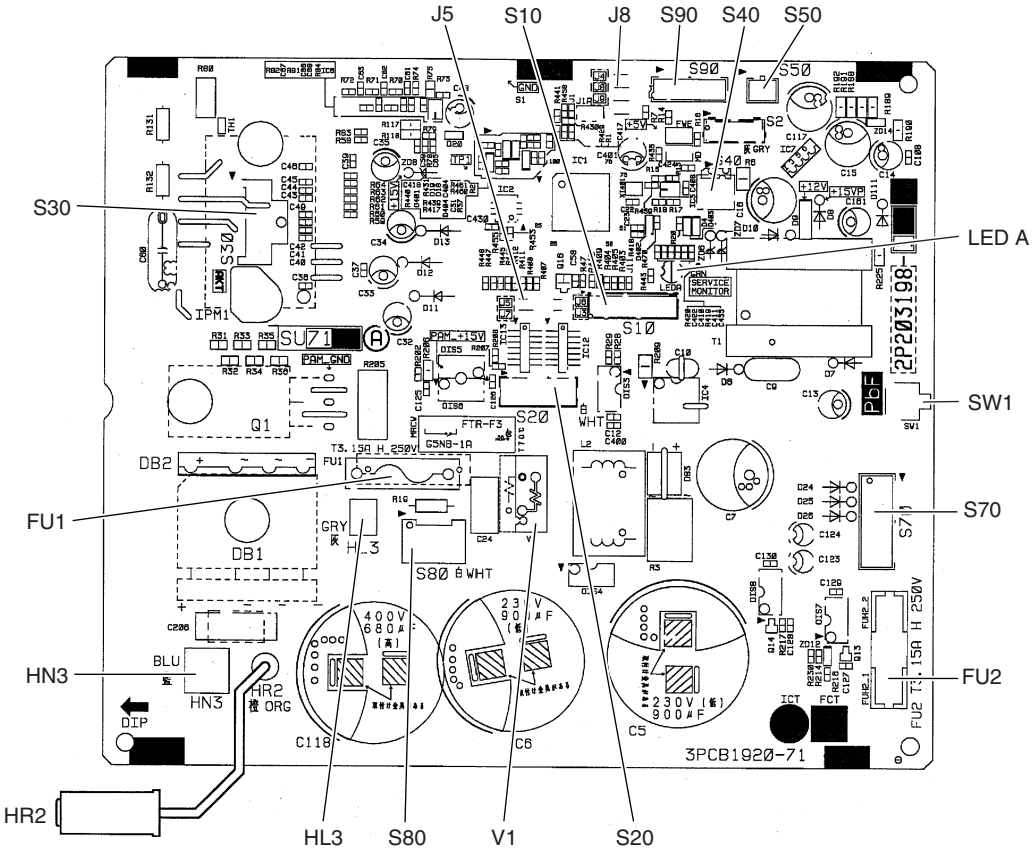
| | | |
|---|---|---|
| 1) | S11 | Connector for main PCB |
| 2) | HL1, HN1, S | Connector for terminal board |
| 3) | E | Terminal for earth wire |
| 4) | HC1, HC2<br>HL2, HN2 | Connector for main PCB |
| 5) | HR1 | Connector for reactor |
| 6) | FU3 | Fuse (20 A, 250 V) |
| 7) | V2, V3 | Varistor |



# 2.2 RK(X)S25/35G2V1B

**Main PCB (PCB2)**

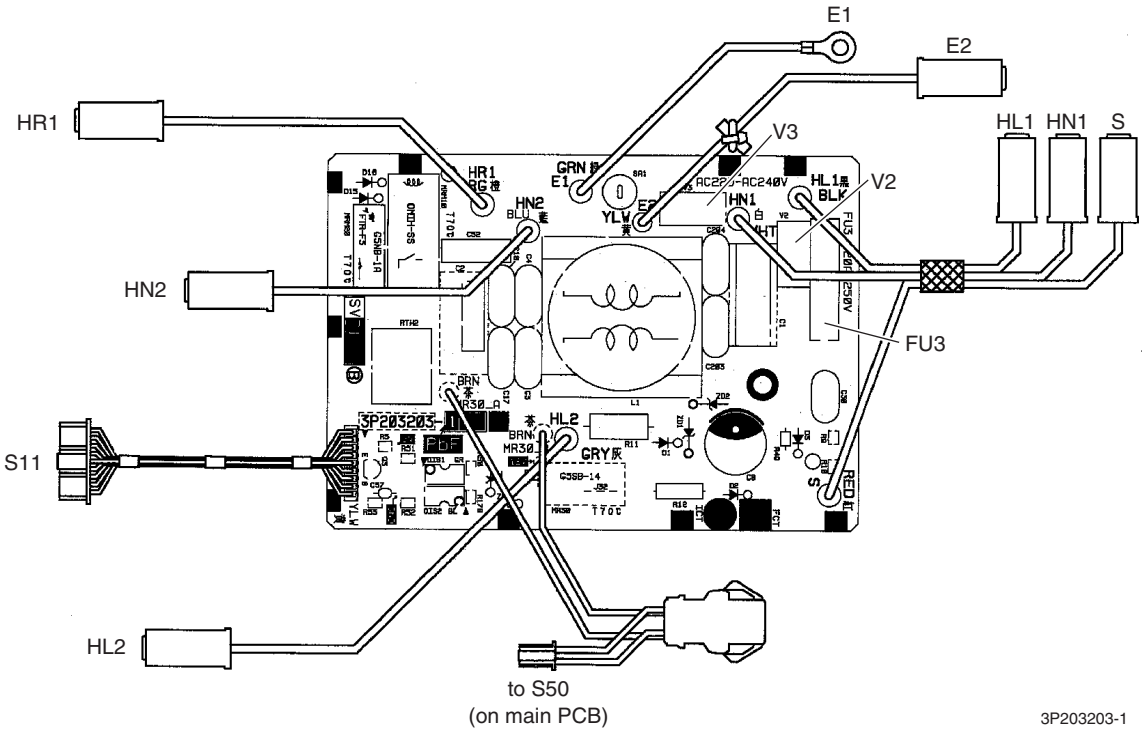
| | | |
|---|---|---|
| 1) | S10 | Connector for filter PCB |
| 2) | S20 | Connector for electronic expansion valve coil |
| 3) | S30 | Connector for compressor |
| 4) | S40 | Connector for overload protector |
| 5) | S50 | Connector for magnetic relay |
| 6) | S70 | Connector for fan motor |
| 7) | S80 | Connector for four way valve coil |
| 8) | S90 | Connector for thermistors<br>(outdoor temperature, outdoor heat exchanger, discharge pipe) |
| 9) | HL3, HN3 | Connector for filter PCB |
| 10) | HR2 | Connector for reactor |
| 11) | FU1, FU2 | Fuse (3.15 A, 250 V) |
| 12) | LED A | LED for service monitor (green) |
| 13) | V1 | Varistor |
| 14) | J5 | Jumper for improvement of defrost performance<br>∗ Refer to page 121 for details. |
| 15) | J8 | Jumper for facility setting<br>∗ Refer to page 120 for details. |
| 16) | SW1 | Forced cooling operation ON/OFF button<br>∗ Refer to page 116 for details. |




**Caution** **Replace the PCB if you accidentally cut a wrong jumper.**
Jumpers are necessary for the electronic circuit. Improper operation may occur if you cut any of them.

## Filter PCB (PCB1)

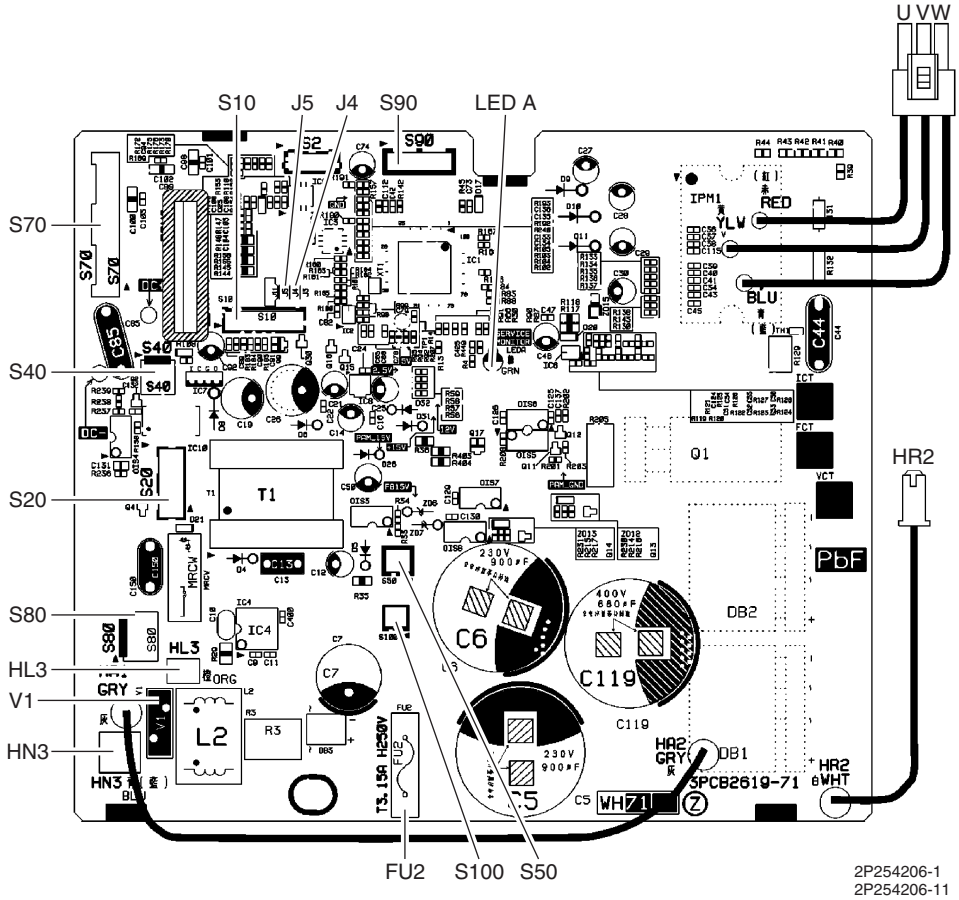
| | | |
|---|---|---|
| 1) | S11 | Connector for main PCB |
| 2) | HL1, HN1, S | Connector for terminal board |
| 3) | E1 | Terminal for earth wire |
| 4) | E2 | Connector for terminal board (earth) |
| 5) | HL2, HN2 | Connector for main PCB |
| 6) | HR1 | Connector for reactor |
| 7) | FU3 | Fuse (20 A, 250 V) |
| 8) | V2, V3 | Varistor |



# 2.3 RK(X)S25/35G2V1B9, RXS25/35J2V1B, RXS25K3V1B, RXS35K2V1B, RXS25/35L2V1B

**Main PCB (PCB2)**

| | |
|---|---|
| 1) S10 | Connector for filter PCB |
| 2) S20 | Connector for electronic expansion valve coil |
| 3) S40 | Connector for overload protector |
| 4) S50 | Connector for magnetic relay |
| 5) S70 | Connector for fan motor |
| 6) S80 | Connector for four way valve coil |
| 7) S90 | Connector for thermistors<br>(outdoor temperature, outdoor heat exchanger, discharge pipe) |
| 8) S100 | Connector for forced operation button PCB |
| 9) HL3, HN3 | Connector for filter PCB |
| 10) HR2 | Connector for reactor |
| 11) U, V, W | Connector for compressor |
| 12) FU2 | Fuse (3.15 A, 250 V) |
| 13) LED A | LED for service monitor (green) |
| 14) V1 | Varistor |
| 15) J4 | Jumper for facility setting<br>∗ Refer to page 120 for details. |
| 16) J5 | Jumper for improvement of defrost performance<br>∗ Refer to page 121 for details. |

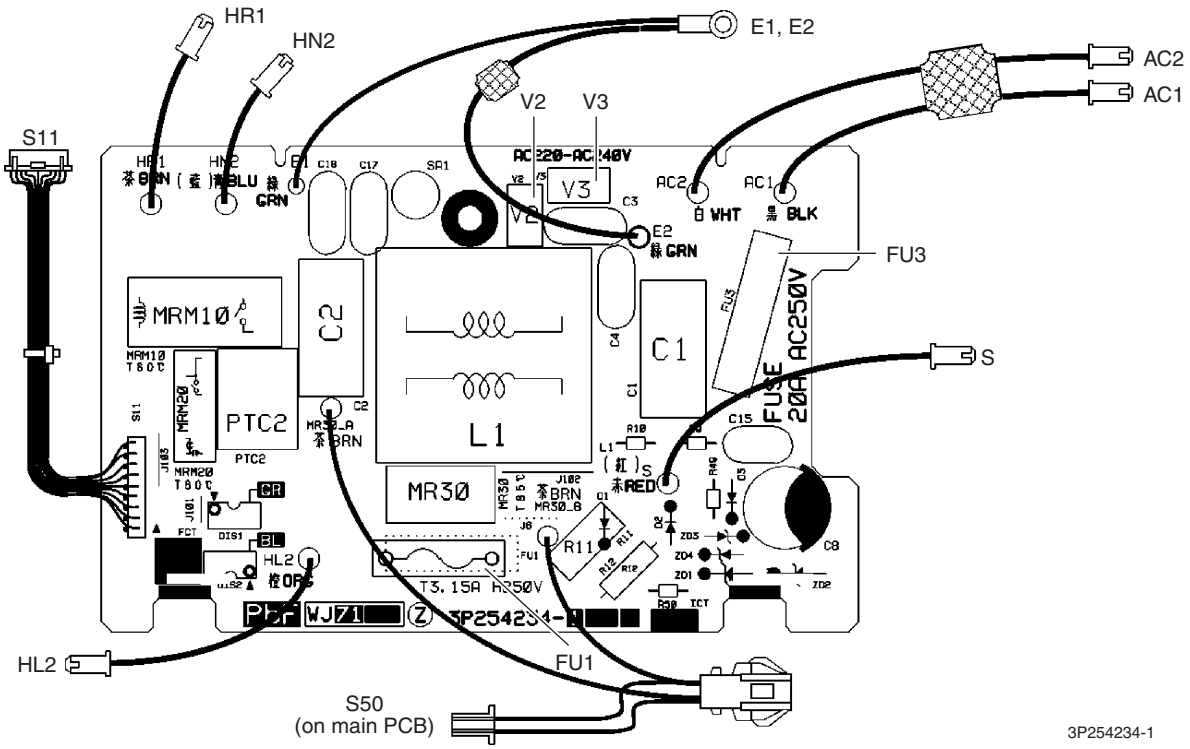



2P254206-1
2P254206-11
2P358715-1

**Caution** **Replace the PCB if you accidentally cut a wrong jumper.**
Jumpers are necessary for the electronic circuit. Improper operation may occur if you cut any of them.

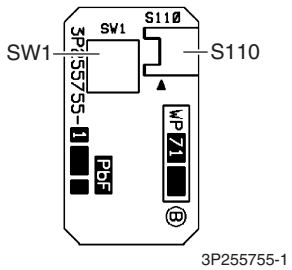
## Filter PCB (PCB1)

1) S11 Connector for main PCB
2) AC1, AC2, S Connector for terminal board
3) E1, E2 Terminal for earth wire
4) HL2, HN2 Connector for main PCB
5) HR1 Connector for reactor
6) FU1 Fuse (3.15 A, 250 V)
7) FU3 Fuse (20 A, 250 V)
8) V2, V3 Varistor




## Forced Operation Button PCB (PCB3)

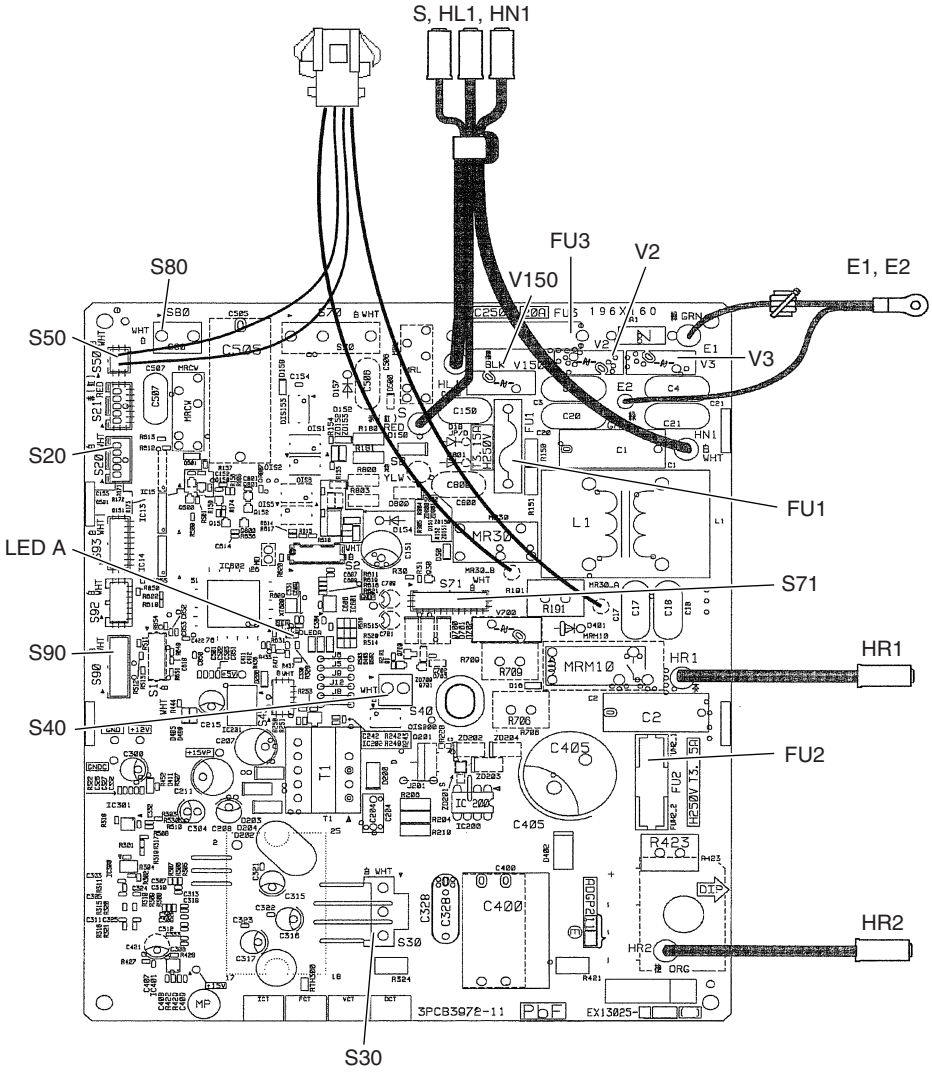
1) S110 Connector for main PCB
2) SW1 Forced cooling operation ON/OFF button
∗ Refer to page 116 for details.



# 2.4 RXS25/35L3V1B

**Main PCB (PCB1)**

| | | |
|---|---|---|
| 1) | S20 | Connector for electronic expansion valve coil |
| 2) | S30 | Connector for compressor motor |
| 3) | S40 | Connector for overload protector |
| 4) | S50 | Connector for magnetic relay |
| 5) | S71 | Connector for DC fan motor |
| 6) | S80 | Connector for four way valve coil |
| 7) | S90 | Connector for thermistors (outdoor temperature, outdoor heat exchanger, discharge pipe) |
| 8) | E1, E2 | Terminal for earth wire |
| 9) | HL1, HN1, S | Connector for terminal board |
| 10) | HR1, HR2 | Connector for reactor |
| 11) | FU1, FU2 | Fuse (3.15 A, 250 V) |
| 12) | FU3 | Fuse (20 A, 250 V) |
| 13) | LED A | LED for service monitor (green) |
| 14) | V2, V3, V150 | Varistor |




2P383853-2

# Part 4
# Functions and Control

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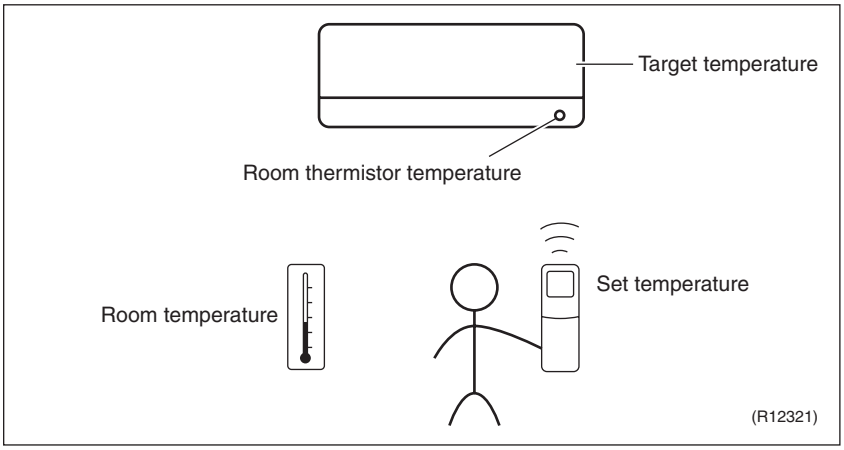
# 1. Main Functions

## 1.1 Temperature Control

**Definitions of Temperatures**

The definitions of temperatures are classified as following.

- Room temperature: temperature of lower part of the room
- Set temperature: temperature set by remote controller
- Room thermistor temperature: temperature detected by room temperature thermistor
- Target temperature: temperature determined by microcomputer




★ The illustration is for wall mounted type as representative.

**Temperature Control**

The temperature of the room is detected by the room temperature thermistor. However, there is a difference between the temperature detected by room temperature thermistor and the temperature of lower part of the room, depending on the type of the indoor unit or installation condition. Practically, the temperature control is done by the target temperature appropriately adjusted for the indoor unit and the temperature detected by room temperature thermistor.

## 1.2 Frequency Principle

**Control Parameters**

The frequency of the compressor is controlled by the following 2 parameters:

- The load condition of the operating indoor unit
- The difference between the room thermistor temperature and the target temperature

The target frequency is adapted by additional parameters in the following cases:

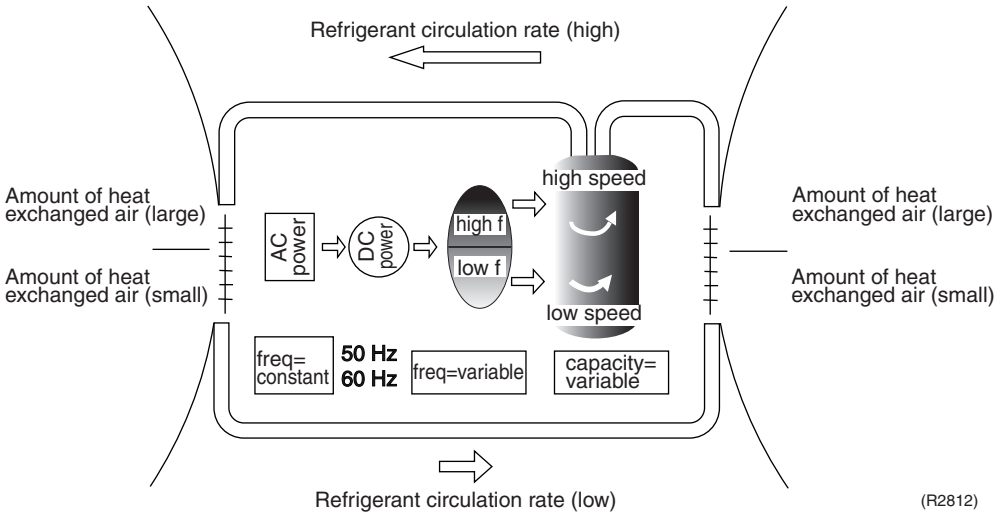
- Frequency restrictions
- Initial settings
- Forced cooling operation

**Inverter Principle**

To regulate the capacity, a frequency control is needed. The inverter makes it possible to control the rotation speed of the compressor. The following table explains the conversion principle:

| Phase | Description |
|---|---|
| 1 | The supplied AC power source is converted into the DC power source for the present. |
| 2 | The DC power source is reconverted into the three phase AC power source with variable frequency.<br>■ When the frequency increases, the rotation speed of the compressor increases resulting in an increase of refrigerant circulation. This leads to a larger amount of heat exchange per unit.<br>■ When the frequency decreases, the rotation speed of the compressor decreases resulting in a decrease of refrigerant circulation. This leads to a smaller amount of heat exchange per unit. |

The following drawing shows a schematic view of the inverter principle:




## Inverter Features

The inverter provides the following features:

- The regulating capacity can be changed according to the changes in the outdoor temperature and cooling / heating load.
- Quick heating and quick cooling
  The rotation speed of the compressor is increased when starting the heating (or cooling). This enables to reach the set temperature quickly.
- Even during extreme cold weather, high capacity is achieved. It is maintained even when the outdoor temperature is 2°C.
- Comfortable air conditioning
  A fine adjustment is integrated to keep the room temperature constant.
- Energy saving heating and cooling
  Once the set temperature is reached, the energy saving operation enables to maintain the room temperature at low power.

## Frequency Limits

The following functions regulate the minimum and maximum frequency:

| Frequency | Functions |
|---|---|
| Low | ■ Four way valve operation compensation. Refer to page 45. |
| High | ■ Compressor protection function. Refer to page 45.<br>■ Discharge pipe temperature control. Refer to page 46.<br>■ Input current control. Refer to page 47.<br>■ Freeze-up protection control. Refer to page 48.<br>■ Heating peak-cut control. Refer to page 48.<br>■ Defrost control. Refer to page 50. |

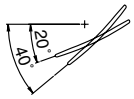
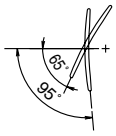
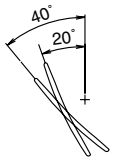
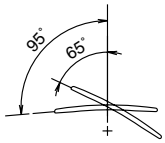
## Forced Cooling Operation

Refer to page 116 for details.

# 1.3 Airflow Direction Control

**Auto-Swing**

The following table explains the auto-swing process for cooling, dry, fan, and heating:

| | Up and Down | |
|---|---|---|
| | Cooling / Dry / Fan | Heating |
| Ceiling |   (R2964) |   (R2963) |
| Floor |   (R2967) |   (R2966) |

# 1.4 Fan Speed Control for Indoor Unit

**Outline**

Phase control and fan speed control contains 9 steps: LLL, LL, SL, L, ML, M, MH, H, and HH. The airflow rate can be automatically controlled depending on the difference between the room thermistor temperature and the target temperature.

**Automatic Fan Speed Control**

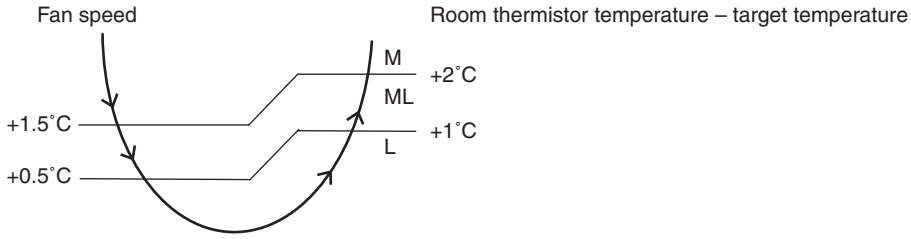
In automatic fan speed control, the step SL is not available.

| Step | Cooling | Heating |
|---|---|---|
| LLL | | |
| LL | | |
| L | | |
| ML | | |
| M | | |
| MH | | |
| H | | |
| HH (POWERFUL) | (R6833) | (R6834) |

⟺ = The airflow rate is automatically controlled within this range when the **FAN** setting button is set to automatic.

**Cooling**

The following drawing explains the principle of fan speed control for cooling.




(R12390)

**Heating**

In heating operation, the fan speed is regulated according to the indoor heat exchanger temperature and the difference between the room thermistor temperature and the target temperature.

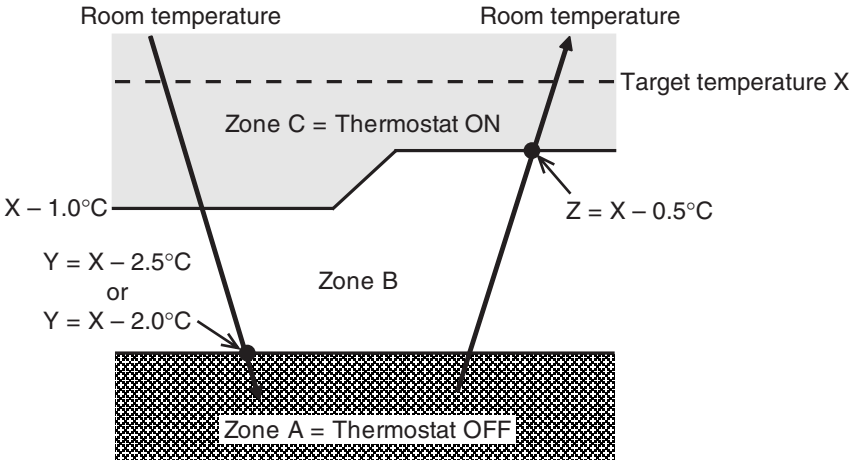
# 1.5 Program Dry Operation

**Outline**

Program dry operation removes humidity while preventing the room temperature from lowering. Since the microcomputer controls both the temperature and airflow rate, the temperature adjustment and **FAN** setting buttons are inoperable.

**Detail**

The microcomputer automatically sets the temperature and airflow rate. The difference between the room thermistor temperature at start-up and the target temperature is divided into two zones. Then, the unit operates in an appropriate capacity for each zone to maintain the temperature and humidity at a comfortable level.




(R22443)

| Room thermistor temperature at start-up | Target temperature X | Thermostat OFF point Y | Thermostat ON point Z ★ |
|---|---|---|---|
| 24°C or more | Room thermistor temperature at start-up | X – 2.5°C | X – 0.5°C |
| 18 ~ 23.5°C | | X – 2.0°C | X – 0.5°C |
| 17.5°C or less | 18°C | X – 2.0°C = 16°C | X – 0.5°C = 17.5°C |

★ Thermostat turns on also when the room temperature is in the zone B for 10 minutes.

# 1.6 Automatic Operation

**Outline**

**Automatic Cooling/Heating Function**

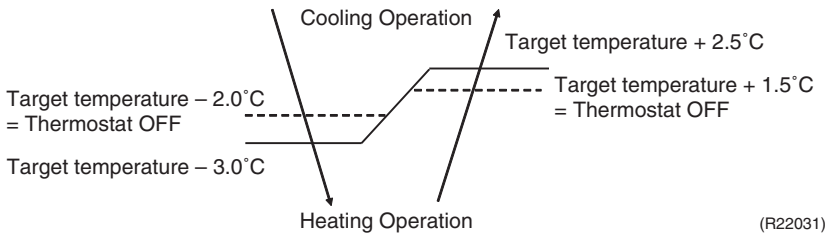
When the automatic operation is selected with the remote controller, the microcomputer automatically determines the operation mode as cooling or heating according to the room temperature and the set temperature at start-up.

The unit automatically switches the operation mode to maintain the room temperature at the set temperature.

**Detail**

Ts: set temperature (set by remote controller)
Tt: target temperature (determined by microcomputer)
Tr: room thermistor temperature (detected by room temperature thermistor)
C: correction value

1. The set temperature (Ts) determines the target temperature (Tt).
   (Ts = 18 ~ 30°C).
2. The target temperature (Tt) is calculated as;
   Tt = Ts + C
   where C is the correction value.
   C = 0°C
3. Thermostat ON/OFF point and operation mode switching point are as follows.
   Tr means the room thermistor temperature.
   (1) Heating → Cooling switching point:
   Tr ≥ Tt + 2.5°C
   (2) Cooling → Heating switching point:
   Tr < Tt – 3.0°C
   (3) Thermostat ON/OFF point is the same as the ON/OFF point of cooling or heating operation.
4. During initial operation
   Tr ≥ Ts : Cooling operation
   Tr < Ts : Heating operation




Ex: When the target temperature is 25°C
Cooling → 23.0°C: Thermostat OFF → 22.0°C: Switch to heating
Heating → 26.5°C: Thermostat OFF → 27.5°C: Switch to cooling

# 1.7 Thermostat Control

**Outline**

Thermostat control is based on the difference between the room thermistor temperature and the target temperature.

**Detail**

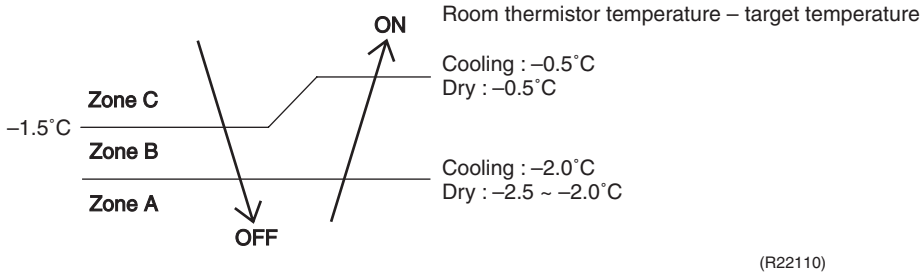
**Thermostat OFF Condition**

- The temperature difference is in the zone A.

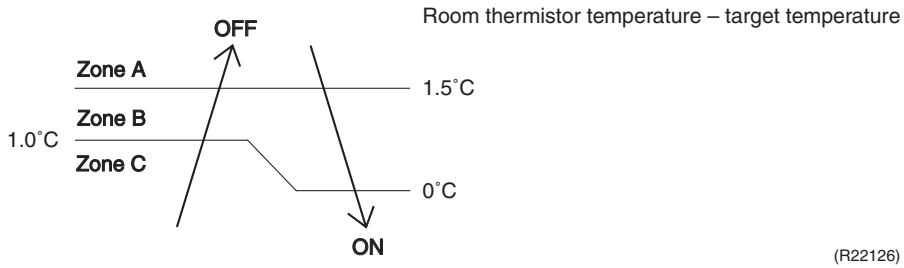
**Thermostat ON Conditions**

- The temperature difference returns to the zone C after being in the zone A.
- The system resumes from defrost control in any zones except A.
- The operation turns on in any zones except A.
- The monitoring time has passed while the temperature difference is in the zone B. (Cooling / Dry: 10 minutes, Heating: 10 seconds)

**Cooling/Dry**




**Heating**




Refer to Temperature Control on page 29 for details.

# 1.8 NIGHT SET Mode

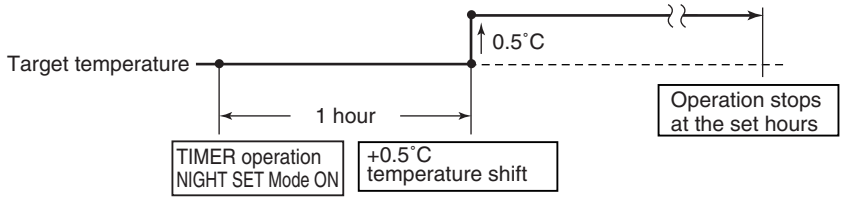
**Outline**

When the OFF TIMER is set, NIGHT SET Mode is automatically activated. NIGHT SET Mode keeps the airflow rate setting.

**Detail**

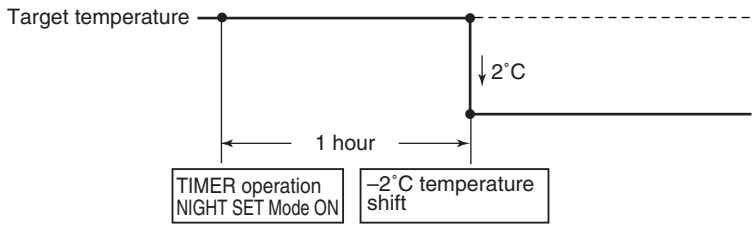
NIGHT SET Mode continues operation at the target temperature for the first one hour, then automatically raises the target temperature slightly in cooling, or lowers it slightly in heating. This prevents excessive cooling in summer and excessive heating in winter to ensure comfortable sleeping conditions, and also conserves electricity.

**Cooling**




(R22018)

**Heating**




(R22029)

# 1.9 HOME LEAVE Operation

**Outline**

HOME LEAVE operation is a function that allows you to record your preferred set temperature and airflow rate. You can start your preferred operation mode simply by pressing the **HOME LEAVE** button on the remote controller.

**Detail**

1. Start of Function

The function starts when the **HOME LEAVE** button is pressed in cooling operation, heating operation (including POWERFUL operation), or while the operation is stopped. If this button is pressed in POWERFUL operation, the POWERFUL operation is canceled and this function becomes effective.

- The **HOME LEAVE** button is ineffective in dry operation and fan operation.

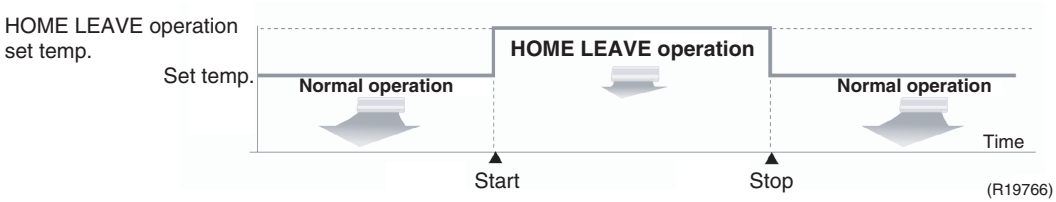
2. Details of Function

A mark representing HOME LEAVE is indicated on the display of the remote controller. The indoor unit is operated according to the set temperature and airflow rate for HOME LEAVE which were recorded in the memory of the remote controller.
The LED (red) of indoor unit representing HOME LEAVE lights up. (It goes out when the operation is stopped.)

