















INSTALLATION, USE AND MAINTENANCE MANUAL






**HIGH EFFICIENCY HEAT RECOVERY UNIT
URC DOMO SMART**

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1 GENERAL INFORMATION

1.1.1 INTRODUCTION

This manual has been designed 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 made with the purchase of our product.

Please read this manual carefully before performing any operation on the unit.

Do not install the unit or perform any work on it unless you have carefully read and understood this manual in its entirety. In particular, all precautions listed in the manual must be taken.

The documentation accompanying the unit must be delivered to the person responsible for the system so that he can carefully preserve it (at least 10 years) for any future assistance, maintenance and repairs.

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

Make sure that upon delivery of the unit, there are no obvious signs of damage caused by transport. If so, indicate this on the delivery note.

This manual reflects the state of the art at the time of marketing of the machine and cannot be considered inadequate because it has been subsequently updated based on 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 Office to receive further information or updates to the technical documentation and for any proposals for improving this manual. All reports received will be rigorously examined.

1.1.2 BASIC 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 device by disabled and unassisted persons is prohibited.
- It is forbidden to touch the device with bare feet or with wet or damp body parts.
- Any cleaning operation is prohibited before having disconnected the appliance from the electrical power supply by setting the main switch of the system to off.

- It is forbidden to modify the safety or regulation devices without the authorization and instructions of the appliance manufacturer.
- It is forbidden to pull, detach or twist the electrical cables coming out of 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 outlet grilles.
- It is forbidden to open the doors to access the internal parts of the appliance without first having set the main switch of the system to off.
- It is forbidden to dispose of packaging material or leave it within the reach of children as it may be a potential source of danger.
- Observe safety distances between the machine and other equipment or structures to ensure sufficient access space to the unit for maintenance and service operations as indicated in this booklet.
- The unit must be powered with electrical cables of a section adequate to the power of the unit. The voltage and frequency values must correspond to those indicated for the respective machines; all machines must be earthed in accordance with the regulations in force in the various countries.



1.1.3 SYMBOLISM



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

Safety related symbols











| | | |
|---|---|---|
|  | <p>ATTENTION Authorized personnel only</p> | Warns that the operations indicated are important for the safe operation of the machines |
|  | <p>DANGER Risk of electric shock</p> | Warns that failure to comply with the instructions may result in a risk of electric shock. |
|  | <p>DANGER</p> | It warns that failure to comply with the instructions involves a risk of harm to exposed persons. |
|  | <p>WARNING</p> | Warns that failure to comply with the instructions may result in damage to the unit or system. |
|  | <p>DANGER</p> | Warns that there is the presence of moving parts and poses a risk of harm to exposed persons |

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

| LABEL | INDICATION |
|---|---|
|  | <p>Electrical hazard. Can be placed anywhere where voltage is present. Turn off the power before each operation.</p> |
|  | <p>Located on the fan inspection panels. Indicates a high pressure compartment, which can only be accessed when the fan is off.</p> |

| | |
|--|--|
|  | <p>Positioned on one side of the machine.</p> <p>Please remember the presence of electrical hazards and we recommend reading the manual before carrying out any operation.</p> |
|  <ul style="list-style-type: none"> - SCARICO CONDENSA - CONDENSATS - CONDENSATION REMOVAL - EVACUACION DE CONDENSACIONES - KONDENSATABLASS | <p>Located next to the condensation water drain.</p> <p>Connect to the water drain as indicated in the corresponding section of this manual.</p> |
| <div style="border: 1px solid black; padding: 5px;"> <p>FILTER INSPECTION PANEL To preserve the energy efficiency, it's recommended to replace the filters when signaled.</p> </div> <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <p>PANNELLO ISPEZIONE FILTRI Per mantenere l'efficienza energetica, si raccomanda di sostituire i filtri quando segnalato.</p> </div> | <p>Located on the filter inspection panels.</p> <p>These panels can be accessed to check and replace filters (as directed in this manual).</p> |

1.1.4 WARNINGS

| | |
|--|---|
|  | <p>The installation of the unit must be carried out by qualified and authorised personnel in accordance with 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 in areas near 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 case of water leaks inside the unit, set the main switch of the system 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 power supply shared with other appliances.</p> |
|  | <p>It is recommended that an earth leakage circuit breaker be installed; failure to install this device may result in electric shock.</p> |
|  | <p>For connection, use a cable long enough to cover the entire distance, without any connections; do not use extension cords and do not apply other loads to the power supply but use a dedicated power circuit.</p> |
|  | <p>After connecting the electrical cables, make sure that the cables are arranged so as not to exert excessive force on the covers or electrical panels; incomplete connection of the covers may cause the terminals to overheat.</p> |
|  | <p>Make sure that the earth connection is made; do not earth the appliance on distribution pipes. Momentary high intensity power 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> |



Make sure that the first start-up is carried out by personnel authorised 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 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 GAMMA

| | | |
|----------------|------|------|
| | - 1- | - 2- |
| URC DOMO SMART | 20 | ZS |

(1) Defines the maximum flow rate

20: 200 m³/h
40: 400 m³/h

2) Electronic version

ZS: BASE Electronics
ZE: ADVANCED Electronics

1.1.7 IDENTIFICATION



- The unit can be identified by the nameplate located on the lower front panel of the unit.
- 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, causes major problems in identifying the machine, in finding spare parts and therefore in any future maintenance.

1.1.8 CONSTRUCTION FEATURES

URC is a ventilation unit complete with heat recovery unit dedicated to air exchange without energy waste.

