

Ventoxx

Harmony Smart

Transform Your Space with Single Room Heat Recovery Unit Harmony-Smart:
**Healthier Air,
Energy Savings, and
Year-Round Comfort in
One Sleek Solution**



Advantages of Ventoxx™ Heat Recovery Ventilation

- **High Heat Recovery Efficiency:** Up to 94% with energy efficiency class A.
- **No Condensate Accumulation:** Ensures stable and reliable operation.
- **No Additional Heating Required:** Heat is preserved solely through the heat exchanger.
- **Low Power Consumption:** As low as 4.7 W/h.
- **No Thermal Bridges:** Design allows for installation without compromising energy efficiency.

Ideal for Various Environments

The Ventoxx Harmony air recuperator is ideal for use in apartments, private homes, cottages, office spaces, small reception areas, customer service points, medical consultation rooms, hotel rooms, hostels, beauty salons, hairdressing studios, fitness centers, and yoga studios.



General Benefits of Ventoxx™ Heat Recovery Ventilation

- **Improves Indoor Air Quality:** Continuously exchanges stale air with fresh air while retaining heat.
- **Reduces Energy Costs:** Minimizes the need for excessive heating by maintaining a consistent indoor temperature.
- **Prevents Mold Growth:** Helps to keep humidity levels low, reducing the risk of mold formation.
- **Environmentally Friendly:** Optimizes energy use, reducing the carbon footprint of your home or business.



