



BEFORE THE FIRST USING YOUR INVERTER SPLIT AIR CONDITIONER, CAREFULLY READ THIS OPERATION MANUAL

DEAR CUSTOMER!

Congratulations on your purchase of an inverter split air conditioner THERMEX.

Air conditioners THERMEX are designed and manufactured in the strict accordance with domestic and international standards guaranteeing operation reliability and safety.

The present user manual applies to THERMEX models of Renca Wi-Fi. The full name of the model of your air conditioner is specified in "Manufacturer's warranty" section (sub-section "Note of sale") and in the marking plate on the air conditioner casing.

1. APPLICATION

Air conditioner (hereinafter referred to as the AC, split-system, split air conditioner) is designed to change, regulate and maintain the set air temperature in the room.

2. SCOPE OF SUPPLY

Indoor unit	- 1 pcs.
Outdoor unit	- 1 pcs.
Operation manual	- 1 pcs.
Remote controller	- 1 pcs.
Installation kit	- 1 set
Packaging	- 1 pcs.

3. SAFETY MEASURES

In order to ensure safe operation of the equipment, prevent traumas and property damage, please follow the safety measures stipulated below.

3.1 When installing the air conditioner

- Installation, relocation and repair of this equipment must be carried out by specialists with appropriate training and qualifications, as well as appropriate licenses and certificates to perform these types of work. Improper installation, disassembly, relocation and repair of equipment can lead to fire, electric shock, injury or damage due to falling equipment, fluid leakage, etc.
- The surface on which the equipment is installed and attached, as well as the fastening of the equipment, must be designed for the weight of the equipment.
- The appliance shall be installed in accordance with national wiring regulations.
- Be careful when lifting the AC to install or remove the unit. Always use two or more people for this.
- Be careful of sharp edges on the front and rear fins of the unit that could cut and cause serious injury.

- AC must be connected to proper electrical outlet or breaker with the correct electrical supply. Only the specified power can be used.
- Proper grounding must be ensured to reduce the risk of shock and fire. Do not or remove the grounding prong. If you do not have a three-prong electric receptacle outlet or breaker in the wall, have a certified electrician install the proper receptacle or breaker. The wall receptacle or breaker MUST be properly grounded.
- Do not use an adapter or an extension cord.
- Always cut off the power of AC before servicing it or moving it.
- In some type of units, there is no appropriate plug corresponding to its power cord because of power, under this condition, an appropriate power breaker should be linked to its power cord, therefore, the instruction part associated with plug using is not available for these types.
- Do not install the equipment above computers, office equipment and other electrical equipment. In case of condensate leakage, this equipment may fail.
- If refrigerant gas leaks during installation, ventilate the area immediately. Toxic gas may be produced if the refrigerant comes into contact with fire.
- Install personnel and air conditioners to eliminate static electricity during air conditioning installation.
- When installing or relocating the air conditioner, be sure to bleed the refrigerant circuit to ensure it is free of air, and use only the specified refrigerant (R32). The presence of air or other foreign matter in the refrigerant circuit causes abnormal pressure rise, which may result in equipment damage.



This appliance is filled with R32 model

3.2 During operation

- Before switching on, check that the air filter is installed correctly. If the equipment has not been used for a long time, it is recommended to clean the filter before starting operation.
- Do not switch on or off the unit by plugging or pulling off the plug, or by switching on or off the breaker. Use the on/off button of the remote control to do this.
- Do not block airflow inside or outside the AC with blinds, drapes, protective covers, shrubs.
- Do not use if power cord is frayed or otherwise damaged. Also avoid using it if there are cracks or abrasion damage along the length, plug or connector.
- Do not put fingers or sticks into the inlet or outlet of AC; the running fan may cause injuries.
- Do not put anything on the outdoor unit.
- Do not place plants or animals directly in the path of the air conditioner's airflow. Doing so could harm them.

- Do not pull the power cable when unplugging the plug from the outlet. This may cause damage to the cable, short circuit or electric shock.
- Switch off the unit, cut off the power source and contact service agent if there is abnormal phenomenon (e.g. burning smell comes out).

3.3 During maintenance

- Switch off the unit, cut off the power source and make sure the fan stops before cleaning the unit.
- Please contact service agents for service. Improper service may cause accident.
- Do not touch the switches with wet hands. This may result in electric shock.
- When replacing the air filter, do not touch the metal parts inside the equipment. This can lead to injury.
- Do not clean the air filter with metal brush; it may be damaged.
- When replacing batteries, replace old batteries with new ones of the same type. Using an old battery together with a new one can cause heat generation, liquid leakage or its explosion.
- If liquid from the battery gets on the skin, eyes or clothes, rinse them thoroughly in clean water and consult a doctor.

3.4 Before starting work

- Before starting the installation, read the instructions carefully. Strictly adhere to the description of the operations performed. Violation of the technology may result in injury to you or others, as well as damage to equipment.

3.5 Check before start-up

- Check the reliability of the grounding.
- Check that the filter is installed correctly.
- Clean the filter before starting after a long break in operation.
- Make sure that nothing is obstructing the incoming and outgoing air flow.

3.6 Electrical safety rules







- All connections must be carried out by qualified personnel.
- Connections must be carried out in compliance with all safety regulations.
- The main circuit breaker must be equipped with a current leakage monitoring device.
- The power supply characteristics must meet the requirements of the specification for this equipment.



Attention! 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. Children should be supervised to ensure that they do not play with the appliance.



Additional Safety Symbols

(A) Read the warnings	(B) Fire warnings	(C) Packaging carton warnings
 <p>Read operator's manual</p>	 <p>Caution, risk or fire</p>	 <p>Caution, risk or fire</p>
 <p>Operator's manual; operating instructions</p>		 <p>Read operator's manual</p>
 <p>Service indicator; read technical manual</p>		

Recommendations for energy saving

Appropriate Temp Setting	Avoid Direct Sunlight
Too low a temperature is harmful to health, it can cause a cold. Therefore, choose a comfortable temperature.	When it is cooling, please use curtain or blind to obstruct direct sunlight. Remember, direct sunlight reduces the cooling efficiency.
Avoid Heat Sources	Close Doors and Windows
When it is cooling, using other heat sources may affect cooling effect.	Incoming outdoor air will affect the cooling or heating efficiency. Remember that open doors and windows reduce the cooling efficiency.
Keep Air Filter Clean	Good Ventilation
Keeping air filter clean ensures high efficiency operation. Timely cleaning of the air filter will ensure the efficiency of the AC.	Do not put objects in front of the inlet and outlet of outdoor unit.

Note:

- When it is heating or cooling, plastic substance may give out a sound because of the temperature change.
- There may be gentle “rustle” sound when the unit starts or stops. It is the normal sound of flowing refrigerant. The sounds of running water can be heard when the AC is thawed and immediately after it is turned off. These sounds are associated with a change in the flow rate of the refrigerant and the cessation of its flow.
- In order to protect the unit, when the compressor stops, there will be a 3-minute delay before restarting.
- Water may flow out from the outdoor unit during heating operation.
- If the indoor humidity is too high, water drops may form on the front grill of indoor unit. This is a normal phenomenon.
- Walls, carpet, furniture or clothes indoors may disseminate peculiar smell.

- In the first several minutes of heating operation, wind may not come out from the indoor unit.
- In heating operation, steam may come out when it is defrosting.

4. MAIN TECHNICAL CHARACTERISTICS

AC power supply shall be within the range of 230 V. Supply network frequency 50 Hz \pm 1%.

The manufacturer reserves the right to make changes to the design, complete set and specifications of the AC without prior notice.

Table 1

Indoor unit		Renca 9 IN Wi-Fi	Renca 12 IN Wi-Fi	Renca 18 IN Wi-Fi
Outdoor unit		Renca 9 OUT Wi-Fi	Renca 12 OUT Wi-Fi	Renca 18 OUT Wi-Fi
Cooling capacity	W	2600 (660 – 3780)	3500 (660 – 4700)	5200 (900 – 6450)
Heating capacity	W	2600 (660 – 4000)	3500 (660 – 5000)	5200 (900 – 7100)
Energy efficiency in cooling mode	SEER	8,5	8,62	8,5
	Energy Level-Cooling	A+++	A+++	A+++
Energy efficiency in heating mode	SCOP (Average Season)	4,6	5,77	4,6
	Energy Level-Heating	A+++	A+++	A+++
Power supply	V-Hz	230/50	230/50	230/50
Power Input	Cooling	W (250 – 1500)	950 (250 – 1600)	1350 (350 – 2600)
	Heating	W (250 – 1690)	920 (250 – 1800)	1300 (350 – 2690)
Rated Current	Cooling	A 2.7 (1.2 – 6.8)	4.3 (1.2 – 7.2)	6.1 (1.6 – 11.7)
	Heating	A 2.9 (1.2 – 7.6)	4.2 (1.2 – 8.1)	5.9 (1.6 – 12.1)
Max. current	A	7.6	8.1	12.1
Refrigerant	Type	R32	R32	R32
	Charge	Kg /	/	/
Refrigerant pipe	Liquid side	mm 6	6	6
	Gas side	mm 9.52	9.52	12
	Max. refrigerant pipe length	m 9	9	12
	Max. difference in level	m 5	7	7

Ambient temperature range	Outdoor (cooling/heating)	°C	+16~53 / -15~30	+16~53 / -15~30	+16~53 / -15~30
	Indoor (cooling/heating)	°C	+17~32 / -0~30	+17~32 / -0~30	+17~32 / -0~30
Indoor unit					
Indoor air flow		m ³ /h	550/500/450/400	550/500/450/400	1200/1050/900/800
Sound Pressure Level		dB	42/40/38/36	42/40/38/36	46/43/40/37
Unit dimension		mm	864 x 331 x 265	864 x 331 x 265	1025 x 319 x 223
Weight		kg	8,32 ±8%	8,32 ±8%	9,79 ±8%
Outdoor unit					
Sound Pressure Level		dB	54	54	55
Unit dimension		mm	890 x 360 x 620	890 x 360 x 620	890 x 360 x 620
Weight		kg	10,42 ±8%	10,42 ±8%	10,42 ±8%
Compressor brand			Sanyo	GMCC	GMCC

The sound pressure level specified in the specification is measured in a special room for this purpose — an acoustic anechoic chamber in which the walls are covered with sound-absorbing material. In a real room, the sound from the equipment is amplified due to multiple reflections from the ceiling, walls, furniture, etc. This effect leads to an increase in the sound pressure level, which depends on the type of room and the characteristics of the reflective surfaces.

