This product has been determined to be in compliance with the Low Voltage Directive (2006/95/EC), and the Electromagnetic Compatibility Directive (2004/108/EEC) of the European Union.

Correct Disposal of This Product
(Waste Electrical & Electronic Equipment)

(When using this air conditioner in European countries, the following guidance must be followed)

- This marking shown on the product or its literature, indicates that waste electrical and electrical equipment (WEEE as in directive 2002/96/EC) should not be mixed with general household waste.
- It is prohibited to dispose of this appliance in domestic household waste.
- For disposal, there are several possibilities:
  1. The municipality has established collection systems, where electronic waste can be disposed of at least free of charge to the user.
  2. When buying a new product, the retailer will take back the old product at least free of charge.
  3. The manufacturer will take back the old appliance for disposal at least free of charge to the user.
  4. As old products contain valuable resources, they can be sold to scrap metal dealers.

Wild disposal of waste in forests and landscapes endangers your health when hazardous substances leak into the ground-water and find their way into the food chain.

This product contains fluorinated gases covered by the Kyoto Protocol

<table>
<thead>
<tr>
<th>Chemical Name of Gas</th>
<th>R410A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Warming Potential (GWP) of Gas</td>
<td>2088</td>
</tr>
</tbody>
</table>

1. Paste the enclosed refrigerant label adjacent to the charging and/or recovering location.
2. Clearly write the charged refrigerant quantity on the refrigerant label using indelible ink.
3. Prevent emission of the contained fluorinated gas. Ensure that the fluorinated gas is never vented to the atmosphere during installation, service or disposal. When any leakage of the contained fluorinated gas is detected, the leak shall be stopped and repaired as soon as possible.
4. Only qualified service personnel are allowed to access and service this product.
5. Any handling of the fluorinated gas in this product, such as when moving the product or recharging the gas, shall comply under (EC) Regulation No. 842/2006 on certain fluorinated greenhouse gases and any relevant local legislation.
6. Contact dealers, installers, etc., for any questions.

<table>
<thead>
<tr>
<th>Indoor Unit</th>
<th>Outdoor Unit</th>
<th>DIMENSION(IDU)</th>
<th>DIMENSION(ODU)</th>
<th>Power Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>42SHV071P1</td>
<td>38SHV071P1</td>
<td>1100x450x270</td>
<td>900x315x860</td>
<td>220-240V 1N~ 50Hz</td>
</tr>
<tr>
<td>42SHV087P1</td>
<td>38SHV087P1</td>
<td>1200x550x380</td>
<td>900x315x860</td>
<td>220-240V 1N~ 50Hz</td>
</tr>
<tr>
<td>42SHV105P1</td>
<td>38SHV105P1</td>
<td>1200x550x380</td>
<td>990x345x965</td>
<td>220-240V 1N~ 50Hz</td>
</tr>
<tr>
<td>42SHV135P1</td>
<td>38SHV135P1</td>
<td>1200x550x380</td>
<td>938x392x1369</td>
<td>220-240V 1N~ 50Hz</td>
</tr>
<tr>
<td>42SHV165P1</td>
<td>38SHV165P1</td>
<td>1400x770x440</td>
<td>938x392x1369</td>
<td>220-240V 1N~ 50Hz</td>
</tr>
</tbody>
</table>

The manufacturer reserves the right to change any product specifications without notice.

GB−1
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1. PREPARING FOR INSTALLATION

1.1 SAFETY PRECAUTIONS

- Installing, starting up, and servicing air-conditioning equipment can be hazardous due to system pressures, electrical components, and equipment location (roofs, elevated structures, etc.).
- Only trained, qualified installers and service mechanics should install, start-up, and serve this equipment.
- When working on the equipment, observe precautions in the literature and on tags, stickers, and labels attached to the equipment.
- Follow all safety codes. Wear safety glasses and work gloves. Keep quenching cloth and fire extinguisher nearby when brazing. Use care in handing, rigging, and setting bulky equipment.
- Read these instructions thoroughly and follow all warnings or cautions included in literature and attached to the unit. Consult local building codes and National Electrical Code for special requirement.

