# MEDIUM STATIC PRESSURE DUCT TYPE AIR CONDITIONER INSTALLATION MANUAL

<table>
<thead>
<tr>
<th>Indoor Unit</th>
<th>Outdoor Unit</th>
<th>Power Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>42SHV052P1</td>
<td>38SHV052P1</td>
<td>220-240V ~ 50Hz</td>
</tr>
</tbody>
</table>

![Image of the air conditioner unit]
Thank you very much for purchasing our air conditioner,
Before using your air conditioner, please read this manual carefully and keep it for future reference.
1. SAFETY PRECAUTIONS

- Keep this manual where the operator can easily find them.
- Read this manual attentively before starting up the units.
- For safety reason the operator must read the following cautions carefully.
- Installation must be performed in accordance with the requirement of NEC and CEC by authorized personnel only. (Applicable to the North American area only)

The safety precautions listed here are divided into two categories.

**WARNING**

If you do not follow these instructions exactly, the unit may cause property damage, personal injury or loss of life.

**CAUTION**

If you do not follow these instructions exactly, the unit may cause minor or moderate property damage, personal injury.

After completing the installation, make sure that the unit operates properly during the start-up operation. Please instruct the customers on how to operate the unit and keep it maintained. Also, inform customers that they should store this installation manual along with the owner's manual for future reference.

**WARNING**

Be sure only trained and qualified service personnel to install, repair or service the equipment.

Improper installation, repair, and maintenance may result in electric shocks, short-circuit, leaks, fire or other damage to the equipment.

Install according to this installation instructions strictly. If installation is defective, it will cause water leakage, electrical shock and fire.

When installing the unit in a small room, take measures against to keep refrigerant concentration from exceeding allowable safety limits in the event of refrigerant leakage. Contact the place of purchase for more information. Excessive refrigerant in a closed ambient can lead to oxygen deficiency.

Use the attached accessories parts and specified parts for installation. Otherwise, it will cause the set to fall, water leakage, electrical shock and fire.

Install at a strong and firm location which is able to withstand the set's weight. If the strength is not enough or installation is not properly done, the set will drop to cause injury.

The appliance must be installed 2.3m / 7.5ft above floor.

The appliance shall not be installed in the laundry.

Before obtaining access to terminals, all supply circuits must be disconnected.

The appliance must be positioned so that the plug is accessible.

The enclosure of the appliance shall be marked by word, or by symbols, with the direction of the fluid flow.

For electrical work, follow the local national wiring standard, regulation and this installation instructions. An independent circuit and single outlet must be used. If electrical circuit capacity is not enough or defect in electrical work, it will cause electrical shock or fire.

Use the specified cable and connect tightly and clamp the cable so that no external force will be acted on the terminal.

Wiring routing must be properly arranged so that control board cover is fixed properly.

If control board cover is not fixed perfectly, it will cause heat-up at connection point of terminal, fire or electrical shock.

If connection or fixing is not perfect, it will cause heat-up or fire at the connection.

An all-pole disconnection switch having a contact separation of at least 3mm/0.118in in all poles should be connected in fixed wiring.

When carrying out piping connection, take care not to let air substances go into refrigeration cycle.

Otherwise, it will cause lower capacity, abnormal high pressure in the refrigeration cycle, explosion and injury.

Do not modify the length of the power supply cord or use of extension cord, and do not share the single outlet with other electrical appliances.

Otherwise, it will cause fire or electrical shock.

Carry out the specified installation work after taking into account strong winds, typhoons or earthquakes.

Improper installation work may result in the equipment falling and causing accidents.
If the refrigerant leaks during installation, ventilate the area immediately. Toxic gas may be produced if the refrigerant comes into the place contacting with fire.

The temperature of refrigerant circuit will be high, please keep the interconnection cable away from the copper tube.

After completing the installation work, check that the refrigerant does not leak. Toxic gas may be produced if the refrigerant leaks into the room and comes into contact with a source of fire, such as a fan heater, stove or cooker.

