

Installation and Operation Manual VENTOXX HARMONY Heat Recovery Ventilation System with Humidity Sensor



CONTENTS

1. Introduction.....	3
1.1. Responsibility.....	3
1.2. Safety Instructions.....	4
2. Ventilation unit.....	4
2.1. Purpose of the unit.....	4
2.2. Scope of delivery	5
2.3. Technical specifications.....	6
3. Preparation for installation.....	7
3.1. Installation of the units.....	7
3.2. General guidelines for selecting the installation location of the recuperator.....	7
3.3. Tools required for installation.....	8
3.4. Safety during operation.....	8
4. Installation of the Ventoxx Harmony uni.....	8
4.1. Creating a hole in the wall.....	8
4.2. Step-by-step installation.....	9
5. Electrical connection of the unit.....	15
5.1. General information.....	15
5.2. Connection of paired units (leader-follower).....	15
5.3. Installation of the inner front panel.....	16
6. Operation of the recuperator.....	19
6.1. Description of the operating modes.....	19
6.2. Automatic ventilation	20
6.3. Description of the indicator symbols.....	21
6.4. Remote control.....	22
6.5. Operating modes of the humidity sensor.....	21
6.6. Operation of the Leader-Follower set in humidity sensor mode.....	23
7. Maintenance of the device.....	23
7.1. Cleaning and replacing the air filter.....	24
7.2. Cleaning the heat exchanger and other components.....	24
7.3. Troubleshooting and error correction.....	26
8. Quality and Warranty.....	27
9. WARRANTY CAR	28

1. Introduction

Welcome and Congratulations on Your Purchase!

You have just acquired a high-quality heat recovery unit by Ventoxx™. If you've only just unpacked your ventilation device, you're now holding in your hands the result of our pride and years of dedicated work. Thousands of hours spent by our engineers on continuous improvement, new developments, and product prototyping; hundreds of laboratory measurements and tests; and countless creative sessions aimed at delivering the best user experience — all of this is built into your Ventoxx™ product.

Our goal is to keep providing you with the best product and customer service possible, and we would be grateful for your feedback.

If you have any questions about our products or your user experience, please don't hesitate to contact us via email: info@ventoxx.ua

1.1. Responsibility

This manual is intended for the installation and operation of the Ventoxx Harmony ventilation unit. It is based on information current as of February 1, 2025. The contents of this manual may be updated or supplemented. The most up-to-date version is always available for free download in PDF format at the official website: <https://ventoxx.ua>.

The installation of the unit into a wall and connection to the electrical network must be carried out only by qualified specialists who are familiar with safety procedures and authorized to perform electrical work. Before installing and connecting the unit, it is essential to read all sections of this manual carefully.

After installation and activation of the unit, and once its operation has been tested and the user has been introduced to the basic operating principles, this manual must be handed over to the owner of the ventilation device or their authorized representative, who will be responsible for the correct use of the unit within the premises.

Improper use of the device may lead to damage and/or pose a risk of injury. The manufacturer is not liable for any incidents resulting from unqualified installation or incorrect operation of the unit, including but not limited to the following:

- violation of safety regulations or failure to follow the installation instructions;
- lack of proper maintenance as outlined in this manual;
- use of materials, spare parts, or components not authorized by Ventoxx™.

1.2. Safety Instructions

The following safety symbols are used in this manual:



Please read this manual carefully. It contains important information on proper installation and connection, warnings about potential hazards, and guidelines for the safe use of the Ventoxx Harmony unit.



Warning: There is a high risk of injury or property damage and/or increased caution is required during operation.



Note: There is a risk of installation errors that may cause damage and/or lead to malfunction of the device.



Caution: Risk of electric shock. Connection to the power supply must be carried out by qualified professionals only.

2. Ventilation unit

2.1. Purpose of the unit

The Ventoxx Harmony ventilation unit is a decentralized ventilation system with heat recovery (hereinafter referred to as the recuperator). Recuperators are designed to provide autonomous air exchange in indoor spaces while preserving heat through the heat recovery process.

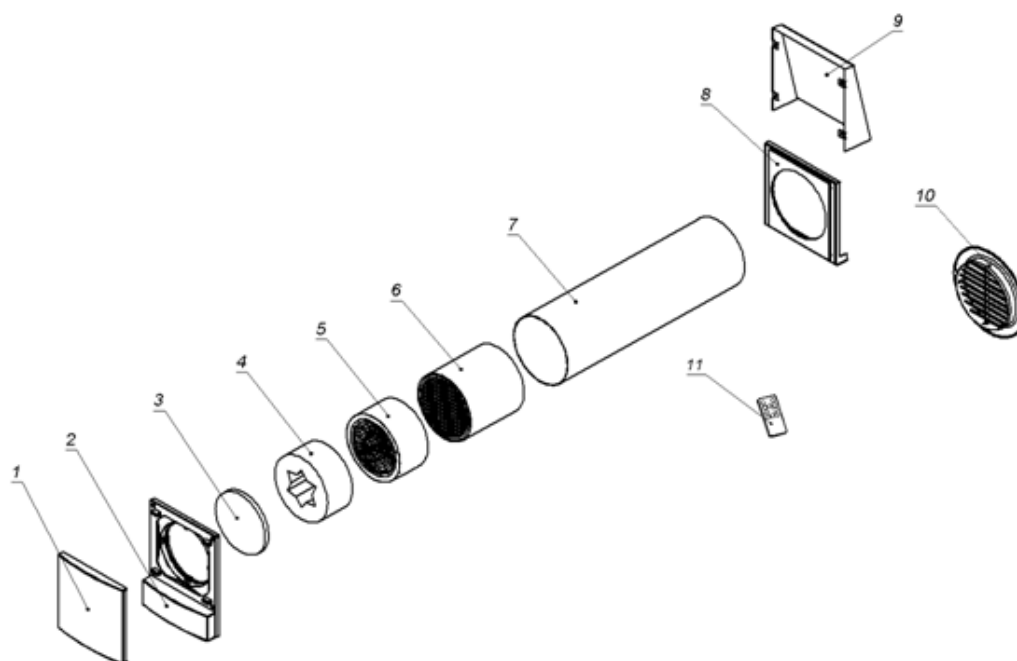
The recuperator can be installed in any residential or public building where people are present and where no special temperature or climate conditions are required.

The unit is equipped with a ceramic heat exchanger that stores heat from the extracted indoor air and transfers that heat to the fresh air coming in from outside.

The recuperator is installed within the wall. The air duct that houses the unit has a standard length of 0.5 or 0.75 meters and must be trimmed to match the wall thickness before installation.

