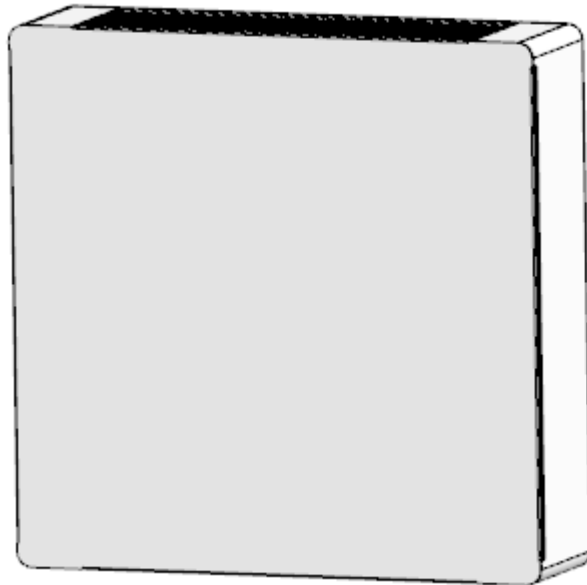


INSTALLATION, USE AND MAINTENANCE MANUAL



DECENTRALIZED HIGH EFFICIENCY HEAT RECOVERY UNIT

INDEX

1	GENERALITY	4
1.1.1	INTRODUCTION.....	4
1.1.2	BASIC SAFETY RULES	4
1.1.3	SYMBOLLOGY	5
1.1.4	WARNINGS	5
1.1.5	COMPLIANCE	6
1.1.6	RANGE	6
1.1.7	IDENTIFICATION.....	7
1.1.8	CONSTRUCTION FEATURES.....	7
1.1.9	OPERATION DESCRIPTION	8
1.1.10	DELIVERY STATE	8
1.1.11	START-UP REQUIREMENTS	8
1.1.12	DISASSEMBLY AND DISPOSAL	8
2	INSTALLATION	9
2.1.1	INSTALLATION CONDITIONS.....	9
2.1.2	UNIT PLACEMENT	10
2.1.3	CONDENSATE DRAIN CONNECTION (enthalpy version not present X)	16
3	ELECTRICAL CONNECTIONS	17
3.1.1	GENERALITY	17
3.1.2	UNIT WIRING DIAGRAMS	19
3.1.3	ELECTRICAL CONNECTIONS VERSION -I-	20
4	COMMISSIONING AND METHOD OF USE	21
4.1.1	GENERALITY	21
4.1.2	PANEL DESCRIPTION ON THE MACHINE	21
4.1.3	PSSWITCH SETTINGS	22

4.1.4	VERSION OPERATION -I-	23
5	MAINTENANCE	26
5.1.1	CLEANING OR REPLACING FILTERS	26
5.1.2	CLEANING THE HEAT EXCHANGER	27
5.1.3	GENERAL CLEANING OF THE UNIT	28
6	ALARMS	29
6.1.1	GENERALITY	29
6.1.2	PROBLEMS WITHOUT ERROR INDICATION ON THE DISPLAY	29
6.1.3	ALARM SIGNALING	30
6.1.4	TABLE OF ALARMS INDICATED BY THE DISPLAY - VERSIONS I -	30
7	NOTES AND MAINTENANCE INFORMATION	31
	NOTE	31

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 basic 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.







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 persons

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
- Ecodesign 2009/125/EC
- RoHS2 2011/65/EU
- WEEE 2012/19/EC

1.1.6 RANGE

	-1-	-2-	-3-	-4-
HRC 08	08	V	X	I

1) Defines the maximum range
Size: 08 up to 80 m³/h

2) Type of installation
V: Vertical view

3) Type of exchanger
V: sensitive
X: enthalpic

4) Type of control
I: electronics I

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, entails major problems in identifying the machine, in finding spare parts and therefore in any future maintenance.

1.1.8 CONSTRUCTION FEATURES

HRC 08 is a very high efficiency dual flow decentralized ventilation unit;

The unit is particularly suitable for residential units with the possibility of installing the number of units necessary to cover the house's air exchange requirement; Each unit covers approximately 50-60 m2 of surface.

CHASSIS:	Self-supporting sheet metal frame Galvanized sheet panels, with internal insulation in high density polyethylene; External painting of the aesthetics with RAL9003 finish;
HEAT EXCHANGER:	High efficiency counter-current cross-flow polypropylene heat exchanger. Low freezing temperatures Very high exchange efficiency.
FANS:	Brushless fans with electronic motor. Very high efficiency and low noise levels.
FILTERS:	70/80% ePM1 filters with low pressure drop. Easily removable both horizontally and vertically.
FREE COOLING:	Free cooling with automatic management through temperature probes
ELECTRICAL CABINET:	Electrical panel complete with 4-speed fan management card, antifreeze, automatic bypass, temperature probes, post-heating coil management and automatic dirty filter signaling. Capacitive touch control panel on board the machine, integrated temperature, air quality and humidity sensors; Wifi chip for management through remote APP;
EFFICIENCY:	Thanks to the construction features and its components, HRC+ is able to achieve recovery efficiency greater than 90%. In the winter and summer seasons there is a considerable energy recovery of the fresh air introduced into the environment.

1.1.9 OPERATION DESCRIPTION

The unit is a decentralized ventilation system with heat recovery with the following characteristics and peculiarities:

promotes healthy ventilation in offices, schools, commercial activities allowing the correct air exchange in the rooms and extracting excess humidity and bad smells;

- allows considerable energy savings for heating thanks to the efficiency of the heat recovery unit greater than 90%;
- the epm1 class filters with low pressure drop guarantee the filtering of the external air, which is essential for allergy sufferers;
- the electronically controlled speed motors guarantee low electricity consumption;
- heat and sound insulation;
- easy access inspection and maintenance by panel with locks;
- frost protection;
- control unit with display;
- predisposition for easy connection to the network and remote control.

1.1.10 DELIVERY STATE

The supply includes:

- recovery unit complete with fans supplied for installation in the pipes
- polypropylene counter-current exchanger pre-inserted inside the unit;
- epm1 class filters pre-inserted inside the unit;
- Telescopic mounting tubes
- Collapsible outdoor grills
- electrical box with connection terminal block;
- wall mounting brackets
- labels/stickers (safety pictograms, identification of air connections, CE marking...) already positioned on the unit.
- 2 cable ties
- installation, use and maintenance manual

1.1.11 START-UP REQUIREMENTS



Before starting, make sure there are no foreign bodies inside the unit.

