

HEAT RECOVERY SINGLE-ROOM UNITS



VENTO V50-1

Air capacity – up to 53 m³/h

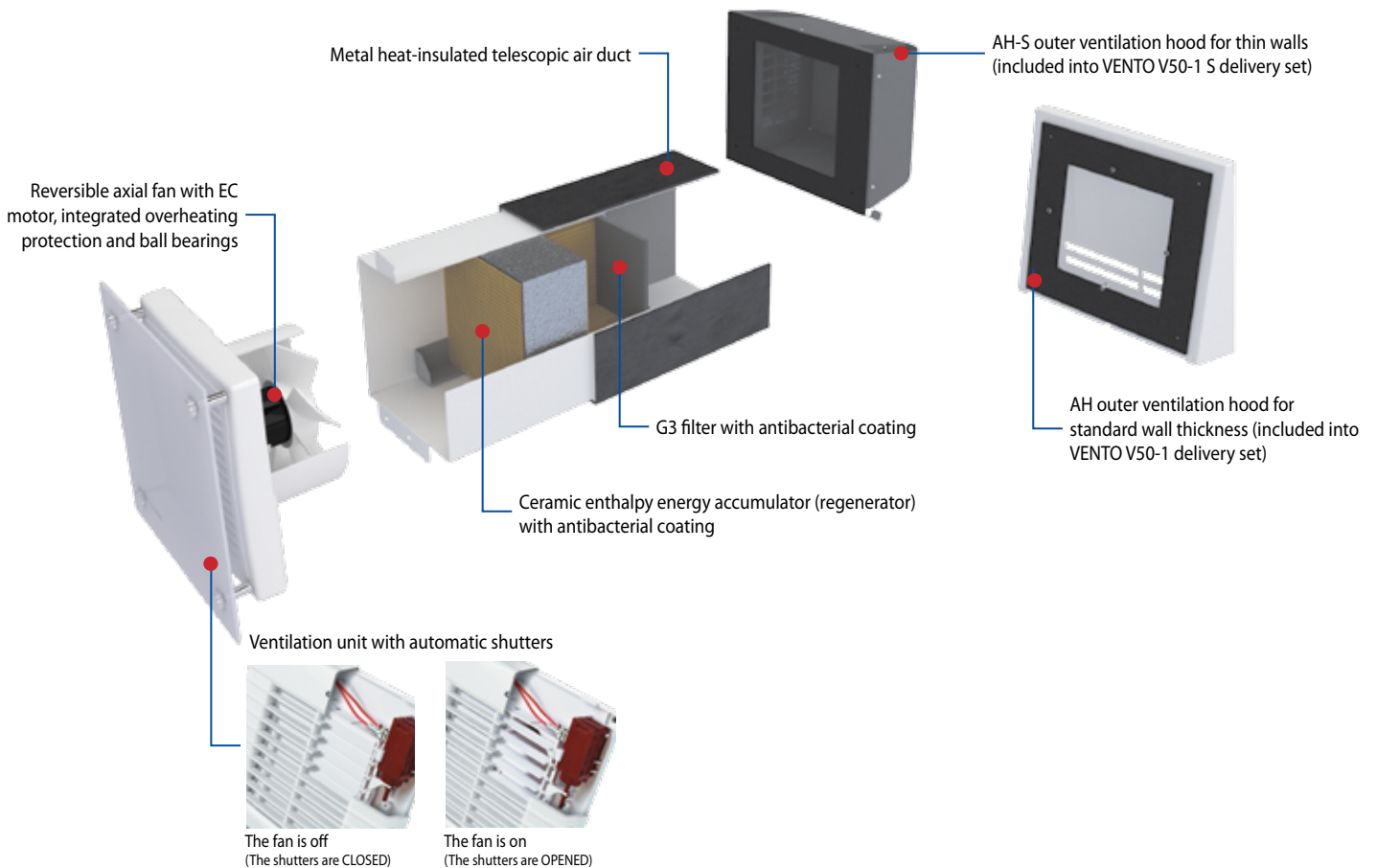
Heat recovery – up to 90 %



Use

- ❑ 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.