2.2 Scope of delivery

The Ventoxx Harmony recuperator consists of the following components:



- 1 – movable part of the inner front panel
- 2 – mounting plate with indicator for current operating mode
- 3 – G3 class air filter
- 4 – Ventoxx Star sound-absorbing element *
- 5 – cartridge with reversible fan
- 6 – ceramic heat accumulator with insulation
- 7 – air duct
- 8 – mounting plate for external metal cover **
- 9 – external metal hood **
- 10 – plastic grille ***
- 11 – remote control unit (RC)

Also included in the package:

- 4 wall plugs (6×40 mm) and 4 screws (4×50 mm) – for mounting the plate with the current mode indicator
- 4 wall plugs (8×50 mm) and 4 screws (5×50 mm) – for mounting the plate of the external metal cover **
- 2 wall plugs (6×40 mm) and 2 screws (3×50 mm) – for attaching the plastic grille ***

* optional component, not included in the basic configuration

** depending on the selected model, the unit may be supplied with a plastic grille instead of a metal cover

After unpacking the purchased product, make sure that all components of the recuperator corresponding to the model you ordered are present (see illustration above).

In addition, each box must include: the installation and operation manual with the warranty card.



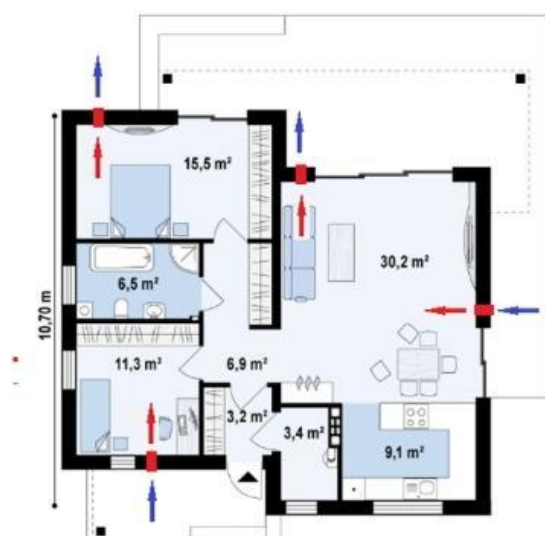
Handle the recuperator with care during unpacking and installation — avoid impacts or drops, as they may damage the ceramic heat accumulator.

2.3. Technical specifications of the Ventoxx Harmony unit with humidity sensor

Number of operating modes	11
Number of fan speeds	3
Recuperator airflow capacity, m ³ /h	17–60
Heat recovery efficiency, %	74–94
Noise level at 1 m distance, dB	22–33
Voltage, V	230
Power consumption, Wh	3 -8,6
Type of heat exchanger	ceramic heat accumulator (Austria)
Wall opening diameter, mm	160–180
Operating temperature range, °C	–20... +50
Dimensions:	
Air duct, mm	∅ 152
Inner front panel, mm	248 × 186
External metal hood, mm	210 × 204
External grille, mm	∅ 200
Installation method	horizontal installation in the external wall with an inclination angle of 1–3° towards the outside.
Filter	G3, washable
Energy efficiency class	A
Maintenance	Filter and heat exchanger cleaning – every 3 months. Filter replacement – every 2 years.

3. Preparation for installation

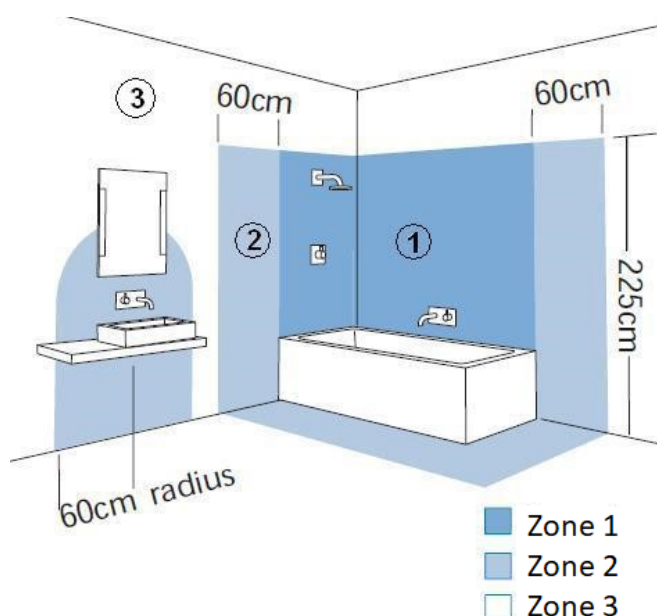
3.1. Installation of the units



The Ventoxx Harmony recuperator is a stationary general ventilation system. Therefore, its overall performance and efficiency depend on the correct placement of the units within the premises, as well as on the properly executed installation and correct use in accordance with the guidelines provided in this manual.

Example of the recommended placement diagram for recuperators in a residential space.

For the installation of the recuperator in bathrooms, the room is divided into zones.



Zone 1, 2 – it is forbidden to install the recuperator due to the risk of water flow entering the device.

Zone 3 – installation of the recuperator is possible. It is recommended to install the recuperator as close to the ceiling as possible, but no less than 25 cm from the ceiling and as far as possible from the bathtub, shower cabin, or washbasin.

3.2. General guidelines for selecting the installation location of the recuperator

- Installation height: For optimal air flow distribution, the recuperators should be installed in the upper segment of the wall at a distance of at least 150 mm from the ceiling.
- Distance between units: Recuperators should be placed at least 2 meters apart.
- Distance from doors: The recuperator should be positioned as far as possible from doors to achieve maximum ventilation efficiency.

- Unobstructed access to the unit: For easier maintenance, ensure that the selected installation location allows for easy removal of the inner front panel.
- Installation above beds: It is not recommended to install the unit directly above the bed, as the occupants may feel a slight air flow movement.

3.3. Tools required for installation

The following tools are required for installation:

- Spirit level
- Utility knife
- If drilling holes – hammer drill with diamond-coated core drill
- Installation foam
- Flat screwdriver (–) 3 mm
- Wire stripping tool (for cable installation)

For installation, you will also need the following fasteners: anchors, wall plugs, screws — selected according to your facade system, type of insulation, structure, and wall material.

3.4. Safety during operation

During the installation of the recuperator, protective equipment must be used::

- Protective glasses
- Work gloves
- Hearing protection
- Head protection
- Special work footwear

4. Installation of the Ventoxx Harmony unit

4.1. Creating a hole in the wall

To install the unit, you must first create a round hole of the required diameter in the wall. In rooms with finished repairs, we recommend always drilling holes using diamond drilling technology. Ensure that the drill bit is designed for drilling holes with a diameter of 160–180 mm. The hole in the wall should be made at an angle of 1-3° towards the outside.

Before making a hole in the wall, ensure that:



- No one is at risk of injury during drilling or from falling debris from the wall being drilled..
- Objects and structures will not be damaged by falling wall pieces during drilling.
- There are no wires or pipes in the drilling area.
- The creation of the hole will not affect the load-bearing function of the wall.

- The creation of the hole will not affect the building's physics, particularly by causing condensation or moisture accumulation in the wall structure.

