



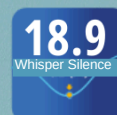
FRESHFLOW HEAT RECOVERY UNIT

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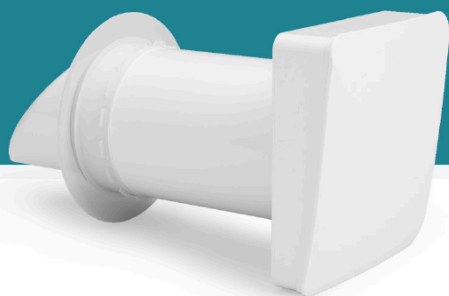


97% up to

Regeneration
Efficiency



- ✓ Modern design
- ✓ Fresh air
- ✓ Remote control



Comfort. Efficiency. Innovation

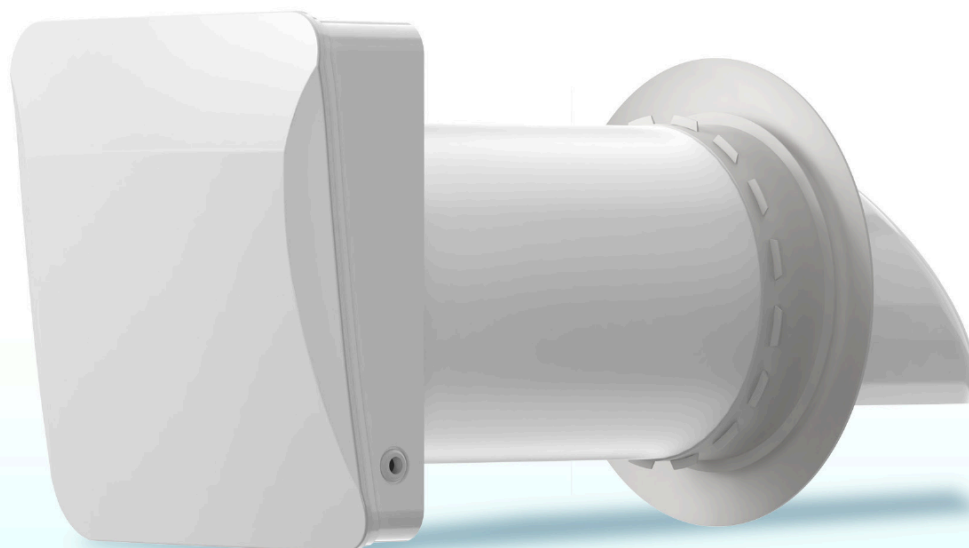
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FRESHFLOW FEATURES

28.7
dB(A)

UP
TO
97%
HEATRECOVERY

6.5w



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Elegant, minimalist design

Blends perfectly with modern interiors.



High-efficiency ceramic core

Up to 97% heat recovery at low air flow



Automatic air shutter

Blocks dust and backdraught when idle.



Single-hole wall mounting

Compact, quick and space-saving setup.



Quiet DC motor

3-speed reversible fan, only 6 W and 28.7 dB(A).



Advanced filtration

Optional F7 (MERV13) filter and washable pre-filter.



Flexible operating modes

Standalone or optional synchronised use of multiple units.



Multiple control options

Remote control and optional mobile app (iOS/Android).



Humidity sensor

Intelligent humidity control to optimise indoor conditions

Dear customer!

Thank you for choosing our device. Please read this user manual carefully.

SAFETY REQUIREMENTS!

- Read this manual carefully before using and installing the heat recovery ventilator.
- Install and operate the ventilator in accordance with this manual and with all applicable local and national building, electrical and technical regulations and standards.
- Take the warnings in this manual seriously, as they contain essential information concerning personal safety.
- Failure to follow the safety instructions may result in personal injury or damage to the heat recovery unit.
- Read the manual carefully and follow it when using the heat recovery unit.
- This appliance may be used by children aged 8 years and above and by persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, if they are supervised or have been instructed in the safe use of the appliance and understand the hazards involved.
- Do not let children play with the appliance. Do not let children clean or maintain the appliance without supervision.
- If the power cord is damaged, it must be replaced by the manufacturer or a qualified person in order to avoid a hazard.
- It is recommended to install the ventilator higher than 2.1 m above the floor.
- Precautions must be taken to prevent the backflow of gases into the room from the open flue of gas-burning or other fuel-burning appliances.
- Extract fans may adversely affect the safe operation of gas-burning or other fuel-burning appliances (including those in other rooms) by causing backflow of flue gases. These gases can cause carbon monoxide poisoning.
- After installing an extract fan, such as a partition fan or a duct fan, the operation of appliances with an open flue should be checked by a competent person to ensure that no backflow of flue gases occurs.
- Do not recharge single-use batteries. Batteries must be inserted with the correct polarity.
- Remove used batteries from the device and dispose of them safely.
- If the device is not to be used for a long period, remove the batteries.
- Do not short-circuit the power terminals.
- Keep the remote control safe to prevent children from swallowing the batteries and causing an accident.



