

INSTALLATION, USE AND MAINTENANCE MANUAL



HIGH EFFICIENCY HEAT RECOVERY – URC DOMO SMART V

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1 GENERALITY

1.1.1 INTRODUCTION

This manual was conceived with the aim of making the 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 product purchased. We would like to thank you for the choice you made with the purchase of our product.

Read this manual carefully before carrying out any operation on the unit.

You must not install the unit, nor carry out any work on it, if you have not first carefully read and understood this manual in all its parts. In particular, all precautions listed in the manual must be adopted.

The documentation accompanying the unit must be delivered 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 good operation, as well as any local legislation in force and specific requirements.

Make sure that when the unit is delivered, there are no obvious signs of damage caused by transport. 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 was subsequently updated based on new experiences. The Manufacturer reserves the right to update production and manuals, without the obligation to update the previous ones, except in exceptional cases.

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

1.1.2 FUNDAMENTAL SAFETY RULES








We remind you that the use of products that use electricity and water requires compliance with some fundamental safety rules:

- The use of the appliance by disabled and unaided people is prohibited
- It is forbidden to touch the appliance with bare feet or with wet or damp parts of the body
- Any cleaning operation is prohibited before having disconnected the appliance from the electrical power supply by positioning the main switch of the system to off
- It is forbidden to modify the safety or regulation devices without the authorization and indications of the appliance manufacturer
- It is forbidden to pull, detach or twist the electrical cables protruding from the appliance, even if it is disconnected from the electrical 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 first having set the main system switch 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 ensure sufficient access space to the unit for maintenance and assistance operations as indicated in this booklet.
- The unit must be powered with electrical cables of 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 the regulations in force in the various countries.


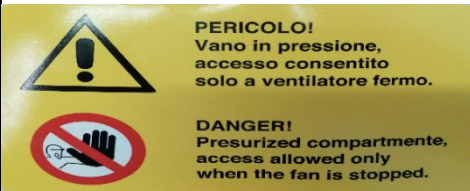

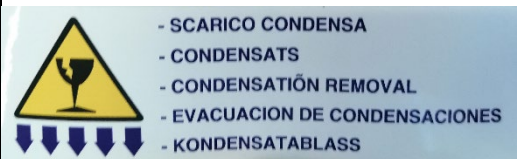
1.1.3 SYMBOLOGY

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

Safety related symbols

	ATTENTION Only authorized personnel	Warns that the operations indicated are important for the safe operation of the machines
	DANGER Risk of electric shock	Warns that failure to comply with the instructions poses a risk of electric shock.
	DANGER	Warns that failure to comply with the requirements entails a risk of harm to exposed people.
	WARNING	Warns that failure to comply with the instructions entails a risk of damage to the unit or system.
	DANGER	It warns that there are moving parts and poses a risk of harm to exposed people

The following labels with the respective indication are placed on the product supplied

LABEL	INDICATION
	Electrical hazard. Can be positioned wherever there is voltage. Turn off the power before any operation.
	Located on the fan inspection panels. Indicates a high pressure compartment, which can only be accessed when the fan is stopped.
	Located on one side of the machine. We remind you of the presence of electrical dangers and we recommend reading the manual before carrying out any operation
	Positioned next to the condensation water drain. Connect to the water drain as indicated in the corresponding section of this manual.

<p>FILTER INSPECTION PANEL To preserve the energy efficiency, it's recommended to replace the filters when signaled.</p>	<p>Positioned on the filter inspection panels.</p>
<p>PANNELLO ISPEZIONE FILTRI Per mantenere l'efficienza energetica, si raccomanda di sostituire i filtri quando segnalato.</p>	<p>These panels can be accessed to check and replace filters (as indicated in this manual).</p>

1.1.4 WARNINGS

	<p>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 carried out it could become a dangerous situation</p>
	<p>Avoid installing the unit in very humid rooms or with large heat sources.</p>
	<p>On the electrical side, to prevent any risk of electrocution, it is essential to disconnect the main switch before making electrical connections and any maintenance operations.</p>
	<p>In the event of water leaks inside the unit, set the main system switch to "Off", close the water taps and contact the technical service</p>
	<p>It is recommended to use a dedicated power circuit; Never use a shared power supply with other appliances.</p>
	<p>It is recommended to install a ground leakage breaker; Failure to install this device could cause electric shock.</p>
	<p>To connect, use a cable of sufficient length to cover the entire distance, without any connection; do not use extension cords and do not apply other loads to the power supply but use a dedicated power supply circuit.</p>
	<p>After connecting the electrical cables, make sure that the cables are routed so as not to exert excessive forces on the covers or electrical panels; any incomplete connection of the covers may cause the terminals to overheat.</p>
	<p>Make sure the earth connection is made; do not earth the appliance on distribution pipes. High intensity momentary surges could damage the unit</p>
	<p>Installations carried out outside the warnings in this manual or use outside the operating limits will instantly void the warranty.</p>
	<p>Make sure that the first commissioning is carried out by personnel authorized by the company (see first commissioning request form)</p>

1.1.5 COMPLIANCE

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

- Machinery Directive 2006/42/EC
- Low Voltage Directive 2014/35/EC

- Electromagnetic Compatibility Directive 2014/30/EC
- Ecodesign 2009/125/EC
- RoHS2 2011/65/EU
- WEEE 2012/19/EC

1.1.6 RANGE

	- 1-	- 2-
URC-DOMO SMART	20	VS

(1) Defines the maximum flow rate 8pm:
200 Mc/h
40: 400 Mc/h

2) Electronic version
VS: BASIC electronics
VE: ADVANCED Electronics

1.1.7 IDENTIFICATION



- The unit is identifiable by the plate located on the lower front panel of the unit.
- On the packaging there will be an additional identification plate with the model of the unit and the shipping references.
- The plate 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 causes major problems in the identification of the machine, in the availability of spare parts and therefore in any future maintenance.

1.1.8 CONSTRUCTION FEATURES

URC DOMO SMART V is a ventilation unit complete with heat recuperator dedicated to air exchange without wasting energy. The unit is particularly suitable for commercial premises or collective residential buildings and in all cases where the nominal flow rates for air exchange do not exceed 400 m³/h.

STRUCTURE:

Self-supporting sheet metal structure.
Externally painted galvanized sheet metal panels with high density EPS insulation. Internal carpentry and cladding in galvanized sheet metal, with sealing gasket.

