

Series
VENTS KSB K2 EC



Centrifugal duct fans in a heat- and sound-insulated casing with air flow up to **7145 m³/h**

Application

The KSB K2 EC fans are designed for supply and exhaust ventilation systems for commercial, office and other public or industrial premises with high requirements to noise level and with limited space for mounting. For example, the unit design includes a possibility of space-restricted installation above suspended ceilings. Compatible with Ø 100-500 mm air ducts.

Design

The fan casing is made of aluzinc. For easy installation and operation, the top cover of the fan is secured with a special lock. The casing is heat- and sound-insulated with a 50 mm layer of non-flammable mineral wool. To ensure better noise absorption, the inner surface of the insulation is made of a perforated metal sheet. The round connecting spigots are rubber sealed.



Motor

The units feature efficient electronically commutated (EC) direct current motors with external rotor and centrifugal impellers with backward curved blades. EC motor is free of friction and wear parts such as a commutator and brushes. These components are replaced by a maintenance-free electronic circuit board. EC motors are characterised with high performance and optimum control across the entire speed range. In addition to that, the efficiency of the electronically commutated motor reaches very impressive levels of up to 90 %.

Built in functions and control

The fan is controlled with the external control signal 0-10 V (capacity control is performed 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 computer display shows all the system parameters and the operation mode can be set individually for each fan in the network.

Installation

Duct fans are intended for mounting to round air ducts. The fans are installed between the air ducts. In case the fan is mounted on flexible joints, attach the fan to a structural unit by means of supports, suspension links or brackets. The fan may be installed in any position in consideration of the air flow direction (as indicated by the arrow on the fan casing). While mounting the fan provide enough access for servicing and repair operations.

Designation key

| Series | Duct diameter | Modification | Motor | Options |
|------------------|---|---|--|--|
| VENTS KSB | 100; 125; 150; 160; 200; 250; 315; 355; 400; 450; 500 | K2: heat- and sound-insulated casing | EC: synchronous electronically commutated motor | R1: power cord with a mains plug. |

