

OPERATING AND INSTALLATION MANUAL

INDOOR UNIT

AIR 2,6 kW

AIR 3,5 kW

AIR 5,3 kW



Družstevní závody Dražice-strojírna s.r.o.
Dražice 69, 294 71 Benátky nad Jizerou
tel.: +420 / 326 370 911
fax: +420 / 326 370 980
e-mail: export@dzd.cz



CAREFULLY READ THIS MANUAL BEFORE INSTALLING!

Dear Customer,

The Works Cooperative of Dražice - Machine Plant, Ltd., would like to thank you for your decision to use a product of our brand.

The product is not intended to be controlled by

- a) people (including children) with reduced physical, sensual or mental capacities, or
- b) people with insufficient knowledge and experiences unless supervised by responsible person, or unless properly instructed by such responsible person.

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Please read this use and installation instructions carefully before installing and using this appliance and keep this manual for future reference.



Caution: Risk of fire / flammable materials

WARNING: Servicing shall only be performed as recommended by the equipment manufacturer. Maintenance and repair requiring the assistance of other skilled personnel shall be carried out under the supervision of the person competent in the use of flammable refrigerants.

Remote controller operating instructions. See "remote controller instructions".

Safety instructions

- To guarantee the unit work normally, please read the manual carefully before installation, and try to install strictly according to this manual.
- Do not let air enter the refrigeration system or discharge refrigerant when moving the air conditioner.
- Properly ground the air conditioner into the earth.
- Check the connecting cables and pipes carefully, make sure they are correct and firm before connecting the power of the air conditioner.
- There must be an air-break switch.
- After installing, the consumer must operate the air conditioner correctly according to this manual, keep a suitable storage for maintenance and moving of the air conditioner in the future.
- Fuse of indoor unit: T 3.15A/5A 250VAC.
- For 2,6kW~3,5kW models, fuse of outdoor unit: T 15A 250VAC
- For 5,3kW models, fuse of outdoor unit: T 20A 250VAC
- The installation instructions for appliances that are intended to be permanently connected to fixed wiring and have a leakage current that may exceed 10 mA, shall state that the installation of a residual current device (RCD) having a rated residual operating current not exceeding 30 mA is advisable.
- Warning: Risk of electric shock can cause injury or death: Disconnect all remote electric power supplies before servicing.
- The maximum length of the connecting pipe between the indoor unit and outdoor unit should be less than 5 meters. It will affect the efficiency of the air conditioner if the distance longer than that length.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- The batteries in remote controller must be recycled or disposed of properly. Disposal of Scrap Batteries - Please discard the batteries as sorted municipal waste at the accessible collection point.
- If the appliance is fixed wiring, the appliance must be fitted with means for disconnection from the supply mains having a contact separation in all poles that provide full disconnection under over voltage category 111 conditions, and these means must be incorporated in the fixed wiring in accordance with the wiring rules.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons to avoid a hazard.
- The appliance shall be installed in accordance with national wiring regulations.
- Servicing shall only be performed as recommended by the equipment manufacturer. Maintenance and repair requiring the assistance of other skilled personnel shall be carried out under the supervision of the person competent in the use of flammable refrigerants.
- The appliance shall not be installed in the laundry.

Preparation before use

Note

- For the multi system, the refrigerant refers to the multi outdoor unit.
- When charging refrigerant into the system, make sure to charge in liquid state, if the refrigerant of the appliance is R32. Otherwise, chemical composition of refrigerant (R32) inside the system may change and thus affect performance of the air conditioner.
- According to the character of refrigerant (R32, the value of GWP is 675), the pressure of the tube is very high, so be sure to be careful when you install and repair the appliance.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons to avoid a hazard.
- Installation of this product must be done by experienced service technicians' professional installers only in accordance with this manual.
- The temperature of refrigerant circuit will be high, please keep the interconnection cable away from the copper tube.

Preset

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

• **Remote Control presetting**

Each time after the remote control is replaced with new batteries or is energized, remote control auto presetting heat pump. If the air conditioner you purchased is a Cooling Only one, heat pump remote controller can also be used.

• **Back-light function of Remote Control(optional)**

Hold down any button on remote control to activate the back light. It automatically shuts off 10 seconds later.

Note: Back-light is an optional function.

• **Auto Restart Presetting**

The air conditioner has an Auto-Restart function.

Safeguarding the environment

This appliance is made of recyclable or re-usable material. Scrapping must be carried out in compliance with local waste disposal regulations. Before scrapping it, make sure to cut off the mains cord so that the appliance cannot be re-used.

For more detailed information on handling and recycling this product, contact your local authorities who deal with the separate collection of rubbish or the shop where you bought the appliance.

SCRAPPING OF APPLIANCE

This appliance is marked according to the European Directive 2012/19/EC, Waste Electrical and Electronic Equipment (WEEE).

This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmentally safe recycling.



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



Be sure not to do.




Pay attention to such a situation.



Grounding is essential.



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

 Use correct power supply in accordance with the rating plate requirement. Otherwise, serious faults or hazard may occur, or a fire maybe break out.




Keep the power supply circuit breaker or plug from dirt. Connect the power supply cord to it firmly and correctly, lest an electric shock or a fire break out due to insufficient contact.



Do not use the power supply circuit breaker or pull off the plug to turn it off during operation. This may cause a fire due to spark, etc.

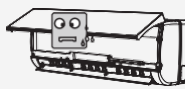


It is the user's responsibility to make the appliance be grounded according to local codes or ordinances by a licensed technician.

 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.




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




Do not touch the operation buttons when your hands are wet.



Turn off the appliance by remote control firstly before cutting off power supply if malfunction occurs.

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



 Do not repair the appliance by yourself. If this is done incorrectly, it may cause an electric shock, etc.



 Do not put any objects on the outdoor unit.



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.

Safety precautions

Precautions for using R32 refrigerant

For the multi system, the refrigerant refers to the multi outdoor unit. The basic installation work procedures are the same as the conventional refrigerant (R22 or R410A). However, pay attention to the following points:



CAUTION

1. Transport of equipment containing flammable refrigerants

Compliance with the transport regulations

2. Marking of equipment using signs

Compliance with local regulations

3. Disposal of equipment using flammable refrigerants

Compliance with national regulations

4. Storage of equipment/appliances

The storage of equipment should be in accordance with the manufacturer's instructions.

5. Storage of packed (unsold) equipment

Storage package protection should be constructed such that mechanical damage to the equipment inside the package will not cause a leak of the refrigerant charge.

The maximum number of pieces of equipment permitted to be stored together will be determined by local regulations.

6. Information on servicing

6-1 Checks to the area

Prior to beginning work on systems containing flammable refrigerants, safety checks are necessary to ensure that the risk of ignition is minimized. For repair to the refrigerating system, the following precautions shall be complied with prior to conducting work on the system.

6-2 Work procedure

Work shall be undertaken under a controlled procedure to minimize the risk of flammable gas or vapor being present while the work is being performed.

6-3 General work area

- All maintenance staff and others working in the local area shall be instructed on the nature of work being carried out. Work in confined spaces shall be avoided.

The area around the workspace shall be sectioned off. Ensure that the conditions within the area have been made safe by control of flammable material.

6-4 Checking for presence of refrigerant

The area shall be checked with an appropriate refrigerant detector prior to and during work, to ensure the technician is aware of potentially flammable atmospheres.

Ensure that the leak detection equipment being used is suitable for use with flammable refrigerants, i.e. non-sparking, adequately sealed or intrinsically safe.



CAUTION

6-5 Presence of fire extinguisher

- If any hot work is to be conducted on the refrigeration equipment or any associated parts, appropriate fire extinguishing equipment shall be available to hand.
- Have a dry powder or CO2 fire extinguisher adjacent to the charging area.