This symbol indicates the possibility of personnel injury or loss of life.

- Refrigerant gas is heavier than air and replaces oxygen. A massive leak could lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- When the air conditioner is installed in a small room, provide appropriate measures to ensure that the concentration of refrigerant leakage occur in the room does not exceed the critical level.
- If the refrigerant gas leaks during installation, ventilate the area immediately.
  Refrigerant gas may produce a toxic gas if it comes in contact with fire such as from a fan heater, stove or cooking device. Exposure to this gas could cause severe injury or death.
- Disconnect from power source before attempting any electrical work. Connect the connective cable correctly.
  Wrongly connecting may result in electric parts damaged.
- Use the specified cables for electrical connections and attach the wires firmly to the terminal block connecting sections so that the external force is not exerted to the terminal.
- Be sure to provide grounding.
  Do not ground units to gas pipes, water pipes, lightning rods or telephone wires. Incomplete grounding could cause a severe shock hazard resulting in injury or death.
- Safely dispose of the packing materials.
  Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries. Tear apart and throw away plastic packaging bags so that children will not play with them. Children playing with plastic bags face the danger of suffocation.
- Do not install unit near concentrations of combustible gas or gas vapors.
- Be sure to use the supplied or exact specified installation parts.
  Use of other parts may cause the unit to come to lose, water leakage, electrical shock, fire or equipment damage.
- When installing or relocating the system, do not allow air or any substances other than the specified refrigerant (R410A) to enter the refrigeration cycle.
- This appliance is not accessible to the general public and intended to be maintained by qualified service personnel and located at a level not less than 2.5m from floor.
- Electrical work should be carried out in accordance with the installation manual and the national, state and local electrical wiring codes.
- Be sure to use a dedicated power circuit. Never share the same power outlet with other appliance.
1. PREPARING FOR INSTALLATION

**WARNING**

- Never modify this unit by removing any of the safety guards or bypassing any of the safety interlock switches.
- In order to avoid a hazard due to inadvertent resetting of the thermal cut-out, this appliance must not be supplied through an external switching device, such as a timer, or connected to a circuit that is regularly switched on and off by the utility.
- Use the prescribed cables for electrical connection with insulation protected by insulation sleeving having an appropriate temperature rating.

Unconformable cables can cause electric leak, anomalous heat production or fire.

**CAUTION**

This symbol indicates the possibility of property damage or serious consequences.

- To avoid personal injury, be careful when handling parts with sharp edges.
- Do not install the indoor or outdoor units in a location with special environmental conditions.
- Do not install in a place that can amplify the noise level of the unit or where noise and discharged air might disturb neighbors.
- Perform the drainage/piping work securely according to the installation manual.
  Improper drain piping may result in water leakage and property damage.
- Do not install the air conditioner in the following places.
  - The place where there is mineral oil or arsenic acid.
  - The place where corrosive gas (such as sulfurous acid gas) or combustible gas (such as thinner) can accumulate or collect, or where volatile combustible substances are handled.
  - The place there is equipment that generates electromagnetic fields or high frequency harmonics.

1.2 ACCESSORIES

The following accessories are supplied with the unit. The type and quantity may differ depending on the specifications.

<table>
<thead>
<tr>
<th>Name of Accessories</th>
<th>Q'ty(pc)</th>
<th>Shape</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pipe insulation material</td>
<td>2</td>
<td>![image]</td>
<td>Insulation</td>
</tr>
<tr>
<td>Drain outlet</td>
<td>1</td>
<td>![image]</td>
<td>Connect drainage hose for outdoor unit.</td>
</tr>
<tr>
<td>Gasket</td>
<td>1</td>
<td>![image]</td>
<td>Seal the drainage outlet for outdoor unit.</td>
</tr>
</tbody>
</table>
1. PREPARING FOR INSTALLATION

The following accessories are related to remote controller.

