

Series
VENTS KSB EC



Centrifugal inline fans
with capacity up to **1500 m³/h**
in a plastic casing

■ **Purpose**

The design of the KSB fans allows to use them in supply and exhaust ventilation systems in premises with high requirements to the noise level, efficiency and fan control and with limited space for mounting.

For example, the unit design includes a possibility of space-restricted installation above suspended ceilings. The KSB EC fans are designed for mounting into Ø 100, 125, 150, 160, 200, 250, 315 mm air ducts.

■ **Design**

The fan casing is made of galvanized sheet steel using heat- and sound-insulation material. The round connecting spigots are rubber sealed.

■ **Motor**

The unit is equipped with high-efficient external rotor EC motors and centrifugal impellers with backward curved blades.

These motors currently are the most cutting-edge solution in the field of energy conservation. The use of EC-motors allows to reduce the electricity consumption by 35% approximately while providing the high capacity and low noise level.

The EC-motors are featured with high performance and totally controllable speed range.

The high efficiency (up to 90%) is a definite advantage of the EC-motors.

The motors are equipped with rolling-element bearings that provide a longer operation period (40000 hours).

■ **Speed control**

The fans are controlled by means of a 0-10 V external control signal while the performance regulation is based on the feedback from the temperature, smoke and other sensors as well as other vital parameter settings.

As the control signal changes the EC fan changes speed accordingly to supply the exact air amount required by the ventilation system.

The maximum fan speed does not depend on the electric mains frequency enabling compatibility with both 50 Hz and 60 Hz networks.

The fans can be easily combined into a single computer-controlled network.

Special software allows for precise control over the operating parameters of the network units.

■ **Mounting**

The fans are intended for installation in round air ducts. They are installed between the air ducts.

The use of flexible connectors requires fixation of the fan on the building structure by means of supports, mounts or fixing brackets.

The fan can be fixed in any position, taking into account the air flow direction indicated by the arrow on the fan casing.

While mounting the fan provide enough access for servicing and repair operations.

Electrical connection and installation must be performed in accordance with the instruction manual and the electrical connections diagram applied to the terminal box.

Designation key

Series	Air duct diameter	Options
VENTS KSB	100; 125; 150; 160; 200; 250; 315	EC – synchronous eLEctronically commutated motor