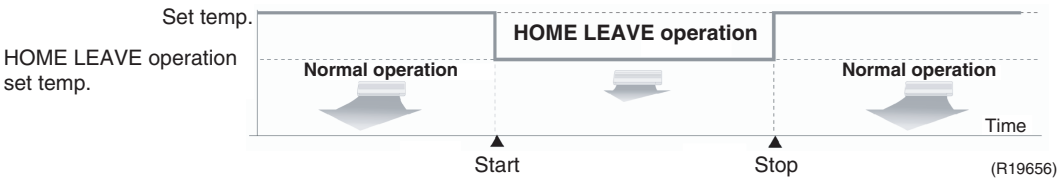
3. End of Function

The function ends when the **HOME LEAVE** button is pressed again during HOME LEAVE operation or when the **POWERFUL** button is pressed.

**Cooling**




**Heating**



**How to Set the Temperature and Airflow Rate**

When using HOME LEAVE operation for the first time, set the temperature and airflow rate for HOME LEAVE operation. Record your preferred temperature and airflow rate.

| | Initial setting | | Selectable range | |
|---|---|---|---|---|
| | Temperature | Airflow rate | Temperature | Airflow rate |
| Cooling | 25°C | | 18 ~ 32°C | 5 steps, , |
| Heating | 25°C | | 10 ~ 30°C | 5 steps, , |

1. Press the **HOME LEAVE** button.
   Make sure is displayed on the remote controller display.
2. Adjust the temperature with ▲ or ▼ as you like.
3. Adjust the airflow rate with the **FAN** setting button as you like.

HOME LEAVE operation will run with these settings the next time you start HOME LEAVE operation. To change the recorded information, repeat steps 1 – 3.

**Others**

- The set temperature and airflow rate are memorized in the remote controller. When the remote controller is reset due to replacement of battery, it is necessary to set the temperature and airflow rate again for HOME LEAVE operation.
- The operation mode cannot be changed while HOME LEAVE operation is being used.

# 1.10 Inverter POWERFUL Operation

**Outline**

In order to exploit the cooling and heating capacity to full extent, the air conditioner can be operated by increasing the indoor fan rotating speed and the compressor frequency.

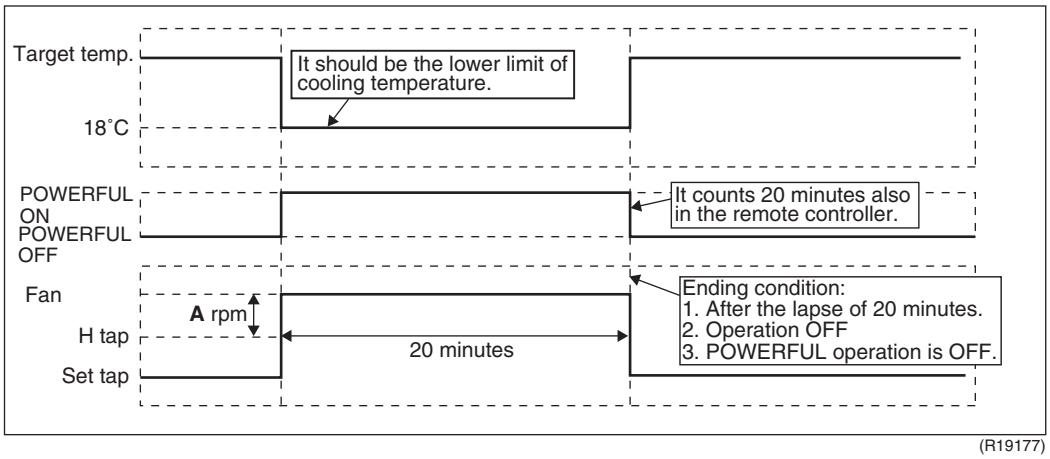
**Detail**

When the **POWERFUL** button is pressed, the fan speed and target temperature are converted to the following states for 20 minutes.

| Operation mode | Fan speed | Target temperature |
|---|---|---|
| COOL | H tap + **A** rpm | 18°C |
| DRY | Dry rotating speed + **A** rpm | Lowered by 2.5°C |
| HEAT | H tap + **A** rpm | 30°C |
| FAN | H tap + **A** rpm | — |
| AUTO | Same as cooling / heating in POWERFUL operation | The target temperature is kept unchanged. |

**A** = 50 rpm

Ex: POWERFUL operation in cooling




(R19177)

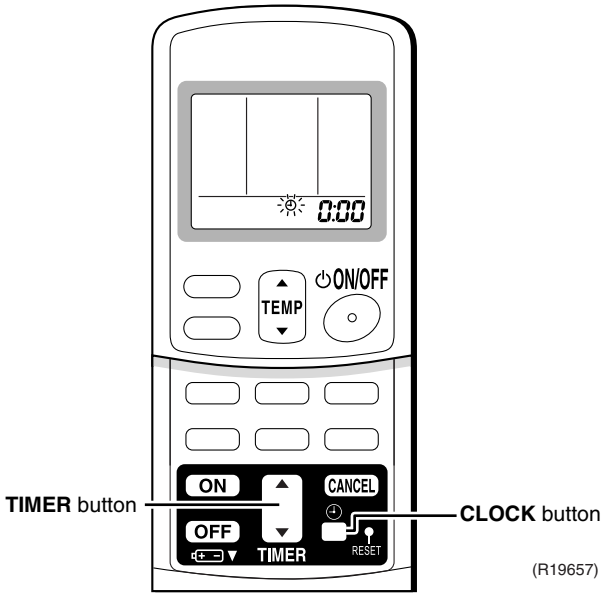
**Note:** POWERFUL Operation cannot be used together with OUTDOOR UNIT QUIET Operation.

# 1.11 Clock Setting

**ARC433 Series**

The clock can be set by taking the following steps:

1. Press the **CLOCK** button.
   → 0:00 is displayed and ⏲ blinks.
2. Press the **TIMER** ▲ or ▼ button to set the clock to the present time.
   Holding down the **TIMER** ▲ or ▼ button increases or decreases the time display rapidly.
3. Press the **CLOCK** button again.
   → : blinks and clock setting is completed.



# 1.12 Other Functions

## 1.12.1 Hot-Start Function

In order to prevent the cold air blast that normally occurs when heating operation is started, the temperature of the indoor heat exchanger is detected, and the airflow is either stopped or significantly weakened resulting in comfortable heating.

**Note:** The cold air blast is prevented using similar control when defrost control starts or when the thermostat is turned ON.

## 1.12.2 Signal Receiving Sign

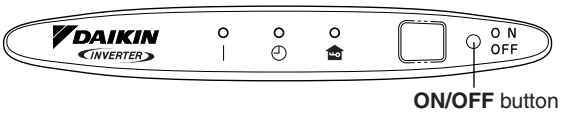
When the indoor unit receives a signal from the remote controller, the unit emits a signal receiving sound.

## 1.12.3 Indoor Unit ON/OFF Button

An **ON/OFF** button is provided on the display of the unit.

- Press the **ON/OFF** button once to start operation. Press once again to stop it.
- The **ON/OFF** button is useful when the remote controller is missing or the battery has run out.
- The operation mode refers to the following table.

| | Operation mode | Temperature setting | Airflow rate |
|---|---|---|---|
| Cooling Only | COOL | 22ºC | Automatic |
| Heat Pump | AUTO | 25ºC | Automatic |




(R19658)

**Forced cooling operation**

Forced cooling operation can be started by pressing the **ON/OFF** button for 5 to 9 seconds while the unit is not operating.

Refer to page 116 for details.

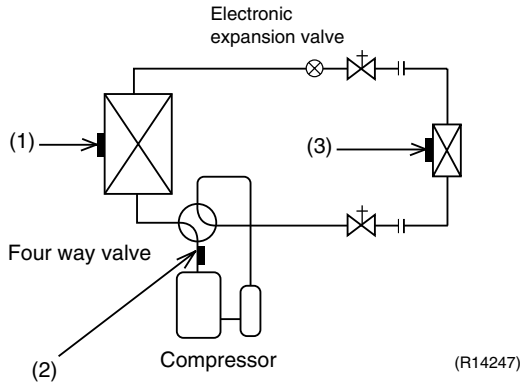
**Note:** When the **ON/OFF** button is pressed for 10 seconds or more, the forced cooling operation is stopped.

## 1.12.4 Auto-restart Function

If a power failure (including one for just a moment) occurs during the operation, the operation restarts automatically when the power is restored in the same condition as before the power failure.

**Note:** It takes 3 minutes to restart the operation because the 3-minute standby function is activated.

# 2. Thermistor Functions




**(1) Outdoor Heat Exchanger Thermistor**

1. The outdoor heat exchanger thermistor is used for controlling the target discharge pipe temperature. The system sets the target discharge pipe temperature according to the outdoor and indoor heat exchanger temperature, and controls the electronic expansion valve opening so that the target discharge pipe temperature can be obtained.
2. In cooling operation, the outdoor heat exchanger thermistor is used for detecting the disconnection of the discharge pipe thermistor. When the discharge pipe temperature drops below the outdoor heat exchanger temperature by more than a certain value, the discharge pipe thermistor is judged as disconnected.
3. In cooling operation, the outdoor heat exchanger thermistor is used for high pressure protection.

**(2) Discharge Pipe Thermistor**

1. The discharge pipe thermistor is used for controlling discharge pipe temperature. If the discharge pipe temperature (used in place of the inner temperature of the compressor) rises abnormally, the operating frequency becomes lower or the operation halts.
2. The discharge pipe thermistor is used for detecting disconnection of the discharge pipe thermistor.

**(3) Indoor Heat Exchanger Thermistor**

1. The indoor heat exchanger thermistor is used for controlling the target discharge pipe temperature. The system sets the target discharge pipe temperature according to the outdoor and indoor heat exchanger temperature, and controls the electronic expansion valve opening so that the target discharge pipe temperature can be obtained.
2. In cooling operation, the indoor heat exchanger thermistor is used for freeze-up protection control. If the indoor heat exchanger temperature drops abnormally, the operating frequency becomes lower or the operation halts.
3. In heating operation, the indoor heat exchanger thermistor is used for detecting the disconnection of the discharge pipe thermistor. When the discharge pipe temperature drops below the indoor heat exchanger temperature by more than a certain value, the discharge pipe thermistor is judged as disconnected.

# 3. Control Specification

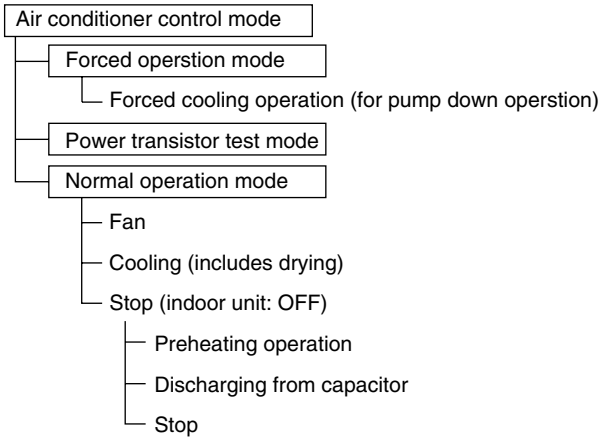
## 3.1 Mode Hierarchy

**Outline**

The air conditioner control has normal operation mode, forced operation mode, and power transistor test mode for installation and servicing.

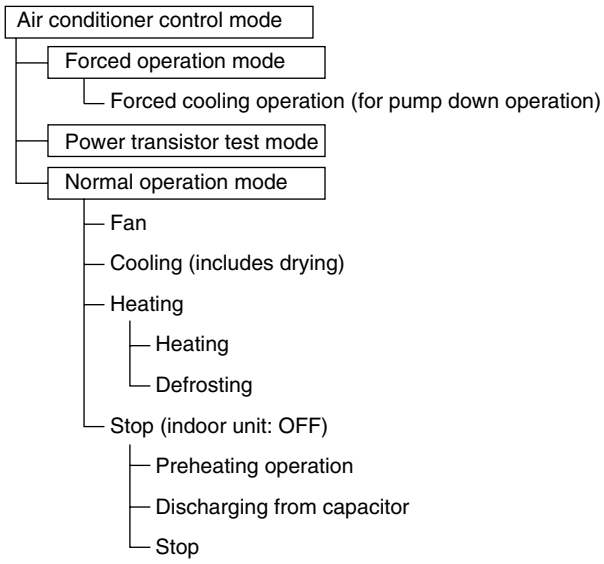
**Detail**

**Cooling Only Model**




(R19505)

**Heat Pump Model**



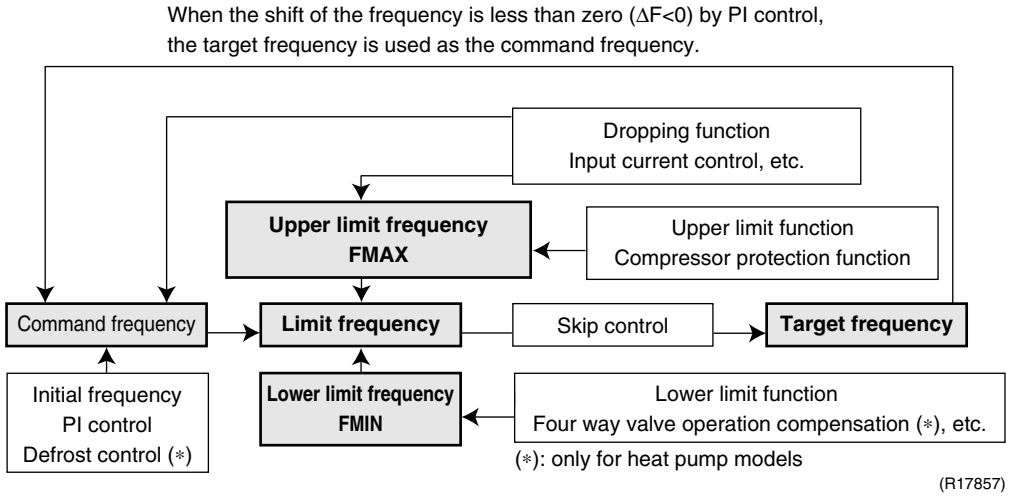

(R19522)

**Note:** Unless specified otherwise, a dry operation command is regarded as cooling operation.

# 3.2 Frequency Control

**Outline**

The compressor frequency is determined according to the difference between the room thermistor temperature and the target temperature.




**Detail**

**For Cooling Only Model**

1. **Determine command frequency**
   Command frequency is determined in the following order of priority.
   1. Forced cooling
   2. Indoor frequency command

2. **Determine upper limit frequency**
   The minimum value is set as an upper limit frequency among the frequency upper limits of the following functions:
   Compressor protection, input current, discharge pipe temperature, freeze-up protection.

3. **Determine lower limit frequency**
   The maximum value is set as a lower limit frequency among the frequency lower limits of the following function:
   Pressure difference upkeep.

4. **Determine prohibited frequency**
   There is a certain prohibited frequency such as a power supply frequency.

**For Heat Pump Model**

1. **Determine command frequency**
   Command frequency is determined in the following order of priority.
   1. Limiting defrost control time
   2. Forced cooling
   3. Indoor frequency command

2. **Determine upper limit frequency**
   The minimum value is set as an upper limit frequency among the frequency upper limits of the following functions:
   Compressor protection, input current, discharge pipe temperature, heating peak-cut, freeze-up protection, defrost.

3. **Determine lower limit frequency**
   The maximum value is set as a lower limit frequency among the frequency lower limits of the following functions:
   Four way valve operation compensation, draft prevention, pressure difference upkeep.

4. **Determine prohibited frequency**
   There is a certain prohibited frequency such as a power supply frequency.

## Initial Frequency

When starting the compressor, the frequency is initialized according to the ΔD value of the indoor unit.

**ΔD signal: Indoor Frequency Command**

The difference between the room thermistor temperature and the target temperature is taken as the ΔD value and is used for ΔD signal of frequency command.

| Temperature difference | ΔD signal | Temperature difference | ΔD signal | Temperature difference | ΔD signal | Temperature difference | ΔD signal |
|---|---|---|---|---|---|---|---|
| –2.0 | ∗OFF | 0 | 4 | 2.0 | 8 | 4.0 | C |
| –1.5 | 1 | 0.5 | 5 | 2.5 | 9 | 4.5 | D |
| –1.0 | 2 | 1.0 | 6 | 3.0 | A | 5.0 | E |
| –0.5 | 3 | 1.5 | 7 | 3.5 | B | 5.5 | F |

∗OFF: Thermostat OFF

## PI Control

1. **P control**
   The ΔD value is calculated in each sampling time (15 ~ 20 seconds), and the frequency is adjusted according to its difference from the frequency previously calculated.

2. **I control**
   If the operating frequency does not change for more than a certain fixed time, the frequency is adjusted according to the ΔD value.
   When the ΔD value is low, the frequency is lowered.
   When the ΔD value is high, the frequency is increased.

3. **Frequency management when other controls are functioning**
   - When frequency is dropping;
     Frequency management is carried out only when the frequency drops.
   - For controlling lower limit;
     Frequency management is carried out only when the frequency rises.

4. **Upper and lower limit of frequency by PI control**
   The frequency upper and lower limits are set according to the command of the indoor unit.
   When the indoor or outdoor unit quiet operation command comes from the indoor unit, the upper limit frequency is lower than the usual setting.

# 3.3 Controls at Mode Changing / Start-up

## 3.3.1 Preheating Control

**Outline**

The inverter operation in open phase starts with the conditions of the outdoor temperature, the discharge pipe temperature, the radiation fin temperature, and the preheating command from the indoor unit.

**Detail**

■ **RK(X)S25/35E2V1B, RK(X)S25/35G2V1B**

**ON Condition**

- When the discharge pipe temperature is below 10°C, the inverter operation in open phase starts.

**OFF Condition**

- When the discharge pipe temperature is higher than 12°C, the inverter operation in open phase stops.

■ **RK(X)S25/35G2V1B9, RXS25/35J2V1B, RXS25K3V1B, RXS35K2V1B, RXS25/35L2V1B, RXS25/35L3V1B**

Outdoor temperature ≥ **A**°C → Control I
Outdoor temperature < **A**°C → Control II

**Control I**

- ON condition
  Discharge pipe temperature < **B**°C
  Radiation fin temperature < 85°C

- OFF condition
  Discharge pipe temperature > **C**°C
  Radiation fin temperature ≥ 90°C

**Control II**

- ON condition
  Discharge pipe temperature < **D**°C
  Radiation fin temperature < 85°C

- OFF condition
  Discharge pipe temperature > **E**°C
  Radiation fin temperature ≥ 90°C

| | **A** (°C) | **B** (°C) | **C** (°C) | **D** (°C) | **E** (°C) |
|---|---|---|---|---|---|
| RK(X)S25/35G2V1B9<br>RXS25/35J2V1B | 7 | 10 | 12 | 20 | 22 |
| RXS25K3V1B<br>RXS35K2V1B<br>RXS25/35L2V1B<br>RXS25/35L3V1B | –2.5 | 0 | 2 | 10 | 12 |

## 3.3.2 Four Way Valve Switching

**Outline**

The four way valve coil is energized / not energized depending on the operation mode. (Heating: ON, Cooling / Dry / Defrost: OFF) In order to eliminate the switching sound as the four way valve coil switches from ON to OFF when the heating is stopped, the OFF delay switch of the four way valve is carried out.

**Detail**

**OFF delay switch of four way valve**

The four way valve coil is energized for 160 seconds after the operation is stopped.

## 3.3.3 Four Way Valve Operation Compensation

**Outline**

At the beginning of operation as the four way valve is switched, the pressure difference to activate the four way valve is acquired when the output frequency is higher than a certain fixed frequency, for a certain fixed time.

**Detail**

**Starting Conditions**

1. When the compressor starts and the four way valve switches from OFF to ON
2. When the four way valve switches from ON to OFF during operation
3. When the compressor starts after resetting
4. When the compressor starts after the fault of four way valve switching

The lower limit of frequency keeps **A** Hz for **B** seconds with any conditions 1 through 4 above.

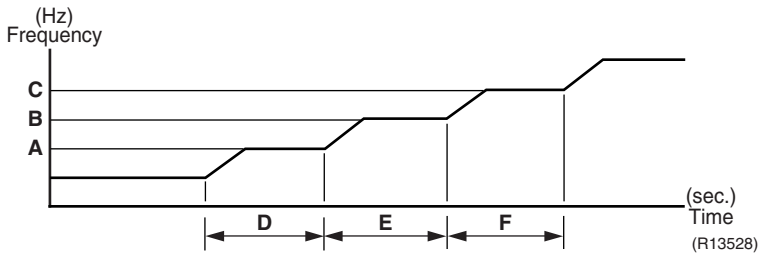
| | Cooling | Heating |
|---|---|---|
| **A** (Hz) | 68 | 66 |
| **B** (seconds) | 45 | |

## 3.3.4 3-minute Standby

Turning on the compressor is prohibited for 3 minutes after turning it off.
(The function is not activated when defrosting.)

## 3.3.5 Compressor Protection Function

When turning the compressor from OFF to ON, the upper limit of frequency is set as follows.
(The function is not activated when defrosting.)



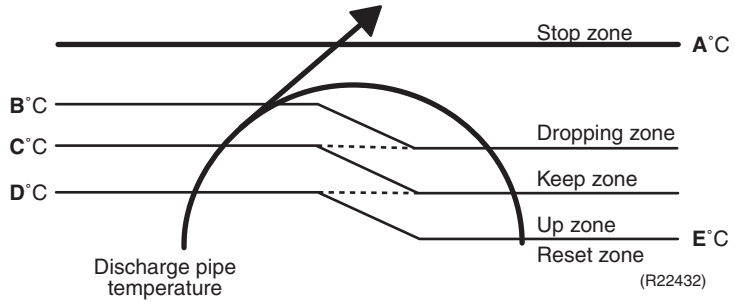

| | RK(X)S25/35E2V1B<br>RK(X)S25/35G2V1B<br>RK(X)S25/35G2V1B9<br>RXS25/35J2V1B<br>RXS25K3V1B<br>RXS35K2V1B<br>RXS25/35L2V1B | RXS25/35L3V1B |
|---|---|---|
| **A** (Hz) | 48 | 40 |
| **B** (Hz) | 64 | 54 |
| **C** (Hz) | 88 | 72 |
| **D** (seconds) | 240 | 180 |
| **E** (seconds) | 360 | 420 |
| **F** (seconds) | 180 | 180 |

# 3.4 Discharge Pipe Temperature Control

**Outline**

The discharge pipe temperature is used as the internal temperature of the compressor. If the discharge pipe temperature rises above a certain level, the upper limit of frequency is set to keep the discharge pipe temperature from rising further.

**Detail**




| | RK(X)S25/35E2V1B<br>RK(X)S25/35G2V1B<br>RK(X)S25/35G2V1B9<br>RXS25/35J2V1B<br>RXS25K3V1B<br>RXS35K2V1B<br>RXS25/35L2V1B | RXS25/35L3V1B |
|---|---|---|
| **A** (ºC) | 110 | 110 |
| **B** (ºC) | 105 | 103 |
| **C** (ºC) | 101 | 98 |
| **D** (ºC) | 99 | 93 |
| **E** (ºC) | 97 | 88 |

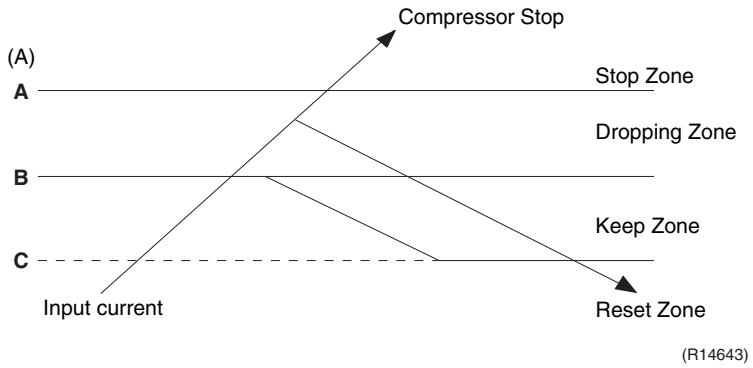
| Zone | Control |
|---|---|
| Stop zone | When the temperature reaches the stop zone, the compressor stops. |
| Dropping zone | The upper limit of frequency decreases. |
| Keep zone | The upper limit of frequency is kept. |
| Up zone | The upper limit of frequency increases. |
| Reset zone | The upper limit of frequency is canceled. |

# 3.5 Input Current Control

**Outline**

The microcomputer calculates the input current while the compressor is running, and sets the frequency upper limit based on the input current.
In case of heat pump models, this control is the upper limit control of frequency and takes priority over the lower limit control of four way valve operation compensation.

**Detail**




**Frequency control in each zone**

**Stop zone**

- After the input current remains in the stop zone for 2.5 seconds, the compressor is stopped.

**Dropping zone**

- The upper limit of the compressor frequency is defined as operation frequency – 2 Hz.
- After this, the output frequency is lowered by 2 Hz every second until it reaches the keep zone.

**Keep zone**

- The present maximum frequency goes on.

**Reset zone**

- Limit of the frequency is canceled.

| | RK(X)S25E2V1B | | RK(X)S25G2V1B | | RK(X)S25G2V1B9<br>RXS25J2V1B | |
|---|---|---|---|---|---|---|
| | Cooling | Heating | Cooling | Heating | Cooling | Heating |
| **A** (A) | 9.25 | | 9.25 | | 9.25 | |
| **B** (A) | 6.0 | 7.5 | 6.5 | 7.5 | 6.25 | 7.5 |
| **C** (A) | 5.25 | 6.75 | 5.75 | 6.75 | 5.5 | 6.75 |

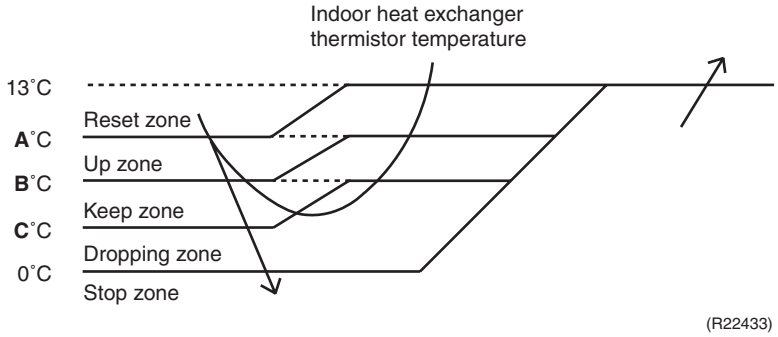
| | RXS25K3V1B<br>RXS25L2V1B<br>RXS25L3V1B | | RK(X)S35E2V1B<br>RK(X)S35G2V1B | | RK(X)S35G2V1B9<br>RXS35J2V1B<br>RXS35K2V1B<br>RXS35L2V1B<br>RXS35L3V1B | |
|---|---|---|---|---|---|---|
| | Cooling | Heating | Cooling | Heating | Cooling | Heating |
| **A** (A) | 9.25 | | 9.25 | | 9.25 | |
| **B** (A) | 7.5 | | 7.25 | 8.25 | 8.25 | |
| **C** (A) | 6.75 | | 6.5 | 7.5 | 7.5 | |

**Limitation of current dropping and stop value according to the outdoor temperature**

- The current drops when outdoor temperature becomes higher than a certain level (depending on the model).

# 3.6 Freeze-up Protection Control

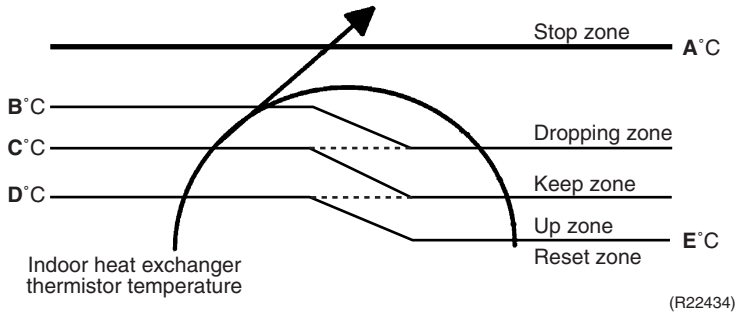
During cooling operation, the signal sent from the indoor unit determines the frequency upper limit and prevents freezing of the indoor heat exchanger. (The signal from the indoor unit is divided into zones.)
The operating frequency limitation is judged with the indoor heat exchanger temperature.




| **A** (°C) | **B** (°C) | **C** (°C) |
|---|---|---|
| 7 | 5 | 3 |

# 3.7 Heating Peak-cut Control

During heating operation, the indoor heat exchanger temperature determines the frequency upper limit to prevent abnormal high pressure.
The operating frequency limitation is judged with the indoor heat exchanger temperature.




| | RXS25/35E2V1B<br>RXS25/35G2V1B<br>RXS25/35G2V1B9<br>RXS25/35J2V1B<br>RXS25K3V1B<br>RXS35K2V1B<br>RXS25/35L2V1B | RXS25/35L3V1B |
|---|---|---|
| **A** (ºC) | 65 | 63 |
| **B** (ºC) | 56 | 56 |
| **C** (ºC) | 53 | 53 |
| **D** (ºC) | 51 | 51 |
| **E** (ºC) | 46 | 46 |

| Zone | Control |
|---|---|
| Stop zone | When the temperature reaches the stop zone, the compressor stops. |
| Dropping zone | The upper limit of frequency decreases. |
| Keep zone | The upper limit of frequency is kept. |
| Up zone | The upper limit of frequency increases. |
| Reset zone | The upper limit of frequency is canceled. |

# 3.8 Outdoor Fan Control

**1. Fan ON control to cool down the electrical box**
The outdoor fan is turned ON when the electrical box temperature is high while the compressor is OFF.

**2. Fan OFF control during defrosting**
The outdoor fan is turned OFF during defrosting.

**3. Fan OFF delay when stopped**
The outdoor fan is turned OFF 60 seconds after the compressor stops.

**4. Fan speed control for pressure difference upkeep**
The rotation speed of the outdoor fan is controlled for keeping the pressure difference during cooling operation with low outdoor temperature.

- When the pressure difference is low, the rotation speed of the outdoor fan is reduced.
- When the pressure difference is high, the rotation speed of the outdoor fan is controlled as well as normal operation.

**5. Fan speed control during forced cooling operation**
The outdoor fan is controlled as well as normal operation during forced cooling operation.

**6. Fan speed control during POWERFUL operation**
The rotation speed of the outdoor fan is increased during POWERFUL operation.

**7. Fan speed control during indoor / outdoor unit quiet operation**
The rotation speed of the outdoor fan is reduced by the command of the indoor / outdoor unit quiet operation.

**8. Fan ON/OFF control when operation (cooling, heating, dry) starts / stops**
The outdoor fan is turned ON when the operation starts. The outdoor fan is turned OFF when the operation stops.

# 3.9 Liquid Compression Protection Function

**Outline**

In order to increase the dependability of the compressor, the compressor is stopped according to the outdoor temperature.

**Detail**

Operation stops depending on the outdoor temperature.
Compressor turns off under the conditions that the system is in cooling operation and outdoor temperature is below –12°C.

# 3.10 Defrost Control

**Outline**

Defrosting is carried out by the cooling cycle (reverse cycle). The defrosting time or outdoor heat exchanger temperature must be more than a certain value to finish defrosting.

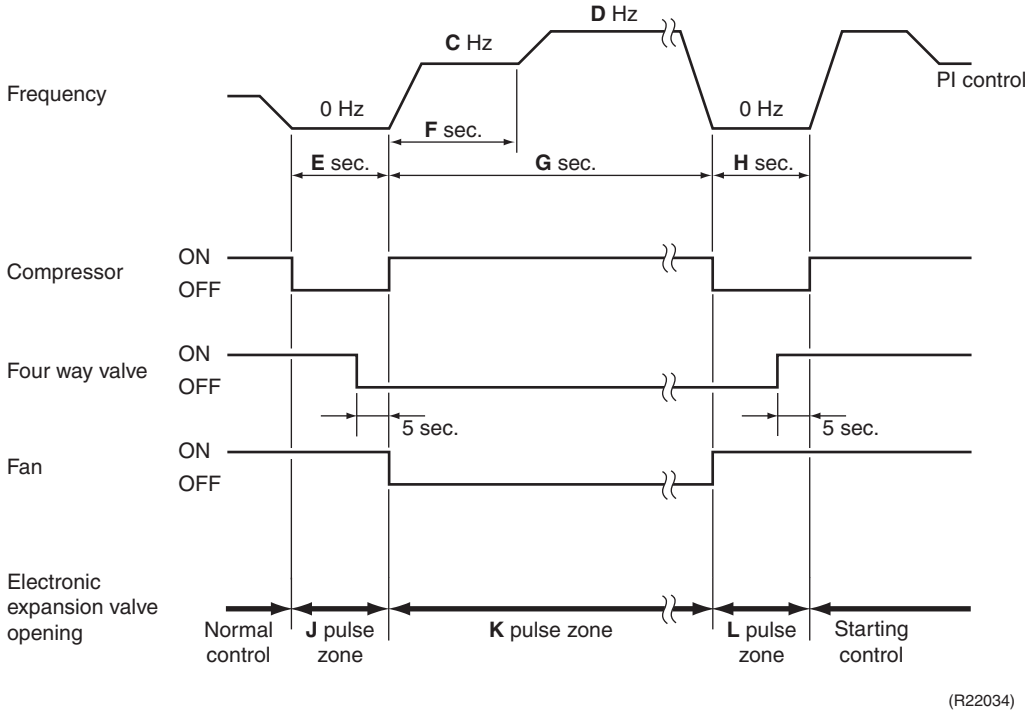
**Detail**

**Conditions for Starting Defrost**

- The starting conditions are determined with the outdoor temperature and the outdoor heat exchanger temperature.
- The system is in heating operation.
- The compressor operates for 6 minutes.
- More than **A** minutes of accumulated time pass after the start of the operation, or ending the previous defrosting.

**Conditions for Canceling Defrost**

The judgment is made with the outdoor heat exchanger temperature. (**B**°C)




| | RXS25/35E2V1B | RXS25/35G2V1B<br>RXS25/35G2V1B9<br>RXS25/35J2V1B | RXS25K3V1B<br>RXS25L2V1B | RXS35K2V1B<br>RXS35L2V1B | RXS25/35L3V1B |
|---|---|---|---|---|---|
| **A** (minutes) | 28 | 28 | 28 | 28 | 28 |
| **B** (°C) | 4 ~ 18 | 4 ~ 18 | 4 ~ 18 | 4 ~ 18 | 4 ~ 18 |
| **C** (Hz) | 74 | 76 | 68 | 76 | 64 ★ |
| **D** (Hz) | 86 | 86 | 86 | 86 | 64 ★ |
| **E** (seconds) | 50 | 50 | 50 | 50 | 50 |
| **F** (seconds) | 60 | 60 | 60 | 60 | 60 |
| **G** (seconds) | 600 | 600 | 600 | 600 | 600 |
| **H** (seconds) | 50 | 60 | 50 | 60 | 60 |
| **J** (pulse) | 450 | 450 | 450 | 450 | 450 |
| **K** (pulse) | 350 | 350 | 350 ~ 400 | 200 ~ 300 | 380 |
| **L** (pulse) | 450 | 450 | 450 | 450 | 450 |

★: The same value continues.

# 3.11 Electronic Expansion Valve Control

**Outline**

The following items are included in the electronic expansion valve control.

**Electronic expansion valve is fully closed**

1. Electronic expansion valve is fully closed when turning on the power.
2. Pressure equalizing control

**Open Control**

1. Electronic expansion valve control when starting operation
2. Electronic expansion valve control when the frequency changes
3. Electronic expansion valve control for defrosting
4. Electronic expansion valve control when the discharge pipe temperature is abnormally high
5. Electronic expansion valve control when the discharge pipe thermistor is disconnected

**Feedback Control**

Target discharge pipe temperature control

**Detail**

The followings are the examples of electronic expansion valve control which function in each operation mode.

| Control \ Status | Power on ; Compressor stop | Operation start | Frequency change under starting control | During target discharge pipe temperature control | Frequency change under target discharge pipe temperature control | Discharge pipe thermistor disconnection | Frequency change under discharge pipe thermistor disconnection control | During defrost control |
|---|---|---|---|---|---|---|---|---|
| Starting operation control | — | ● | — | — | — | — | — | — |
| Control when the frequency changes | — | — | ● | — | ● | — | — | — |
| Target discharge pipe temperature control | — | — | — | ● | — | — | — | — |
| Discharge pipe thermistor disconnection control | — | — | — | — | — | ● | ● | — |
| High discharge pipe temperature control | — | ● | ● | ● | ● | — | — | — |
| Defrost control (heating only) | — | — | — | — | — | — | — | ● |
| Pressure equalizing control | ● | — | — | — | — | — | — | — |
| Opening limit control | — | ● | ● | ● | ● | ● | ● | — |

● : Available
— : Not available

## 3.11.1 Fully Closing with Power ON

The electronic expansion valve is initialized when turning on the power. The opening position is set and the pressure is equalized.

## 3.11.2 Pressure Equalizing Control

When the compressor is stopped, the pressure equalizing control is activated. The electronic expansion valve opens, and develops the pressure equalization.

## 3.11.3 Opening Limit Control

The maximum and minimum opening of the electronic expansion valve are limited.

| | |
|---|---|
| Maximum opening (pulse) | 480 |
| Minimum opening (pulse) | 52 |

The electronic expansion valve is fully closed when cooling operation stops, and is controlled at a fixed opening during defrosting.

## 3.11.4 Starting Operation Control

The electronic expansion valve opening is controlled when the operation starts, thus preventing superheating or liquid compression.

## 3.11.5 Control when the Frequency Changes

When the target discharge pipe temperature control is active, if the target frequency changes to a specified value in a certain time period, the target discharge pipe temperature control is canceled and the target opening of the electronic expansion valve is changed according to the frequency shift.

## 3.11.6 High Discharge Pipe Temperature Control

When the compressor is operating, if the discharge pipe temperature exceeds a certain value, the electronic expansion valve opens and the refrigerant runs to the low pressure side. This procedure lowers the discharge pipe temperature.

