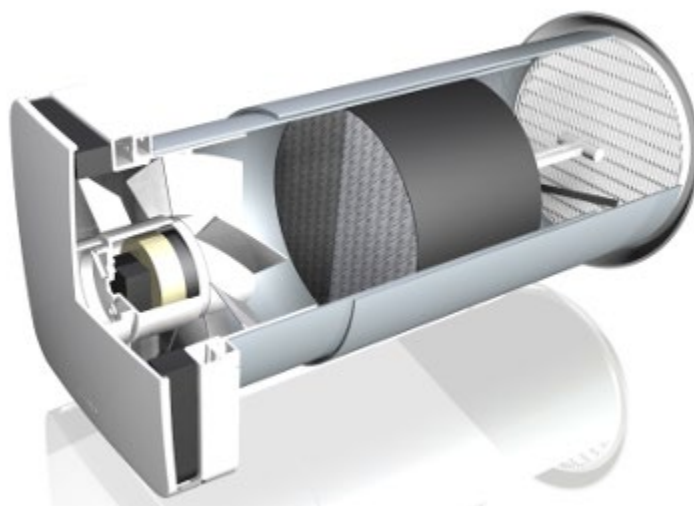


HRC

Heat recovery high-efficiency



HEAT RECOVERY HIGH-EFFICIENCY HRC 02- 05 S/E

Innova S.r.l.

Via I Maggio, 8 - 38089 Storo (TN) - Tel. +39 0465 670104 - Fax +39 0465 674965 - info@innovaenergie.com

Capitale sociale int. vers. € 150.000. - CF/P.IVA 01827470228 - Iscrizione REA nr.180610 - Num. reg. Imprese (TN) 10656

Numero Meccanografico TN025148

www.innovaenergie.com

INDEX

1	GENERALITY	Pag.
1.1	INTRODUCTION	4
1.2	SAFETY RULES	4
1.3	SYMBOLY	4
1.4	WARNINGS	5
1.5	CONFORMITY '	5
1.6	IDENTIFICATION	5
1.7	DESCRIPTION OF OPERATION	5
1.8	DELIVERY STATE	6
1.9	REQUIREMENTS FOR STARTING	6
1.10	REMOVAL AND DISPOSAL	7

2	INSTALLATION	Pag.
2.1	GENERALITY	8
2.2	POSITIONING AND ASSEMBLY UNIT	8

3	ELECTRICAL CONNECTIONS	Pag.
3.1	GENERALITY	11
3.2	CONNECTION AND POWER SUPPLY -VERSION S -	11
3.3	WIRING UNIT '- VERSION S -	12
3.4	POWER CONNECTION -VERSION E-	12
3.5	WIRELESS REMOTE CONTROL	13
3.6	WIRING UNIT '- VERSION -	13

4	PROCEDURE CONFIGURATION VERSION -E-	Pag.
4.1	GENERALITY'	14
4.2	CONFIGURATION UNIT 'MASTER	14
4.3	CONFIGURATION UNIT 'SLAVE	15
4.4	DECOUPLING UNIT 'SLAVE	18
4.5	DECOUPLING UNIT 'MASTER	18

5	COMMISSIONING AND METHOD 'GUIDE	Pag.
5.1	GENERALITY'	19
5.2	OPERATING UNIT 'S CONTROL -VERSION	19
5.3	OPERATING UNIT 'CONTROL - VERSION -	21
5.4	SETTING - VERSION E.	24

6	ORDINARY MAINTENANCE	Pag.
6.1	CLEANING OR REPLACING THE FILTER	26
6.2	CLEANING OR REPLACING THE EXCHANGE CERAMIC	26
6.3	GENERAL CLEANING UNIT '	27
6.4	FUNZIOAMENTO WIRELESS COMMUNICATION AND INFORMATION	27
6.5	WARNING AND BATTERY REPLACEMENT OF REMOTE CONTROL	27

7	ALARMS	Pag.
7.1	GENERALITY'	29
7.2	PROBLEMS RELATED TO THE OPERATION OF THE UNIT 'FAN	29
7.3	PROBLEMS RELATED TO THE OPERATION OF 'UNITY' CONTROL	29

8	ACCESSORIES	Pag.
8.1	DFM fixing Dima wall	30
8.2	GEM exterior aesthetics Grid	30
8.3	CVR Cover Finishing	31
8.4	KUA output Installation kit at an angle	31
8.5	KDP units Preparation kit	31
8.6	KIS Isolation Kit units	32

9	TABLE SYSTEM CONFIGURATION	Pag.
9.1	TABLE SYSTEM CONFIGURATION	33

1. GENERAL INFORMATION

1.1 INTRODUCTION

This manual has been designed with the aim to make it as easy as possible the installation and management of your appliance. By reading and applying the tips in this manual, you can get the best performance of the product purchased. We would like to thank you for your choice with the purchase of our product. Please read this file before making any operation on the unit. You should not install the unit or perform on it any work, unless you haven't thoroughly read and understood this manual in all its parts. In particular, it must take all the precautions listed in the manual. The installation of the unit must take into account both the purely technical requirements for the proper functioning, as well as any local legislation force that the requirements specifications. Ensure on the delivery of the unit, there are no obvious signs of damage in transit. If that's the case, indicate on the delivery note. This manual reflects the state of the art at the time of commercialization of the machine and can not be considered inadequate because later updated according to new experiences. The Manufacturer reserves the right to update products and manuals, without any obligation to the previous update, except in exceptional cases. Contact the Sales Department of the manufacturer for further information or technical documentation updates and to suggest any improvements in this manual. All reports received will be strictly scrutinized.

1.2 BASIC SAFETY RULES

Recall that the use of products using electricity and moving parts requires observance of some basic safety rules:

- The use of the equipment to disabled people and non-assisted is prohibited
- It's forbidden to touch the appliance with bare feet and with wet or damp body parts
- Any operation of cleaning is prohibited before disconnecting the appliance from the electric network by placing the main general switch on off.
- It's forbidden to modify the safety or adjustment devices without authorization and instructions from the manufacturer
- Do not pull, detach or twist the electric cables coming from the device, even if this is disconnected from the electrical power network.
- It's forbidden to introduce objects and substances through the intake grilles and air flow.
- It's forbidden to open the doors of access to the internal parts of the appliance, without having first placed the main switch of the appliance on off.
- It's forbidden to disperse and leave within reach of children the packing material as it can be potentially dangerous.
- Respect the safety distances between the machine and other equipment or structures to ensure a sufficient space for access to the unit maintenance and service as indicated in this booklet.

The unit must be powered by electrical cables with a suitable section to the unit's power. The voltage and frequency values must correspond to those indicated for the respective machines; All units must be earthed in compliance with current legislation in the various countries.

1.3 SYMBOLS

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

Symbols on safety

CAUTION ONLY AUTHORIZED PERSONNEL	It warns that the indicated operations are important to the safe operation of the machine
DANGER RISK OF ELECTRIC SHOCK	It warns that failure to observe the precaution may cause electric shock.

DANGER	It warns that failure to observe the precaution may cause risk of injury to exposed persons.
---------------	--

WARNING	It warns that failure to observe the precaution may cause damage to the unit or system.
----------------	---

1.4 WARNINGS

	The installation of the unit must be performed by personnel qualified according to the regulations in the various countries. If the installation is not performed could become a dangerous situation
	Avoid installing the unit in wet rooms or in the presence of large amounts of heat.
	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 operation. After connecting the cables, ensure that the cables are placed so as not to exert excessive forces on the shell or on electrical panels; any incomplete link of the covers may cause overheating of the terminals.
	Installations carried out outside of the warnings of this manual or use outside of the operating limits will void Instantly the warranty.
	Make sure that the installation and initial operation is carried out by authorized personnel

1.5 COMPLIANCE



L 'unit is compliant with the following standards:

- 2014/35 / EC Low Voltage Directive
- 2006 / 42CE Machinery Directive
- 2014/30 / EC Electromagnetic Compatibility Directive

1.6 IDENTIFICATION

- The unit is identifiable through the plate located inside the lid of the same. The same plate and 'shown on the right as a guide.
 - Sull 'package will be an additional nameplate with dell' drive model and shipping references.
- The plaque on 'Packaging has no significance for the traceability of the product in the years following the sale.

