



FLOOR STANDING AC

INSTRUCTION MANUAL

Read this manual carefully before operation

Pictures in this manual are for reference only, the product in kind prevail.



CG-36FSAC02



Floor Type Room Air Conditioner

Use and Care Manual

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Preparation before use

Before using the air conditioner, be sure to check and preset the following.

• Remote Controller presetting

Each time after the remote controller replaces batteries or is energized, remote controller auto presetting heat pump. If the air conditioner you purchased is a cooling only one, but you preset the remote controller as Heat pump, it doesn't bring any matter.

• This air conditioner has been designed for the following temperatures. Operate it within this range.

Series	Model	Mode	Outdoor working temperature (°C)		
Series	Model	Wode	maximum	minimum	
Cooling only type	18K	Cooling Operation	43	15	
	24K	Cooling Operation	48	15	
Haat assess to as	241/1201/1201/	Cooling Operation	52	15	
Heat pump type	24K/30K/36K	Heating Operation	24	-10	

• Storage condition: Temperature -25°C~60°C

Humidity 30%~80%

• NOTES

Heating and electric heating function are not available in single cooling only models.

CAUTION Statements

Alert Symbols:

⚠ DANGER: The symbol refers to a hazard which can result in severe personal injury or death.

▲ WARNING: The symbol refers to a hazard or an unsafe practice which may result in severe personal iniury or death.

A CAUTION: The symbol refers to a hazard or an unsafe practice which may result in personal injury. product or property damage.

: It refers to the remarks and instruction to the operation, maintenance and service. NOTE

- We recommend that this air conditioner is installed properly by qualified installation technicians in accordance with the installation instructions provided with the unit.
- Before installation, check if the voltage of the power supply at installation site is the same as the voltage shown on the nameplate.
- The appliance shall also be installed in accordance with national wiring regulations.

♠ DANGER

- Do not perform any alterations to this product, otherwise, it may possibly cause such consequences as water leakage, breakdown, short-circuit, electric shock, fire and
- Piping and welding work should be carried out far away from the flammable explosive material vessels, including the air-conditioner refrigerant, to guarantee the security of
- To protect the air conditioner from heavy corrosion, avoid installing the outdoor unit where salt water can splash directly onto it or in sulphurous air near a spa. Do not install the air conditioner where excessively high heat-generating objects are placed.

▲ WARNING

- If the supply cord is damaged, it must be replaced by the factory or its service department to avoid danger.
- The place where this product is installed must have the reliable electrical earth facility and protections. Please do not connect the grounding of this product to various kinds of air-feeding ducts, drain piping, lightning protection facility as well as other piping lines to avoid receiving an electric shock and damages caused by other factors.
- Wiring must be done by a qualified electrician. All the wiring must comply with the local electrical codes.
- Consider the capacity of the electric current of your electrical meter and socket before installation.
- The power wire where this product is installed should have independent leakage protective device and the electric current over-load protection device provided for this product.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge of using air-conditioner, 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.
- Means for disconnection, which can provide full disconnection in all poles, must be incorporated in the fixed wiring in accordance with the wiring regulations.
- The cord of the H07RN-F type or the electrically equivalent type must be used for power connection and interconnection between outdoor unit and indoor unit. The size of the cord is detailed below.
- Details of type and rating of fuses, or rating of circuit breakers / ELB is detailed below. If the fuses in units burn up, please call the service agency to change it. Please do not change it by yourself, or else may result in accident, for example shock.

CAUTION Statements

- The wiring diagram with a clear indication of the connections and wiring to external control devices and supply cord are detailed below.
- The method of connection of the appliance to the electrical supply and interconnection of separate components are detailed below.
- It is necessary to allow disconnection of the appliance from the supply after installation.
 The disconnection may be achieved by incorporating a switch in the fixed wiring in accordance with the wiring rules.
- CAUTION: 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.
- The information of dimensions of the space necessary for correct installation of the appliance including the minimum permissible distances to adjacent structures is detailed below.
- Instructions on addition charging of refrigerants are detailed below.
- Read this manual carefully before using this air conditioner. If you still have any difficulties or problems, consult your dealer for help.
- The air conditioner is designed to provide you with comfortable room conditions. Use this unit only for its intended purpose as described in this instruction manual.