## 3.11.7 Discharge Pipe Thermistor Disconnection Control

**Outline**

The disconnection of the discharge pipe thermistor is detected by comparing the discharge pipe temperature with the condensation temperature. If the discharge pipe thermistor is disconnected, the electronic expansion valve opens according to the outdoor temperature and the operation frequency, operates for a specified time, and then stops.
After 3 minutes, the operation restarts and checks if the discharge pipe thermistor is disconnected. If the discharge pipe thermistor is disconnected, the system stops after operating for a specified time.
If the disconnection is detected repeatedly, the system is shut down. When the compressor runs for 60 minutes without any error, the error counter is reset.

**Detail**

**Determining thermistor disconnection**
When the starting control (cooling: **A** seconds, heating: **B** seconds) finishes, the detection timer for disconnection of the discharge pipe thermistor (**C** seconds) starts. When the timer is over, the following adjustment is made.

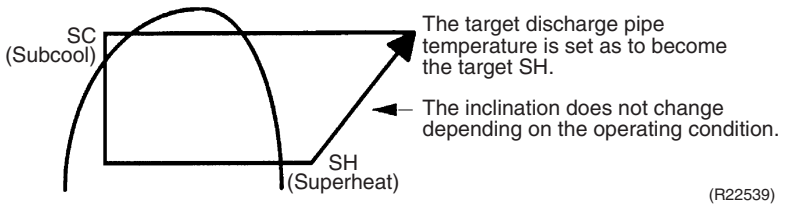
1. When the operation mode is cooling
   When the following condition is fulfilled, the discharge pipe thermistor disconnection is ascertained.
   Discharge pipe temperature + 6°C < outdoor heat exchanger temperature
2. When the operation mode is heating
   When the following condition is fulfilled, the discharge pipe thermistor disconnection is ascertained.
   Discharge pipe temperature + 6°C < indoor heat exchanger temperature

| | |
|---|---|
| **A** (seconds) | 10 |
| **B** (seconds) | 120 |
| **C** (seconds) | 810 |

**When the thermistor is disconnected**
When the disconnection is ascertained, the compressor continues operation for 9 minutes and then stops.
If the compressor stops repeatedly, the system is shut down.

## 3.11.8 Target Discharge Pipe Temperature Control

The target discharge pipe temperature is obtained from the indoor and outdoor heat exchanger temperature, and the electronic expansion valve opening is adjusted so that the actual discharge pipe temperature becomes close to the target discharge pipe temperature. (Indirect SH (superheating) control using the discharge pipe temperature)




The electronic expansion valve opening and the target discharge pipe temperature are checked every 20 seconds. The opening degree of the electronic expansion valve is adjusted by the followings.

- Target discharge pipe temperature
- Actual discharge pipe temperature
- Previous discharge pipe temperature

# 3.12 Malfunctions

## 3.12.1 Sensor Malfunction Detection

Sensor malfunction can be detected in the following thermistors:

1. Outdoor heat exchanger thermistor
2. Discharge pipe thermistor
3. Radiation fin thermistor
4. Outdoor temperature thermistor

## 3.12.2 Detection of Overcurrent and Overload

**Outline**

An excessive output current is detected and the OL temperature is observed to protect the compressor.

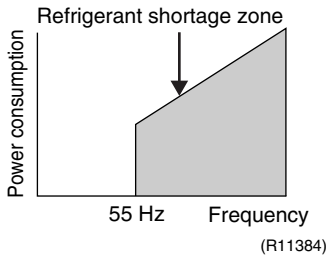
**Detail**

- If the OL (compressor head) temperature exceeds 120°C, the system shuts down the compressor.
- If the inverter current exceeds 9.25 A, the system shuts down the compressor.

## 3.12.3 Refrigerant Shortage Detection

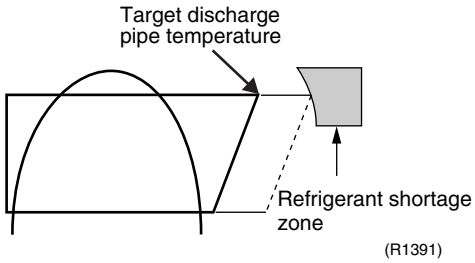
**I: Detecting by power consumption**

If the power consumption is below the specified value and the frequency is higher than the specified frequency, it is regarded as refrigerant shortage.
The power consumption is low comparing with that in the normal operation when refrigerant is insufficient, and refrigerant shortage is detected by checking power consumption.




**II: Detecting by discharge pipe temperature**

If the discharge pipe temperature is higher than the target discharge pipe temperature, and the electronic expansion valve is fully open for more than the specified time, it is regarded as refrigerant shortage.




**III: Detecting by the difference of temperature**

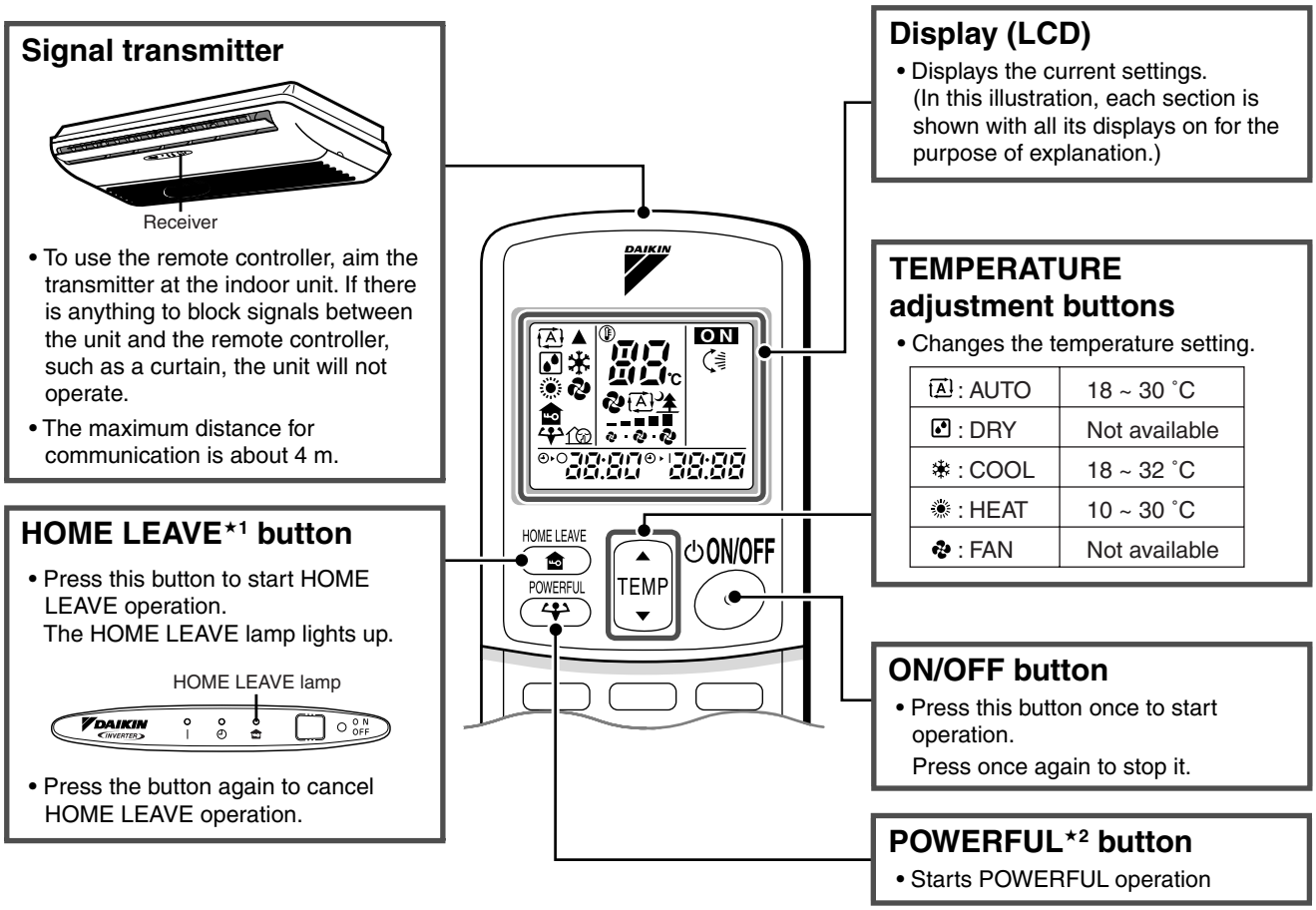
If the difference between suction and discharge temperature is smaller than the specified value, it is regarded as refrigerant shortage.

Refer to page 70 for details.

# Part 5
# Remote Controller

1. Remote Controller .....56

# 1. Remote Controller




| | |
|---|---|
| Heat pump model | ARC433B67 |
| Cooling only model | ARC433B68 |

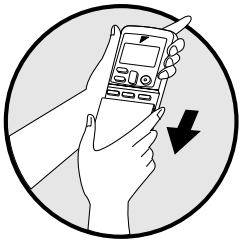
**Reference**

Refer to the following pages for details.

| | | |
|---|---|---|
| ★1 | HOME LEAVE operation | P.36 |
| ★2 | Inverter POWERFUL operation | P.37 |

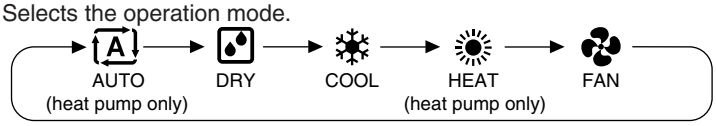
**Note:** Refer to the operation manual of applicable model for details. You can download operation manuals from Daikin Business Portal:
Daikin Business Portal → Document Search → Item Category → Installation/Operation Manual
(URL: https://global1d.daikin.com/business_portal/login/)

**Open the Front Cover**



## Mode button

- Selects the operation mode.

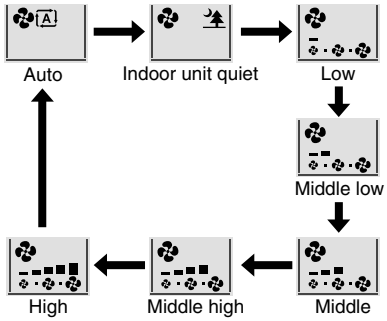



## QUIET button

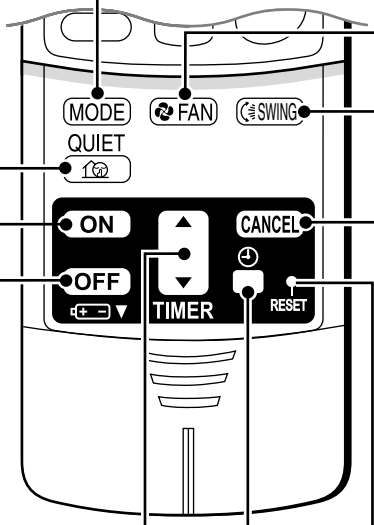
- Starts OUTDOOR UNIT QUIET operation
- OUTDOOR UNIT QUIET operation is not available in FAN and DRY operation
- OUTDOOR UNIT QUIET operation and POWERFUL operation cannot be used at the same time. Priority is given to the function you pressed last.

## FAN setting button

- Selects the airflow rate setting every time you press this button.




- In indoor unit quiet operation, operation sound becomes weak. (The airflow rate also decreases.)
- In DRY operation, the airflow rate setting is not available.




## ON TIMER button

- Press this button and adjust the time with the TIMER setting button.
  Press this button again to complete TIMER setting.

## OFF TIMER button

- Press this button and adjust the time with the TIMER setting button.
  Press this button again to complete TIMER setting.

## SWING★3 button

- Adjusts the airflow direction.
- When you press the SWING button, the flap moves up and down. The flap stops when you press the SWING button again.

## TIMER CANCEL button

- Cancels the timer setting.

## TIMER Setting button

- Changes the ON/OFF TIMER settings.

## RESET button

- Restarts the unit if it freezes.
- Use a thin object to push.

## CLOCK★4 button

(R22972)

**Reference**

Refer to the following pages for details.

| | | |
|---|---|---|
| ★3 | Auto-swing | P.31 |
| ★4 | Clock setting | P.38 |

**Note:** Refer to the operation manual of applicable model for details. You can download operation manuals from Daikin Business Portal:
Daikin Business Portal → Document Search → Item Category → Installation/Operation Manual
(URL: https://global1d.daikin.com/business_portal/login/)

# Part 6
# Service Diagnosis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# 1. General Problem Symptoms and Check Items

| Symptom | Check Item | Measures | Reference Page |
|---|---|---|---|
| The unit does not operate. | Check the power supply. | Check if the rated voltage is supplied. | — |
| | Check the type of the indoor unit. | Check if the indoor unit type is compatible with the outdoor unit. | — |
| | Check the outdoor temperature. | Heating operation is not available when the outdoor temperature is 18°CWB or higher, and cooling operation is not available when the outdoor temperature is below –10°CDB. | — |
| | Diagnose with remote controller indication. | — | 64 |
| | Check the remote controller addresses. | Check if address settings for the remote controller and indoor unit are correct. | 119 |
| Operation sometimes stops. | Check the power supply. | A power failure of 2 to 10 cycles stops air conditioner operation. (Operation lamp OFF) | — |
| | Check the outdoor temperature. | Heating operation is not available when the outdoor temperature is 18°CWB or higher, and cooling operation is not available when the outdoor temperature is below –10°CDB. | — |
| | Diagnose with remote controller indication. | — | 64 |
| The unit operates but does not cool, or does not heat. | Check for wiring and piping errors in the connection between the indoor unit and outdoor unit. | — | — |
| | Check for thermistor detection errors. | Check if the thermistor is mounted securely. | — |
| | Check for faulty operation of the electronic expansion valve. | Set the unit to cooling operation, and check the liquid pipe temperature to see if the electronic expansion valve works. | — |
| | Diagnose with remote controller indication. | — | 64 |
| | Diagnose by service port pressure and operating current. | Check for refrigerant shortage. | 70 |
| Large operating noise and vibrations | Check the output voltage of the power module. | — | 112 |
| | Check the power module. | — | — |
| | Check the installation condition. | Check if the required spaces for installation (specified in the installation manual) are provided. | — |

# 2. Troubleshooting with LED

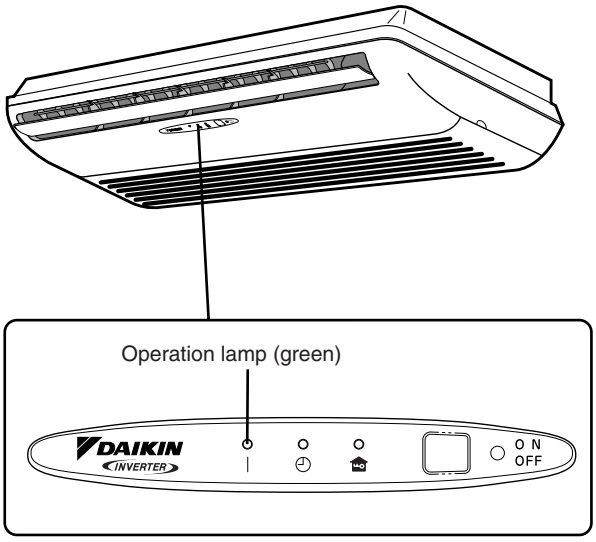
## 2.1 Indoor Unit

**Operation Lamp**

The operation lamp blinks when any of the following errors is detected.

1. When a protection device of the indoor or outdoor unit is activated, or when the thermistor malfunctions.
2. When a signal transmission error occurs between the indoor and outdoor units.

In either case, conduct the diagnostic procedure described in the following pages.




(R2974)

**Service Monitor**

The indoor unit has a green LED (LED A) on the control PCB. When the microcomputer works in order, the LED A blinks. (Refer to page 19 for the location of LED A.)

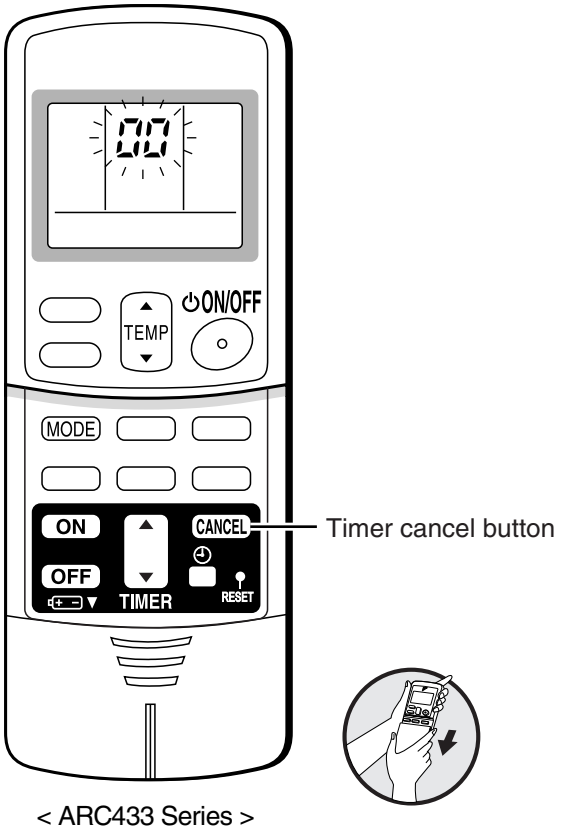
## 2.2 Outdoor Unit

The outdoor unit has a green LED (LED A) on the PCB. When the microcomputer works in order, the LED A blinks. (Refer to page 21, 23, 25, 27 for the location of LED A.)

# 3. Service Diagnosis

**Method 1**

1. When the timer cancel button is held down for 5 seconds, 00 is displayed on the temperature display screen.




< ARC433 Series >

(R18206)

2. Press the timer cancel button repeatedly until a long beep sounds.

■ The code indication changes in the sequence shown below.

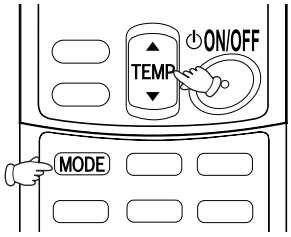
| No. | Code | No. | Code | No. | Code |
|---|---|---|---|---|---|
| 1 | 00 | 12 | C7 | 23 | H0 |
| 2 | U4 | 13 | H8 | 24 | E1 |
| 3 | F3 | 14 | J3 | 25 | P4 |
| 4 | E6 | 15 | A3 | 26 | L3 |
| 5 | L5 | 16 | A1 | 27 | L4 |
| 6 | A6 | 17 | C4 | 28 | H6 |
| 7 | E5 | 18 | C5 | 29 | H7 |
| 8 | F6 | 19 | H9 | 30 | U2 |
| 9 | C9 | 20 | J6 | 31 | UH |
| 10 | U0 | 21 | UA | 32 | EA |
| 11 | E7 | 22 | A5 | 33 | AH |

**Note:**

1. A short beep or two consecutive beeps indicate non-corresponding codes.
2. To return to the normal mode, hold the timer cancel button down for 5 seconds. When the remote controller is left untouched for 60 seconds, it also returns to the normal mode.
3. Not all the error codes are displayed. When you cannot find the error code, try method 2. (→ Refer to page 62.)

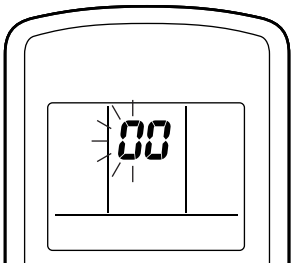
**Method 2**

1. Press the center of the **TEMP** button and the **MODE** button at the same time to enter the diagnosis mode.



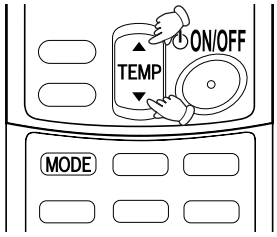
(R4272)

The left-side number blinks.



(R14967)

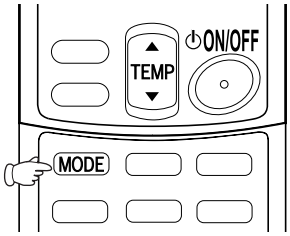
2. Press the **TEMP ▲** or **TEMP ▼** button and change the number until you hear the two consecutive beeps or the long beep.



(R4274)

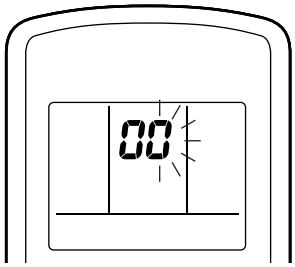
3. Diagnose by the sound.
   ★ beep: The left-side number does not correspond with the error code.
   ★ two consecutive beeps: The left-side number corresponds with the error code but the right-side number does not.
   ★ long beep: Both the left-side and right-side numbers correspond with the error code. The numbers indicated when you hear the long beep are the error code. Error codes and description → Refer to page 64.

4. Press the **MODE** button.



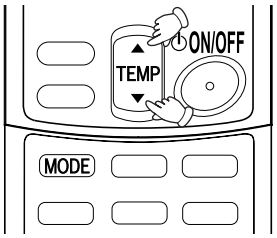
(R4275)

The right-side number blinks.



(R14968)

5. Press the **TEMP ▲** or **TEMP ▼** button and change the number until you hear the long beep.

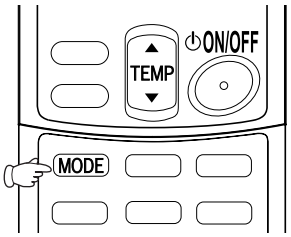


(R4277)

6. Diagnose by the sound.
   ★ beep: The left-side number does not correspond with the error code.
   ★ two consecutive beeps: The left-side number corresponds with the error code but the right-side number does not.
   ★ long beep: Both the left-side and right-side numbers correspond with the error code.

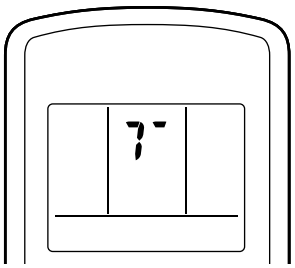
7. Determine the error code.
   The numbers indicated when you hear the long beep are the error code.
   Error codes and description → Refer to page 64.

8. Press the **MODE** button to exit from the diagnosis mode.



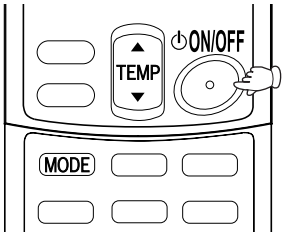
(R4278)

The display 7 means the trial operation mode.
Refer to page 118 for trial operation.



(R14969)

9. Press the **ON/OFF** button twice to return to the normal mode.



(R9670)

**Note:** When the remote controller is left untouched for 60 seconds, it returns to the normal mode.

# 4. Troubleshooting

## 4.1 Error Codes and Descriptions

| | Error Codes | Description | Reference Page |
|---|---|---|---|
| System | 00 | Normal | — |
| | U0★ | Refrigerant shortage | 70 |
| | U2 | Low-voltage detection or over-voltage detection | 72 |
| | U4 | Signal transmission error (between indoor unit and outdoor unit) | 74 |
| | U8 | Unspecified voltage (between indoor unit and outdoor unit) | 76 |
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| | P4 | Radiation fin thermistor or related abnormality | 92 |

★: Displayed only when system-down occurs.

# 4.2 Indoor Unit PCB Abnormality

**Error Code** A1

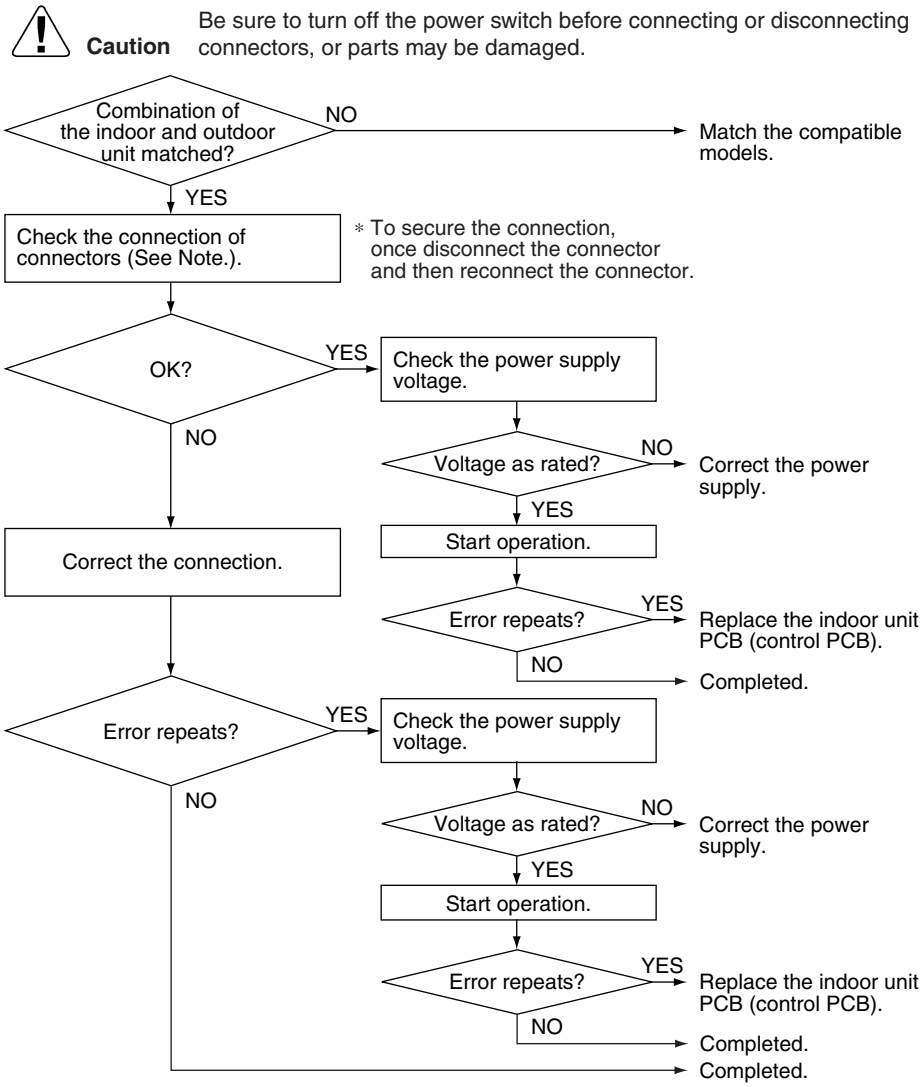
**Method of Error Detection** The system checks if the circuit works properly within the microcomputer of the indoor unit.

**Error Decision Conditions** The system cannot set the internal settings.

**Supposed Causes**

- Wrong models interconnected
- Defective indoor unit PCB
- Disconnection of connector
- Reduction of power supply voltage

**Troubleshooting**




**Note:** Check the following connector.

| Model Type | Connector |
|---|---|
| Floor / ceiling suspended dual type | S36 ~ S37 |

# 4.3 Freeze-up Protection Control / Heating Peak-cut Control

**Error Code**

A5

**Method of Error Detection**

- Freeze-up protection control
  During cooling operation, the freeze-up protection control (operation halt) is activated according to the temperature detected by the indoor heat exchanger thermistor.
- Heating peak-cut control
  During heating operation, the temperature detected by the indoor heat exchanger thermistor is used for the heating peak-cut control (operation halt, outdoor fan stop, etc.)

**Error Decision Conditions**

- Freeze-up protection control
  During cooling operation, the indoor heat exchanger temperature is below 0°C.
- Heating peak-cut control
  During heating operation, the indoor heat exchanger temperature is above 65°C

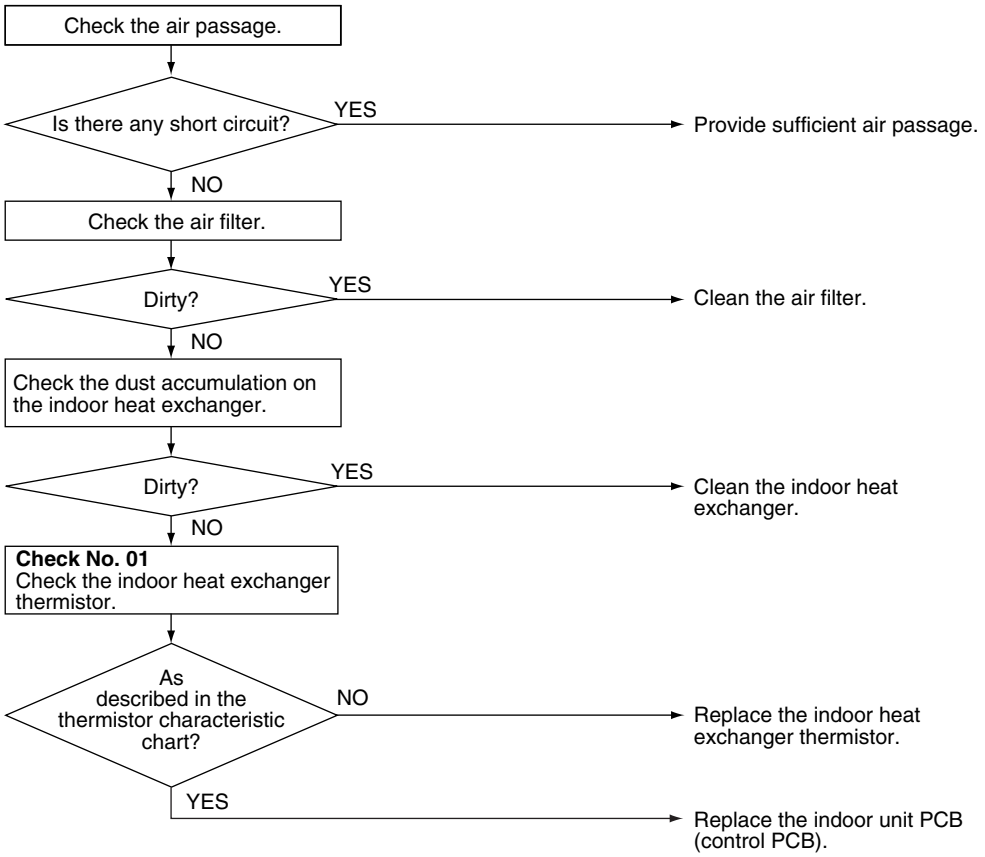
**Supposed Causes**

- Short-circuited air
- Clogged air filter of the indoor unit
- Dust accumulation on the indoor heat exchanger
- Defective indoor heat exchanger thermistor
- Defective indoor unit PCB

**Troubleshooting**

**Check No.01**
**Refer to P.102**

**Caution** Be sure to turn off the power switch before connecting or disconnecting connectors, or parts may be damaged.



# 4.4 Fan Motor (AC Motor) or Related Abnormality

**Error Code**

A6

**Method of Error Detection**

The rotation speed detected by the Hall IC during fan motor operation determines abnormal fan motor operation.

**Error Decision Conditions**

The detected rotation speed does not reach the demanded rotation speed of the target tap.

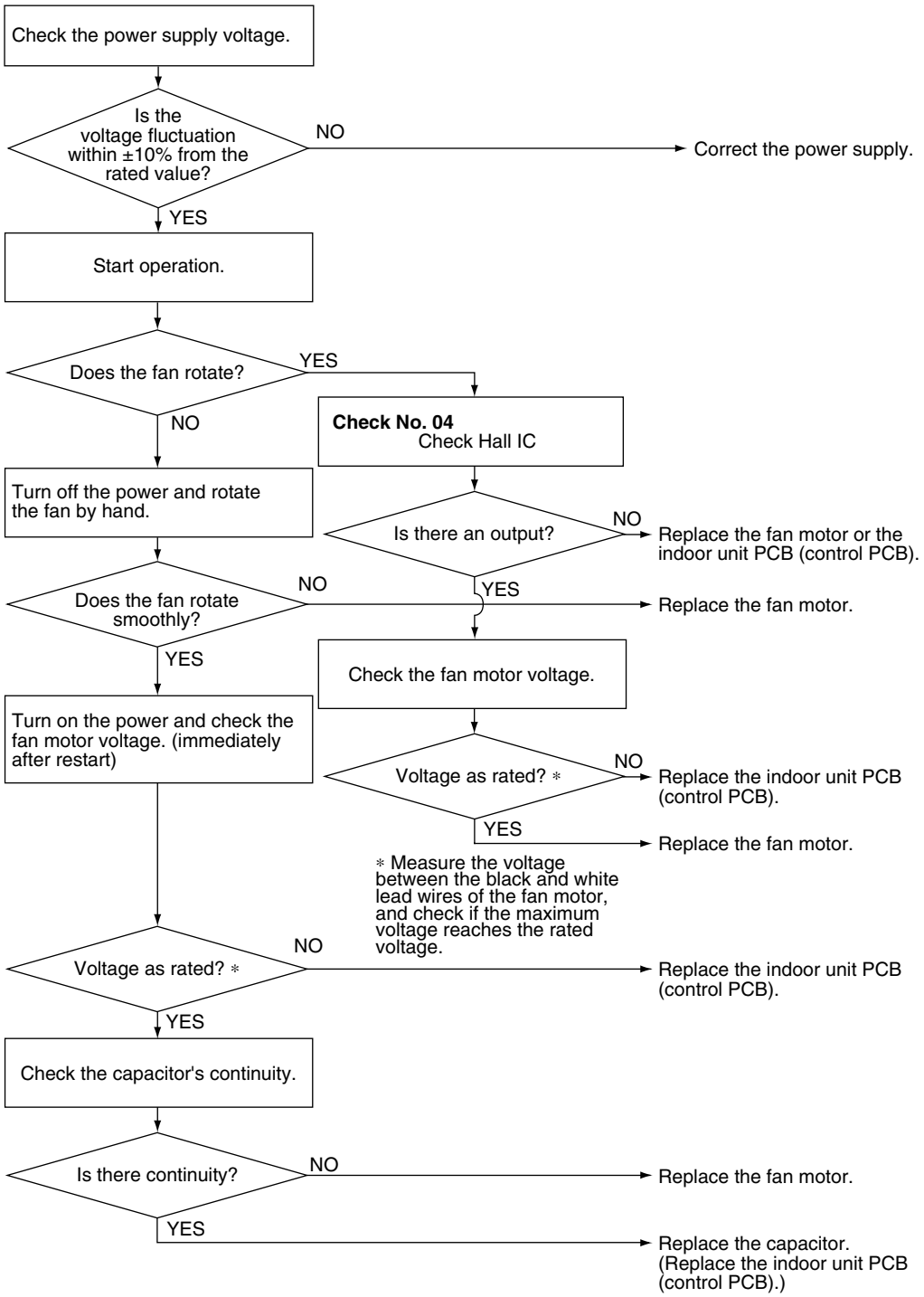
**Supposed Causes**

- Power supply voltage is not as specified.
- Layer short inside the fan motor winding
- Breaking of wire inside the fan motor
- Breaking of the fan motor lead wires
- Defective capacitor of the fan motor
- Defective indoor unit PCB

## Troubleshooting

**Check No.04**
**Refer to P.103**

**Caution** Be sure to turn off the power switch before connecting or disconnecting connectors, or parts may be damaged.



# 4.5 Thermistor or Related Abnormality (Indoor Unit)

**Error Code**

C4, C9

**Method of Error Detection**

The temperatures detected by the thermistors determine thermistor errors.

**Error Decision Conditions**

The voltage between the both ends of the thermistor is 4.96 V and more or 0.04 V and less during compressor operation.

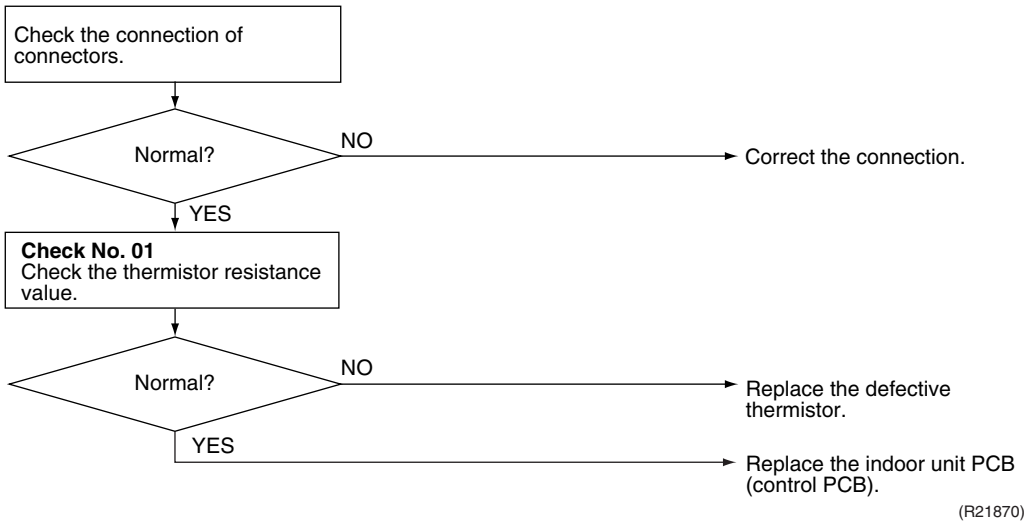
**Supposed Causes**

- Disconnection of connector
- Thermistor corresponding to the error code is defective.
- Defective indoor unit PCB

**Troubleshooting**

**Check No.01**
**Refer to P.102**

**Caution** Be sure to turn off the power switch before connecting or disconnecting connectors, or parts may be damaged.




C4 : Indoor heat exchanger thermistor
C9 : Room temperature thermistor

# 4.6 Refrigerant Shortage

**Error Code**

U0

**Method of Error Detection**

**Refrigerant shortage detection I:**
Refrigerant shortage is detected by checking the input current value and the compressor running frequency. If the refrigerant is short, the input current is lower than the normal value.

**Refrigerant shortage detection II:**
Refrigerant shortage is detected by checking the discharge pipe temperature and the opening of the electronic expansion valve. If the refrigerant is short, the discharge pipe temperature tends to rise.