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 infill panels in galvanized sheet metal, with sealing gasket.

HEAT EXCHANGER:

High efficiency (>90%) countercurrent cross-flow polypropylene exchanger. Summer and winter operation.
EN308 certified recovery performance.

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 pressure drop efficiency ePM 1 - 70 % (F7) both on the fresh air and on the extracted air. Easy extraction for ordinary maintenance in all permitted installation positions.

AVAILABILITY AND VERSIONS

2 models with horizontal or vertical development

For all configurations, the orientation of the outlets can be changed on site (further details in the data sheet and technical drawings).

Two control versions: BASIC / EVOLVED

BASIC VERSION

Simple electrical provision 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).

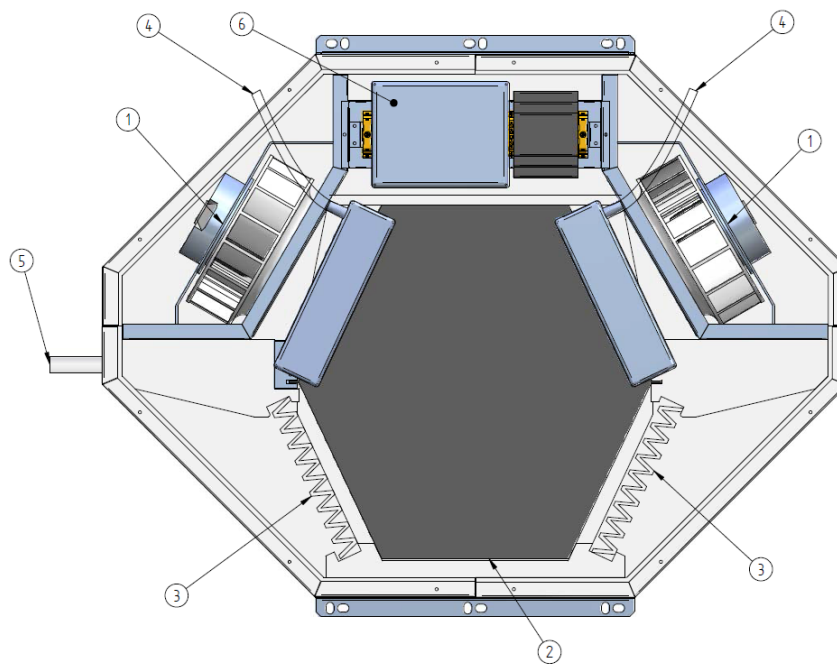
Each version can be completed with a dedicated control (BASE or EVOLUTION, accessory on request)

The URC DOMO SMART units are suitable for internal, ceiling or floor installation and external installation with a roof (additional accessory).

For the URC DOMO SMART units, electric batteries (external to the structure) and modules with heating or cooling batteries (water supply fluid) are available.

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

1.1.9 MAIN COMPONENTS OF THE UNIT



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

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 that allow them to be lifted and positioned at 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 fully pre-charged with refrigerant gas in the circuits and with non-freezing oil in the compressors. Under no circumstances may there be water in the hydraulic circuits, since the unit is carefully emptied after testing. Upon arrival, the customer is required to inspect the unit, including 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 seek compensation from the carrier, reporting the extent of the damage in detail on the delivery note, producing photographic evidence of the apparent damage and notifying any apparent damage to the carrier by registered mail. The manufacturer does not assume responsibility for damage due to transport even if it has carried out the shipment itself. Great care must be taken when handling the units during unloading and positioning, in order to avoid damage to the casing and the more delicate internal components such as compressors, exchangers, etc. In any case, keep the unit in a horizontal position without tilting it. All the instructions regarding the precautions necessary to avoid damage to the unit and the indication of its weight are reported on the packaging. The materials that make up the packaging can be of various natures 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 DISMANTLING AND DISPOSAL



Do not disassemble or dispose of the product yourself. 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 in accordance with national and local regulations governing the use of electrical devices and in accordance with the following indications:

- install the unit inside residential buildings with ambient temperatures 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 frost-free location (condensation water must be drained unfrozen, at a certain angle, using a siphon);
- do not install the unit in areas with high 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 air duct connections and for carrying out maintenance;
- The consistency of the ceiling/wall/floor where the unit will be installed must be adequate for the weight of the unit and not cause vibrations.

The environment chosen for installation must have:

- air duct connections;
- single-phase electrical connection 230V 50Hz
- Condensation drain connection



2.1.2 UNIT PLACEMENT

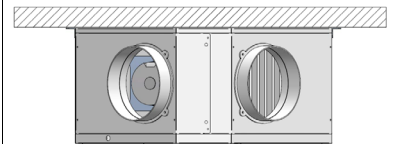
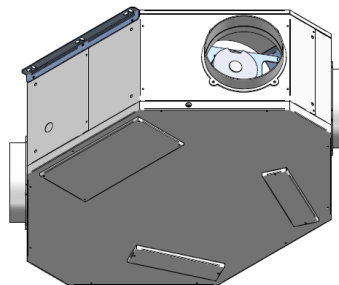
Ceiling Mount – Horizontal Unit

To mount the ceiling unit you will need:

- Position the unit against the wall so that the side of the electrical panel is at least 30 cm away from adjacent walls.
- fix the unit to the ceiling, using the brackets already installed on the unit and using suitable anchoring systems (plugs, threaded rods, chains, etc.) and check that it is level using a spirit level.

