InlineVent® EC rectangular duct fans
Ø 500 mm, backward curved, for rectangular ducts 80 x 50 cm

KR EC 500



Designed for the delivery of contaminated air.

EC

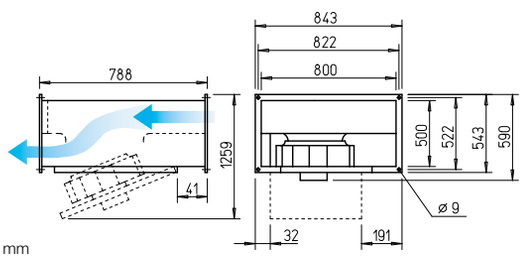
SKR EC 500 – sound-insulated



Low 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.

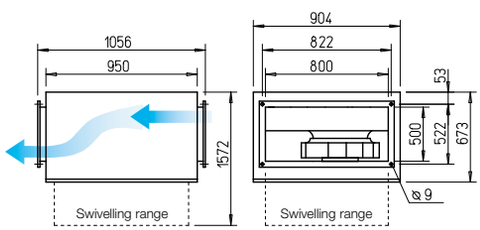
EC

Dimensions KR EC 500



Dim. in mm

Dimensions SKR EC 500 – sound-insulated



Dim. in mm

Features KR EC and SKR EC

- Highly efficient EC motor for low 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.

Special features SKR EC

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

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.

Common features KR EC and SKR EC

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

Drive
Energy-efficient, speed-controllable EC external rotor motor with IP44 protection and high efficiency. Maintenance-free and equipped with ball bearings. 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.

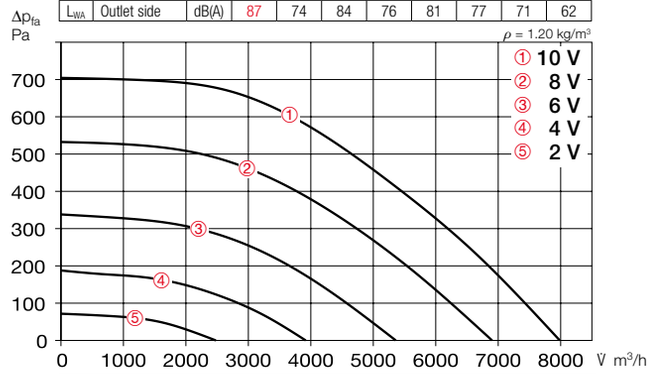
The case-radiated noise as sound pressure at 4 m (free field conditions) is also specified in the type table and in the table below the performance curve.

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 flush-mount.		Speed potentiometer surface-mount.	
		V̇ m³/h	min⁻¹	dB(A) in 4 m	kW	A	No.	+ °C	kg	Type	Ref. no.	Type	Ref. no.	Type	Ref. no.
Three-phase current, 3~, 400 V, 50/60 Hz, EC motor, protection category IP44															
KRD EC 500/80/50 A	08174	7990	1350	47	1.24	1.92	1479	60	50.5	**EUR EC** [1)2)]	01347	**PU 10** [1)]	01734	**PA 10** [1)]	01735
KRD EC 500/80/50 B [3)]	06128	9080	1550	51	1.81	2.79	1479	60	50.5	**EUR EC** [1)2)]	01347	**PU 10** [1)]	01734	**PA 10** [1)]	01735
Sound-insulated SKR EC – Three-phase current, 3~, 400 V, 50/60 Hz, EC motor, protection category IP44															
SKRD EC 500/80/50 A	08299	7990	1350	45	1.22	1.88	1479	60	73.5	**EUR EC** [1)2)]	01347	**PU 10** [1)]	01734	**PA 10** [1)]	01735
SKRD EC 500/80/50 B	08179	8760	1540	48	1.82	2.81	1479	60	73.5	**EUR EC** [1)2)]	01347	**PU 10** [1)]	01734	**PA 10** [1)]	01735

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

Performance curves KRD EC 500/80/50 A

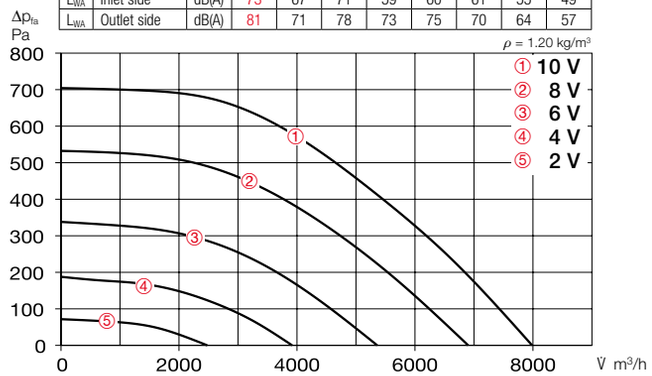
Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Radiation	dB(A)	67	59	63	60	58	53	46	40
L_{WA}	Inlet side	dB(A)	80	71	75	68	75	72	67	59
L_{WA}	Outlet side	dB(A)	87	74	84	76	81	77	71	62



