

**SOUND-INSULATED FANS**

**Series VENTS VS**



Inline centrifugal fans with backward curved blades in heat- and sound-insulated casing with the air capacity up to **16 870 m<sup>3</sup>/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 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**

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 fan with VPG flexible anti-vibration connectors



VS fan with KN-VS outer hood



VS fan with VVG flexible anti-vibration connectors

**Designation key:**

Series	Impeller diameter	Motor	
		Polarity	Phase
<b>VENTS VS</b>	355; 400; 450; 500; 560; 630; 710	S – high-powered motor	E – single phase D – three phase

**ErP data**

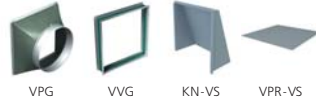
Overall efficiency	η, [%]
Measurement category	MC
Efficiency category	EC
Efficiency grade	N
Variable speed drive	VSD
Power	[kW]
Current	[A]
Air flow	[m <sup>3</sup> /h]
Static pressure	[Pa]
Speed	[n/min <sup>-1</sup> ]
Specific ratio	SR

**Accessories**



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**Offered options for fans**



VPG VVG KN-VS VPR-VS

**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 <sup>3</sup> /h] with the air flow:					
– perpendicularly	2890	2660	3750	3950	3340
– straight forward	2650	2380	3535	3740	3110
RPM [min <sup>-1</sup> ]	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 <sup>3</sup> /h] with the air flow:					
– perpendicularly	5630	5700	7330	7940	11340
– straight forward	4930	5080	6680	7200	10490
RPM [min <sup>-1</sup> ]	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	IP X4	IP X4	IP X4	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 <sup>3</sup> /h] with the air flow:					
– perpendicularly	7970	15170	16870	12030	15830
– straight forward	7330	13740	14930	10440	14880
RPM [min <sup>-1</sup> ]	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

