

FANS FOR ROUND DUCTS

Series  
**VENTS VK EC**



Inline centrifugal fans in plastic casing with the air capacity up to **1500 m³/h**

**Applications**

Supply and exhaust ventilation and air conditioning systems of various premises requiring cost-saving controllable ventilation. The best ventilation solution for exhaust ventilation of bathrooms, kitchens and other humid premises. Compatible with Ø 100, 125, 150, 200, 250 and 315 mm round air ducts.

**Design**

Durable, impact-resistant and corrosion-free ABS-plastic casing. Airtight terminal box for connection to power mains. VK...EC P is fitted with a built-in smooth speed controller and power cord with IEC C14 electric

plug.

**Motor**

High-efficient electronically commutated direct current motors with backward curved blades. Such motors are the most state-of-the-art energy saving solution. Power consumption of EC motors is 35% less as compared to standard motors. The fans with EC motors have excellent aerodynamic performance and low-noise operation. EC motors are featured with high performance and total speed controllable range. High efficiency reaching 90% is the premium advantage of the electronically-commutated motors. The motors are equipped with ball bearings designed for at least 40 000 operating hours.

**Speed control**

The fan is operated with an external 0-10 V control signal. The air capacity is controlled depending on air temperature, pressure level, smoke content, etc. The speed of the EC motor changes proportionally to fluctuations of the control parameter and the fan delivers a required air volume to the ventilation system. Maximum fan speed does not depend on the current frequency. The fan is compatible both with 50 or 60 Hz power mains. The fans may be integrated into a unified data processing control system. The specially designed software provides precise control of all the fans integrated into the system.

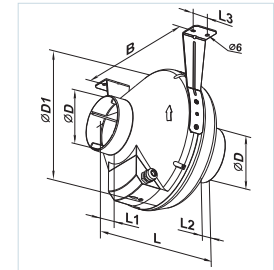
**Mounting**

The fans are designed for duct mounting in any point of the ventilation system with the casing mounted at any angle. In case of vertical mounting a protective outer hood must be installed on the top. Fixation to the floor wall or ceiling is performed with the supplied mounting brackets. Electric connection and installation must be performed in compliance with the manual and the wiring diagram on the terminal box.





**Overall dimensions:**

Model	Dimensions [mm]							Weight [kg]
	ØD	ØD1	B	L	L1	L2	L3	
VK 100 EC	100	250	270	230	30	27	30	2,0
VK 125 EC	125	250	270	220	30	27	30	2,2
VK 150 EC	150 / 160	300	310	286	30	30	30	2,5
VK 200 EC	200	340	354	276	30	30	40	3,0
VK 250 EC	250	340	354	265	30	30	40	4,3
VK 315 EC	315	400	414	276	40	55	40	4,9



**Technical data:**

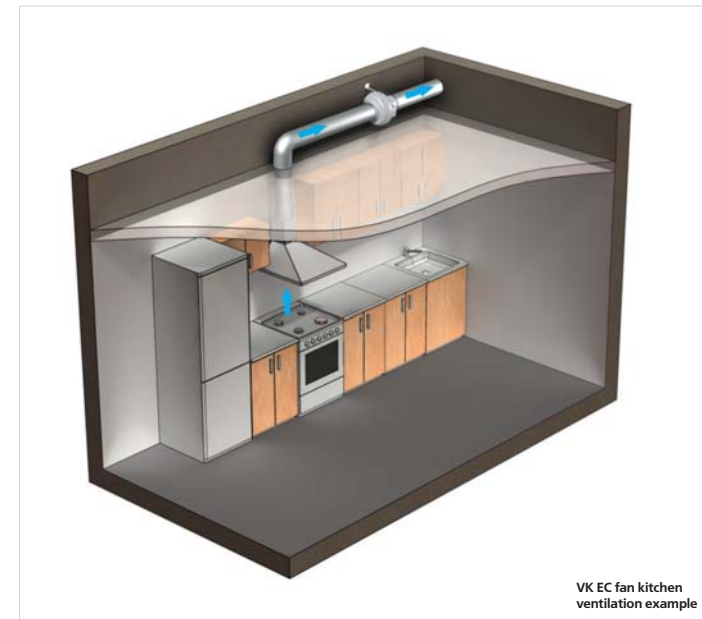
	VK 100 EC*	VK 125 EC*	VK 150 EC*	VK 200 EC*	VK 250 EC 	VK 315 EC 
Voltage [V /50/60 Hz]	1 - 230					
Power [W]	82	84	82	84	165	165
Current [A]	0,62	0,64	0,63	0,64	1,10	1,15
Max. air capacity [m³/h]	340	420	630	885	1250	1500
RPM [min <sup>-1</sup> ]	3400	3600	3400	2700	2600	2500
Sound pressure level at 3 m distance [dB(A)]	51	52	50	48	46	49
Max. transported air temperature [°C]	-25 +60	-25 +60	-25 +60	-25 +60	-25 +60	-25 +60
SEC class**	B					
Protection rating	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4

