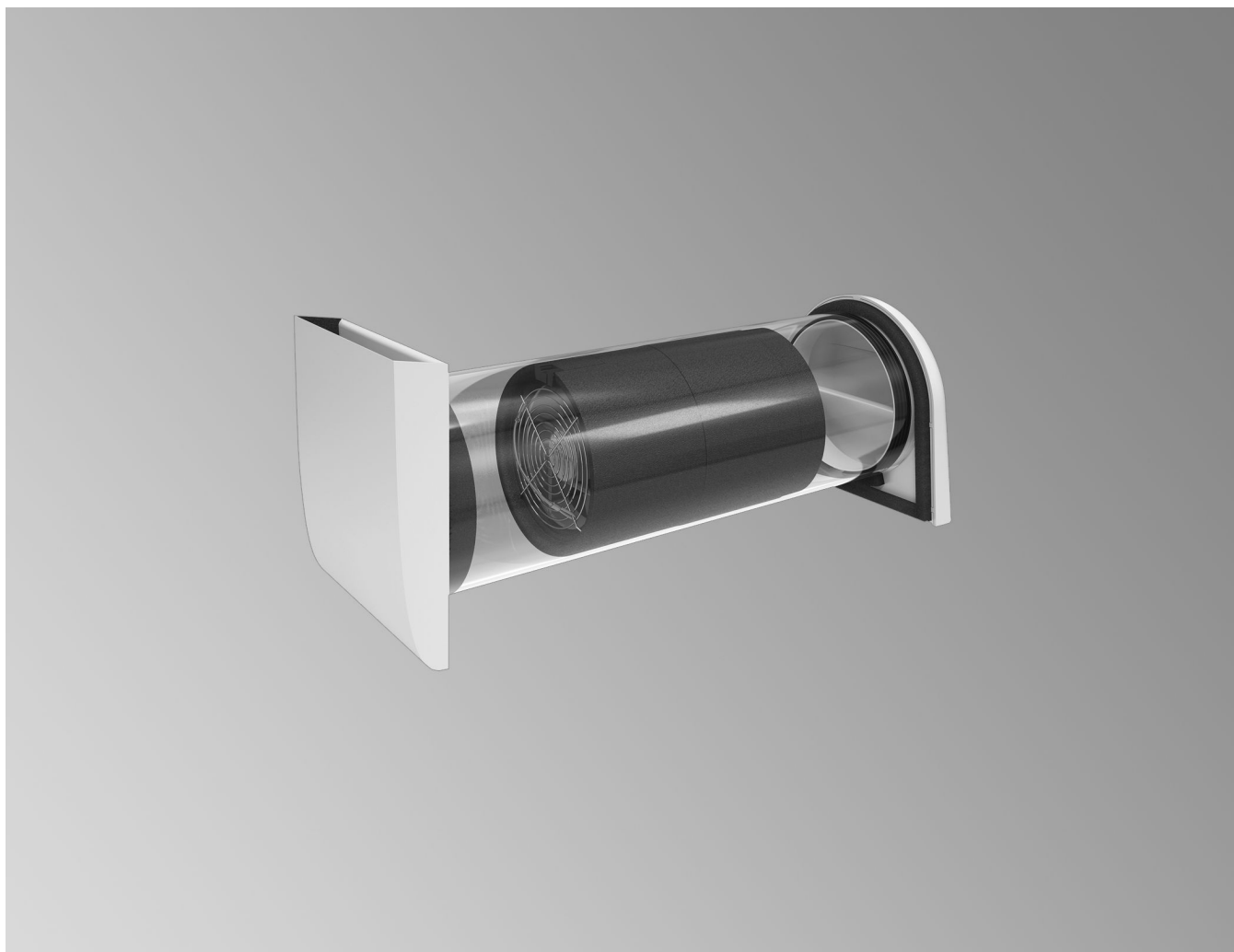


Datasheet

For part no. and prices: see pricelist



Decentralised ventilation unit with heat recovery for demand-dependent ventilation of rooms

VITOVENT 050-D Type H20E A43

- Air flow rate up to 43 m³/h
- 2 to 6 fans and one programming unit form one fan group (can be expanded with an additional power supply unit)
- Operation with change of direction
- Simultaneous heat recovery and humidity control via integrated, cleanable ceramic thermal stores

Product description

Decentralised ventilation unit with heat recovery for single rooms or apartments



The decentralised ventilation units with heat recovery are used for supplying air to and extracting air from single rooms or several rooms in residential buildings.

The units are installed in the external walls.

The ventilation units are equipped with a heat exchanger unit (ceramic storage block) for heat recovery. The units are operated in pairs. Air is drawn into the building via the fan of one ventilation unit (supply air mode), while the second ventilation unit channels air out of the building (extract air mode). Depending on the ventilation stage, the units swap their air flow direction simultaneously after 50 to 70 s.

The Vitovent 050-D, type H20E A43 is designed for a maximum air flow rate of 43 m³/h.