Accessories



Silencer

Filters

Heaters

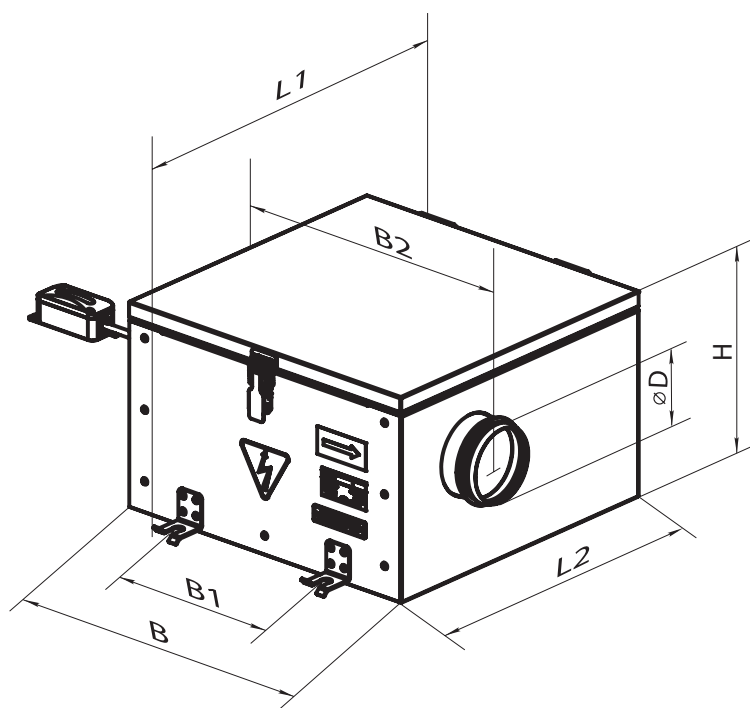
Non-return valve

Air damper

Speed controller

Overall dimensions of fans

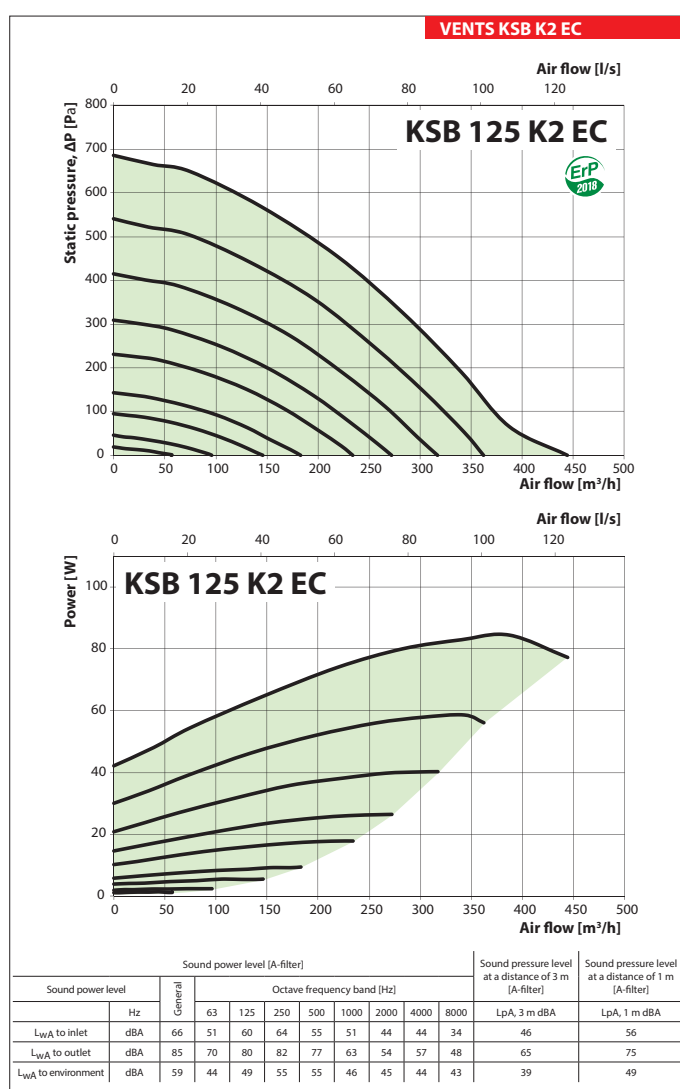
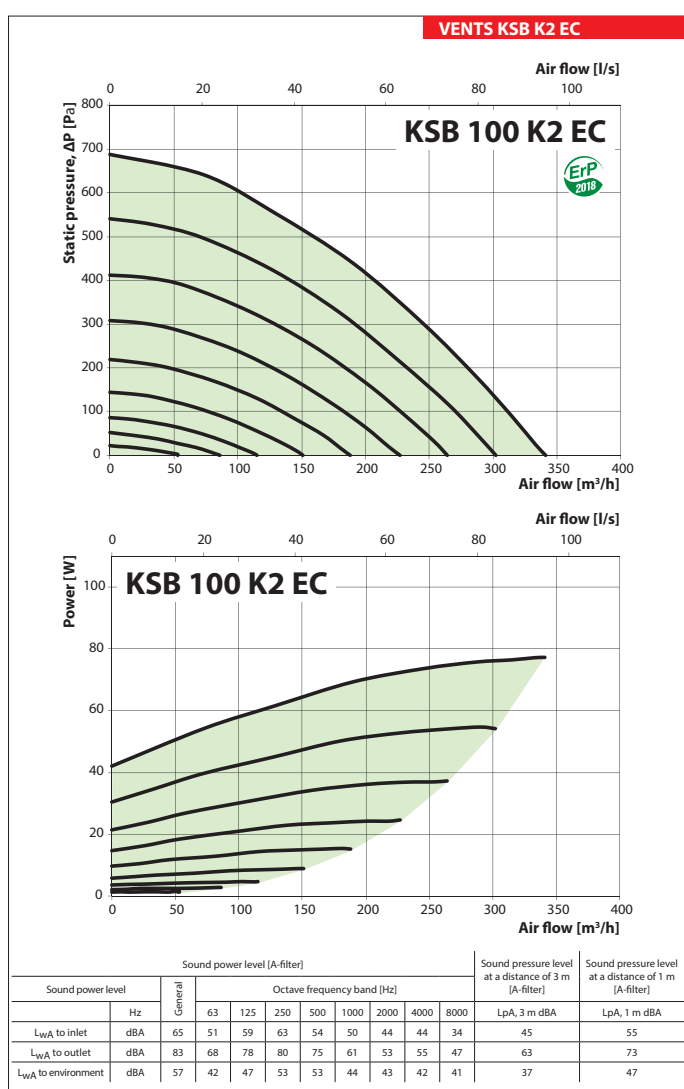
| Model | Dimensions [mm] | | | | | | | Weight [kg] |
|---------------|-----------------|------|-----|------|-----|------|-----|-------------|
| | ∅D | B | B1 | B2 | H | L1 | L2 | |
| KSB 100 K2 EC | 99 | 420 | 228 | 517 | 270 | 507 | 414 | 12 |
| KSB 125 K2 EC | 124 | 420 | 228 | 517 | 270 | 507 | 414 | 12 |
| KSB 150 K2 EC | 149 | 420 | 228 | 517 | 270 | 507 | 414 | 12 |
| KSB 160 K2 EC | 159 | 420 | 228 | 517 | 270 | 507 | 414 | 12 |
| KSB 200 K2 EC | 198 | 551 | 374 | 648 | 328 | 646 | 553 | 20 |
| KSB 250 K2 EC | 248 | 665 | 487 | 762 | 371 | 709 | 616 | 27 |
| KSB 315 K2 EC | 313 | 807 | 600 | 904 | 505 | 818 | 737 | 47 |
| KSB 355 K2 EC | 354 | 807 | 600 | 904 | 505 | 818 | 737 | 47 |
| KSB 400 K2 EC | 399 | 807 | 600 | 904 | 505 | 818 | 737 | 47 |
| KSB 450 K2 EC | 449 | 885 | 670 | 982 | 580 | 886 | 805 | 60 |
| KSB 500 K2 EC | 499 | 1049 | 800 | 1146 | 660 | 1079 | 998 | 86 |



