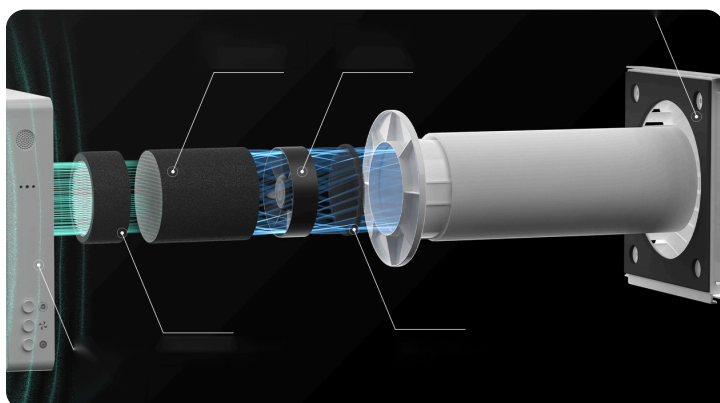


FRESHFLOW R110

User manual
heat recovery ventilator



Single-room heat recovery ventilator with up to 97% heat recovery

CE

for the user and the qualified installer

Safety requirements

- Read this manual carefully before use and keep it for future reference.
- Installation and servicing must be carried out in accordance with this manual and with the applicable building and electrical regulations.
- Failure to follow the safety rules may result in personal injury or damage to the unit.
- The appliance may be used by children aged 8 and over and by persons with reduced physical, sensory or mental capabilities if they are supervised or have been instructed in its safe use.
- Children must not clean or service the appliance without supervision.
- A damaged power cord must be replaced by a qualified person.
- It is recommended to install the unit higher than 2.1 m above the floor.
- Extract fans may affect the operation of appliances burning gas or other fuels – an adequate air supply must be ensured so that flue gases do not flow back into the room.
- Remove the batteries from the remote control if the unit will not be used for a long time. Keep the remote control out of reach of children – swallowing a battery may cause an accident.

Symbols used in the manual

	WARNING Information about a risk to health or life.		PROHIBITED Action that is not permitted.
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Precautions during installation

	Disconnect the unit from the power supply before any repair or maintenance.		Do not use the unit in rooms where the temperature exceeds the permissible operating range.		Do not install the unit near heat sources or open flames.
	Unpack the unit carefully and check it for transport damage.		Do not use a damaged unit or a damaged power cord.		During installation follow the safety rules for the use of power tools.
	Do not touch the unit or the controller with wet hands.		Children must not operate the unit or play with it.		Do not clean the unit with water – protect the electrical parts against flooding.
	Do not block the air duct while the unit is running.		Disconnect the fan from the power supply before maintenance.		Do not damage the power cord and do not place any objects on it.

Intended use

The FRESHFLOW R110 is a single-room ventilation unit with heat recovery, intended for flats, houses, offices, hotels, cafés and classrooms. It provides a constant supply of fresh air without opening the windows and recovers up to 97% of the thermal energy from the extracted air.

The unit is designed for continuous operation. It is not intended for extracting fumes from kitchen hoods or for drying buildings after wet works.

