

**SPLIT WALL UNIT ROOM DUCTLESS THERMO PUMP**

**INSTALLATION MANUAL**

**(INVERTER TYPE)**

Please read this manual thoroughly before installing and operating this unit.

Installation must be performed in accordance with the national wiring Standards by authorized personnel only.

Contact an authorized service technician for repair or maintenance of this unit.

The appliance is not intended for use by young children without supervision, Young children should be supervised to ensure that they do not play with Appliance.

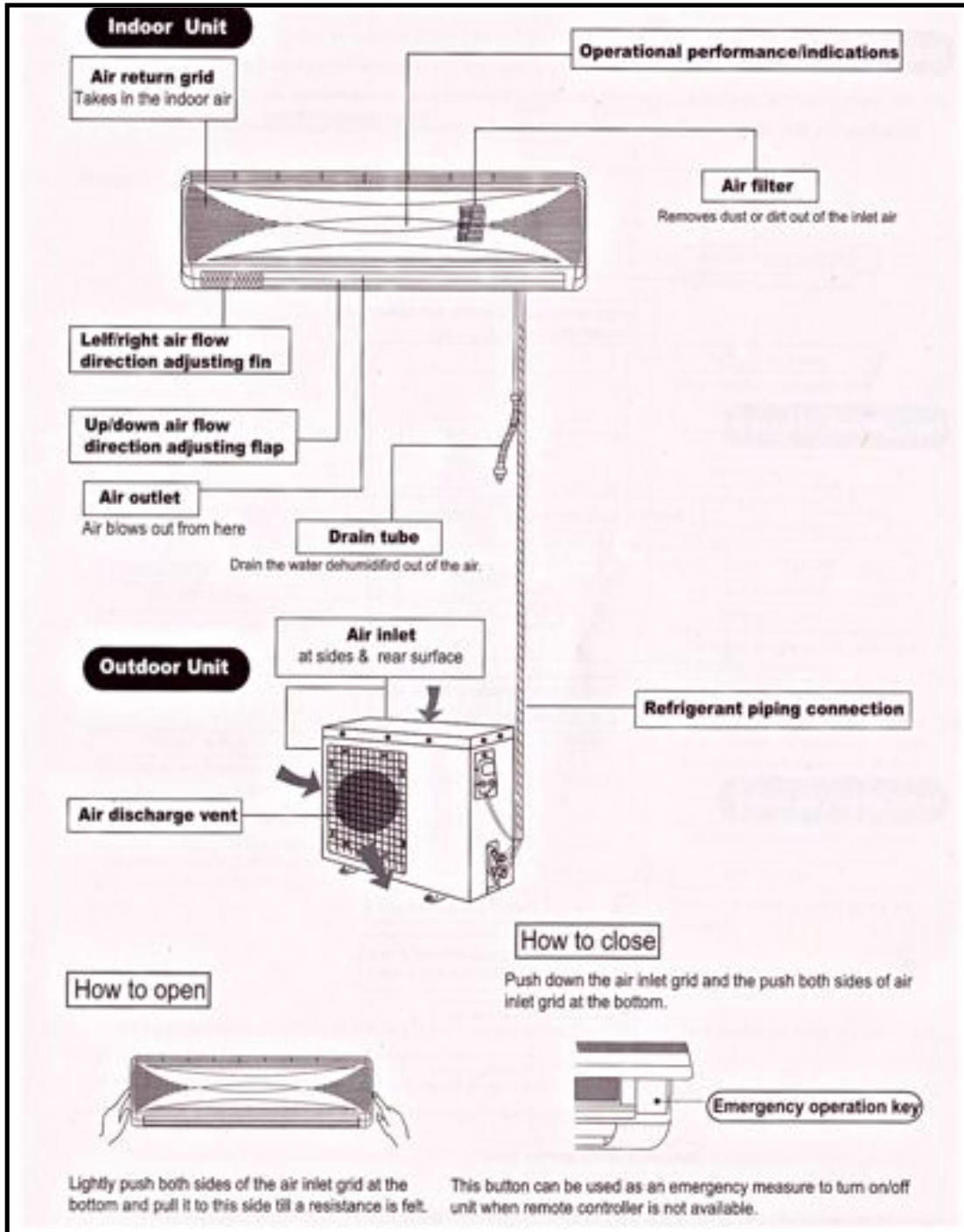
## Forward

Thermo pumps should be installed by qualified installers only. This instruction manual is a universal version for the models of the split wall-mounted thermo pumps manufactured by our Co. The appearance of the units that you purchase may differ from the ones described in the manual, this does not affect proper operations and usage. Please note, faulty installation will not be covered by the warranty. Improper installation will cause water leakage, electrical shock, or fire. The unit must be installed in an easily accessible area. Any additional cost required for special equipment to service the unit will be the responsibility of the customer.