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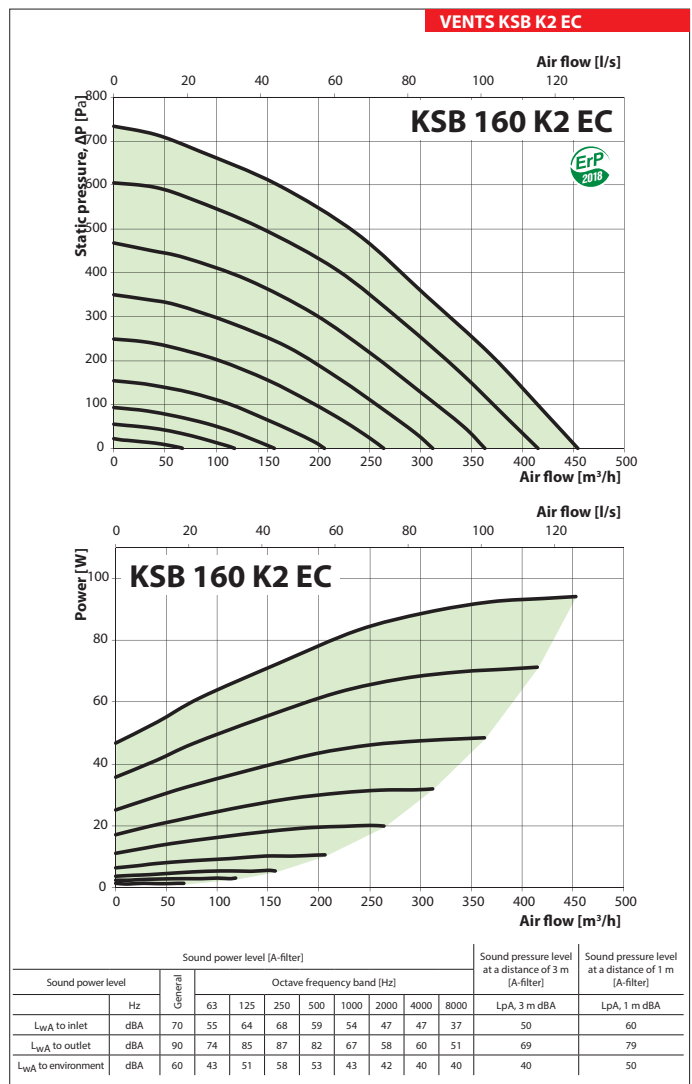
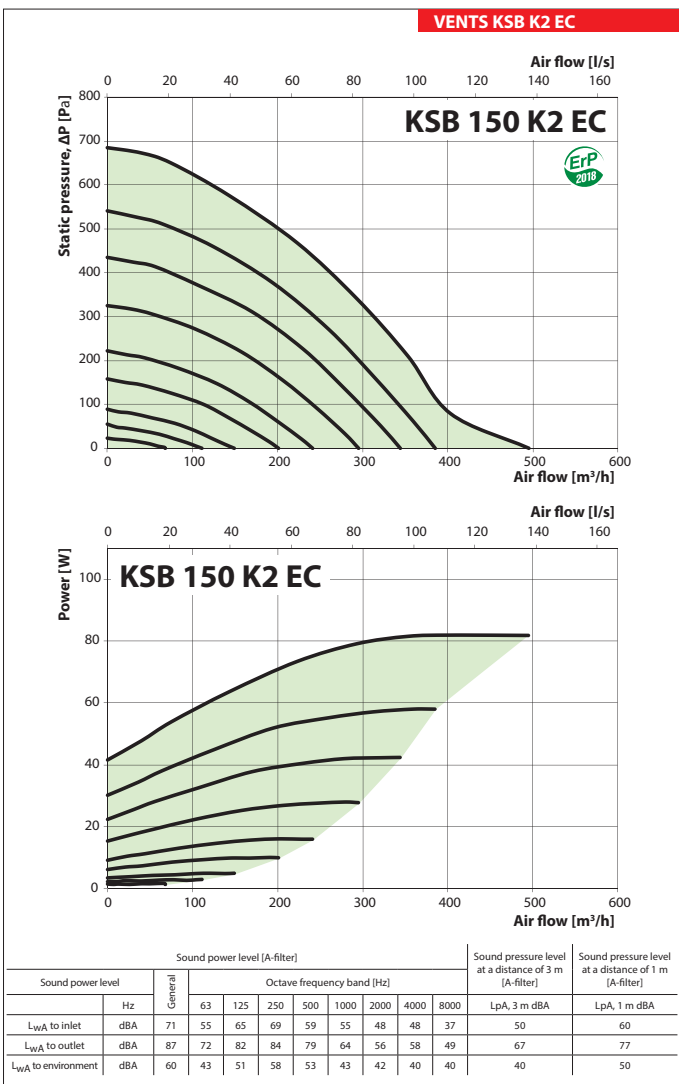
Technical data