\* Compliant to the ErP-regulation (EC) 327/2011, the power consumption at optimum efficiency is < 125W.  
\*\* The EC norm 1254/2014 is not applicable for maximum air capacity > 1000 m³/h

**Designation key:**

Series	Duct diameter	Motor	Options
VENTS VK	100; 125; 150; 200; 250; 315	EC: synchronous electronically commutated motor	<b>P</b> – built-in smooth speed controller and power cable with IEC C14 electric plug. <b>R</b> – power cord with IEC C14 electric plug.

**Accessories**

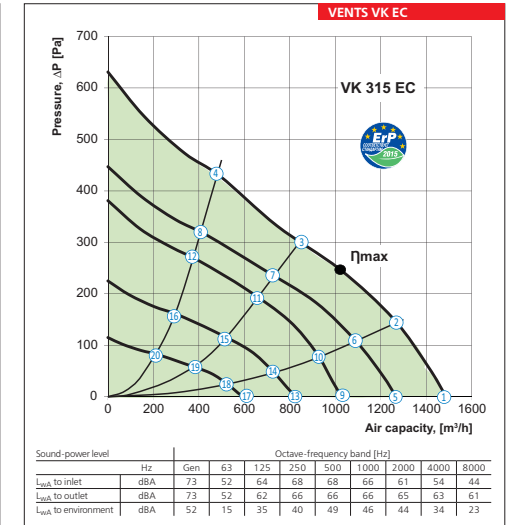
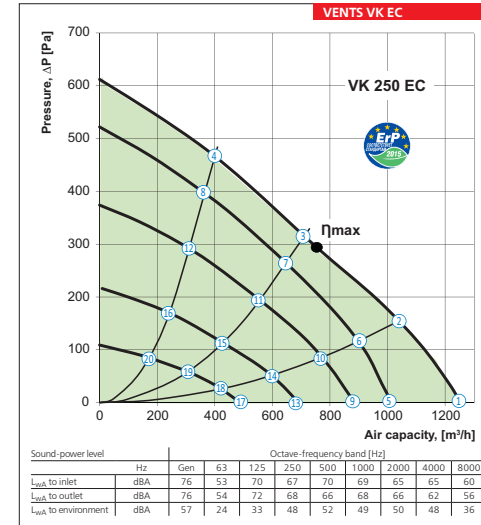
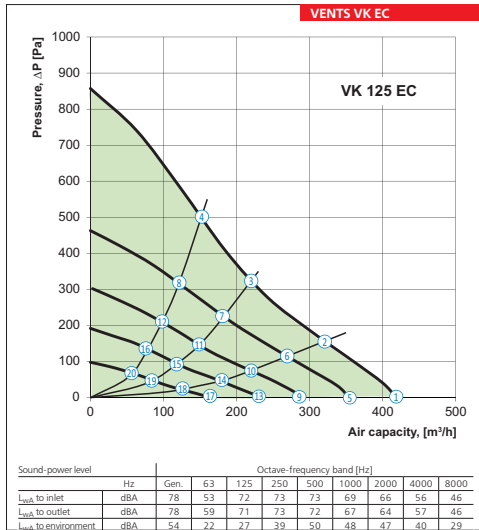
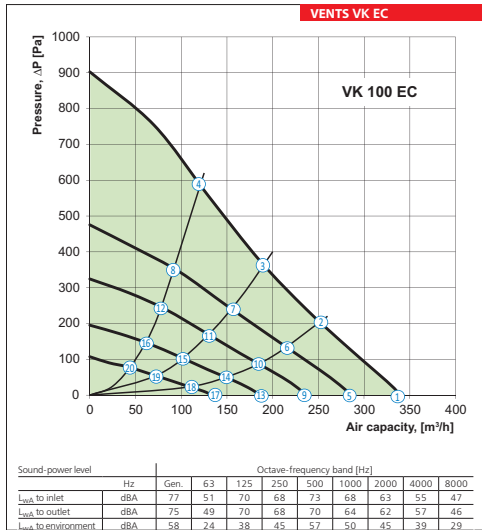
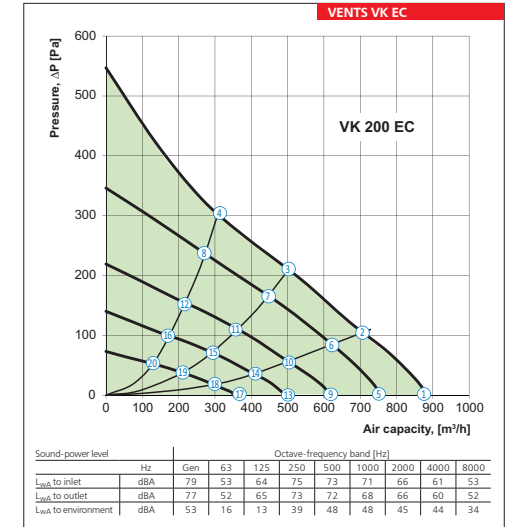
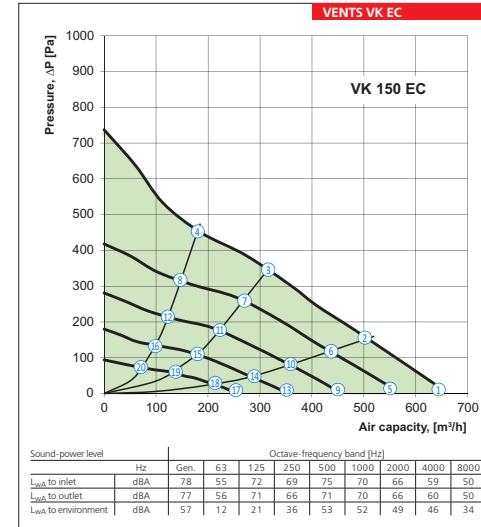


