# BLAUBERG Ventilation

# Vento Expert A50-1 S10 W V.2
## Heat recovery single room units

## Features

- Arrangement of efficient energy saving, supply and exhaust, single room ventilation in flats, houses, cottages, social and commercial premises.
- Reducing heat losses caused by ventilation due to heat recovery.
- Humidity balance and controllable air exchange create individually controlled microclimate.
- Wi-Fi data exchange between several single-room ventilation units for coordinated operation.
- Controlled by Android or iOS smartphone or tablet.

**Air flow:**
up to  50 m³/h
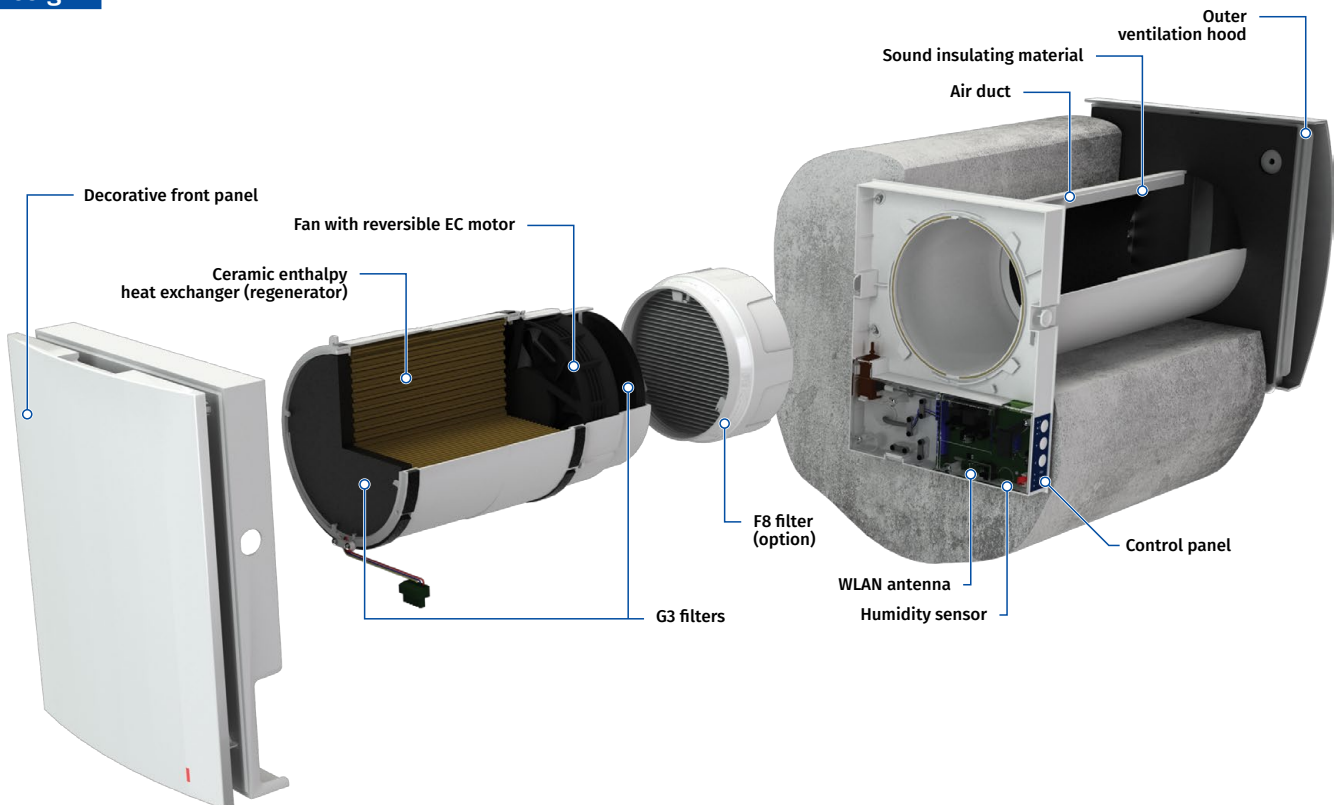        14 l/s

**Heat recovery efficiency:**
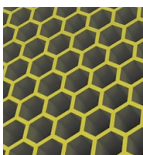up to  93 %

**Power:**
from  4.45 W
**SFP:**  from 1.02 W/l/s

**Noise level:**
from  11 dBA

EC motor    ErP 2018    Wi Fi READY

## Design



- Decorative front panel
- Fan with reversible EC motor
- Ceramic enthalpy heat exchanger (regenerator)
- G3 filters
- F8 filter (option)
- WLAN antenna
- Humidity sensor
- Control panel
- Air duct
- Sound insulating material
- Outer ventilation hood