The excision, the deterioration and the illegibility of the nameplate on the unit, involves great problems in the identification of the machine, in the availability of spare parts, and then in all its future maintenance.

1.7 DESCRIPTION OF OPERATION

The unit is a ventilation system with heat recovery by the following characteristics and features:

- It promotes a healthy ventilation inside of the housing, allowing the correct air change of the environments and extracting excess moisture and odors;
- It allows a considerable energy saving for heating thanks to the efficiency of the heat exchanger;
- The class G3 filter, low pressure loss, guarantee the outside air filtering, fundamental for people with allergies;
- the electronic speed control motor, guarantee a low consumption of electricity;
- inspection and maintenance of easy access through panel with snap closures;
- provision for easy access to the network and the remote control;

1.8 STATE OF SUPPLY

The supply includes:

VERSIONS - S - MASTER AND SLAVE				VERSIONS ONLY - S - MASTER'S DEGREE	
1- UNITA 'FAN	2- RECOVERY	3- TELESCOPIC TUBE	4- OUTDOOR GRILL	UNITS 'CONTROL	POWER SUPPLY

VERSIONS - E- MASTER AND SLAVE				VERSIONS ONLY - IS - MASTER'S DEGREE
1- FAN UNIT	2- RECOVERY	3- TELESCOPIC TUBE	4- OUTDOOR GRILL	REMOTE

ACCESSORIES:

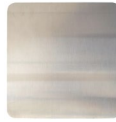
<p style="text-align: center;">KIT OF PREPARATION</p>	<p style="text-align: center;">UNIT ISOLATION KIT</p>	<p style="text-align: center;">KIT OUT CORNER</p>	<p style="text-align: center;">TEMPLATE FOR WALL MOUNTING</p>	<p style="text-align: center;">GRID OUTSIDE BEAUTY</p>
---	---	---	---	--



REPLACEMENT FILTER



REPLENISHER SPARE



AESTHETIC COVERS



1.9 REQUIREMENTS FOR STARTING

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

Check the hardware of the closing panels and doors of inspections.

If there are no channels installed on one of the 4 aeraulic sockets, provide adequate protection to install a network.

Check the power supply and the grounding of the unit.

1:10 REMOVAL AND DISPOSAL

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



2. INSTALLATION

2.1 GENERAL INFORMATION

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

- install the unit within residential buildings with ambient temperature between 0 °C and 45 °C;
- avoid areas in close proximity to sources of heat, steam, flammable and / or explosive and particularly dusty areas;
- the consistency of the wall where the unit is to be installed must be adequate and not cause vibrations.

In the environment chosen for the installation must be present:

- coring for connection of the air duct;
- Electrical connection responding to current regulations

The unit is an integral part of a balanced ventilation system, attention to the coupling unit and a natural draft boiler (ex. Open fireplace) which may cause a depression in the environment, due to which there may be a reflux gas discharge into the environment.

2.2 POSITIONING AND ASSEMBLY UNIT

To mount the drive, you must:

- Realize, for the whole thickness of the wall, a minimum diameter of hole:
162mm (HRC05S VERSION)
102mm (HRC02S VERSION)
with an inclination of 1 ° to the outside environment.
- The hole may be positioned at any height.
It is recommended on a height of 1.8 meters and distant from the lateral walls and ceilings at least 100mm.

Ensuring sufficient space for the performance of maintenance tasks: it must be guaranteed the opening of the cover of the unit (from the bottom). Do not mount the unit with the hips in direct contact with the walls to avoid possible noises from contact, insert strips of rubber or neoprene in this case.

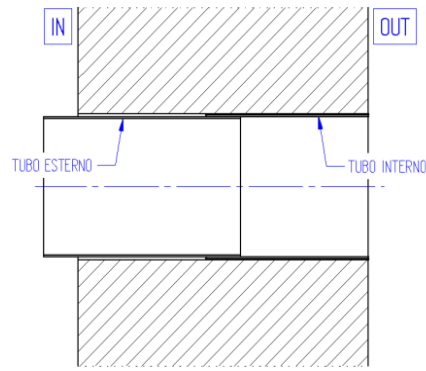


Fig.1A Recommended positioning

If you use two units on the same wall of 1,2mt maintain this minimum distance between a core and another.
If instead you use two adjacent walls at an angle, keep up with the minimum distance of the coring 1,2mt from the angle common to the two walls.

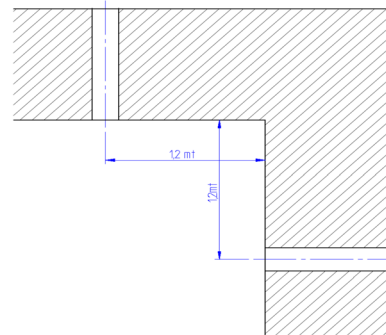
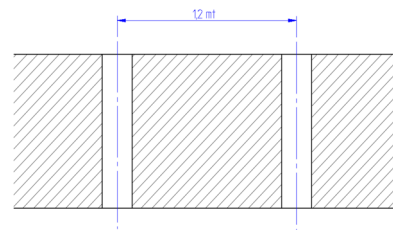


Fig. 1B positioning two units

Pull the heat exchanger from the telescopic tube through the handle. (Figure 2).



Fig.2 Extraction exchanger

Sprinkle the hole made with cement mortar or polyurethane foam.

Insert the telescopic tube into the drilled hole and bringing the part of the tube with a larger diameter to the outer wall thread.

Handle the part of the tube with a smaller diameter, bringing it flush with the inner wall. (Fig. 3)

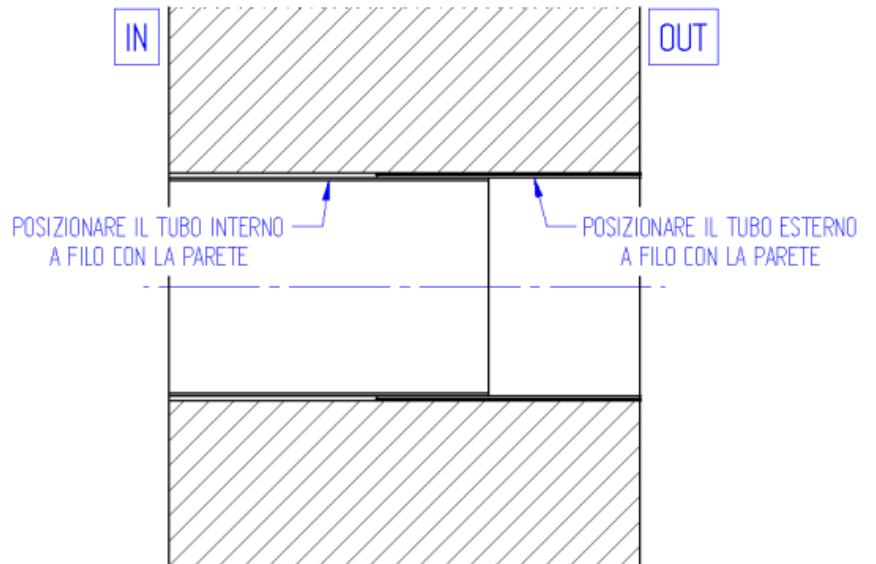


Fig.3 Positioning telescopic tube

Wait until the cement mortar or polyurethane foam grip.

Place the rack inside-out by compressing the springs on the larger diameter tube towards the final part of the core outwards.
Release and check the fixing of the grid.

-Input the heat exchanger from the inside to the final part of the tube with smaller diameter.

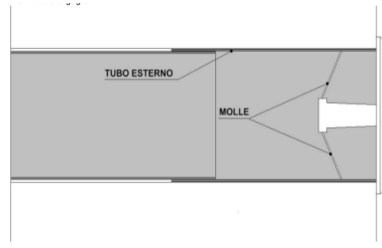


Figure 4 Positioning: Outdoor Grill

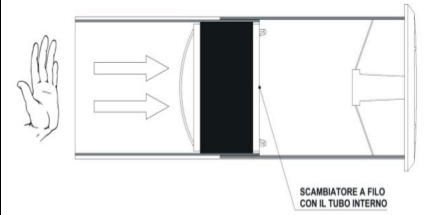


Fig.5 Inserting exchanger

Detach the cover from the motor support by pressing on the lateral holes (1) with a small screwdriver (fig.6).