6-6 No ignition sources

- No person carrying out work in relation to a refrigeration system which involves exposing any pipe work that contains or has contained flammable refrigerant shall use any sources of ignition in such a manner that it may lead to the risk of fire or explosion.
- All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal, during which flammable refrigerant can possibly be released to the surrounding space.
- Prior to work taking place, the area around the equipment is to be surveyed to make sure that there are no flammable hazards or ignition risks. "No Smoking" signs shall be displayed.

6-7 Ventilated area

- Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work.
- A degree of ventilation shall continue during the period that the work is carried out.
- The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.

6-8 Checks to the refrigeration equipment

- Where electrical components are being changed, they shall be fit for the purpose and to the correct specification.
- At all times the manufacturer's maintenance and service guidelines shall be followed. If in doubt consult the manufacturer's technical department for assistance.
- The following checks shall be applied to installations using flammable refrigerants:
 - The charge size is in accordance with the room size within which the refrigerant containing parts are installed;
 - The ventilation machinery and outlets are operating adequately and are not obstructed;
 - If an indirect refrigerating circuit is being used, the secondary circuit shall be checked for the presence of refrigerant;
 - Marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be corrected;
 - Refrigeration pipe or components are installed in a position where they are unlikely to be exposed to any substance which may corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are suitably protected against being so corroded.



CAUTION

6-9 Checks to electrical devices

Repair and maintenance to electrical components shall include initial safety checks and component inspection procedures.

If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt with.

If the fault cannot be corrected immediately but it is necessary to continue operation, an adequate temporary solution shall be used.

This shall be reported to the owner of the equipment, so all parties are advised. Initial safety checks shall include:

- – That capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking;
- – That there no live electrical components and wiring are exposed while charging, recovering or purging the system;
- – That there is continuity of earth bonding.

7. Repairs to sealed components

During repairs to sealed components, all electrical supplies shall be disconnected from the equipment being worked upon prior to any removal of sealed covers, etc.

If it is necessary to have an electrical supply to equipment during servicing, then a permanently operating form of leak detection shall be located at the most critical point to warn of a potentially hazardous situation.

Attention shall be paid to the following to ensure that by working on electrical components, the casing is not altered in such a way that the level of protection is affected.

This shall include damage to cables, excessive number of connections, terminals not made to original specification, damage to seals, incorrect fitting of glands, etc.

- Ensure that apparatus is mounted securely.
- Ensure that seals or sealing materials have not degraded such that they no longer serve the purpose of preventing the ingress of flammable atmospheres. Replacement parts shall be in accordance with the manufacturer's specifications.

• NOTE:

The use of silicon sealant may inhibit the effectiveness of some types of leak detection equipment. Intrinsically safe components do not have to be isolated prior to working on them.

8. Repair to intrinsically safe components

Do not apply any permanent inductive or capacitance loads to the circuit without ensuring that this will not exceed the permissible voltage and current permitted for the equipment in use.

Intrinsically safe components are the only types that can be worked on while live in the presence of a flammable atmosphere. The test apparatus shall be at the correct rating.

Replace components only with parts specified by the manufacturer.

- Other parts may result in the ignition of refrigerant in the atmosphere from a leak.



CAUTION

9. Cabling

- Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects.
- The check shall also consider the effects of aging or continual vibration from sources such as compressors or fans.

10. Detection of flammable refrigerants

Under no circumstances shall potential sources of ignition be used in the searching

- for or detection of refrigerant leaks.

A halide torch (or any other detector using a naked flame) shall not be used.

11. Leak detection methods

- The following leak detection methods are deemed acceptable for systems containing flammable refrigerants:
 - – Electronic leak detectors shall be used to detect flammable refrigerants, but the sensitivity may not be adequate, or may need re-calibration. (Detection equipment shall be calibrated in a refrigerant-free area.)
 - – Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used.
 - – Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant employed and the appropriate percentage of gas (25 % maximum) is confirmed.
 - – Leak detection fluids are suitable for use with most refrigerants but the use of detergents containing chlorine shall be avoided as the chlorine may react with the refrigerant and corrode the copper pipe-work.
 - – If a leak is suspected, all naked flames shall be removed/ extinguished.
 - – If a leakage of refrigerant is found which requires brazing, all of the refrigerant shall be recovered from the system, or isolated (by means of shut off valves) in a part of the system remote from the leak.
 - – Oxygen free nitrogen (OFN) shall then be purged through the system both before and during the brazing process.

12. Removal and evacuation

When breaking into the refrigerant circuit to make repairs – or for any other purpose – conventional procedures shall be used.

However, it is important that best practice is followed since flammability is a consideration.

- The following procedure shall be adhered to:
 - – Remove refrigerant;
 - – Purge the circuit with inert gas
 - – Evacuate;
 - – Purge again with inert gas;
 - – Open the circuit by cutting or brazing.



CAUTION

The refrigerant charge shall be recovered into the correct recovery cylinders.

The system shall be “flushed” with OFN to render the unit safe. This process may need to be repeated several times.

- Compressed air or oxygen shall not be used for this task.
- Flushing shall be achieved by breaking the vacuum in the system with OFN and
- continuing to fill until the working pressure is achieved, then venting to atmosphere,
- and finally pulling down to a vacuum.

This process shall be repeated until no refrigerant is within the system. When the final OFN charge is used, the system shall be vented down to atmospheric pressure to enable work to take place.

- This operation is absolutely vital if brazing operations on the pipe-work are to take place.

- Ensure that the outlet for the vacuum pump is not close to any ignition sources and
- there is ventilation available.

13. Charging procedures

In addition to conventional charging procedures, the following requirements shall be followed:

- Ensure that contamination of different refrigerants does not occur when using charging equipment.
- Hoses or lines shall be as short as possible to minimize the amount of refrigerant contained in them.
- Cylinders shall be kept upright.
- Ensure that the refrigeration system is earthed prior to charging the system with refrigerant.
- Label the system when charging is complete (if not already).
- Extreme care shall be taken not to overfill the refrigeration system. Prior to recharging the system, it shall be pressure tested with OFN.
- The system shall be leak tested on completion of charging but prior to commissioning. A follow up leak test shall be carried out prior to leaving the site.

14. Decommissioning

- Before carrying out this procedure, it is essential that the technician is completely familiar with the equipment and all its detail.
- It is recommended good practice that all refrigerants are recovered safely. Prior to the task being carried out, an oil and refrigerant sample shall be taken in case analysis is required prior to re-use of reclaimed refrigerant. It is essential that electrical power is available before the task is commenced.
- a) Become familiar with the equipment and its operation.
- b) Isolate system electrically.



CAUTION

- c) Before attempting the procedure ensure that:
 - Mechanical handling equipment is available, if required, for handling refrigerant cylinders;
 - All personal protective equipment is available and being used correctly;
 - The recovery process is always supervised by a competent person;
 - Recovery equipment and cylinders conform to the appropriate standards.
- d) Pump down refrigerant system, if possible.
- e) If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.
- f) Make sure that cylinder is situated on the scales before recovery takes place.
- g) Start the recovery machine and operate in accordance with manufacturer's instructions.
- h) Do not overfill cylinders. (No more than 80 % volume liquid charge).
- i) Do not exceed the maximum working pressure of the cylinder, even temporarily.
- j) When the cylinders have been filled correctly and the process completed, make sure that the cylinders and the equipment are removed from site promptly and all isolation valves on the equipment are closed off.
- k) Recovered refrigerant shall not be charged into another refrigeration system unless it has been cleaned and checked.

15. Labelling

- Equipment shall be labelled stating that it has been de-commissioned and emptied
 - of refrigerant.
- The label shall be dated and signed.
- Ensure that there are labels on the equipment stating the equipment contains flammable refrigerant.

16. Recovery

- When removing refrigerant from a system, either for servicing or decommissioning, it
 - is recommended good practice that all refrigerants are removed safely.
- When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed.
- Ensure that the correct number of cylinders for holding the total system charge is available.
- All cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant (i.e. special cylinders for the recovery of refrigerant).
- Cylinders shall be complete with pressure relief valve and associated shut-off valves in good working order.
- Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs.
- The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of flammable refrigerants.

