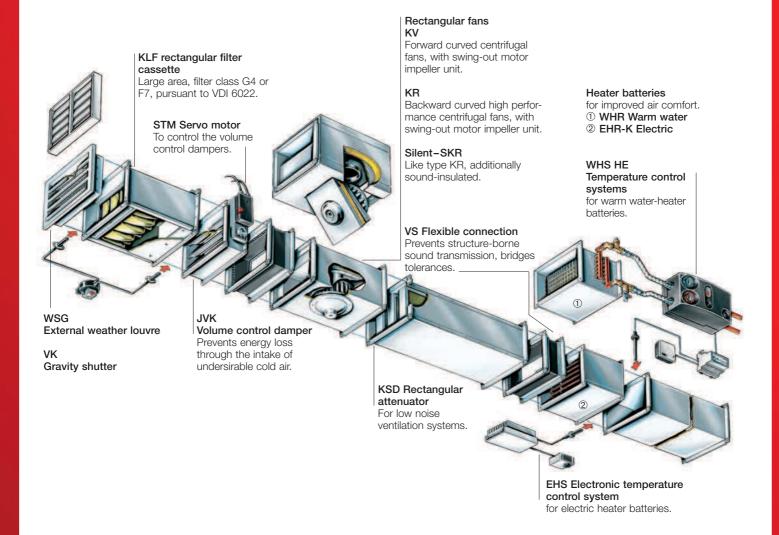






# Perfectly coordinated system solutions from the leading supplier.

- The components are available in every size and every performance level.
- All the components are compatible with each other and fit exactly together.
- Short installation time, simple design and rational procurement.











**RECTANGULAR** 

**Helios** 

**CENTRIFUGAL FANS** Selection table Product-specific information

372

**FORWARD CURVED** 

rectangular fans KV

Ø 200 – 450 mm

 $\dot{V} = 920 - 8500 \,\text{m}^3/\text{h}$ 

InlineVent®

**CURVED** InlineVent® rectangular fans KR

**BACKWARD** 



**Energy-efficient** EC version KR EC

Standard AC types KR

Ø 180 – 630 mm 30 x 15 cm - 100 x 50 cm  $\dot{V} = 540 - 12100 \,\text{m}^3/\text{h}$ 

374<sup>on</sup> 406<sup>on</sup> 410<sup>on</sup>

**SOUND-INSULATED** rectangular fans **Backward curved Acoustic Line SKR** 



**Energy-efficient** EC version SKR EC

50 x 25 cm - 100 x 50 cm

Standard AC types SKR

Ø 315 – 630 mm 50 x 25 cm - 100 x 50 cm  $\dot{V} = 1770 - 9540 \,\text{m}^3/\text{h}$ 

**ACCESSORIES** for InlineVent® rectangular fans

420

40 x 20 cm - 100 x 50 cm



This chart is enables the easy selection of rectangular fans by combining the parameters of static pressure increase  $\Delta p_{\text{fa}}$ , case breakout and intake

air sound levels as sound pressure levels at 4 m (free field conditions).

	Sound press. breakout	Sound press. intake	Air flow volumes V m³/h against static pressure												
Туре	L <sub>PA</sub> dB(A)	L <sub>PA</sub> dB(A)	(ΔP <sub>fa</sub> ) in F	Pa											
	in 4 m	in 4 m	0	50	100	150	200	250	300	350	400	500	600	700	800
KV - with forward curv	ed impellers														
KVW 200/4/40/20	37	49	920	890	850	800	750	40							
KVD 200/4/40/20	36	50	1130	1030	930	830	710	1000	4040						
KVD 225/4/50/25	43	52	1920	1820	1710	1590	1460	1290	1040	1000					
KVD 250/4/50/30	42	56	0000	0700	0000	2110	1970	1810	1610	1320	0000	0000			
KVD 280/4/60/30 KVD 315/4/60/35	45 48	59 61	3930	3780	3620	3470	3310	3150 4400	2990 4230	2820 4060	2620 3870	2000 3430	2700		
KVD 355/4/70/40	40 54	67						4400	5580	5440	5300	4960	4540	3920	
KVD 355/6/70/40	42	53			4970	4680	4380	4060	3680	3190	5500	4900	4040	3920	
KVD 355/8/70/40	35	47	4790	4410	4000	3520	2850	4000	3000	3130					
KVD 400/6/80/50	45	60	7620	7320	7020	6710	6390	6060	5690	5290	4800	1460			
KVD 400/8/80/50	38	51			5140	4670	4150	3420							
KVD 450/6/100/50	50	60							8170	7850	7500	6630	5220		
KVD 450/8/100/50	46	56			7290	6880	6420	5860	5120	3980					
KR EC – with backwar	d curved imp	ellers / SKR	EC - with	sound isola	ated casing	g									
KRW EC 180/30/15	44	58	660	620	590	550	520	480	440	410	360	240	70		
KRW EC 225/40/20	46	60	1430	1280	1130	1010	920	830	750	660	590	440	290	120	
KRW EC 315/50/25	44	56	1410	1320	1190	1060	970	870	780	700	630	480	340	190	
KRW EC 355/60/30	46	58	3110	3000	2870	2730	2590	2430	2260	2020	1750				
KRW EC 400/60/35	56	66	4460	4360	4250	4140	4020	3890	3760	3630	3500	3230	2890	2500	1950
KRW EC 450/70/40	46	59	5450	5210	4970	4740	4480	4210	3960	3670	3380	2580	1570		
KRD EC 450/70/40	54	67	7480	7310	7080	6860	6650	6450	6200	5970	5750	5300	4820	0=4	
KRD EC 500/80/50 A	51	62	8810	8520	8230	7940	7630	7260	6890	6560	6120	5300	4170	2590	0570
KRD EC 500/80/50 B	60	69	10400	10210	10010	9810	9600	9390	9180	8970	8760	8260	7720	7170	6570
KRD EC 560/100/50 A	54	62	11270	10840	10410	10000	9630	9270	8890	8480	8010	6990	5340	1190	0000
KRD EC 560/100/50 B SKRW EC 315/50/25	60 47	69 54	14410 2600	14120 2500	13830 2400	13530 2270	13230 2140	12950 2020	12670 1860	12410 1720	12130 1500	11550 1040	10970	10360	9620
SKRW EC 355/60/30	51	58	3950	3840	3720	3590	3480	3370	3250	3120	3000	2750	2460	2070	580
SKRW EC 400/60/35	51	56	4200	4100	4000	3890	3760	3620	3480	3330	3170	2880	2560	1990	300
SKRW EC 450/70/40	45	54	5420	5130	4900	4620	4330	4050	3770	3420	3060	2280	1010	1330	
SKRD EC 355/60/30	52	60	4550	4450	4360	4230	4125	4030	3920	3830	3710	3500	3280	3030	2695
SKRD EC 400/60/35	51	58	5000	4880	4760	4630	4510	4380	4250	4160	3940	3630	3340	3060	2750
SKRD EC 450/70/40 A	51	59	7500	7290	7120	6820	6590	6360	6110	5930	5620	5200	4710	4200	3320
SKRD EC 500/80/50 A	48	56	8600	8250	7910	7540	7190	6830	6450	6070	5660	4770	3270		
SKRD EC 500/80/50 B	55	61	10650	10400	10160	9920	9710	9440	9210	8980	8720	8240	7670	7000	6280
SKRD EC 560/100/50 A	48	56	10070	9740	9410	9080	8720	8310	7870	7420	6890	5700	3990		
SKRD EC 560/100/50 B	56	60	13700	13450	13190	12920	12650	12370	12090	11810	11540	10980	10410	9750	8990
KR – with backward co					•										
KRW 180/2/30/15	37	51	540	480	420	360	280	210	110						
KRW 225/2/40/20	40	52	1020	920	820	700	590	490	380	260	100				
KRW 225/2/50/25	45	52	1160	1100	1040	990	910	850	780	690	610	340	60		
KRW 315/4/50/25 KRW 355/4/60/35	39	51 55	1760 3600	1580	1390	1110 2900	840	370	1220	F70					
KRW 400/4/70/40	42 44	55 54	4970	3370 4710	3130 4400	4110	2590 3730	2090 3320	1330 2750	570 2090	1160				
KRW 450/4/70/40	51	59	6650	6360	6010	5710	5430	5120	4730	4280	3850	2290			
KRW 500/4/80/50	52	62	9700	9380	9040	8670	8310	7920	7460	6890	6260	4590	2290		
KRD 355/4/60/35	37	50	2840	2640	2410	2110	1860	1510	1050	450	0200	1000	2230		
KRD 450/4/70/40	47	57	5830	5570	5320	5060	4810	4550	4230	3930	3610	2840	1840		
KRD 500/4/80/50 A	52	58	8430	8120	7810	7490	7110	6670	6300	5870	5420	4530	3560	1330	
KRD 560/6/80/50	41	53	7460	6940	6300	5630	5110	4290	3490	2410	400				
KRD 560/4/80/50	55	66	11970	11630	11260	10870	10480	10080	9640	9140	8620	7230	5470	2920	840
KRD 630/6/100/50	44	55	8740	8280	7700	7140	6440	5750	5060	4310	3370	920			
KRD 630/4/100/50	55	66	12100	11800	11510	11230	10940	10640	10320	9980	9620	8810	7760	6210	4620
SKRW 315/4/50/25	34	43	1770	1620	1400	1170	650								
SKRW 355/4/60/35	39	49	3580	3350	3070	2830	2450	1880	110						
SKRW 400/4/70/40	42	49	4940	4540	4230	3830	3470	3040	2460	1670	780				
SKRW 500/4/80/50	48	52	9540	9130	8640	8130	7630	7130	6640	6020	5520	4020			
SKRD 355/4/60/35	34	43	2800	2510	2270	2030	1670	1300	650	140					
SKRD 450/4/70/40	46	52	5430	5230	5000	4770	4520	4240	4000	3640	3290	2380	860		
SKRD 500/6/70/40	36	48	4620	4230	3800	3480	2980	2490	1490				0.5.1		
SKRD 500/4/80/50	48	54	8050	7830	7520	7060	6650	6210	5820	5450	5040	4150	2560	690	
SKRD 560/6/80/50	36	46	7600	6990	6220	5630	5040	4280	3220	1810	400				
SKRD 630/6/100/50	43	52	8450	8010	7450	6900	6230	5490	4750	3780	2670				