5. DESCRIPTION OF COMPONENTS

5.1 The composition of the split system:

Indoor unit: housing, heat exchanger, electric motor, fan, electronic control unit.

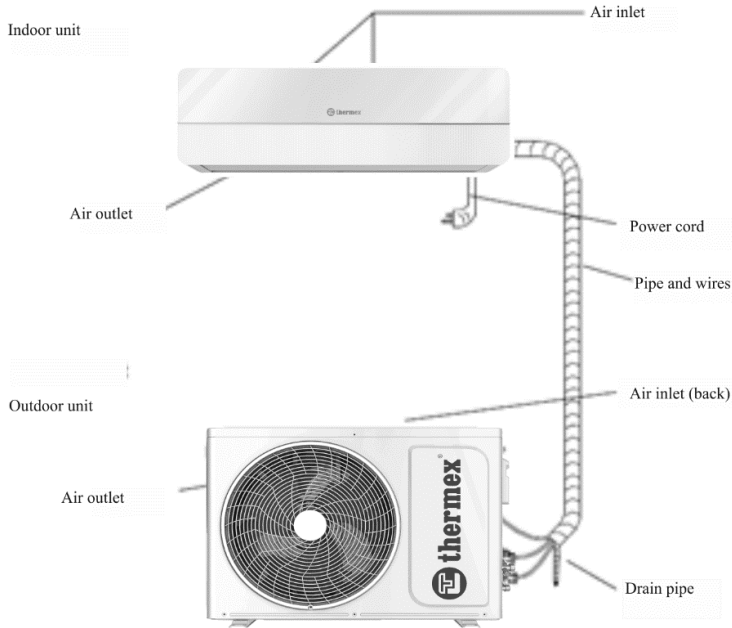
Outdoor unit: housing, heat exchanger, electric motor, fan, compressor, electronic components.

During installation, copper pipes and a communication cable (from third-party manufacturers) connect the indoor and outdoor units.

The split system consists of indoor and outdoor units, designed to change, regulate and maintain a set indoor air temperature. The principle of operation is based on the transfer of heat from the room to the street (and vice versa). Heat transfer is achieved by changing the aggregate state of the refrigerant (R32) from liquid to gaseous during its movement between heat exchangers (consisting of copper tubes and aluminum fins (lamellae) indoor and outdoor units. To change the aggregate state of the refrigerant, a compressor and a throttling device are used. In turn, fans with electric motors provide

the movement of air through the heat exchangers. The system is controlled by an electronic control unit.

Arrangement of elements






The appearance of the equipment shown in the illustrations may differ in appearance depending on the model of equipment you purchased. All illustrations in this manual are provided for informational purposes only. They may differ from the purchased equipment (depending on the model). The actual appearance of the equipment is of primary importance.

5.2 Display screen

The indoor unit is equipped with a hidden type display that allows you to project an indication of the operation of the AC directly through the front panel.

The temperature settings are displayed in the operating mode.

In the ventilation mode (FAN), the current room temperature is displayed.

Image of indicator	Name of indicator	Description of indicator
	“RUN” indicator (optional)	This signal light is on when the unit is in “RUN” status. When in Defrosting or Cooling airflow proof, the indicator is flashing.
	“TIMER” indicator (optional)	This signal light is on when the unit is in Timer.
	“TEMPERATURE” indicator	This display can show the set temperature. When the indicator display F4, F1 or F2, means the AC runs abnormally

Remark:

- Flashing of any indicator means the AC runs abnormally; please contact the distributor in time.
- The indicators on the display screen can be still controlled by “DISPLAY” button on remote controller.

5.3 Indicator light

“RUNNING” indicator – This indicator lights green when the unit is in “RUNNING” status; AC is in HEAT, COOL, FAN, DRY mode.



“TIMER” indicator (Yellow) – This indicator lights yellow when the unit is in TIMER mode.



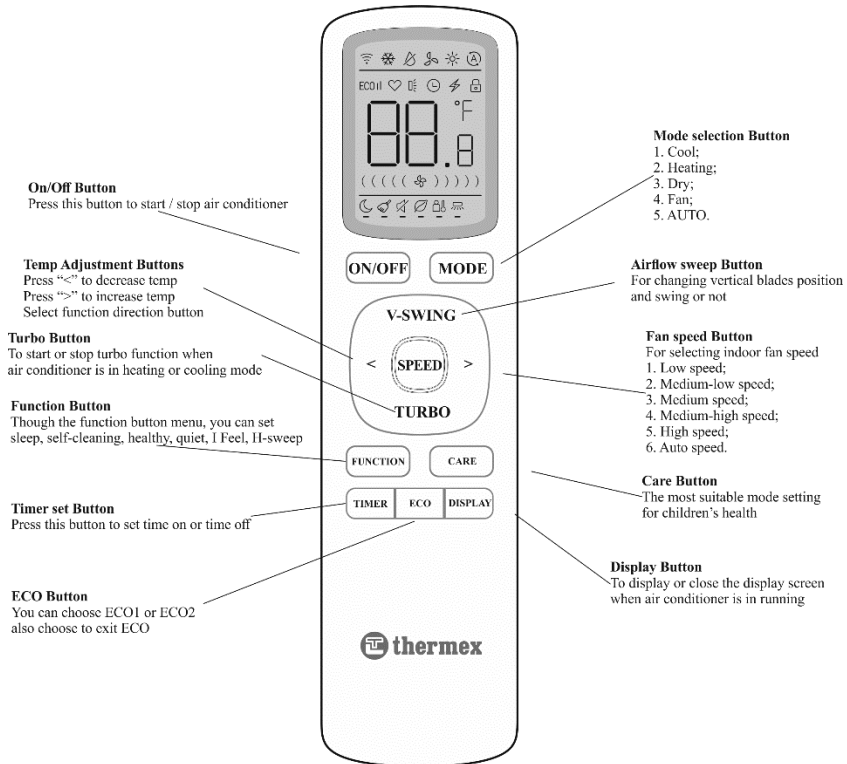
“TEMPERATURE” indicator shows the set temperature.

5.4 Remote controller

The convenience of managing THERMEX equipment is one of its main characteristics. Intuitive control system of the split-system allows you to choose the desired mode of the air conditioner, start any of the functions from the remote control.



Attention! Do not leave the remote control in direct sunlight, do not heat it, do not wash the remote control with liquid detergents, do not drop the remote control. The remote control must be in line of sight from the indoor unit of the AC and no further than 8 meters from it. When the batteries are discharged, the range of the control panel may decrease.



5.5 Control buttons

ON/OFF

Press to turn on the AC; pressing again will turn off the AC.

TEMPERATURE ADJUSTMENT BUTTONS

Press and hold the "Temperature Up" and "Temperature Down" keys for 5S after turning on the machine, and the display can be switched to Fahrenheit. Press and hold the "Temperature Up" and "Temperature Down" keys for 5S again to switch back to Celsius.

TURBO

If you want to make the room air cool or warm quickly, you can press “turbo” button in cooling or heating mode, AC will run in power function. If press “turbo” button again, AC will exit power function.

FUNCTION

Through the function button menu, you can set sleep, self-cleaning, healthy, quiet, I-Feel, H-sweep, AUH.

Click the function button to first return to the next function position of the last set function. You can move the position of the function to be set by adding and subtracting keys. The function to be set flashes for 10s. Click the function key within 10s, and this function will be selected. The lower horizontal line of the selected function icon lights up. Click the function button again to cancel the function, and the lower horizontal line will cancel.

TIMER

The following operation options are possible: switching on at the appointed time; switching on at the appointed time after the AC is turned off by timer.

The first press of the button will enter the time setting mode. Each subsequent press will change the value of the set time by 0.5 hours. When the button is held down, the time will change faster.

TIMER ON - Timer for turning on the equipment.

TIMER OFF - Equipment shutdown timer.

If you do not press the buttons for five seconds, the remote control will exit the time setting mode, the readings are automatically saved in the remote settings, the symbol will be displayed on the display ⌚. When the desired time comes, the AC will turn on/turn off automatically.

The timer runs for the next 24 hours.

To reset the time, press the **TIMER ON/ TIMER OFF** button again.

MODE

Operation mode selection button:

1. Automatic operation - When operating in AUTO mode, the AC will automatically select the operating mode (cooling, vent, heating) according to the algorithm laid down, depending on the required temperature set on the control panel and the temperature in the room. In AUTO mode, the fan speed is selected automatically by the AC.

If AUTO mode is uncomfortable for you, then you can choose a different mode of operation at any time. Press the **MODE** button to select the desired mode.

2. Cooling, heating, and ventilation – It is not possible to select the temperature setting in FAN (ventilation) mode.

3. Dehumidification – In DRY mode, the fan speed cannot be selected.

V-SWING

Airflow sweep button for changing vertical blades position and swing or not.



Attention! When using COOL or DRY modes, do not install horizontal blinds at too large an angle for long periods of time, condensation may form on the blinds. When using COOL or HEAT modes, installing blinds at a very large angle can reduce the performance of the AC due to limited air flow. For some air conditioners, the vertical angle of the airflow can be set using a remote control.

SPEED

Fan speed button for selecting indoor fan speeds. Use this button to select a comfortable fan speed. There are 6 fan operation modes in total in the AC:

1. Low speed;
2. Medium-low speed;
3. Medium speed;
4. Medium-high speed;
5. High speed;
6. Auto speed.

CARE

The most suitable mode setting for children's health. After pressing this button, the air guide bar of the AC inside the AC is directly to the top direction, so the air of the AC will not blow directly to people, and the temperature will be automatically adjusted to 26 degrees. In addition, this high light function is for families with children.

DISPLAY

Pressing it will turn off or turn on the LED display of the indoor unit. The display turns off completely when this button is pressed. Pressing again turns on the indoor unit display.

ECO

You can choose ECO1 or ECO2 also choose to exit ECO.

