Single-room heat recovery ventilation unit with enthalpy ceramic heat exchanger





Breezy Eco heat recovery unit is a modern solution that combines balanced ventilation with heat recovery, an optional built-in electric heater, temperature sensor, as well as a user-friendly interface. With its compact and multi-purpose design, the device provides an effective way to improve indoor air quality without losing valuable heat (or coolness). The unit is designed for through-the-wall installation inside a prepared hole in an outer wall of the building. Breezy Eco is a decentralized unit and does not require ducting, therefore it is typically much easier to install. This makes them excellent for retrofitting in flats, apartments, hotels, houses, cottages, social and commercial indoor areas that have insufficient space to install a centralized system with ducts.

FEATURES:

- Simultaneously supplies and extracts air through a single hole in the outer wall.
- Separate settings for each EC fan ensure balanced ventilation.
- $\cdot\,$ Reducing heat losses caused by heat and energy recovery.
- Efficient ceramic heat exchanger of hexagonal cellular structure with automatic frost protection system.
- Version with electric heater available.
- G3 supply and extract filters.
- Temperature sensor.
- Controlled with an Android or iOS smartphone or tablet.
- $\cdot\,$ House ventilation control via cloud service from anywhere in the world.

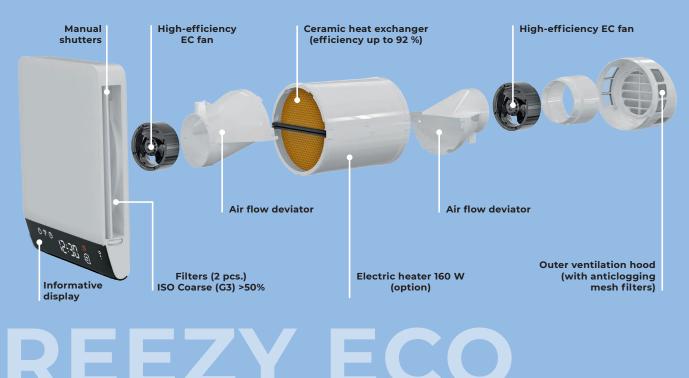
FUNCTIONS



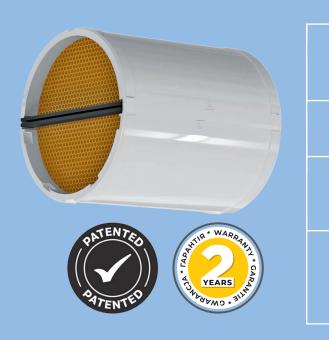
MODES OF OPERATION



- **Heat recovery mode** simultaneously supplies and removes air through one opening in the outer wall with a cyclical change in the direction of air. The defrosting algorithm is activated by a triggered temperature sensor.
- Ventilation mode active operation of both fans, simultaneous supply and exhaust without changing direction.
- **Supply mode** active operation of both fans, simultaneously pumping air into the room. Activation of the electric heater is possible.
- **Exhaust mode** active operation of both fans, simultaneously removing air to the outside. Activation of the electric heater is not possible.



CERAMIC HEAT EXCHANGER



The process of heat recovery occurs through regeneration with the preservation of moisture, which is very important for the cold and dry winter period.

No moisture condensation occurs in the heat recovery mode in winter.

High regeneration efficiency due to the innovative hexagonal structure of the heat exchanger cells. Recovers up to 92% of heat from extracted air.

The cartridge, which includes the regenerator, is sealed because it is made of ABS plastic, therefore it reduces the accumulation of dirt on the heat exchanger and facilitates cleaning.

The regenerator is protected with a hydrophilic layer that prevents the penetration of moisture and the development of fungi, mold and bacteria on its surface.

UNIT OPERATING LOGIC

- To increase the efficiency of the Breezy Eco, the regenerator is divided into two parts, which are isolated from one another, thus eliminating the transfer of air, heat and moisture between them.
- One of the fans operates in the supply mode: fresh cold intake air from outside flows through the first regenerator, and absorbs accumulated heat and humidity.
- Meanwhile, the other fan operates in the exhaust mode: warm stale air is extracted from the room to the outside, and while passing through the other regenerator, it gradually heats the air up and transfers some of the moisture.
- After 70 seconds operation the fans change the rotation direction and the opposite processes start.

ALL FUNCTIONS IN YOUR SMARTPHONE

Breezy Eco combines compact size and a wide range of functions that are easy to track in a smartphone application.



AND EVEN MORE.

Just say «Hey Google...» or «Alexa...» and test, control and run Breezy Eco in English, German, Swedish, Norwegian, Danish, Polish, Dutch, French, Spanish*.

