

KR EC 450



Designed for the delivery of contaminated air.



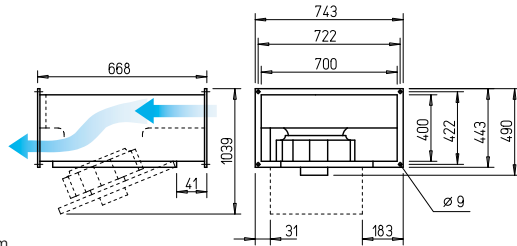
SKR EC 450 – sound-insulated



Lowest noise levels for inlet side and case radiation with high performance density. Use in extract air and intake air systems with specific noise level requirements.

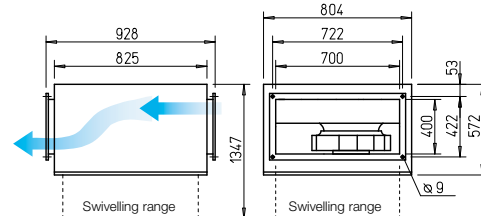


Dimensions KR EC 450



Dim. in mm

Dimensions SKR EC 450 – sound-insulated



Dim. in mm

Features KR EC and SKR EC

- Highly efficient EC motor for the lowest operating costs.
- High-pressure and high-volume centrifugal fan with high efficiency.
- Particularly easy to service (cleaning) due to retractable motor-impeller unit.
- Easily accessible for cleaning and thus designed for the delivery of contaminated air.
- Linear throughflow.
- Compact design, convenient installation.

Description

- Casing KR EC**  
Made of galvanised steel sheet. Double-sided rectangular duct flange profiles (20 mm) for installation in rectangular duct system.
- Casing SKR EC**  
Like above, but with additional sound insulation cladding made of 50 mm thick mineral fibre boards. With a sound absorbing lining on the inside.

Special features SKR EC

- Lowest noise levels for inlet side and case radiation with high performance density.

Common features KR EC and SKR EC

- Impeller**  
Centrifugal, with backward curved blades made of aluminium. Aerodynamically optimised, inlet via nozzle.

Drive

Energy-saving, speed-controllable external rotor EC motor in protection category IP44 with the highest level of efficiency. Maintenance-free and radio interference-free, ball bearing mounted. Motor and impeller dynamically balanced.

Motor protection

Integrated electronic temperature monitoring system for EC motor and electronics.

Power control

Continuously variable speed control with potentiometer or continuously variable speed regulation with universal control system (see table). Performance levels are shown in the performance curve as an example.

Electrical connection

Terminal box (IP54) mounted to external cable.

Installation

Installation possible in any position. Note accessibility/swivel angle.

Noise

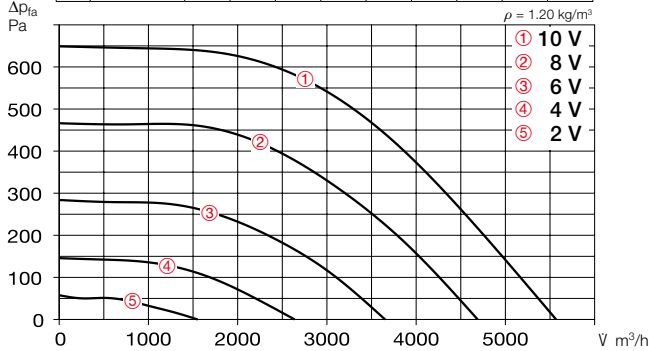
The total level and range are specified above the performance diagram for:  
 Case-radiated sound power  
 Inlet side sound power  
 Outlet side sound power.  
 The case-radiated noise as sound pressure at 4 m (free field conditions) is also specified in the type table and in the table below the performance curve.