HEAT EXCHANGER:

High efficiency (>90%) countercurrent cross-flow polypropylene exchanger. Summer and winter operation.
Performance of the recuperator certified EN308.

SUMMER BYPASS:

Automatic through temperature probes.

FANS:

Brushless fans with electronic motor and modulating control. Very high efficiency and low noise levels - ErP2018 compliant

FILTERS:

Filters with low efficiency pressure drop ePM 1 - 70% (F7) on both fresh air and extracted air. Easy to extract for routine maintenance in all permitted installation positions.

AVAILABILITY AND VERSIONS

2 models with horizontal or vertical development
For all configurations it is possible to change the orientation of the outlets on site (further details in the data sheet and technical drawings).
Two control versions: BASIC / EVOLVED

BASIC VERSION

Simple electrical setup for quick connection of the unit to the mains.

EVOLVED VERSION

Solution with electrical panel on board the unit complete with microprocessor and dedicated regulation. Management of modulating fans, display of internal machine temperature probes, management of dirty filters with pressure switches, management of free-cooling with temperature probes. Management of water and electric post heating-cooling batteries.
On-off valve management.

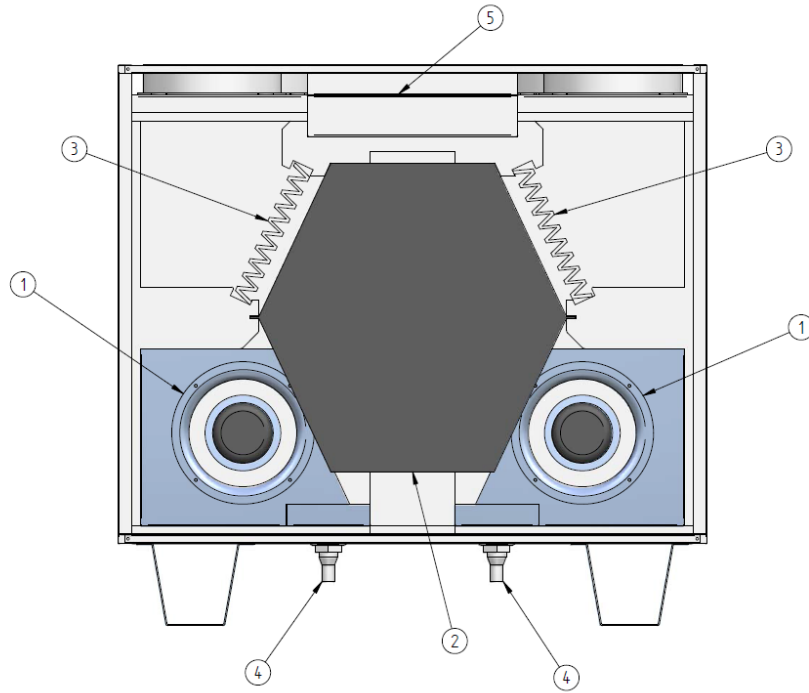
Wi-Fi connection and possibility of management via dedicated app (available on IOS and Android).

Each version can be completed by the dedicated control (BASIC or EVOLVED, accessory on request)

The URC DOMO SMART V units are suitable for internal, ceiling or floor installation and external installation with canopy (additional accessory).
Electric coils (external to the structure) and modules with heating or cooling coil (water supply fluid) are available for the URC DOMO SMART V units.

Other accessories and possible adjustments according to technical data sheet and price list

1.1.9 MAIN COMPONENTS OF THE UNIT



1. Fan
2. Heat exchanger
3. Air filters
4. Vertical exhaust system
5. Control electronics housing

1.1.10 PACKAGING 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 that allow them to be lifted and positioned on the installation site. The unit can be stored in a room 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-loaded with refrigerant gas in the circuits and non-freeze oil in the compressors. Under no circumstances may there be water 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 suffered any damage during transport; the unit left the factory in perfect condition. Otherwise, it is necessary to immediately take action against the carrier by reporting the extent of the damage in detail on the delivery note, producing photographic evidence of the apparent damage and notifying the shipper of any apparent damage by registered mail. The manufacturer does not assume responsibility for damage due to transport even in the case he provided the shipment himself. Great care must be taken when handling the units during unloading and positioning on site, in order to avoid damage to the casing and more delicate internal components such as compressors, exchangers, etc. In any case, keep the unit in a horizontal position without tilting it. All indications regarding the necessary precautions to ensure that no damage occurs

to the unit and the indication of its weight are shown on the packaging. The materials that make up the packaging can be of various types 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 dismantling, demolition and 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 national and local regulations regulating 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 condensation water must be discharged without freezing, at a certain inclination, using a siphon);
- do not install the unit in areas with a high level of relative humidity (such as the bathroom or toilet) to avoid condensation on the external surface;
- choose an installation location where there is sufficient space around the unit for the air duct connections and to be able to carry out maintenance work;
- 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;
- 230V 50Hz single-phase electrical connection
- connection for condensate drain

2.1.2 UNIT POSITIONING



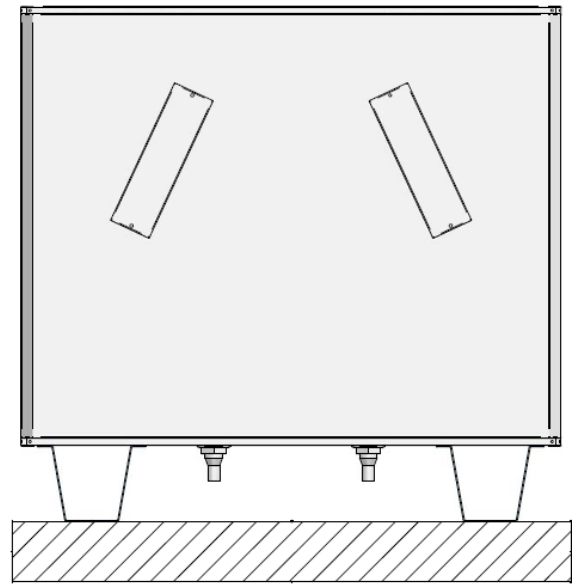
Floor Mount – Vertical Unit

To mount the unit on the floor you will need:

- Place the unit on the floor so that the left and right sides are at least 50 cm away from the immediately adjacent walls.
- fix the unit to the floor, using the brackets already installed on the unit and using suitable anchoring systems (plugs, threaded bars, chains...) and check its leveling with the help of a level.