One of the best heat recovery efficiency on the market due to innovative hexagonal structure of the heat exchanger cells

**Wi Fi READY**

Built-in Wi-Fi for wireless communication between units and Android or iOS device control

Integrated automatic air shutters prevent air back drafting

Easy maintenance.
Indoor unit is opened by pressing the latches on both sides.
The specially designed front panel can be closed manually to ensure 100 % air tightness and protect against wind impact

### Designation key

| Model | Air duct | Rated air flow [m³/h] | Front panel | Ventilation hood type | Control |
|---|---|---|---|---|---|
| Vento Expert | **A:** round air duct | **50** | **-1:** flat front panel | **S10:** white plastic hood AH-10 white 160 (for standard walls) | **W V.2:** Control and setup of the unit with the Wi-Fi mobile application |
| | | | | **S:** metal hood (for thin walls) | |

## Control

○ Unit control via smartphone or tablet application.
○ The units can be connected by Wi-Fi for synchronized operation.
○ House ventilation control via cloud service from anywhere in the world.
○ Connection to smart house or Building Management System (BMS) via Wi-Fi.

**Blauberg Vento V.2** app for Android or iOS devices is available at Google Play and App Store.

GET IT ON
Google Play

Download on the
App Store

**SMART HOUSE**
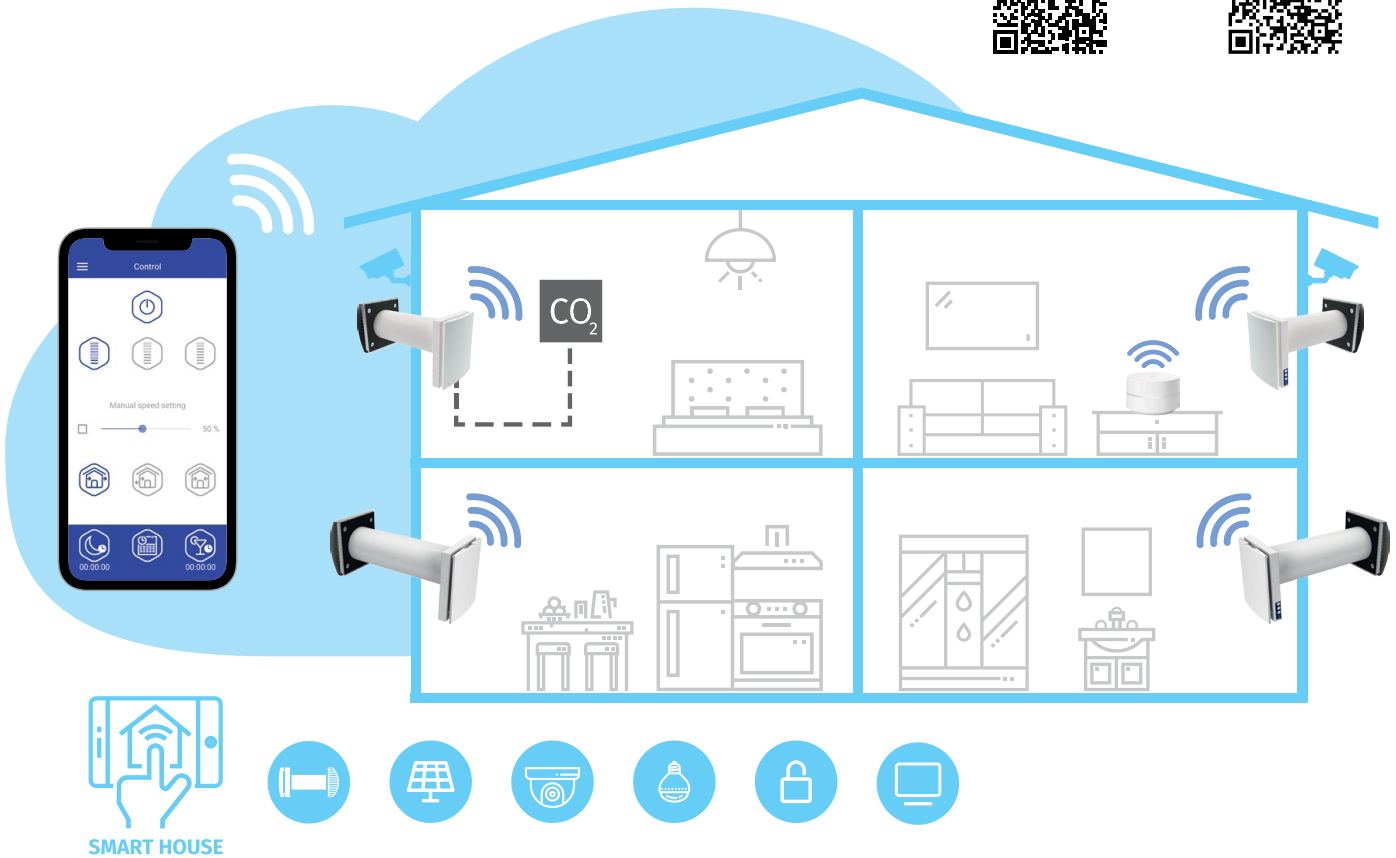
○ **Vento Expert A50-1 S10 W V.2** either can operate as independent unit or can be connected with other units in a house and controlled with a master unit. In this case, only the master unit receives a signal from the remote control.

