



DC Inverter Monoblock Duct Type Air Conditioner

Owner's Manual

Air Conditioners

 **INVERTER**

EPC12-A1
EPE30-A1
EPC30-A1

Thank you for choosing Polaris Technologies Air Conditioners, please read this owner's manual carefully before operation and retain it for future reference.

User Notice



- Never install wired controller in wet place or under sunlight directly.
- Shielding twisted pair line must be adopted as signal line or wiring (communication) of wired controller once the unit is installed in the place where there is electromagnetic interference.
- Make sure communication line is connected into correct port to avoid communication malfunction.
- Never knock, throw or frequently disassemble the wired controller.
- Never operate the wired controller with wet hand.

CONTENT



Safety Considerations	1
1 Unit Function	3
1.1 Setting of Double Indoor Room Sensors	3
2 Installation Instructions	4
2.1 Instructions of Unit Installation	4
2.2 Installation of Unit	6
2.3 Electrical Installation	15
3 Troubleshooting and Maintenance	19
4 Appendix	21

Safety Considerations

Please read this manual carefully before use and operate correctly as instructed in the manual. You are specially warned to note the two symbols below:

-  A symbol indicating that improper operation might cause human death or severe injury;
-  A symbol indicating that improper operation might cause human property damage.

WARNING!

-  Children should be supervised to ensure that they do not play with the appliance.
- 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.
- This unit uses  flammable refrigerant. Engas M60 (Hydrocarbon)
- Should a refrigerant leak occur, the power to the Air-conditioning unit will be turned off and an alarm will sound. When this occurs, please contact your installer immediately.
- Please install at a place strong enough to support the weight of air conditioner unit. If not , the air conditioner unit might fall down and cause human injury or death.
- To ensure proper drainage, the drainage pipe shall be correctly installed according to installation instructions. Take proper measures for heat preservation to prevent condensing. Improper installation of pipes might cause. leakage and wet the articles in the room.
- Do not use or store flammable, explosive, poisonous or other dangerous substances beside the air conditioner.
- In case of trouble (e.g.burnt smell), please immediately cut off the main power of air conditioner unit .
- Keep air flow to avoid shortage of oxygen in the room.
- Never insert your finger or any objects into air outlet and inlet grill.
- Never plug or unplug the power cable directly to start or stop the air conditioning unit.
- Please take constant care to check if the mounting rack is damaged after long use.
- Never modify the air conditioner. Please contact the dealer or professional installation workers for repair or relocation of the air conditioner.
- The appliance shall not be installed in the laundry.
- Before installation, please check the power supply for compliance with the ratings on nameplate. Check the power safety as well (Operating by professional)
- Before use, please check and confirm if the cables , drainage pipes and pipelines are correctly connected, hence to eliminate the risk of water leakage, refrigerant leakage, electric shock or fire.
- Main power must be securely earthed to ensure effective grounding of air conditioner unit and avoid the risk of electric shock. Please do not connect the earth cable to coal gas pipe, water pipe, lightning rod or telephone line.
- Once started, the air conditioner shall not be stopped at least after 5 minutes or longer, otherwise the oil return to compressor may be affected.
- Do not let the child to operate the air conditioner unit.
- Do not operate the air conditioner unit with wet hands.
- Please disconnect the main power before cleaning the air conditioner or replacing the air filter.

- Please disconnect the main power if to put the air conditioner unit out of use for a long period.
- Please do not expose the air conditioner unit directly under corrosive environment with water or moisture.
- Please do not foot on or place any goods on air conditioner unit.
- After electrical installation, the air conditioner unit shall be energized for electrical leakage test.

(Operating by professional)

- 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.
- An all-pole disconnection switch having a contact separation of at least 3mm in all poles should be connected in fixed wiring.
- The appliance shall be installed in accordance with national wiring regulations.
- The temperature of refrigerant circuit will be high, please keep the interconnection cable away from the copper tube.

1 Unit Function

1.1 Setting of Double Indoor Room Sensors

This series of ducted air-conditioning unit has two indoor room sensors. One is located at the air intake of the indoor unit and the other one is located inside the wire controller.

User can select one from the two indoor room sensors on the basis of the engineering requirement.

(Refer to the section of wire controller instructions for detailed operation.)