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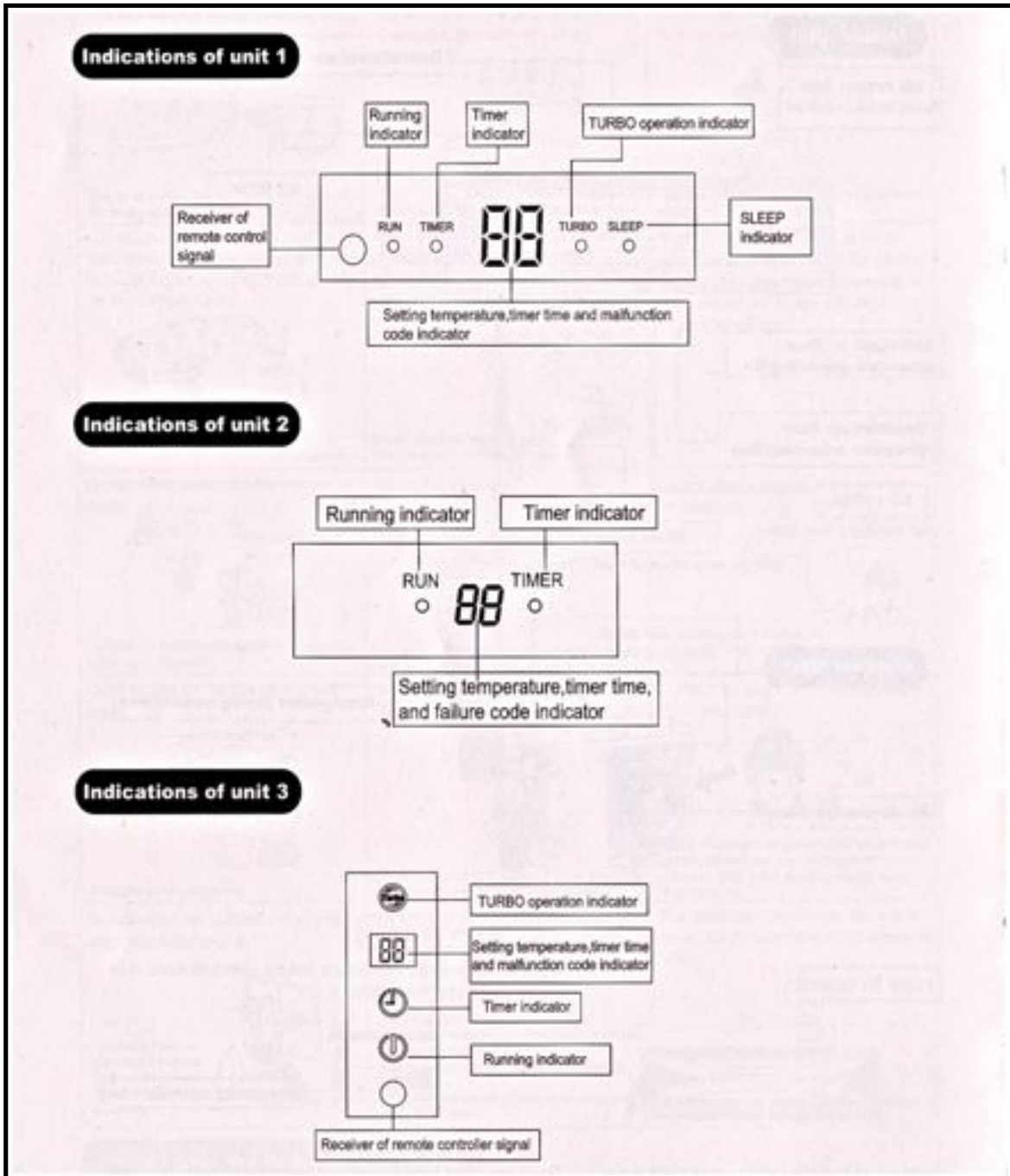
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## Description of Parts