| | KSB 100 K2 EC | KSB 125 K2 EC |
|--|---------------|---------------|
| Unit voltage [V/50 (60) Hz] | 1~230 | 1~230 |
| Power [W] | 69 | 78 |
| Current [A] | 0.55 | 0.59 |
| Maximum air flow [m³/h] | 341 | 444 |
| RPM [min ⁻¹] | 3270 | 3270 |
| Sound pressure level at 3 m distance [dBA] | 37 | 39 |
| Maximum transported air temperature [°C] | -25...+55 | -25...+55 |
| SEC class | B | B |
| Ingress protection rating | IPX4 | IPX4 |



Technical data

| | KSB 150 K2 EC | KSB 160 K2 EC |
|--|----------------------|----------------------|
| Unit voltage [V/50 (60) Hz] | 1~230 | 1~230 |
| Power [W] | 81 | 85 |
| Current [A] | 0.61 | 0.76 |
| Maximum air flow [m³/h] | 495 | 454 |
| RPM [min ⁻¹] | 3270 | 3600 |
| Sound pressure level at 3 m distance [dBA] | 40 | 40 |
| Maximum transported air temperature [°C] | -25...+55 | -25...+55 |
| SEC class | B | B |
| Ingress protection rating | IPX4 | IPX4 |

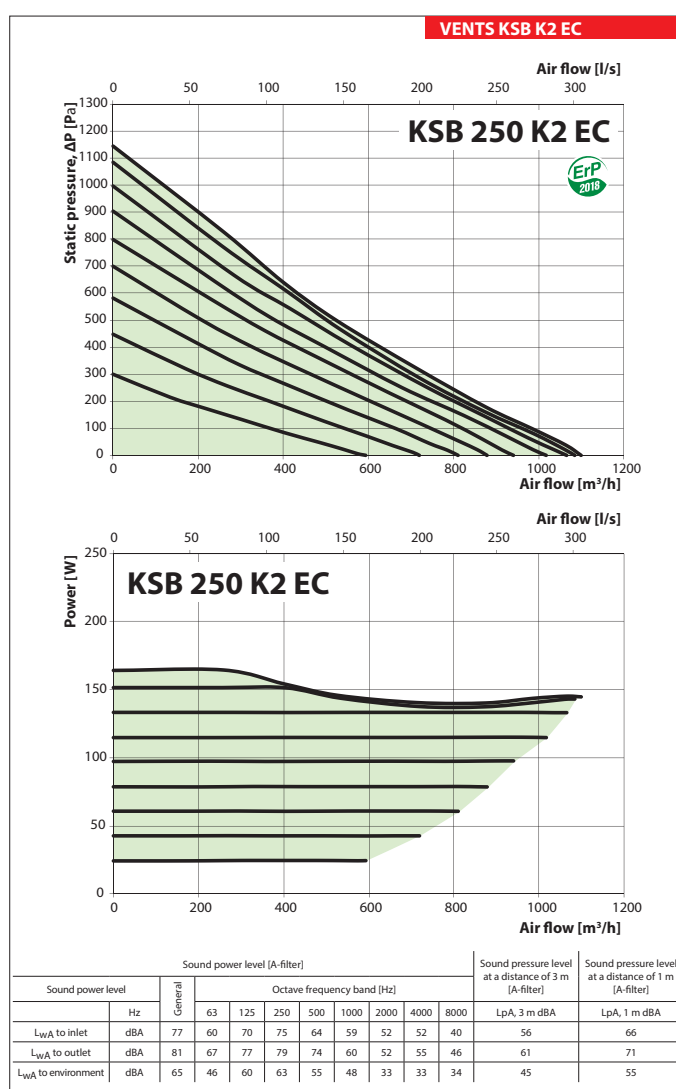
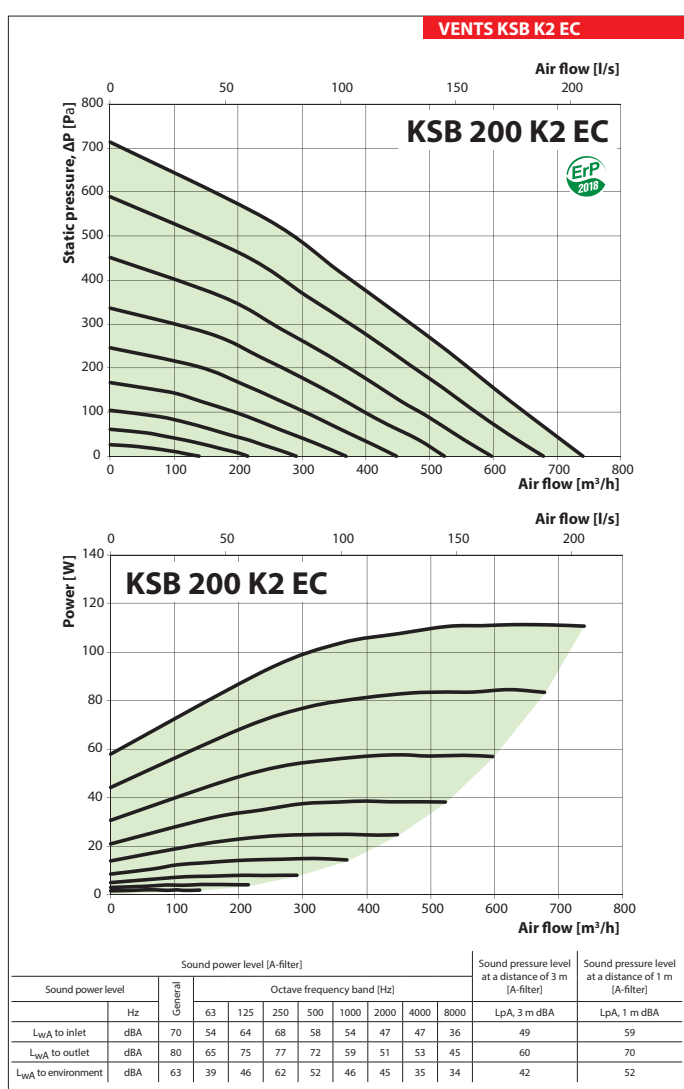