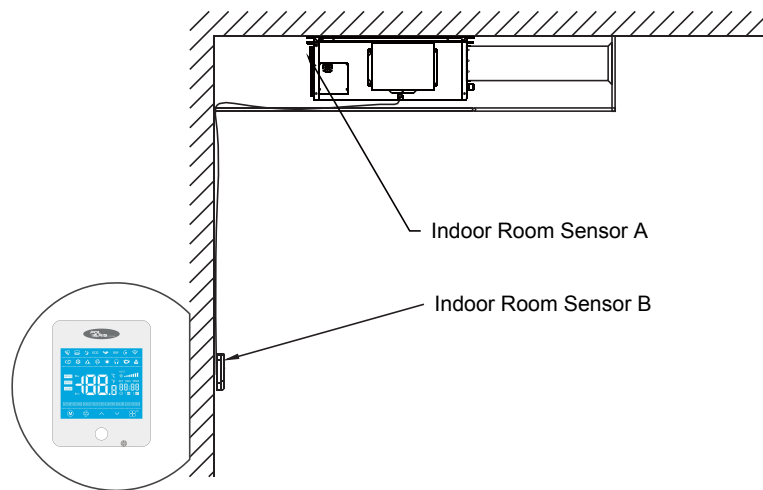


Fig.1

2 Installation Instructions

2.1 Instructions of Unit Installation

2.1.1 Profile Dimensions of Indoor Unit

10 kW EPE30-A1

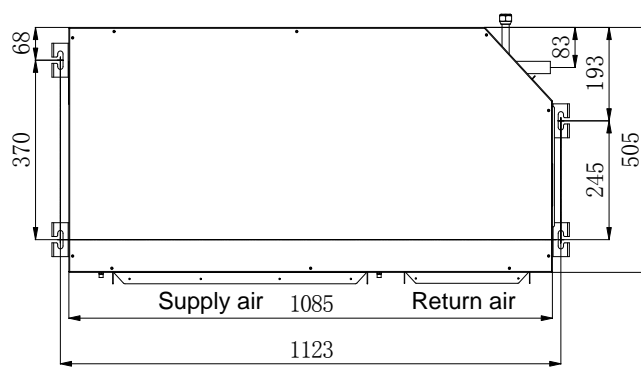
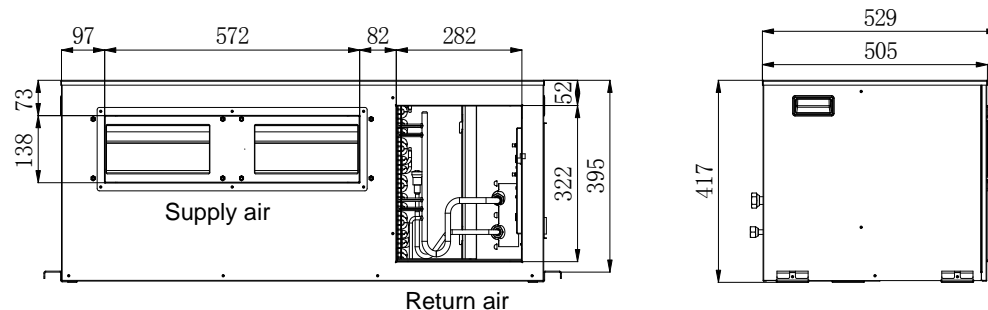


Fig.2

2.1.2 Profile dimensions of outdoor unit

10 kW EPC30-A1

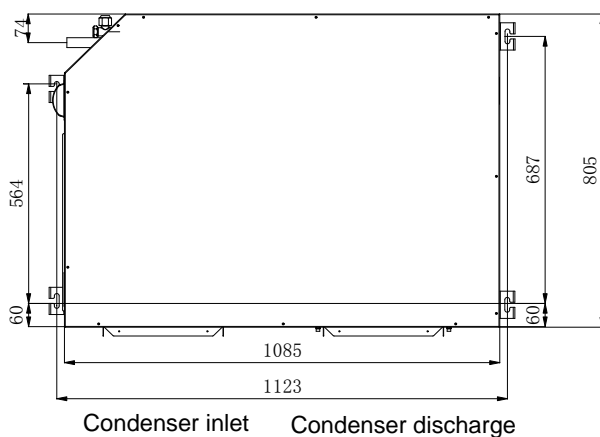
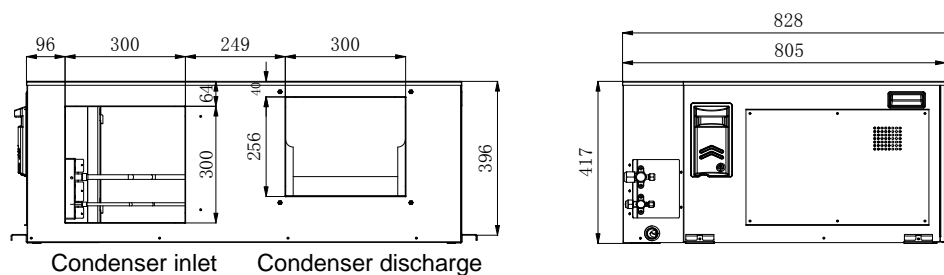
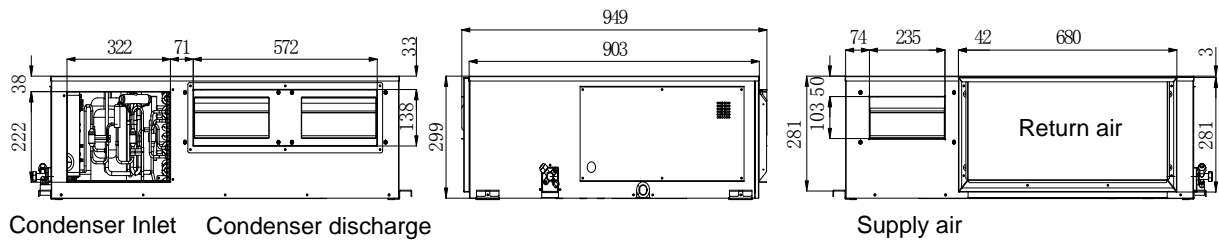
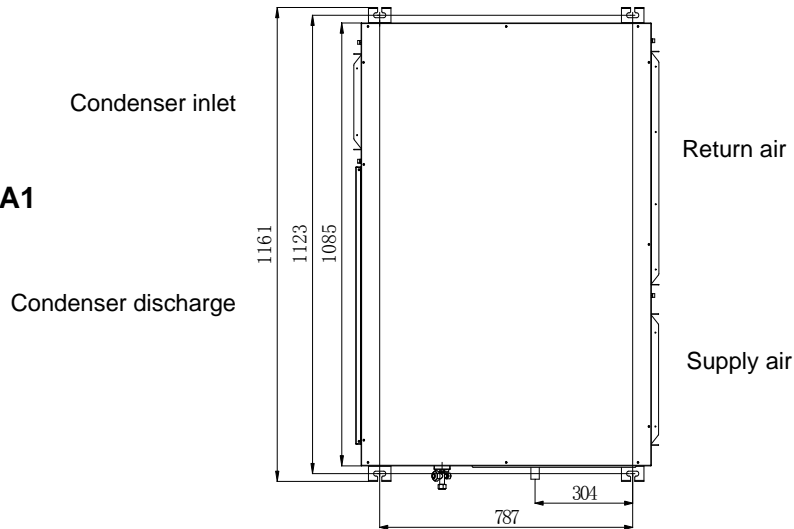


