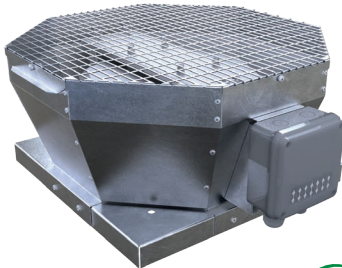
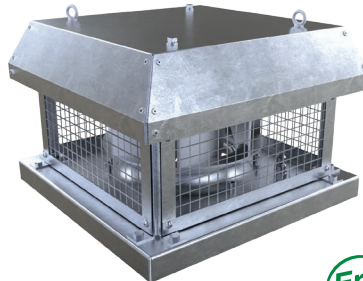


CENTRIFUGAL ROOF FANS

Series VENTS VKV



Series VENTS VKHZ



Centrifugal roof fans with vertical air exhaust and with maximum air flow of up to **17010 m³/h**

Centrifugal roof fans with horizontal air exhaust and with maximum air flow of up to **17010 m³/h**

■ Application

Exhaust ventilation system for various premises suitable for roof mounting. Compatible with Ø 200-630 mm air ducts. Suitable for any roof types as well as vertical ventilation shafts.

■ Design

The fan casing is made of steel with polymeric coating (VENTS VKV and VENTS VKH models), aluminum (VENTS VKVA, VENTS VKHA), galvanized steel (VENTS VKVz, VENTS VKHz).

■ Motor

2-, 4- or 6-pole single- or three-phase asynchronous motors with an external rotor and impeller with backward curved blades. The motor is equipped with thermal overheating protection with automatic restart as well as ball bearings for long service life. For precise features, safe operation and low noise, each turbine is dynamically balanced while assembly. Motors protection rating IP44, IP54.

■ Speed control

Both smooth or step speed control is performed by means of the thyristor or autotransformer controller. Several fans can be connected to one controller in case the total power and operating current do not exceed the rated controller values.

■ Mounting

The fan is mounted on the roof directly above the ventilating duct or shaft and is firmly fixed to the flat surface by means of a connecting plate. While mounting VKH fans directly onto the flat roof a supporting block shall be provided to prevent water and snow drops into the vent of the ventilation shaft. Electrical connection and installation shall be performed in compliance with the manual and circuit diagram on the terminal box.

For connection of the fans to round air ducts use the following accessories: KKV damper, GVK flexible connector, FKV counter flange. For mounting of the fans to flat surface use the mounting frame RKV.



VENTS VKV



VENTS VKHz

Designation key

Series and modification	Casing material	Motor modification		Turbine standard size
		Number of poles	Phase	
VENTS VKV: vertical air exhaust VENTS VKHz: horizontal air exhaust	_: steel with polymeric coating A: aluminum z: galvanized steel	2 4 6	E: single-phase D: three-phase	190; 220; 225; 250; 280; 310; 355; 400; 450; 500; 560; 630; 710

Accessories



Flexible connector

Counterflange

Mounting frame

Silencers

Backdraft damper

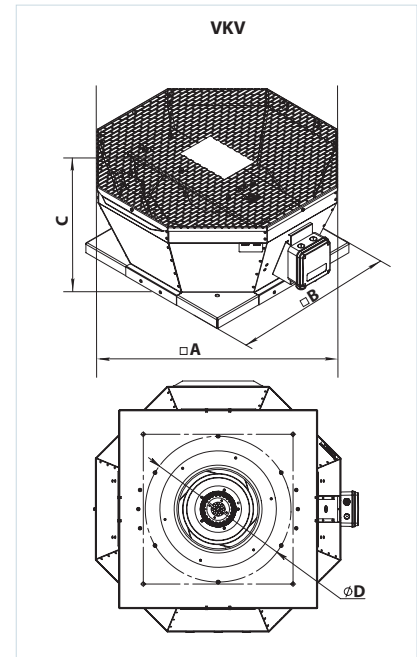
Air shutter

Speed controllers

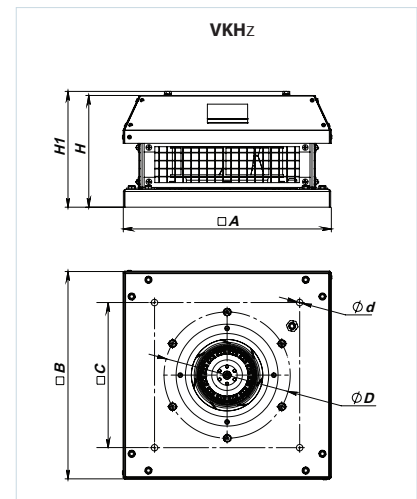
Fan overall dimensions

Type	Dimensions [mm]			øD, flange connection dimensions	Mass [kg]
	A	B	C		
VKV 2E 190	417	355	170	213	7
VKV 2E 220*			190		
VKV 2E 225*			215		
VKV 4E 225*	481	425	240	285	9
VKV 2E 250			276		
VKV 4E 250			291		
VKV 4E 280	547	425	276	285	13
VKV 2E 310			300		
VKV 4E 310*			20		
VKV 4D 310*	613	477	300	438	19
VKV 4E 355			26		
VKV 4D 355			33		
VKV 4E 400	738	598	375	438	31
VKV 6E 400			33		
VKV 4D 400			33		
VKV 4E 450	859	668	430	445	41
VKV 6E 450			425		
VKV 4D 450			445		
VKV 6E 500*	859	668	460	430	52
VKV 4D 500*			445		
VKV 6D 500*			605		
VKV 6E 560	951	833	485	600	63
VKV 4D 560			485		
VKV 6D 560			63		
VKV 6D 630*	951	939	600	600	81
VKV 6D 710*	992	939	674	674	114

*The counter flange (not included in the delivery set) should be mounted together with the inlet ring.