up to 50 m³/h



up to 30 dB



up to 94% HREC

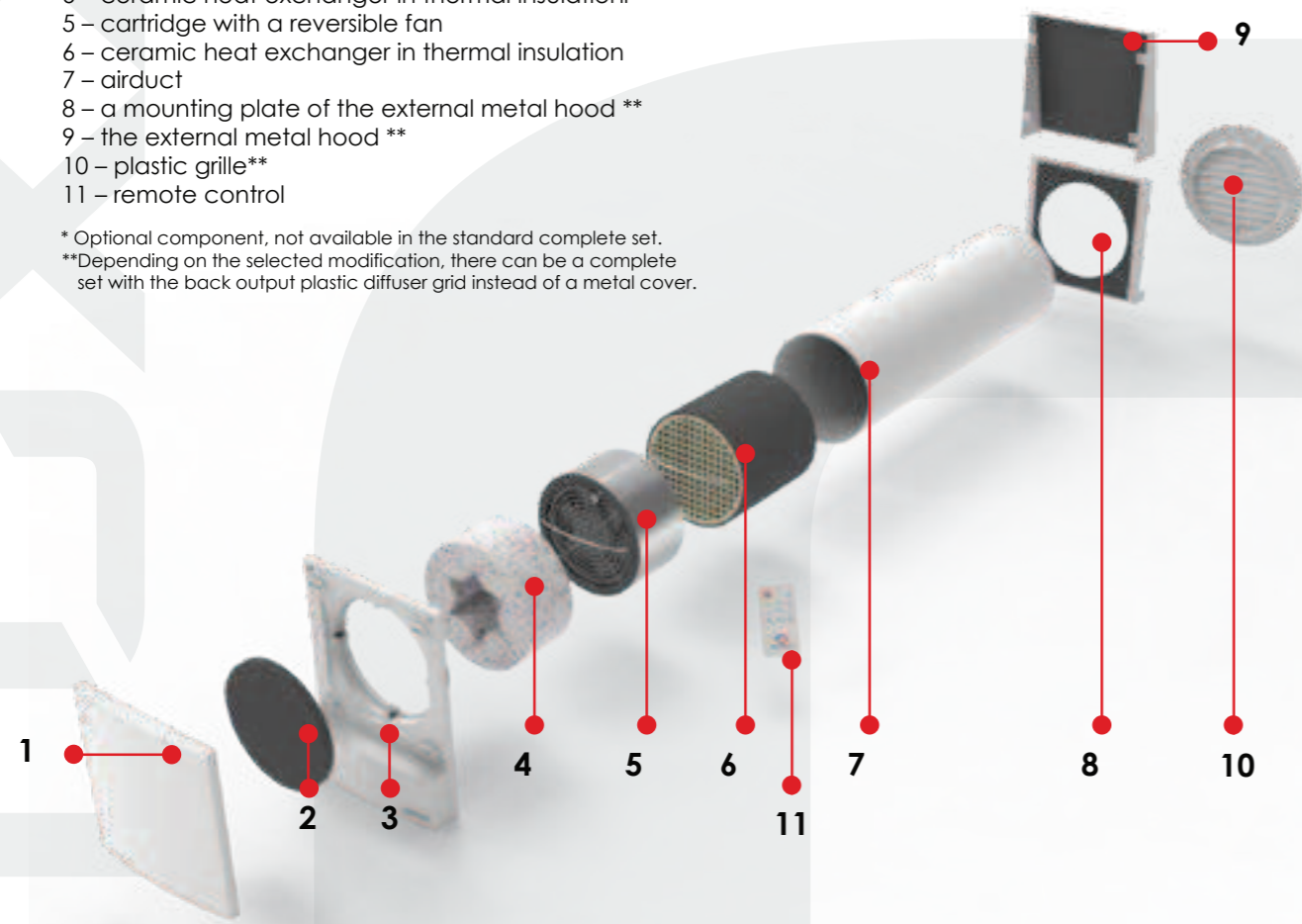


up to 4,7 W

Ventoxx Harmony HRV consists of the following components

- 1 – inner front panel
- 2 – G3 filter
- 3 – mounting plate with indication
- 4 – sound insulation element Sta
- 5 – ceramic heat exchanger in thermal insulation*
- 6 – cartridge with a reversible fan
- 7 – airduct
- 8 – a mounting plate of the external metal hood **
- 9 – the external metal hood **
- 10 – plastic grille**
- 11 – remote control

* Optional component, not available in the standard complete set.
 ** Depending on the selected modification, there can be a complete set with the back output plastic diffuser grid instead of a metal cover.

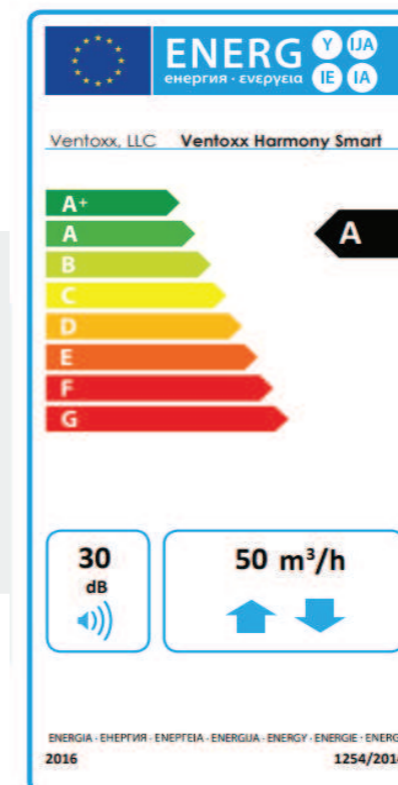


Product dimensions



Technical data sheet of Ventoxx Harmony Smart

| Description | Data |
|---|--|
| Number of operating modes | 11 |
| Number of speeds | 3 |
| HRV capacity, m ³ /h | 17–50 |
| Recovery efficiency, % | 74–94 |
| Noise level at a distance of 1 m, dB | 22-30 |
| Voltage, V | 230 |
| Power Consumption, W | 1,5-4,7 |
| Type of heat exchanger | the ceramic heat exchanger (Austria) |
| Diameter of the hole in the wall, mm | 160–180 |
| Temperature mode of operation, °C | -20... +50 |
| Dimensions: | |
| Air duct, mm | ∅ 150 |
| The inner cover, mm | 248 × 186 |
| The metal hood of the outer metal cover, mm | 210 × 204 |
| Back output diffuser grid, mm | ∅ 200 |
| Placement method | horizontal placement in the outer wall with an angle of 1–3° towards the street |
| Filter | G3, washable |
| Energy efficiency class | A |
| Maintenance | Washing of filters and heat exchanger is every 3 months. Changing filters is every 2 years. |



Perfection in the Details

In the world of air quality and energy efficiency, every detail counts. The Harmony-Smart unit is designed for those who value precision and comfort in air quality management. Each component is crafted to enhance performance, user experience, and ease of installation.