Accessories



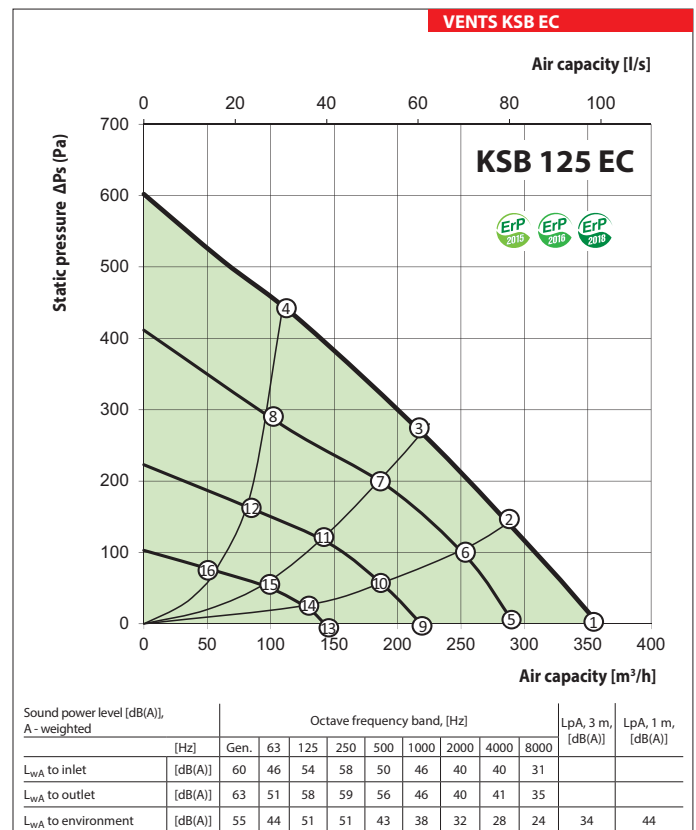
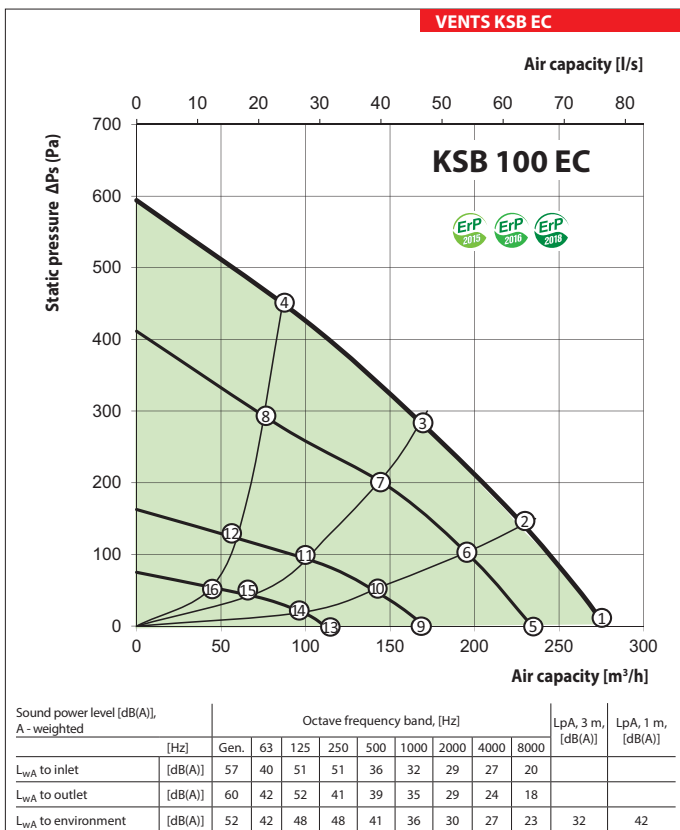
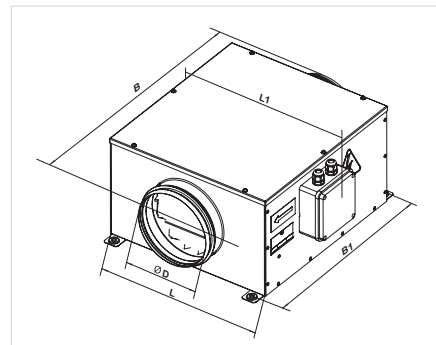
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TEchnical data:

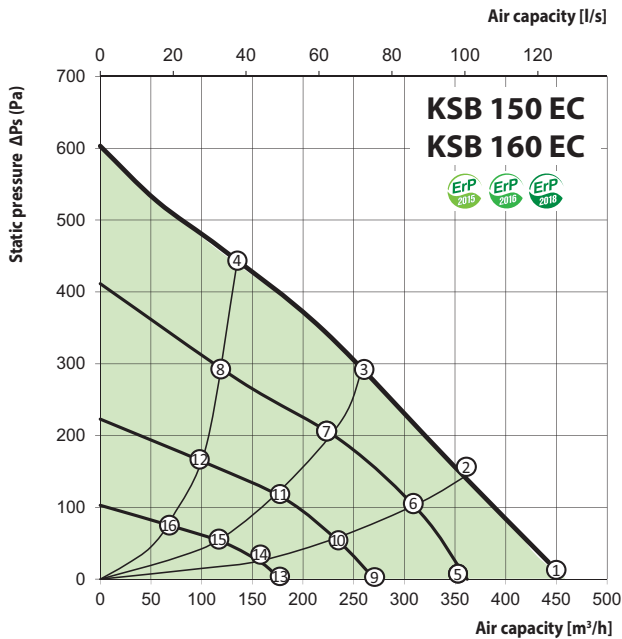
	KSB 100 EC	KSB 125 EC	KSB 150 EC KSB 160 EC	KSB 200 EC	KSB 250 EC	KSB 315 EC
Unit voltage [V /50-60 Hz]	1~ 230					
Power [W]	83			166		
Current [A]	0,63			1,15		
Maximum air capacity [m³/h]	280	360	450	640	1220	1310
RPM	3200		2580		2510	2620
Sound pressure level at 3 m distance [dB(A)]	32	34	35	37	40	42
Max. transported air temperature [°C]	-25 +60					
Energy efficiency class	C	B	C	B	-	-
Ingress protection rating	IPX4					

Overall dimensions

Model	Dimensions [mm]				
	Ø D	B	B1	L	L1
KSB 100 EC	99	447	380	325	375
KSB 125 EC	124	447	380	325	375
KSB 150 EC	149	477	410	355	405
KSB 160 EC	159	477	410	355	405
KSB 200 EC	199	590	506	435	490
KSB 250 EC	249	590	506	435	490
KSB 315 EC	314	650	566	505	560