Check the fixings of the closure panels and inspection doors.

Check the power supply and grounding of the unit.

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:

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

2.1.2 UNIT PLACEMENT

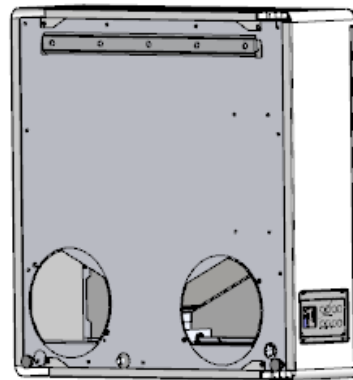


Unit placement

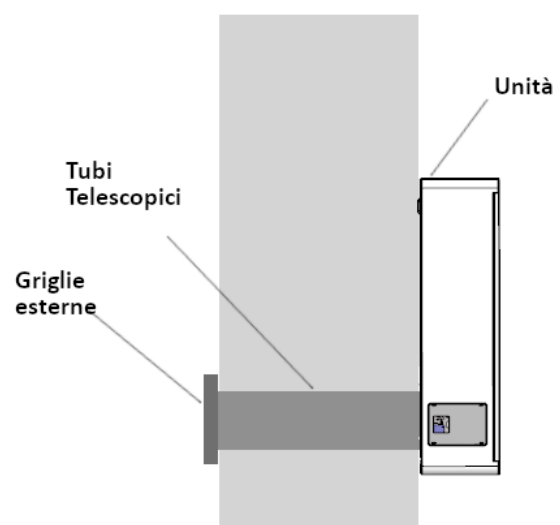
The unit can be installed against an external wall with the pipes directly to the outside



The installation takes place directly adjacent to the wall and directed outward holes;



The assembly sequence includes the installation of the telescopic tubes, the external grille and the unit;



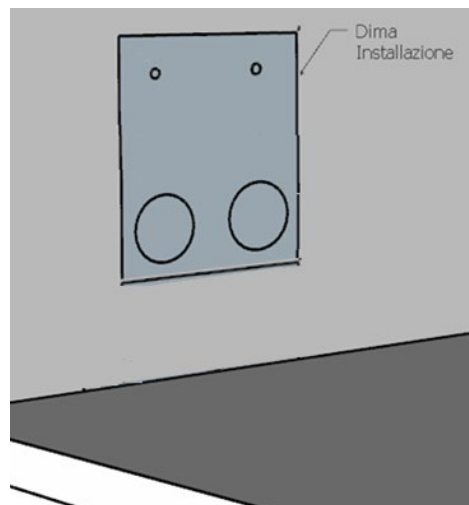
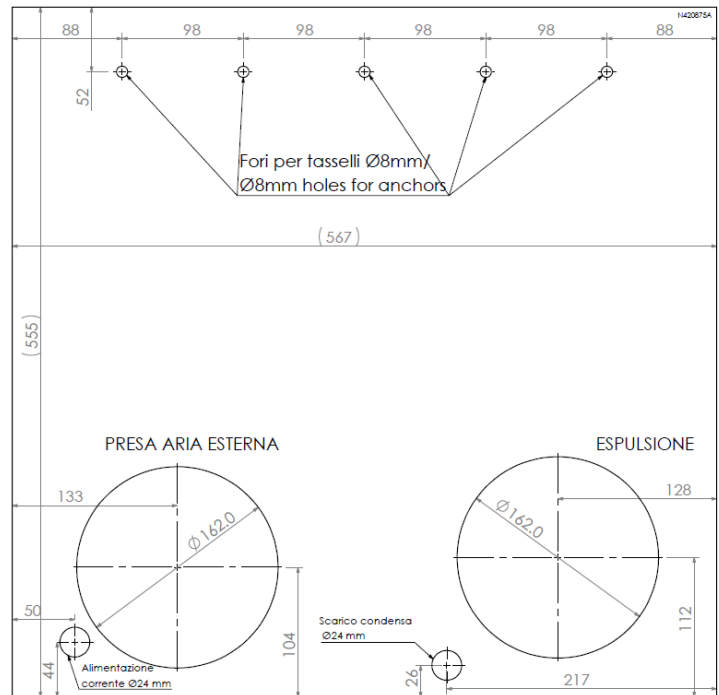
Unit placement

Template for wall holes

For the assembly of the unit, a template is supplied to easily make the holes in the wall of the unit and the fixing points;

- Place the installation template on the wall
- Mark and drill the wall making the two holes for external air and expulsion of internal air
- Prepare the condensate drain if it is conveyed directly outside with the air passage holes;
- Ensure sufficient space for carrying out maintenance activities: the opening of the unit cover must be guaranteed
- Prepare the fixing holes for the unit

Do not mount the unit with the sides in direct contact with the walls to avoid possible contact noise;



Wall installation template

Piping assembly

Sprinkle the hole made with cement mortar or polyurethane foam.

Insert the telescopic tube inside the hole made and bring the part of the tube with the larger diameter flush with the external wall.

Move the part of the pipe with the smaller diameter, bringing it flush with the internal wall. (fig.3)

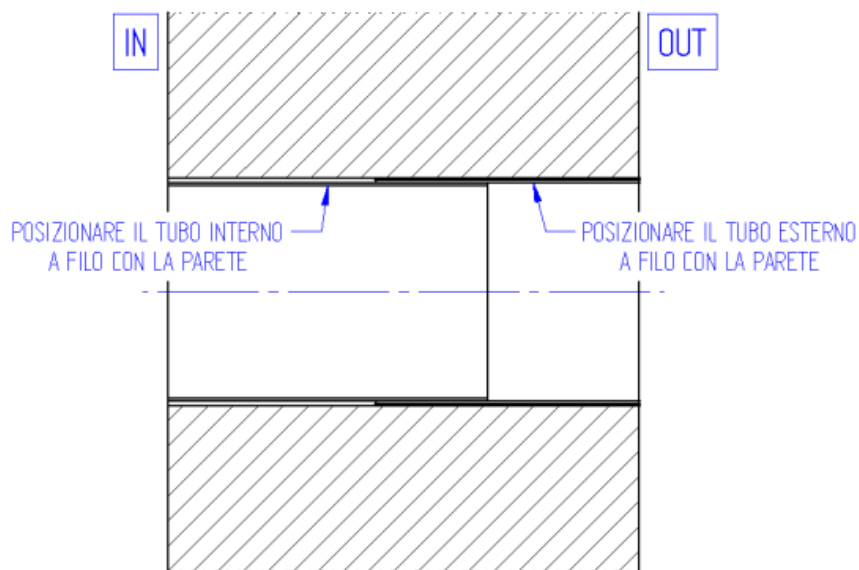


Fig.3 Positioning of the telescopic tube

Installation of external grilles

Wait for the cement mortar or polyurethane foam to set.

