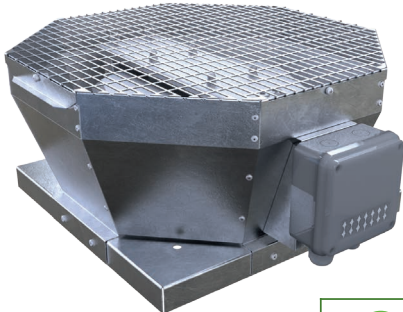


CENTRIFUGAL ROOF FANS

Series
VENTS VKV EC



Roof exhaust centrifugal fans with vertical air exhaust and the air flow up to **18270 m³/h**

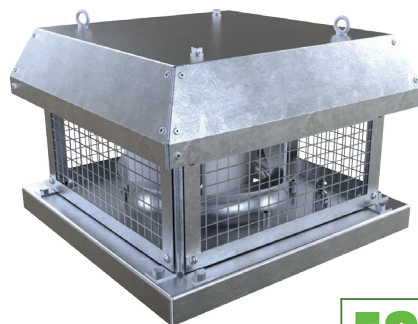
Application

The fans are rated for exhaust ventilation and air conditioning systems 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), aluminum (VKVA EC and VKHA EC) or from steel with polymeric coating (VKV EC and VKH EC).

Series
VENTS VKH EC



Roof exhaust centrifugal fans with horizontal air exhaust and the air flow up to **18270 m³/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

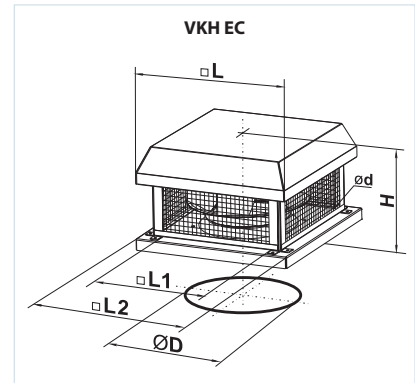
Series and modification	Casing material	Turbine standard size	Motor type
VENTS VKV: vertical air exhaust VENTS VKH: horizontal air exhaust	z: galvanized steel (by default) _: steel with polymeric coating A: aluminum	190; 225; 250; 280; 310; 355; 400; 450; 500; 560; 630	EC: synchronous electronically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

