INSTALLATION, USE AND MAINTENANCE MANUAL

..2.0 Rinnova Ceiling

INDEX

1 GENERALITY

1.1.1 INTRODUCTION

This manual was conceived with the aim of making installation and management of your system as simple as possible.
By reading and applying the suggestions in this manual, you will be able to obtain the best performance from the purchased product.
We would like to thank you for the choice you made by purchasing our product.

Read this booklet carefully before carrying out any operation on the unit.
The unit must not be installed or performed on it in any way unless this manual has been carefully read and understood in all its parts. In particular, all the precautions listed in the manual must be taken.

The documentation supplied with the unit must be handed over to the system manager so that he can keep it carefully (at least 10 years) for any future assistance, maintenance and repairs.

The installation of the unit must take into account both the purely technical requirements for correct operation and any local legislation in force and specific provisions.

Make sure that when the unit is delivered, there are no obvious signs of transport damage. In this case, indicate it on the delivery note.

This manual reflects the state of the art at the time the machine was marketed and cannot be considered inadequate because it is subsequently updated on the basis of new experiences. The Manufacturer reserves the right to update the production and the manuals, without the obligation to update the previous ones, except in exceptional cases.

Contact the Manufacturer's Sales Department to receive further information or updates to the technical documentation and for any improvement proposal to this manual. All reports received will be rigorously screened.

1.1.2 BASIC SAFETY RULES

We remind you that the use of products that use electricity and water implies the observance of some fundamental safety rules:

- Use of the appliance by disabled and unassisted persons is prohibited
- It is forbidden to touch the appliance with bare feet and with wet or damp parts of the body
- Any cleaning operation is prohibited before having disconnected the appliance from the mains power supply by setting the main system switch to off
- It is forbidden to modify the safety or adjustment devices without the authorization and indications of the appliance manufacturer
- It is forbidden to pull, disconnect or twist the electric cables coming out of the appliance, even if this is disconnected from the mains power supply.
- It is forbidden to introduce objects and substances through the air intake and delivery grilles.
- It is forbidden to open the access doors to the internal parts of the appliance without having first turned the main switch of the system to off.
- It is forbidden to disperse and leave the packaging material within the reach of children as it can be a potential source of danger.
- Respect the safety distances between the machine and other equipment or structures to guarantee sufficient access space to the unit for maintenance and assistance operations as indicated in this booklet.
- The power supply of the unit must take place with electric cables having a section suitable for the power of the unit. The voltage and frequency values must correspond to those indicated for the respective machines; all machines must be earthed as per current legislation in the various countries.
- Do not release R410A into the atmosphere: R410A is a fluorinated greenhouse gas, referred to in the Kyoto protocol, with a global warming potential (GWP)=1975.

1.1.3 SYMBOLOGY

The symbols shown in the following file allow you to quickly provide the information necessary for correct use of the unit.

Safety related symbols

	**ATTENTION** Authorized personnel only	Warns that the operations indicated are important for the safe operation of the machines
	**DANGER** Risk of electric shock	Warns that failure to observe the instructions involves a risk of electric shock.
	**DANGER**	Warns that failure to observe the instructions involves a risk of harm to exposed persons.
	**WARNING**	It warns that failure to observe the instructions involves a risk of damage to the unit or the system.
	**DANGER**	Warns that there is the presence of moving parts and involves a risk of harm to exposed people

1.1.4 WARNINGS

	The installation of the unit must be carried out by qualified and authorized personnel according to the regulations in force in the various countries. If the installation is not performed it could become a dangerous situation
	Avoid installing the unit in very humid rooms or with the presence of large heat sources.
	On the electrical side, to prevent any risk of electrocution, it is essential to disconnect the main switch before carrying out any operations electrical connections and any maintenance operation.
	In the event of water leaks inside the unit, position the main switch of the system to "Off", close the taps of the water and contact the technical service
	It is recommended to use a dedicated power circuit; Never use a power supply in common with other appliances.
	It is recommended to install an earth leakage breaker; failure to install this device may result in shock electric.
	For the connection, use a cable long enough to cover the entire distance, without any connection; do not use extension cords and do not apply other loads on the power supply but use a dedicated power circuit.

	After connecting the electric cables, make sure that the cables are arranged so as not to exert excessive forces on the covers or on the electrical panels; any incomplete connection of the covers may cause overheating of the terminals.
	Make sure that the earth connection is made; do not earth the appliance on distribution pipes. High intensity surge currents could damage the unit
	Installations carried out outside the warnings of this manual or use outside the operating limits will invalidate the guarantee instantly.
	Make sure that the first start-up is carried out by personnel authorized by the company (see first start-up request form)

1.1.5 COMPLIANCE

The CE marking (present on each machine) certifies compliance with the following EU standards:

- Low Voltage Directive 2014/35/EC
- Electromagnetic Compatibility Directive 2014/30/EC
- RoHS2 2011/65/EU
- WEEE 2012/19/EC

1.1.6 RANGE

		-1-	-2-	-3-	-4-
..2.0 Rinnova Ceiling		40	H	M	Y

1) Defines the Total flow rate and the fresh air flow rate

40 - up to 460 m³/h

2) Configuration

H - horizontal

3) Type of installation

M: Sight

4) Electronic typology

Y: Electronics version Y remote control

W: Electronic version W command on board + remote control

1.1.7 IDENTIFICATION

- The unit can be identified by the plate placed on the lower front panel of the same.
- On the packaging there will be an additional identification plate with the unit model and shipping references.
- The label on the packaging has no value for the traceability of the product in the years following the sale.

The removal, deterioration and illegibility of the plate placed on the unit, involves major problems in identifying the machine, in finding spare parts and therefore in any future maintenance.

