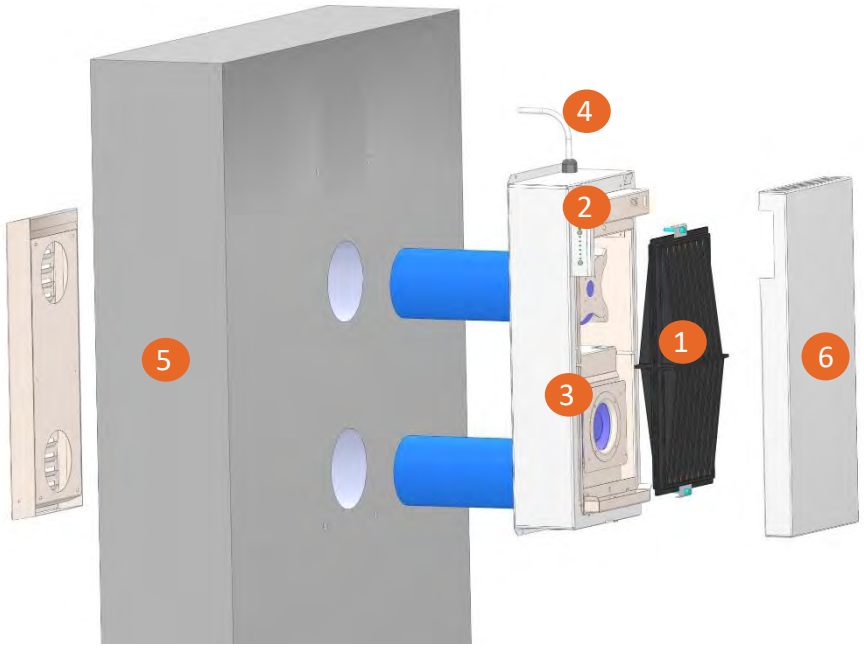
Fresh-r
Smart indoor air care

Fresh-r Compac
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.



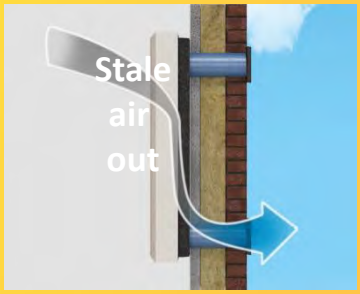
Key Features

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 82% at 80m^3 / hour.
2. Air quality is monitored by CO_2 sensor and humidity sensor. Dust sensors are optional.
3. Ventilators refresh the indoor air, with a capacity of up to 120 m^3 per hour.
4. Runs on 230 Volt, with average use below 7 Watt, the same as one led lamp.
5. Fresh-r can be mounted both on as well as in the wall. When mounting on the wall, 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.

CERTIFIED COMPONENT
Passive House Institute

World champion in ventilation



Fresh-r is like a breathing window

Technical Data

Heat exchanger	Copper wire
HE efficicency	82% *
ErP label	A+
Controls	CO_2 /RH /Temp. Dust/PM optional
Balanced	Yes
Mounting	In the wall or On the wall
Outside duct diameter	100 mm duct, 120 mm incl. insulation sleeve
Extract duct connection	Optional 'Everywhere'
Condensate discharge	Integrated in exhaust
Electricity supply	230v/1ph/50Hz
Max power consumption Average power consumption	25 Watt 7 Watt
Wi-Fi inside / LTE inside	Yes / Optional
Filter class	Standard: ISO Course 30%-50% (G3) Optional: ePM1-70% (F8)
Dimensions (HxWxD) in mm On-the-Wall In-the-Wall In-the-Wall including frame semi-In-the-Wall	 716 x 284 x 192 819 x 384 x 204 819 x 384 x 219 724 x 326 x 191

* Test at volume of 80 m3/h

Flow & electricity

25 m³/ hr (7 l/s)	5.3 Watt
53 m³/ hr (15 l/s)	11.7 Watt
76 m³/ hr (21 l/s)	17.6 Watt

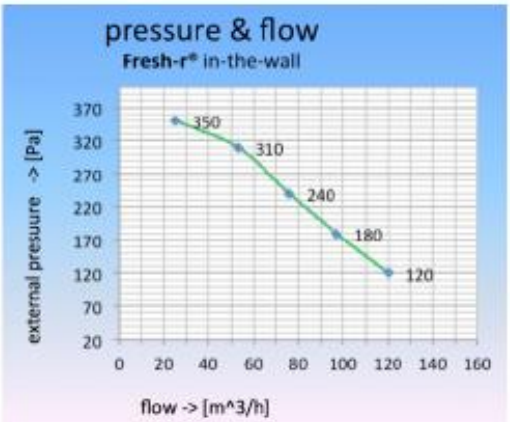
Testing by BRE UK for SAP Appendix F
Certifiable as passive house component

Flow & sound

35 m³/ hr (7 l/s)	25 dB(A)
65 m³/ hr (15 l/s)	30 dB(A)
80 m³/ hr (21 l/s)	35 dB(A)

NEN-EN-ISO 3741 tested by Cauberg-Huygen

Pressure Flow Graph



Air flow control

The Fresh-r saves on heating costs through its high efficiency on heat recovery. In addition, the airflow control provides an additional saving of an average of 35% on ventilation energy consumption by only ventilating when necessary. The air flow rate is automatically adjusted. CO2, RH and temperature sensors with its smart control are always included in the Fresh-r and are located in outgoing air stream. The automatic mode can manually be overruled by increasing / decreasing fan speed. The user interface indicates the air quality level in 3 steps with icons for good, medium and poor.

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.

Minimised cold bridge

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

Modular Design

The Fresh-r is constructed of independent modules that can be easily connected, disconnected, or interchanged. Each module typically performs a particular task. This design approach offers benefits like ease of maintenance and cost-effectiveness.

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.

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Smart indoor air care

www.fresh-r.eu

Fresh-r is a brand name of Vaventis BV

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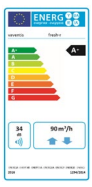
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