

SOUND-INSULATED FANS

Series **VENTS VS**



Inline centrifugal fans in heat- and sound-insulated casing with the air capacity up to **16 870 m³/h**. Applied for supply and exhaust ventilation systems for various premises with high requirements to noise level. Compatible with round and rectangular air ducts.

■ Applications

Supply and exhaust ventilation systems for various premises with high noise level requirements. The VS fan design enables to assemble various ventilation configurations due to changeable positions of the removable panels. Such design enables air supply in all directions, both linearly and at the angle 90 °C. The aluzinc casing with high corrosion-resistant properties and heat-insulating material allows outdoor installation of the fan. The fans may be integrated into an assembled supply ventilation system.

■ Design

The fan casing is made of aluminium frame, fastened with aluminium bends and removable double-skinned aluzinc panels, heat- and sound-insulated with 20 mm non-combustible mineral wool. The connecting pipes that also serve as vibration absorbing connectors are available with round and square sections. The round pipes are fitted with rubber sealing rings. The connecting pipes are not included into the delivery set and are available upon separate order!

■ Motor

2-, 4- or 6-pole asynchronous external rotor motor and centrifugal impeller with backward curved blades.

The motors are equipped with overheating protection, which is connected to the external protection device (i.e., the model VS 355-4E has thermal switches with automatic restart). The specially greased ball bearing motor ensures low noise and maintenance-free operation.

■ Speed control

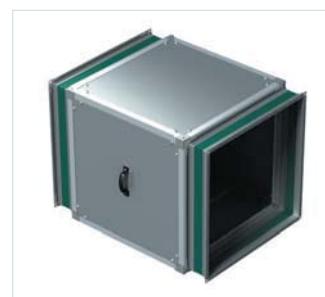
Smooth or step speed control with a thyristor or autotransformer speed controller. Speed control is adjusted by the supply voltage regulation. Air flow is regulated by the motor speed. Several fans may be connected to one speed controller provided that the total power and operating current do not exceed the rated speed controller parameters.

■ Mounting

Inline fans are designed for connection to rectangular or round air ducts with a flexible connector of respective cross section. The fan are designed for inline mounting. While connecting the fan to flexible connectors, provide its fixing to a building with supports, suspension or fixing bracket. The fan is suitable for any mounting position, on condition that the pointer on the fan casing matches the air motion direction in the system. While mounting the fan provide enough access for its servicing.



VS series fan with VPG connecting reducers



VS fan with VVG flexible ant-vibration flexible connectors



Designation key:

Series	Impeller diameter		Motor	
VENTS VS	355; 400; 450; 500; 560; 630; 710	S – high-powered motor	Polarity	Phase
			4, 6	E – single phase D – three phases

Accessories



page 408



page 409



page 410



page 412



page 413



page 414



page 415



page 416



VPG

VVG

Technical data:

	VS 355-4E	VS 355-4D	VS 400-4E	VS 400-4D	
Voltage [V/50 Hz]	1~ 230	3~ 400	1~ 230	3~ 400 Δ	3~ 400 Y
Power [W]	245	230	480	515	385
Current [A]	1.12	0.52	2.40	1.41	0.70
Max. air capacity [m ³ /h] with the air flow:					
- perpendicularly	2890	2660	3750	3950	3340
- straight forward	2650	2380	3535	3740	3110
RPM [min ⁻¹]	1420	1400	1370	1415	1235
Noise level at 3 m [dBA]	54	53	51	51	47
Transported air temperature [°C]	-25 +50	-25 +70	-40 +80	-40 +60	-40 +80
Protection rating	IP X4	IP X4	IP X4	IP X4	

Technical data:

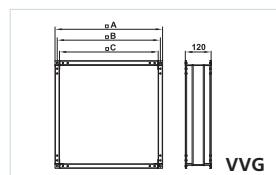
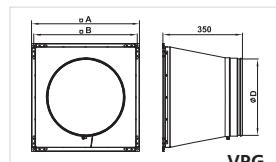
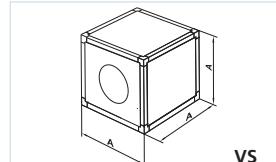
	VS 450-4E	VS 450-4D	VS 500-4E	VS 500-4D	VS 560-4D
Voltage [V/50 Hz]	1~ 230	3~ 400	1~ 230	3~ 400	3~ 400
Power [W]	680	740	1300	1430	2380
Current [A]	3.00	1.50	5.70	3.00	5.00
Max. air capacity [m ³ /h] with the air flow:					
- perpendicularly	5630	5700	7330	7940	11340
- straight forward	4930	5080	6680	7200	10490
RPM [min ⁻¹]	1250	1350	1320	1375	1365
Noise level at 3 m [dBA]	53	54	55	58	56
Transported air temperature [°C]	-40 +70	-40 +80	-20 +50	-40 +80	-40 +60
Protection rating	IP X4				