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### CAUTION

Ground the air conditioner.
Do not connect the ground wire to gas or water pipes, lightning rod or a telephone ground wire. Inappropriate grounding may result in electric shocks.

Be sure to install an earth leakage breaker. Failure to install an earth leakage breaker may result in electric shocks.

Connect the outdoor unit wires, then connect the indoor unit wires. You are not allowed to connect the air conditioner with the power supply until the wiring and piping is done.

While following the instructions in this installation manual, install drain piping in order to ensure proper drainage and insulate piping in order to prevent condensation. Improper drain piping may result in water leakage and property damage.

Install the indoor and outdoor units, power supply wiring and connecting wires should be at least 1 meter away from televisions or radios in order to prevent image interference or noise. Depending on the radio waves, a distance of 1 meter may not be sufficient enough to eliminate the noise.

The appliance is not intended for use by young children or infirm persons without supervision.

Don't install the air conditioner in the following circumstance:
- There is petrolatum existing.
- There is salty air surrounding (near the coast).
- There is caustic gas (the sulfide, for example) existing in the air (near a hot spring).
- The Volt vibrates violently (in the factories).
- In buses or cabinets.
- In kitchen where it is full of oil gas.
- There is strong electromagnetic wave existing.
- There are inflammable materials or gas.
- There is acid or alkaline liquid evaporating.
- Other special conditions.

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The appliance shall be installed in accordance with national wiring regulations.

Do not operate your air conditioner in a wet room such as a bathroom or laundry room.

An all-pole disconnection device which has at least 3mm clearances in all poles, and have a leakage current that may exceed 10mA, the residual current device (RCD) having a rated residual operating current not exceeding 30mA, and disconnection must be incorporated in the fixed wiring in accordance with the wiring rules.

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### 2. INSTALLATION INFORMATION

- To install properly, please read this "installation manual" at first.
- The air conditioner must be installed by qualified persons.
- When installing the indoor unit or its tubing, please follow this manual as strictly as possible.
- If the air conditioner is installed on a metal part of the building, it must be electrically insulated according to the relevant standards to electrical appliances.
- When all the installation work is finished, please turn on the power only after a thorough check.
- Regret for no further announcement if there is any change of this manual caused by product improvement.

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### INSTALLATION ORDER

- Select the location;
- Install the indoor unit;
- Install the outdoor unit;
- Install the connecting pipe;
- Connect the drain pipe;
- Wiring;
- Test operation.
3. ATTACHED FITTINGS

Please check whether the following fittings are of full scope. If there are some spare fittings, please restore them carefully.

Table 3-1

<table>
<thead>
<tr>
<th>NAME</th>
<th>SHAPE</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Insulation sheath</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>2. Binding tape</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>3. Seal sponge</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>4. Tubing &amp; Fittings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Drain joint</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>6. Seal ring</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>7. Remote controller</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>8. Frame</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>9. Mounting screw(ST2.9×10-C-H)</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>10. Alkaline dry batteries (AM4)</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>11. Remote controller manual</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>12. Wired controller</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>13. Magnetic ring</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>(twist the electric wires L and N around the magnetic ring to five circles)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Owner’s manual</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>15. Installation manual</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
4. INSPECTING AND HANDLING THE UNIT

At delivery, the package should be checked and any damage should be reported immediately to the service agent.

When handling the unit, take into account the following:

1. Fragile, handle the unit with care.
   - Keep the unit upright in order to avoid compressor damage.
2. Choose on before hand the path along which the unit is to be brought in.
3. Move this unit as originally package as possible.
4. When lifting the unit, always use protectors to prevent belt damage and pay attention to the position of the unit’s centre of gravity.
5. Minimum installation height of this unit is 2.5 meter.

