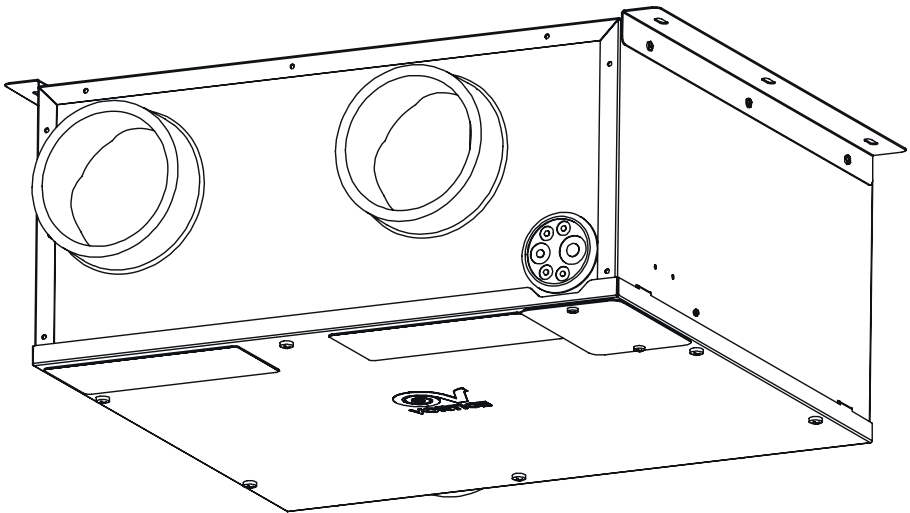

VORT INVISIBLE MINI VORT INVISIBLE MINI EVO VORT INVISIBLE MINI TOP



Index

1	General informations	34
1.1	Description of the symbols	34
1.1.1	Obligation	34
1.1.2	Prohibition	34
1.1.3	Danger	34
1.2	Purpose of the manual	34
2	Product description	35
3	Compliance	35
4	Safety/Warnings	36
5	Unit placement	37
6	Installation	38
7	Drainage connection	39
8	Electrical connections	40
8.1	Vmax start through light control	41
9	Operation	42
10	HMI installation - remote control display	43
11	Use	44
11.1	"Heat recovery" Function	44
11.2	"No-Frost" Function	44
11.3	"By-Pass" Function	44
11.4	"By-Pass" Valve check	44
11.5	"Post-ventilation" Function	45
11.6	"Holiday" Function	45
11.7	"By-Pass MAN" Function	45
11.8	"Quiet" Function	45
12	Operation via remote control panel	46
12.1	User interface	46
12.2	Pagina "Home"	47
12.3	Equipment start-up/shut-down	48
12.3.1	Operating mode selection	48
12.3.2	"Main menu" page	48
12.3.3	"USE MENU" page	48
12.3.4	User "Operations menu" page	48
12.3.5	Installer "Operations menu" page	50
12.3.6	"Setting speed Menu" Page	54
12.3.7	"Alarms" page	54
12.3.8	Pre-alarm: "Filters checking"	54
12.3.9	Alarm: "Filters to be replace"	55
12.3.10	Alarm: No Frost - Wait one hour	55
12.3.11	Alarm: "Ext Probe fault"	55
12.3.12	Alarm: "Int Probe fault"	56
12.3.13	Alarm: "Exh Probe fault"	56
12.3.14	Alarm: "Pipe"	56
12.3.15	"SETUP" page	57
12.3.16	DATE&HOUR page	57
12.3.17	"Time programming" page (not in UK market)	57
12.3.18	"Info" page	58

13 Maintenance and cleaning	59
13.1 Gaining access to the unit.....	59
13.2 Heat exchanger, condense tray removal and servicing.	59
13.3 Replacement of the electronic board	60
13.4 Maintenance (recommended)	60
13.5 Filter cleaning (fig. 18).....	60
14 Disposal.....	61

Read the instructions contained in this booklet carefully before using the appliance.

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.

ENGLISH

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 Product description

VORT INVISIBLE MINI is 3-speed (Min, Max, Holiday) residential heat recovery unit + bypass (mechanical in the case of EVO and TOP models) + humidity sensor (TOP models). The unit is designed to continuously remove stale air from rooms by means of a system of fixed piping and grilles. The heat is recovered from the air suctioned from the room by means of a high-performance heat exchanger, which transfers it to the incoming cool air. The flow rate of the ventilation can increase up to "Max" mode, for example if there is a high amount of humidity in the room. The extracted air is discharged outside by means of a single duct to a grille. The frame is made of galvanized painted steel. The internal sides of the housing are made in expanded polypropylene.

The heat recovery unit is also equipped with a filter maintenance warning system. (for more information refer to section 13.5).

3 Compliance

- These appliances are designed for use in residential and commercial properties.
- 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.
- The installation of the flush-mounted box for the remote display must only be carried out by professionally qualified personnel.
- If the power supply cable is damaged, have it replaced without delay by a VORTICE authorised Technical Support Centre.
- The appliance internal parts must be cleaned only by a skilled professional.
- 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.

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.



OBLIGATION

- Make sure that the regulations and practices regarding the place of installation and use of this equipment are complied with.
- Make sure that the power supply voltage of the mains, the frequency, the number of phases and the nominal power supply comply with the unit label data.
- The exhaust air must be released to the outside.
- If the appliance does not function correctly or develops a fault, contact a VORTICE authorised Technical Support Centre without delay. Ensure that only genuine original VORTICE spares are used for any repairs.
- When the unit is used to manage moist air, a condensate collection and discharge system must be incorporated in the exhaust pipe to ensure safe and healthy operation in compliance with regulations.
- Should the appliance be dropped or suffer heavy impact, have it checked without delay by a VORTICE authorised Technical Support Centre.
- 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.
- Be sure not to damage hidden electrical cables when installing the unit.
- 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.
- Las instrucciones para el mantenimiento deben cumplirse para evitar daños y/o desgaste excesivo del aparato.
- Be sure not to damage hidden electrical cables when installing the unit.



OBLIGATION

- Follow the safety instructions to prevent any harm to the user.



PROHIBITION

- Do not use this appliance for functions other than those described in this booklet.
- Do not leave packaging within reach of children or individuals with disabilities.
- 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 install this unit where it may be subject to splashing water .
- DO NOT use this unit where there is, excessive dust, or an air rich in fibre, oil grease are present.
- Do not stand objects on the appliance.
- The appliance cannot be used to pilot the operation of water heaters, stoves, etc.; neither must it drain into the hot water ducts of such appliances.



ATTENTION

- Certain fundamental rules must be observed when using any electrical appliance:
 - never touch the appliance with wet or damp hands.
 - never touch the appliance while barefoot.
- The flow of extracted air must be clean (i.e. free of grease, soot, chemical and corrosive agents and explosive or flammable mixtures).
- Keep the air intake and outlet ports of the appliance free of obstructions, to ensure optimum air flow.
- The motors are equipped with watertight bearings and therefore do not need lubrication.



OBLIGATION

- In the case of:

- dismantle the appliance, using the proper tools.
 - removal of the heat exchanger.
 - removal of the motor module.
- the appliance must first be switched off and disconnected from the electrical power supply.
- Switch off the system main switch when:
 - an operating fault is detected.
 - it is needed to clean the external parts of the product.
 - the appliance will not be used for a short or long period of time.

5 Unit placement

Make sure there is adequate room for access for installation and maintenance. Make sure that wiring of the selected mains is equipped with a nearby disconnecting switch for maintenance.

NOTE: The unit is used only for suspended operation.

The unit is typically installed to false ceiling, but if this is not possible, it can be placed on a mezzanine or in any suitable position. Make sure also that accessibility for control, exhaust outlets position and of the electrical services must be taken into consideration.

It is the responsibility of the installer to ensure that all aspects of the system design are taken into account. The system is designed as a ducted unit and should only be used in the presence of piping. Make sure the pipes are supported along their entire length.

The unit has 4 nozzles, each of which is marked with a label. Make sure the correct piping is connected to the appropriate outlets.

The ability to access the unit for maintenance must be taken into consideration. Fan maintenance and heat exchanger cleaning should be performed annually. The filters must be cleaned as required.

PLEASE NOTE: Make sure to leave enough space to allow the cover to be removed and to provide sufficient access for filter and heat exchanger maintenance.

NOZZLES

The unit is supplied with 120 mm nozzles. For satisfactory unit operation, make sure that the piping is positioned as shown in the design diagram. Any change from the design diagram can cause an increase in noise in use at maximum power.