**Refrigerant shortage detection III:**
Refrigerant shortage is detected by checking the difference between suction and discharge temperature.

**Error Decision Conditions**

**Refrigerant shortage detection I:**
The following conditions continue for 7 minutes.
- Input current × input voltage ≤ **A** × output frequency + **B**
- Output frequency > **C**

| **A** (coefficient) | **B** (W) | **C** (Hz) |
|---|---|---|
| 640/256 | 0 | 55 |

**Refrigerant shortage detection II:**
The following conditions continue for 80 seconds.
- Opening of the electronic expansion valve ≥ **D**
- Discharge pipe temperature > **E** × target discharge pipe temperature + **F**

| | **D** (pulse) | **E** (constant) | **F** (°C) |
|---|---|---|---|
| RK(X)S25/35E2V1B | 480 | 255/256 | 30 |
| RK(X)S25/35G2V1B<br>RK(X)S25/35G2V1B9<br>RXS25/35J2V1B<br>RXS25K3V1B<br>RXS35K2V1B<br>RXS25/35L2V1B<br>RXS25/35L3V1B | 480 | 128/128 | 30 |

**Refrigerant shortage detection III:**
When the difference of the temperature is smaller than **G**°C, it is regarded as refrigerant shortage.

| Operation mode | Description | **G** (°C) |
|---|---|---|
| Cooling | room thermistor temperature – indoor heat exchanger temperature | 4.0 |
| | outdoor heat exchanger temperature – outdoor temperature | 4.0 |
| Heating | indoor heat exchanger temperature – room thermistor temperature | 3.0 |
| | outdoor temperature – outdoor heat exchanger temperature | 3.0 |

- If the error repeats, the system is shut down.
- Reset condition: Continuous run for about 60 minutes without any other error

**Supposed Causes**

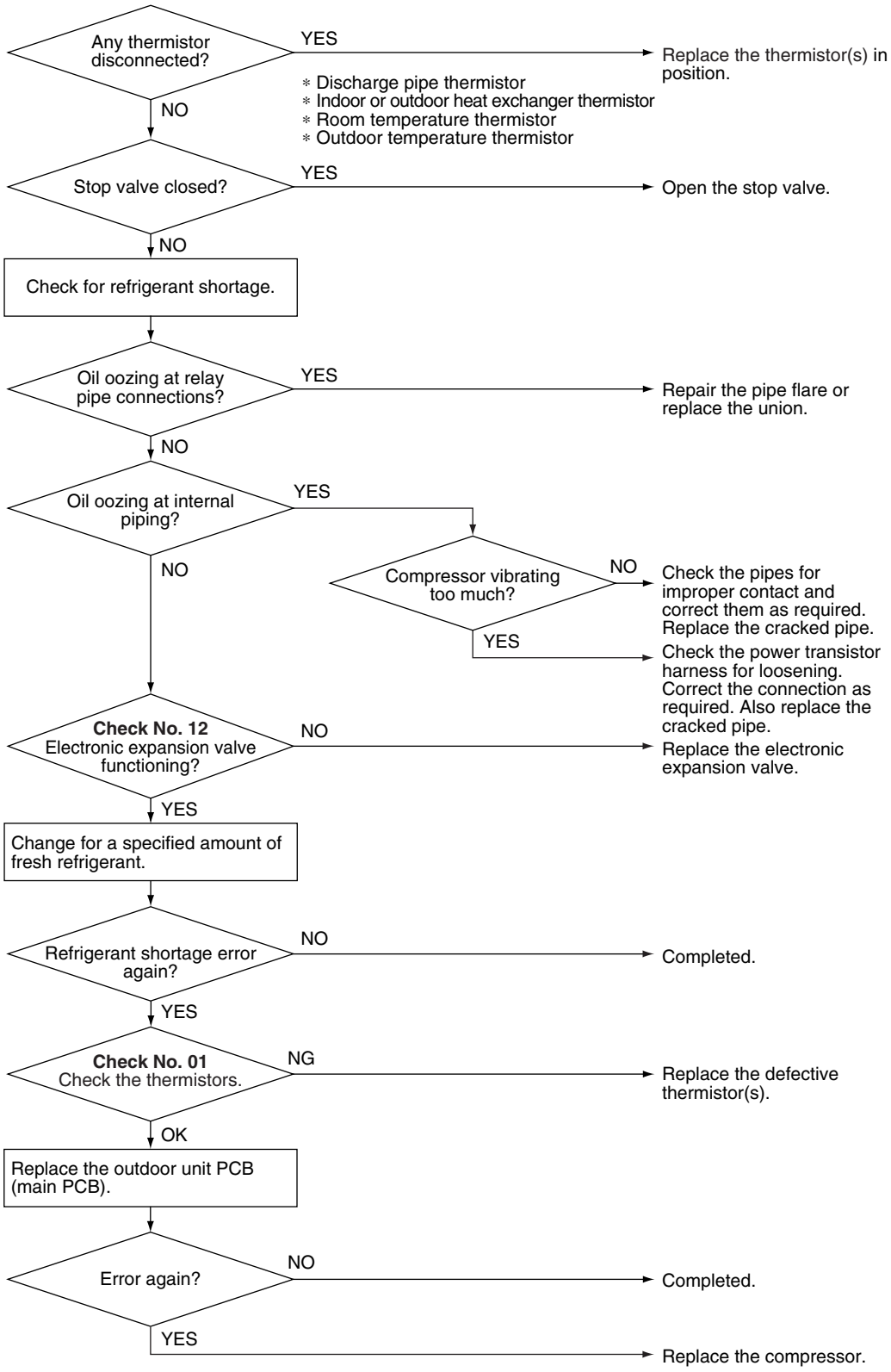
- Disconnection of the discharge pipe thermistor, indoor or outdoor heat exchanger thermistor, room or outdoor temperature thermistor
- Closed stop valve
- Refrigerant shortage (refrigerant leakage)
- Poor compression performance of compressor
- Defective electronic expansion valve

## Troubleshooting

**Check No.01**
**Refer to P.102**

**Check No.12**
**Refer to P.104**

**Caution** Be sure to turn off the power switch before connecting or disconnecting connectors, or parts may be damaged.



# 4.7 Low-voltage Detection or Over-voltage Detection

**Error Code**

UP

**Method of Error Detection**

**Low-voltage detection:**
An abnormal voltage drop is detected by the DC voltage detection circuit.

**Over-voltage detection:**
An abnormal voltage rise is detected by the over-voltage detection circuit.

**Error Decision Conditions**

**Low-voltage detection:**
- The voltage detected by the DC voltage detection circuit is below 180 V.
- The compressor stops if the error occurs, and restarts automatically after 3-minute standby.

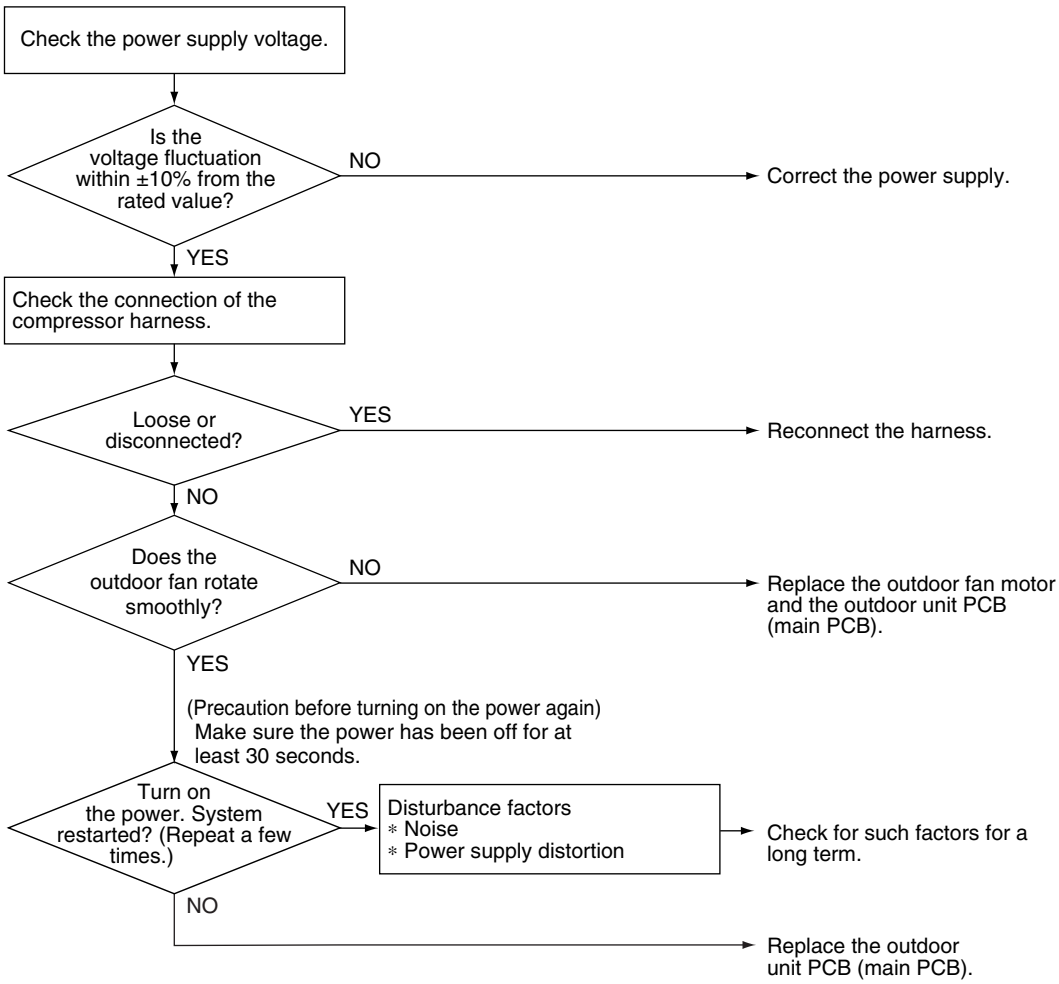
**Over-voltage detection:**
- An over-voltage signal is fed from the over-voltage detection circuit to the microcomputer.
- The compressor stops if the error occurs, and restarts automatically after 3-minute standby.

**Supposed Causes**

- Power supply voltage is not as specified.
- Defective DC voltage detection circuit
- Defective over-voltage detection circuit
- Defective PAM control part
- Disconnection of compressor harness
- Short circuit inside the fan motor winding
- Noise
- Momentary drop of voltage
- Momentary power failure
- Defective outdoor unit PCB

## Troubleshooting

**Caution** Be sure to turn off the power switch before connecting or disconnecting connectors, or parts may be damaged.




(R22445)

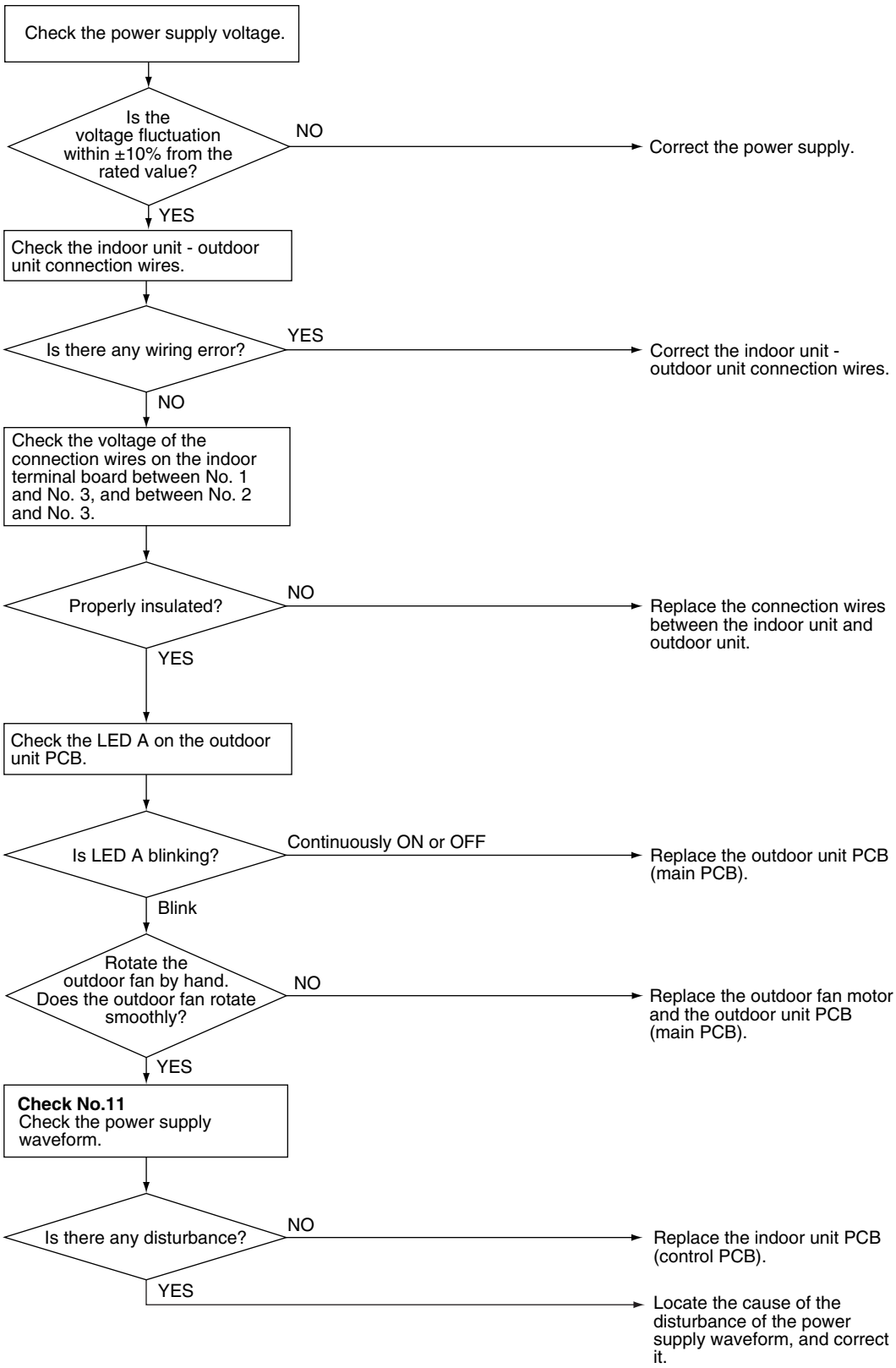
# 4.8 Signal Transmission Error (Between Indoor Unit and Outdoor Unit)

| | |
|---|---|
| **Error Code** | U4 |
| **Method of Error Detection** | The data received from the outdoor unit in signal transmission is checked whether it is normal. |
| **Error Decision Conditions** | The data sent from the outdoor unit cannot be received normally, or the content of the data is abnormal. |
| **Supposed Causes** | ■ Power supply voltage is not as specified.<br>■ Reduction of power supply voltage<br>■ Wiring error<br>■ Breaking of the connection wires between the indoor and outdoor units (wire No. 3)<br>■ Defective outdoor unit PCB<br>■ Short circuit inside the fan motor winding<br>■ Defective indoor unit PCB<br>■ Disturbed power supply waveform |

## Troubleshooting

**Check No.11**
**Refer to P.103**

**Caution** Be sure to turn off the power switch before connecting or disconnecting connectors, or parts may be damaged.



# 4.9 Unspecified Voltage (Between Indoor Unit and Outdoor Unit)

**Error Code**

UP

**Method of Error Detection**

The supply power is detected for its requirements (pair type is different from multi type) by the indoor / outdoor transmission signal.

**Error Decision Conditions**

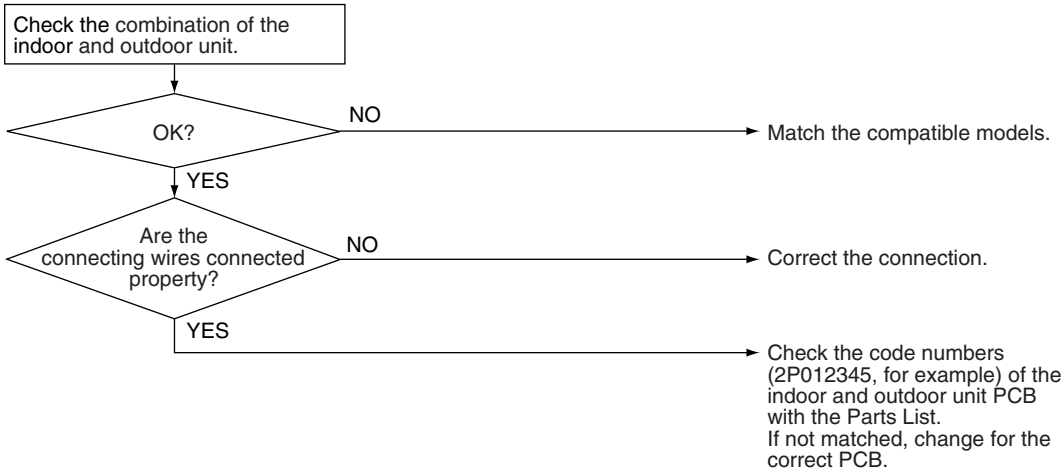
The pair type and multi type are interconnected.

**Supposed Causes**

- Wrong models interconnected
- Wrong wiring of connecting wires
- Wrong indoor unit PCB or outdoor unit PCB mounted
- Defective indoor unit PCB
- Defective outdoor unit PCB

**Troubleshooting**

**Caution** Be sure to turn off the power switch before connecting or disconnecting connectors, or parts may be damaged.




(R20435)

# 4.10 Outdoor Unit PCB Abnormality

**Error Code**

E1

**Method of Error Detection**

- The system checks if the microprocessor is working in order.
- The system checks if the zero-cross signal comes in properly.

**Error Decision Conditions**

- The microprocessor program runs out of control.
- The zero-cross signal is not detected.

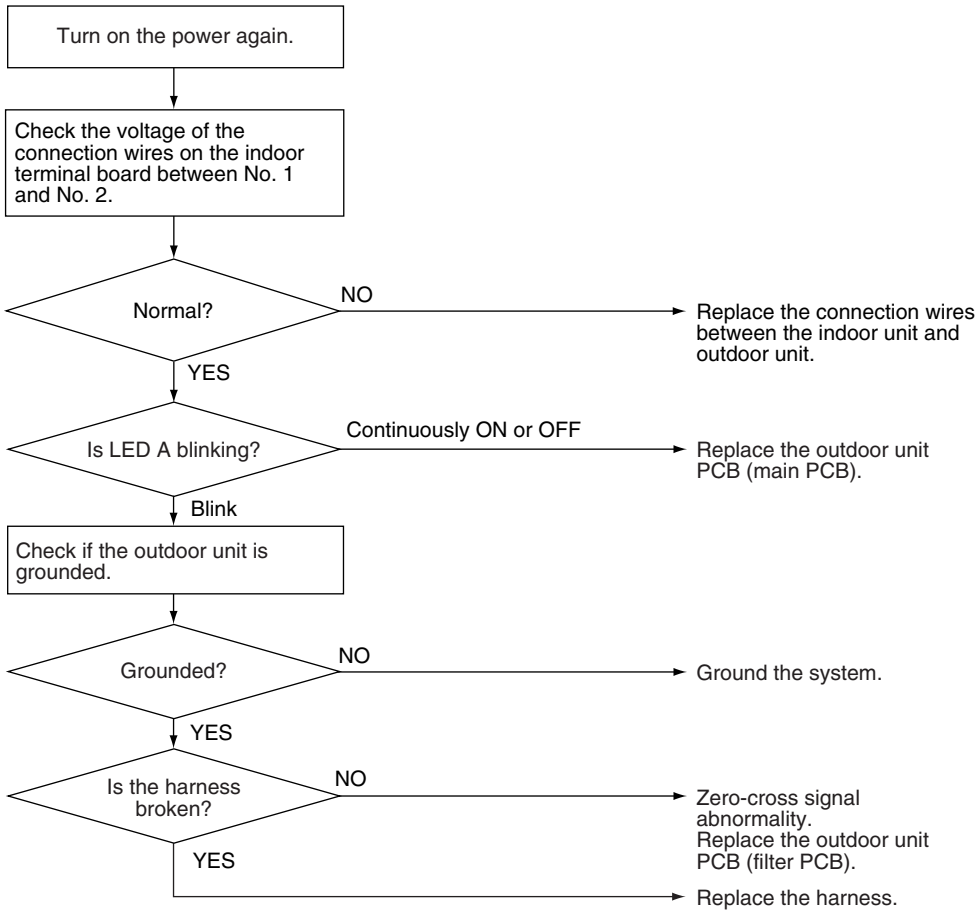
**Supposed Causes**

- Defective outdoor unit PCB
- Broken harness between PCBs
- Noise
- Momentary drop of voltage
- Momentary power failure

**Troubleshooting**

**RK(X)S25/35E2V1B, RK(X)S25/35G2V1B, RK(X)S25/35G2V1B9, RXS25/35J2V1B, RXS25K3V1B, RXS35K2V1B, RXS25/35L2V1B**

**Caution** Be sure to turn off the power switch before connecting or disconnecting connectors, or parts may be damaged.

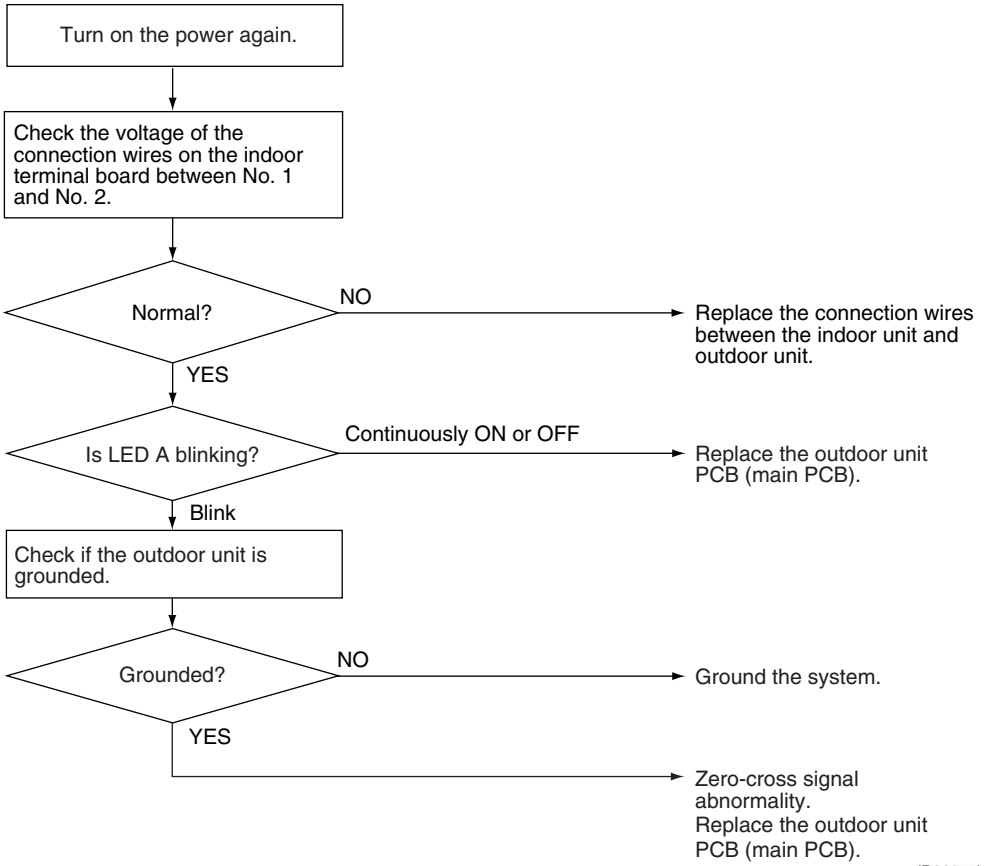



(R22974)

## Troubleshooting

### RXS25/35L3V1B

**Caution** Be sure to turn off the power switch before connecting or disconnecting connectors, or parts may be damaged.




(R22975)

# 4.11 OL Activation (Compressor Overload)

| | |
|---|---|
| **Error Code** | E5 |
| **Method of Error Detection** | A compressor overload is detected through compressor OL. |
| **Error Decision Conditions** | ■ If the error repeats, the system is shut down.<br>■ Reset condition: Continuous run for about 60 minutes without any other error |
| **Supposed Causes** | ■ Disconnection of discharge pipe thermistor<br>■ Defective discharge pipe thermistor<br>■ Disconnection of connector S40<br>■ Disconnection of 2 terminals of OL (Q1L)<br>■ Defective OL (Q1L)<br>■ Broken OL harness<br>■ Defective electronic expansion valve or coil<br>■ Defective four way valve or coil<br>■ Defective outdoor unit PCB<br>■ Refrigerant shortage<br>■ Water mixed in refrigerant<br>■ Defective stop valve |

## Troubleshooting

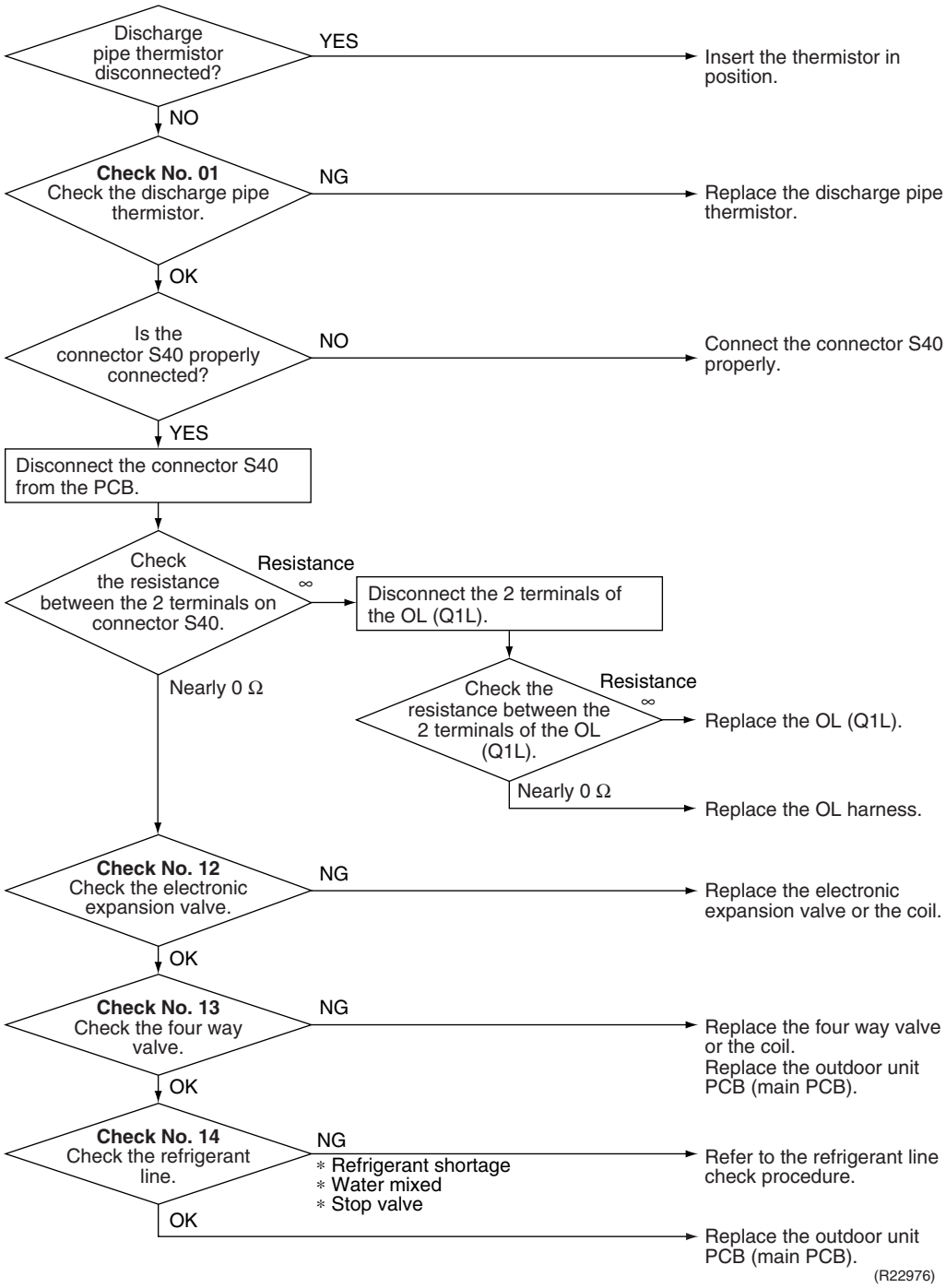
Check No.01
Refer to P.102

Check No.12
Refer to P.104

Check No.13
Refer to P.105

Check No.14
Refer to P.105

**Caution** Be sure to turn off the power switch before connecting or disconnecting connectors, or parts may be damaged.




**Note:** OL (Q1L) activating temperature: 120°C
OL (Q1L) recovery temperature: 95°C

# 4.12 Compressor Lock

**Error Code**

E6

**Method of Error Detection**

A compressor lock is detected by checking the compressor running condition through the position detection circuit.

**Error Decision Conditions**

- A compressor lock is detected by the current waveform generated when applying high-frequency voltage to the motor.
- If the error repeats, the system is shut down.
- Reset condition: Continuous run for about 11 minutes without any other error

**Supposed Causes**

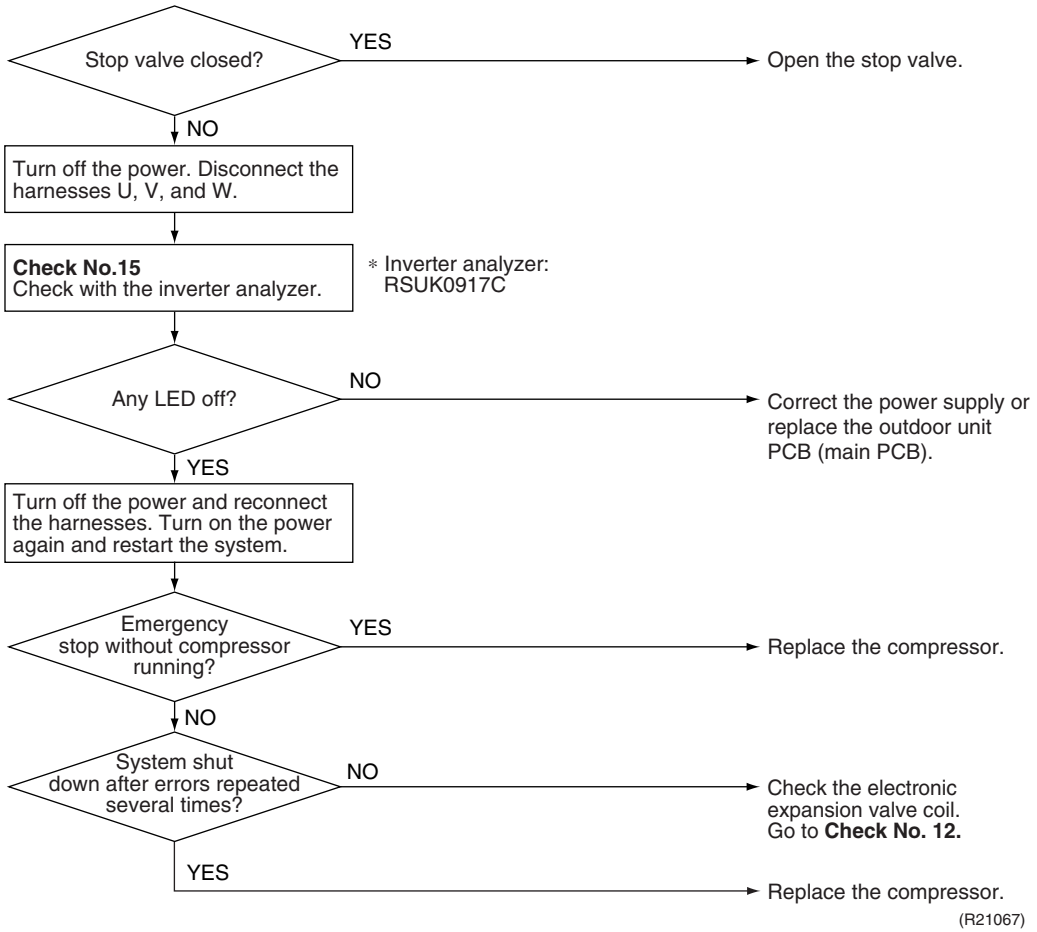
- Closed stop valve
- Compressor locked
- Disconnection of compressor harness

**Troubleshooting**

**Check No.12**
**Refer to P.104**

**Check No.15**
**Refer to P.106**

**Caution** Be sure to turn off the power switch before connecting or disconnecting connectors, or parts may be damaged.
(Precaution before turning on the power again)
Make sure the power has been off for at least 30 seconds.



# 4.13 DC Fan Lock

**Error Code**

E7

**Method of Error Detection**

An error is determined with the high-voltage fan motor rotation speed detected by the Hall IC.

**Error Decision Conditions**

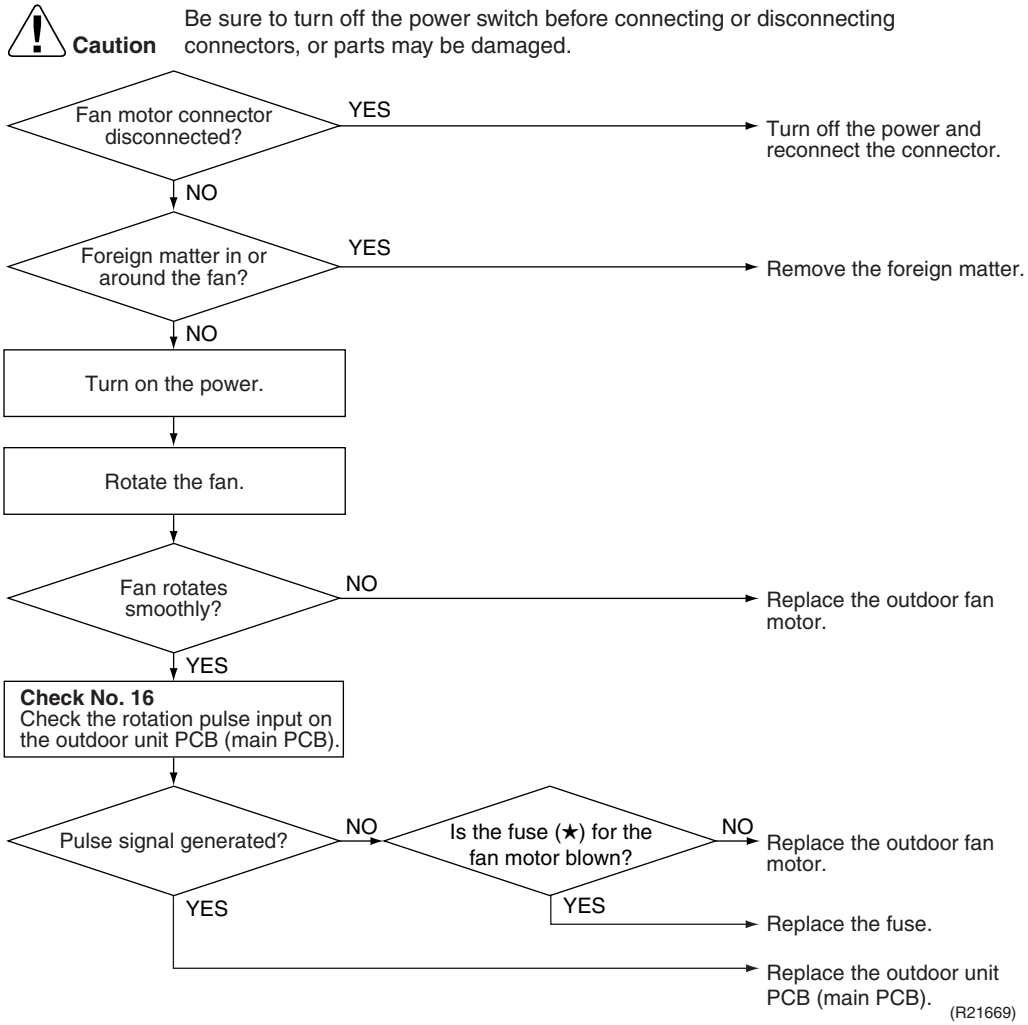
- The fan does not start in 15 ~ 60 seconds (depending on the model) even when the fan motor is running.
- If the error repeats, the system is shut down.
- Reset condition: Continuous run for about 11 minutes without any other error

**Supposed Causes**

- Disconnection of the fan motor
- Foreign matter stuck in the fan
- Defective fan motor
- Defective outdoor unit PCB

**Troubleshooting**

**Check No.16**
**Refer to P.108**




★ FU2

# 4.14 Input Overcurrent Detection

**Error Code**

E8

**Method of Error Detection**

An input overcurrent is detected by checking the input current value with the compressor running.

**Error Decision Conditions**

The current exceeds about 9.25 A for 2.5 seconds with the compressor running.
(The upper limit of the current decreases when the outdoor temperature exceeds a certain level.)