For complete information see the "general technical information" and descriptions on the product pages.

#### Position, installation and drainage holes

Models can be installed in any position, however types KR must be installed with the inspection flap facing downwards or to the side. The swing-out areas need to be cleared and accessed easily for service and maintenance.

If condensation occurs (e.g. ntermittent operation, high humidity or varying temperatures) the fan must be installed in a way that the condensation can drain off unhindered.

Additional holes may have to be drilled into the casing at the appropriate positions. Alternatively, the duct system may have to be insulated to avoid condensation.

#### ■ Noise/vibration transmission

To be prevented from ducting and building. Therefore, the fan should be secured with sound insulation and connected flexibly to the ducting.

For this, see VS accessories.

#### Explosion proof models

With regards to operating conditions and norms please refer to chapter "Information for planning - explosion proof". The ex-protected types correspond to unit group II, category 2G for operation in zone 1 and 2 pursuant to Directive 2014/34/EU (ATEX). The motors of the KVD Ex range are equipped with positive temperature coefficient (PTC) thermistors (to monitor the temperature of windings) as standard. They are prewired to the terminal board and must be connected to the motor protection tripping unit MSA.

This makes the KVD Ex fans suitable for speed control that can be carried out via TSD or TSSD transformer controllers. The minimum voltage should not drop below 100 V. Electronic speed control or regulation by means of a frequency

inverter are not permitted.

#### ■ Motor - Impeller

All AC types incorporate a motor with external rotor motor protected to IP 44 or IP 54 within the air flow. They conform to DIN EN 60034/VDE 0530 and DIN EN 60335-1/VDE 0700-1 with an insulation class F, plus moisture protection.

The EC types are equipped with energy-saving, speed-controllable EC external rotor motors protected to IP 44 or IP 54 for the lowest operating costs.

All motors are maintenance free, interference-free, speed controllable and suitable for continuous operation.

The ball bearings are greased for life.

The centrifugal impellers are pressed onto the rotating part of the motor body and dynamically balanced to DIN ISO 1940 T.1 – class 6.3 as one unit.

#### Speed control

All InlineVent® AC rectangular fans are speed controllable via voltage reduction of 0 – 100 %. Thereby the operating level can be adapted to the required air flow volume. Our speed controllers are suitable to control various fans (one or more) up to their maximum nominal output. When selecting a controller not shown on the chart, allow for a 10 % safety margin. It is possible to control 3 ph.-fans through frequency inverter by on-

through frequency inverter by onsite installation of sine filters between inverter and motor. All EC types are steplessly controllable via speed-potentiometer. Regulation is also possible via three-step switch or steplessly via universal control system or electronic differential pressure/temperature controller. For example, the performance

levels are shown on the charac-

# teristic curve.

The air flow direction of centrifugal fans is fixed and cannot be reversed; but it can be specified in all units through the installation method. The rotational direction and the direction of air flow are marked with arrows on the units and must be checked when installing.

☐ Incorrect direction of rotation

If the fan is operated in the incorrect direction of rotation the AC motor will be overloaded and the thermal contacts will trip. Typical indication of this is a virtually low fan efficiency combined with high noise levels and vibration.

#### ☐ Air flow temperature

All models are applicable in the range of -40 °C to at least +60 °C, types KV Ex from -20 °C to +40 °C.

The upper temp. threshold value varies between the models and can be found at the related charts on the individual product page.

#### The models and their specifications

#### KV

Centrifugal rectangular fans with forward curved impeller paddles and swing-out motor impeller unit. Low-noise centrifugal impellers in volute casing for high pressure levels.

 $\dot{V}=920-8500~\text{m}^3/\text{h}.$  Compact and flat design for versatile usage in exhaust and fresh air systems in commercial and industrial applications.



#### KR and KR EC

Rectangular fans with backward curved impeller paddles, with optional energy-saving EC motor technology. High performance centrifugal impellers with high efficiency. Swing-out motor impeller unit.

 $V=540-14\,410$  m $^3/h$ . For conveying higher volume flow rates in extract and fresh air systems.

Uncritical in extraction of polluted air



#### SKR and SKR EC

High performance centrifugal impellers (backward curved) in sound insulated casing with good damping characteristics for noise-critical applications, with optional energy-saving EC motor technology. Performance figures similar to KR.

 $\dot{V}=1770-13700~\text{m}^3/\text{h}.$  For further reduction of intake and exhaust air noise levels, rectangular attenuators (KLF, accessory) are recommended. Exhaust and fresh air fans for applications with specific noise level requirements.







Rectangular centrifugal fan with forward curved impeller blades and swing-out motor impeller unit.

- Low-noise centrifugal impellers in aerodynamic galvanised steel casing for high pressure levels.
- Compact and flat design for use in extract and fresh air systems in commercial and industrial applications.

#### ■ Specification

#### □ Casing

Made of galvanised steel and flanged on both ends. Space saving, compact design.

Easy to clean and service thanks to the swing-out motor impeller unit.

#### ☐ Impeller

Forward curved centrifugal impeller made of galvanised steel, highly efficient with low noise levels. Aerodynamically optimised casing; intake air flow by means of an inlet nozzle.

#### ■ Motor

Totally enclosed, maintenancefree external rotor motor with directly fitted impeller, protected to IP 44.

Windings with protection against moisture. Ball bearing mounted and interference-free. Dynamically balanced with

resilient motor mounting bracket for low vibration and low noise operation.

#### □ Electrical connection

Dim. in mm

Terminal box (IP 55 for 3 ph.- or IP 44 for 1 ph.-types) is mounted with a permanently attached cable.

#### ■ Motor protection

Model KVW through thermal contacts which are connected in series with winding and automatically resets. Model KVD through built-in thermal contacts which must be connected to a motor full protection device.

#### ☐ Speed control

By voltage reduction using a 5 speed transformer controller (recommended) or an electronic controller (stepless). The performance figures at corresponding voltages are given in the performance curve.

#### □ Sound Levels

444

422

400

Swing-out area

Above the performance curve, total values and spectrum are given for:

ø9

- Sound level case breakout
- Sound level intake
- Sound level exhaust
  The sound power level (on intake) is additionally shown within the performance curve for corresponding control voltages.
  In the table below you can also find:
- Case breakout sound level at 4 m (free field conditions).

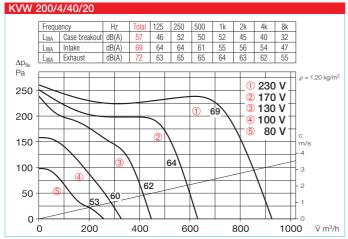
#### Installation

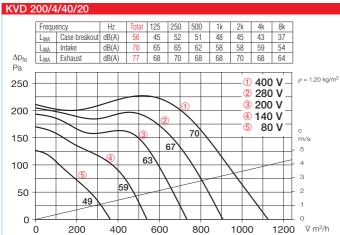
Possible in any position. Attention should be paid to accessibility/swing out.