4.2. Step-by-step installation

Step 1:

After selecting the installation location and creating the mounting hole in the wall, run the 220 V power supply cable to the hole.

Step 2:

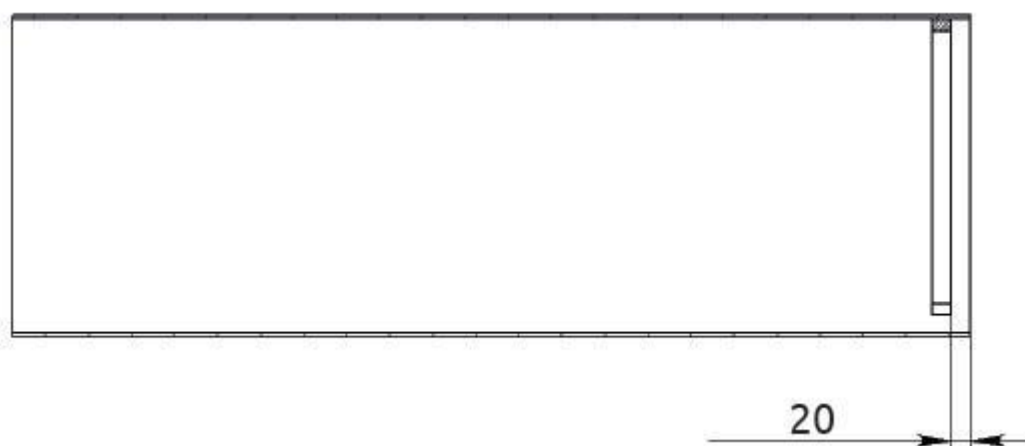
Measure the wall thickness. If you have purchased a configuration with an external metal cover (positions 8 and 9 in the configuration diagram), add 15 mm to this measurement. For configurations with an external grille (position 10 in the configuration diagram), no additional thickness needs to be added. Measure the resulting length on the air duct, mark it with a pencil, and carefully cut off the excess, removing any unevenness.



In the basic configuration, the air duct has a length of 500 mm and can be installed in a wall with a maximum thickness of 485 mm. If the wall thickness in your premises is greater, installation is still possible, provided that you order an additional air duct of the required length (0.5 m, 0.75 m, 1 m, 1.5 m).

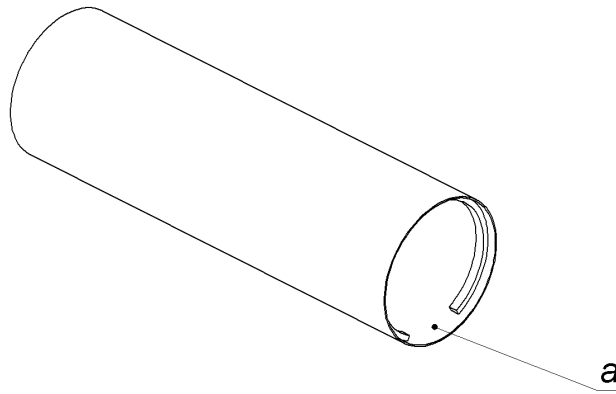
Step 3:

After the air duct has been shortened to the required length, **stick** the rubber limiter, which is included with the unit, at a distance of 10–15 mm from the cut end of the pipe. For a tighter fit of the limiter, we recommend slightly warming the adhesive layer using a heat gun.



The limiter should not cover the entire diameter of the air duct — it should be applied in such a way that one segment remains uncovered.

The air duct should be placed in the wall in such a way that the uncovered gap ("a" on the diagram) is positioned at the bottom.

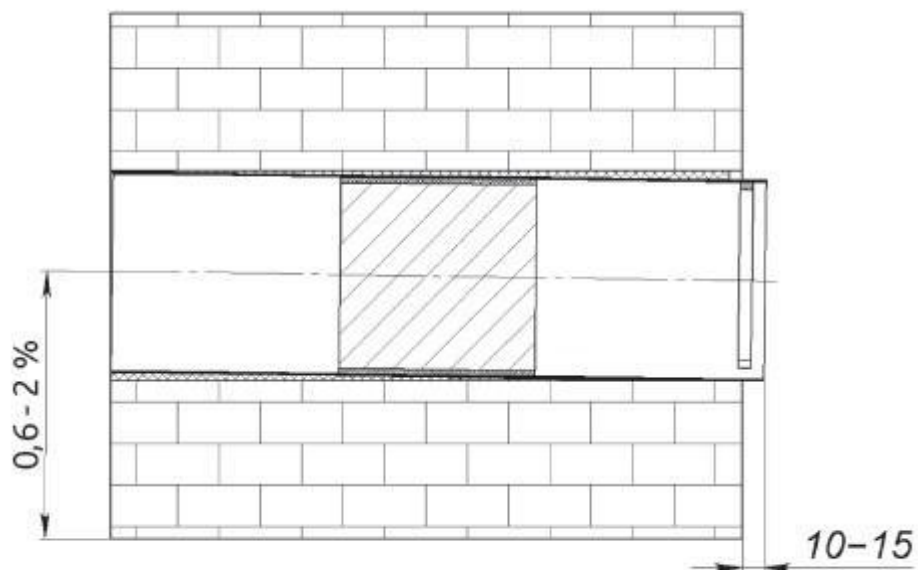


Step 4:

Insert the ceramic heat accumulator into the air duct and push it in approximately halfway along the length of the pipe. Align the air duct with the center of the mounting hole, with an inclination of 1–3° towards the outside.

At the same time, from the outside of the building, the air duct should:

- Protrude 10–15 mm from the wall if you have purchased the configuration with an external metal cover;
- Be level with the wall if you have purchased the configuration with an external grille.



Step 5:

Once the air duct is correctly positioned in the wall, secure it using installation foam.



When working with installation foam, it is essential to wear work gloves and protective glasses to avoid the foam getting into your eyes or on your skin. Ensure that the product you plan to use is safe.



Attention! Ensure that the air duct does not deform during installation and while the foam is setting. Do not remove the heat exchanger until the foam has fully cured!

Step 6:

After the installation foam has fully cured, check the ease of access to the heat exchanger. The heat exchanger should move easily within the air duct — up to the limiter and all the way out of the pipe. If the heat exchanger is difficult to move or cannot be removed from the air duct at all, it indicates that the pipe has deformed during the curing of the foam. To correct the deformation, it is necessary to partially or completely remove the installation foam and repeat steps 4–5.

Step 7:

Insert the heat exchanger into the air duct and move it up to the limiter. Install the cartridge with the fan (grille facing the room) up against the heat exchanger. Lead the fan wires into the room.