▲ WARNING

- Never use gasoline or other inflammable gas near the air-conditioner, which is very dangerous.
- When the air conditioner operation is abnormal, such as burnt smell, deformation, fire, smoke, etc., it is forbidden to continue using the air conditioner, the main power switch of the air conditioner must be cut off immediately and the agent must be contacted.

A CAUTION

- Do not turn the air conditioner on and off from the power main switch. Use the ON/OFF operation button.
- Do not stick anything into the air inlet and air outlet of both the indoor and outdoor units. This is dangerous because the fan is rotating at a high speed.
- Do not cool or heat the room too much if babies or invalids are present.

Precaution

Symbols in this Use and Care Manual are interpreted as shown below.

Be sure not to do.

Be sure to follow this instruction.

Pay attention to such a situation.

Grounding is essential.

Marning: Incorrect handling could cause a serious hazard, such as death, serious injury, etc.



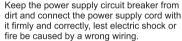


 \triangle

Do not clean the appliance with gasoline, basic or acid detergent.

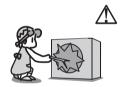
Use correct power supply in accordance with the rating plate requirement.

Otherwise, serious faults or hazard may occur or a fire maybe break out.





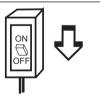
Do not knit, pull or press the power supply cord, lest the power supply cord be broken. An electric shock or fire is probably caused by a broken power supply cord.



Never insert a stick or similar obstacle to the unit. Since the fan rotates at high speed, this may cause an injury.



It is harmful to your health if the cool air reaches you for a long time. It is advisable to let the air flow be deflected to all the room.



Stop the appliance and then turn off the power supply circuit breaker immediately when something is wrong during operation.



It is advisable to install, repair or move the appliance by a licenced person.



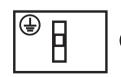
Prevent the air flow from reaching the gas burners and stove.



Do not employ the appliance to dry clothes or cool food, etc.



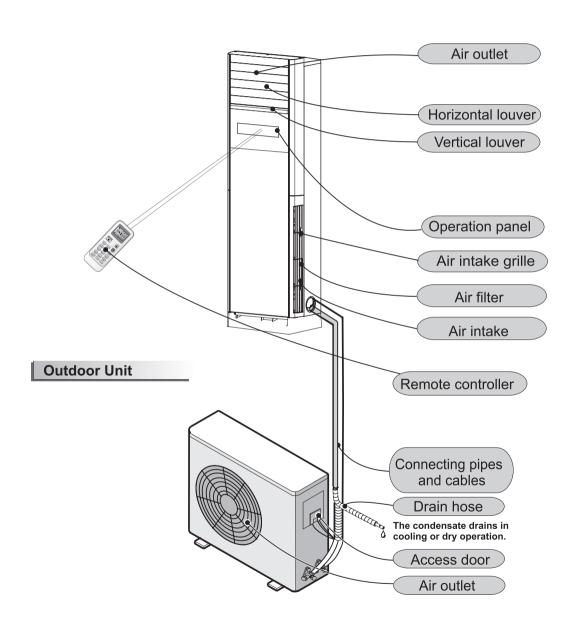
Do not put any objects on the outdoor



It is the user's responsibility to make the appliance be grounded according to local codes or ordinances by a licenced technician.

Identification of parts

Indoor Unit

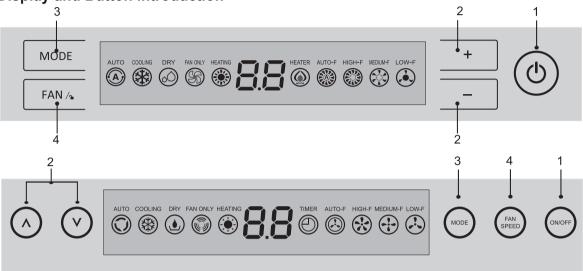




This figure is based on the external view of a standard model. Consequently, the shape may differ from that of the air conditioner you have selected.

Display Introduction

Display and Button Introduction



Button Operation

1. ON/OFF BUTTON

For turning on/off the appliance.

2. TEMPERATURE SETTING BUTTONS

Used to adjust the set temperature.

Every pressing ___ / \omega / __ button can raise the temperature by 1°C;

Every pressing ___ / _ v / _ button can reduce the temperature by 1°C.

3. MODE BUTTON

For selecting the operation mode.

Each time "MODE" button is pressed, the operation mode is changed in sequence:

4. FAN SPEED BUTTON

For selecting indoor fan speed.