Fig.3

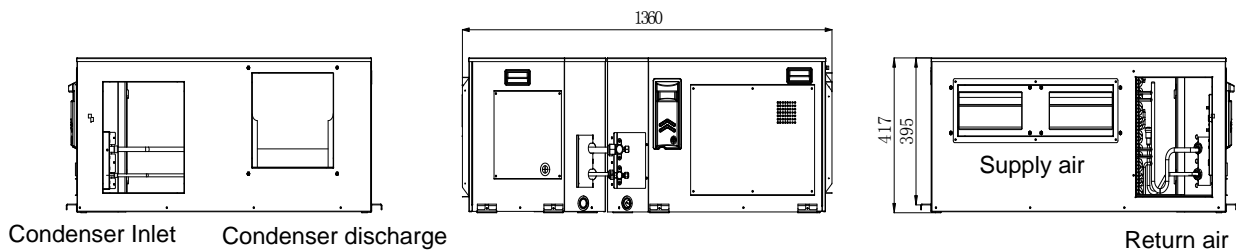
2.1.3 Dimensions of complete Unit



3.5 kW EPC12-A1



Dimensions of complete Unit Fig.4



10 kW EPC30-A1 & EPE30-A1

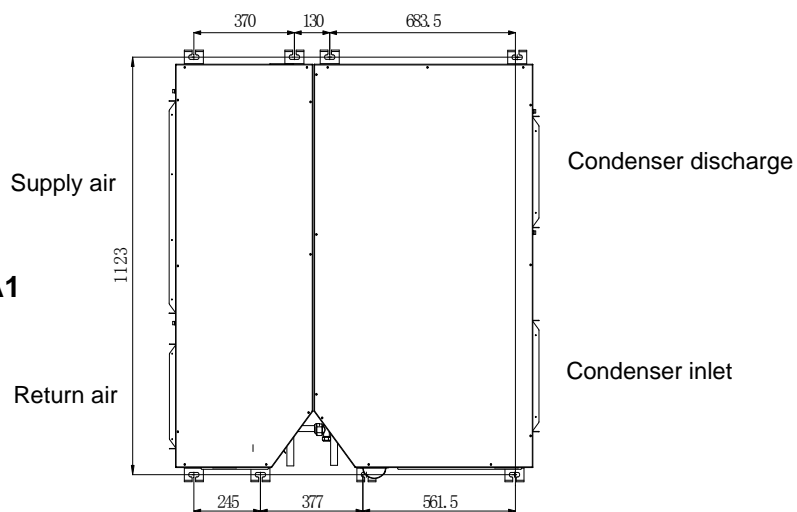


Fig.5

2.2 Installation of Unit

2.2.1 Precautions on Installation

When the outdoor unit and indoor unit are installed separately , They should be installed in the right place .The installation notes are as follows.

2.2.1.1 Precautions on Installation of Outdoor Unit

To ensure the unit in proper function, selection of installation location must be in accordance with following principles:

(1) Outdoor unit shall be installed so that the air discharged by outdoor unit will not return and that

sufficient space for repair shall be provided around the machine.

(2) The installation site must have good ventilation, so that the outdoor unit can take in and exhaust enough air. Ensure that there is no obstacle for the air intake and exhaust of the outdoor unit. If there is any obstacle blocking the air intake or exhaust, remove it.

(3) Place of installation shall be strong enough to support the weight of outdoor unit, and it shall be able to insulate noise and prevent vibration. Ensure that the wind and noise from the unit will not affect your neighbors.

(4) Avoid direct sunshine over the unit.

(5) Place of installation must be able to drain the rainwater and defrosting water.

(6) Place of installation must ensure the machine will not be buried under snow or subject to the

influence of rubbish or oil fog.

(7) The installation site must be at a place where the air exhaust outlet does not face strong wind.

2.2.1.2 Precautions on Installation of Outdoor Unit

(1) Ensure the top hanging piece has strong strength to withstand the weight of the unit. (2) The drainage pipe has convenient flow of water.

(3) There is no obstacle blocking the air intake and exhaust outlet, so as to ensure sound air circulation.

(4) The installation spaces required by the drawing must be ensured, so as to provide enough space for the service and maintenance.

(5) The installation site must be far away from heat source, leakage of inflammable gas or smoke.

(6) The indoor unit is of ceiling mount (indoor unit is hidden inside the ceiling).

(7) The indoor and outdoor units, the power cable and the connecting electrical lines must be at least 1 meter from any TV set or radio. This is to avoid image interference or noise of the TV set or radio. (Even if the distance is 1 meter, noise can also exist if there is strong electric wave.)

2.2.2 Installation method

(1) Insert a M10 expansion bolt into the hole. Drive a nail into the bolt. Refer to the profile dimensions drawing of the indoor unit for the distance between the holes. Refer to Fig. 5 for the installation of the expansion bolt.

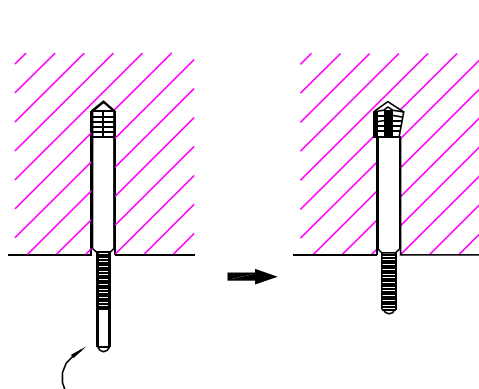
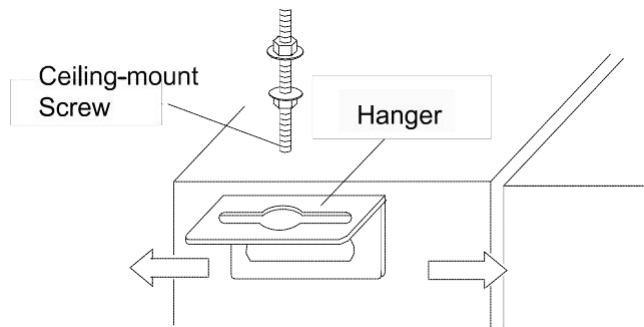


Fig.5



Note: Optional Spring Kit available (recommended)

Fig.6

(2) Install the hanger onto the unit as Fig.6 shows.

(3) Install the unit at the ceiling as Fig.7 shows.

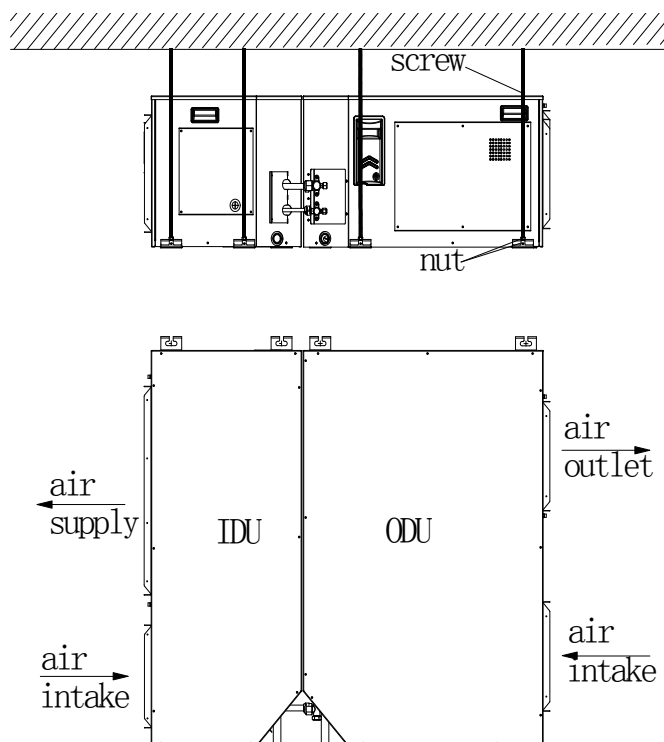


Fig.7

(4) Install the unit Separately (30K) as Fig.8 shows.