NOTE: In situations where it is not possible or preferable to use 120 mm pipes, 100 mm pipes can be used but PLEASE NOTE that noise levels will increase in "MAX" mode.

DRAINAGE

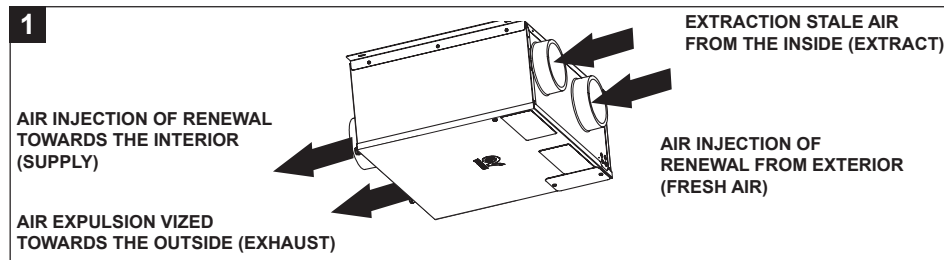
IMPORTANT: The unit will sometimes produce condensate that MUST be discharged. The unit is equipped with 2 drain connections. When using a condensate adapter, a 16 mm rigid plug-in pipe MUST be used.

IMPORTANT: Do not use glue to fit the hose onto the adapter. This joint must be disconnected when removing the heat exchanger for periodic service and maintenance.

When using flexible hoses for condensate, cut the condensate adapter and use the connector of the straight hose supplied. Do not leave folds in the condensate hose.

The unit is equipped with an anti-flooding condensate collection device.

NOTE: The fan will stop and an ALARM! will appear on the display if the condensate drainage path is blocked and the unit goes into anti-flooding mode.



ENGLISH

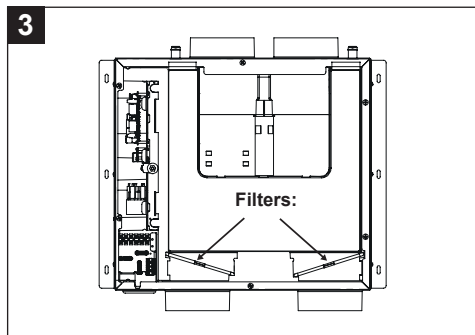
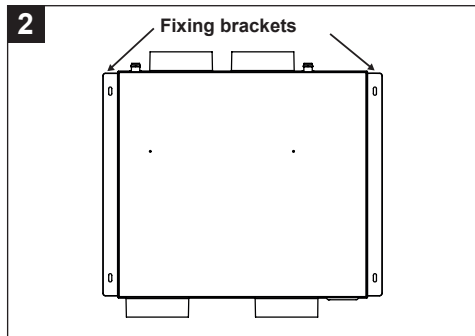
6 Installation

NOTE: Installation must be performed by competent personnel in accordance with the authorities involved and in compliance with all applicable regulations and standards.

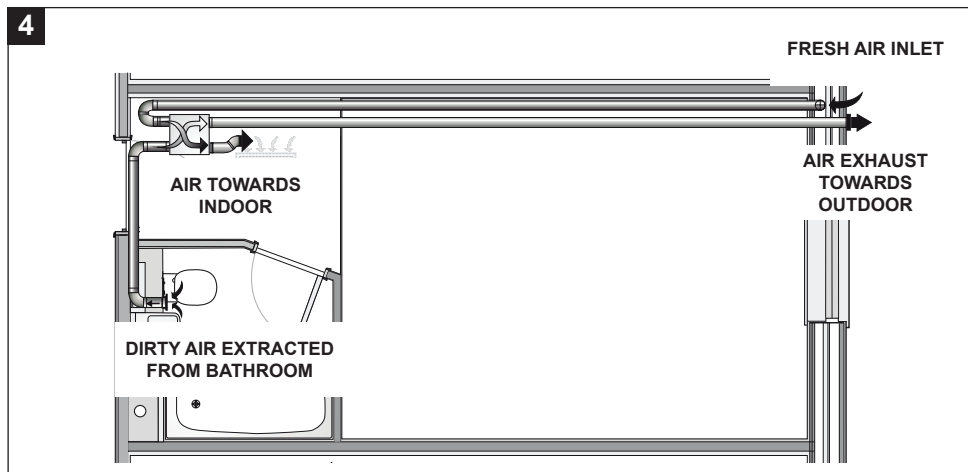
When the unit position has been decided, secure it with the 2 fixing brackets levelled (fig.2). Use screws suitable for the surface on which it is fixed.

NOTE: For better air distribution on the surface of the filters, insert them as shown in fig.3.

NOTE: During installation, do not place the product with the side of the electronic card facing the wall, as it could create problems during maintenance.



Installation example:



7 Drainage connection

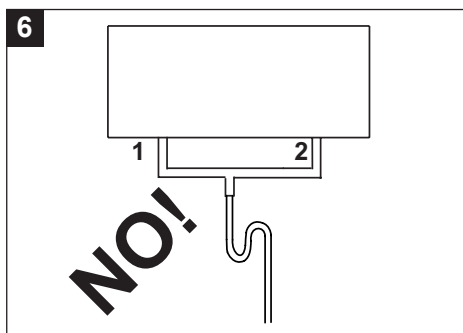
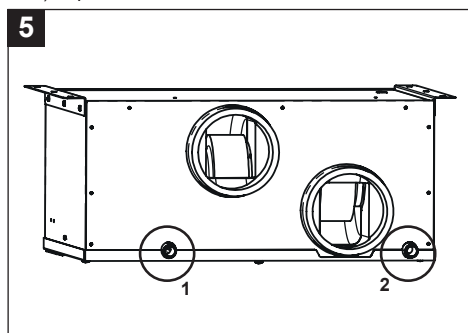
The condensate drain can be made by connecting two flexible pipes with an internal diameter of approximately 16 mm to the drains. To prevent the formation of air bubbles, it is necessary to create a siphon with the tube that comes out of the drain identified with number 1 on the appliance, as indicated in fig. 5 and 7.

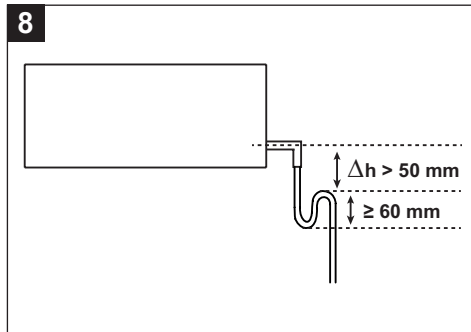
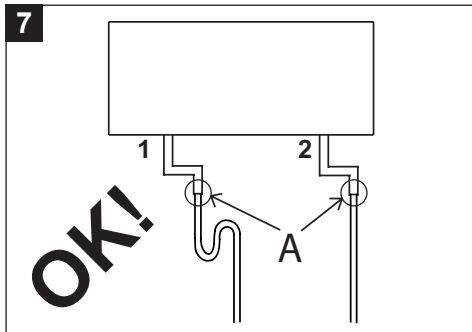
Diagonally cut the tube termination.

The configuration illustrated in figure 6 should be absolutely avoided.

NOTES:

- It is necessary to make the siphon, respecting the dimensions indicated in fig.8 otherwise the regular operation of the appliance is not guaranteed.
- Condensate can also be drained off through the waste plumbing system of the building.
- Properly seal both connection areas between the condensate discharge fitting and the siphon (Fig. 7, detail A) to prevent air infiltration into the unit.