Each time "FAN " / "FAN SPEED" button is pressed, the fan speed is changed in sequence:



"AUTO" fan speed is invalid when select"FAN ONLY"mode.

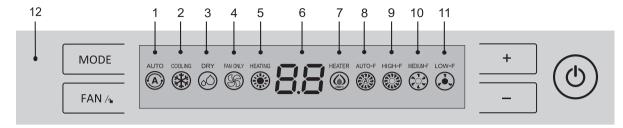
"FAN" / "FAN SPEED" button is invalid when select "DRY"mode. "/*"is unavailable in some models.

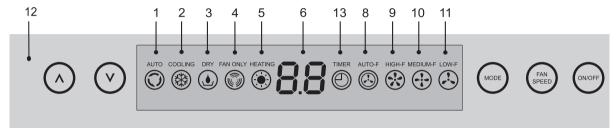
It can also used to unlock user interface.

The user interface will lock automatically if idle beyond 1 minute, then the user interface will be locked; Hold the "FAN" / "FAN SPEED" button for 3 seconds to unlock; The remote control is still usable when the user interface has locked.



Display Introduction





Display Introduction

- 1. Auto mode display: Display during auto mode.
- 2. Cooling mode display: Display during cooling mode.
- 3. Dry mode display: Display during dry mode.
- 4. Fan only mode display: Display during fan only mode.
- 5. Heating mode display: Display during heating mode.
- 6. Temperature display: Display indoor set temperature or indoor temperature.
- 7. Heater display: It lights up during heating mode when electric heater is on (Only valid for models with electric heater).
- 8. 9. 10. 11. Fan speed set display.
- 8. Auto fan speed display: It lights up during the appliance is set with auto fan speed.
- 9. High fan speed display: It lights up during the appliance is set with high fan speed.
- 10. Medium fan speed display: It lights up during the appliance is set with medium fan speed.
- 11. Low fan speed display: It lights up during the appliance is set with low fan speed.
- 12. Signal Receptor.
- 13. Timer mode display: It lights up during timer on/timer off mode.
- 14. Sleep mode display: It lights up during sleep mode, and the LCD will stop lighting after 10 seconds.
- 15. Button locked display: It lights up when the user interface has been locked.
- 16. Temperature indicator: Display indoor temperature when 🗂 lights up;

Display outdoor temperature when ↑ lights up;

Display indoor set temperature when ☐ and 👫 all go off.

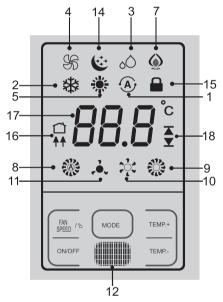
17. Temperature display: Display indoor set temperature, indoor temperature or outdoor temperature.

Default display indoor set temperature.

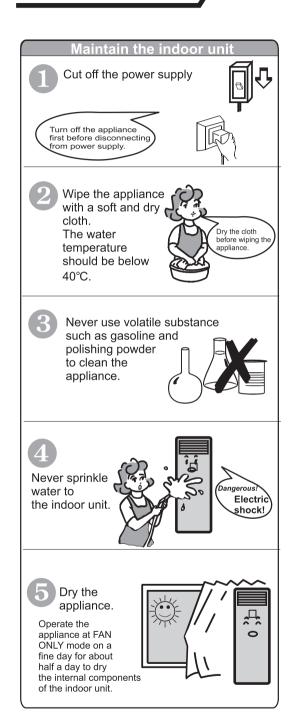
18. Limit temperature set indicator:

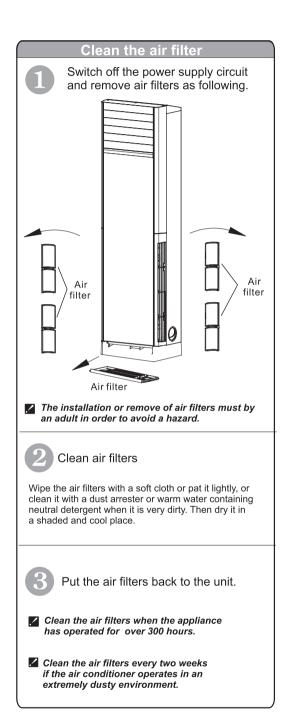
It indicates that the set temperature allowed has reached the max. valve when ∡ lights up;

It indicates that the set temperature allowed has reached the min. valve when \mathbf{Y} lights up.