The heat recovery unit must be disconnected from the power supply before installation or repair.



The heat recovery unit must not be used outside the temperature range specified in this manual, nor in an aggressive or explosive environment.



Do not place any heating appliances or other devices near the power cord of the heat recovery unit.



Do not use damaged equipment or cables to connect the heat recovery unit to the power supply.



When installing the heat recovery unit, observe the safety regulations for the use of power tools.



Unpack the heat recovery unit carefully.



Use the heat recovery unit only for the purpose intended by the manufacturer.



Do not touch the controller or the remote control with wet hands. Do not carry out maintenance with wet hands.



Do not let children operate the appliance



Do not clean the fan with water. Protect electrical parts from flooding.



Do not block the air duct while the heat recovery unit is running.



Disconnect the heat recovery unit from the power supply before maintenance.

HIGH-EFFICIENCY ENERGY REGENERATOR

The regenerator with a hygienically treated ceramic core recovers up to 97% of thermal energy. A honeycomb or ball-structure regenerator is also available, providing an optimal balance of efficiency, cleanliness and comfort.



FRONT PANEL

Designed to blend into the room, the front panel has a smooth, modern surface that looks more like a decorative element than an appliance. A discreet finishing touch for any wall.



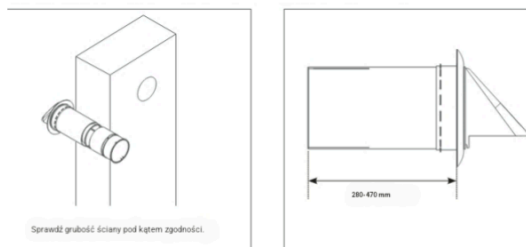
AUTOMATIC SHUTTER

Discreetly built into the housing, the automatic shutter closes gently once the device stops. It protects against dust, insects and cold draughts.

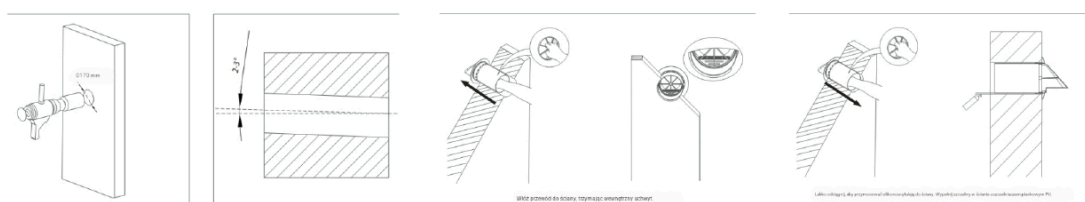


INSTALLATION INSTRUCTIONS

1. After checking that the wall thickness matches the product, insert the outer duct into the wall and make sure the air inlet/outlet is correctly angled downwards.

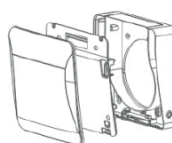
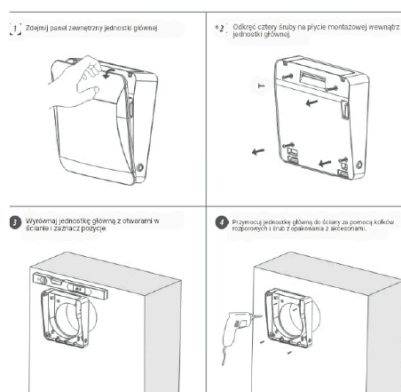


2. Drill a 170 mm diameter hole in the wall with a slight downward slope. Make sure there is at least 50 cm clearance from the edge of the hole to the ceiling.