Ensure sufficient space for carrying out maintenance activities: the opening of the unit cover from the front and the side panels must be guaranteed.

Do not mount the unit in direct contact with walls or floors. To avoid possible contact noises, insert rubber or neoprene strips in this case.



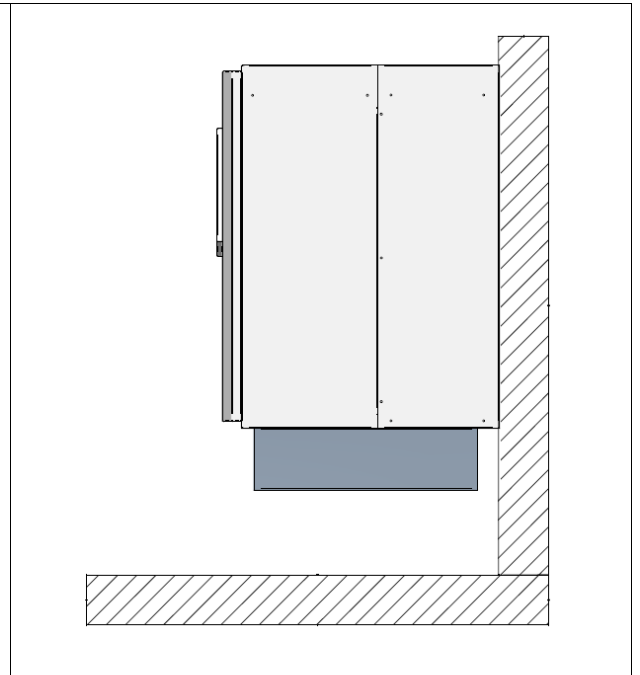
Wall Mount - Vertical Unit

To mount the unit on the wall you will need:

- Position the unit on the wall so that the left and right sides are at least 50 cm away from the immediately adjacent walls.
- fix the unit to the wall, using the brackets already installed on the unit and using suitable anchoring systems (plugs, threaded bars, chains...) and check its leveling with the help of a level.

Ensure sufficient space for carrying out maintenance activities: the opening of the unit cover from the front and the side panels must be guaranteed.

Do not mount the unit in direct contact with walls or floors. To avoid possible contact noises, insert rubber or neoprene strips in this case.

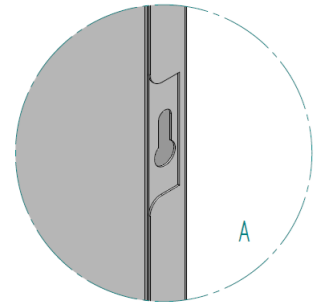
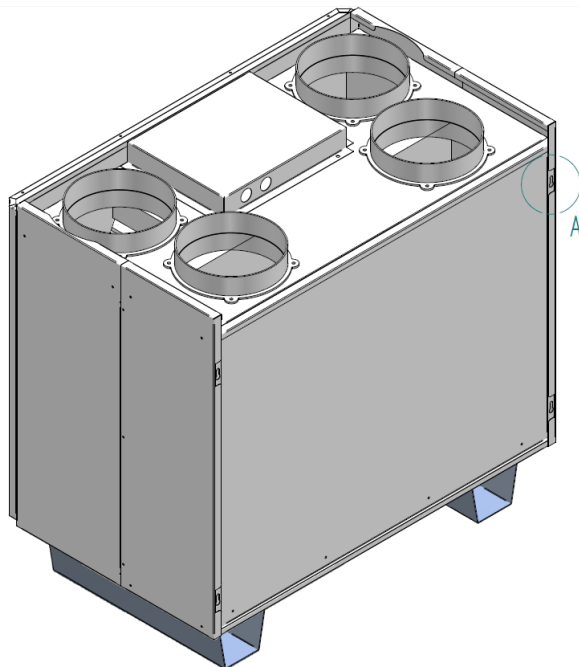


2.1.3 ANCHOR BRACKETS



The brackets are already mounted on the unit on the rear panel.

They are designed for fixing using dowels and threaded rods





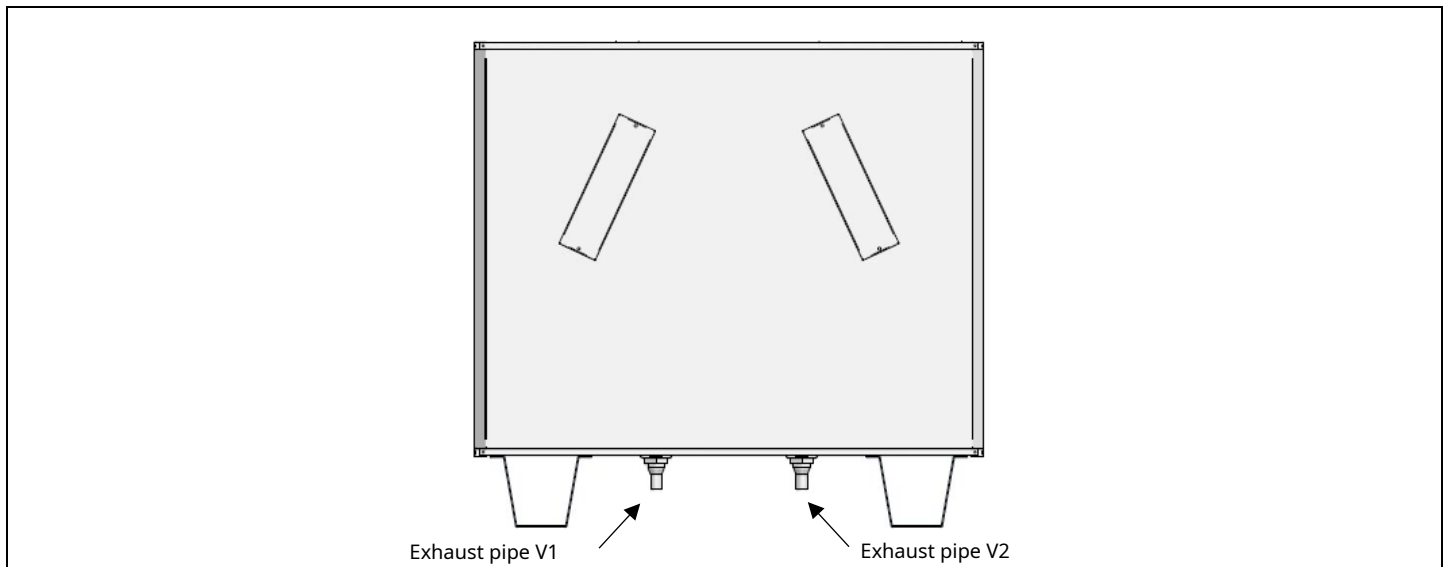
2.1.4 CONDENSATE DRAIN CONNECTION

Due to the heat recovery system (the hot expelled air is cooled by the incoming air inside the heat exchanger), the humidity contained in the internal air condenses inside the unit.