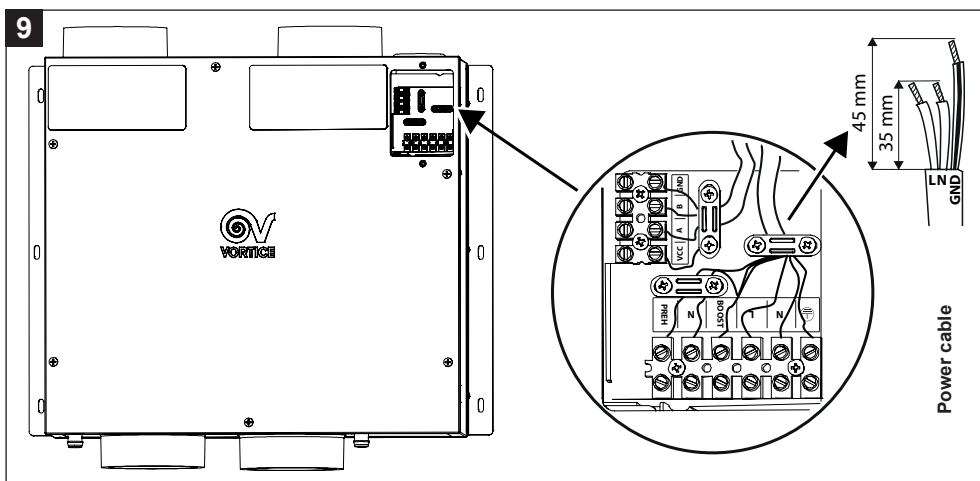


8 Electrical connections



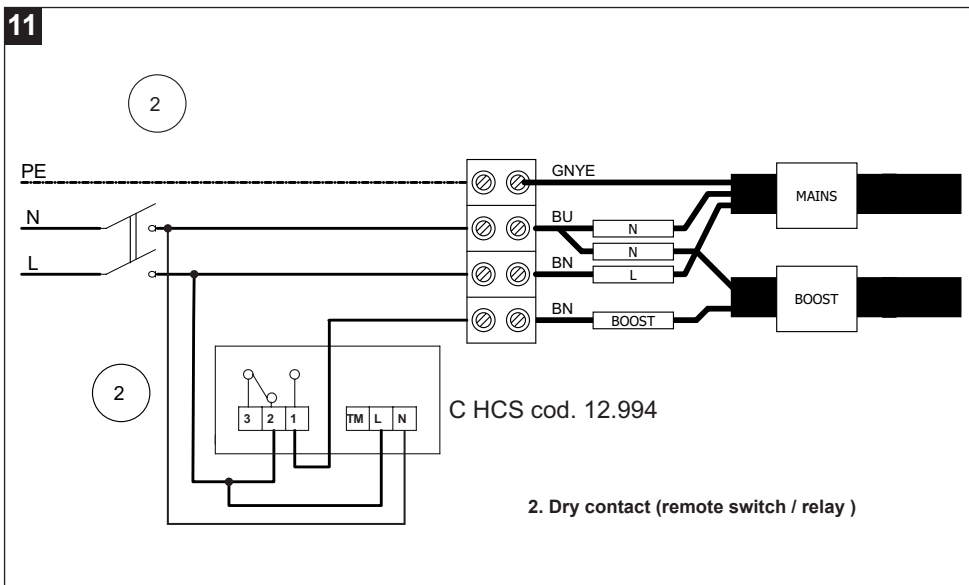
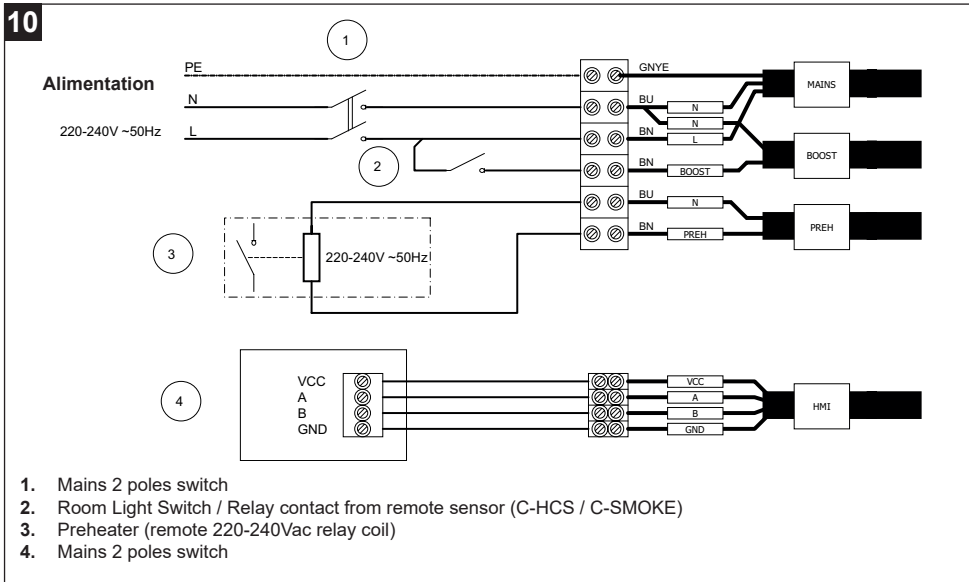
ATTENTION:

- This unit must have an earthing connection. All wiring must be compliant with the regulations in force in the country of installation.
- The unit is compatible for a single-phase 220-240 V, 50 Hz power supply.
- The unit requires a flexible power cable. Connect the cable to the terminal block and let it out through a cable gland and a cable clamp.
- The unit must be connected directly to the power supply through a special magnetothermal switch.
- To connect the HMI remote display to the machine, use cables with a section between 0.35 mm² and 2.5 mm². Max length 100 m. Given that the display connection cable should be kept separate or away from the power cables, if there are problems of electromagnetic interference from other devices installed in the environment (which produce malfunction of the display), it is recommended to use shielded cables.
- To connect the product power supply, use a cable with a minimum section of 3X0.75 mm² H05VV-F.

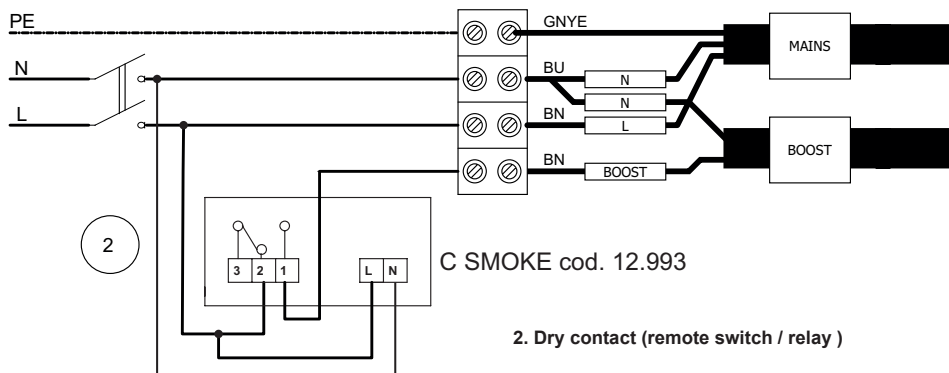


8.1 Vmax start through light control

Through contact n.2 in fig. 10, the machine can be connected to the switch of a room, which coming on it starts the machine at maximum speed. The machine start-up and shutdown delay they can be adjusted using the appropriate "ON DELAY" and "OFF DELAY" menus as described in the section "12 Operation via remote control panel".



12



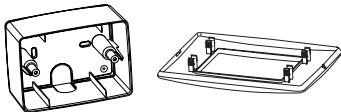

9 Operation

Product operation differs depending on the type of product you have chosen.






Model	Code	Target market	Thermodynamic bypass	Mechanic bypass	HR sensor	Weekly programming
VORT INVISIBLE MINI	12215	UK	●	-	-	-
VORT INVISIBLE MINI EVO	12216	UK	-	●	-	-
VORT INVISIBLE MINI TOP	12214	Italy	-	●	●	●
	12218	UK	-	●	●	-
	12219	Export	-	●	●	●

10 HMI installation - remote control display

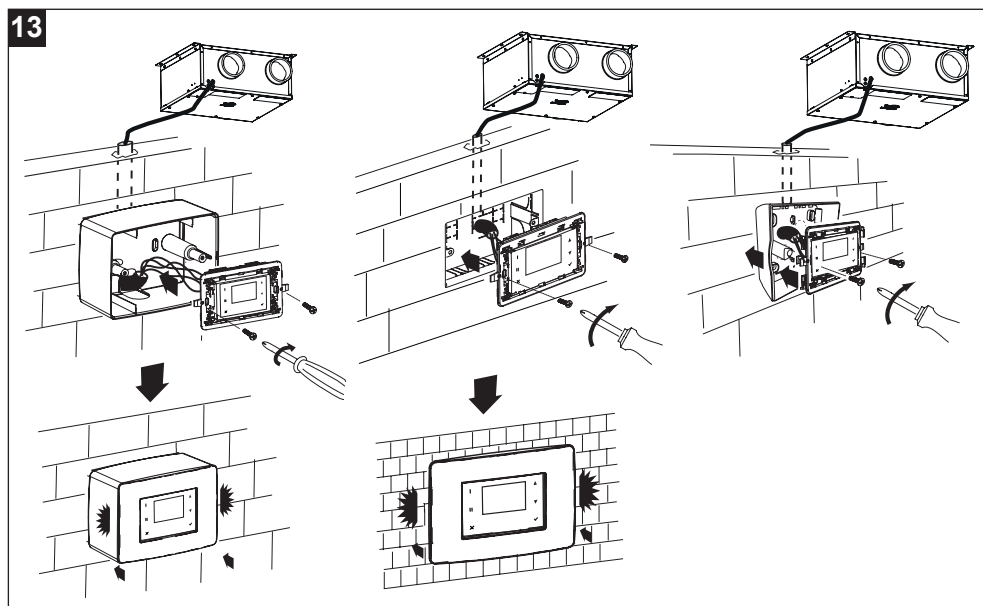
For code 12214 (VORT INVISIBLE MINI TOP) the SCP503 wall box, including the aesthetic plate, is already included in the supply. For flush mounting of the display relating to code 12214, it is possible to order the flush box (cod. 22461).