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SOUND-INSULATED FANS

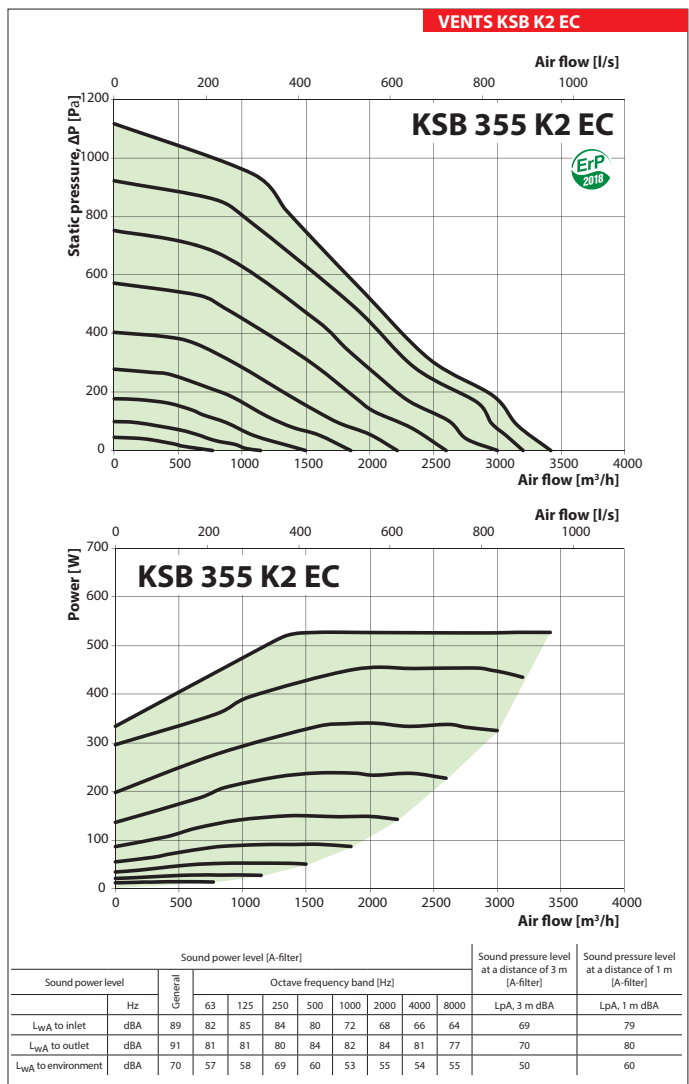
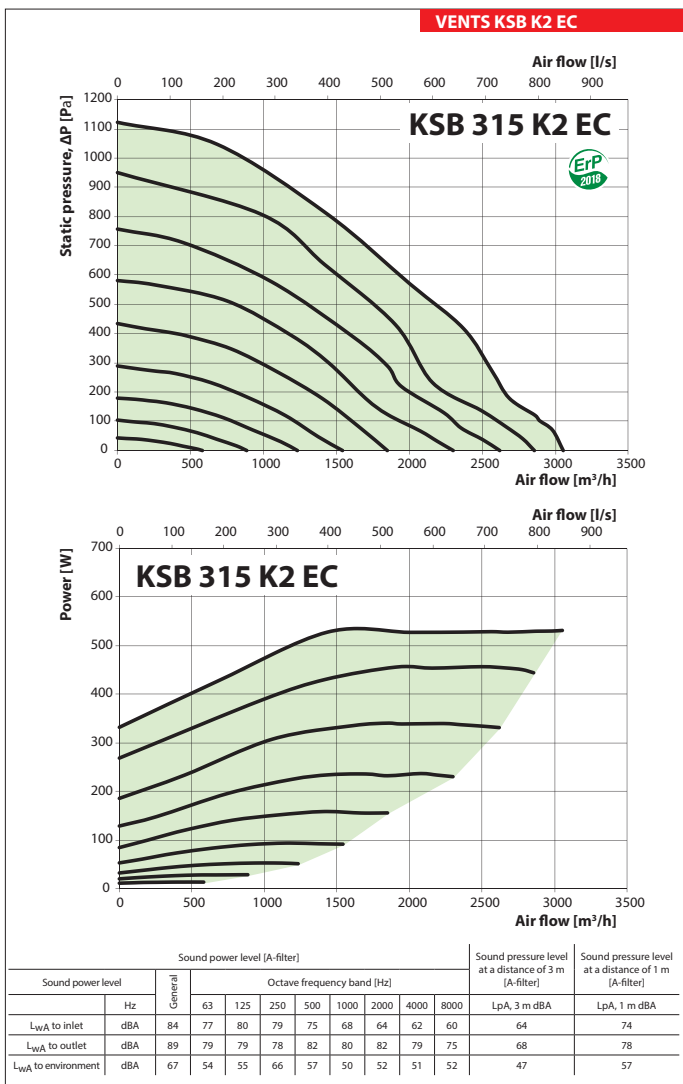
Technical data

| | KSB 200 K2 EC | KSB 250 K2 EC |
|--|---------------|---------------|
| Unit voltage [V/50 (60) Hz] | 1~230 | 1~230 |
| Power [W] | 111 | 164 |
| Current [A] | 0.88 | 1.32 |
| Maximum air flow [m³/h] | 740 | 1097 |
| RPM [min ⁻¹] | 2400 | 2800 |
| Sound pressure level at 3 m distance [dBA] | 42 | 45 |
| Maximum transported air temperature [°C] | -25...+55 | -25...+55 |
| SEC class | B | B |
| Ingress protection rating | IPX4 | IPX4 |