**FOR LIVING ROOMS AND BEDROOMS**

master   slave   slave   slave

**Vento Expert**

**FOR KITCHEN AND BATHROOM**

slave   slave

**Vento Expert Duo**

○ Control of the unit operation mode is also performed by means of the sensor control panel located on the unit casing or the remote control.

ON/OFF button

3 unit speeds

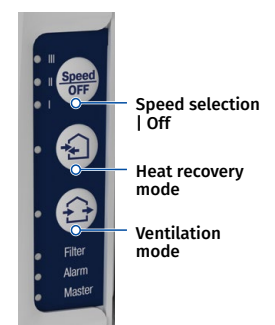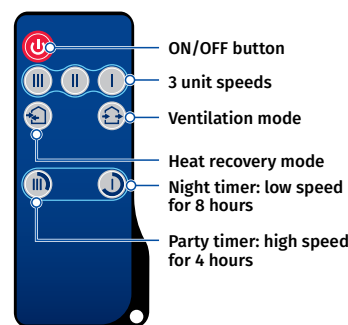Ventilation mode

Heat recovery mode
Night timer: low speed for 8 hours

Party timer: high speed for 4 hours

Speed selection | Off
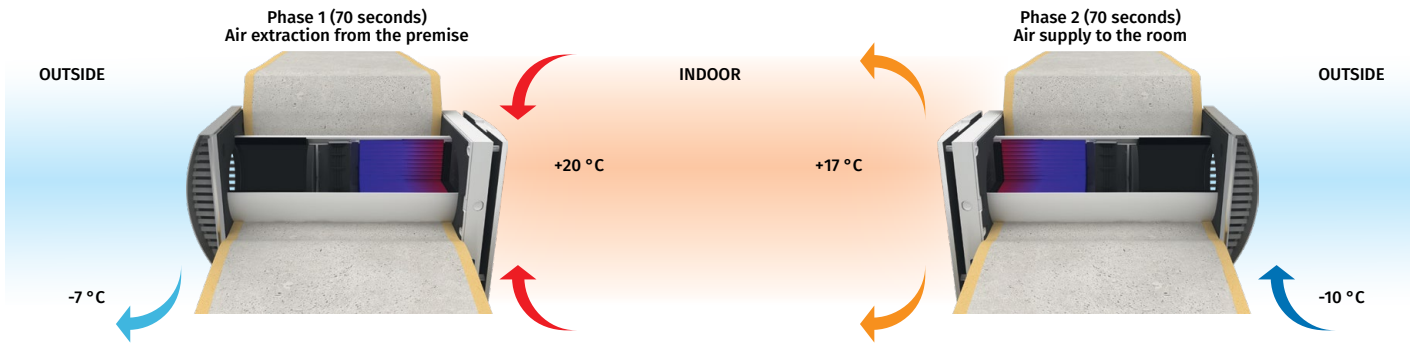
Heat recovery mode

Ventilation mode

○ **Vento Expert** is equipped with a humidity sensor for indoor humidity control. If humidity increases above a set point, the unit boosts to the speed III.