Maintenance





Protection

Operating condition

The protective device may trip and stop if it is operated outside allowed temperature range.

If the air conditioner runs in COOLING or DRY mode with door or window opened for a long time when relative humidity is above 80%, dew may drip down from the outlet.

Noise pollution

- Install the air conditioner at a place that can bear its weight and ensure the quiet operation.
- Install the outdoor unit at a place where the air discharged and the operation noise would not annoy your neighbors.
- Do not place any obstacles in front of the air outlet of the outdoor unit lest it increases the noise level.

Features of protector

- 1 The protective device will work at following cases.
 - Restarting the unit at once after operation stops or changing mode during operation, please wait for 3 minutes.
 - Connect to power supply and turn on the unit at once, it may start 20 seconds later.
- If all operation has stopped, press ON/OFF button again to restart, Timer should be set again
 if it has been canceled.

Features of HEATING mode

Preheating

At the beginning of HEATING operation, the airflow from indoor unit is discharged 2-5 minutes later.

Defrosting

During HEATING operation the appliance will defrost automatically to improve efficiency. This procedure usually lasts for 2-10 minutes. During defrosting, fans stop operation. After defrosting completes, it returns to "HEATING" mode automatically.

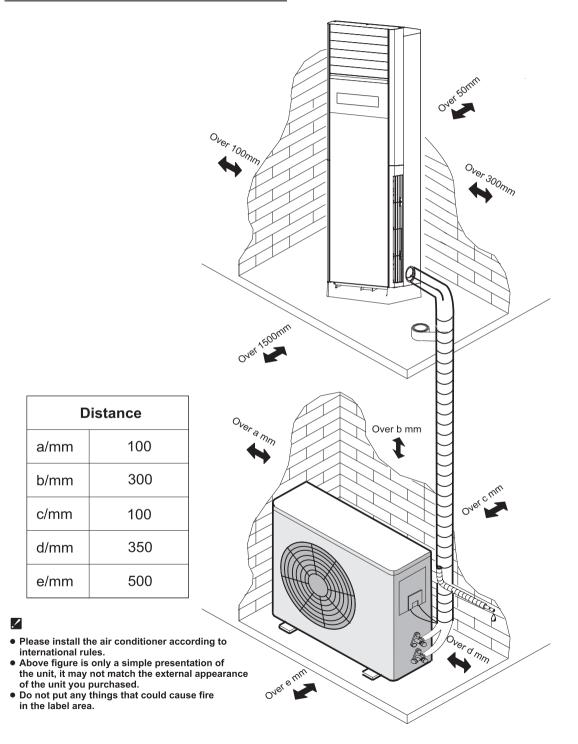
✓ It is hard to increase the room temperature when outdoor temperature is very low. It might take longer time if the working temperature range not closer to the operation limits. Heating is NOT available for cooling only air conditioner models.

Trouble Shooting/

The following cases may not always be a problem, please check it before asking for service.

Trouble	Analysis
Does not run	 If the protector trips or fuse is blown. If the leakage breaker trips. If the plug loosened. Sometimes it stops working to protect the appliance.
Not cool or warm enough	 Is the air filter dirty? Are the intakes and outlets of the air conditioner blocked? Is the temperature set properly?
Ineffective control	If strong interference (from excessive static electricity discharge, power supply voltage abnormality)presents, sometimes operation will be affected. In this case, switch off the breaker and switch on it again 2~3 seconds later.
Does not operate immediately	Shifting to other modes during operation, wait 3 minutes to start.
Peculiar odor	Odor may come from sources such as furniture or cigarette and blown out by the unit.
A sound of running-water	Caused by the flow of refrigerant inside the air conditioner, not a failure.
A "pi-pa" sound can be heard	Caused by the expansion or contraction of the internal components due to temperature changes. That is not a failure.
Blow mist from the outlet	Room air is cooled down by the cold air blown out from the unit and mist thus form during "COOLING" or "DRY" mode when humidity is too high inside.

