CENTRIFUGAL ROOF FANS

Series **VENTS VKHC EC**



Roof exhaust centrifugal fans with horizontal air exhaust and the air flow up to 1500 m³/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 aluminum (VKHCA EC) or from steel with polymeric coating (VKHC EC).

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

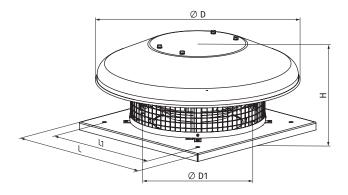
The fan is controlled by an external 0-10 V control signal. The fan capacity is regulated depending on temperature, pressure, smoke level etc. The fan has low energy consumption at any speed. Maximum fan speed does not depend on the available current frequency and is suitable for operation both at 50 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

VKHC...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 VKHC...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.

Fan overall dimensions

Туре	Dimensions [mm]					Weight
	Н	ØD	ØD1	L	L1	[kg]
VKHC 190 EC	178	503	210	330	245	6
VKHC 225 EC	193	503	210	330	245	7
VKHC 250 EC	224	503	285	420	330	8



Designation key

Series and modification	Casing material	Turbine standard size	Motor type
VENTS VKHC: horizontal air exhaust	_: steel with polymeric coating A: aluminum	190; 225; 250	EC : synchronous electronically commutated motor

Accessories



















Back valve

Counterflange

Mounting

Silencers

Backdraft

Air shutter

Speed



Technical data

	VKHC 190 EC	VKHC 225 EC	VKHC 250 EC			
Voltage [V/50 (60) Hz]		1~230				
Power [W]	110	95	164			
Current [A]	0.87	0.8	1.25			
Max. air flow [m³/h]	770	1 350	1 500			
RPM [min-1]	3538	2478	3310			
Sound pressure level at 3 m [dBA]	52	47	54			
Transported air temperature [°C]		-25+60				
Turbine protection rating		IP55				
Protection rating		IPX4				
Erp compliance		2018				