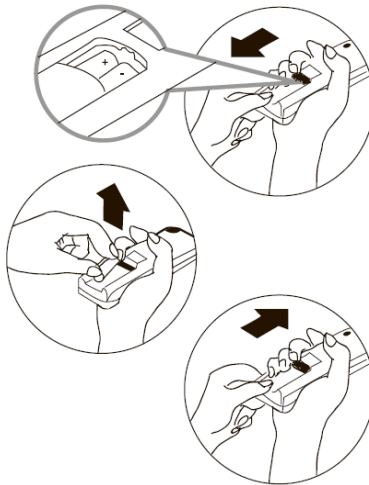
The above illustration of remote controller is only for reference, it may be slightly different from the actual product you selected.

Instruction for remote controller

- The remote controller uses two AAA batteries under normal, condition the batteries last for about 6 months. Please use two new batteries of similar type (pay attention to the poles in installing). When using remote controller, please point the signal emitter towards indoor unit receiver.
- There should be no obstacle between remote controller and indoor unit.

- Do not use wireless equipment (such as mobile phone) near indoor unit. If interference occurs because of this, please switch off the unit, pull out power plug, then plug again and switch on after a while.
- There is no direct sunlight to the indoor receiver, or it can not receive the signal from the remote controller.
- Do not cast the remote controller.
- Do not put the remote controller under the sunlight or near the oven.
- Do not sprinkle water or juice on the remote controller, use soft cloth for cleaning if it occurs.
- The batteries must be removed from the appliance before it is scrapped and that they are disposed of safety.

Replacing the batteries in the remote control



1. Slide the cover off the back of the remote control.
2. Insert two AAA alkaline batteries, make sure they are inserted in accordance with the specified direction.

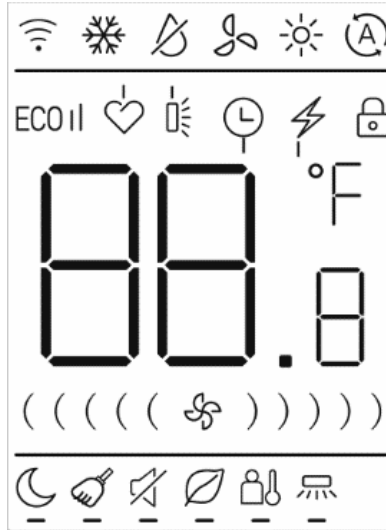
For control AC with a mobile - use Wi-Fi function.







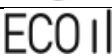




1. Install app “Thermex Home” from GooglePlay or AppStore. Create an account.
2. Press the "Function" button on the remote control (p. 5.4 – 5.5). Appears Wi-Fi indication (p. 5.6).
3. In application “Thermex Home”:
 - Click Add Device
 - From the drop list, select Air conditioner
 - Next follow the instructions of application.













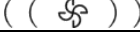


Failures:

- Make sure Wi-Fi function is enabled on your mobile device
- Make sure you are connected to the Internet or contact your provider. If there is no connection, then contact your provider.

5.6 Display indication



	Signal Emission indicator
	COOL mode indicator
	DRY mode indicator
	FAN mode indicator
	HEAT mode indicator
	AUTO mode indicator
	ECO mode indicator
	CARE mode indicator
	Displayed in according with vertical blades position and swing or not
	Displayed when setting time to turn on or turn off the air conditioner
	TURBO mode indicator

	Display lock indicator (optional)
	Indicator for measuring the current set temperature
	SLEEP mode indicator
	SELF-CLEAN mode indicator
	QUIET mode indicator
	HEALTHY mode indicator
	I FEEL mode indicator
	Displayed when the horizontal swing function is selected (optional)
	AUTO fan speed indicator (glimmer)
	HIGH fan speed indicator
	MEDIUM-HIGH fan speed indicator
	MEDIUM fan speed indicator
	MEDIUM-LOW fan speed indicator
	LOW fan speed indicator
	Displayed setting temperature and timing time

6. PRINCIPLE OF OPERATION

6.1 The principle of operation in different modes

The principle of operation of the AC in cooling mode

The operation of the AC in cooling mode is based on the transfer of heat from the room outside (most often to the street). Accordingly, the performance of the AC can increase or decrease depending on the increase or decrease in the temperature of the air outside. If the outdoor air temperature is negative, the performance of the AC decreases, and the operation of the AC in cooling mode at a negative temperature can lead to equipment malfunction.

The principle of operation of the AC in heating mode

The operation of the AC in heating mode is based on the transfer of heat from the street to the room. Accordingly, the performance of the AC can increase or decrease with an increase or decrease in the temperature outside. If the outdoor air temperature

is negative, the performance of the AC decreases, and the operation of the AC in heating mode can lead to equipment malfunction.

To prevent the supply of cold air into the room, the AC has a special program. After turning on the AC in the heating mode, the fan of the indoor unit does not turn on until the temperature of the heat exchanger of the indoor unit rises to a certain value.

The principle of operation of the defrosting system of the AC in the heating mode

When the AC is operating in heating mode at negative outdoor temperatures, the AC can automatically stop to thaw the heat exchanger of the outdoor unit. At the same time, the fans of the outdoor and indoor units stop, the indicator on the indoor unit blinks, and steam can escape from the outdoor unit and water can drip. This is not a malfunction, after thawing, the AC will automatically turn on.

6.2 Protection functions

Protection functions can prolong the air conditioner's service life and provide more comfortable airflow.

Frost protection function

When operating in cooling mode, if the temperature of the internal heat exchanger falls below 0 °C, the AC microprocessor will turn off the AC compressor. This function will help protect the AC from damage and breakdowns in case of a lack of refrigerant in the system.

Autorestart

The AC is equipped with an auto-restart function. This means that after the power supply is turned off, at the moment when the power supply appears again, the AC will turn on automatically in the same operating mode in which it worked before the power supply was turned off. The auto-restart function is active only when working with an infrared wireless remote control.

Delay-starting protection for the compressor

The compressor will restart working at least 3 minutes (5 minutes in heating mode) after being turned off to keep the pressure balance of the cooling system.

Remarks: There will be 1 minute for the compressor to work after the unit is electrified for the first time.

Dry for enzyme-prevention (optional)

Indoor fan motor will go on running for 3 minutes at low fan speed when turned off in cooling mode in order to keep dry condition inside the unit.

Cooling overload working (optional)

In cooling operation, if the temperature of outdoor heat exchanger is too high, indoor fan speed will be adjusted to a lower gear automatically and compressor may be stopped.

Drip proof (optional)

In cooling and dehumidification operation, louver blades can change the position automatically to prevent from dripping.

7. INSTALLATION AND CONNECTION

All installation and electrical works shall be performed by qualified personnel.



WARNING! Split type AC will work for you for a long period of time if it is correctly installed. Improper installation could cause problems such as leakage of water or refrigerant, electric shock or fire.

8. ARRANGEMENT AND INSTALLATION

8.1 Installation guide

All installation and electrical works shall be performed by qualified personnel. AC installation shall be performed in accordance with marking on the housing.

- This AC meets the safety and operation standards promulgated by the Nation.
- You need to invite professional AC service and maintenance personnel to install or remove the AC. Problems may occur and you may suffer losses if non-professionals install the AC.
- User shall provide the power that meets installation and operation requirements. Please refer to nameplate for details about the voltage for this product. Voltage beyond this scope will affect the normal operation of the AC.
- Separate power point with delay fuse protector or automatic breaker should be used for the AC.
- The AC must be correctly and reliably grounded, or it may cause electric shock or fire.
- Do not switch on the power of the AC before well connecting and carefully checking the tubing and wires.
- The appliance shall not be installed in laundry or bathroom.
- In case necessary, please consult your supply authority for system information.
- The plug shall be accessible after installed the appliance.
- This instruction is subject to change without notice.

8.2 Position for indoor unit

Before installing the indoor unit, it is necessary to choose a suitable location. At the same time, it must meet the following conditions:

- Good discharge for water.
- At least 1m away from wireless equipment (such as TV, radio etc.).
- Mounted on the wall that can bear the weight of the AC and won't produce noise while unit working.
- The distance between the indoor unit and the floor should be greater than 2.3m.
- The plug shall be accessible after installing the appliance.

- Ensure the distance as required in Fig.1.
- The back of the indoor unit should be close to the wall (Fig.1).

DO NOT install the unit in the following locations:

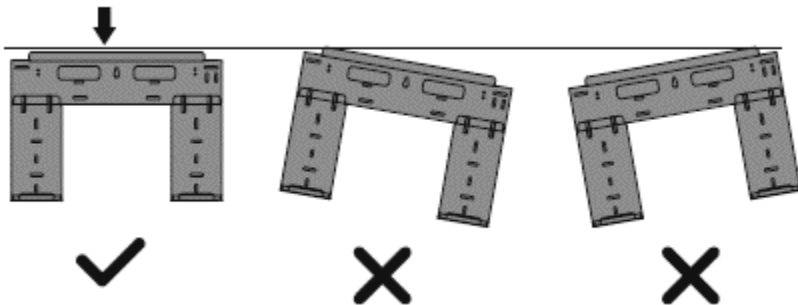
- Near any source of heat, steam or combustible gas;
- Near flammable objects such as curtains or clothing
- Near any obstacle that can block free air circulation;
- Near doorways;
- In places exposed to direct sunlight.



Fig. 1

8.3 Determining the positions of holes in the wall for pipelines

- Determine the location of the holes in the wall based on the position of the mounting plate (see mounting plate dimensions).
- Keep the mounting plate strictly horizontal using the level.



In the absence of already installed communications, sufficient space should be provided for a hole in the wall for the signal cable and the refrigerant pipeline connecting the indoor and outdoor units. By default, all pipelines are located on the right side of the indoor unit (when viewed from the front side of the unit). However, it is possible to arrange pipelines both on the right and on the left side of the block.

8.4 Fixing installation panel

The installation panel is the device on which the indoor unit will be fixed.