Design

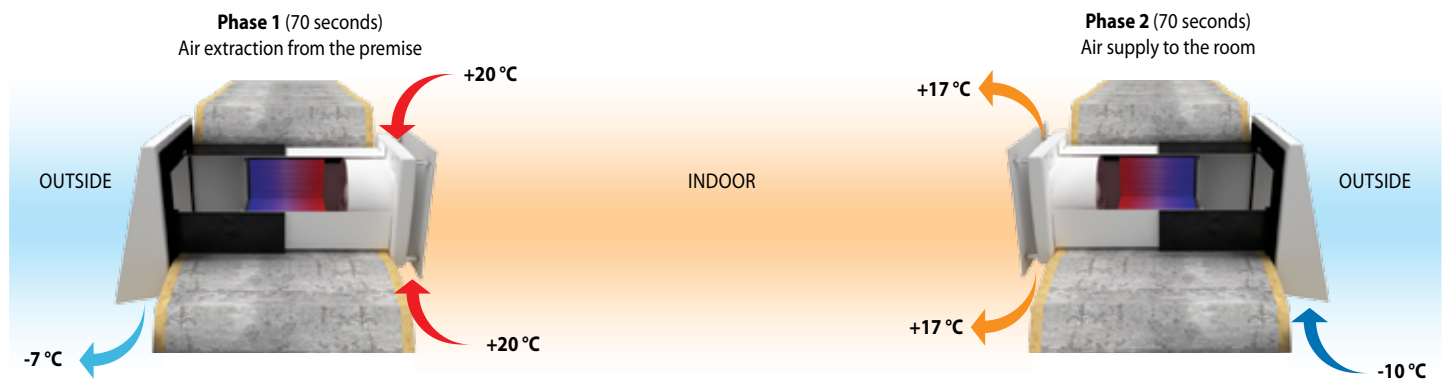


Heat and moisture regeneration

- ❑ High-tech ceramic energy accumulator with heat recovery up to 90 %.
- ❑ Due to its cellular structure it has a larger contact 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.
- 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 is switched to the extract air mode.

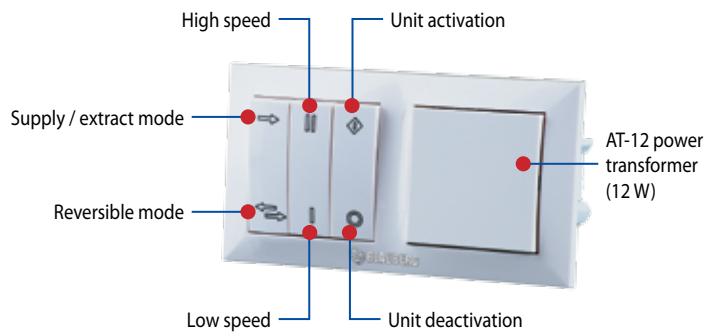
Control

The integrated automation system enables operation of the unit at the first low speed or the second high speed:

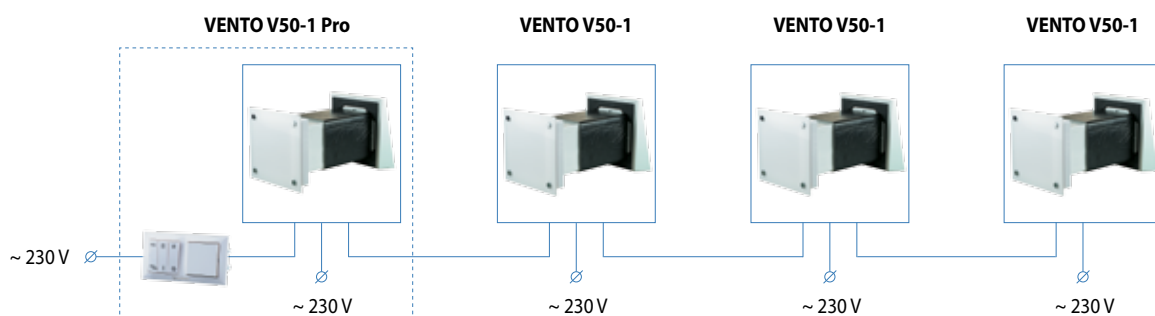
- ventilation mode (air supply or air extract);
- reversible heat regeneration mode.

The unit operation mode control is performed by means of an external control block with a power transformer:

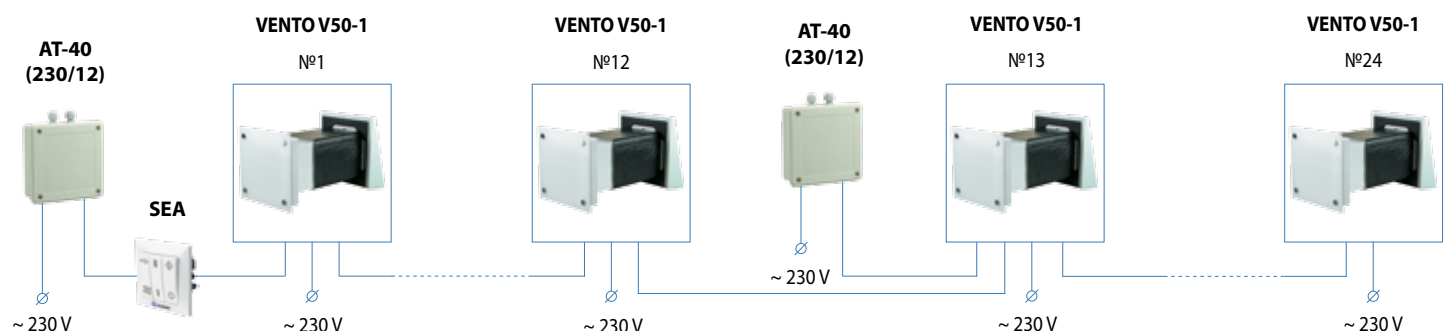
- in **VENTO V50-1 Pro / V50-1 S Pro** delivery set included (model SEA-T12);
- available upon separate order for **VENTO V50-1 / V50-1 S** (model SEA-T12 or SEA).