CAUTION

- In addition, a set of calibrated weighing scales shall be available and in good working order.
- Hoses shall be complete with leak-free disconnect couplings and in good condition. Before using the recovery machine, check that it is in satisfactory working order, has been properly maintained and that any associated electrical components are sealed to prevent ignition in the event of a refrigerant release. Consult manufacturer if in doubt.
- The recovered refrigerant shall be returned to the refrigerant supplier in the correct recovery cylinder, and the relevant Waste Transfer Note arranged. Do not mix refrigerants in recovery units and especially not in cylinders.
- If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant.
- The evacuation process shall be carried out prior to returning the compressor to the suppliers.
- Only electric heating to the compressor body shall be employed to accelerate this process.
- When oil is drained from a system, it shall be carried out safely.

CAUTION

- When moving or relocating the air conditioner, consult experienced service technicians for disconnection and reinstallation of the unit.
- Do not place any other electrical products or household belongings under indoor unit or outdoor unit. Condensation dripping from the unit might get them wet and may cause damage or malfunction of your property.
- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
- The appliance shall be stored in a room without continuously operating ignition sources (for example, open flames, an operating gas appliance or an operating electric heater).
- Do not pierce or burn.
- Be aware that refrigerants may not contain an odor. To keep ventilation openings, clear of obstruction.
- The appliance shall be stored in a well-ventilated area where the room size corresponds to the room area as specified for operation.
- The appliance shall be stored in a room without continuously operating open flames (for example an operating gas appliance) and ignition sources (for example an operating electric heater).



CAUTION

- Any person who is involved with working on or breaking into a refrigerant circuit should hold a current valid certificate from an industry-accredited assessment authority, which authorizes their competence to handle refrigerants safely in accordance with an industry recognized assessment specification.

Servicing shall only be performed as recommended by the equipment manufacturer.

Maintenance and repair requiring the assistance of other skilled personnel shall be

- carried out under the supervision of the person competent in the use of flammable refrigerants.
- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.

Appliance shall be installed, operated and stored in a room with a floor area larger than 10 m².

- The installation of pipe-work shall be kept to a room with a floor area larger than 10 m².

- The pipe-work shall be compliance with national gas regulations. The maximum refrigerant charge amount is 2.5 kg.

Mechanical connectors used indoors shall comply with ISO 14903. When

- mechanical connectors are reused indoors, sealing parts shall be renewed. When flared joints are reused indoors, the flare part shall be re-fabricated. The installation of pipe-work shall be kept to a minimum.

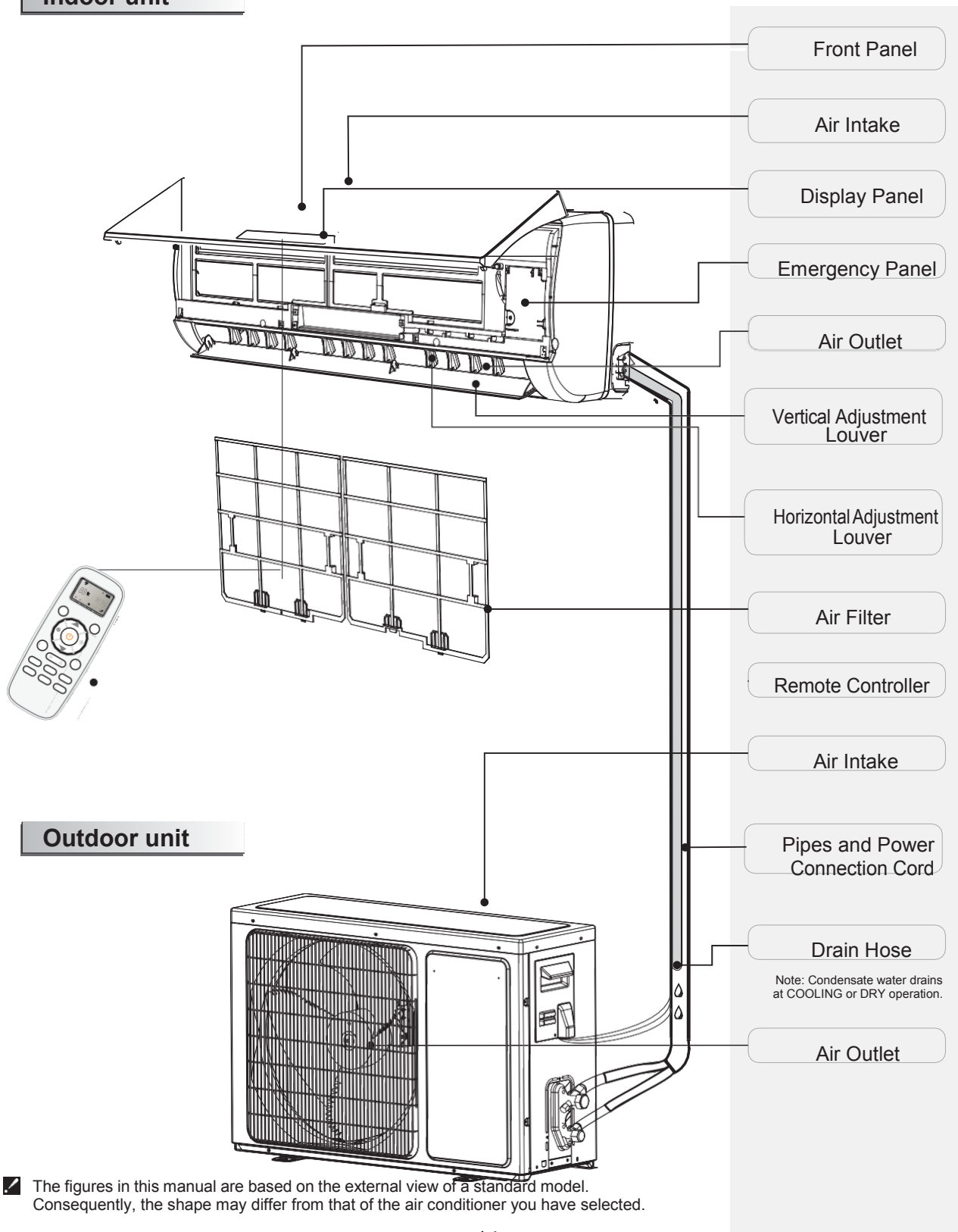
Mechanical connections shall be accessible for maintenance purposes.

Explanation of symbols displayed on the indoor unit or outdoor unit.

	WARNING	This symbol shows that this appliance uses a flammable refrigerant. If the refrigerant is leaked and exposed to an external ignition source, there is a risk of fire
	CAUTION	This symbol shows that the operation manual should be read carefully.
	CAUTION	This symbol shows that a service personnel should be handling this equipment with reference to the installation manual.
	CAUTION	This symbol shows that information is available such as the operating manual or installation manual.

