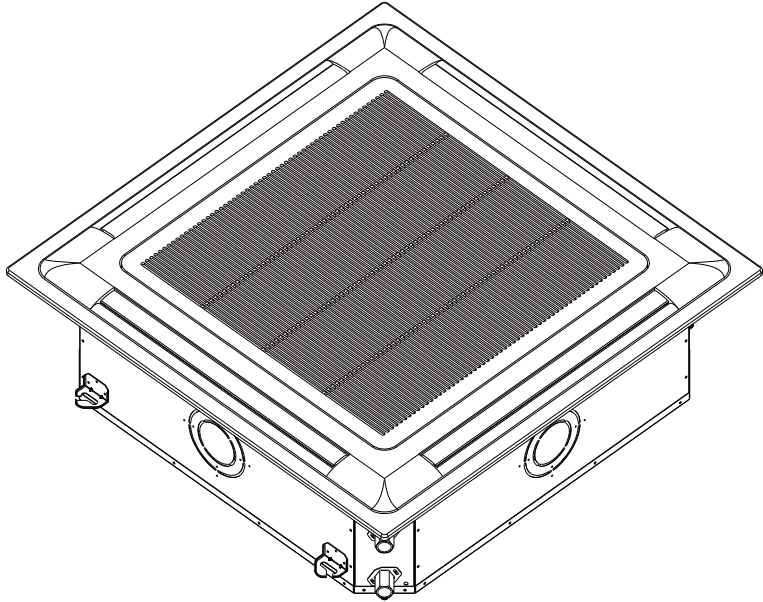


Use and Installation Manual For Cassette type Fan Coil Unit



- The installation should be completed by qualified technicians.
- For your convenient use, please read this manual and operate the fan coil by following the steps indicated in the manual.
- Please keep this manual in good condition for your reference in the future

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1. PRECAUTIONS

- Be sure to be in conformity with the local, national and international laws and regulations.
- Read "PRECAUTIONS" carefully before installation.
- The following precautions include important safety items. Observe them and never forget.
- Keep this manual in a handy place for future reference.
- Before out from factory, Fan Coil Unit has passed Fan Coil Over pressure Resistant Test, Statically and Dynamically Balanced Adjustment, Noise Test, Air (cool) Volume Test, Electric Property Test, Outline Quality Detection.

The safety precautions listed here are divided into two categories.
In either case, important safety information is listed which must be read carefully.



WARNING

Failure to observe a warning may result in death.



CAUTION

Failure to observe a caution may result in injury or damage to the equipment.

After completing the installation, make sure that the unit operates properly during the start-up operation.

Please instruct the customer on how to operate the unit and keep it maintained.



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, electrica shock and fire.

Use the attached accessories parts and specified parts for installation.

Otherwise, it might cause the set to fall, water leakage, electrical shock and fire.

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 fire.

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

If connection or fixing is not perfect, it will cause heatup or fire at the connection.

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 heatup at connection point of terminal, fire or electrical shock.

If the supply cord is damaged, it must be replaced by the manufacture or its service agent or a similarly qualified person in order to avoid a hazard.

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

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.

After completing the installation work, check that the water do not leak.

The cool water in the unit can not lower than 3°C, hot water can not higher than 65°C. Water in the unit must be clean, air quality must meet to the standard of PH=6.5~7.5.



CAUTION

Ground the Fan coil unit.

Do not connect the ground wire to gas or water pipes, lightning rod or a telephone ground wire. Incomplete 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.

You are not allow to connect the Fan coil unit with the power source until wiring and piping the fan coil unit 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 Fan coil units, power supply wiring and connecting wires 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.



CAUTION

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.



DISPOSAL: Do not dispose this product as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.

Don't install the Fan coil unit in the following locations:

- 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.

2.USER

2.1. Machine description

The fan coil unit is used to the temperature adjust for indoor of building.
The fan coil unit distribute the air flowing with 4 ways.
The unit can be installed by Horizontal only.

2.1.1. Standard conditions of use

The fan-coil unit is intended for the treatment of air (summer and winter climatisation) inside buildings used for domestic or similar purposes. The unit is not designed for installation in rooms used for laundry purposes.



DANGER!

The machines are designed for indoor installation for use in domestic or similar environments.

DANGER!

Do not introduce objects through the air intake or delivery grilles.

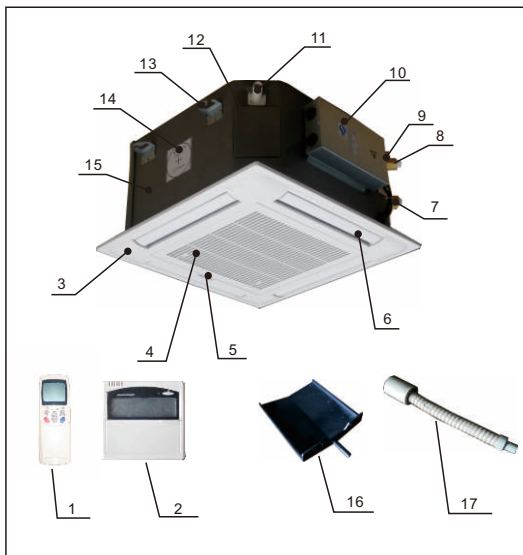
IMPORTANT!

The unit will function correctly only if the instructions for use are scrupulously followed, if the specified clearances are complied with during installation and if the operating restrictions indicated in this manual are strictly adhered to.

IMPORTANT!

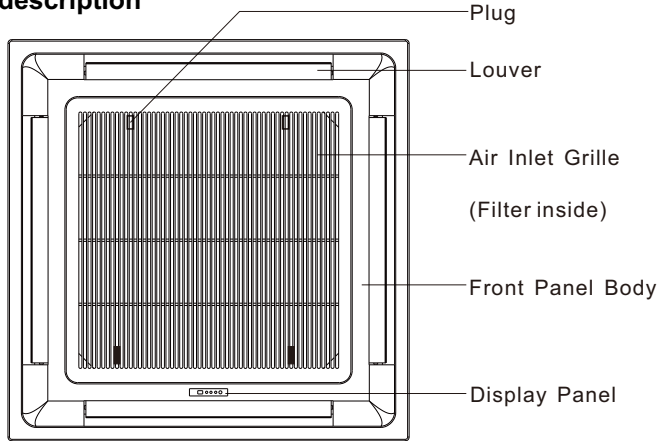
If clearance distances are not maintained at installation, it could cause maintenance difficulties and reduction in performance.