Technical data:

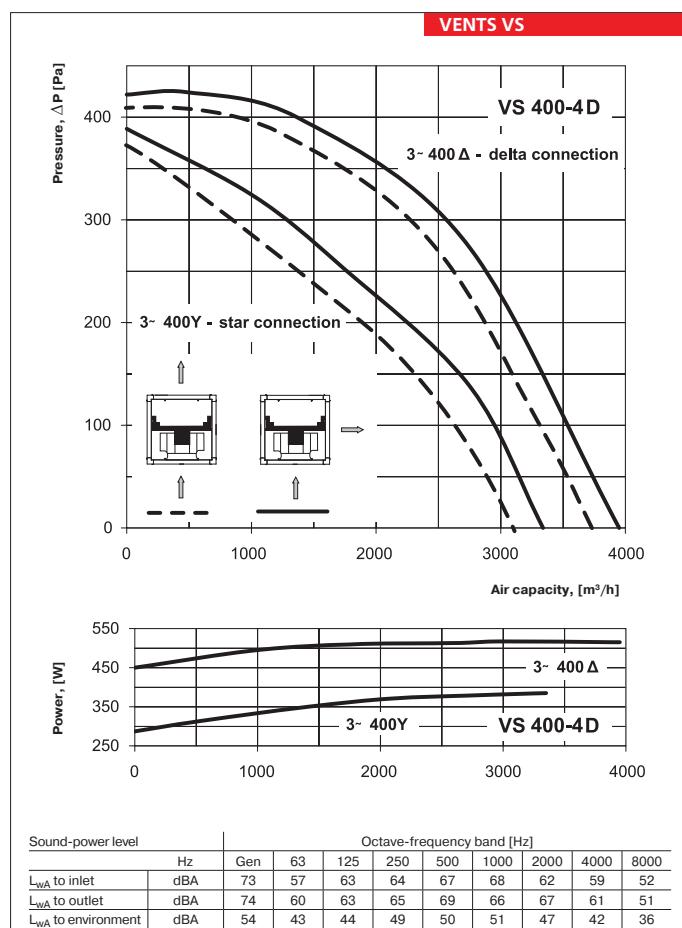
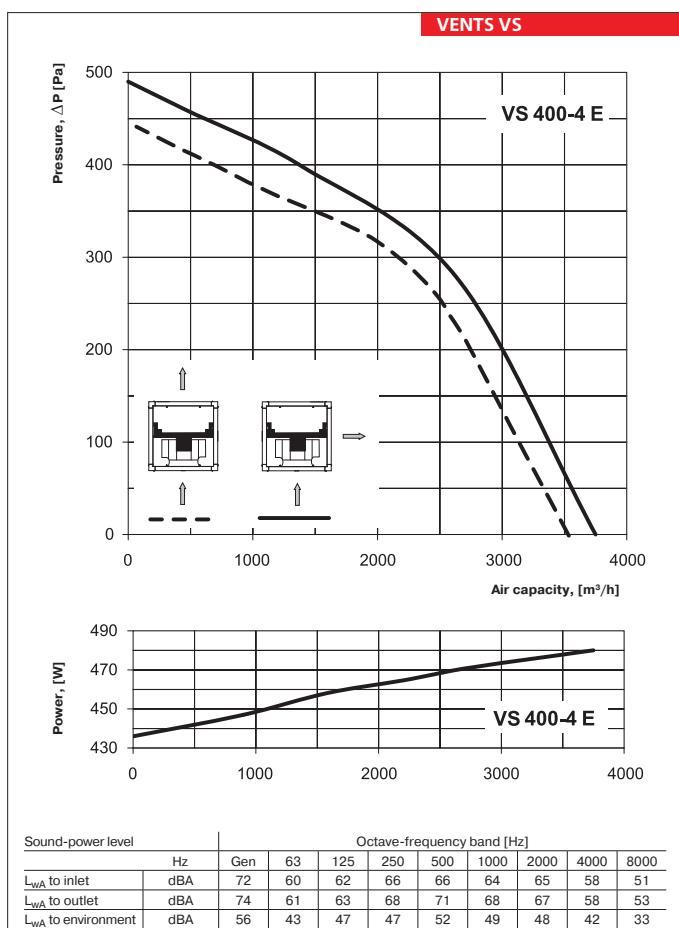
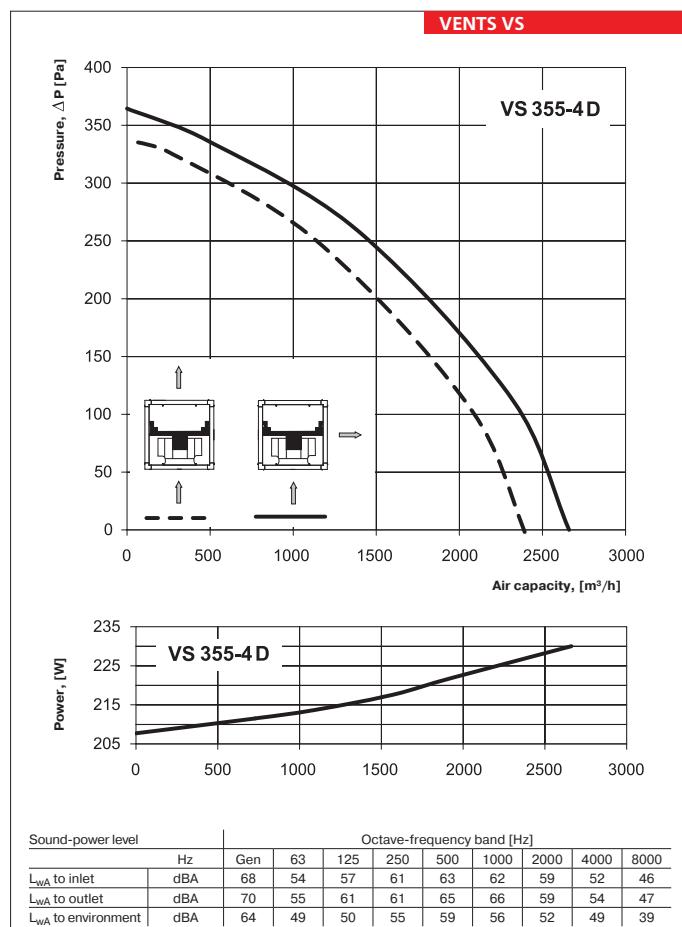
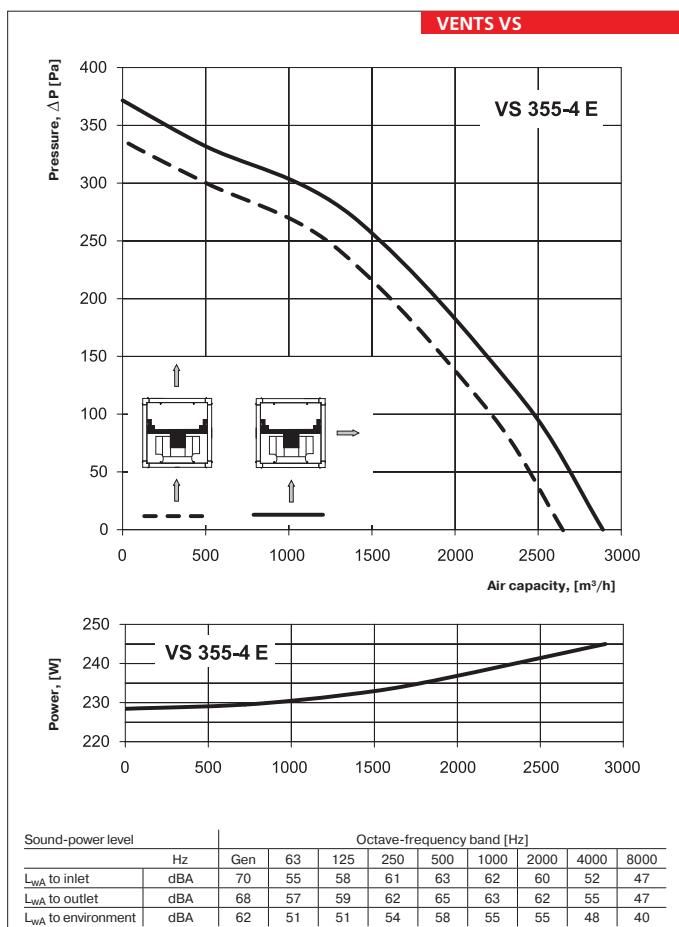
	VS 560-6D	VS 630-4D	VS 630S-4D	VS 630-6D	VS 710-6D
Voltage [V/50 Hz]	3~ 400	3~ 400	3~ 400	3~ 400	3~ 400
Power [W]	780	3310	4250	1310	2000
Current [A]	1.70	6.20	7.55	2.80	3.90
Max. air capacity [m ³ /h] with the air flow:					
- perpendicularly	7970	15170	16870	12030	15830
- straight forward	7330	13740	14930	10440	14880
RPM [min ⁻¹]	885	1170	1300	880	890
Noise level at 3 m [dBA]	49	67	69	55	59
Transported air temperature [°C]	-40 +55	-40 +35	-40 +60	-40 +60	-20 +40
Protection rating	IP X4	IP X4	IP X4	IP X4	IP X4