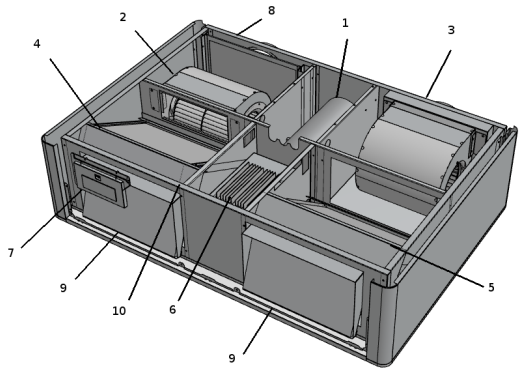
1.1.8 CONSTRUCTION FEATURES

The ..2.0 Rinnova Ceiling units are designed for the renewal of air in rooms. The ease of installation through two 160 mm diam. holes and the high renewal air flow rate allow application in situations such as residential buildings, schools, clinics, offices and all contexts where air renewal is required; The thermodynamic recovery allows to have an integration with respect to the environmental climatic conditions, helping the air conditioning system to satisfy the internal comfort; Furthermore, the air introduced is always at a temperature close to or better than the room temperature, thus guaranteeing superior perceived comfort;

The unit is made up of a monobloc including all components for correct operation: fans, cooling circuit with high efficiency compressors, air filtration sections and high efficiency counter-current heat recovery unit.

ALL IN ONE:	Complete unit capable of exchanging the air and integrating the thermal and refrigeration requests of the rooms served. The unit is complete with every component for its operation and is ready for use.
UV LAMP AND VOC SENSOR:	The unit is equipped with a UV lamp (accessory) which allows a germicidal action on the air introduced from outside through the effect of the UVC; The lamp is activated automatically according to the ambient air quality,
VENTILATION:	Fans with directly coupled brushless motor; The fans operate in various modes mainly controlled by the air quality sensor located inside the unit;
ACTIVE THERMODYNAMIC RECOVERY:	The unit allows the active recovery of the energy of the expelled air. The thermodynamic recovery allows, thanks to its cooling circuit, to supply energy to the environment in a higher quantity than that subtracted from the ventilation for 90% of the unit's operation;
FILTRATION:	There are 2 ePM1 filters on the extracted air and the introduced air; The inlet air filter is placed after the coil to completely filter out any impurities in the inlet air. There is a Coarse pre-filter on the outside air which protects the cleanliness of the unit;
STRUCTURE:	Self-supporting sheet metal frame Self-supporting sheet metal structure, externally painted (in the visible versions), with interposed thermal and acoustic insulation in polyethylene and Epdm;
REFRIGERANT CIRCUIT:	Made of brazed copper complete with: BLDC high efficiency compressor, drier filter, finned coils, electronic expansion valve, reverse valve and safety devices.
ADJUSTMENT:	Electrical panel on the unit with microprocessor and dedicated regulation. Fan management, display and timed dirty filter management temperature setpoint. Defrost algorithm management optimized for operation with low outside temperatures; Panel with graphic interface and WI-FI on board the machine and remote control included in the visible versions; Remote panel to be purchased optionally with WI-FI or MODBUS RTU for connection up to 10 m from the unit for built-in versions;

1.1.9 MAIN COMPONENTS OF THE UNIT



1 Compressor	6 Electrical panel
2 Supply fan	7 Displays
3 Exhaust fan	8 External air pre-filter
4 Battery entry	9 Epm filters1
5 Battery ejected	10 UV lamp

1.1.10 PACKING AND TRANSPORT

The units are supplied for transport fixed on a wooden pallet and inserted in cardboard boxes. To facilitate movement, the units are equipped with a wooden pallet and hooks on the base which allow them to be lifted and positioned on the installation site. The unit can be stored in a place protected from atmospheric agents with temperatures not lower than 0 °C, up to a maximum of 40 °C.

1.1.11 RECEPTION, CONTROL AND HANDLING

The unit is shipped completely pre-charged with refrigerant gas in the circuits and with non-freezing oil in the compressors. Under no circumstances can water be present in the hydraulic circuits, since after testing the unit is carefully emptied. Upon arrival, the customer is required to inspect the unit also in the internal areas to verify that it has not been damaged during transport; the unit left the factory in perfect condition. Otherwise, it is necessary to take immediate recourse against the carrier, reporting the extent of the damage in detail on the document, producing photographic evidence of the apparent damage and notifying any apparent damage to the shipper by registered mail. The manufacturer assumes no responsibility for damage due to transport, even in if he did the shipping himself.

Great care must be taken in handling the units during unloading and positioning on site, in order to avoid damage to the casing and to the more delicate internal components such as compressors, exchangers, etc. In any case, keep the unit horizontal without tilting it. All the indications regarding the precautions necessary to ensure that no damage is done to the unit and the indication of the weight of the same are shown on the packaging. The materials that make up the packaging can be of various kinds such as wood, cardboard or polyethylene (plastic). It is good practice to send them for disposal or recycling through specialized companies to reduce their environmental impact.

1.1.12 DISASSEMBLY AND DISPOSAL

Do not disassemble or dispose of the product yourself. The disassembly, demolition, disposal of the product must be carried out by authorized personnel in accordance with local regulations.

