

Series  
**VENTS VKV EC**  
**VENTS VKVz EC**  
**VENTS VKVA EC**



Roof exhaust centrifugal fans with vertical air exhaust and the air flow up to **18270 m<sup>3</sup>/h**

■ **Application**

Exhaust ventilation systems for commercial, office and other public or industrial premises for various premises that require reasonable energy saving solutions and controlled ventilation systems. The use of fans equipped with EC motors, provides significant savings in electricity consumption and is the most effective and modern solution in ventilation systems. Such characteristics are especially important for application in public premises as banks, supermarkets, restaurants, hotels, residential premises or domestic spaces.

■ **Design**

The fan casing is made of galvanized steel (VKVz EC and VKHz EC), aluminum (VKVA EC) or from steel with polymeric coating (VKV EC and VKH EC).

Series  
**VENTS VKH EC**  
**VENTS VKHz EC**



Roof exhaust centrifugal fans with horizontal air exhaust and the air flow up to **18270 m<sup>3</sup>/h**

■ **Motor**

The fans are equipped with high-efficient electronically-commutated direct current motors with external rotor and impellers with backward curved blades. EC motor is free of friction and wear parts as a commutator and brushes. These components are replaced by a maintenance-free electronic circuit board. EC motors are featured with high performance and well controllable speed range. Premium efficiency reaching 90 % is a definite advantage of electronically commutated motors.

■ **Integrated functions and control**

The fan is controlled by an external 0-10 V control signal. The fan capacity is regulated depending on temperature, pressure, smoke level etc. The fan has low energy consumption at any speed. Maximum fan speed does not depend on the available current frequency and is suitable for operation both at 50 and 60 Hz. Several fans can be integrated into a single computer-driven control system. Custom designed software provides high accuracy control of the fans integrated into a network. The LED-display of the computer shows all the system parameters and the operation mode can be set individually for each fan in the network.

■ **Mounting**

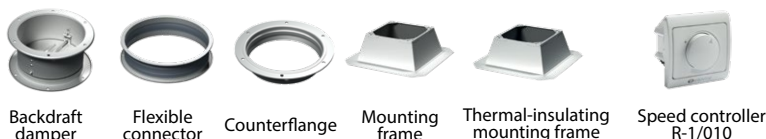
VKV/VKH...EC fans are designed for mounting on the roof. The mounting plate enables the fan installation on a level surface directly above a ventilation shaft or air duct and the holes on this mounting plate provide reliable rigid fixing of the fan to a static surface. While mounting the VKH...EC fans to the level surface provide a support to exclude possible water or snow ingress into an exhaust vent of the respective ventilation shaft. While installing the fan provide enough space for maintenance works. 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.



**Designation key**

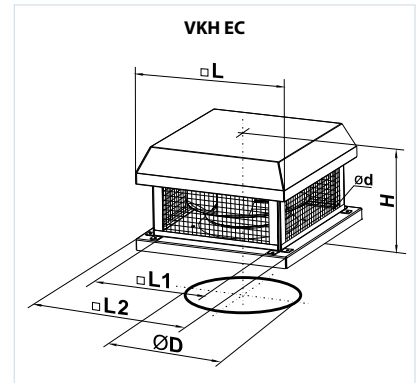
Series and modification	Casing material	Turbine standard size	Motor type
<b>VENTS VKV:</b> vertical air exhaust <b>VENTS VKH:</b> horizontal air exhaust	z: galvanized steel (by default) _: steel with polymeric coating A: aluminum	190; 225; 250; 280; 310; 355; 400; 450; 500; 560; 630	<b>EC:</b> synchronous electronically commutated motor

