

# VENTO EXPERT A50-1 Pro

## 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.



**Air flow:**  
up to 50 m<sup>3</sup>/h  
14 l/s



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



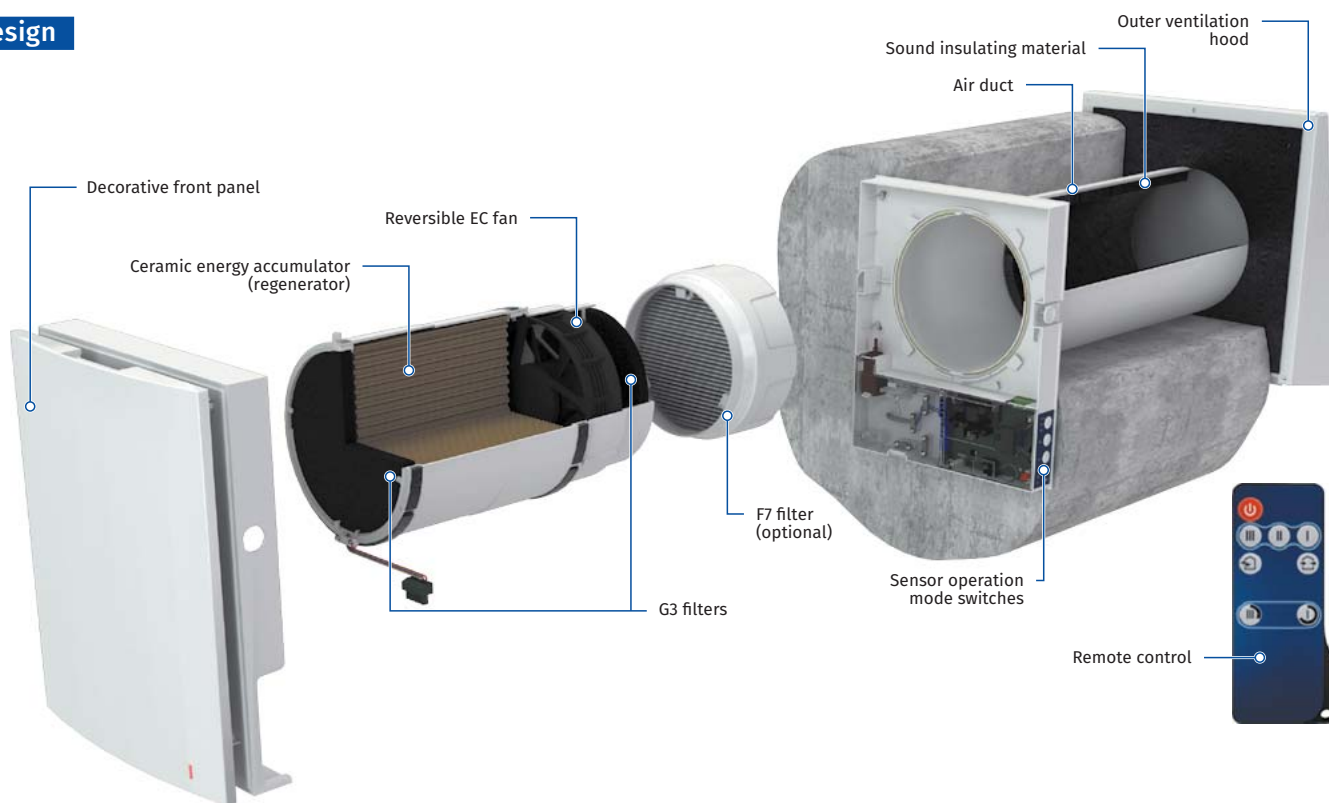
**Power:**  
from 3.61 W



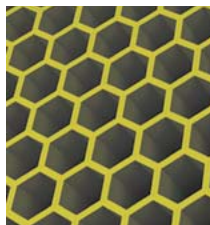
**Noise level:**  
from 11 dBA



### Design



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



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



Integrated automatic air shutters prevent air back drafting.