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Modul. system componer	nts 370

Туре	Ref. no.	Air flow volume, free discharge		Sound press. case breakout	Power co	nsumption	Wiring diagram		ir flow ature at Control	Weight net approx.	with	Speed control nout otect. unit	٧	vith	Motor full protectio device to connect t built-in thermal conta	
		V m³/h	min-1	dB(A) in 4 m	kW	Α	No.	+°C	+°C	kg	Туре	Ref. no.	Type	Ref. no.	Type	Ref. no.
1-phase motor, 230	V, 50 Hz, ca	apacitor mot	or, protect	ion to IP 44												
KVW 200/4/40/20	5675	925	810	37	0.21	0,95	508	60	50	11	TSW 1,5	1495	_	_	_	_
3-phase motor, 230	/400 <b>V</b> , 50 H	lz, protected	to IP 44													
KVD 200/4/40/20	5676	1130	1260	36	0.25	0,82/0,47	860	70	70	8,6	TSD 0,8	1500	RDS 1	1314	MD	5849







# Shutters, grilles and louvres 420, 487 on Filters, heaters and attenuators 421 on Temperature control systems for heaters 427, 432 on Speed controllers and motor full protection devices 525 on

#### Accessories

#### Gravity shutter

Type VK 40/20 Ref. no. 0874 External airflow operated gravity shutter made of polymer, light grey.

#### External louvres

#### Type WSG 40/20 Ref. no. 0109

Robust construction made of aluminium extrusion profile, natural colour anodised.

#### Volume control damper for ducting

Type JVK 40/20 Ref. no. 6910 Casing made with flanges on both sides. The control mechanism is outside the airstream. For electrical drive, see STM, accessory.

#### Circular spigot

#### Type FSK 40/20 Ref. no. 0832

For cost effective adaption of rectangular fans into circular ducting systems with Ø 200 mm.

#### Flexible connectors

#### Type VS 40/20 Ref. no. 5694

Flexible in-duct connector with flanges on both sides.

#### Counterflange

#### Type GF 40/20 Ref. no. 6919

Flange frames made of galvanised steel for connection to ducting.

#### Rectangular attenuator

Type KSD 40/20 Ref. no. 8728 For in-duct installation on intake or exhaust side.

#### Air-duct filter

## **Type KLF 40/20 G4** No. 8720 **Type KLF 40/20 F7** No. 8644

Bag filter with a large cross section area. Galvanised steel casing with flanges on both sides.

#### Electric heater battery

**Type EHR-K 6/40/20** No. 8702 **Type EHR-K 15/40/20** No. 8703

Heating elements enclosed in a galvanised steel casing with connecting flanges on both sides.

Temperature control system for electric heater battery

Type EHSD 16 Ref. no. 5003

Warm water heater battery
Type WHR 2/40/20
No. 8782
Type WHR 4/40/20
No. 8783

For in-duct installation.

Temperature control system for warm water heater battery Type WHS HE Ref. no. 8319





























Rectangular centrifugal fan with forward curved impeller blades and swing-out motor impeller unit.

- Low-noise centrifugal impellers in aerodynamic galvanised steel casing for high pressure levels.
- Compact and flat design for use in extract and fresh air systems in commercial and industrial applications.

#### Specification

#### □ Casing

Made of galvanised steel and flanged on both ends. Space saving, compact design.

Easy to clean and service thanks to the swing-out motor impeller unit.

#### ☐ Impeller

Forward curved centrifugal impeller made of galvanised steel, highly efficient with low noise levels. Aerodynamically optimised casing; intake air flow by means of an inlet nozzle.

#### ■ Motor

Totally enclosed, maintenancefree external rotor motor with directly fitted impeller, protected to IP 44.

Windings with protection against moisture. Ball bearing mounted and interference-free.



Dynamically balanced with resilient motor mounting bracket for low vibration and low noise operation.

#### ☐ Electrical connection

Terminal box (IP 55 for 3 ph., IP 65 for explosion-proof types) is mounted with permanently attached cable.

#### ■ Motor protection

Through built-in thermal contacts which must be connected to a motor full protection device.

#### □ Speed control

By voltage reduction using a 5 speed transformer controller (recommended) or an electronic controller (stepless). The performance figures at corresponding voltages are given in the performance curve.

#### □ Sound Levels

522 500

Above the performance curve, total values and spectrum are given for:

- Sound level case breakout
- Sound level intake
- Sound level exhaust
  The sound power level (on intake) is additionally shown within the performance curve for corresponding control voltages.
  In the table below you can also find:
- Case breakout sound level at 4 m (free field conditions).

#### ■ Installation

Possible in any position. Attention should be paid to accessibility/swing out.

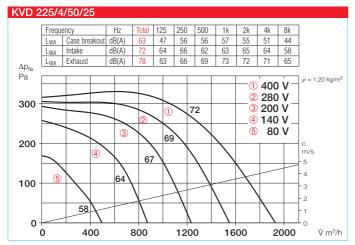
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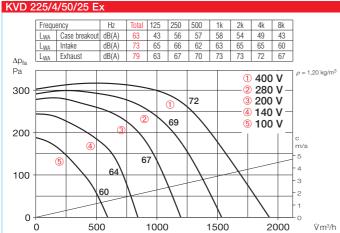
#### ■ Explosion-proof models

Thermal motor protection through built-in PTC (positive temperature coefficient) thermistors which must be connected to a tripping unit MSA. Using this motor protection enables the speed control where a minimum voltage of 100 V must be maintained.

Туре	Ref. no.	Air flow volume, free discharge	Nominal R.P.M.	Sound press. case breakout	Power cor	nsumption	Wiring diagram	Max. a tempera Nom. vol.	ature at	Weight net approx.	with motor pro		١	vith	Motor full protection device to connect built-in thermal conta	
		Ÿ m³/h	min-1	dB(A) in 4 m	kW	Α	No.	+°C	+°C	kg	Туре	Ref. no.	Туре	Ref. no.	Туре	Ref. no.
3 ph. motor, 230/40	n. motor, 230/400 V, 50 Hz, protection to IP 44															
KVD 225/4/50/25	5679	1950	1270	43	0.54	1.6/0.93	860	65	60	17	TSD 1,5	1501	RDS 2	1315	MD	5849
Explosion-proof Ex	e II, temper	ature class T	1 – T3, 3-	phase 400 V,	50 Hz, p	rotection	to IP 44									
KVD 225/4/50/25 E	<b>x</b> 6810	1900	1280	43	0.53	0.92	899	40	40	17	TSD 1,5	1501	_	_	MSA	1289







#### Accessory details Page Shutters, grilles and louvres 420, 487 on Filters, heaters and attenuators 421 on Temperature control systems for heaters 427, 432 on Speed controllers and motor full protection devices 525 on

#### Accessories

#### Gravity shutter

Type VK 50/25 Ref. no. 0875 External airflow operated gravity shutter made of polymer, light grey.

#### External louvres

#### Type WSG 50/25 Ref. no. 0110

Robust construction made of aluminium extrusion profile, natural colour anodised.

#### Volume control damper for ducting

Type JVK 50/25 Ref. no. 6911 Casing made with flanges on both sides. The control mechanism is outside the airstream. For electrical drive, see STM, accessory.

#### Circular spigot

#### Type FSK 50/25 Ref. no. 0833

For cost effective adaption of rectangular fans into circular ducting systems with Ø 250 mm.

#### Flexible connectors

#### Type VS 50/25 Ref. no. 5695

Flexible in-duct connector with flanges on both sides.

- for Ex-fans Type VS 50/25 Ex Ref. no. 0265

#### Counterflange

#### Type GF 50/25 Ref. no. 6920

Flange frames made of galvanised steel for connection to ducting.

#### Rectangular attenuator

#### **Type KSD 50/25-30** No. 8729 For in-duct installation on intake or exhaust side.

#### Air-duct filter

#### Type KLF 50/25-30 G4 No. 8721 **Type KLF 50/25-30 F7** No. 8645

Bag filter with a large cross section area. Galvanised steel casing with flanges on both sides.

#### Electric heater battery Type EHR-K 8/50/25-30 No. 8704 Type EHR-K 24/50/25-30 No. 8705

Heating elements enclosed in a galvanised steel casing with connecting flanges on both sides.