Insert the grid in-out by compressing the springs on the larger diameter pipe towards the outward end of the core.

Release and check the fastening of the grille.

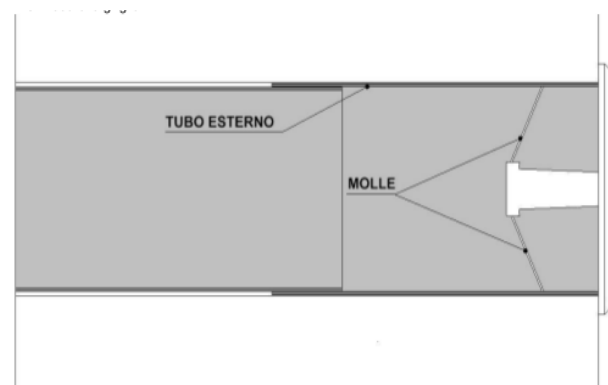


Fig.4 Positioning of the external grille

Fan assembly

Insert the fans in the pipes respecting the indications of the direction of the fan as shown in the figure shown in the following image;

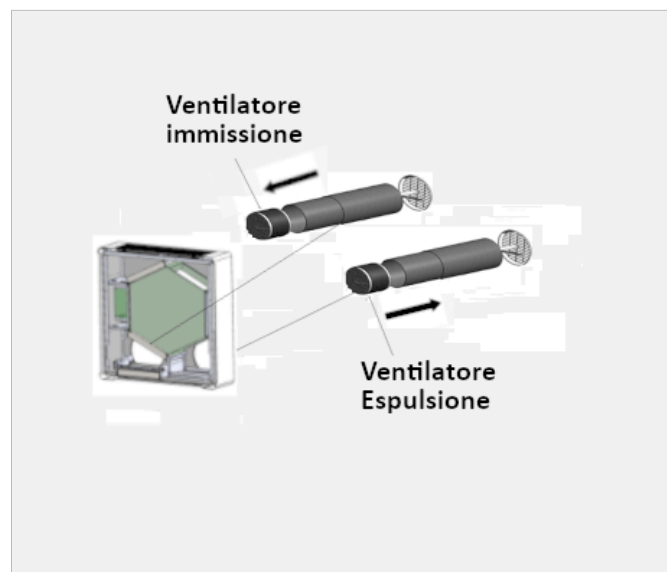
-Insert the fan into the pipe with a smaller diameter avoiding making it slide too much in the pipe;

NB If it is placed in a pipe with a larger diameter, the seal of the fan gasket could be insufficient;



Insertion of fans

- Follow the diagram on the side and respect the labels positioned on the fan and on the unit in order to have the correct installation on the expulsion side and the inlet side;



Correct installation of the fans

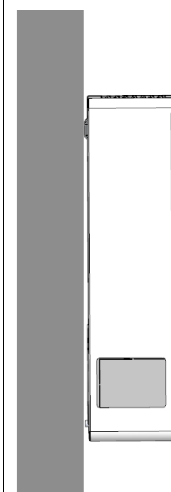
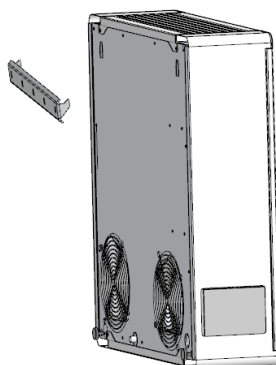
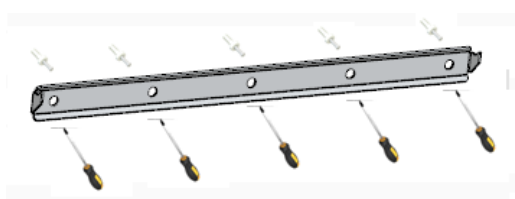
- Wall mounted unit

The unit is supplied with a wall mounting bracket

To fix the unit on the wall:

- Drill and plug the wall bracket using the references on the assembly template;
- Level the bracket, preferring a minimum inclination towards the left side condensate drain
- Rest the unit on the bracket, tilting it with the top towards the wall so that it hooks onto the bracket and let the unit rotate towards the wall so that there is adherence between the wall and the rear insulation;
- Fix the lower central bracket inserted inside the base to lock the unit to the wall
- Ensure sufficient space for carrying out maintenance activities: the opening of the cover of the unit (from below) must be guaranteed.
- Respect the left side distance to have access to the control display

Do not mount the unit with the sides in direct contact with the walls to avoid possible contact noise;