2.1.2. Construction features

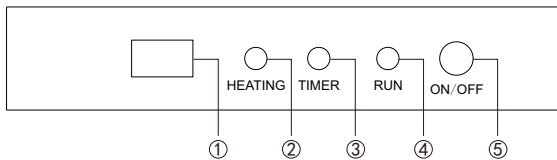


- 1.Remote controller
- 2.Wire controller(Optional)
- 3.Panel
- 4.Grill(Filter inside)
- 5.Lamp board (Receiver)
- 6.Louver
- 7.Water inlet connection
- 8.Water outlet connection
- 9.Air vent valve
- 10.Electric box
- 11.Drain water outlet
- 12.Drain pump window
- 13.Hanging hook
- 14.Air duct connection
- 15.Cassette FCU body(Master unit)
- 16.Auxiliary drain pan
- 17.Soft drain pipe

2.1.3. Panel description



2.1.4. Display panel sketch



- ① Infrared receive window
- ② Auxiliary heating lamp (red)
- ③ Timer lamp (yellow)
- ④ Running lamp (green)
- ⑤ On/off button

- ① Infrared receive window--receiving the signal from the remote;
- ② Auxiliary heating lamp--When the auxiliary electric heater (optional) on, it light;
- ③ Timer lamp--When the timer on or off is set, it light;
- ④ Running lamp--unit running, it light;
- ⑤ On/off button--press this button,the unit can be switched on or off;

2.1.5. Restrictions on use



IMPORTANT

The machine has been designed and built solely and exclusively to function as a ceiling(floor) mounted termina,supplied through ducting or panelling;any other use is expressly prohibited. Installation of the machine in an explosive environment is also forbidden.

2.1.6. Operation range

Use the system in the following temperature for safe and effective operation.

Mode	Temperature	
	Room temperature	water inlet temperature
Cooling	17°C ~ 32°C	3°C ~ 20°C
Heating	5°C ~ 30°C	30°C ~ 70°C

NOTE
1 If fan coil unit is used outside the above conditions, it may cause the unit to function abnormally.
2 The phenomenon is normal that the surface of fan coil unit may condense water when the relative larger humidity in room, please close the door and window.
3 Optimum performance will be achieved within these operating temperature range.
4 Water system operating pressurer: Max: 1.6MPa, Min:0.15MPa.

2.1.7. Information about further risks and unavoidable hazards



WARNING

IMPORTANT

Pay the most attention to the signs and symbols located on the fan coil units.

If any risks remain in spite of the provisions adopted, or if there are any potential or hidden risks, there are indicated by adhesive labels attached to the machine.



CAUTION

IMPORTANT

Only use original spare parts and accessories. The company shall not be held liable for damage caused by tampering or work carried out by unauthorised personnel or malfunctions caused by the use of non-original spare parts or accessories.

IMPORTANT!

In the case of a water supply with a particularly high content of hard water salts, it is advisable to fit a water softener.

2.2. Operation

2.2.1. Prolonged shutdown



CAUTION

IMPORTANT!

If the unit is not used during the winter period, the water contained in the system may freeze which might cause the coil broken and water leaking.

If the machine is going to be out of use for long periods of time, it is necessary to disconnect the unit from the mains by opening the main switch (which is required to be fitted by the installer).

If the unit is not used during the winter period, the water contained in the system should be drained in good time. Alternatively, a suitable quantity of anti-freeze should be mixed with the water.

2.2.2. Startup after prolonged shutdown

Before starting up the unit again;

- Clean or change the airfilters;
- Clean the heat-exchanger;
- Clean the condensation collector tray drain tube or make sure it is clear;
- Bleed any air from the water system;
- It is advisable to run the unit at maximum speed for several hours.

2.2.3. The user can selection following controller to do operate:

Remote controller (Always standard, pls check the manual of remote controller).

Wire controller (Optional)

Intelligent operation if the fan coil unit was connected to an intelligent building system (Mod-bus function is Optional)

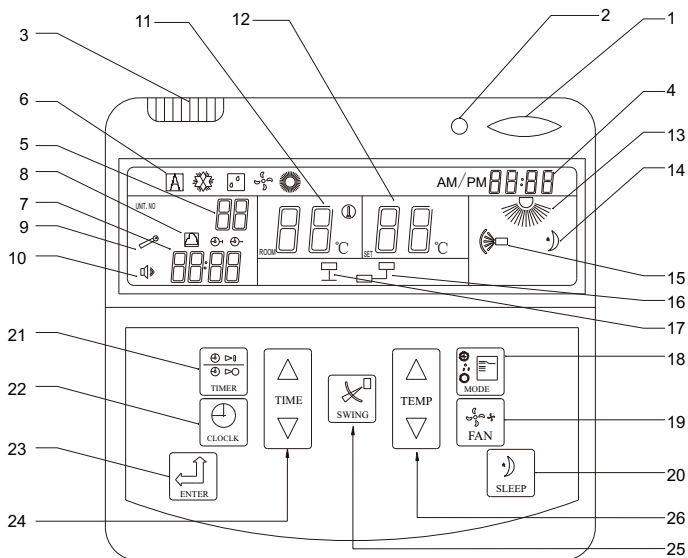
On-Off switch on panel

2.3. Controller

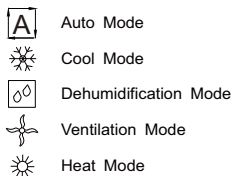
2.3.1. Remote controller

Pls read the instruction of remote controller from “Remote controller Operating Manual”

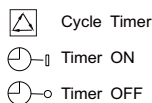
2.3.2. Wire controller(Optional)



- 1—ON/OFF Button
- 2—Signal LED
- 3—Room TEMP. Sensor
- 4—AM/PM Time Display
- 5—Unit Number
- 6—Mode: Auto, Cool, Dehumidification, Ventilation and Heat



- 7—Setting Time
- 8—Timer ON/OFF



- 9—Error Mark, 01. Room TEMP. sensor is wrong; 02. Pump is wrong;
- 04 Pipe TEMP. sensor is wrong.
- 10—Error Alarm
- 11—Room TEMP.
- 12—Setting TEMP.

- 13—Fan Speed: Auto, Low, Medium and High
- 14—Sleep Mode
- 15—Swing Display
- 16—Communication Icon
- 17—Wall pad is working Icon
- 18—Mode Select Button
- 19—Fan Speed Select Button
- 20—Sleep Mode , It will automatically adjust TEMP. and save energy when you are sleeping in cool mode or heat mode. If the wall pad is the master, press it for 3s, communication icon appear, you can set parameters and select one slave unit from 1 to 31 by press Time up or down button, all parameters have been sent to one you selected or all slave units you selected none after press Enter Button.
- 21—Timer ON/OFF Button, When the unit is on/off, press the button to set timer off/on, Press Time up or down button to set timer off/on time
- 22—Clock Button, Press it first then press Time up or down button to set time
- 23—Enter Button, In order to avoid misoperation , all setting (except ON/OFF Button) is valid after press it
- 24—Time up/down, Press Timer ON/OFF Button or Clock Button first, then press it to set timer time or clock time
- 25—Swing Button,
- 26—TEMP. Up/Down Button, Press Up Button to increase TEMP. 1℃ step (MAX: 31℃)
Press Down Button to decrease TEMP. 1℃ step (MIN: 16℃)

2.3.3. ON/OFF switch

After the firstly pressing on the switch, the buzzer will do a “Di” sound, and then the unit will run under the “Auto” mode;
After the second pressing on the switch, the buzzer will do a “Di” sound, and then the unit will turn off;

2.4. Cleaning the unit



DANGER

Always switch off the electric power before beginning cleaning or maintenance operations.
Do not spill water on the unit.