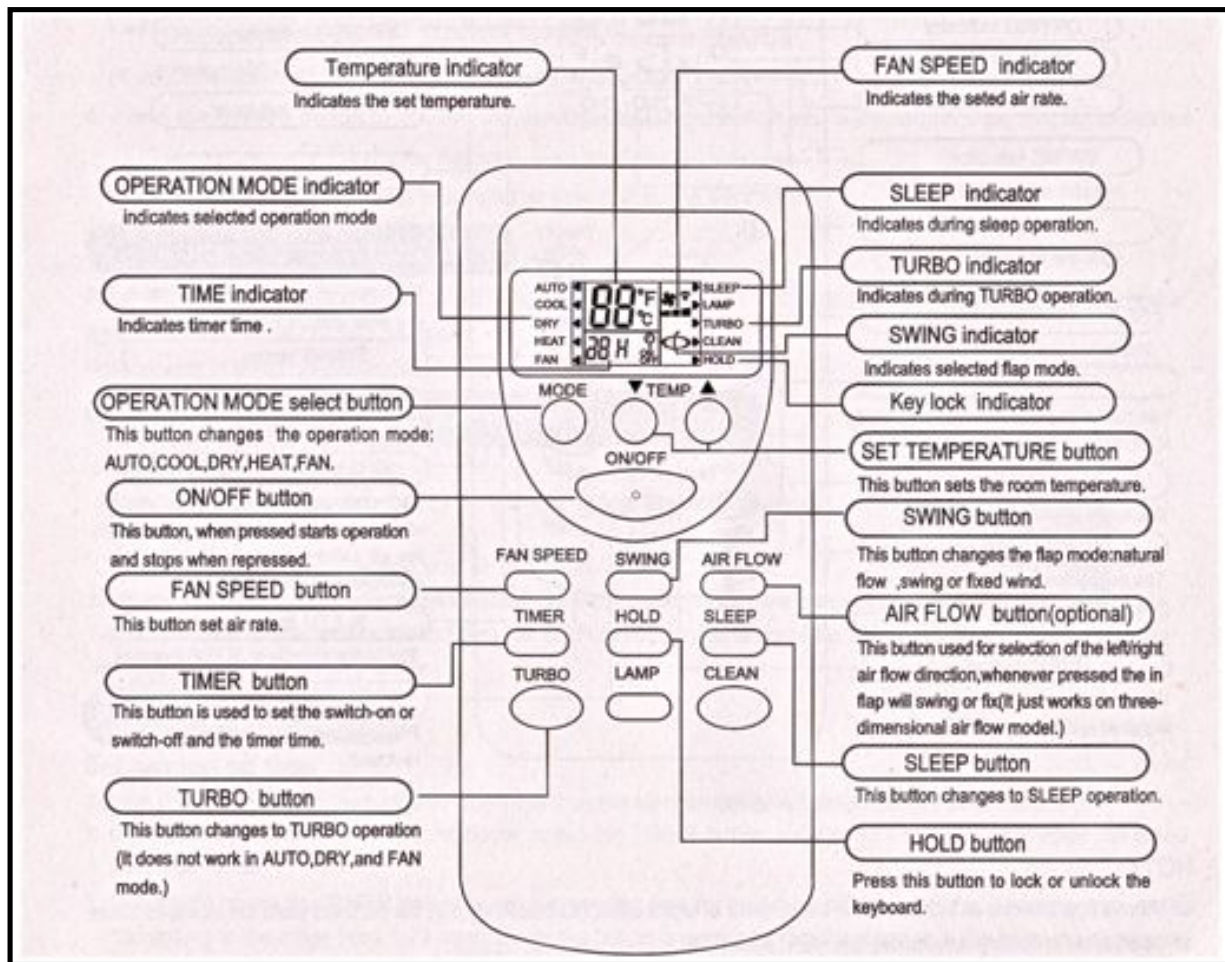


Appearance and features may vary between models. Do not open the grid at an angle over 60 degrees. Do not operate the unit with too much force.

## Description of Parts



## Description of Parts



NOTE: When TERBO operation is selected, room temperature is not controlled. Cancel the TURBO operation if the room is too hot or cold.