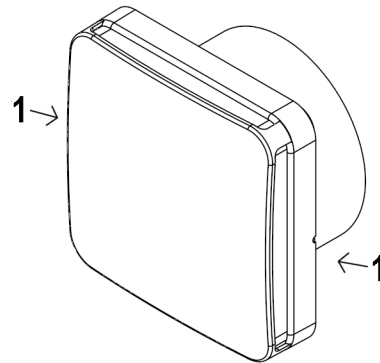


Fig.6 release front cover

Fracture the tax provided for the connections passage (2), in the case of external connections not under trace fracturing the planned areas (3) both on the motor support that on the cover (fig.7).

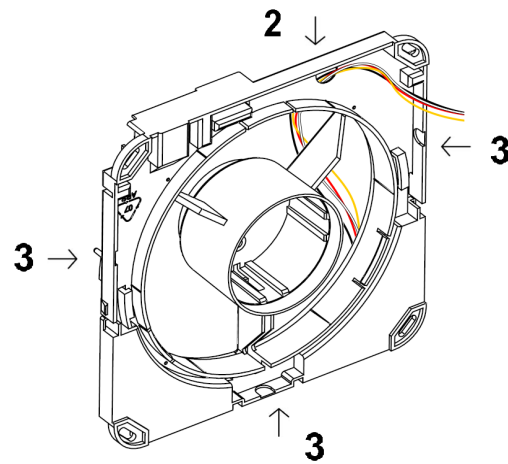


Fig.7 Inserting cables

Fix the motor support in correspondence with the drain hole by using screws and dowels (fig.8).

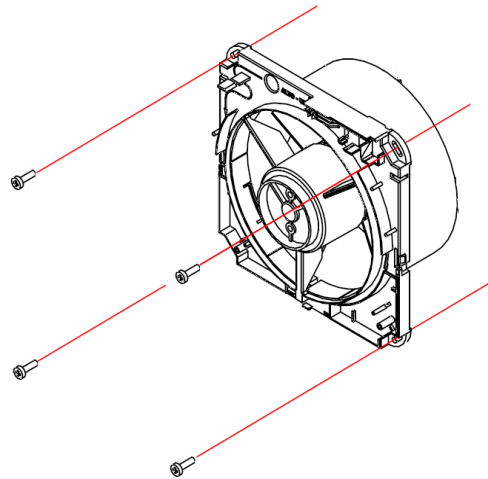


Fig.8 Attaching motor support

3. ELECTRICAL CONNECTIONS

3.1 GENERAL

- First starting any operation to make the electrical connection to make sure that the unit is not electrically supplied
- Perform electrical connections required exclusively by consulting the wiring diagram attached to this manual.
- Make that the electrical components selected for the installation (main switch, circuit breakers, cables and terminal section) are suitable for installed unit electrical power and taking into account the maximum achievable load. The data related are indicated on the unit nameplate
- E 'forbidden to enter the electrical wiring in the unit except where specified in this booklet.
- Use cables and electrical conductors of appropriate sections and comply with current regulations of the various countries.
- Avoid absolutely to pass the electric cables in direct contact with pipes or components within the unit

3.2 CONNECTING POWER SUPPLY AND UNIT CONTROL - S VERSION

Connect to the power network the power supply by the AC IN side.

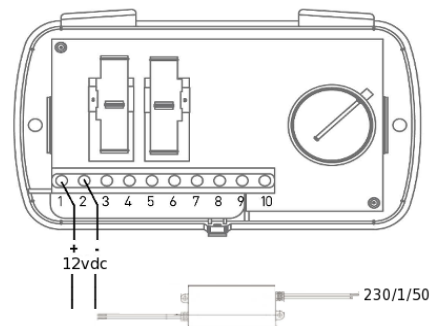
- Blue wire (N)
- Brown wire (L)

Connect feeder towards the control unit the two wires to the power supply output 12Vdc DC side OUT.

Respect the polarity.

- Red wire (+)
- Black wire (-)

The command unit may be placed on the 503 box or wall and has a fastening screw below for access to internal parts.

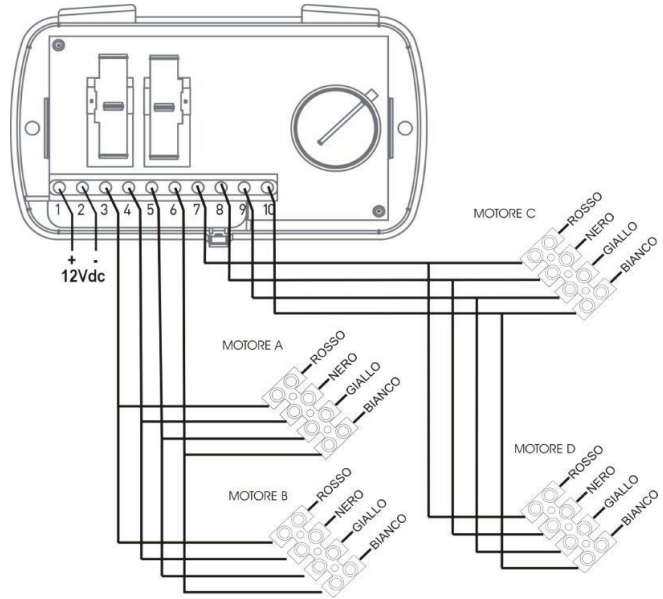


Operating Voltage Connection and power supply

3.3 WIRING UNIT -VERSION S .

Connect the control unit up to 4 engines.
 The connection is made through two dedicated outputs of which connect two motors in parallel.
 The first release:
 3-4- supply first and second motor
 5-6- Control signals first and second motor
 7-8 Power third and fourth motor
 9-10 Control Signals third and fourth motor

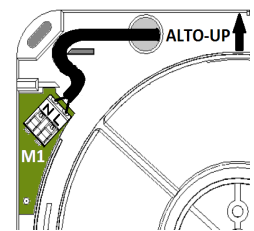
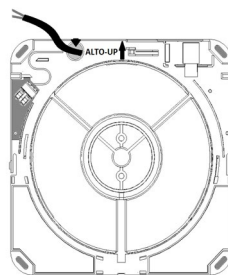
If there will be two motors they can be connected either in parallel on the first output, both differentiated on the first and second outputs. When connected on different outputs, The motors work with alternating sense of rotation so as to create an air inlet and a contemporary extraction. If connected in parallel, the motors work with a sense of rotation in parallel so as to double the instantaneous flow rate of the various cycles of operation. Also for the third motor it will be possible to connect it to the preferred output depending on the unit positioning.



CONNECTIONS BY THE CUSTOMER		
1-2	12VDC power supply from power supply	Respect the polarities
3 - 4 - 5 - 6	Connecting engines with direct logic in automatic operation	Maximum two engines
7 - 8 - 9 - 10	motors Connection with inverse logic in the automatic mode	Contact voltage (220v)

3.4 POWER CONNECTION - VERSION E-

The HRC version E Unit provides the power direct 230/1/50;
 on top of the unit there is an electronic card with two terminals for connecting L and N.

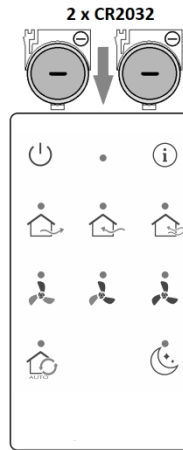


Operating Voltage Connection

3.5 TV REMOTE WIRELESS

The control unit provides wireless link, towards the HRC unit.
There is no need to connect electric wires.