For cleaning, use a soft cloth dampened with water and alcohol. Do not use hot water, solvents or abrasives, or corrosive substances.

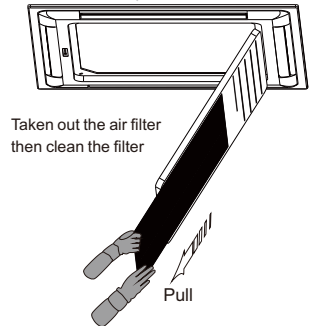
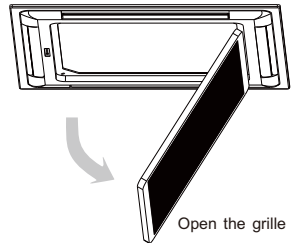
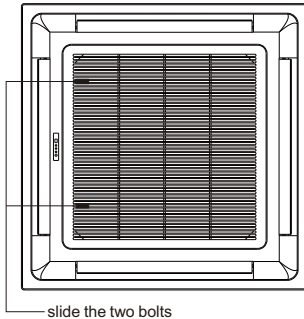
2.4.1. Cleaning the air filter

To ensure correct air intake, the air filter must be cleaned at least once a month, or more frequently if the unit is being used in very dusty environments. The filter must always be removed from the unit for cleaning.

The filter is housed inside the air grille of the unit;

To remove the filter proceed as following indicated.

- ① Slide the two bolts of air inlet grille and then hang the grille;
- ② Open the grille and then taken out the filter;
- ③ Clean the filter ;
- ④ Install filter and close the grille;



- The air filter must be cleaned by blowing it out with compressed air or washing it in water. Before refitting the filter, make sure it is clean and completely dry. If the filter is damaged, it must be replaced with a genuine corresponding filter.

2.5. Warning and suggestions

Always avoid obstructing the flow of air, or using the unit as a surface to lean on, The use of water or aerosol sprays in proximity to the unit can cause electric shocks and malfunctions.

3. INSTALLATION AND MAINTENANCE

3.1. Transport and handling

3.1.1. Packaging and components



DANGER

DO NOT OPEN OR TAMPER WITH THE PACKAGING BEFORE INSTALLATION.

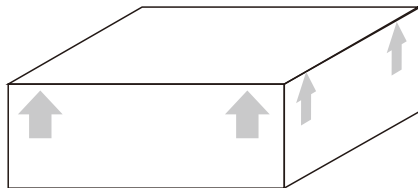
The units should only be moved and lifted by professional personnel trained in these operations.

Check on arrival that the unit has not been damaged during transport and that it is complete with all its parts.

To remove the packaging, follow these instructions:

- Check for visible damage
- Open the packaging.
- Check that the packet containing the manual for use and maintenance is inside.
- Dispose of the packaging material in accordance with current legislation, at the appropriate waste reception or recycling site.

Pls keep the carton stacked
abide by the stacking direction



DANGER

Do not leave the packaging within reach of children.



PRESERVE THE ENVIRONMENT!

Dispose of the packaging materials in compliance with the national or local legislation in force in your country.

3.1.2. Handling



DANGER

Movement of the unit should be performed with care, in order to avoid damage to the external structure and to the internal mechanical and electrical components.

Also make sure that there are no obstacles or people along the route, to avoid the danger of collisions or crushing and to prevent the lifting or handling device from turning over.

All the operations listed below must be carried out in accordance with current health and safety regulations, both as regards the equipment used and as regards the procedure followed. Before commencing moving operations, check that the lifting apparatus has the required capacity for the unit in question.

The units may be moved or lifted either by hand or by means of a suitable trolley. If the weight of the unit is more than 30kg, moving units need to be moved at the same time, it is advisable to put the machines in a container and lift them by means of a crane or something similar.

3.1.3. Storage conditions

Units in their packaging may be stacked not more than four layer, and must be kept under cover.

3.2. Clearance and positioning

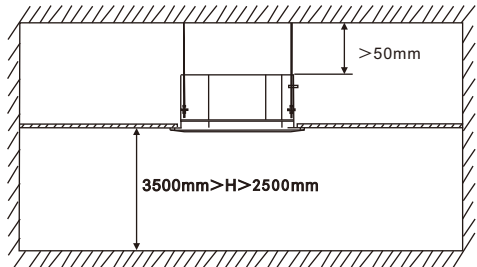
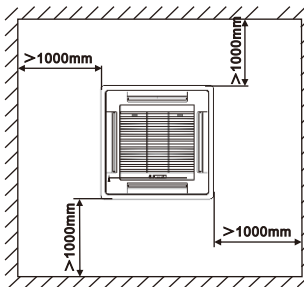


IMPORTANT

Incorrect positioning or installation of the unit may amplify noise levels and vibrations generated during operation.

- The units can be mounted only horizontally, Provided that the correct clearances for positioning are maintained.

3.2.1 Reserve installation space



3.2.2. Dimension of fan coil unit

Pls check the dimension of fan coil unit from the item4 "DIMENSION OF FAN COIL UNIT".

3.3. Installation



DANGER!

Installation must only be carried out by qualified technicians, trained to work with fan coil unit system. Incorrect installation could lead to unit malfunctioning and a consequent deterioration in performance.

DANGER!

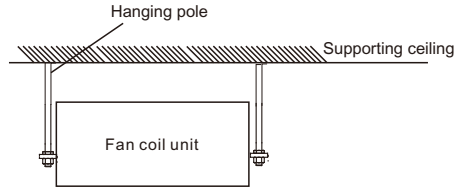
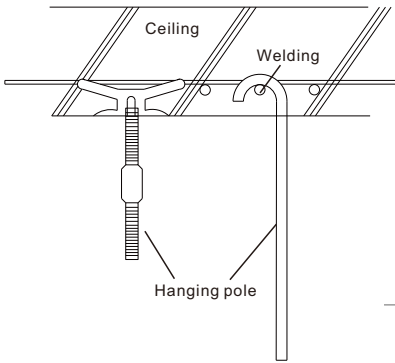
The unit must be installed according to national or local rules in force at the time of installation.

3.3.1. Select the suspension foundation

- The suspension foundation must be firm and reliable, and can support the wooden frame and reinforced concrete structure that weigh more than 200kg.
- It is necessary to select the structure able to resist against certain vibration and keep firmness and supporting capacity for a long time as the suspension foundation.
- Before construction, please consult the construction contractor and indoor decoration contractor and obtain their recognition.