Wall mounting

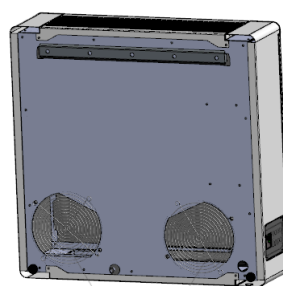
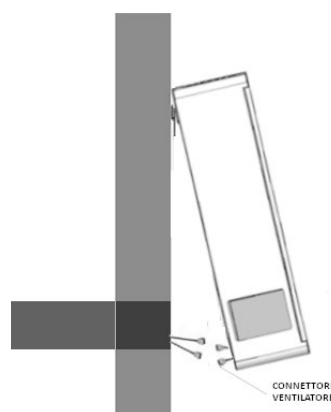
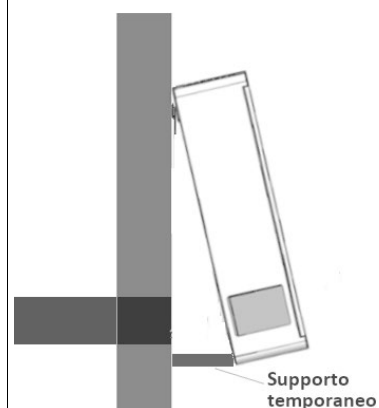
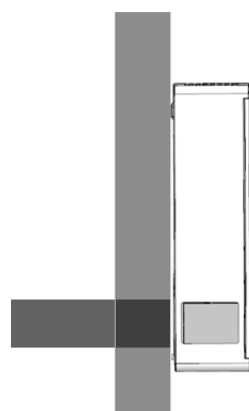
Fan connectors connection

After installing pipes, fans and units it is necessary to connect the connectors of the fans to the unit;

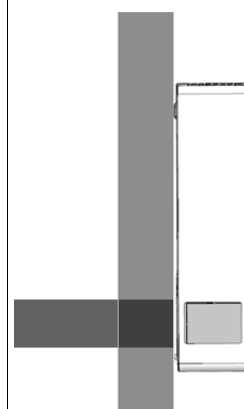
To connect the fan connectors;

- Rotate the unit from below, creating a gap between the wall and the unit;
- Use a temporary support such as a spacer to keep the unit temporarily off the wall;
- Connect the connectors of the two fans;
Each fan has a 4-pole connector for the power supply and a 2-pole connector for the signal;
- Pay attention to the positioning of the cables and if necessary use the two clamps supplied to block them on the anti-intrusion grille;
- Remove the temporary support and leave the unit leaning against the wall, paying attention to the cables that do not interfere with the closing of the unit;

NB Do not carry out the operation with the unit powered;



Griglie antintrusione
per fissaggio cavi con
fascette in dotazione



Wall mounting

2.1.3 CONDENSATE DRAIN CONNECTION (NOT PRESENT ENTHALPY VERSION X)

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

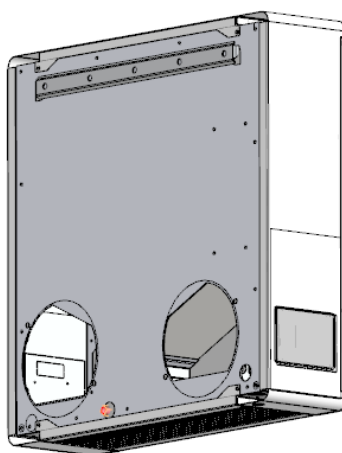
For the correct functioning of the heat recovery unit, it is therefore necessary to connect a condensate drain to the hydraulic system or to lose it externally. Furthermore, to allow the correct outflow of the condensate water and to avoid air suction, the condensate drain must always be equipped with the special siphon by the installer;

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 hose for any maintenance
- 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 and of sufficient height (at least 15-20mm)

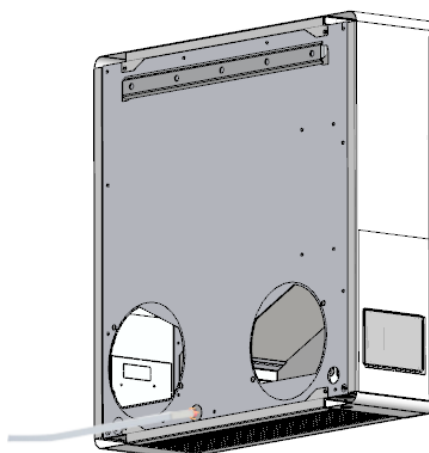
On the machine, the drain is placed on the lower part accessible from the base;

A Dn20 silicone pipe is supplied on the rear side in order to facilitate exit from the machine and connection to the condensate drain network;



ATTENTION TO THE HORIZONTAL SECTIONS FOR THE CONDENSATE DISCHARGE WITH INSTALLATION DIRECTLY TOWARDS THE OUTSIDE;

IF WATER STAGNANT AND THE OUTDOOR TEMPERATURES ARE BELOW 0°, THERE IS DANGER OF FREEZING THE EXHAUST AND THEREFORE POSSIBLE INTERNAL WATER LEAKS;



Condensate drain

3 ELECTRICAL CONNECTIONS

3.1.1 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 efficient earth connection. The manufacturer refuses all responsibility for non-observance;
- 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

Size	70
Maximum absorbed current	TO 0.3

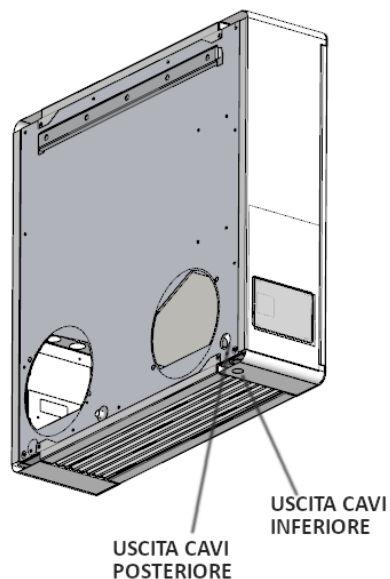
For the electrical connections, a power cable with schuko socket is supplied;

On the machine the electrical connections are placed on the lower part and on the rear part;

For the electrical connection of other cables:

- Use the hole adjacent to the electrical cord outlet hole to route other connections to the unit's electrical panel;

Pay attention that the cables do not come into contact with the impellers of the fans;