Temperature control system for electric heater battery

Type EHSD 16 Ref. no. 5003

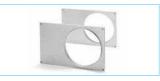
Warm water heater battery **Type WHR 2/50/25-30** No. 8784 Type WHR 4/50/25-30 No. 8785 For in-duct installation.

Temperature control system for warm water heater battery Type WHS HE Ref. no. 8319



























#### Rectangular centrifugal fan with forward curved impeller blades and swing-out motor impeller

- Low-noise centrifugal impellers in aerodynamic galvanised steel casing for high pressure levels.
- Compact and flat design for use in extract and fresh air systems in commercial and industrial applications.

#### Specification

#### Casing

Made of galvanised steel and flanged on both ends. Space saving, compact design.

☐ Easy to clean and service thanks to the swing-out motor impeller unit.

#### Impeller

Forward curved centrifugal impeller made of galvanised steel, highly efficient with low noise levels. Aerodynamically optimised casing; intake air flow by means of an inlet nozzle.

#### Motor

Totally enclosed, maintenancefree external rotor motor with directly fitted impeller, protected to IP 44.

Windings with protection against moisture. Ball bearing mounted and interference-free.



for low vibration and low noise operation.

#### ■ Electrical connection

Terminal box (IP 55 for 3 ph., IP 65 for explosion-proof types) is mounted with permanently attached cable.

#### ■ Motor protection

Through built-in thermal contacts which must be connected to a motor full protection device.

#### ■ Speed control

By voltage reduction using a 5 speed transformer controller (recommended) or an electronic controller (stepless). The performance figures at corresponding voltages are given in the performance curve.

#### Sound Levels

522 500

Above the performance curve, total values and spectrum are given for:

- Sound level case breakout
- Sound level intake
- Sound level exhaust The sound power level (on intake) is additionally shown within the performance curve for corresponding control voltages. In the table below you can also
- Case breakout sound level at 4 m (free field conditions).

#### ■ Installation

Possible in any position. Attention should be paid to accessibility/swing out.

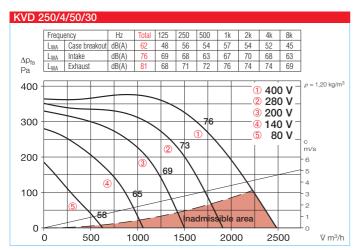
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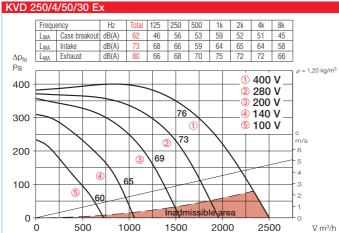
#### Explosion-proof models

Thermal motor protection through built-in PTC (positive temperature coefficient) thermistors which must be connected to a tripping unit MSA. Using this motor protection enables the speed control where a minimum voltage of 100 V must be maintained.

Туре	Ref. no.	Air flow volume, free discharge	Nominal R.P.M.	Sound press. case breakout	Power cor	nsumption	Wiring diagram	Max. a tempera Nom. vol.	ir flow ature at Control	Weight net approx.	with	Speed contr nout otect. unit	٧	vith	Motor full protection device to connect built-in thermal contact to the contact the contac	
		Ÿ m³/h	min-1	dB(A) in 4 m	kW	Α	No.	+°C	+°C	kg	Туре	Ref. no.	Type	Ref. no.	Type	Ref. no.
3-phase motor, 230	3-phase motor, 230/400 V, 50 Hz, protected to IP 44															
KVD 250/4/50/30	5682	2200	1260	42	0.72	2.5/1.5	860	60	60	21	TSD 1,5	1501	RDS 2	1315	MD	5849
Explosion-proof Ex	e II, temper	ature class 1	1 – T3, 3-	phase 400 V	, 50 Hz, p	rotection	to IP 44									
KVD 250/4/50/30 E	x 6811	2300	1240	42	0.74	1.5	899	40	40	21	TSD 1,5	1501	_	_	MSA	1289







#### Accessory details Page Shutters, grilles and louvres 420, 487 on Filters, heaters and 421 on attenuators Temperature control systems for heaters 427, 432 on Speed controllers and motor full protection devices 525 on

#### Accessories

#### Gravity shutter

Type VK 50/30 Ref. no. 0876 External airflow operated gravity shutter made of polymer, light grey.

#### External louvres

#### Type WSG 50/30 Ref. no. 0111

Robust construction made of aluminium extrusion profile, natural colour anodised.

#### Volume control damper for ducting

Type JVK 50/30 Ref. no. 6912 Casing made with flanges on both sides. The control mechanism is outside the airstream. For electrical drive, see STM, accessory.

#### Circular spigot

#### Type FSK 50/30 Ref. no. 0837

For cost effective adaption of rectangular fans into circular ducting systems with Ø 315 mm.

#### Flexible connectors

#### Type VS 50/30 Ref. no. 5696

Flexible in-duct connector with flanges on both sides.

- for Ex-fans Type VS 50/30 Ex Ref. no. 0266

#### Counterflange

#### Type GF 50/30 Ref. no. 6921

Flange frames made of galvanised steel for connection to ducting.

#### Rectangular attenuator **Type KSD 50/25-30** No. 8729

For in-duct installation on intake or exhaust side.

#### Air-duct filter

#### Type KLF 50/25-30 G4 No. 8721 **Type KLF 50/25-30 F7** No. 8645

Bag filter with a large cross section area. Galvanised steel casing with flanges on both sides.

#### Electric heater battery Type EHR-K 8/50/25-30 No. 8704 Type EHR-K 24/50/25-30 No. 8705

Heating elements enclosed in a galvanised steel casing with connecting flanges on both sides.

Temperature control system for electric heater battery

Type EHSD 16 Ref. no. 5003

Warm water heater battery **Type WHR 2/50/25-30** No. 8784 Type WHR 4/50/25-30 No. 8785 For in-duct installation.

Temperature control system for warm water heater battery Type WHS HE Ref. no. 8319



























Rectangular centrifugal fan with forward curved impeller blades and swing-out motor impeller

- Low-noise centrifugal impellers in aerodynamic galvanised steel casing for high pressure levels.
- Compact and flat design for use in extract and fresh air systems in commercial and industrial applications.

#### Specification

#### Casing

Made of galvanised steel and flanged on both ends. Space saving, compact design.

☐ Easy to clean and service thanks to the swing-out motor impeller unit.

#### Impeller

Forward curved centrifugal impeller made of galvanised steel, highly efficient with low noise levels. Aerodynamically optimised casing; intake air flow by means of an inlet nozzle.

#### Motor

Totally enclosed, maintenancefree external rotor motor with directly fitted impeller, protected to IP 44.

Windings with protection against moisture. Ball bearing mounted and interference-free.



silient motor mounting bracket for low vibration and low noise operation.

#### ■ Electrical connection

Terminal box (IP 55 for 3 ph., IP 65 for explosion-proof types) is mounted with permanently attached cable.

#### ■ Motor protection

Through built-in thermal contacts which must be connected to a motor full protection device.

#### ■ Speed control

By voltage reduction using a 5 speed transformer controller (recommended) or an electronic controller (stepless). The performance figures at corresponding voltages are given in the performance curve.

#### Sound Levels

644

622 600

Above the performance curve, total values and spectrum are given for:

- Sound level case breakout
- Sound level intake
  - Sound level exhaust The sound power level (on intake) is additionally shown within the performance curve for corresponding control voltages. In the table below you can also
- Case breakout sound level at 4 m (free field conditions).

#### ■ Installation

Possible in any position. Attention should be paid to accessibility/swing out.

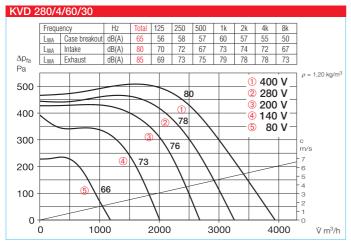
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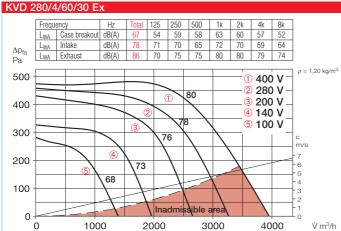
#### Explosion-proof models

Thermal motor protection through built-in PTC (positive temperature coefficient) thermistors which must be connected to a tripping unit MSA. Using this motor protection enables the speed control where a minimum voltage of 100 V must be maintained.

