

### **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.
- Heat recovery minimises ventilation heat losses.
- Humidity balance and controllable air exchange create individually set 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  $88\,\%$ 



Power: from 4.50 W SFP: from 1.01 W/I/s



Noise level: from 13 dBA

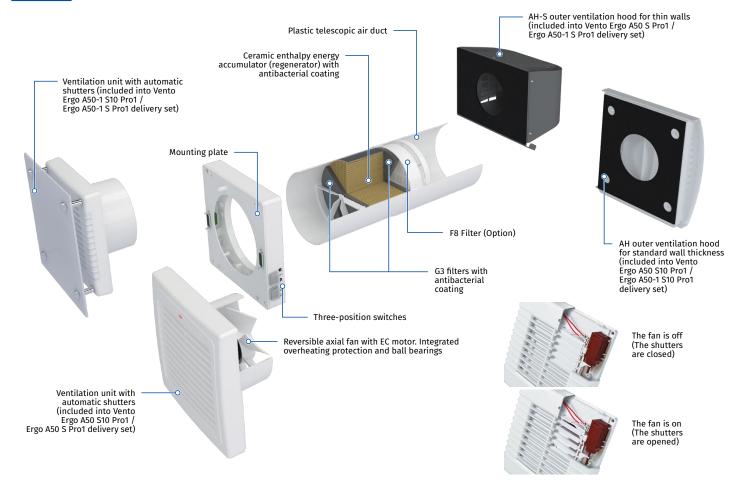








### Design



### **Designation key**

Model	Air duct	Rated air flow [m³/h]	Front panel	Hood type	Control
Vento Ergo	A: round air duct	50	_: no flat front panel -1: flat front panel	\$10: white plastic hood AH-10 white 100 (for standard walls) \$2: AH-S chrome 150 metal hood for thin walls	<b>Pro1:</b> three-position switches and remote control

94 blaubergventilatoren.de



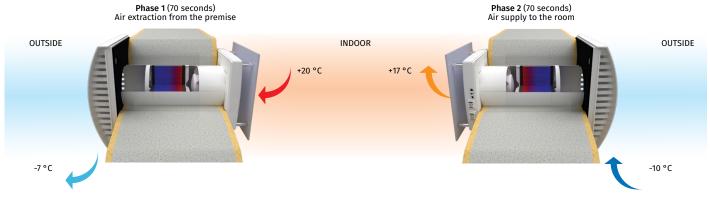
#### **HEAT RECOVERY SINGLE-ROOM UNITS**

### Heat and humidity regeneration

• High-tech ceramic energy accumulator with heat recovery up to 88 %.

• Due to its cellular structure it has a larger heat transfer area surface and high efficiency. The energy accumulator is featured with excellent heat-conducting properties and thermal energy storage capacity.

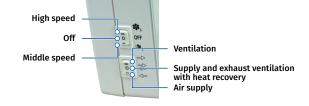
### **UNIT OPERATING LOGIC IN WINTER PERIOD**

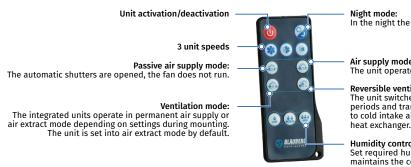


- Warm stale air is extracted from the premise, flows through the ceramic regenerator and transfers a part of the accumulated heat and moisture to it.
- In 70 seconds, after heating of the ceramic regenerator, the unit switches to the supply mode.
- o Clean cold intake air flows through the regenerator and absorbs accumulated heat and humidity.
- In 70 seconds, after cooling of the ceramic regenerator, the unit is switched to the extract air mode.

### Control

- The unit operation mode control is performed by means of manual three-position switches located on the unit casing or using the remote
- The unit is equipped with a humidity sensor for indoor humidity control and regulation.
- Connection of the units into one ventilation system provide balanced ventilation and central control.
- Remote control and operation mode selection:





In the night the unit is switched to low speed mode by the photo sensor.

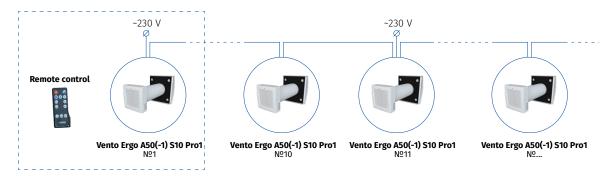
**Air supply mode:** The unit operates in permanent air supply mode.

Reversible ventilation with heat recovery:
The unit switches from supply to extract mode and vice versa in set time periods and transfers the heat and moisture contained in the extract air o cold intake air in winter or the coolness in summer through the ceramic

**Humidity control mode:** 

Set required humidity level (45, 55 or 65 %). The unit automatically maintains the comfortable set indoor humidity point.

• Connection of several units in series enables their synchronous control by the first unit. The signal from the remote control is received by the first unit only. Power 230 V must be supplied to the 1st and every 11th unit in a chain.



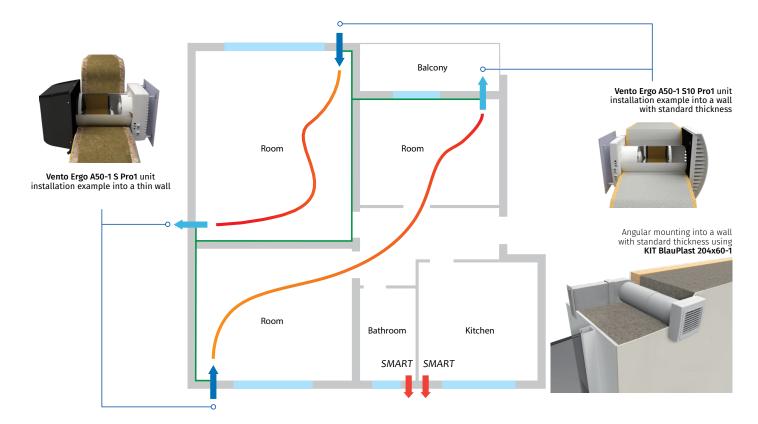
SINGLE-ROOM VENTILATION | 2020



#### **HEAT RECOVERY SINGLE-ROOM UNITS**

### Mounting

- The unit is designed for external through-the-wall installation inside a prepared round hole in the outer wall of the building.
- The best ventilation solution is pairwise installation of reverse phase connected units. Some units supply fresh air to the room and the other units extract stale air from the room. This allows to arrange the most efficient balanced ventilation.
- In case of brand new construction the units are mounted in two stages:
  - pre-installation at the stage of the indoor finishing and outer decorative wall finishing. It includes installation of the telescopic air ducts, outer ventilation hood and laying out of electric cables.
  - final mounting before commissioning of a house. It includes installation of the regenerator, the filters. connection of the ventilation unit.
- If mounting of the ventilation hood on the outer wall is undesirable it
  may be flush mounted and the external grille may be inserted into the
  outer window jamb using the KIT BlauPlast 204x60-1 pre-installation kit.
  Available upon separate order.



96 blaubergventilatoren.de

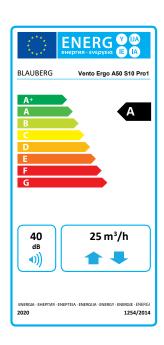


### **HEAT RECOVERY SINGLE-ROOM UNITS**

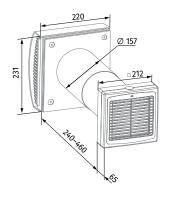
### Technical data

Parameters	Vento Ergo A50 S10 Pro1 Vento Ergo A50-1 S10 Pro1		
Speed	I	II	III
Voltage [V / 50 (60) Hz]		1 ~ 100-230	
Power [W]	4.5	5	7
Current [A]	0.024	0.026	0.039
RPM [min-1]	610	800	1450
Maximum air flow [m³/h (l/s)]	21 (6)	32 (9)	50 (14)
Air flow in heat recovery mode [m³/h (l/s)]	11 (3)	16 (4)	25 (7)
SFP [W/l/s]	1.54	1.12	1.01
Filter	G3 (Option: F8 PM2.5 > 99 %*)		
Outdoor sound pressure attenuation according to DIN EN 20140 [dBA]		40	
Sound pressure level at 1 m according to ISO 3741: 2004 [dBA]	22	29	32
Sound pressure level at 3 m according to ISO 3741: 2004 [dBA]	13	20	23
Heat recovery efficiency according to DIBt LÜ-A 20 [%]		up to 88	
Transported air temperature [°C]	-20+40		
Ingress protection rating	IP24		

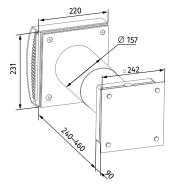
<sup>\*</sup> maximum air flow 40 m³/h



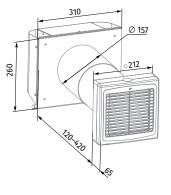
### Overall dimensions [mm]



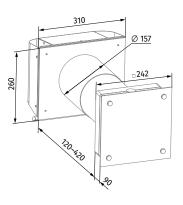
Vento Ergo A50 S10 Pro1



Vento Ergo A50-1 S10 Pro1



Vento Ergo A50 S Pro1



Vento Ergo A50-1 S Pro1



**HEAT RECOVERY SINGLE-ROOM UNITS** 

### Accessories

Name		Description	
Pre-installation Kit Vento Ergo A50 S10 Pro1		Pre-installation kit for mounting into a wall with standard thickness. Includes:  • Round telescopic air duct with the diameter of 150 mm and adjustable length from 240 to 460 mm  • AH-10 white 160 outer ventilation hood  • Plastic foam plug  • Plastic foam wedges	
Completion Kit Vento Ergo A50 Pro1		Includes:  • Ceramic regenerator Ø 150 mm  • Vento Ergo A50 ventilation unit  • G3 filters  • Mounting plate • Remote control	
Completion Kit Vento Ergo A50-1 Pro1		Includes:  • Ceramic regenerator    • 150 mm  • Vento Ergo A50-1 ventilation unit  • G3 filters  • Mounting plate • Remote control	
FP Vento Ergo A50 G3		G3 filters (2 pcs.)	
AH-8 white 150		White painted aluminium outer ventilation hood with frost protection for a cold climate	
AH-8 chrome 150		Brushed stainless steel outer ventilation hood with frost protection for a cold climate	
AH-10 *colour* 160	ANTHORN	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-S grey 150		Outer ventilation hood for thin wall, painted grey	
AH-S chrome 150		Outer ventilation hood for thin wall made of brushed stainless steel	
PP 160/0.5		Outer ventilation hood for mounting from inside	
KIT BlauPlast 204x60-1		Installation kit for angular mounting. Includes:  • Plastic ventilation grille 230x86 mm  • Plastic air duct 204x60 mm  • Plastic connecting bend from Ø 150 to 204x60 mm	

98 blaubergventilatoren.de



**HEAT RECOVERY SINGLE-ROOM UNITS** 

Name		Description
FP Vento Ergo A50 F8		F8 filter
FB Vento Ergo	000	Remote control

SINGLE-ROOM VENTILATION | 2020