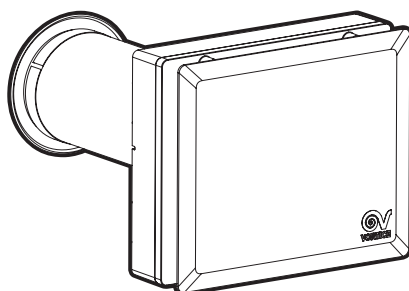
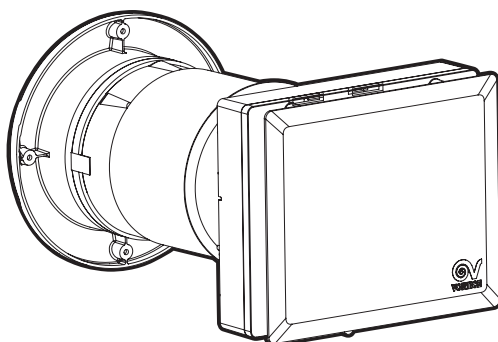

VORT HRW 30 MONO EVO
VORT HRW 30 MONO EVO HCS



VORT HRW 40 MONO EVO
VORT HRW 40/60 MONO EVO HCS



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Read the instructions contained in this booklet carefully before using the appliance. VORTICE cannot assume any responsibility for damage to property or personal injury resulting from failure to abide by the instructions given in this booklet. Following these instructions will ensure a long service life and overall electrical and mechanical reliability. Keep this instruction booklet in a safe place.

1 General informations

1.1 Description of the symbols

1.1.1 Obligation



GENERIC OBLIGATION.



READING INSTRUCTIONS IS MANDATORY.



TURNING OFF THE POWER IS MANDATORY.



CONTACT PROFESSIONALLY QUALIFIED PERSONNEL ONLY.

1.1.2 Prohibition



GENERIC PROHIBITION.

1.1.3 Danger



GENERIC DANGER.

1.2 Purpose of the manual

This manual contains information on the use and maintenance of the appliance and provides useful information for the correct use of the appliance.



OBLIGATION

Before installing and using the appliance, read the warnings in this manual carefully

VORTICE S.p.A. cannot assume any responsibility for damage to property or personal injury resulting from failure to abide by the instructions given in this booklet. Following these instructions will ensure a long service life and overall electrical and mechanical reliability. Keep this instruction booklet in a safe place. Do not make modifications to this manual.

2 Description and use

VORT HRW MONO EVO (hereinafter "device") is a decentralized heat recovery ventilation system, which can be installed on perimeter walls with thickness between 260 mm (283 for VORT HRW 40 MONO EVO / VORT HRW 60 MONO EVO HCS) and 700 mm.

The device is available in five versions:

- Installation inside holes with a nominal diameter of 100 mm and a maximum air flow rate (in boost mode) of 38 m³/h:
- **VORT HRW 30 MONO EVO** with on-board machine controls.
- **VORT HRW 30 MONO EVO HCS** with remote control and relative humidity, temperature and ambient light sensors.
- Installation inside holes with a nominal diameter of 160 mm and a maximum air flow rate (in boost mode) of 40 m³/h (VORT HRW 40) or 60 m³/h (VORT HRW 60 HCS);
- **VORT HRW 40 MONO EVO** with on-board machine controls.
- **VORT HRW 40 MONO EVO HCS / VORT HRW 60 MONO EVO HCS** with remote control and relative humidity, temperature and ambient light sensors.

Humidity, temperature and ambient light sensors, integrated in HCS versions, allow the automatic operation of the device ("Auto HR%", "Auto Comfort", "Auto night" functions).

- Maximum absorbed power VORT HRW 30 MONO EVO: 5W.
- Maximum absorbed power VORT HRW 40 MONO EVO: 6W.
- Maximum absorbed power VORT HRW 60 MONO EVO HCS: 8W.

2.1 Common features for all models:

- 5 speeds corresponding to 5 airflows.
- 1 input suitable for remote connection with cable compatible with external modules VORTICE "C TEMP" (temperature sensor) and "C HCS" (humidity sensor) or equivalent. Cable length ≤ 30m.
- 1 direct output for fan control.
- RS485 communication BUS to synchronize together pairs of devices.
- Long-term timer (3/6/12 months) with daily increase for filter clogging control.
- Insulation class: II.
- Power supply: 220-240V ~ 50-60Hz.

3 Compliance

- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- These appliances are designed for use in residential and commercial properties.
- The appliance must be installed by a professionally qualified electrician only.
- Ensure that the electrical system to which the appliance is connected complies with applicable standards.
- An omnipolar switch with a contact opening distance of 3 mm or higher should be provided for installation, enabling complete disconnection

under overvoltage category III conditions.

- Products equipped with single-phase wiring (M) engines ALWAYS require connection to 220-240V (or only 230V where required) single-phase lines. Any kind of modification shall be considered as product tampering and shall nullify the relative Warranty.
- Precautions must be taken to prevent the backflow of gas from the gas exhaust pipe or other fuel-burning appliances into the room.
- Fans have been designed to be mounted on external walls.

4 Safety/Warnings



OBLIGATION

- After removing the appliance from its packaging, ensure that it is complete and undamaged. If in doubt contact an authorised VORTICE service centre. Do not leave packaging within the reach of children or differently able persons.
- Store the appliance out of the reach of children and disabled persons if you decide to disconnect it from the power supply and use it no more.
- Maintenance instructions must be followed to prevent damage and/or excessive wear to the appliance.



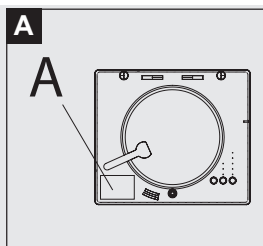
OBLIGATION

- In the event that the appliance malfunctions or develops a fault, contact VORTICE immediately. Ensure that only genuine original VORTICE spares are used for repairs.
- Check that the electrical power supply/socket provides the maximum electrical power required by the appliance. If this is not the case, arrange for a qualified electrician to make the necessary modifications.
- Regularly inspect the appliance for visible defects. If the appliance is defective in any way, do not use it, and contact a VORTICE authorised Technical Support Centre without delay.
- The appliance internal parts must be cleaned only by a skilled professional.
- Should the appliance be dropped or suffer heavy impact, have it checked without delay by a VORTICE authorised Technical Support Centre.
- If the power cord becomes damaged, it must be replaced by the manufacturer or its technical assistance service, or in any case by a person with similar qualifications, in order to prevent any risk.



OBLIGATION

- Follow the safety instructions to prevent any harm to the user.
- The installation must be carried out following the safety regulations in force in the country of destination, and the instructions in this booklet.
- Specifications for the power supply must correspond to the electrical data on the plate A.



PROHIBITION

- Do not use this appliance for functions other than those described in this booklet.
- Do not operate the appliance where inflammable vapours or substances are present (alcohol, insecticides, petrol, etc.).
- Do not make modifications of any kind to this appliance.
- Do not expose the appliance to the weather (rain, sun, etc.).
- Do not stand objects on the appliance.
- Keep the air intake and outlet ports of the appliance free of obstructions, to ensure optimum air flow.

ENGLISH



ATTENTION

- Certain fundamental rules must be observed when using any electrical appliance:
 - never touch appliances with wet or damp hands;
 - never touch appliances while barefoot;
 - do not allow the unit to be operated by unsupervised children or disabled persons.
- The appliance must be installed in such a way as to ensure that under normal operating conditions, no one can come into contact with any moving parts or live electrical components.
- In the event of: dismantling the appliance with the appropriate tools, removing the heat exchanger for cleaning recommended: every six months) or removing the motor module; the appliance must first be switched off and disconnected from the electrical power supply.
- Switch off the main switch on the system when: a malfunction is detected, you decide to perform external cleaning maintenance, you decide not to use the device for short or long periods.
- The flow of extracted air must be clean, (i.e. free of grease, soot, chemical and corrosive agents and explosive or flammable mixtures).
- Operating temperature range: $-20 \div 50^{\circ}\text{C}$.