Scope of delivery

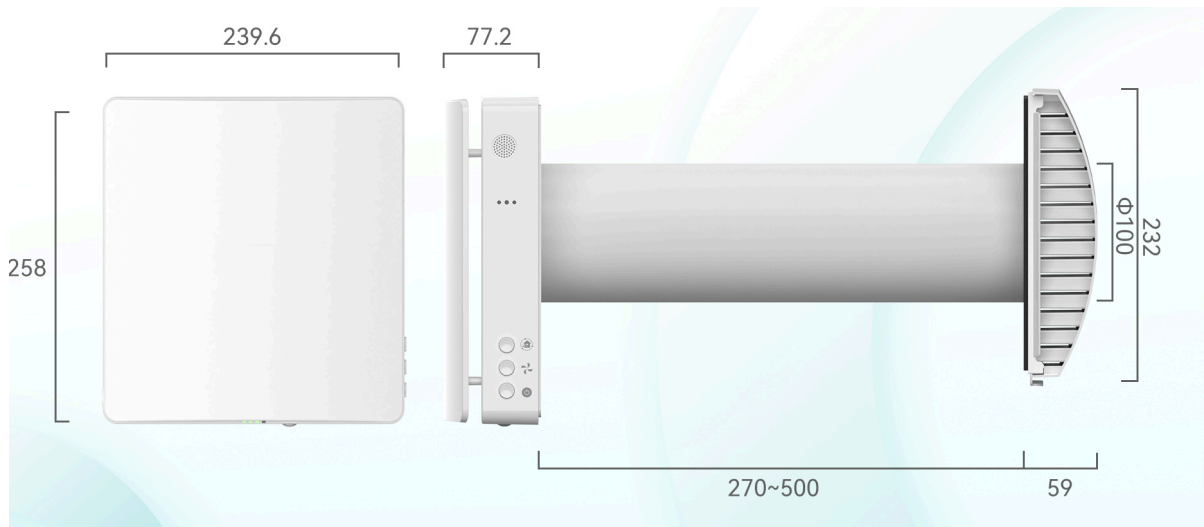
- Ventilation unit – 1 pc.
- Remote control – 1 pc.
- User manual – 1 pc.
- Duct with external hood – 1 pc.
- Set of screws and plugs – 1 set

Technical parameters

Parameter	Unit	Value
Voltage / frequency	V, Hz	220–240, 50/60
Power input	W	5,9
Fan speed (max.)	rpm	1100 / 2200 / 2600 / 2950
Air flow in supply / extract mode	m³/h	10 / 20 / 25
Air flow in heat recovery mode	m³/h	5 / 10 / 12,5
Air flow in supply / extract mode	CFM	5,9 / 11,8 / 14,7
Air flow in heat recovery mode	CFM	3 / 5,9 / 7,4
Max. air flow (boost mode)	m³/h (CFM)	30 (17,6)
Sound pressure level	dB(A)	31,2
Heat recovery	%	up to 97
Protection rating	—	IPX4, class I
Duct diameter	mm	100
SEC class	—	A
Mounting	—	wall bracket
Net weight	kg	2,7

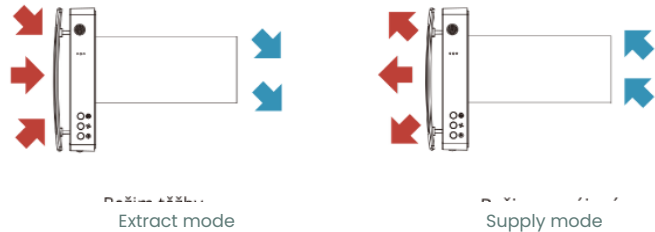
*The unit works with alternating voltage in the range of 100–240 V.

Overall dimensions (mm)



75-second operating cycle

The ceramic regenerative heat exchanger works in cycles of 75 seconds. In the first cycle the stale, warm indoor air passes through the exchanger and gives up its heat and moisture to it. After 75 seconds the fan reverses its direction: fresh outdoor air flows through the heated exchanger and returns to the room warmed, at a temperature close to the indoor temperature. In summer the process is reversed — the cooler indoor air cools the exchanger and the incoming warm outdoor air is pre-cooled.



Operating modes

Heat recovery	Cyclic operation every 75 s with heat recovery — the basic mode, recommended for continuous operation.
Supply	Constant supply of outdoor air, without heat recovery.
Extract	Constant extraction of air from the room, without heat recovery.
Boost mode	Temporary increase of the air flow up to 30 m³/h, e.g. after cooking.
Night mode	Operation at the lowest speed with reduced noise.

