

VENTO EXPERT A50-1 PRO V.3

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 m³/h
14 l/s



Heat recovery efficiency:
up to 95 %



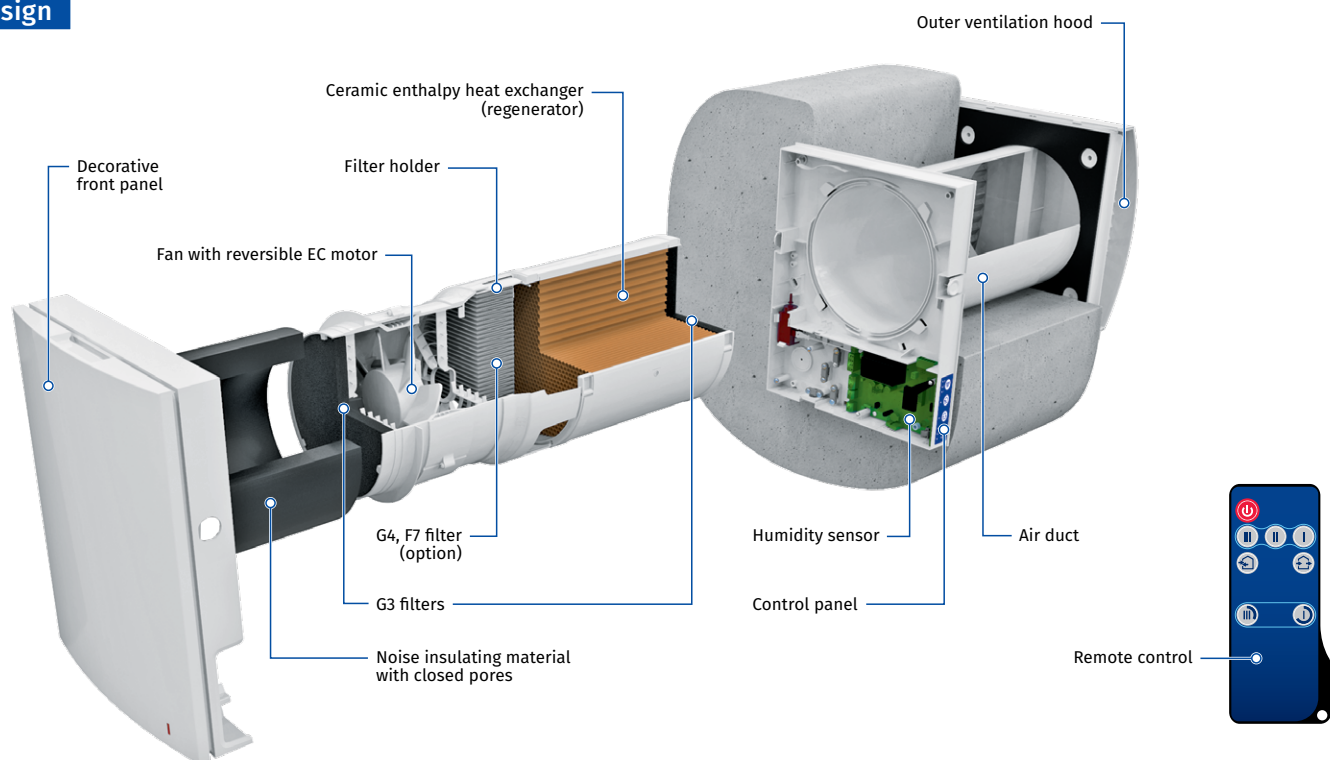
Power: from 5.0 W
SFP: from 1.22 W/l/s



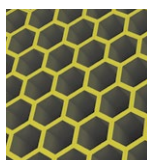
Noise level:
from 4 dBA



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



The demountable design of the regenerator cartridge improves heat recovery efficiency and simplifies maintenance