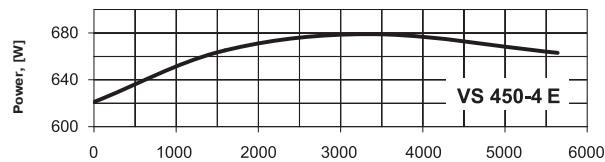
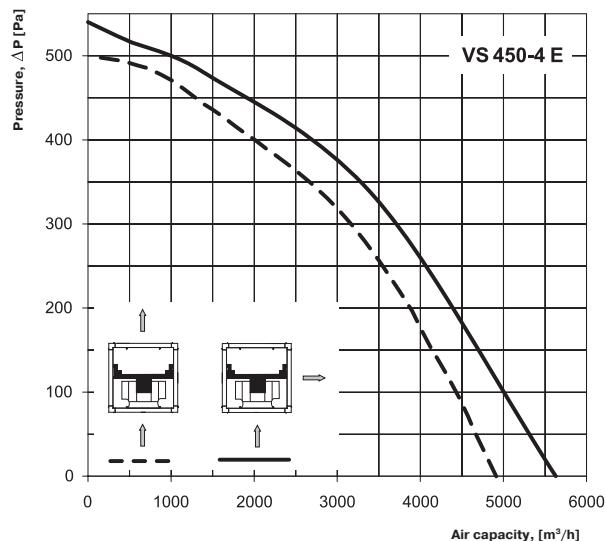
Fan and additional equipment overall dimensions:

Type	Dimensions [mm]		Weight [kg]	Options		Dimensions [mm]			
	A	VPG		VVG	A	B	C	ØD	
VS 355-4E	500	25			490	470	445	355	
VS 355-4D	500	25	VPG 500/355	VVG 500x500					
VS 400-4E	670	39			660	640	615	400	
VS 400-4D	670	39	VPG 670/400		660	640	615	450	
VS 450-4E	670	43		VVG 670x670	660	640	615	450	
VS 450-4D	670	43	VPG 670/450		660	640	615	500	
VS 500-4E	670	52			790	770	745	560	
VS 500-4D	670	56	VPG 670/500		790	770	745	630	
VS 560-4D	800	99			790	770	745	560	
VS 560-6D	800	86	VPG 800/560		790	770	745	630	
VS 630-4D	800	102		VVG 800x800	790	770	745	630	
VS 630S-4D	800	100	VPG 800/630		790	770	745	630	
VS 630-6D	800	98			790	770	745	710	
VS 710-6D	1000	136	VPG 1000/710	VVG 1000x1000	990	970	945	710	

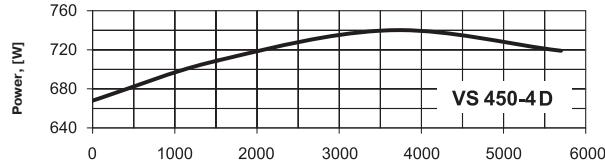
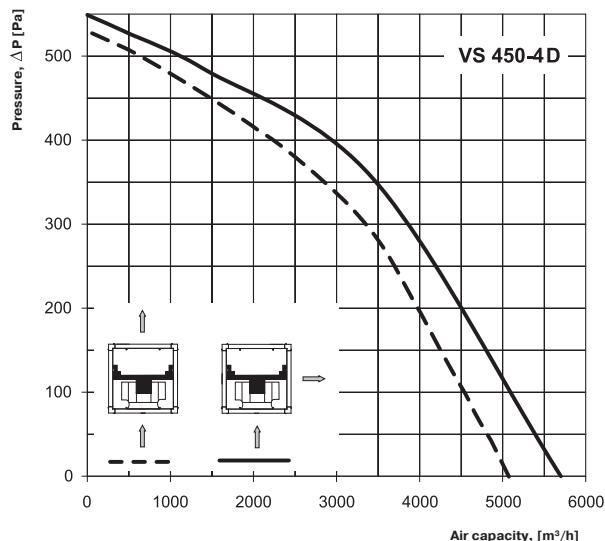