Identification of parts

Indoor unit



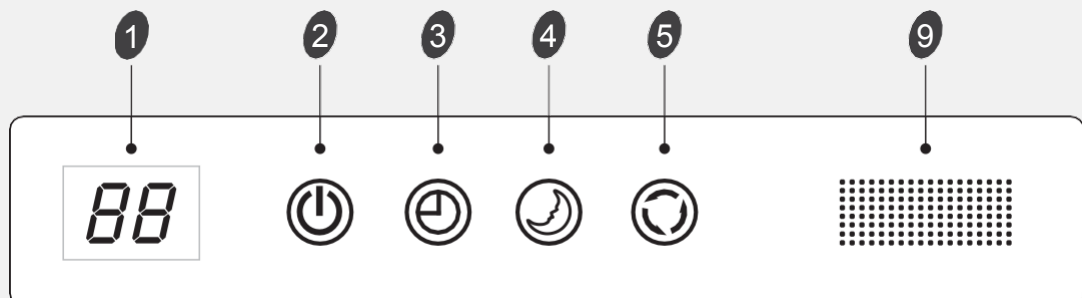
Outdoor unit

☑ The figures in this manual are 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

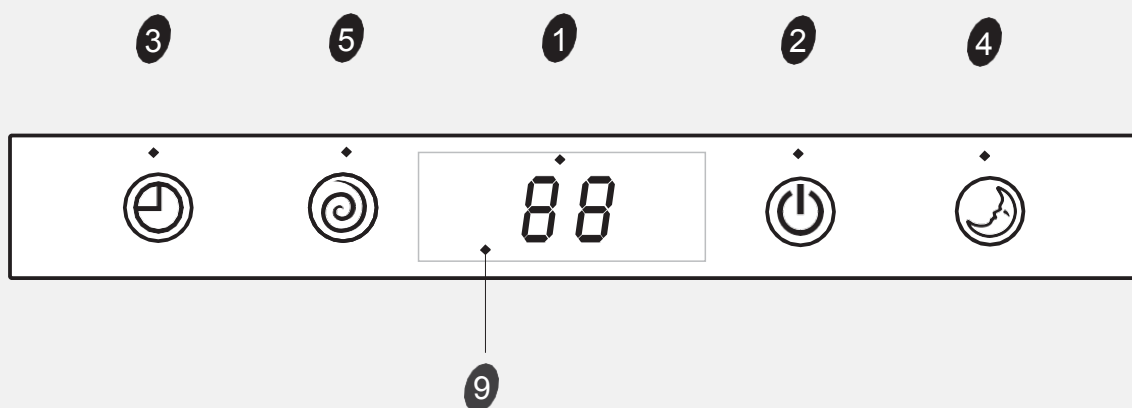
	Temperature indicator 1 Display set temperature. It shows FC after 200 hours of usage as reminder to clean the filter. After filter cleaning press the filter reset button located on the indoor unit behind the front panel to reset the display. (optional)
	Running indicator 2 It lights up when the AC is running. It flashes during defrosting.
	Timer indicator 3 It lights up during set time.
	Sleep indicator 4 It lights up in sleep mode.
	Compressor indicator 5 It lights up when the compressor is on.
	Super indicator 6 It lights up in super mode.
	Mode indicator 7 Heating displays orange, others display white
	Fan speed indicator 8
	Signal Receptor 9
	Smart WIFI indicator 10 It lights up during WIFI is on.
	NANO indicator 11 It lights up in NANO mode.

VG/VL series

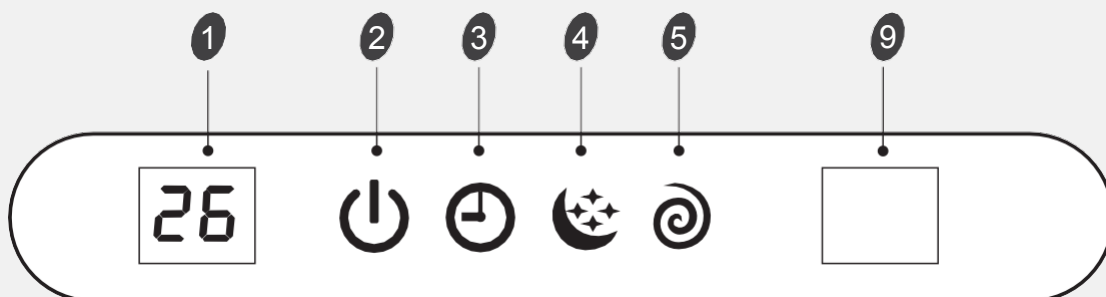


The symbols may be different from these models, but the functions are similar.

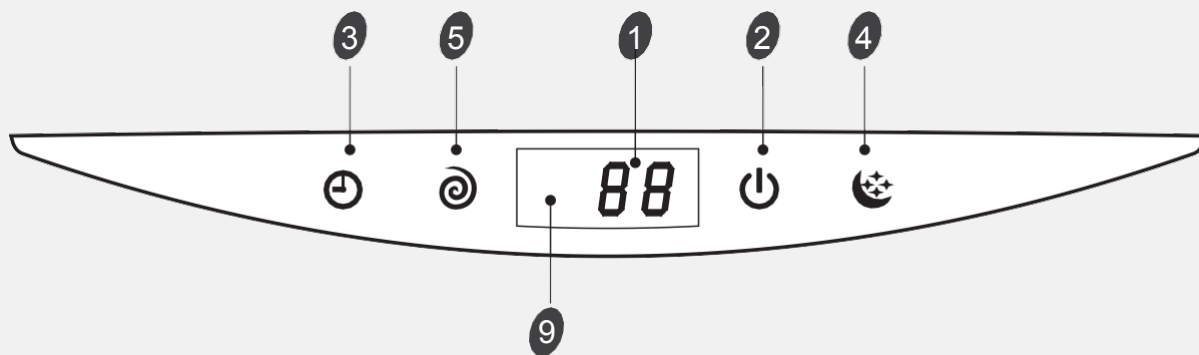
VT series



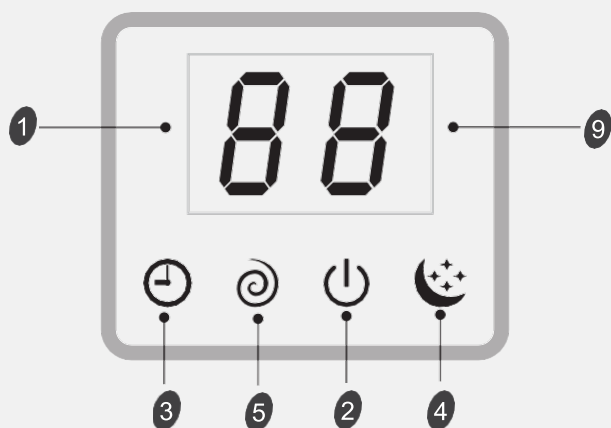
SF/DG (Right side)