Designation key

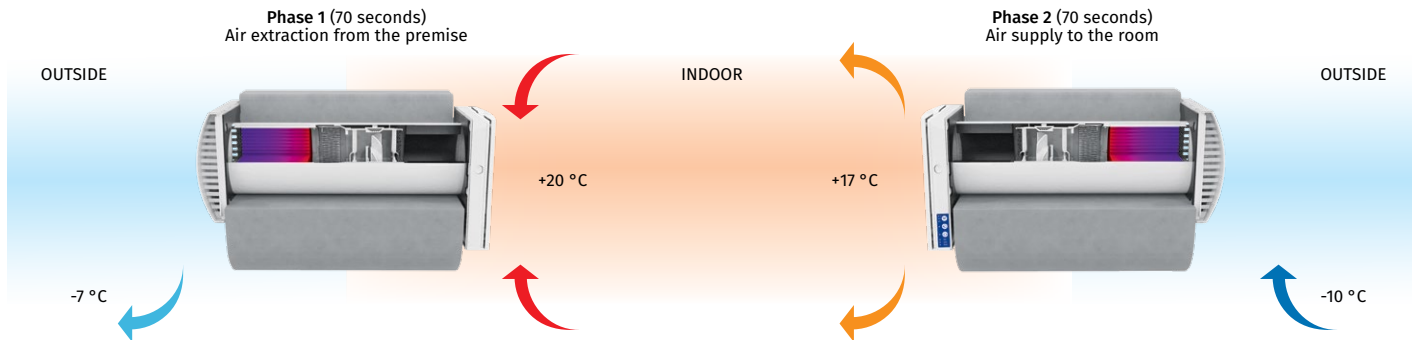
Model	Air duct	Rated air flow [m ³ /h]	Front panel	Ventilation hood type	Control
Vento Expert	A: round air duct	50	-1: flat front panel	-: white plastic hood AH-10 white 160 (for standard walls) S: metal hood for thin walls	Pro V.3: control with touch buttons and a remote control

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HEAT RECOVERY SINGLE-ROOM UNITS

Heat and humidity regeneration

UNIT OPERATING LOGIC IN WINTER PERIOD

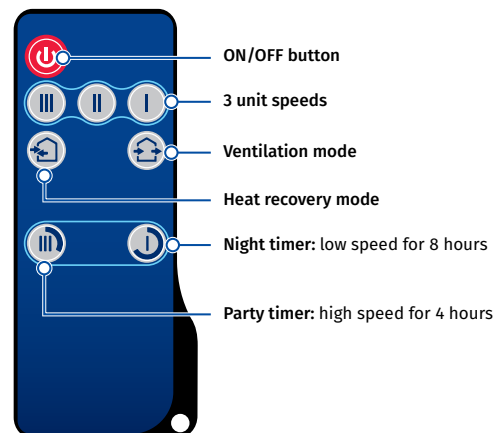
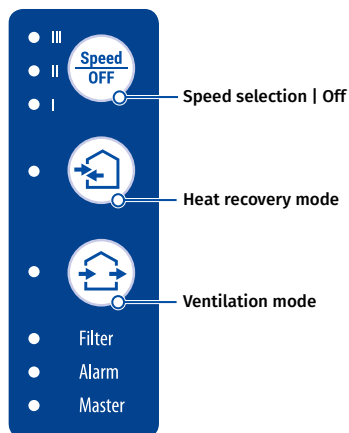


- Warm stale air is extracted from the premise, flows through the ceramic regenerator and transfers its heat energy and moisture to it.
- As the ceramic regenerator gets warmed up, the unit switches to the supply mode.

- 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.

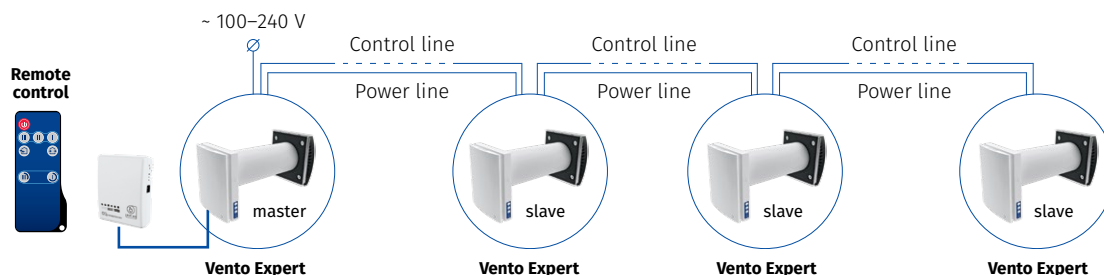
Control

- 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.