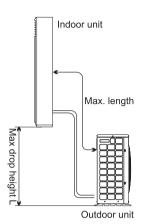
Installation diagram of air conditioner



Installation locations

Location for installing indoor unit

- 1. No obstacle around the air outlet and air flow can spread to the whole room.
- 2. It is easy to arrange connection pipe and drill a wall hole.
- 3. Keep a required distance from the ceiling and wall as illustrated on the figure of the previous page.
- 4. Easy to take down and install the air filter.
- 5. Keep the unit a distance of over 1 meter away from a TV set, radio etc. that may arouse interference.
- 6. Do not put anything around the air intake.
- 7. Install it at a place that can bear the weight of it and would not increase noise and vibration during operation.
- 8. Avoid installing it where there is much oily smoke, salty, sulfide gas, dust and direct sunlight.

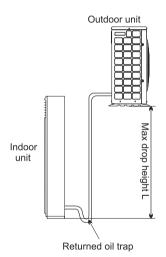


Location for installing outdoor unit

- 1. Install it at a place where it is convenient for installation and well ventilated.
- 2. Keep the required distance away from the wall as required on the previous page when carrying on installation.
- 3. Pipe length and drop height should comply with the scope required below.

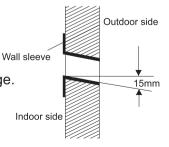
Model	18K	24K	30K/36K
Max. pipe length	20m	30m	30m
Max. drop height	15m	15m	20m
Oil trap	every 5m	every 5m	every 5m

- 4. When operating at a special place, for example, a place of greasy dirt, vulcanization gas or high-salty seashore, make sure to adopt an effective isolation measure.
- 5. Avoid installing it on the roadside where there is a risk of muddy water.
- 6. Install it where your neighbors would not be annoyed by operating noise or discharged hot air.
- 7. Install it on a fixed shelf that is not subject to increasing noise.
- 8. Install it at a place without blockage for air outlet.



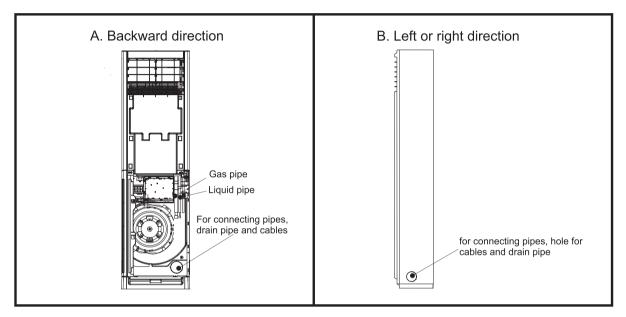
Wall hole

- 1. The hole should slide down towards outside for easy drainage.
- 2. Install the wall sleeve into the wall hole to prevent the pipes and cables from being damaged.
- 3. Put on the attached wall sleeve and sleeve cap to keep the wall tidy and clean.



Pipe direction

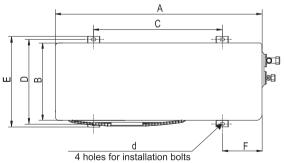
Indoor piping, drainage and wiring can be arrange at 3 optional directions Select a most suitable one for installation convenience.



Outdoor unit installation

- Fix the outdoor unit with 4 bolts, 4 washers and 4 nuts to prevent it from noise and vibration.
- 2. The installation dimensions are as following.

						(1	Unit: mm)
Model Capacity (Btu/h)	А	В	С	D	Е	F	d
18K	810	280	510	310	338	150	10×17
24K	860	310	542	341	368	168	11×17
30K/36K	890	365	662	390	414	112	12×18



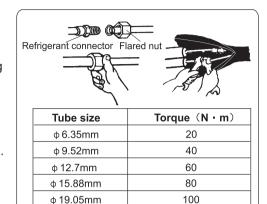
Pipes connection

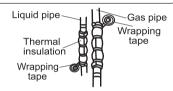
- 1. Remove the air intake grille
 - a. Loosen the 4 Philips screws and remove the air intake grille.
 - b. Reinstall the air intake grille after piping connection of indoor unit has been finished.
- 2. Remove the two flared nuts attached on indoor pipes.
 - a. Draw the connecting pipes from outside of the indoor unit cabinet to inside, and take away the plastic seal caps from their ends.