5 Structure and equipment (fig. B)

Components common to all models

The main components of the device are:

- main body (1) already assembled which includes:
 - Body with pre-assembled plug-in terminal block, frontal grille and aesthetic panel in polycarbonate (PC) tested according to standard UNI EN ISO 11925-2:2010 and resulted in class E for reaction to fire (according to the EN 13501-1 standard).
 - Motor holder and push-button panel in ABS material.
 - 5-speed reversible EC fan.
 - Integrated electronic board.
 - Closing device (disk) sealing the front panel to prevent temperature changes in the winter months and the entry of pollutants and odors from the outside.
 - Washable internal filter with frame.
 - Flange (2) wall mountable with pre-assembled terminal block.
- Terminal block cover with screw and cable gland (3).
- PVC pipe for installation inside walls with thickness from 260 mm (283 mm VORT HRW 40 MONO EVO / VORT HRW 60 MONO EVO HCS) to 700 mm (optional).

VORT HRW 30 MONO EVO

- Storage type heat exchanger, made of ceramic material with external filter already assembled (4A)
- External ventilation grille (d.100 T10 RB) in plastic material, externally mountable. Grid equipped with anti-insect net (5A).

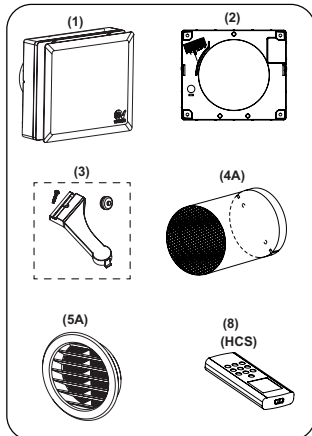
VORT HRW 40 MONO EVO - VORT HRW 60 MONO EVO HCS

- Storage type heat exchanger, made of ceramic material supplied with two expanded polypropylene (EPP) housings and it is complete with a central gasket to prevent air infiltration (4B).
- Outer rubber grille (5B), which can be mounted externally with plugs or inserted internally through the hole in the wall with no need for external scaffolding.
- Washable external filter with holder grids (x2) (6).
- Anti-insect filter (7).
- Assembling the anti-insect filter: Keep the cables tight and insert the filter inside the external grill by pressing slowly (see Fig. 13 n.6).

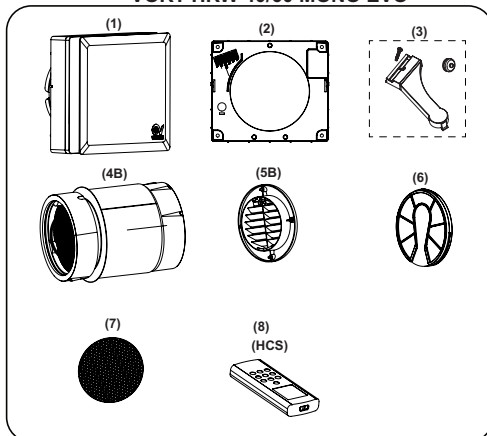
VORT HRW 30 MONO EVO HCS / VORT HRW 40 MONO EVO HCS / VORT HRW 60 MONO EVO HCS
Remote control (8).

B

VORT HRW 30 MONO EVO



VORT HRW 40/60 MONO EVO



6 VORT HRW 30 MONO EVO installation

Fig. 1 ÷ 11.

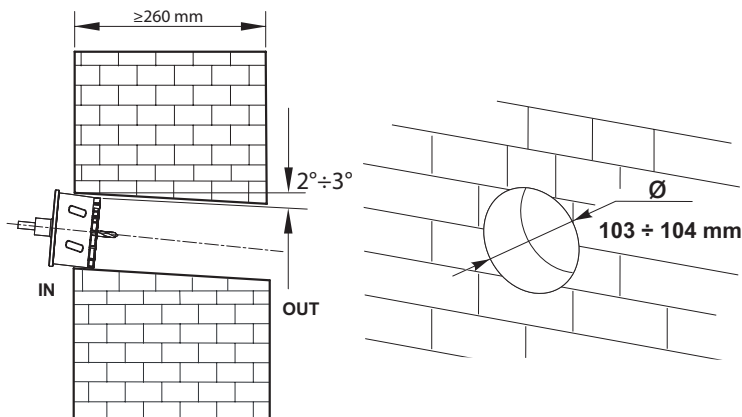
Note. Before proceeding with the installation, remove the internal protective packaging in the appliance.

Note. Before carrying out installation, remove the spacers inside the PVC installation pipe (provided as accessory) and cut the pipe according to the wall thickness.

- **Note.** Before installing the grill, apply a fixing adhesive for plastic materials and masonry with a grip strength of 120 kg/m² along the circumference of the hole (see fig. 2).

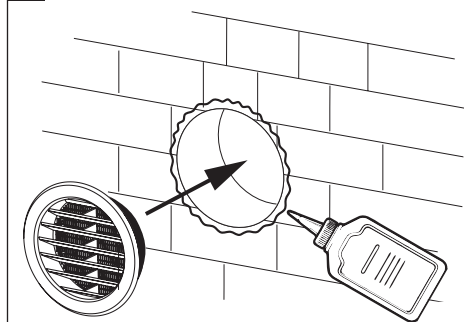
VORT HRW 30 MONO EVO

1

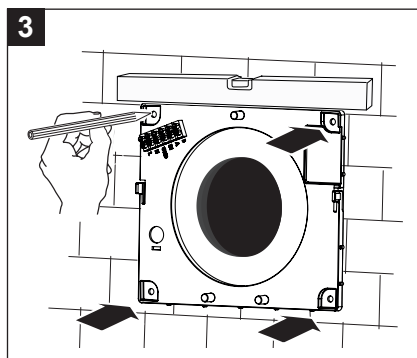


ENGLISH

2



3



4

$\varnothing 6 \text{ mm}$

Drill the two holes for the power cables and PCB signal cables inside the dotted area.

5

6

LOW VOLTAGE
Remote Unit Sync Bus

LOW VOLTAGE
Remote dry Contact

MAINS
220-240V-50-60Hz

1 TERMINAL BLOCK

2 MAIN BIPOLAR SWITCH

7

RS485

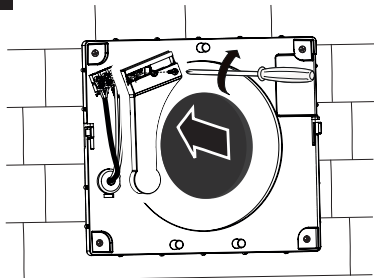
220-240V-50-60Hz

RS485

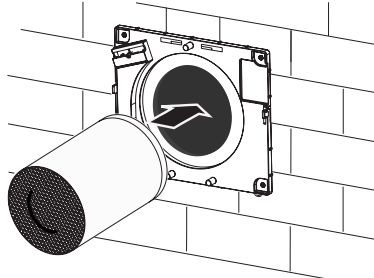
220-240V-50-60Hz

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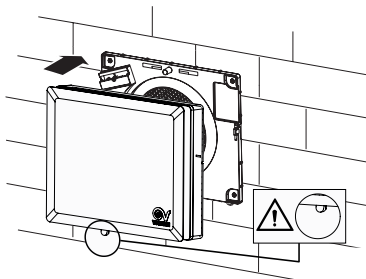
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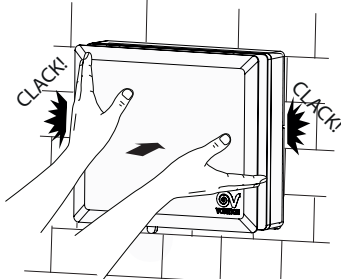
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10



11



7 VORT HRW 40/60 MONO EVO installation

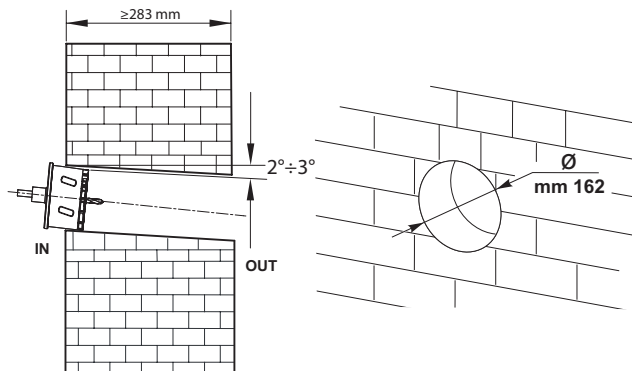
Fig 12÷ 25.