Fan overall dimensions

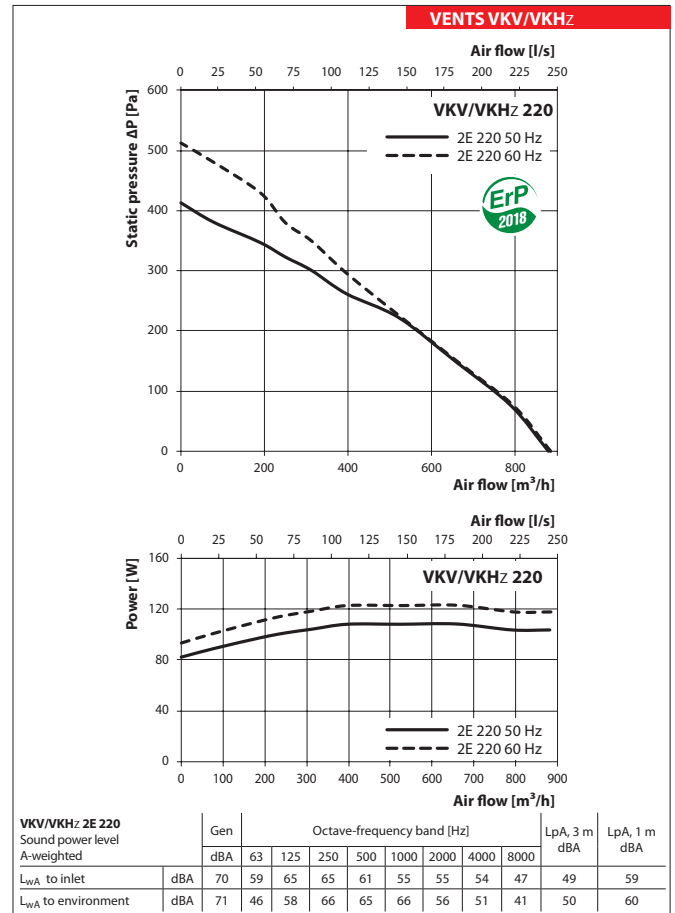
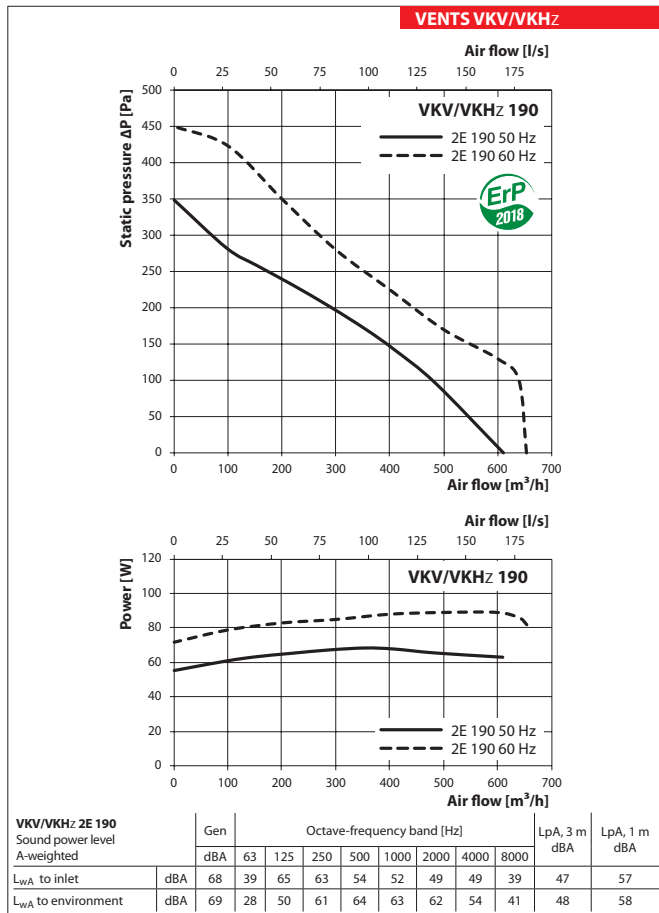
Type	Dimensions [mm]						øD, flange connection dimensions	Mass [kg]		
	H	H1	A	B	C	ød				
VKHz 2E 190	189	195	351	350	245	11	213	8.2		
VKHz 2E 220	180	186	337	338						
VKHz 2E 225	210	217	351	350						
VKHz 4E 225	233	240	451	450	330	11	210	8.8		
VKHz 2E 250	237	244								
VKHz 4E 250	265	272								
VKHz 4E 280	265	272	451	450	330	11	291	13.5		
VKHz 2E 310	251	258								
VKHz 4E 310	287	294								
VKHz 4D 310	322	361	625	620	450	11	285	14.2		
VKHz 4E 355									322	361
VKHz 4D 355									347	386
VKHz 4E 400	376	415	625	620	450	11	438	35		
VKHz 6E 400									376	415
VKHz 4D 400									347	386
VKHz 4E 450	420	459	710	700	535	11	438	46.6		
VKHz 6E 450									420	459
VKHz 4D 450									420	459
VKHz 6E 500	461	501	710	700	535	11	438	45.5		
VKHz 4D 500	490	530								
VKHz 6D 500	461	501								
VKHz 6E 560	489	528	900	895	750	11	605	76.4		
VKHz 4D 560									489	528
VKHz 6D 560									489	528
VKHz 6D 630	520	560	1000	990	840	20	605	96.3		
VKHz 6D 710	570	619	1060	1050	840	20	674	134		