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

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



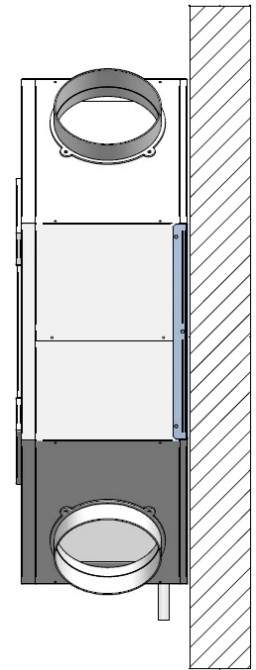
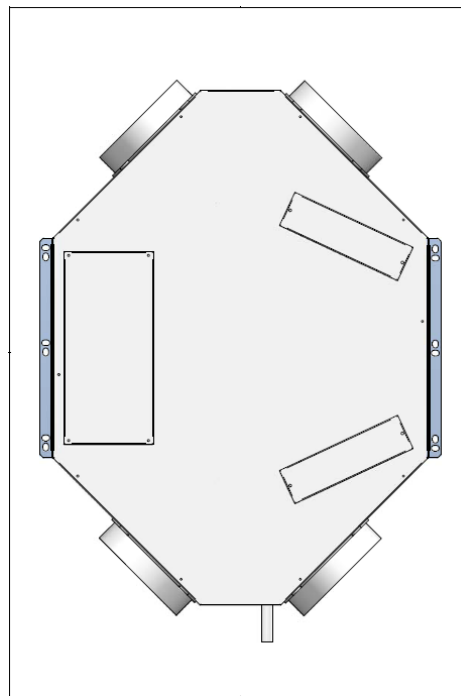
Wall Mount - Unit V

To mount the unit on the wall you need:

- Position the unit against the wall so that the side of the electrical panel is at least 30 cm away from adjacent walls.
- fix the unit to the wall, using the brackets already installed on the unit and using suitable anchoring systems (plugs, threaded rods, chains, etc.) and check that it is level using a spirit level.

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

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

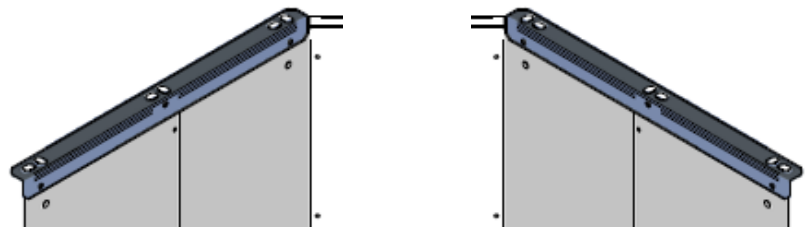


2.1.3 ANCHORING BRACKETS



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

They are designed for fixing through dowels and threaded rods



2.1.4 CONDENSATE DRAIN CONNECTION

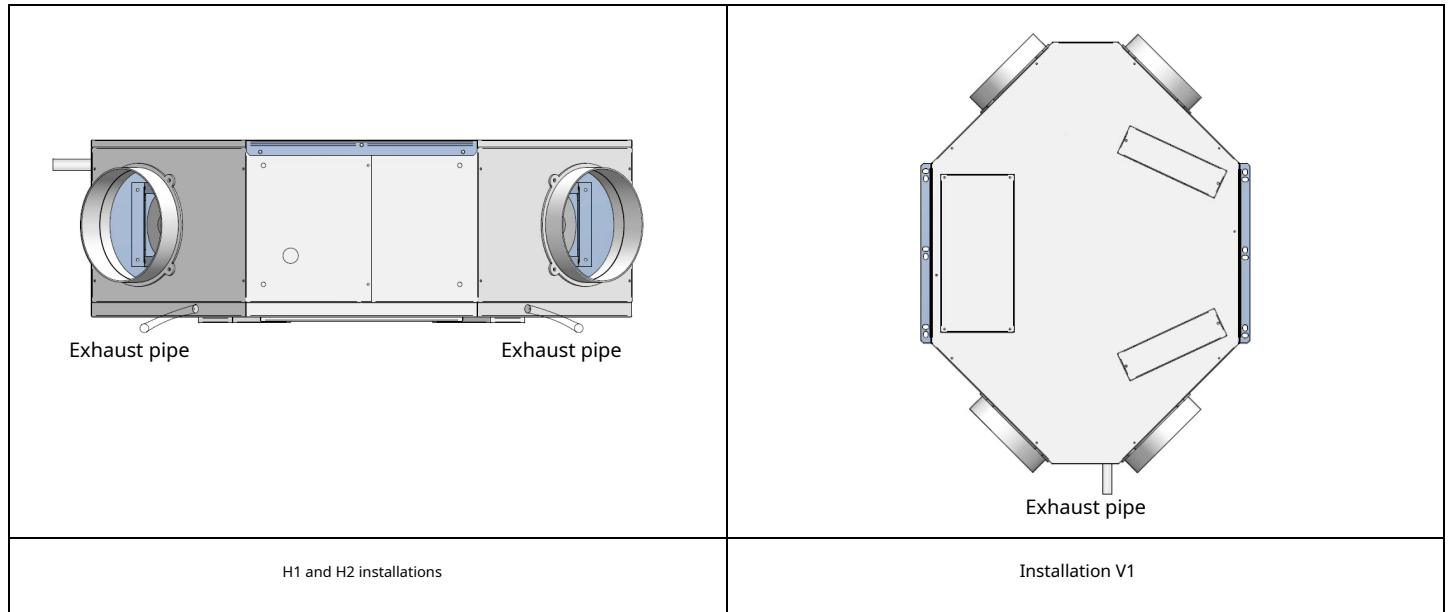


Due to the heat recovery system (the hot exhaust air is cooled by the incoming air inside the heat exchanger), the humidity contained in the internal air condenses inside the unit.