Note. Before proceeding with the installation, remove the internal protective packaging in the appliance.

Note. Before carrying out installation, remove the spacers inside the PVC installation pipe (provided as accessory) and cut the pipe according to the wall thickness.

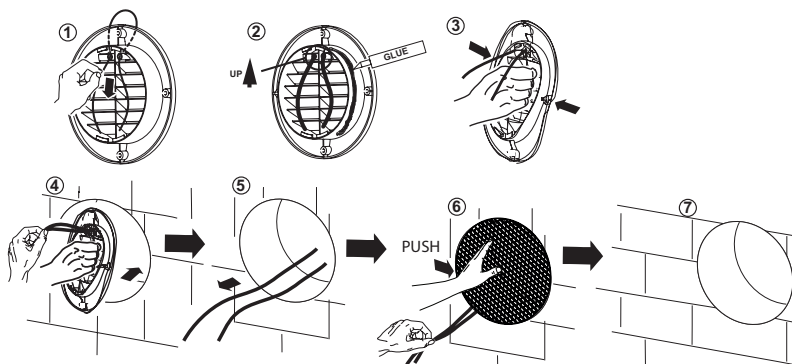
VORT HRW 40/60 MONO EVO It is mandatory to install within a perimeter wall with a thickness of at least 283 mm.

12



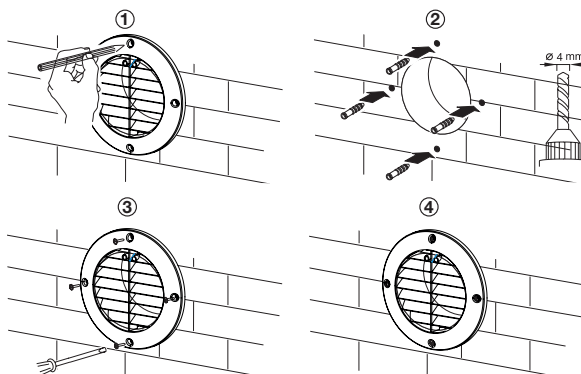
VORT HRW 40/60 MONO EVO -GRILLE MOUNTING FROM INSIDE

13



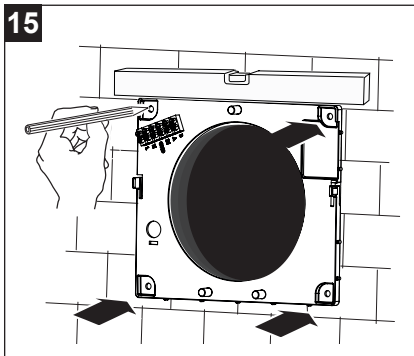
VORT HRW 40/60 MONO EVO -GRILLE MOUNTING FROM OUTSIDE

14

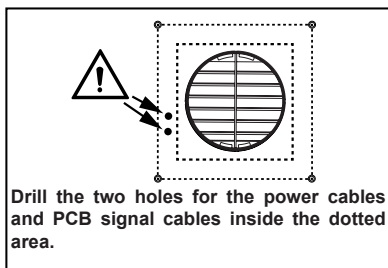
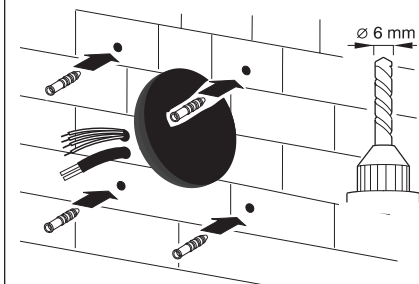


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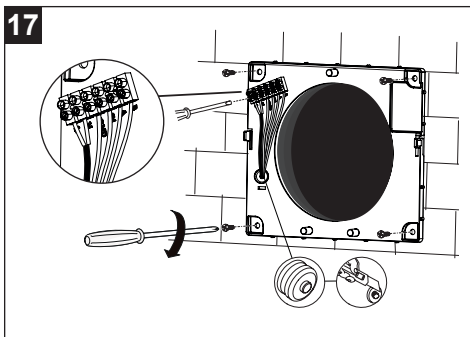
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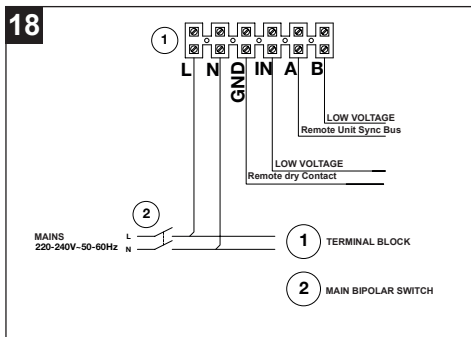
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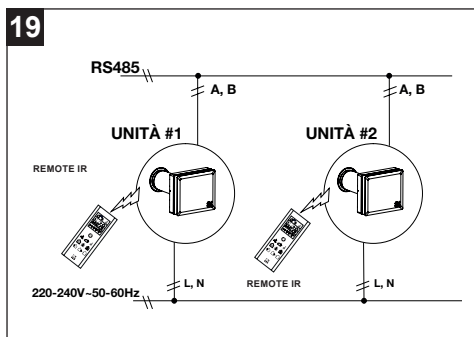
17



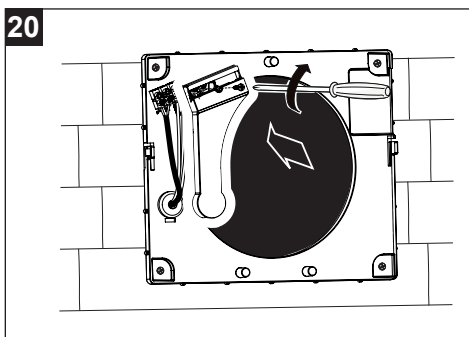
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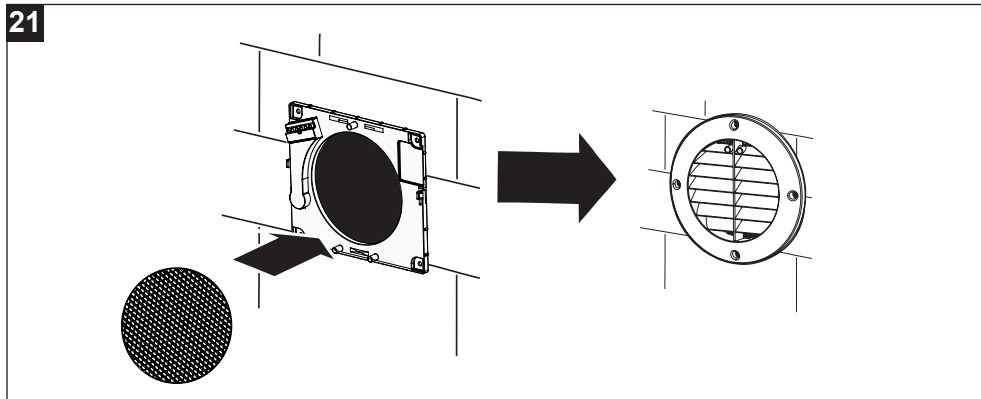


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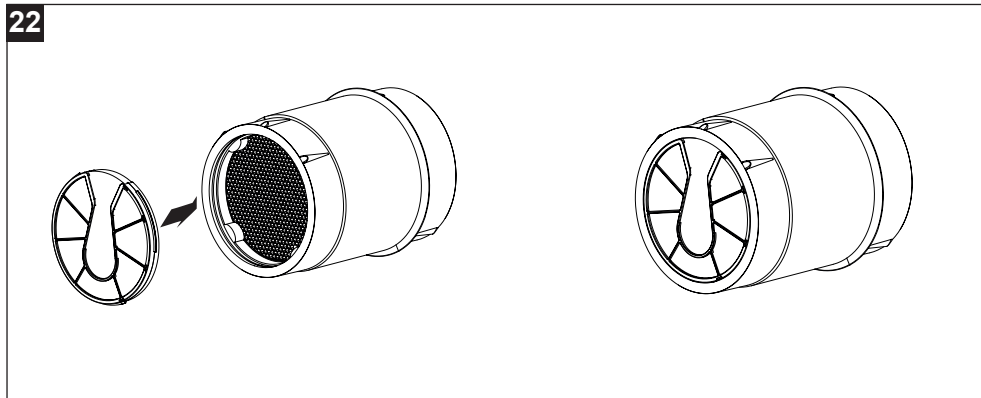
INSERT ANTI-INSECT FILTER