Туре	Ref. no.	Air flow volume, free discharge	Nominal R.P.M.	Sound press. case breakout	Power cor	sumption	Wiring diagram	Max. a tempera Nom. vol.	ature at	Weight net approx.	with	speed contr lout otect. unit	V	vith	Motor full protection device to connect built-in thermal contacts	
		V m³/h	min-1	dB(A) in 4 m	kW	Α	No.	+°C	+°C	kg	Type	Ref. no.	Type	Ref. no.	Туре	Ref. no.
3-phase motor, 230	3-phase motor, 230/400 V, 50 Hz, protected to IP 44															
KVD 280/4/60/30	5684	3950	1300	45	1.67	5.4/3.1	860	65	60	35	TSD 5,5	1503	RDS 7	1578	MD	5849
Explosion-proof Ex	e II, temper	ature class T	1 – T3, 3-	-phase 230/4	00 V, 50 H	lz, protec	tion to IP 44	ļ								
KVD 280/4/60/30 E	<b>x</b> 6812	3450	1340	47	1.45	2.9	899	40	40	34	TSD 5,5	1503	_	_	MSA	1289







#### Accessory details Page Shutters, grilles and louvres 420, 487 on Filters, heaters and attenuators 421 on Temperature control systems for heaters 427, 432 on Speed controllers and motor

525 on

full protection devices

#### Accessories

#### Gravity shutter

Type VK 60/30 Ref. no. 0877 External airflow operated gravity shutter made of polymer, light grey.

#### External louvres

Type WSG 60/30 Ref. no. 0112

Robust construction made of aluminium extrusion profile, natural colour anodised.

#### Volume control damper for ducting

Type JVK 60/30 Ref. no. 6913 Casing made with flanges on both sides. The control mechanism is outside the airstream. For electrical drive, see STM, accessory.

#### Circular spigot

Type FSK 60/30 Ref. no. 0834

For cost effective adaption of rectangular fans into circular ducting systems with Ø 315 mm.

#### Flexible connectors

Type VS 60/30 Ref. no. 5697 Flexible in-duct connector with

flanges on both sides. - for Ex-fans

Type VS 60/30 Ex Ref. no. 0267

#### Counterflange

Type GF 60/30 Ref. no. 6922

Flange frames made of galvanised steel for connection to ducting.

#### Rectangular attenuator **Type KSD 60/30-35** No. 8730

For in-duct installation on intake or exhaust side.

#### Air-duct filter

Type KLF 60/30-35 G4 No. 8722 Type KLF 60/30-35 F7 No. 8646

Bag filter with a large cross section area. Galvanised steel casing with flanges on both sides.

#### Electric heater battery Type EHR-K 15/60/30-35 No. 8706 Type EHR-K 30/60/30-35 No. 8707

Heating elements enclosed in a galvanised steel casing with connecting flanges on both sides.

Temperature control system for electric heater battery

Type EHSD 16 Ref. no. 5003

Warm water heater battery Type WHR 2/60/30-35 No. 8786 **Type WHR 4/60/30-35** No. 8787 For in-duct installation.

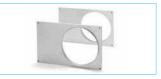
Temperature control system for warm water heater battery Type WHS HE<sup>1)</sup> Ref. no. 8319

1) In model WHR 4/60/30-35 the heat output is reduced



























Rectangular centrifugal fan with forward curved impeller blades and swing-out motor impeller unit.

- Low-noise centrifugal impellers in aerodynamic galvanised steel casing for high pressure levels.
- Compact and flat design for use in extract and fresh air systems in commercial and industrial applications.

#### Specification

#### □ Casing

Made of galvanised steel and flanged on both ends. Space saving, compact design.

Easy to clean and service thanks to the swing-out motor impeller unit.

#### ☐ Impeller

Forward curved centrifugal impeller made of galvanised steel, highly efficient with low noise levels. Aerodynamically optimised casing; intake air flow by means of an inlet nozzle.

#### ■ Motor

Totally enclosed, maintenancefree external rotor motor with directly fitted impeller, protected to IP 44.

Windings with protection against moisture. Ball bearing mounted and interference-free.



Dynamically balanced with resilient motor mounting bracket for low vibration and low noise operation.

#### ■ Electrical connection

Terminal box (IP 55 for 3 ph., IP 65 for explosion-proof types) is mounted with permanently attached cable.

#### ■ Motor protection

Through built-in thermal contacts which must be connected to a motor full protection device.

#### Speed control

By voltage reduction using a 5 speed transformer controller (recommended) or an electronic controller (stepless). The performance figures at corresponding voltages are given in the performance curve.

#### □ Sound Levels

644

622

Above the performance curve, total values and spectrum are given for:

- Sound level case breakout
- Sound level intake
- Sound level exhaust
  The sound power level (on intake) is additionally shown within the performance curve for corresponding control voltages.
  In the table below you can also find:
- Case breakout sound level at 4 m (free field conditions).

#### ■ Installation

Possible in any position. Attention should be paid to accessibility/swing out.

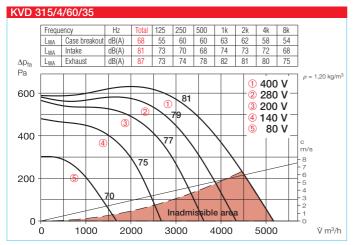
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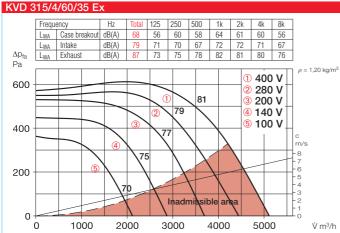
#### ■ Explosion-proof models

Thermal motor protection through built-in PTC (positive temperature coefficient) thermistors which must be connected to a tripping unit MSA. Using this motor protection enables the speed control where a minimum voltage of 100 V must be maintained.

Туре	Ref. no.	Air flow volume, free discharge	Nominal R.P.M.	Sound press. case breakout	Power cor	nsumption	Wiring diagram	Max. a tempera Nom. vol.	ature at	Weight net approx.	with motor pro		V	vith	Motor full protection device to connect built-in thermal contact	
		V m³/h	min-1	dB(A) in 4 m	kW	Α	No.	+°C	+°C	kg	Туре	Ref. no.	Type	Ref. no.	Туре	Ref. no.
3-phase motor, 230																
KVD 315/4/60/35	5686	4500	1350	48	2.06	6.8/3.9	860	60	55	42	TSD 5,5	1503	RDS 7	1578	MD	5849
Explosion-proof Ex	e II, temper	ature class T	1 – T3, 3-	phase 230/4	00 V, 50 H	łz, protec	tion to IP 44	ļ								
KVD 315/4/60/35 Ex	<b>c</b> 6813	4200	1370	48	2.0	4.0	899	40	40	42	TSD 5,5	1503	_	_	MSA	1289







# Accessory details Page Shutters, grilles and louvres 420, 487 on Filters, heaters and attenuators 421 on Temperature control systems for heaters 427, 432 on Speed controllers and motor full protection devices 525 on

#### Accessories

#### Gravity shutter

**Type VK 60/35** Ref. no. 0878 External airflow operated gravity shutter made of polymer, light grey.

#### External louvres

#### Type WSG 60/35 Ref. no. 0113

Robust construction made of aluminium extrusion profile, natural colour anodised.

#### Volume control damper for ducting

Type JVK 60/35 Ref. no. 6914 Casing made with flanges on both sides. The control mechanism is outside the airstream. For electrical drive, see STM, accessory.

#### Circular spigot

#### Type FSK 60/35 Ref. no. 0835

For cost effective adaption of rectangular fans into circular ducting systems with Ø 355 mm.

#### Flexible connectors

#### **Type VS 60/35** Ref. no. 5698

Flexible in-duct connector with flanges on both sides.

for Ex-fansType VS 60/35 Ex Ref. no. 0268

#### Counterflange

#### Type GF 60/35 Ref. no. 6923

Flange frames made of galvanised steel for connection to ducting.

#### Rectangular attenuator

Type KSD 60/30-35 No. 8730 For in-duct installation on intake or exhaust side.

#### Air-duct filter

#### Type KLF 60/30-35 G4 No. 8722 Type KLF 60/30-35 F7 No. 8646

Bag filter with a large cross section area. Galvanised steel casing with flanges on both sides.

#### Electric heater battery

#### Type EHR-K 15/60/30-35 No. 8706 Type EHR-K 30/60/30-35 No. 8707

Heating elements enclosed in a galvanised steel casing with connecting flanges on both sides.