- Dismantle the metal installation board of the indoor unit. Adjust the mounting panel to horizontal position.
- Drill holes, insert plastic expansion tubes at the appropriate locations on the wall, and fix the installation board on the wall with M5x30 screws and washer 6. Ensure that there must be at least 4 fixed points in the wall. Ensure installation board to horizontal position.
- Drill holes as Fig. 2 shows. The hole, 80mm in diameter, should slightly slide down outwards.
- Cut PVC tubes at a slight angle in the length shorter than wall thickness and inset it into the hole (Fig.3).
- Mount the wall cap.

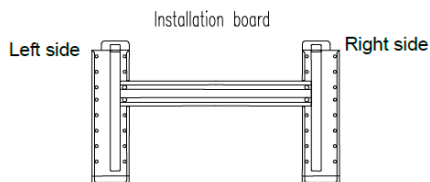


Fig. 2

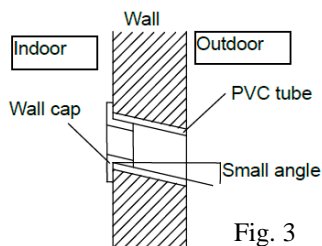
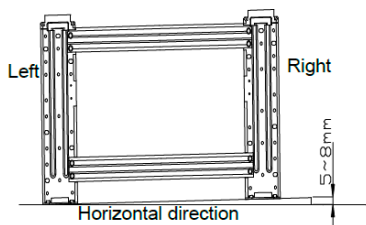
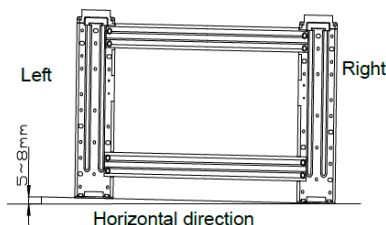


Fig. 3



8.5 Preparation for installation of refrigerant pipelines

The refrigerant tube may be connected in several directions as below shown figures. The refrigerant pipeline is located inside the heat-insulating sleeve attached to the back of the unit. Before laying the pipeline through the hole in the wall, it must be prepared.

- Connecting right back tube (similar to right lower tube) (Optional, Refer to Fig.4).
- Pull out the tubing from bottom of the chassis; and connect the drainpipe. Strap the joint of tubing reliably.
- Lead the connecting wire to the indoor unit (Do not connect to the power).
- Strap together the tubes, discharge pipe and connecting wire with adhesive tape. The discharge pipe is put at the below.
- Remove the board which is on the chassis.

- Check if the connections are reliable.
- Mount the indoor unit on the two hooks at the upper part of installation board.

Connecting left back tube (similar to left lower tube). (Optional, Refer to Fig. 5)

- Move the discharge tube to the left side, and discharge cap to the right side.
- Fix the tubes in the slot of the indoor unit with the fix clamp.

Note:

Left chart is available for the position of drain hose, refer to Fig. 4.

Right chart is available for the position of drain hose, refer to Fig. 5.

The refrigerant pipeline can exit the indoor unit from four sides: Left, Right, Left rear, Right rear.

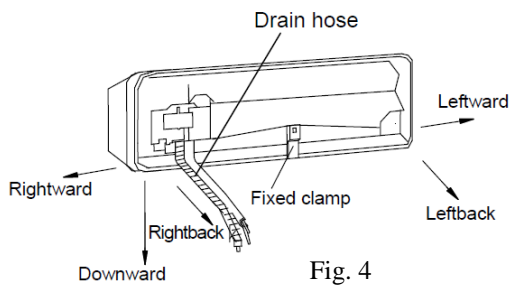


Fig. 4

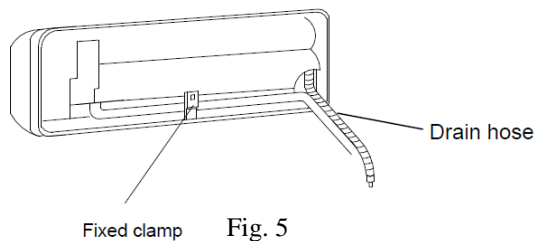
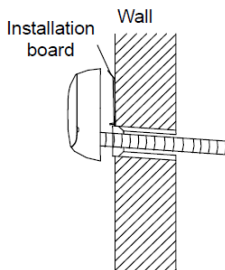


Fig. 5

8.6 Position for outdoor unit

Before installing the outdoor unit, it is necessary to choose a suitable location. At the same time, it must meet the following conditions:

- Avoid direct sunlight.
- Away from heat source, steam source, leakage of flammable gas, smoke and dust.
- Select a place that is away from rain (snow) and has good ventilation.
- Neighbors will not be affected by the blown wind and noise, or discharged water.
- The place that is easy to install and service.

- Mounted on the solid and reliable foundation will not increase noise or shock.
- To get high cooling performance, make sure the unit's front, rear, left and right sides must be located in an open area.
- In an area with strong, constant winds, try to install the unit downwind or use a windshield (a windshield is preferable).
- In places where snow is expected to fall, it is necessary to raise the block above the base area to prevent the accumulation of ice or damage to the body exchange. The unit must be installed above the average snowfall level for this area, the minimum installation height is 18 inches.
- The outlet is proposed to be in open air, any obstacle will affect the performances.
- The installing distance must be required as Fig. 6 shows.

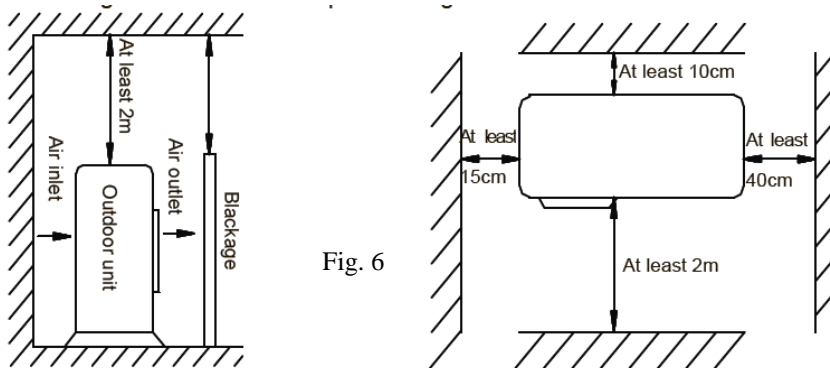


Fig. 6

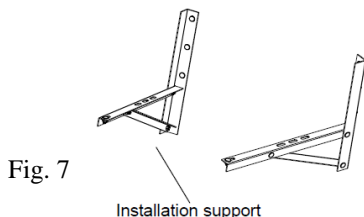
DO NOT install the unit in the following locations:

- Near obstacles that block air inlets and outlets.
- With access to sidewalks, crowded places or where the noise of a working device will cause concern to others.
- Near places where animals are kept or near plants that are harmful to the escaping hot air.
- Near sources of flammable gases.
- In places subject to heavy dust.
- In places with a high salt content in the air.

8.7 Outdoor unit installation

- If installation brackets for installing outdoor unit are needed, user could buy the brackets from our company or agents (Fig. 7).
- Assemble the mounting frame and supports with the attached 6 screws, plain washers, spring washers, and nuts.
- Drill 6 or more holes on the wall according to the feet size of the AC. Determine the locations for mounting left and right supports. Ensure that the left and right supports are on the same level.
- Fix installation frame on the wall with expansive bolts.

- Fix outdoor unit with 4 bolts on the installation brackets.
- Fittings must be tightly screwed; Connection must be tight and reliable.
- In installing outdoor unit, the body should be hung with ropes to prevent from falling.
- In installing or repair, tools and components should XL be prevented from falling.
- Regularly check the reliability of the installation frame.



When installed on the roof

- Make sure that nothing interferes with a good heat exchange.
- Measure the distance between the legs of the outdoor unit.
- Mark the holes at the installation site, drill the holes and, using dowels, fix the brackets.
- When installing on the surface (roof), prepare the frame (foundation) for the block in advance.
- The outdoor unit is attached with bolts and nuts $\varnothing 10$ or $\varnothing 8$ mm to a horizontal frame or bracket.
- After fixing the unit, install the condensate drain pipe from the outdoor unit. The fitting option (A or B) depends on the scope of delivery and the model of the outdoor unit (Fig. 8).

If the drainage pipe is supplied with a rubber seal – A type "A" drainage pipe, follow these steps:

1. Install a rubber seal on the end of the drain pipe that will be connected to the outdoor unit.
2. Insert the drain pipe into the opening of the block pallet.
3. Turn the drain pipe 90° so that it locks in place with a click in the position when it is directed to the front side of the unit.
4. Connect the drain hose extension (not included) to the drain pipe to drain water from the unit in heating mode.

If the drainage pipe is supplied without a rubber seal – a type "B" drainage pipe, follow these steps:

1. Insert the drain pipe into the hole in the pallet of the unit. The drain pipe will lock in place with a click.

2. Connect the drain hose extension (not included) to the drain pipe to drain water from the unit in heating mode.

When using the equipment in cold climates, make sure that the drainage hose is positioned as vertically as possible to ensure rapid condensate drainage. If the condensate drains too slowly, it may freeze in the hose.

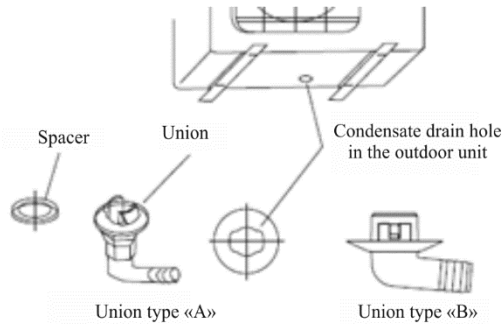


Fig. 8

8.8 Tubing selection

- Ensure that the level (height) difference of indoor and outdoor units and the length of tubing meet the requirement in the Table 3.
- If the tubing is longer than 7m, but shorter than 15m, refrigerant should be supplemented according to Table 3.
- If the installation position of the outdoor unit is higher than indoor unit and the gas tubing is longer than 10m, add an oil trap on the gas tubing for every 8m. (Fig. 9).