21



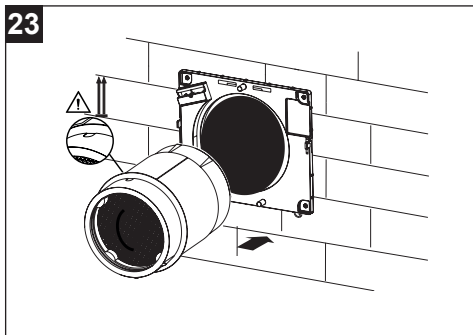
INSERTING FILTER

22

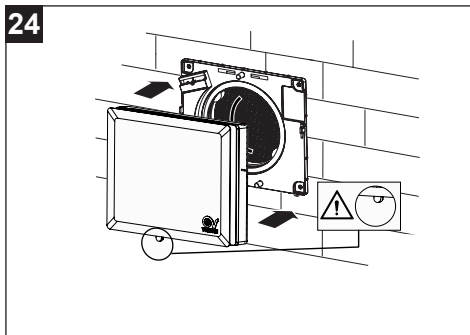


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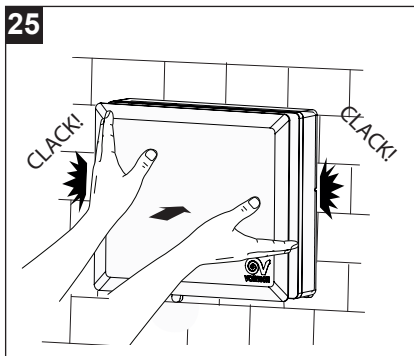
23



24



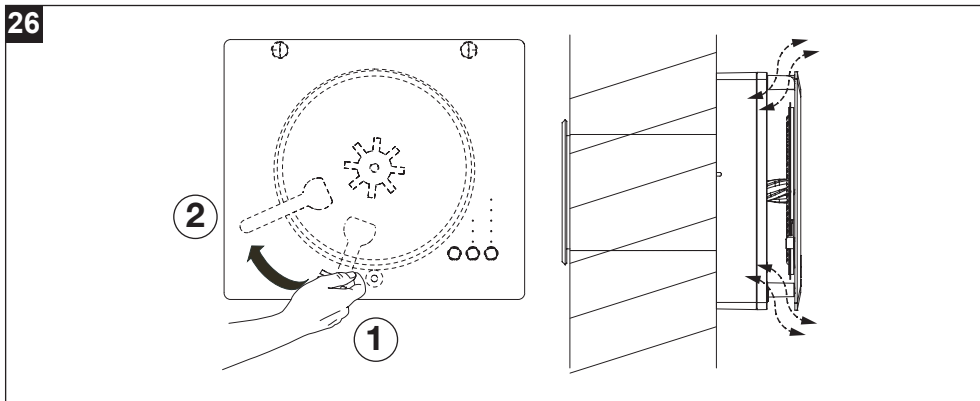
25



8 Use (fig. 26)

To use the appliance, make sure the lever of the closing disk is in the open position, by rotating the lever to position 2.

26

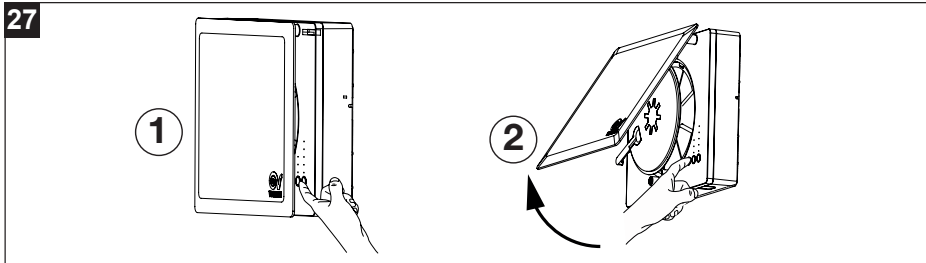


8.1 DESCRIPTION OF THE UNIT COMMANDS

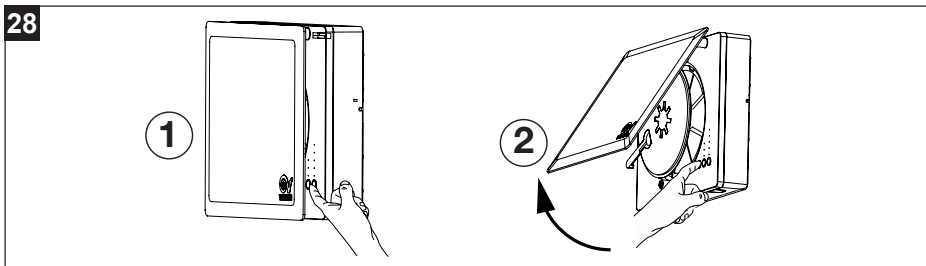


WARNING (FIG. 27)

The control panel is accessible by inserting the hand in the space between the cover and the front grille (1) or by lifting up the cover (2).



The device is controlled by means of on-board buttons (Fig. 28).



A: SPEED KEY: position selector (Night / Quiet / Performance / High performance / Boost). LED 1- LED 5: speed / air flow from min to max. Press the button cyclically to select the desired value. The white LEDs from 1 to 5 will light up to indicate the speed from 1 to 5.

B: MODE KEY: three position selector. Press repeatedly to cycle through the different modes: recovery, intake, extraction, natural ventilation (intake and extraction LEDs switch on simultaneously). The respective LEDs will light up steadily:

- **RECOVERY** heat recovery (the system works like an heat recovery unit, with cyclic inversion of the direction of rotation).
- **INTAKE** the system operates as a fan, with room air intake.
- **EXTRACTION** the system works as a fan, with air extraction from the room.
- **NATURAL VENTILATION** If the device is connected to one or more units via RS485 communication bus, you can set the NATURAL VENTILATION mode: if set as an even unit the device will operate in extraction mode, if set as an odd unit the device will operate in intake mode, creating an air current in the environment.
- **Note 1:** In the HCS versions, natural ventilation can be selected automatically via the external IR remote control (see fig. 32).

Note 2: The RS485 bus allows to balance the air flow rates of intake and extracted air, provided that the total number of installed units is equal to an even number. For example, 4 units can be connected on the RS485 bus setting two units as "even" and two units as "odd". In the case of an installation of an odd number of units, the air flows balancing will not occur.

Note 3: To see how to set the device as an even or an odd unit, refer to the section "parameter programming sequences".

Note 4: The backlighting of the keys on the device remains active for one minute from the last press of any key.

Note 5: The backlighting of the keys on the remote control of HCS versions remains active for 15 seconds from the last press of any key.

C: FUNCTION KEY to activate or deactivate the 3 different AUTO functions available and activate or deactivate the stand-by mode.

To activate or deactivate the stand-by mode:

If the device is switched on and the FUNCTION key is pressed (stand-by / on-off function), the fan stops and the LEDs of the SPEED column turn off. If the appliance is off and you press the FUNCTION button, the appliance starts at the speed and mode previously set.

The available functions are:

- **Auto night (only for HCS models)**

The ambient light sensor detects the presence or absence of ambient light and, depending on whether the measurement is higher or lower than the threshold value set via SW (fixed value that cannot be changed by the user) it allows or prevents both the switch to a speed higher than the minimum both the transition to boost speed via remote input or HR% sensor. Therefore, at night when the presence of daylight is not detected, the appliance switches to minimum speed preventing the switch to a speed higher than the minimum one. When the presence of daylight is detected again, the appliance returns to operate at the previously set speed, and it is allowed the switch to higher speeds or boost via remote input or HR% sensor.

- **Auto HR%**

In case of presence of humidity beyond the alarm threshold (60%, 75% or 90% - the default value is 75%), it is automatically selected the extraction mode at maximum speed.