<table>
<thead>
<tr>
<th>Name of Accessories</th>
<th>Q’ty(pc)</th>
<th>Shape</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote Controller</td>
<td>1</td>
<td>![Remote Controller Icon]</td>
<td>To remote control the air conditioner</td>
</tr>
<tr>
<td>Remote controller holder</td>
<td>1</td>
<td>![Remote Controller Holder Icon]</td>
<td>To hold the remote controller on the wall</td>
</tr>
<tr>
<td>Tapped screw</td>
<td>2</td>
<td>![Tapped Screw Icon]</td>
<td>To fix the remote controller holder</td>
</tr>
<tr>
<td>Battery</td>
<td>2</td>
<td>![Battery Icon]</td>
<td>For remote controller</td>
</tr>
<tr>
<td>Connecting wire for display (2m)</td>
<td>1</td>
<td>N/A</td>
<td>Wire between display and control board.</td>
</tr>
</tbody>
</table>

Note: The accessories related to remote controller will be unavailable for the models with wired controller. For wired controller accessories, please refer to attached manual of wired controller.

2. INDOOR UNIT INSTALLATION

2.1 INSTALLATION SITE CHOOSING

INDOOR UNIT
■ Where it is out of direct sunlight.
■ Where the airflow is not blocked.
■ Where an optimum air distribution is ensured.
■ Where the condensate can drain correctly and safely.
■ Install the indoor unit on a wall/ceiling that prevents vibration and is strong enough to hold the product weight.
■ Maintain sufficient clearance around the indoor unit for maintenance and servicing.
■ Where the air filter can be removed and cleaned easily.
■ Where the piping between the indoor and outdoor units is within the allowable limits.
■ Install the indoor unit 1m or more away from the TV or radio to prevent the screen from being distorted or noise from being generated.
■ Install the indoor unit as far away as possible from fluorescent and incandescent lights so that the remote control can be operated well.

Confirm that there is enough room for installation and maintenance.
2. INDOOR UNIT INSTALLATION

SPACE REQUIREMENT FOR INDOOR UNIT
This unit has installed with air inlet duct flange, but without air filter.

Applicable to 42SHV071P1

Applicable to 42SHV087P1 & 42SHV105P1 & 42SHV135P1

NOTE: 14 groups all around

NOTE: 12 groups all around

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2. INDOOR UNIT INSTALLATION

Table 5-1

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gas pipe connection</td>
<td>15.9 (7.1~10.5kw unit)</td>
</tr>
<tr>
<td>2</td>
<td>Liquid pipe connection</td>
<td>9.52</td>
</tr>
<tr>
<td>3</td>
<td>Drain pipe connection</td>
<td>OD 25 ID 20</td>
</tr>
<tr>
<td>4</td>
<td>Drain pipe connection</td>
<td>Using drain pump (optional)</td>
</tr>
<tr>
<td>5</td>
<td>Power supply connection</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Air ducted flange</td>
<td></td>
</tr>
</tbody>
</table>
2. INDOOR UNIT INSTALLATION

2.2 INSTALL THE SUSPENSION BOLTS

2.2.1 Mark the spots on the ceiling where you want to install the indoor unit.

2.2.2 Drill holes at the marking spots and then insert bolt anchors. Use existing ceiling supports or construct a suitable support.

NOTE
- Use a hole-in-anchor, sunken insert for existing ceilings.

2.2.3 Install the suspension bolts (use W3/8 or M10 suspension bolts, 4 pieces) depending on the ceiling type.

2.3 HANGING THE INDOOR UNIT

2.3.1 Screw double nuts to each suspension bolts making space for hanging the indoor unit.

2.3.2 Hang the indoor unit to the suspension bolts between two nuts.

2.3.3 Screw the nuts to suspend the unit

2.3.4 Adjust level of the unit by using level vial for all four sides.

CAUTION
- It is recommended to install the Y joint before installing the indoor unit
- When moving the unit during or after unpacking, make sure to lift by holding its hooks.
- Do not exert any pressure on other parts, especially the refrigerant piping, drain piping and flange parts.