For the correct functioning of the heat recuperator, it is therefore necessary to connect a condensate drain to the plumbing system (drain) of the house to the correct pipe of the unit's drain pipe protruding approximately 6 cm and made of non-toxic material. Furthermore, to allow the correct flow of condensation water and avoid air suction, **the condensate drain must always be equipped with the appropriate siphon**. Refer to the AIR CONNECTIONS section for the various possible configurations. Unused drain pipes will need to be plugged to prevent air from escaping from the unit.

For the installation of the condensate drain, respect the following regulations:

- give a slope of at least 2% to the drain pipe;
- provide for the possibility of disconnecting the exhaust pipe for any maintenance (in particular in the case of ceiling installation);
- Always connect the siphon to the condensate drain on **EJECTION SIDE** of the unit.
- make sure that the drain end of the hose is at least below the water level of the siphon;
- make sure the siphon is always full of water.



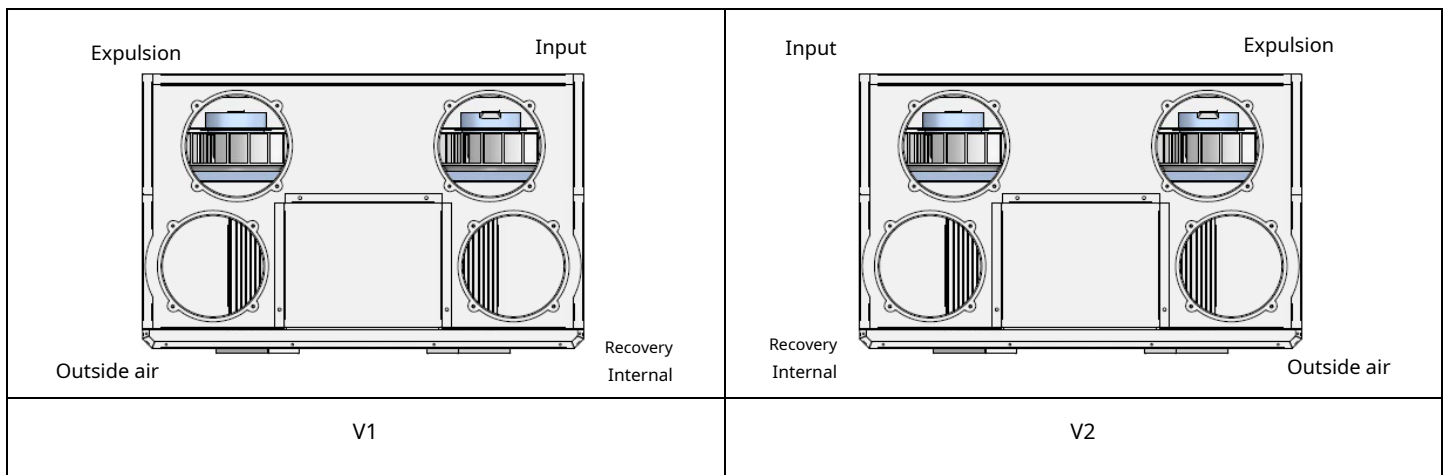
3 AREALIC CONNECTIONS

3.1.1 AREALIC ORIENTATIONS



The unit is equipped with 4 male circular connections **DN Ø 160**.

For the correct connection of the air ducts, refer to the configurations below and the stickers placed on the unit. According to the system in which the unit is to be installed, it will be possible to appropriately orient the four arealic connections in the following ways:



The units are shown seen from above and with the front inspection part facing downwards.

In the V1 and V2 versions always connect the exhaust pipe closest to the **EJECTION SIDE** and consequently plug the one present on the inlet duct with the appropriate cap.

It is essential that the condensate drain is always properly connected to the siphon. Refer to the **CONDENSATE DRAIN CONNECTION** section for more detailed information.

4 ELECTRICAL CONNECTIONS

4.1.1 GENERALITY



- Before starting any operation to make the electrical connection, make sure that the unit is not electrically powered
- Carry out the necessary electrical connections by consulting exclusively the electrical diagram attached to this manual.
- Install a suitable interruption and differential protection device to exclusively serve the unit.
- it is essential that the unit is connected to an earthed socket.
- Check that the electrical components chosen for the 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 inrush currents of the compressor as well as the maximum load that can be reached.
- The relevant data is indicated on the attached wiring diagram and on the unit's identification plate.
- It is forbidden to enter the unit with electrical cables unless specified in this document.
- Use cables and electrical conductors of adequate cross-section and compliant with the regulations in force in the various countries.
- Absolutely avoid running electrical cables in direct contact with pipes or components inside the unit
- After the first moments of operation, check the tightening of the screws of the power supply

terminals Table for sizing the power supply line

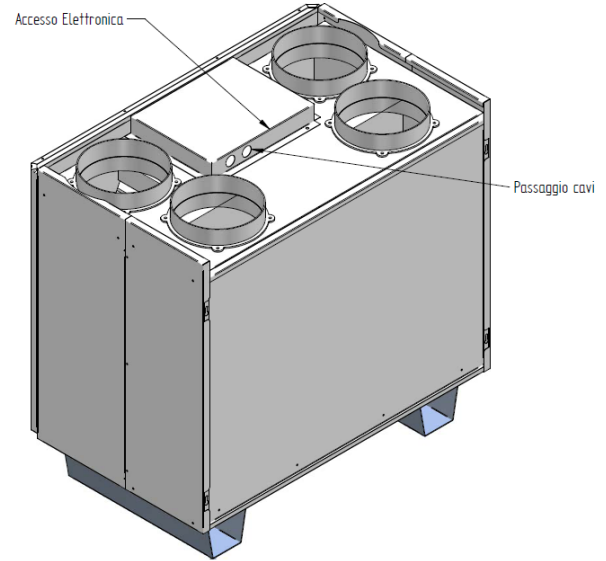
Electrical Data

Size		URC DOMO SMART V200	URC DOMO SMART V400
Supply voltage	T/P/F	230V / 1Ph / 50Hz	
Max power absorbed	W	2 X 50	2 X 100
Max current absorbed	TO	0.8	1,2
Unit protection degree	IP	IP 20	IP 20