## Ordering Information

| Part Number | Model | Description |
|---|---|---|
| BLAVENTOA50EXPERTV2 | Vento Expert A50-1 S10 W V.2 | SINGLE ROOM ERV WITH WIFI CONTROL |

BLAUBERG
*Ventilation*

## Energy recovery

### UNIT OPERATING LOGIC IN WINTER PERIOD

**Phase 1 (70 seconds)**
**Air extraction from the premise**

**Phase 2 (70 seconds)**
**Air supply to the room**

OUTSIDE

INDOOR

OUTSIDE
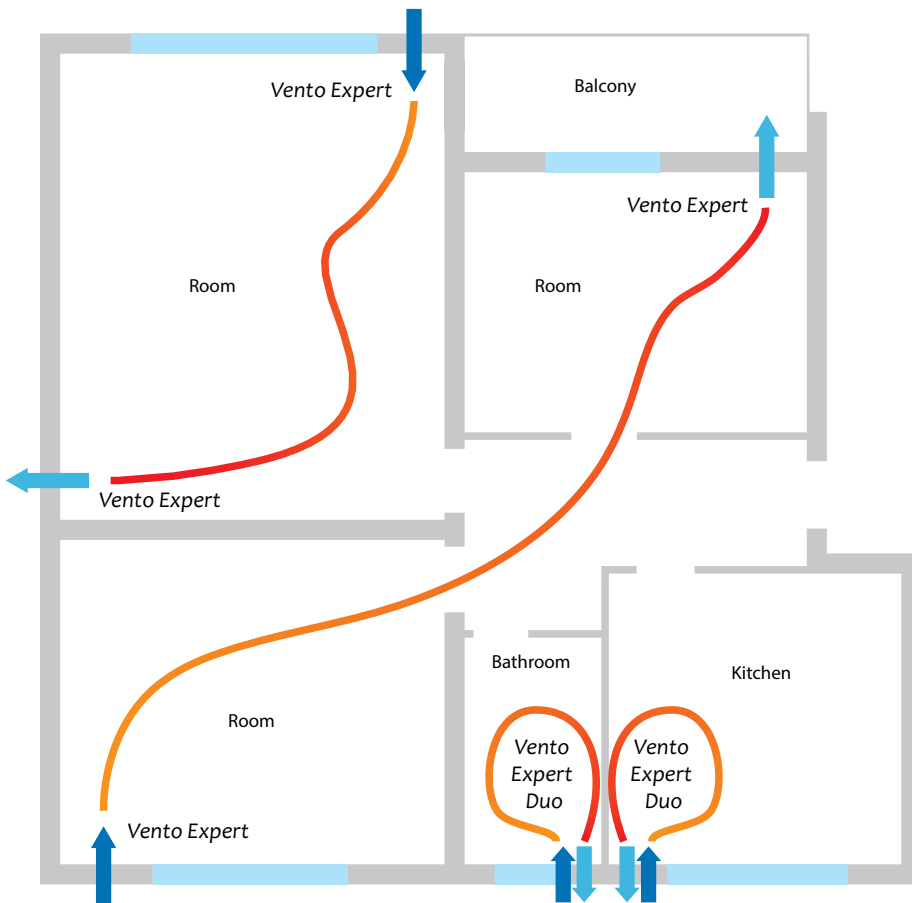
+20 °C

+17 °C

-7 °C

-10 °C

- Warm stale air is extracted from the premise, flows through the ceramic heat exchanger and transfers its heat and moisture to it.
- As the ceramic heat exchanger gets warmed up, the unit switches to the supply mode.

- Clean cold intake air flows through the heat exchanger and absorbs accumulated heat and humidity.
- When the heat exchanger is cooled down, the unit switches to the extract air mode.

## Mounting

- The unit is designed for through-the-wall installation inside a prepared hole in an outer wall of the building.
- The best ventilation solution is pairwise installation of reverse phase synchronized units. Some units ensure supply of fresh air to the room and the other units extract air from the premise. This way the most efficient balanced ventilation is arranged.
- In case of brand new construction, units are mounted in two stages:

- Pre-installation of an air duct and an outer ventilation hood at the stage of indoor finishing and outer decorative wall finishing.
- Completion of the installation before commissioning of a house. It includes installation of the indoor unit with controller and shutters the cartridge, the heat exchanger, the fan and the filters.
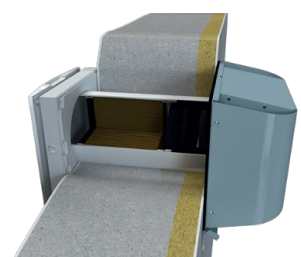
*Vento Expert*