2 INSTALLATION

2.1.1 INSTALLATION CONDITIONS

The unit must be installed according to the national and local standards governing the use of electrical devices and according to the following indications:

- install the unit inside residential buildings with an ambient temperature between 0°C and 45°C;
- avoid areas near sources of heat, steam, flammable and/or explosive gases and particularly dusty areas;
- install the unit in a place not subject to frost (the condensed water must be discharged not frozen, at a certain angle, using a siphon);
- do not install the unit in areas with a high relative humidity (such as the bathroom or toilet) to avoid condensation on the external surface;
- choose an installation site where there is sufficient space around the unit for the connections of the air ducts and to be able to carry out maintenance operations;
- the consistency of the ceiling/wall/floor where the unit will be installed must be suitable for the weight of the unit and not cause vibrations.

In the environment chosen for installation there must be:

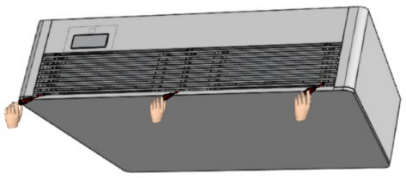
- air duct connections;
- 230 V single-phase electrical connection
- connection for the condensate drain

2.1.2 UNIT PLACEMENT

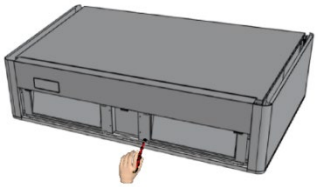
Ceiling mount

To mount the unit on the ceiling you will need:

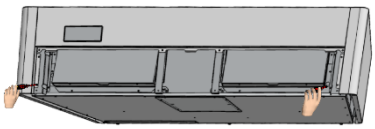
- Remove the front grille by extracting it levering from the bottom upwards and extracting it first towards the bottom;

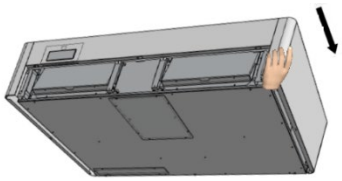


- remove the lower panel using the front screws and extracting it from the rear seats;

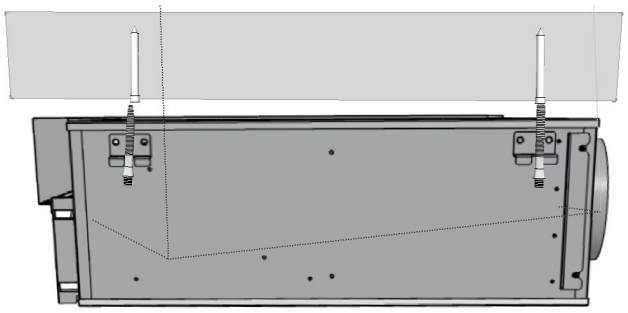


- Remove the screws on the side panels by removing the 4 screws on the front;
- Push the side to make it come out of the rear seats and remove it;





- Fix the unit to the ceiling, using the brackets, using suitable anchoring systems (dowels, chains…) and check its leveling using a spirit level.
- Keep the unit detached from the ceiling at least 10mm;
- Do not mount the unit with the sides in direct contact with the walls to avoid possible contact noise, insert rubber or neoprene strips in this case.



Ensure sufficient space for carrying out maintenance activities: the opening of the cover of the unit (from below) must be guaranteed.

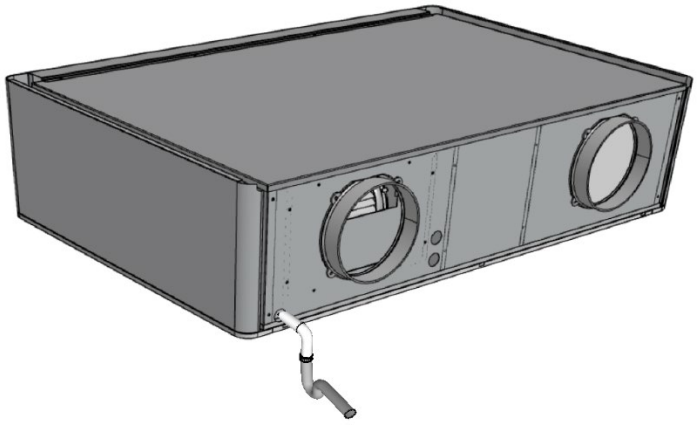
Ceiling mount

2.1.3 CONDENSATE DRAIN CONNECTION !

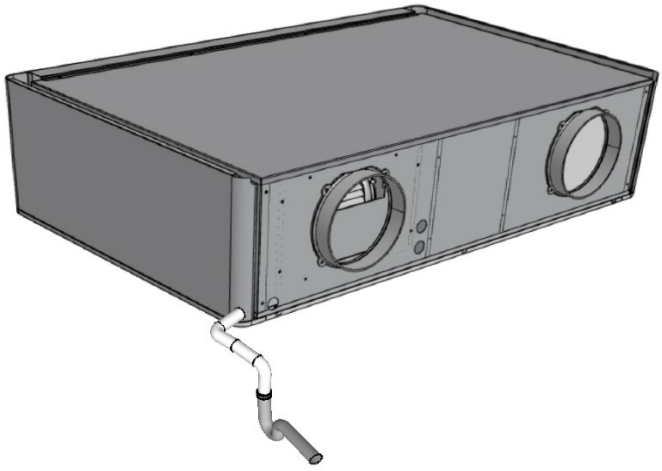
Due to the thermodynamic heat recovery system of the dehumidification coils, the humidity contained in the internal air condenses inside the unit.