5. INDOOR UNIT INSTALLATION

5.1 Installation place

The indoor unit should be installed in a location that meets the following requirements:

- There is enough room for installation and maintenance.
- The ceiling is horizontal, and its structure can endure the weight of the indoor unit.
- The outlet and the inlet are not impeded, and the influence of external air is the least.
- The air flow can reach throughout the room.
- The connecting pipe and drainpipe could be extracted out easily.
- There is no direct radiation from heaters.

Maintenance roomage

5.2 Install the main body

1. Installing Ø10/Ø0.394in hanging screw bolts. (4 bolts)
   - Please refer to the following figures for positioning 4 screw bolts.
   - Evaluate the ceiling construction and please install with Ø10/Ø0.394in hanging screw bolts.
   - Consult the construction personnels for the specific procedures.
     - Do keep the ceiling flat. Consolidate the roof beam to avoid possible vibration.
   - Carry out the pipe and line operation in the ceiling after finishing the installation of the main body. While choosing where to start the operation, determine the direction of the pipes to be drawn out. Especially in case there is a ceiling, position the refrigerant pipes, drain pipes, indoor & outdoor lines to the connection places before hanging up the machine.
   - The installation of hanging screw bolts.
     - Cut off the roof beam.
     - Strengthen the place that has been cut off, and consolidate the roof beam.
   - After the selection of installation location, position the refrigerant pipes, drain pipes, indoor & outdoor wires to the connection places before hanging up the machine.
   - The installation of hanging screw bolts.

   NOTE

   Confirm the minimum drain tilt is 1/100 or more

5.2.1 Wooden construction

Put the square timber traversely over the roof beam, then install the hanging screw bolts. (Refer to Fig.5-2)
5.2.2 New concrete bricks

Inlaying or embedding the screw bolts. (Refer to Fig. 5-3)

(Blade shape insertion) (Slide insertion)

5.2.3 For Original concrete bricks

Use embedding screw bold, crock and stick harness. (Refer to Fig. 5-4)

Steel bar
Embedding screw bolt
(Pipe hanging and embedding screw bolt)

5.2.4 Steel roof beam structure

Install and use directly the supporting angle steel. (Refer to Fig. 5-5)

5.2.5 Overhanging the indoor unit

(1) Overhang the indoor unit onto the hanging screw bolts with block.
(2) Position the indoor unit in a flat level by using the level indicator, unless it may cause leakage.

5.3 Duct and accessories installation

1. Install the filter(optional) according to air inlet size.
2. Install the canvas tie-in between the body and duct.

3. Air inlet and air outlet duct should be apart far enough to avoid air passage short-circuit.
4. Recommended duct connection

5. Please refer to the following static pressure to install

Table 5-1

<table>
<thead>
<tr>
<th>MODEL</th>
<th>Maximum Static Pressure (Pa)</th>
</tr>
</thead>
<tbody>
<tr>
<td>42SHV052P1</td>
<td>70</td>
</tr>
</tbody>
</table>

Change the fan motor static pressure corresponding to external duct static pressure.

NOTE
1. Do not put the connecting duct weight on the indoor unit.
2. When connecting duct, use inflammable canvas tie-in to prevent vibrating.
3. Insulation foam should be wrapped outside the duct to avoid condensate and internal duct underlayer shall be added to reduce the noise for special requirement.
The positioning of ceiling hole, indoor unit and hanging screw bolts

Dimension and air outlet size

Air inlet size

Position size of descensional ventilation opening

Size of mounted hook

Fig. 5-8
1. Take off ventilation panel and flange, cut off the staples at side rail.

2. Stick the attached seal sponge as per the indicating place in the following fig, and then change the mounting positions of air return panel and air return flange.

3. When install the filter mesh, please plug it into flange inclined from air return opening, and then push up.

4. The installation has finish, upon filter mesh which fixing blocks have been insert to the flange positional holes.

How to adjust the air inlet direction? (From rear side to under-side.)