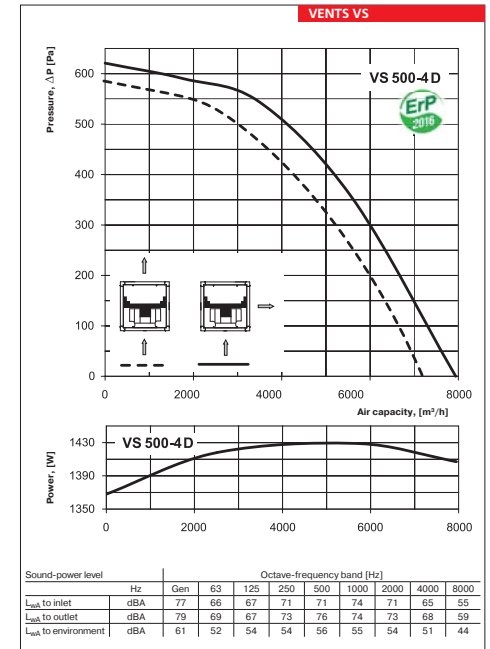
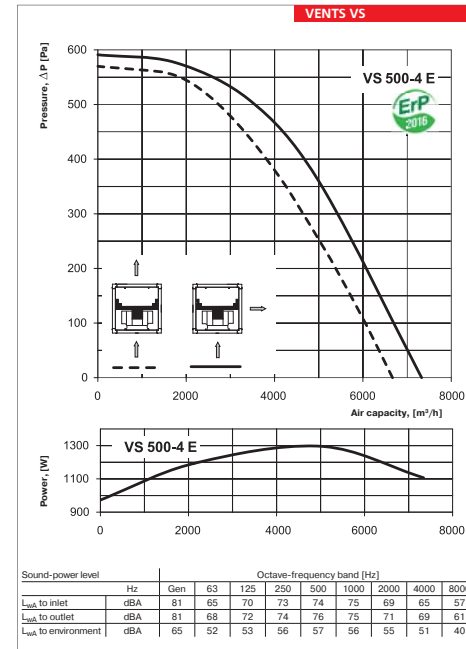
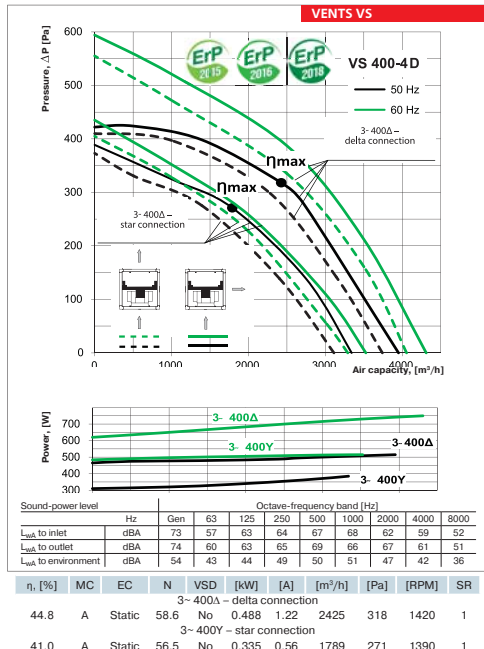
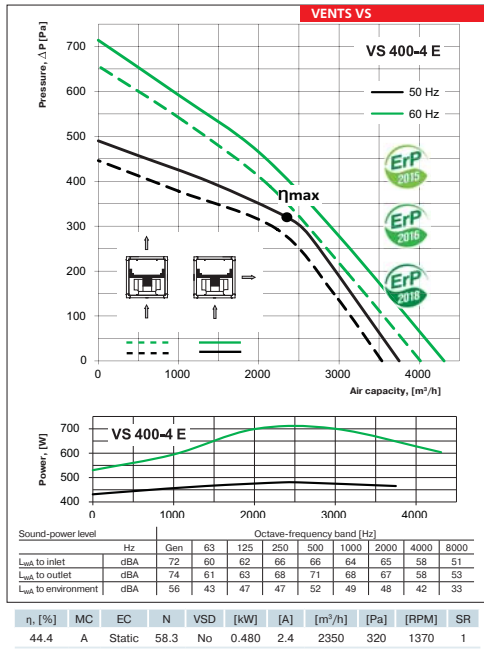