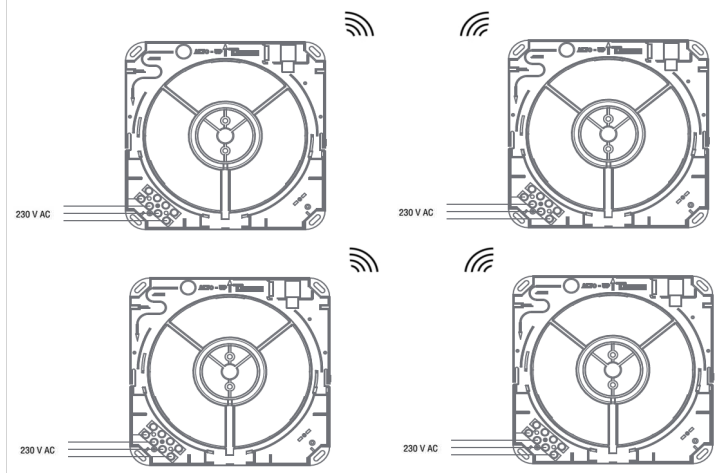
The unit is powered through two batteries type CR3032 supplied.



Wireless Remote Control

3.6 WIRING UNIT 'AND -VERSION.

Connect the power supply 230/1/50 to each installed unit.
The communication between devices takes place through wireless communications.
There will be a master device with the remote control supplied and more slave units (up to 16) that will be controlled through the network generated by the master unit.



CONNECTIONS BY THE CUSTOMER

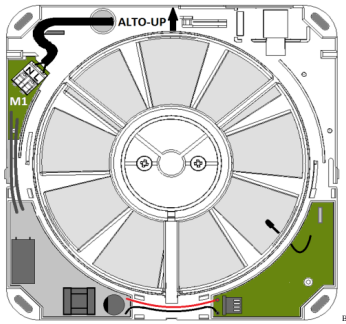
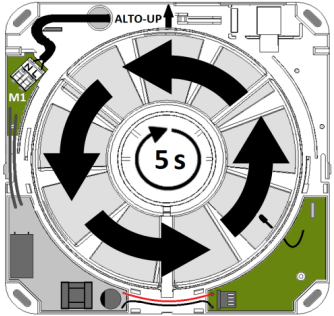


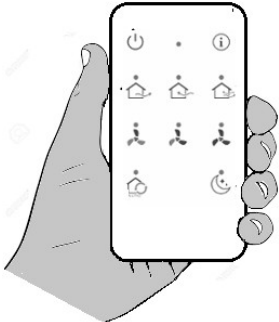
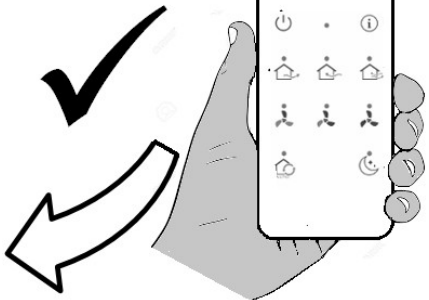
L - N	from 230/1/50 Mains	
-------	---------------------	--

4. SYSTEM CONFIGURATION VERSIONE -E-

4.1 GENERAL '

-The configuration must be carried out in the initial operation by the installer or by qualified personnel.
 Incorrect configuration could jeopardize the proper functioning of the system.
 Carefully follow the setup procedure described below.

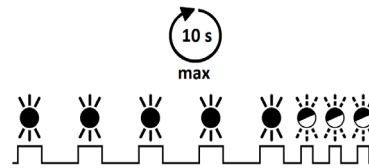
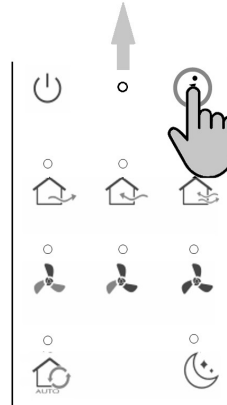
4.2 CONFIGURATION UNIT MASTER

<p>1 Power on all units in the system. The units will be powered and in standby mode.</p> <p>2 Move close to master with the remote control and insert the batteries into the remote control. The remote control will start flashing and will connect the master unit. The master unit will respond with a short rotation of the fan.</p>		
<p>Max 5 cm. </p>		
<p></p>		
<p><i>Unit Configuration Master</i></p>		

4.3 CONFIGURATION UNIT SLAVE

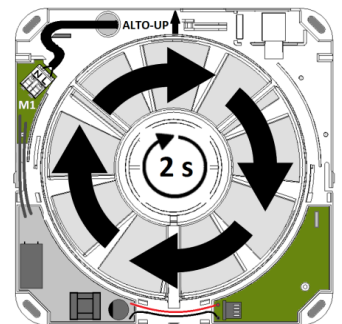
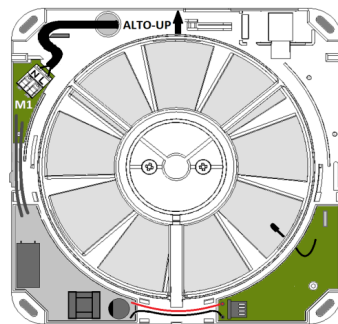
NB - The slave can be configured only after setting up the Master unit

- 1 Press and hold the info button for at least 5 seconds. The central signaling LED will flash rapidly as shown in the illustration signaling the entry in the configuration.



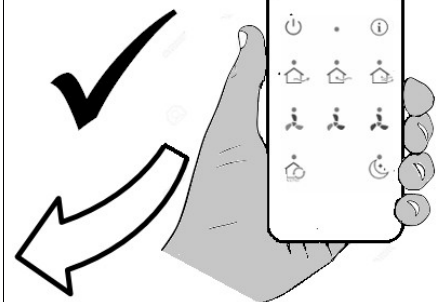
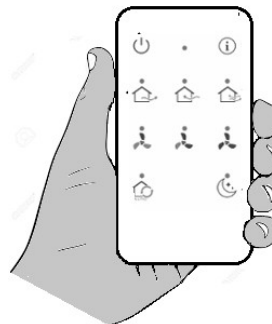
Login Slave configuration procedure

- 2 Bring the remote close to the first slave who needs to be configured. The slave unit will respond with a short rotation of the fan.



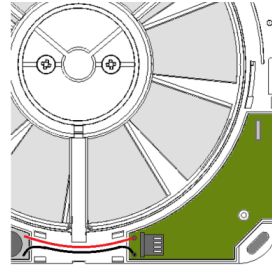
Max 5 cm. ↑↓

30 s
Max

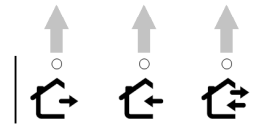
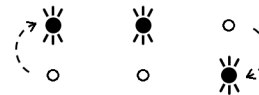


unit Slave Configuration

3 Once the slave is coupled the OUT extraction led (left led) and led IN single input central) will blink alternating with the LED IN / OUT of the automatic cycle (right)



Max 5 cm.

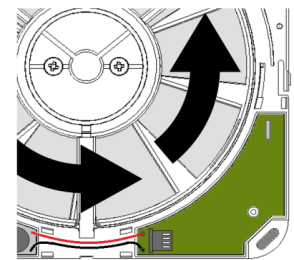
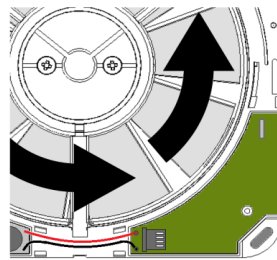


Selecting Slave mode

Now it will be possible to select the operating mode of the unit compared to the master unit in operation injection / extraction cycle.

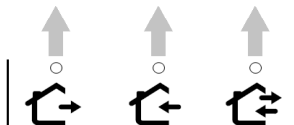
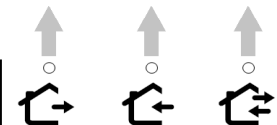
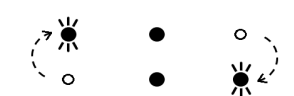
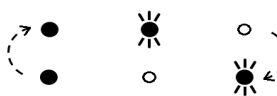
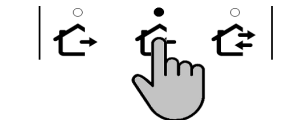
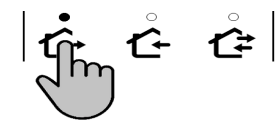
-If you want the units' operation recovery rotate opposite to the master press the OUT button extraction as in column A, until the fan starts to rotate.
The LEDs will flash at this point alternatively as indicated in column A.