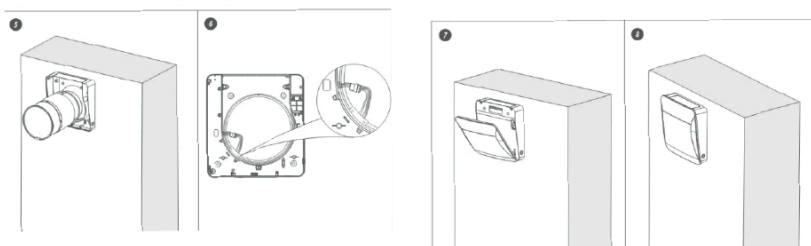


Installing the main unit

1. Remove the front panel, align the unit's air outlet with the wall air duct, mark the screw holes and then fix the unit to the wall



2. Insert the inner tube and connect the fan wires. Finally, refit the mounting plate in the main unit, tighten the four screws and refit the front panel to complete the installation.



FRESHFLOW

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- ▶ Every 75 seconds the airflow gently reverses: fresh air comes in, stale air goes out. This alternating cycle keeps your room

clean.

continuous ventilation with no need for ventilation ducts or opening windows.

- ▶ Hidden in the wall, the fan runs with exceptionally low energy consumption and minimal noise

providing quieter surroundings, longer motor life and cleaner indoor air, both day and night.

- ▶ More than just ventilation. FRESHFLOW

FRESHFLOW
18.9 dB(A)*

Falling leaf
20 dB(A)

Whisper
30-50 dB(A)

**ULTRA QUIET
OPERATION**

Sleep well

*Tested in an authorised laboratory
lowest speed within a 1.5 m radius around the unit.

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5 EN

Intelligent airflow for year-round comfort

FRESHFLOW does not just ventilate — it precisely manages the airflow in your home. Every 75 seconds it reverses the airflow, providing a balanced exchange of indoor and outdoor air while keeping the energy inside your home.

The result? Cleaner air, lower energy bills and a more comfortable home all year round.

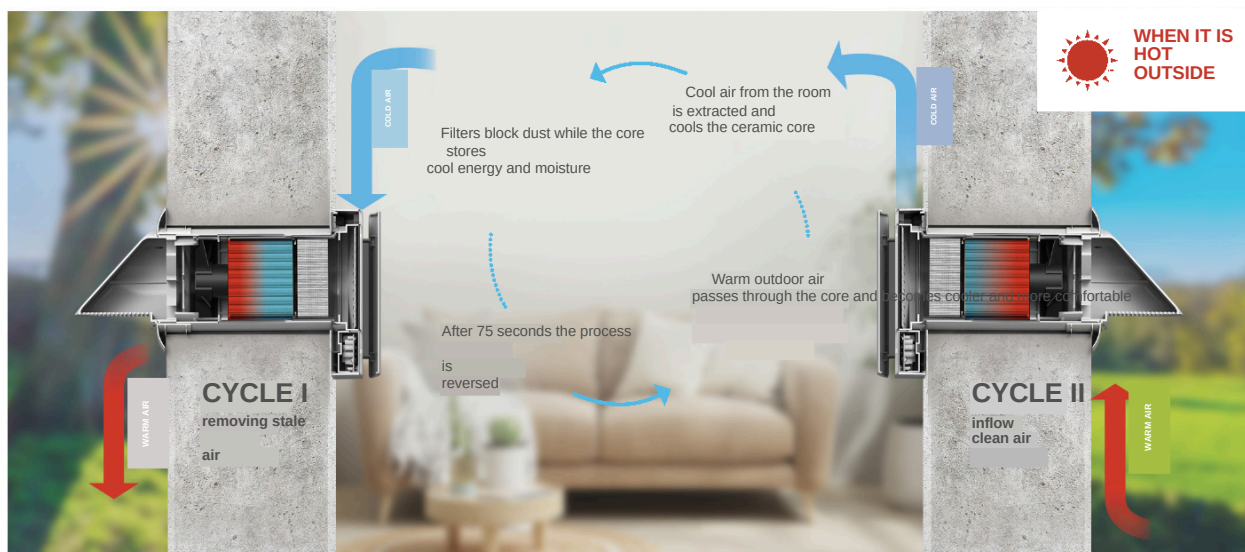
Energy savings in winter

As stale air is removed from the room, the ceramic core absorbs its heat. When the fan reverses, fresh outdoor air passes through the pre-heated core, delivering the recovered heat back into the room — keeping it cosy without wasting energy.