For the correct functioning of the heat recovery unit, it is therefore necessary to connect the condensate drain to the hydraulic system (drain); Furthermore, to allow the correct outflow of the condensate water and avoid air suction, the condensate drains must be equipped with a special siphon to be supplied and installed by the installer;

The condensate drain comes out as standard at the rear of the unit where there should be a hole in the wall as shown alongside;

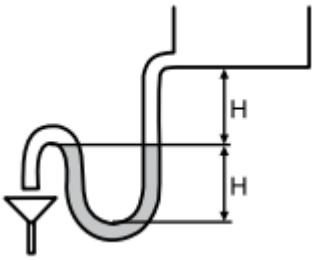


If it is impossible to bring the condensate drain outside, it is possible to exit on the right side of the unit using the pre-cut hole on the side;



For the installation of the condensate drain, comply with the following standards:

- give the drain pipe a slope of at least 2%;
- provide for the possibility of disconnecting the drain pipe for any maintenance (particularly in the case of ceiling installation);
- make sure that the discharge end of the hose is at least below the water level of the siphon;
- make sure that the siphon is always full of water.
- The H dimension as per the attached image must be at least H=50 mm;



Condensate drain connection

3 AREA CONNECTIONS

3.1.1 AREAUAL ORIENTATIONS

The unit is equipped with 2 circular rear connections for connection to the external air;
For the correct connection of the air ducts, refer to the following diagram and the stickers placed on the unit.

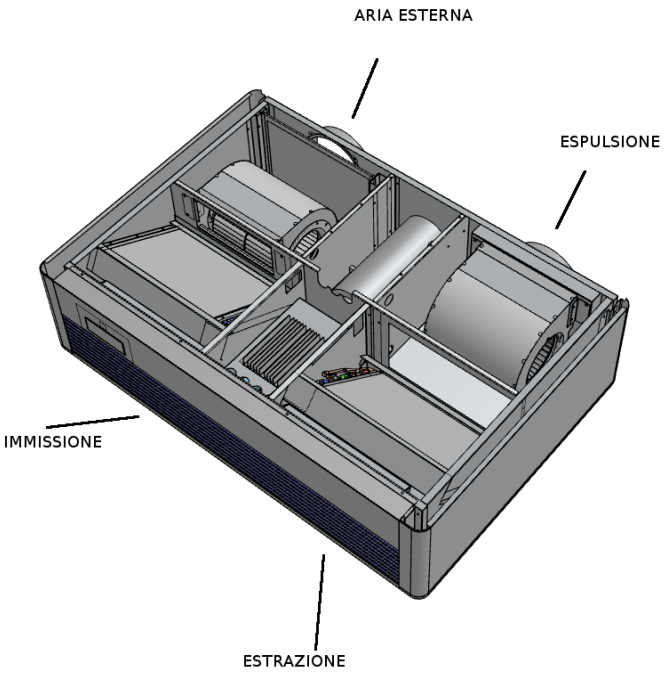
Table of unit aeraulic connection diameters

Unit	..2.0 Rinnova Ceiling
External air Ø mm Ø Ejection mm	160 mm

We recommend the installation of at least 500 mm of flexible piping to avoid the dragging of vibrations and annoying noises due to the installation.

Configurations Air flows

CONFIGURATION ..2.0 RENEW CEILING



VIEW FROM ABOVE

3.1.2 INSTALLATION OF EXTERNAL GRILLES

Once the holes have been made, inside them, they must be introduced the supplied plastic sheets.

Roll up the sheet and introduce it into the hole, paying attention to the seam A which must always be positioned upwards.

Cut any excess part of the tube using a normal cutter.

To position the external grids, proceed as follows:

- attach the chains to the ends of the springs;

- fold the external shutters back on themselves;

- introduce the arm into the hole until it protrudes completely the damper outside maintaining the end of the chain stitches with the other hand to avoid accidental falls;

- reopen the damper outside the hole;

- rotate the damper so as to bring the flap in vertical position C checking that the mechanism closing functions;

- pull the chains by tensioning the springs;

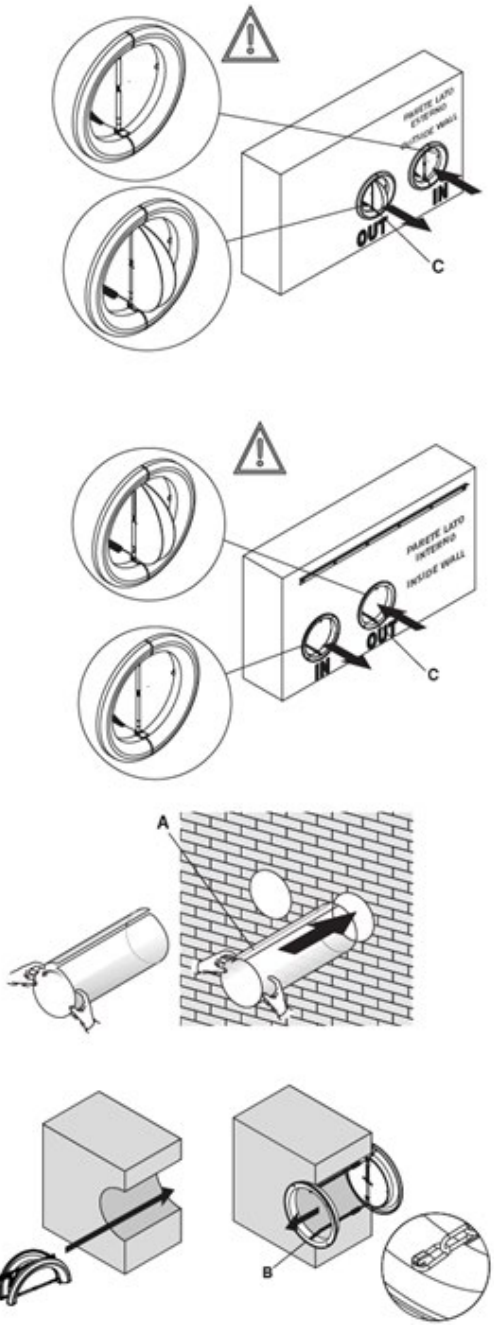
- cut the links of the chain stitches with a nipper excess.