SCP503 box (with plate) already present in the supply of the cod. 12214	Accessory: built-in box (cod. 22461)
	

For the other codes in the VORT INVISIBLE MINI range, the SCP DIN installation box (code 12898) can be ordered as an accessory for wall mounting of the HMI remote display.

Accessory: SCP DIN wall box (cod. 12898)	12215	12216	12218	12219
				

- ATTENTION: The installation of the remote control panel box must be carried out only by professionally qualified personnel.



11 Use

Appliance is automatically managed by an electronic control system. Appliance can automatically choose the most suitable operating mode, depending on the outside temperature. When the appliance is switched, both motors will reduce speed for 3 minutes to allow repositioning of the bypass valve. After, motors will start up again.

NOTE: this is a normal system procedure and should not be perceived as a malfunction.

11.1 “Heat recovery” Function

This kind of function is normally activated, except when:

- automatic functions: “No-Frost”, “By-Pass” and “Post-ventilation” are active.
- the manual function: “By-Pass MAN” is active.

Stale air is expelled outside by means of an outside duct while, at the same time, renewed air is also extracted from the outside. This renewed air is heated by the combined action of the air/air heat exchange. The renewed air enters into the room by the Cleaned air duct.

11.2 “No-Frost” Function

The function is activable if 2 minutes are left after Appliance turning On. “No-Frost” function is automatically active when the Appliance check a too low External air temperature, for a certain time.

When the function “No-Frost” is active:

- the message “No-Frost” appears on the display
- the user can not change ventilation Speeds.
- “Program” function is NOT enabled.

The main scope of the “No-Frost” function is to avoid appliance damaging, because of too low temperatures. When the message “Alarm!” and “Lock!” appears on the display: it represents a “no-frost timeout”. This means that “No-Frost” procedure has proved insufficient and the appliance goes into protected mode for one hour, with the motors off, following which it will restart automatically.

NOTE: Restarting is automatic and doesn't need User presence.

11.3 “By-Pass” Function

This type of operation is automatically set and it is useful to ventilate the apartment without heat transfer. With the bypass valve open, air can be extracted directly from inside, without passing through the heat exchanger. The flow of air vented to the inside continues to pass through the heat exchanger, that will not be effective anymore. “By-Pass air Temperature” represents the “Desired air temperature”: according to this, the Appliance activates/deactivates the bypass valve. User can select the “By-Pass air Temperature” into a range of temperatures: from 15°C to 30°C. The preset “By-Pass air Temperature” value is 18°C (default).

NOTE: The “By-Pass” automatic function is deactivated when:

- External air temperature is less than 15°C;
- “No-Frost” function is active.

Example: Autumn case (sunny afternoon)

External air Temperature = 23°C;

Indoor air Temperature = 20°C;

Bypass air Temperature = 24°C.

Appliance extracts the External air (hot) without heat exchanging with the Indoor air (cold). In this way, thanks to environmental conditions, a “free heating” is provided.

Example: Spring case (morning)

External air Temperature = 16°C;

Indoor air Temperature = 20°C;

Bypass air Temperature = 18°C.

Appliance extracts the External air (cold) without heat exchanging with the Indoor air (hot). In this way, thanks to environmental conditions, a “free cooling” is provided.

11.4 “By-Pass” Valve check

A Valve check is performed:

1. When the appliance is switched on both motors will reduce speed to allow repositioning of the by-pass valve.

After, motors will start up again.

2. After 24 h from the last By-Pass valve opening Appliance forces a By-pass activating to check the effective position of the valve:
 - if the valve is opened, force the opening;
 - if the valve is closed, force the closing.

This is a normal system procedure and should not be perceived as a malfunction.

NOTES

- Every time, during By-Pass opening and closing (max 180 sec), Appliance automatically reduces fan-ventilators speeds to the 20%, in order to help the By-Pass valve movement.
- In case of Temperature sensors anomalies, By-Pass valve will stay preventively closed.
- When the function is active, the message "By-Pass" appears on the display: see "Home Page" section in the "Operation and use" paragraph.

11.5 "Post-ventilation" Function

This kind of function is automatically activate after:

- every time Pre-Heater is turned off (if Pre-Heater installed) both motor-fans active (about 3 minutes) to avoid overheating;
- every time you turn the Appliance off indoor air is extracted at the max speed (about 2 minutes) to avoid condensate presence on the heat exchanger.

This is a normal system procedure and should not be perceived as a malfunction.

11.6 "Holiday" Function

Special mode of operation: manually enabled and useful if the user leaves the room for a longer period of time.

Operation includes:

- fixed "30% less than the Minimum" speed (no other speeds, no OFF equipment);
- environment sensors not enabled (remote inputs not activated);
- bypass always closed.

When the mode is active, the message "Holiday" appears on the display: see "Home Page" in the "Operation and Use" section.

NOTE: Activating the Mode "Holiday" will be deactivate other product functionings/selections.

To re-activate other product functionings/selections, need to deactivate the Mode "Holiday" before. For more details on how to activate / deactivate the function, see "Activating / deactivating Holiday" in the "Operation with remote control display".

11.7 "By-Pass MAN" Function

Special mode of operation: manually enabled and useful if you want to force air replacement without heat recovery. The operating principle is the same as: "By-Pass" function.

NOTE: If manually enabled, the "By-Pass MAN" function will remain active for 12 h. After this period, the "By-Pass MAN" function will come back to: Not enabled.

NOTE: (In case of "By-Pass MAN" Enabled) However you can manually deactivate the function, setting "NO" on "By-Pass MAN Menu". After Deactivating, the operating principle will be come back the same of "By-Pass" function.

NOTE: In case of "No-Frost" function active, you can not manually activate the "By-Pass MAN" function.

When the function is active, the message "By-Pass" appears on the display: see section 12.2. For more details on how to activate/deactivate the function, refer to paragraph 12.3.5.

11.8 "Quiet" Function

This is a particular operating mode: if the user needs to temporarily disable the appliance's Boost operation (for example to exceed the RH relative humidity threshold set in the dedicated menu), this function is available which can be programmed by the user. In the dedicated menu, you will have to set the daily time slot in which the machine will be inhibited from switching to Boost mode in order to limit the noise within the pre-established time slot. This function is very useful during the night time slot

ENGLISH

12 Operation via remote control panel

The product "VORT INVISIBLE MINI" can be controlled through a remote display LCD HMI supplied with the product.

12.1 User interface

The following operations can be performed through the user interface:

- Temperature control
- Air speed adjustment
- Weekly air speed programming
- Alarms management.
- Setting the relative humidity (TOP models).
- etc...

The following table shows functions related to each key on the interface.

I	Function 1 recall key.
II	Function 2 recall key.
X	Key to exit from the displayed page.
▲	Key to: increase speed / move to the upper row or value.
▼	Key to: decrease speed / move to the lower row or value.
✓	Confirmation key (OK).

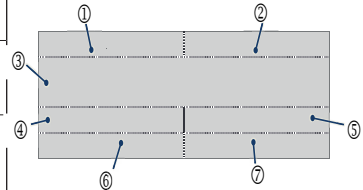
I	Display	▲
II		▼
X		✓

Key and display backlighting remains active for about two minutes after the last key is pressed. When backlighting is off, you can switch it back on again without activating any function by pressing any key.

12.2 Pagina “Home”

Upon start-up, the display shows Vortice logo for about 10 seconds, then it goes to the “HOME” page. This page allows you to view various data useful for controlling equipment. The data and information that the page can display are indicated in the figure and table below.