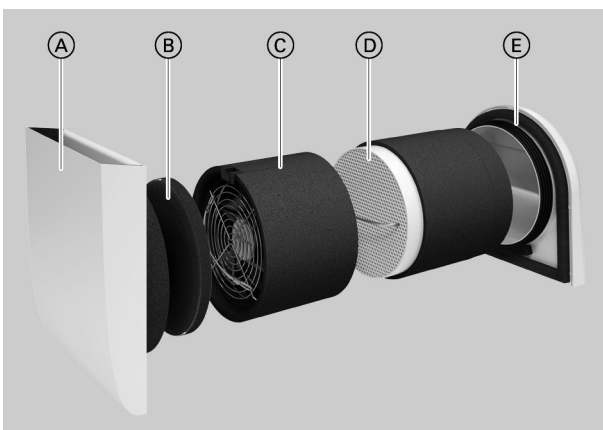
Heat recovery

In extract air mode, the air expelled from the building transfers its heat to the heat exchanger unit. When the air flow direction changes, the air entering the building is preheated by this heat exchanger unit.

System layout

A ventilation system always consists of at least 2 ventilation units and a programming unit or rotary controller. A maximum of 6 ventilation units per programming unit or rotary controller can be combined and synchronised with each other for supplying air to and extracting air from entire residential units.

Benefits



- (A) Internal wall cover
- (B) Filter
- (C) Fan
- (D) Ceramic thermal store
- (E) External wall cover (accessories)

Benefits (cont.)

- Energy cost savings through heat recovery
- Reliable moisture protection without having to frequently open windows.
- Airing mode for cooling during summer nights
- Easy installation with standard \varnothing 162 mm drilled hole
- Installation in 2 steps with set for unfinished walls and completion set
- Simple operation with large buttons or rotary controller
- Star wiring configuration and anti-twist connections
- Tool-free maintenance from the living space

Required accessories

1 x accessory per ventilation unit

■ Round wall sleeve

500 mm or 700 mm, can be cut to length, with protective plug

And

■ External wall cover

- Plastic external wall cover or
- Stainless steel external wall cover or
- Design stainless steel external wall cover or
- Installation element for window reveal

1 x accessory per ventilation system

A ventilation system can consist of 2, 4 or 6 ventilation units. A combination of different ventilation systems in one residential unit is possible.

Programming unit

■ Programming unit with large buttons

- Programming unit
- Base for programming unit

Or

■ Rotary controller

- Programming unit
- Base for programming unit
- Wall frame

Or

■ WiFi programming unit

- Programming unit
- Base for programming unit
- Wall frame

1 x accessory for every 6 ventilation units

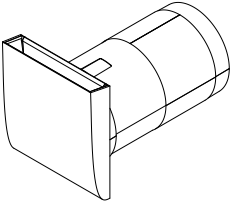
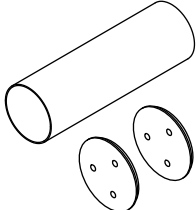
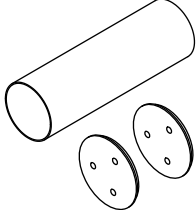
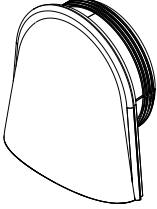
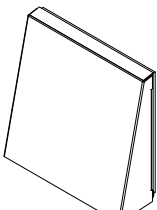
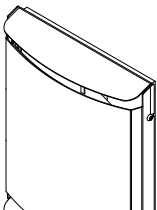
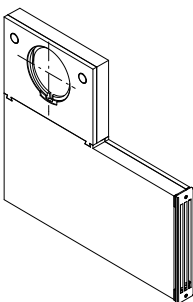
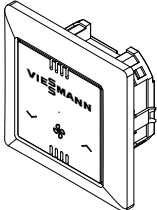
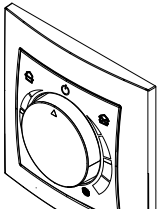
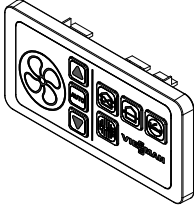
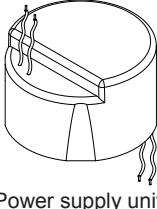
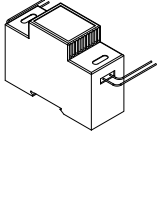
Power supply unit

- Power supply unit, flush mounted

Or

- Power supply unit, top-hat rail

Required accessories (cont.)

