

#### **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 regulated air exchange create individually controlled microclimate.
- Coordinated network based on several integrated single-room ventilation units with central control.

| ဂျို | Air flow:<br>up to 50 m³/h<br>14 l/s       |   | • •                |
|------|--|---|--------------------|
| 3    | Heat recovery efficiency:<br>up to 93 %    |   |                    |
| ۶    | Power: from 3.61 W<br>SFP: from 0.75 W/I/s | 0 |                    |
|      | Noise level:<br>from 11 dBA                |   | 0000<br>000<br>000 |
| EC   |  |   |                    |

#### Design





Easy maintenance. Indoor unit is opened by pressing the latches on both sides

#### Designation key

| Model        | Air duct          |  |
|--------------|-------------------|--|
| Vento Expert | A: round air duct |  |



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

Rated air flow [m³/h]



Front panel

-1: flat front panel

Integrated automatic air shutters prevent air back drafting

Ventilation hood type

**S10:** white plastic hood AH-10 white 160 (for standard walls)

S: metal hood for thin walls



The specially designed front panel can be closed manually to ensure 100 % air tightness and protect against wind impact

#### Control

**Pro:** control with touch buttons and a remote control



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#### Heat and humidity regeneration

#### **UNIT OPERATING LOGIC IN WINTER PERIOD**



- Warm stale air is extracted from the premise, flows through the ceramic regenerator and transfers its heat energy and moisture to it.
- As the ceramic regenerator gets warmed up, the unit switches to the supply mode.
- Clean cold intake air flows through the regenerator and absorbs accumulated heat and humidity.
- When the ceramic regenerator is cooled down, the unit switches to the extract air mode.

#### Control

• Control of the unit operation mode is performed by means of sensor control panel located on the unit casing or a remote controller.





**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.

Vento Expert 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.





### HEAT RECOVERY SINGLE-ROOM UNITS

#### 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 connected 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** at the stage of the indoor finishing and outer decorative wall finishing. It includes installation of an air duct, an outer ventilation hood and cable installation.
  - **Final mounting** before commissioning of a house. It includes installation of a regenerator with a fan and filters and mounting and wiring of an indoor unit with a controller and shutters.





### Technical data

| Parameters   | Vento Expert A50-1 S10 Pro    |        |         |
|--|-------------------------------|--------|---------|
| Speed  | I                             | II     | III     |
| Voltage [V / 50 (60) Hz]   | 100-240                       |        |         |
| Power [W]  | 3.61                          | 4.15   | 5.20    |
| Current [A]  | 0.025                         | 0.030  | 0.039   |
| RPM [min <sup>-1</sup> ]   | 800                           | 1300   | 1900    |
| Air flow in ventilation mode [m³/h (l/s)]  | 15 (4)                        | 30 (8) | 50 (14) |
| Air flow in heat recovery mode [m³/h (l/s)]  | 8 (2)                         | 15 (4) | 25 (7)  |
| SFP [W/l/s]  | 1.73                          | 1.00   | 0.75    |
| Filter   | G3 (Option: F8 PM2.5 > 99 %*) |        |         |
| Transported air temperature [°C]   | -20+40                        |        |         |
| Sound pressure level at 1 m [dBA]  | 20                            | 27     | 30      |
| Sound pressure level at 3 m [dBA]  | 11                            | 18     | 21      |
| Outdoor sound pressure attenuation [dBA] in accordance with<br>DIN EN 20140                      | 42                            |        |         |
| Indoor/outdoor airtightness classification of the complete unit<br>in accordance with EN 13141-8 | D1                            |        |         |
| Heat recovery efficiency according to DIBt LÜ-A 20 [%]   | up to 93                      |        |         |
| Ingress Protection Rating  | IP24                          |        |         |



\* maximum air flow 40 m³/h

### Overall dimensions [mm]



Vento Expert A50-1 S10 Pro



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## Accessories

| Name   |           | Description   |  |
|--|-----------|---|--|
| Pre-installation<br>Kit Vento Expert A50-1 S10 |           | Pre-installation kit for mounting into a wall with standard thickness. Includes:<br>• Air duct<br>• AH 160 outer ventilation hood<br>• Plastic foam plug<br>• Plastic foam wedges |  |
| Pre-installation<br>Kit Vento Expert A50-1 S   |           | Pre-installation kit for mounting into a thin wall. Includes:<br>• Air duct<br>• AH-S chrome 160 outer ventilation hood<br>• Plastic foam plug<br>• Plastic foam wedges           |  |
| Completion Kit Vento Expert<br>A50-1           |           | Final mounting kit. Includes:<br>• Cartridge with a heat regenerator, a fan and G3 filters<br>• Indoor unit with a controller and shutters<br>• Remote control                    |  |
| ZL1 Vento 160/150                              | Ţ,        | Cartridge with heat regenerator for cold climate  |  |
| FP Vento Expert A50 G3                         |           | G3 filters (2 pcs.)   |  |
| FP Vento Expert A50 F8                         |           | Includes:<br>• Plastic frame (1 pc.)<br>• G2 pre-filter (1 pc.)<br>• F8 filter (1 pc.). Filtration rate PM2.5 > 99 %<br>F8 filter reduces airflow of the unit down to 40 m³/h     |  |
| 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                             | attivites | 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 chrome 160                                |           | Outer ventilation hood for thin wall made of brushed stainless steel  |  |
| AH-S grey 160                                  |           | Outer ventilation hood for thin wall, painted grey  |  |



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| Name                     |   | Description  |
|--------------------------|---|--|
| PP 160/0.5               |   | Outer plastic ventilation hood for mounting from inside  |
| 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) |
| FB-Vento Expert          |   | Remote control   |
| CD-1                     | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 | CO2 sensor with LED CO2 indication and a sensor button for operation mode selection            |
| CD-2                     | anne.   | CO2 sensor   |