● Inner Front Panel: Personalized Airflow Control

The Inner Front Panel of the Harmony-Smart is designed for easy airflow control, allowing you to direct fresh air exactly where you need it with a simple press on the right, left, or bottom. When not in use, a press in the center smoothly closes the recuperator, conserving energy and preventing unnecessary air exchange, while keeping your space neat. Plus, the front panel is compact, saving space without compromising on functionality.



● G3 Filter: Clean Air, Protected Components

The G3 Filter is strategically placed on the room side of the unit, where most dust accumulates. By filtering out particulates before they reach the fan and heat exchanger, this filter ensures that the core components of the Harmony-Smart unit remain clean and efficient for longer periods. The result is not only purer air but also reduced maintenance and extended lifespan for the unit - key selling points for any discerning customer.



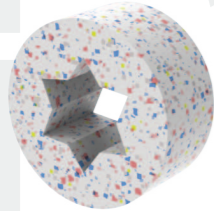
● Mounting Plate with Indication: User-Friendly Interface

The Mounting Plate is equipped with a soft yellow display that keeps the user informed about the operating mode of the unit at a glance. The gentle illumination is designed to be easy on the eyes, ensuring it doesn't distract or disrupt the ambiance of the room. Furthermore, the brightness of the display is adjustable, allowing users to dim or completely turn off the light as needed.



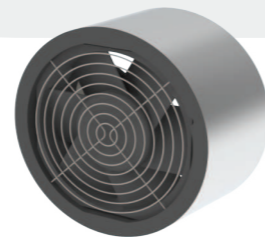
● Sound Insulation Element Star: Quiet Comfort

For environments where silence is golden, the Sound Insulation Element Star is an essential component. The Harmony-Smart HRV is already quiet, operating at just 22...30 dB, but with the Sound Insulation Element Star, it becomes even quieter. This component reduces noise levels by an additional 30%, making it perfect for noise-sensitive areas like bedrooms or offices. Plus, the material is hypoallergenic and resistant to bacteria and moisture, ensuring both a peaceful and healthy environment.



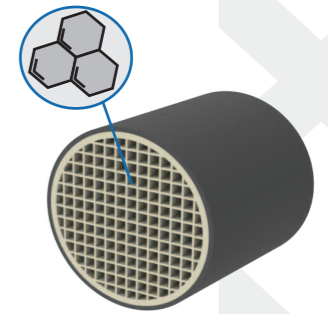
● Reversible Fan: World-Class Performance

At the heart of the Harmony-Smart is the reversible fan, sourced from industry leader Papst. This fan is engineered for excellence, delivering consistent performance whether in supply or exhaust mode. This dual functionality ensures that the unit efficiently circulates air, enhancing the overall air quality and energy efficiency.



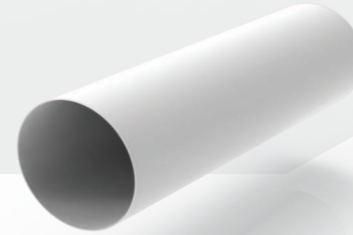
● Ceramic Heat Exchanger: Maximum Efficiency, Long-Term Durability

The Ceramic Heat Exchanger exemplifies advanced engineering combined with unmatched efficiency. Featuring a honeycomb or hexagonal structure, this heat exchanger maximizes surface area, thereby enhancing its ability to absorb and store heat. With best-in-class dimensions of 150 mm in diameter and 143 mm in length, it offers ample surface for heat transfer, significantly boosting the unit's overall efficiency. Produced in Austria to the highest quality standards, this durable ceramic exchanger is resistant to crumbling and comes with a 10-year warranty, making it a fundamental element of the Harmony-Smart unit's longevity and performance.



● Airduct: Flexible Installation

The air duct of the Harmony-Smart is designed for easy installation in a variety of spaces. With a diameter of 150 mm, it offers a significant advantage over recuperators with smaller ducts of 100 mm or 125 mm. The larger diameter allows for greater ventilation volume and higher heat recovery efficiency, making it a more effective solution.



Available in standard lengths of 50 cm and 75 cm, the air duct can be shortened to 32 cm for thinner walls or ordered in custom lengths up to 1.5 meters for thicker structures. This flexibility ensures it can meet a wide range of installation needs, making it suitable for different types of buildings.