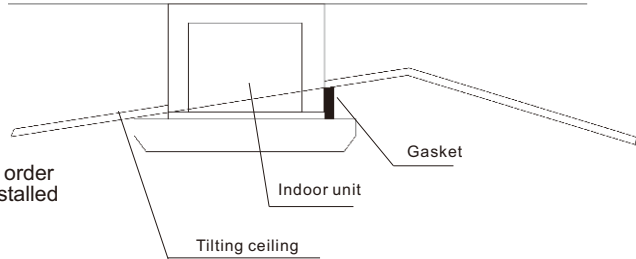
3.3.2. Hang the master unit to ceiling

Mark out the fixing points on the ceiling, either by marking through the drillings in the unit itself, or by referring to the measurements given in "DIMENSIONS". Use expansion screw as the hanging pole, hang the unit to it and then tighten the nut, make sure the unit will not loose.



- During installation of indoor unit on the ceiling, it is necessary to note that the ceiling must be in level position, and in order to prevent ceiling vibration, it is necessary to reinforce the ceiling.

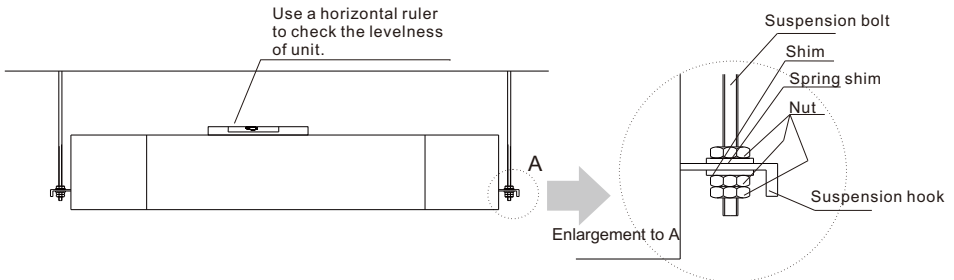
- If this unit body is installed on a tilting ceiling, a gasket should be installed between the ceiling and the air outlet panel, in order to ensure that this unit body is installed on a level surface. As shown in right figure:



3.3.3. Fix the master unit to ceiling

The indoor master unit should be suspended as shown in the sketch below:

- Adjust the relative position of the suspension hook on the suspension bolt so that the master is in Level position in all directions. Check with a level gauge after completion of installation in order to ensure the level of indoor master unit. Or otherwise water leakage and air leakage may be caused.
- Tighten the bolt and ensure that four hooks are in close contact with the nuts and shims, and the unit is suspended firmly and reliably onto the hooks.
- Ensure that after the master unit is installed, it will not shake or be fixed unsteadily.
- Ensure that the center of the indoor master unit should almost coincide with that of the opening on the ceiling.



3.3.4. Hydraulic connections

3.3.4.1. Water inlet/outlet connecting to the system



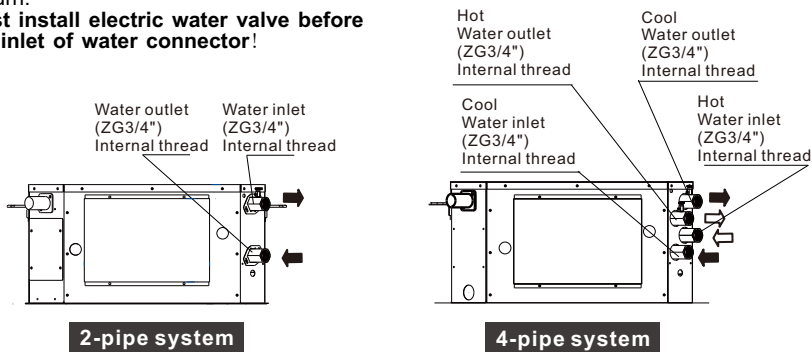
CAUTION

IMPORTANT

It is most important that the hydraulic connections are made with great care by specialised fitters. A violence installation will cause the coil leaking.

Connect the unit to the water system by means of the fittings which are marked Flow and Return.

Must install electric water valve before the inlet of water connector!



All the water coils, including the optional extras, are equipped with air bleed-valves next to the upper union, and (optional) with water drain valves next to the lower union. All the valves can be opened and closed by hand.



CAUTION

IMPORTANT!

The water coils can be partially drained through the drain valves. To drain them completely, they should be blown out with an air-jet.

3.3.4.2. Insulation and checking

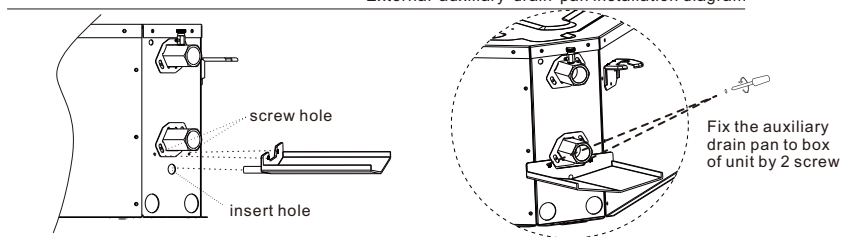
When installation is complete, it is necessary to :

- Bleed the air contained in the circuit.
- Lag the connection pipes and any valves fitted with anticondensation material 10 mm thick and install the auxiliary drain pan.

Install the auxiliary (optional parts)

The auxiliary drain pan can collect some condensate water caused by water connection pipe and flow back to main drain pan.

External auxiliary drain pan installation diagram



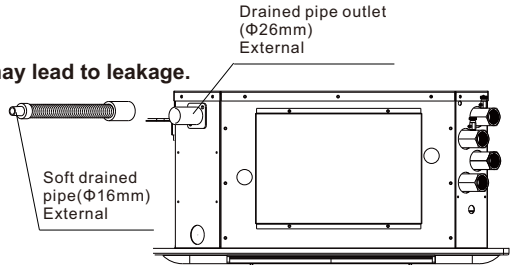
3. 3. 5. Condensate drainage system connections



IMPORTANT

Incorrect installation of drainage works may lead to leakage.