### Table 5-2

<table>
<thead>
<tr>
<th>Outline dimension</th>
<th>air outlet opening size</th>
<th>air return opening size</th>
<th>Size of mounted lug</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>920</td>
<td>210</td>
<td>635</td>
<td>570</td>
</tr>
</tbody>
</table>

- **5.9 Fan performances**

  Static pressure curve (middle static pressure duct)
6. OUTDOOR UNIT INSTALLATION

6.1 Installation Place

- The outdoor unit should be installed in the location that meets the following requirements:
  - There is enough room for installation and maintenance.
  - The air outlet and the air inlet are not impeded, and cannot be reached by strong wind.
  - It must be a dry and well ventilating place.
  - The support is flat and horizontal and can stand the weight of the outdoor unit. And will no additional noise or vibration.
  - Your neighborhood will not feel uncomfortable with the noise or expelled air.
  - It is easy to install the connecting pipes or cables.
  - Determine the air outlet direction where the discharged air is not blocked.
  - There is no danger of fire due to leakage of inflammable gas.
  - The piping length between the outdoor unit and the indoor unit may not exceed the allowable piping length.
  - In the case that the installation place is exposed to strong wind such as a seaside, make sure the fan operating properly by putting the unit lengthwise along the wall or using a dust shield. (Refer to Fig.6-1)
  - If possible, do not install the unit where it is exposed to direct sunlight.
  - If necessary, install a blind that does not interfere with the air flow.
  - During the heating mode, the water drained off the outdoor unit, the condensate should be well drained away by the drain hole to an appropriate place, so as not to interfere other people.
  - Select the position where it will not be subject to snow drifts, accumulation of leaves or other seasonal debris. If unavoidable, please cover it with a shelter.
  - Locate the outdoor unit as close to the indoor unit as possible.
  - If possible, please remove the obstacles nearby to prevent the performance from being impeded by too little of air circulation.
  - The minimum distance between the outdoor unit and obstacles described in the installation chart does not mean that the same is applicable to the situation of an airtight room. Leave open two of the three directions (M,N,P).

The outdoor unit should be installed in the location that meets the following requirements:

All the figures in this manual are for explanation purpose only. They may be slightly different from the air conditioner you purchased. The actual unit shall prevail.
6.4 Moving and installation

- Since the gravity center of the unit is not at its physical center, so please be careful when lifting it with a sling.
- Never hold the inlet of the outdoor unit to prevent it from deforming.
- Do not touch the fan with hands or other objects.
- Do not lean it more than 45° and do not lay it sidelong.
- Make concrete foundation according to the specifications of the outdoor units. (Refer to Fig.6-5)
- Fasten the feet of this unit with bolts firmly to prevent it from collapsing in case of earthquake or strong wind. (Refer to Fig.6-5)

Concrete Foundation

1. Foundation could be on flat and is recommended be 100-300mm higher than ground level.
2. Install a drainage around foundation for smooth drain
3. When installing the outdoor unit fix the unit by anchor bolts of M10
4. When installing the unit on a roof or a veranda, drain water sometimes turns to ice on the cold weather. Therefore, avoid draining in an area that people often use because it is slippery.

7. INSTALL THE CONNECTING PIPE

7.1 Preparation and Caution

Before installation make sure the height difference, the length of refrigerant pipe, and the number of the bends between the indoor unit and outdoor unit meet the following requirements:
(The number of bends less than 10)

Table 7-1

<table>
<thead>
<tr>
<th>Model</th>
<th>The type of models</th>
<th>The length of refrigerant pipe</th>
<th>The max height drop</th>
</tr>
</thead>
<tbody>
<tr>
<td>42SHV052P1</td>
<td>R410A inverter Split type air conditioner</td>
<td>25</td>
<td>12</td>
</tr>
</tbody>
</table>

The outdoor unit is charged with rating refrigerant amount in the factory. Additional charge refers to the table below:

Table 7-2

<table>
<thead>
<tr>
<th>liquid tube(mm)</th>
<th>R410A</th>
</tr>
</thead>
<tbody>
<tr>
<td>ø6.35</td>
<td>orifice in the outdoor unit</td>
</tr>
<tr>
<td>ø9.53</td>
<td>orifice in the outdoor unit</td>
</tr>
<tr>
<td>ø12.7</td>
<td>orifice in the outdoor unit</td>
</tr>
<tr>
<td>ø15.9</td>
<td>orifice in the outdoor unit</td>
</tr>
<tr>
<td>ø19.0</td>
<td>orifice in the outdoor unit</td>
</tr>
</tbody>
</table>

- NOTE: the table above refer to the liquid tube.
- NOTE: The number of bends is up to the length of the max height drop. Usually for each 10m need a bend.

CAUTION

All field piping must be provided by a licensed refrigeration technician and must comply with the relevant local and national codes.

Prevent let air, dust, or other impurities enter in the pipe system during installation.

Insulation pipe shall be used to the gas piping and the liquid piping. Otherwise, the condensate may happen.

7.2 The Procedure of Connecting Pipes

1. Measure the required length of the connecting pipe, then make it by the following way.

- Connect the indoor unit first, then the outdoor unit.
- Bend the tubing in proper way. Do not twist the pipe.

Bend the pipe with thumb

min-radius 100mm/3.94in
• Put some refrigerant oil on the surfaces of the flare pipe and the joint nuts then wrench it for 3~4 rounds with hands before fasten the flare nuts.(Refer to chart 16)

![Fig.7-2](image)

• Be sure to use two wrenches simultaneously when you connect or disconnect the pipes.

![Fig.7-3](image)

NOTE

The service valves of the outdoor unit should be completely closed(as original status). Every time to connect, first to loosen nuts, then connect the flare pipes within 5 minutes. If the nuts have been loosened for a long time, dusts and other impurities may enter the pipe system and may cause malfunction. So please expel the air out of the pipe with refrigerant before connection.

Expel the air(refer to the "8.1") after connecting the refrigerant pipe with the indoor unit and the outdoor unit. Then fasten the nuts at the service valves.

Bend the connecting pipe of small wall thickness.
  - Cut out a proper concave at the bending part of the insulating pipe.
  - Then expose the pipe(cover it with tapes after bending).
  - To prevent twist of deforming, please bend the pipe at a proper radius.

The bending angle should not exceed 90°.

Bending position is preferably in the middle of the bendable pipe. Do not bend the pipe more than three times.

Be sure to use the same insulating materials when you buy the brass pipe. (More than 9mm/0.35in thick)

2. Place The Pipe

Drill a hole in the wall (suitable just for the size of the wall sleeve), then set on the fittings such as the wall sleeve and its cover.

Bind the connecting pipe and the cables together tightly with binding tapes.

Pass the bound connecting pipe through the wall sleeve from outside. Make sure of the pipe allocation not to damage the copper tubes.

3 Connect the pipes.

4 Expel the air with a vacuum pump or refrigerant.

5 Open the service valves of the outdoor unit.

6 Check the refrigerant leakage. Check all the joints with the leak detector or soap water.

7 Cover the joints of the connecting pipe with the insulation foam, and bind them well with the tapes to prevent potential leakage.

8. REFRIGERANT PIPE

8.1 Vacuum with vacuum pump

1) Use the vacuum pump which vacuum level lower than -0.1MPa and the air discharge capacity above 40L/min.

2) The outdoor unit is not necessary to vacuum, don't open the outdoor unit gas and liquid pipe shut-off valves.

3) Make sure the vacuum pump could result as -0.1MPa or below after 2 hrs or above operation. If the pump operated 3 hrs or above could not achieve to -0.1MPa or below, please check whether water mix or gas leak inside of the pipe.