- fix the hook of the chain to the wall B.

Only use the grills provided, or grids that maintain the same characteristics.

The dampers must be positioned with the fin vertically. Shutters are different. It is necessary to distinguish that to be positioned on the intake from the one to be positioned on the delivery, based on the opening direction of the flaps.

Once the installation of the grilles is completed, check their opening (inwards the duct for the "IN" suction grille and towards the outside of the duct for the "OUT" exhaust grille). Note that the grilles open when the outside air flow is activated to allow the cooling or heating function. For their testing it is therefore essential to operate the air conditioner to cool or heat



Installation of external grilles

4 ELECTRICAL CONNECTIONS

4.1.1 GENERALITY

- Before starting any operation to make the electrical connections, make sure that the unit is not electrically powered
- Make the necessary electrical connections by consulting only the electrical diagram attached to this manual.
- Install a suitable cut-off and differential protection device for the exclusive service of the unit.
- It is essential that the unit is connected to an earth socket.
- Check that the electrical components chosen for installation (main switch, circuit breakers, cable section and terminals) are suitable for the electrical power of the installed unit and that they take into account the compressor peak currents as well as the maximum load that can be reached. The relative data are indicated on the attached wiring diagram and on the unit identification plate
- It is forbidden to enter the unit with electric cables unless specified in this booklet.
- Use cables and electrical conductors with adequate sections and compliant with the regulations in force in the various countries.
- Absolutely avoid running the electrical cables in direct contact with pipes or components inside the unit
- After the first moments of operation, check the tightness of the screws of the power supply terminals

Power line sizing table

Models		***40***
Diet	V/Ph/Hz	230/1/50
Max absorbed current	TO	6.1

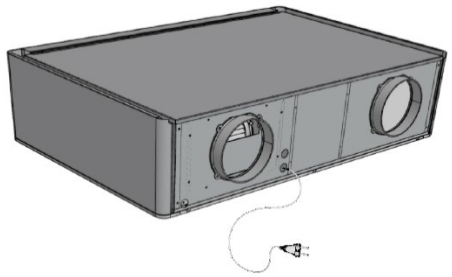
4.1.2 CONNECTION PLACEMENT AND PROCEDURES

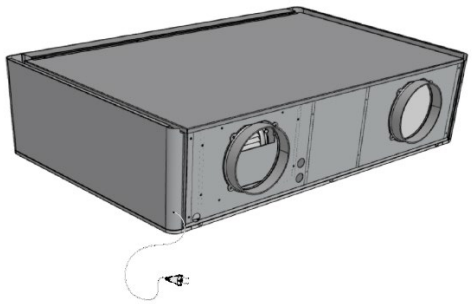
The unit is supplied with all electrical connections prearranged and with a shucko plug for connection to the mains;

The electrical cable entry is positioned on the rear of the unit where two DN 16 mm passages are provided;

If it is impossible to bring the wiring from the rear of the unit, it is possible to exit on the right side of the unit using the pre-cut hole on the side;

Furthermore, in the lower part, the electrical panel can be reached via a dedicated door





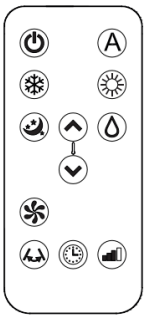
Condensate drain connection

4.1.3 INSERTING THE REMOTE CONTROL BATTERIES

Only a 3 V CR2025 dry lithium battery (included in delivery) may be used for the remote control.

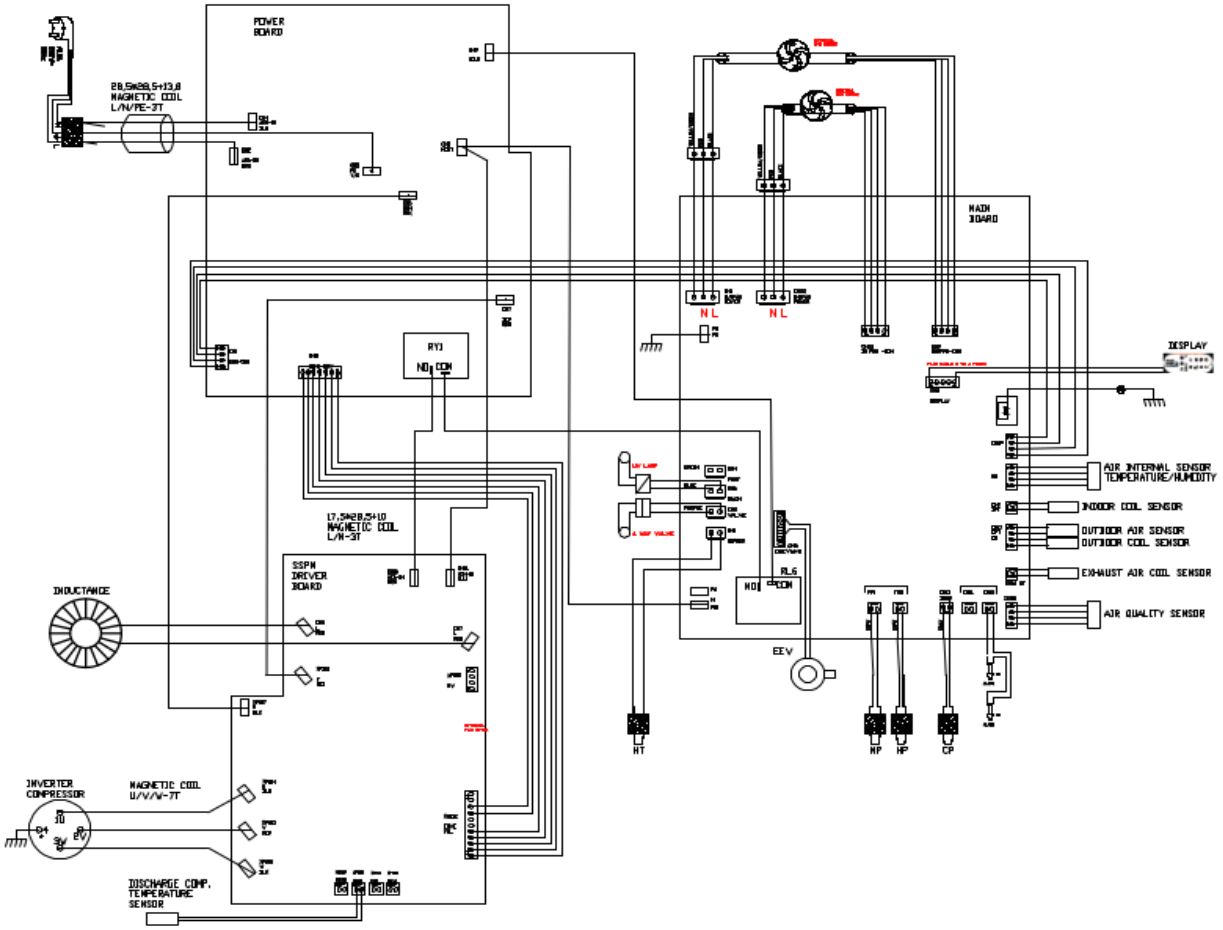
Exhausted batteries must be disposed of only through the appropriate collection points set up by the Local Authorities for waste of this type.

