

Wall-mounted Fan Coil Chiller Installation Manual



- Installation work should be done by professionals.
- For your convenient use, please read this manual carefully, and operate accordingly.
- Please keep the manual carefully for the purpose of looking up.

Notice

Incorrect operation due to ignoring instruction will cause harm or damage. The seriousness is classified by the following indications:



WARNING

This symbol indicates the possibility of death or serious injury.

CAUTION

This symbol indicates the possibility of injury or damage to properties only.

WARNING

- 1. This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision. (Only for the AC with CE-MARKING)**
- 2. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.** 
(Except for the AC with CE-MARKING)
- 3. The air conditioner must be grounded. Incomplete grounding may result in electric shocks. Do not connect the earth wire to the gas pipeline, water pipeline, lightning rod, or telephone earth wire.**
- 4. Don't pull out the power plug during operating or with wet hands.** 
It can cause electric shock or fire.
- 5. The appliance shall be installed in accordance with national wiring regulations.**

6. Don't pull the power cord when pull out the power plug.

The damage of pulling power cord will cause serious electric shock.



7. The power plug must be inserted tightly.

Otherwise, it can cause electric shock or overheating, even fire.



8. Don't share the socket with other electric appliance, and use the broken or unstandord cord.

Otherwise, it can cause electric shock even fire.



9. Clean the dust on the plug regularly.

Otherwise the dust mixed, humidity will result in insulation fault even fire.



10. An earth leakage breaker with rated capacity must be installed to avoid possible electric shocks.



11. Cut off the main power switch when not using the unit for a long time. Otherwise, it may cause product failure or fire.



12. Stop operation and cut off the main power in storm or hurricane. Operation with windows opened may cause electric shock.



13. Don't install air conditioner in a place where there is flammable gas or liquid. The distance between them should above 1m. It may cause fire.



14. Don't put a finger, a rod or other object into the air outlet or inlet.

As a fan is rotating at a high speed, it will cause injury.



15. Don't touch the swinging wind vanes.

It may clamp your finger and damage the driving parts of the wind vanes.



16. Don't attempt to repair the air conditioner by yourself.

You may be hurt or cause further malfunctions.



17. Take care not let the remote control and the indoor unit watered or being too wet, or may short circuit even caused fire.



18. Don't use liquid or corrosive cleaning agent wipe the air-conditioner and sprinkle water or other liquid either.

Otherwise the inclosure will be damaged even electric shock.



19. If the power supply cord is damaged, it must be replaced by the manufacture or its service agent or a similar qualified person.

Introduction

The installation manual assume that the owners' host, water pipes have been installed in right place. Therefore, the installation manual only involves the installation of our Company's fan coil chiller; you may also need additional drawings or other instructions to guide the installation of additional equipment.

1.preparatory work before installation

Make sure that you have experienced technical staff to install the chiller.

Before installation, firstly check whether the preparatory work is finished, such as water pipes, wire interface and chiller fixed bolts.

2. the protective measures

During the installation process should be particularly careful to prevent the wall of dust, insulation, paint or other foreign matter deposited on the fan motor or the fan blade.

Foreign body should be removed before chiller operation.

3.transport fault Statement

Fan coil chillers have been inspected and tested in the factory, all chillers should maintain a perfect condition when delivered to the site with proper transport way.

If there is serious damage, please communicate with the transport personnel or distributors.

4.Storage

If the chiller be stored outdoors, pay particular attention to moisture, corrosion, anti-dust.

5.unpack

(1)The chiller should be carefully moved out from the carton, prohibit improper moving, extrusion, collision fan.

(2)Check whether the chiller is damage, such as bumps, severe deformation or fan loose, if so, please contact your dealer.

Installation

1.the choice of installation location

Chiller should be hanging in the solid wall, 1.8-2 m height is generally appropriate, but in any case, the chiller leaving the ceiling and the wall's both sides 10-15cm is better , so that it is enabling ventilation.

Installation position should avoid direct sunlight, the wing outlet not directly toward the sitting, lying people, you should also consider the problem of condensate water drainage facilities.

2.the chiller installation

Pick off the baseboard of the indoor unit, horizontally press on the selected wall space position. According to the arrows indicate hole location surrounded by the baseboard, do marks on the wall, then drill holes in the wall with electric drill, stuffed with plastic expansion anchor bolts, using wood screws through the indicated bottom holes and crewing into expansion anchor bolts to set up the baseboard.