For the electrical connection:

- Remove the electronic cover screws;
- Use the cable passage provided on the cover itself to enter the electrical cables inside the unit;
- Use electrical cables with double insulation when crossing to the electrical box;
- Enter the cables inside the electrical box and make the electrical connections;

Be careful not to leave unconnected cables inside the electrical compartment.



4.1.2 ADJUSTMENTS



Each URC DOMO SMART V unit is equipped with a type of regulation, chosen by the customer.

4.1.3 BASIC ADJUSTMENT (CNV-BPM COMMAND)



The URC DOMO SMART unit is equipped with an internal compartment for the electrical connection, with connection terminal block.

The terminal block contains the fan cables, both for the power supply and for the signal.

The basic CNV-BPM control is supplied inside the packaging of the URC DOMO SMART unit.

The connection from the terminal block on the machine to the basic control is the responsibility of the customer.

For connection, refer to the diagrams below.

With the BASIC adjustment the user will be able to set the speeds of the air supply and extraction fans by acting on the CNV-BPM control button.

By pressing the bypass control activation/deactivation button, the user can choose to activate or deactivate the freecooling/freeheating functionality.

If the temperature and humidity conditions of the external air are favorable (for example, particularly hot winter days, or summer evenings).

Once the favorable thermo-hygrometric conditions of the external air have ended, pressing the bypass control button will restore the total exchange of air flows through the heat recuperator.

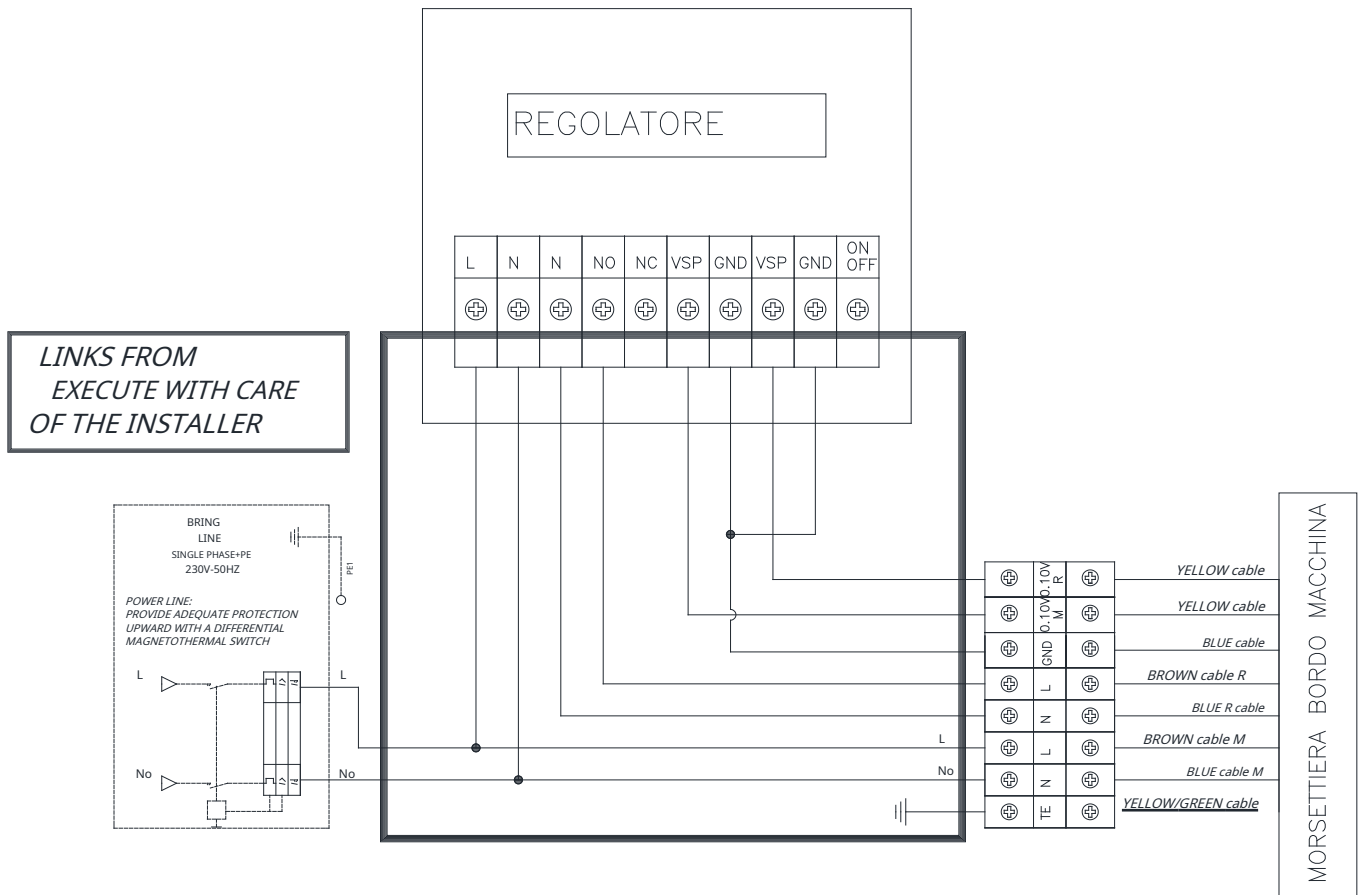
For the connection between URC DOMO SMART V and CNV-BPM basic control:

- Make sure that the single-phase power supply line is suitable for supporting the loads of the 2 fans (see table for the sizing of the power supply line).
- Make sure fans are properly grounded.