Technical data

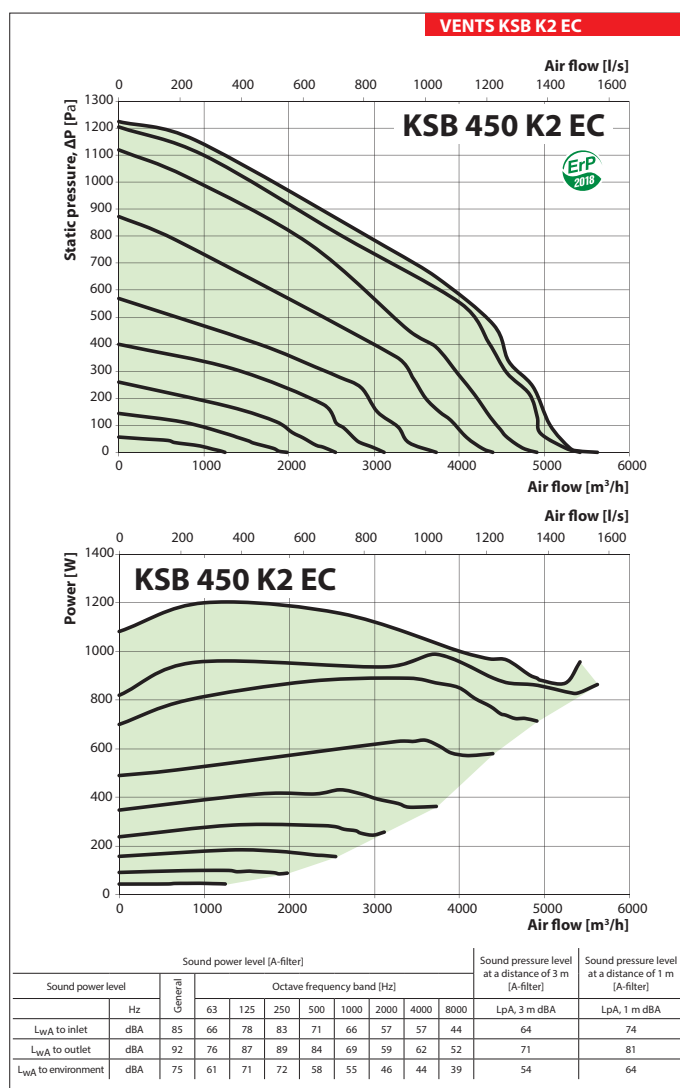
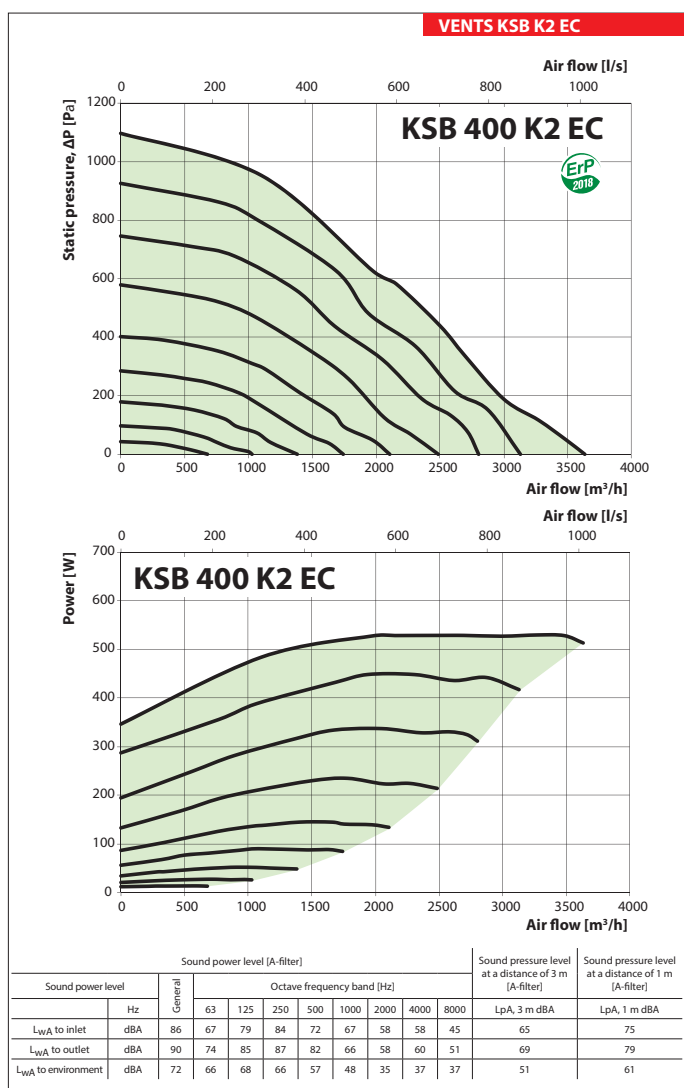
| | KSB 315 K2 EC | KSB 355 K2 EC |
|--|----------------------|----------------------|
| Unit voltage [V/50 (60) Hz] | 1~230 | 1~230 |
| Power [W] | 531 | 527 |
| Current [A] | 2.32 | 2.31 |
| Maximum air flow [m³/h] | 3053 | 3417 |
| RPM [min ⁻¹] | 2360 | 2360 |
| Sound pressure level at 3 m distance [dBA] | 47 | 50 |
| Maximum transported air temperature [°C] | -25...+55 | -25...+55 |
| SEC class | - | - |
| Ingress protection rating | IPX4 | IPX4 |