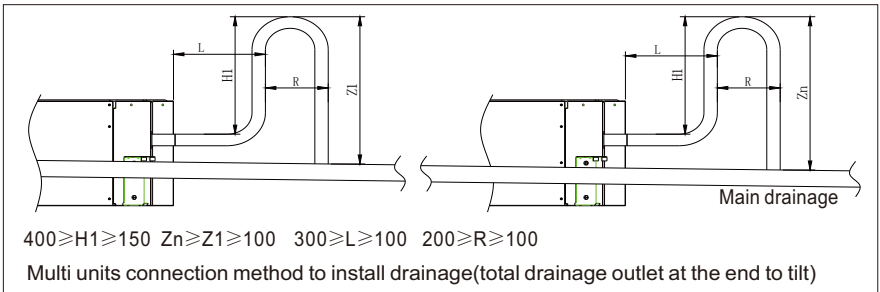
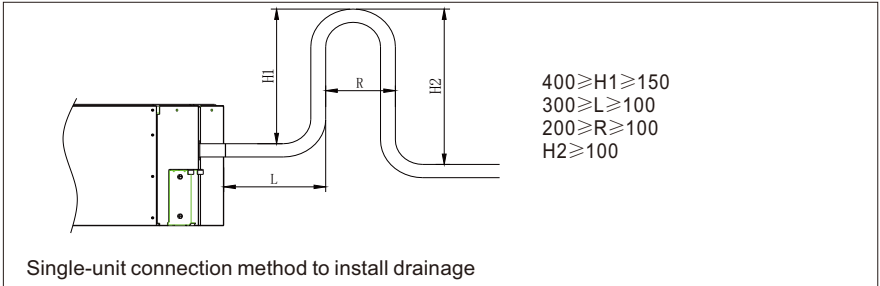
The condensation drainage system must be set up with an adequate fall, to ensure that the water escapes properly. Following are directions for setting up a proper condensation.



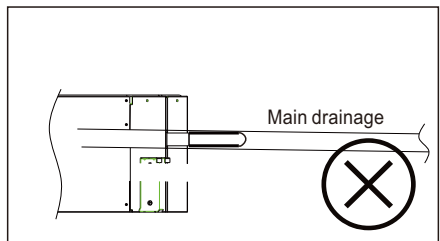
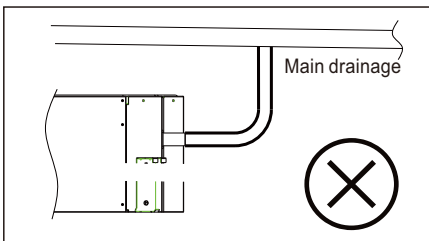
Connection of Draining Pipes

Use the suitable PVC tube diameter, Use the adhesive joint drainage, and use PVC pipe joints connected family of tape.

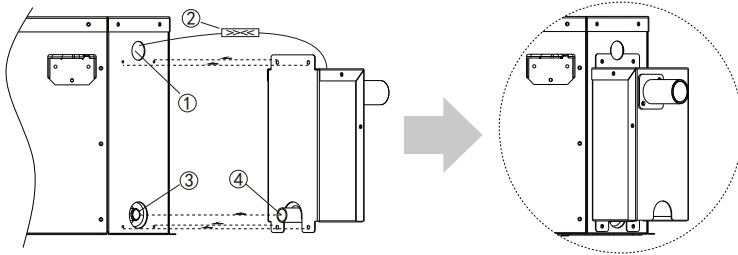
Use insulation material (thickness 10mm or more) to do insulation for all the drain pipe. Strengthening the various pipe support points, check all piping work link.



Following installation will cause to leaking:



3.3.6. Connection of external component(Optional)



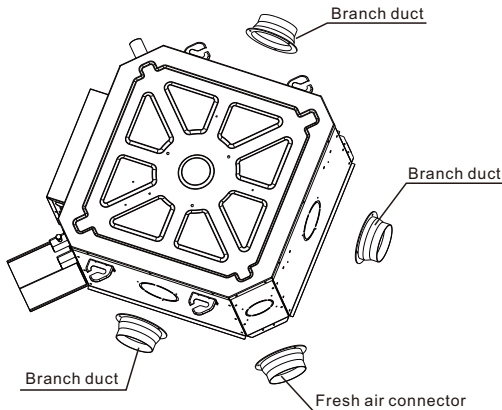
① through wire hole ② plugs ③ drain pipe ④ connect pipe

Connect the “4- connect pipe” to “3- drain pipe”, until the external pump touch the surface of FCU; Fixing four screws through the hole to connect the component with the FCU; Connect the pump’s wire and float switch’s wire .

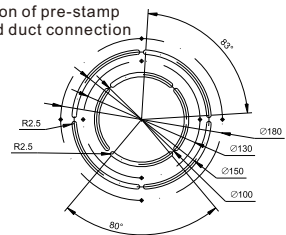
3.3.7. Connection of external fresh air ,delivery of treated air to adjacent room(Optional)

The pre-stamped holes(optional) on the side of unit body permit the separate attachment of an external fresh intake air pipe and a delivery pipe for treated air towards the adjacent room.

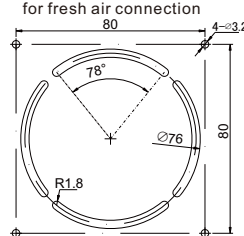
There is one (1) pre-stamped hole for fresh air and three (3) pre-stamped holes for branch duct connection(The pre-stamped hole is all optional and the standard unit is without pre-stamp).



Dimension of pre-stamp for brand duct connection



Dimension of pre-stamp for fresh air connection



3.3.8. Antifrost protection



IMPORTANT

When the unit is out of service, remember to arrange in good time for the entire water content in the circuit to be drained down.
Mixing the water with glycol modifies the performance of the unit.
Pay attention to the safety instructions regarding ethylene glycol which printed on the container.

Draining the water circuit needs to be under taken in good time.
However, if the operation of draining the system is felt to be too laborious, a suitable quantity of antifreeze may be mixed with the water instead.

3.3.9 Installation of panel



CAUTION

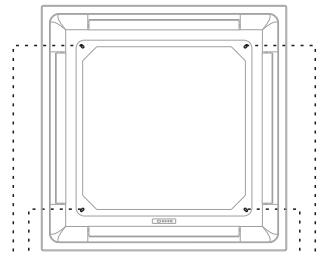
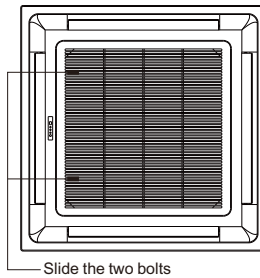
IMPORTANT

Must use 30mm length (M5) bolt to connect the panel and master unit, otherwise might cause condensate water leaking;

The louver is forbid to be moved by hand;

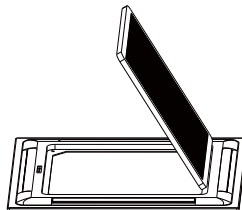
3.3.9.1. Connect the panel to master unit

- Open the grill, and take off the grille from panel;
- Use the 4 bolts attached at bag of panel carton to connect the panel with master unit ,pls refer to the position shown at right drawing;
- Tight the 4 bolts until the panel link with the unit, check there have no gap between panel and master unit;

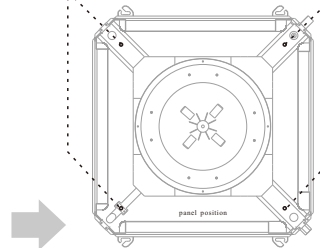


3.3.9.2. Connect the electric parts of panel to master unit

- Connect the connector of swing motor(4pcs) & display panel (1pcs) to according connector of master unit;



Take off grille



Connect the panel to unit

3.3.10. Electrical connections



CAUTION

IMPORTANT!