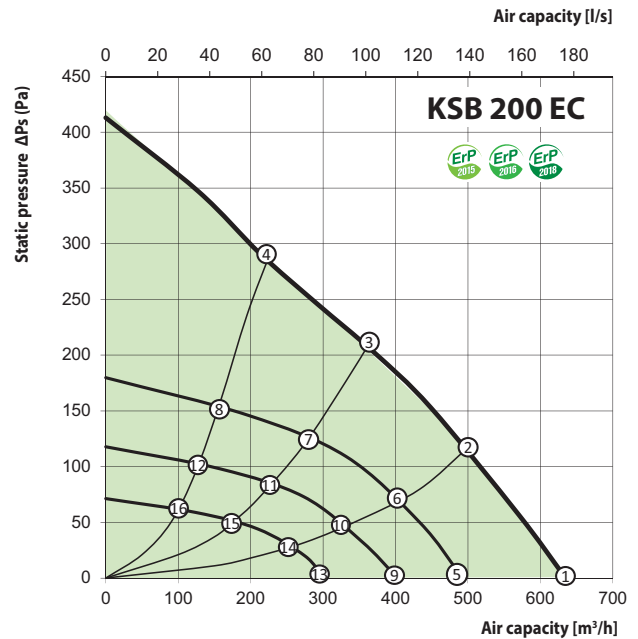


VENTS KSB EC



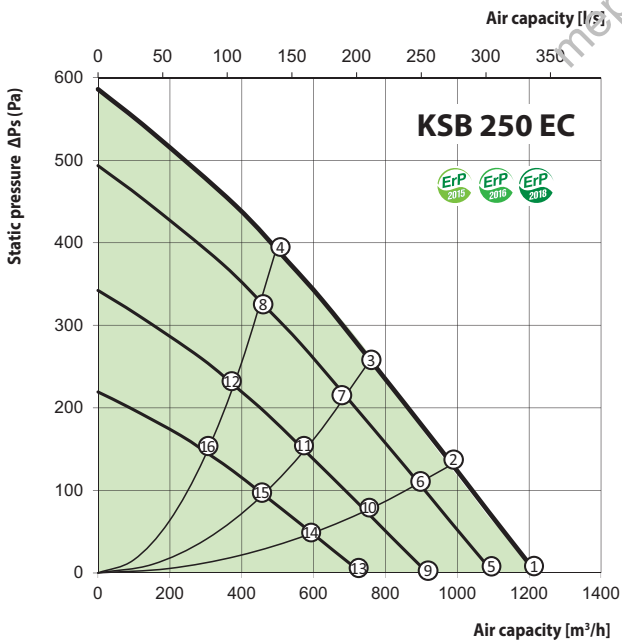
Sound power level [dB(A)], A - weighted	[Hz]	Octave frequency band, [Hz]								LpA, 3 m, [dB(A)]	LpA, 1 m, [dB(A)]	
		Gen.	63	125	250	500	1000	2000	4000			8000
L _{WA} to inlet	[dB(A)]	61	43	55	55	39	35	32	28	21		
L _{WA} to outlet	[dB(A)]	64	47	58	46	43	39	31	26	20		
L _{WA} to environment	[dB(A)]	56	45	52	52	44	39	32	29	25	35	45

VENTS KSB EC



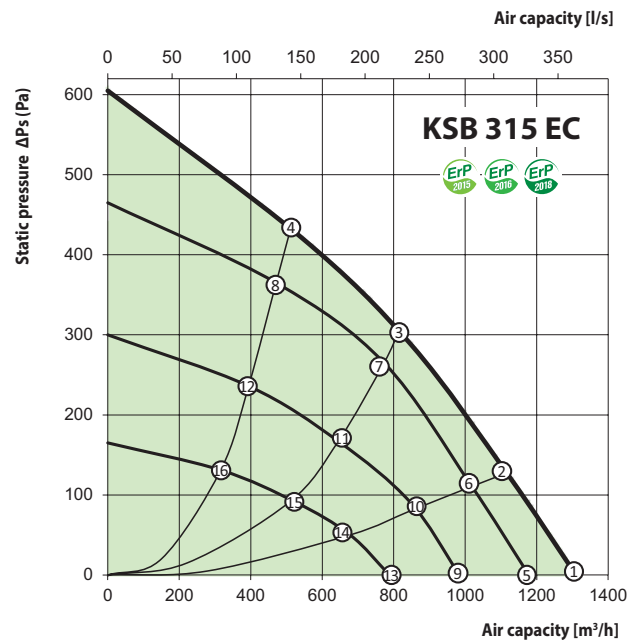
Sound power level [dB(A)], A - weighted	[Hz]	Octave frequency band, [Hz]								LpA, 3 m, [dB(A)]	LpA, 1 m, [dB(A)]	
		Gen.	63	125	250	500	1000	2000	4000			8000
L _{WA} to inlet	[dB(A)]	62	43	56	56	39	35	32	29	22		
L _{WA} to outlet	[dB(A)]	65	47	59	46	43	39	32	27	21		
L _{WA} to environment	[dB(A)]	57	46	53	54	45	40	33	30	25	37	47