CENTRIFUGAL ROOF FANS

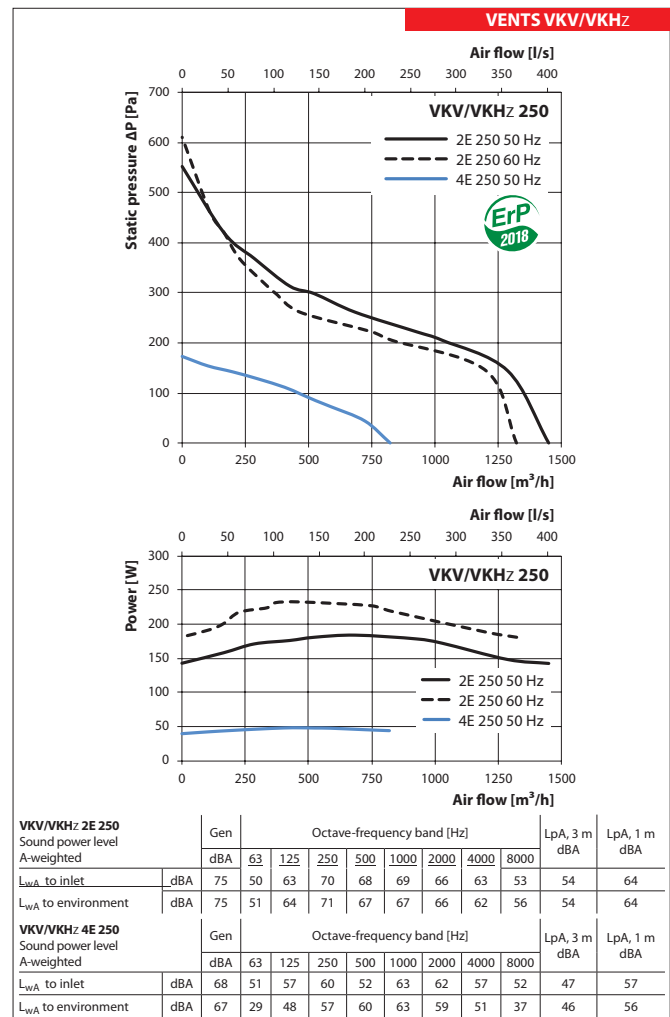
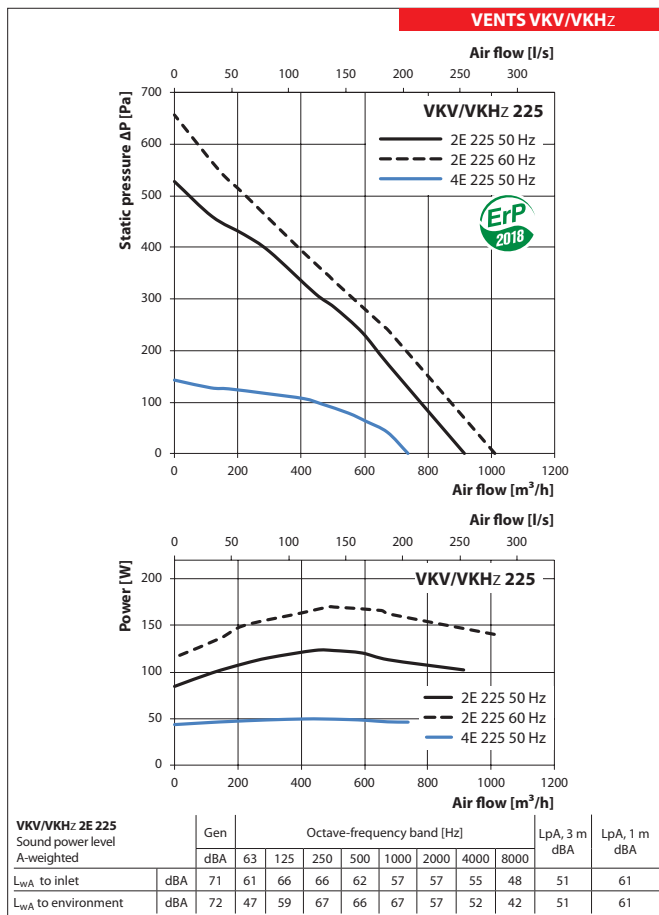
Technical data