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

### Designation key

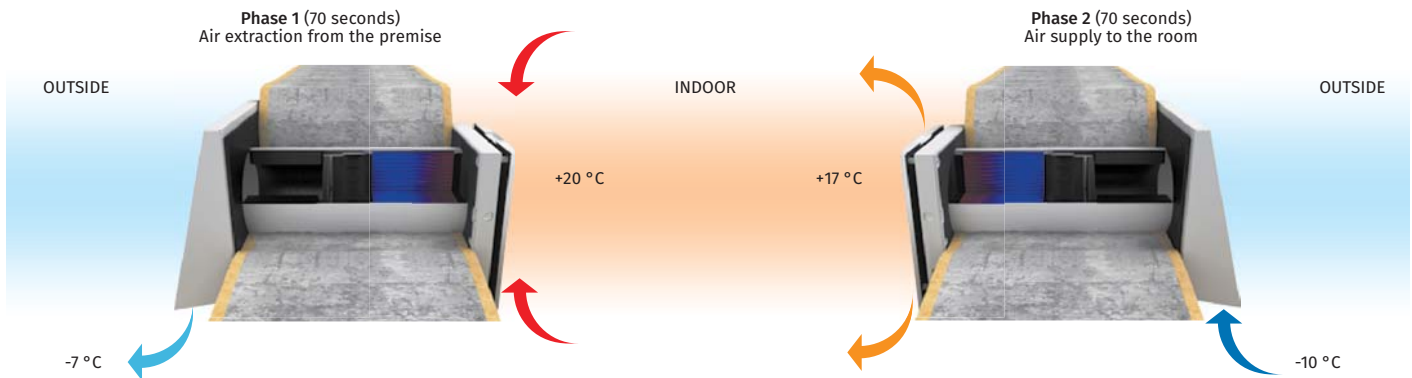
Model	Air duct	Nominal air flow [m <sup>3</sup> /h]	Front panel	Hood type	Control
VENTO Expert	A: round air duct	50	-1: flat front panel	_: hood for standard walls (by default) S: metal hood for thin walls	Pro: remote control

# VENTO EXPERT A50-1 Pro

## HEAT RECOVERY SINGLE-ROOM UNITS

### Heat and moisture regeneration

#### UNIT OPERATING LOGIC IN WINTER PERIOD

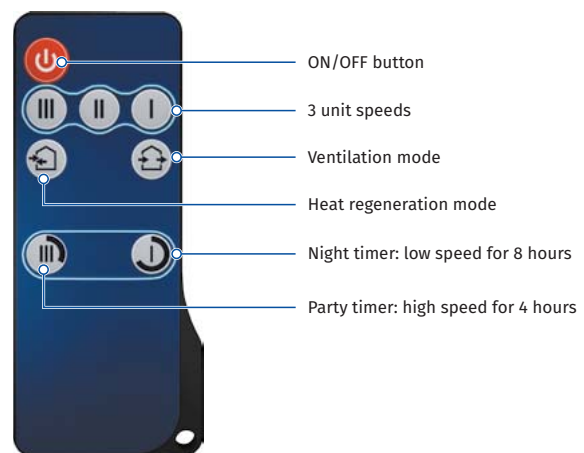
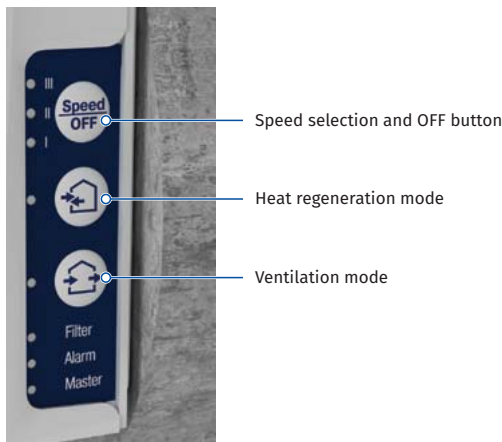


- Warm stale air is extracted from the premise, flows through the ceramic regenerator and transfers its heat energy and moisture to it.
- As the ceramic regenerator gets warmed up, the unit switches to the supply mode.

- 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.



The unit is equipped with a humidity sensor for indoor humidity control. Connection of the units in series ensures balanced ventilation. First unit in the chain becomes the master one.