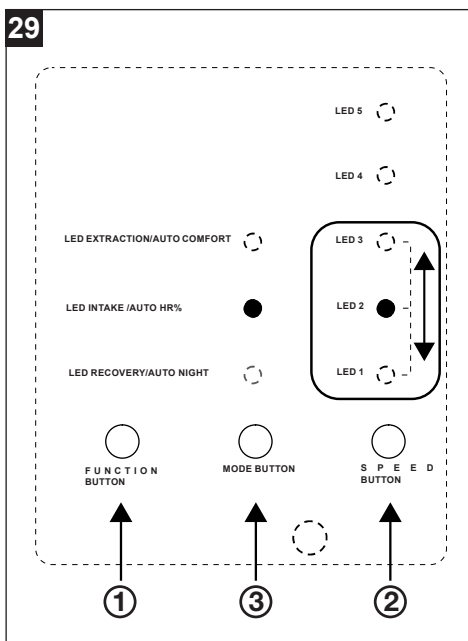
- **Auto comfort**

heat recovery mode, the period that determines the inversion of rotation of the fans is fixed based on the temperature of the air introduced into the room: if too cold, the cycle time is reduced.

To enable a function (fig. 29):

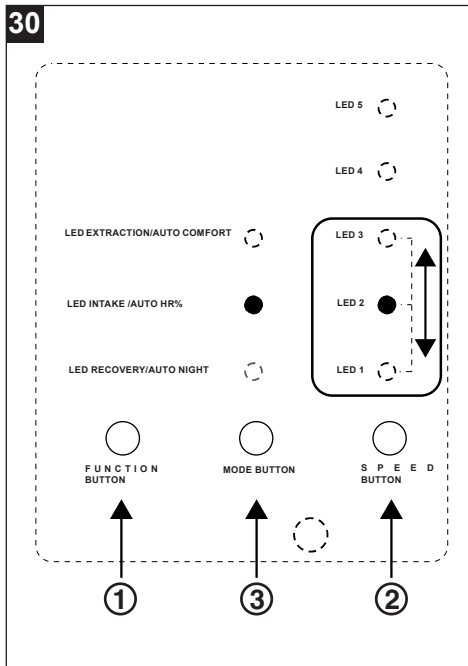
1. press the **FUNCTION** button for **more than 2 seconds**.
2. press the **SPEED** button to select one of the three LED 1, LED 2 e LED 3 corresponding to the AUTONIGHT / AUTO HR% / AUTO COMFORT.
3. press the **MODE** button to enable the function -> the chosen LED in the mode column blinks.
4. to **SAVE** the settings, press the **FUNCTION** button for **more than 2 seconds**. All SPEED LEDs blink 4 TIMES to indicate correct storage.
5. to **CANCEL** and exit the setting procedure, press the **FUNCTION** key once. All SPEED LEDs blink ONLY ONCE WITHOUT SAVING any changes made.
6. to **CHECK** which function is assigned to the appliance, press the FUNCTION button for more than 2 seconds: the LED corresponding to the set function blinks for about 20 seconds, then all the speed LEDs flash and the device returns to standard display.

Note: The user can enable all the three functions simultaneously.



To disable a function (fig. 30):

1. Press the **FUNCTION** button for **more than 2 seconds**.
2. Press the **SPEED** button to select one of the three LED 1, LED 2 e LED 3 corresponding to the AUTONIGHT / AUTO HR% / AUTO COMFORT function to be disabled.
3. Press the **MODE** button to disable the function.
4. To **SAVE** the settings, press the **FUNCTION** button for **more than 2 seconds**. All SPEED LEDs blink 4 TIMES to indicate correct storage.
5. To **CANCEL** and exit the setting procedure, press the **FUNCTION** key **once**. All SPEED LEDs blink **ONLY ONCE** WITHOUT SAVING any changes made.
6. To **CHECK** which function is assigned to the appliance press the **FUNCTION** button for **more than 2 seconds**: the LED corresponding to the set function blinks for about 20 seconds, then all the speed LEDs flash and the device returns to standard display.



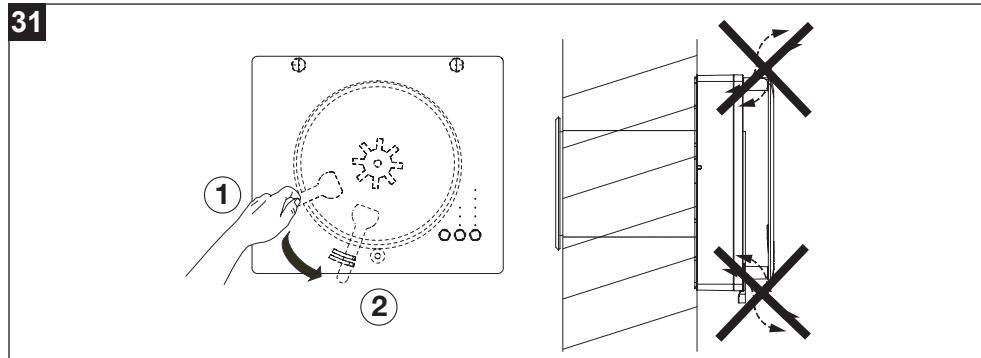
D: FILTER LED

One led (**D** - fig. 28) shows the status of the filters:

- LED OFF: filters are clean
- LED ON: filters to be cleaned or replaced (for each day of operation, a counter in the memory is increased and when the maximum preset time is reached (90/180/365 days), the signalling LED lights up). Refer to section "maintenance and cleaning".

CLOSING OF THE DEVICE

To avoid air to come inside the room, set the device in stand-by mode by pressing the FUNCTION key (LEDs in the SPEED column switch off) and turn the lever to close position (fig. 31).



9 Parameters programming sequences

By means of appropriate actions on the keyboard buttons, it is possible to reset the clogged filter counter, or program the unit's operating parameters, as specified below:

To entry in programming mode:

- Press simultaneously the SPEED - MODE - FUNCTION buttons.
- LED 5 turns on white.
- Press the buttons in the following sequence: SPEED - SPEED - MODE - FUNCTION - FUNCTION – MODE.

To set the relative humidity threshold:

- Press the SPEED button.
- The currently set threshold is displayed by lighting one of the white LEDs 1, 2 or 3 depending on whether the value is 60%, 75% or 90% (the default value is 75%).
- Press the SPEED button to modify the value.
- Press the FUNCTION button to confirm.
- All the speed LEDs from 1 to 5 will blink briefly to indicate that the value has been stored and the device will return to normal operation.
- If the FUNCTION key is not pressed within 20 sec, the device will return to normal operation without memorizing.

To select cycle time:

- Press MODE button.
- The currently set time is displayed by lighting one of the white LEDs in position 1, 2 or 3 depending on whether the time is 50, 60 or 90s. (Default value = 60s).
- Press the SPEED button to modify the value.
- Press the FUNCTION button to confirm.
- All the speed LEDs from 1 to 5 will flash briefly to indicate successful storage and the device will return to normal operation.
- If the FUNCTION key is not pressed within 20 sec, the device will return to normal operation without memorizing

NOTE: Cycle time programming can only be carried out on the unit set as master.

To select the clogged filter alarm interval:

- Press the FUNCTION button.
- The time currently set is displayed by lighting one of the white LEDs in position 1, 2 or 3 depending on whether the interval is equal to 90, 180 or 365 days.
- Press the SPEED button to modify the value.
- Press the FUNCTION button to confirm.
- All the speed LEDs from 1 to 5 will blink briefly to indicate that the storage has taken place and the equipment will return to normal operation.
- If the FUNCTION key is not pressed within 20 sec, the device will return to normal operation without memorizing.

To reset the clogged filter counter:

- Press simultaneously the SPEED - MODE - FUNCTION buttons.
- Press the buttons in the following sequence: Mode - Mode - Speed - Speed - Mode - Mode.
- Press the FUNCTION key within 20 sec.
- All the speed LEDs from 1 to 5 will blink briefly to indicate that the reset has taken place and the device will return to normal operation.
- If the FUNCTION button is not pressed within 20 sec, the device will return to normal operation without having reset the filter timer.

NOTE: Cycle time programming can only be carried out on the unit set as master.



Note: for regular operation between multiple devices, it is necessary to set the type of unit (Master / Slave and Even / Odd)

To set the device as “RS485 network master”:

- Press simultaneously the SPEED - MODE - FUNCTION buttons.
- Press in sequence the following buttons: MODE - MODE - SPEED - SPEED - FUNCTION - FUNCTION.
- Press the Mode button within 20 sec.
- All speed LEDs from 1 to 5 will blink briefly to indicate that the device has been set as master unit.
- If you do not press the MODE button within 20 sec, the device will return to normal operation without making any changes to the settings.