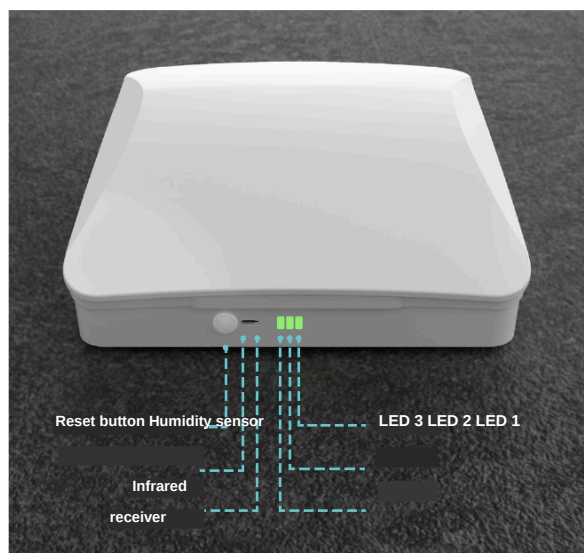
• Energy recovery in summer

On hot days the process reverses: cooler indoor air cools the ceramic core. Fresh, warmer outdoor air then passes through the cooled core, reducing the amount of heat entering the room — so your home stays fresh and comfortable and cooling takes far less effort.



Easy comfort, your way

► LED display



Button functions:

1. Short press of the RESET button: select speed 1 / speed 2 / speed 3 / off, in sequence.

Settings:

1. Press and hold the RESET button for 3 seconds and the fan enters Wi-Fi pairing mode; the green LED1 flashes, and when LED1 flashes green quickly x4 the Wi-Fi connection has been established.

2. Press and hold the RESET button for 6 seconds / 9 seconds: enter the pairing setup function and set the unit as the leader. The blue LED1 flashes, the fan becomes the leader unit and is in pairing mode.

If LED1 and LED2 are blue and flashing, the fan becomes a follower unit in pairing mode, and when LED1 flashes blue quickly x4 the pairing setup is complete.

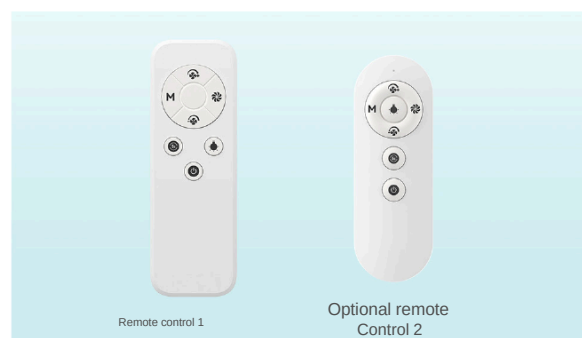
3. Press and hold the RESET button for 12 seconds to reset the filter alarm — the red LED1 flashes quickly x3

4. Press and hold the RESET button for 15 seconds to restore the factory settings; LED1 red / LED2 green / LED3 blue flash quickly x4 — the factory settings have been restored.

Power-on status (RGB LED):

- 1. Green light: supply mode
- 2. Red light: extract mode
- 3. Blue light: heat recovery mode
- 4. Flashing blue light: humidity extraction active. Flashing red light: filter cleaning reminder (960 operating hours). Red LED1 flashing quickly x4: filter timer reset

► Remote control



REMOTE CONTROL FUNCTIONS

1. Speed +/-: adjusts the 3 fan speeds
2. MMode switch: changes the operating mode.
3. Light on/off: toggles the LED indicators
4. Boost mode: enter fan boost mode; the fan runs at the highest speed for 30 min. unless another operation is performed
5. Filter alarm reset. After cleaning the filter, press this button for 5 s to reset the filter alarm. The red LED flashes 3 times.
6. Power on/off

► Pairing function (optional)

1. One remote control can operate several units if no roles have been assigned.
2. Once roles are assigned, only the leader unit responds to the remote control. Follower units carry out the leader's commands.
3. In heat recovery mode the follower fan runs in the opposite direction to the leader fan; in the same direction in other modes.