For the correct operation of the heat recovery unit, it is therefore necessary to connect a condensation drain to the plumbing system (drain) of the house to the correct pipe drain pipe of the unit protruding about 6 cm and in 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 exhaust pipes must be plugged to prevent air from leaking from the unit.

When installing the condensate drain, follow the following rules:

- give the exhaust pipe a slope of at least 2%;
- provide for the possibility of disconnecting the exhaust pipe for any maintenance (particularly in the case of ceiling installation);
- Always connect the siphon to the condensate drain on **EXPULSION SIDE** of the unit.
- make sure 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.



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 According to the imp



THERE

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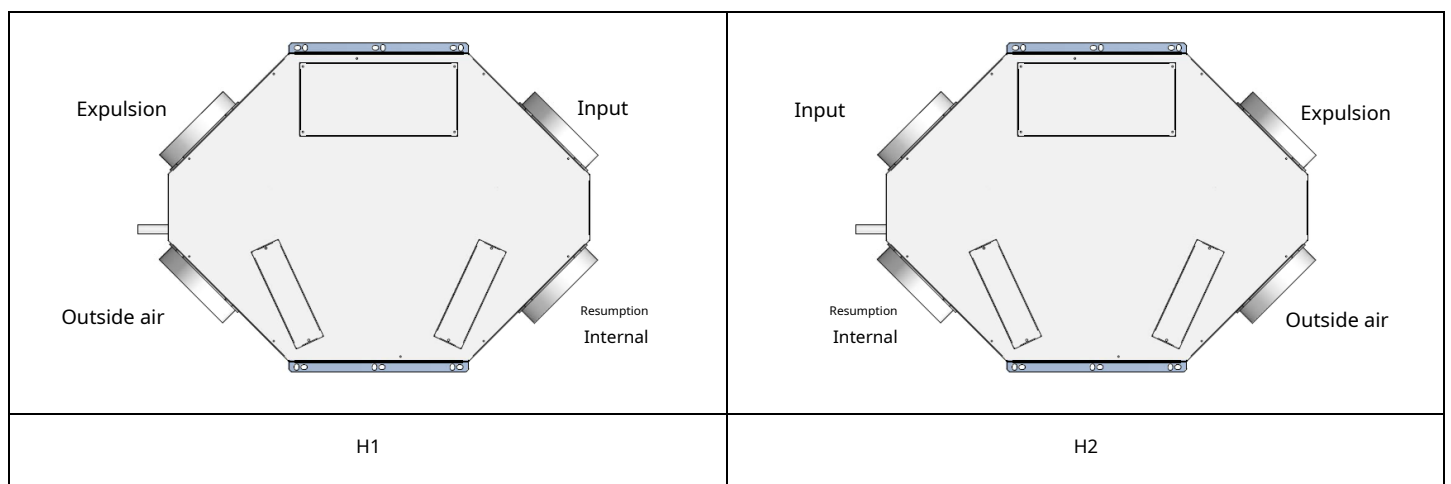
refer to the configurations here

i on the unit.

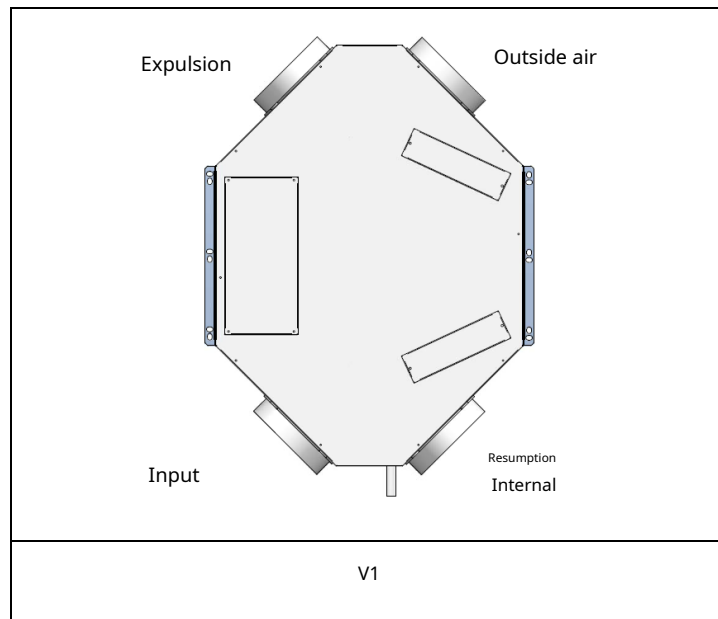
tallata, it will be possible to orient appropriately

in the following ways:

VERSION



VERTICAL VERSION V



The units are shown from below (H version) and from the front (V version)

In the H1 and H2 versions, always connect the exhaust pipe closest to the **EXPULSION SIDE** and consequently plug the one present on the intake 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 GENERAL INFORMATION

- Before starting any operation to make the electrical connection, make sure that the unit is not powered.
- Make the necessary electrical connections by consulting only the electrical diagram attached to this manual.
- Install a suitable differential protection and interruption device serving the unit exclusively.
- 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 compressor starting currents as well as the maximum load that can be reached.
- The relevant data are indicated on the attached wiring diagram and on the unit's identification plate.
- It is prohibited to enter the unit with electrical cables unless specified in this booklet.
- Use cables and electrical conductors of adequate cross-sections 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 power terminal screws. Table for sizing the power line.