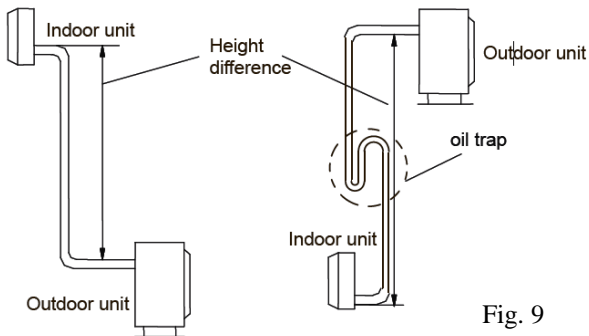


Fig. 9

Tubing size (mm/inch)		Standard tubing Length (m)	Max tubing Length (m)	Height Difference (m)	Additional refrigerants (g/m)
Liquid tube	Gas tube				
Ø6(1/4")	Ø9.52(3/8")	5.0	9	5	12
Ø6(1/4")	Ø12(1/2")	5.0	12	7	12
Ø6(1/4")	Ø15.88(5/8")	5.0	15	8	12
Ø9.52(3/8")	Ø15.88(5/8")	5.0	15	8	12
Ø9.52(3/8")	Ø19.05(3/4")	5.0	20	10	12

8.9 Tubing connection

- Detach the valve cover of outdoor unit.
- Align flaring nut to the thread center, and screw the nut tightly by hand.
- Screw tightly the flaring nut with torque spanner until the torque spanner produces "click" sound (Fig. 10).
- It is recommended to use torque spanner to connect the tubing. If other flexible or fixed spanner is used, it may damage the horn mouth due to improper force.
- The bending angle of the tube should not be too small or the tube may break up, so the service personnel should use tube bender to bend the tube.
- Never let water, dust or sand gets into the pipe.

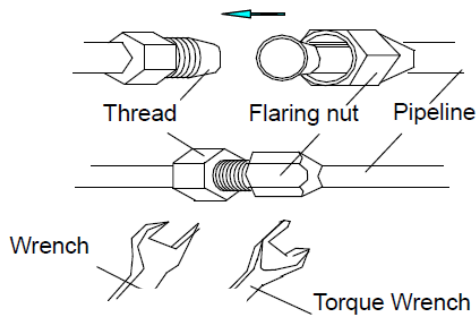


Fig. 10

Connection of the pipeline to the outdoor unit:

For the whole unit that individual cover of valve is available (refer to packing list), the installing method is as follow:

- Unscrew the cover of valve located on the side of the outdoor unit.
- Remove the protective caps from the ends of the valves.
- Align the flared pipes with each valve and the flaring nut from hand to stop.
- Grab the valve body with the key. Do not grab the nut that seals the service valve with the key.
- Use a torque spanner. While holding the valve body, tighten the cone nut.

- Loosen the flaring nut slightly, and then tighten again.
- Repeat steps 3-6 for the remaining pipes.
- After connecting the connecting pipes between the indoor and outdoor units in accordance with the installation method described above, fix the cover of valve on the side of the outdoor unit with three appropriate screws (Fig. 11).

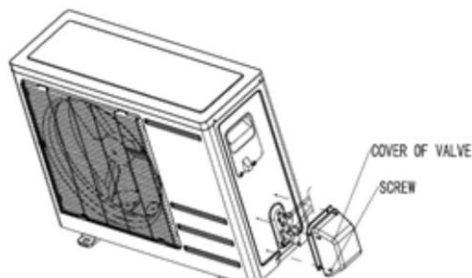


Fig. 11

The condensate must be discharged by gravity, for this the pipeline must go under a slight slope. Do not allow loops and sagging of the pipeline. When removing condensate into the sewer, do not allow the pipeline to end in water. This can lead to condensate leaks. Remove the air filter and pour a small amount of water into the drain pan (tub) to make sure that the water flows out of the unit smoothly.

8.10 Tube strapping

- Strapping with PVC Protective tape must be careful, do not damage the pipeline and drain pipe.
- Strapping should start from the lower part of the outdoor unit to the indoor unit (Fig.12).
- Fix the PVC tape with adhesive tape to prevent loosening.
- Drainpipe should slightly slide down outwards to ensure drainage well.
- When the indoor unit is lower than the outdoor unit, bend the tube to proper extent to prevent water draining into house.
- Tie together the drain hose, refrigerant piping, and signal cable.
- Use a heat-insulating tape to tightly tie together the signal wire, the refrigerant pipes and the drainage hose. Re-check that the kit is connected.
- Fix the tube bundle with tube clamps on the wall.
- Allow enough space between discharge pipe and the ground. Do not put the discharge pipe in water or ditch.
- Seal the external wall holes with sealing gum or putty.

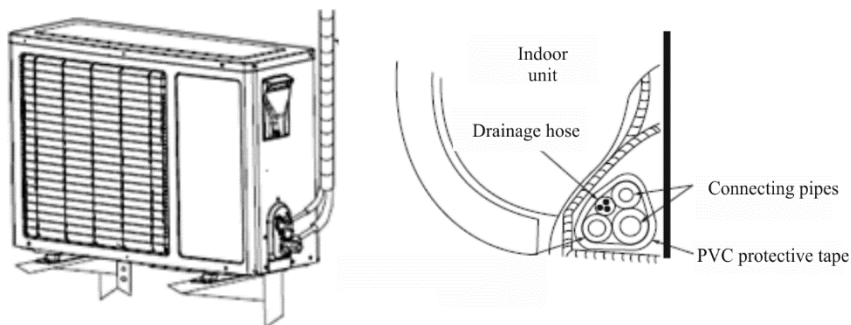


Fig. 12

8.11 Connection of wires

Before performing any electrical work, read these rules:

1. All wires must comply with local and national electrical regulations and be connected by a qualified technician.
2. All electrical connections must be made in accordance with the electrical connection diagram located on the panels of the indoor and outdoor units.
3. If there is a serious problem with the safety of the power supply, immediately stop working until the problem is resolved.
4. The supply voltage must be within 90-110% of the rated voltage. Insufficient power supply may cause malfunction, electric shock or fire.
5. Connect the unit only to a separate outlet. It is not allowed to connect other electrical appliances to the same outlet.
6. Check the grounding of the AC.
7. All wires must be rigidly connected. The absence of a rigid connection can lead to overheating of the terminal, which will lead to malfunction of the product and possible fire.
8. Do not allow the wires to touch the refrigerant line, compressor or any moving parts inside the unit.
9. If the unit has an auxiliary electric heater, it must be installed at least 1 meter away from any combustible materials.
10. To avoid electric shock, never touch the electrical components immediately after the power supply is turned off. After the power is turned off, you need to wait.

Connection the indoor unit

- Open upward the inlet grid to the greatest extends.
- Remove the electric cover from the unit.
- Loose the screw at connection lid (Fig. 13).

- Dismantle the wire pressure plate.
- Connect the power connecting wires and signal control wire separately to the corresponding terminals. (In Fig.15, please choose the same wiring diagram just with the wiring diagram of unit)
- Loose off the screw on the earth plate; press earth wire tightly.
- Press tightly the connecting wires of the unit with lead wire pressure plate.
- Close the connection lid screw it tightly and close the inlet grid.

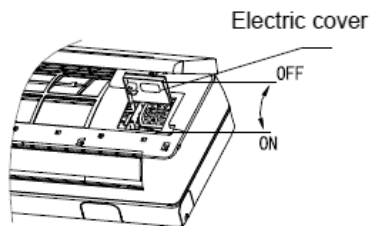


Fig. 13

Connection the outdoor unit

- Unscrew and dismantle the electronic device lid (Fig. 14).
- Loose the screw at connection lid.
- Dismantle the pressure plate of wire fastener.
- Connect the connecting wires of the unit separately to the corresponding terminals (Fig. 15).
- Press tightly the connecting wires of the unit with top pressure plate.
- Remount the electronic device lid to the original position.
- To prevent water from flowing through the cable into the terminal block, make a small loop next to the cover of the terminal box.
- If user wants to prolong or replace the power wire, please do it according to the Table 4.

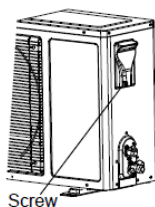


Fig. 14

Model	Parameter	Power connecting wires	Signal control wire	Power cord
	Max. Length	10m	10m	5m
Renca 9 Wi-Fi, Renca 12 Wi-Fi	Cross sectional area	$\geq 1.0 \text{ mm}^2$	$\geq 1.0 \text{ mm}^2$	$\geq 1.0 \text{ mm}^2$
Renca 18 Wi-Fi		$\geq 1.5 \text{ mm}^2$	$\geq 1.5 \text{ mm}^2$	$\geq 1.5 \text{ mm}^2$

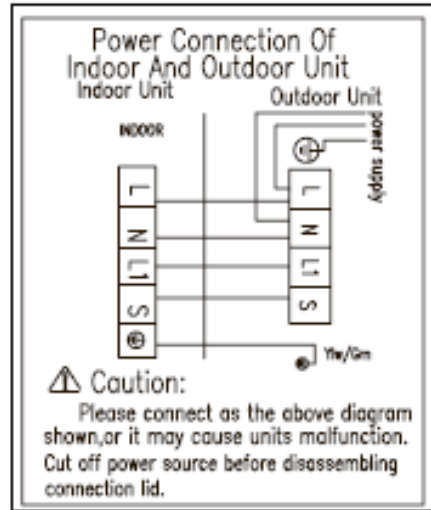
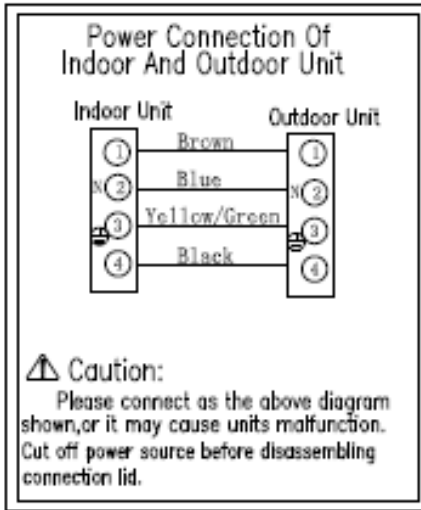


Fig. 15

Note:

- Earthing screw must use special screw (stainless machining screws or copper screws M4)
- Ensure that all wires are securely connected, will not lose or separate.
- Ensure that wire connections are carried out according to the wiring diagram of the AC.
- The above figures are only schematic, and they may be slightly different from the actual appliances you select.