	VKV/VKHz 2E 190		VKV/VKHz 2E 220	
Voltage [V]	1~230		1~230	
Frequency [Hz]	50	60	50	60
Power [W]	69	89	108	118
Current [A]	0.30	0.40	0.49	0.54
Max. air flow [m ³ /h]	610	654	880	883
RPM [min ⁻¹]	2680	2980	2580	2840
Sound pressure level at 3 m [dBA]	48	49	50	51
Transported air temperature [°C]	-25...+50		-25...+50	
Protection rating	IPX4		IPX4	
Motor protection rating	IP44		IP44	
SEC class	C	-	C	-



Technical data

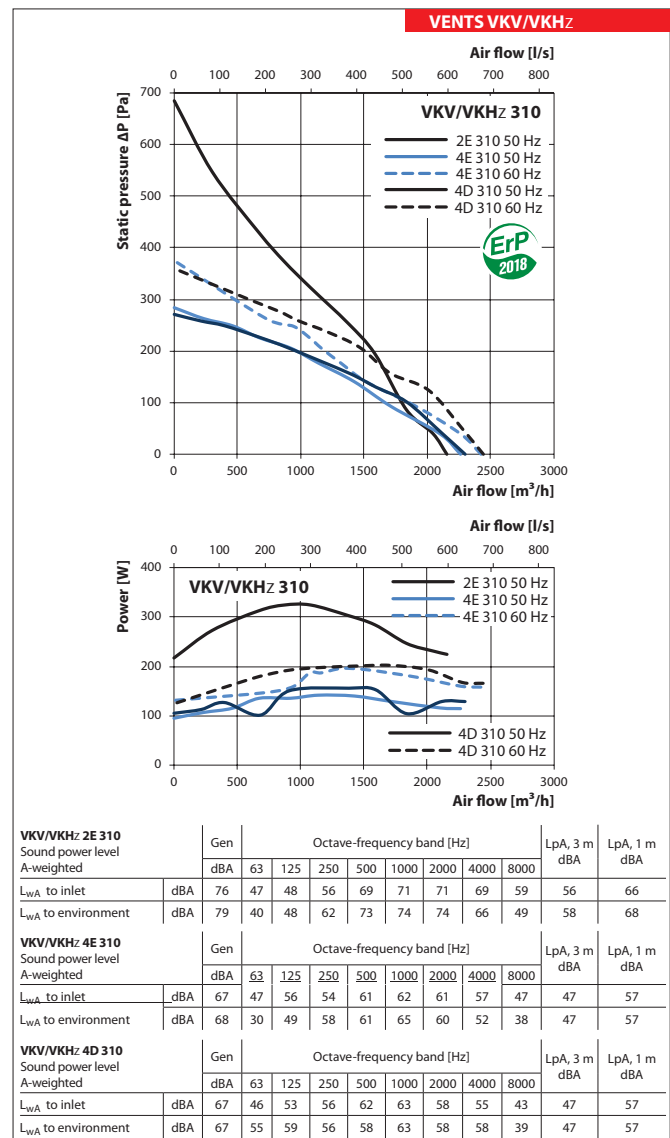
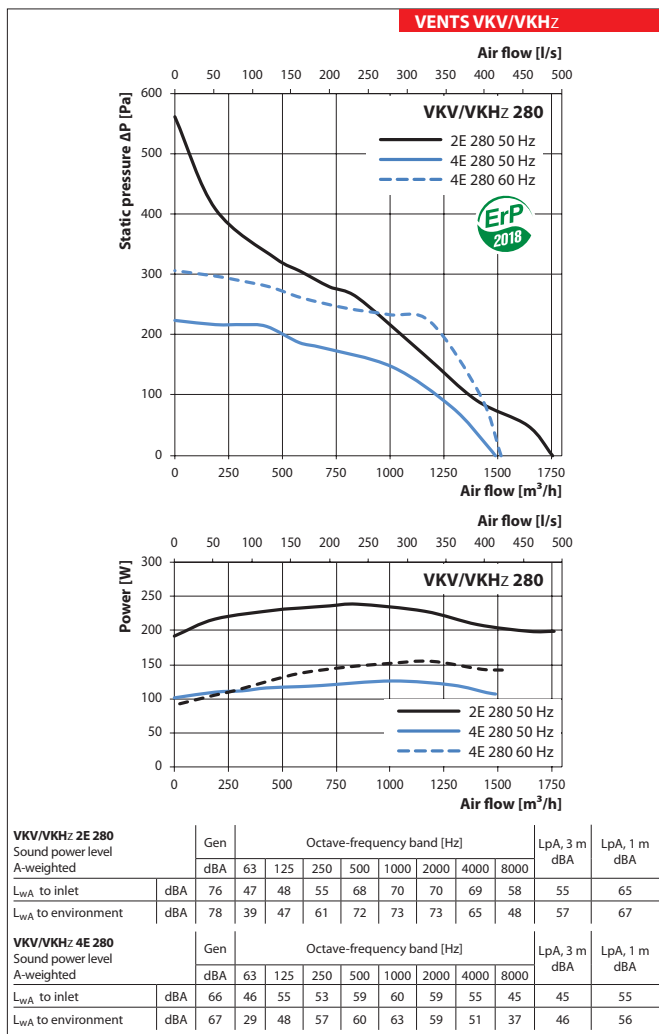
	VKV/VKHz 2E 225		VKV/VKHz 4E 225	VKV/VKHz 2E 250		VKV/VKHz 4E 250
Voltage [V]	1~230		1~230	1~230		1~230
Frequency [Hz]	50	60	50	50	60	50
Power [W]	123	169	49	184	232	48
Current [A]	0.54	0.70	0.22	0.81	0.90	0.23
Max. air flow [m ³ /h]	915	1 010	738	1 450	1 320	820
RPM [min ⁻¹]	2790	2820	1400	2480	2320	1440
Sound pressure level at 3 m [dBA]	51	52	45	54	53	46
Transported air temperature [°C]	-25...+50		-25...+50	-25...+50		-25...+50
Protection rating	IPX4		IPX4	IPX4		IPX4
Motor protection rating	IP44		IP44	IP44		IP44
SEC class	C	-	B	-	-	B