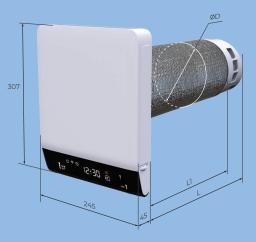


*Important: The feature availability could depend on your country, region and language. Check it for your speaker/smartphone or ask its manufacturer.

DIMENSIONS [mm]

| Madal | | Overall dimensions [mm] | | | | |
|------------------------|-----|-------------------------|------|----------------|--|--|
| Model | ØD | L | u | Wall thickness | | |
| Breezy Eco 160(E) | 162 | 540 | 439 | 240*440 | | |
| Breezy Eco 160(E) L055 | | 650 | 550 | 450550 | | |
| Breezy Eco 160(E) L07 | | 800 | 700 | 560700 | | |
| Breezy Eco 160(E) L1 | | 1100 | 1000 | 7101000 | | |

* With an optional expansion joint



TECHNICAL DATA

| | | Breezy Eco 160 | | | Breezy Eco 160-E | | |
|--|--------|--------------------|-----|------|------------------|------|------|
| Speed | | 1 | 2 | 3 | 1 | 2 | 3 |
| Voltage / Frequency | V / Hz | 220-240 V 50/60 Hz | | | | | |
| Max. unit power without electric heater | W | 3 5 8 | | 8 | 3 | 5 | 8 |
| Integrated electric heater power | W | - | | 160 | | | |
| Max. unit current without electric heater | А | 0.02 0.03 0.04 | | 0.04 | 0.02 | 0.03 | 0.04 |
| Max. unit current with electric heater | А | - | | 0.93 | 0.94 | 0.95 | |
| Air flow in heat recovery mode | m³/h | 10 | 30 | 48 | 10 | 30 | 48 |
| | l/s | 3 | 8 | 13 | 3 | 8 | 13 |
| Air flow in supply (exhaust) mode | m³/h | 15 | 60 | 80 | 15 | 60 | 80 |
| Air flow in ventilation mode | m³/h | 10 | 30 | 48 | 10 | 30 | 48 |
| SFP | W/I/s | 1.08 | 0.6 | 0.6 | 1.08 | 0.6 | 0.6 |
| Sound pressure level @ 1m | dBA | 24 | 36 | 50 | 24 | 36 | 50 |
| Sound pressure level @ 3m | dBA | 14 | 27 | 40 | 14 | 27 | 40 |
| Noise attenuation according to DIN EN ISO 10140-2: 2010 | dBA | 40/44 40/45 | | | | | |
| Classification of air flow sensitivity to pressure difference variations in accordance with EN 13141-8 | | S3 | | | | | |
| Indoor/outdoor airtightness classification of the complete unit in accordance with EN 13141-8 | | DI | | | | | |
| Heat recovery efficiency | % | ≤ 92 | | ≤ 90 | | | |
| Heat exchanger material | | Ceramic | | | | | |
| Heat exchanger type | | Regenerative | | | | | |
| Transported air temperature | С | -15 + 50 -25 + 50 | | |) | | |
| Filter | | G3 | | | | | |
| Ingress Protection rating | IP | x4 | | | | | |
| SEC class | | А | | | | | |

ASSORTMENT

| Options & functions | Breezy Eco 160 | Breezy Eco 160-E | |
|--|---|--|--|
| Heat recovery, supply only, extract only modes | + | + | |
| 3 speeds with independent adjustment from 10 to 100% for supply and exhaust | + | + | |
| Temperature sensor | + | + | |
| Light sensor | + | + | |
| Electric heater | - | + | |
| Frost protection by heating the regenerator with exhaust air | + | + | |
| Filter maintenance indication | + | + | |
| Remote control using an IR remote control and a smartphone via Wi-Fi | + | + | |
| Functional smartphone application with voice control, cloud service works with Google Home or Alexa | + | + | |
| Functional smartphone application with voice control, cloud service and air quality level statistics | + | + | |
| Main screens in the smartphone application | Speed (3 speeds) Speed (smooth adjustment) | - Speed (3 speeds) - Speed (smooth adjustment) - Heater | |

ACCESSORIES

| Option | Breezy Eco 160(E) |
|---|--|
| External compensator pad | CPO-40 Breezy 160 CPO-80 Breezy Eco 160 CPO-120 Breezy Eco 160 CPO-160 Breezy Eco 160 CPO-200 Breezy Eco 160 |
| Expansion kit for thick walls | KLW Breezy Eco 160 L055 KLW Breezy Eco 160 L07 KLW Breezy Eco 160 L1 |
| Metal decorative cuff for indoor installation | MP Breezy 160 |
| Filter G3 | SF Breezy Eco G3 (2 pcs.) |
| Filter G4 | SF Breezy Eco G4 (2 pcs.) |



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