To set the device as “RS485 network slave”:

- Press simultaneously the SPEED - MODE - FUNCTION buttons.
- Press in sequence the following buttons: MODE - MODE - SPEED - SPEED - FUNCTION - FUNCTION.
- Press the SPEED button within 20 sec.
- All speed LEDs from 1 to 5 will blink briefly to indicate that the device has been set as Slave.
- If the SPEED button is not pressed within 20 sec, the device will return to normal operation without making any changes to the settings.

To set the device as “Even Unit”:

- Press simultaneously the SPEED - MODE - FUNCTION buttons.
- Press in sequence the buttons SPEED - SPEED - FUNCTION - FUNCTION - MODE - MODE.
- Press the SPEED button within 20 sec.
- All speed LEDs from 1 to 5 will blink briefly to indicate that the device has been set as an even numbered unit.
- If the SPEED button is not pressed within 20 sec, the device will return to normal operation without making any changes to the settings.

To set the device as an “Odd Unit”:

- Press simultaneously the SPEED - MODE - FUNCTION buttons.
- Press in sequence the buttons SPEED - SPEED - FUNCTION - FUNCTION - MODE - MODE.
- Press the FUNCTION key within 20 sec.
- All speed LEDs from 1 to 5 will blink briefly to indicate that the device has been set as an odd-numbered unit.
- If the Function button is not pressed within 20 sec, the device will return to normal operation without making any changes to the settings.

9.1 Remote I/O

The connected device can be remotely controlled via clean contacts on remote input 1. If the remote input is active, the keyboard on the machine is disabled.

9.1.1 Remote input 1:

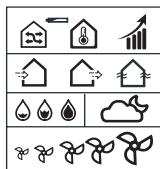
- With input contact 1 closed, all the connected fans work in extraction at maximum speed.
- If 20 seconds since the last key press have not elapsed:
 - The white EXTRACTION LED lights up.
 - The white 1,2,3,4,5 LEDs light up.

ENGLISH

10 IR remote control (HCS models only)

HCS models are equipped with a remote control with LCD display. By default the recovery function, the autocomfort, auto HR% and autonight modes are active. The humidity threshold is set at the maximum value (90%) and the speed is set to the maximum in order to obtain the maximum air flow rate (5 fans displayed). The remote control transmits its default state to the device and consequently updates the state on the appliance. If the state of the device does not synchronize with the state of the remote control, point the remote control towards the device and press a button on the remote control to activate the synchronization. After inserting the batteries, the remote control is active. After pressing the ON / OFF button, the display looks like in figure 32:

32



FUNCTION	Default state	LCD ICON
HEAT RECOVERY MODE	ON	
AUTO COMFORT	ON	
TIMED BOOST	OFF	
INTAKE	OFF	
EXTRACTION	OFF	
N A T U R A L VENTILATION	OFF	
AUTO HR % (60% - 75% - 90 %)	HIGH (90% - three drops on)	
AUTO NIGHT	ON	
FAN SPEED	HIGH (five fans displayed)	
LOW BATTERY	OFF	

10.1 Keys description:

- ON/OFF FUNTION

Press ON/OFF key to start the device or to select the STANDBY mode.

- **FAN SPEED SELECTION BUTTON**

Fan speed selection is always available. Press Fan key  to select fan speed (MINIMUM \LOW\MED\HIGH\BOOST). Fan speed mode will cycle as below:

FAN SPEED	LCD ICON
>MINIMUM > LOW > MED > HIGH > BOOST > MINIMUM...	>  >  >  >  >  >  >  >  >  >  >  >  >  >  >  >  >  >  >  >  >  >  >  >  >  >  >  >  >  > >

• “AUTO NIGHT” FUNCTION

NIGHT AUTO function  is always available. Press NIGHT AUTO button at any time to toggle NIGHT AUTO function on and off.

AUTO NIGHT	LCD ICON
>ON > OFF > ON >...	>  > >  ...

• “TIMED BOOST” FUNCTION

Press the TIMED BOOST button  to activate (ON) or deactivate (OFF) the TIMED BOOST function.

NOTE: If TIMED BOOST function is ON, TIMED BOOST icon remains active for 30 minutes and then switches off. **NOTE:** If TIMED BOOST is ON and then TIMED BOOST key is pushed, then TIMED BOOST icon will immediately switch off.



TIMED BOOST	LCD ICON
>ON > OFF > ON >...	>  > icon OFF >  ...
ON >...	>  > icon OFF after 30 minutes

• “HEAT RECOVERY” FUNCTION

Press “heat recovery button”  at any time to select HEAT RECOVERY mode.

HEAT RECOVERY	LCD ICON
>ON	> 

NOTE: if HEAT RECOVERY button  is pushed, then SUPPLY icon , EXTRACT icon , NATURAL VENTILATION icon  will switch off.

• “AUTO COMFORT” FUNCTION

Press AUTO COMFORT button  at any time to toggle AUTO COMFORT function ON and OFF.

AUTO COMFORT	LCD ICON
>ON > OFF > ON >...	>  > icon OFF > ...

• HUMIDITY THRESHOLD

Press UMIDITY THRESHOLD button  to select UMIDITY THRESHOLD value (OFF/LOW/MED/HIGH). UMIDITY THRESHOLD value will cycle as in the following table:

HUMIDITY THRESHOLD	LCD ICON
>OFF >LOW > MED > HIGH ...	icon off >  >  >  >  >  ...

ENGLISH

• “SUPPLY” MODE

Press the “supply” button  at any time to select SUPPLY mode.

INTAKE	LCD ICON
>ON	> 

Note: if SUPPLY button is pushed , then HEAT RECOVERY icon , EXTRACTION icon  and NATURAL VENTILATION icon  will switch off.

• “EXTRACTION” mode

Press “extraction” button  to select this mode.

EXTRACTION	LCD ICON
>ON	> 

Note: If EXTRACTION button  is pushed, then HEAT RECOVERY icon , SUPPLY icon  and NATURAL VENTILATION icon  will switch off.

• “NATURAL VENTILATION” MODE

Press NATURAL VENTILATION button  to select this mode.

NATURAL VENTILATION	LCD ICON
>ON	> 

Note: if NATURAL VENTILATION button is pushed , then HEAT RECOVERY icon , SUPPLY icon  and EXTRACTION icon  will switch off.

• “Low battery indication” function

When the remote control has been used for a long time and there is no enough power left, the remote control will show “low battery indication”  on the LCD , it shows the user need to replace a new battery. It will blink all the time till the battery has been replaced.

• “Backlight” function

When using the remote control, the LEDs backlight is on. If the remote control has not been used for 10 seconds, the backlight function is turned off for energy saving.

• “Reset” function

A small hole in the back of the remote control works as reset function.

11 Technical data

Model		VORT HRW 31 MONO EVO	VORT HRW 31 MONO EVO HCS	VORT HRW 40 MONO EVO	VORT HRW 40 MONO EVO HCS	VORT HRW 60 MONO EVO HCS
Max absorbed power (W)		4		5		8
Nominal duct diameter (mm)		100		160		160
Airflow max (m ³ /h)	Night	6		15		10
	Quiet	10		22		25
	Performance	15		30		35
	High Performance	21		38		45
	Boost	38		40		60
Sound power level L _w [dB(A)]	Night	36,6		36,5		31,8
	Quiet	41,2		38,4		44,6
	Performance	49,5		42,9		51,5
	High Performance	53,1		48,1		56,5
	Boost	66,8		49,3		62
Pressure max (Pa)	Night	10		17		15
	Quiet	20		24		40
	Performance	40		37		60
	High Performance	45		46,5		100
	Boost	135		47		120
Sound pressure level L _p [dB (A)] 3m	Night	19,1		19,0		14
	Quiet	23,7		20,9		27,1
	Performance	32,0		25,4		33,9
	High Performance	35,6		30,6		39
	Boost	49,2		31,8		44,6

12 Maintenance and cleaning

Before starting any maintenance or cleaning operation set the device to standby mode (LEDs in SPEED column turn off) and wait for the fan to stop.