Maximum range 15 m.
The signal can pass through 18 cm



Wireless pairing for balanced ventilation

One unit supplies fresh air for 75 s while the other extracts stale air from the room for 75 s, creating a balanced ventilation system.

- ▶ Wireless connection between the leader unit and the follower unit.
- ▶ No wiring or dialling required.
- ▶ Very long transmission range of 30 metres
- ▶ Wireless pairing. Effortless synchronisation.
- ▶ Several units together. Full control.
Control an unlimited number of devices from the app. With a single tap. In every room.



Barriers and interference. In practice, installation at a distance of 8–15 metres is recommended. Avoid strong sources of interference and shielding objects (e.g. iron frames,

aluminium ceilings).

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WiFi function (optional)

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- ON/OFF switch
- Fan speed selection Operating
- mode selection
- Pairing status
- Outdoor temperature display
- Filter alarm
- 12-hour timer setting
- Indicator lights on/off Weekly schedule
- Fan speed boost function
- Multi-connection control
- Intelligent control based on local weather
- Humidity control



The app is available from the App Store and Google Play.



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Works with Alexa and Google Assistant.



Energy savings and improved indoor air comfort

► Humidity control

The unit is fitted with a humidity sensor; the user can set the desired humidity level using the app. In heat recovery mode, when the indoor humidity level

exceeds the set value, the unit switches to extract mode to draw air out of the room and lower the humidity level.

The device returns to its previous operating mode when the indoor humidity falls below the set humidity by 5%.

► Scene control (optional)

The user can create scenes based on weather changes, schedule or changes in device status.

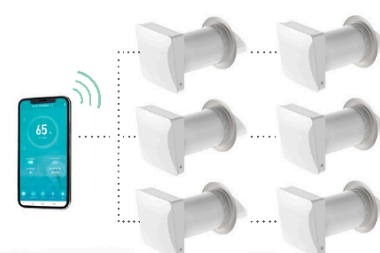


For example, when the outdoor relative humidity exceeds 85%, the user can set the fan to stop or to run in extract mode, to prevent outdoor moisture from entering the room. The device will

operate automatically according to the settings.

► Group control (optional)

The heat recovery unit can be controlled as a group from the app. The number of units is unlimited. The user can easily control all units in the group.



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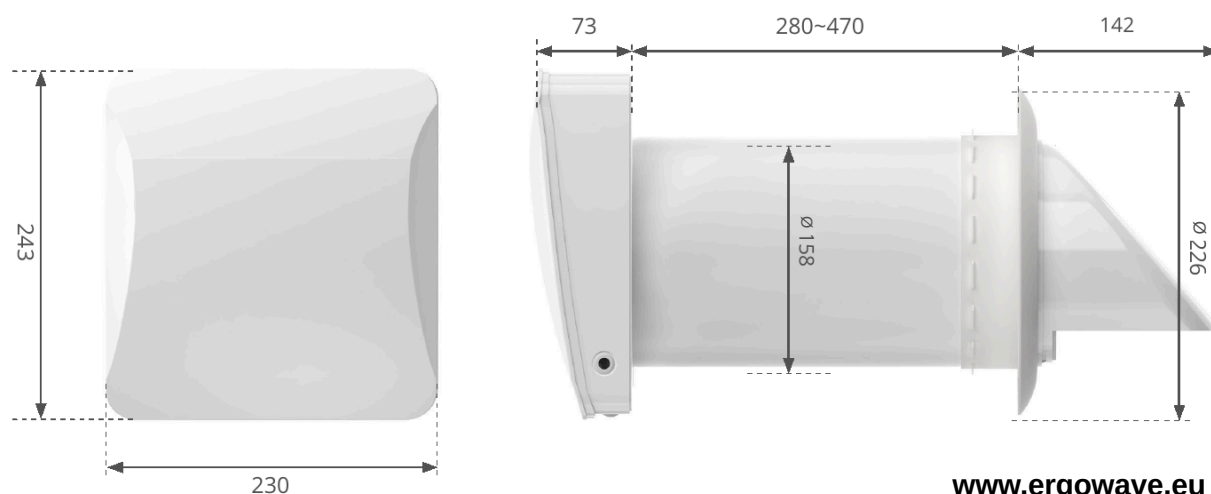
Technical parameters

Voltage	100 V~240 V AC /50-60 Hz		
Power (W)	4.7	5.6	6,5
Air flow (L/M/H) (m3/h)	30	50	60
Air flow (L/M/H) (CFM)	17.6	29.4	35.3
Sound pressure level dB(A)	18.9	25.2	28,7
Regeneration efficiency SEC	Up to 97%		
	A+		
rpm (max.)	2200		
Duct diameter (mm)	158		
Product size (mm)	230×243×499,7 (Duct length in the wall is 280-470 mm)		
Net weight (kg)	3.9		

*Note: the air flow in supply/extract mode without the F7 filter is approximately 34/56/70 CMH or 20/33/41.2 CFM, and the relative parameters will be adjusted accordingly.