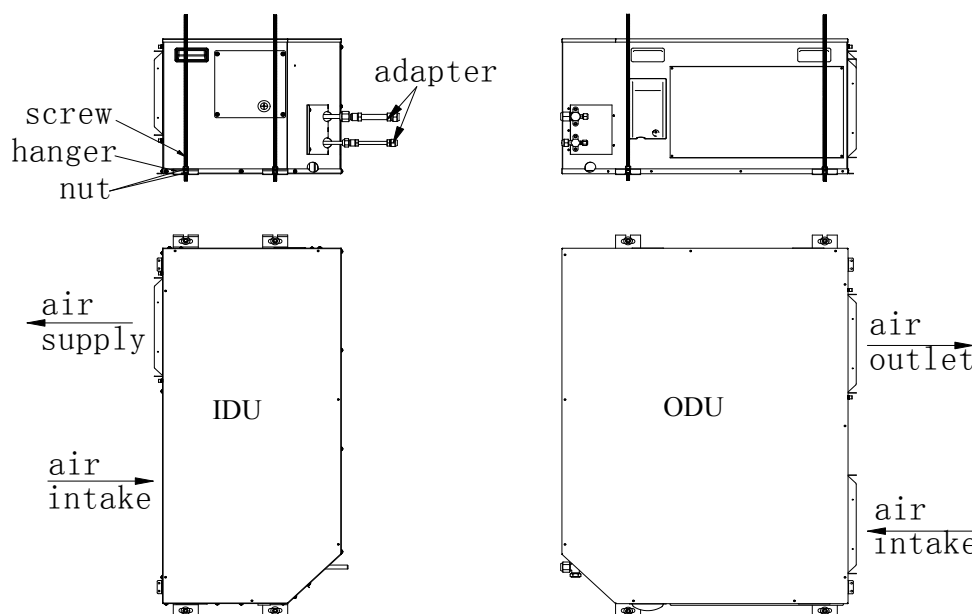


Fig.8



Precautions for unfavorable installation:

- ① The preparation of all pipes (connecting pipes and drainage pipes) and cables (connecting lines of wire controller, indoor unit and outdoor unit) must be ready before the installation, so as to achieve smooth installation.
- ② Drill an opening on the ceiling. Maybe it is required to support the ceiling to ensure the evenness of it and avoid the vibration of it. Consult with the user or a construction company for details.
- ③ In case the strength of ceiling is not enough, use angle iron sections to set up a beam support.

Place the unit at the beam and fix it.

2.2.3 Level Check of the Unit

After the indoor and outdoor unit is installed, it is required to check the level of the whole unit. The unit must be placed horizontally, but the condensate pipe shall be installed obliquely, so as to facilitate the drainage of condensate.

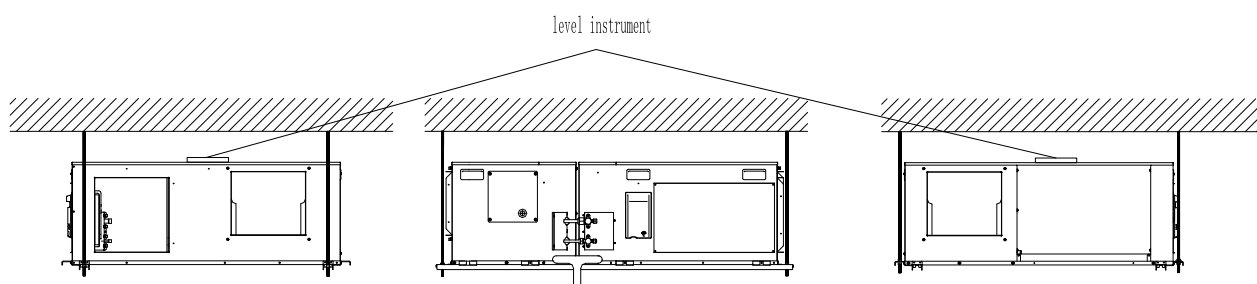
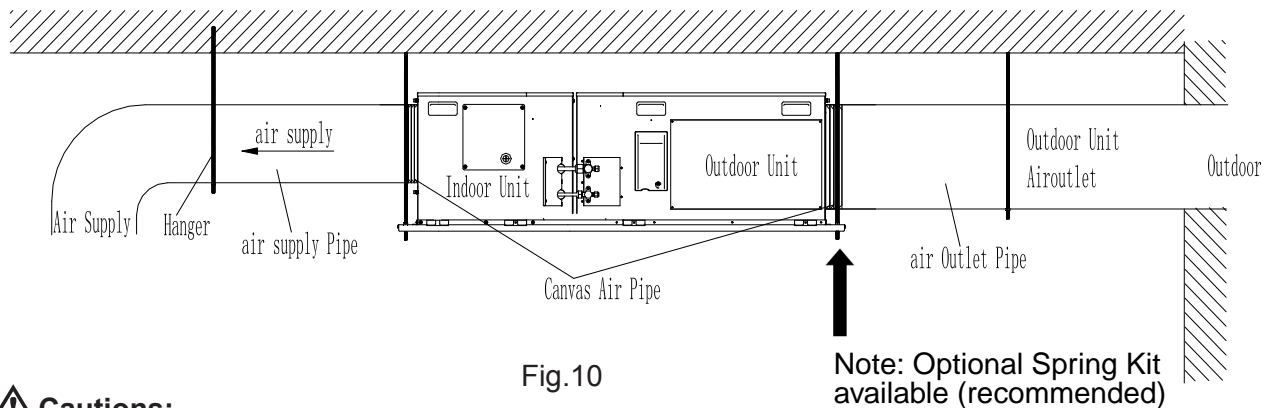


Fig.9

2.2.4 Installation of Rectangular Air Pipe



⚠ Cautions:

- ① The air supply pipe, the air intake pipe and the fresh air pipe must be covered with a layer of thermal insulation, so as to avoid thermal leakage and condensation. Firstly apply liquid nail on the pipes, then attach the thermal insulation cotton with a layer of tinfoil. Use the liquid nail cover to fix it. Lastly use tinfoil adhesive tape to carefully seal the joints; other good thermal insulation materials can also be used.
- ② The air supply pipes and the air intake pipes shall be fixed to the prefabricated boards of the ceiling by using iron supports. The joints of the pipes must be sealed by glue so as to avoid leakage.
- ③ The design and installation of air pipes must be in conformity with the relevant state engineering criteria.
- ④ The edge of the air intake pipe must be at least 150mm away from the wall. The air intake must be covered with filter.
- ⑤ Silencing and shock absorption shall be considered in the design and installation of the air pipes. Additionally, the noise source must be far away from where people stay. The air intake shall not be located above the place where users stay (offices and rest places, etc.)