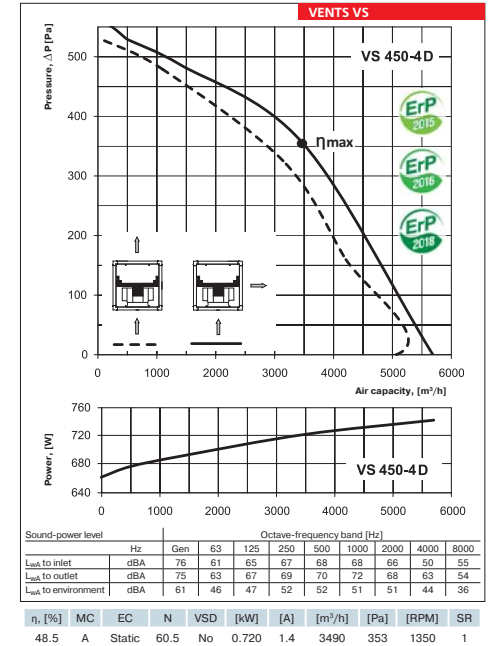
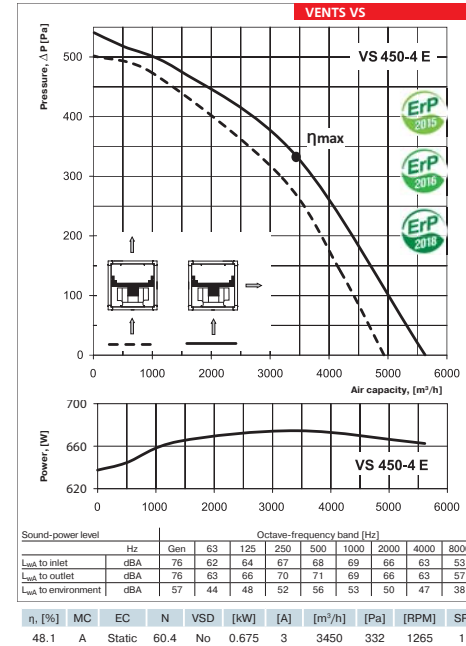
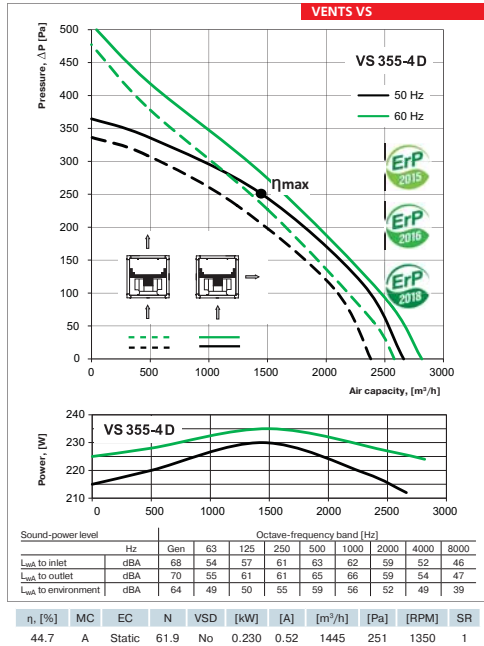
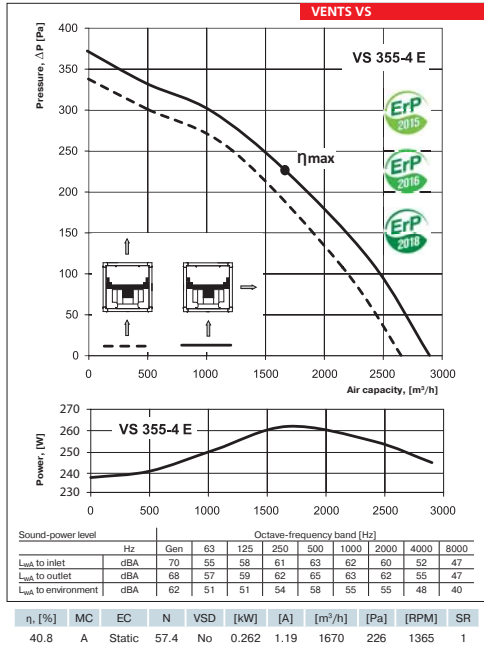