![Diagram](image)

CAUTION

Don't mix up the different refrigerants or abuse the tools and measurements which directly contact with refrigerants.

Don't adopt refrigerant gas for air vacuuming.

If vacuum level could not get to -0.1MPa, please check whether resulted by leakage and confirm the leakage site. If no leakage, please operate the vacuum pump again 1 or 2 hrs.
9. REFRIGERANT PIPE CONNECTION

9.1 Expel The Air

1 Flaring
   • Cut a pipe with a pipe cutter. (Refer to Fig.9-1)
     
   • Insert a flare nut into a pipe and flare the pipe.

2 Fasten the nut
   • Put the connecting pipes at the proper position, wrench the nuts with hands then fasten it with two wrenches simultaneously. (Refer to Fig.9-2)

CAUTION

Too large torque will harm the bellmouthing and too small will cause leakage. Please determine the torque according to Table 9-1.

<table>
<thead>
<tr>
<th>Pipe gauge</th>
<th>Flare dimension A</th>
<th>Flare shape</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø6.35</td>
<td>8.3</td>
<td>8.7</td>
</tr>
<tr>
<td>Ø9.52</td>
<td>12.0</td>
<td>12.4</td>
</tr>
<tr>
<td>Ø12.7</td>
<td>15.4</td>
<td>15.8</td>
</tr>
<tr>
<td>Ø15.9</td>
<td>18.6</td>
<td>19.0</td>
</tr>
<tr>
<td>Ø19.1</td>
<td>22.9</td>
<td>23.3</td>
</tr>
</tbody>
</table>

3 Expel the air with a vacuum pump (Refer to Fig.9-3)

(Please refer to its manual for the way of using manifold valve)

- Loosen and remove the nuts of service valves A and B, and connect the charge hose of the manifold valve with the maintenance terminator of service valve A. (Be sure that service valves A and B are both closed)

- Connect the joint of the charge hose with the vacuum pump.

- Open the Lo-lever of the manifold valve completely.

- Turn on the vacuum pump. At the beginning of pumping, loosen the nut of service valve B a little to check whether the air comes in (the sound of the pump changes, and the indicator of compound meter turns below zero). Then fasten the nut.

- When the pumping has finished, close the Lo-lever of the manifold valve completely and turn off the vacuum pump. When you have pumped for over 15 minutes, please confirm that the indicator of multimeter is on -1.0X10^3Pa (-76cmHg)

- Loosen and remove the nuts of service valves A and B to open service valve A and B completely, then fasten nuts.

- Disassemble the charge hose of service valve A, and fasten the nut.

9.2 Check the Leakage

Check all the joints with the leak detector or soap water. (Refer Fig.9-5 as a reference illustration)

in the chart

A.....Lo-stop valve
B.....Hi-stop valve
C,D.....Joints of the connecting pipe to the indoor unit.
9.3 Insulation

- Be sure to completely insulate all the exposed parts of the flare pipes.
- Incomplete insulation may cause condensate.

10. CONNECTIVE DIAGRAM

11. CONNECT THE DRAIN PIPE

- Install the drainpipe of the indoor unit
  - Use a polyethylene tube as the drainpipe (out-dia. 29-31mm / 1.14-1.22in, in-dia. 25mm / 0.984in). It could be bought from the local market.
  - When extending drainpipe, tighten the connector with water-proof tape to prevent it leakage.
  - Please lean the drainpipe down toward outdoor (outlet-side) at a degree of over 1/50 to avoid water flowing back. And please avoid any bulge.
  - Do not drag the drainpipe violently. Meanwhile, one support point should be set every 1-1.5m / 3.28-4.92ft to prevent the drainpipe from yielding. Or tie the drainpipe with the connecting pipe to fix it.
  - If the outlet of the drainpipe is higher than the body's pump joint, the pipe should be arranged as vertically as possible. And the lift distance must be less than 550mm / 21.65in, otherwise the water cannot be lifted completely and cause overflow. (Only available for the unit with pump.)
  - The end of the drainpipe should be over 50mm / 1.969in higher than the ground, and do not immerse it in water. If you discharge the water directly into sewage, be sure to make a U-form aquaseal by bending the pipe up to prevent the smelly gas entering the house through the drain pipe.