Ventilation mode of the entire system can be controlled by means of the control panel on the master unit. A signal from the remote control is received by the master unit only.

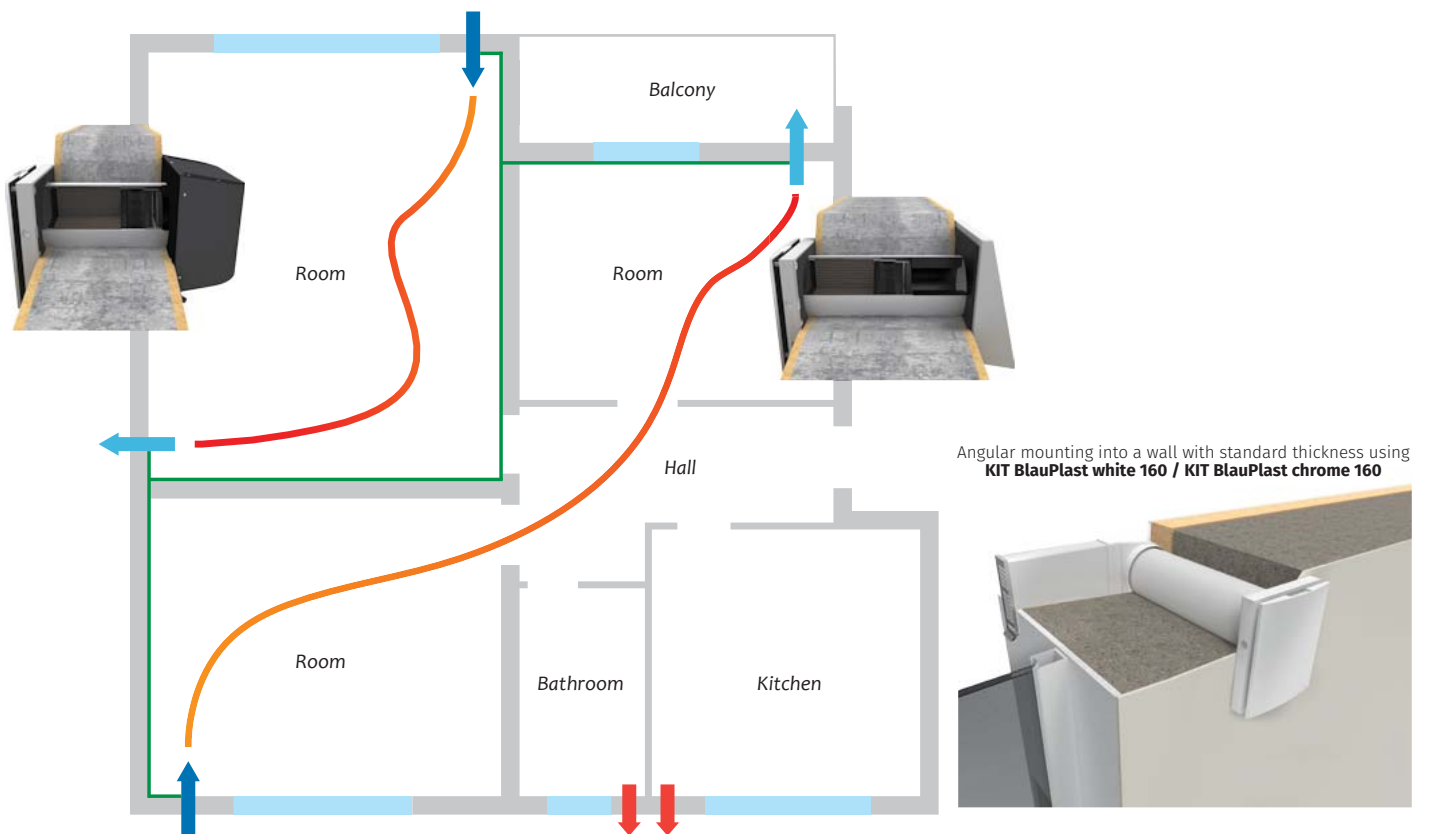


# VENTO EXPERT A50-1 Pro

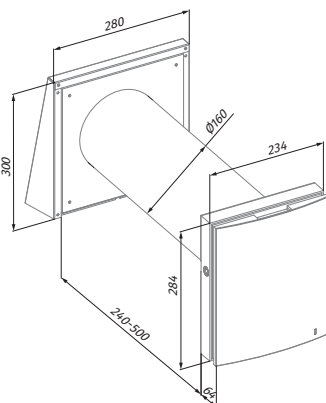
## HEAT RECOVERY SINGLE-ROOM UNITS

### Mounting

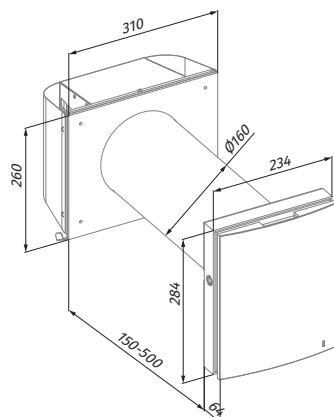
- The unit is designed for through-the-wall installation inside a prepared hole in an outer wall of the building.
- The best ventilation solution is pairwise installation of reverse phase connected units. Some units ensure supply of fresh air to the room and the other units extract air from the premise. 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.



### Overall dimensions [mm]



VENTO Expert A50-1 Pro



VENTO Expert A50-1 S Pro  
(for thin walls)

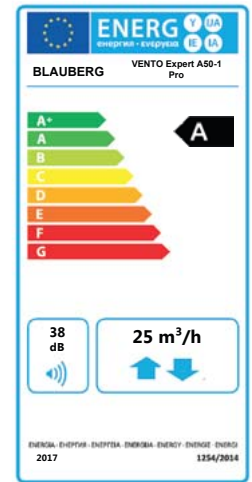
# VENTO EXPERT A50-1 PRO

HEAT RECOVERY SINGLE-ROOM UNITS

## Technical data

Parameters	VENTO Expert A50-1 Pro		
	I	II	III
Speed			
Voltage [V / 50 (60) Hz]		100-230	
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 [m <sup>3</sup> /h (l/s)]	15 (4)	30 (8)	50 (14)
Air flow in heat recovery mode [m <sup>3</sup> /h (l/s)]	8 (2)	15 (4)	25 (7)
Filter	G3 (Option: F7 PM2.5 > 99 %*)		
Transported air temperature [°C]	-20...+50		
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 DIN EN 20140	42		