12.1 Filters cleaning

The maintenance time for filters can be set to 90, 180 or 365 days (see specific section in the "programming sequence").

Cleaning /replacement of internal filter (fig. 33): Remove the closing disk (1), remove the filter (2), wash or replace it and reposition it in its seat with the filter frame; re-insert the closing disk.

Cleaning /replacement of external filter for VORT HRW 40 MONO EVO / VORT HRW 60 MONO EVO (fig. 34): follow the steps from 1 to 6 and repeat them in the reverse order once the filter has been cleaned or removed.

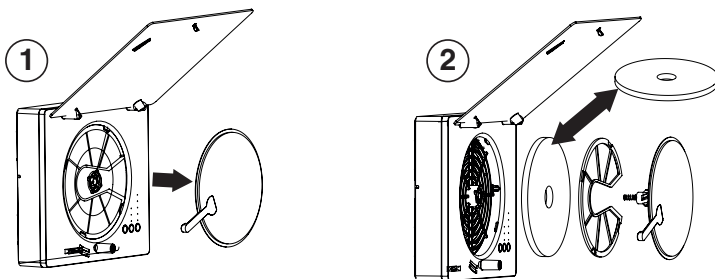
Cleaning/ replacement of external filter for VORT HRW 30 MONO EVO (fig. 35): follow the steps from 1 to 6 and repeat them in the reverse order once the filter has been cleaned or removed.

On every model it is mandatory to reset the saturated filter situation by following the procedure described in the section "parameters programming sequence", before returning to the normal functioning of the device.

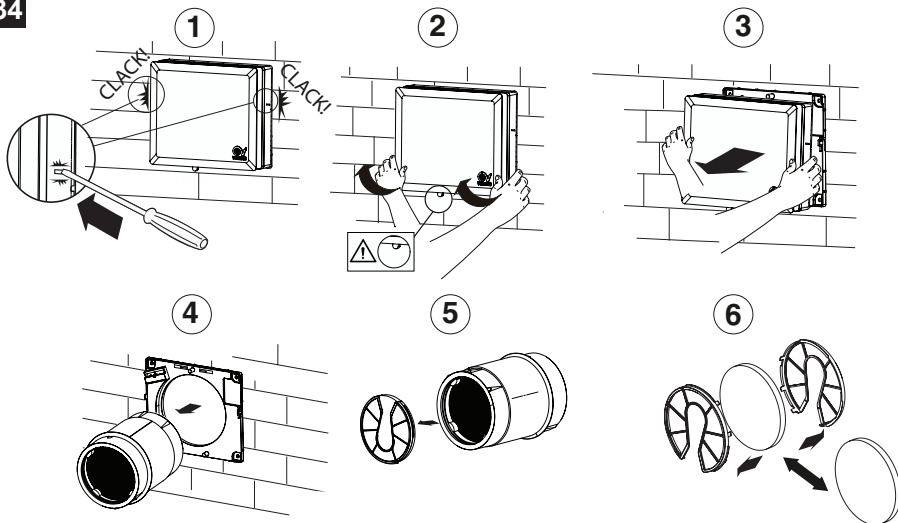
Note. Failure to clean or replace filters causes problems for system efficiency, including:

- increased pressure losses in the air circulation system and reduced airflow;
- Consequent decrease in machine yield and worsening of comfort in the environment

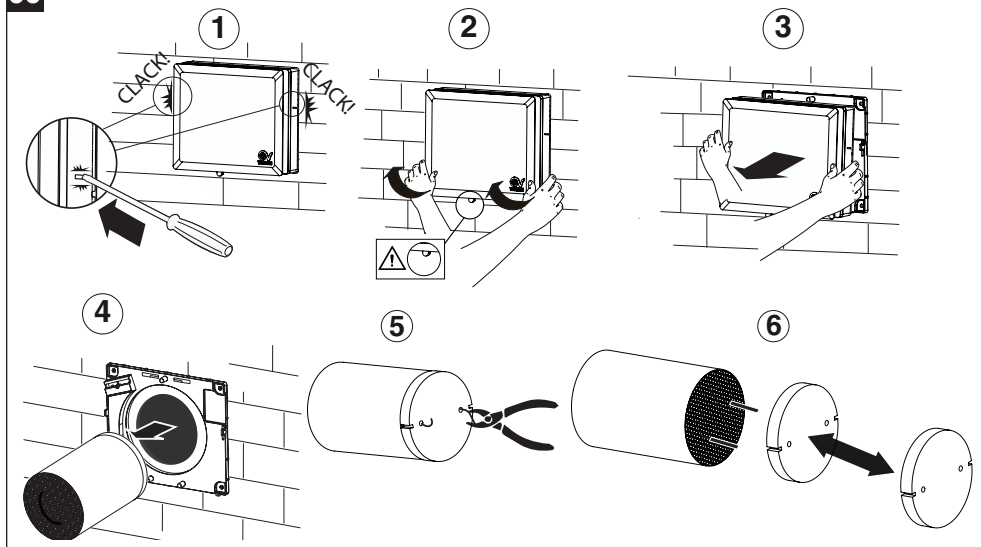
33



34



35



13 Disposal

This product complies with Directive 2012/19/EU on the management of waste electrical and electronic equipment (WEEE).

The crossed-out wheeled bin symbol on the appliance indicates that, at the end of its life, the product should not be discarded together with household waste but must be taken to a separate collection point for electrical and electronic equipment. This will avoid negative effects on the environment and health, and will encourage correct treatment, disposal and recycling of the materials from which the product is made.



Contact the municipal authority for the location of this type of facility. Alternatively, the distributor is obliged to take back the appliance to be disposed of free of charge in exchange for the purchase of an equivalent appliance.



GARANZIA CONVENZIONALE - ITALIA

5.199.084.224

1. DIRITTI DEI CONSUMATORI

- 1.1** Il consumatore dispone per legge, a titolo gratuito, di rimedi per i difetti di conformità dei prodotti nei confronti del venditore che non sono pregiudicati dalla presente garanzia convenzionale aggiuntiva del produttore.
- 1.2** La presente garanzia convenzionale offerta da VORTICE S.p.A., con sede in Strada Cerca 2, Frazione di Zoate, 20067, Tribiano (MI) non pregiudica, pertanto, i diritti dei consumatori che sono previsti dalla Direttiva (UE) 2019/771 (c.d. "direttiva garanzia") e dalla relativa legislazione nazionale di attuazione e recepimento nei paesi membri della UE (in Italia v. Codice del Consumo D.lgs. 206/2005).

2. DURATA DELLA GARANZIA CONVENZIONALE

- 2.1** VORTICE S.p.A. offre la presente garanzia convenzionale su tutti i propri prodotti per il periodo di 2 anni.
- 2.2** Per i soli prodotti appartenenti alle famiglie Nordik HVLS e Nordik PIVOT, la garanzia convenzionale offerta da VORTICE S.p.A. ha durata di 5 anni per le parti meccaniche ed il motore e di 3 anni per l'inverter.
- 2.3** La garanzia convenzionale decorre, in tutti i casi previsti, dalla data di acquisto dei prodotti che deve essere comprovata dall'acquirente per mezzo di idoneo documento fiscale rilasciato dal venditore (scontrino o fattura), che deve indicare la data di acquisto ed il modello di prodotto acquistato.

3. CONDIZIONI DELLA GARANZIA CONVENZIONALE - ESCLUSIONI

- 3.1** Nel periodo di garanzia previsto, VORTICE S.p.A. si impegna, attraverso la propria rete di assistenza e dopo aver effettuato le opportune valutazioni tecniche, a riparare o a sostituire il prodotto o le parti del prodotto stesso che risultino affette da difetti originari di fabbricazione. I rimedi della sostituzione o della riparazione sono posti in essere senza spese per il soggetto qualificabile come Consumatore a norma di legge.
- 3.2** Sono esclusi dalla garanzia convenzionale tutti i difetti e/o i guasti derivanti da:
- a) normale usura del prodotto o dei componenti del prodotto medesimo;
 - b) utilizzo non corretto o improprio del prodotto, in difformità rispetto alle istruzioni ed alle avvertenze fornite da VORTICE S.p.A. unitamente al prodotto medesimo;
 - c) installazione del prodotto in difformità rispetto alle istruzioni fornite da VORTICE S.p.A. o comunque in difformità rispetto alla regola dell'arte vigente in materia di installazione di prodotti elettrici;
 - d) errato allacciamento alla rete di alimentazione elettrica o da tensione di alimentazione diversa da quella prevista per l'apparecchio, ovvero diversa dal limite stabilito dalla norma CEI (+/- 10% del valore nominale);
 - e) manutenzione errata e/o carente e/o effettuata in difformità rispetto alle istruzioni fornite da VORTICE S.p.A.;
 - f) manutenzione e/o altri interventi effettuati da personale non abilitato o da soggetti non autorizzati da VORTICE S.p.A.;
 - g) guasti derivanti da errate condizioni di trasporto o di magazzinaggio del prodotto non imputabili a VORTICE S.p.A.;
 - h) modifica del prodotto da parte di soggetto diverso da VORTICE S.p.A. o non espressamente autorizzato per iscritto da quest'ultimo.