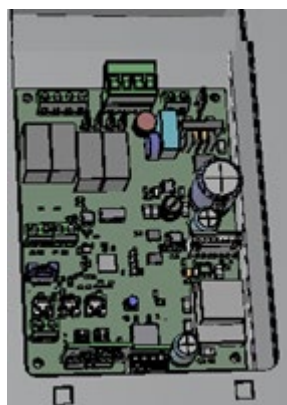
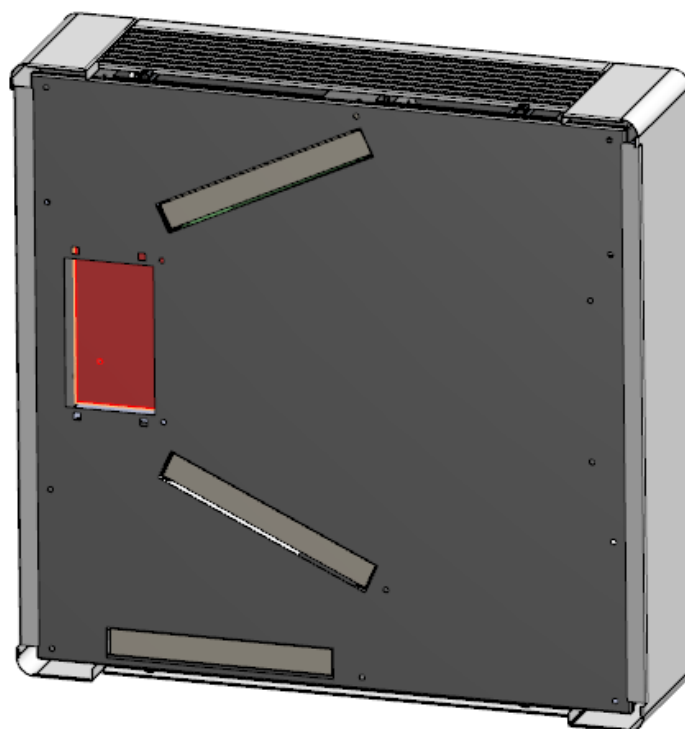


Electrical connections

The electronic card is located on the front left side of the unit where any auxiliary connections can be made;

For auxiliary electrical connections

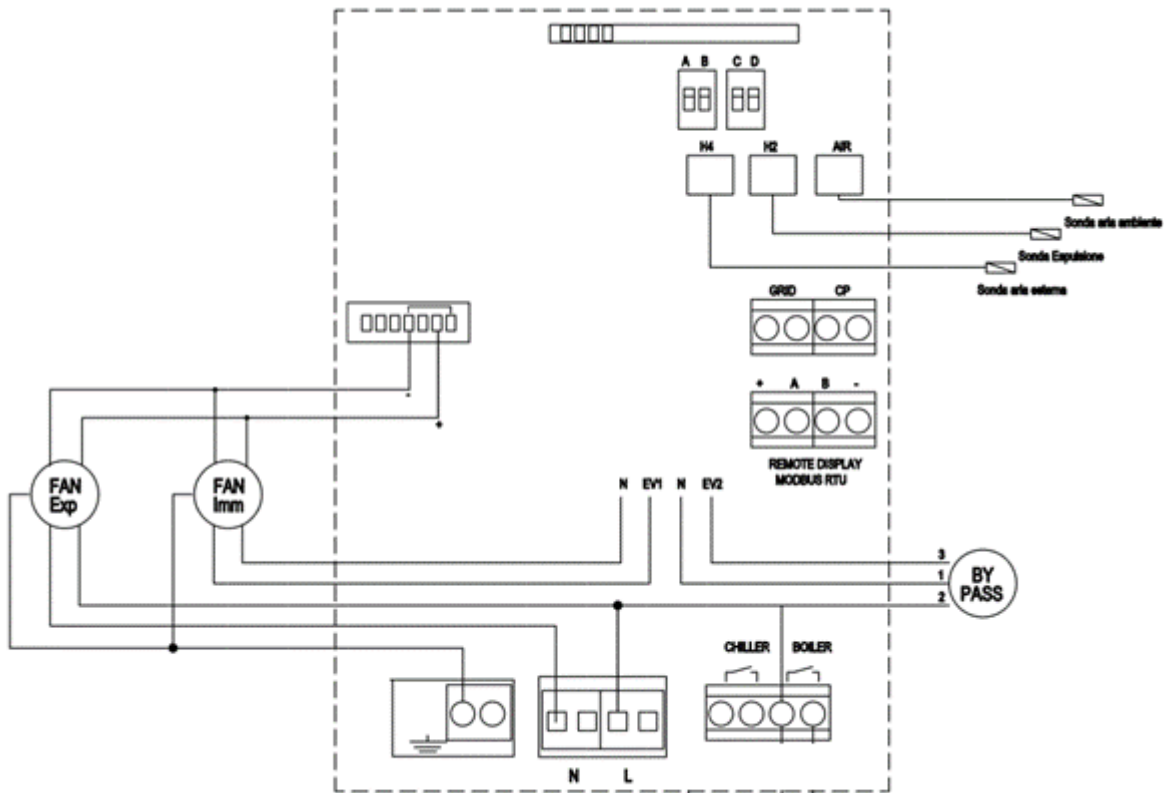
- Use the hole adjacent to the electrical cord outlet hole to route other connections to the unit's electrical panel;
- Remove the front aesthetic cover as indicated in the maintenance chapter;
- Remove the 2+2 front panel screws under the grilles
- Use the two cable glands to enter the electrical cables inside the unit;
- Use electrical cables with double insulation in the crossing up to the electrical box;
- Enter the cables inside the electrical box and make the electrical connections;



Auxiliary electrical connections

3.1.2 UNIT WIRING DIAGRAMS

Version I



LINKS PROVIDED BY THE CUSTOMER

GRID	Speed Booster	Contact closed / function active
CHILLER	Post battery generator control or preheating battery	Clean Contact
REMOTE DISPLAY	Remote control (4 wires)	
ON OFF REMOTE (ON DISPLAY)	Remote ON OFF contact present on remote display	Contact closed / unit OFF

3.1.3 ELECTRICAL CONNECTIONS VERSION -I-



Auxiliary Connections

The card allows the operation of the EC Brushless fan through a remote control described above;

Some auxiliary functions have been implemented in the card such as the connection of the regulators and the management of a battery / post valve;