Regeneration efficiency [%] in accordance with DIBt LÜ-A 20	up to 93		
SEC Class	A		
Ingress Protection Rating	IP24		

\* maximum air flow 40 m<sup>3</sup>/h



## Accessories

Name		Description
Pre-installation Kit VENTO Expert A50-1		Pre-installation kit for mounting into a wall with standard thickness. Includes: • Air duct; • AH 160 outer ventilation hood; • Plastic foam plug. • Plastic foam wedges.
Pre-installation Kit VENTO Expert A50-1 S		Pre-installation kit for mounting into a thin wall. Includes: • Air duct; • AH-S 160 outer ventilation hood; • Plastic foam plug. • Plastic foam wedges.
Completion Kit VENTO Expert A50-1		Final mounting kit. Includes: • Cartridge with a heat regenerator, a fan and G3 filters; • Indoor unit with a controller and shutters; • Remote control.
FP VENTO Expert A50 G3		G3 filters (2 pcs.)
FP VENTO Expert A50 F7		Includes: • Plastic frame (1 pc.); • G2 pre-filter (1 pc.); • F7 filter (1 pc.). Filtration rate PM2.5 99 %. F7 filter reduces airflow of the unit down to 40 m <sup>3</sup> /h
FB-Vento Expert		Remote control
KIT BlauPlast white 160		Mounting kit for angular installation in walls with standard thickness
KIT BlauPlast chrome 160		Kit for angular mounting with stainless stees outer grille
PP 160		Plastic outer grille with pipe for mounting from indoor
CD-1		CO <sub>2</sub> sensor with LED indication and On/Off button
CD-2		CO <sub>2</sub> sensor