To insert the battery, open the special release door located in the lower part of the remote control. The battery must be inserted scrupulously respecting the polarity. Close the flap after inserting the battery



Remote control batteries

4.1.4 WIRING DIAGRAM



4.1.5 CONNECTIONS

NL-PE – POWER SUPPLY

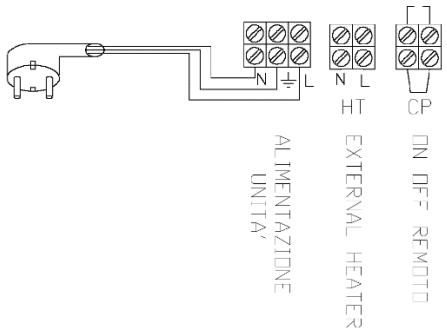
The unit is supplied with a power supply socket connected to terminals N , L , PE ;

HT - EXTERNAL HEATER

It provides for the connection of the integrative electrical resistance (Accessory) to be inserted on the air delivery duct

CP- ON OFF REMOTE

Provides an external connection to enable the unit as an presence or window contact; Comes with a bridge included;



Connections

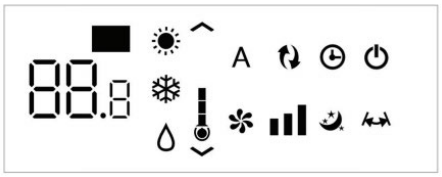
5 COMMISSIONING AND METHOD OF USE

5.1.1 OPERATION OF THE CONTROL PANEL ON THE MACHINEWIFI AND REMOTE CONTROL

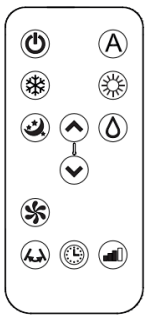
The unit is controlled both through the wi-fi panel on the machine and through the infrared remote control supplied. It is also possible to download the app and control the main functions from IOS systems or ANDROID systems;

The display normally shows the operating status (see paragraph Description of operation) and any alarms (see paragraph Viewing alarms on the display). Furthermore, by pressing the various symbols it is possible to select the various functions. By pressing the keys it is possible to set the various functions (see paragraph Description of operation). The remote control supplied with the appliance has been designed to give it maximum sturdiness and exceptional functionality, however it must be handled with some caution.

To avoid:
- leave it exposed to rain, spill liquid on its keyboard, or drop it in water
- make it subject to strong impacts or drop it on hard surfaces
- leave it exposed to sunlight



Wifi machine board panel



Remote control

1 Tasto riferito al telecomando
2 Tasto riferito al display touch-screen

TASTO / DISPLAY :

- 88.8 Setpoint
- Tasto su
- Tasto giù
- Tasto accensione / spegnimento
- A Tasto benessere (funzionamento automatico economico)
- Tasto funzionamento in solo raffreddamento
- Tasto funzionamento in sola deumidificazione
- Tasto funzionamento in sola ventilazione
- Tasto funzionamento in solo riscaldamento (1)
- Tasto funzionamento in solo riscaldamento (2)
- Tasto benessere notturno
- Tasto controllo della velocità del ventilatore
- Tasto impostazione funzione Timer (1)
- Tasto impostazione funzione Timer (2)
- Sensore di luminosità
- Termometro digitale; 1÷7 barrette rosse in inverno, blu in estate

5.1.1.2 TURNING THE UNIT ON AND OFF

In order to manage the appliance using the remote control or the touch screen display, the main switch which has been provided on the power supply line must be switched on (and on whose position the technician who installed the appliance can be more precise), or insert the power plug of the appliance into the socket of the system. Once the operations described have been carried out, by holding down (3 seconds) the symbols on the touch screen display, or with the remote control, it is possible to manage the system.