Standard unit	Wall sleeve	External wall cover	Programming unit	Power supply unit
	<p data-bbox="464 719 660 745">Wall sleeve 500 mm</p>  <p data-bbox="464 987 660 1014">Wall sleeve 700 mm</p> 	<p data-bbox="724 284 917 333">Plastic external wall cover</p>  <p data-bbox="724 577 917 627">Stainless steel external wall cover</p>  <p data-bbox="724 898 917 969">Design stainless steel external wall cover</p>  <p data-bbox="724 1294 917 1344">Installation element for window reveal</p> 	<p data-bbox="970 551 1189 577">WiFi programming unit</p>  <p data-bbox="999 815 1161 842">Rotary controller</p>  <p data-bbox="946 1135 1214 1184">Programming unit with large buttons</p> 	<p data-bbox="1256 750 1434 799">Power supply unit, flush mounted</p>  <p data-bbox="1256 1016 1434 1066">Power supply unit, top-hat rail</p> 

Specification

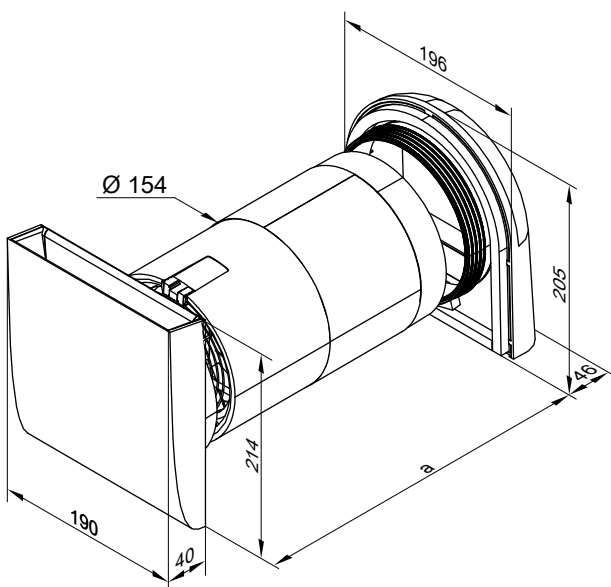
Specification – ventilation unit

Vitovent 050-D, type H20E A43

Part no.		Z015395			
Ventilation stages		Background Stage 1	Reduced Stage 2	Standard Stage 3	Intensive Stage 4
Air flow rates					
– Eco mode/airing in paired operation	m ³ /h	16	22	30	43
Heat recovery level		Max. 90			
Sound transmission data					
– Sound power level	dB(A)	32	43	52	52
– Sound pressure level ^{*1}	dB(A)	14	20	27	35
Electrical values					
– Power consumption	W	0.9	1.1	1.6	2.8
– Rated voltage	V $\overline{=}$	12			
– IP rating		IP 22			
Fan		Axial fan			
Efficiency (DIBt)					
– Heat recovery level, corrected	%	82			
– Specific power consumption	W/(m ³ /h)	0.14			
– Electrical efficiency ratio		> 10			
Permissible temperatures					
– Outdoor air temperature	°C	-20 to 40			
– Room air temperature	°C	15 to 35			
Permissible relative humidity (in the room)					
– Absolute humidity	g/kg	< 12			
– Constant	%	< 70			
– Peak	%	< 90			
Dimensions					
Minimum wall thickness	mm	See table "Specification – external wall cover with wall sleeve"			
Internal wall cover					
– Width	mm	190			
– Height	mm	214			
– Depth	mm	40			
– Material, colour		Plastic ASA, white			
Weight	kg	4.6			

Dimensions

Ventilation unit with wall sleeve and external wall cover



a Min./max. wall thickness depends on the combination of wall sleeve and external wall cover used.

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*1 Determined at a distance of 2 m under free field conditions in supply air mode.

Specification (cont.)

Specification – external wall cover with wall sleeve

	Wall sleeve, round, with external wall cover	Wall sleeve, round, with Design stainless steel external wall cover	Installation set for window reveal with external wall grille
Part no. of external wall cover	ZK03627	ZK03629	ZK04641
Part no. of wall sleeve			
– Length 500 mm	ZK02707	ZK02707	ZK02707
– Length 700 mm	ZK02708	ZK02708	ZK02708
Material of external wall cover/grille	Plastic (ASA)	Stainless steel	Steel, painted
Colour	White	Stainless steel	White
Wall thickness			
– Minimum	mm	305	270
– Min./max. with wall sleeve accessory	mm	500/700	495/695
– Recommendation	mm	≥ 305	≥ 270
Drilled hole	∅ mm	162	162
Dimensions of external wall cover			
– Width	mm	196	206
– Height	mm	205	255
– Depth	mm	46	45
Standard sound level difference Dn,w			
– Ventilation unit only	dB	40	40
– Ventilation unit with sound insulation set	dB	46	44

Specification – programming units

	WiFi programming unit	Programming unit	Rotary controller
Part no.	ZK04640	ZK02952	ZK03626
Electrical values			
– Operating voltage	V _~	24	12
– Power consumption	W	< 1.0	1.2
– IP rating		IP 30	IP 40
Permissible ambient temperatures	°C	0 to 40	0 to 40
Enclosure			
– Material	Plastic	Plastic	Plastic
– Colour	White	White	White
– Level of contamination	2	2	2
Control modes to ErP			
– Manual control		X	X
– Time control		X	
– Central demand control		X	X
– Control according to local demand		X	

Subject to technical modifications.

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