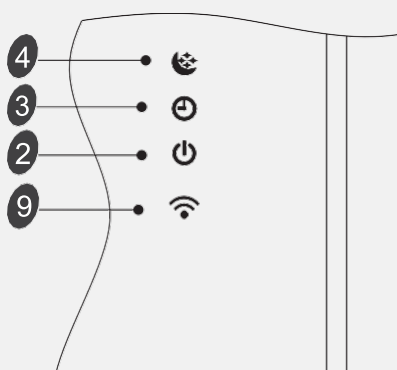
SE series



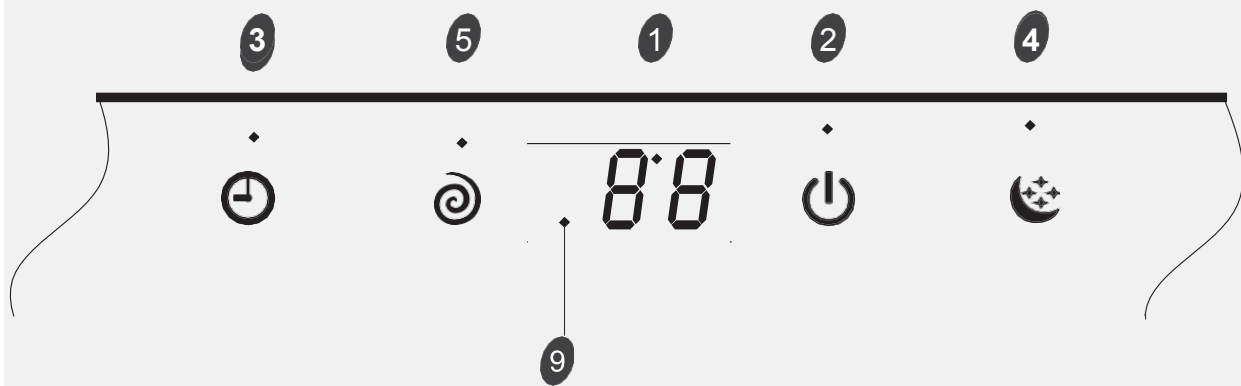
NS/DE series



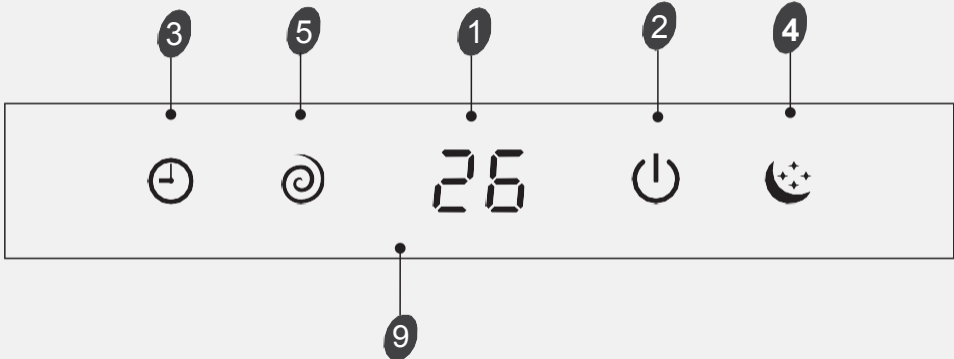
NT series



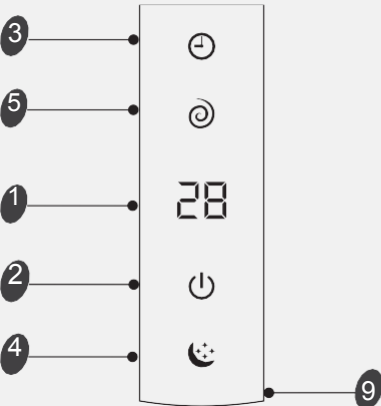
VQ/TE/TF/DA/DG(Middle)/DH/DL(Right side) series



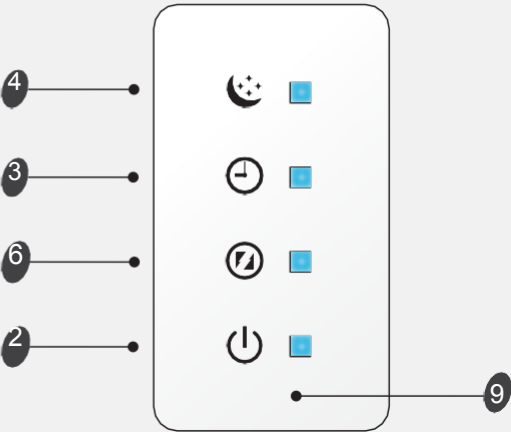
VM series



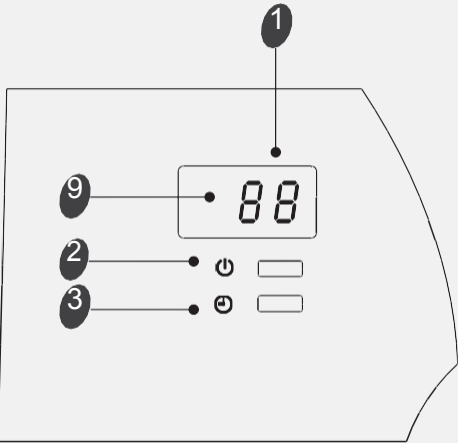
NM/DF series



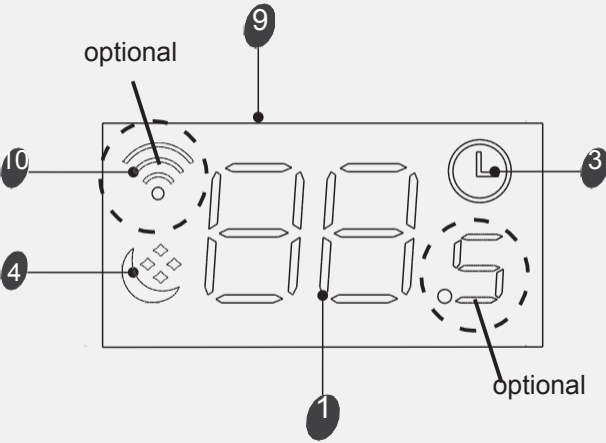
NK series



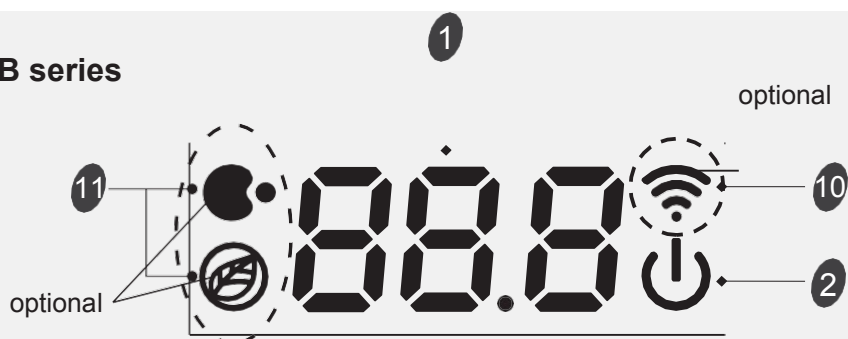
TA/TC series



TQ/TR series

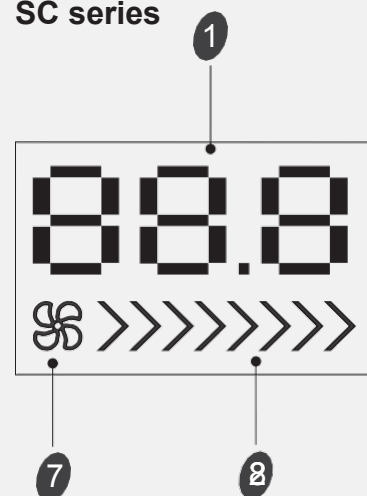
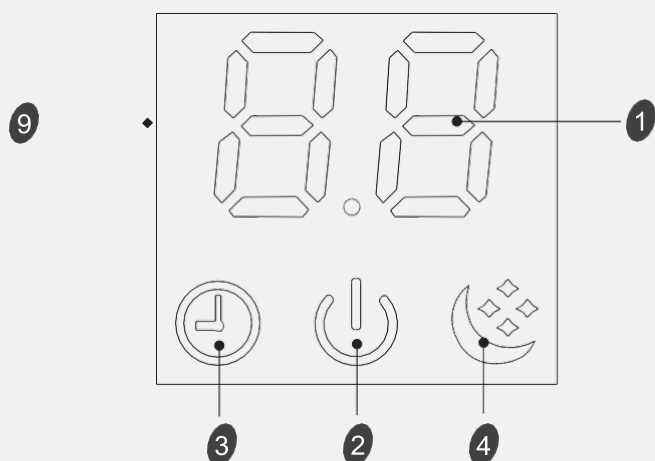


QA/QB series

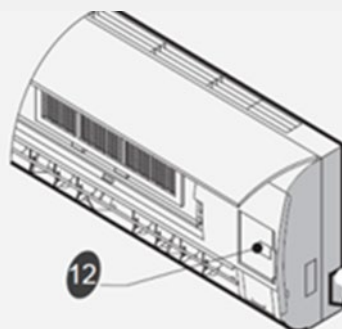


SA/TD/TG/TS/DB/DC/DJ/DK/DL(Middle) series

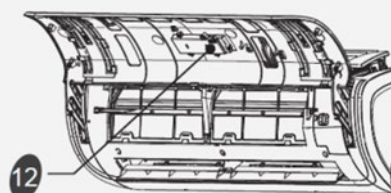
SC series



Emergency button 12



QA/QB series



ON/OFF To let the AC run or stop by pressing the button.