CENTRIFUGAL ROOF FANS

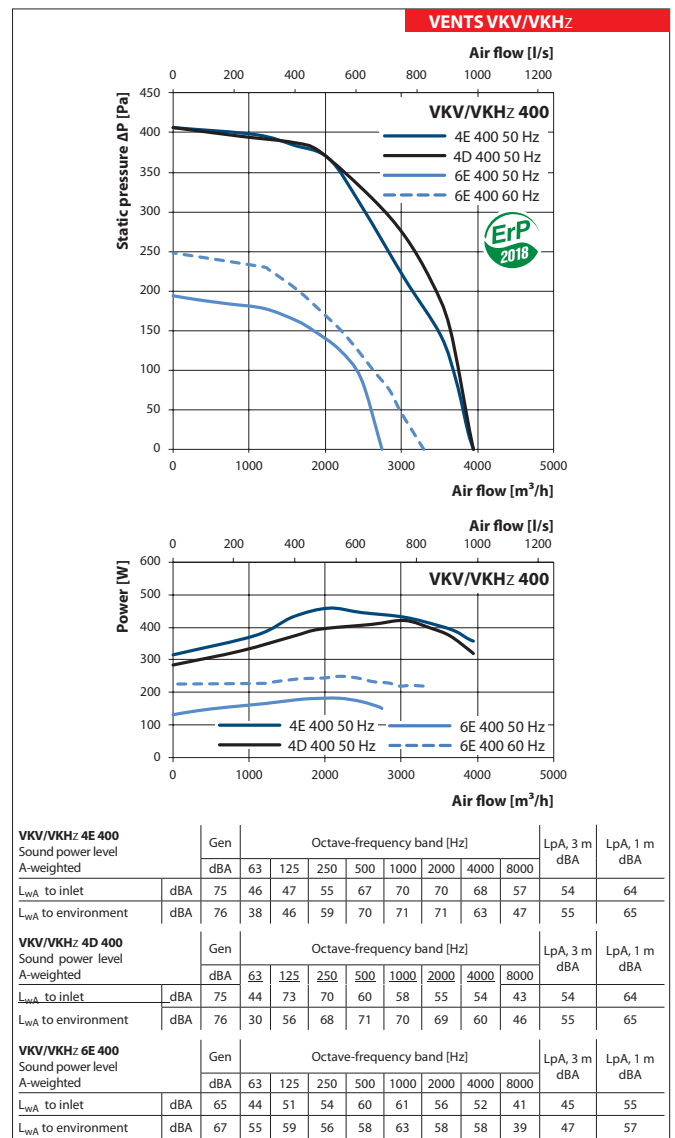
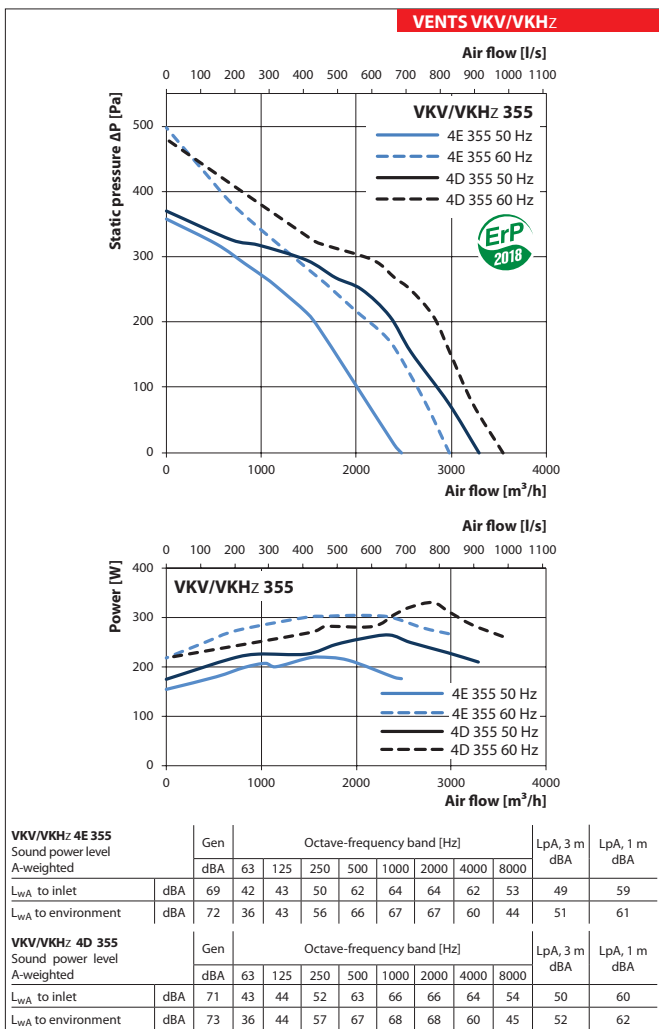
Technical data