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Sound power level [dB(A)], A - weighted	[Hz]	Octave frequency band, [Hz]								LpA, 3 m, [dB(A)]	LpA, 1 m, [dB(A)]	
		Gen.	63	125	250	500	1000	2000	4000			8000
L _{WA} to inlet	[dB(A)]	66	46	59	59	42	37	34	31	23		
L _{WA} to outlet	[dB(A)]	69	50	62	49	46	42	34	28	22		
L _{WA} to environment	[dB(A)]	61	49	57	57	48	43	36	32	27	40	50

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Sound power level [dB(A)], A - weighted	[Hz]	Octave frequency band, [Hz]								LpA, 3 m, [dB(A)]	LpA, 1 m, [dB(A)]	
		Gen.	63	125	250	500	1000	2000	4000			8000
L _{WA} to inlet	[dB(A)]	67	52	61	65	56	51	45	45	35		
L _{WA} to outlet	[dB(A)]	70	56	66	66	62	51	44	46	39		
L _{WA} to environment	[dB(A)]	62	51	58	59	50	44	37	32	28	42	52

Point	Power [W]					
	KSB 100 EC	KSB 125 EC	KSB 150 EC KSB 160 EC	KSB 200 EC	KSB 250 EC	KSB 315 EC
1	83	83	83	82	166	156
2	83	83	83	83	166	166
3	83	83	83	82	166	165
4	83	81	81	82	165	166
5	51	50	49	38	101	101
6	52	52	51	44	125	126
7	59	58	57	52	140	139
8	56	54	54	48	125	126
9	26	25	24	20	57	58
10	25	26	25	23	71	70
11	28	29	28	28	79	80
12	26	26	26	26	71	71
13	12	11	10	10	27	27
14	11	12	11	12	34	35
15	14	12	12	14	39	40
16	12	11	11	13	34	35

Point	Sound pressure level at 3 m (1 m distance) [dB(A)]					
	KSB 100 EC	KSB 125 EC	KSB 150 EC KSB 160 EC	KSB 200 EC	KSB 250 EC	KSB 315 EC
1	32 (42)	34 (44)	35 (45)	37 (47)	40 (50)	42 (52)
2	32 (42)	34 (44)	34 (44)	36 (46)	40 (50)	40 (50)
3	31 (41)	33 (43)	34 (44)	35 (45)	39 (49)	41 (51)
4	30 (40)	32 (42)	33 (43)	35 (45)	38 (48)	39 (49)
5	27 (37)	28 (38)	30 (40)	31 (41)	34 (44)	35 (45)
6	26 (36)	28 (38)	28 (38)	30 (40)	33 (43)	35 (45)
7	26 (36)	27 (37)	26 (36)	29 (39)	32 (42)	32 (42)
8	24 (34)	26 (36)	26 (36)	28 (38)	31 (41)	32 (42)
9	24 (34)	25 (35)	25 (35)	28 (38)	30 (40)	31 (41)
10	24 (34)	25 (35)	23 (33)	27 (37)	30 (40)	30 (40)
11	21 (31)	24 (34)	22 (32)	24 (34)	26 (36)	27 (37)
12	20 (30)	23 (33)	22 (32)	23 (33)	25 (35)	26 (36)
13	20 (30)	22 (32)	21 (31)	23 (33)	25 (35)	25 (35)
14	19 (29)	21 (31)	21 (31)	22 (32)	24 (34)	25 (35)
15	19 (29)	19 (29)	20 (30)	21 (31)	23 (33)	23 (33)
16	17 (27)	17 (27)	18 (28)	20 (30)	21 (31)	22 (32)