If instead you want the slave units to rotate parallel to the master press the Enter button IN as in column B, until the fan starts to rotate.
The LED will blink at this point as indicated in Column B.



Max 5 cm.

Max 5 cm.

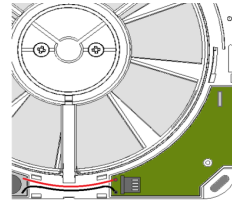


Column A

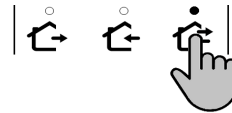
Column B
Selecting parallel operation to the master

Selecting the opposite operation to the master

4 Confirm the selection through the prolonged pressure of the IN / OUT key cycle and wait for the temporary stop of the fan which then resumes operation.

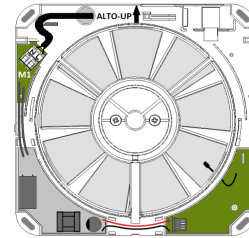


Max 5 cm. ↑↓



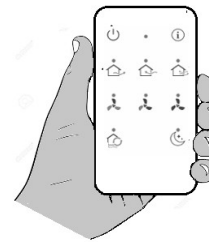
Slave configuration Confirmation

5 Approach with the remote control to the second slave and repeat the configuration for all the remaining slaves



Max 5 cm. ↑↓

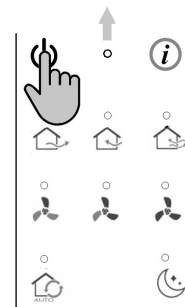
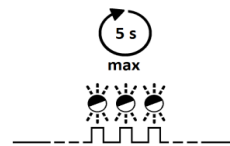
30 s
Max



Procedure for all slaves

6 Exit configuration procedure of the slave by pressing the ON OFF button.

The info LEDs will flash not 'more' quickly signaling the exit from the slaves configuration mode.



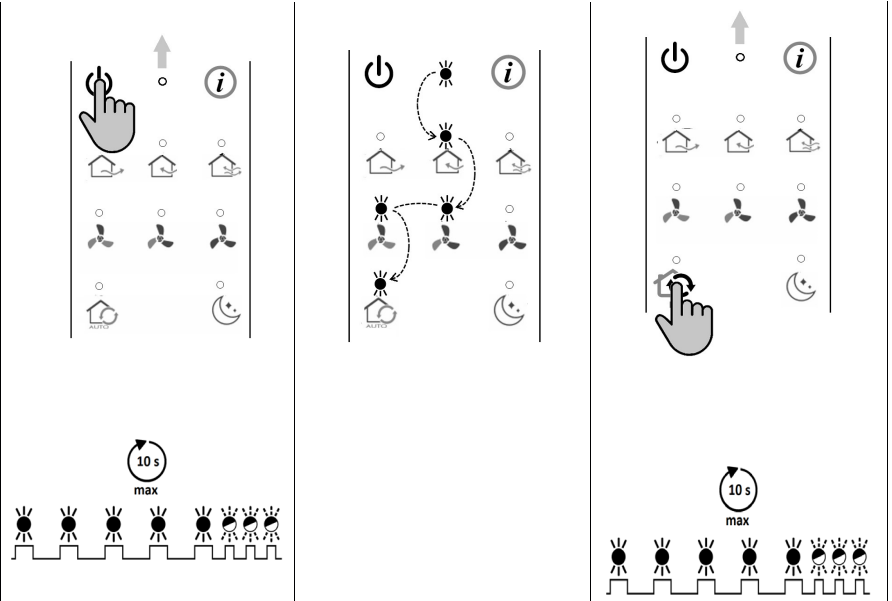
Output Slave configuration procedure

4.4 PROCEDURE FOR REST / DECOUPLING OF SLAVE

1 Press the ON OFF button when held down and wait until the central LED starts flashing quickly. The central signaling LED will flash rapidly as shown in the illustration signaling the entry in the configuration.

2 After a few seconds the remote control will show a sequence of LEDs as shown in the central figure. The LEDs indicate the decoupling mode enabled.

3 Long press the AUTO button to decouple all slaves from the system.



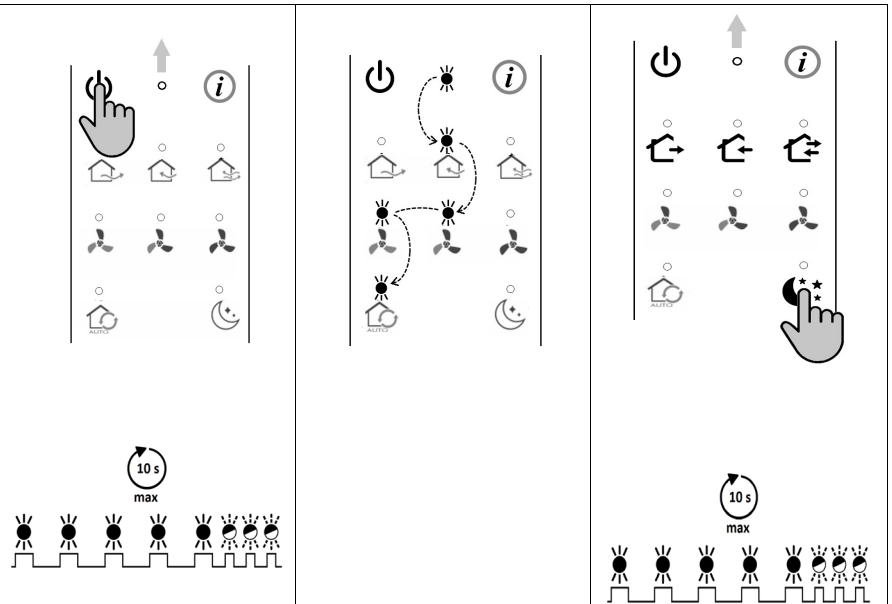
Procedures disaccoppiamento slave

4.5 PROCEDURE FOR REST / DECOUPLING MASTER OF THE REMOTE CONTROL

1 Press the ON OFF button when held down and wait until the central LED starts flashing quickly. The central signaling LED will flash rapidly as shown in the illustration signaling the entry in the configuration.

2 After a few seconds the remote control will show a sequence of LEDs as shown in the central figure. The LEDs indicate the decoupling mode enabled.

3 Long press the SLEEP button to decouple all slaves from the system.



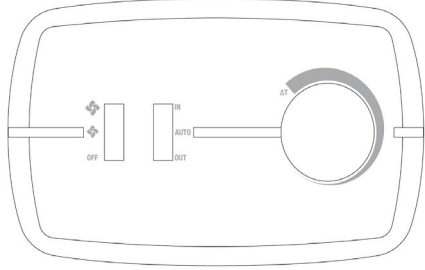


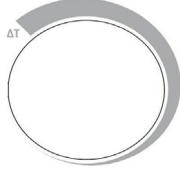
decoupling procedure Master

5. COMMISSIONING AND METHOD FOR USE

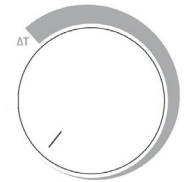
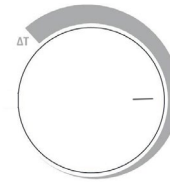
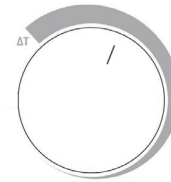
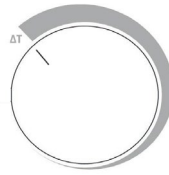
5.1 GENERAL

To ensure the "discharge" of the moisture that is created naturally within the building, the unit must operate continuously at least at a reduced speed (speed 1). If you turn off the ventilation unit, you might encounter condensation inside the machine and inside the building with possible damage due to moisture.