Attention! Do not mix up the wiring, it is dangerous, and may cause a malfunction of the air conditioner.

WARNING! All wiring must be carried out strictly in accordance with the wiring diagram located on the back of the front panel of the indoor unit.



WARNING! Before performing electrical or installation work, turn off the main power supply of the system.

8.12 Recharge with refrigerant



Attention! Before starting the AC, be sure to remove the air from the AC! Otherwise, the air remaining in the system can cause malfunctions in the operation of the AC and lead to serious malfunctions! When working with R32 refrigerant, it is recommended to use a 2-stage vacuum pump with a check valve to avoid oil from the vacuum pump entering the refrigeration circuit! Details on vacuuming the system are given in the section "Air removal by vacuum pump".



Attention! When working with R32, it is mandatory to remove air by a two-stage vacuum pump with a check valve to prevent the vacuum pump oil from entering the hydraulic circuit! Use the right equipment when working.

Removal of air by vacuum pump

It is necessary to vacuum the system for at least 30 minutes. If the installation of pipelines took place under atmospheric precipitation or with an air humidity of more than 60%, then it is necessary to vacuum the system for at least 2 hours.

- Make sure that all the tubes of indoor and outdoor unit are connecting well.
- Take off valve bonnet from two-way and three-way valves by spanner; connect vacuum pump and compound valve to the service valve bonnet.
- Open the low-pressure switch of compound valve, and run vacuum pump until units' internal pressure at 10 mmHg.
- After 15 minutes of pump operation, check the readings. The arrow should show (-1 kg/cm²) or lower. If the arrow shows positive pressure or 0, there is probably a leaky connection or damage to the pipeline in the system. Fix the problem and perform the vacuuming again. The damaged area can be found by crimping the pipeline with nitrogen at a pressure of up to 25 kg / cm².
- Vacuum the system for at least 30 minutes. If the pressure gauge shows pressure (-1 kg/cm²) or lower, close the low pressure valve on the manifold, turn off the pump and leave the system with the connected pressure gauge manifold for 5 minutes. If the pressure does not rise, open the valve on the pressure gauge manifold and continue vacuuming for another 15 minutes, close the valve on the pressure gauge manifold. Wait 5 minutes, then check if the system pressure has changed. If the pressure in the system changes, refer to the section "Checking for gas leaks" for information about checking for leaks. If there is no pressure change in the system, unscrew the cap of the high-pressure valve. Insert the hex key into the high pressure valve and open the valve by turning the key counterclockwise. You will hear the gas filling the system. After 5 seconds, close the valve.

- Monitor the pressure gauge for one minute to make sure there is no change in pressure. The pressure gauge value should be slightly higher than atmospheric pressure. Fully open the 2- and 3-way valves and tighten the cover of the 2- and 3-way valves.
- Remove the filling hose from the service port.

Checking for leaks

In order to check the leaks, you need to perform the following steps:

1. Close (screw) the plugs on all ports of the outdoor unit tightly.
2. Check with a leak detector or soap foam for leaks at the inspection points. The verification points are indicated in the figure below.
 - Check point 1: the connection point of the pipelines to the indoor unit (nuts and fittings).
 - Check point 2: the connection point of the pipelines to the outdoor unit (nuts), protective caps on the fans.

If there are leaks, disconnect the equipment, close the ports with hex keys, disconnect the equipment from the power supply and perform a re-installation. In case of leakage from under the plugs, contact the nearest service center.



Attention! Refuel the system only in the liquid phase! Refueling with gas can cause an imbalance in the composition of the mixture and lead to equipment malfunction! Remember that polyester oil used in the refrigeration circuit is very hygroscopic, and if the refrigeration circuit of the outdoor unit or the entire system was open to atmospheric air for more than 5 minutes, it will require vacuuming the entire system for at least 30 minutes. If the refrigeration circuit has been open for more than 20 minutes, a complete oil change in the compressor will be required.

8.13 Verification for leaks of electricity and refrigerant

The test run is performed only after completing the following steps:

- Electrical safety check — check all electrical connections of the system;
- Gas leak check — check all connections of the freon pipelines and make sure that there are no leaks in the system;
- Make sure that the gas and liquid valves (high and low pressure) are fully open.

Verification electrical connections before test run

Measure the ground resistance with a tester. The grounding resistance should be less than 0.1 ohms.

During the test run, use a multimeter to perform a comprehensive electrical leakage test. If a power leak is detected, immediately turn off the equipment and invite a specialist to find and eliminate the cause of the leak.



Attention! All electrical connections MUST comply with local and national electrical regulations. Connections must be performed by qualified personnel.

Verification for refrigerant leaks before test run

There are two ways to check for refrigerant leaks:

1. Soap solution — Use a soft brush to apply soapy water or liquid detergent to all pipe connection points inside and outside the room. The presence of bubbles indicates a leak.
2. Leak detector — When using a leak detector, see the operating instructions of the device.

9. SERVICE AND MAINTENANCE



Attention! Before any work, the AC must be turned off and de-energized. Washing the AC when it is turned on can lead to electric shock!

Attention! If your AC is equipped with a plasma filter, it is forbidden to touch the body of the plasma filter for at least 10 minutes after disconnecting the power from the AC!

Volatile liquids (such as solvent or gasoline) can damage the AC. Wipe the conditioner with a soft dry cloth or a cloth slightly moistened with water or detergent.

Careful maintenance and overhaul in advance can prolong the air conditioner's service life and save electricity charges.

Caution:

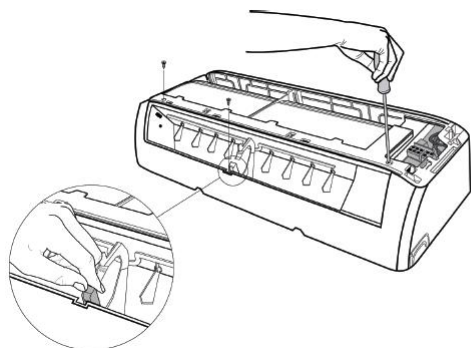
- Stop AC by remote controller and pull off the plug before service and maintenance.
- Do not stand on unstable objects when you clean or service AC or it may cause personal injury.
- Do not touch the metal part of the body when you remove the front panel, or it may cause personal injury.

9.1 Clean the front panel

If the dirt can't be removed, please clean it with warm damp cloth (soaked with warm water below 40°C). In order to clean the front panel, you need to perform the following steps:

1. Open the front panel.
2. Remove the pre-filters.

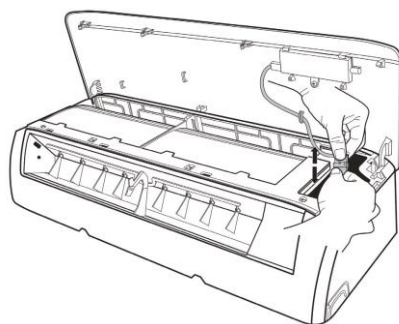
3. Unscrew the 5 screws of the front panel.



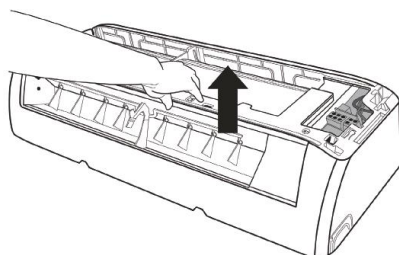
4. Open the connection lid.



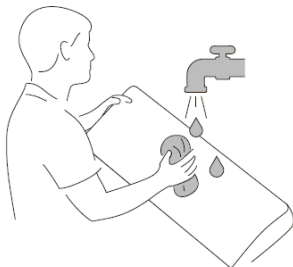
5. Disconnect the display board connector.



6. Pull the front panel in the direction shown in the illustration below to remove it.



7. Wash the front panel in water with neutral detergents. Before washing, remove the display from the front panel. The water temperature should not be higher than 40°C.



8. Insert front panel into the original position.

The appearance of the equipment shown in the illustrations may differ in appearance depending on the model of equipment you purchased. All illustrations in this manual are provided for informational purposes only. They may differ from the purchased equipment (depending on the model). The actual appearance of the equipment is of primary importance.



WARNING!

- **Do not clean the unit with water, or it may cause electric shock.**
- **Do not clean the remote controller with water.**
- **Do not clean with alcohol, gasoline, banana oil, or polishing.**
- **Do not clean the unit violently, or it may cause the front panel falling down.**
- **Do not clean the front panel or remote controller with metal brush, it may damage the surface.**

9.2 Clean air filter

A clogged air filter can reduce the cooling efficiency of your device, it is also possible to change the air flow and significantly increase the noise of the airflow from the device. Therefore, cleaning the air filter should be done at least once every two weeks and as needed. Remember that a clogged, dirty filter reduces the performance of the AC. In order to clean the filter, you need to perform the following steps:

1. Open the front panel.
2. Grasp the tab on the end of the filter, lift it up and pull it towards you.
3. If your AC is equipped with additional air filters (small filters that are inserted into large filters), then remove these small filters before cleaning. Small filters can only be cleaned with a vacuum cleaner!
4. Clean it with vacuum cleaner or water. If air filter is very dirty, please clean it with warm soapy water or mild detergent. Then dry it in the shadow.
5. Shake the filter after washing to remove excess water. Do not replace the wet filter until it is dry.
6. Insert air filter into the previous position, and close the front panel.

Note:

- Air filter should be cleaned at least once every two weeks, or heating or cooling capacity will be reduced.
- Do not clean the air filter with metal brush; it may be damaged.

10. POSSIBLE FAULTS AND REMEDIES

Attention! Do not try to repair the AC yourself. Contact an authorized service center or your dealer.