Dimensions

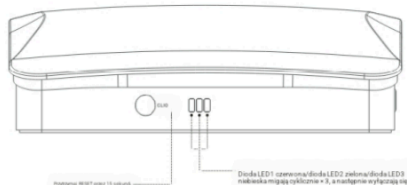
(Unit: mm)



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RESTORING FACTORY SETTINGS

Press and hold the reset button for 15 seconds; LED1 red / LED2 green / LED3 blue flash three times in sequence and then switch off, and the device restores the factory settings.

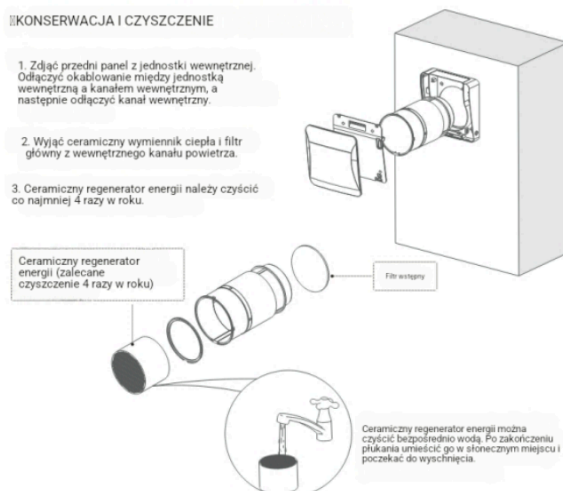


*If your fan has a humidity sensor but no Wi-Fi function, you will not be able to monitor the indoor humidity value in real time on your mobile phone. The humidity control function is still available, however. The default humidity limit is 85%. In heat recovery mode, when the relative humidity exceeds 85%, the device automatically switches to extract mode.

*If the heat recovery unit has a Wi-Fi function, the user can set the humidity limit in the app. Detailed information can be found in the description of the humidity control function in the section IOT NETWORK CONFIGURATION AND APP INTERFACE

MAINTENANCE AND CLEANING

1. Remove the front panel from the indoor unit. Disconnect the wiring between the indoor unit and the inner duct, then disconnect the inner duct.
2. Remove the ceramic heat exchanger and the main filter from the inner air duct. 3. The ceramic energy regenerator should be cleaned at least 4 times a year.



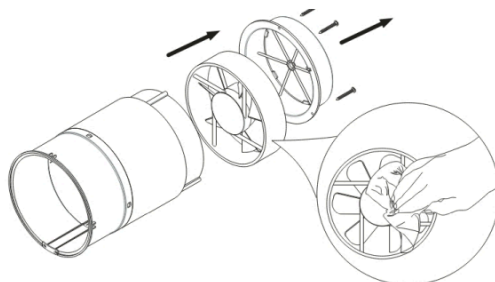
The F7 filter is optional.

If the device is fitted with an F7 filter, clean it at least 4 times a year. The F7 filter cannot be washed and must be vacuumed or replaced when dirty. To purchase replacement filters, please contact your dealer.

Even regular technical maintenance may not completely prevent dirt from building up on the regenerator assemblies. Clean the exchanger regularly to maintain high heat exchange efficiency. Vacuum the exchanger at least once a year.

Clean the pre-filter at least 4 times a year. The user may wash or vacuum the pre-filter. Remember to dry the pre-filter after washing and refit it in the ventilation duct.

Fan maintenance (once a year). Remove the fixed bracket from the inner duct and take out the fan. Clean the impeller blades. Use a soft brush, cloth or vacuum cleaner to clean the impeller. Do not use abrasive detergents, solvents or sharp objects. The impeller blades should be cleaned once a year.