2.2.5 Installation of Drainage Pipeline

- (1) The Drainage Pipeline shall be installed with an inclining angel of 5~10°, so as to facilitate the drainage of condensate. The joints of the Drainage Pipeline must be covered by thermal insulation materials to avoid generation of exterior condensate. (As shown in Fig.39)
- (2) A Drainage outlet is located at both the left and right sides of the indoor unit. After selecting one Drainage outlet, the other outlet shall be blocked by rubber plug. Bundle the blocked outlet with string to avoid leakage, and also use thermal insulation materials to wrap the blocked outlet.
- (3) When shipped out from factory, both the Drainage outlets are blocked by rubber plugs.
- (4) When connecting the drainage pipe with the unit, do not apply excessive force to the pipeline at the side of the unit. The fixing position of the pipeline shall be near the unit.
- (5) Purchase general-purpose hard PVC pipe locally to be used as the drainage pipeline. When carrying out connection, place the end of the PVC pipeline into the drainage hole. Use flexible

drainage tube and tighten it with thread loop. Never use adhesive to connect the drainage hole and the flexible drainage tube.

(6) When the laid drainage pipe is used for multiple units, the common pipe shall be about 100mm lower than the drainage outlet of each set of unit. A pipe with thicker wall shall be used for such purpose.

2.2.6 Pipe Preparation

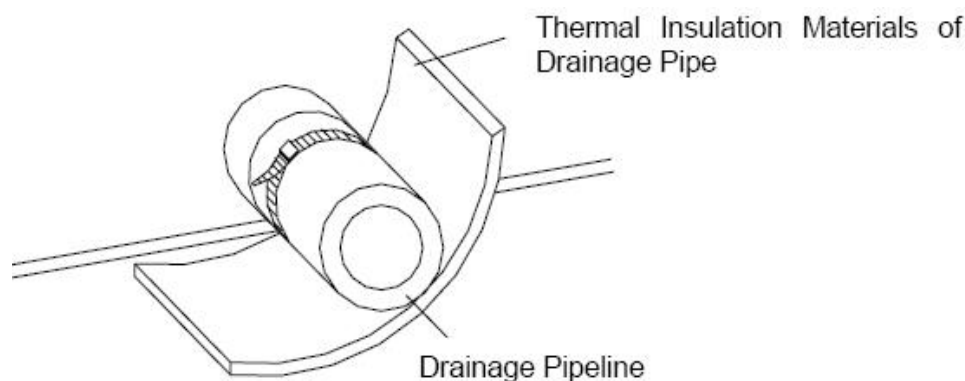


Fig.11 Thermal Insulation of Drainage Pipeline

Cautions: The joint of Drainage Pipeline must not have leakage.

2.2.7 Testing of Drainage System

- (1) After the electrical installation is completed, carry out the testing of the drainage system.
- (2) During the test, check if the water correctly flows through the pipelines. Carefully observe the joints to ensure that there is no leakage. If the unit is to be installed in a new house, carry out testing before decorating the ceiling.

2.2.8 Selection of Connecting Pipe (for 30k)

The refrigerant is R410A

Table 1

Model	Size of Fitting Pipe (Inch)		Ma. Pipe Length (m)	Max.Height Difference between Indoor Unit and Outdoor Unit (m)	Amount of Additional Refrigerant to be Filled (For Extra Length of Pipe)
	Liquid	Gas			
EPE30-A1	3/8	5/8	30	15	36 g/m

Note:

- ① The standard pipe length is 5m. When the length (L) of the connecting pipe is less than or equals 7m, there is no need to add refrigerant. If the connecting pipe is longer than 7m, it is required to add refrigerant. In the above table, the amounts of refrigerant to be added for the models are listed for each additional meter of pipe length.
- ② The pipe wall thickness shall be 0.5-1.0 mm and the pipe wall shall be able to withstand the pressure of 6.0 MPa.
- ③ The longer the connecting pipe, the lower the cooling effect and the heating effect.

2.2.9 Connection of Pipeline

- (1) Align the flared end of the copper pipe with the center of the thread joint. Manually tighten the flared end nut.
- (2) Use torque spanner to tighten the flared end nut until the spanner clatters (Fig.12).

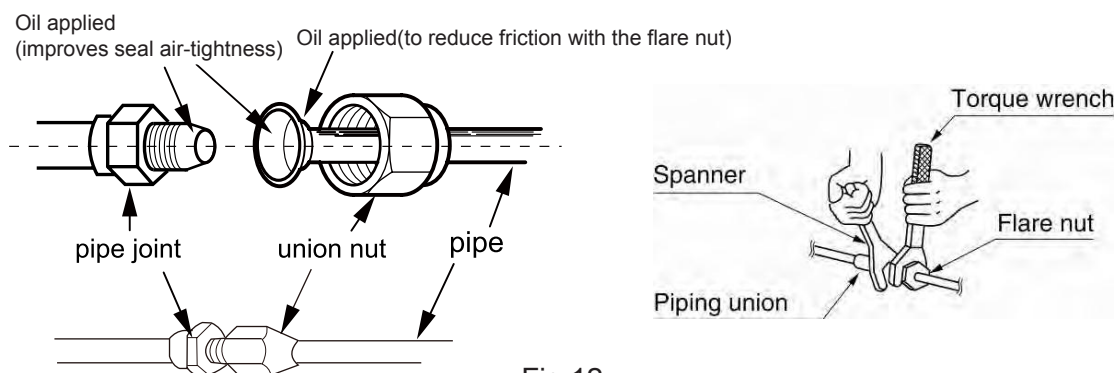


Fig.12

The following table describes the torques for tightening nuts of different pipe diameters.