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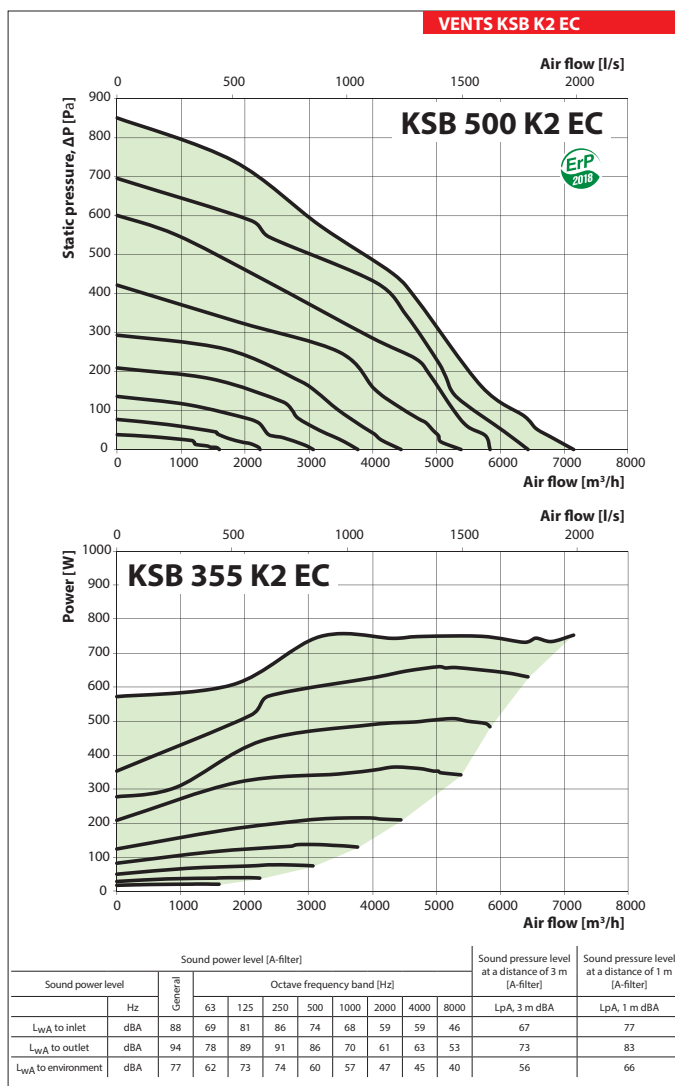
Technical data

| | KSB 400 K2 EC | KSB 450 K2 EC |
|--|---------------|---------------|
| Unit voltage [V/50 (60) Hz] | 1~230 | 1~230 |
| Power [W] | 513 | 1200 |
| Current [A] | 2.25 | 1.95 |
| Maximum air flow [m³/h] | 3633 | 5620 |
| RPM [min ⁻¹] | 2360 | 2580 |
| Sound pressure level at 3 m distance [dBA] | 51 | 54 |
| Maximum transported air temperature [°C] | -25...+55 | -25...+55 |
| SEC class | - | - |
| Ingress protection rating | IPX4 | IPX4 |



Technical data

| | | KSB 500 K2 EC |
|--|--|----------------------|
| Unit voltage [V/50 (60) Hz] | | 1~230 |
| Power [W] | | 752 |
| Current [A] | | 3.42 |
| Maximum air flow [m³/h] | | 7145 |
| RPM [min ⁻¹] | | 1440 |
| Sound pressure level at 3 m distance [dBA] | | 56 |
| Maximum transported air temperature [°C] | | -25...+55 |
| SEC class | | - |
| Ingress protection rating | | IPX4 |



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