STORAGE AND TRANSPORT RULES

Store the heat recovery unit in the manufacturer's original packaging, in a dry place. The storage environment must be free from aggressive vapours and chemical mixtures that could cause corrosion or deform the insulation and seals. Use lifting equipment for transport and storage to prevent damage to the fan caused by a fall or excessive vibration. Observe the transport requirements applicable to this type of cargo. Transport by any vehicle is permitted provided the fan is protected against mechanical damage and weather conditions. Avoid mechanical shocks and impacts during transport.

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 DECLARATION OF PERFORMANCE

Issuer of the declaration: ergowave sp. z o.o., ul. Malinowa 14H, 43-100 Tychy, Poland, VAT ID: 6463025040 | REGON: 543175153

Importer of the product:

➔ HEAT RECOVERY UNIT: FRESHFLOW R-160, FRESHFLOW R-110

Country of origin: China

☒ Declaration of conformity

ergowave sp. z o.o. declares that the above products:

- are safe to use,
- meet the requirements set out in the manufacturer's technical documentation,
- and comply with the applicable European Union directives and technical standards.

⚙ Characteristics and conformity tests

1. The performance of the product complies with the technical requirements laid down in the applicable EU regulations.
2. Conformity testing was carried out in accordance with the directives:
 - Directive 2014/30/EU (EMC): harmonised standards applied:
 - EN 60335-1:2012+A11:2014+A13:2017+A1:2019+A14:2019+A2:2019+A15:2021+A16:2023 EN IEC 60335-2-80:2024+A11:2024; EN 62233:2008
 - EN IEC 62311:2020; EN 50665:2017
 - EMC ETSI EN 301 489-1 V2.2.3 (2019-11)
 - ETSI EN 301 489-3 V2.3.2 (2023-01)
 - ETSI EN 301 489-17 V3.3.1 (2024-09)
 - EN IEC 61000-3-2:2019 + A1:2021 + A2:2024
 - EN 61000-3-3:2013 + A1:2019 + A2:2021
 - ETSI EN 300 328 V2.2.2 (2019-07)
 - ETSI EN 300 220-1 V3.1.1 (2017-02)
 - ETSI EN 300 220-2 V3.2.1 (2018-06)

Test reports: ZHT-250919121S01, ZHT-250919121W01-1, ZHT-250919121W01-2, ZHT-25091921W01-3, ZHT-250919121W01-4

Place and date of issue of the declaration: Tychy, 01.01.2026

WARRANTY CARD

Warranty granted to:

Date of warranty:

Invoice number / handover protocol:

Device model / serial number:.....

1. The products are covered by a 24-month manufacturer's warranty, counted from the date of sale.
2. If the device is repaired under warranty, the warranty period is extended by the duration of the repair, counted in full days.
3. The warranty covers hidden manufacturing defects of the products.
4. The warranty does not cover damage resulting from:
 - incorrect installation, commissioning or operation not in accordance with the technical documentation of the device,
 - incorrect connection or supplying the device with a voltage other than that indicated on the rating plate and/or in the technical documentation,
 - operation in conditions inconsistent with the intended use and design parameters (e.g. presence of grease, dust, extremely high or low temperatures),
 - burnout of the electric motors resulting from operation of the device without the thermal protection required by the technical documentation,
 - improper or neglected maintenance provided for in the technical documentation.
5. Any damage to a device covered by the warranty should be reported to: ergowave sp. z o.o., ul. Malinowa 14H, 43-100 Tychy, Poland; email: office@ergowave.eu
6. A complaint report should contain:
 1. device model,
 2. serial number,
 3. date of report,
 4. description of the damage,
 5. date of purchase,
 6. a copy of the proof of purchase.
7. Complaints are processed within 30 days of the date of report.
8. The device must be dismantled, packed appropriately and sent to the address:
9. If the complaint is accepted, the device will be repaired or replaced with a new one and returned to the Buyer. The shipping cost is covered by the Guarantor.
10. The Guarantor reserves the right to choose the method of fulfilling the warranty — repair or replacement with a new device.
11. In the case of an unfounded warranty claim, the device will be repaired and/or returned at the Buyer's expense, after the Buyer has accepted the costs of repair and shipping.
12. Any unauthorised repairs or structural modifications to the devices void the warranty.
13. The warranty does not exclude, limit or suspend the Buyer's rights arising from the provisions on warranty for defects of the item sold.

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