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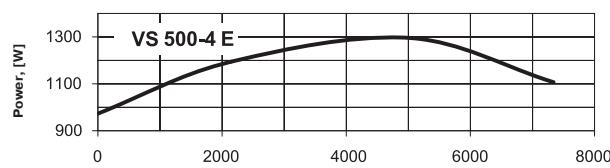
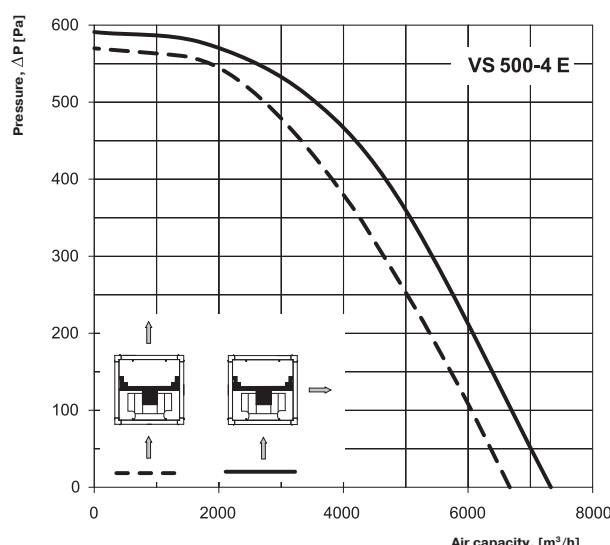


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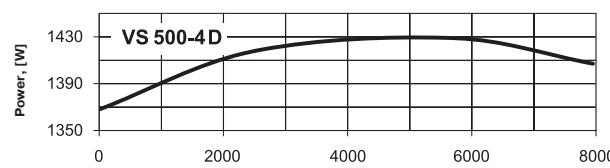
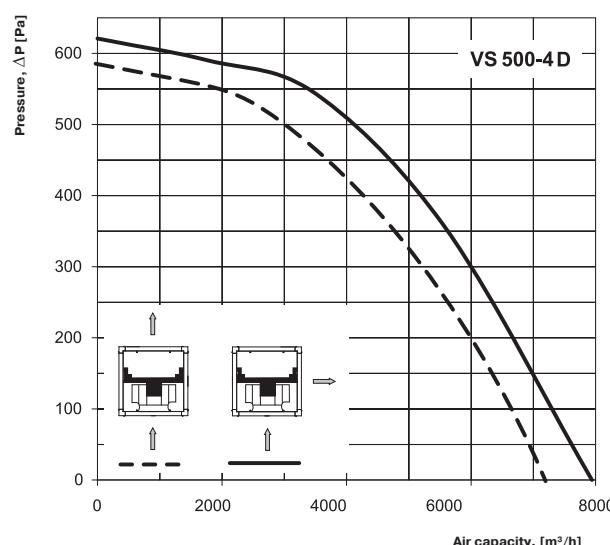
Sound-power level		Octave-frequency band [Hz]								
Hz	Gen	63	125	250	500	1000	2000	4000	8000	
L _{WA} to inlet	dBA	76	62	64	67	68	69	66	63	53
L _{WA} to outlet	dBA	76	63	66	70	71	69	66	63	57
L _{WA} to environment	dBA	57	44	48	52	56	53	50	47	38

VENTS VS

Sound-power level		Octave-frequency band [Hz]							
Hz	Gen	63	125	250	500	1000	2000	4000	8000
L _{WA} to inlet	dBA	76	61	65	67	68	66	50	55
L _{WA} to outlet	dBA	75	63	67	69	70	72	68	63
L _{WA} to environment	dBA	61	46	47	52	52	51	44	36

VENTS VS

Sound-power level		Octave-frequency band [Hz]							
Hz	Gen	63	125	250	500	1000	2000	4000	8000
L _{WA} to inlet	dBA	81	65	70	73	74	75	69	57
L _{WA} to outlet	dBA	81	68	72	74	76	75	71	61
L _{WA} to environment	dBA	65	52	53	56	57	56	55	40

VENTS VS

Sound-power level		Octave-frequency band [Hz]							
Hz	Gen	63	125	250	500	1000	2000	4000	8000
L _{WA} to inlet	dBA	77	66	67	71	71	74	71	55
L _{WA} to outlet	dBA	79	69	67	73	76	74	73	59
L _{WA} to environment	dBA	61	52	54	54	56	55	54	44

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