Electrical connection of the unit must be carried out by qualified personnel in compliance with the regulations in effect in the country where the unit is installed. The company shall not be held liable for damage to persons or property caused by incorrect electrical connection.

An all-pole disconnection device which has at least 3mm separation distance in all pole and a residual current device (RCD) with the rating of above 10mA shall be incorporated in the fixed wiring according to the national rule.

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



DANGER!

Always install a general automatic switch in a protected area near the appliance with an adequate capacity characteristic delayed curve with sufficient breaking power.

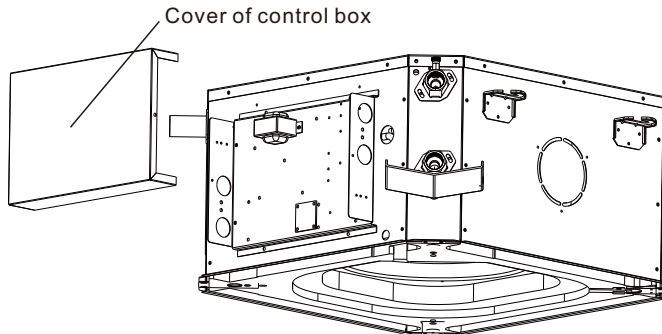
There should be a minimum distance of 3mm between the contacts.

Earth connection is compulsory by law to ensure user safety while the machine is in use.

AIR FLOW VOLUME		m ³ /h	340~2720
		cfm	200~1600
POWER	PHASE FREQUENCY & VOLTAGE		1-phase
			220-240V~50(60)Hz
CIRCUIT BREAKER / FUSE (A)		without electric heater	15 / 15
		with electric heater	30 / 30

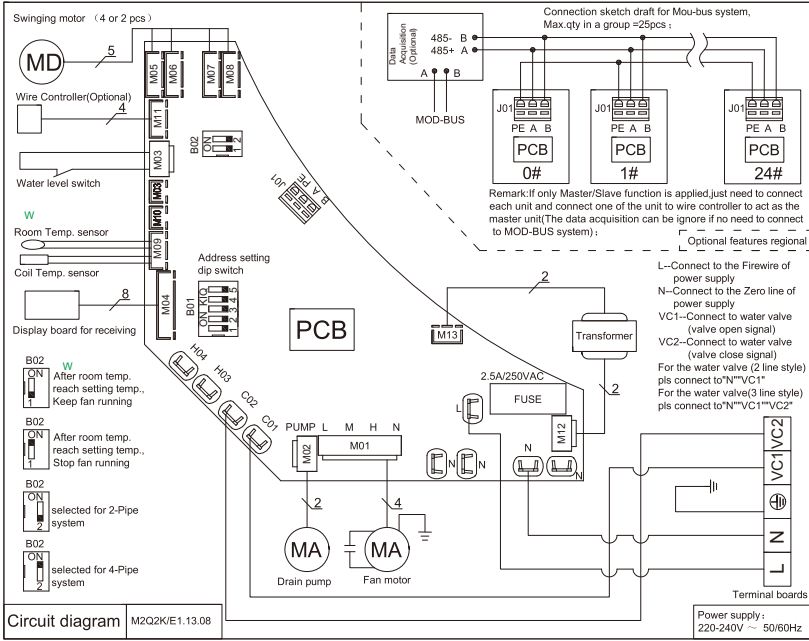
3.3.10.1. Wiring

Remove control box cover and install the connection wires. See Wiring Diagrams. After wiring, install control box cover

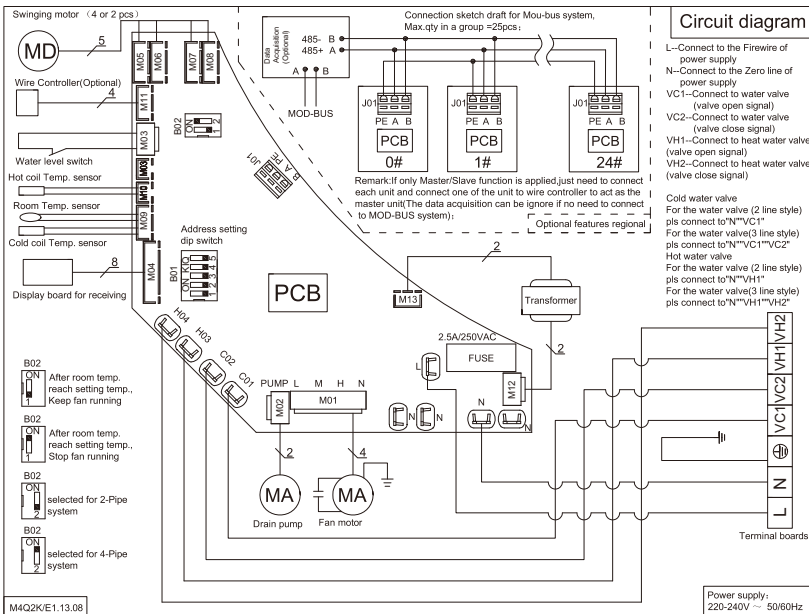


- correspond to 220-240V single phase at 50(60)Hz; that the available power is sufficient for the running the equipment; and that the supply cables are of adequate section for the maximum current which will be required.
- Make sure that the electrical supply system complies with current national safety regulations.
- Electrical connections must be made in accordance with the wiring diagrams supplied with the machine. For connection to the electrical supply network, use double-insulated flexible cable, twin pole + earth, section 1.5mm² , type H05RN-F.
- Pass the supply cable through the slot beside the air filter. Use the cable clamp provided on the inner side of the panel to secure the supply cable and the connecting cables, and strip only the length of cable needed to go into the connector block. In the event that the unit is mounted on a metal surface, earth connections must be made in compliance with local regulations. If the optional extra electric heating element is fitted, a separate power supply must be provided. Use double-insulated flexible cable, twin pole + earth, section 2.5mm², type H05RN-F.

3.3.10.2. Wiring drawing of 2-pipe system



3.3.10.3. Wiring drawing of 4-pipe system



3.3.11. Startup instructions



IMPORTANT!

Machine commissioning or the first start up must be carried out by skilled personnel qualified to work on this type of product.

DANGER!

Before starting up, make sure that the installation and electrical connections have been carried out in accordance with the instructions in this manual. Also make sure that there are no unauthorised persons in the vicinity of the machine during these operations.

3.3.11.1. Exclude the air inside the fan coil

- Start up the water pump to circulate the pipeline water ;
- Loosen the air vent screw, exclude air inside the coil until there is water flow out from the air vent valve. (If there is air inside the coil, we can hear the "ZiZi" sound from the air vent.)
- After the air has been excluded, then tighten the air vent again.