# Installation of Indoor and Outdoor Unit

## Indoor Unit

Do not expose the indoor unit to sunlight, heat or steam.

Select a place where there are no obstacles in front or around the unit.

Make sure the condensation drainage can be conveniently routed away.

Do not install near a doorway.

Ensure that the space on the left and right of the unit is more the 12cm.

Use a stud finder to locate studs to prevent unnecessary damage to the wall. The unit should be installed on the wall where the height from the floor to the ceiling is 2.3 meters or more.

A minimum pipe run of 3 meters is required to minimize vibration and excessive noise.

The indoor unit should be installed on the wall at a height of 2.3 meters or more from the floor and a minimum clearance of 15 cm from the ceiling.

## Outdoor unit

Ensure that the clearance around the back of the unit is more than 60cm and the left side is more than 10cm. The front of the unit should have more than 100cm of clearance and the connection side should have more than 60cm of clearance.

If a cover is built over the outdoor unit to prevent direct sunlight or rain exposure, make sure that heat radiating from the condenser is not restricted.

Animals or plants should not be allowed near the unit.

Select a location for the unit to be placed where the warm air and noise from the unit does not disturb the neighbors.

## Rooftop installation

If the outdoor unit is installed on a rooftop, be sure to level the unit.

Ensure the roof structure and anchoring method are adequate for the unit.

Consult local codes regarding rooftop mounting.

If the outdoor unit is installed on a roof structure or external walls, this may result in excessive noise and vibration, and may also be classified as a non serviceable installation.

**NOTE:** Make sure the air conditioning unit is properly grounded; the grounding wire should be tightly connected to the ground of the power source. Improper grounding might cause electric shock or other hazards.

## Operating Instructions

### OPERATING IN SELECTED MODES

1. Point the remote controller at the unit, press the ON/OFF button then, press the MODE button, select the desired mode; AUTO, COOL, DRY, HEAT, or FAN.
2. Press the SET TEMPERATURE button to increase or decrease the reading until the required temperature is displayed. The room temperature range is from 16° C - 32° C (61° F - 90° F). (It should automatically set at 25° C (76° F) and unadjustable in AUTO and DRYING mode.)
3. Press the FAN SPEED button to choose the air rate you want, low, med, or high. (It will automatically set at low speed and unadjustable in DRY mode.)
4. Press the SWING button to choose the up/down airflow direction you want. (It will automatically set at fixed wind airflow direction in DRY mode.)

### TURBO OPERATION

Press TURBO button during COOL or HEAT operation, the air rate can be set in HIGH. Press the TURBO button again and it will release the TURBO operation. During the TURBO operation, the air rate cannot be changed.

### ADJUSTING LEFT/RIGHT AIR FLOW DIRECTION

Method 1; Manually adjust

Adjust the direction by moving directly the left/right airflow direction-adjusting flap by hand. The thermo pump must be turned off.

Method 2; Horizontal & vertical auto swing (three-dimensional air flow model).

Adjust the direction with the remote controller. Press the AIR FLOW button; the air swinging flaps will constantly make a left/right swinging or fixed motion.

### OPERATING THE TIMER

#### Set turning off time

Set the time for the unit to turn off and when it is time, the thermo pump will automatically stop operating.

1. During the operation of the thermo pump, press the TIMER button and the thermo pump will enter the timed switch-off mode.
2. Continually press the TIMER button to set the needed time for switching off the machine. The timer can make the setting in the range from 1-24 hours. Every time the button is pressed change is indicated.
3. After the setting of the timed switch-off, the digits shown on the display screen will go down by 1 for every elapsed hour. The displayed digits indicate the remaining time prior to the timed switch-off.

#### Set turning on time

Set the time for the unit to turn on and when it is time, the thermo pump will automatically start operating.

1. When the thermo pump is in the standby mode, press the TIMER button and the thermo pump will enter the timed switch-on mode.
2. Continually press the TIMER button to set the required time for switching on the machine. The timer can make the setting in the range from 1-24 hours.
3. After the setting of the timed switch-on, the digits shown on the display screen will go down by 1 every elapsed hour. The displayed digits indicate the remaining time prior to the timed switch-on.



## Operating Instructions

### Releasing procedure

When the indication on display screen is 24 hour,press the TIMER button again to delete the timed mode.