● External Metal Hood: All-Weather Protection

The External Metal Hood provides robust protection against the elements, ensuring that the unit operates efficiently in all weather conditions, including strong winds. This durable component guarantees that the Harmony-Smart unit remains a reliable and long-lasting solution for air quality management, regardless of external conditions.



● Plastic Grille: Economical Choice

For those seeking a more budget-friendly option, the Plastic Grille offers reliable performance without compromising on quality. It serves as an economical alternative to the metal hood, providing essential protection for the unit's external components while maintaining the overall aesthetic appeal.



● Remote Control:

Easily control operating modes with the intuitive remote control, offering 1st, 2nd, and 3rd-speed options for both recuperation and ventilation, plus an intensive ventilation mode.



● Slim Configuration:

Allows the Harmony-Smart recuperator to be installed in thin walls with a minimum thickness of just 17 cm, making it an ideal choice for spaces with limited wall depth.



● Invisible Configuration:

Preserves the original architectural design of the building, making it a perfect option for buildings with refined architecture and intricate facades, ensuring the HRV blends seamlessly without compromising the aesthetic.



Smart Control and Integration

The Harmony-Smart recuperator seamlessly integrates with the **Smart Life - Smart Living** application, putting complete control at your fingertips.



The app interface mirrors the functions of the remote control, offering an intuitive, user-friendly experience.

Beyond basic controls, the app allows you to connect the recuperator with other smart devices, such as *CO2, humidity, and temperature sensors*, enabling intelligent interactions and automations that enhance your indoor environment.



For advanced control, the **Ventoxx web application** provides the ability to easily pair two recuperators, enabling them to work together in a leader-follower configuration. This feature is perfect for optimizing air quality across larger spaces.

- With the Ventoxx web application, you can:
- Remotely control the recuperator.
 - Set custom scenarios.
 - Schedule mode changes to suit your needs.

If internet connectivity is unavailable, such as in remote or rural areas, you can still pair two recuperators using a wireless connection by pressing the On/Off button three times and then button 3. This provides integration and control without the need for wiring or Wi-Fi, offering flexibility wherever you are.