**Accessories**



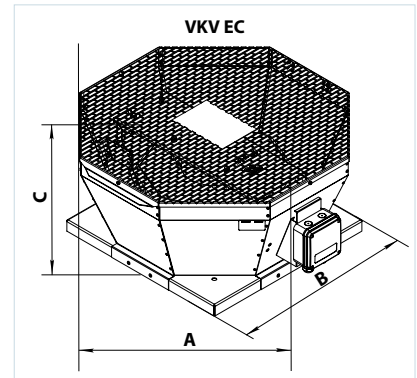
**Fan overall dimensions**

Type	Dimensions [mm]						Weight [kg]
	∅D	∅d	H	L	L1	L2	
VKH/VKHz 190 EC	213	11	189	351	245	350	8
VKH/VKHz 225 EC	213	11	234	351	245	350	8
VKH/VKHz 250 EC	285	11	237	451	330	450	13
VKH/VKHz 280 EC	285	11	263	451	330	450	13
VKH/VKHz 310 EC	285	11	263	451	330	450	16
VKH/VKHz 355 EC	438	11	322	625	450	620	27
VKH/VKHz 400 EC	438	11	384	625	450	620	27
VKH/VKHz 450 EC	438	11	420	710	535	700	46
VKH/VKHz 500 EC	445	11	467	710	535	700	51
VKH/VKHz 560 EC	605	14	489	900	750	895	71
VKH/VKHz 630 EC	600	20	520	1000	750	990	101

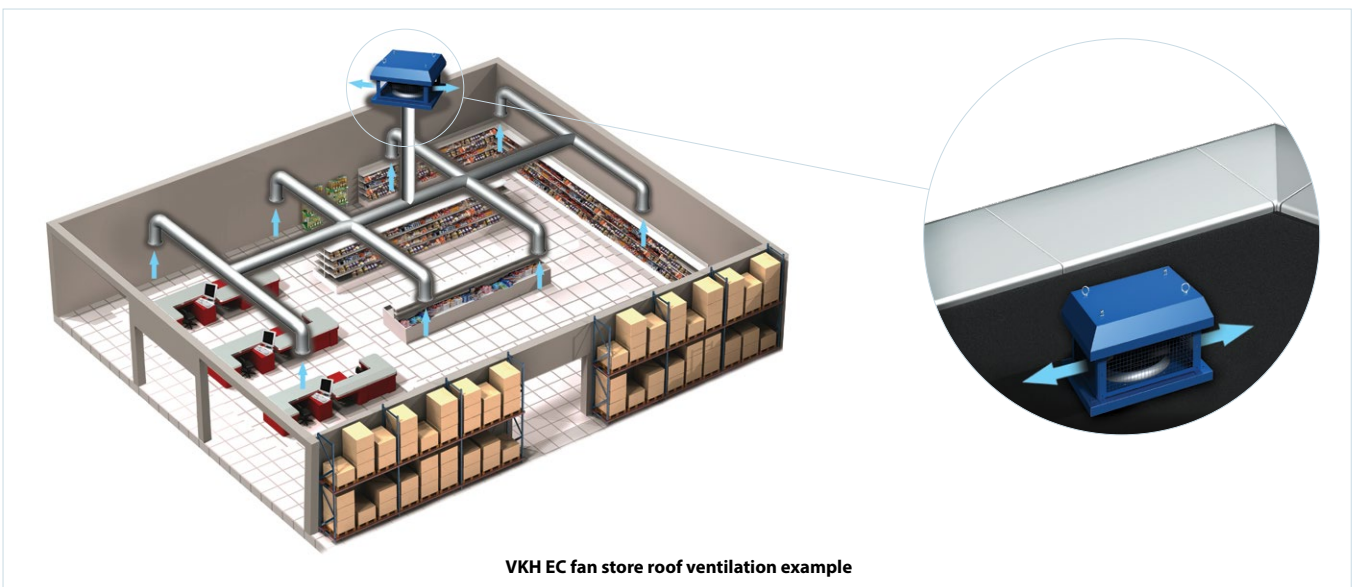


**Fan overall dimensions**

Type	Dimensions [mm]			Weight [kg]
	A	B	C	
VKV/VKVz/VKVA 190 EC	417	354	166	7
VKV/VKVz/VKVA 225 EC	417	355	210	7
VKV/VKVz/VKVA 250 EC	481	425	236	11
VKV/VKVz/VKVA 280 EC	547	425	274	14
VKV/VKVz/VKVA 310 EC	613	477	296	20
VKV/VKVz/VKVA 355 EC	738	598	326	23
VKV/VKVz 400 EC	738	598	371	35
VKV/VKVz 450 EC	738	668	425	44
VKV/VKVz 500 EC	859	668	455	52
VKV/VKVz 560 EC	859	833	478	63
VKV/VKVz 630 EC	951	890	530	80