Accessories



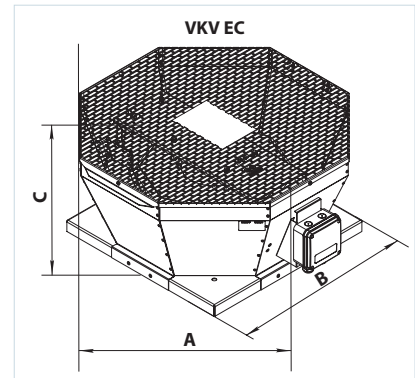
Fan overall dimensions

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

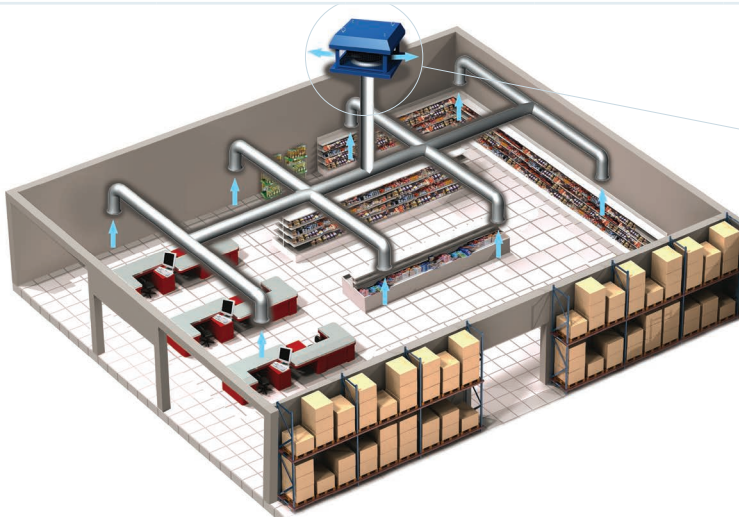


Fan overall dimensions

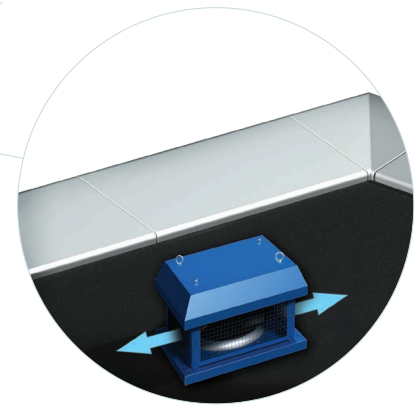
Type	Dimensions [mm]			Weight [kg]
	A	B	C	
VKV 190 EC	417	354	166	7
VKV 225 EC	417	355	210	7
VKV 250 EC	481	425	236	11
VKV 280 EC	547	425	274	14
VKV 310 EC	613	477	296	20
VKV 355 EC	738	598	326	23
VKV 400 EC	738	598	371	35
VKV 450 EC	738	668	425	44
VKV 500 EC	859	668	455	52
VKV 560 EC	859	833	478	63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