CAUTION
- Ensure that the ceiling is strong enough to bear the weight of the unit. Before hanging the unit, test the strength of each attached suspension bolt. It might be necessary to reinforce the ceiling frame to prevent shaking. Consult an architect or carpenter for details.
2. INDOOR UNIT INSTALLATION

2.4 INSTALL THE DRAIN PIPE

- Remove the cover of the drain hose connection port
- Insert the flexible hose (field supply, I.D.: Φ25) to the drain hose port. Fix it to the indoor unit with pipe clamp (field supply) securely.
- Install the flexible hose to the PVC water pipe securely with PVC adhesive. Wrap the drain hose with the insulation materials.

2.4.1 Drainpipe connection

For unit without the drain pump
- Install horizontal drainpipe with a slope of 1/100 or more and fix it by hanger space 1.0~1.5m.
- Install U-trap at the end of the drainpipe to prevent a nasty smell to reach the indoor unit.
- Do not install the drainpipe to upward position. It may cause water flow back to the unit.

For unit with the drain pump
- The drain pipe should be install within 200mm from the flexible hose and then install horizontal drainpipe with a slope of 1/00 or more and fix it by hanger space of 1.0~1.5m.
- The flexible hose should not be installed upward position; it may cause water flow back to the indoor unit.

2.4.2 Drainage test

Unit without Pump
- Conduct the drainage test before making the duct connection
- Gradually insert about 2 liters of water into the drain pan indoor unit with stow tube.
- Check and confirm the water flows out through the drain hose.
- Check the drain water drops at the end of the drain pipe.
- Make sure there is no water leak at the drainage
2. INDOOR UNIT INSTALLATION

UNIT WITH PUMP
- Open the cover of water supply intake by turning and pulling the cover.
- Gradually insert about 2 liters of water into the indoor unit with stow tube.
- Operate the unit under COOLING mode and check a drain pump pumping (a time lag of 1 minute is allowed before water flowing out depending on the length of the drain pipe).
- Check and confirm the water flows out through the drain hose.
- Check the drain water drops at the end of the drain pipe.
- Make sure there is no water leak at the drainage
- Reassemble the cover of water supply intake.

2.5 INSTALL THE DUCT

**CAUTION**
- Use the hanger rods to install the connecting duct instead of loading it directly onto the indoor unit.
- Use nonflammable canvas tie-in to prevent vibration.
- If external resistance is too high (due to long extension of duct, for example), the air flow volume may drop too low at each air outlet. Consult qualified engineer to increase the fan speed to increase the static pressure corresponding to external resistance.

Connect the duct supplied in the field.
2.4.1 Attach the duct and intake-side/outlet-side flange (field supply)
2.4.2 Connect the flange to the main unit with screws
2.4.3 Wrap the flange and duct connection area with aluminum tape or something similar to prevent air escaping.

**NOTE**
- Air inlet and air outlet should be apart far enough to ensure the performance of the unit.
- When attaching a duct to the intake side, be sure also to attach an air filter (field supply)
- Be sure to insulate the duct to prevent condensation from forming
- Refer to the technical documentation for fan performance curve
3. OUTDOOR UNIT INSTALLATION

3.1 INSTALLATION SITE CHOOSING

OUTDOOR UNIT

■ Where it is out of rain or direct sunlight.
■ Where it is well-ventilated and free from obstacles near the air inlet and air outlet.
■ Where does not increase the operating noise or vibration of the outdoor unit.
■ Where does not cause any drainage problem with discharged water.
■ Install the outdoor unit properly at a place that is durable enough to the weight of the outdoor unit.
■ Where provides appropriate clearances as outlined
■ Where the piping between the indoor and outdoor units is within the allowable limits.
■ In regions with snowfall and cold temperatures, avoid installing the outdoor unit in areas where it can be covered by snow. If heavy snow is expected, a field supplied ice or stand and field supplied-installed wind baffle should be installed to protect the unit from snow accumulation and blocked air intake.
■ When installing the outdoor unit in a place that is constantly exposed to a strong wind, it is recommended that a wind baffle be used.