Balcony

*Vento Expert*

Room

Room

*Vento Expert*

Room

Bathroom

Kitchen

*Vento Expert*

*Vento Expert Duo*

*Vento Expert Duo*

Angular mounting into a wallwith standard thickness using
**KIT BlauPlast white 160 / KIT BlauPlast chrome 160**
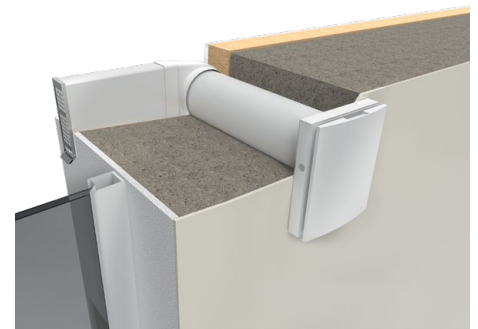
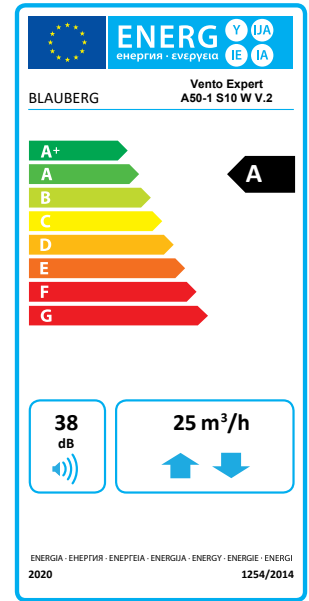Unit installation example with the hood for thin walls
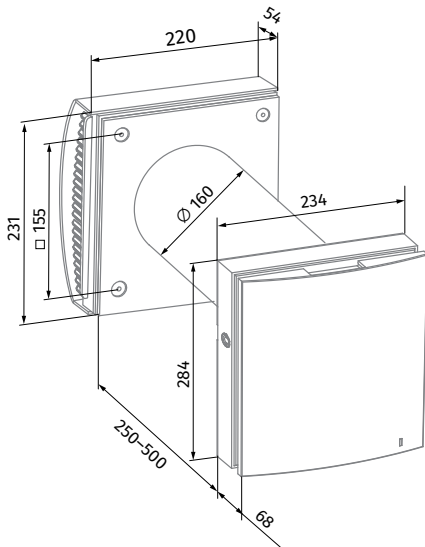**AH-S grey 160 / AH-S chrome 160**

SINGLE-ROOM UNITS WITH HEAT RECOVERY

## Technical data

| Parameters | Vento Expert A50-1 S10 W V.2<br>Vento Expert A50-1 S W V.2 | | |
|---|---|---|---|
| Speed | I | II | III |
| Voltage [V / 50 (60) Hz] | 100−240 | | |
| Power [W] | 4.45 | 5.08 | 7.06 |
| Current [A] | 0.035 | 0.040 | 0.059 |
| RPM [min⁻¹] | 800 | 1300 | 1900 |
| Air flow in ventilation mode [m³/h (l/s)] | 15 (4) | 30 (8) | 50 (14) |
| Air flow in energy recovery mode [m³/h (l/s)] | 8 (2) | 15 (4) | 25 (7) |
| SFP [W/l/s] | 2.14 | 1.22 | 1.02 |
| Filter | G3 (Option: F8 PM2.5 > 99 %*) | | |
| Transported air temperature [°C] | -20…+40 | | |
| Sound pressure level at 1 m in accordance with ISO 3741:2004 [dBA] | 20 | 27 | 30 |
| Sound pressure level at 3 m in accordance with ISO 3741:2004 [dBA] | 11 | 18 | 21 |
| Outdoor sound pressure attenuation in accordance with DIN EN 20140 [dBA] | 42 | | |
| Classification of air flow sensitivity to pressure difference variations in accordance with EN 13141-8 | S2 | | |
| Indoor/outdoor airtightness classification of the complete unit in accordance with EN 13141-8 | D1 | | |
| Heat recovery efficiency in accordance with DIBt LÜ-A 20 [%] | up to 93 | | |
| Ingress protection rating | IP24 | | |