VS fan gym ventilation example

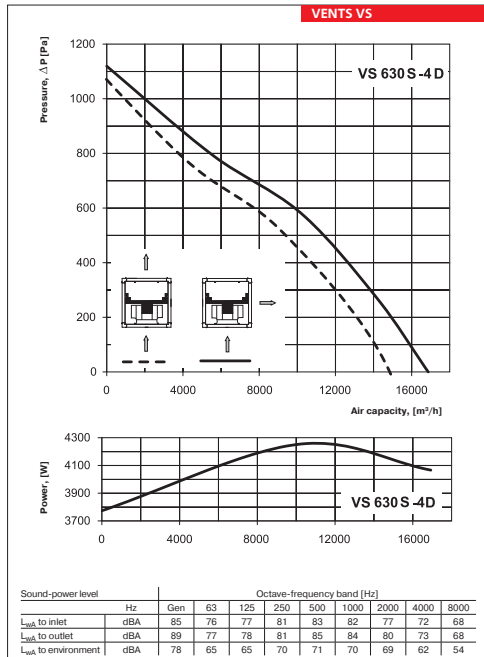
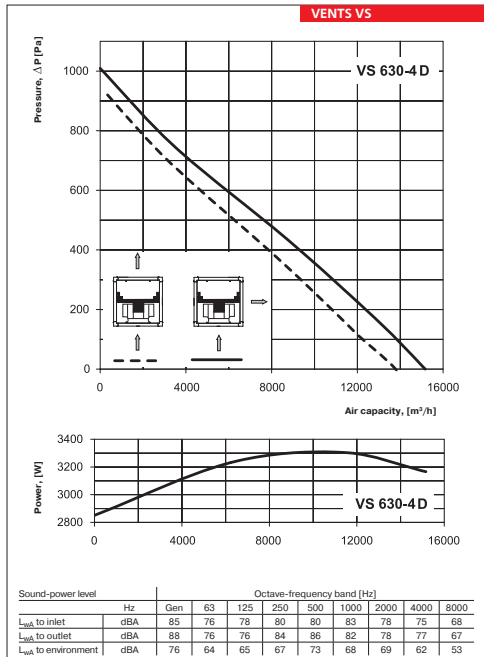
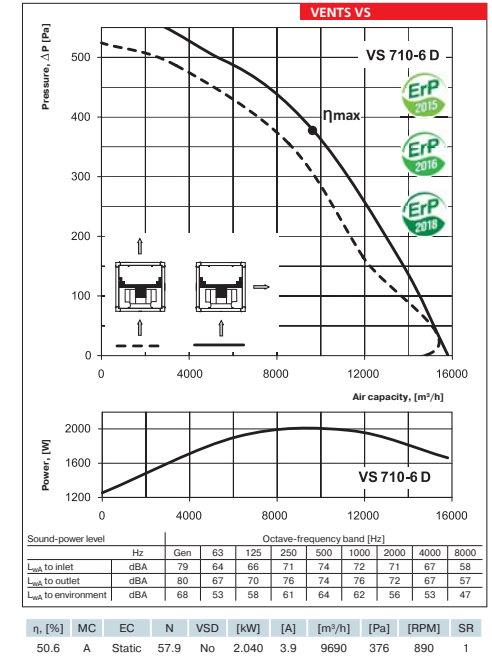
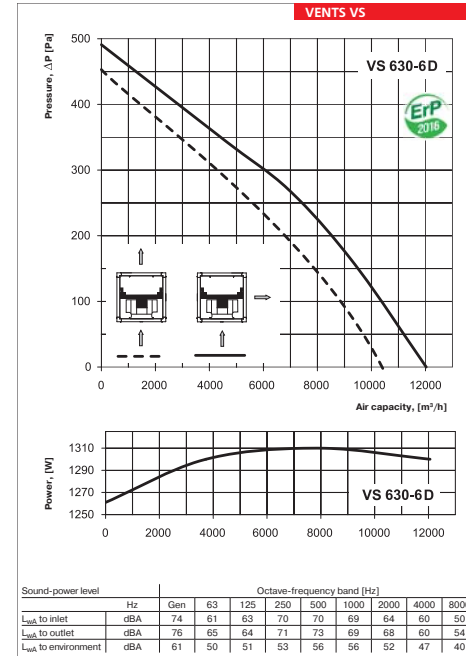
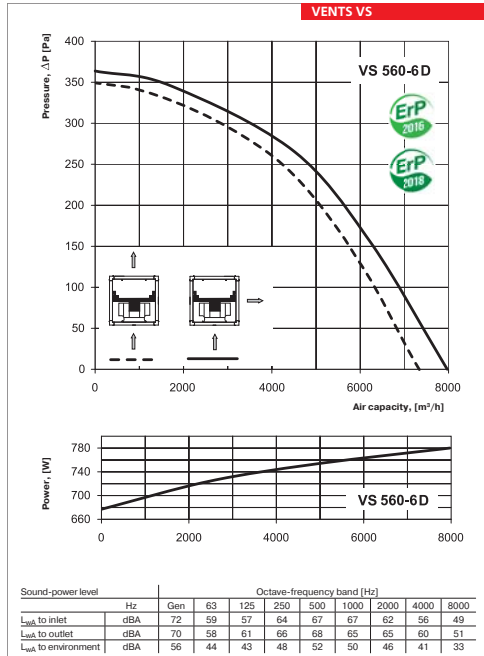
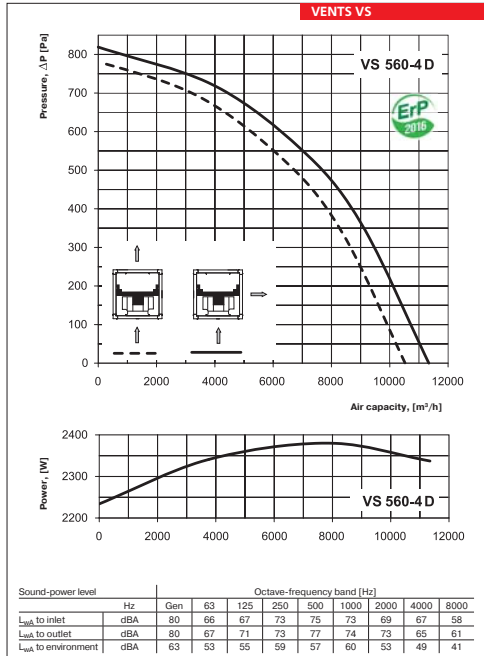