3.2 OUTDOOR UNIT MOUNTING DIMENSION

<table>
<thead>
<tr>
<th>MODEL</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>38SHV071P1</td>
<td>900</td>
<td>590</td>
<td>333</td>
<td>355</td>
<td>302</td>
<td>315</td>
<td>860</td>
</tr>
<tr>
<td>38SHV087P1</td>
<td>990</td>
<td>624</td>
<td>366</td>
<td>396</td>
<td>340</td>
<td>345</td>
<td>965</td>
</tr>
<tr>
<td>38SHV105P1</td>
<td>938</td>
<td>634</td>
<td>404</td>
<td>448</td>
<td>368</td>
<td>392</td>
<td>1369</td>
</tr>
</tbody>
</table>
3. OUTDOOR UNIT INSTALLATION

3.3 SPACE REQUIREMENT FOR OUTDOOR UNIT

**Single Unit Installation**

(Wall or obstacle)

![Diagram showing space requirements for outdoor unit]

- Air inlet
- Maintain channel
- Fix with bolt
- Air outlet
- (Wall or obstacle)

**Parallel connect the two units or above**

- >30cm
- >30cm
- >200cm
- >60cm
- N
- >60cm
- >50
- >300
- >300
- >30
- >60
- >200
- M
- P
- Fix with bolt

**Parallel connect the front with rear sides.**

- >200
- >50
- >300
- >300
- >30

3.4 INSTALL THE OUTDOOR UNIT

- Before installation, check strength and horizontality of the base so that abnormal sound does not generate.
- Fix the base firmly with anchor bolts (M10) to prevent it from collapsing.
- Install the foundation and vibration-proof rubbers to directly support the bottom surface of the fixing leg that is in contact with the bottom plate of the outdoor unit.

![Diagram showing installation details]

- Outdoor unit
- Vibration-proof rubber
- Anchor bolt (M10)
- Mortar Hole (Φ100mm x Depth 150mm)
- Drainage (Wide 100mm x Depth 150mm)

3.5 INSTALL THE DRAIN PIPE FOR OUTDOOR UNIT

- Connect the drain outlet with an extension drain hose
- Fit the gasket onto drain outlet.
- Insert the drain outlet into the base pan hole of outdoor unit, and rotate 90 degree to securely assemble them.

![Diagram showing drain pipe installation]

- Base pan hole of outdoor unit
- Gasket
- Drain Outlet
- Drain hose (Field supply)
4. REFRIGERANT PIPING WORK

**CAUTION**
- Check if the height difference between indoor unit & outdoor unit and the total length of refrigerant pipe meet system requirement.
- Refrigerant piping work follows the indoor unit and outdoor unit installation, connect the pipe at the indoor side first, then the outdoor side.
- Always keep ends of tubing sealed by placing a cap or covering with tape during installation and do NOT remove them until you are ready to connect the piping.
- Be sure to insulate any field piping all the way to the piping connection inside the unit. Any exposed piping may cause condensation or burns if touched.

4.1 FLARING

**NOTE**
- Tools required for flaring are pipe cutter, reamer, flaring tool and pipe holder.

4.1.1 Using a pipe cutter to cut the pipe to the requested length. Ensure that the cut edge remains at 90° with the side of the pipe.

4.1.2 Use a reamer to remove burrs with the cut surface downward so that the chips do not enter the pipe.

4.1.3 Carry out flaring work using flaring tools as below.

4.1.4 Check if the flaring is properly made. See incorrectly flared pipes sample below.

4.2 PIPING WORK

4.2.1 Align the center to tighten the flare nut and finish connection using two wrenches.

4.2.2 Select the appropriate insulation material for refrigerant pipe. (Min. 10mm, thermal insulating foam C)
- Use separate thermal insulation pipes for gas & liquid pipes.
- The thickness above is a standard of the indoor temperature of 27°C and humidity of 80%. If installing in an unfavorable conditions such as near bathrooms, kitchens, and other similar locations, reinforce the insulation.
- Insulation’s heat-resistance temperature should be more than 120°C.
- Use the adhesives on the connection part of insulation to prevent moisture from entering.
- Repair and cover any possible cracks in the insulation specially check the bent part or hanger of pipe.
4. REFRIGERANT PIPING WORK