Download on the App Store

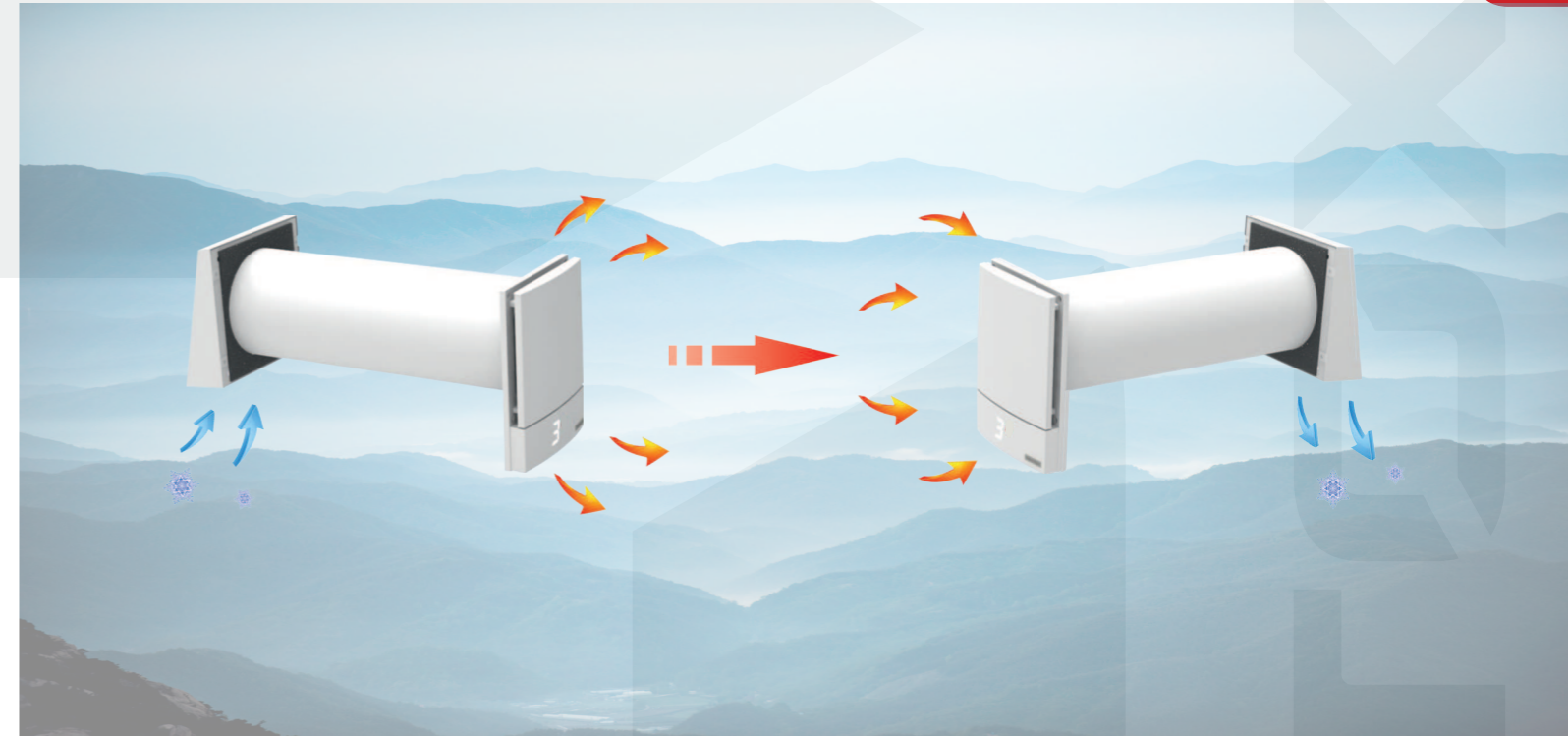


Get it on Google Play



Operation Principle

The Harmony-Smart recuperator is designed with a plastic air duct, sealed with caps at both ends. On the exterior side, it features either a grille or a wind-protective metal cover, while on the interior side, it has a plastic cover that acts as an air valve. The recuperator ensures continuous air exchange within the room without the need for user intervention, even with windows closed. Thanks to built-in filters, fresh air enters the rooms purified, while stale air, enriched with carbon dioxide, is expelled outside. By retaining heat in the ceramic heat exchanger, the recuperator warms the incoming fresh air, even during cold winters. This allows you to eliminate the need for window ventilation, preventing heat loss and reducing the entry of dust, smog, and noise from outside.

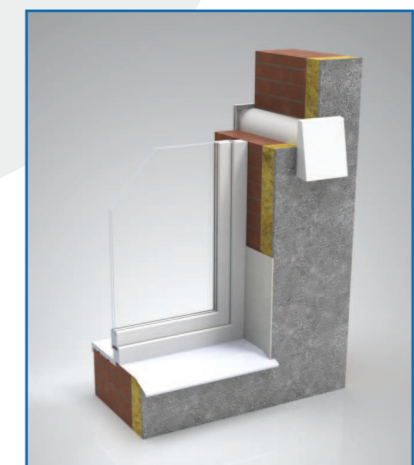


Step-by-Step Operation:

1. The used air is drawn into the recuperator by the fan, passing through the heat exchanger and transferring most of its heat (heat exchange effect) before being expelled outside.
2. After 68 seconds, the heat exchanger reaches room temperature. At this point, the fan automatically switches direction, and fresh air is drawn into the room.
3. As the fresh air passes through the heated heat exchanger, it absorbs maximum warmth, nearly reaching room temperature. Meanwhile, the heat exchanger slowly cools down.
4. After another 68 seconds, the fan reverses direction again, and the cycle repeats.