	VKV/VKHz 2E 280			VKV/VKHz 4E 280			VKV/VKHz 2E 310			VKV/VKHz 4E 310			VKV/VKHz 4D 310											
Voltage [V]	1~230			1~230			1~230			1~230			3~400											
Frequency [Hz]	50			50			60			50			60											
Power [W]	238			125			155			324			141			195			155			202		
Current [A]	1.04			0.61			0.99			1.42			0.64			0.87			0.29			0.32		
Max. air flow [m ³ /h]	1 760			1 490			1 520			2 150			2 265			2 425			2 300			2 442		
RPM [min ⁻¹]	2330			1446			1710			2620			1420			1740			1410			1550		
Sound pressure level at 3 m [dBA]	57			46			46			58			47			49			47			48		
Transported air temperature [°C]	-25...+50			-25...+50			-25...+50			-25...+50			-25...+50			-25...+50			-25...+50			-25...+50		
Protection rating	IPX4			IPX4			IPX4			IPX4			IPX4			IPX4			IPX4			IPX4		
Motor protection rating	IP44			IP44			IP44			IP44			IP54			IP54			IP54			IP54		



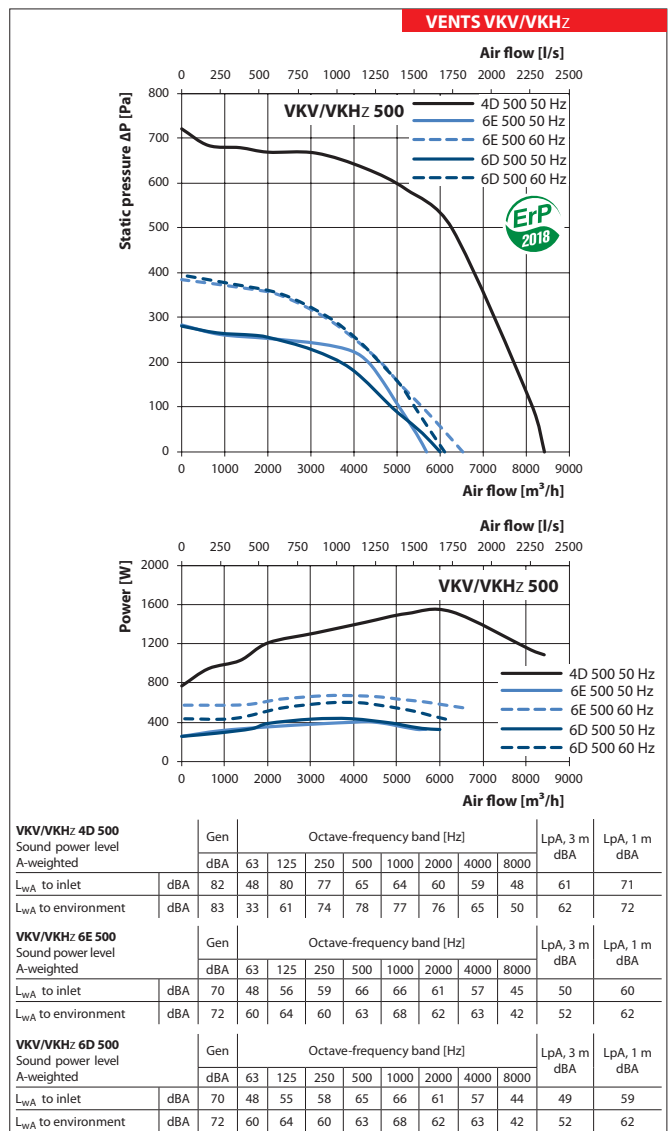
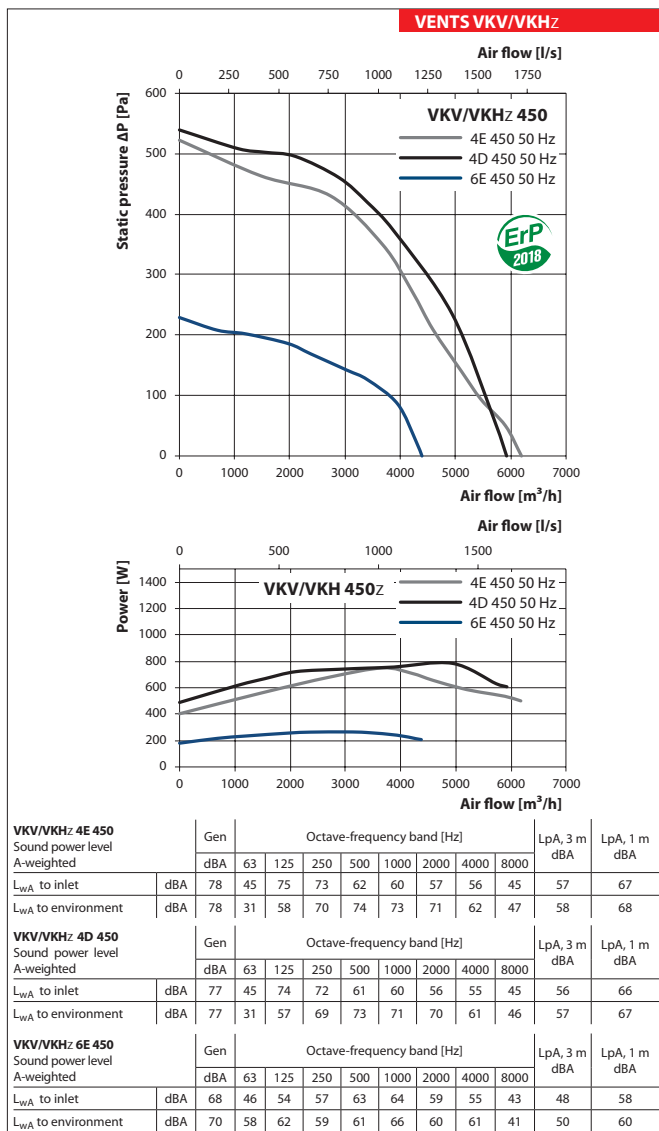
Technical data