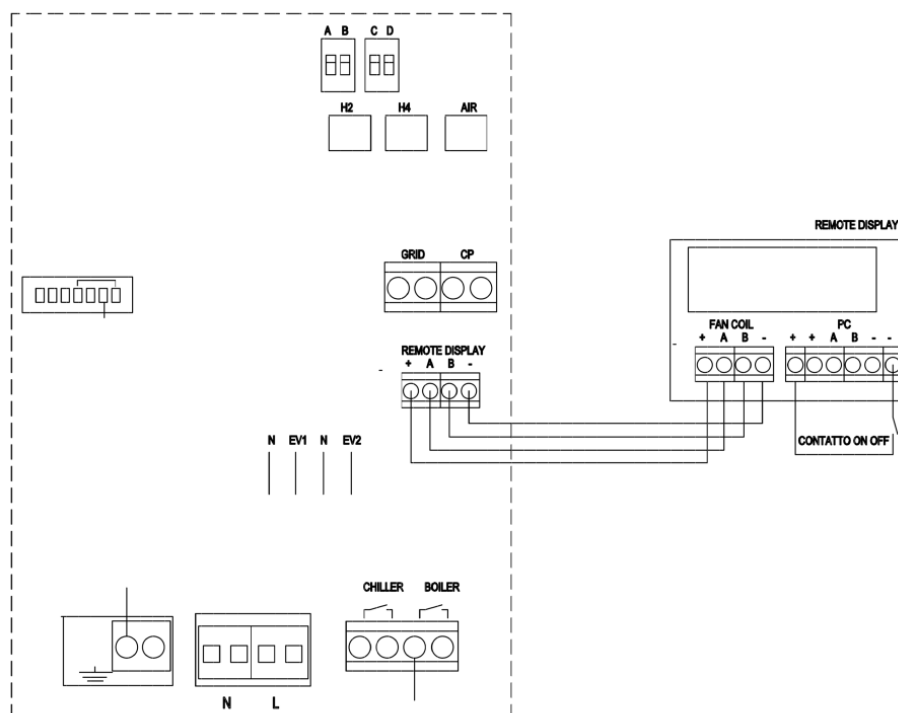
REMOTE ON OFF LINK

The remote panel has an ON OFF command with which the unit can be connected via a clean contact to a device for remotely switching on / off the unit such as a switch or a timer

The logic provides:

Contact closed: Unit OFF

Contact open: Unit ON



BOOSTER CONNECTION

The connection of a contact which brings the ventilation speed to maximum speed is foreseen;

The connection is made on the GRID terminals

as indicated on the wiring diagram

Contact closed – booster speed active



Booster



Booster connection

4 COMMISSIONING AND METHOD OF USE

4.1.1 GENERALITY



The commissioning of the unit and any modification of the factory settings must only be carried out by qualified personnel (authorised installer).

4.1.2 PANEL DESCRIPTION ON THE MACHINE

The unit is controlled completely manually by the user, through the touch control on the wall;

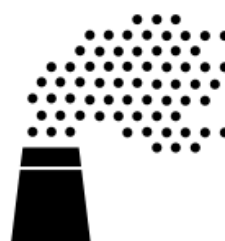
The remote control has an internal air quality and humidity sensor for automatic control of the air flow;

The sensors interact to regulate the air flow and ensure the comfort of humidity and air quality inside the environment;

The control includes the WIFI module, to be able to control the unit through a dedicated APP to monitor and set the status of the sensors and the operation of the machine from mobile devices locally and remotely via the cloud;



Humidity sensor



Air quality sensor



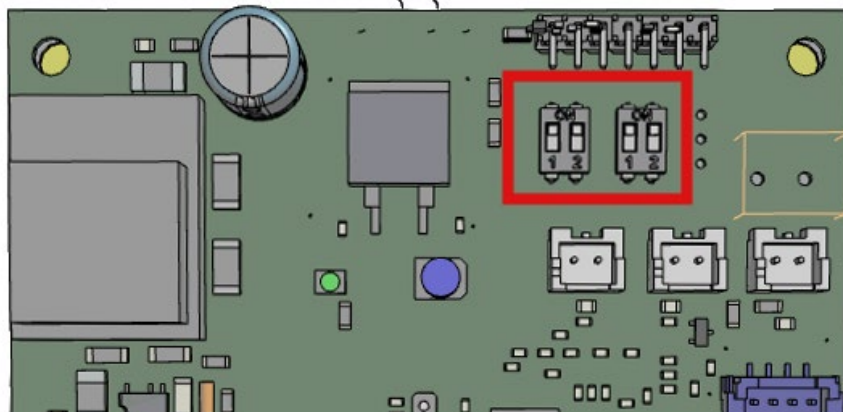
WIFI module

Remote command

4.1.3 PSSWITCH SETTINGS

In the upper part of the board there are 4 dipswitches for the various operating configurations of the unit;

It is essential to set the dip-switches correctly; then the indications for the various methods of use are repeated;



DIPSWITCH FUNCTIONS		
DIP SWITCH A	ON	OFF
	CHILLER contact pre-heating coil activation	CHILLER contact pre-heating coil deactivation
DIP SWITCH B	ON	OFF
	– Unit enabling with modulating coil control	- Unit disabling with modulating coil control
	NB The unit model is factory set to OFF; do not change the setting to avoid malfunctioning of the unit;	
CD DIP SWITCH	The combination of these Dip Switches decides the functioning of the humidity and air quality sensors	
	ON OFF	OFF ON
	Room humidity control	Environmental quality control
	OR NOT	
	Room humidity and room air quality controls active The maximum value between the two calculated is used;	







4.1.4 OPERATION

The unit is controlled completely manually by the user, through the touch control on the wall;

The remote control has an internal air quality and humidity sensor for automatic control of the air flow;



Remote Panel

The keys on the main screen are shown below:	Meaning of the keys in the main display:			
		Allows the unit to be switched on / off from the keyboard		Button for modifying the temperature set
		Fan speed selection keys: Quiet / nominal / maximum		Summer / winter selection key
		Button for nominal speed operation and sensor		ALARM signalling
	Display of main screen keys			

4.1.4.1 TURNING THE UNIT ON AND OFF

-The unit can be enabled and disabled through the On / Off key on the display.



Unit On / Off

4.1.4.1 DISPLAY HUMIDITY AND IAQ

Holding the central fan key down (3 sec) displays the humidity detected immediately.

Pressing the same key again for 3 seconds switches to the IAQ value.

Wait 10 seconds without pressing any key to automatically exit this menu and return to the main one.



Humidity set adjustment

4.1.4.2 CHANGE FAN SPEED AND BOOSTER FUNCTION

- The keys for selecting the desired speed of the unit are present on the display;

Every time the speed is selected, after 1 second there is an effective variation in fan speed.