Table 2

Pipe Diameter	Tightening Torque
3/8 (Inch)	35-40 (N·m)
5/8 (Inch)	60-65 (N·m)

- (3) The bending angle of the fitting pipe shall not be too large, and otherwise the pipe may break. Please use a bender when bending the fitting pipes.
- (4) Use sponge to wrap the connecting pipe and joint, Then use plastic tape to bundle the sponge.

2.2.10 Air Purging

The purpose of the air purging is to get rid of moisture and air in the system, otherwise moisture and air may cause ineffectiveness of the compressor which directly affects the cooling capacity.

(1) Purging by Using Vacuum

- Take out the nut cover of the inlet for refrigerant.
- Connect the tube of the vacuum watch with the vacuum pump, having the low-pressure end linking to the inlet for refrigerant. As shown in figure on right.
- Starting the vacuum pump, when the indicator turns to -1 bar, closing the low pressure handle and stopping vacuum. Keep for 15 minutes, ensuring the pressure of the vacuum watch remains.
- Take out the value cover of the gas valve together with the liquid valve.
- Loosing the cord of liquid valve until the pressure rise to 0 bar.
- Dismantle the tube from the cover of the inlet for refrigerant then, tighten the cover.
- Loose the valve cord of the gas valve as well as the liquid valve entirely.
- Tighten the valve cover of the gas valve and liquid valve so as to check whether leakage occurred.

Note: This unit uses Engas M60 flammable refrigerant

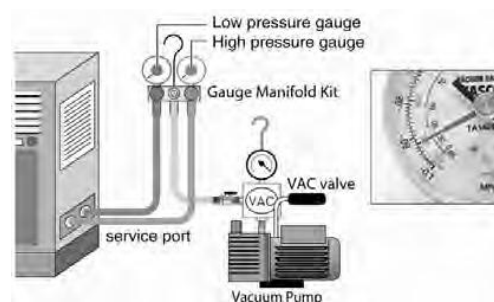


Fig.13

(2) Gap Leakage Check

Check if it leaks or not by applying soapsuds on every joint and then inspect carefully. After the check, wipe them off completely. Cover the indoor unit joint with pipe insulation and four plastic bands to prevent condensing at joints

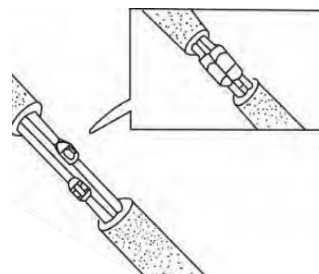


Fig.14

2.2.11 Installation of Protective Layer of Connecting Pipe

- (1) To avoid generation of condensate on the connecting pipe and avoid leakage, the big pipe and the small pipe of the connecting pipe must be covered by thermal insulation materials, be bundled by adhesive tape, and be isolated from air.
- (2) The joint connecting to the indoor unit must be wrapped by thermal insulation material. There shall be no gap between the connecting pipe joint and the wall of the indoor unit. Refer to Fig.46.

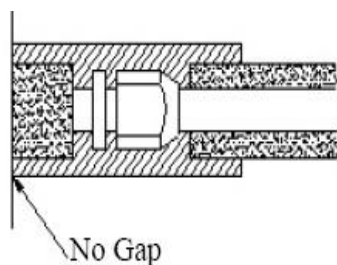


Fig.15

Cautions:

After the pipes are wrapped by protective materials, never bend the pipes to form very small angle, and otherwise the pipes may crack or break.

- (3) Use adhesive tape to wrap the pipes:

- 1) Use adhesive tape to bundle the connecting pipe and the cables together. To prevent condensate from overflowing out from the drainage pipe, separate the drainage pipe from the connecting pipe and the cables.
- 2) Use thermal insulation tape to wrap the pipes from the bottom of the outdoor unit until the upper end of the pipe where the pipe enters the wall. When wrapping thermal insulation tape, the later circle of tape must cover half of the front circle of tape (Refer to Fig.46).
- 3) Wrapped pipe must be fixed to wall using pipe clamps.

Cautions:

- ① Do not wrap the protective tape too tight, and otherwise the efficiency of thermal insulation may be decreased. Ensure that the condensate drainage flexible tube is separate from the bundled pipes.
- ② After the protective work is completed and the pipes are wrapped, use seal material to block the hole in the wall, so as to prevent rain and wind from entering the room.

2.2.12 Position and Method of Installing Wire Controller

- (1) One end of the control wire of the wire controller is connected with main board of electric box of indoor unit inside, it should be tightened by wire clamp, the other end should be connected with the wire controller (installation sketch map as shown in below). The control wire be used for the indoor unit and wire controller, which is special, the length is 8 meters, the material be adopted for the control wire should be metallic substance. The wire controller could not be disassembled and the control wire be used for the wire controller should not be changed by users optionally, the installation and maintenance should be carried out by the professional personnel.

- (2) First select an installation position. According to the size of the control wire of the wire controller, leave a recess or a embedded wire hole to bury the control wire.
- (3) If the control wire between the wire controller and the indoor unit is surface-mounted, use 1# metallic pipe and make matching recess in the wall (refer to Fig.16; If concealed installation is adopted, 1# metallic pipe can be used (Refer to Fig.17).
- (4) No matter if surface mounting or concealed mounting is selected, it is required to drill 2 holes (in the same level) which distance shall be the same as the distance (60mm) of installation holes in the bottom plate of the wire controller. Then insert a wood plug into each hole. Fix the bottom plate of the wire controller to the wall by using the two holes. Plug the control wire onto the control panel. Lastly install the panel of the wire controller.

Caution:

During the installation of the bottom plate of the wire controller, pay attention to the direction of the bottom plate. The plate's side with two notches must be at the lower position, and otherwise the panel of the wire controller cannot be correctly installed.