**Supposed Causes**

- Outdoor temperature is out of operation range.
- Defective compressor
- Defective power module
- Defective outdoor unit PCB
- Short circuit

**Troubleshooting**

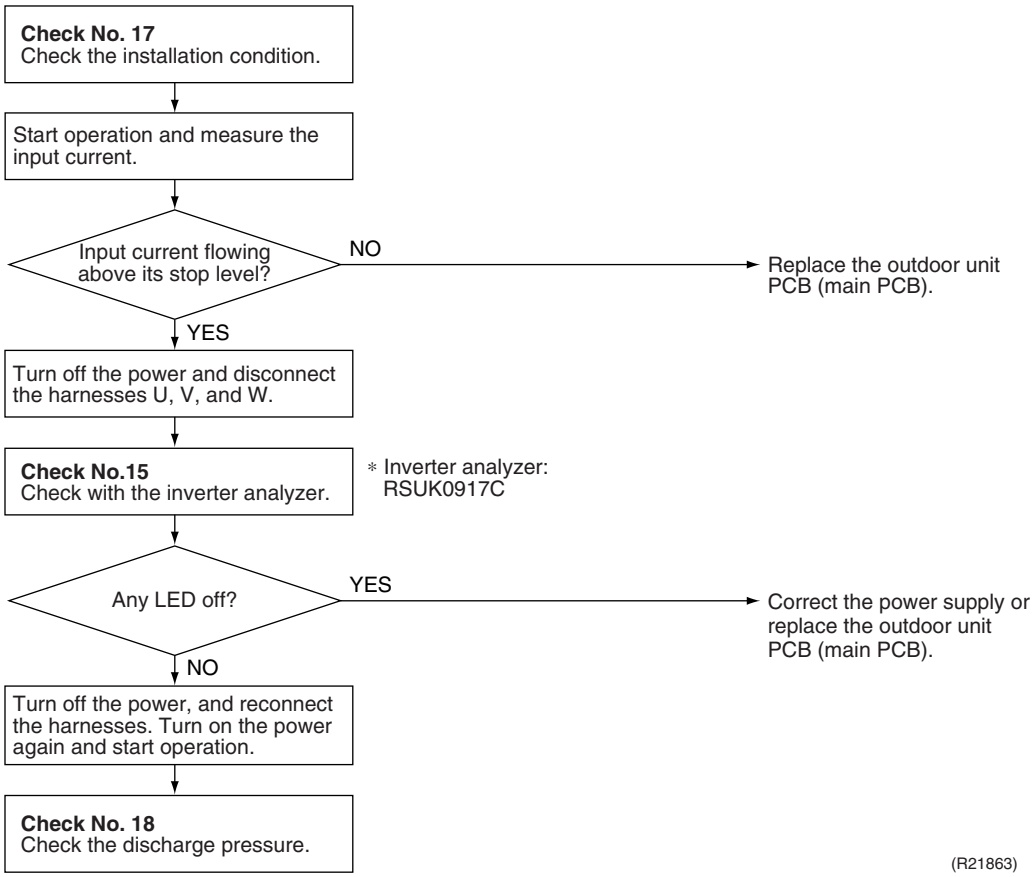
**Check No.15**
**Refer to P.106**

**Check No.17**
**Refer to P.109**

**Check No.18**
**Refer to P.109**

**Caution** Be sure to turn off the power switch before connecting or disconnecting connectors, or parts may be damaged.

∗ An input overcurrent may result from wrong internal wiring. If the system is interrupted by an input overcurrent after the wires have been disconnected and reconnected for part replacement, check the wiring again.



# 4.15 Four Way Valve Abnormality

**Error Code**

EA

**Method of Error Detection**

The room temperature thermistor and the indoor heat exchanger thermistor are checked if they function within their normal ranges in each operation mode.

**Error Decision Conditions**

A following condition continues over 10 minutes after operating for 5 minutes.

**Cooling / Dry**

**A – B** < –5°C

**Heating**

**B – A** < –5°C

**A**: Room thermistor temperature
**B**: Indoor heat exchanger temperature

- If the error repeats, the system is shut down.
- Reset condition: Continuous run for about 60 minutes without any other error

**Supposed Causes**

- Disconnection of four way valve coil
- Defective four way valve, coil, or harness
- Defective outdoor unit PCB
- Defective thermistor
- Refrigerant shortage
- Water mixed in refrigerant
- Defective stop valve

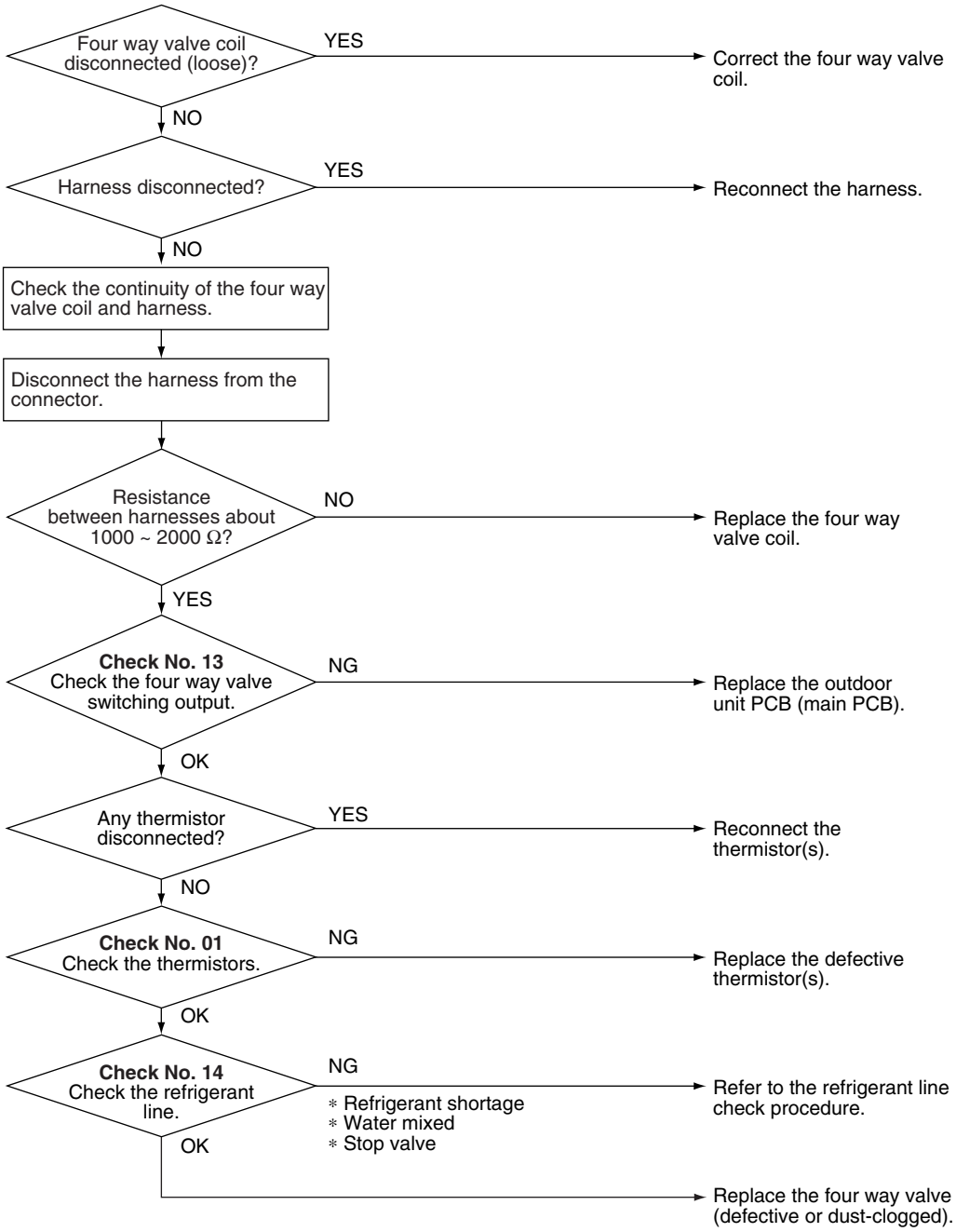
## Troubleshooting

**Check No.01**
**Refer to P.102**

**Check No.13**
**Refer to P.105**

**Check No.14**
**Refer to P.105**

**Caution** Be sure to turn off the power switch before connecting or disconnecting connectors, or parts may be damaged.




(R20405)

# 4.16 Discharge Pipe Temperature Control

**Error Code**

F3

**Method of Error Detection**

An error is determined with the temperature detected by the discharge pipe thermistor.

**Error Decision Conditions**

- If the temperature detected by the discharge pipe thermistor rises above **A**°C, the compressor stops.
- The error is cleared when the discharge pipe temperature has dropped below **B**°C.

| | **A** (°C) | **B** (°C) |
|---|---|---|
| (1) above 45 Hz (rising), above 40 Hz (dropping) | 110 | 97 |
| (2) 30 ~ 45 Hz (rising), 25 ~ 40 Hz (dropping) | 105 | 92 |
| (3) below 30 Hz (rising), below 25 Hz (dropping) | 99 | 86 |

- If the error repeats, the system is shut down.
- Reset condition: Continuous run for about 60 minutes without any other error

**Supposed Causes**

- Defective discharge pipe thermistor
  (Defective outdoor heat exchanger thermistor or outdoor temperature thermistor)
- Defective electronic expansion valve or coil
- Refrigerant shortage
- Defective four way valve
- Water mixed in refrigerant
- Defective stop valve
- Defective outdoor unit PCB

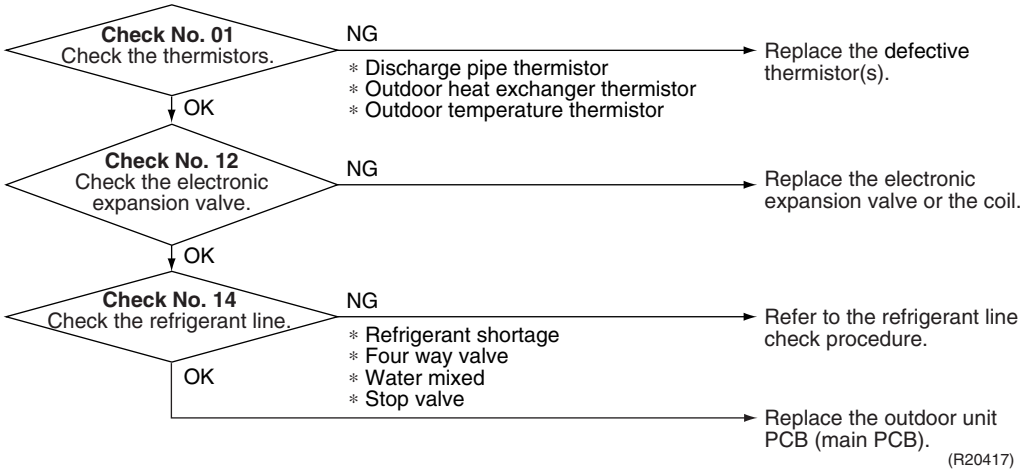
**Troubleshooting**

**Check No.01**
**Refer to P.102**

**Check No.12**
**Refer to P.104**

**Check No.14**
**Refer to P.105**

**Caution** Be sure to turn off the power switch before connecting or disconnecting connectors, or parts may be damaged.



# 4.17 High Pressure Control in Cooling

**Error Code**

F6

**Method of Error Detection**

High-pressure control (operation halt, frequency drop, etc.) is activated in cooling operation if the temperature sensed by the outdoor heat exchanger thermistor exceeds the limit.

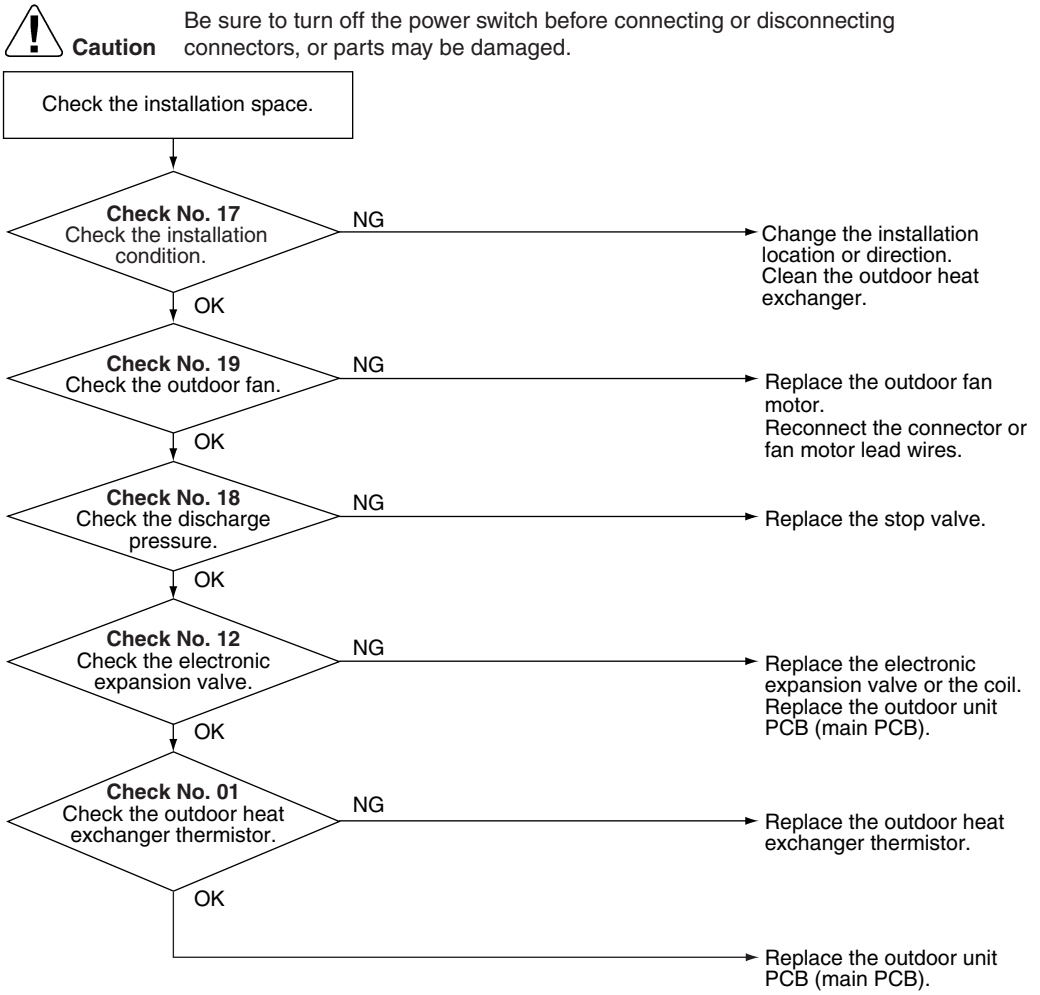
**Error Decision Conditions**

- The temperature sensed by the outdoor heat exchanger thermistor rises above about 65°C.
- The error is cleared when the temperature drops below about 50 ~ 55°C.

**Supposed Causes**

- The installation space is not large enough.
- Dirty outdoor heat exchanger
- Defective outdoor fan motor
- Defective stop valve
- Defective electronic expansion valve or coil
- Defective outdoor heat exchanger thermistor
- Defective outdoor unit PCB

**Troubleshooting**



# 4.18 Compressor System Sensor Abnormality

**Error Code**

H0

**Method of Error Detection**

The system checks the DC current before the compressor starts.

**Error Decision Conditions**

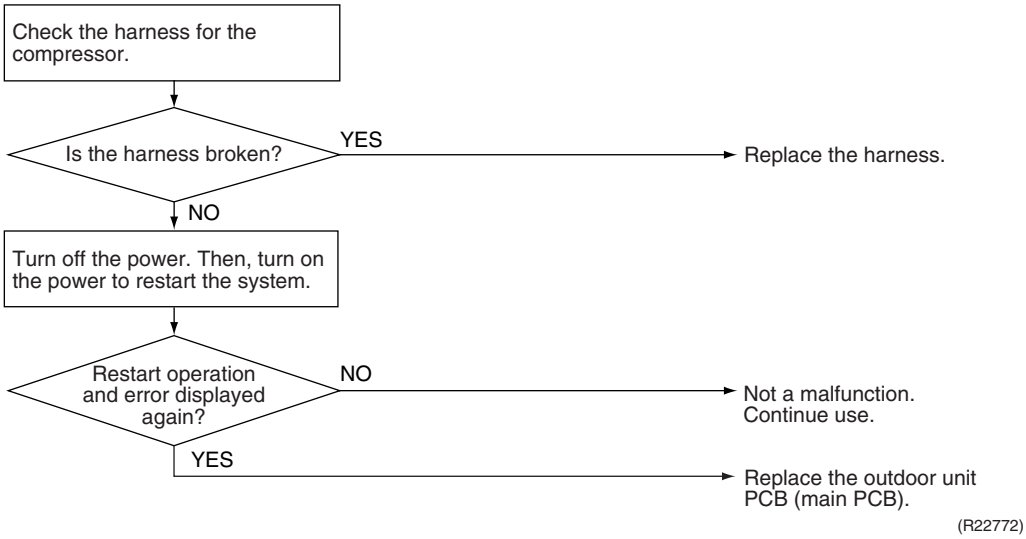
- The voltage converted from the DC current before compressor start-up is out of the range 0.5 ~ 4.5 V.
- The DC voltage before compressor start-up is below 50 V.

**Supposed Causes**

- Broken or disconnected harness
- Defective outdoor unit PCB

**Troubleshooting**

**Caution** Be sure to turn off the power switch before connecting or disconnecting connectors, or parts may be damaged.



# 4.19 Position Sensor Abnormality

**Error Code**

H6

**Method of Error Detection**

A compressor start-up failure is detected by checking the compressor running condition through the position detection circuit.

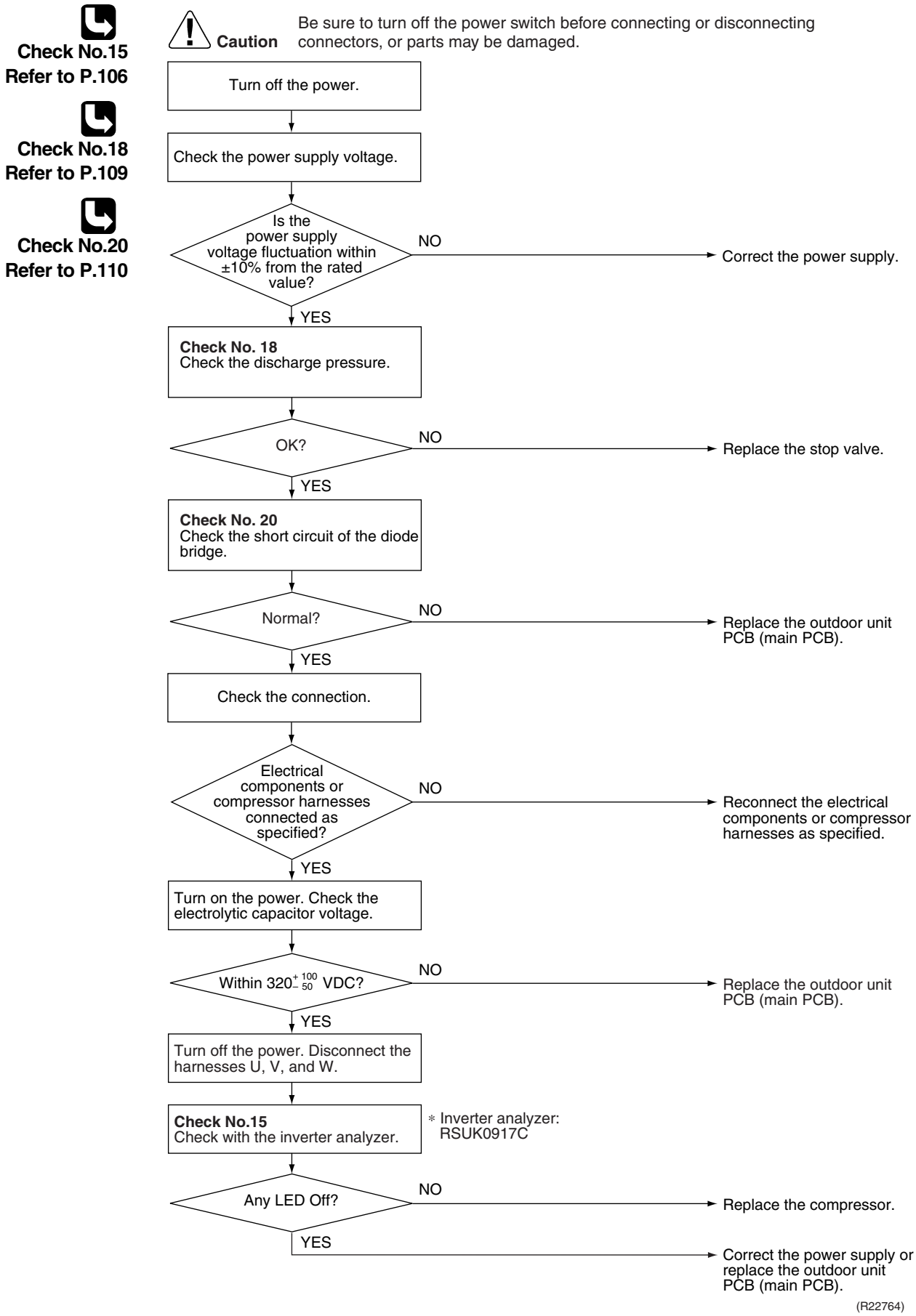
**Error Decision Conditions**

- If the error repeats, the system is shut down.
- Reset condition: Continuous run for about 11 minutes without any other error

**Supposed Causes**

- Power supply voltage is not as specified.
- Disconnection of the compressor harness
- Defective compressor
- Defective outdoor unit PCB
- Start-up failure caused by the closed stop valve
- Input voltage is outside the specified range.

## Troubleshooting



# 4.20 DC Voltage / Current Sensor Abnormality

**Error Code**

H8

**Method of Error Detection**

DC voltage or DC current sensor abnormality is identified based on the compressor running frequency and the input current.

**Error Decision Conditions**

- If the error repeats, the system is shut down.
- Reset condition: Continuous run for about 60 minutes without any other error

**Supposed Causes**

- Defective outdoor unit PCB

**Troubleshooting**

**Caution** Be sure to turn off the power switch before connecting or disconnecting connectors, or parts may be damaged.

**Replace the outdoor unit PCB (main PCB).**

# 4.21 Thermistor or Related Abnormality (Outdoor Unit)

**Error Code**

H9, J3, J6, P4

**Method of Error Detection**

This fault is identified based on the thermistor input voltage to the microcomputer.
A thermistor fault is identified based on the temperature sensed by each thermistor.

**Error Decision Conditions**

- The voltage between the both ends of the thermistor is above 4.96 V or below 0.04 V with the power on.
- J3 error is judged if the discharge pipe temperature is lower than the heat exchanger temperature.

**Supposed Causes**

- Disconnection of the connector for the thermistor
- Thermistor corresponding to the error code is defective.
- Defective heat exchanger thermistor in the case of J3 error (outdoor heat exchanger thermistor in cooling operation, or indoor heat exchanger thermistor in heating operation)
- Defective outdoor unit PCB

**Troubleshooting**

**In case of P4 for RK(X)S25/35G2V1B, RK(X)S25/35G2V1B9, RXS25/35J2V1B, RXS25K3V1B, RXS35K2V1B, RXS25/35L2V1B, RXS25/35L3V1B**

**Caution** Be sure to turn off the power switch before connecting or disconnecting connectors, or parts may be damaged.

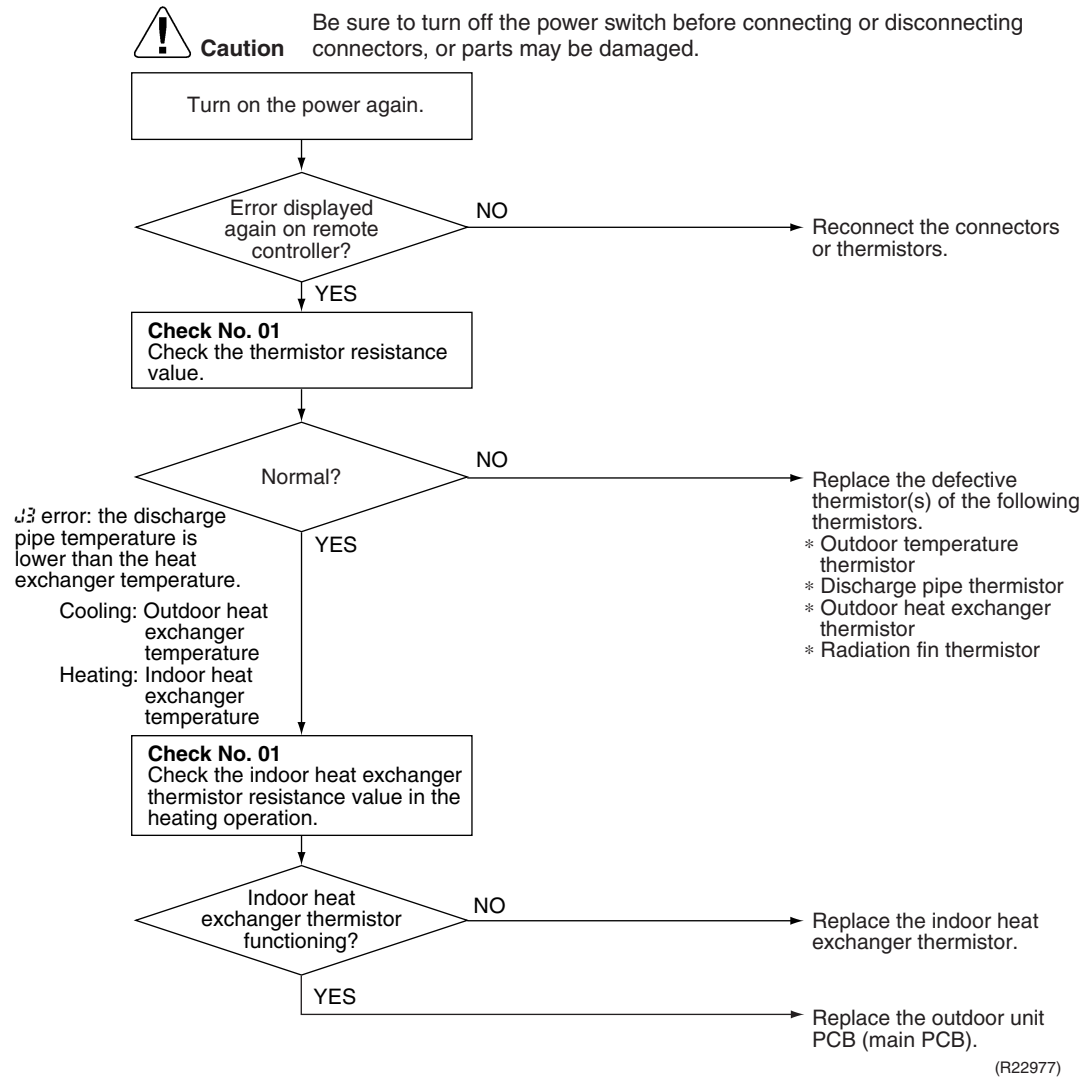
**Replace the outdoor unit PCB (main PCB).**

P4 : Radiation fin thermistor

## Troubleshooting

Check No.01
Refer to P.102

- **In case of RK(X)S25/35E2V1B**
- **In case of H9, J3, J6 for RK(X)S25/35G2V1B, RK(X)S25/35G2V1B9, RXS25/35J2V1B, RXS25K3V1B, RXS35K2V1B, RXS25/35L2V1B, RXS25/35L3V1B**




H9 : Outdoor temperature thermistor
J3 : Discharge pipe thermistor
J6 : Outdoor heat exchanger thermistor
P4 : Radiation fin thermistor

# 4.22 Electrical Box Temperature Rise

**Error Code**

L3

**Method of Error Detection**

An electrical box temperature rise is detected by checking the radiation fin thermistor with the compressor off.

**Error Decision Conditions**

- With the compressor off, the radiation fin temperature is above **A**°C.
- The error is cleared when the radiation fin temperature drops below **B**°C.
- To cool the electrical components, the outdoor fan starts when the radiation fin temperature rises above **C**°C and stops when the radiation fin temperature drops below **B**°C.

| | **A** (°C) | **B** (°C) | **C** (°C) |
|---|---|---|---|
| RK(X)S25/35E2V1B, RK(X)S25/35G2V1B | 80 | 70 | 80 |
| RK(X)S25/35G2V1B9, RXS25/35J2V1B RXS25K3V1B, RXS35K2V1B, RXS25/35L2V1B RXS25/35L3V1B | 98 | 75 | 83 |

**Supposed Causes**

- Defective outdoor fan motor
- Short circuit
- Defective radiation fin thermistor
- Disconnection of connector
- Defective outdoor unit PCB

## Troubleshooting

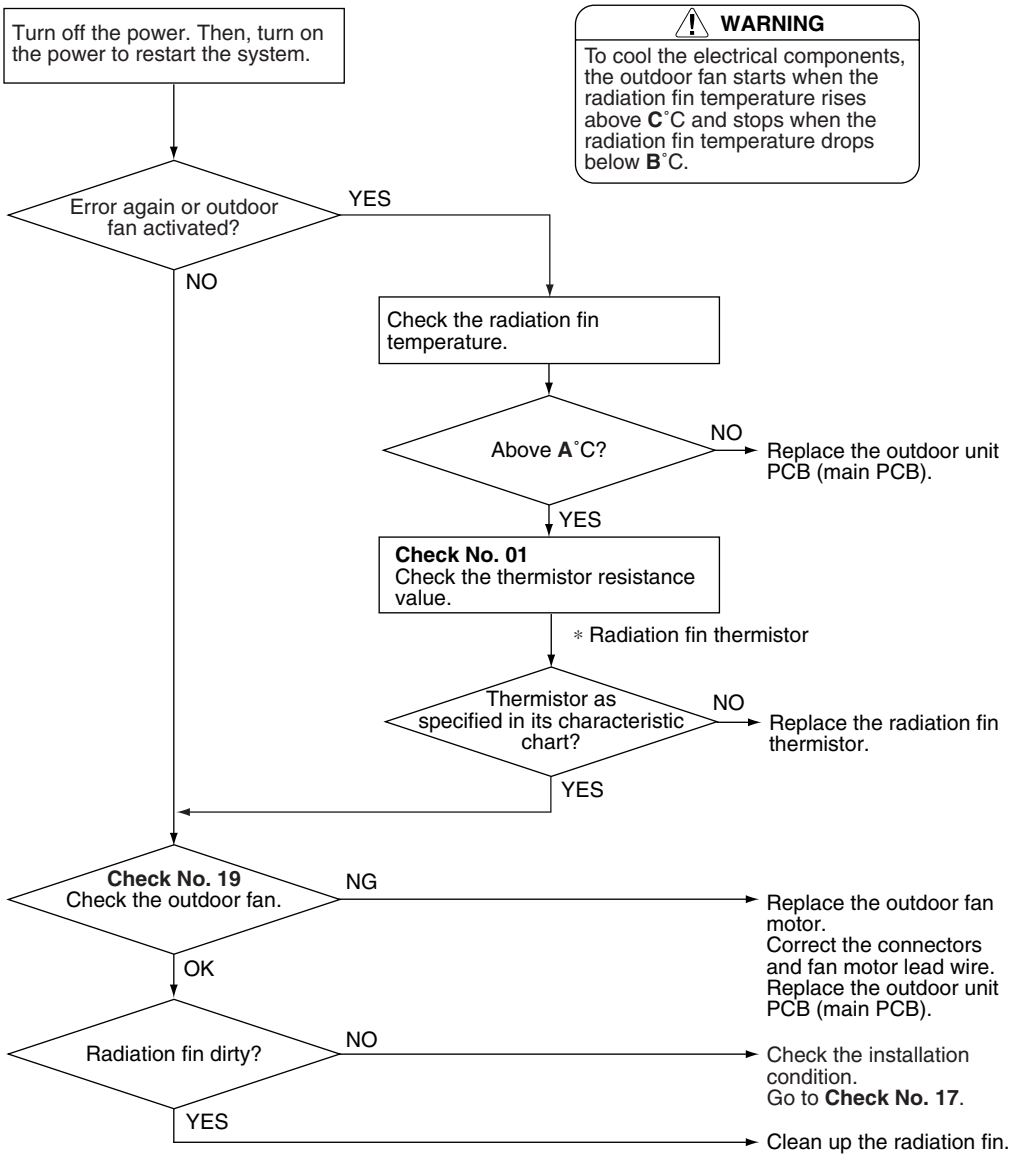
### RK(X)S25/35E2V1B

Check No.01
Refer to P.102

Check No.17
Refer to P.109

Check No.19
Refer to P.110

**Caution** Be sure to turn off the power switch before connecting or disconnecting connectors, or parts may be damaged.




| | **A** (°C) | **B** (°C) | **C** (°C) |
|---|---|---|---|
| RK(X)S25/35E2V1B | 80 | 70 | 80 |

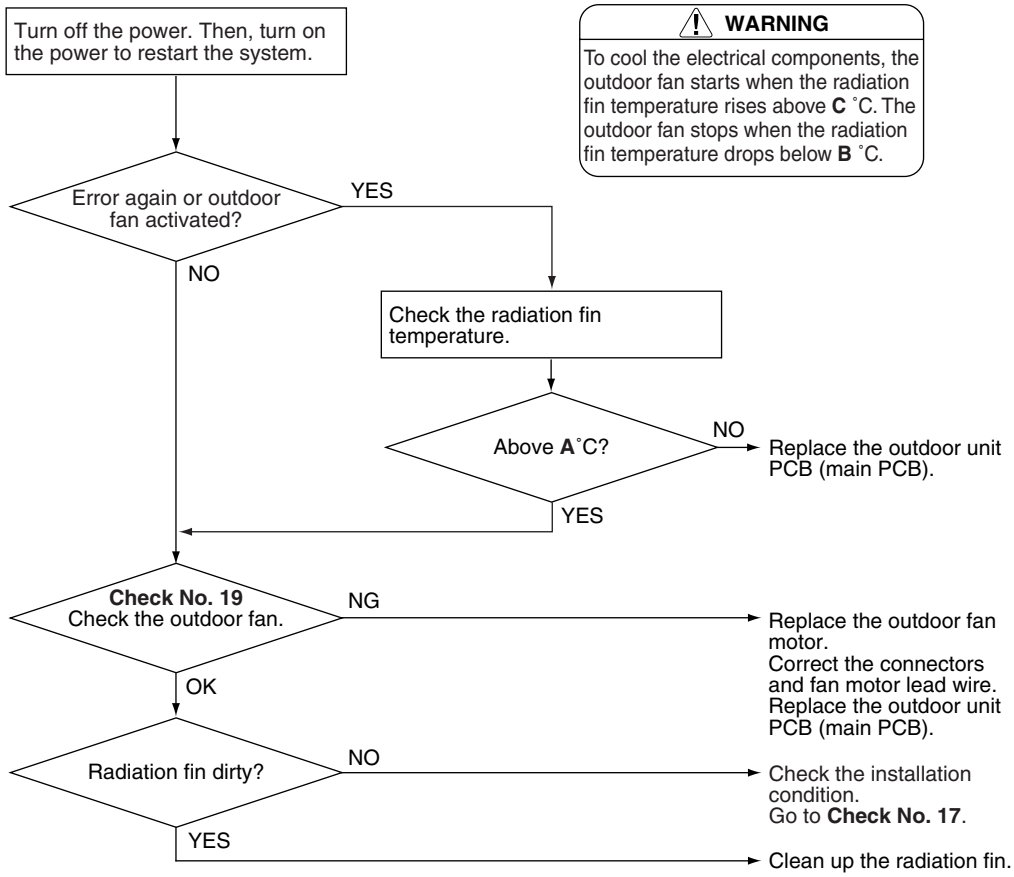
## Troubleshooting

### RK(X)S25/35G2V1B, RK(X)S25/35G2V1B9, RXS25/35J2V1B, RXS25K3V1B, RXS35K2V1B, RXS25/35L2V1B, RXS25/35L3V1B

Check No.17
Refer to P.109

Check No.19
Refer to P.110

**Caution** Be sure to turn off the power switch before connecting or disconnecting connectors, or parts may be damaged.




(R21436)

| | **A** (°C) | **B** (°C) | **C** (°C) |
|---|---|---|---|
| RK(X)S25/35G2V1B | 80 | 70 | 80 |
| RK(X)S25/35G2V1B9<br>RXS25/35J2V1B<br>RXS25K3V1B<br>RXS35K2V1B<br>RXS25/35L2V1B<br>RXS25/35L3V1B | 98 | 75 | 83 |

# 4.23 Radiation Fin Temperature Rise

**Error Code**

L4

**Method of Error Detection**

A radiation fin temperature rise is detected by checking the radiation fin thermistor with the compressor on.

**Error Decision Conditions**

- If the radiation fin temperature with the compressor on is above **A**°C.
- The error is cleared when the radiation fin temperature drops below **B**°C.
- If the error repeats, the system is shut down.
- Reset condition: Continuous run for about 60 minutes without any other error

| | **A** (°C) | **B** (°C) |
|---|---|---|
| RK(X)S25/35E2V1B, RK(X)S25/35G2V1B | 90 | 85 |
| RK(X)S25/35G2V1B9, RXS25/35J2V1B RXS25K3V1B, RXS35K2V1B, RXS25/35L2V1B RXS25/35L3V1B | 98 | 78 |

**Supposed Causes**

- Defective outdoor fan motor
- Short circuit
- Defective radiation fin thermistor
- Disconnection of connector
- Defective outdoor unit PCB
- Silicone grease is not applied properly on the radiation fin after replacing the outdoor unit PCB.