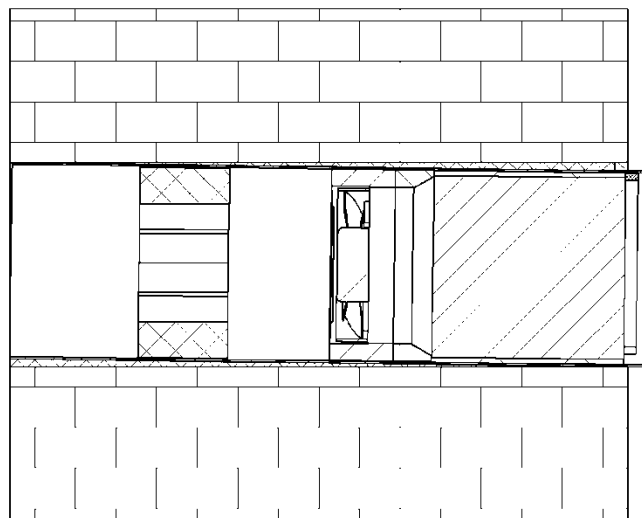
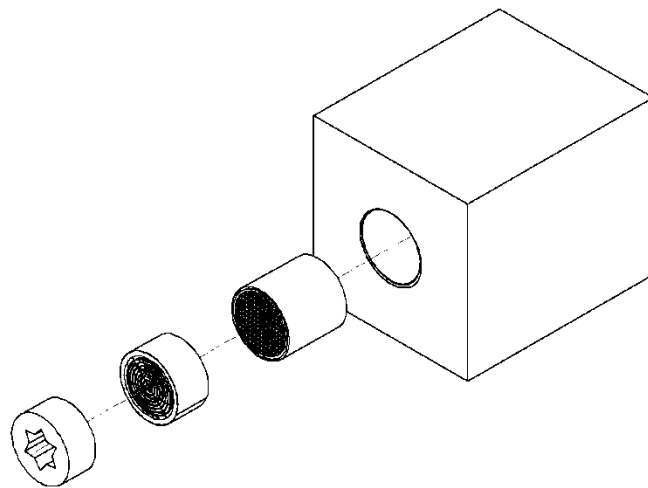
Step 7a (optional):

If your model configuration includes additional soundproofing in the form of the sound insulation element Ventoxx Star, install it immediately behind the fan — in the free space between the cartridge with the fan and the edge of the air duct.



Attention! The installation of the sound insulation element is only possible if the minimum air duct length is 400 mm.

Push the fan wires through the hole in the sound insulation element and lead them into the room.



Step 8:

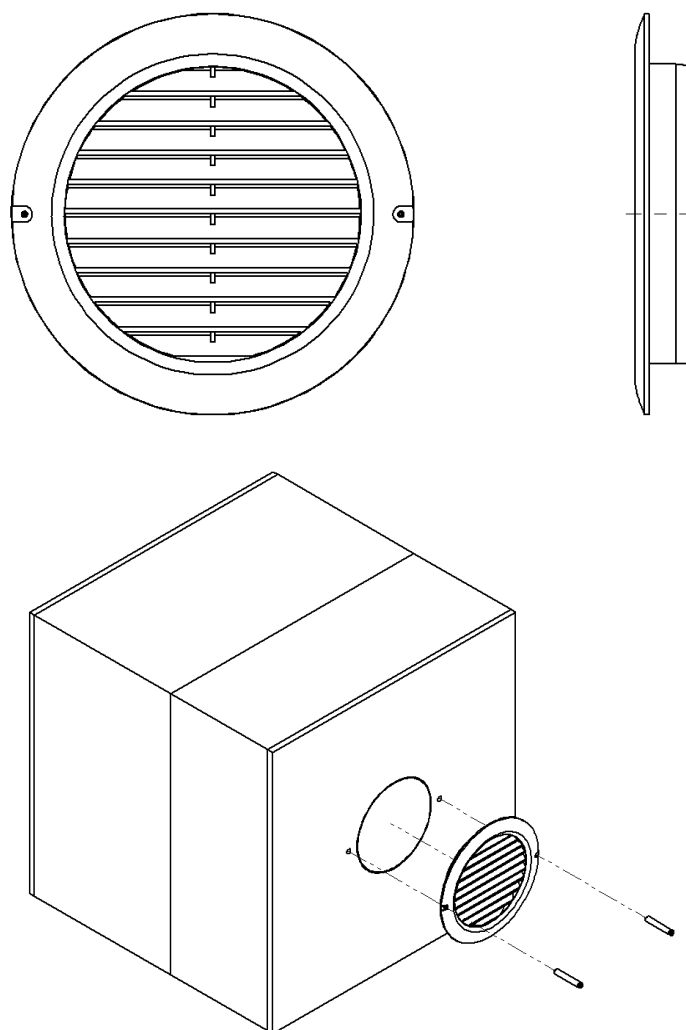
To prevent precipitation from entering the wall material or insulation, the space between the wall hole and the air duct should be sealed from the outside of the building using a sealing compound (plaster, mortar, sealant).

Step 9a:

Attach the external grille if your configuration includes covering the recuperator with a grille from the outside.

The grille fastening system should be chosen according to your facade system, type of insulation, wall structure, and material, and may not match the fasteners included in the delivery.

Place the grille at the mounting location and mark the drilling points with a pencil. Drill the holes for your fastening system, clean them and the air duct from any debris. Install the fasteners into the holes, place the cover, and screw it into the wall using the fastening system.



If the wall surface is rough or uneven, it is recommended to apply sealant to the inner surface of the plastic grille flange to eliminate the gap between the cover and the wall.

Step 9b:

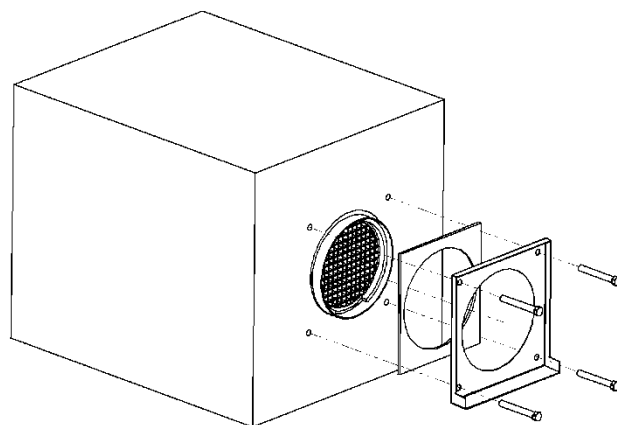
Attach the external metal cover if your configuration includes covering the recuperator with a weatherproof cover.

The fastening system for the external metal cover (anchors, wall plugs, screws) should be selected according to your facade system, type of insulation, wall structure, and material, and may not match the sizes included in the delivery.

Mark the points for the fastener holes on the wall. For anchor installation, the hole diameter in the mounting plate should be 9 mm.