1	Normally blank display area.
2	<ul style="list-style-type: none"> - “Bypass,” when the relative function is activated. - “No-Frost,” when the relative function is activated.
3	<p>Equipment operating status:</p> <ul style="list-style-type: none"> - Speed: “MIN”, “MAX”. <p>In the event of an alarm:</p> <ul style="list-style-type: none"> - with appliance blocked: “Alarm!” message alternated with “Block!”; - without the unit lock: “Alarm!” Message. <p>See “Alarms” in the “Operation and Use” section.</p> <p>“Holiday,” when the relative function is activated.</p>
4	<ul style="list-style-type: none"> - “Ext’ Value of the outside air temperature (Example: Ext +5°C) after pushing the button [I].
5	<ul style="list-style-type: none"> - “Int’ Value of the indoor air temperature (Example: Ext +22°C) after pushing the button [II]. - “Progr.” if weekly programming is active, after the key is pressed [I] (NON UK market). - The message “Man.” will appear if during weekly programming the user manually varies the speed.
6	<ul style="list-style-type: none"> - “Exh” value of the exhaust air temperature (for example Exh + 18°C) after the key is pressed [II]. - Date (for example 03/04/2023), after the key is pressed [I]
7	<ul style="list-style-type: none"> - “Sup” value of the supply air temperature after the key is pressed [II] - Time of day (i.e. 12:30), after the key is pressed [I]. - % show the set value of the hr, turns black when the value threshold has been exceeded.



The following picture is showing the different display areas

MIN	
Ext + 5°C	Int + 18°C
Exh + 18°C	Sup + 18°C

MAX	
04/06/19	Man 08:31

MAX	
HR% 70	

ENGLISH

12.3 Equipment start-up/shut-down

To start the equipment: Connect the machine to the main power supply.

CAUTION: It is possible to turn completely off the machine only by disconnecting it from the mains.

12.3.1 Operating mode selection

To increase speed: from the "HOME" page, press the [▲] key until one of the following texts is displayed: "Min", "Max". Each text displayed corresponds to a different speed of the fans and consequently one different scope.

To reduce the speed: from the "HOME" page, press the [▼] key, until the following text is displayed: "Min".

MIN	
Ext + 5°C	Int + 18°C
Ext + 18°C	Sup + 18°C

MAX	
	Man
04/06/19	08:31

12.3.2 "Main menu" page

Press the [✓], button from the "HOME" page to go to the "Main Menu" page.

From this new screen you can manage:

- Operations menu (allows some devices or some functions to be activated);
- Alarms (enables verification and management of any alarms);
- Configuration (enables date and time configuration);
- Info (enables viewing of software versions).

Use the [▲] and [▼]. keys to move from one line to another. The selected line is highlighted in black.

Use the [✓]: key to go to the highlighted page.

Use the [X]: key: To exit from a page without saving.

MAIN MENU
USE MENU
ALARM
SETUP
INFO

MAIN MENU
USE MENU
ALARM
SETUP
INFO



After 2 minutes with no keys being pressed, the display returns to the "Home" page without saving any changes.

12.3.3 "USE MENU" page

To access the User menu or the Installer menu: from the "Main menu," select the line "Operations menu" and press the [✓] key. You will be asked to enter a password to access the User menu or Installer menu.

The credentials for access to them are as follows:

- 13 "USER" menu
- 23 "INSTALL" menu

12.3.4 User "Operations menu" page

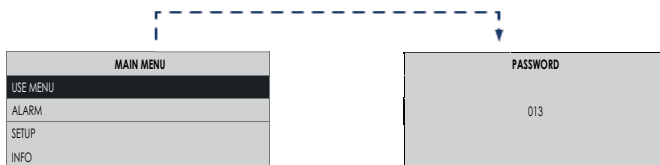
Select the user "Operations menu", entering the password as shown in the figure.

From this new page you can manage:

- Bypass MAN: 12 h forced activation of the function: "By-pass";
- Activation of the "Holiday" mode: appliance always active at 30% less than the minimum speed.
- Prog. Activation: activation of the programmed operation in the scheduled time slots.
- Auto: activation of automatic operation based on the relative humidity rate.

Use keys [▲] and [▼] to move from one row to another. The selected row is highlighted in negative contrast.

Use the key [✓] to activate or deactivate the function or device highlighted.

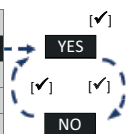


Use the [X] key to exit from the current screen and return to the previous screen without saving.



Warning: after 2 minutes with no keys being pressed, the display returns to the “Home” page without saving any changes.

USE MENU	
BYPASS MAN	NO
HOLIDAY	NO
ACT PROG	NO
AUTO	NO



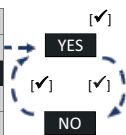
Activating/deactivating “Bypass Man” function

Use keys [▲] and [▼] to select “BYPASS MAN”:

Press the [✓] key:

- To activate choose [YES].
- To deactivate choose [NO].

USE MENU	
BYPASS MAN	NO
HOLIDAY	NO
ACT PROG	NO
AUTO	NO

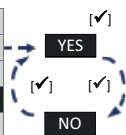


Activating / deactivating “Holiday” Function

Use keys [▲] and [▼] to select “HOLIDAY”: push the key [✓]:

- To activate choose [YES].
- To deactivate choose [NO].

USE MENU	
BYPASS MAN	NO
HOLIDAY	NO
ACT PROG	NO
AUTO	NO



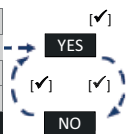
Activate/Deactivate Active programming mode (not for UK market)

Use the [▲] and [▼] keys to select “ACT. PROG.”:

Press the [✓] key:

- To activate choose [YES].
- To deactivate choose [NO].

USE MENU	
BYPASS MAN	NO
HOLIDAY	NO
ACT PROG	NO
AUTO	NO



Activate/Deactivate Automatic mode (only for INVISIBLE TOP models)

Used to activate the automatic speed management according to the relative humidity rate.

Use the [▲] and [▼] keys to select “AUTO”:

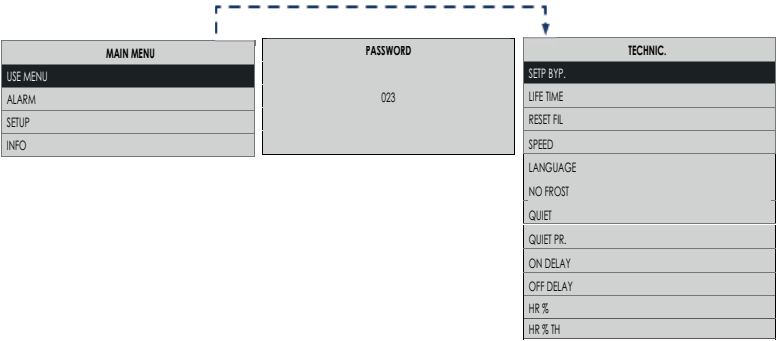
Press the [✓] key:

- select [YES] to activate;
- To deactivate choose [NO].

ENGLISH

12.3.5 Installer “Operations menu” page

Enter the password as shown in the figure to access the installer / operations menu.



From this new page you can manage:

Setp Byp.
“Bypass” mode activates based on the outside temperature: “Setp Byp” is selectable in a range between 15°C and 30°C .

SETP BYP.

018

▲

▼

Lifetime
To set the filter duration time, which can vary between 3, 6 and 12 months. (See paragraph 12.3.8):

LIFETIME

3

▲

▼

Reset Fil
In case of Filters replacing, you need to reset the Filters Timer manually:

- select [YES] to reset.
- select [NO] to not reset.

RESET FIL

YES

▲

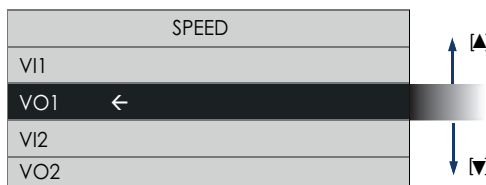
▼

Speed

From "Installer menu" page, selecting "Speed", you can join to "Setting speed". Here, you can set motorfan speeds:

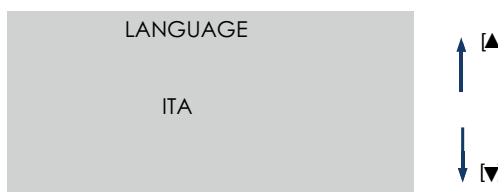
- Clean air outlet inside the room (VI)
- Stale air outlet to outside (VO).

For more details on setting "Speed", refer to section 12.3.6.