4.3 REFRIGERANT PIPE

<table>
<thead>
<tr>
<th>Model</th>
<th>Liquid Side</th>
<th>Gas Side</th>
<th>Allowable pipe length (m)</th>
<th>Max. Height difference (m)</th>
<th>Chargeless length (m)</th>
<th>Additional charge per meter (R410A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>38SHV071P1</td>
<td>Φ9.52mm</td>
<td>Φ15.9mm</td>
<td>50</td>
<td>25</td>
<td>15</td>
<td>30 g/m</td>
</tr>
<tr>
<td>38SHV087P1</td>
<td>Φ9.52mm</td>
<td>Φ15.9mm</td>
<td>50</td>
<td>25</td>
<td>15</td>
<td>30 g/m</td>
</tr>
<tr>
<td>38SHV105P1</td>
<td>Φ9.52mm</td>
<td>Φ15.9mm</td>
<td>65</td>
<td>30</td>
<td>15</td>
<td>30 g/m</td>
</tr>
<tr>
<td>38SHV135P1</td>
<td>Φ9.52mm</td>
<td>Φ19mm</td>
<td>65</td>
<td>30</td>
<td>15</td>
<td>30 g/m</td>
</tr>
<tr>
<td>38SHV165P1</td>
<td>Φ9.52mm</td>
<td>Φ19mm</td>
<td>65</td>
<td>30</td>
<td>15</td>
<td>30 g/m</td>
</tr>
</tbody>
</table>

NOTE
- When the pipe length is over 15 meter, refrigerant should be added according to pipe length table.
- When the pipe length is under 15 meter, refrigerant should be reduced according to the pipe length table, charge amount on nameplate is based on 5 meter.

4.4 AIR EVACUATION
- Connect the charge hose from the manifold gauge to the service port of the gas side packed valve.
- Connect the charge hose to the port of the vacuum pump.
- Fully open the handle Lo of manifold gauge.
- Operate the vacuum pump to evacuate air from the system until 76cmHg.
- Close the handle Lo of manifold gauge.
- Fully open the valve stem of the packed valves.
- Remove the charging hose form the service port.
- Securely tighten caps of packed valve.

4.5 LEAKAGE TEST
After the piping work is finished, make sure to check the connection part of each refrigerant pipe and confirm that there is no gas leak by applying soapy water to them or by using a leak detector specific for HFC refrigerants. Refer below picture for illustration.
4. REFRIGERANT PIPING WORK

4.6 PIPING CONNECTION DIAGRAM
5. WIRING

- All the electrical connections must be carried out by qualified installers and all the wirings must be connected according to the wiring diagram.
- Make ground connection prior to any other electrical connections.
- All power sources must be turned off before wiring work and do not turn on the power until you have made sure all the wirings have been safety checked.
- A main switch and circuit breaker or fuse must be installed, the capacity should be above 1.5 times of maximum current in circuit.
- An individual branch circuit and single socket used only for this appliance must be available.
- Wire cross section is depending on the rated current and national, state and local electrical wiring code. Consult local building codes and National electrical code for special requirement.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- The unit must be connected to the main power supply by means of a circuit breaker or a switch with a contact separation of at least 3mm in all poles. Installation of a residual current device (RCD) having a rated residual operating current not exceeding 30mA is advisable.