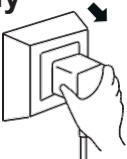
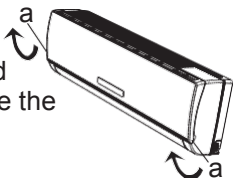


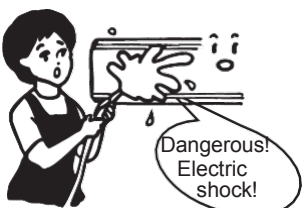

FOR THE MULTI SYSTEM

OFF you can stop the unit immediately by pressing the button.

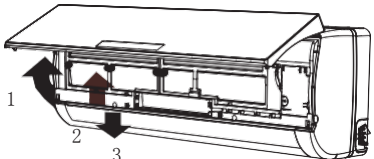
Force COOLING: you can force the unit to run in cooling mode and high fan speed by pressing the button for 5 seconds. And in this status, the room-temperature will be ignored.

Maintenance

◆ Front panel maintenance

<p>1 Cut off the power supply</p> <p>Turn off the appliance first before disconnecting from power supply.</p> 	<p>2</p> <p>Grasp position "a" and pull outward to remove the front panel.</p> 
<p>3 Wipe with a soft and dry cloth.</p> <p>Use soft moisture cloth to clean if the front panel is very dirty;</p>  <p>Use a dry and soft cloth to clean it.</p>	<p>4 Never use volatile substance such as gasoline or polishing powder to clean the appliance.</p> 
<p>5 Never sprinkle water onto the indoor unit</p>  <p>Dangerous! Electric shock!</p>	<p>6 Reinstall and shut the front panel.</p> <p>Reinstall and shut the front panel by pressing position "b" downward.</p> 

◆ Air filter maintenance

<p>1 Stop the appliance, cut off the power supply and remove the air filter.</p>  <ol style="list-style-type: none"> 1. Open the front panel. 2. Press the handle of the filter gently from the front. 3. Grasp the handle and slide out the filter. 	<p>2 Clean and reinstall the air filter.</p> <p>If the dirt is conspicuous, wash it with a solution of detergent in lukewarm water. After cleaning, dry well in shade.</p>
<p>3 Close the front panel again.</p> <p>☑ Clean the air filter every two weeks if the air conditioner operates in an extremely dusty environment.</p>	<p>It is necessary to clean the air filter after using it for about 100 hours.</p>

Protection

◆ Operating condition

Operating temperature

Temperature		Cooling operation (DB/WB)	Heating operation (DB/WB)	Drying operation (DB/WB)
Indoor temperature	max	32°C/23°C	27°C/18°C	32°C/23°C
	min	21°C/15°C	20°C/15°C	18°C
Outdoor temperature	max	43°C/26°C	24°C/18°C	43°C/26°C
	min	-15°C/-16°C	-15°C/-16°C	21°C

NOTE:

*Optimum performance will be achieved within these operating temperatures. If air conditioner is used outside of the above conditions, the protective device maybe trip and stop the appliance.

**For Tropical (T3) Climate condition models, the temperature point is 55°C instead of 43°C.*

The temperature of some products is allowed beyond the range. In specific situation, please consult the merchant. 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 to operate more quietly.
- 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, you need to wait for 3 minutes.
- Connect to power supply and turn on the unit at once, it may start 20 seconds later.

2. 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

Preheat

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

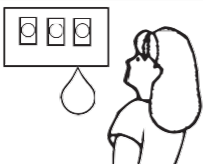
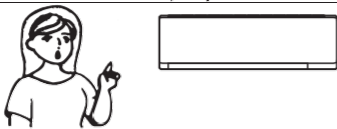
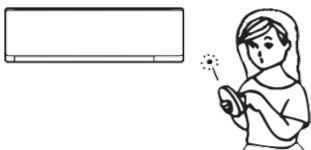
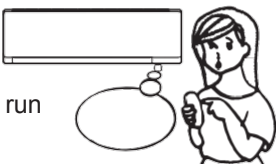
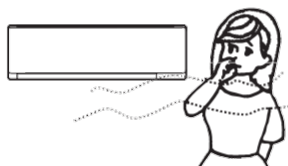
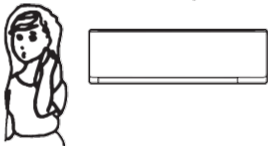
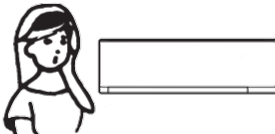

Defrost

In **HEATING** operation, the appliance will defrost (de-ice) automatically to raise efficiency. This procedure usually lasts 2-10 minutes. During defrosting, fans stop operation. After defrosting completes, it returns to **HEATING** mode automatically.

Note: Heating is NOT available for cooling only air conditioner models.