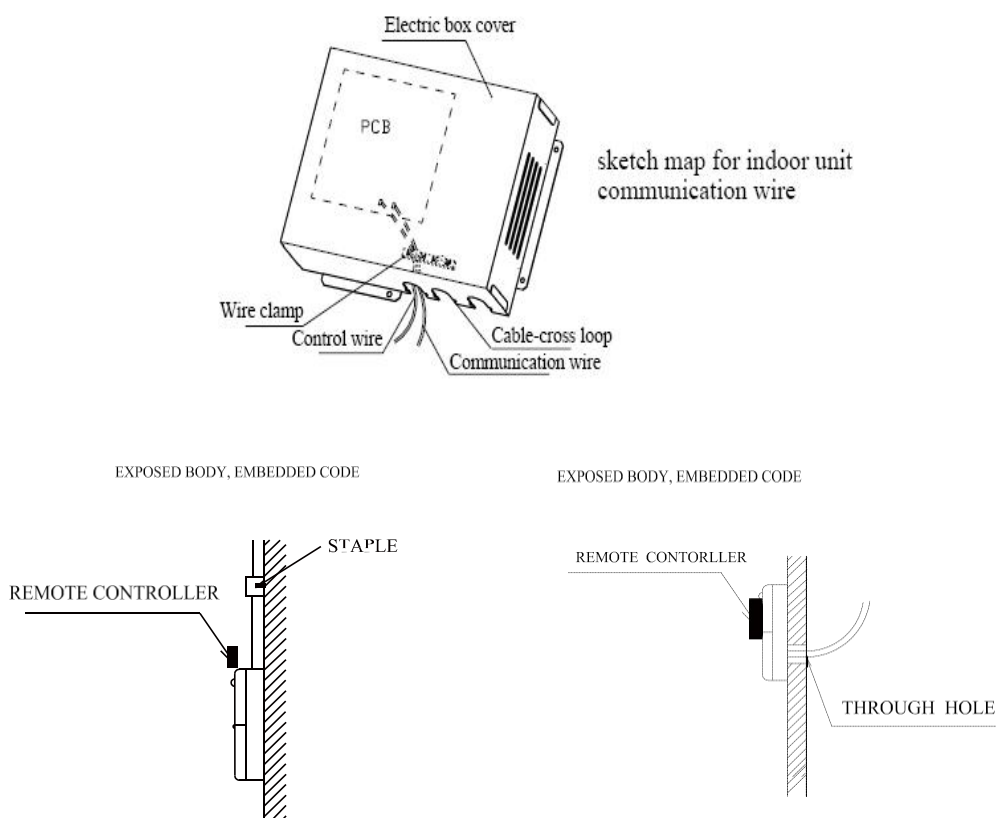


Fig.16 Surface mounting of Cable

Fig.17 Concealed mounting of Cable

⚠ Cautions:

- ① The communication distance between the main board and the wire controller is 8 meters.
- ② The wire controller shall not be installed in a place where there is water drop or large amount of water vapor.

2.3 Electrical Installation

Cautions:

Before installing the electrical equipment, please pay attention to the following matters which have been specially pointed out by our designers:

- ① Check to see if the power supply used conforms to the rated power supply specified on the nameplate.
- ② The capacity of the power supply must be large enough. The section area of fitting line in the room shall be larger than 2.5mm².
- ③ The lines must be installed by professional personnel.

An electricity leakage protection switch and an air switch with gap between electrode heads larger than 3mm shall be installed in the fixed line.

(1) Connection of signal wire

- 1) Use wire stripper to strip the insulation layer (25mm long) from the end of the signal wire.
- 2) Remove the screw at the terminal board of the air-conditioning unit.
- 3) Use pliers to bend the end of the signal wire so that a loop matching the screw size is formed.
- 4) Put the screw through the loop of the signal wire and fix the loop at the terminal board.

(2) Connection of multiple twisted wires

- 1) Use wire stripper to strip the insulation layer (10mm long) from the end of the multiple twisted wires.
- 2) Remove the screw at the terminal board of the air-conditioning unit.
- 3) Use crimping pliers to connect a terminal (matching the size of the screw) at the end of the multiple twisted wires.
- 4) Put the screw through the terminal of the multiple twisted wires and fix the terminal at the terminal board.

Warning:

If the power supply flexible line or the signal line of the equipment is damaged, only use special flexible line to replace it.

- ① Before connecting lines, read the voltages of the relevant parts on the nameplate. Then carry out line connection according to the schematic diagram.
- ② The air-conditioning unit shall have special power supply line which shall be equipped with electricity leakage switch and air switch, so as to deal with overload conditions.
- ③ The air-conditioning unit must have grounding to avoid hazard owing to insulation failure.
- ④ All fitting lines must use crimp terminals or single wire. If multiple twisted wires are connected to terminal board, arc may arise.
- ⑤ All line connections must conform to the schematic diagram of lines. Wrong connection may cause abnormal operation or damage of the air-conditioning unit.

- ⑥ Do not let any cable contact the refrigerant pipe, the compressor and moving parts such as fan.
- ⑦ Do not change the internal line connections inside the air-conditioning unit. The manufacturer shall not be liable for any loss or abnormal operation arising from wrong line connections.

2.3.1 Power Cable Connection

(1) Air-conditioning unit with single-phase power supply

- 1) Remove the front-side panel of the outdoor unit.
- 2) Pass the cable through rubber ring.
- 3) Connect the power supply cable to the “L, N” terminals and the grounding screw on the metal electric box.
- 4) Use cable fastener to bundle and fix the cable.

(2) Air-conditioning unit with 3-phase power supply

- 1) Remove the front-side panel of the outdoor unit.
- 2) Attach rubber ring to the cable-cross hole of the outdoor unit.
- 3) Pass the cable through rubber ring.
- 4) Connect the power cable to the terminal marked “L1,L2,L3 & N”. Connect earth wire to the earthed terminal screw on the electric box.
- 5) Use cable fastener to bundle and fix the cable.

Cautions:

Take great care when carrying out the following connections, so as to avoid malfunction of the air-conditioning unit because of electromagnetic interference.

- ① The signal line of the wire controller must be separated from the power line and the connecting line between the indoor unit and the outdoor unit.
- ② In case the unit is installed in a place vulnerable by electromagnetic interference, it is better to use shielded cable or double-twisted cable as the signal line of the wire controller.

2.3.2 Connection of Signal Line of Wire Controller

- (1) Open the cover of the electric box of the indoor unit.
- (2) Pull the signal cable of the wire controller through the rubber ring.
- (3) Plug the signal line of the wire controller onto the 4-bit pin socket at the circuit board of the indoor unit.
- (4) Use cable fastener to bundle and fix the signal cable of the wire controller.