Installation and Operation Features

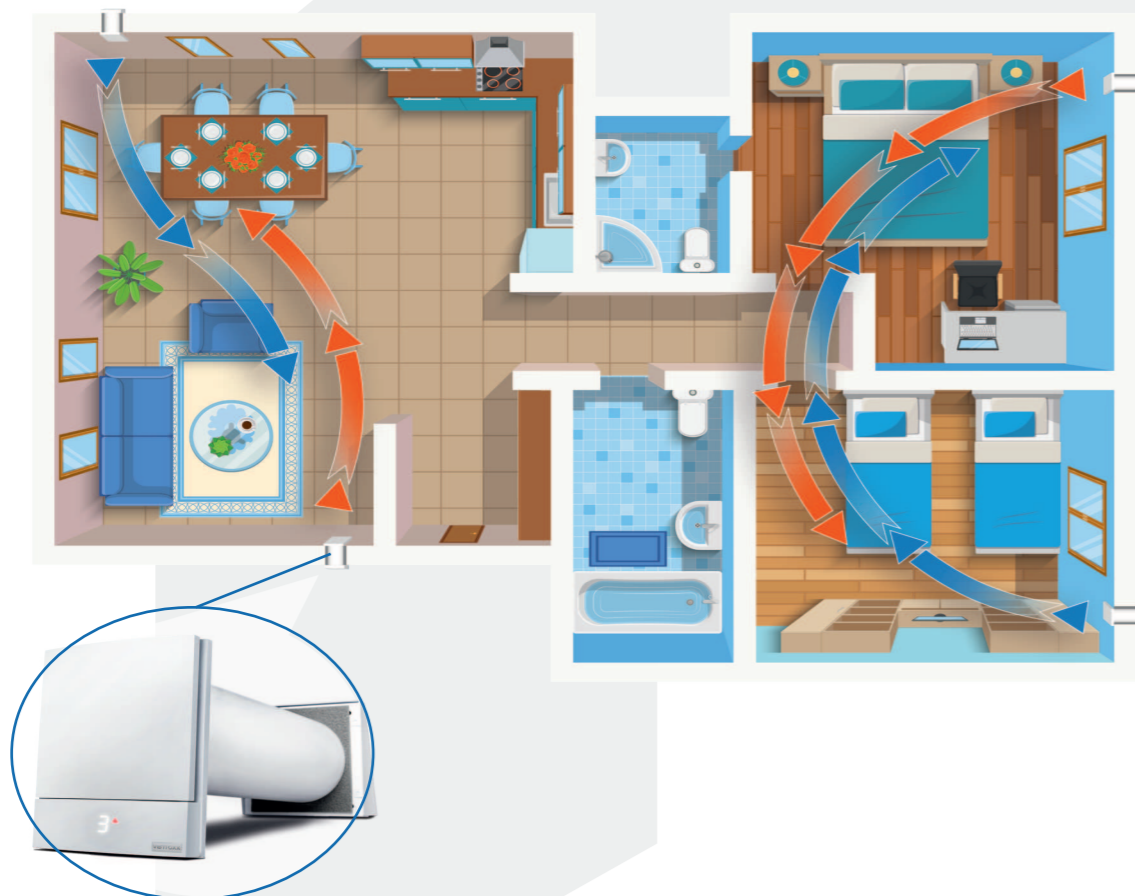
Recuperators are installed into the exterior wall. Airtight installation without thermal bridges ensures no uncontrolled air drafts through gaps and makes the system suitable even for energy-efficient buildings.



How Many Recuperators Are Needed and Where to Place Them?

For effective ventilation, it is recommended to install recuperators in pairs. This is because they operate in reverse phases: one draws in fresh air while the other expels stale air. This creates a continuous airflow circuit that covers more than one room. Ventilation systems can work effectively even with closed doors, as long as there is a gap of at least 5 mm between the door and the floor.

The number of recuperators required for a house, apartment, or office is determined based on the volume of the space and the number of occupants.



Guidelines for Installing Ventoxx™ Recuperators

- 1. Installation Height:** For optimal air distribution, install recuperators in the upper segment of the wall, at least 150 mm from the ceiling.
- 2. Distance Between Units:** Recuperators should be placed at least 2 meters apart from each other.
- 3. Distance from Doors:** To maximize ventilation efficiency, place the recuperator as far from doors as possible.
- 4. Accessibility:** Ensure the installation location allows easy removal of the interior cover for maintenance.
- 5. Before Drilling:**
 - Confirm there are no wires or pipes in the drilling area.
 - Ensure drilling will not compromise the wall's structural integrity.
 - Verify that drilling will not affect the building's physics, - such as causing condensation or moisture buildup in the wall structure.