VENTS
FAN SERIES
VKV EC/
VKH EC



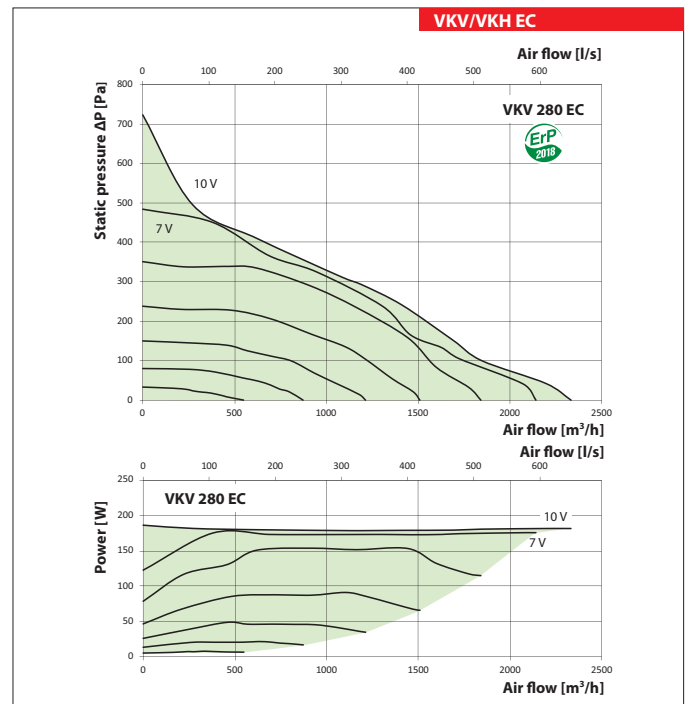
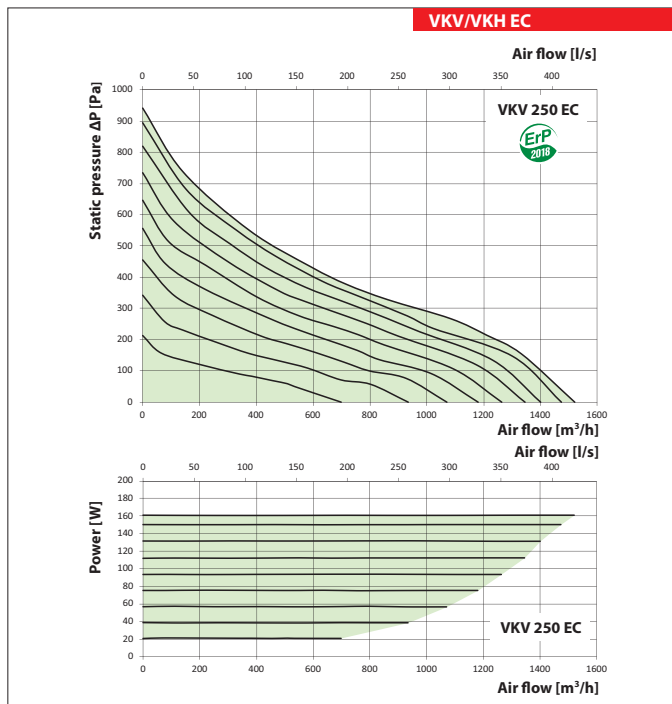
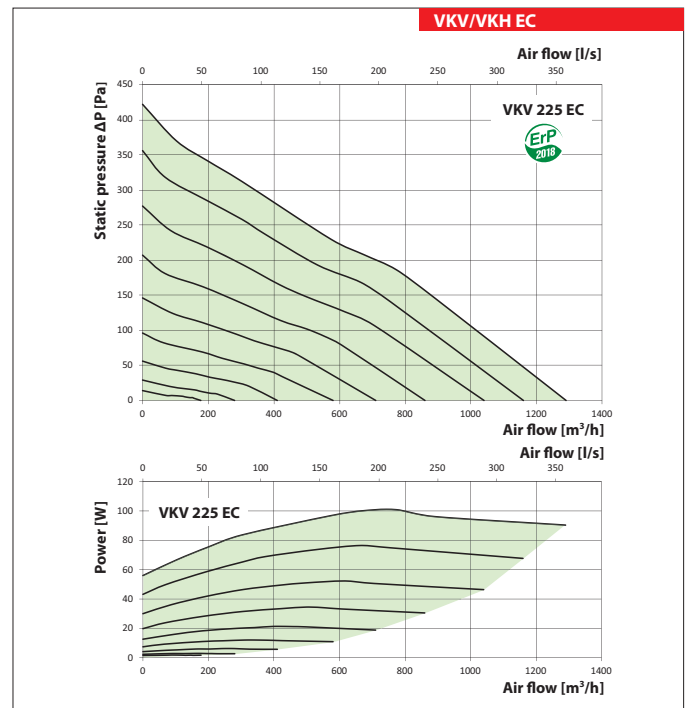
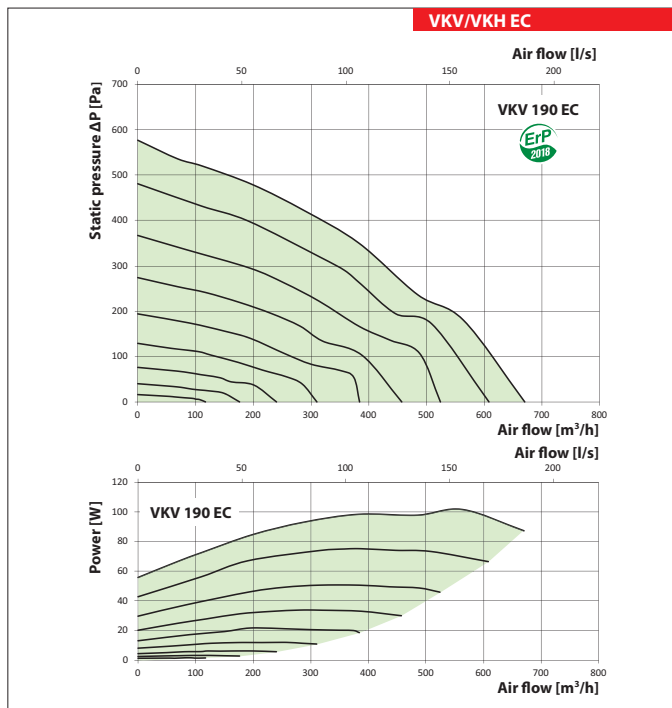
VKH EC fan store roof ventilation example