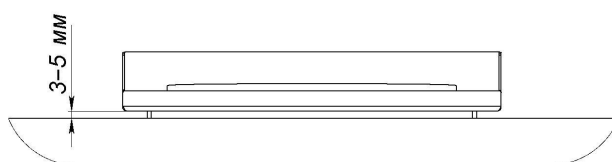
Place the mounting plate with the seal onto the protruding part of the air duct and mark the drilling points with a pencil. Remove the mounting plate. Drill the holes and clean any debris from the holes and the air duct.

Note: If the wall is uneven, it may cause precipitation to enter and damage the structure. In this case, it is necessary to level the wall irregularities with sealant. However, ensure the required gap between the mounting plate and the wall – 3-5 mm. Press the mounting plate against the wall and tighten the anchors.



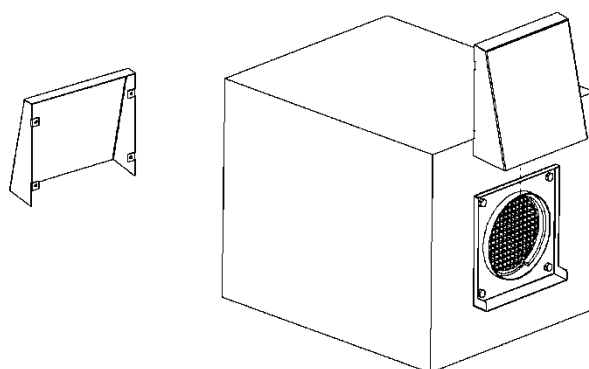
Top view

Вид сверху



Step 10:

Place the external cover hood onto the mounting plate, inserting the metal cover tabs into the gap between the wall and the mounting plate.



5. Electrical connection of the unit

5.1. General information

The Ventoxx Harmony recuperator offers various control options via a remote control.

Depending on the number and placement of the units you are installing in the room, the recuperators that work in pairs should be connected to each other. The following sections of the manual describe the options for electrical connection of the recuperator sets.

5.2. Connection of paired units (leader-follower)

The devices in the basic configuration are divided into two types:

1. Leader units
2. Follower units

The leader and follower units can be distinguished by the labels on the packaging:

(red) leader unit;

(blue) follower unit.

The leader unit is the only device that responds to remote control signals. On this unit, the user can select the desired operating mode and switch the connected follower unit to the required operating mode. The current operating mode is displayed as an indicator on the cover of the leader unit. The leader unit can also operate autonomously, without being connected to the follower units.

The follower unit does not have its own power supply, and its fan is connected directly to the three-wire bus of the leader unit, as shown in the diagram.

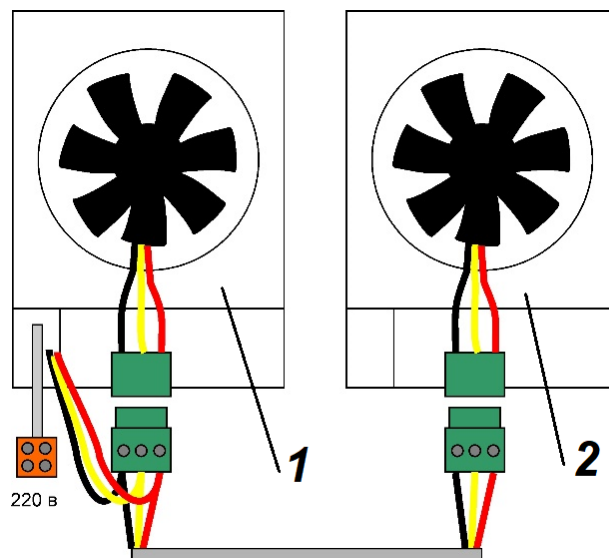


Diagram of connecting the pair of units:

1 — active leader unit; 2 — follower unit.

A three-wire cable is used to control the follower units. Depending on the length of the cable run, the following wire cross-sectional areas should be used:

- up to 10 m — 0.75 mm²
- up to 20 m — 1 mm²
- up to 30 m — 1.5 mm²

When using a three-wire main cable, the connection with the green connector must be made through a terminal block using a wire with a cross-section no larger than 0.5 mm².

After connecting all recuperators and installing the inner front panels, the main recuperator can be turned on using the remote control.

If multiple pairs of recuperators are installed in an apartment or building, any main recuperator can be controlled with a single remote control.

For more details on controlling the recuperator operating modes, refer to section 7.3 of this manual.

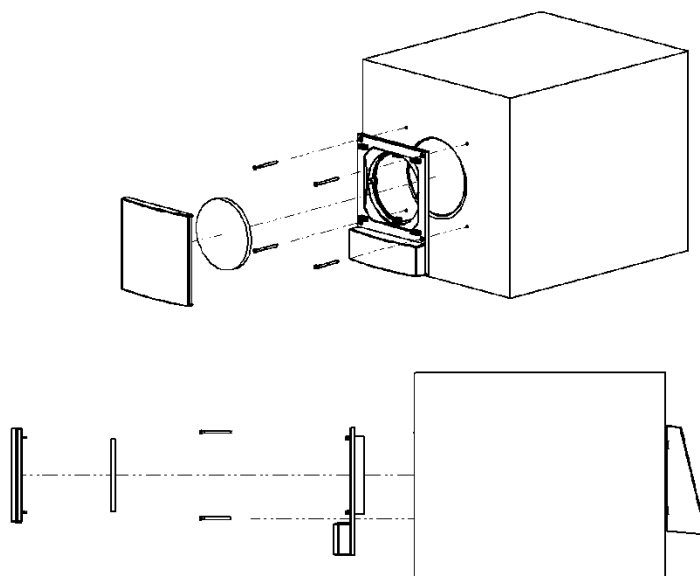
5.3. Installation of the inner front panel

Step 1:

Place the mounting plate against the wall, aligning it symmetrically with the hole. Mark the points for the anchor fasteners with a pencil.

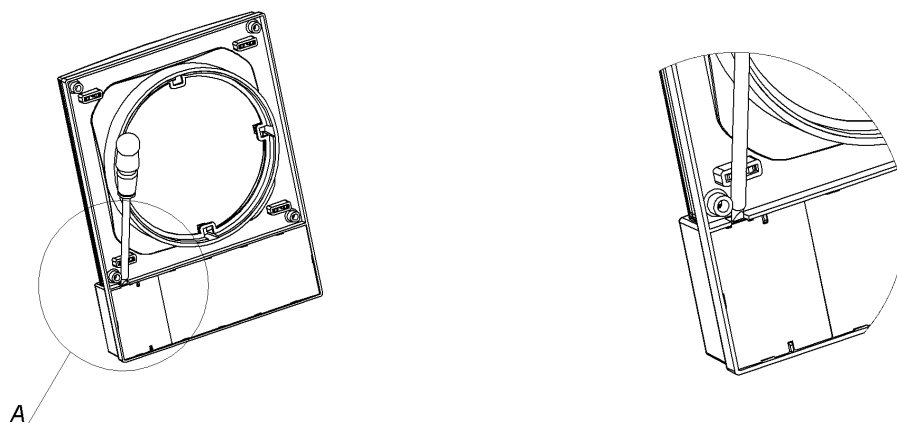
Step 2:

Make 4 holes in the wall with a diameter of 5 mm and insert wall plugs suitable for the material and structure of your wall into these holes.