- Electrically connect the CNV-BPM control, bringing PHASE and NEUTRAL of the 230V-1F-50Hz line to terminals L and N respectively, as indicated in the attached diagram.
- Connect the NEUTRAL of the supply fan (BLUE M cable of the terminal block) to the neutral of the power supply
- Connect the PHASE M of the supply fan (BROWN cable M of the terminal block) to the power supply phase
- Connect the NEUTRAL of the return fan (BLUE R cable of the terminal block) to the N contact of the CNV-BPM control, as per the attached diagram
- Connect PHASE M of the return fan (BROWN cable R of the terminal block) to the NO contact of the CNV-BPM control, as per the attached diagram
- Connect the GND of each fan (BLUE cable of the fan terminal block) to the GND contacts of the CNV-BPM regulator, as per the attached diagram
- Connect the 0-10V of each fan (YELLOW cable of the fan terminal block) to the 0-10V contact of the CNV-BPM regulator, as per the attached diagram
- To connect the signals between the fan terminal blocks and the 0-10V potentiometer, use a shielded/braided cable (Belden 8772 type with a minimum section of 1mm).

CHECK THAT THE ABSORBED CURRENT OF THE FANS COMPLIES WITH THE RATED CURRENT STATED ON THE UNIT.

NB: THE COLORS OF THE TERMINAL BLOCK CABLES MAY VARY DEPENDING ON THE URC DOMO SMART SMART MODEL, ALWAYS REFER TO THE DIAGRAMS ATTACHED IN THE JUNCTION BOX, IN CASE OF DIFFERENCES IN THE COLORS



4.1.4 ADVANCED REGULATION



The URC DOMO SMART V unit is equipped with an electronic regulation board, wired inside the unit.

The panel is set up with protection fuses for all electrical components (fans, any additional accessories such as 2 or 3-way valves for batteries, electrical resistors, active type probes).

A remote display is also supplied, to be installed in the room, to control all the functions guaranteed by the electronic regulation board.

The URC DOMO SMART V unit is supplied plug and play.

The installer must therefore:

- Bring the single-phase power line to the terminals in the electrical panel. To size the power supply line, always refer to the table in this section, electrical connections, general information.
- Connect the remote display supplied to the electronic regulation board, following the instructions in the diagrams present.

All remaining electrical connections are made at the factory.

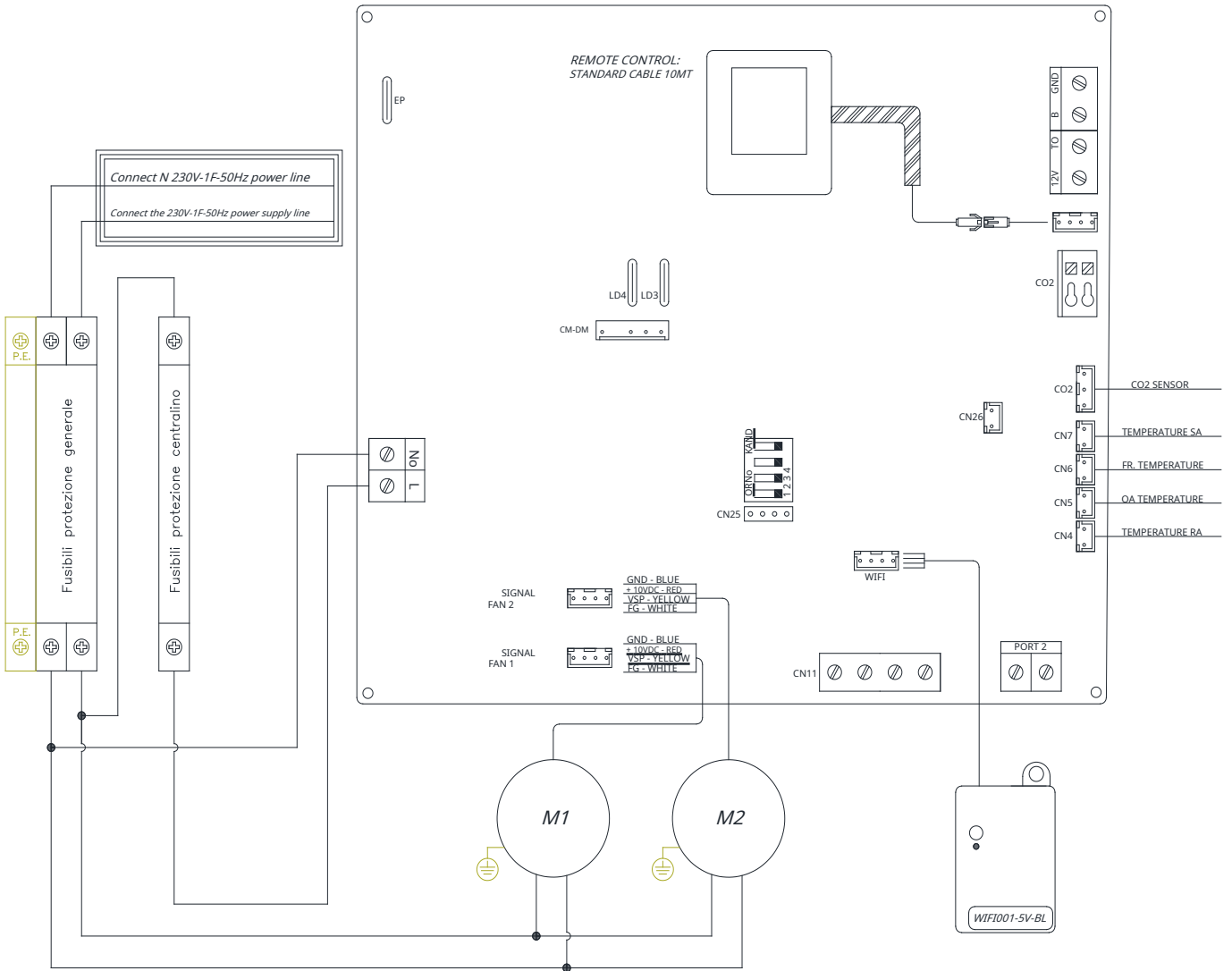
With the CNV-SMART adjustment the user will be able to:

- Check the fan speeds, both in parallel (fans at the same speed) and at differentiated speed (one of the 2 fans faster than the other).
- Control the switching on and off of the URC DOMO SMART V unit according to time slots.
- Control a 2 or 3 way valve for post water coil, with on/off signal. The batteries and their valves are available as accessories
- Check an electric post heating coil, with on/off signal. Electric batteries are available as accessories. Control up to 4 calibration dampers with on/off signal. The calibration dampers and related actuators are available as accessories.
- Control of temperatures of external air, return air, supply air, exhaust air.