To arrange a central controlled ventilation system based on 4 units connect three VENTO V50-1 / V50-1 S units to one VENTO V50-1 Pro / VENTO V50-1 S Pro unit with SEA-T12 control and power unit. No extra accessories are required.



To arrange a central controlled ventilation system based on more than 4 units connect a required number of the units, one SEA three-position switch and several 12 W AT-12 transformers or 40 W AT-40 transformers, depending on the total unit power consumption to one VENTO V50-1 / VENTO V50-1 S unit.

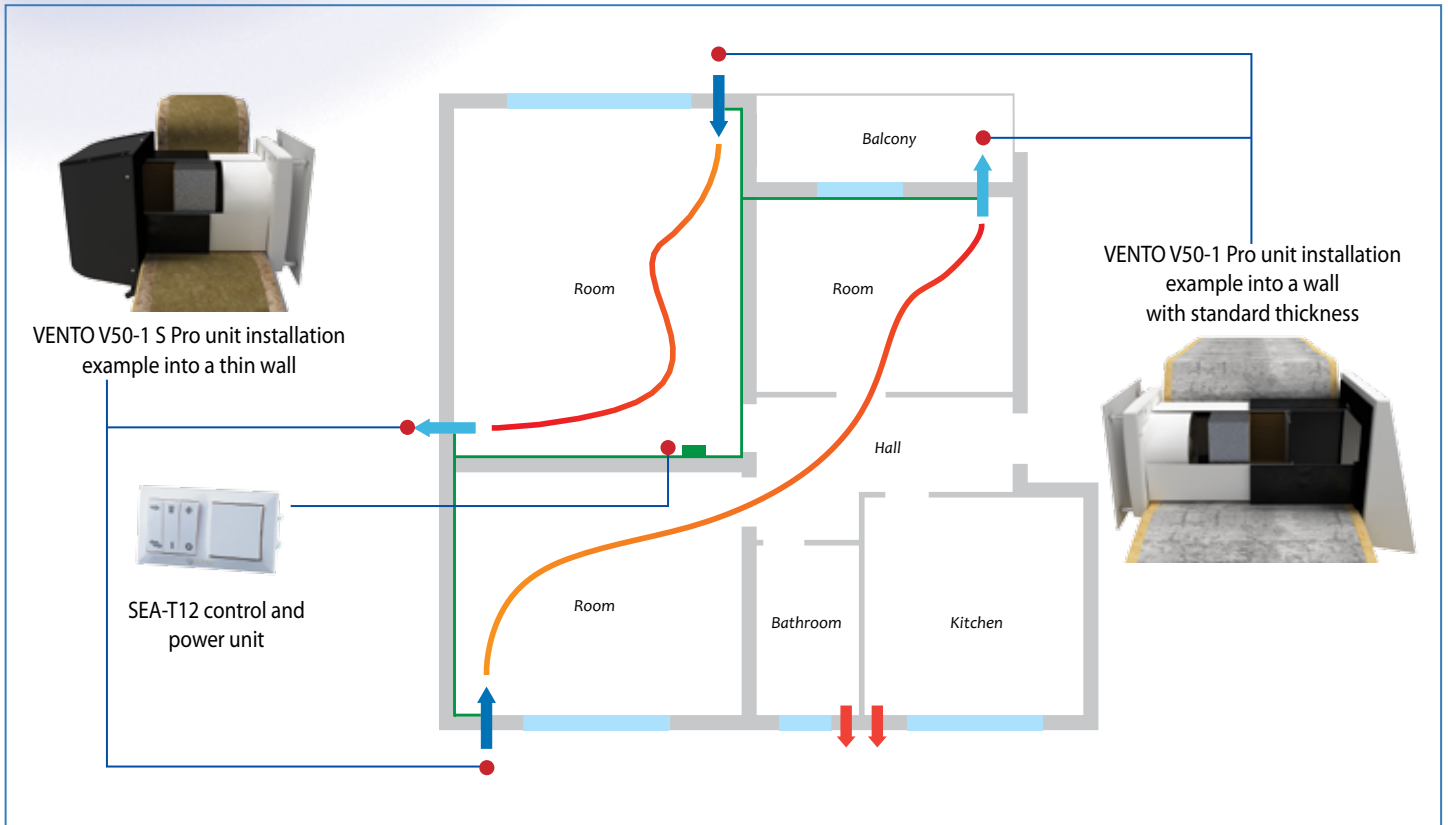


HEAT RECOVERY SINGLE-ROOM UNITS

■ Mounting

- The unit is designed for external through-the-wall installation inside a prepared square 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.

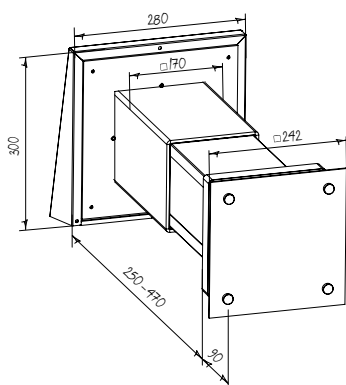
- In case of brand new construction the units are mounted in two stages:
 - **pre-installation** at the stage of the indoor finishing and outer decorative wall finishing. It includes installation of the telescopic air ducts, outer ventilation hood and laying out of electric cables.
 - **final mounting** before commissioning of a house. It includes installation of the regenerator, the filter, connection of the ventilation unit and automation.



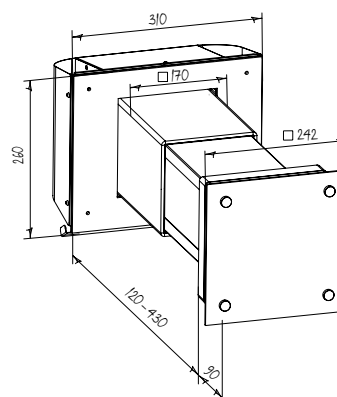
■ Technical data

Parameters	VENTO V50-1 / VENTO V50-1 Pro VENTO V50-1 S / VENTO V50-1 S Pro	
	1	2
Speed	1	2
Voltage / 50 Hz [V]	220-240	
Power [W]	3.68	4.83
Current [A]	0.021	0.026
RPM [min ⁻¹]	599	1155
Air capacity [m ³ /h]	26	53
Sound pressure level at 1 m [dB(A)]	24	34
Sound pressure level at 3 m [dB(A)]	14	24
Outdoor sound pressure attenuation [dB(A)]	19	
Regeneration efficiency [%]	up to 90	
SEC class	A	