# Temperature control system for electric heater battery Type EHSD 16 Ref. no. 5003

Warm water heater battery
Type WHR 2/60/30-35 No. 8786
Type WHR 4/60/30-35 No. 8787
For in-duct installation.

Temperature control system for warm water heater battery

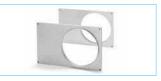
Type WHS HE<sup>1)</sup> Ref. no. 8319

1) In model WHR 4/60/30-35 the heat output is reduced



























Rectangular centrifugal fan with forward curved impeller blades and swing-out motor impeller unit.

- Low-noise centrifugal impellers in aerodynamic galvanised steel casing for high pressure levels.
- Compact and flat design for use in extract and fresh air systems in commercial and industrial applications.

#### Specification

#### □ Casing

Made of galvanised steel and flanged on both ends. Space saving, compact design.

Easy to clean and service thanks to the swing-out motor impeller unit.

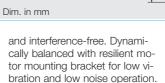
#### ☐ Impeller

Forward curved centrifugal impeller made of galvanised steel, highly efficient with low noise levels. Aerodynamically optimised casing; intake air flow by means of an inlet nozzle.

#### ■ Motor

Totally enclosed, maintenancefree external rotor motor with directly fitted impeller, protected to IP 44.

Windings with protection against moisture. Ball bearing mounted



#### ■ Electrical connection

Terminal box (IP 55 for 3 ph., IP 65 for explosion-proof types) is mounted with permanently attached cable.

#### ■ Motor protection

Through built-in thermal contacts which must be connected to a motor full protection device.

#### Speed control

By voltage reduction using a 5 speed transformer controller (recommended) or an electronic controller (stepless). The performance figures at corresponding voltages are given in the performance curve.

#### □ Sound Levels

744

722 700

Above the performance curve, total values and spectrum are given for:

- Sound level case breakout
- Sound level intake
- Sound level exhaust
   The sound power level (on intake) is additionally shown within the performance curve for corresponding control voltages.
   In the table below you can also find:
- Case breakout sound level at 4 m (free field conditions).

#### ■ Installation

Possible in any position. Attention should be paid to accessibility/swing out.

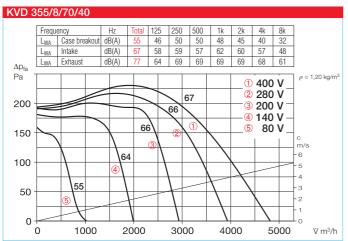
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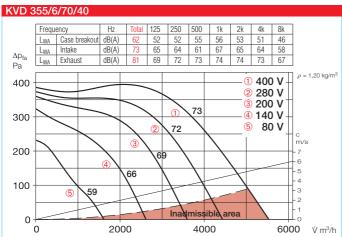
#### ■ Explosion-proof models

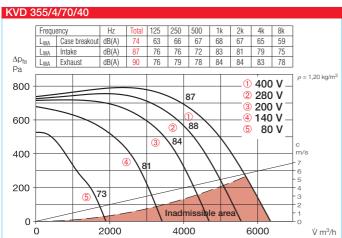
Thermal motor protection through built-in PTC (positive temperature coefficient) thermistors which must be connected to a tripping unit MSA. Using this motor protection enables the speed control where a minimum voltage of 100 V must be maintained.

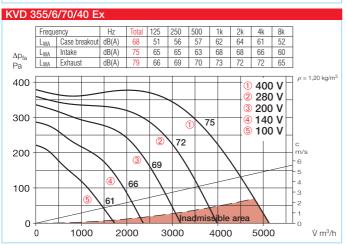
Туре	Ref. no.	Air flow volume, free discharge	Nominal R.P.M.	Sound press. case breakout	Power co	nsumption	Wiring diagram	Max. a tempera Nom. vol.		Weight net approx.	with	Speed cont hout otect. unit	٧	vith	device to	protection connect mal contacts
		Ÿ m³/h	min-1	dB(A) in 4 m	kW	Α	No.	+°C	+°C	kg	Туре	Ref. no.	Type	Ref. no.	Туре	Ref. no.
3-phase motor, 230	/400 V, 50 H	z, protected	to IP 44													
KVD 355/8/70/40	5687	4850	680	35	1.02	3.9/2.3	860	70	70	49	TSD 5,5	1503	RDS 4	1316	MD	5849
KVD 355/6/70/40	5688	5000	830	42	1.53	5.5/3.2	860	60	60	54	TSD 5,5	1503	RDS 4	1316	MD	5849
KVD 355/4/70/40	5689	5800	1400	54	3.48	10.4/6.0	860	70	50	60	TSD 11	1513	RDS 11	1332	MD	5849
Explosion-proof Ex	e II, temper	ature class 1	1 – T3, 3-	phase 230/4	00 V, 50 I	Hz, protec	tion to IP 44	1								
KVD 355/6/70/40 Ex	6814	4800	800	48	1.40	2.4	899	40	40	49	TSD 3,0	1502	_	_	MSA	1289











#### Accessories

#### Gravity shutter

Type VK 70/40 Ref. no. 0879 External airflow operated gravity shutter made of polymer, light grey.

#### External louvres

#### Type WSG 70/40 Ref. no. 0114

Robust construction made of aluminium extrusion profile, natural colour anodised.

#### Volume control damper for ducting

Type JVK 70/40 Ref. no. 6915 Casing made with flanges on both sides. The control mechanism is

sides. The control mechanism is outside the airstream. For electrical drive, see STM, accessory.

#### Circular spigot

#### Type FSK 70/40 Ref. no. 0840

For cost effective adaption of rectangular fans into circular ducting systems with Ø 400 mm.

#### Flexible connectors

#### **Type VS 70/40** Ref. no. 5699

Flexible in-duct connector with flanges on both sides.

- for Ex-fans

Type VS 70/40 Ex Ref. no. 0269

#### Counterflange

#### Type GF 70/40 Ref. no. 6924

Flange frames made of galvanised steel for connection to ducting.

#### Rectangular attenuator

Type KSD 70/40 Ref. no. 8731 For in-duct installation on intake or exhaust side.

#### Air-duct filter

## **Type KLF 70/40 G4** No. 8723 **Type KLF 70/40 F7** No. 8647

Bag filter with a large cross section area. Galvanised steel casing with flanges on both sides.

Warm water heater battery
Type WHR 2/70/40 No. 8788

Type WHR 4/70/40 No. 8789

For in-duct installation.

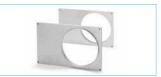
# Temperature control system for warm water heater battery Type WHS HE<sup>1)</sup> Ref. no. 8319

1) In model WHR 4/70/40 the heat output is reduced





















# Accessory details Page Shutters, grilles and louvres 420, 487 on

Filters, heaters and attenuators 421 on Temperature control systems for heaters 427, 432 on Speed controllers and motor full protection devices 525 on





Rectangular centrifugal fan with forward curved impeller blades and swing-out motor impeller unit.

- Low-noise centrifugal impellers in aerodynamic galvanised steel casing for high pressure levels.
- Compact and flat design for use in extract and fresh air systems in commercial and industrial applications.

#### ■ Specification

#### □ Casing

Made of galvanised steel and flanged on both ends. Space saving, compact design.

Easy to clean and service thanks to the swing-out motor impeller unit.

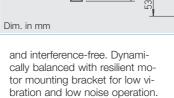
#### ☐ Impeller

Forward curved centrifugal impeller made of galvanised steel, highly efficient with low noise levels. Aerodynamically optimised casing; intake air flow by means of an inlet nozzle.

#### ■ Motor

Totally enclosed, maintenancefree external rotor motor with directly fitted impeller, protected to IP 44.

Windings with protection against moisture. Ball bearing mounted



#### ■ Electrical connection

Terminal box (IP 55) is mounted with a permanently attached cable.

#### ■ Motor protection

Through built-in thermal contacts which must be connected to a motor full protection device.

#### □ Speed control

By voltage reduction using a 5 speed transformer controller (recommended) or an electronic controller (stepless). The performance figures at corresponding voltages are given in the performance curve.

#### □ Sound Levels

844

822 800

Above the performance curve, total values and spectrum are given for:

- Sound level case breakout
- Sound level intake
  - Sound level exhaust
    The sound power level (on intake) is additionally shown within the performance curve for corresponding control voltages.
    In the table below you can also find:
- Case breakout sound level at 4 m (free field conditions).