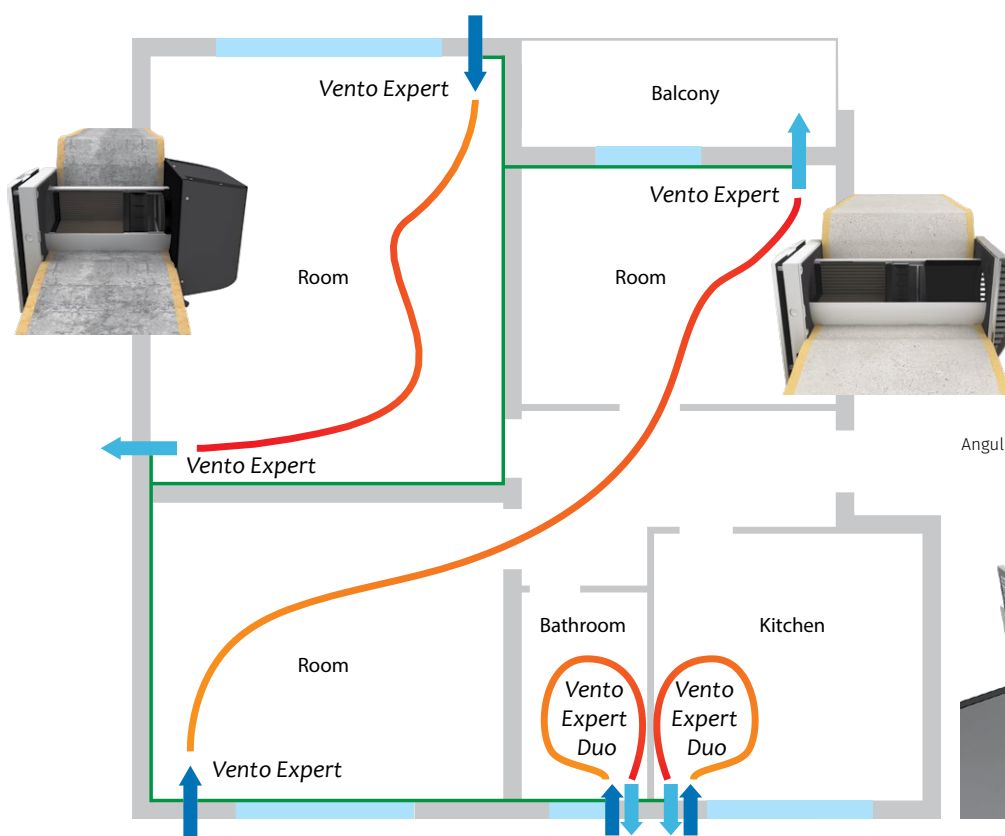


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Mounting

- 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.



Angular mounting into a wall with standard thickness using
KIT BlauPlast white 160 / KIT BlauPlast chrome 160



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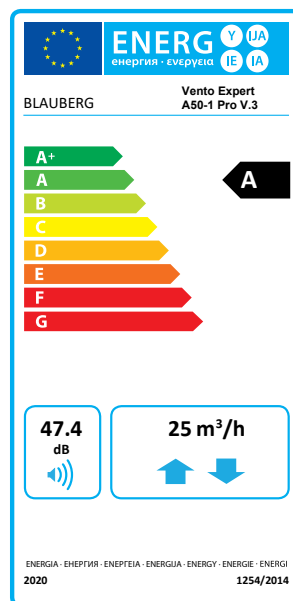
HEAT RECOVERY SINGLE-ROOM UNITS

Technical data

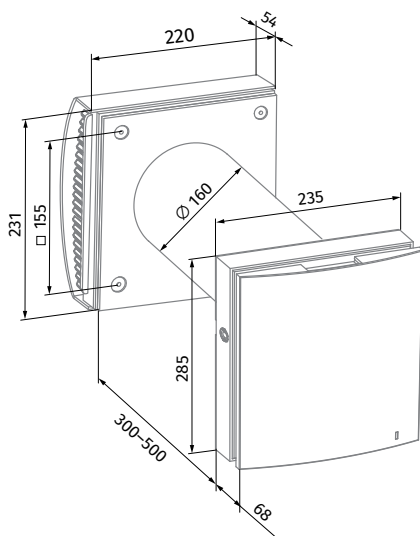
Parameters	Vento Expert A50-1 Pro V.3		
Speed	I	II	III
Voltage [V / 50 (60) Hz]	100–240		
Power [W]	5.0	6.0	8.5
Current [A]	0.035	0.040	0.059
RPM [min ⁻¹]	800	1300	1900
Air flow in ventilation mode [m ³ /h (l/s)]	15 (4)	35 (10)	50 (14)
Air flow in heat recovery mode [m ³ /h (l/s)]	8 (2)	18 (5)	25 (7)
SFP [W/l/s]	2.40	1.44	1.22
Filter	G3 (Option: G4; F7 PM2.5 > 70 %*)		
Transported air temperature [°C]	-20...+40		
Sound pressure level at 1 m [dBA]	13	25	37
Sound pressure level at 3 m [dBA]	4	16	28
Outdoor sound pressure attenuation [dBA] in accordance with DIN EN 20140	41/47**		
Indoor/outdoor airtightness classification of the complete unit in accordance with EN 13141-8	D1		
Heat recovery efficiency according to DIBt LÜ-A 20 [%]	up to 95		
Ingress Protection Rating	IP24		

* maximum air flow 40 m³/h

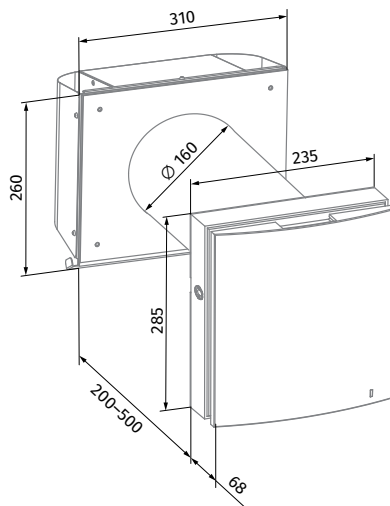
** with open and closed front panel



Overall dimensions [mm]



Vento Expert A50-1 Pro V.3




























Vento Expert A50-1 S Pro V.3
(for thin walls)

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HEAT RECOVERY SINGLE-ROOM UNITS

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 chrome 160 outer ventilation hood • Plastic foam plug • Plastic foam wedges
Completion Kit Vento Expert A50-1 Pro V.3		Final mounting kit. Includes: • Regenerator module • Fan module • G3 filters (2 pcs.) • Indoor unit with a controller and shutters • Remote control
FP2 Vento G3		G3 filters (2 pcs.)
FP2 Vento G4		Coarse filter. Includes: • Plastic filter holder (1 pc.) • G4 filter (1 pc.).
FPC 150x50 G4		G4 coarse filter
FP2 Vento F7		Filter set. Includes: • Plastic filter holder (1 pc.) • F7 fine filter (1 pc.). Filtration rate PM2.5 > 70 %
FPC 150x50 F7		F7 fine filter. Filtration rate PM2.5 > 70 %
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

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Name		Description
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
PP 160/0.5		Outer ventilation hood for mounting from inside
KIT BlauPlast white 160		Kit for angular mounting with white colour 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		CO ₂ sensor with LED CO ₂ indication and a sensor button for operation mode selection
CD-2		CO ₂ sensor