4. PROCEDURA DI VALIDAZIONE DELLA GARANZIA CONVENZIONALE - INTERVENTI

- 4.1** Per fare valere la garanzia convenzionale il consumatore dovrà inviare il documento fiscale comprovante la data di acquisto unitamente alla presente pagina, contenente l'indicazione del numero di matricola del prodotto, agli indirizzi indicati nel successivo paragrafo 4.2.

- 4.2** Modalità di esecuzione degli interventi e indirizzi e-mail di contatto:

- per prodotti ATEX: gli interventi saranno eseguiti presso la Sede VORTICE S.p.A.; scrivere un'e-mail all'indirizzo postvendita@vortice.it o contattare il numero 0290699395;
- per i prodotti Climatizzazione: gli interventi saranno eseguiti presso il domicilio del cliente per i prodotti che necessitano di installazione e per quelli che non sono facilmente trasportabili, oppure in tutti gli altri casi presso uno dei Centri di Assistenza Tecnica autorizzati da VORTICE S.p.A.; scrivere un'e-mail all'indirizzo postvendita@vortice.it o contattare il numero 0290699395;
- per tutti gli altri prodotti: gli interventi saranno eseguiti presso uno dei Centri di Assistenza Tecnica autorizzati da VORTICE S.p.A., identificabili contattando il numero verde 800.555.777.

La prestazione eseguita in garanzia non prolunga il periodo di validità della garanzia stessa. Pertanto, in caso di sostituzione del prodotto o di un suo componente, sul bene o sul singolo componente fornito in sostituzione non decorre un nuovo periodo di garanzia a partire dal momento dell'effettuazione dell'intervento, in quanto si deve tener conto esclusivamente della data di acquisto del prodotto originario.

5. ESTENSIONE TERRITORIALE

La presente garanzia è valida su tutto il territorio italiano.

CONF.	COLL.
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WARRANTY - OTHER COUNTRIES

The consumer has by law, free of charge, the legal guarantee of conformity with the seller, as described in Directive (EU) 2019/771 in force since January 1, 2022. In EU member countries also refer to local regulations.

PAÍSES DE AMÉRICA LATINA

GARANTÍA ESTÁNDAR VORTICE LATAM S.A.

5.199.084.224

1. DERECHOS DEL CONSUMIDOR

- 1.1 El consumidor dispone por ley, de forma gratuita, recursos por la falta de conformidad de los productos frente al vendedor que no se ven afectados por esta garantía estándar adicional del fabricante.

2. DURACIÓN DE LA GARANTÍA ESTÁNDAR

- 2.1 VORTICE LATAM S. A. ofrece esta garantía estándar por un periodo de **2 años**.
2.2 Para productos de las familias Nordik HVLS y Nordik PIVOT, la garantía estándar ofrecida por VORTICE LATAM S.A. tiene una duración de **5 años** para las partes mecánicas y motor y de **3 años** para el inversor.
2.3 La garantía estándar comienza, en todos los casos previstos, a partir de la fecha de compra de los productos que deberá ser acreditada por el comprador mediante un documento fiscal emitido por el vendedor (recibo o factura), que debe indicar la fecha de compra y el modelo del producto adquirido.

3. CONDICIONES DE LA GARANTÍA ESTÁNDAR - EXCLUSIONES

- 3.1 Durante el periodo de garantía, VORTICE LATAM S. A. se compromete, a través de su red de asistencia y previa realización de las oportunas valoraciones técnicas, a reparar o reemplazar el producto o partes del producto que estén afectadas por defectos de fabricación originales. La sustitución o las reparaciones se realizan sin costo adicional para la persona calificada como consumidor según la ley.
- 3.2 Quedan excluidos de la garantía estándar todos los defectos y/o fallas derivados de:
- a) desgaste normal del producto o de sus componentes.
 - b) uso incorrecto o inadecuado del producto, contrario a las instrucciones y advertencias proporcionadas por VORTICE LATAM S. A. junto con el producto mismo.
 - c) instalación del producto no conforme a las instrucciones proporcionadas por VORTICE LATAM S.A. o en cualquier caso no conforme a la normativa vigente en instalación de productos eléctricos.
 - d) conexión incorrecta a la red de alimentación eléctrica o a una tensión de alimentación diferente de la prevista para el equipo.
 - e) mantenimiento incorrecto y/o deficiente y/o realizado de forma contraria a las instrucciones proporcionadas por VORTICE LATAM S. A.
 - f) mantenimiento y/u otras intervenciones realizadas por personal no autorizado por VORTICE LATAM S. A.
 - g) fallas derivadas de condiciones incorrectas de transporte o almacenamiento del producto no imputables a VORTICE LATAM S. A.
 - h) modificación del producto por persona ajena a VORTICE S. p. A. o no autorizada expresamente por escrito por éste.

4. PROCEDIMIENTO DE VALIDACIÓN DE LA GARANTÍA ESTÁNDAR – REPARACIONES

- 4.1 Para hacer efectiva la garantía estándar, el consumidor deberá enviar el documento fiscal que acredite la fecha de compra junto con esta hoja a VORTICE LATAM S.A., indicando el número de serie del producto.
- 4.2 Las intervenciones se realizarán en uno de los Centros de Asistencia Técnica autorizados por VORTICE LATAM S.A. El servicio realizado bajo garantía no extiende el periodo de validez de la garantía. Por lo tanto, en caso de sustitución del producto o de uno de sus componentes, no se inicia un nuevo periodo de garantía sobre el bien o sobre el componente individual suministrado como sustitución a partir del momento en que se realiza la intervención, ya que sólo debe indicarse la fecha teniendo en cuenta la compra del producto original.

Procedimiento para la realización de las intervenciones y direcciones de correo electrónico de contacto:

- para productos ATEX: las reparaciones se realizarán en la sede de VORTICE LATAM S. A.; Escriba un email al correo info@vortice-latam.com o comuníquese al número + (506) 87346996;
- para los productos que requieren instalación y para los que no son fácilmente transportables las reparaciones se realizarán en el domicilio del cliente; Escriba un email a info@vortice-latam.com o comuníquese al número + (506) 87346996;
- Para todos los demás productos: las reparaciones se realizarán en uno de los Centros de Asistencia Técnica Autorizado por VORTICE LATAM S. A. identificable comunicándose con el número + (506) 87346996.

5. EXTENSIÓN TERRITORIAL

Esta garantía es válida en todos los países de América Latina donde se vende este producto.

GARANTÍA - OTROS PAÍSES

El consumidor tiene por ley, de forma gratuita, la garantía legal de conformidad con el vendedor, tal y como se describe en la Directiva (UE) 2019/771 en vigor desde el 1 de enero de 2022. En los países miembros de la UE también consulte las normativas locales.



VORTICE S.p.A. si riserva il diritto di apportare tutte le varianti migliorative ai prodotti in corso di vendita.
VORTICE S.p.A. reserves the right to make improvements to products at any time and without prior notice.
VORTICE S.p.A. se réserve le droit d'apporter toutes les variations afin d'améliorer ses produits en cours de commercialisation.
VORTICE S.p.A. behält sich vor, alle eventuellen Verbesserungsänderungen an den Produkten des Verkaufsangebots vorzunehmen.
VORTICE S.p.A. se reserva el derecho a hacer cambios en los productos para su mejora en cualquier momento sin previo aviso.
VORTICE S.p.A. 公司 股份有限公司 保留在产品销售期间进行产品改良的权利。

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