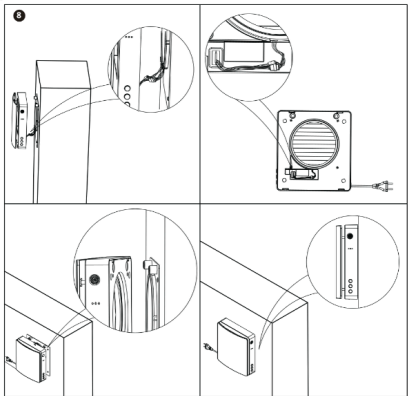
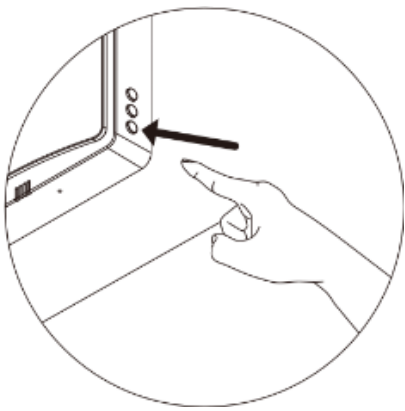
The air flow is set in three speeds: 10, 20 and 25 m³/h in supply and extract mode and 5, 10 and 12.5 m³/h in heat recovery mode.

Preparing the opening

- Choose an external wall, keeping at least 300 mm from the ceiling and corners and 2.1 m from the floor.
- Drill an opening of 105–110 mm in diameter with a 2–3° slope outwards so that condensate can drain freely.
- Clean the opening and insert the duct, cutting it to the wall thickness (range 280–470 mm).
- Fit the rain hood on the outside.

Mounting the unit

- Hold the wall bracket in place, mark and drill the holes, insert the plugs and screw the bracket on.
- Insert the ceramic core and the filters into the duct according to the direction marking.
- Connect the power cord to the terminal block, observing the polarity.
- Hang the unit on the bracket and click the front panel into place.



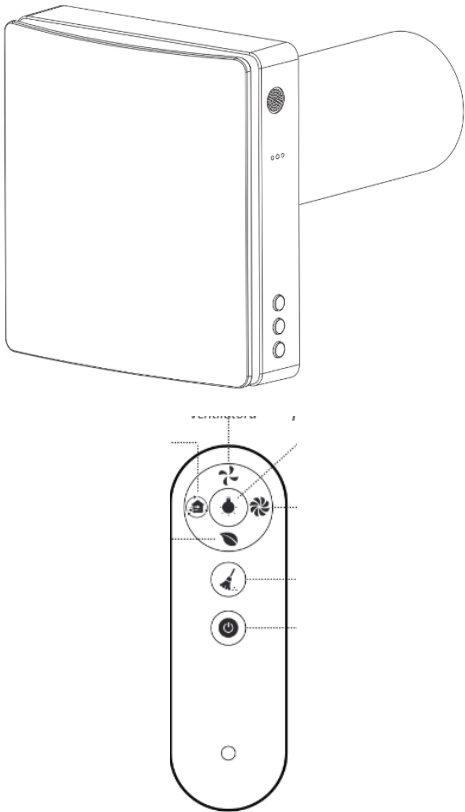
The electrical installation may only be carried out by a person with the appropriate qualifications. Switch off the power supply to the circuit before connecting.

The unit

- Front panel with a smooth surface and a concealed air inlet.
- Ceramic regenerative heat exchanger with up to 97% recovery.
- Pre-filter and outlet filter protecting against dust and insects.
- Automatic damper closing the duct after the unit stops.
- RESET button and infrared sensor on the housing.