**Step 3:**

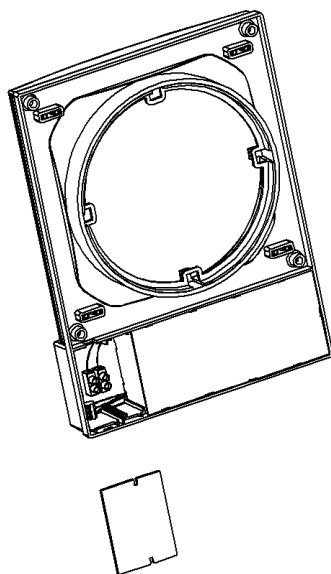
On the back of the inner front panel, there is a mounting compartment containing the connection cables with connectors at the ends.

To connect the unit to the power supply, use a screwdriver, as shown in the diagram, to lift the cover of the mounting compartment.



Attention! Be careful not to damage the cover of the electronics compartment, which is sealed with seals. Damage to the seals will result in the removal of the unit from the warranty.

The two-wire cable with screw terminals (usually white or orange in color) is intended for connecting the 220 V power supply. The power supply cable, brought to the installation location of the unit, must be connected to the unit's cable, after deactivating the power line for safety.



Attention! It is recommended to have a separate 220 V line for the operation of the units and not to connect powerful electrical devices to this line. The 220 V power lines and control lines should not be placed next to each other — the minimum distance between them must be 50 mm. If this is not possible, the 220 V line should be placed in a grounded metal sleeve.

Step 4:

Connect the unit to the power supply network in the mounting compartment and, through the special connector, connect the fan control (see section 5 — Electrical connection of the unit). Place the wires from the fan to the green connector between the mounting panel and the wall.

Step 5:

Attach the mounting panel of the inner front panel to the wall using countersunk screws. Place the filter into its designated spot. After that, install the movable part of the cover onto the mounting panel. If the installation is done correctly, you will hear a distinctive click.

Step 6:

Apply 220 V power to the recuperator. Check the functionality of all the devices.

6. Operation of the recuperator

6.1. Description of the operating modes of the Ventoux Harmony recuperator

The recuperator operates in one of three main modes:

- Heat recovery, with sub-modes for air exchange speeds;
- Ventilation, with sub-modes for air exchange speeds;
- Intensive ventilation.

Heat recovery mode:

This is the standard automatic ventilation mode with heat recovery. In this mode, the fresh air entering the room is preheated by the heat of the extracted used air. In this way, heat is preserved inside the room, which is filled with fresh air, while excess moisture is vented outside.

Attention! For information on the operation of the recuperator during hot weather, see section 6.2.

In heat recovery mode, the ventilation unit can operate at speeds from 1 to 3 — for configurations with remote control. The speed selection depends on the area of your room, the need for air exchange at a specific moment, and your preferences regarding ventilation intensity. For nighttime, we recommend setting the minimum ventilation speed.

The recuperator automatically changes the operating direction every 65 seconds: it alternates between exhaust and air intake. If recuperators are installed in pairs in your room, the operation of each pair is always coordinated: one unit works in exhaust mode, the other in air intake mode, and vice versa.

The selected operating speed is displayed as a number on the recuperator cover and is indicated by a blue or red arrow: red means the recuperator is in exhaust mode, blue means air intake.

If the device was turned off in heat recovery mode, it will resume operation at the same speed that was selected before it was turned off when the power is restored. At the same time, the leader unit will start in exhaust mode.

Ventilation mode:

In ventilation mode, the recuperator performs only air intake or exhaust, meaning heat recovery does not occur. In this mode, air from the outside enters the room at outdoor temperature. This mode is needed for short-term and quick air renewal (for example, on

a summer evening or during a heatwave, after rain) to quickly bring cool air from outside into the house.

When this mode is selected, the recuperator operates at the same speed that was chosen before ventilation mode was activated. Even if paired devices are working in your room, they will all operate synchronously in this mode: either for air intake or exhaust, depending on your selection. Using the buttons on the remote control with the house icon and arrows (inward/outward), the user can choose the direction of ventilation: into the house or out of it.

Operation in ventilation mode will continue until the user selects a different mode.

Attention! Prolonged operation of the recuperator in ventilation mode can disrupt the microclimate in the room. Do not allow the room to become too cold in the winter or overheated in the summer. **Activate this mode for a maximum of 10 minutes.**

Intensive ventilation mode:

This mode is designed for intensive air exchange without heat recovery at maximum speed (higher than the third/fifth speed) for 10 minutes. The direction of ventilation is indicated by one of the arrows. After 10 minutes, the unit automatically switches to the second speed in the standard heat recovery mode.

To activate this mode, press the power on/off button and the fan symbol button on the remote control in sequence. The user can change the direction of airflow as needed.

This ventilation mode is necessary for quickly refreshing the air (for example, if an unpleasant odor appears in the room).

6.2. Automatic ventilation during hot weather

In the summer, the recuperator operates in a similar way: during heat recovery, the cool air inside the room is stored in the heat exchanger and transferred to the warm air coming from outside, cooling it. In this way, the recuperator allows ventilation of the room while maintaining a comfortable indoor microclimate and preventing hot air from entering, ensuring that the temperature remains pleasant during hot weather.

Please note that the above-mentioned effect is only possible if additional protection from the sun is provided during the hottest hours of the day!

Recommendations for operating the unit during hot weather:

- For nighttime and during the morning coolness, it is recommended to switch to ventilation mode WITHOUT heat recovery in the direction of air intake. This will allow cooler fresh air to enter the room.

- After a thunderstorm or summer rain, when the outdoor air temporarily cools, you can turn on intensive ventilation mode in the direction of air intake for 10 minutes. This will quickly bring the cool air into the room.
- If the room has cooled overnight, before the heat of the day arrives, turn the recuperator on in heat recovery mode and ensure protection from the sun: close the windows and cover them with thick curtains or blinds. The less sunlight that enters, the more effective the sun protection will be.
- If there is an air conditioner, during the hot day the recuperator can work in the standard heat recovery mode at medium speed. In this case, the air conditioner can be set to its minimum mode, as the recuperator (unlike an open window) brings in fresh air that is not at the outdoor temperature, but already slightly cooled.
- Throughout the day and during the hottest hours, the recuperator will automatically ventilate the room — the warm air coming from outside will be cooled by the internal used air, refreshing the room and maintaining the indoor microclimate.

6.3. Description of the indicator symbols on the inner front panel of the recuperator:

The indicator on the screen displays the mode selected by the user. The user can turn off the indicator using the remote control. When switching between operating modes, the selected mode briefly appears on the display and then fades away. In the off state, the indicator is completely invisible on the inner front panel of the recuperator. After power is turned off and then turned back on, the indicator remains in the mode that the user selected before turning off the power.