5.2 OPERATION UNITS 'CONTROL VERSION - S -

<p>The control unit, is constituted by two switching selectors to three positions, and by an adjustment knob.</p> <p>E 'prepared for fastening with screws adapted to the recessed box 503; and 'still possible to fix it on any type of flat wall using suitable fixings.</p>	 <p style="text-align: center;"><i>Control Unit</i></p>
<p>The ventilation speed selector gives the possibility to choose the maximum speed, minimum speed and the system shutdown. The speed variation allows to modify the flow rate of air exchanged with the outside in any operation mode.</p> <p>The flow rates are 25 and 50mc / h.</p>	 <p style="text-align: center;"><i>On selection key and speed 'fan</i></p>
<p>The dx switching button provides three modes of operation:</p> <ul style="list-style-type: none"> -Auto: the unit alternates between the flow extraction and air intake; -In: Only air inlet; -Out: only extraction air. 	 <p style="text-align: center;"><i>Operating mode selection button</i></p>
<p>The adjustment knob allows to change the tempo of the input cycle / extracting air from a minimum of 35 sec to a maximum of 200 sec. as a function of the temperature difference between the outside and the inside.</p> <p>If the temperature difference between inside and outside is high, to ensure the thermal efficiency, the cycle time must be as small as possible. If, however, the temperature difference is close to zero, the cycle should last as much as possible.</p>	

For example, if the outside temperature is in winter -5°C and then the temperature difference between inside and outside is high, turn the knob until the position with the DT piu 'marked line. Contrary on a spring day, where the temperature difference is minimal or close to zero, rotate the knob to position with the DT piu 'thin line; The following four reference values.



POSITION	1	2	3	4
CYCLE TIME	35s	70s	130s	220s
DELTATI	20th	10th	5th	$0^{\circ} / 2^{\circ}$

Grip Position 1

Knob Position 2

Position Knob 3

Knob Position 4

5.3 OPERATING UNIT CONTROL VERSION - E -

The control unit, consists of ten buttons that enclose all of the product to their internal functions.

The central LED, among the on off button and the info button, It allows you to view by pressing a function key, sending the command fan unit.

Above a few buttons, it is present signaling led through which the request for information to the ventilating unit, will indicate the operating status.



Remote Version E



Here you are shown the icons of keys and their meaning on the remote control:

Meaning of keys:

	Button ON OFF				Key to: -Riattivazione remote control -Information request
	Extracting key		Enter button		cycle button
	Low speed		speed Med		Max speed
	Operation Speed 'car with: sensors -Temperature -Humidity -Light				Operation Speed 'Night

Viewing the main mask keys

UNLOCK / REMOTE REENABLING

<p>1After three minutes of non-use remote control to save energy enters lock mode / Sleep.</p> <p>2Press the Info button for at least 2 seconds to reactivate and unlock the remote control.</p> <p>3The remote control and ready to commands.</p>			
<p>3 MIN → STAND-BY </p>	<p>2 s</p>	<p>READY</p>	
<p style="text-align: center;"><i>Unlocking by remote control standby</i></p>			

ON OFF UNIT ' / SELECTION RULES' AND SPEED '

<p>1To activate the unit / system from off;</p> <p>2first select the desired mode between extracting, placing and cycle;</p> <p>3 now select the fan speed between min - med - max</p> <p>EXAMPLE : In this picture, and 'selected mode automatic cycle and the speed 'media.</p> <p>With regard to the single extraction or single function input, the unit returns after 30mins alone in modlità cycle.</p> <p>-To turn off the system, press the ON-OFF button.</p>	<p style="text-align: center;"><i>unit Activation</i></p>	<p style="text-align: center;"><i>System Shutdown</i></p>
---	---	---

REQUEST STATE SYSTEM

<p>1With active remote control and 'can query the system to understand the status and active functions. Press the info button and wait for the remote control illuminate the LEDs relative to the states:</p> <p>The remote control will display after a few seconds and for a few seconds:</p> <ul style="list-style-type: none"> -How 'set -Speed set -Functions sensors and night if active 			
--	--	--	--

EXAMPLE :

The figure beside the remote controller responded automatic cycle and the speed 'maximum'.

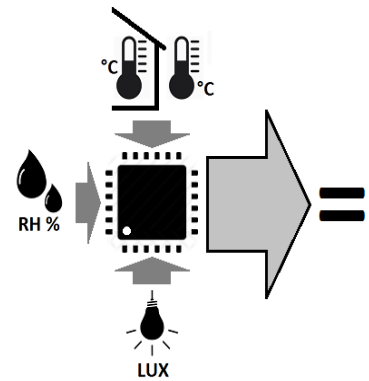
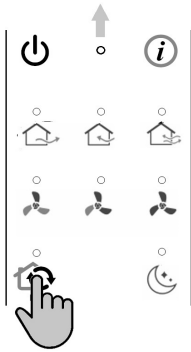
Status request from remote system

AUTOMATIC

1If you press the Auto button, the unit enters the mode 'Automatic'.

In this mode, the blower unit "Master" detects the environmental parameters (temperature, humidity and brightness) and carries out the procedures and calculations indicated below to ensure the best environmental comfort.

Every single slave instead regulates the ventilation as a function of its light and humidity sensors.



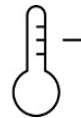
Operation Auto mode

EXTRA CYCLE RECOVERY OPERATION AND REGENERATIVE MODULAT

The master drive mode has the purpose of controlling the entry and extraction time to optimize the system's regenerative recovery cycle.

At the first activation of the "Auto" mode, after 10 minutes and subsequently every 12 hours, the "Master" ventilation unit performs the procedure "Extra-cycle" to detect the temperature difference between the environment and the outside in order to determine the duration of the "Auto cycle" most suitable which will also be adopted by any ventilation "Slave" units present in the plant. The procedure "Extra-cycle" lasts five minutes, during which communication with the transmitter is inhibited; at this stage, any commands given with the remote control will have as abutment three flashes of the LEDs.

The duration of the recovery cycle is determined in Auto outcome of the "Extra-cycle" procedure and it can vary between 30 and 200 seconds, which will be shared equally between the extraction phase and the placing.



Operation Extraciclo recovery and regenerative modulating

DRY

A humidity sensor allows every single ventilation unit to detect the environmental humidity, and in case of necessity, to activate independently of the high-speed air extraction cycles to reduce the moisture and improve the environmental comfort. Depending on the ambient humidity conditions, the procedure may have a duration of between 2 ÷ 12 minutes (during which the communication with the remote control is inhibited) and can be repeated at hourly intervals. The drying cycle is suspended in "night mode."

Note: This feature is disabled by default; to enable par.fo see "Parameter Settings".



dehumidification function

BRIGHTNESS SENSOR '

A light sensor allows every single ventilation units alone to adopt the minimum speed (extra-low) during the night. If necessary, the brightness sensors can be excluded; in this case the night mode can only be activated manually by means of the remote control button.

Note: This feature is disabled by default; to enable par.fo see "Parameter Settings".

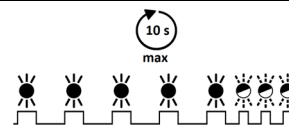
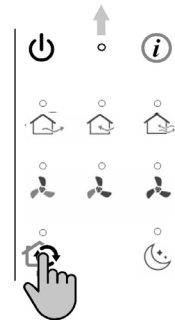


brightness sensor function '

5.4 SETTING THE PARAMETERS (THRESHOLD HUMIDITY 'OPERATION AND ACTIVATION LIGHT) - VERSION -

1 Press the AUTO button when held up in that the central LED does not blink fast. The central signaling LED will flash ' rapidly as shown in the illustration which indicates the parametetri configuration.

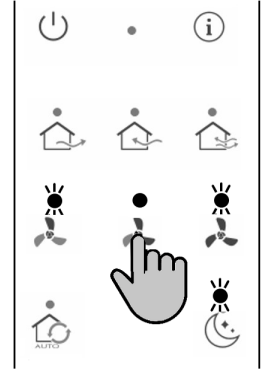
Now it will be possible to set:
-the level of humidity for dehumidification function
-l'attivazione or deactivation of the light function



Login procedure parameter configuration

2 The remote control will display fixed LED to indicate:

-By means of the three speeds of the fans the moisture threshold setting desired between: Low - Medium and High

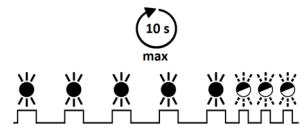
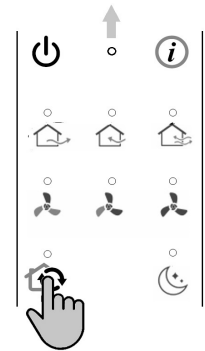
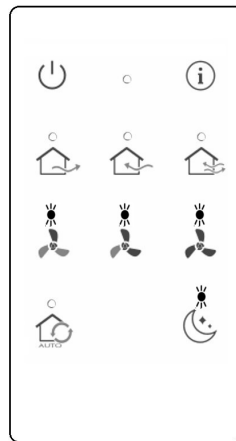


Selecting humidity threshold

3 -Choose whether to enable or disable the function of the light sensor.