Type	Ref. no.	Flow rate Free blowing	Rated speed	Sound press. case-radiation	Power consum.	Current consum.	Wiring diagram	Max. air flow temp.	Wgt net aprx.	Universal control system		Speed potentiometer		
										Type	Ref. no.	Type	Ref. no.	
<b>Alternating current, 1~, 230 V, 50/60 Hz, EC motor, protection category IP44</b>														
KRW EC 450/70/40	06127	5570	1500	48	0.86	3.80	979	60	37.0	EUR EC <sup>1)2)</sup> 01347	PU 10 <sup>1)</sup>	01734	PA 10 <sup>1)</sup>	01735
<b>Three-phase current, 3~, 400 V, 50/60 Hz, EC motor, protection category IP44</b>														
KRD EC 450/70/40	08173	7520	1920	54	1.82	2.81	1479	60	38.2	EUR EC <sup>1)2)</sup> 01347	PU 10 <sup>1)</sup>	01734	PA 10 <sup>1)</sup>	01735
<b>Sound-insulated SKR EC – Alternating current, 1~, 230 V, 50/60 Hz, EC motor, protection category IP44</b>														
SKRW EC 450/70/40 <sup>3)</sup>	06129	5390	1510	46	0.84	3.70	979	60	56.0	EUR EC <sup>1)2)</sup> 01347	PU 10 <sup>1)</sup>	01734	PA 10 <sup>1)</sup>	01735
<b>Sound-insulated SKR EC – Three-phase current, 3~, 400 V, 50/60 Hz, EC motor, protection category IP44</b>														
SKRD EC 450/70/40 A	08178	7460	1940	49	1.81	2.81	1479	60	57.2	EUR EC <sup>1)2)</sup> 01347	PU 10 <sup>1)</sup>	01734	PA 10 <sup>1)</sup>	01735

<sup>1)</sup> Multiple EC fans can normally be connected. <sup>2)</sup> alternative electronic diff. pressure/ temperature controller (EDR/ETR, No. 01437/01438) or three level speed switch (SU/SA, No. 04266/04267), see Accessories. <sup>3)</sup> Performance diagram at www.HellosSelect.de.

**Performance curves KRW EC 450/70/40**

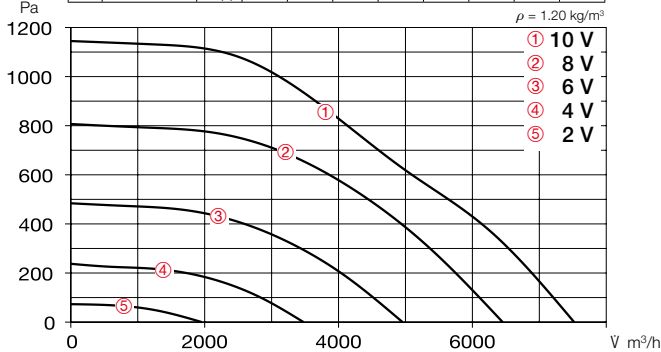
Frequency	Hz	Tot.	125	250	500	1k	2k	4k	8k
L <sub>WA</sub> Radiation		dB(A)	68	56	66	59	57	52	48
L <sub>WA</sub> Inlet side		dB(A)	81	70	77	72	71	71	67
L <sub>WA</sub> Outlet side		dB(A)	86	71	83	76	81	76	72



Free blowing						
Voltage V	n min <sup>-1</sup>	V m³/h	P W	I A	Lp dB(A)	SFP kW/m³/s
10	1500	5570	630	2.8	48	0.40
8	1270	4690	380	1.7	43	0.29
6	980	3650	180	0.8	37	0.18
4	700	2640	75	0.4	29	0.10