- Drainage test
  - Check whether the drainpipe is unhindered.
  - New built house should have this test done before paving the ceiling.

- The unit with pump.

1. Remove the test cover, and stow about 2000ml water to the water pan.

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Installation manual
12. Motor and drain pump maintenance

(Take rear ventilated as example)

**Motor maintain:**
1. Take off the ventilated panel.
2. Take off the blower housing.
3. Take off the motor.

**Pump maintenance:**
1. Screw off four screws from drain pump.
2. Plug off pump power supply and water level switch cable.
3. Take off pump.

13. CONTROL (ONLY FOR INVERTER UNITS)

- The capacity of the system and the network address of the air-conditioner can be set by the switches on the indoor Main Control Board.
- Before setting, turn off the power. After setting, restart the unit.
- Setting is not allowed when the unit is power on.

### 13.1 Horsepower code setting

The capacity of the indoor unit has been set in the factory according to the below table.

<table>
<thead>
<tr>
<th>Horsepower code</th>
<th>Capacity (kw)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC1</td>
<td>5.3</td>
</tr>
<tr>
<td>ENC2</td>
<td>5.6</td>
</tr>
<tr>
<td>ENC3</td>
<td>7.1</td>
</tr>
<tr>
<td>ENC4</td>
<td>9.0</td>
</tr>
<tr>
<td>ENC5</td>
<td>10.5</td>
</tr>
<tr>
<td>ENC6</td>
<td>14.0</td>
</tr>
<tr>
<td>ENC7</td>
<td>16.0</td>
</tr>
</tbody>
</table>

**Note:** The capacity has been set in the factory, anyone can’t adjust it except the qualified person.

### 13.2 Network address set

Every air-conditioner in network has only one network address to distinguish each other. Address code of air-conditioner in LAN is set by code switches S1 & S2 on the Main Control Board of the indoor unit, and the set range is 0-63.
Test operation

1) The indoor unit
   a. Whether the buttons on the remote controller works well.
   b. Whether the air flow louver moves normally.
   c. Whether the room temperature is adjusted suitable.
   d. Whether the indicator lights normally.
   e. Whether the temporary switch on the unit works well.
   f. Whether the drainage is normal.
   g. Whether there is abnormal vibration or noise during operation.
   h. Whether the air conditioner works well in heating mode (heat pump model).
2) The outdoor unit
   a. Whether there is abnormal vibration and noise during operation.
   b. Whether the exhaust air, noise, or condensate influence your neighborhood.
   c. Whether there is any refrigerant leakage during operation.

CAUTION

3 minutes delay is normal when restarting the unit for compressor protection.

Table 14-1

<table>
<thead>
<tr>
<th>MODEL</th>
<th>PHASE</th>
<th>FREQUENCY AND VOLT</th>
</tr>
</thead>
<tbody>
<tr>
<td>42SHV052P1</td>
<td>1 Phase</td>
<td>220-240V</td>
</tr>
<tr>
<td>38SHV052P1</td>
<td>1 Phase</td>
<td>220-240V</td>
</tr>
</tbody>
</table>

CAUTION

The power supply is included in the power supply above mentioned can be applied to the table. Before obtaining access to terminals, all supply circuits must be disconnected.

Wiring figure

Fig.14-1

- Ground the air conditioner properly in case to affect its anti-interference function.

A disconnection device having an air gap contact separation in all active conductors should be incorporated in the fixed wiring according to the National Wiring Regulation.

When wiring, please choose the corresponding chart, or it may cause damage. The signs of the indoor terminal block in the some of following fugures may be replaced by L N L1 N1.