## Troubleshooting

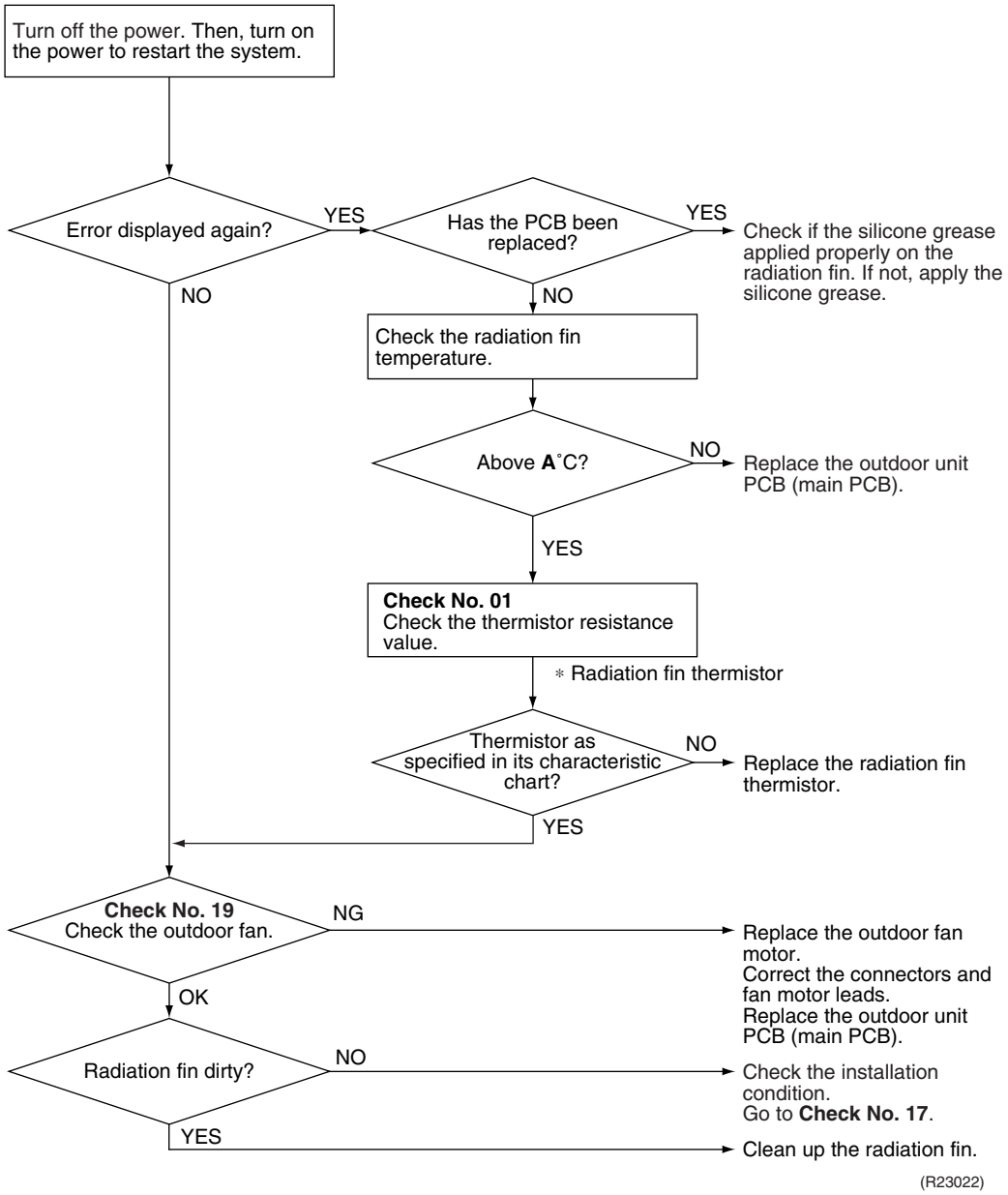
### RK(X)S25/35E2V1B

**Check No.01**
**Refer to P.102**

**Check No.17**
**Refer to P.109**

**Check No.19**
**Refer to P.110**

**Caution** Be sure to turn off the power switch before connecting or disconnecting connectors, or parts may be damaged.




| | **A** (°C) |
|---|---|
| RK(X)S25/35E2V1B | 90 |

**Note:** Refer to Silicone Grease on Power Transistor / Diode Bridge on page 122 for details.

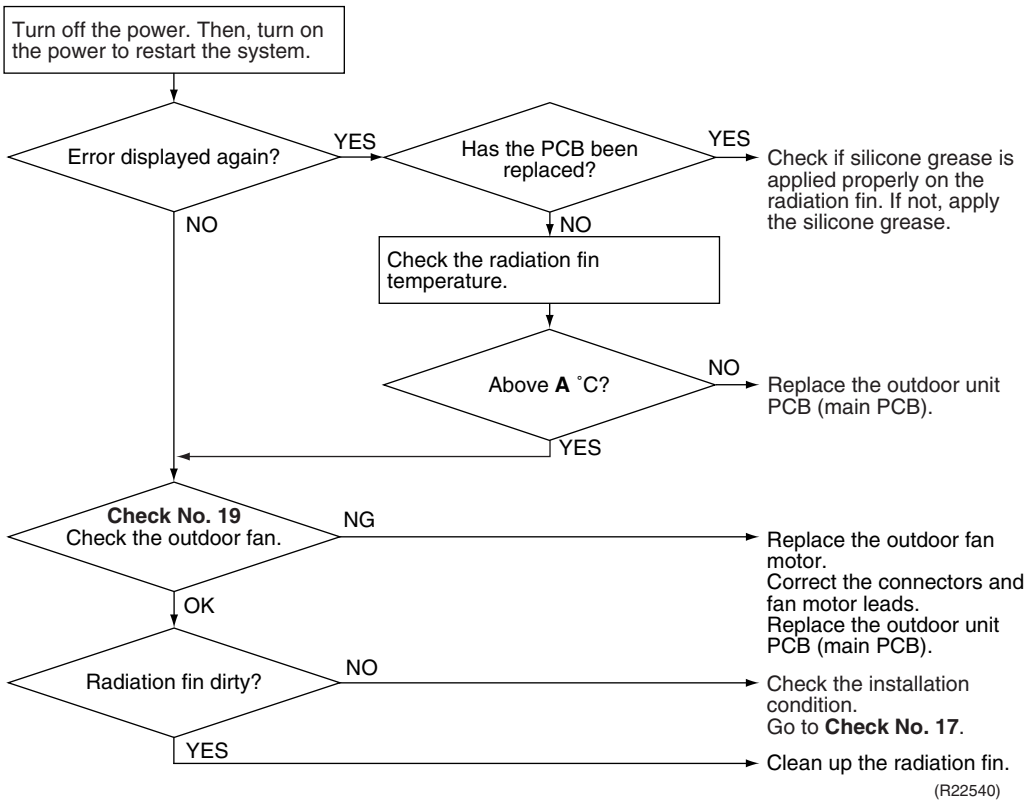
## Troubleshooting

**RK(X)S25/35G2V1B, RK(X)S25/35G2V1B9, RXS25/35J2V1B, RXS25K3V1B, RXS35K2V1B, RXS25/35L2V1B, RXS25/35L3V1B**

**Caution** Be sure to turn off the power switch before connecting or disconnecting connectors, or parts may be damaged.

**Check No.17**
**Refer to P.109**

**Check No.19**
**Refer to P.110**




| | **A** (°C) |
|---|---|
| RK(X)S25/35G2V1B | 90 |
| RK(X)S25/35G2V1B9<br>RXS25/35J2V1B<br>RXS25K3V1B<br>RXS35K2V1B<br>RXS25/35L2V1B<br>RXS25/35L3V1B | 98 |

**Note:** Refer to Silicone Grease on Power Transistor / Diode Bridge on page 122 for details.

# 4.24 Output Overcurrent Detection

**Error Code**

L5

**Method of Error Detection**

An output overcurrent is detected by checking the current that flows in the inverter DC section.

**Error Decision Conditions**

- A position signal error occurs while the compressor is running.
- A rotation speed error occurs while the compressor is running.
- An output overcurrent signal is fed from the output overcurrent detection circuit to the microcomputer.
- If the error repeats, the system is shut down.
- Reset condition: Continuous run for about 11 minutes without any other error

**Supposed Causes**

- Poor installation condition
- Closed stop valve
- Defective power module
- Wrong internal wiring
- Abnormal power supply voltage
- Defective outdoor unit PCB
- Power supply voltage is not as specified.
- Defective compressor

## Troubleshooting

Check No.15
Refer to P.106

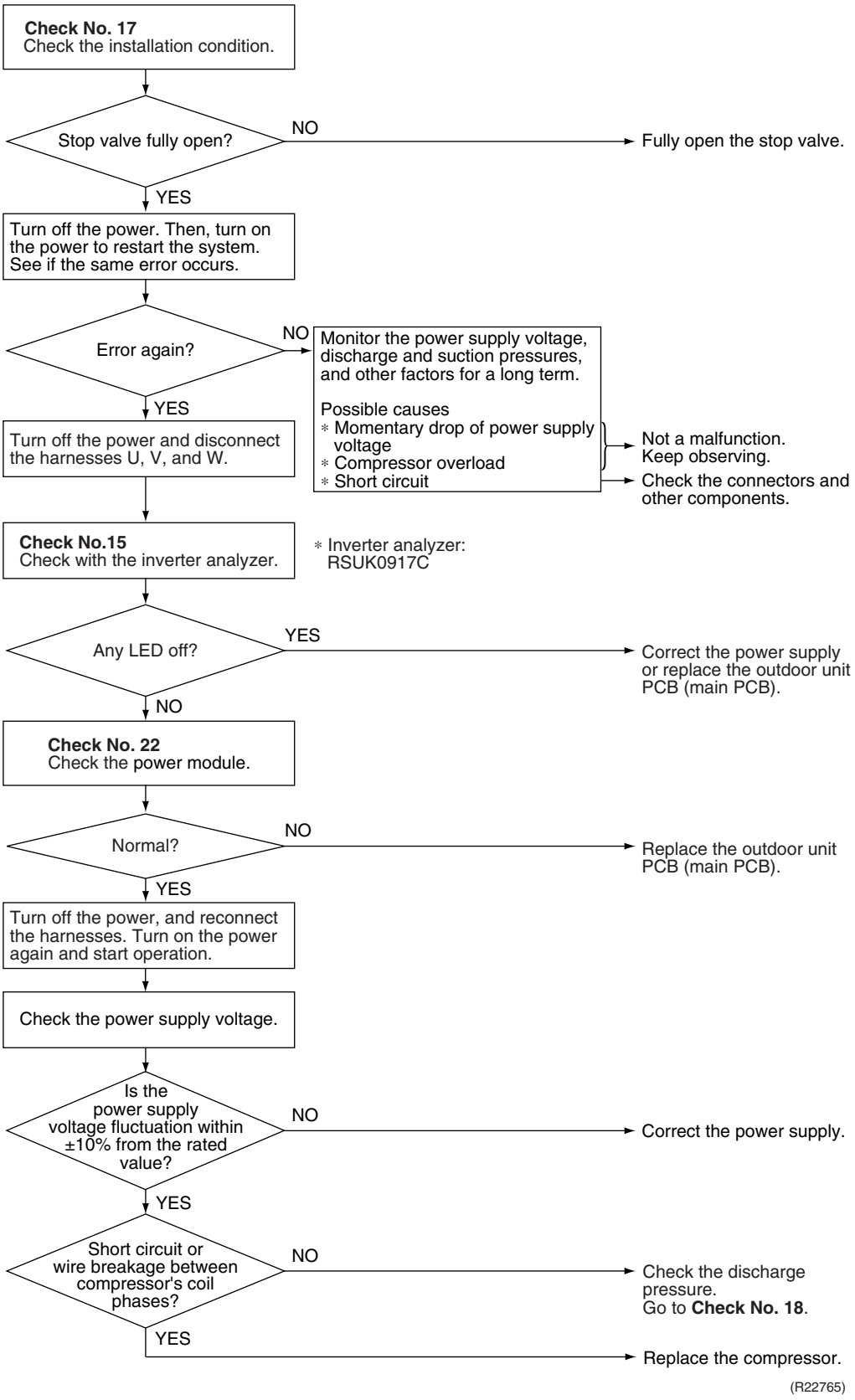
Check No.17
Refer to P.109

Check No.18
Refer to P.109

Check No.22
Refer to P.112

**Caution** Be sure to turn off the power switch before connecting or disconnecting connectors, or parts may be damaged.

∗ An output overcurrent may result from wrong internal wiring. If the system is interrupted by an output overcurrent after the wires have been disconnected and reconnected for part replacement, check the wiring again.



# 5. Check

## 5.1 Thermistor Resistance Check

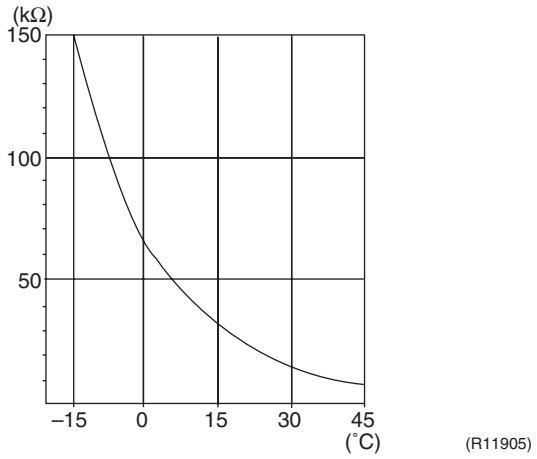
**Check No.01**

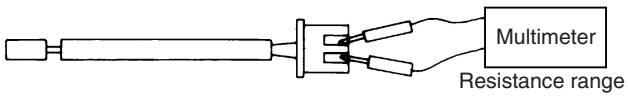
Disconnect the connectors of the thermistors from the PCB, and measure the resistance of each thermistor using multimeter.

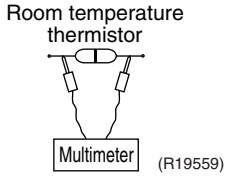
The data is for reference purpose only.

| Thermistor temperature (°C) | Resistance (kΩ) |
|---|---|
| –20 | 197.8 |
| –15 | 148.2 |
| –10 | 112.1 |
| –5 | 85.60 |
| 0 | 65.93 |
| 5 | 51.14 |
| 10 | 39.99 |
| 15 | 31.52 |
| 20 | 25.02 |
| 25 | 20.00 |
| 30 | 16.10 |
| 35 | 13.04 |
| 40 | 10.62 |
| 45 | 8.707 |
| 50 | 7.176 |

(R25°C = 20 kΩ, B = 3950 K)



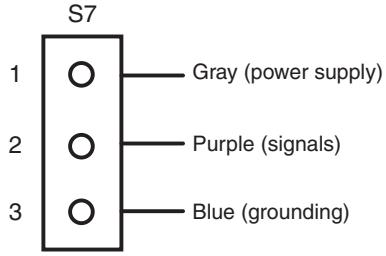

- When the room temperature thermistor is soldered on a PCB, remove the PCB from the control PCB to measure the resistance.
- When the connector of indoor heat exchanger thermistor is soldered on a PCB, remove the thermistor and measure the resistance.

# 5.2 Hall IC Check

**Check No.04**

1. Check the connector connection.
2. With the power on, operation off, and the connector connected, check the following.
   (1) Output voltage of about 5 V between pins 1 and 3.
   (2) Generation of 3 pulses between pins 2 and 3 when the fan motor is operating.

   If NG in step (1) → Defective PCB → Replace the PCB (control PCB).
   If NG in step (2) → Defective Hall IC → Replace the fan motor.
   If OK in both steps (1) and (2) → Replace the PCB (control PCB).




(R14211)

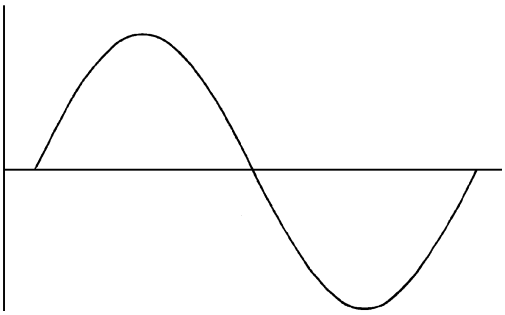
# 5.3 Power Supply Waveforms Check

**Check No.11**

Measure the power supply waveform between No. 1 and No. 2 on the terminal board, and check the waveform disturbance.

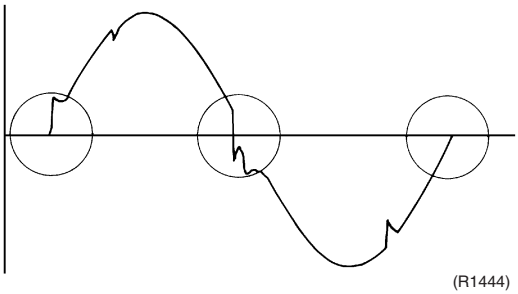
- Check if the power supply waveform is a sine wave. (Fig.1)
- Check if there is waveform disturbance near the zero-cross. (sections circled in Fig.2)

**Fig.1**



(R1736)

**Fig.2**



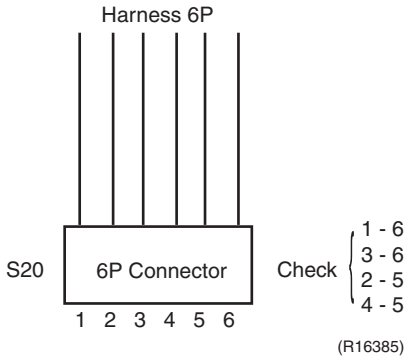
(R1444)

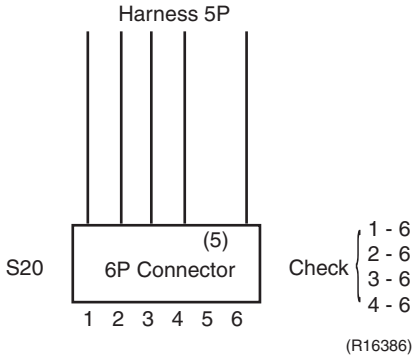
# 5.4 Electronic Expansion Valve Check

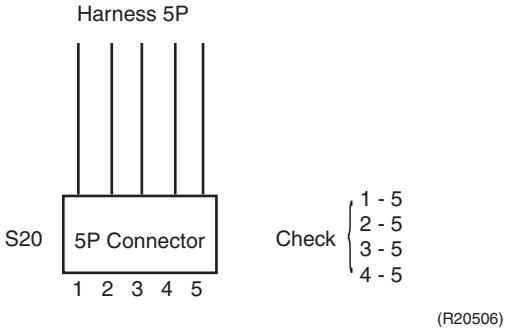
**Check No.12**

Conduct the following to check the electronic expansion valve (EV).

1. Check if the EV connector is correctly connected to the PCB.
2. Turn the power off and on again, and check if the EV generates a latching sound.
3. If the EV does not generate a latching sound in the above step 2, disconnect the connector and check the continuity using a multimeter.
4. Check the continuity between the pins 1 - 6, 3 - 6, 2 - 5, 4 - 5 (between the pins 1 - 6, 2 - 6, 3 - 6, 4 - 6 for the harness 5P models). If there is no continuity between the pins, the EV coil is faulty.
5. If the continuity is confirmed in step 3, the outdoor unit PCB is faulty

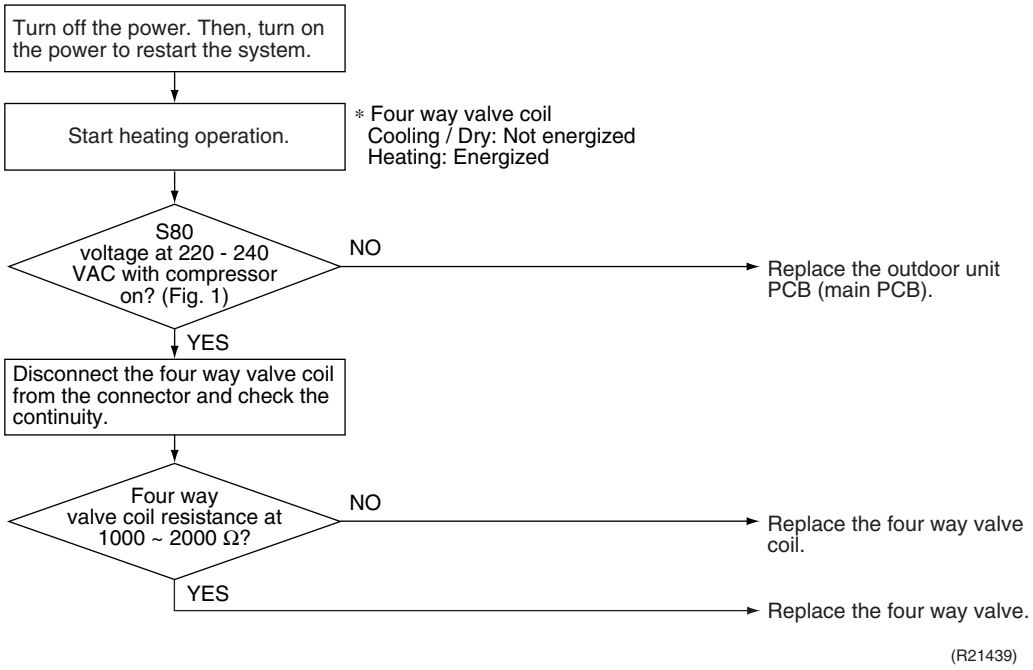


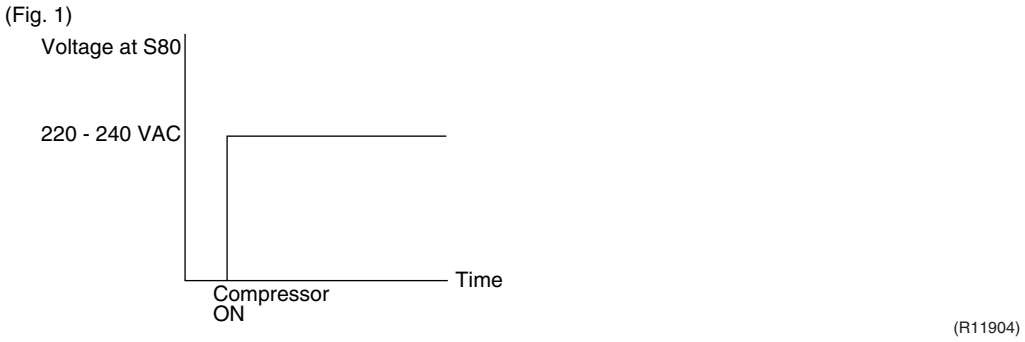



# 5.5 Four Way Valve Performance Check

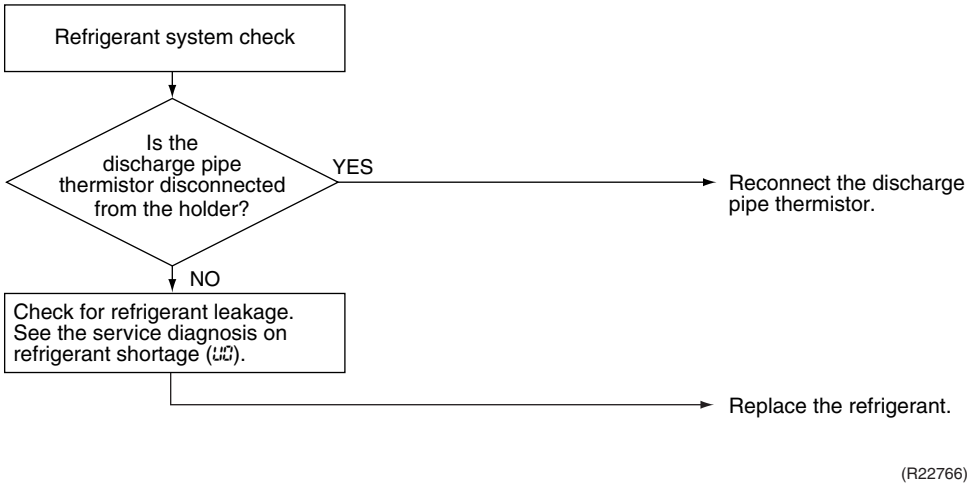
**Check No.13**




# 5.6 Inverter Unit Refrigerant System Check

**Check No.14**



# 5.7 Inverter Analyzer Check

**Check No.15**

■ **Characteristics**

Inverter analyzer: RSUK0917C

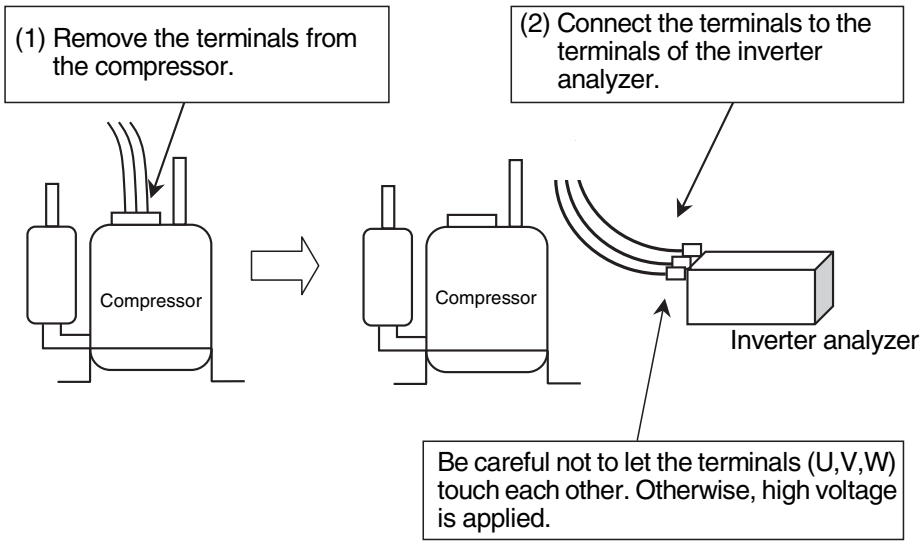
If an abnormal stop occurs due to compressor startup failure or overcurrent output when using an inverter unit, it is difficult to judge whether the stop is caused by the compressor failure or some other failure (main PCB, power module, etc.). The inverter analyzer makes it possible to judge the cause of trouble easily and securely. (Connect an inverter analyzer as a quasi-compressor instead of compressor and check the output of the inverter)

■ **Operation Method**

**Step 1**
Be sure to turn the power off.

**Step 2**
Install an inverter analyzer instead of a compressor.

Note:
Make sure the charged voltage of the built-in smoothing electrolytic capacitor drops to 10 VDC or below before carrying out the service work.




(R22731)

Reference:
If the terminals of the compressor are not FASTON terminals (difficult to remove the wire on the terminals), it is possible to connect wires available on site to the outdoor unit from output side of PCB. (Do not connect them to the compressor at the same time, otherwise it may result in incorrect detection.)

**Step 3**
**RK(X)S25/35E2V1B, RK(X)S25/35G2V1B, RK(X)S25/35G2V1B9, RXS25/35J2V1B, RXS25K3V1B, RXS35K2V1B, RXS25/35L2V1B**
Activate the power transistor test operation from the outdoor unit.
1) Press the forced cooling operation **ON/OFF** button for 5 seconds.
(Refer to page 116 for the position.)
→ Power transistor test operation starts.

**RXS25/35L3V1B**

Activate power transistor test operation from indoor unit.

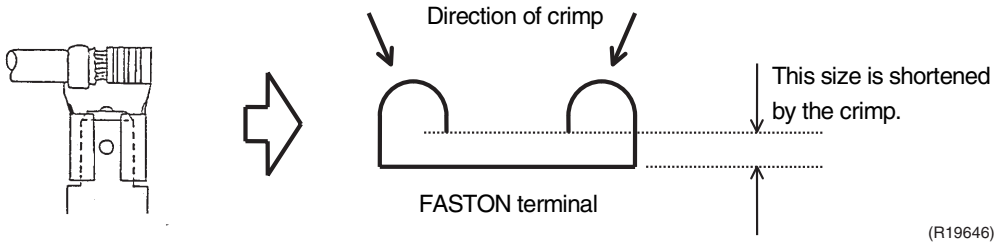
(1) Turn the power on.
(2) Select FAN operation with the **MODE** button on the remote controller.
(3) Press the center of the **TEMP** button and the **MODE** button at the same time.
→ 00 is displayed with the left-side number blinking.
(4) Press the **MODE** button.
→ 00 is displayed with the right-side number blinking.
(5) Press the **MODE** button.
→ 7 is displayed.
(6) Press the **ON/OFF** button.
→ Power transistor test operation starts.

■ **Diagnose method (Diagnose according to 6 LEDs lighting status.)**

(1) If all the LEDs are lit uniformly, the compressor is defective.
→ Replace the compressor.
(2) If the LEDs are not lit uniformly, check the power module.
→ Refer to **Check No.22**.
(3) If NG in **Check No.22**, replace the power module.
(Replace the main PCB. The power module is united with the main PCB.)
If OK in **Check No.22**, check if there is any solder cracking on the PCB.
(4) If any solder cracking is found, replace the PCB or repair the soldered section.
If there is no solder cracking, replace the PCB.

**Caution**

(1) When the output frequency is low, the LEDs blink slowly. As the output frequency increases, the LEDs blink quicker. (The LEDs look like they are lit.)
(2) On completion of the inverter analyzer diagnosis, be sure to re-crimp the FASTON terminals. Otherwise, the terminals may be burned due to loosening.



# 5.8 Rotation Pulse Check on the Outdoor Unit PCB

**Check No.16**

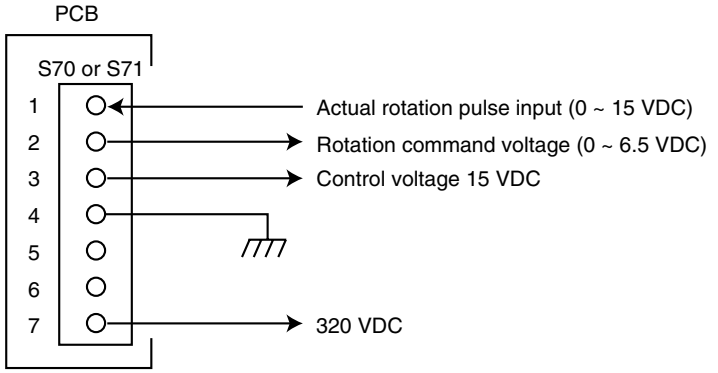
**RK(X)S25/35E2V1B, RK(X)S25/35G2V1B, RXS25/35L3V1B**

Make sure that the voltage of 320 ± 30 V is applied.

1. Set operation off and power off. Disconnect the connector S70 or S71.
2. Check that the voltage between the pins 4 - 7 is 320 VDC.
3. Check that the control voltage between the pins 3 - 4 is 15 VDC.
4. Check that the rotation command voltage between the pins 2 - 4 is 0 ~ 6.5 VDC.
5. Keep operation off and power off. Connect the connector S70 or S71.
6. Check whether 4 rotation pulses (0 ~ 15 VDC) are input at the pins 1 - 4 when the fan motor is rotated 1 turn by hand.

When the fuse is melted, check the outdoor fan motor for proper function.

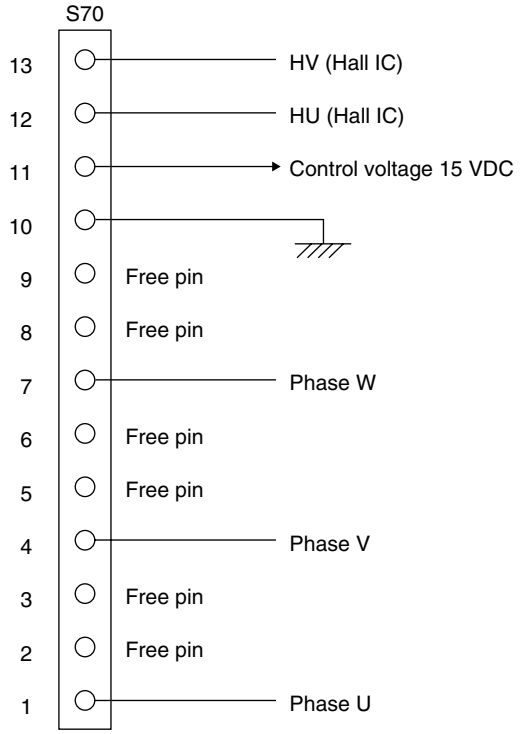
If NG in step 2 → Defective PCB → Replace the outdoor unit PCB (main PCB).
If NG in step 4 → Defective Hall IC → Replace the outdoor fan motor.
If OK in both steps 2 and 4 → Replace the outdoor unit PCB (main PCB).




(R20507)

**RK(X)S25/35G2V1B9, RXS25/35J2V1B, RXS25K3V1B, RXS35K2V1B, RXS25/35L2V1B**

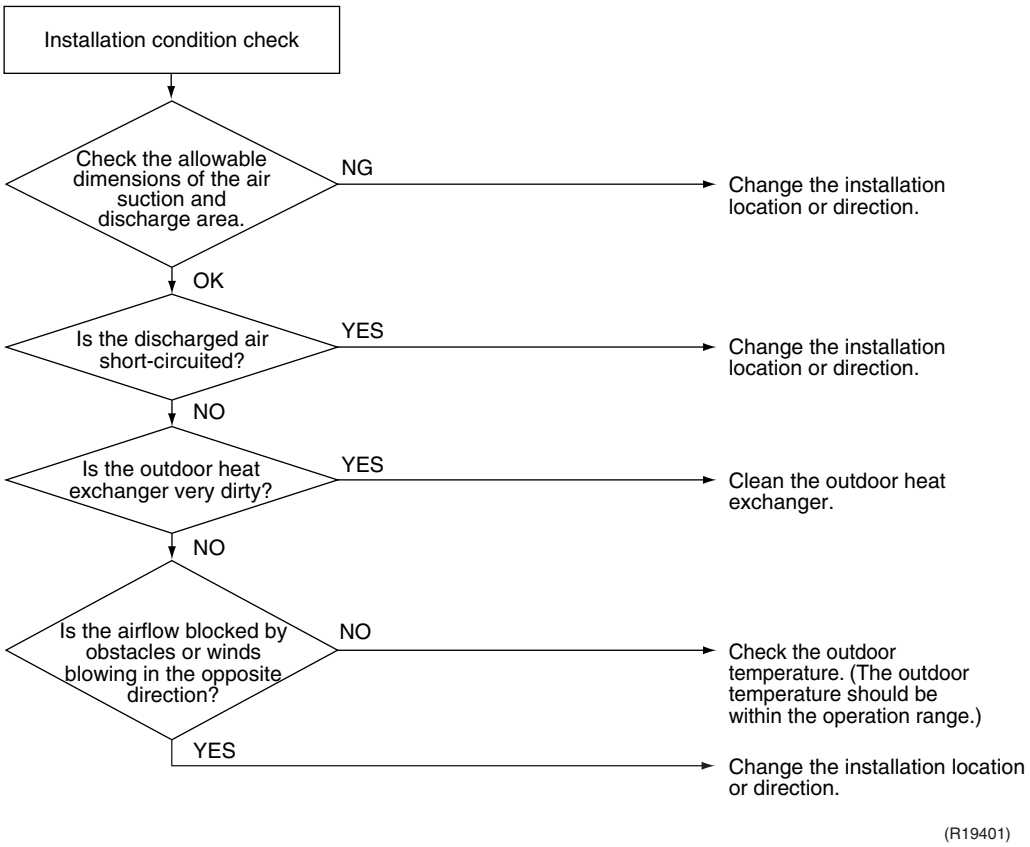
1. Check that the voltage between the pins 10 - 11 is 15 VDC.
2. Check if the Hall IC generates the rotation pulse (0 ~ 15 VDC) 4 times between the pins 10 - 12, 10 - 13, when the fan motor is manually rotated once.