	Free blowing					
Voltage V	**n** min⁻¹	**V̇** m³/h	**P** W	**I** A	**Lp** dB(A)	**SFP** kW/m³/s
10	1358	7990	900	1.4	47	0.40
8	1181	6900	610	1.0	44	0.32
6	935	5360	310	0.6	39	0.21
4	687	3920	140	0.3	32	0.13

Performance curves SKRD EC 500/80/50 A

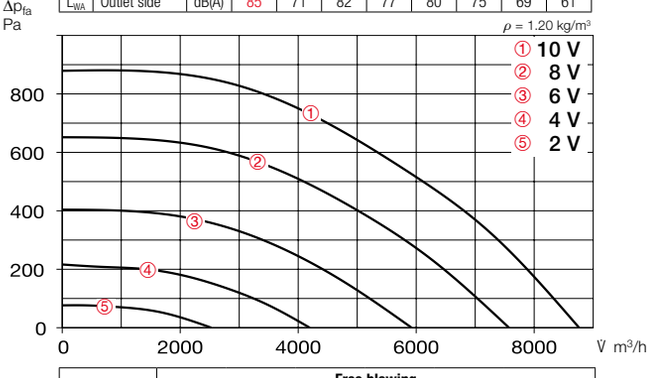
Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Radiation	dB(A)	65	58	63	51	53	45	44	40
L_{WA}	Inlet side	dB(A)	73	67	71	59	60	61	55	49
L_{WA}	Outlet side	dB(A)	81	71	78	73	75	70	64	57



	Free blowing					
Voltage V	**n** min⁻¹	**V̇** m³/h	**P** W	**I** A	**Lp** dB(A)	**SFP** kW/m³/s
10	1360	7990	900	1.4	45	0.40
8	1180	6900	610	1.0	42	0.32
6	930	5360	320	0.6	40	0.21
4	690	3920	140	0.3	31	0.13

Performance curves SKRD EC 500/80/50 B

Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Radiation	dB(A)	68	57	66	54	62	48	47	45
L_{WA}	Inlet side	dB(A)	75	68	73	63	64	64	59	53
L_{WA}	Outlet side	dB(A)	85	71	82	77	80	75	69	61



	Free blowing					
Voltage V	**n** min⁻¹	**V̇** m³/h	**P** W	**I** A	**Lp** dB(A)	**SFP** kW/m³/s
10	1560	8760	1420	2.2	51	0.58
8	1340	7570	900	1.4	48	0.43
6	1050	5920	440	0.7	42	0.26
4	760	4200	180	0.4	34	0.15

Accessories

External wall shutter
VK 80/50 Ref. no. 00880
Automatic overpressure shutter made of light grey plastic.



Weather protection grille
WSG 80/50 Ref. no. 00115
Stable construction made of extruded aluminium profiles, natural colour anodised.



Multi-leaf damper for rectangular duct installation
JVK 80/50 Ref. no. 06916
Frame casing with double-sided flanges, positioning mechanism outside of air flow. Electrical drive see STM, Accessories.



Fitting
FSK 80/50 Ref. no. 00842
For cost-effective integration of rectangular duct fans in round duct systems with Ø 500 mm.



Flexible connector
VS 80/50 Ref. no. 05700
Flexible rectangular duct connector with double-sided flange frame.



Counter flange
GF 80/50 Ref. no. 06925
Flange frame made of galvanised steel sheet for connection to the rectangular duct.



Rectangular duct silencer
KSD 80/50 Ref. no. 08732
For outlet and inlet side insertion in the rectangular duct system.



Rectangular duct air filter
KLF 80/50 Coarse 70%* 08670
KLF 80/50 ePM1 50%* 08654
With large bag filter. Galvanised steel sheet casing with double-sided flanges.



Warm water heating element
WHR 2/80/50 Ref. no. 08795
WHR 4/80/50 Ref. no. 08796
For installation in rectangular duct system.



Accessory details	**Page**
Shutters and weather prot. grille	482, 563 ff.
Filters, heating elements and silencers	483 ff.
Universal control system, electronic controllers, speed potentiometer	615 ff.

* See product page 477 for detailed description.