LED indication

Green light	Supply mode
Red light	Extract mode
Blue light	Heat recovery mode
Flashing blue	Moisture extraction switched on
Flashing red	Reminder to clean the filters (after 960 h of operation)
Red, 4 quick flashes	Resetting the filter timer



Remote control

Speed +/-	Switching between the three fan speeds
MODE	Changing the operating mode
Backlight	Switching the indicator LEDs on and off
Boost	Operation at maximum air flow for 30 minutes
Filter reset	Hold for 5 s after cleaning the filters
ON/OFF	Switching the unit on and off

Before using the remote control for the first time, remove the insulating strip of the CR2025 battery. The maximum range is 15 m.

LEADER and FOLLOWER

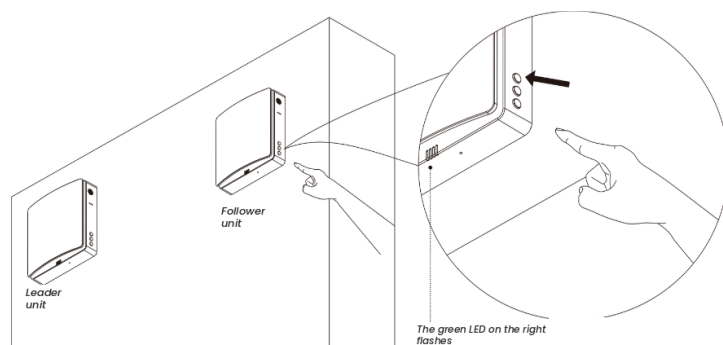
Two units can be connected wirelessly. One works as the leader unit (LEADER), the other as the follower unit (FOLLOWER). In heat recovery mode they work alternately: while one supplies fresh air, the other extracts the stale air — creating a balanced ventilation system.



Recommended maximum distance between the units: 15 m

Leader unit: hold the RESET button for 6 seconds — LED1 starts flashing blue and the unit enters pairing mode as LEADER.

Follower unit: hold RESET for 9 seconds — LED1 and LED2 flash blue. Four quick blue flashes indicate that pairing is complete.



The signal passes through partitions up to 180 mm thick. Avoid mounting behind metal structures and aluminium ceilings.

First connection to the app

- Download the Smart Life or Tuya app from the App Store or Google Play and create an account.
- Switch on Wi-Fi in your phone and connect to a 2.4 GHz network.
- Hold the RESET button on the unit for 3 seconds — the green LED1 starts flashing.
- In the app select adding a device and enter the Wi-Fi network password.
- Four quick green flashes indicate a successful connection.

Functions available in the app

- Switching on and off and selecting the speed and operating mode.
- Weekly schedule and timer.
- Outdoor temperature and humidity level readout.
- Group control of several units at the same time.
- Filter replacement reminder.
- Works with Amazon Alexa and Google Assistant.



Resetting the Wi-Fi settings: hold the RESET button for 15 seconds — the LEDs flash red, green and blue in sequence.

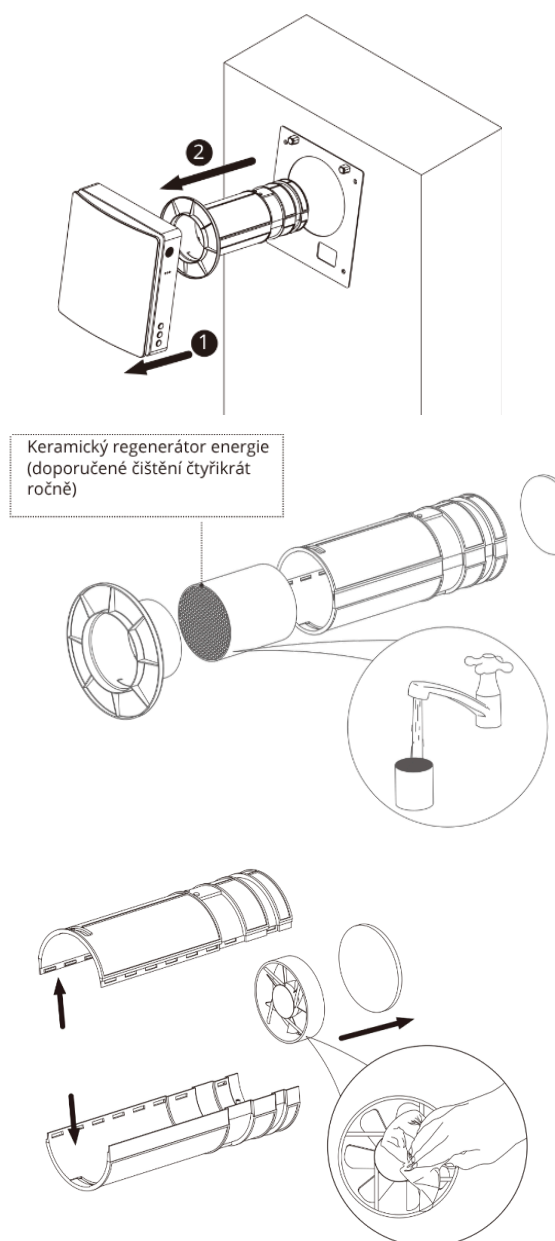
Cleaning (once a year)