### Wiring figure

#### Power supply and connecting wires specification

<table>
<thead>
<tr>
<th>Model</th>
<th>SHV071P1</th>
<th>SHV087P1</th>
<th>SHV105/135P1</th>
<th>SHV165P1</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDOOR UNIT POWER</td>
<td>1-phase</td>
<td>1-phase</td>
<td>1-phase</td>
<td>1-phase</td>
</tr>
<tr>
<td>Frequency and Voltage</td>
<td>220-240V, 50Hz</td>
<td>220-240V, 50Hz</td>
<td>220-240V, 50Hz</td>
<td>220-240V, 50Hz</td>
</tr>
<tr>
<td>POWER WIRING (mm²)</td>
<td>3×1.0</td>
<td>3×1.0</td>
<td>3×1.0</td>
<td>3×1.0</td>
</tr>
<tr>
<td>CIRCUIT BREAKER (A)</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>OUTDOOR UNIT POWER</td>
<td>1-phase</td>
<td>1-phase</td>
<td>1-phase</td>
<td>1-phase</td>
</tr>
<tr>
<td>Frequency and Voltage</td>
<td>220-240V, 50Hz</td>
<td>220-240V, 50Hz</td>
<td>220-240V, 50Hz</td>
<td>220-240V, 50Hz</td>
</tr>
<tr>
<td>POWER WIRING (mm²)</td>
<td>3×2.5</td>
<td>3×2.5</td>
<td>3×4.0</td>
<td>3×4.0</td>
</tr>
<tr>
<td>CIRCUIT BREAKER (A)</td>
<td>30</td>
<td>40</td>
<td>40</td>
<td>50</td>
</tr>
<tr>
<td>Indoor/Outdoor Connecting Wiring (Weak Electric Signal) (mm²)</td>
<td>3×0.5</td>
<td>3×0.5</td>
<td>3×0.5</td>
<td>3×0.5</td>
</tr>
<tr>
<td>Indoor/Outdoor Connecting Wiring (Strong Electric Signal) (mm²)</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
</tr>
</tbody>
</table>
6. MOTOR AND WATER PUMP DISASSEMBLE

6.1 MOTOR MAINTENANCE

Remove the front side plate from top
- Remove the top cover
- Remove the bolts and screws of front side plate
- Take out the motor assembly

Remove the front side plate from bottom
- Remove the bottom base
- Remove the bolts and screws of front side plate. (Be careful that the front side plate may fall down)
- Take out the motor assembly

Take out the motor directly (only for plastic scroll and blower)
- Remove the chassis assembly and filter
- Remove the blower housing
- Take out the motor

6.2 DRAIN PUMP MAINTENANCE

- Remove the screws that fix the drain pump (4 locations)
- Plug off the cable for pump power supply and water level switch.
- Remove the drain pump
7. FINAL CHECK AND TRAIL OPERATION

7.1 FINAL CHECK LIST
To complete the installation, perform the following checks before the trial operation.

- Strength of the installation site for both indoor and outdoor sides, confirm no obstruction of the unit air outlet or return.
- Tightness of Refrigerant piping connection and confirm no leakage
- Electric wiring connections are correctly completed and unit has been grounding connected
- Check the total length of the piping and record the volume of the additional charged refrigerant
- The power supply should complying with the rated voltage of the air conditioner
- Insulation of the pipe
- Drainage

7.2 MANUAL OPERATION
Manual operation can be accessed by pressing manual button on display panel.
Press the manual button repeatedly to change modes as follows:

- Once = AUTO mode [heat, cool or fan, 24°C and auto fan speed.
- Twice = COOLING mode [switch to AUTO mode after 30 minutes (mainly used for trial operation)]
- Three times = OFF

7.3 TRAIL OPERATION
Set the air conditioning under the COOLING mode with the remote controller (or manual button) and check the running status of both indoor unit and outdoor unit. In case of any malfunction, resolve it according to chapter “Trouble shooting” in the “Service Manual”.

Indoor unit

- Whether the buttons (such as ON/OFF, MODE, TEMPERATURE, FAN SPEED etc.) on the remote controller work well.
- Whether the louver moves normally.
- Whether the room temperature is adjusted well.
- Whether the indicator lights on the display panel are normal.
- Whether the “manual” button works well.
- Whether the drainage is normal.
- Whether there is a vibration or abnormal noise during the operation.
- Whether the indoor unit works well in COOLING or HEATING mode.

Outdoor unit

- Whether there is a vibration or abnormal noise during the operation.
- Whether the wind, noise or condensed generated by the air conditioner have disturb your neighborhood.
- Whether there is any refrigerant leakage.

⚠️ CAUTION

- When restart the unit, there will be approximately 3 minutes delay to run for protection.