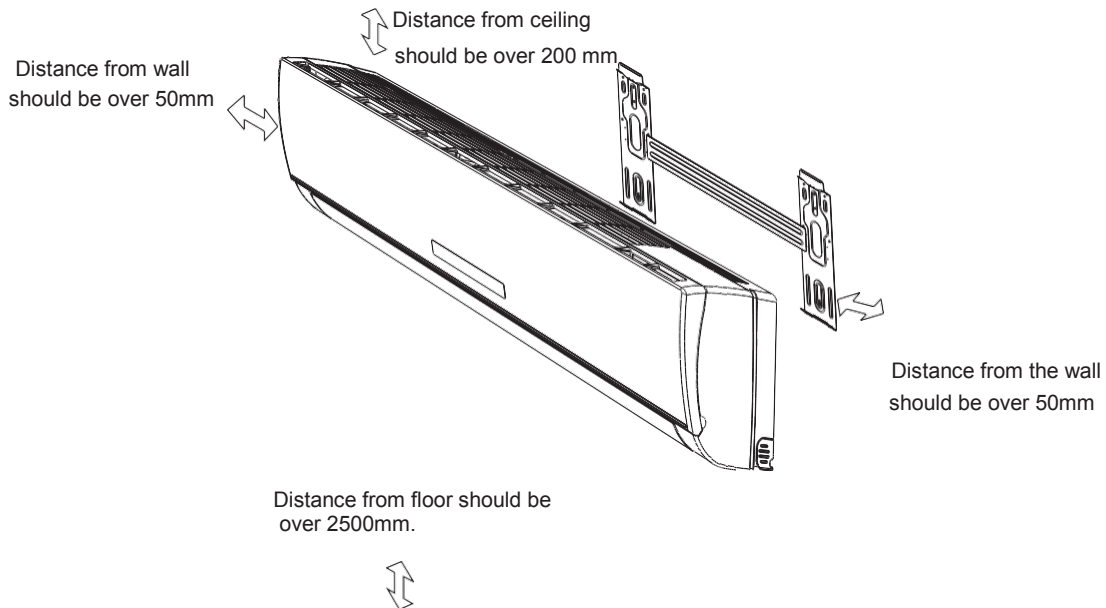
Troubleshooting

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

Trouble		Analysis																														
Does not run		<ul style="list-style-type: none">• If the protector trip or fuse is blown. Please wait for 3 minutes and start again, protector device may be preventing unit to work.• If batteries in the remote controller exhausted.• If the plug is not properly plugged.																														
No cooling or heating air		<ul style="list-style-type: none">• Is the air filter dirty?• Are the intakes and outlets of the air conditioner blocked?• Is the temperature set properly?																														
Ineffective control		<ul style="list-style-type: none">• If strong interference (from excessive static electricity discharge, power supply voltage abnormality) presents, operation will be abnormal. Then, disconnect from the power supply and connect back 2-3 seconds later.																														
Does not operate immediately don't run		<ul style="list-style-type: none">• Changing mode during operation, 3 minutes will delay.																														
Peculiar odor		<ul style="list-style-type: none">• This odor may come from another source such as furniture, cigarette etc, which is sucked in the unit and blows out with the air.																														
A sound of flowing water		<ul style="list-style-type: none">• Caused by the flow of refrigerant in the air conditioner, not a trouble.• Defrosting sound in heating mode.																														
Cracking sound is heard		<ul style="list-style-type: none">• The sound may be generated by the expansion or contraction of the front panel due to change of temperature.																														
Spray mist from the outlet		<ul style="list-style-type: none">• Mist appears when the room air becomes very cold because of cool air discharged from indoor unit during COOLING or DRY operation mode.																														
The running indicator flashes on constantly, and indoor fan stops.		<ul style="list-style-type: none">• The unit is shifting from heating mode to defrost.• The indicator will flash within twelve minutes and returns to heating mode.																														
Mode interferes For the reason that all indoor units use one outdoor unit, outdoor unit can only run with same mode (cooling or heating), so, when the mode you set is different from the mode that outdoor is running with, mode interfere occurs. Following shows the mode interfere scene.		<table><tr><td></td><td>cooling</td><td>dry</td><td>heating</td><td>fan</td><td></td></tr><tr><td>cooling</td><td>✓</td><td>✓</td><td>×</td><td>✓</td><td>✓ --- normal</td></tr><tr><td>dry</td><td>✓</td><td>✓</td><td>×</td><td>✓</td><td>×</td></tr><tr><td>heating</td><td>×</td><td>×</td><td>✓</td><td>×</td><td>×</td></tr><tr><td>fan</td><td>✓</td><td>✓</td><td>×</td><td>✓</td><td>×</td></tr></table> <p>outdoor unit always run with the mode of first indoor unit that turned on. when the setting mode of following indoor unit is interfered with it, 3 beeps would be heard, and the indoor unit interfered with the normal running units would turn off automatically.</p>		cooling	dry	heating	fan		cooling	✓	✓	×	✓	✓ --- normal	dry	✓	✓	×	✓	×	heating	×	×	✓	×	×	fan	✓	✓	×	✓	×
	cooling	dry	heating	fan																												
cooling	✓	✓	×	✓	✓ --- normal																											
dry	✓	✓	×	✓	×																											
heating	×	×	✓	×	×																											
fan	✓	✓	×	✓	×																											

Installation instructions

Installation diagram



Indoor unit A



- Above figure is only a simple presentation of the unit, it may not match the external appearance of the unit you purchased.
- Installation must be performed in accordance with the national wiring standards by authorized personnel only.

Select the installation locations

Location for installing indoor unit:

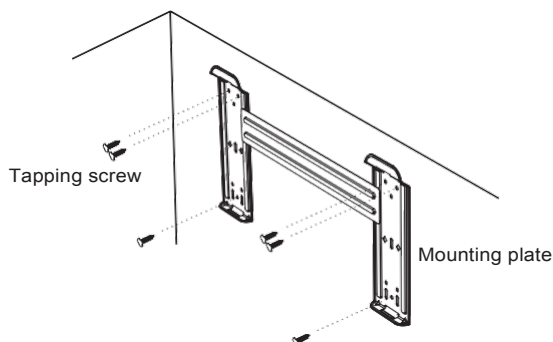
1. No obstacle near the air outlet and the air can be blown to every corner in the room easily.
2. It is easy to draw off connection pipe and drill a wall hole.
3. Keep the required distance from the ceiling and wall according to installation diagram.
4. Easy to detach air filter.
5. Keep the appliance and remote controller one meter away from the TV set, radio etc.
6. Do not put anything near the air intake to obstruct it.
7. The remote controller will operate abnormally in a room fitted with digital lights.
8. Install it at a place that can bear the weight of it.

Installation of outdoor unit refers to the outdoor unit installation manual.

Indoor unit installation

1. Installing the Mounting Plate

- Decide an installing location for the mounting plate according to the indoor unit location and pipe direction.
- Keep the mounting plate horizontally with a horizontal ruler or level.
- Drill holes of 32mm in depth on the wall for fixing the plate.
- Insert the plastic plugs to the hole, fix the mounting plate with tapping screws.
- Inspect if the mounting plate is well fixed. Then drill a hole for pipe.

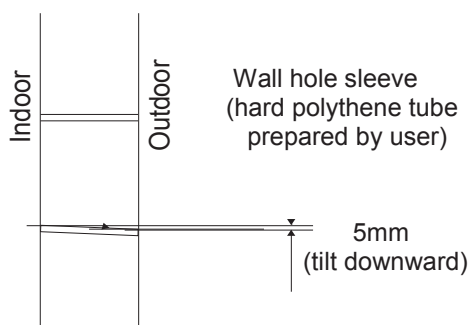


Note: The shape of your mounting plate may be different from the one above, but the installation method is similar.

Note: As the above figure shown, the six holes matched with tapping screw on the mounting plate must be used to fix the mounting plate, the others are prepared.

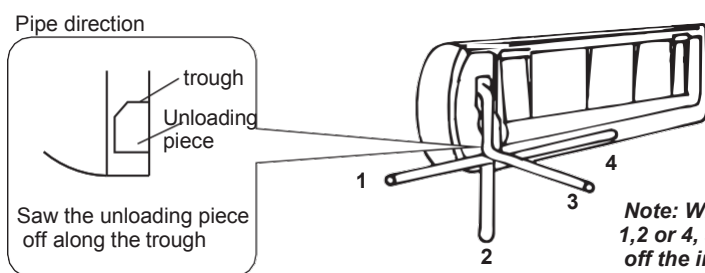
2. Drill a Hole for Pipe

- Decide the position of hole for pipe according to the location of mounting plate.
- Drill a hole on the wall about 50mm. The hole should tilt a little downward toward outside.
- Install a sleeve through the wall hole to keep the wall tidy and clean.



3. Indoor Unit Pipe Installation

- Put the pipes (liquid and gas pipe) and cables through the wall hole from outside or put them through from inside after indoor pipe and cables connection complete so as to connect to outdoor unit.
- Decide whether saw the unloading piece off in accordance with the pipe direction. (as shown below)



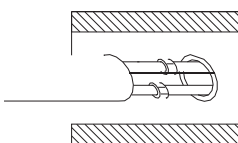
Note: When installing the pipe at the directions 1, 2 or 4, saw the corresponding unloading piece off the indoor unit base.

- After connecting pipe as required, install the drain hose. Then connect the power cords. After connecting, wrap the pipes, cords and drain hose together with thermal insulation materials.

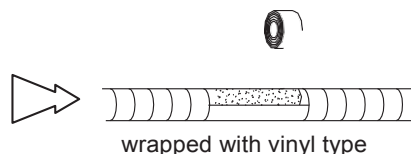


• **Pipe Joints Thermal Insulation:**

Wrap the pipes joints with thermal insulation materials and then wrap with a vinyl tape.



Thermal insulation



wrapped with vinyl type

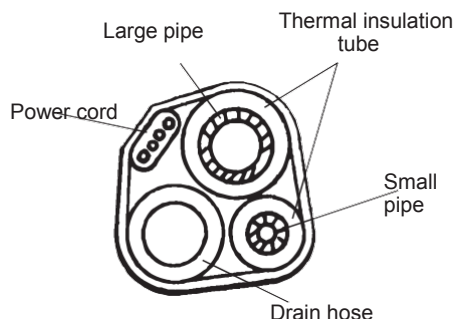
• **Pipes Thermal Insulation:**

a. Place the drain hose under the pipes.

b. Insulation material uses polythene foam over 6mm in thickness.

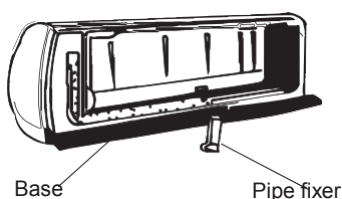
Note: Drain hose is prepared by user.