### SLEEP OPERATION

Use this mode to reduce operation sound when sleeping,etc.

Press the SLEEP button,the air flow sound from the indoor unit is decreased.

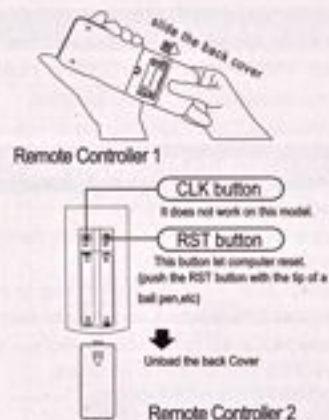
Press the SLEEP button again can release the mode.

NOTE:

- Use the sleep mode when you are going to bed.If this mode is used in the day,the capacity is reduced since the ambient temperature is too high.(COOL MODE).
- During the operation of cooling,the room temperature will be raised gradually by 2°C(36°F) higher than the setting after the machine begins to operate in the sleeping mode.
- During the operation of heating mode,the room temperature will be dropped gradually 5°C(41°F) lower than the setting after the machine begins to operate in the sleeping mode.

### REPLACEMENT OF BATTERIES

- When the signal from the remote controller becomes weak and the indoor unit can not receive it properly;or the indications on the display screen becomes blurred,please slide the back cover and replace with two new batteries.
- The positive and negative poles must match the installation positions.
- New batteries of the same type have to be used for replacement.
- If the remote controller is not to be used for long time,take out the batteries so as to prevent the leakage of the electrolyte from damaging the controller.
- If when the remote controller is at abnormal state,you can take out the batteries on the back cover to clear off the display.



### 【Features of Heating Operations】

#### Basic principles and performances

- The machines absorb heat from the outdoor air and transfer it indoors so as to heat the room air. The heating capabilities through this principle of heat pump go up/down with the increase/decrease of the temperatures of the outdoor air.
- It only needs a fairly short time for such hot air circulation system to raise the room temperature.
- When the outdoor air temperature is very low, the system can be used together with other heating devices. But good ventilation should be maintained to ensure safety and prevent accidents.

#### Defrosting

When the outdoor air temperature is very low and humidity is very high, frosting will occur to the heat exchanger of the outdoor unit, which has negative impacts upon the efficiency of the heating performance. In such case, the automatic defrosting function will come into play. The heating operation will be stopped for 5-10 minutes to do the defrosting.

- The fans of both the outdoor and indoor units are stopped.
- During the defrosting, the outdoor unit might generate some steam. It is caused by fast defrosting, which is not a performance failure.
- Upon the completion of the defrosting process, the heating operation is resumed.

## Maintenance

The air conditioner must be turned off power before the maintenance is to be carried out.

### Before the season of operation

- 1 Check if there are any blocking materials in the intake and outlet vents of the indoor and outdoor units.



- 2 Check if the installation stand is corroded or rusty.

- 3 Check if the machine is properly grounded.



- 4 Check if the air filter is clean.

- 5 Connect to the power source.

- 6 Put batteries in the remote controller.

### During the season of operation

The cleaning of the air filter screen (Standard intervals should be once every two weeks).

- 1 Remove the air filter screen from the unit.

- Gently press the two lower ends of the grid and open it.
- Gently pull up the air filter screen and take it out in the direction of your body.



- 2 Clean the air filter screen.

If the screen is very dirty, please use lukewarm water (about 30°C or 85°F) to clean it. Air it dry after the cleaning.

Note:

- Do not use boiling water to clean the screen.
- Do not bake the screen dry over a fire.
- Do not exert too much force in pulling and stretching the screen.

- 3 Install the air filter screen.

To operate the air conditioner without the air filter screen on will cause the interior of the machine dirty which might lead to poor performances or damages to the units.

#### Clean the air conditioner

- Use a soft and dry cloth to rub the air conditioner, or use a vacuum cleaner to clean it.
- If the air conditioner is very dirty, use a piece of cloth and soak it with neutral home-use detergent to do the cleaning.



### After the season of operation

- 1 Set the temperature at 30°C or 85°F and operate in the fan status for about half a day.



To make the interior of the units dry

- 2 Stop the operation of the machine and turn off the power switch.

The air conditioner will consume about 5W of electric power after the machine is turned off. For the purpose of energy saving and safety, it is advisable to pull the plug out during the non-operational seasons.