Led Night On = Function active
Led Night Off = function off

Press the AUTO button when held up in that the central LED does not blink fast for exit the configuration parameters if there are no selections.



Activating light sensor and output configuration parameters

6. MAINTENANCE

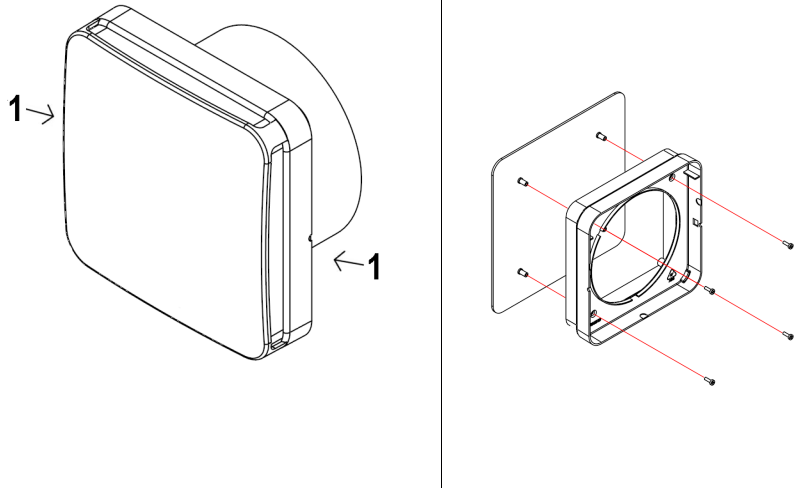
To always ensure the proper and optimal operation of the unit, it is necessary to periodically perform all maintenance interventions.



230 Volt WARNING: By removing the unit ventilation cover, in the version -E- accessing live parts.

6.1 CLEANING OR REPLACING THE FILTERS

Disconnect the power supply fan unit.
 Detach the cover from the motor support by pressing on the lateral holes (1) by means of a small screwdriver as shown in the figure to the side.
 Unscrew the four screws of the cover.
 Remove the filter and clean it with a vacuum cleaner or blow it with compressed air.
 E 'possible to immerse the filter in water and wash it periodically.
 Allow to dry completely before reinstalling the filter inside the unit.



filter for extracting Vista

6.2 CLEANING THE COOLER

It is advisable to check from time to time the state of the heat exchanger.
 The operation must be performed by qualified personnel and proceed as follows:
 -Disconnect power unit
 -open the unit cover by unlocking the fastening hooks;
 -smontare the motor support through the screws used for fixing.
 Extract the exchanger inwards with great caution.
 -take clean very gently using a vacuum cleaner or a compressor;
 -list again within the heat exchanger;
 -reinstallare through the motor support and the screws used to fix the unit cover



exchanger for extracting Vista

6.3 GENERAL CLEANING UNIT '

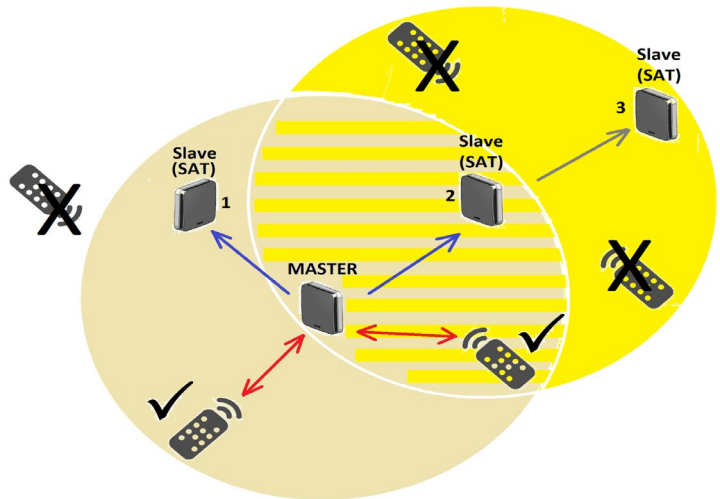
It is advisable to occasionally proceed to the verification and eventual cleaning of the fans, the condensate drain and the internal walls of the unit. These operations must be carried out only by qualified personnel (installer).
To perform the above operations proceed as follows:
-Disconnect power unit
-open the unit cover by unlocking the fastening hooks;
-smontare the motor support through the screws used for fixing.
Extract the exchanger inwards with great caution.
-take cleaning unit 'very gently using a vacuum cleaner or a compressor;
-check also the state of the external grid cleaner
-list again within the heat exchanger;
-reinstallare through the motor support and the screws used to fix the unit cover



Views units for general cleaning

6.4 OPERATION AND INFORMATION ON WIRELESS COMMUNICATION

The remote control interacts exclusively with the MASTER ventilation unit, which in turn sends commands to the slave unit.
The slave units that are out of reach of radio coverage unit MASTER, receive commands from Slave closer; in the example that follows, the unit Slave no.3, propagated receives commands from Slave 2.

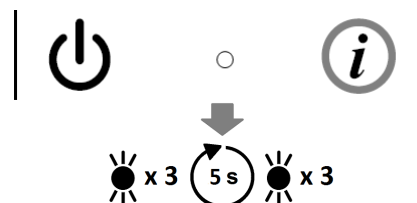


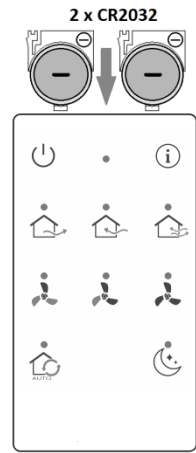
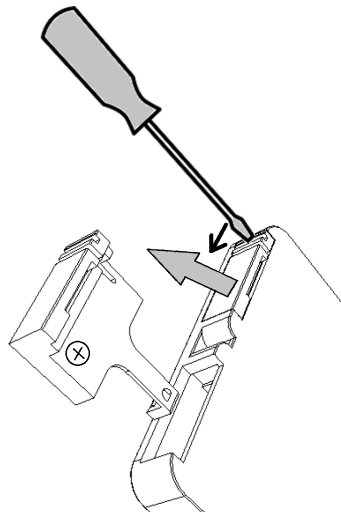
Wireless Communication

6.5 WARNING AND BATTERY REPLACEMENT REMOTE CONTROL

The remote control includes two CR2032 batteries; The remote control signal through the flashes shown by side, the battery needs to be replaced; Replace both batteries in the remote control with two new batteries.

It's obligatory to dispose of batteries at special dedicated containers;





Replacing remote control batteries



7. ALLARMIARMS

7.1 GENERAL

In the event of problems or faults, contact the installer or the authorized service center.