3.3.11.2. Checking before the starting up

Before starting up the unit, make sure that:

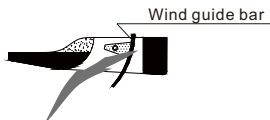
- The unit is positioned correctly;
- The unit is not inclined;
- The unit will not leak under a test by 1.0MPa pressure;
- The flow and return pipes of the water system are correctly connected;
- The pipes are clean and free of air;
- The unit falls correctly towards the drainage outlet and the trap;
- The heat-exchangers are clean;
- The electrical connections are correct;
- The screws holding the cables are well tightened;
- The supply voltage is as required;
- The power consumption of the blower is correct and does not exceed the maximum permitted.

3.3.11.3. Starting up the fan coil unit

Power on the unit, use controller to start up the machine;
To check the following items:

- The air flowing under high/medium/low speed is comfortable and different in each speed;
- There is no abnormal noise during the running;
- The condensate water can be drained smoothly and there is no condensate water falling down when the fan coil unit is running under cooling mode;
- If there is an install water on/off valve and electromotive valve installed on the intake tube connector of the FCU, please use controller to set the working mode to the cooling or heating according to the cool or hot water circulation, then observe whether the water intake electromotive valve is under normal operation and whether there is cold or hot wind blowing from the air outlet.
- Press the SWING button on the wall pad, check whether the louver is swinging normally. Change the air swing direction and check whether the air flowing can be sent to the required space.

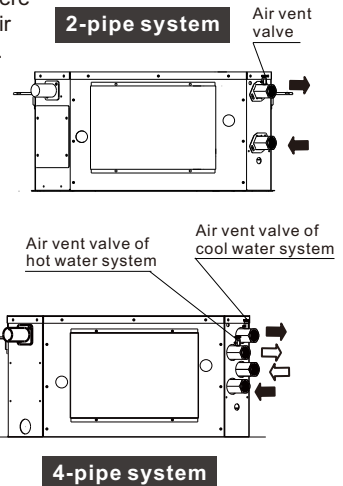
When heating, hot air goes up, and wind guide bars should be adjusted so that air goes downwards.



When cooling, cold air goes down, and wind guide bars should be adjusted so that air goes upwards.



- Press ON/OFF button to end the running test after confirming the unit is working smoothly.



3.3.11.4. Trouble elimination

After finishing the running test , please specify the detailed fan coil unit operation guide and caution

Trouble elimination :

If the unit still can not working properly through above test and the indicator light on the function indicating board is shown on the wall pad, you should eliminate the trouble by below means .

Error code table

RUN (Green)	TIMER (Yellow)	HEATING (Red)	Wired controller display fault code	Fault Symptoms
★	⊗	⊗	02	Water level switch acts
⊗	★	⊗	01	Indoor temperature sensor is open-circuited or short-circuited
⊗	⊗	★	04	T2 Pipe temperature sensor is open-circuited or short-circuited
⊗	★	★	08	T3 Pipe temperature sensor is open-circuited or short-circuited(Only fit 4 pipe system)
★ mean “flashing”		⊗ mean “off”		

Note: If there are two units fails, the code of wire controller appears as the sum of the two fault code:
(07 = 01 +02 +04),

3.4. Maintenance



DANGER!

Maintenance work must only be carried out by qualified technicians authorised to work on fan coil unit

Use suitable work gloves.

Do not introduce pointed objects through the air intake grilles.

Disconnect the power supply before cleaning and maintenance.

Always disconnect the unit from the mains power supply at the main isolator switch before carrying out maintenance work or checks. Make sure that no one accidentally supplies power to the machine, lock the main switch in the Off position.

3.4.1. Scheduled maintenance

■ Once a month

Check the state of cleanliness of the air filters.

The air filters are made of fibre and are washable in water. The state of cleanliness of the filters must be checked regularly at the start of the operating season and on a monthly basis.

■ Every six months

Check the state of cleanliness of the heat-exchanger and the condensation drain-tube.

With the unit switched off, remove the casing of the machine and check the state of the heat exchanger and the condensation drain-tube.

If necessary:

- Remove any foreign bodies from the finned surface which may obstruct air flow;
- Clean off the dust with a jet of compressed air; wash and brush, gently, with water;
- Dry with a jet of compressed air;
- Check that there are no obstructions in the condensation drain tube which could prevent the normal flow of water.

Check for the presence of air in the water system.

- start the system and run for a few minutes;
 - stop the system;
- Exclude the air inside the system abide by the item 3.3.11.1

■ **At the end of the season**

Drain the water system (for all coils) .

To avoid the risk of rupture due to freezing, it is advisable to drain the water from the system at the end of every season.

■ **Electrical Circuit**

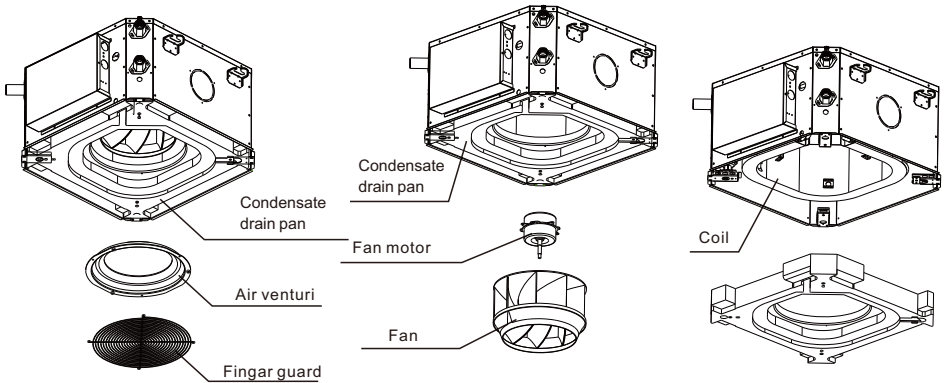
The following operations are recommended for the maintenance of the electrical circuit:

- Check the unit 's power absorption using a clip-on ammeter and compare the reading with the values shown on the documentation;
- Inspect and, if necessary tighten the electrical contacts and terminals.

3.4.2. Service

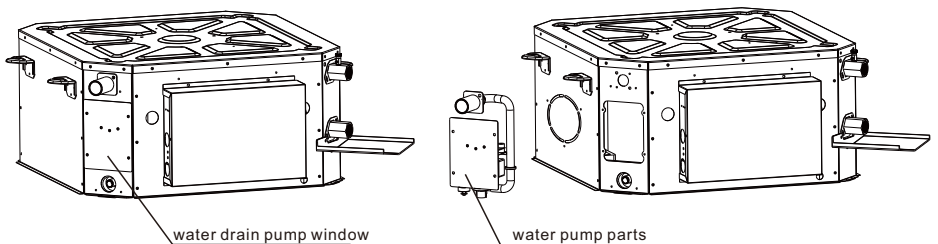
Replacement of parts

- The electrical panel is easily accessible by removing the cover panel.
- The inspection or replacement of internal components, such as heat exchanger coil, fan blower, fan motor, involves the removal of the condensate drain pan.
- The inspection or replacement of drain pump, only need to open the pump maintenance port.
- During the removal of the condensate drain pan protect the floor under the unit with a plastic sheet from condensate water that could be spilled.
- Remove fixing screws of the drain pan fixture and remove condensate drain pan with care.