To transmit the commands to the indoor unit, turn the front of the remote control towards the display of the indoor unit itself. Receipt of the command is confirmed by the emission of a note from the buzzer and by the relative visualization on the display. The maximum distance at which commands can be received is approximately 8 metres. Using the appropriate button it is possible to turn the appliance off (stand-by) or on. The control system of the appliance is equipped with a memory, so that all settings will not be lost either in the event of switching off or in the event of a power failure. The button in question is used to activate and deactivate the appliance for short periods. In the event of a prolonged standstill of the appliance,

Unit On / Off

5.1.1.3 MODIFY TEMPERATURE SET

- On the display there are the keys for selecting the desired temperature of the unit; Every time the set temperature is modified, the display will also show the requested set point variation	 Modify set temperature

5.1.1.4 CHANGE FAN SPEED

-By pressing this button sequentially, it is possible to set the power supplied by the appliance to 5 settings: Minimum, Medium, Maximum, Dual Power and Automatic. The greater the power set, the greater the yield of the appliance, but the less silent it is. The Dual Power function (visible by the flashing of the 3 speed bars on the display and the scrolling of the 7 red or blue bars of the digital thermometer), available in heating and cooling only, provides an Overboost for 30 minutes. Subsequently, the controller inhibits the function and goes into automatic operation. By setting the Automatic choice (visible by scrolling the 3 speed bars on the display) the on-board microprocessor adjusts the power automatically, keeping it higher the greater the difference between the room temperature and the set temperature. In dehumidification only and nocturnal comfort mode, power control is not possible as the appliance can only operate at minimum.	 Fan speed management

5.1.1.5 AUTOMATIC FUNCTION

By setting this function, the appliance prepares itself so as to obtain optimal comfort in the air-conditioned room. Depending on the set temperature, the air conditioner automatically selects the operating mode (cooling or heating), and the fan speed based on the temperature of the room and the quality of the air detected;	 AUTO function

5.1.1.6 VENTILATION ONLY FUNCTION

-By activating this function, the compressor is never activated and the appliance does not perform any action either on the temperature or humidity in the room. It is possible to choose the fan speed	 Ventilation only

5.1.1.7 NIGHT WELLNESS FUNCTION

With the appliance on and cooling or heating mode selected, pressing the button allows you to perform multiple functions aimed at maximizing the silence of the appliance, saving electricity and regulating night-time well-being. In this mode, fan operation is set to minimum speed. This feature should be activated immediately before falling asleep • In cooling, the temperature set is increased by 1 °C after one hour and by a further °C after 2. After the second hour, the temperature set is not altered further and after another 6 hours the appliance is placed on standby. • In heating mode, the set temperature is decreased by 1 °C after one hour and by a further °C after 2 hours. After the second hour, the temperature setting is not altered further and after another 6 hours the appliance is placed in stand-by. This function is not available for dehumidification only, ventilation only and automatic economy mode and can be excluded at any time (ideally when you wake up) by pressing the button again. If the timer function is set at the same time, the appliance will switch off after the set time has elapsed.	 Nocturnal well-being

5.1.1.8 DEHUMIDIFICATION FUNCTION

Using this mode, the appliance dehumidifies the room. Activating this function is therefore particularly useful in mid-season, ie on those days (such as rainy days for example) in which the temperature is all in all pleasant, but excessive humidity makes one feel a certain sense of unease. In this mode, both the room temperature setting and the fan speed setting are ignored, which always correspond to the minimum. With this mode it is normal for the appliance to work intermittently	 Dehumidification

5.1.1.9 SEASON CHANGE

- Season change must be made from the keyboard; Press and hold the season change button for at least 3 seconds to change the status of the season; The operation must be carried out to activate the correct logics: Symbol logic: SUN - WINTER SNOWFLAKE - SUMMER		 Season change

5.1.1.10 TIMER FUNCTION

The logic of the appliance provides the User with the possibility of programming its activation or deactivation, as desired. While the air conditioner is on, it is possible to program its shutdown by pressing the Timer button, followed by setting the number of hours (from 1 to 24) after which the appliance will go into stand-by. • When the air conditioner is off, it is possible to preset its switching on by pressing the Timer button, followed by setting the number of hours (from 1 to 24) after which the appliance will start Press the key again to confirm.	  

5.1.1.11 DESCRIPTION OF OPERATION AIR QUALITY SENSOR

-The unit foresees the functioning of the fans according to the pre-selected speed and the internal logics linked to the value of air quality detected; For each speed, if the air quality is not optimal, the fans increase the flow rates to have a greater air exchange and improve the quality of the internal air;	

5.1.1.12 UVC LAMP OPERATION DESCRIPTION

-The unit foresees the operation of a germicidal UVC lamp placed in the new air intake section; The lamp is activated permanently together with the activation of the fans;	

6 MAINTENANCE

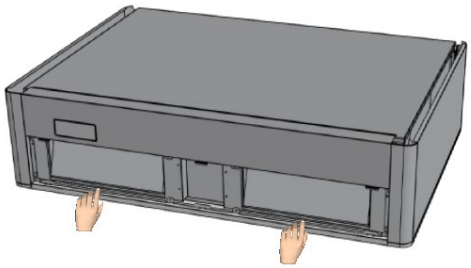
To always guarantee the correct and optimal functioning of the unit, it is necessary to carry out all the maintenance interventions periodically.

6.1.1 CLEANING OR REPLACING EPM1 FILTERS

To replace the filters, or clean them, proceed as follows:

- remove power to the unit;
- remove the front grille
- extract the 2 dirty filters by sliding downwards;
- gently insert the new filters;
- close the front grille;

If the conditions of the filters allow it, they can be cleaned using a vacuum cleaner or a low pressure compressor.