VENTS  
 FAN SERIES  
 VKV EC/  
 VKH EC

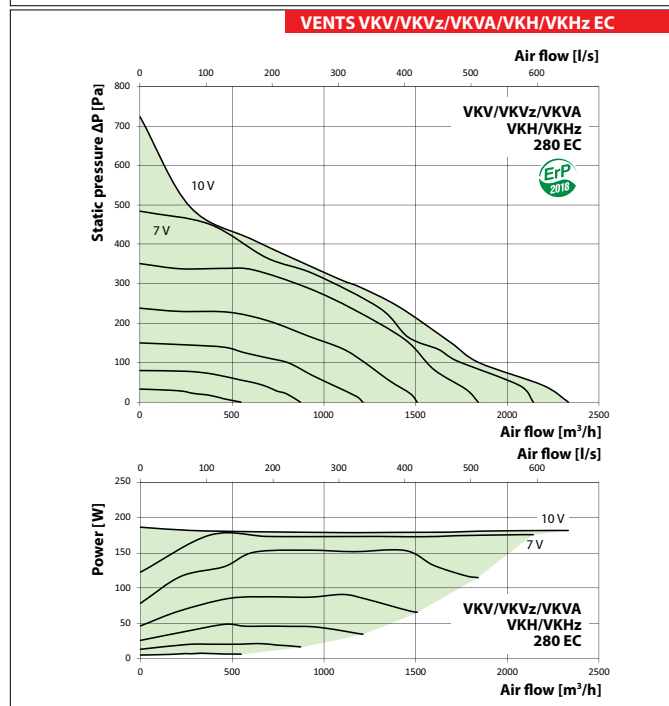
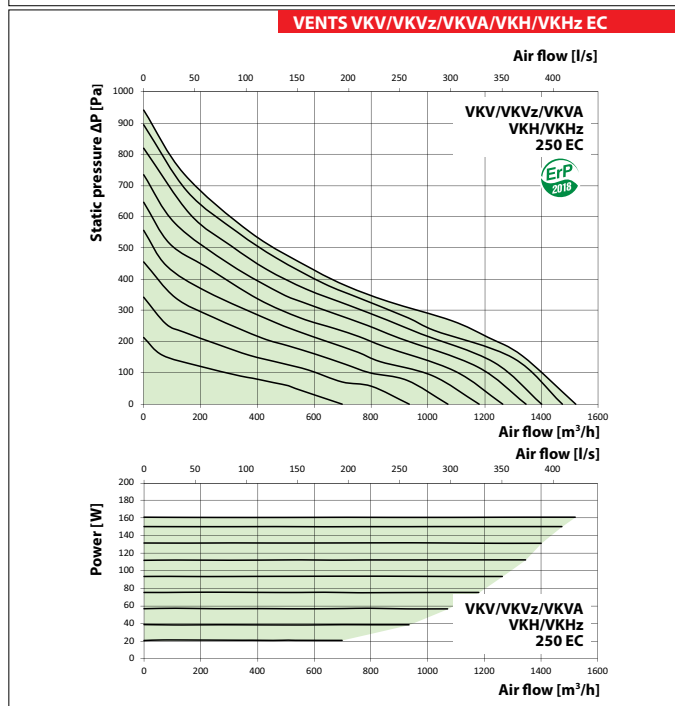
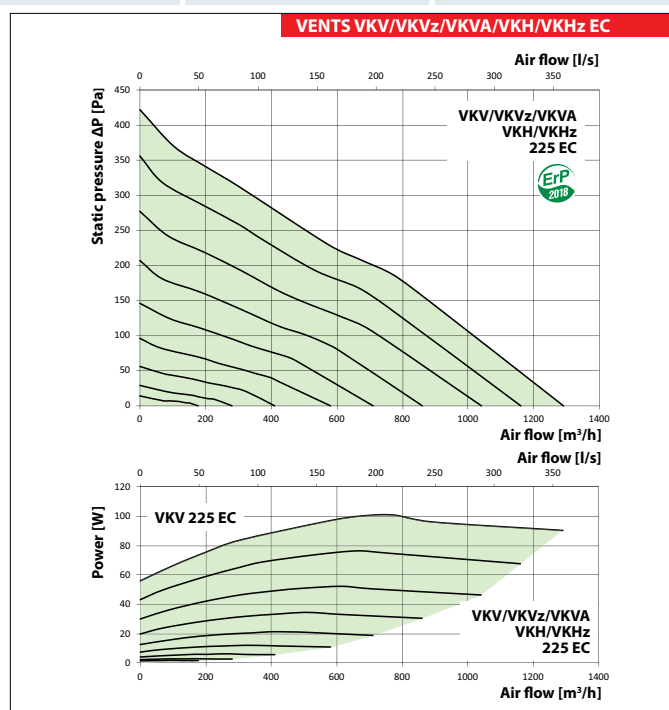
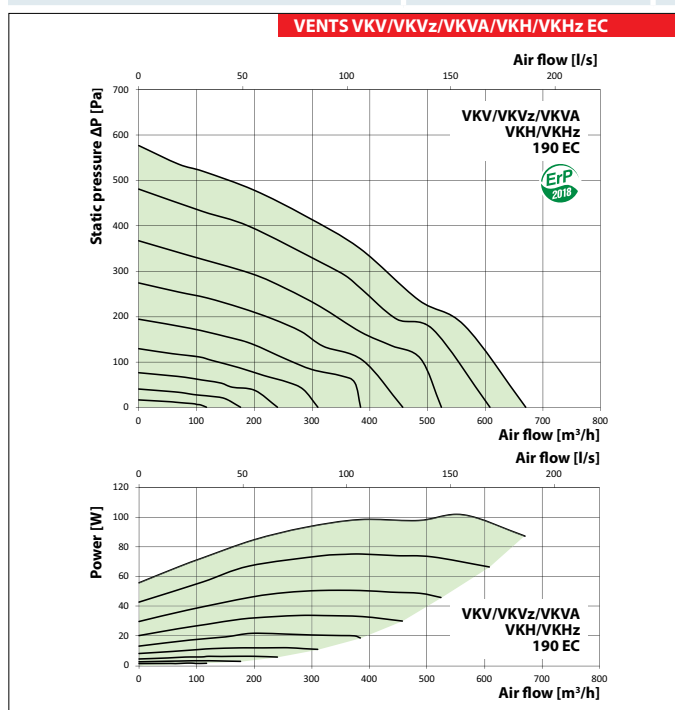