Electrical Data

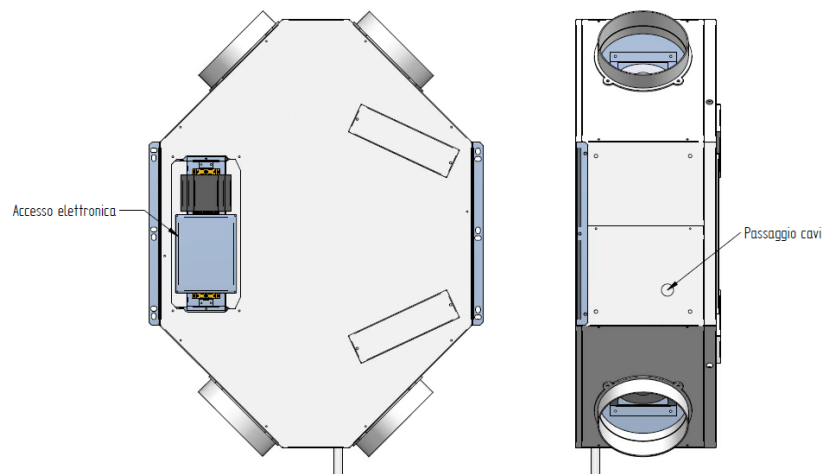
| Size | | URC DOMO SMART 200 | URC DOMO SMART 400 |
|-----------------------|-------|--------------------|--------------------|
| Supply voltage | T/P/F | 230V / 1Ph / 50Hz | |
| Max power absorbed | W | 2 X 50 | 2 X 100 |
| Max current absorbed | TO | 0,8 | 1,2 |
| Unit protection level | IP | IP 20 | IP 20 |

For the electrical connection:

- Remove the electronics cover screws;
- Use the cable passage provided on the side to enter the electrical cables inside the unit;
- Use double-insulated electrical cables when crossing to the electrical box;
- Enter the cables inside the electrical box and make the electrical connections;

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

Be careful that the cables do not come into contact with the fan impellers.



4.1.2 ADJUSTMENTS



Each URC DOMO SMART 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 a connection terminal block.

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

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

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

For the connection, refer to the diagrams below.

With the BASE regulation the user can 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 function.

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

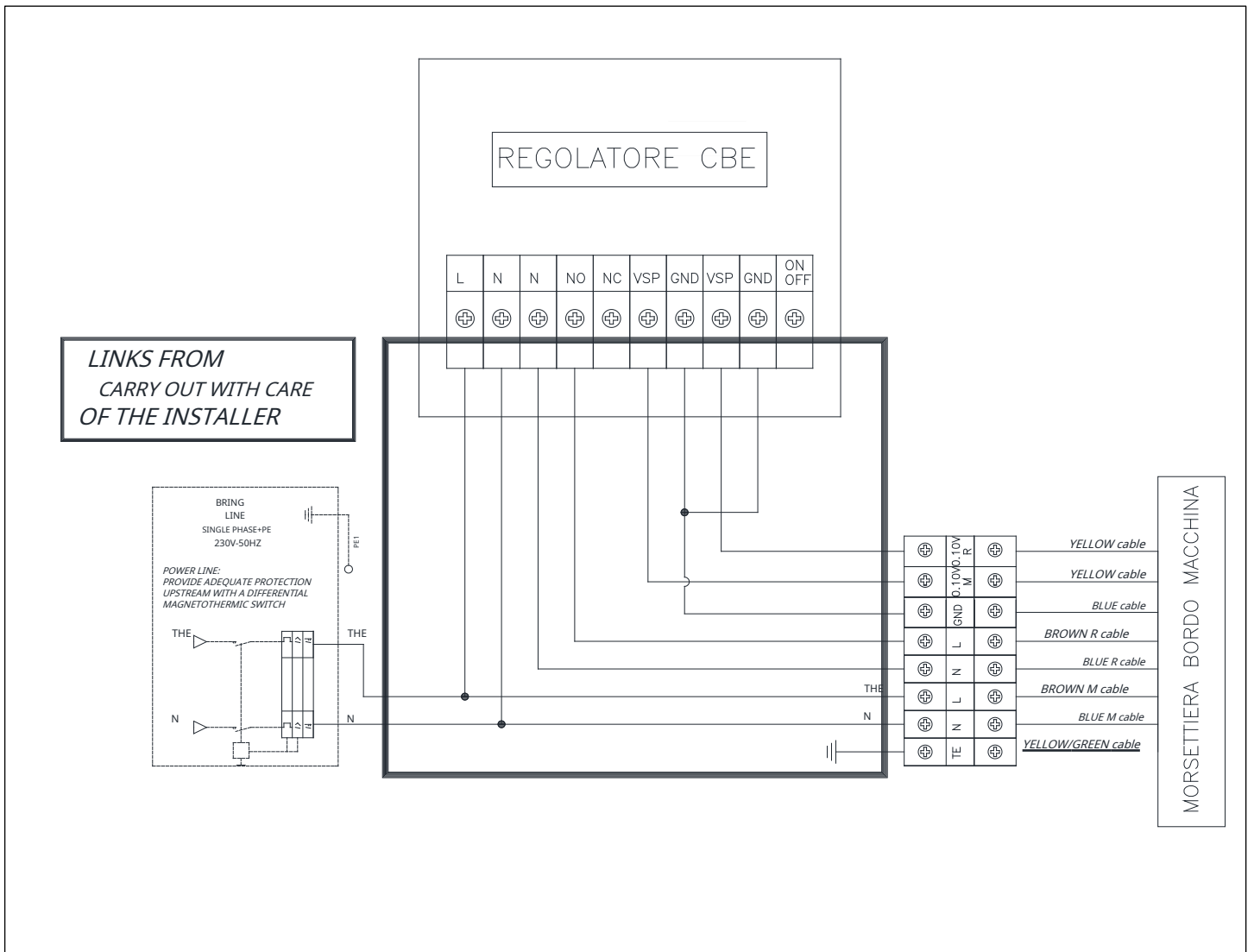
Once the favourable thermo-hygrometric conditions of the external air have ended, pressing the bypass control button will restore the total exchange of air flows through the heat recovery unit.