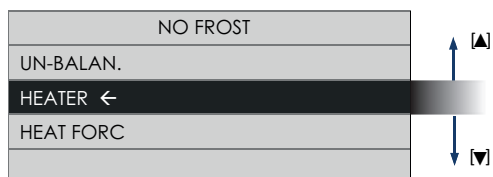
Language

Language selection



No Frost

From "INSTALL" menu, selecting "NO FROST", you can enter the "NO FROST" setting menu. From this new page, it is now possible to choose the desired function during the "NO FROST" process.

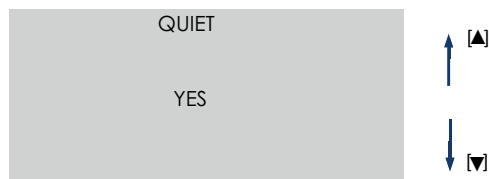


Quiet mode

Lets you activate QUIET mode.

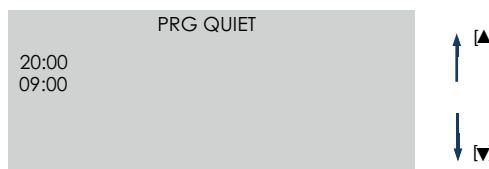
To activate QUIET mode,

- To activate QUIET mode, select [YES].
- To switch off QUIET mode, select [NO].



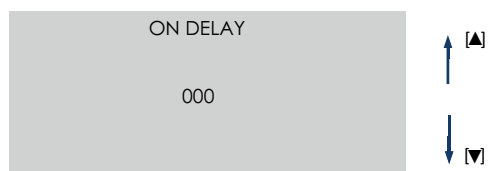
Prg Quiet

Allows you to select the time slot in which the QUIET mode will be active once activated in the QUIET menu.



On delay

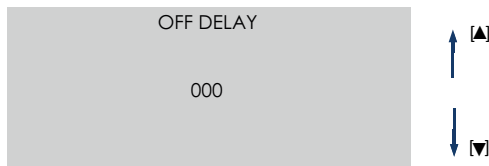
It is possible to select the delay times for starting the machine at Vmax using the light switch in a room. (0 or 2 min), contact n2 fig.10.



ENGLISH

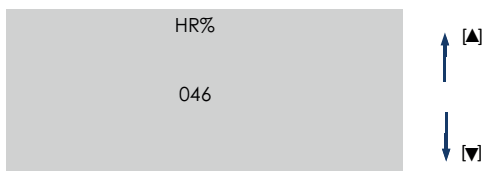
Off delay

It is possible to select the delay times for switching off the machine at Vmax using the light switch on button in a room (between 0 and 20 min in 1 min steps) contact n°2 fig.10.



HR %

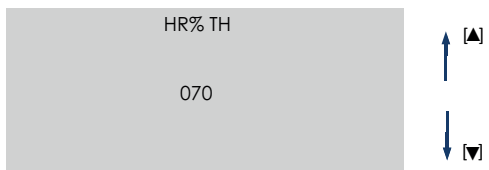
Lets you only display the relative humidity of the environment. (TOP models).



HR % th

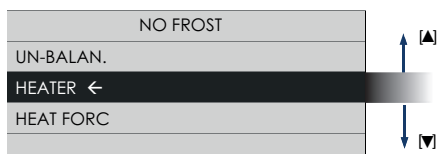
This function lets you set the relative humidity threshold values, after which the machine automatically increases motor speed.

NOTE: This appliance is not to be regarded as a dehumidifier! Once the set RH relative humidity threshold is exceeded, the machine will automatically increase the speed in order to increase the air exchange until the RH value of the threshold is lowered to the set threshold. The UP or DW keys can be used to modify the threshold values, between the 4 predetermined values 60, 70, 80 and 90% (TOP models).



“No Frost Menu” page

From “Installer menu” page, you can select “No Frost”, in order to join to “Setting No Frost”. Pressing the [✓] key it shows:



Pre-set values	
UN-BALAN.	YES (enabled)
HEATER	NO (disabled)

From here, you can select the “No Frost” functions that you wish to Activate/Deactivate:

Un-Balan.:

When the air external temperature is too cold, if the function is Enabled, the Pre-Heater starts to run, for a certain time. Appliance will try to prevent the formation of ice on the heat exchanger by exploiting the electrical resistance installed on the extraction channel from the outside.

Heater

(only in case of installing the Pre-Heater optional) when the air external temperature is too cold, if the function is Enabled, the Pre-Heater starts to run, for a certain time. Appliance will try to prevent the formation of ice on the heat exchanger by exploiting the electrical resistance installed on the extraction channel from the outside.



In case of “Heater” function NOT Enabled, the Pre-Heater will not work, also if correctly wired.



In case the Pre-Heater is NOT installed, keeping “Heater” Enabled, will produce abnormalities on “No Frost” function.

Heat Forc:

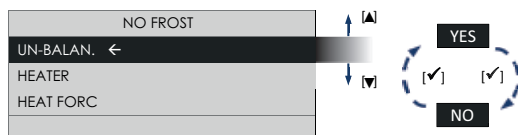
(only in case of installing the optional Pre-Heater)
when installing the Pre-Heater, a “working test” is possible forcing Pre-Heater activation. In case of “Heat Forc” Enabled, the Pre-Heater will run for 15 seconds; So after that, the function “Heat Forc” will come back “NOT Enabled”.

Activate/deactivate “Un-balan.” function

Use keys [▲] and [▼] in order to select “UN-BALAN.”:

Press the[✓]key:

- To activate choose [YES].
- To deactivate choose [NO].

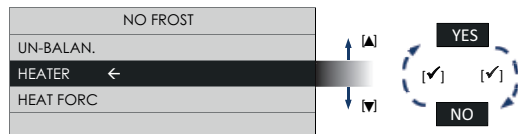


Activating / deactivating “Heater” Function

Use keys [▲] and [▼] in order to select “HEATER”:

Press the[✓]key:

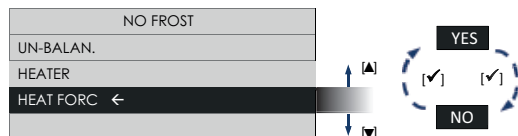
- To activate choose [YES].
- To deactivate choose [NO].



Activating / deactivating “Heat Forc” Function

Activating / deactivating “Heat Forc” Function
Press the[✓]key:

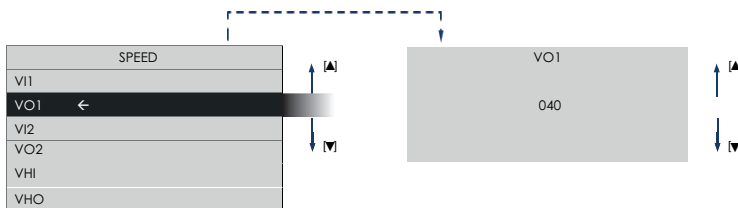
- To activate choose [YES].
- To deactivate choose [NO].



ENGLISH

12.3.6 “Setting speed Menu” Page

From “Installer menu” page, you can select “Speed”, in order to join to “Setting speed”. Pressing the [✓] key will display:



Motor speed can be adjusted depending on the system flow rates, selecting:

VI = Fresh air intake from outside

VI1 = min speed 1

VI2 = max speed 2

VO = Stale air outlet to outside

VO1 = min speed 1

VO2 = min speed 2

VHI = Holiday mode speed for the delivery of clean air into the house

VHO = Holiday mode speed for the delivery of stale air to the outside

12.3.7 “Alarms” page

Access the “ALARM” page only if the machine detects one of the problems detailed below:

- Pre-alarm: Filters checking without blocking the machine;
- Alarm: Filters replacing without blocking the machine;
- Alarm: No Frost - Wait one hour occurs with the machine lock;
- Alarm: Ext probe damaged without blocking the machine (No Frost, By-pass: not enabled);
- Alarm: Int probe damaged without blocking the machine (“By-pass” not enabled);
- Alarm: Exh probe damaged without blocking the machine (No Frost not enabled);
- Alarm: Pipe occurs with the machine lock;

Alarm with machine lock: On the “HOME” page, are alternated shown the words “Alarm!” And “Block!”.

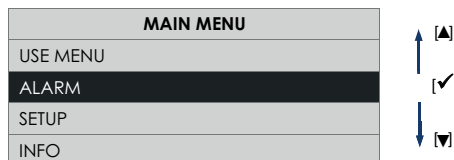
Alarm without blocking the machine: on the “HOME” page, the message “Alarm!” Appears.

In the presence of alarms: select the “ALARM” line on the “MAIN MENU” page and press the [✓] key .