**VKH EC fan store roof ventilation example**

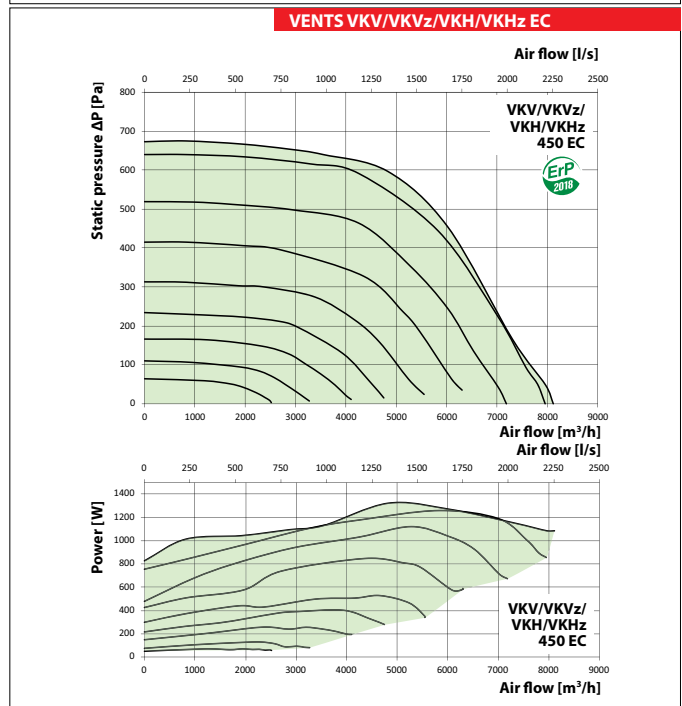
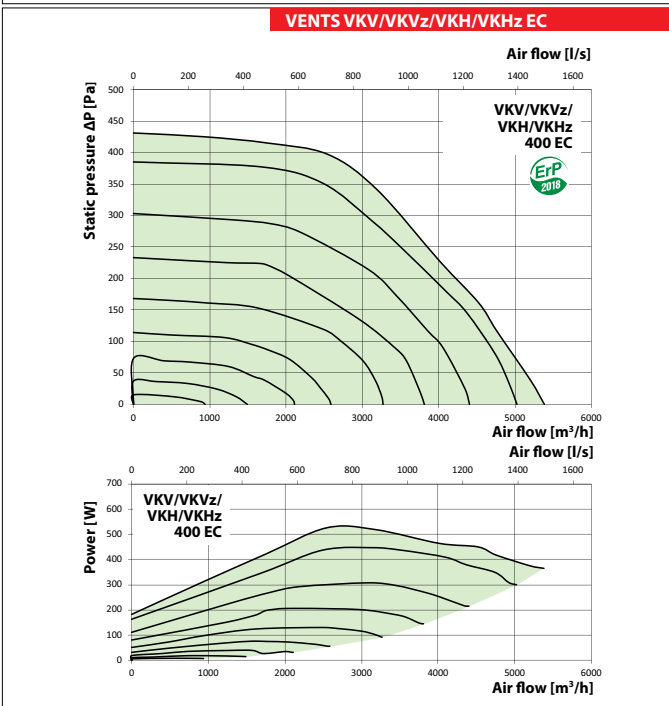