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

- Make sure that the single-phase power line is capable of supporting the loads of the 2 fans (see table for power line sizing).
- Make sure fans are properly grounded.
- Electrically connect the CNV-BPM control, bringing PHASE and NEUTRAL of the 230V-1F-50Hz line to the L and N terminals respectively, as indicated in the attached diagram.
- Connect the NEUTRAL of the supply fan (BLUE M cable of the terminal board) to the neutral of the power supply
- Connect the PHASE M of the supply fan (BROWN M cable of the terminal block) to the power supply phase
- Connect the NEUTRAL of the recovery fan (BLUE R cable of the terminal block) to the N contact of the CNV-BPM control, as per the attached diagram
- Connect the PHASE M of the recovery fan (BROWN R cable of the terminal board) 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/twisted cable (type Belden 8772 with a minimum cross-section of 1mm).

CHECK THAT THE ABSORBED CURRENT OF THE FANS COMPLIES WITH THE PLATE CURRENT SHOWN ON THE UNIT.

NB: THE COLOURS OF THE TERMINAL BLOCK CABLES MAY VARY DEPENDING ON THE URC DOMO SMART MODEL. ALWAYS FOLLOW THE DIAGRAMS ATTACHED IN THE JUNCTION BOX IN THE EVENT OF DIFFERENCES IN THE COLOURS.



4.1.4 CNV-SMART ADJUSTMENT



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

The panel is equipped 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 viewer is also supplied, to be installed in the room, to control all the functions guaranteed by the electronic regulation board.

The URC DOMO SMART unit comes plug and play.

The installer must therefore:

- Bring the single-phase power line to the terminals in the electrical panel. For the sizing of the power line, always refer to the table in this section electrical connections, general information.
- Connect the supplied remote viewer to the electronic control board, following the instructions in the diagrams provided.

All remaining electrical connections are made at the factory.

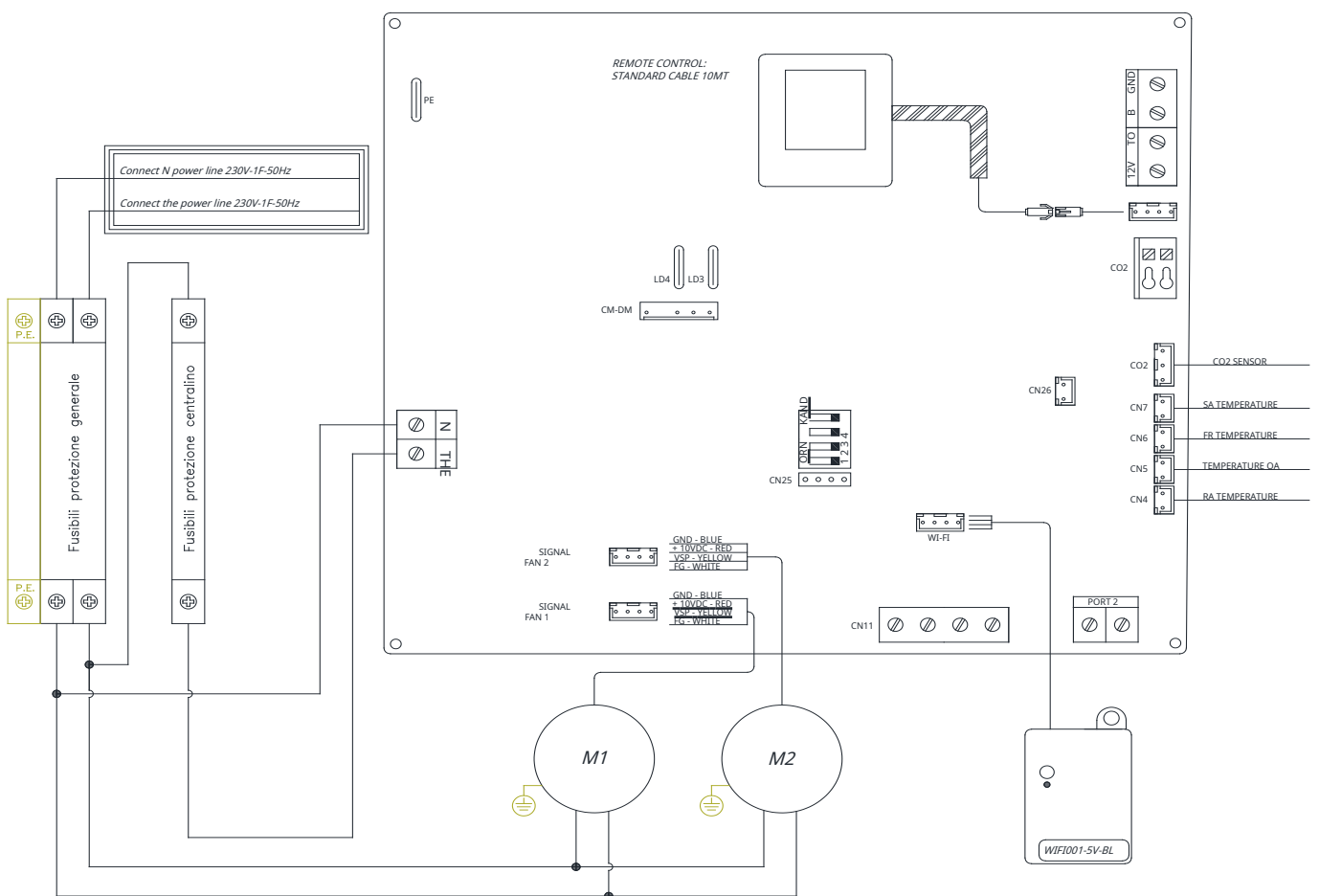
With the CNV-SMART regulation the user will be able to:

- 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 unit based on time slots.
- Control a 2 or 3 way valve for post water battery, with on/off signal. Batteries and their valves are available as accessories
- Control an electric post-heating battery, with on/off signal. Electric batteries are available as accessories. Control up to 4 calibration dampers with on/off signal. Calibration dampers and their actuators are available as accessories.
- Control of outside air, return air, supply air and exhaust air temperatures.
- Automatic control of the bypass function for freecooling, based on adjustable set points.
- Automatic control of dirt accumulation in the filters via timer, to signal 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 our Technical Office and request the specific manual.

Below is a simplified connection diagram with accessories not connected.



View the APP SMART LIFE manual for basic control



4.1.5 CONNECTION OF THE COMPLETE ELECTRIC BATTERY ACCESSORY WITH REGULATION -BE-

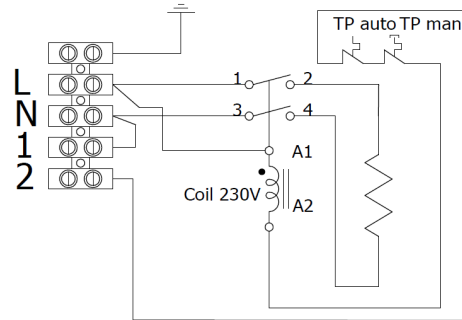
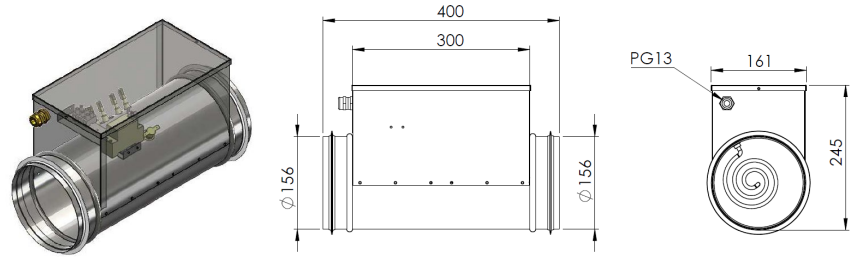


The circular section electric post-heating units consist of a galvanized sheet metal frame with wire resistance.

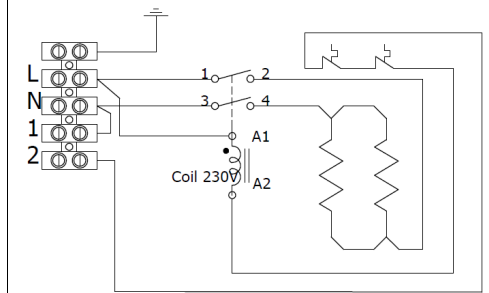
They are equipped with circular flanges that facilitate installation on the duct.

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

- Automatic reset thermal protector;
- Manual reset thermal protector;
- Contactor;
- Terminal block;



Hero Smart 200 Version



Hero Smart 400 Version

Connection diagram for BE electric battery

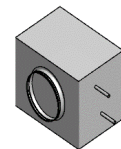
4.1.6 CONNECTION OF THE WATER HEATING BATTERY ACCESSORY -BAC-



The water post-heating batteries consist of two galvanized sheet metal flanges and a heat exchange battery made of copper pipes and aluminum fins.

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

They are equipped with threaded connections.

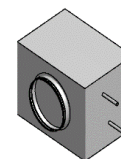


BAC

4.1.7 CONNECTION OF THE WATER COOLING BATTERY ACCESSORY -BAF-



The water batteries consist of a galvanized sheet metal frame and a heat exchange battery composed of copper pipes and aluminum fins. They are equipped with circular flanges that 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 ensure that the unit always functions correctly and optimally, all maintenance operations must be carried out periodically.

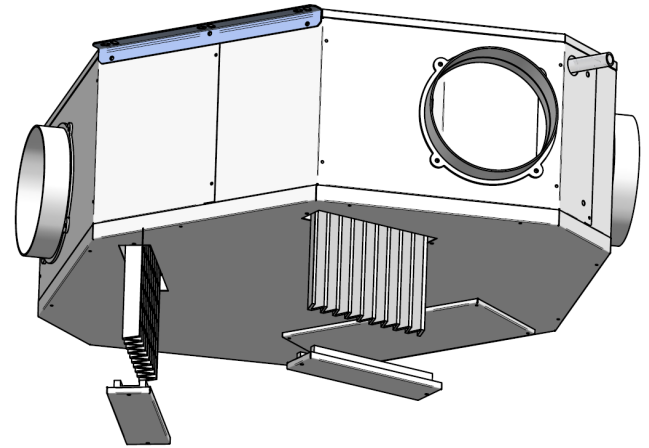
5.1.1 CLEANING OR REPLACING FILTERS



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

- remove power from 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 condition of the filters allows it, you can proceed to clean them using a vacuum cleaner or a low-pressure compressor.