-There are three selectable speeds:

Night (minimum speed) – nominal (medium speed) – maximum (maximum speed)

The Booster command, which takes priority over any speed, is managed via the digital contact;



Fan speed management

4.1.4.3 NOMINAL SPEED FUNCTION

- By pressing the auto key, the unit will operate according to the request setting of the humidity and air quality sensors according to the dipswitch settings made when starting the unit;

If the sensors are set, the logics will be as follows:

-Humidity sensor:

- in winter, the flow rate regulation increases according to the increase in humidity;

In this way the room humidity is controlled in order to have the correct humidity in the room;

-in summer the regulation is reversed and the flow rate decreases as the internal humidity increases;

this is because in summer the external absolute humidity contributes to the increase of the internal relative humidity;

-IAQ air quality sensor:

In both seasons the unit detects the air quality index; This numerical value ranges from 0 (very good air quality) to 5 (very bad air quality). The sensor ranges are

- From 0 to 1.99: Excellent air quality
- From 2 to 2.99: Good air quality
- From 3 to 3.99: Average air quality; Exposure to these values for more than 12 months is not recommended
- From 4 to 4.99: Poor air quality; Exposure to these values for more than 1 month is not recommended
- 5: Unacceptable air quality; Exposure to these values is not recommended

The Recommended Setting Value which is set by default is 2.5

Changing this parameter is only available in the installer menu, accessible by authorized personnel.



AUTO function

4.1.4.4 SEASON CHANGE

-The season change on version I must be done 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:

In winter the antifreeze function and in summer the bypass function;

Symbol logic: SUN - WINTER SNOWFLAKE - SUMMER



Season change

4.1.4.5 KEY LOCK

By pressing the + and - keys simultaneously for 3 seconds, local blocking of all keys is activated, confirmation is given by the display of the writing bL.

All adjustments are inhibited by the user and bL appears when any key is pressed. Repeating the sequence unlocks the keys.

bL

Key lock

4.1.4.6 PANEL BRIGHTNESS ADJUSTMENT

With the panel off, keep the + key pressed for 5 seconds until the writing 01 appears. With the - key, bring the value to 00 and wait 20 seconds to check the correct setting.

0/0

Brightness adjustment

4.1.4.7 TEMPERATURE SET POINT FOR POST BATTERY CHECK

-The temperature set point occurs by pressing the + and - keys;

The panel always shows the detected temperature, by pressing one of the two keys alongside,

the set temperature set point is shown immediately and it will be possible to modify the Set temperature value;



Temperature set regulation

4.1.4.8 HUMIDITY SET POINT AIR FLOW ADJUSTMENT AUTO

The humidity set point occurs by holding down (3sec) the central fan key;

The panel immediately shows the humidity detected, when one of the two keys + and - is pressed,

the set humidity set point is shown immediately and it will be possible to modify the Set humidity value;

Wait 10 seconds without pressing any key to automatically exit this menu and return to the main one.



Humidity set adjustment

5 MAINTENANCE

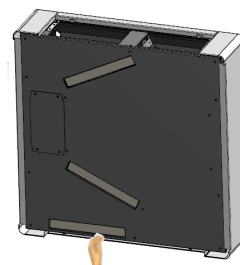
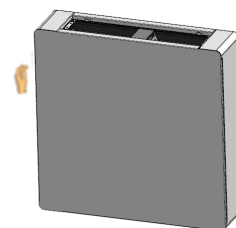
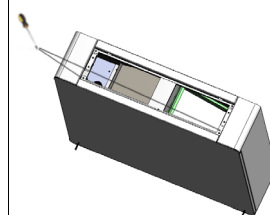
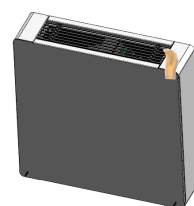
To always guarantee the correct and optimal functioning of the unit, it is necessary to carry out all the maintenance interventions periodically.

5.1.1 CLEANING OR REPLACING FILTERS

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

- remove power to the unit;
- Remove the grilles at the top and bottom of the unit
- remove the 2+2 front panel fixing screws
- remove the front cover
- take out the dirty filters;
- gently insert the new filters;
- close the aesthetic cover and reposition the two grilles