In the mode with the indicator on, the following symbols can be seen on the cover:

A horizontal line — power on/off of the unit. This is the first symbol you see when power is supplied to the unit. When the unit is turned off and then turned on again, the recuperator automatically selects the mode that was chosen before it was turned off.

The numbers from 1 to 3 — indicate the selected operating speed of the recuperator.

The upward arrow (red or white) — indicates that the unit is operating in exhaust mode.

The downward arrow (blue or white) — indicates that the unit is operating in air intake mode.

The upward arrow flashing — indicates the unit is operating in heat recovery mode (exhaust).

The downward arrow flashing — indicates the unit is operating in heat recovery mode (air intake).

One of the arrows constantly glowing — indicates that the recuperator is operating in intensive ventilation mode.

One of the arrows constantly glowing + a number from 1 to 3 — indicates that the recuperator is operating in ventilation mode at the speed indicated by the number.

Blue indicator under the cover — indicates that the humidity sensor is active.

One horizontal line glowing for 2 seconds — activation of the minimum humidity percentage (70%).

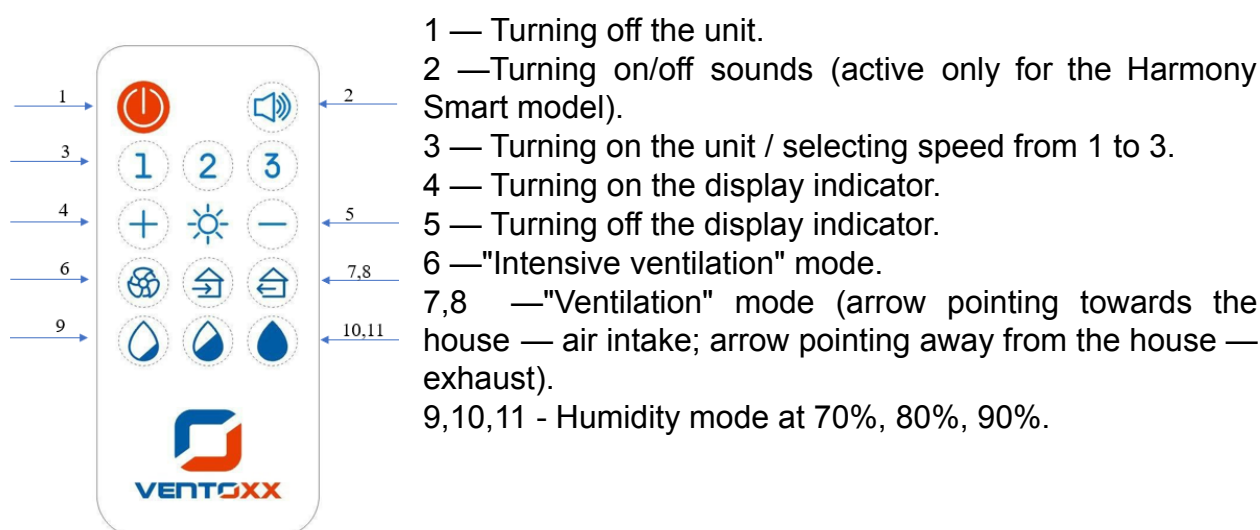
Two horizontal lines glowing for 2 seconds — activation of the medium humidity percentage (80%).

Three horizontal lines glowing for 2 seconds — activation of the maximum humidity mode (90%).

6.4. Control of the recuperator using the remote control

The remote control allows you to turn the ventilation on/off, select the operating mode of the recuperator, and adjust the speed. The current operating mode is displayed on the cover using the indicator.

Before using the remote control, remove the protective film from the battery compartment.



6.5. Operating modes of the humidity sensor:

Thanks to this feature, the device can be installed in bathrooms and rooms with high humidity.

By default, the humidity sensor is not active (!). You can activate it by pressing one of the humidity buttons. The activation of the sensor will be displayed on the inner front panel of the recuperator at the bottom — a blue LED will light up, and also, on the inner front panel, the indicator for one of the three modes will appear for 2 seconds.

When the minimum humidity percentage is activated, one horizontal stripe will appear on the panel.

When the medium humidity mode is activated, two horizontal stripes will appear on the panel.

When the maximum humidity percentage is activated, three horizontal stripes will appear on the panel for 2 seconds.

Button 9 – Activates the humidity sensor at the minimum humidity percentage.

Button 10 – Activates the humidity sensor at the medium humidity percentage.

Button 11 – Activates the humidity sensor at the maximum humidity percentage.

When the sensor is activated, the blue LED will start flashing.

The humidity sensor monitors the set parameter, and if it exceeds the specified value, the unit will switch to exhaust mode at the 3rd speed. The unit will remain in this mode until the humidity percentage drops below the set value. During this time, the LED indicator will flash blue.

Once the humidity drops below the set value, the system will return to the mode it was operating in before the sensor was triggered. The blue LED will stop flashing and remain lit.

Pressing the activated humidity mode button again will deactivate the sensor. The blue LED will turn off.

6.6. Operation of the Leader-Follower set in humidity sensor mode

The leader unit operates as a regular standalone recuperator. However, when the humidity sensor is triggered and the unit switches to the 3rd speed in exhaust mode, the follower unit will operate in air intake mode.

Humidity sensor-equipped sets are recommended to be installed in a single large room. The humidity sensor is only mounted in the leader unit.

When installing a set with a humidity sensor in separate rooms, the humidity level will only be measured in the room where the leader unit is installed.

7. Maintenance of the device

Maintenance of the ventilation unit involves regular cleaning of the air filter, ceramic heat exchanger, and, if necessary, other components twice a year: before the start and after the end of the heating season. We recommend checking the air filter every 2–3 months to ensure it is not clogged. In some cases, and depending on the level of contamination, it may be necessary to clean the filters and heat exchanger more frequently than recommended.