	VKV/VKHz 4E 355		VKV/VKHz 4D 355		VKV/VKHz 4E 400	VKV/VKHz 6E 400		VKV/VKHz 4D 400
Voltage [V]	1~230		3~400		1~230	1~230		3~400
Frequency [Hz]	50	60	50	60	50	50	60	50
Power [W]	219	304	264	330	457	184	249	420
Current [A]	0.96	1.33	0.58	0.64	2.00	0.89	1.10	0.99
Max. air flow [m ³ /h]	2 480	2 976	3 290	3 540	3 950	2 740	3 289	3 950
RPM [min ⁻¹]	1420	1580	1430	1650	1440	945	1071	1440
Sound pressure level at 3 m [dBA]	51	52	52	53	55	47	49	55
Transported air temperature [°C]	-25...+50		-30...+60		-30...+60	-30...+60		-30...+60
Protection rating	IPX4		IPX4		IPX4	IPX4		IPX4
Motor protection rating	IP54		IP54		IP54	IP54		IP54



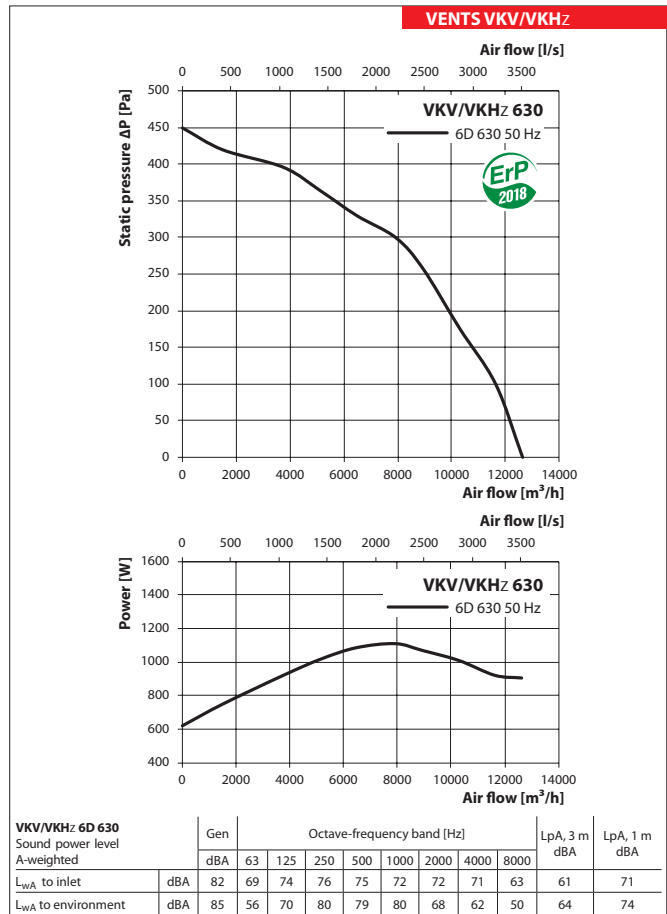
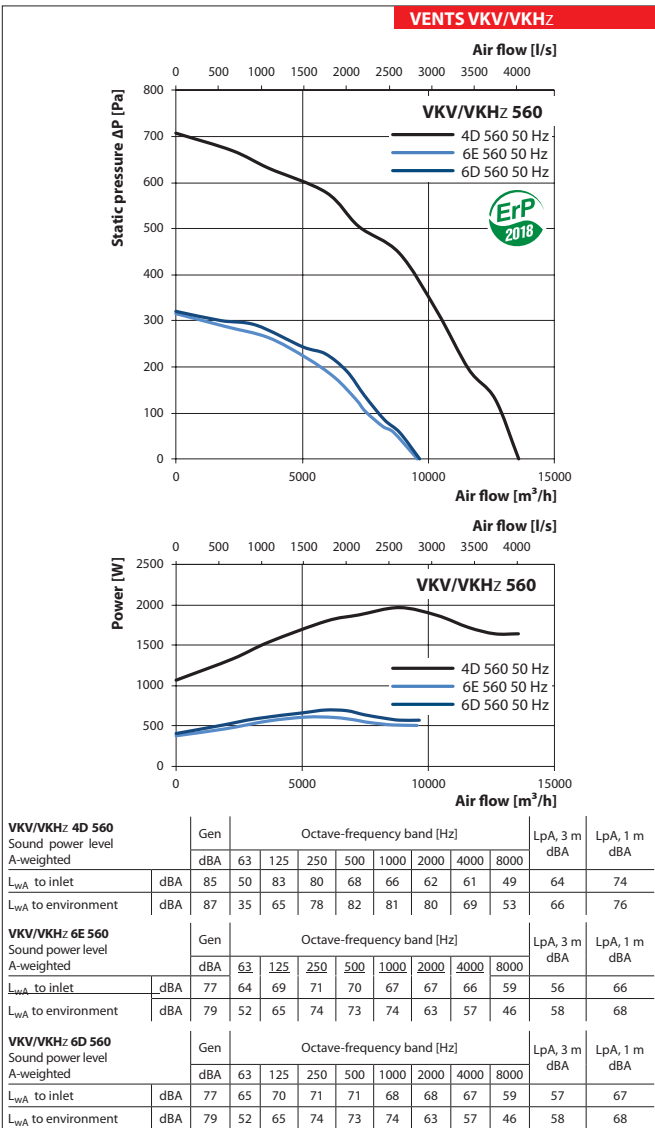
CENTRIFUGAL ROOF FANS
Technical data

	VKV/VKHz 4E 450	VKV/VKHz 6E 450	VKV/VKHz 4D 450	VKV/VKHz 4D 500	VKV/VKHz 6E 500	VKV/VKHz 6D 500
Voltage [V]	1~230	1~230	3~400	3~400	1~230	3~400
Frequency [Hz]	50	50	50	50	50	60
Power [W]	749	268	755	1527	407	673
Current [A]	3.35	1.25	1.50	2.64	1.81	3.05
Max. air flow [m ³ /h]	6 180	4 380	5 920	8 435	5 680	6 532
RPM [min ⁻¹]	1400	940	1440	1460	970	1120