7.2 ISSUES IN OPERATING UNIT '

PROBLEM	CAUSE	REMEDIES
The fan does not activate	-Power supply is not inserted -Not operates the unit control unit incorrect electrical -Links -Ventilatori in thermal protection	-Make the power supply on the fan -Make the control unit and its relative power -Check the power supply operation -Check that the fan impellers are not obstructed
The fan stops unexpectedly	-Pale fan obstructed -Voltage to the wrong engine by the control unit incorrect electrical -Links -Ventilatori in thermal protection	-Make the power supply on the fan -Make the control unit and its relative power -Check the power supply operation -Check that the fan impellers are not obstructed
Air flow insufficient	-Filter, exchanger or clogged grids -Body stranger inside the pipe -Problems of fan blades	-Clean the filters -Increase the speed of rotation -Clean piping, heat exchanger -Make the fan impellers
Insufficient exchanger Yield	-Scambiatore clogged -Time cycle set improperly	-Clean the surfaces of the exchanger -Set the time cycle according to the directions above
Excessive vibration and noise	-Installation incorrect unit -Installation incorrect piping -Squilibrio of fan impeller	-Check brackets and hardware unit -Verify brackets and hardware piping -Verify status of fan impellers
Water leakage from the unit	-Installation unit with wrong inclination	-Check the correct installation of the unit fan

7.3 ISSUES IN OPERATING UNIT 'OF CONTROL OR POWER

PROBLEM	CAUSE	REMEDIES
The fan does not activate	-Units command fails -Power Supply Fault	-Verify or replace the control unit
The fan does not change speed	-Units command fails	-Verify or replace the control unit
The fan does not change the operating mode	-Units command fails	-Verify or replace the control unit
The fan runs with unexpected times	-Units command fails	-Verify or replace the control unit
The remote control does not work	-Empty batteries or remote control failure	-Check or replace batteries

8. ACCESSORIES

The unit can be accompanied by some installation accessories.
Read the instructions below for the installation of each accessory.

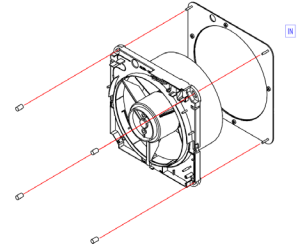
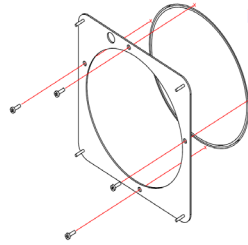
8.1 DFM fixing Dima wall

The wall mounting template allows you to remove the unit from the wall without the need for removal of the fixing screws to the wall.
The template is installed to the wall using screws and dowels;
on the template is then fixed the motor mounting which will be supplied from the threaded leaflets supplied.

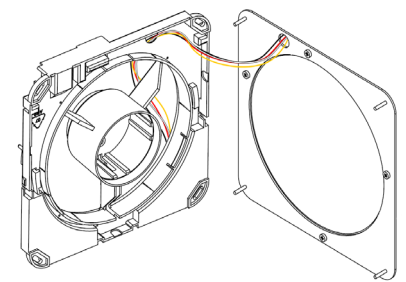
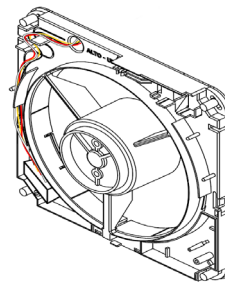
For inspection of the heat exchanger and the internal parts of the tube, it will not remove the screws to the wall, but only to remove the flyers of Reverse locking of the template.

For inspection of the heat exchanger and the internal parts of the tube, it will not remove the screws to the wall, but only to remove the flyers of Reverse locking of the template.

Perform the following steps with the appliance is not powered.
Proceed by removing the cover with the filter.
Unlocking the four clamps from its seat.
Unscrew the four flyers locking the template.
Paying attention to the wires, will remove the motor mounting platform that will remain raised by the wires and allow the cleaning operations of the heat exchanger and the tube.
Refit the motor support plate, arrange the wires and the terminals; refit the cover with the filter.



DFM - Installation of fixing template wall



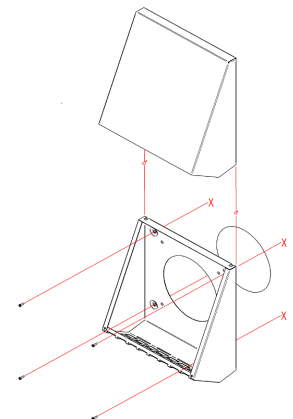
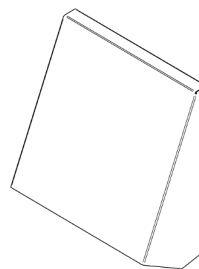
DFM - Inspection and tube exchanger with DFM

8.2 GEM - exterior aesthetics Grid

The outer GEM aesthetic grid, and a finishing grid external alternative to the external grid already supplied with the product.
The grid provides for the construction in two pieces. A piece and consists of a flat plate for the comfortable attachment of the wall grid.

Secure the flat part of the aesthetic grid with dowels.
Install the plastic circular rack provided in the standard product through the hole of the aesthetic grid plate.
Overlap the part of the aesthetic finish of the exterior aesthetics grid.

Make sure the centering of the hole of the grid, relative to the tube in order to avoid load losses and air obstructions.

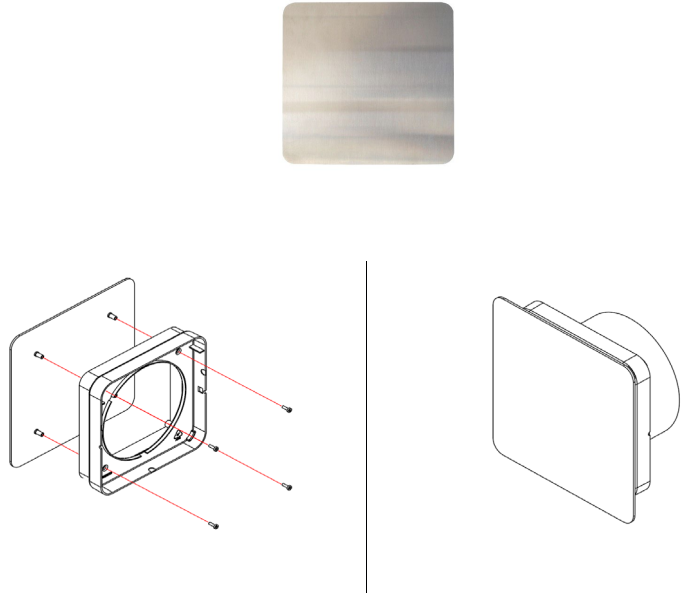


exterior aesthetics GEM Grid

8.3 CVR - aesthetic Cover

The unit involves the use of a series of aesthetic covers available when ordering. The replacement of the cover of the product series takes place through a few simple operations:

- Remove the motor support cover and carried out as indicated for the cleaning and removal of the filter.
- Svitare the four screws holding the rear cover of the standard plastic finish.
- Place the cover aesthetic choice and replace the four screws of the new cover.



CVR - aesthetic Cover

8.4 KUA - Corner installation output Kit

The kit provides for the possibility 'to install the product with the discharge does not direct on the wall, but with the direction of the angular flow. For example, if you have the shoulders between the window and the outer wall, and 'you can mask the grid using the kit and exiting at an angle close to the window frame.



KUA - angled output Kit

8.5 KDP - the preparation kit

The kit includes the possibility 'prepare for the installation of the product under construction. The kit consists of a plastic tube of slightly greater diameter of the pipe telescopic standard supplied with the appliance. And an internal cap made of expanded polystyrene to prevent the leakage of air and have the insulation heat up to the moment of installation of the product.



KDP - Kit specifying unit

KIS 8.6 - Isolation Kit

The kit includes the possibility 'to isolate the outside of the product, avoiding thermal transmittances towards the outer surfaces of the product.

The isolation and 'consists of a double-shell coated insulating material.

With the insulation kit the diameter of the hole for installing the product becomes:

HRC05S - 200mm

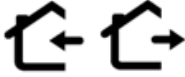




HRC02S - 160mm



KUA - Isolation Kit

9. TABLE SYSTEM CONFIGURATION

During the installation it is recommended to fill in the summary table of the plant in order to keep track of the settings made, in order to facilitate any maintenance interventions.

	UNIT	LOCAL / ENVIRONMENT	PARAMETER SETTINGS				
			 Direction of rotation Cycle in Ans	 HR% MIN	 HR% MED	 HR% MAX	 LUX
-	MASTER		X				
1	SLAVE						
2	SLAVE						
3	SLAVE						
4	SLAVE						
5	SLAVE						
6	SLAVE						
7	SLAVE						
8	SLAVE						
9	SLAVE						
10	SLAVE						
11	SLAVE						
12	SLAVE						
13	SLAVE						
14	SLAVE						
15	SLAVE						
16	SLAVE						

Technical Assistance Center

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