- 3 Clean and install the air filter screen.

- 4 Clean the indoor and outdoor units.



- 5 Take the batteries out from the remote controller.

#### Note:

If the air filter screen is blocked by dust or dirt, the performance of cooling and heating will be affected, with the operation noise and power consumption increased. Therefore, the air filter screen should be cleaned regularly.

## Installation of electrical components

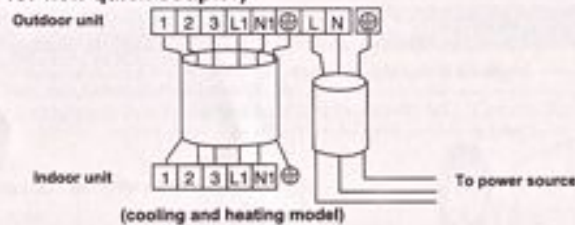
### Points of attention

- HACR type breaker should be utilized along with proper installation;
- Make sure of the applicable voltage and cables or wires for the specific model to be used, before doing the connections;
- Read the prompts at the terminal board for wiring. Make sure the wiring is done correctly.
- Pay attention to the poles of the signal terminal and connect the terminals to match the identification numbers.
- When the wiring connections are wrong, the compressor will not work.
- The connecting wires are not supplied.
- The provision for connection of one of the wiring systems that in accordance with the National Electric Code shall be had. ANSI/NFPA 70-1990 would be acceptable for it.
- **2500W/2600W/3500W MODEL:** The connecting wires specification is 14 AWG, VW-1 (or THHW), copper core and 90°C (or 194°F). Their set screw diameter is 4 mm. The power source is 115V, 60Hz and 1 phase. Minimum circuit ampacity of the wiring systems is 20A.
- **5100W/6600W/7000W MODEL:** The connecting wires specification is 14 AWG, VW-1 (or THHW), copper core and 105°C (or 221°F). Their set screw diameter is 4 mm. The power source is 240V, 60Hz and 1 phase. Minimum circuit ampacity of the wiring systems is 20A.

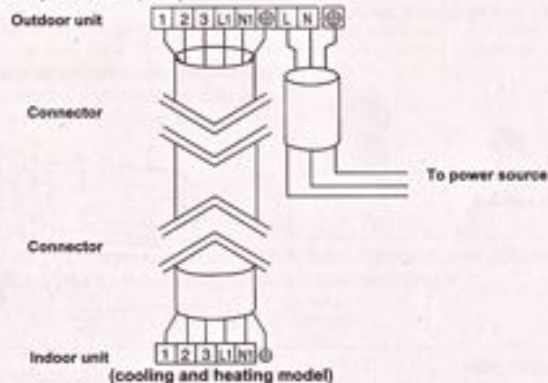
### Connection of wires for outdoor unit

2500W/2600W/3500W MODEL:

Method1 (Suitable for non-quick coupler)

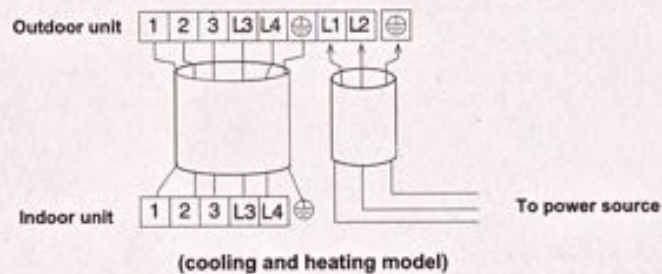


Method2 (Suitable for quick coupler)



## Installation of electrical components

### 5100W/6600W/7000W MODEL:



#### Note:

- The environment conditions must be taken into consideration when the connections of power cable are made (such as the ambient temperature, direct exposure to heat/direct exposure to sunlight);
- The specifications for the power cable refer to the minimum values of the metal core wires. Taking into consideration the voltage losses, the core wire of power cable must be one size larger than the specifications;
- The grounding wire must be connected to the indoor units and outdoor units;
- The laying of power cables must be done by qualified electricians and comply with the regulations of the local power supply authorities and with the standards of the electric appliances;

#### Caution:

If you purchase the cooling and heating model, you should connect the indoor wire connector with outdoor probe wire connector for defrosting, see below figure:

