

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 85 m³/h 24 l/s



Heat recovery efficiency: up to $90 \,\%$



Power: from 4.74 W SFP: from 0.80 W/I/s



Noise level: from 19 dBA

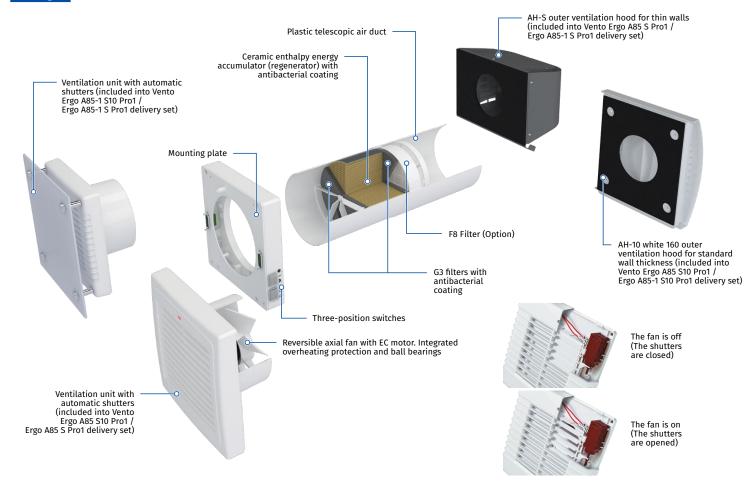








Design



Designation key

Model	Air duct	Rated air flow [m³/h]	Front panel	Hood type	Control
Vento Ergo	A: round air duct	85	_: no flat front panel -1: flat front panel	\$10: white plastic hood AH-10 white 100 \$: AH-S chrome 150 metal hood for thin walls	Pro1: three-position switches and remote control

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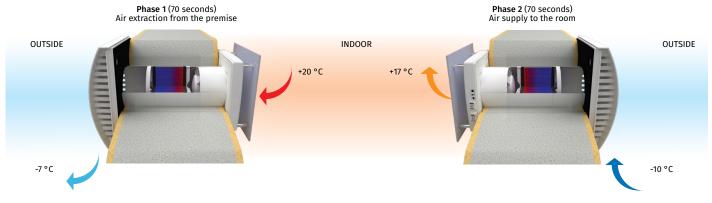
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Heat and humidity regeneration

• 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.

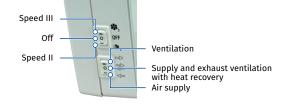
UNIT OPERATING LOGIC IN WINTER PERIOD

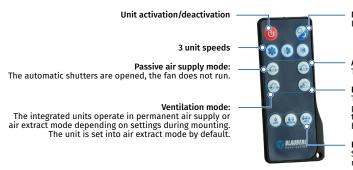


- Warm stale air is extracted from the premise, flows through the ceramic regenerator and transfers a part of the accumulated heat and moisture to it.
- In 70 seconds, after heating of the ceramic regenerator, the unit switches to the supply mode.
- o Clean cold intake air flows through the regenerator 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.
- o Connection of the units into one ventilation system provide balanced ventilation and central control.
- Remote control and operation mode selection:





 $\label{eq:Night mode:} \ensuremath{\text{In the night the unit is switched to low speed mode by the photo sensor.}}$

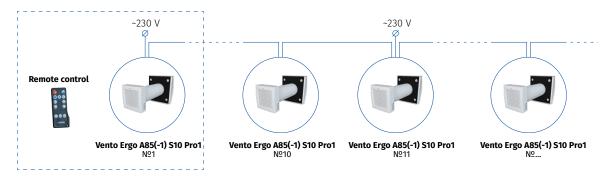
Air supply mode: The unit operates in permanent air supply mode.

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 heat exchanger.

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 220 V must be supplied to the 1st and every 11th unit in a chain.



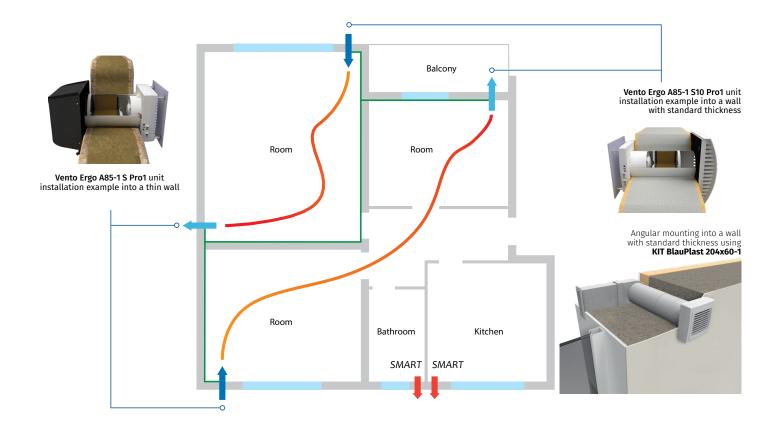
SINGLE-ROOM VENTILATION | 2020 101



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.



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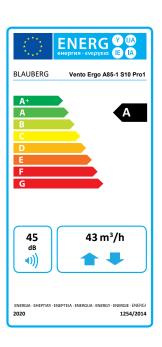


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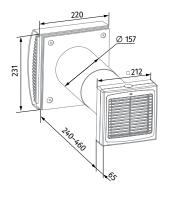
Technical data

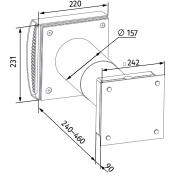
Parameters	Vento Ergo A85 S10 Pro1 Vento Ergo A85-1 S10 Pro1		
Speed	I	II	III
Voltage [V / 50 (60) Hz]		1 ~ 100-230	
Power [W]	4.74	6.56	9.65
Current [A]	0.034	0.050	0.071
RPM [min ⁻¹]	1000	1500	2045
Maximum air flow [m³/h (l/s)]	36 (10)	59 (16)	85 (24)
Air flow in heat recovery mode [m³/h (l/s)]	18 (5)	30 (8)	43 (12)
SFP [W/l/s]	0.95	0.80	0.82
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]	29	35	44
Sound pressure level at 3 m according to ISO 3741: 2004 [dBA]	19	25	34
Heat recovery efficiency according to DIBt LÜ-A 20 [%]		up to 90	
Transported air temperature [°C]	-20+40		
Ingress protection rating	IP24		

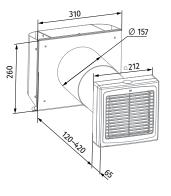
^{*} maximum air flow 40 m³/h

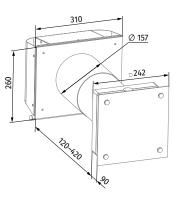


Overall dimensions [mm]









Vento Ergo A85 S10 Pro1

Vento Ergo A85-1 S10 Pro1

Vento Ergo A85 S Pro1

Vento Ergo A85-1 S Pro1



HEAT RECOVERY SINGLE-ROOM UNITS

Accessories

Name		Provided to		
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 A85 Pro1		Includes: • Ceramic regenerator Ø 150 mm • Vento Ergo A85 ventilation unit • G3 filters • Mounting plate • Remote control		
Completion Kit Vento Ergo A85-1 Pro1		Includes: • Ceramic regenerator Ø 150 mm • Vento Ergo A85-1 ventilation unit • G3 filters • Mounting plate • Remote control		
FP Vento Ergo A50 G3		G3 filters (2 pcs.)		
AH-10 *colour* 160	THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAM	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 160		Outer ventilation hood for thin wall, painted grey		
AH-S chrome 160		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		
FP Vento Ergo A50 F8		F8 filter		
FB Vento Ergo	9 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Remote control		

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