\* maximum air flow 40 m³/h

ENERG **ENERG** энергия · ενεργεια

BLAUBERG    **Vento Expert A50-1 S10 W V.2**

A+
A
B
C
D
E
F
G

**A**

**38** dB

**25 m³/h**

ENERGIA · ЕНЕРГИЯ · ЕΝΕΡΓΕΙΑ · ENERGIJA · ENERGY · ENERGIE · ENERGI
2020                1254/2014

## Overall dimensions [mm]
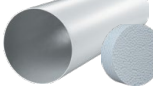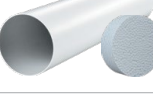


Vento Expert A50-1 S10 W V.2
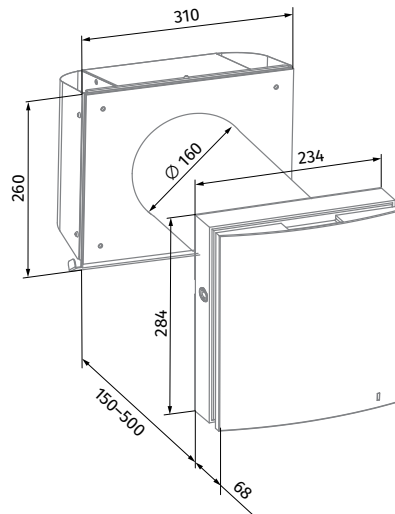


Vento Expert A50-1 S W V.2
(for thin walls)

## Accessories

SINGLE-ROOM UNITS WITH HEAT RECOVERY

| Name | Description |
|------|-------------|
| **Pre-installation Kit Vento Expert A50-1 S10** | Pre-installation kit for mounting into walls with standard thickness. Includes:<br>• Air duct<br>• AH-10 white 160 outer ventilation hood<br>• Polystyrene foam plug<br>• Polystyrene foam wedges |
| **Pre-installation Kit Vento Expert A50-1 S** | Pre-installation kit for mounting into thin walls. Includes:<br>• Air duct<br>• AH-S chrome 160 outer ventilation hood<br>• Polystyrene foam plug<br>• Polystyrene foam wedges |
| **Completion Kit Vento Expert A50-1 W V.2** | Final mounting kit. Includes:<br>• Cartridge with a heat exchanger, a fan and G3 filters<br>• Indoor unit with a controller and shutters<br>• Remote control |
| **ZL1 Vento 160/150** | Cartridge with heat regenerator for cold climate |
| **FP Vento Expert A50 G3** | G3 filters (2 pcs.) |
| **FP Vento Expert A50 F8** | Filter set. Includes:<br>• Plastic frame (1 pc.)<br>• G2 pre-filter (1 pc.)<br>• F8 filter (1 pc.). Filtration rate PM2.5 > 99 % |
| **AH-8 white 160** | White painted aluminium outer ventilation hood with frost protection for a cold climate |
| **AH-8 chrome 160** | Brushed stainless steel outer ventilation hood with frost protection for a cold climate |
| **AH-10 *colour* 160** | Plastic outer ventilation hood. Available in colours: white, black, grey, terracotta, brown, vintage |
| **AH-10 chrome 160** | Plastic outer ventilation hood with a plate with brushed stainless steel effect finish |
| **AH-11 *colour* 160** | Plastic outer ventilation hood. Available in colours: white, black, grey, terracotta, brown, vintage |
| **AH-S white 160** | Stainless steel ventilation hood, painted white |
| **AH-S chrome 160** | Brushed stainless steel ventilation hood |
| **PP 160/0.5** | Plastic outer grille with pipe for mounting from indoor |

| Name | | Description |
|------|------|-------------|
| KIT BlauPlast white 160 | | Kit for angular mounting with white color grille (for walls with standard thickness) |
| KIT BlauPlast chrome 160 | | Kit for angular mounting with stainless steel outer grille (for walls with standard thickness) |
| R 160-500 | | 500 mm air duct and polystyrene foam plug |
| R 160-700 | | 700 mm air duct and polystyrene foam plug |
| SE Vento Expert W | | Sensor control panel |
| FB Vento Expert A50 | | Remote control |
| CD-1 | | $CO_2$ sensor with LED $CO_2$ indication and a sensor button for operation mode selection |
| CD-2 | | $CO_2$ sensor |
| S Vento Expert A50 | | Cardboard template for indoor installation of the unit |

SINGLE-ROOM UNITS WITH HEAT RECOVERY