**ErP data**

Overall efficiency	η <sub>t</sub> [%]
Measurement category	MC
Efficiency category	EC
Efficiency grade	N
Variable speed drive	VSD
Power	[kW]
Current	[A]
Air flow	[m³/h]
Static pressure	[Pa]
Speed	[n/min <sup>-1</sup> ]
Specific ratio	SR

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Point	Power [W]					
	VK 100 EC	VK 125 EC	VK 150 EC	VK 200 EC	VK 250 EC	VK 315 EC
1	82	84	82	84	152	149
2	82	82	82	84	161	164
3	81	82	82	83	165	165
4	81	81	82	82	154	158
5	51	51	54	51	121	94
6	50	50	57	54	131	106
7	45	48	53	58	140	112
8	40	45	49	55	125	104
9	32	31	32	28	76	74
10	30	30	33	32	83	83
11	28	29	31	32	89	90
12	25	24	27	31	78	84
13	17	18	17	16	37	37
14	16	17	17	18	40	39
15	15	16	17	18	43	45
16	13	14	16	17	38	41
17	8	8	9	8	16	17
18	8	8	9	8	17	19
19	7	7	8	9	18	19
20	6	7	8	8	16	17



$\eta_n$ [%]	MC	EC	N	VSD	[kW]	[A]	[m³/h]	[Pa]	[RPM]	SR
43,5	A	Static	62	Yes	0,17	1,14	754	294	2485	1

$\eta_n$ [%]	MC	EC	N	VSD	[kW]	[A]	[m³/h]	[Pa]	[RPM]	SR
49,5	A	Static	62	Yes	0,17	1,15	1022	247	2472	1