Air conditioner is in error		
Malfunction	Failure Cause	Remedy method
Air Conditioner doesn't turn on	Power supply is disconnected	Wait for the power to be restored
	The circuit breaker has tripped; the fuse has blown	Turn on the circuit breaker. If the circuit breaker has tripped again, call the service department
	The batteries in the control panel are discharged	Replace the batteries
	Other radio equipment is used within 1 m of the device	Remove extraneous radio equipment
	The timer is set incorrectly	Set the correct time or cancel the timer settings
Poor cooling or heating performance	The air intake or exhaust pipe is blocked by foreign objects	Clear the way for air, remove foreign objects
	The air filter of the indoor unit is clogged with dirt	Clean the filter
	Windows or doors are open, direct sunlight enters the room	Close windows, doors, curtain windows
	The set temperature or speed of the AC exceeded. 3-minute delay for the compressor start-up has been triggered	Wait

Do not try to fix these breakdowns yourself:

Malfunction	Remedy method
Strong extraneous sounds or vibration during operation of the AC	Turn off the AC immediately, remove the power and contact the nearest service center or your dealer
Strong unpleasant smell of burnt insulation or mold from the indoor unit	
Condensate from the indoor unit enters the room	
The automatic power protection switch is often triggered	
A warm power cord or an outlet in which the AC is turned on	

Lightning or the operation of a wireless car headset can cause problems in the operation of the AC. Disconnect the power from the AC and turn it back on after five minutes.

If you do not plan to use the AC for a long time, perform the following operations:

- Turn on the ventilation mode for several hours to dehumidify the installation from the inside;
- Turn off the AC and turn off the power, remove the batteries from the remote.

If the problem cannot be fixed by yourself, please contact the nearest service center or your dealer. Accurately describe the malfunction and model of the AC.

11. ERROR CODES, EXPLANATION AND RECOMMENDATIONS TO FIX THEM

IDU Display	Fault Details	Failure Cause	Remedy method
EE	Indoor unit EEPROM fault	IDU main PCB is damaged	Replace a new IDU main PCB
F0	Indoor fan motor fault	1. IDU fan is blocked. 2. IDU fan motor is damaged. 3. IDU main PCB is damaged.	1. Clean the fan's block 2. Replace a new IDU fan motor 3. Replace a new IDU main PCB
E1	Indoor PCB zero-crossing fault	IDU main PCB is damaged	Replace a new IDU main PCB
F3	Indoor coil sensor fault	1. IDU coil sensor is loose or short circuit. 2. IDU main PCB is damaged	1. Loose: connect it well again; short circuit: replace a new IDU coil sensor 2. Replace a new IDU main PCB
F1	Indoor room temperature sensor fault	1. IDU room temperature sensor is loose or short circuit. 2. IDU main PCB is damaged.	1. Loose: connect it well again; short circuit: replace a new IDU room temperature sensor 2. Replace a new IDU main PCB
F6	Indoor and outdoor communication fault	1. The IDU and ODU connecting wire were connected in wrong order when installation. 2. Poor contact between the connecting wire cable and the terminal block. 3. The connecting wire is damaged. 4. No ODU rated voltage output or IDU main PCB is damaged. 5. ODU reactor connecting wire is loose, or the reactor is damaged.	1. Check the connecting wire to confirm it correct. 2. Connect it well again. 3. Replace a new connecting wire. 4. Replace a new IDU main PCB. 5. Connect it well, or replace a new reactor. 6. Replace a new ODU main PCB.

		6, ODU main PCB is damaged.	
EF	Outdoor unit EEPROM fault	ODU main PCB is damaged.	Replace a new ODU main PCB
E4	Compressor starting abnormal (phase failure, reverse)	1. ODU compressor connecting wire is loose or damaged. 2. ODU main PCB is damaged.	1. Connect the wire well, or replace a new compressor connecting wire
E3	Compressor out-of-step fault	ODU main PCB is damaged.	Replace a new ODU main PCB
F9	IPM module fault (Intelligent Power Module)	ODU main PCB is damaged/	Replace a new ODU main PCB
F5	Exhaust temperature sensor fault	1. ODU exhaust temperature sensor is loose or short circuit. 2. ODU main PCB is damaged.	1. Replace a new exhaust temperature sensor. 2. Replace a new ODU main PCB.
F4	Outdoor coil temperature sensor fault	1. ODU coil temperature sensor is loose or short circuit. 2. ODU main PCB is damaged.	1. Replace a new ODU coil temperature sensor. 2. Replace a new ODU main PCB.
F2	Outdoor ambient temperature sensor fault	1. ODU ambient temperature sensor is loose or short circuit. 2. ODU main PCB is damaged.	1. Replace a new ODU ambient temperature sensor. 2. Replace a new ODU main PCB.
E8	Outdoor system exception	1. Too many dust on the ODU condenser to make block, causing the ODU coil or exhaust temperature too high. 2. ODU fan motor damaged, causing the ODU coil or exhaust temperature too high. 3. The gas leaked, causing the gas lockage.	1. Clean the condenser's block. 2. Replace a new ODU fan motor. 3. Fill R32 gas.

12. TRANSPORTATION AND STORAGE OF AIR CONDITIONERS

Transportation and storage of AC shall be carried out in accordance with manipulation marks on the packaging:



– need to protect the goods from moisture



– fragile, delicate handling



– recommended storage temperature range from +5° to +40° C



– correct vertical position of cargo

13. DISPOSAL

When disposing of the AC comply with local environmental laws and guidelines.

All parts of the AC are made of materials allowing, where appropriate, environmentally sound disposal, which must be made in accordance with the rules and regulations of the country where the AC is operated. It shall be handed over to the authorized collection center for the recycling of electrical and electronic equipment waster generated at the end of life of the product.

Electrical and electronic products, as well as batteries, should not be mixed with unsorted household garbage.

Do not attempt to dismantle the system yourself: disassembly of the product, removal of the refrigerating agent, oil and other parts must be carried out by a qualified specialist in accordance with local and national legislation.

Aggregates and used batteries must be taken to a special recycling station for recycling, recycling and reuse.

The manufacturer reserves the right to make changes to the configuration, design and characteristics of the equipment without prior notice, without deterioration of the performance characteristics of the products.

14. ENERGY EFFICIENCY CLASS OF EQUIPMENT

Model	SEER / SCOP (Average season)
THERMEX Renca 9 Wi-Fi	8,5 / 4,6
THERMEX Renca 12 Wi-Fi	8,62 / 5,77
THERMEX Renca 18 Wi-Fi	8,5 / 4,6

SEER (Seasonal Energy Efficiency Ratio) is a measurement of AC efficiency. It is the ratio of cooling power-to-power consumption.

SCOP (Seasonal Coefficient of Performance) it is the ratio of heating power-to-power consumption. It defines the performance of a reversible air conditioning unit in hot mode or a heat pump throughout use.

15. TEST RUN

The test run should run for 30 minutes.

- Connect the power supply to the unit.
- Press the ON/OFF button on the remote control to turn on the AC.
 - Press the MODE button to view the following modes: COOL — set the lowest possible temperature on the remote control.
 - HEAT — set the maximum possible temperature on the remote control.
- Check each mode for 5 minutes and perform the following checks:

Control points of work	+	-
There is no leakage of electricity		
Grounding of equipment		
All terminals of electrical connections are closed		
The indoor and outdoor units are securely fixed		
Absence of leaks at all points of connection of pipelines		
Condensate is freely discharged through the drainage hose		
The entire pipeline is insulated		
The cooling mode is working correctly		
The heating mode works correctly		
The blinds of the indoor unit rotate		
The indoor unit processes commands from the remote control		

16. MAINTENANCE REGULATIONS

Each AC needs periodic maintenance. The specified service can be performed by a specially trained person in accordance with these regulations.



Attention! The absence of periodic qualified technical maintenance or its untimely implementation may lead to unstable operation, equipment breakdown and refusal of warranty repair!

All maintenance work must be carried out by qualified personnel!

Maintenance regulations:

1. Cleaning the fins of the heat exchanger of the indoor unit.
2. Spilling of drainage channels to drain condensate.
3. Cleaning of decorative panels from dust and dirt.
4. Cleaning the indoor unit filter.
5. Check the condition of the fan motor bearings.
6. Checking the reliability of the contacts of the electrical connections of the supply and connecting cables.
7. Cleaning the fan impeller.
8. Checking the efficiency of the evaporator by the temperature difference of the incoming and outgoing air.
9. Inspection of the air intake grate and fins of the condenser (if necessary, cleaning).
10. Checking the operation of the motor compressor by noise and heating.
11. Checking the reliability of electrical connections.
12. Checking the mounting and balancing of the fan impeller.
13. Checking the condition of the fan motor bearings.
14. Checking the current consumption for compliance with the passport data of the controller.

A note about the maintenance work is put in the warranty card by the specialist who carried out the maintenance!

Maintenance should be carried out regularly at least 2 times a year (every 6 months). For equipment installed in server rooms and not having rotation and redundancy blocks — at least 4 times a year (every 3 months).

17. MANUFACTURER'S WARRANTY

The manufacturer sets 2 years as the period of warranty for AC.

The warranty period is calculated from the date of AC sale. If there is no or corrected date of sale and shop stamp, the warranty period is calculated from the date of AC manufacture. Claims within the warranty period are accepted only on presentation of the warranty card with marks of the seller, and the identification plate on the casing of the AC. Release date of an AC is encoded in a unique serial number, located on the identification plate on the casing. AC serial number consists of thirteen digits. The third and fourth digits of the serial number are year of manufacture, the fifth and sixth digits - month of release, the seventh and eighth digits - day of AC release. Claims within the warranty period are accepted only on presentation of the guarantee card with marks of the seller, and the identification plate on the casing of the AC.

The warranty covers only the air conditioners used for the purposes not related to commercial activities. The responsibility for following the installation and connection rules lies with the buyer and the service company implementing the connection.

When installing and using the AC, the consumer shall be obliged to observe the requirements ensuring fail-safe operation of the appliance within the warranty period. If the requirements are violated, the warranty obligations of the manufacturer shall be discharged:

- to follow the safety measures and rules of installation, connection, and servicing stipulated in this Manual;
- to exclude any mechanical damages caused by negligent storage, transportation or mounting of the equipment;
- to use for connection of the AC the cable with the cross section of not less than the minimum recommended cross section advised by the manufacturer (stipulated on the sticker on the body of the appliance and in this Manual).

The manufacturer shall not be liable for defects due to violations of principles of installation, operation and maintenance of AC set forth herein, including in cases where these defects have arisen due to invalid parameters of mains (electricity), where AC is operated, and due to the intervention of a third party. Manufacturer's warranty does not cover claims for appearance of AC.