- Disconnect the unit from the power supply and remove the front panel.
- Take the filters and the ceramic exchanger out of the duct.
- Rinse or vacuum the pre-filter, dry it thoroughly and fit it back.
- Vacuum the ceramic exchanger with a soft brush — do not wash it under running water.
- Clean the impeller blades with a soft brush or cloth, without solvents or sharp tools.
- After reassembly reset the filter timer with the RESET button.

Clean the filters at least 4 times a year, and more often in dusty environments. A dirty filter reduces the air flow and increases the noise level.

Storage and transport

- Store the unit in its original packaging, in a dry place, away from chemical vapours.
- Transport it in a way that protects it against shocks, impacts and weather conditions.



Symptom	Possible cause	Solution
The unit does not work	No power supply or a loose cable	Check the fuse and the mains connection
	The unit switched off with the remote control	Switch it on again with the ON/OFF button
Low air flow	Dirty filters or exchanger	Clean the filters and the ceramic exchanger
	Blocked air inlet or outlet	Remove obstacles from the duct and the external hood
Noisy operation	Contaminated fan impeller	Clean the impeller blades
	The unit is not mounted level	Check the fixing of the wall bracket
The remote control does not work	Flat battery or insulating strip	Replace the CR2025 battery, remove the insulating strip
	Obstacle between the remote control and the sensor	Point the remote control directly at the unit, from up to 15 m
No Wi-Fi connection	5 GHz network instead of 2.4 GHz	Connect the phone to a 2.4 GHz network and repeat pairing
	Wrong network password	Reset the settings (RESET for 15 s) and repeat the configuration
Flashing red LED	960 operating hours have elapsed	Clean the filters and reset the timer (RESET for 12 s)
Condensate in the duct	Insufficient duct slope	Correct the duct slope to 2–3° outwards

Warranty

The product is covered by a 24-month manufacturer's warranty counted from the date of sale. The warranty does not cover damage resulting from incorrect installation, supply with a voltage other than that stated on the rating plate, operation in conditions other than intended and neglect of the maintenance described in this manual.

CE declaration of conformity

ergowave sp. z o.o., ul. Malinowa 14H, 43-100 Tychy, Poland, declares under its sole responsibility that the product **single-room heat recovery ventilator FRESHFLOW R110** complies with the requirements of the following European Union directives:

- Low Voltage Directive 2014/35/EU (LVD),
- Electromagnetic Compatibility Directive 2014/30/EU (EMC),
- Directive 2011/65/EU on the restriction of hazardous substances (RoHS),
- Regulation 1253/2014 on ecodesign requirements for ventilation units.

The conformity assessment was carried out on the basis of harmonised standards. The technical documentation is kept at the company's registered office. The product bears the CE marking.

Place and date of issue: Tychy, 01.01.2026 | Country of origin: China