Then open holes on the wall, the holes are used for the connecting pipes which should through the wall. Holes location in the wall depends on the circular gap on the baseboard. When opening the holes, you can use electric drill to drill a circle holes around the circular gap, then use iron neither cut through to be holes in this way, accurate, and save time. When digging hole in the wall Should make the hole have an inside-out tilt slope in order to discharge condensate water.

The elicitation way of connecting pipe, due to the installation site have left behind elicitation, right behind elicitation, the lower right side and left side elicitation and other ways.

After elicitation, connect hoses to cover on the insulation sleeve, in the position which is about 10mm inside the cabinet, start the pack up for pipeline, until to the joint of hosepipe, the remaining should be done after the joint connection finished.

After completion of the above, you can hang the chiller on the baseboard and make the connecting pipe through the hole in the wall.

3.electrical controls and connections

1. Must strictly follow the wiring diagram. Non-sharing of two and more than two chillers of a speed control switch or a thermostat.
2. After installation should be carefully checked before the first run whether the wiring is correct, the ground is reliable.

Caution	Electrical construction must be done by qualified professional and technical personnel; you should set air-conditioning independent connection fixed line. The fixed-line connections must be equipped with more than 3mm away from the contacts to open very wide disconnect device. Power lines and cables should be used of specialized cables, for installation or replacement, must be specified by the manufacturers of professional and technical personnel to operate, users shall not operate by himself.
	The earth leakage protective device, power switch and circuit breaker must be installed in the power, otherwise it will cause electric shock.
	Must be grounded connection, if not properly grounded, may cause electric shock.
	The power cord must use GB5023 stipulated 227IEC53 (RVV) type or equivalent above electric wire, and fastened with wire fixtures, make terminal not easily disconnect with external force. Improper connection or fastening cause fires. The connecting cable must use GB5013 stipulated 245IEC57 (YZW)) type or equivalent above one.
Notice	Do not connect ground wire in the gas pipes, water pipes, telephone lines or a lightning rod and other products' ground line.
Else	<p>Please connect the power line to follow the connection circuit diagram request.</p> <p>●Connect terminals securely in safety seat with cable fixed device wires, to prevent external force in the wires and dangerous.</p>

4.the system pressure test and water leakage

For fan coil air conditioning system, before the system pressure test, first should formulate pressure-tested scheme, select the appropriate test pump, to formulate rational pressure-tested waterway. In testing process should be conscientiously record pressure-tested condition, monitor the system pressure changes at any time, You should pay attention to the following points when formulating pressure-tested plan

- (1) The exhaust valve on system piping line must be opened before adding water into coils, then close the valve after exhausting the air inside coil.
- (2) Water pressure test should be done on the temperature conditions above 5°C, otherwise should take anti-freeze measures.

- (3) Water pressure test need subsection lifting pressure, be slow evenly when lifting pressure, carefully check whether each joint leaking after pump stop working and keep steady pressure. Shall not take repair work with water pressure.
- (4) Add water to the system to be layered with water, stratified exhaust, drill pilot operation.
- (5) Confirm system pipeline without leakage, finally take thermal insulation processing for pipeline according to the design plan.
- (6) The scheme formulated system pressure should be followed by the principle of low to high flow, excessive enters step by step. And be sure to follow the above points, otherwise you may cause structural damage to fan coil chillers and system pipeline.

Use and maintenance

1. Installation ends, shall carefully check whether fan motor operation is normal after electrify. If any abnormal must immediately find reason after cut off power supply.
2. During the time chiller stop working, the system should be filled with water to reduce pipeline corrosion; but in winter should take ant freezing measures to avoid heat exchanger copper tube cracking.
3. Chiller using cold water temperature should be not less than 6 °C, hot water temperature no higher than 65 °C, requires clean water, preferably demineralized water.
The Pressure range of the unit operation water: 0.05MPa~1.6 MPa.
4. To achieve the best heat transfer effect of the chiller, we advise you to open the exhaust valve on the system pipeline when your first time uses, in order to remove the air inside the pipe.
5. Air filter should be cleaned regularly according to the using environment clean level, so as not to affect the heat transfer performance and ventilation.
6. After two years operation, you should take a comprehensive maintenance for the whole system of the chiller. You can clean pipes and heat exchanger to remove dirt with chemical methods. Our factory can provide professional services.

Note

If the unit have some damage by water hammer problem in the condition of project installation, debugging and using, our company won't take charge of it.