Sound pressure level at 3 m [dBA]	58	50	57	62	52	54
Transported air temperature [°C]	-30...+60	-30...+60	-30...+50	-30...+50	-25...+60	-25...+60
Protection rating	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4
Motor protection rating	IP54	IP54	IP54	IP54	IP54	IP54



Technical data

	VKV/VKHz 4D 560	VKV/VKHz 6E 560	VKV/VKHz 6D 560	VKV/VKHz 6D 630
Voltage [V]	3~400	1~230	3~400	3~400
Frequency [Hz]	50	50	50	50
Power [W]	1970	613	696	1110
Current [A]	3.36	2.70	1.44	2.42
Max. air flow [m ³ /h]	13 560	9 560	9 630	12 640
RPM [min ⁻¹]	1400	930	970	957
Sound pressure level at 3 m [dBA]	66	58	58	64
Transported air temperature [°C]	-25...+50	-25...+50	-25...+50	-25...+50
Protection rating	IPX4	IPX4	IPX4	IPX4
Motor protection rating	IP54	IP54	IP54	IP54



CENTRIFUGAL ROOF FANS

Technical data

	VKV/VKHz 6D 710
Voltage [V]	3~400
Frequency [Hz]	50
Power [W]	2583
Current [A]	4.87
Max. air flow [m ³ /h]	17 010
RPM [min ⁻¹]	945
Sound pressure level at 3 m [dBA]	67
Transported air temperature [°C]	-25...+70
Protection rating	IPX4
Motor protection rating	IP54