- Automatic control of the bypass function for free-cooling, based on settable set-points.
- Automatic monitoring system of the cleanliness of the filters via timer, with notification of the need for replacement.
- Integrated Wi-Fi sensor, for unit management via app.
- Possibility of managing ventilation via AQ-CO2 sensor. The sensor is available as an accessory, and connects wirelessly to the control unit.

For further information regarding the CNV-SMART regulation and the possible configurations, contact us. Technical office requesting the specific manual.

Below is a simplified connection diagram with accessories not connected.



4.1.5 ELECTRIC BATTERY ACCESSORY CONNECTION COMPLETE WITH ADJUSTMENT -BE-

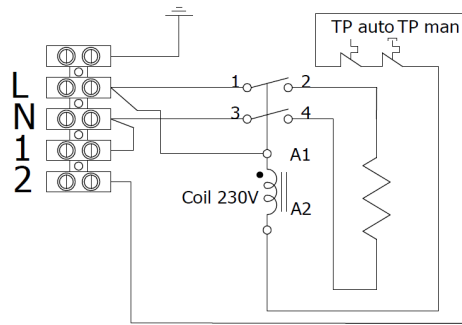
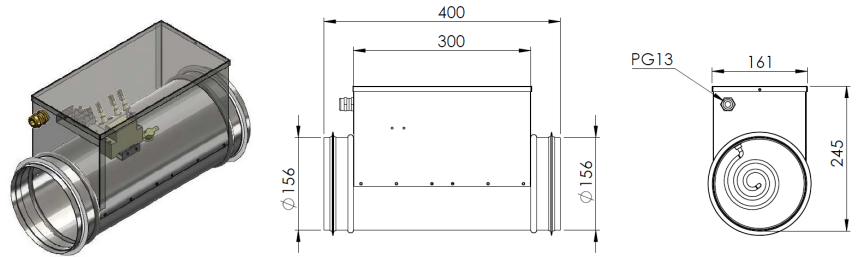


The electric post-heating units with circular section are made up of a galvanized sheet metal frame with wire resistance.

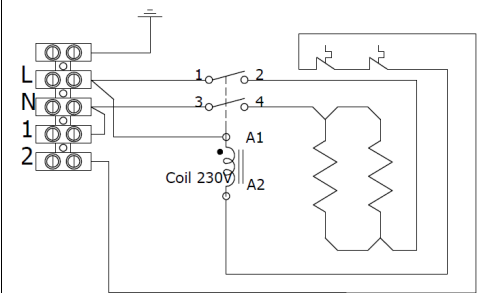
They are equipped with circular flanges which facilitate installation on the duct.

The side electrical box already complete with cable gland allows access to the components inside:

- Automatic reset thermo protector;
- Thermo protector with manual reset;
- Contactor;
- Terminal block;



URC DOMO SMART V 20 version



URC DOMO SMART V 40 version

BE electric battery connection diagram

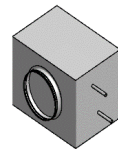
4.1.6 ACCESSORY CONNECTION OF WATER HEATING COIL -BAC-



The water post-heating coils are made up of two galvanized sheet metal flanges and a heat exchange coil made up of copper pipes and aluminum fins.

They are equipped with circular flanges which facilitate installation on the duct.

They are equipped with threaded connections.

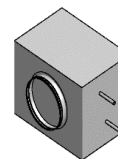


BAC

4.1.7 ACCESSORY CONNECTION OF WATER COOLING COIL -BAF-



The water coils are made up of a galvanized sheet metal frame and a heat exchange coil made up of copper pipes and aluminum fins. They are equipped with circular flanges which facilitate installation on the duct. They are equipped with threaded connections including valves for air venting and battery draining. It is necessary to provide a condensation drain for the summer function of the battery.



BAF

5 MAINTENANCE

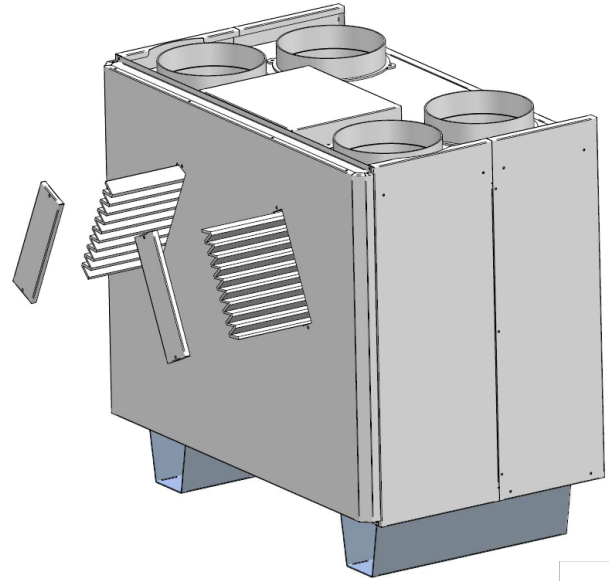
To always guarantee the correct and optimal functioning of the unit, it is necessary to periodically carry out all maintenance operations.

5.1.1 CLEANING OR REPLACING FILTERS

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

- remove power to the unit;
- open the filter covers using the dedicated screws;
- remove dirty filters;
- gently insert the new filters;
- close the filter cover with the dedicated screws;
- connect the power cord and turn on the unit from the switch on the side panel.