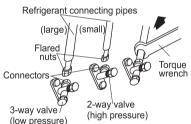


- b. It is convenient to connect to the indoor unit connector with a L-shape pipe.
- 3. Connect the connecting pipes to indoor unit connectors.
 - a. Make sure to keep the indoor pipes and connecting pipes at the same axial line while connecting.
 - b. Turn the flared nuts clockwise with your hands at first, then tighten with torque wrenches.
 - Pay attention to the allowed torque as shown on right table to prevent the pipes, connectors and flared nuts from being deformed and damaged.
- **4. Thermal insulation for connecting joints.** It is advisable to wrap the connecting joints, lest condensate generates and drips. The liquid and gas pipes should be wrapped respectively.
- 5. Connect the connecting pipes to the outdoor unit.
 - a. Remove the flared nuts from 2-way valve and 3-way valve.
 - b. Take away the plastic seal caps from the connecting pipes.
 - c. Tighten the flared nuts with your hands at first, and then with torque wrenches, making sure connectors and the pipes are kept on the same axial line. Pay attention to the torque required.

Model Capacity(Btu/h)	Gas pipe	Liquid pipe	
18K	Φ12.7mm	Φ6.35mm	
24K/30K/36K	Ф 15.88mm	Ф 9.52mm	





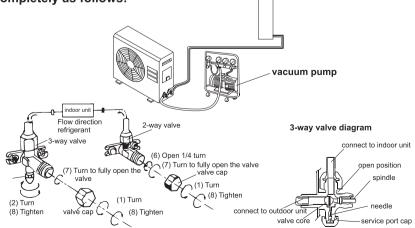


Air exhaust

Air and moisture remains inside the refrigeration system, may has the following bad effects:

- Rise of pressure inside the refrigeration system;
- Decrease of cooling (or heating) effect;
- Moisture frozen and blocking the refrigeration system;
- Rusting of certain parts of the system

After connecting the indoor and outdoor units, it is necessary to exhaust the air inside the pipes completely as follows:



Air exhaust process:

- (1) Unscrew and remove caps from the stop valves.
- (2) Connect vacuum pump flexible hose to the service valve.
- (3) Start vacuum pump for 10-15 minutes until reaching a vacuum of 10mmHg absolutes.
- (4) With vacuum pump still running close the low pressure knob on vacuum pump manifold. Then stop vacuum pump.
- (5) Open 2-way valve 1/4 turn then close it after 10 seconds. Check tightness of all joints using liquid soap or an electronic leak detector.
- (6) Turn 2 and 3-way valves stem to fully the valves. Disconnect vacuum pump flexible hose.
- (7) Replace and tighten all valve caps. After exhausting, use electronic leakage detector or soapsuds to check all pipe connecting portions of outdoor and indoor units.

Charge additional refrigerant

The refrigerant charge volume for the unit is based on using a 5m connecting pipe. If the connecting pipe's length is longer than 5m, it is advisable to charge additional refrigerant for the unit in order to achieve better operation.

Model Capacity(Btu/h)	Additional Refrigerant				
18K	(L-5)X0.015 kg				
24K/30K/36K	(L-5)X0.035 kg				

(* "L" refers to length of connection pipe.)

The additional Refrigerant should be charged from the service port of the 3-way valve when the appliance is operating in cooling mode.

Do not allow air enter the refrigeration system while charging Refrigerant.

Drainage arrangement

- Arrange the drainage pipe from wall to outdoor .
- Slide down the drainage pipe for easy drainage.
- Connect the attached drain hose to indoor drainage pipe and stick them well to prevent condensate from leaking.
- Wrap the indoor part of drainage pipe with thermal insulation material.

Thermal insulation from here to indoor stick here Drain hose

Wrap the piping

- Wrap the connecting pipes and cables together with tape, but not including the drainage pipe. Drainage pipe can be fixed along them separately.
- Wrapping from the joint of outdoor unit to that of indoor unit, each round of tape should cover half of its previous one.

Connecting pipes Cables Drainage pipe

Wiring connection

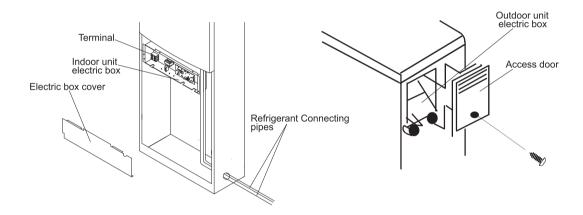
1. Important notice

- It is the user's responsibility to make external wiring connection be finished correctly.
- The external wiring must be conducted by a licensed electrician and complies with local codes or ordinances.
- Special attention must be paid to the power supply (as per rating plate).