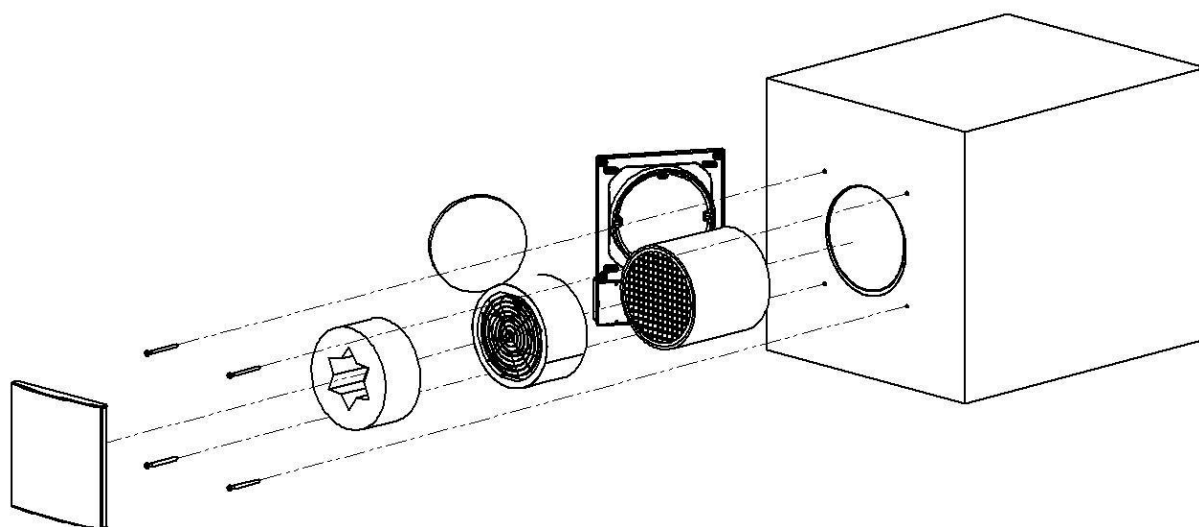
Attention! Before performing maintenance on the unit, disconnect the power supply.

7.1. Cleaning and replacing the air filter

To clean the filter, you need to remove the inner front panel, which is located on the recuperator inside the room. To do this, gently remove the movable part of the cover from the mounting panel using both hands. Take the filter out of the unit.

Rinse the filter under running water and leave it to dry. Once it is completely dry, reinstall the filter into its designated place and insert the movable part of the cover back.

7.2. Cleaning the heat exchanger and other components



Step 1:

Disconnect the power supply from the unit. Remove the movable part of the inner front panel from the mounting plate. Take out the filter, and if necessary, wash it under running water and allow it to dry completely.

Step 2:

Disconnect the fan wires from the green connector. Hold the mounting panel with your hands and unscrew the screws, wall plugs, and anchors. Gently move the mounting panel, disconnect the wires, and remove the panel from the wall.

Step 3:

Remove the Ventoxx Star sound insulation element (if installed in the recuperator) and the cartridge with the fan by pulling on the auxiliary cord. Take out the heat exchanger using the cord attached to it.



Be careful and avoid any impacts or drops of the device, as this may cause damage to the ceramic heat exchanger.

Step 4:

Thoroughly rinse the heat exchanger under running water and allow it to dry completely.

Step 5:

While disassembling the recuperator, check the level of contamination of other components, such as the fan blades, air duct walls, and sound insulation element. If necessary, carefully clean these components using the method described below.

Step 5a:

Carefully clean the fan using air or a soft sponge or brush. You can also wipe the fan blades with a slightly damp cloth.



It is forbidden to wash the fan under a water stream or with air that contains water droplets! Such cleaning methods will inevitably cause damage and improper operation of the recuperator.

Step 5b:

Vacuum the air duct and wipe it with a damp sponge, cloth, or brush. Make sure the limiter, which is attached to the end of the air duct, is preserved.

Step 5c:

To clean the Ventoxx Star sound insulation element, use a vacuum cleaner, shake it out, or rinse it under running water. Machine washing is not allowed! Be sure to dry it completely before reinstalling it.

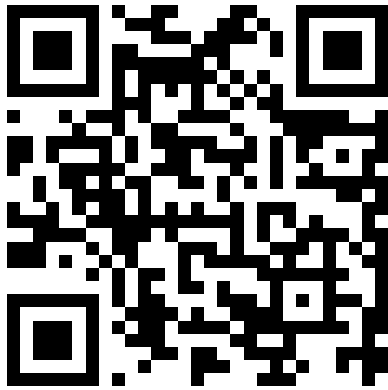


Any components of the recuperator should only be reinstalled into the device after they are completely dry following cleaning!

Step 6:

Reassemble the recuperator in reverse order according to this manual. Reconnect the wires and install the movable part of the cover onto the mounting plate. Reconnect the power supply.

See the video tutorial "How to replace the filter and clean the heat exchanger in the Ventoxx recuperator":



7.3. Troubleshooting and error correction

Error	Possible solutions: Please check:
Insufficient air flow	▪ the selected fan speed — if necessary, choose a higher speed. ▪ if the movable panel on the inner front panel is closed — open it. ▪ the level of dirt on the filter — if necessary, clean it. ▪ the level of dirt on the heat exchanger — if necessary, clean it.
Cold air is blowing	▪ whether the ventilation devices are connected according to the installation instructions and if the pairing of the units has been done correctly. ▪ the recuperator might be in ventilation mode (in this case, heat recovery does not occur) — switch the system to the standard heat recovery ventilation mode.
Unusual noise from the recuperator	▪ whether the installation of the recuperator and control system (especially after cleaning the filter and/or heat exchanger) was performed according to the installation instructions. ▪ whether the fan is dirty or if any foreign objects have entered it — please clean the fan and/or remove any foreign objects.
Fan stoppage	▪ whether the fan is correctly connected. ▪ whether the power is supplied to the fan. ▪ whether the control system is properly connected. If you answered "yes" to all the previous questions and the issue persists, it is possible that the control system or the fan is faulty. Please contact the seller or the manufacturer of the device for further assistance.

8. Quality and Warranty

Carefully read the installation and operation manual for the Ventoxx ventilation device before installation and use.

The warranty period for any Ventoxx product is 2 years from the date of purchase. The warranty for the heat exchanger is 10 years.

The warranty obligations are to ensure the correct operation of the purchased device and associated equipment, provided they are installed, started, used, and maintained according to the official manufacturer's manual for the specific recuperator model and during the warranty period.

The warranty will be voided in the following cases:

- Damage to the protective seals on the mounting panel of the inner front panel.
- The ventilation device operated without a filter.
- The ventilation device was subjected to heavy contamination (such as during room renovations) due to improper closure of the recuperators and control systems from dust and dirt.
- The filter and heat exchanger were not cleaned.
- Non-original components were used.
- The design and/or settings of the device and its control elements were changed without the manufacturer's consent.

In case of a breakdown or malfunction after the warranty period, please contact the manufacturer's sales representative from whom the product was purchased. Official representatives of Ventoxx will check the device's operation, fix any faults, and/or provide consultations on proper device maintenance.

Warranty obligations are only fulfilled when a warranty card is available!

KEEP THE WARRANTY CARD!

To activate the warranty, please scan the QR code and register the device. If you are unable to access the registration page, manually write the twelve-digit number from the device's box on the warranty card.

9. WARRANTY CARD

Buyer, Full Name: _____

Address of installation the Ventoxx ventilation device. _____

Date of purchase: « ____ » _____ 20__

Installation date: « ____ » _____ 20__

Warranty valid until: « ____ » _____ 20__

Warranty on the heat exchanger valid until: « ____ » _____ 20__

Organization that performed the installation: _____

Warranty card issued by: _____