Declaration of Conformity

No: 003



This declaration of conformity is issued under the sole responsibility of the manufacturer who declares that the below described radio equipment is in conformity with the following relevant European Union harmonisation legislations:

Radio Equipment Directive 2014/53/EU (RED)

Radio Equipment: **Ventilation system with heat recovery with Wi-Fi module**
 Series: **Ventoxx**
 Models: **Ventoxx Harmony Smart, Ventoxx Harmony Slim Line Smart, Ventoxx Harmony Invisible Smart, Ventoxx Double Smart, Ventoxx RV-2 NG Smart**
 Manufacturer name: **«Ventoxx» LLC**
 Address: **61060, Heroiv Kharkova av. 142, Kharkiv city, Ukraine**
 Authorized representative: **Saugių namų laboratorija, UAB. Neravų 2A-6, Neravų kaimas, Viečiūnų sen., Druskininkų sav., Lietuva. Tel.: +37069818781. e-mail: info@sanlab.lt**

The conformity assessment procedure used for this declaration is Annex III of RED 2014/53/EU and the product will bear the CE-Marking CE accordingly. Conformity to the essential requirements of the legislation(s) have been demonstrated by using the following standards:

| | |
|-----------------------------------|---|
| Health and Safety (Art 3(1) (a)): | EN 60335-2-80:2003/A2:2009, EN 60335-1:2012/A15:2021, |
| EMC (Art.3(1) (b)): | EN 301 489-1 V2.2.3:2019, EN 301 489-17 V3.2.4:2020 EN 61000-3-2:2014, EN 61000-3-3:2013, EN 55014-1:2017/A11:2020, EN 55014-2:1997/A2:2008 |
| Radio: Spectrum (Art.3(2)): | EN 300 328 V2.2.2:2019 |

The statement is based on a single evaluation of one sample of above-mentioned products. The statement is based on design and type of product, which is brought into circulation by us, and risk assessment of probably use.



The declaration is valid until the next date of review or introduction of modifications of the technical parameters of the products and production process. In case of alteration in product characteristics, not agreed by authorized representative, this declaration will lose its validity.

Other relevant Directives have to be observed.

Signed for and on behalf of the manufacturer by:

Director

Signature / Stamp

Tomas Čepulis



Date of issue: 03.10.2023

Form QAT_10-M05, version 03, effective since June 19th, 2023

CERTIFICATE



No. 0D230808.VQD81

Certificate's Holder: «Ventox» LLC
61060, Heroiv Kharkova av. 142, Kharkiv city, Ukraine

Certification
ECM Mark



Product: Ventilation System with Heat Recovery
Brand: Ventox
Model(s): (see the following annex)

Verification to: Standard:
EN 60335-2-80:2003/A2:2009,
EN 60335-1:2012/A15:2021, EN 55014-1:2017/A11:2020,
EN 55014-2:1997/A2:2008, EN 61000-3-2:2014,
EN 61000-3-3:2013

related to CE Directive(s):
2006/42/EC (Machinery)
2014/35/EU (Low Voltage)
2014/30/EU (Electromagnetic Compatibility)

Remark:

The manufacturer has voluntarily decided to submit its documents concerning the above-mentioned product for verification. Ente Certificazione Macchine confirms that the documentation made available and immediately returned to it, as containing sensitive data, meets the essential requirements of the above-mentioned directive/standard. The verification activity carried out exclusively concerned the technical documentation and no verification was carried out on the product. This document cannot replace the EC Declaration of Conformity. This document was issued in accordance with regulation RGVOL01 published on the website of www.entecerma.it and concerning voluntary certifications with a non-notified procedure.

Issuance date: 08 August 2023

Expiry date: 07 August 2028

For online check:



Approver
Ente Certificazione Macchine
Legal Representative
Luca Bedonni



Ente Certificazione Macchine Srl

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Form QAT_10-M05, version 03, effective since June 19th, 2023

Annex I



No. 0D230808.VQD81

Model(s):

Ventox Harmony, Ventox Harmony Slim Line,
Ventox Harmony Invisible, Ventox Fresh, Ventox Fresh Slim Line,
Ventox Fresh Invisible, Ventox Double, Ventox Twist, Ventox Comfort,
Ventox Comfort Slim Line, Ventox Comfort Invisible, Ventox RV-2 NG,
Ventox RV-30

Ente Certificazione Macchine Srl

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