Filter extraction view

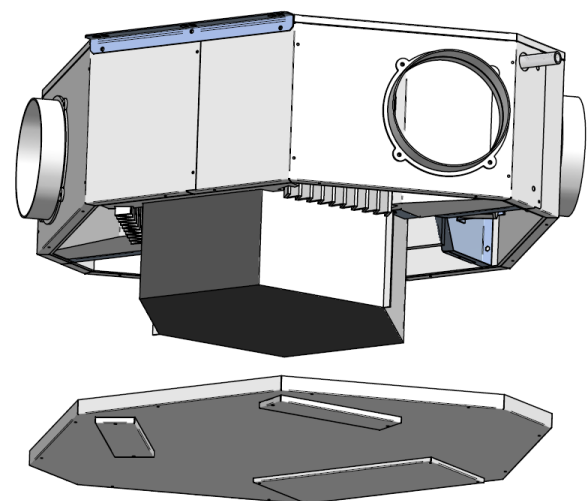
5.1.2 HEAT EXCHANGER CLEANING



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

To clean the heat exchanger proceed as follows:

- remove power from the unit
- in case of ceiling installation, disconnect the condensation drain pipe;
- open the cover of the unit 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 avoid dirt entering the heat exchanger, clean in the opposite direction to the air flow);
- reinsert the exchanger into place;
- close the cover, locking it in place 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 unit for exchanger removal

5.1.3 GENERAL UNIT CLEANING



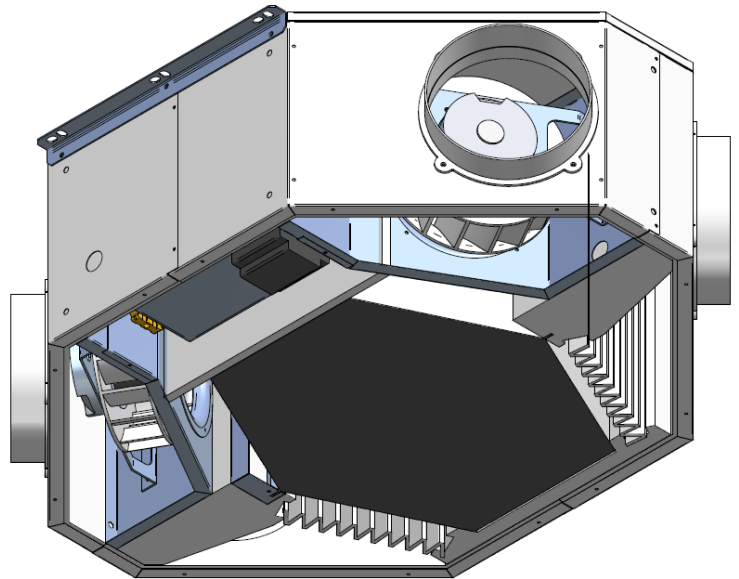
It is recommended to occasionally check and clean the fans, condensation drain and internal walls of the unit. These operations must be carried out only by qualified personnel (installer).

To carry out the above operations proceed as follows:

- remove power from the unit
- in case of ceiling installation, disconnect the condensation drain pipe;
- open the cover of the unit 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, condensation drain and walls;
- close the cover, locking it in place 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 dampened with water, a soft-bristled brush or a low-pressure compressor.

Attention! There are small metal or plastic clips on the blades to help balance the blades, DO NOT remove them.



General cleaning of the unit

6 ALARMS

6.1.1 GENERAL INFORMATION

In case of problems or failures, note the model and serial number of the unit you own (found on the identification plate attached to the side of the unit) and contact the installer.

Below is the table of unit malfunctions. 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"> - Power is not on - The speed adjustment device does not work - fan speed - Incorrect electrical connections - Fans in thermal protection | <ul style="list-style-type: none"> - Check the power supply to the fan - Check the adjustment device of the 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 rotation speed - Clean pipes or exchanger |
| Insufficient exchanger efficiency | <ul style="list-style-type: none"> - Clogged exchanger fins | <ul style="list-style-type: none"> - Clean the exchanger surfaces |
| Excessive vibrations and noise | <ul style="list-style-type: none"> - Improper installation of the unit - Incorrect installation of pipes - Fan impeller imbalance | <ul style="list-style-type: none"> - Check the unit's brackets and fixings - Check pipe brackets and fixings - Check the condition of the fan impellers |
| Water leaks from the unit | <ul style="list-style-type: none"> - Condensation drain blocked - Siphon not installed correctly | <ul style="list-style-type: none"> - Clean the condensation drain - Check the correct installation of the siphon |
| Difficult start | <ul style="list-style-type: none"> - Supply voltage too low - Insufficient engine torque | <ul style="list-style-type: none"> - Check the supply voltage that is not below 10% of the voltage plate number plate - Power the unit with partially closed dampers to reduce the motor starting torque. If starting correctly, replace the motor with a larger one. |

7 MAINTENANCE NOTES AND INFORMATION

7.1.1 NOTE

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