**Performance curves KRD EC 450/70/40**

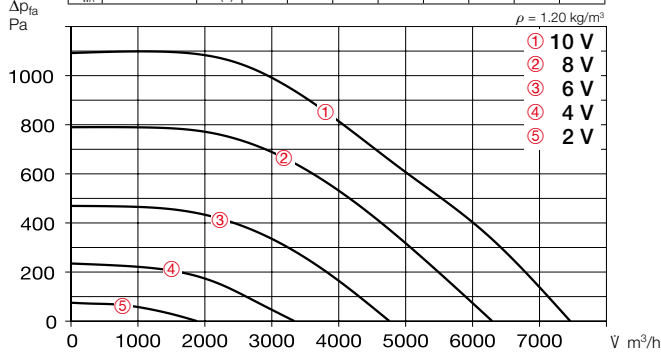
Frequency	Hz	Tot.	125	250	500	1k	2k	4k	8k
L <sub>WA</sub> Radiation		dB(A)	74	59	73	65	64	59	53
L <sub>WA</sub> Inlet side		dB(A)	84	74	78	76	76	77	72
L <sub>WA</sub> Outlet side		dB(A)	91	75	85	81	87	82	78



Free blowing						
Voltage V	n min <sup>-1</sup>	V m³/h	P W	I A	Lp dB(A)	SFP kW/m³/s
10	1970	7520	1560	2.4	54	0.75
8	1670	6450	950	1.5	51	0.53
6	1290	4960	450	0.7	44	0.33
4	900	3480	170	0.4	36	0.18

**Performance curves SKRD EC 450/70/40 A**

Frequency	Hz	Tot.	125	250	500	1k	2k	4k	8k
L <sub>WA</sub> Radiation		dB(A)	69	61	67	56	56	48	42
L <sub>WA</sub> Inlet side		dB(A)	79	72	74	72	71	66	61
L <sub>WA</sub> Outlet side		dB(A)	86	73	80	77	82	77	72



Free blowing						
Voltage V	n min <sup>-1</sup>	V m³/h	P W	I A	Lp dB(A)	SFP kW/m³/s
10	1970	7460	1500	2.3	49	0.72
8	1670	6290	920	1.4	47	0.53
6	1290	4760	440	0.7	43	0.33
4	900	3340	170	0.3	36	0.18

**Accessories**

**External wall shutter**  
**VK 70/40** Ref. no. 00879  
 Automatic overpressure shutter made of light grey plastic.



**Weather protection grille**  
**WSG 70/40** Ref. no. 00114  
 Stable construction made of extruded aluminium profiles, natural colour anodised.



**Multi-leaf damper for rectangular duct installation**  
**JVK 70/40** Ref. no. 06915  
 Frame casing with double-sided flanges, positioning mechanism outside of air flow. Electrical drive see STM, Accessories.



**Fitting**  
**FSK 70/40** Ref. no. 00840  
 For cost-effective integration of rectangular duct fans in round duct systems with Ø 400 mm.



**Flexible connector**  
**VS 70/40** Ref. no. 05699  
 Flexible rectangular duct connector with double-sided flange frame.



**Counter flange**  
**GF 70/40** Ref. no. 06924  
 Flange frame made of galvanised steel sheet for connection to the rectangular duct.



**Rectangular duct silencer**  
**KSD 70/40** Ref. no. 08731  
 For outlet and inlet side insertion in the rectangular duct system.



**Rectangular duct air filter**  
**KLF 70/40 Coarse 70%\*** 08723  
**KLF 70/40 ePM1 50%\*** 08647  
 With large bag filter. Galvanised steel sheet casing with double-sided flanges.



**Warm water heating element**  
**WHR 2/70/40** Ref. no. 08788  
**WHR 4/70/40** Ref. no. 08789  
 For installation in rectangular duct system.



**Temperature control system for warm water heating element**  
**WHS HE<sup>1)</sup>** Ref. no. 08319



<sup>1)</sup> With heat output reduced to 2200 l/h for Type WHR 4/70/40.

Accessory details	Page
Shutters and weather prot. grille	480, 561 ff.
Filters, heating elements and silencers	481 ff.
Temperature control systems for heating elements	487, 492 f
Universal control system, electronic controllers, speed potentiometer	613 ff.

\* See product page 477 for detailed description.