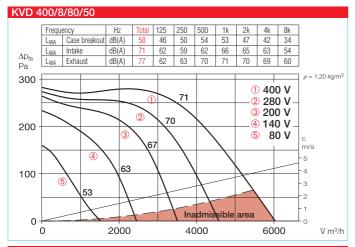
#### Installation

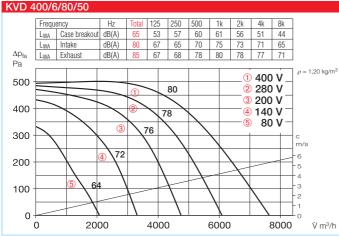
Possible in any position. Attention should be paid to accessibility/swing out.

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Туре	Ref. no.	Air flow volume, free discharge	Nominal R.P.M.	Sound press. case breakout	Power co	nsumption	Wiring diagram	Max. a temper Nom. vol.	ature at	Weight net approx.	s with motor pro		V	víth	device to	protection connect mal contacts
		V m³/h	min-1	dB(A) in 4 m	kW	Α	No.	+°C	+°C	kg	Type	Ref. no.	Type	Ref. no.	Туре	Ref. no.
3-phase motor, 23	0/400 <b>V</b> , 50 H	lz, protected	to IP 44													
KVD 400/8/80/50	5690	5400	640	38	1.29	5.1/2.9	860	70	70	66	TSD 5,5	1503	RDS 4	1316	MD	5849
KVD 400/6/80/50	5691	7600	860	45	2.81	9.1/5.3	860	70	50	70	TSD 7,0	1504	RDS 7	1578	MD	5849







#### Accessories

#### Gravity shutter

**Type VK 80/50** Ref. no. 0880 External airflow operated gravity shutter made of polymer, light grey.

#### External louvres

#### Type WSG 80/50 Ref. no. 0115

Robust construction made of aluminium extrusion profile, natural colour anodised.

#### Volume control damper for ducting

Type JVK 80/50 Ref. no. 6916 Casing made with flanges on both sides. The control mechanism is outside the airstream. For electrical drive, see STM, accessory.

#### Circular spigot

#### Type FSK 80/50 Ref. no. 0842

For cost effective adaption of rectangular fans into circular ducting systems with Ø 500 mm.

#### Flexible connectors

#### Type VS 80/50 Ref. no. 5700

Flexible in-duct connector with flanges on both sides.

#### Counterflange

#### **Type GF 80/50** Ref. no. 6925 Flange frames made of galvanised

steel for connection to ducting.

#### Rectangular attenuator Type KSD 80/50 Ref. no. 8732

For in-duct installation on intake or exhaust side.

#### Air-duct filter

## **Type KLF 80/50 G4** No. 8670 **Type KLF 80/50 F7** No. 8654

Bag filter with a large cross section area. Galvanised steel casing with flanges on both sides.

#### Warm water heater battery

**Type WHR 2/80/50** No. 8795

**Type WHR 4/80/50** No. 8796

For in-duct installation.



















#### Accessory details Page

Shutters, grilles and louvres

louvres 420, 487 on Filters, heaters and

attenuators 421 on Speed controllers and motor full protection devices 525 on





#### Rectangular centrifugal fan with forward curved impeller blades and swing-out motor impeller unit.

- Low-noise centrifugal impellers in aerodynamic galvanised steel casing for high pressure levels.
- Compact and flat design for use in extract and fresh air systems in commercial and industrial applications.

#### ■ Specification

#### □ Casing

Made of galvanised steel and flanged on both ends. Space saving, compact design.

Easy to clean and service thanks to the swing-out motor impeller unit.

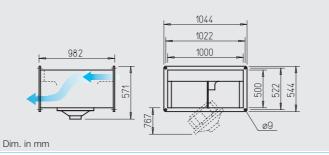
#### ☐ Impeller

Forward curved centrifugal impeller made of galvanised steel, highly efficient with low noise levels. Aerodynamically optimised casing; intake air flow by means of an inlet nozzle.

#### ■ Motor

Totally enclosed, maintenancefree external rotor motor with directly fitted impeller, protected to IP 44.

Windings with protection against moisture. Ball bearing mounted and interference-free.



NotePageSelection chart372Technical description373Design guidelines10 onModul. system components370

Dynamically balanced with resilient motor mounting bracket for low vibration and low noise operation.

#### ■ Electrical connection

Terminal box (IP 55) is mounted with a permanently attached cable.

#### ■ Motor protection

Through built-in thermal contacts which must be connected to a motor full protection device.

#### ■ Speed control

By voltage reduction using a 5 speed transformer controller (recommended) or an electronic controller (stepless). The performance figures at corresponding voltages are given in the performance curve.

#### □ Sound Levels

Above the performance curve, total values and spectrum are given for:

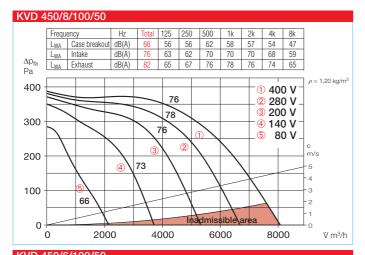
- Sound level case breakout
- Sound level intake
  - Sound level exhaust
    The sound power level (on intake) is additionally shown within the performance curve for corresponding control voltages.
    In the table below you can also find:
- Case breakout sound level at 4 m (free field conditions).

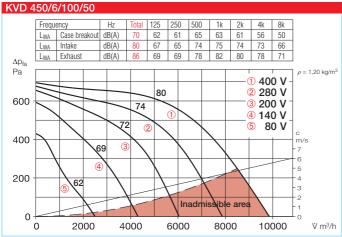
#### Installation

Possible in any position. Attention should be paid to accessibility/swing out.

Туре	Ref. no.	Air flow volume, free discharge	Nominal R.P.M.	Sound press. case breakout	Power co	nsumption	Wiring diagram	Max. a tempera Nom. vol.	ir flow ature at Control	Weight net approx.	wit	Speed cont hout otect. unit	W	ith	Motor full device to built-in therr	connect
		V m³/h	min-1	dB(A) in 4 m	kW	Α	No.	+°C	+°C	kg	Туре	Ref. no.	Туре	Ref. no.	Туре	Ref. no.
3-phase motor, 23	30/400 <b>V</b> , 50 H	lz, protected	to IP 44													
KVD 450/8/100/50	5692	7600	690	46	2.26	8.6/5.0	860	60	50	90	TSD 7,0	1504	RDS 7	1578	MD	5849
KVD 450/6/100/50	5693	8500	870	50	3.65	11.6/6.7	860	70	50	90	TSD 11	1513	<b>RDS 11</b>	1332	MD	5849







#### Accessories

#### Gravity shutter

Type VK 100/50 Ref. no. 0881 External airflow operated gravity shutter made of polymer, light grey.

#### External louvres

#### Type WSG 100/50 Ref. no. 0116

Robust construction made of aluminium extrusion profile, natural colour anodised.

#### Volume control damper for ducting

#### Type JVK 100/50 Ref. no. 6917

Casing made with flanges on both sides. The control mechanism is outside the airstream. For electrical drive, see STM, accessory.

#### Circular spigot

#### Type FSK 100/50 Ref. no. 0843

For cost effective adaption of rectangular fans into circular ducting systems with Ø 500 mm.

#### Flexible connectors

#### Type VS 100/50 Ref. no. 5701

Flexible in-duct connector with flanges on both sides.

#### Counterflange

#### Type GF 100/50 Ref. no. 6926 Flange frames made of galvanised

steel for connection to ducting.

# Rectangular attenuator Type KSD 100/50 Ref. no. 8733 For in dust installation on intoke or

For in-duct installation on intake or exhaust side.

#### Air-duct filter

**Type KLF 100/50 G4** No. 8671 **Type KLF 100/50 F7** No. 8655

Bag filter with a large cross section area. Galvanised steel casing with flanges on both sides.

#### Warm water heater battery

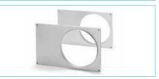
**Type WHR 2/100/50** No. 8797 **Type WHR 4/100/50** No. 8798

For in-duct installation.



















#### Accessory details Page

Shutters, grilles and

louvres 420, 487 on Filters, heaters and

attenuators 421 on Speed controllers and motor full protection devices 525 on







# KR EC Suitable for polluted air. (fig. similar)

Rectangular EC centrifugal fan with backward curved impeller and swing-out motor impeller unit.

- Highly efficient EC-motor for lowest operating costs.
- High performance with high efficiency impellers.
- Use in extract and fresh air systems for conveying higher air flow volume.
- Suitable for extraction of polluted air.

