



Fresh-r

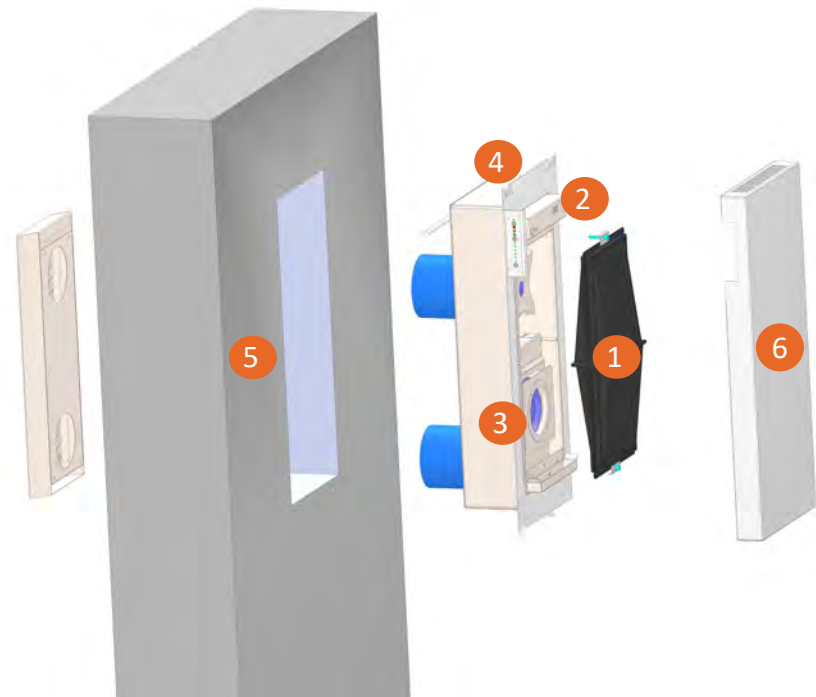
Smart indoor
air care

Fresh-r Compac In-the-Wall Specifications and Data


Smart measurement and control technology that reuses heat in the winter and coolness in the summer.

Keeps it comfortable indoors and the air healthy, without losing energy.

Demand-driven and balanced HR ventilation without ducts.

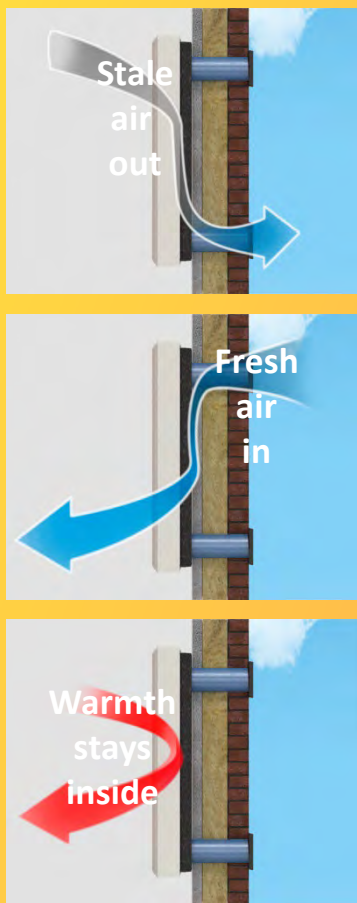


Key Features

- 1** The heat exchanger is made of copper, that conducts heat 1000 times better than polyethylene, of which other heat exchangers are made. Therefore temperature is exchanged from the outgoing air to the incoming air in a much shorter air path, which has multiple advantages:
 1. Keeps the unit compact;
 2. Low pressure drop, resulting in low fan energy usage and very low noise levels;
 3. Sub-zero °C efficiency;
 4. A thermal efficiency of 90% at 60 m³ / hour.
 - 2** Air quality is monitored by CO₂ sensor and humidity sensor. Dust sensors are optional.
 - 3** Ventilators refresh the indoor air, with a capacity of up to 125 m³ per hour.
 - 4** Runs on 220 Volt, with average use below 7 Watt, the same as one led lamp.
 - 5** The outside wall. Fresh-r can be installed both on as well as in the wall. For on the wall installation, only two holes of 130 mm need to be drilled.
 - 6** Easy to maintain with low maintenance costs. All parts are easily accessible through a sound-insulated door.
-  3 year warranty when connected to Wi-Fi or LTE.
2 year warranty when not connected to Wi-Fi or LTE.