- The Suitable power supply of your appliance has been shown on rating label.
- The appliance must ground correctly. The earth wire should be prepared by user.
- Never change the internal wiring of your appliance randomly.

2. Steps of external wiring connection

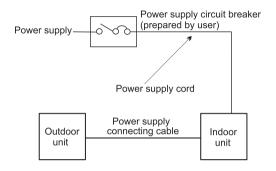
- 1. Remove air intake grille and electric box cover of indoor unit.
- 2. Remove access door of outdoor unit.
- 3. Connect the power supply connecting cable between indoor and outdoor unit. Please refer to the following pages for details.
- 4. Make sure the cables being fixed well with an effective anchorage after connecting.
- 5. Grounding work must be carried out for indoor and outdoor units.
- 6. Install the components removed back to the unit.

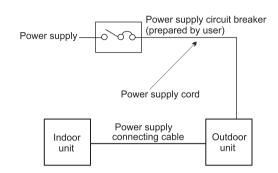


3. External wiring diagrams

► For 18K

For 24K/30K/36K





4. Cable specification

Model Capacity (Btu/h)	Power Supply	ELB		Power Source Cable Size	Connecting Cable Size	Circuit
		Nominal Current(A)	Nominal Sensitive Current (mA)	EN60335-1	EN60335-1	Breaker(A)
18K	220-240V ~,50Hz	20	30	3×2. 5mm²	3×1.5 mm 2	20
24K (Cooling only type)	220-240V ~,50Hz	25	30	3×2. 5mm²	5×1.5mm²	25
24K (Heat pump type)	220-240V ~,50Hz	32	30	3×4. 0mm²	3×0.75 mm ² 3×1.5 mm ² 2×0.3 mm ²	32
30K/36K	220-240V ~,50Hz	40	30	3×4. 0mm²	3×1.5 mm ² 3×1.5 mm ² 2×0.3 mm ²	40



- 1. Above section area for cables is a minimum one. If the connection between indoor and outdoor unit is very long, it is advisable to employ a cable with a larger class to avoid decreasing of voltage.
 - 2. The earth wire for the whole unit should be 4.0mm², and prepared by user.

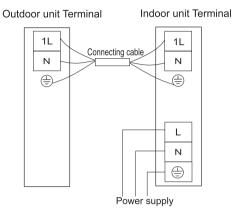
To be in compliance with IEC 61000-3-11, the product shall be connected only to a supply of the system impedance: |Zsys| ≤0.018Ω (for heat pump type). Before connecting the product to public power network, please consult your local power supply authority to ensure the power network meet above requirement.

5. Electrical work

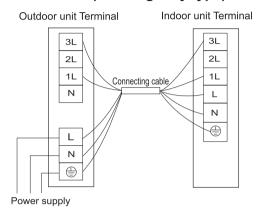
Make sure that the color of wires of the outdoor unit and the terminal No. are the same as those of the indoor unit.

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

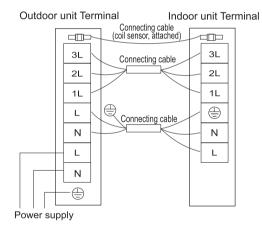
▶ For 18K



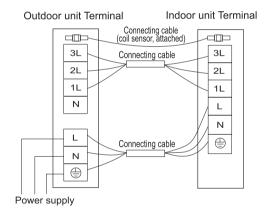
► For 24K(Cooling only type)



► For 24K(Heat pump type)



► For 30K/36K



Test run

Before testing

- a. Check if piping, drainage and external wiring have been finished correctly.
- b. Check if the power supply complies with requirements; if there is refrigerant leakage; if the all wires and cables are correctly connected and well fixed.

Function test

- a. After checking, energize your appliance and press the buttons on the control panel to see if the buttons function;
- b. If screen displays normally.

Notes

- 1. Please read this operating and installation instructions carefully.
- 2. Do not let air in or refrigerant out during installing or reinstalling the appliance.
- 3. Test run the air conditioner after finishing installation and keep the record.
- 4. The air conditioner operates safely when ambient static pressure is 0.8~1.05 standard atmosphere pressure.
- 5. When charging refrigerant into the system, make sure to charge in liquid state. Otherwise, chemical composition of refrigerant inside the system may change and thus affect performance of the air conditioner.
- 6. The circuit of fastness connecting to the user must have all poles broken device (contact clearance is 3mm).

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