- Drain pipe should point downward for easy drain flow. Do not arrange the drain pipe twisted, sticking out or wave around, do not immerse the end of it in water.
- If an extension drain hose is connected to the drain pipe, make sure to thermal insulated when passing along the indoor unit.



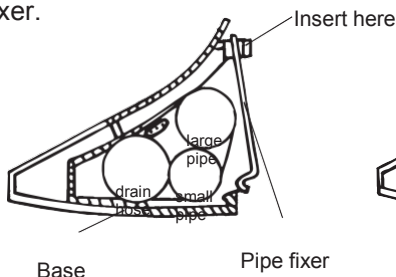
(prepared by user)

- When the pipes are directed to the right, pipes, power Cord and drain pipe should be thermal insulated and fixed onto the back of the unit with a pipe fixer.



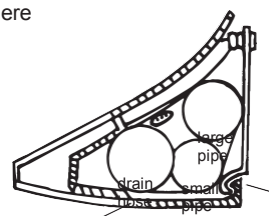
Base

Pipe fixer



Base

Pipe fixer



Base

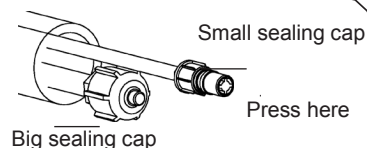
Hook here

A. Insert the pipe fixer to the slot.

B. Press to hook the pipe fixer onto the base.

Piping Connection:

- Before unscrewing the big and the small sealing caps, press the small sealing cap with the finger until the exhaust noise stops, and then loosen the finger.
- Connect indoor unit pipes with two wrenches. Pay special attention to the allowed torque as shown below to prevent the pipes, connectors and flare nuts from being deformed and damaged.
- Pre-tighten them with fingers at first, then use the wrenches.



Small sealing cap

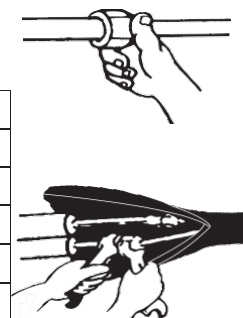
Press here

Big sealing cap



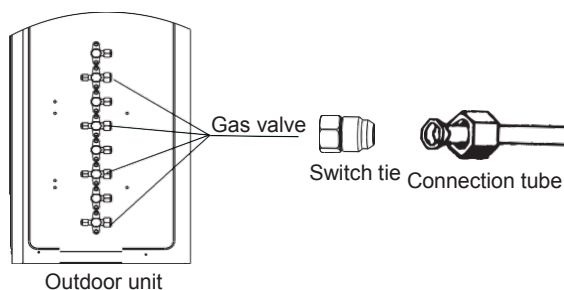
⚠ If you don't hear the exhaust noise, please contact with the merchant.

Model	Pipe size	Torque	Nut width	Mi. Thickness
2,6k, 3,5k and 5,3kW	Liquid Side (ϕ 6mm or 1/4 inch)	15~20N·m	17mm	0.5mm
7kW	Liquid Side (ϕ 9.53mm or 3/8 inch)	30~35N·m	22mm	0.6mm
2,6k and 3,5 kW	Gas Side (ϕ 9.53mm or 3/8 inch)	30~35N·m	22mm	0.6mm
5,3kW	Gas Side (ϕ 12mm or 1/2 inch)	50~55N·m	24mm	0.6mm
7kW	Gas Side (ϕ 16mm or 5/8 inch)	60~65N·m	27mm	0.6mm



⚠ **Note: Piping connection should be conducted on outdoor side!**

- ✍ The 5,3kW indoor unit include the switch tie-in accessory only for 5,3kW indoor. It may switch 9.52 gas connection tube into 12.7 connection tube. It is installed outdoor unit.
- ✍ If the flare joint nut assy has been loosened after it has been completely tightened, replace with a new flare joint nut assy.
- ✍ When removing the piping to relocate or repair the unit, replace with a new flare less joint nut assy.

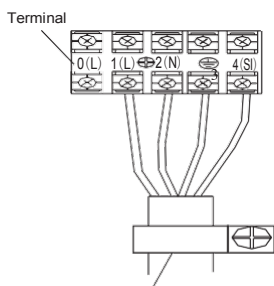
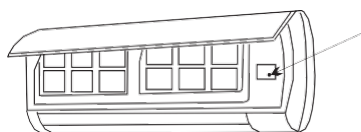
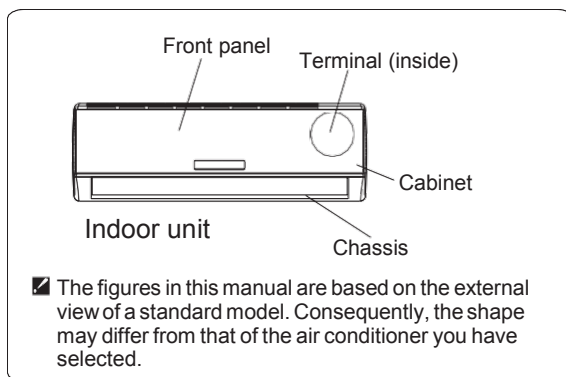


4. Connecting of the Cable

• Indoor Unit

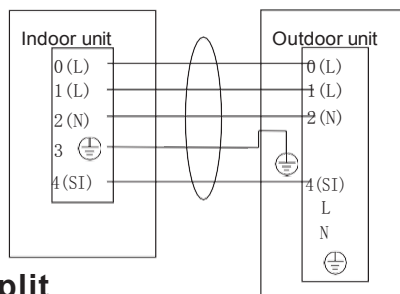
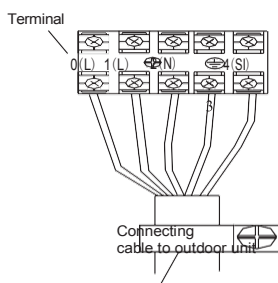
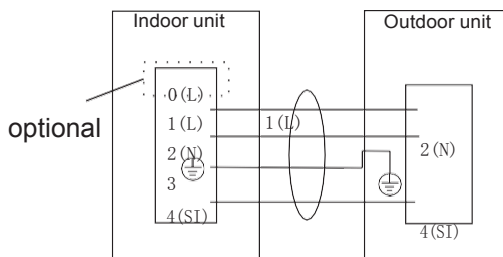
Connect the connecting cable to the outdoor unit by connecting the wires to the terminals on the control board individually in accordance with the outdoor unit connection.

Note: For some models, it is necessary to remove the cabinet to connect to indoor unit terminal.



Connecting cable to outdoor unit

Warning:
Before obtaining access to terminals, all supply circuits must be disconnected.



NOTE: For the mono split

Caution:

- 1.Never fail to have an individual power circuit specifically for the air conditioner. As for the method of wiring, refer to the circuit diagram posted on the inside of the access door.**
- 2.Confirm that the cable thickness is as specified in the power source specification. (See the cable specification table below).**
- 3.Check the wires and make sure that they are all tightly fastened after cable connection.**
- 4.Be sure to install an earth leakage circuit breaker in wet or moist area.**

Cable Specifications

Indoor and outdoor connecting wire specification	Cable 4-core 0.75mm ² , in conformity with Design 245 IEC 57 or H07RN-F.
Indoor and outdoor connecting wire specification (for the 2,1k~3,5kW mono split)	Cable 5-core 1.0mm ² , in conformity with Design 245 IEC 57 or H07RN-F.
Indoor and outdoor connecting wire specification (for the 5,3kW mono split)	Cable 5-core 1.5mm ² , in conformity with Design 245 IEC 57 or H07RN-F.
Indoor and outdoor connecting wire specification (for the 7kW mono split)	Cable 5-core 2.5mm ² , in conformity with Design 245 IEC 57 or H07RN-F.

Attention:

Accessibility to the plug must be guaranteed even after the installation of the appliance to disconnect it in case of need. If not possible, connect appliance to a double-pole switching device with contact separation of at least 3 mm placed in an accessible position even after installation