Taking off Finger guard and air venturi

PUMP MAINTNANCE



USER KNOWLEDGE

In case one of following conditions should happen, please stop the unit immediately, switch off the power supply and contact your dealer or local Customer Service Centers	
Symptoms	When there is a fault symptom listed in above table, the same fault persists after the indoor power supply is switched off and then switched on again.
	The fuse wire is frequently blown out or the circuit breaker acts frequently.
	The fan coil unit gives out high abnormal noises
	The unit shivers and there are other symptoms indicating that it is not installed steadily and firmly.
	There is serious water leakage in indoor unit.
There happen other abnormal conditions	

In case one of the following conditions should happen, please check the FCU as shown below. If the problems persist, please contact your dealer or local Customer Service Center and inform them of the product type and fault details.

Fault	Possible Causes	Solutions
Fan coil unit cannot start up	No power is supplied.	Wait for power resumption
	Power switch is not turned on	Turn on the power switch
	Fuse wire of power switch is molten	Replace the fuse wire
	There is no voltage in the batteries in remote controller	Replace the batteries
	The switch-on timing set for AC unit does not expire	Wait for expiration of switch-on timing or cancel it
Air is blast but there is poor Cool(heating) effect	Improper temperature setting	Correctly set the temperature, and adjust it to a higher value or lower value.
	Air filter gauze is blocked with dust or dirt	Clean the filter.
	The air inlet or outlet of indoor unit is blocked	Remove the blocking
	Doors or/and windows are open	Close doors and windows
	Too great heat (cooling) load in rooms	Close the heat (cooling) sources
Air is blast but no cool or heating is available	Improper temperature setting	Re-set the temperature
	Improper mode setting	Set correct mode
Dews exist on the panels	Too high indoor dehumidify	Switch on high-speed wind and open the wind guide bar to maximum.



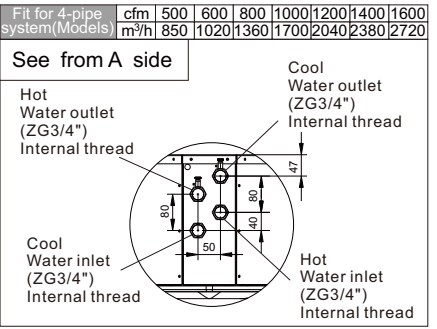
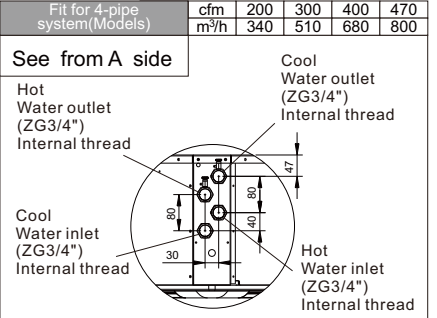
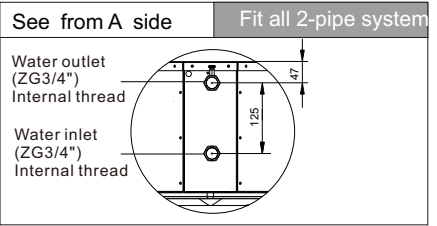
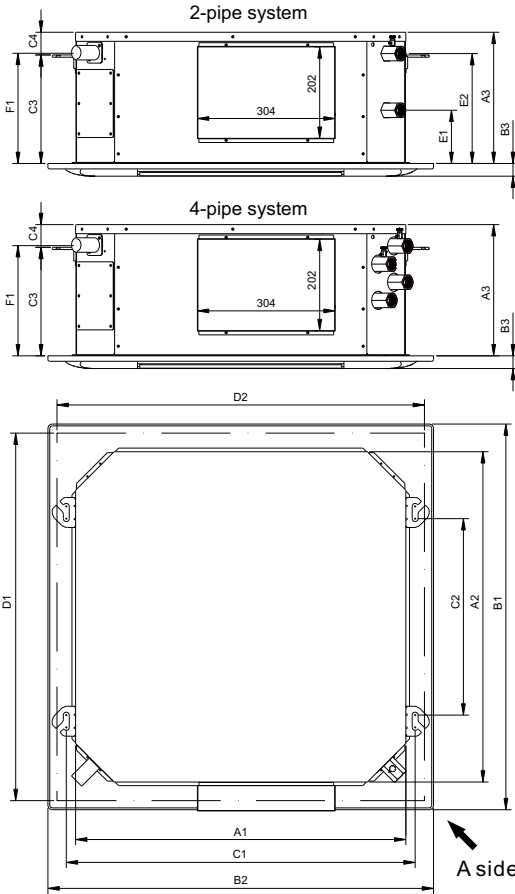
PRESERVE THE ENVIRONMENT!

We care about protecting the environment. When the unit is dismantled it is important to adhere scrupulously to the following procedures.

The unit should only be dismantled by a firm authorized for the disposal of scrap machinery. . The unit as a whole is composed of materials considered as secondary raw materials and the following conditions

- If the system has antifreeze as an additive, it must not be just dumped because it causes pollution. It should be collected and suitably disposed.
- The electronic components (electrolytic condensers) should be considered special waste and as such they should be delivered to a firm authorized to collect them.
- The expanded polyurethane rubber insulation on the pipes and the expanded polyethylene mesh, the expanded polyurethane and sound-absorbent sponging lining the bodywork must be removed and processed as urban refuse.

4. DIMENSION OF FAN COIL UNIT



Fit model (AIR FLOW VOLUME)	cfm		200, 300, 400, 470	500, 600, 800	1000, 1200, 1400, 1600
	(m ³ /h)				
			340, 510, 680, 800	850, 1020, 1360	1700, 2040, 2380, 2720
Dimension name	Annotation	Units			
Length of master unit	A1	(mm)	570	730	930
Width of master unit	A2	(mm)	570	730	930
Height of master unit	A3	(mm)	290	290	290
Length of panel	B1	(mm)	650	850	1050
Width of panel	B2	(mm)	650	850	1050
Thickness of panel	B3	(mm)	28	28	28
Hook distance 1	C1	(mm)	616	769	969
Hook distance 2	C2	(mm)	253	433	633
Hook distance 3	C3	(mm)	239	239	239
Hook distance 4	C4	(mm)	50	50	50
Suggested ceiling opening(Length)	D1	(mm)	620	810	1010
Suggested ceiling opening(Width)	D2	(mm)	620	810	1010
Water in/out pipe connection position 1 (2pipe system only)	E1	(mm)	117	117	117
Water in/out pipe connection position 2 (2pipe system only)	E2	(mm)	242	242	242
Condensate water drain pipe connection position	F1	(mm)	242	242	242