(R19663)

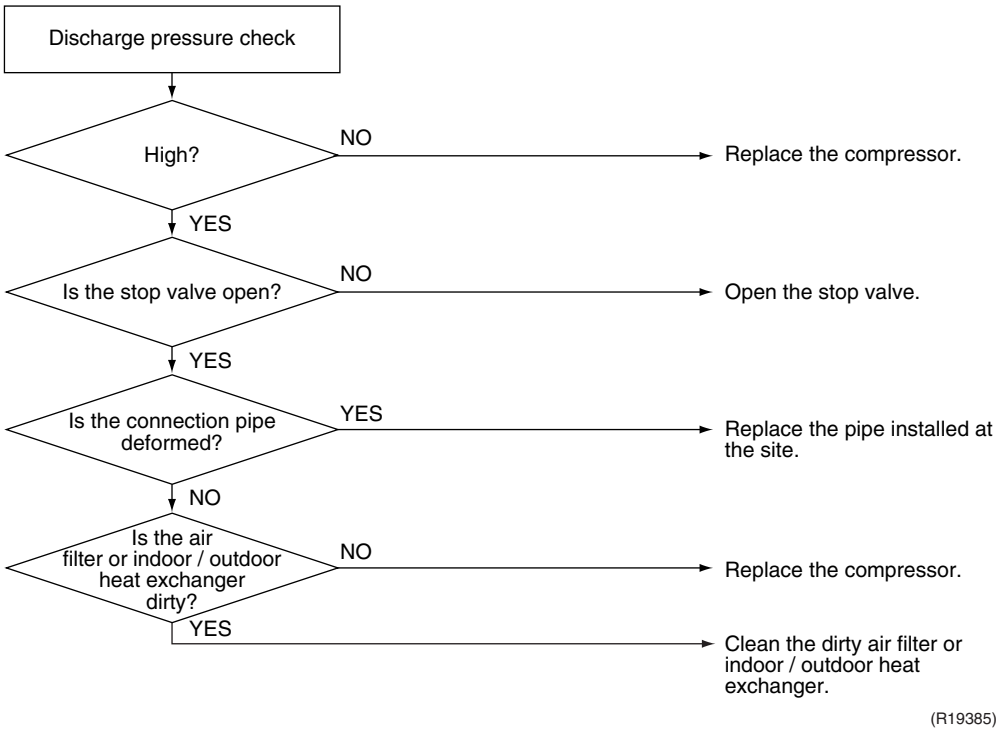
# 5.9 Installation Condition Check

**Check No.17**



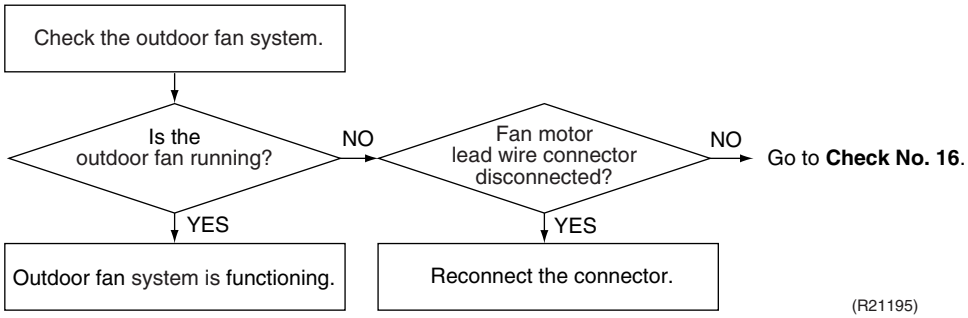

# 5.10 Discharge Pressure Check

**Check No.18**



# 5.11 Outdoor Fan System Check

**Check No.19** **DC motor**



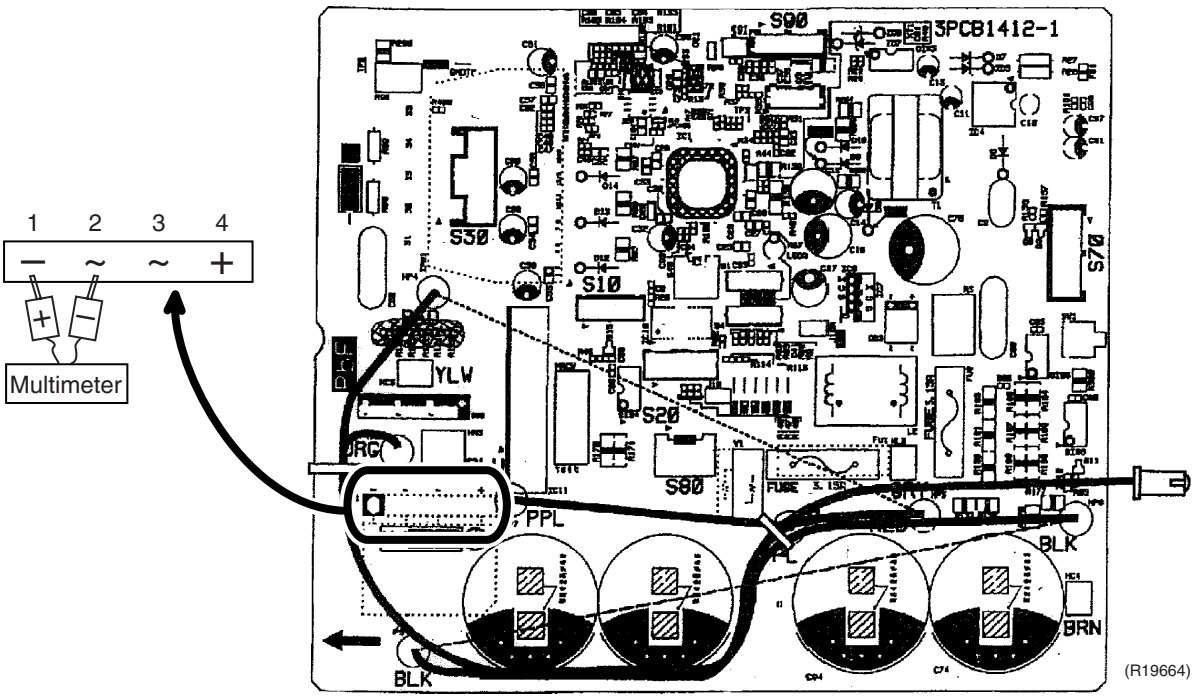

# 5.12 Main Circuit Short Check

**Check No.20** Check to make sure that the voltage between (+) and (–) of the diode bridge (DB1) is about 0 V before checking.

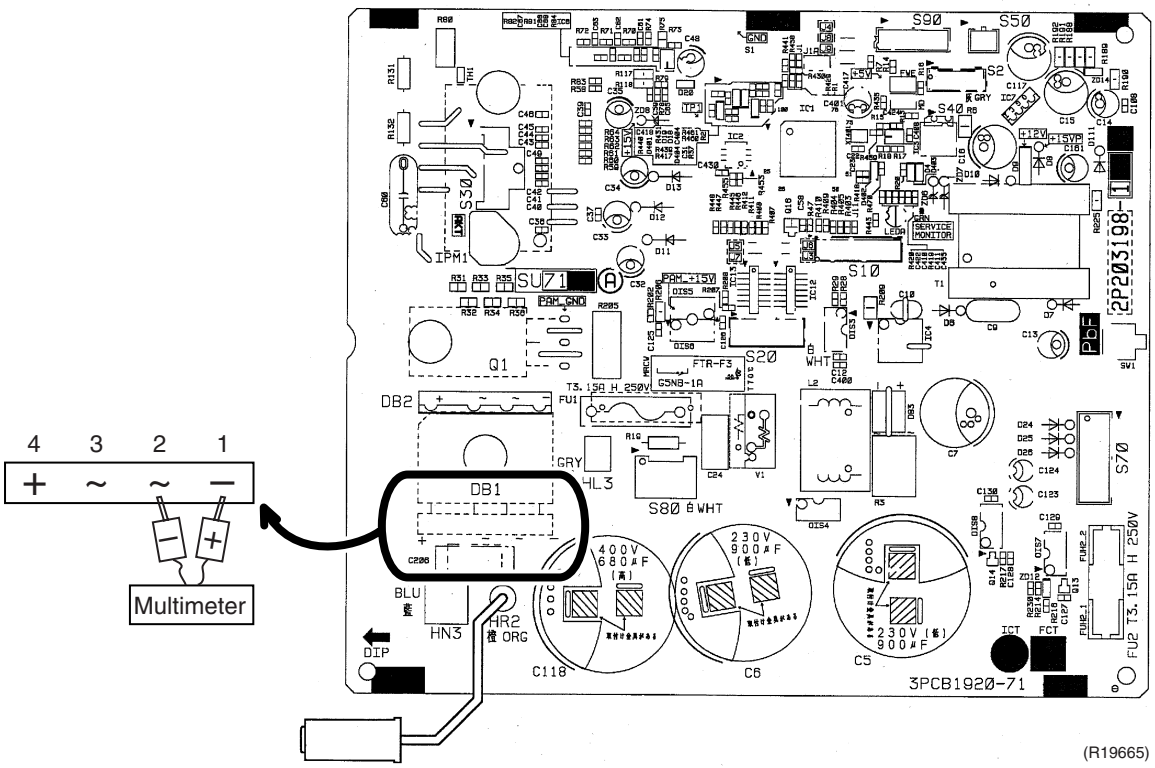
- Measure the resistance between the pins of the DB1 referring to the table below.
- If the resistance is ∞ or less than 1 kΩ, short circuit occurs on the main circuit.

| Positive terminal (+) of digital multimeter | ~ (2, 3) | + (4) | ~ (2, 3) | – (1) |
|---|---|---|---|---|
| Negative terminal (–) of digital multimeter | + (4) | ~ (2, 3) | – (1) | ~ (2, 3) |
| Resistance is OK. | several kΩ ~ several MΩ | | | |
| Resistance is NG. | 0 Ω or ∞ | | | |

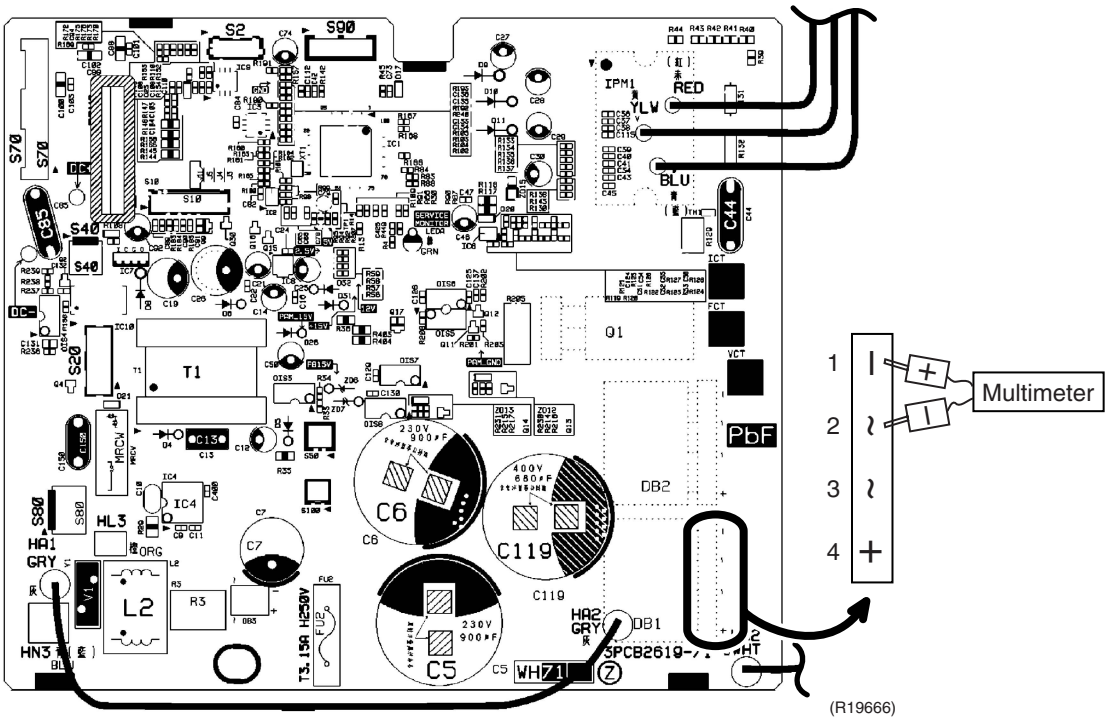
**RK(X)S25/35E2V1B**



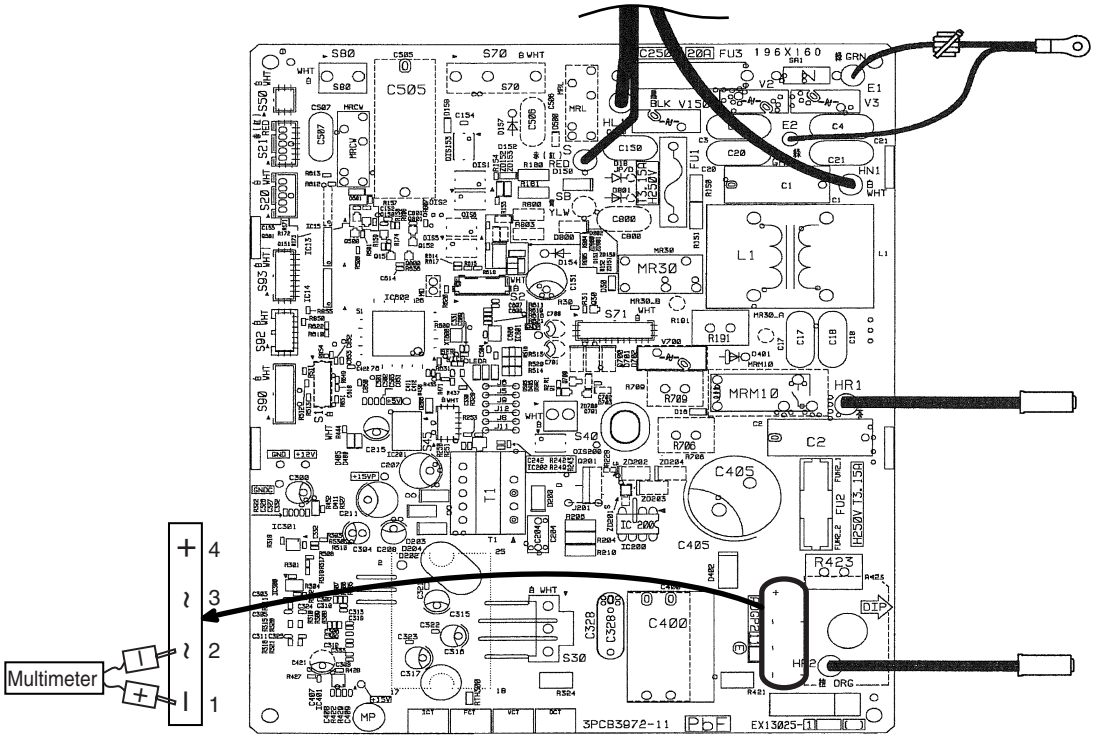
**RK(X)S25/35G2V1B**




**RK(X)S25/35G2V1B9, RXS25/35J2V1B, RXS25K3V1B, RXS35K2V1B, RXS25/35L2V1B**



**RXS25/35L3V1B**




# 5.13 Power Module Check

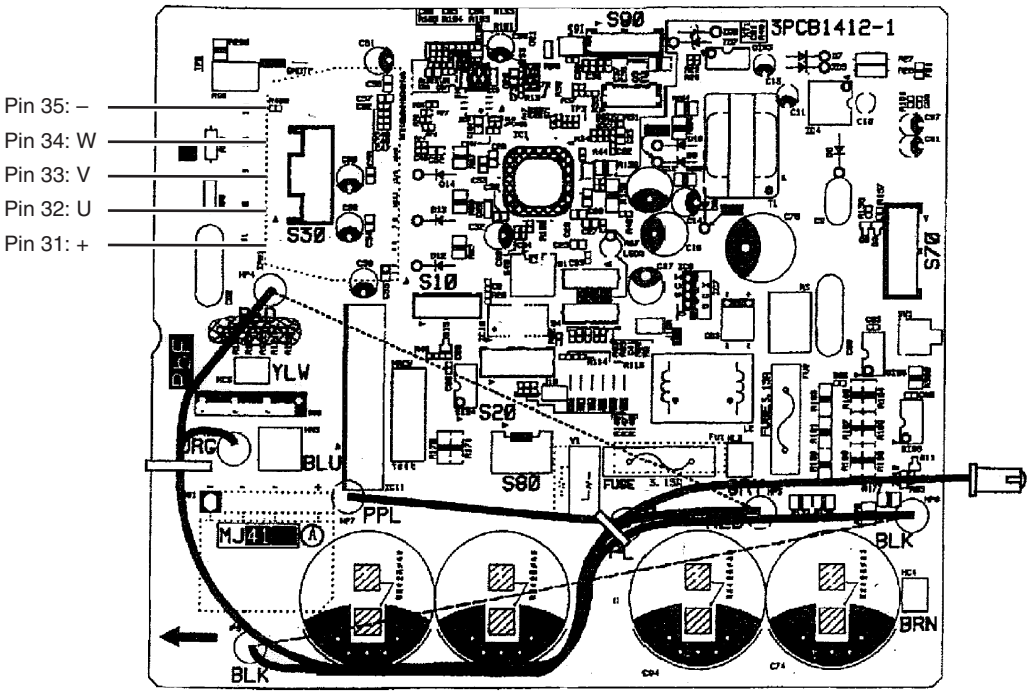
**Check No.22**

Check to make sure that the voltage between (+) and (–) of the power module is about 0 V before checking.

- Disconnect the compressor harness connector from the outdoor unit PCB. To disengage the connector, press the protrusion on the connector.
- Follow the procedure below to measure resistance between the terminals of the power module and the terminals of the compressor with a multimeter. Evaluate the measurement results referring to the following table.

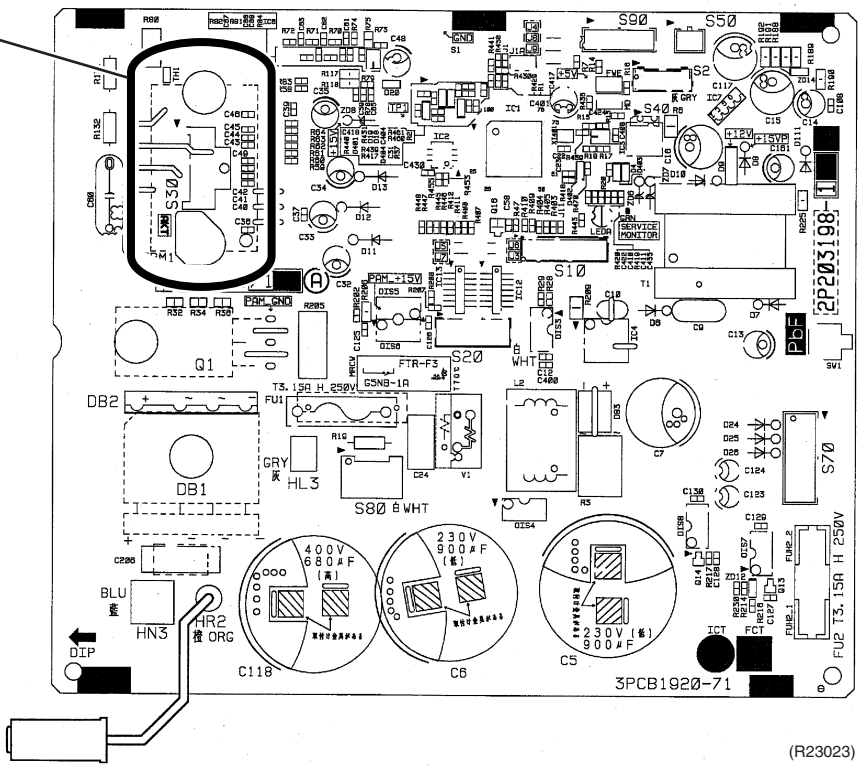
| | | | | |
|---|---|---|---|---|
| Positive terminal (+) of digital multimeter | Power module (+) | UVW | Power module (–) | UVW |
| Negative terminal (–) of digital multimeter | UVW | Power module (+) | UVW | Power module (–) |
| Resistance is OK. | several kΩ ~ several MΩ | | | |
| Resistance is NG. | 0 Ω or ∞ | | | |

## RK(X)S25/35E2V1B



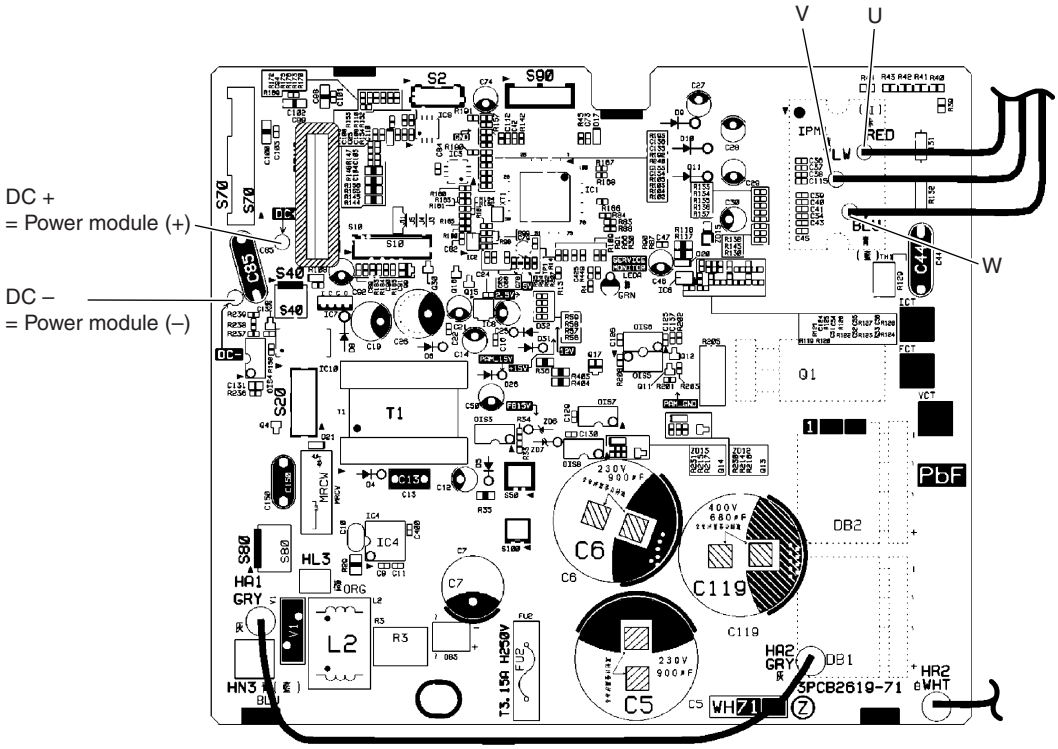

(R22979)

## RK(X)S25/35G2V1B

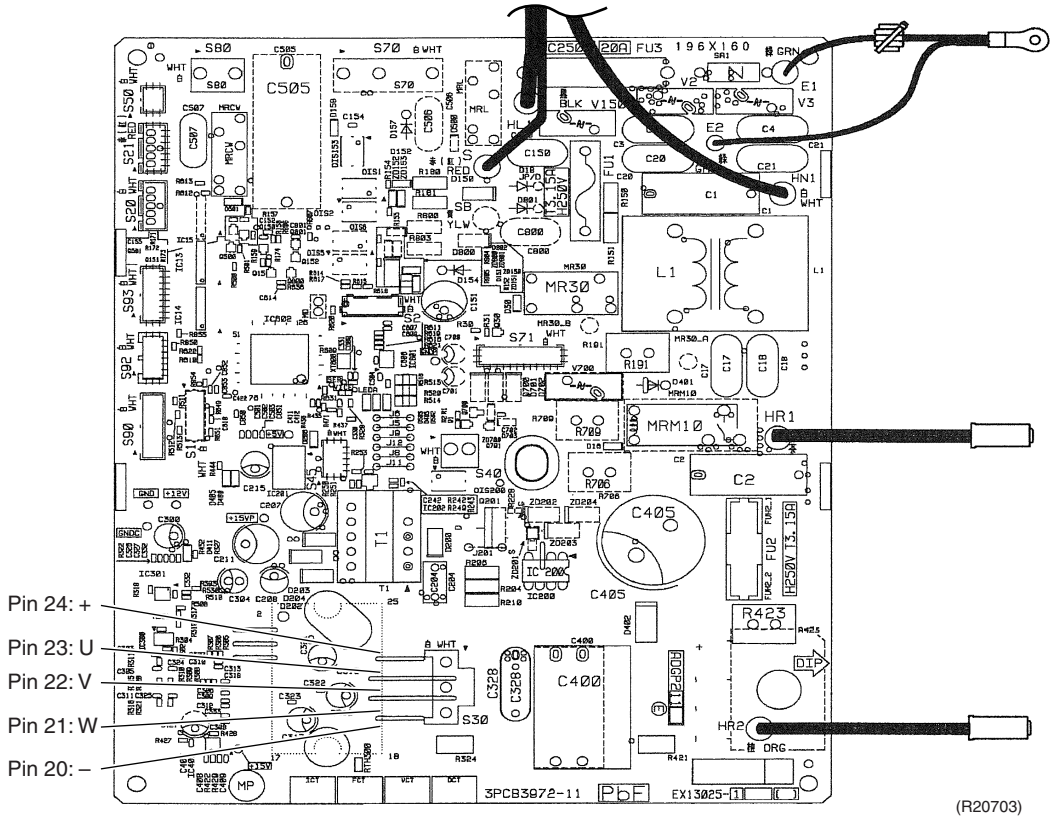



(R23023)

### RK(X)S25/35G2V1B9, RXS25/35J2V1B, RXS25K3V1B, RXS35K2V1B, RXS25/35L2V1B




### RXS25/35L3V1B



# Part 7
# Trial Operation and Field Settings

1. Tips for Servicing .....116
   1.1 Pump Down Operation .....116
   1.2 Forced Cooling Operation .....116
2. Trial Operation .....118
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   3.3 Jumper and Switch Settings .....121
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# 1.Tips for Servicing

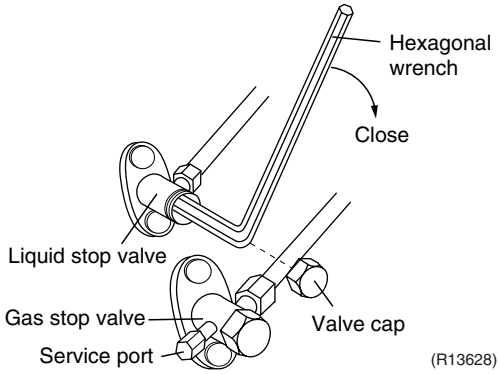
## 1.1 Pump Down Operation

**Outline**

In order to protect the environment, be sure to conduct pump down operation when relocating or disposing of the unit.

**Detail**

1) Remove the valve caps from the liquid stop valve and the gas stop valve.
2) Carry out forced cooling operation.
3) After 5 to 10 minutes, close the liquid stop valve with a hexagonal wrench.
4) After 2 to 3 minutes, close the gas stop valve and stop the forced cooling operation.

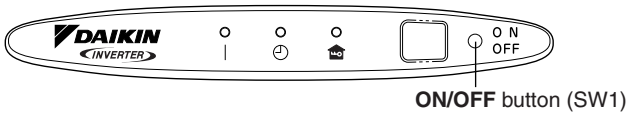



Refer to page 116 for forced cooling operation.

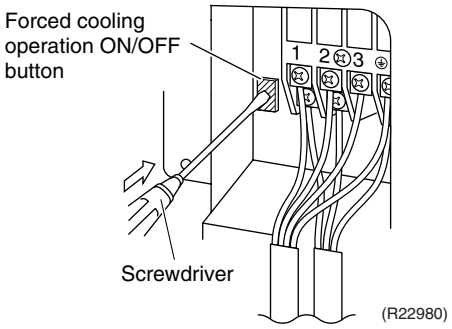
## 1.2 Forced Cooling Operation

| Item | Forced Cooling |
|---|---|
| Conditions | The forced cooling operation is allowed when both of the following conditions are met.<br><br>1) The outdoor unit is not abnormal and not in the 3-minute standby mode.<br>2) The outdoor unit is not operating. |
| Start | The forced cooling operation starts when any of the following conditions is fulfilled.<br><br>1) Press the forced cooling operation **ON/OFF** button (SW1) on the indoor unit for 5 seconds.<br>2) Press the forced cooling operation ON/OFF button (SW1) on the outdoor unit. (RK(X)S25/35E2V1B, RK(X)S25/35G2V1B, RK(X)S25/35G2V1B9, RXS25/35J2V1B, RXS25K3V1B, RXS35K2V1B, RXS25/35L2V1B only) |
| Command frequency | RK(X)S25/35E2V1B, RK(X)S25/35G2V1B: 68 Hz<br>RK(X)S25/35G2V1B9, RXS25/35J2V1B, RXS25K3V1B, RXS35K2V1B, RXS25/35L2V1B: 58 Hz |
| End | The forced cooling operation ends when any of the following conditions is fulfilled.<br><br>1) The operation ends automatically after 15 minutes.<br>2) Press the forced cooling operation **ON/OFF** button (SW1) on the indoor unit again.<br>3) Press the **ON/OFF** button on the remote controller.<br>4) Press the forced cooling operation ON/OFF button (SW1) on the outdoor unit. (RK(X)S25/35E2V1B, RK(X)S25/35G2V1B, RK(X)S25/35G2V1B9, RXS25/35J2V1B, RXS25K3V1B, RXS35K2V1B, RXS25/35L2V1B only) |
| Others | Protection functions have priority over all other functions during forced cooling operation. |

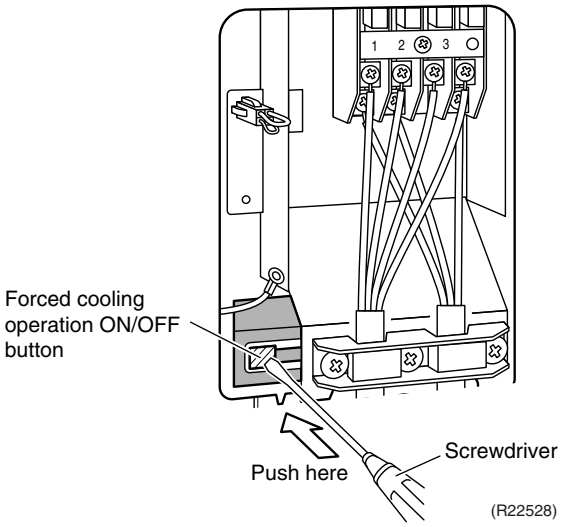
### Indoor Unit




### Outdoor Unit: RK(X)S25/35E2V1B, RK(X)S25/35G2V1B




### Outdoor Unit: RK(X)S25/35G2V1B9, RXS25/35J2V1B, RXS25K3V1B, RXS35K2V1B, RXS25/35L2V1B




**Caution** When pressing the button, do not touch the terminal board. It has a high voltage and may cause electric shock.

# 2. Trial Operation

**Outline**

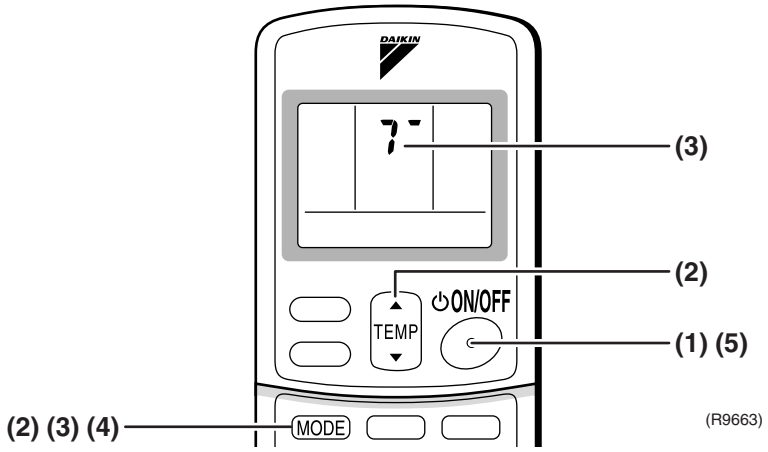
Carry out the trial operation in accordance with the operation manual to ensure that all functions and parts, such as flap movement, are working properly.
Trial operation should be carried out in either cooling or heating operation.

**Detail**

1. Measure the power supply voltage and make sure that it falls within the specified range.
2. In cooling operation, select the lowest programmable temperature (18°C); in heating operation, select the highest programmable temperature (30°C).
   - Trial operation may be disabled in either operation mode depending on the room temperature.
   - After trial operation is complete, set the temperature to a normal level (26°C ~ 28°C in cooling, 20°C ~ 24°C in heating operation).
   - For protection, the system does not start for 3 minutes after it is turned off.

**ARC433 Series**

(1) Press the **ON/OFF** button to turn on the system.
(2) Press the center of the **TEMP** button and the **MODE** button at the same time.
(3) Press the **MODE** button twice.
(7 appears on the display to indicate that trial operation is selected.)
(4) Press the **MODE** button and select operation mode.
(5) Trial operation terminates in about 30 minutes and switches into normal mode. To quit a trial operation, press the **ON/OFF** button.



# 3. Field Settings

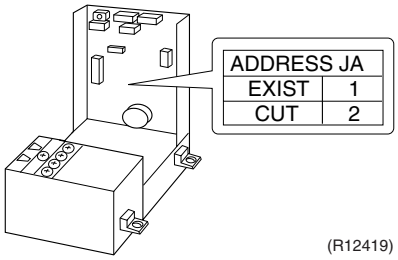
## 3.1 When 2 Units are Installed in 1 Room

**Outline**

When 2 indoor units are installed in 1 room, 1 of the 2 indoor units and the corresponding wireless remote controller can be set for different addresses.
Both the indoor unit PCB and the wireless remote controller need alteration.

**Indoor Unit PCB**

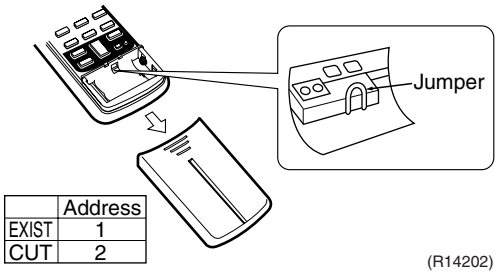
■ Cut the address setting jumper JA on the control PCB.




**Caution** **Replace the PCB if you accidentally cut a wrong jumper.**
Jumpers are necessary for electronic circuit. Improper operation may occur if you cut any of them.

**Wireless Remote Controller**

■ Cut the address setting jumper.



# 3.2 Facility Setting Jumper (cooling at low outdoor temperature)

**Outline**

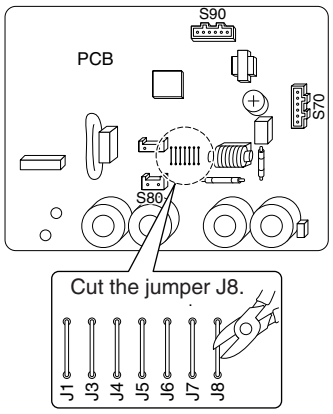
This function is limited only for facilities (the target of air conditioning is equipment (such as computer)). Never use it in a residence or office (a place where people are present).

**Detail**

You can expand the operation range to –15°C by cutting the jumper on the outdoor unit PCB. Note that the operation may stop if the outdoor temperature drops below –15°C. If the outdoor temperature rises, the operation starts again.

■ **RKS25/35E2V1B**

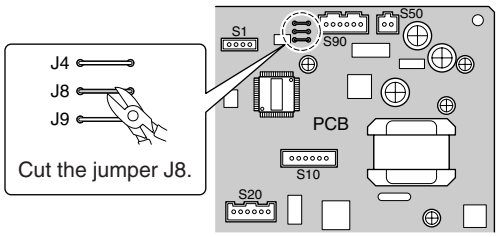
**Main PCB**




(R18373)

■ **RK(X)S25/35G2V1B**

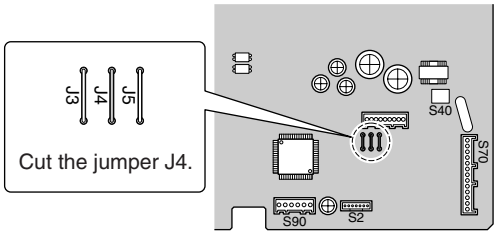
**Main PCB**




(R18374)

■ **RK(X)S25/35G2V1B9, RXS25/35J2V1B, RXS25K3V1B, RXS35K2V1B, RXS25/35L2V1B**

**Main PCB**




(R18253)

**Caution** **<u>Replace the PCB if you accidentally cut a wrong jumper.</u>**
Jumpers are necessary for electronic circuit. Improper operation may occur if you cut any of them.

**Caution**

1. If the outdoor unit is installed where the outdoor heat exchanger of the unit is exposed to direct wind, provide a windbreak wall.
2. Intermittent noises may be produced by the indoor unit due to the outdoor fan turning on and off when using facility settings.
3. Do not place humidifiers or other items which might raise the humidity in rooms where facility settings are being used.
   A humidifier might cause dew condensation from the indoor unit outlet vent.
4. Cutting the jumper sets the indoor fan tap to the highest position.

# 3.3 Jumper and Switch Settings

## Indoor Unit

| Function | Jumper | When connected (factory setting) | When cut |
|---|---|---|---|
| Fan speed setting when compressor stops for thermostat OFF. (effective only in cooling operation) | JB | Fan speed setting ; Remote controller setting | The fan stops. |
| Power failure recovery function | JC | Auto-restart | The unit does not resume operation after recovering from a power failure. Timer settings are cleared. |

| Function | Switch | FLOOR (factory setting) | CEILING |
|---|---|---|---|
| Installation style changeover | SW2 | When installed as the floor mounted type | When installed as the ceiling suspended type |

For the location of the jumper and the switch, refer to page 19.

## Outdoor Unit

| Function | Jumper | Jumper: connected (factory setting) | Jumper: cut |
|---|---|---|---|
| Improvement of defrost performance | RK(X)S25/35E2V1B → J5<br>RK(X)S25/35G2V1B → J5<br>RK(X)S25/35G2V1B9 → J5<br>RXS25/35J2V1B → J5<br>RXS25K3V1B → J5<br>RXS35K2V1B → J5<br>RXS25/35L2V1B → J5 | Standard control | Reinforced control (Ex: The frequency increases, the duration time of defrost lengthens.) |

For the location of the jumper, refer to page 21, 23, 25.

**Caution** **Replace the PCB if you accidentally cut a wrong jumper.**
Jumpers are necessary for electronic circuit. Improper operation may occur if you cut any of them.

# 4. Silicone Grease on Power Transistor / Diode Bridge

**Outline**

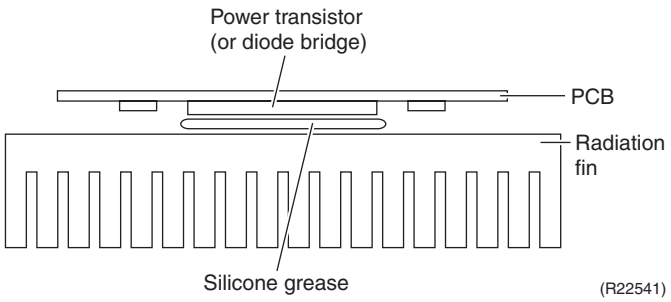
Apply the specified silicone grease to the heat radiation part of a power transistor / diode bridge when you replace an outdoor unit PCB. The silicone grease encourages the heat radiation of a power transistor / diode bridge.

**Detail**

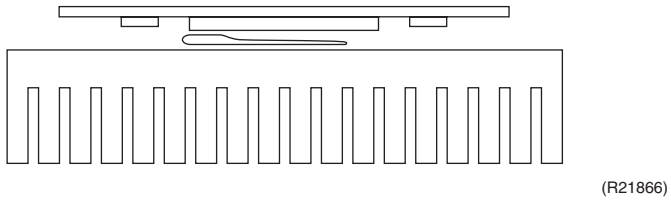
1. Wipe off the old silicone grease completely.
2. Apply the silicone grease evenly. See the illustrations below for examples of application.
3. Tighten the screws of the power transistor / diode bridge.
4. Make sure that the heat radiation parts are firmly contacted to the radiation fin.

Note: Smoke emission may be caused by bad heat radiation when the silicone grease is not appropriately applied.