A new descriptive page shows the specific alarm text and troubleshooting instructions.



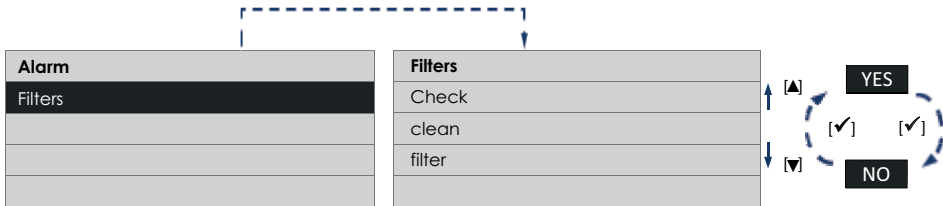
After 2 minutes with no keys being pressed, the display returns to the “Home” page without saving any changes.



12.3.8 Pre-alarm: “Filters checking”

After the preset time has elapsed, “Alarm” appears in “HOME” and the note “Check clean filter” in the “Alarms”

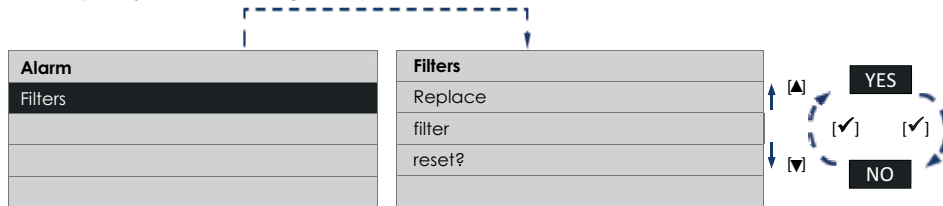
page. To replace the filters, follow the instructions in section “13 Maintenance and cleaning”. Press the [✓] key and the following will appear:



12.3.9 Alarm: “Filters to be replace”

After the preset period of time, “Alarm!” appears in “HOME” and on the “Alarms” page the note: “Replace reset”. To replace the filters, follow the instructions in section “13 Maintenance and cleaning”.

Press the [✓] key and the following will appear:

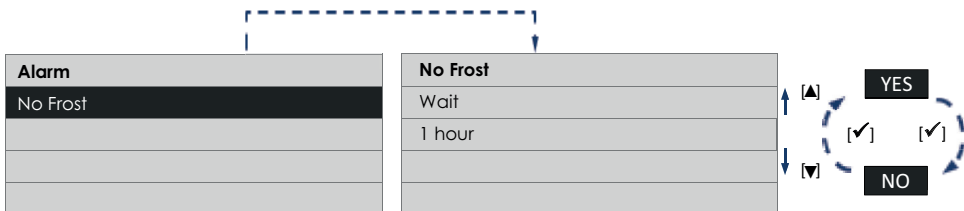


NOTE : When the filters timer is reset (See section “12.3.5 Installer “Operations menu” page”), it is resetted also the counter.

12.3.10 Alarm: No Frost - Wait one hour

The device is provided with temperature probes which measure air temperature.

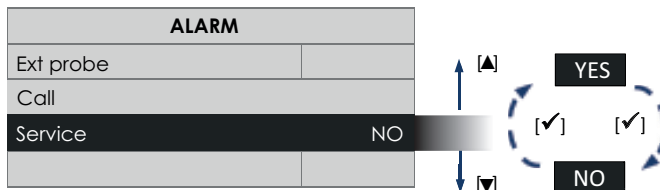
If temperatures are too low, “No Frost”, “Alarm!” “Block!” appear on the “HOME” page and the following note appears on the “Alarm” page: “Wait 1 hour”. Press the [✓] key and the following will appear:



12.3.11 Alarm: “Ext Probe fault”

The equipment is equipped with an External temperature probe that measures the air temperature extracted from outside. The Probe Fault reports in “HOME” the message “Alarm!” “Lock!” and in the “Alarms” page the note “Ext probe Call Service”. Pressing the [✓] key will display:

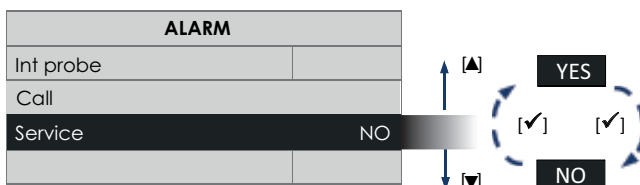
ENGLISH



For the intervention of technical personnel, it is necessary to call the Assistance service.

12.3.12 Alarm: "Int Probe fault"

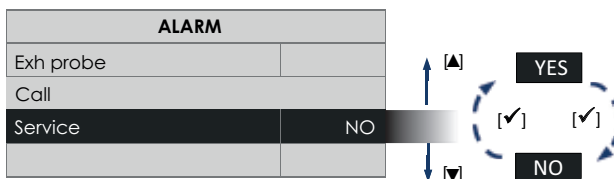
The equipment is equipped with temperature probes that measure the air temperatures. In case of too low temperatures, No-frost alarm reports in "HOME" the message "Alarm!" "Lock!" and in the "Alarms" page the note "Wait 1 hour". Pressing the [✓] key will display:



Call Customer service to request assistance from technical personnel.

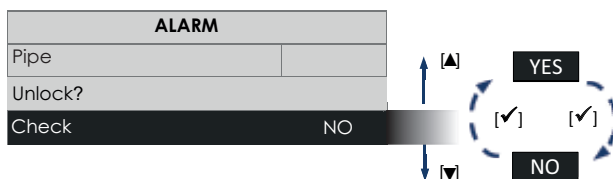
12.3.13 Alarm: "Exh Probe fault"

The equipment is equipped with an Exhaust temperature probe that measures the air temperature extracted from the outside. The Probe Fault reports in "HOME" the message "Alarm!" "Lock!" and in the "Alarms" page the note "Exh probe Call Service". Pressing the [✓] key will display:



12.3.14 Alarm: "Pipe"

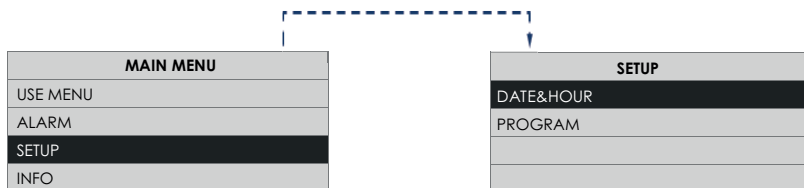
This alarm indicates that the water in the tray has reached the threshold level and the drain hose may be blocked. The Probe Fault reports in "HOME" the message "Alarm!" and in the "Alarms" page the **note**: "Pipe unlock check". Pressing the key [✓] key will display:



Finally, after checking the drain pipe, to reset the alarm, select the [YES] key and press the [✓] key again. If the alarm reappears after resetting, it is necessary to call the Service.

12.3.15 “SETUP” page

Select the “SETUP” menu and press the [✓] key on the “MAIN MENU” page.

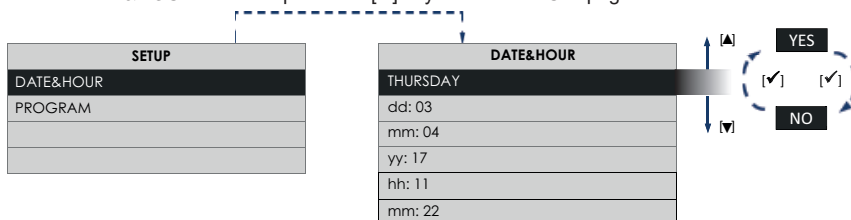


From this new page you can manage:

- “Date & Time” page
- “Time programming” page

12.3.16 DATE&HOUR page

- To set the day of the week and the current time
- Select the “DATE&HOUR” line and press the [✓] key on the “SETUP” page.



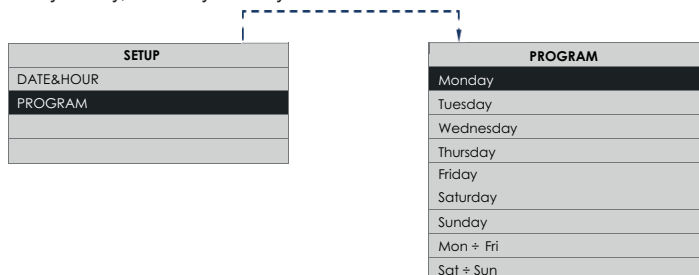
Use the keys [▲] and [▼] to move within the line. Press the key [✓] to enable editing of the selected item. Press key [✓] again to exit from the edit page and return to the “Date & Time” page. Press the [X] key to return to the “Configuration” page.