VS fan office ventilation example

SOUND-INSULATED FANS

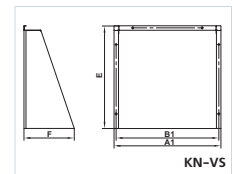
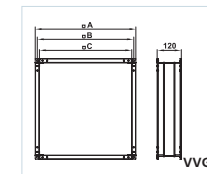
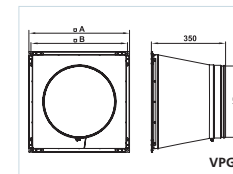
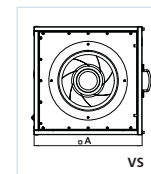


SOUND-INSULATED FANS



Fan and additional equipment overall dimensions:

Type	Dimen- sions [mm] A	Weight [kg]	Options				Dimensions [mm]								
			VPG	VVG	KN-VS	VPR-VS	A	A1	B	B1	C	ØD	E	F	G
VS 355-4E	520	25	VPG	VVG	KN-VS	VPR-VS	490	478	470	458	445	355	458	225	600
VS 355-4D	520	25	500/355	500x500	315-355	315-355									
VS 400-4E	690	39	VPG	VVG	KN-VS	VPR-VS	660	648	640	628	615	400	628	321	770
VS 400-4D	690	39	670/400												
VS 450-4E	690	43	VPG	VVG	KN-VS	VPR-VS	660	648	640	628	615	450	628	321	770
VS 450-4D	690	43	670/450	670x670	400-500	400-500									
VS 500-4E	690	52	VPG	VVG	KN-VS	VPR-VS	660	648	640	628	615	500	628	321	770
VS 500-4D	690	56	670/500												
VS 560-4D	820	99	VPG	VVG	KN-VS	VPR-VS	790	778	770	758	745	560	758	421	900
VS 560-6D	820	86	800/560												
VS 630-4D	820	102	VPG	VVG	KN-VS	VPR-VS	790	778	770	758	745	630	758	421	900
VS 630S-4D	820	100	800/630	800x800	560-630	560-630									
VS 630-6D	820	98	VPG	VVG	KN-VS	VPR-VS	790	778	770	758	745	630	758	421	900
VS 630-4D	820	102	800/630												
VS 710-6D	1020	136	VPG	VVG	KN-VS	VPR-VS	990	978	970	958	945	710	758	421	900
			1000/710	1000x1000	710	710									



FAN SERIES VENTS VS