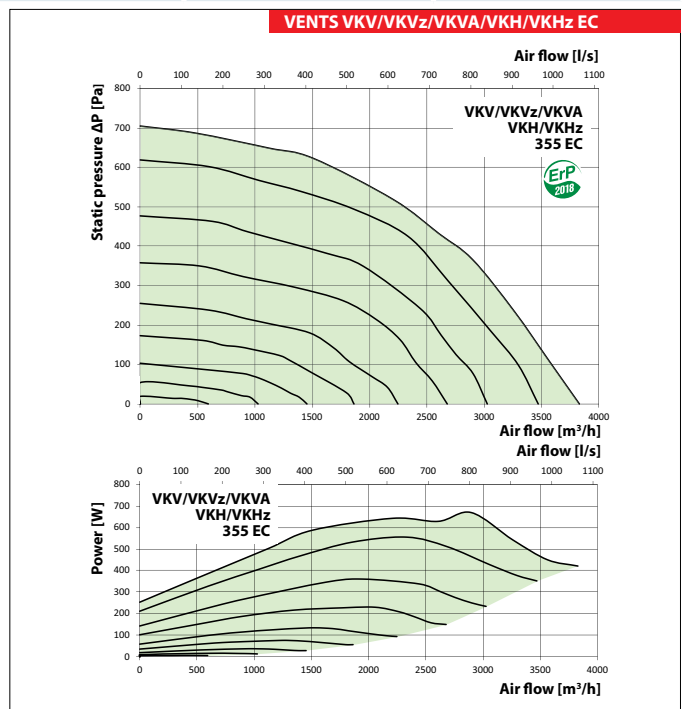
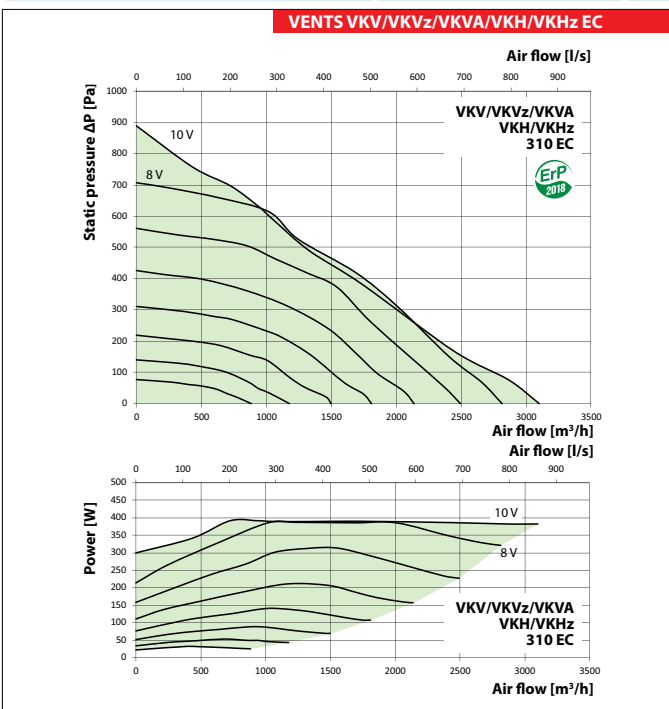
# CENTRIFUGAL ROOF FANS