Filter extraction view

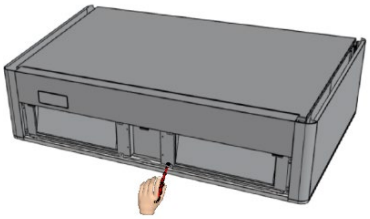
6.1.2 REPLACING THE PREFILTER

To clean the external air pre-filter, proceed as follows:

- remove power to the unit;
- Remove the front grille
- remove the lower panel using the front screws and extracting it from the rear seats;
- remove the inspection door using the dedicated screws;
- take out the filter;

If the conditions of the filters allow it, they can be cleaned using a vacuum cleaner or a low pressure compressor.

- Close the filter cover making sure that you tighten all the screws;
- Reposition the lower panel in its seats and insert the screws in the front part;
- Reposition the grate in its seat;



Filter extraction view

6.1.3 LAMP MAINTENANCE

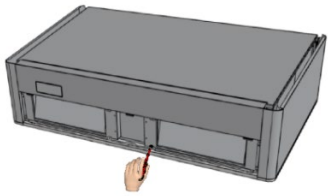
To carry out maintenance on the UVC lamp:

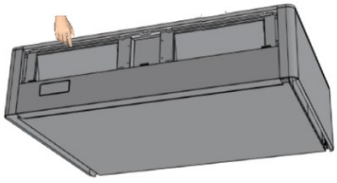
- Cut power to the unit;
- Remove the front grille
- Remove the intake air filter to access the UV lamp;
- The UV lamp will be clearly visible behind the filter;
- Remove the lamp from the support and from the connector, being careful to extract it gently
- Replace and reseat the new lamp
- Reinsert the filter in its seat;
- Finally, position the front grille,

Attention

Never carry out these operations with the lamp and the unit powered;

UVC rays can cause damage to the skin and eyes;





View for lamp maintenance

7 ALARMS

7.1.1 GENERALITY

In the event of problems or failures, take note of any error code that has appeared on the display of the electronic control unit or of the remote control, take note of the model and serial number of the unit you have (present on the identification plate attached to the side of the unit) and contact the installer.

7.1.2 PROBLEMS WITHOUT ERROR INDICATION ON THE DISPLAY

Below is the table of unit malfunctions

PROBLEM	CAUSES	REMEDIES
Display off	No power supply (illuminated switch off)	Check the connection to the electrical network Check and if necessary replace the fuse on the power connector (black) on the side of the unit.
Little or no air flow The premises remain humid	Clogged filters	Replace filters
	Clogged exchanger	Clean the exchanger
	Ice cream exchanger	Take the exchanger to a warm place and wait for it to defrost, do not heat with direct heat sources.
	Dirty fan	Clean the fan
	Clogged fan ducts	Clean the ventilation ducts
	Outside temperature below 0 °C	The unit may be in anti-freeze mode, wait until the outside temperature rises or install an electric heater for pre-heating.
High noise	Noise coming from the unit	Check for cracks and/or air leaks from the unit panels Check the siphon connection Check if the motors turn correctly (bearings)
	Noise coming from the ducts	Check for cracks on the intake / intake / exhaust ducts
Vibrations Elevate	Panels that vibrate	Check the integrity of the panels and aluminum profiles of the unit Check that the cover of the unit and the panel covering the electronic board are closed correctly Check that there are no walls that can transmit vibrations to the wall / floor / false ceilings
	Fan blades out of balance	Check the integrity of the blades Clean the fans Check that the small metal clips for balancing the blades are still present on the fans
Condensate leak	Clogged condensate drain	Clean the condensate drain
	Condensate does not flow from the drain duct into the collection tray	Verify that the unit is perfectly level Check that the condensate drain connections are clogged
The device does not turn on	There is no electricity supply	Check if there is voltage in the network (by switching on a light bulb in the house, for example).
		Check that any exclusive magneto-thermal switch protecting the appliance has not tripped (if so, reset it). If the problem repeats, immediately contact the After-Sales Service and avoid attempting to operate the appliance.
The appliance does not cool/heat sufficiently	The set temperature is too high or too low	Check and correct the temperature setting if necessary
	The air filter is clogged	Check the air filter and clean it if necessary
	Check that there are no obstacles for the airflow indoors or outdoors.	Remove anything that might obstruct the airflow.

7.1.3 TABLE OF ALARMS INDICATED BY THE DISPLAY

The table below shows the unit operating anomalies indicated, in the electronic versions, by the display on the machine or by the remote controls.

ALARM	CAUSE	OPERATION
E1	RT ambient temperature probe faulty	The Cooling, Dehumidification and Heating functions can be activated regularly. The regulation only monitors the internal coil antifreeze
E2	Faulty IPT internal battery probe	The Cooling, Dehumidification and Heating functions can be activated regularly.
E3	External air temperature probe OT faulty	The Cooling, Dehumidification and Heating functions can be activated regularly.
E4	Faulty OPT external battery probe	The Cooling, Dehumidification and Heating functions can be activated regularly. The regulation carries out defrosting cycles at fixed times.
E5	Faulty internal fan motor	None of the functions of the appliance can be activated.
E6	Faulty external fan motor	None of the functions of the appliance can be activated.
E7	No communication with the display	None of the functions of the appliance can be activated.
E8	Compressor discharge probe failure	None of the functions of the appliance can be activated.
PC	CP presence contact open	The device is activated only if the contact is closed. Check the connection of the terminals.

8 NOTES AND MAINTENANCE INFORMATION

NOTE

07-2023

N420964A-00

The data contained in this manual may be changed by the manufacturer without notice.