Ingress protection rating	IP 24	

Overall dimensions







VENTO V50-1



VENTO V50-1 S

Accessories

Accessory name	Description
 <p>SEA-T12 (230/12) control and power unit</p>	<p>☐ SEA-T12 is an external control unit with a 12 W power transformer. It is included into VENTO V50-1 Pro and VENTO V50-1 S Pro units standard delivery set.</p>
 <p>SEA control unit</p>	<p>☐ SEA is an external control unit for the unit operation mode control.</p>
 <p>AT-12 (230/12) power transformer</p>	<p>☐ AT-12 is a 12 W power transformer for synchronous connection of 4 units. Used jointly with SEA control unit it ensures a central controllable ventilation system.</p>
 <p>AT-40 (230/12) power transformer</p>	<p>☐ AT-40 is a 40 W power transformer for synchronous connection of 12 units. Used jointly with SEA control unit it ensures a central controllable ventilation system.</p>
<p>Pre-installation kit for mounting into a wall with standard thickness Pre-installation Kit VENTO V50-1</p>	<p>☐ Used for brand new construction and stepwise mounting of the units during indoor and outer decorative wall finishing.</p> <p>☐ Includes:</p> <ul style="list-style-type: none"> • Square telescopic air duct, section 164x164 mm, 250-470 mm long. • AH 164x164 outer ventilation hood. • Plastic foam plug.
<p>Pre-installation kit for mounting into a thin wall Pre-installation Kit VENTO V50-1 S</p>	<p>☐ Includes:</p> <ul style="list-style-type: none"> • Square telescopic air duct, section 164x164 mm, 120-430 mm long. • AH 164x164 S outer ventilation hood. • Plastic foam plug.
<p>Final mounting kit Completion Kit VENTO V50-1</p>	<p>☐ Includes:</p> <ul style="list-style-type: none"> • Ceramic regenerator 164x164 mm. • VENTO V50-1 ventilation unit. • G3 filter.