World champion
in ventilation



Fresh-r is like a breathing window



Fresh-r

Smart indoor air care

www.fresh-r.eu

Fresh-r is a brand name of Vaventis BV

Technical Data

| | |
|------------------------------|---|
| Heat exchanger | Copper wire |
| HE efficiency | 90 % * |
| ErP label | A+ |
| Controls | CO ₂ / RH / Temp. |
| Balanced | Yes |
| Mounting | In the wall or On the wall |
| Outside duct diameter | 100 mm duct, 120 mm incl. insulation sleeve |
| Extract duct connection | In next model |
| Condensate discharge | Integrated in exhaust |
| Electricity supply | 230v/1ph/50Hz |
| Max power consumption | 25 Watt |
| Average power consumption | 7 Watt |
| Wi-Fi inside / LTE inside | Yes / Optional |
| Filter class | M5 standard F8 in next model |
| Dimensions (H x W x D in mm) | |
| - On the wall | 716 x 284 x 192 |
| - In the wall body | 638 x 284 x 134 |
| - In the wall door | 725 x 326 x 58 |

* Test at norm volume of 60 m³/hr and 87 % at 80 m³/hr performed by BRE UK

Air flow control

The Fresh-r saves 35% (avg.) on the overall ventilation energy by only ventilating when needed. The air flow rate is automatically adjusted to keep air quality good (1200 PPM CO₂ level). CO₂ and RH sensors with its smart control are always included in the Fresh-r and are situated in outgoing air stream. The automatic mode can manually be overruled for 90 minutes by increasing / decreasing fan speed. The user interface indicates the air quality level in 3 steps with icons for good, medium and bad.

Air balance control

Two backward curved fans are continuously balanced using smart controls combined with 4 temperature sensors. This worldwide patented system enables very direct balance control, also with strong winds.

Flow & electricity

| | |
|---------------------------------|-----------|
| 25 m ³ / hr (7 l/s) | 5.3 Watt |
| 53 m ³ / hr (15 l/s) | 11.7 Watt |
| 76 m ³ / hr (21 l/s) | 17.6 Watt |

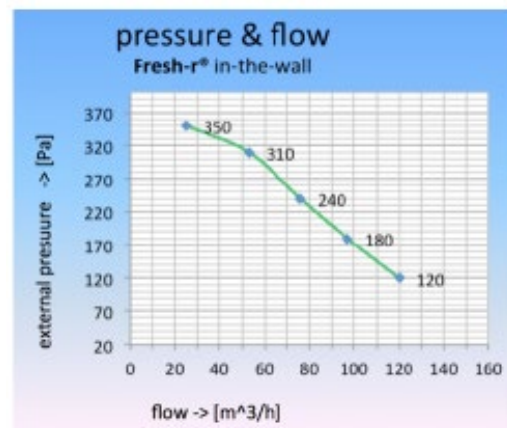
Testing by BRE planned for SAP Appendix F. To be certified as Passive House component.

Flow & sound

| | |
|---------------------------------|----------|
| 35 m ³ / hr (7 l/s) | 25 dB(A) |
| 65 m ³ / hr (15 l/s) | 30 dB(A) |
| 80 m ³ / hr (21 l/s) | 35 dB(A) |

NEN-EN-ISO 3741 tested by Cauberg-Huygen

Pressure Flow Graph



Minimised cold bridge

The cold side of the Fresh-r is completely separated from the warm side.

Circular Design

The design of the Fresh-r takes into account the different technical lifespans of various components. Repair and reuse of all used parts - for other Fresh-r's or a completely different product - is easy because the Fresh-r is designed for disassembly for a circular economy.

Fresh-r, Vaventis BV reserve the right, in the interests of continuous development, to alter specifications without prior notice. All orders are accepted subject to our conditions of sale which are available on request.