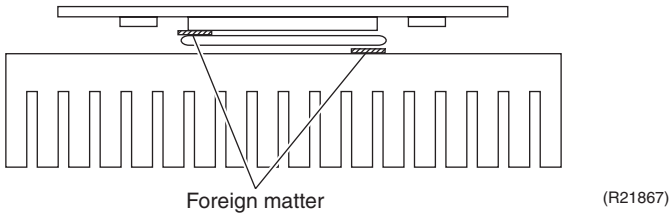
■ OK: Evenly applied




■ NG: Not evenly applied




■ NG: Foreign matter is stuck.



# Part 8
# Appendix

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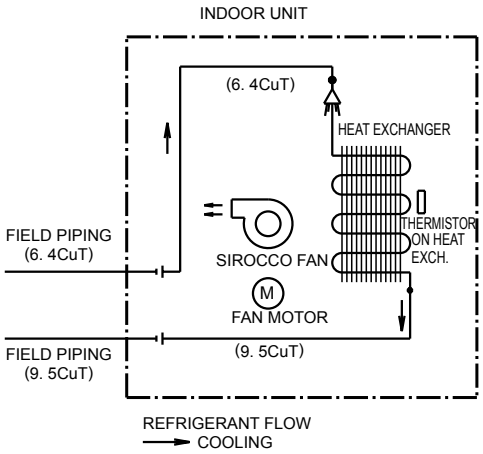
   1.1 Indoor Unit ..... 124
   1.2 Outdoor Unit ..... 125
2. Wiring Diagrams ..... 128
   2.1 Indoor Unit ..... 128
   2.2 Outdoor Unit ..... 129

# 1. Piping Diagrams

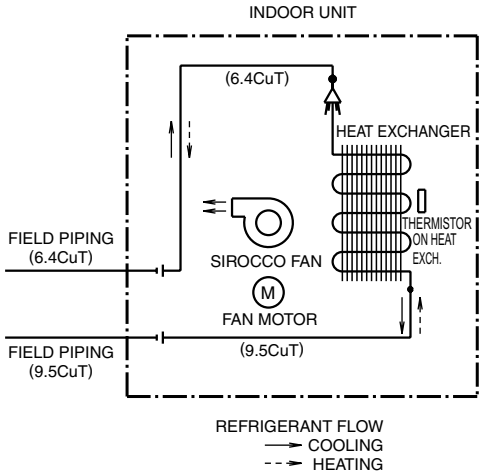
## 1.1 Indoor Unit

**FLKS25/35BAVMB**




4D034012E

**FLXS25/35BAVMB, FLXS35BAVMB9**

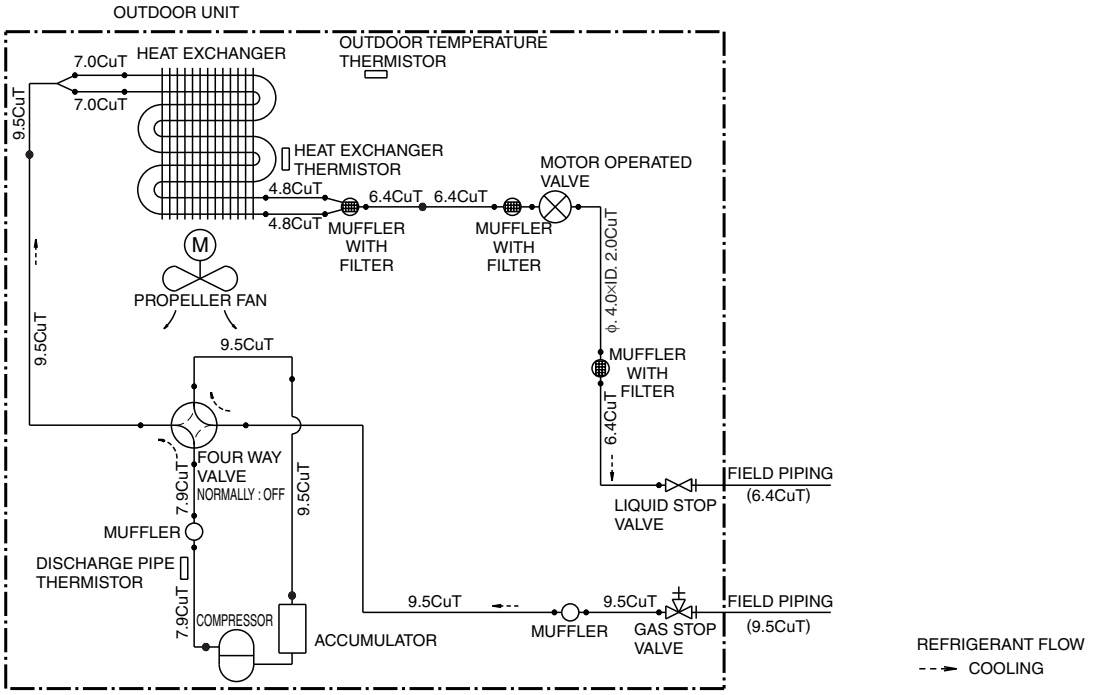



4D048722C

# 1.2 Outdoor Unit

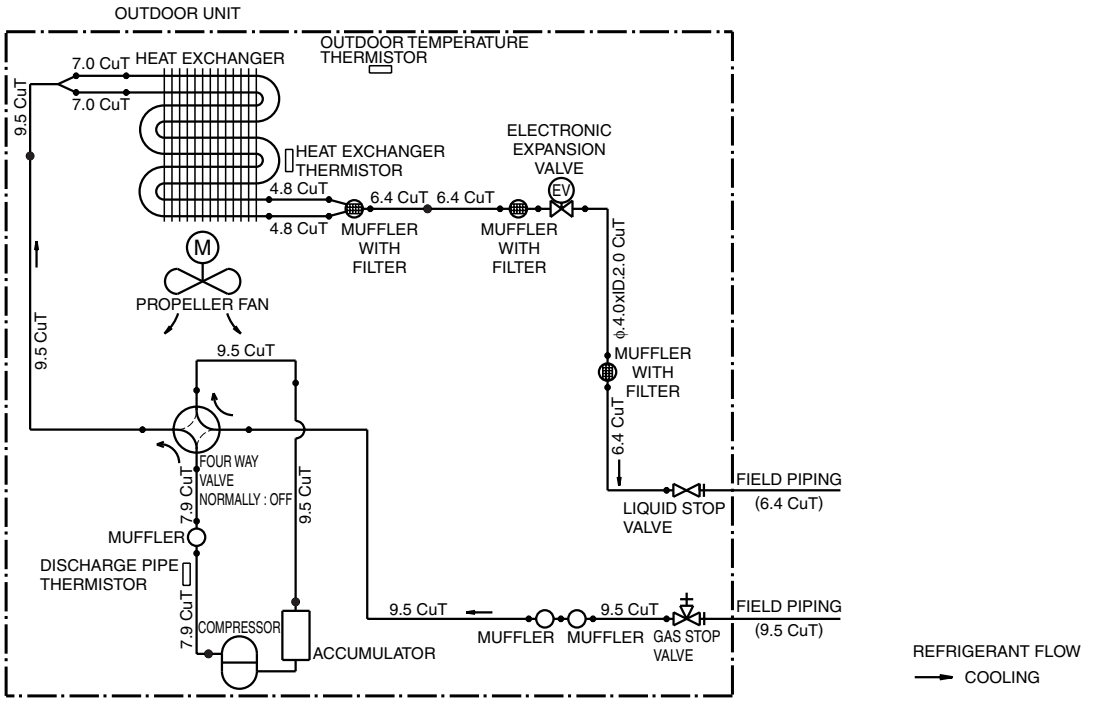
## 1.2.1 Cooling Only

### RKS25/35E2V1B




3D047318G

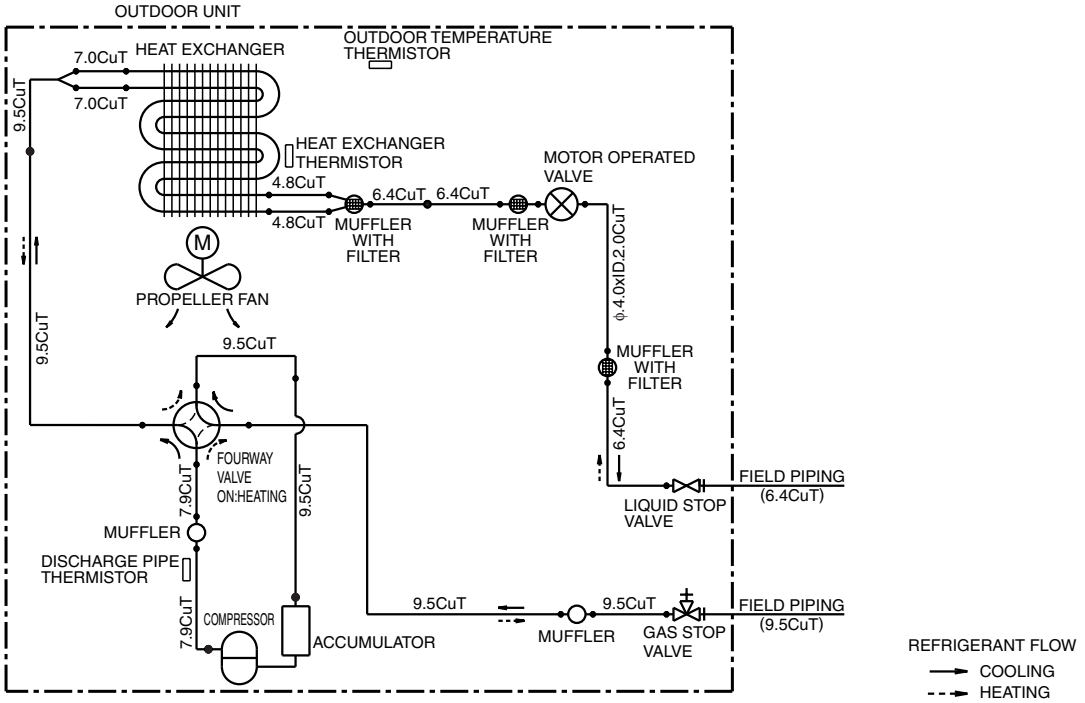
### RKS25/35G2V1B, RKS25/35G2V1B9



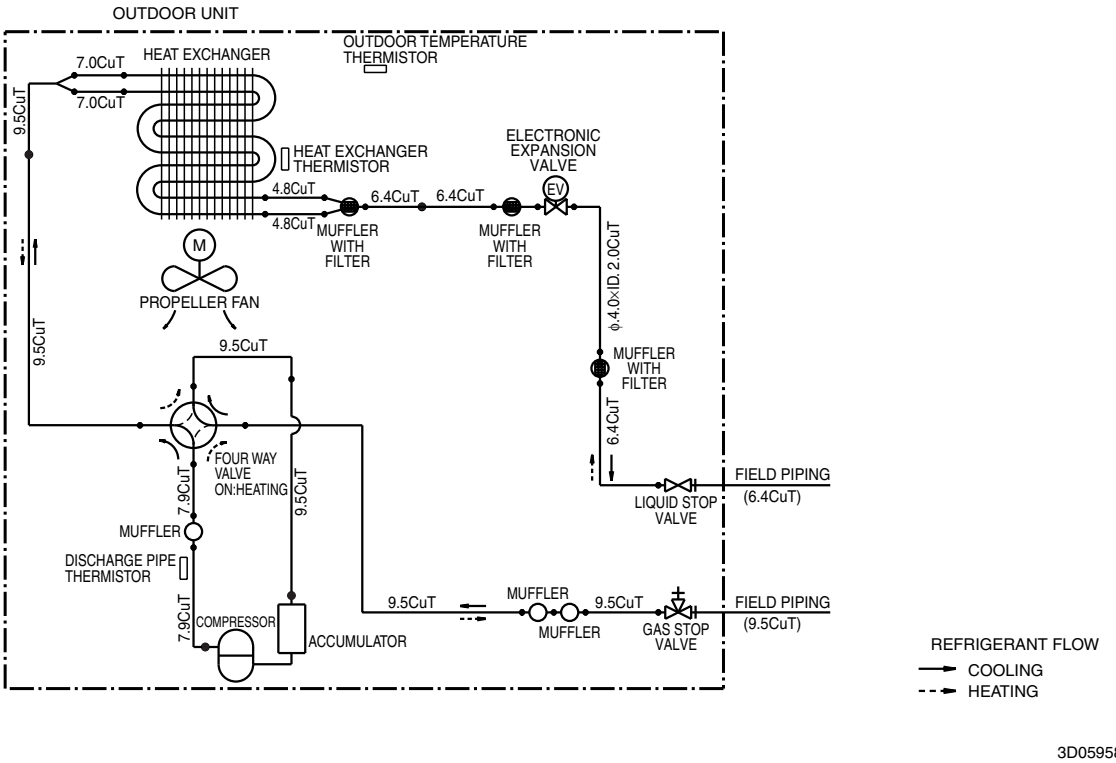

3D059589H

## 1.2.2 Heat Pump

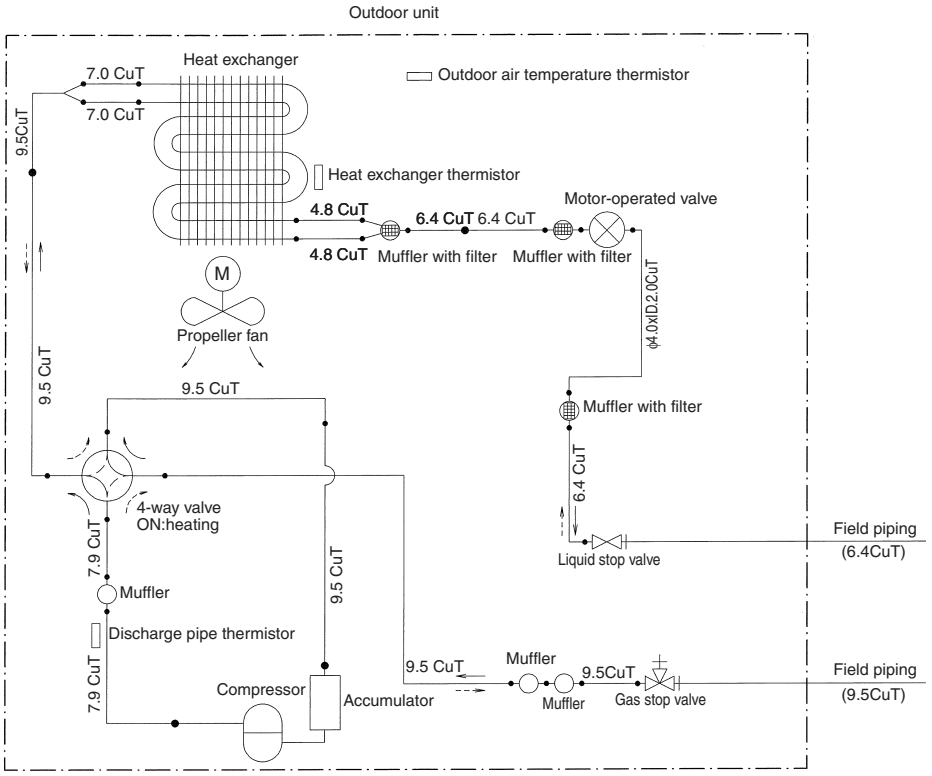
### RXS25/35E2V1B




### RXS25/35G2V1B, RXS25/35G2V1B9, RXS25/35J2V1B, RXS25K3V1B, RXS35K2V1B, RXS25/35L2V1B

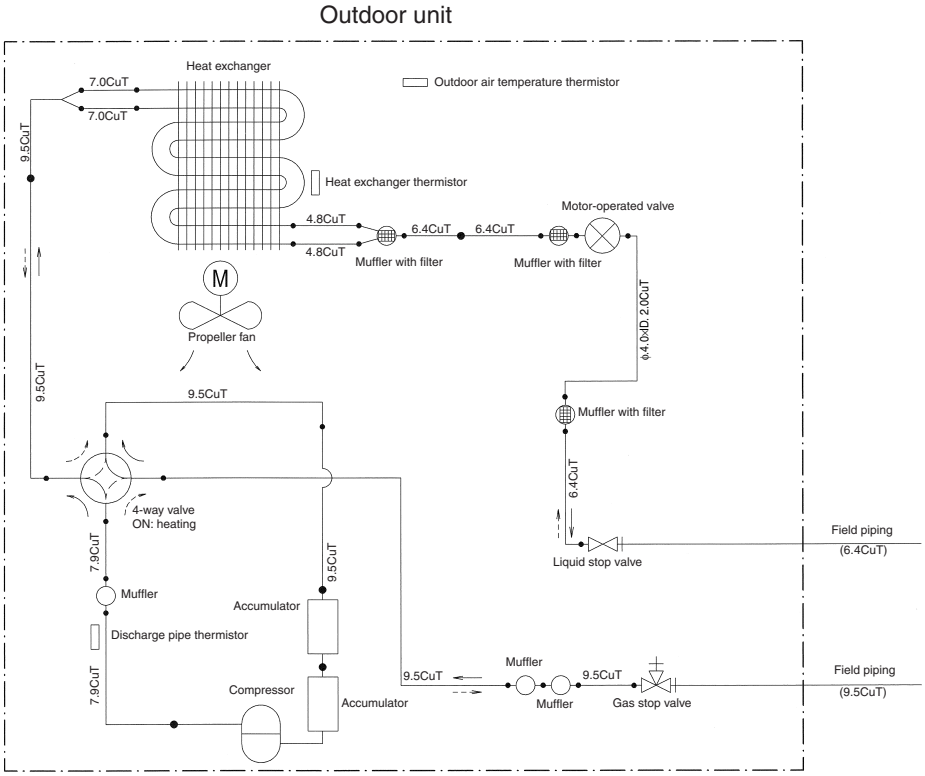


## RXS25L3V1B




3D091995A

## RXS35L3V1B

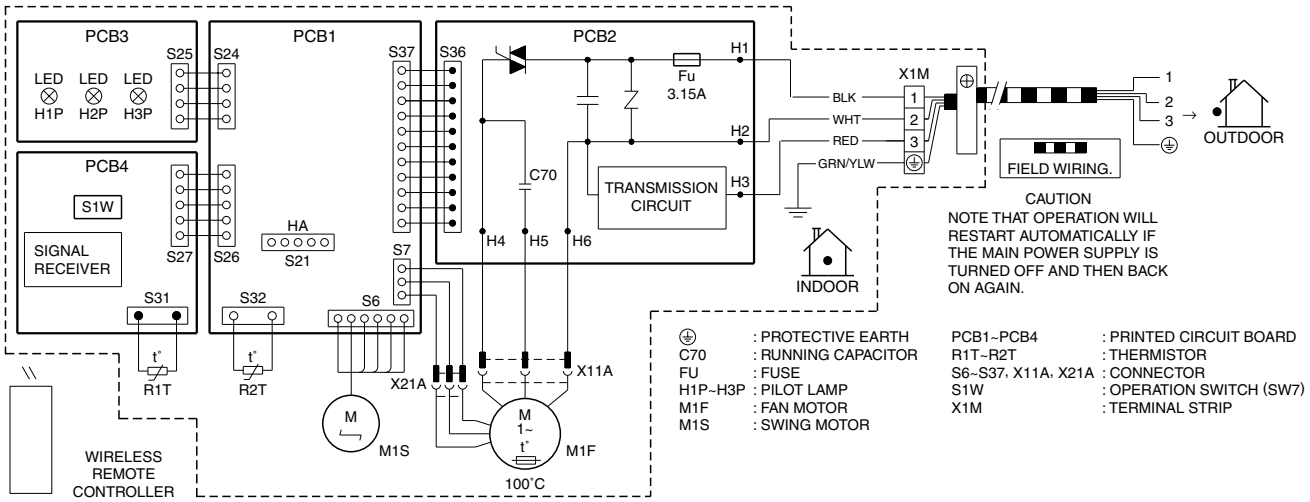



3D092419

# 2. Wiring Diagrams

## 2.1 Indoor Unit

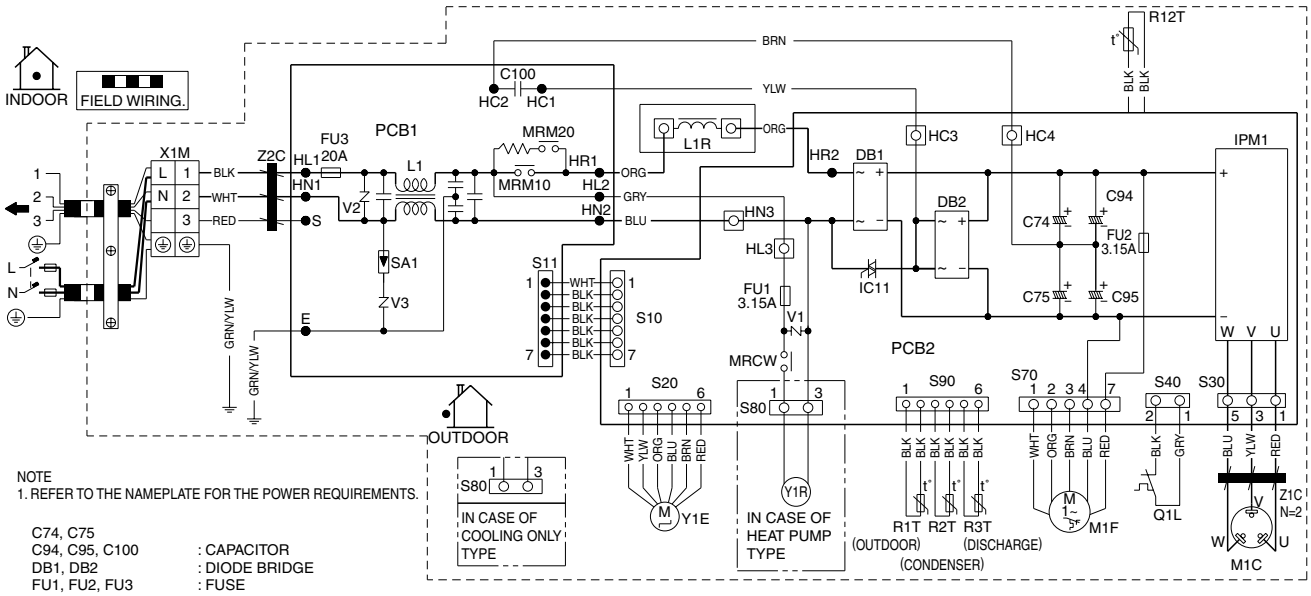
**FLK(X)S25/35BAVMB, FLXS35BAVMB9**




**Note:** PCB1: Contorl PCB
PCB2: Power Supply PCB
PCB3: Display PCB
PCB4: Signal Receiver PCB
Refer to Part 3 for Printed Circuit Board Connector Wiring Diagram.

# 2.2 Outdoor Unit

## RK(X)S25/35E2V1B



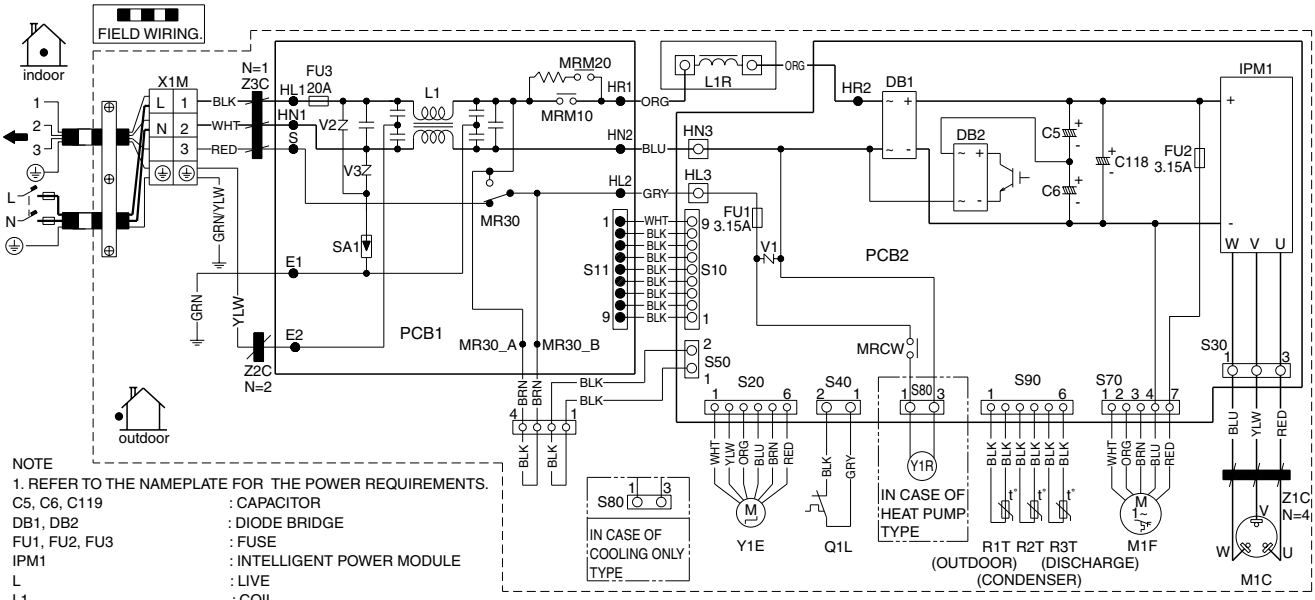

NOTE
1. REFER TO THE NAMEPLATE FOR THE POWER REQUIREMENTS.

| | |
|---|---|
| C74, C75 | |
| C94, C95, C100 | : CAPACITOR |
| DB1, DB2 | : DIODE BRIDGE |
| FU1, FU2, FU3 | : FUSE |
| IC11 | : TRIAC |
| IPM1 | : INTELLIGENT POWER MODULE |
| L | : LIVE |
| L1 | : COIL |
| L1R | : REACTOR |
| M1C | : COMPRESSOR MOTOR |
| M1F | : FAN MOTOR |
| MRCW, MRM10, MRM20 | : MAGNETIC RELAY |
| N | : NEUTRAL |
| PCB1, PCB2 | : PRINTED CIRCUIT BOARD |
| Q1L | : OVERLOAD PROTECTOR |
| R1T, R2T, R3T, R12T | : THERMISTOR |
| S10, S11, S20 | |
| S30, S40, S70 | |
| S80, S90, S91 | |
| HC3, HC4, HL3, HN3 | : CONNECTOR |
| SA1 | : SURGE ARRESTER |
| V1, V2, V3 | : VARISTOR |
| X1M | : TERMINAL STRIP |
| Y1E | : ELECTRONIC EXPANSION VALVE COIL |
| Y1R | : REVERSING SOLENOID VALVE COIL |
| Z1C, Z2C | : FERRITE CORE |
| ⏚ | : PROTECTIVE EARTH |

3D046707P

**Note:** PCB1: Filter PCB
PCB2: Main PCB
Refer to Part 3 for Printed Circuit Board Connector Wiring Diagram.

## RK(X)S25/35G2V1B



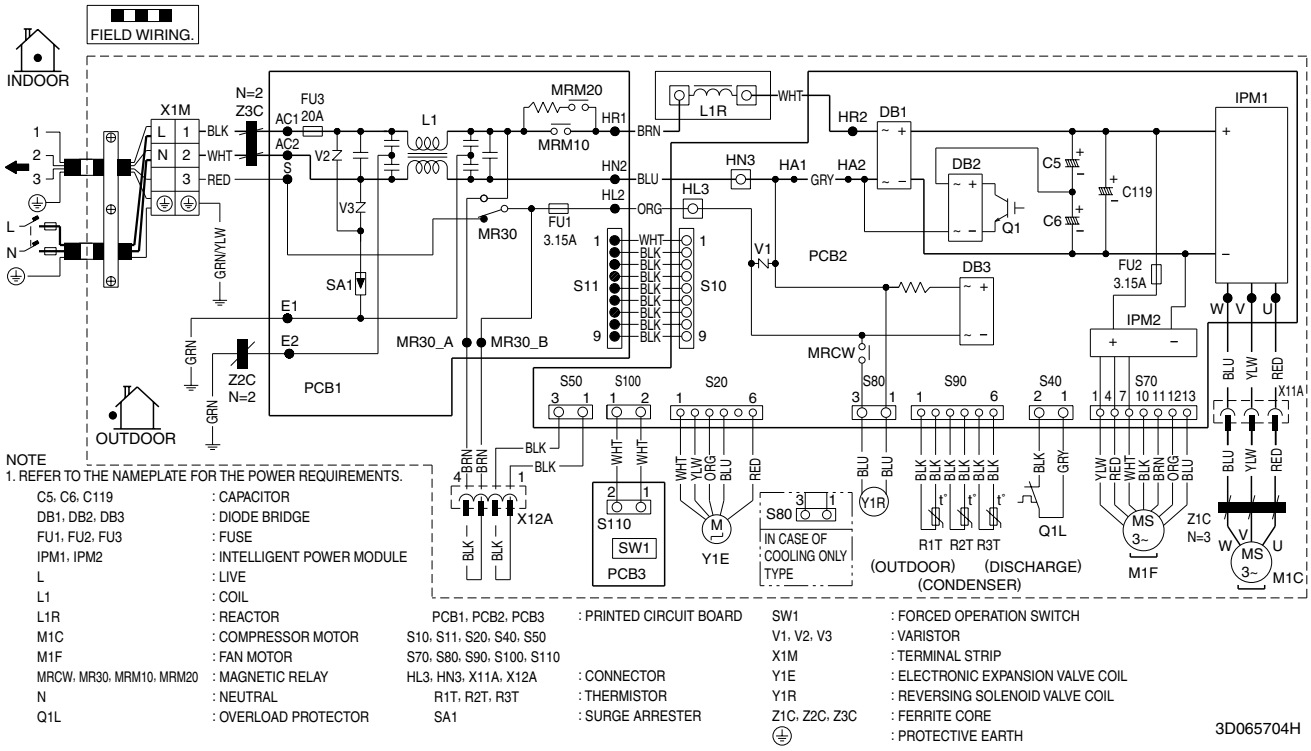

NOTE
1. REFER TO THE NAMEPLATE FOR THE POWER REQUIREMENTS.

| | |
|---|---|
| C5, C6, C119 | : CAPACITOR |
| DB1, DB2 | : DIODE BRIDGE |
| FU1, FU2, FU3 | : FUSE |
| IPM1 | : INTELLIGENT POWER MODULE |
| L | : LIVE |
| L1 | : COIL |
| L1R | : REACTOR |
| M1C | : COMPRESSOR MOTOR |
| M1F | : FAN MOTOR |
| MRCW, MR30, MRM10, MRM20 | : MAGNETIC RELAY |
| N | : NEUTRAL |
| Q1L | : OVERLOAD PROTECTOR |
| PCB1, PCB2 | : PRINTED CIRCUIT BOARD |
| PTC1 | : THERMISTOR PTC |
| S10, S11, S20, S30, S40, S50, S70, S80, S90, HL3, HN3 | : CONNECTOR |
| R1T, R2T, R3T | : THERMISTOR |
| SA1 | : SURGE ARRESTER |
| V1, V2, V3 | : VARISTOR |
| X1M | : TERMINAL STRIP |
| Y1E | : ELECTRONIC EXPANSION VALVE COIL |
| Y1R | : REVERSING SOLENOID VALVE COIL |
| Z1C, Z2C, Z3C | : FERRITE CORE |
| ⏚ | : PROTECTIVE EARTH |

3D058684B

**Note:** PCB1: Filter PCB
PCB2: Main PCB
Refer to Part 3 for Printed Circuit Board Connector Wiring Diagram.

## RK(X)S25/35G2V1B9, RXS25/35J2V1B, RXS25K3V1B, RXS35K2V1B, RXS25/35L2V1B

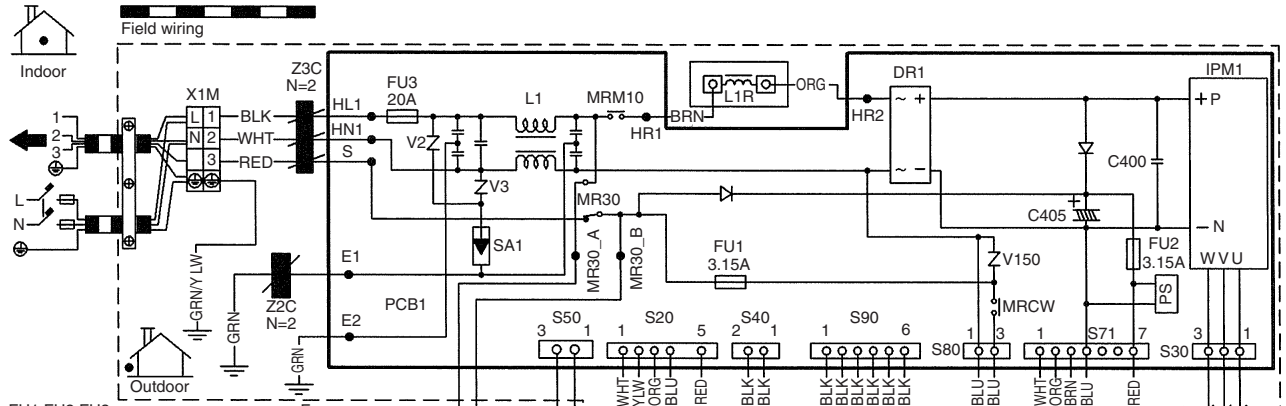



NOTE
1. REFER TO THE NAMEPLATE FOR THE POWER REQUIREMENTS.

| | |
|---|---|
| C5, C6, C119 | : CAPACITOR |
| DB1, DB2, DB3 | : DIODE BRIDGE |
| FU1, FU2, FU3 | : FUSE |
| IPM1, IPM2 | : INTELLIGENT POWER MODULE |
| L | : LIVE |
| L1 | : COIL |
| L1R | : REACTOR |
| M1C | : COMPRESSOR MOTOR |
| M1F | : FAN MOTOR |
| MRCW, MR30, MRM10, MRM20 | : MAGNETIC RELAY |
| N | : NEUTRAL |
| Q1L | : OVERLOAD PROTECTOR |
| PCB1, PCB2, PCB3 | : PRINTED CIRCUIT BOARD |
| S10, S11, S20, S40, S50 | |
| S70, S80, S90, S100, S110 | |
| HL3, HN3, X11A, X12A | : CONNECTOR |
| R1T, R2T, R3T | : THERMISTOR |
| SA1 | : SURGE ARRESTER |
| SW1 | : FORCED OPERATION SWITCH |
| V1, V2, V3 | : VARISTOR |
| X1M | : TERMINAL STRIP |
| Y1E | : ELECTRONIC EXPANSION VALVE COIL |
| Y1R | : REVERSING SOLENOID VALVE COIL |
| Z1C, Z2C, Z3C | : FERRITE CORE |
| ⏚ | : PROTECTIVE EARTH |

**Note:** PCB1: Filter PCB
PCB2: Main PCB
PCB3: Forced Operation Button PCB
Refer to Part 3 for Printed Circuit Board Connector Wiring Diagram.

## RXS25/35L3V1B




| | |
|---|---|
| FU1,FU2,FU3 | : Fuse |
| L1 | : Coil |
| L1R | : Reactor |
| HL1, HN1, E1, E2, HR1, HR2 | |
| X12A, S, MR30_A, MR30_B | : Connection |
| R1T, R2T, R3T | : Thermistor |
| S20, S30, S40, S50, S71, S80, S90 | : Connector |
| V2, V3, V150 | : Varistor |
| C400, C405 | : Capacitor |
| L | : Live |
| Z1C, Z2C, Z3C | : Ferrite core |
| PS | : Power supply |
| M1F | : Fan motor |
| MRCW, MR30, MRM10 | : Magnetic relay |
| N | : Neutral |

DB1: Diode bridge
X1M: Terminal strip
PCB1: Printed circuit board
M1C: Compressor motor
Q1L: Overload protector
IPM1: Intelligent power module
SA1: Surge arrestor
Y1R: Reversing solenoid valve coil
Y1E: Electronic expansion valve coil

⏚ : Protective earth
⏚ : Earth

BLK: Black
WHT: White
BRN: Brown
RED: Red
GRN: Green
YLW: Yellow
ORG: Orange
BLU: Blue

For the power requirements, refer to the nameplate.

4D090151

**Note:** PCB1: Main PCB
Refer to Part 3 for Printed Circuit Board Connector Wiring Diagram.

# Revision History

| Month / Year | Version | Revised contents |
|---|---|---|
| 01 / 2007 | SiBE05-722 | First edition |
| 05 / 2010 | SiBE05-722_A | Model addition: RK(X)S25/35G2V1B, RK(X)S25/35G2V1B9 |
| 01 / 2011 | SiBE05-722_B | Model addition: RXS25/35J2V1B |
| 12 / 2012 | SiBE05-722_C | Model addition: RXS25K3V1B, RXS35K2V1B |
| 01 / 2014 | SiBE05-722ED | Model addition: FLXS35BAVMB9, RXS35L2V1B |
| 01 / 2016 | SiBE05-722EE | Model addition: RXS25L2V1B, RXS25/35L3V1B<br>Part 6, 7 (page 58-122): Reference only |

Warning

- Daikin products are manufactured for export to numerous countries throughout the world. Prior to purchase, please confirm with your local authorised importer, distributor and/or retailer whether this product conforms to the applicable standards, and is suitable for use, in the region where the product will be used. This statement does not purport to exclude, restrict or modify the application of any local legislation.
- Ask a qualified installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Use only those parts and accessories supplied or specified by Daikin. Ask a qualified installer or contractor to install those parts and accessories. Use of unauthorised parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Read the user's manual carefully before using this product. The user's manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

If you have any enquiries, please contact your local importer, distributor and/or retailer.

## Cautions on product corrosion

1. Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced.
2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided. If you need to install the outdoor unit close to the sea shore, contact your local distributor.

**Dealer**

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01/2016 AK.B