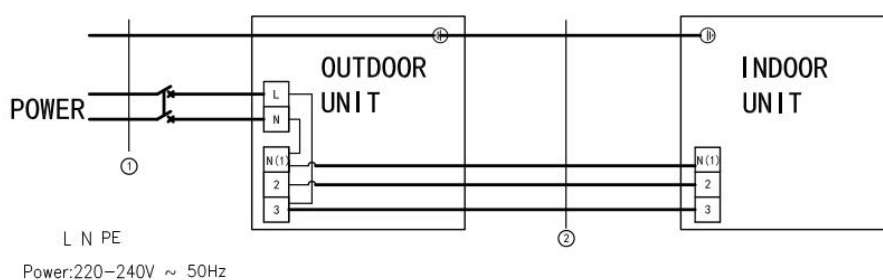
2.3.3 Cable Connecting Diagram of Unit

Electric wiring connection:

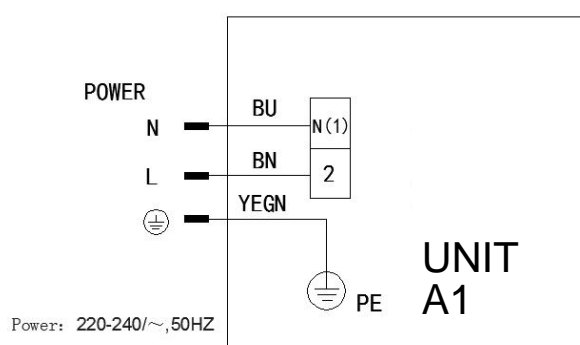
The section area of cables selected by users must not be smaller than the specifications shown diagram.

Power: 220-240/~,50HZ

EPE30-A1
1 Power cord 3×2.5 mm ²
2 Power cord 4×0.75mm ²
EPC12-A1
1 Power cord 3×1.5 mm ²



Connecting Diagram of Unit A1



Connecting Diagram of Unit A1

The following table recommended by the model selection manual is about how to select the air switch and power cable.

Warning! The section area of cables selected by users must not be smaller than the specifications shown in the table below.

Table.3

Model	Power Supply	Capability of Air Switch(A) (Outdoor)	Minimum Sectional Area Of Earth Wire (Outdoor/Indoor) (mm²)
EPE30-A1	220-240/~,50HZ	25	2.5/0.75
EPC12-A1	220-240/~,50HZ	16	1.5

- (1) The specifications of the breaker and power cable listed in the table above are determined based on the maximum power (maximum amps) of the unit.
- (2) The specifications of the power cable listed in the table above are applied to the conduit-guarded multi-wire copper cable (like, YJV copper cable, consisting of PE insulated wires and a PVC cable jacket) used at 40°C and resistible to 90°C(see IEC 60364-5-52). If the working condition changes, they should be modified according to the related national standard.
- (3) The specifications of the breaker listed in the table above are applied to the breaker with the working temperature at 40°C. If the working condition changes, they should be modified according to the related national standard.

3 Troubleshooting and Maintenance

If your air-conditioning unit suffers from abnormal operation or failure, please first check the flowing points before repair:

Table 4


Failure	Possible Reasons
The unit cannot be started.	① The power supply is not connected. ② Electrical leakage of air-conditioning unit causes tripping of leakage switch. ③ The operating keys are locked. ④ The control loop has failure.
No power to unit and alarm is sounding	A gas leak has been detected. Contact your installer and do not use the Air conditioner.
Poor cooling effect.	① The air filter is dirty or blocked. ② There is heat source or too many people inside the room. ③ The door or window is open. ④ There is obstacle at the air intake or outlet. ⑤ The set temperature is too high thus cooling is hindered. ⑥ There is refrigerant leakage. ⑦ The performance of room temperature sensor becomes worse
Poor heating effect	① The air filter is dirty or blocked. ② The door or window is not firmly closed. ③ The set room temperature is too low thus heating is hindered. ④ There is refrigerant leakage. ⑤ The outdoor ambient temperature is lower than -5°C. ⑥ Control line is abnormal.

Note: After carrying out the check of the above items and taking relevant measures to solve the problems found but the air-conditioning unit still does not function well, please stop the operation of the unit immediately and contact the local service agency designated by Pioneer air. Only ask professional serviceman to check and repair the unit.

Routine Maintenance

(1) Cleaning the Air Filter(Operating by the professional)

- 1) Do not disassemble the air filter when cleaning it. Otherwise failure may be caused
- 2) If the air-conditioning unit is used in an environment with much dust, you should clean the air filter frequently (once every two weeks).

 **Cautions:** You shall pay attention to the following matters when cleaning the air-conditioning unit.

- Cut off all power supply before contacting the line connecting equipment.
- Only clean the air-conditioning unit after the unit is shut off and the power supply is disconnected. Otherwise electrical shock or injury may be caused.
- Do not use water to clean the air-conditioning unit. Otherwise there may be electrical shock.
- Take care when cleaning the air-conditioning unit. Use a steady stepping stand.

(2) Maintenance at the Beginning of Operating Season

- 1) Check the air inlet and outlet of the indoor and outdoor units to confirm there is no blockage.
- 2) Check to see if the grounding wire is in good condition; (Operating by the professional)
- 3) Check to see if the line connection is in good condition ;(Operating by the professional)
- 4) Check if there is any word displaying on the LCD of the wire controller after connecting the unit to power supply.

Note: If there is any abnormal condition, ask after sales to offer guidance.

(3) Maintenance at the End of the Operational Season

- 1) When the weather is clear, operate the unit under fan mode for half a day, so as to dry the inside of the unit.
- 2) If not to use the air-conditioning unit for a long time, please cut off the power supply. Now the words on the LCD of the wire controller shall disappear.

4 Appendix

Air conditioner nominal working condition and working range:

Table 12

Test condition	Indoor side		Outdoor side	
	DB(°C)	WB(°C)	DB(°C)	WB(°C)
Nominal cooling	27	19	35	24
Nominal heating	20	—	7	6
Rated cooling	32	23	48	—
Low temp cooling	21	15	18(-15)	—
Rated heating	27	—	24	18
Low temp heating	20	—	-7	-8

Note:

- ① The design of this unit conforms to the requirements of EN14511 standard.
- ② The air volume is measured at the relevant standard external static pressure.
- ③ Cooling (heating) capacity stated above is measured under nominal working conditions corresponding to standard external static pressure. The parameters are subject to change with the improvement of products, in which case the values on nameplate shall prevail.
- ④ In this table, the outdoor side DB temperature of low temp cooling include two values, the one in the bracket is the working condition of the appliance with function of low temp cooling.



This product must not be disposed together with the domestic waste. This product has to be disposed at an authorized place for recycling of electrical and electronic appliances.

Polaris Technologies Pty Ltd

Building No. 5
49 Frenchs Forest Road
Frenchs Forest NSW 2086
Australia
1300 782 761
sales@polaristechnologies.com.au
www.polaristechnologies.com.au