12.3.17 “Time programming” page (not in UK market)

Allows you to set the fan speeds (Vmin and Vmax) for six different time slots.

From the “Configuration” page, choose the “Prg chrono” line and press the [✓] key, you enter a new page as highlighted in the following figures.

Pressing the [▲] or [▼] keys several times scrolls every day from Monday to Sunday up to the predefined intervals Monday-Friday, Saturday-Sunday.



ENGLISH

Press the [✓] key to confirm:



The “prg crono” function allows to set up to 6 different time bands. Press the buttons [▲] o [▼] more times to cycle through the time intervals.

NOTE

In the not specified time intervals the machine will work at the speed set in the HOME page.

NOTE

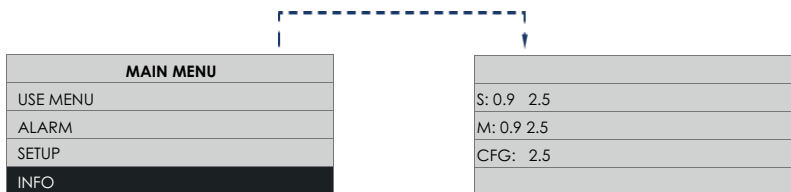
The speed can still be adjusted in the HOME page also during the time intervals. In this case the word “Man” will appear in the “HOME” page.

12.3.18 “Info” page

Select the “Info” line and press the [✓] key on the “Main menu” page.

The “Info” page contains the following information from top to bottom:

- User interface firmware version;
- Electronic control board firmware version.



13 Maintenance and cleaning

- **WARNING:** Internal cleaning of the product must only be carried out by qualified personnel.

IMPORTANT: Before commencing any servicing or component replacement. Ensure the electrical supply to the unit is isolated.

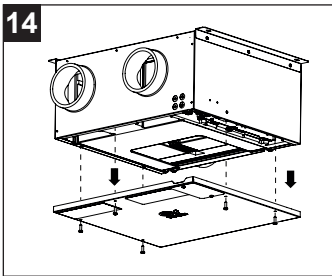
IMPORTANT: This unit is suspended and care **MUST** be taken when removing the access panel making sure no components fall out. All filters must be cleaned first before commencing servicing and maintenance.

Remove the magnetic covers and remove the filters. See Section "Cleaning the filter".

The supply and extract fans and heat exchanger need cleaning annually.

13.1 Gaining access to the unit

To remove the cover panel release the 6 screws securing the the cover plate access panel and then remove it. See fig.14.



13.2 Heat exchanger, condense tray removal and servicing.

(fig.15)

Disconnect the flexible pipe from the condense adapter, be aware the condense pipe may contain water.

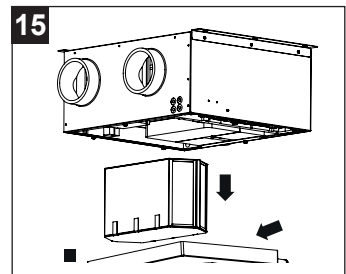
First remove the pan by pulling it downwards and sliding the drain fittings out of the holes, then remove the exchange pack by pulling it downwards. Take care not to damage the air passages of the heat exchanger. See figure 16.

Be aware, the condensate tray may contain water.

Check all the air passages in the heat exchanger are free from obstruction. If not clean by vacuuming or with a light brush.

NOTE: DO NOT USE WATER OR OTHER FLUIDS.

NOTE: Under no circumstance must any sharp implements which are likely to distort or puncture the heat exchanger air passage walls, be used. Wipe clean the condensate tray.



If the machine can no longer drain water, check if the drain hoses are blocked. In this case, use a container and place it under the hoses connection, then remove the hoses from the connection to allow the water to flow out. Always check by removing the tray that all the water has been removed.

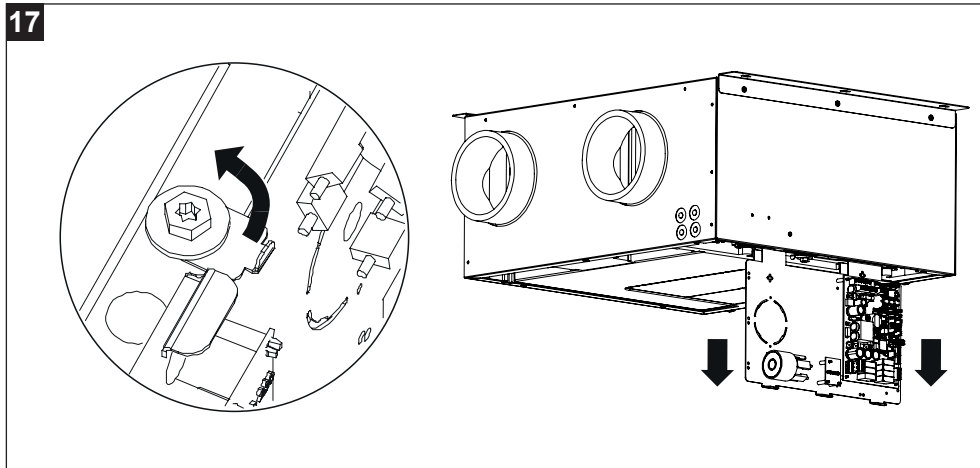
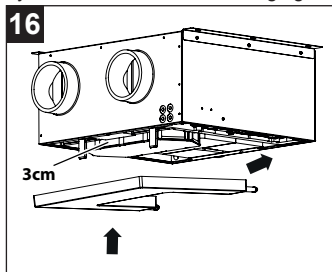
ENGLISH

To re-insert the condensate collection tray, first raise the exchange pack by about 3 cm to avoid damaging the seals.

Then insert the fittings into the holes and push the tray and the exchange pack to the bottom. (fig.16).

13.3 Replacement of the electronic board

To replace the electronic board, it is possible to remove it from the machine by turning the plate tab and pulling the card towards you. (fig.17).



13.4 Maintenance (recommended)

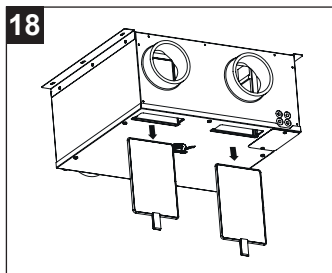
Remove all dust etc. from both the impellor and the motor, taking care not to disturb the balance of the fan. Refit or replacement is in reverse order.

13.5 Filter cleaning (fig. 18)

The machine is equipped with a "Filter cleaning signal", indicated by an alarm on the display supplied with the machine. In the presence of this alarm, the machine signals that the filters are dirty or to be replaced.

Remove the filters, first removing the magnetic covers, cleaning them or replacing them and putting them back in the machine. Then reset the filter cleaning alarm through the special alarm menu in the main menu of the control panel display.

Remove all debris with a soft brush or Hoover.



The instructions are also available in electronic format at the following address:

<https://www.vortice.it/it/ventilazione-residenziale/recupero-calore/controsoffitto/12214>

14 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.
-------	-------

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.



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。

VORTICE GROUP COMPANIES

VORTICE S.p.A.
Strada Cerca, 2 - frazione di Zoate
20067 - Tribiano (MI)
Tel. +39 02-90.69.91
ITALY
vortice.com
postvendita@vortice-italy.com

VORTICE INDUSTRIAL Srl
Via B. Brugnoli, 3
37063 - Isola della Scala (VR)
Tel. +39 045 6631042
ITALY
vorticeindustrial.com
info@vorticeindustrial.com

VORTICE VENTILATION SYSTEM (CHANGZHOU) CO.LTD
Building 19, No.388 West Huanghe Road, Xinbei District,
Changzhou, Jiangsu Province CAP:213000
CHINA
vortice-china.com
vortice@vortice-china.com

VORTICE LIMITED
Beeches House-Eastern Avenue
Burton on Trent - DE 13 0BB
Tel. +44 1283-49.29.49
UNITED KINGDOM
vortice.ltd.uk
sales@vortice.ltd.uk

VORTICE LATAM S.A.
Bodega #6
Zona Franca BES Alajuela - Alajuela 20101 Tel.
(+506) 2201 6934
COSTA RICA
vortice-latam.com
info@vortice-latam.com

CASALS VENTILACIÓN INDUSTRIAL IND., S.L.
Ctra. Camprodon, s/n
17860 - Sant Joan de les Abadesses (Girona)
SPAIN
casals.com
ventilacion@casals.com