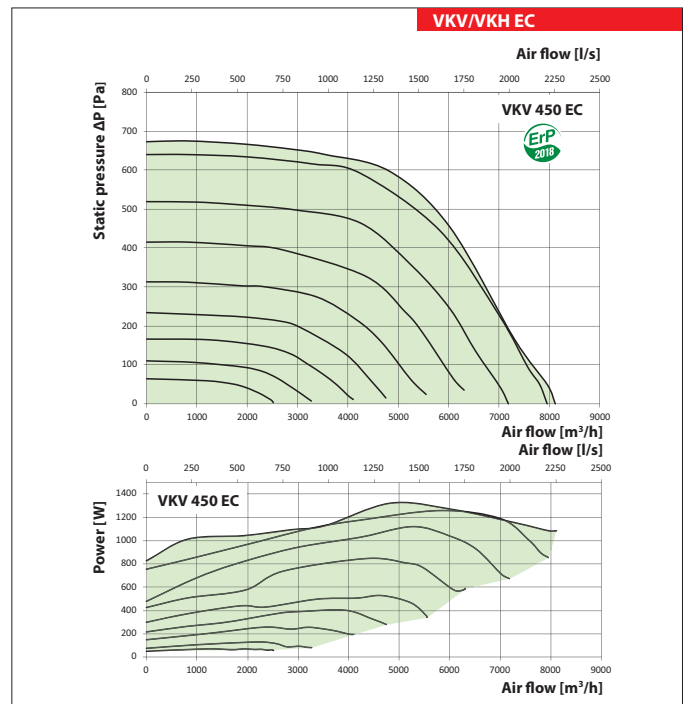
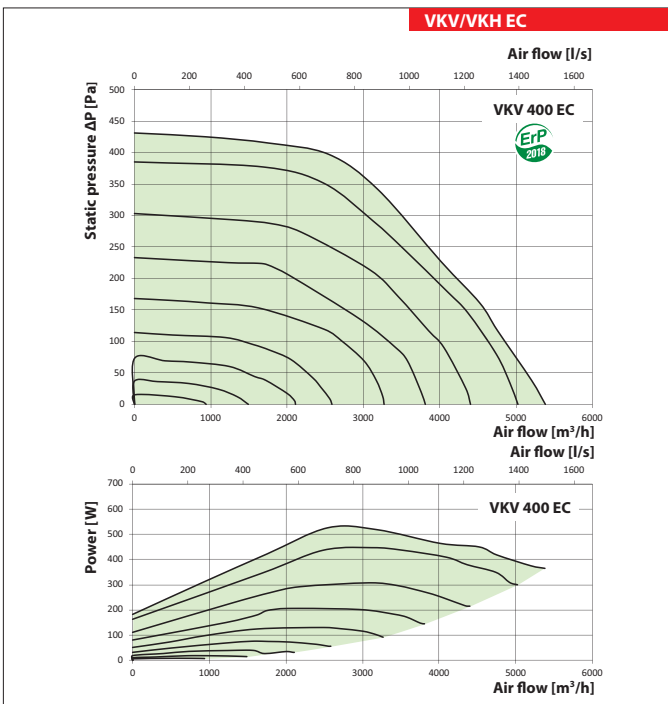
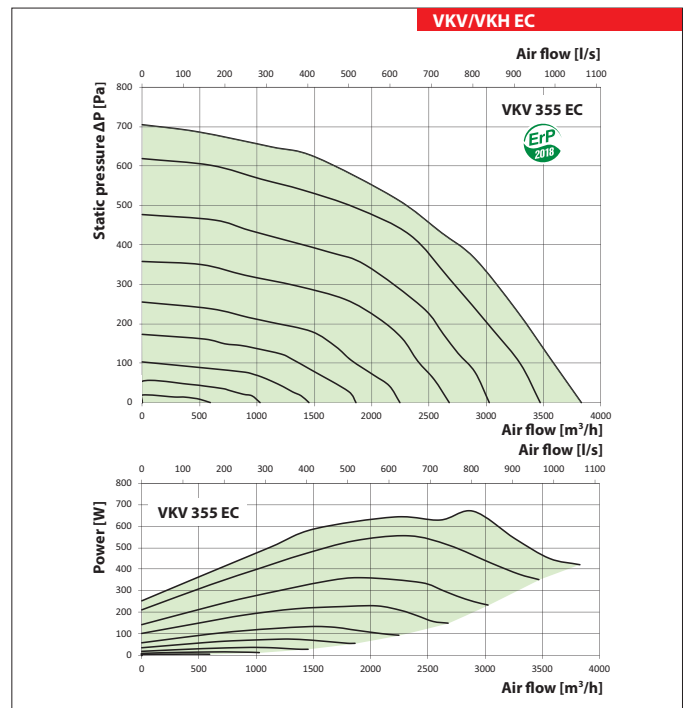
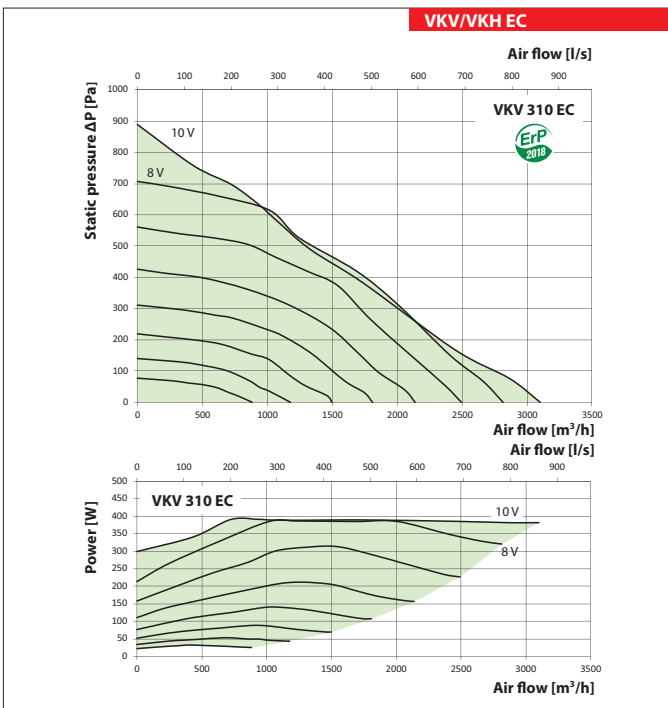
CENTRIFUGAL ROOF FANS

Technical data

	VKV/VKH 190 EC	VKV/VKH 225 EC	VKV/VKH 250 EC	VKV/VKH 280 EC
Voltage [V/50 (60) Hz]	1~230	1~230	1~230	1~200-277
Power [W]	102	101	161	182
Current [A]	0.77	0.80	1.29	1.34
Max. air flow [m ³ /h]	670	1 290	1 470	2 330
RPM [min ⁻¹]	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/VKH 310 EC	VKV/VKH 355 EC	VKV/VKH 400 EC	VKV/VKH 450 EC
Voltage [V/50 (60) Hz]	1~200-277	1~200-277	1~200-277	3~380-480
Power [W]	391	669	526	1323
Current [A]	1.72	9.36	3.90	3.27
Max. air flow [m ³ /h]	3 100	3 830	5 380	8 110
RPM [min ⁻¹]	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/VKH 500 EC	VKV/VKH 560 EC	VKV/VKH 630 EC
Voltage [V/50 (60) Hz]	3~380-480	3~380-480	3~380-480
Power [W]	1350	2412	2973
Current [A]	2.08	3.83	4.66
Max. air flow [m ³ /h]	10 900	13 640	18 270
RPM [min ⁻¹]	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	-	-	-