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



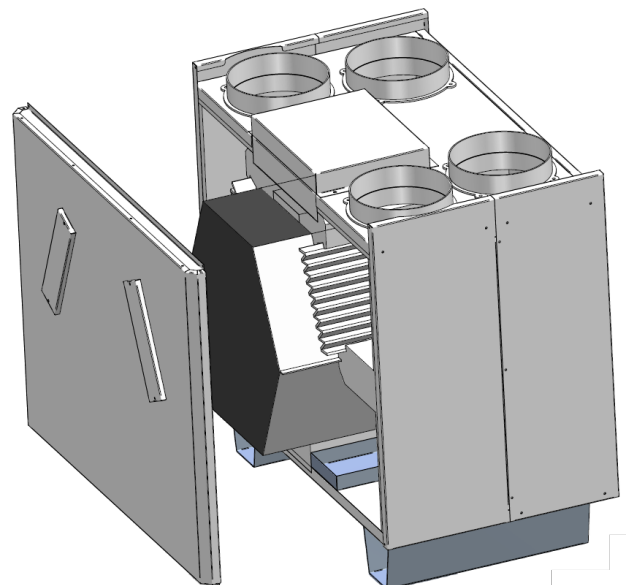
Filter extraction view

5.1.2 CLEANING THE HEAT EXCHANGER

It is advisable to check the condition of the heat exchanger at each cleaning/change of filters and to clean it if deemed appropriate. This operation must only be carried out by qualified personnel (installer).

To clean the heat exchanger proceed as follows:

- remove power from the unit
- in case of ceiling installation, disconnect the condensate drain pipe;
- open the unit cover by unscrewing the appropriate screws and making sure that the exchanger does not come out of its seat;
- remove the heat exchanger
- proceed with cleaning very delicately using a vacuum cleaner or a low pressure compressor (to prevent dirt from entering the heat exchanger, clean in the opposite direction to that of the air flow);
- insert the exchanger back into place;
- close the cover, locking it in position with the appropriate screws;
- connect the power cord and turn on the unit from the switch on the side panel.



Attention! Never touch the fins of the exchanger, handle the exchanger by holding it only on the closed sides.

View of unit for exchanger removal

5.1.3 GENERAL CLEANING OF UNIT



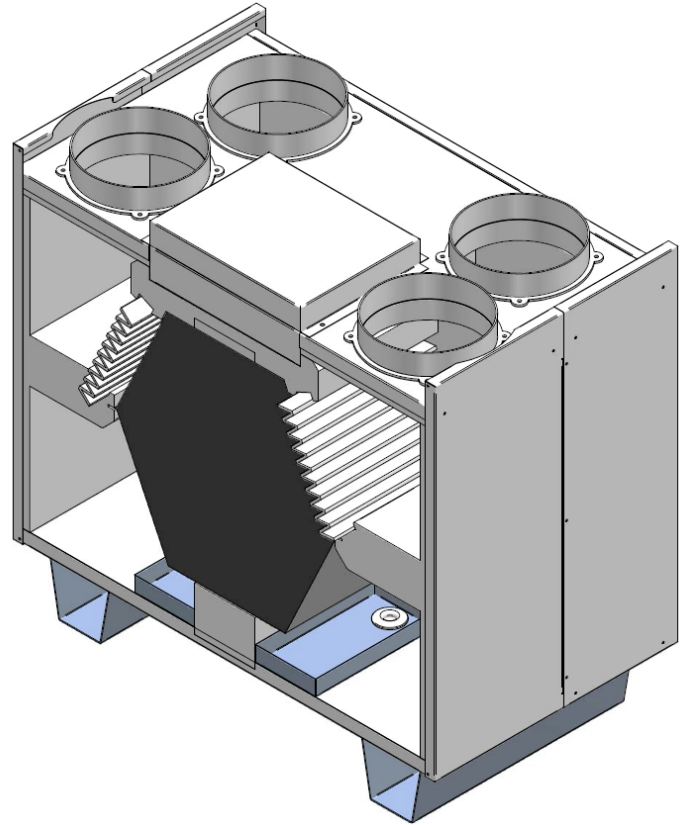
It is advisable to occasionally check and, if necessary, clean the fans, the condensate drain and the internal walls of the unit. These operations must only be carried out by qualified personnel (installer).

To carry out the above operations, proceed as follows:

- remove power from the unit
- in case of ceiling installation, disconnect the condensate drain pipe;
- open the unit cover by unscrewing the appropriate screws and making sure that the exchanger does not come out of its seat;
- proceed to check and, if necessary, clean the fans, the condensate drain and the walls;
- close the cover, locking it in position with the appropriate screws;
- connect the power cord and turn on the unit from the switch on the side panel.

For cleaning you can use a vacuum cleaner, a cloth slightly moistened with water, a soft bristle brush or a low pressure compressor.

Attention! There are small metal or plastic clips on the blades for balancing the blades themselves, DO NOT remove them.



General cleaning of the unit

6 ALARMS

6.1.1 GENERAL INFORMATION

In the event of problems or faults, take note of the model and serial number of the unit you have (found on the identification plate attached to the side of the unit) and contact your installer.

Below is the table of unit operating anomalies. For all alarms indicated by the control panel, refer to the specific manual.

ANOMALY DESCRIPTION	CAUSE	REMEDY
The fans are not active	<ul style="list-style-type: none"> - The power is not on - The adjustment device does not work - fan speed - Incorrect electrical connections - Fans with thermal protection 	<ul style="list-style-type: none"> - Check the power supply on the fan - Check the adjustment device - fan speed - Check that the fan is not overheated and in thermal protection
Insufficient air flow or useful pressure	<ul style="list-style-type: none"> - Clogged filters - Insufficient rotation speed - Clogged pipes or exchanger 	<ul style="list-style-type: none"> - Clean the filters - Increase the rotation speed - Clean pipes or exchanger
Insufficient exchanger performance	<ul style="list-style-type: none"> - Clogged exchanger fins 	<ul style="list-style-type: none"> - Clean the surfaces of the exchanger
Excessive vibrations and noise	<ul style="list-style-type: none"> - Improper installation of the unit - Incorrect installation of pipes - Unbalance of the fan impeller 	<ul style="list-style-type: none"> - Check the unit's brackets and fixings - Check the brackets and pipe fixings - Check the condition of the fan impellers
Water leaks from the unit	<ul style="list-style-type: none"> - Condensate drain blocked - Siphon not installed correctly 	<ul style="list-style-type: none"> - Clean the condensate drain - Check the correct installation of the siphon
Difficult starting	<ul style="list-style-type: none"> - Supply voltage too low - Insufficient engine torque 	<ul style="list-style-type: none"> - Check the power supply voltage that is not below 10% of the voltage nameplate rating - Power the unit with partially closed dampers in order to reduce the starting torque of the motor. In case of correct starting, replace the engine with a larger one.

NOTE

A series of horizontal dotted lines for taking notes.

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02 -2024

Technical Assistance Center

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

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