18. INFORMATION ON THE MANUFACTURER

Manufacturer:

SUMEC Machinery&ElectricCo., Ltd

198 Changjiang Road, Nanjing, 210018, China

All models have been certified and comply with requirements of European Directives: 2014/35/EU, 2014/30/EU and 2011/65/EU (RoHS).



NOTE OF SALE

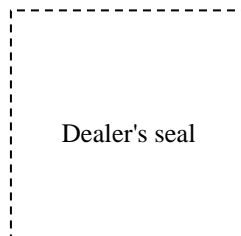
Model _____ Serial No. _____

Date of sale _____, 20 ____ .

Dealer: _____

Dealer's representative

signature _____



The product is completed; I have no claims for the appearance of the product. Operation manual with the necessary marks is received. I have read, understood and accepted operation rules and warranty terms.

Customer's signature: _____

NOTE OF INSTALLATION

The air conditioner has been installed, inspected and launched by a specialist of a service center or another organization having a license for such activities.

Legal address: _____

Actual address:

Phone/fax: _____

(Stamps with the full name of the company and license number)

Technician _____

(signature) (Name)

The owner of the appliance has been instructed about the main rules of the appliance usage

Date: _____ 20 _____

(signature of the owner of the appliance)



WARRANTY CERTIFICATE 1 /

TAGLIANDO DI GARANZIA 1 / TALÓN DE GARANTÍA 1 / GARANTIEZETTEL 1 /

GARANTIEKAART 1 / BON DE GARANTIE 1 / ГАРАНТИЙНЫЙ ТАЛОН 1 /

GARANTIJAS TALONS 1 / GARANTINIS TALONAS 1 / ГАРАНТИТАЛОН 1

Model / Modello / Modelo / Ausführung / Model / Modèle / Модель / Modelis / Modelis / Mudel		Dealer's seal / Timbro del venditore / Sello de la empresa-vendedor / Siegel des verkäufers / Stempel van firma verkoper / Sceau de la firme productrice / Печать фирмы продавца / Pārdevēja zīmogs / Įmonės pardavėjos antspaudas / Mūļafirma pitser
Serial No. / Numero di matricola / Número de serie / Serie / Serie nr / Numéro de série / Серийный номер / Sērijas numurs / Serijinis Nr. / Seerianumber		
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Dealer / Venditore / Empresa-vendedor / Verkäufer / Firma verkoper / Firme productrice / Фирма продавец / Pārdevējs / Pardavėjas / Mūļafirma		

To be filled by the dealer / Reservato al venditore / Timbro del venditore / Wird von dem verkäufer ausgefüllt / Word ingevuld door firma-verkoper / À remplir uniquement par la firme productrice / Заполняется фирмой продавцом / Aizpilda pārdevējs / Pildo įmonė pardavėja / Tāidab mūļafirma



WARRANTY CERTIFICATE 2 /

TAGLIANDO DI GARANZIA 2 / TALÓN DE GARANTÍA 2 / GARANTIEZETTEL 2 /

GARANTIEKAART 2 / BON DE GARANTIE 2 / ГАРАНТИЙНЫЙ ТАЛОН 2 /

GARANTIJAS TALONS 2 / GARANTINIS TALONAS 2 / ГАРАНТИТАЛОН 2

Model / Modello / Modelo / Ausführung / Model / Modèle / Модель / Modelis / Modelis / Mudel		Dealer's seal / Timbro del venditore / Sello de la empresa-vendedor / Siegel des verkäufers / Stempel van firma verkoper / Sceau de la firme productrice / Печать фирмы продавца / Pārdevēja zīmogs / Įmonės pardavėjos antspaudas / Mūļafirma pitser
Serial No. / Numero di matricola / Número de serie / Serie / Serie nr / Numéro de série / Серийный номер / Sērijas numurs / Serijinis Nr. / Seerianumber		
Date of sale / Data di vendita / Fecha de venta / Verkaufsdatum / Verkoopdatum / Date de vente / Дата продажи / Pārdošanas datums / Pardavimo data / Mūīgi kuopāev		
Dealer / Venditore / Empresa-vendedor / Verkäufer / Firma verkoper / Firme productrice / Фирма продавец / Pārdevējs / Pardavėjas / Mūļafirma		

To be filled by the dealer / Reservato al venditore / Timbro del venditore / Wird von dem verkäufer ausgefüllt / Word ingevuld door firma-verkoper / À remplir uniquement par la firme productrice / Заполняется фирмой продавцом / Aizpilda pārdevējs / Pildo įmonė pardavėja / Tāidab mūļafirma

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Defect / Difetto / Defecto / Defekt / Gebrek / Dėfaut / Дефект / Defekts / Defektas / Rike		
Executed work / Lavori eseguiti / Trabajo cumplido / Durchgefėhrte Arbeiten / Gedane werkzaamheden / Travail produit / Выполненная работа / Izpildėtis darbs / Atlikti darbai / Tehtud t33		
Expert (full name) / Tecnico / Contramaestre (nombres y apellidos) / Fachspezialist (name) / Vakkundige (naam) / Rėparateur (nom, prėnom) / Специалист (имя) / Meistars / Meistras / Spetsialist (nimi)		

Filled in by service center / Riservato al centro di assistenza / Se complementa por el centro de asistencia tėcnica / Wird von dem Servicebetrieb ausgefėllt / Wordt ingevuld door het servicecentrum / Ā remplir uniquement par le service client / Заполняется сервисным центром / Aizpilda servisa centrs / Pildo aptarnavimo centras / Tėidab teeninduskeskus

Date of acceptance / Data di ricezione / Fecha de la recepci3n / Aufnahme datum / Datum van ontvangst / Date d'acceptance / Дата приема / Saņemšanas datums / Priėmimo data / Vastuvėtu kuupėev		Stamp of service center / Timbro del centro di assistenza / Sello del centro de asistencia tėcnica / Siegel des servicebetriebs / Stempel van servicecentrum / Sceau du service client / Печать сервисного центра / Servisa centra žimogs / Aptarnavimo centro antspaudas / Teeninduskeskuse pitser
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WARRANTY CERTIFICATE 3 /

TAGLIANDO DI GARANZIA 3 / TALÓN DE GARANTÍA 3 / GARANTIEZETTEL 3 /

GARANTIEKAART 3 / BON DE GARANTIE 3 / ГАРАНТИЙНЫЙ ТАЛОН 3 /

GARANTIJAS TALONS 3 / GARANTINIS TALONAS 3 / ГАРАНТИТАЛОН 3

Model / Modello / Modelo / Ausführung / Model / Modèle / Модель / Modelis / Modelis / Mudel		Dealer's seal / Timbro del venditore / Sello de la empresa-vendedor / Siegel des verkäufers / Stempel van firma verkoper / Sceau de la firme productrice / Печать фирмы продавца / Pārdevēja zīmogs / Įmonės pardavėjos antspaudas / Mūļafirma pitser
Serial No. / Numero di matricola / Número de serie / Serie / Serie nr / Numéro de série / Серийный номер / Sērijas numurs / Serijinis Nr. / Seerianumber		
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Dealer / Venditore / Empresa-vendedor / Verkäufer / Firma verkoper / Firme productrice / Фирма продавец / Pārdevējs / Pardavėjas / Mūļifirma		

To be filled by the dealer / Reservato al venditore / Timbro del venditore / Wird von dem verkäufer ausgefüllt / Word ingevuld door firma-verkoper / À remplir uniquement par la firme productrice / Заполняется фирмой продавцом / Aizpilda pārdevējs / Pildo įmonė pardavėja / Taidab mūļafirma



WARRANTY CERTIFICATE 4 /

TAGLIANDO DI GARANZIA 4 / TALÓN DE GARANTÍA 4 / GARANTIEZETTEL 4 /

GARANTIEKAART 4 / BON DE GARANTIE 4 / ГАРАНТИЙНЫЙ ТАЛОН 4 /

GARANTIJAS TALONS 4 / GARANTINIS TALONAS 4 / ГАРАНТИТАЛОН 4

Model / Modello / Modelo / Ausführung / Model / Modèle / Модель / Modelis / Modelis / Mudel		Dealer's seal / Timbro del venditore / Sello de la empresa-vendedor / Siegel des verkäufers / Stempel van firma verkoper / Sceau de la firme productrice / Печать фирмы продавца / Pārdevēja zīmogs / Įmonės pardavėjos antspaudas / Mūļafirma pitser
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Date of acceptance / Data di ricezione / Fecha de la recepci3n / Aufnahme datum / Datum van ontvangst / Date d'acceptance / Дата приема / Saņemšanas datums / Priėmimo data / Vastuvėtu kuupėev		Stamp of service center / Timbro del centro di assistenza / Sello del centro de asistencia tėcnica / Siegel des servicebetriebs / Stempel van servicecentrum / Sceau du service client / Печать сервисного центра / Servisa centra zīmogs / Aptarnavimo centro antspaudas / Teeninduskeskuse pitser
Issue date / Data do consegna / Fecha de la expedici3n / Ausgabedatum / Datum van uitgifte / Date de dėlivrance / Дата выдачи / Izsniegšanas datums / Īdavimo data / Vėljaandmise kuupėev		
Defect / Difetto / Defecto / Defekt / Gebrek / Dėfaut / Дефект / Defekts / Defektas / Rike		
Executed work / Lavori eseguiti / Trabajo cumplido / Durchgefėhrte Arbeiten / Gedane werkzaamheden / Travail produit / Выполненная работа / Izpildģtais darbs / Atlikti darbai / Tehtud t33		
Expert (full name) / Tecnico / Contramaestre (nombres y apellidos) / Fachspezialist (name) / Vakkundige (naam) / Rėparateur (nom, prėnom) / Специалист (имя) / Meistars / Meistras / Spetsialist (nimi)		

Filled in by service center / Riservato al centro di assistenza / Se complementa por el centro de asistencia tėcnica / Wird von dem Servicebetrieb ausgefėllt / Wordt ingevuld door het servicecentrum / Ā remplir uniquement par le service client / Заполняется сервисным центром / Aizpilda servisa centrs / Pildo aptarnavimo centras / Tėidab teeninduskeskus