

Datasheet

For part no. and prices: see pricelist



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

VITOVENT 100-D Type H00E A45

- Air flow rate up to 45 m³/h
- 2 to 6 fans and one programming unit form one fan group (can be expanded with an additional power supply unit)
- Separate control of fan groups via a central control unit with touchscreen
- 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). At the same time, 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 synchronously after 50 to 70 s.

The Vitovent 100-D, type H00E A45 is designed for a maximum air flow rate of 46 m³/h.

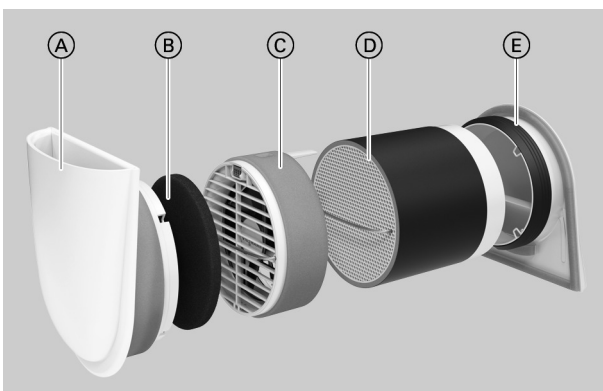
Heat recovery

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. Any number of ventilation units 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
- Continuous operation ensures comfortable room temperatures.
- Balanced humidity management prevents building damage.
- Airing mode for cooling during summer nights
- Easy installation with standard Ø 162 mm drilled hole
- Installation in 2 steps with set for unfinished walls and completion set
- Easy operation via touchscreen or LED programming unit
- Internal and external wall covers optimised for noise and flow
- Individual control of the air change rate in ventilation zones
- Wiring with a star or ring configuration and encoded connections with no risk of mix-ups
- 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

Programming unit

- Touchscreen programming unit
 - Programming unit
 - Base for programming unit
 - Wall frame

Or

- LED programming unit
 - 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

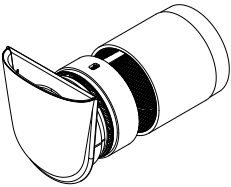
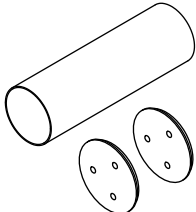
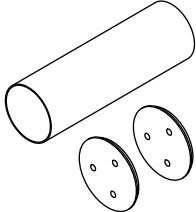
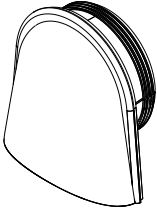
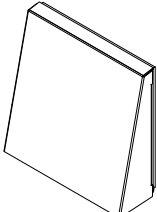
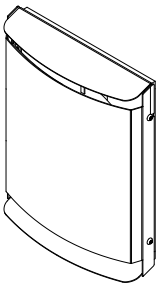
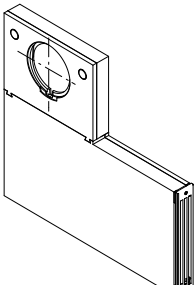
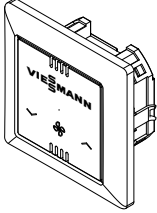
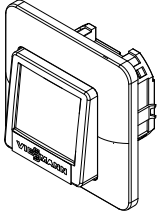
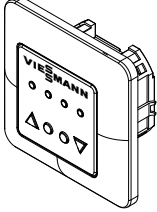
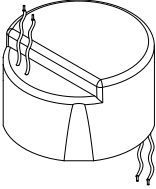
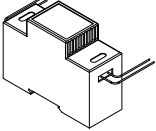
Power supply unit

- 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="724 284 920 338">Plastic external wall cover</p>  <p data-bbox="724 577 920 631">Stainless steel external wall cover</p>  <p data-bbox="724 898 920 969">Design stainless steel external wall cover</p>  <p data-bbox="724 1294 920 1348">Installation element for window reveal</p> 	<p data-bbox="970 577 1189 604">WiFi programming unit</p>  <p data-bbox="954 842 1204 896">Touchscreen programming unit</p>  <p data-bbox="970 1133 1189 1160">LED programming unit</p> 	<p data-bbox="1257 748 1433 801">Power supply unit, flush mounted</p>  <p data-bbox="1257 1016 1433 1070">Power supply unit, top-hat rail</p> 

Specification

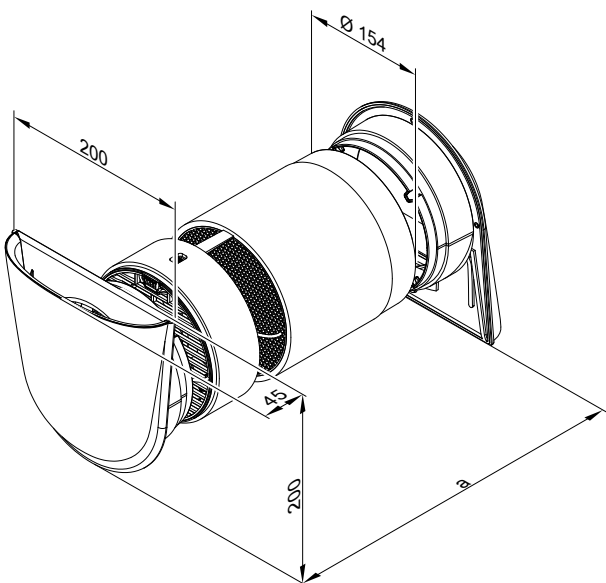
Specification – ventilation unit

Vitovent 100-D, type H00E A45

Part no.		Z014868			
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	18	28	38	46
Heat recovery level		Max. 91			
Sound transmission data					
– Sound power level	dB(A)	29	37	46	49
– Sound pressure level ^{*1}	dB(A)	11	19	28	33
Electrical values					
– Power consumption	W	1.8	2.3	3.1	4.1
– Max. power consumption	W		10.2		
– Rated voltage	V _~		42		
– IP rating			IP 42		
Fan		Axial fan			
Efficiency (DIBt)					
– Heat recovery level, corrected	%		81		
– Specific power consumption	W/(m ³ /h)		0.17		
– 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		200		
– Height	mm		200		
– Depth	mm		45		
– 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.





*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	ZK03628	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	335	280
– Min./max. with wall sleeve accessory	mm	500/700	495/695
– Recommendation	mm	≥ 360	≥ 305
Drilled hole	∅ mm	162	162
Dimensions of external wall cover			
– Width	mm	200	206
– Height	mm	200	255
– Depth	mm	45	45
Standard sound level difference Dn,w			
– Ventilation unit only	dB	44	41
– Ventilation unit with sound insulation set	dB	48	45

Specification – programming units

	WiFi programming unit	Touchscreen programming unit	LED programming unit
Part no.	ZK04640	ZK02709	ZK02710
Electrical values			
– Operating voltage	V _~	42	42
– Power consumption	W	< 1	2
– IP rating		IP 30	IP 40
Battery		CR 2032	CR 2032
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	X
– Central demand control		X	X
– Control according to local demand		X	X

Subject to technical modifications.

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