## Technical data

	VKV/VKVz/VKVA/ VKH/VKHz 190 EC	VKV/VKVz/VKVA/ VKH/VKHz 225 EC	VKV/VKVz/VKVA/ VKH/VKHz 250 EC	VKV/VKVz/VKVA/ VKH/VKHz 280 EC
Voltage [V/50 (60) Hz]	1~230	1~230	1~230	1~230
Power [W]	102	101	161	182
Current [A]	0.77	0.80	1.29	1.34
Max. air flow [m³/h]	670	1 290	1 470	2 330
RPM [min <sup>-1</sup> ]	3520	2400	3300	2610
Noise level at 3 m [dBA]	52	47	54	48
Transported air temperature [°C]	-25...+60	-25...+60	-25...+60	-20...+60
Turbine protection rating	IP55	IP55	IP55	IP44
Protection rating	IPX4	IPX4	IPX4	IPX4
SEC class	B	-	-	-



	VKV/VKVz/VKVA/ VKH/VKHz 310 EC	VKV/VKVz/VKVA/ VKH/VKHz 355 EC	VKV/VKVz/ VKH/VKHz 400 EC	VKV/VKVz/ VKH/VKHz 450 EC
Voltage [V/50 (60) Hz]	1~230	1~230	1~230	3~400
Power [W]	391	669	526	1323
Current [A]	1.72	4.95	3.90	3.27
Max. air flow [m³/h]	3 100	3 830	5 380	8 110
RPM [min <sup>-1</sup> ]	2600	1550	1450	1560
Noise level at 3 m [dBA]	49	51	58	63
Transported air temperature [°C]	-20...+60	-25...+50	-25...+50	-20...+60
Turbine protection rating	IP54	IP54	IP54	IP54
Protection rating	IPX4	IPX4	IPX4	IPX4
SEC class	-	-	-	-



VENTS  
 VKV EC/  
 VKH EC  
 FAN SERIES

# CENTRIFUGAL ROOF FANS

## Technical data

	VKV/VKVz/ VKH/VKHz 500 EC	VKV/VKVz/ VKH/VKHz 560 EC	VKV/VKVz/ VKH/VKHz 630 EC
Voltage [V/50 (60) Hz]	3~400	3~400	3~400
Power [W]	1350	2412	2973
Current [A]	2.08	3.83	4.66
Max. air flow [m <sup>3</sup> /h]	10 900	13 640	18 270
RPM [min <sup>-1</sup> ]	1480	1540	1450
Noise level at 3 m [dBA]	67	69	71
Transported air temperature [°C]	-25...+50	-25...+60	-25...+55
Turbine protection rating	IP54	IP54	IP54
Protection rating	IPX4	IPX4	IPX4
SEC class	-	-	-