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



View for filter extraction

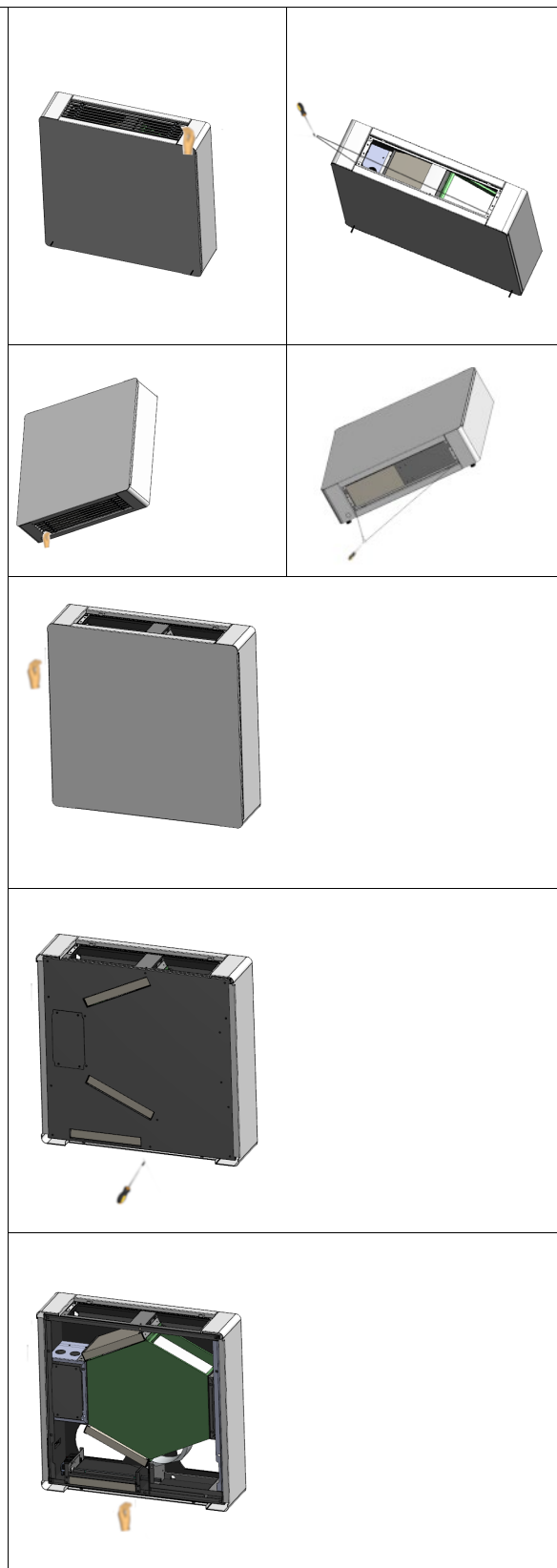
5.1.2 CLEANING THE HEAT EXCHANGER

We recommend that you check the condition of the heat exchanger annually and 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 to the unit;
- Remove the grilles at the top and bottom of the unit
- remove the 2+2 front panel fixing screws
- remove the front cover
- remove the front panel screws to access the heat exchanger
- remove the heat exchanger through the coordinate of the exchanger
- clean the heat exchanger with compressed air;
- reassemble the front panel with screws and the aesthetic panel

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



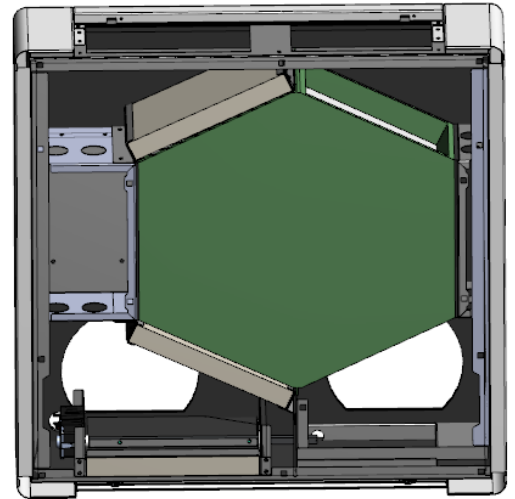
View for exchanger extraction

5.1.3 GENERAL CLEANING OF THE 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).

For cleaning it is possible to use a vacuum cleaner, a cloth slightly moistened with water, a soft bristle brush or a low pressure compressor.

Attention! On the blades there are small metal clips for balancing the blades themselves, DO NOT remove them.



Unit views for general cleaning

6 ALARMS

6.1.1 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.

6.1.2 PROBLEMS WITHOUT ERROR INDICATION ON THE DISPLAY

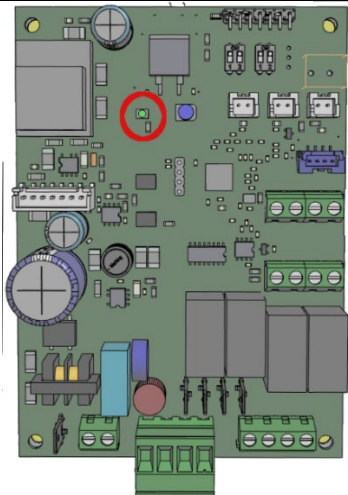

PROBLEM	CAUSE	REMEDIES
The fans are not active	<ul style="list-style-type: none"> -The power is not turned on -The fan speed adjustment device does not work - Wrong electrical connections - Fans in thermal protection 	<ul style="list-style-type: none"> -Check the power supply on the fan - Check the fan speed adjustment device -Check that the fan is not overheated and in thermal protection
Insufficient air flow or working pressure	<ul style="list-style-type: none"> -Filters clogged -Insufficient rotation speed - Clogged pipes or exchanger 	<ul style="list-style-type: none"> -Clean the filters -Increase the rotation speed -Clean pipes or exchanger
Exchanger performance insufficient	<ul style="list-style-type: none"> -Clogged exchanger fins 	<ul style="list-style-type: none"> -Clean the surfaces of the exchanger
Excessive vibration and noise	<ul style="list-style-type: none"> -Incorrect installation of the unit -Incorrect installation of the pipes - Imbalance of the fan impeller 	<ul style="list-style-type: none"> -Check the unit's brackets and fixings -Check pipe fixings and fixings - Check the state 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 that the power supply voltage is not below 10% of the rated voltage on the plate -Feed the unit with partially closed shutters in order to reduce the starting torque of the motor. In case of correct starting, replace the motor with an oversized one.

6.1.3 ALARM SIGNALING

Below is a list of all the alarms managed by the application.

The presence of an alarm has two display modes:

- an error code present on the command;
- a led on the electronic card which shows a sequence of flashes with the type of alarm present.

	
1 UNIT CARD ALARM SIGNAL LED	2 PANEL ALARM SIGNALING

6.1.4 TABLE OF ALARMS INDICATED BY THE DISPLAY

The table below shows the unit operating anomalies indicated, in the electronic versions I, by the remote display or by the flashing of the LED on the board.

COD E	DESCRIPTION	CAUSE	REMEDY	CARD FLASHES
E1	AIR recovery probe alarm	Probe broken or not reading	Check the connection of the probe or replace it	1 flash – off 3 seconds
	Fan alarm	Bad fan connector or no feedback signal	Check the connection of the fan connector to the board Replace the fan control cable	2 flashes – off 3 seconds
	H2 expulsion probe alarm	Probe broken or not reading	Check the connection of the probe or replace it	3 flashes – off 3 seconds
	External air probe alarm H4	Probe broken or not reading	Check the connection of the probe or replace it	5 flashes – off 3 seconds
	Connection alarm with remote display	Remote display connection error	Check the electrical connections Verify that A and B are not reversed Check the correct insertion of the display connection board on the main board	Led Off
	Communication alarm with remote display	No communication between display and board for at least 300 seconds.	Check the status of the filter and keep the on off key pressed to reset the signal; Verify that A and B are not reversed Check the correct insertion of the display connection board on the main board	6 flashes – off 3 seconds

7 NOTES AND MAINTENANCE INFORMATION

NOTE

03-2023 N42

Technical Assistance Center

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