#### Special features

- ☐ High pressure and high volume specific centrifugal fan with high efficiency.
- Particularly easy to service (cleaning) thanks to the swingout motor impeller unit.
- ☐ For cleaning, easy access and therefore suitable for extraction of polluted air.
- Compact design, less space requirement and straight throughflow.

#### Specification

#### Casing

Dim. in mm

Made of galvanised steel. Flanged (20 mm) on both ends for in-duct installation.

#### ☐ Impeller

Centrifugal, backward curved impeller made of polymer. Aerodynamically optimised, intake air flow by means of an inlet nozzle.

#### ☐ Motor

Energy saving, speed controllable EC-external rotor motors with highest efficiency, protection to IP 44. With ball bearings, maintenance-free and interference-free. Motor and impeller are dynamically balanced.

#### ■ Motor protection

\_72

343

322

300

20

Integrated electronic temperature monitoring for EC-motor and electronics.

150 172 193

ø9

#### ■ Speed control

Stepless speed control with potentiometer or stepless speed control with universal control system (see table). Duties at different speeds are exemplarily given in the performance curve.

#### ☐ Electrical connection

Terminal box (IP 54) fitted to flying lead.

#### Installation

Installation in any position.
Allowance must be made for the motor swing out access.

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#### ■ Sound levels

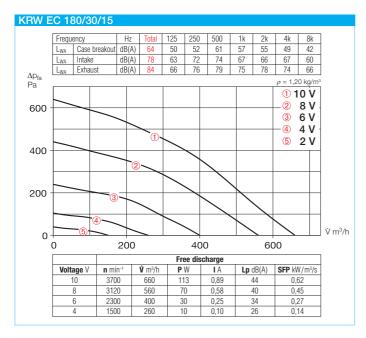
- Sound level case breakout
- Sound level intake
- Sound level exhaust
   In the table below as well as underneath the performance curve you can find additionally the sound pressure level at 4 m (free field conditions).

Туре	Ref no.	Air flow volume (FID)	Nominal R.P.M.	Sound press. case breakout	Motor power	Current	Wiring diagram	max.air flow temperature		contro	versal I system		Speed-pot sh	entiometer surfa	
		V m³∕h	min <sup>-1</sup>	dB(A) in 4 m	kW	Α	No.	+ °C	kg	Туре	Ref. no.	Туре	Ref. no.	Туре	Ref. no.
Single Phase, 230 V, 5	0/60 Hz, EC m	otor, protec	tion to IP 44	ļ											
KRW EC 180/30/15	8168	660	3700	44	0.11	0.90	979	60	6.2	EUR EC	1347	PU 10 <sup>1)</sup>	1734	PA 10 <sup>1)</sup>	1735

<sup>1)</sup> Multiple EC fans can normally be connected 2) alternative electronic differential pressure/temp. controller (EDR/ETR, No. 1437/1438) or three-step speed controller (SU/SA, No. 4266/4267), s. accessories







#### Accessories

#### Gravity shutter

**Type VK 30/15** Ref. no. 0735 Air stream operated louvres, light grey polymer.

#### External louvre

#### Type WSG 30/15 Ref. no. 0108

Heavy duty construction made from profile anodised aluminium extrusion.

#### Vol. control damper for ducting Type JVK 30/15 Ref. no. 6927

Casing with flanges on both sides. The control mechanism is outside the airstream. For electrical drive, see STM, accessory.

#### Circular spigot

#### Type FSK 30/15 Ref. no. 0831

For cost effective adaption of rectangular fans into circular ducting systems with Ø 160 mm.

#### Flexible connectors

#### Type VS 30/15 Ref. no. 6928

Flexible in-duct connector with flanges on both sides.

#### Counterflange

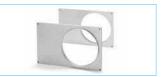
#### **Type GF 30/15** Ref. no. 6918

Flange frames made of galvanised steel for connection to ducting.













#### Accessory details Page

Shutters, grilles and louvres 420, 487 on Filters, heater batteries and attenuators 421 on Universal control system,

speed-potentiometer 539 on

electronic controller,







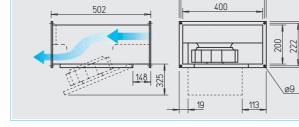
# KR EC Suitable for polluted air. (Fig. similar)

Rectangular EC centrifugal fan with backward curved impeller and swing-out motor impeller unit

- Highly efficient EC-motor for lowest operating costs.
- High performance with high efficiency impellers.
- Use in extract and fresh air systems for conveying higher air flow volume.
- Suitable for extraction of polluted air.

#### Special features

- ☐ High pressure and high volume specific centrifugal fan with high efficiency.
- Particularly easy to service (cleaning) thanks to the swingout motor impeller unit.
- ☐ For cleaning, easy access and therefore suitable for extraction of polluted air.
- Compact design, less space requirement and straight throughflow.



#### Specification

Dim. in mm

#### Casing

Made of galvanised steel. Flanged (20 mm) on both ends for in-duct installation.

#### ☐ Impeller

Centrifugal, backward curved impeller made of polymer. Aerodynamically optimised, intake air flow by means of an inlet nozzle.

#### ☐ Motor

Energy saving, speed controllable EC-external rotor motors with highest efficiency, protection to IP 44. With ball bearings, maintenance-free and interference-free. Motor and impeller are dynamically balanced.

#### ■ Motor protection

443

422

Integrated electronic temperature monitoring for EC-motor and electronics.

#### ■ Speed control

Stepless speed control with potentiometer or stepless speed control with universal control system (see table). Duties at different speeds are exemplarily given in the performance curve.

#### ☐ Electrical connection

Terminal box (IP 54) fitted to flying lead.

#### ☐ Installation

Installation in any position.
Allowance must be made for the motor swing out access.

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Selection chart	372
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#### ■ Sound levels

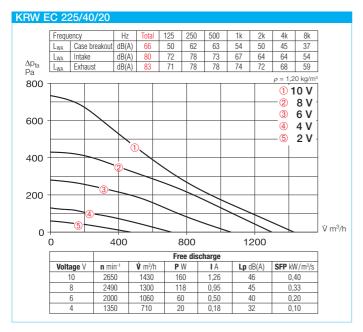
- Sound level case breakout
- Sound level intake
- Sound level exhaust
   In the table below as well as underneath the performance curve you can find additionally the sound pressure level at 4 m (free field conditions).

Туре	Ref. no.	Air flow volume (FID)	Nominal R.P.M.	Sound press. case breakout	Motor power	Current	Wiring diagram	max.air flow temperature		Unive control		flu	Speed-pot ish	entiometer surf	
		V m³/h	min <sup>-1</sup>	dB(A) in 4 m	kW	Α	No.	+ °C	kg	Туре	Ref. no.	Туре	Ref. no.	Туре	Ref. no.
Single Phase, 230 V,	50/60 Hz, EC n	notor, protec	tion to IP 44	ļ											
KRW EC 225/40/20	8169	1430	2650	46	0,16	1,26	979	60	9,8	EUR EC 1)	1347	PU 10 <sup>1)</sup>	1734	PA 10 <sup>1)</sup>	1735

<sup>1)</sup> Multiple EC fans can normally be connected 2) alternative electronic differential pressure/temp. controller (EDR/ETR, No. 1437/1438) or three-step speed controller (SU/SA, No. 4266/4267), s. accessories







#### Accessory details

Page

Shutters, grilles
and louvres 420, 487 on
Filters, heater batteries
and attenuators 421 on
Temperature control systems
for heater batteries 427, 432 on
Universal control system,
electronic controller,
speed-potentiometer 539 on

#### Accessories

#### Gravity shutter

**Type VK 40/20** Ref. no. 0874 Air stream operated louvres, light grey polymer.

#### External louvre

Type WSG 40/20 Ref. no. 0109

Heavy duty construction made from profile anodised aluminium extrusion.

#### Vol. control damper for ducting Type JVK 40/20 Ref. no. 6910

Casing with flanges on both sides. The control mechanism is outside the airstream. For electrical drive, see STM, accessory.

#### Circular spigot

Type FSK 40/20 Ref. no. 0832

For cost effective adaption of rectangular fans into circular ducting systems with Ø 200 mm.

#### Flexible connectors

Type VS 40/20 Ref. no. 5694

Flexible in-duct connector with flanges on both sides.

#### Counterflange

Type GF 40/20 Ref. no. 6919

Flange frames made of galvanised steel for connection to ducting.

# Rectangular attenuator Type KSD 40/20 Ref. no. 8728 For in-duct installation on intake or exhaust side

#### Air-duct filter

Type KLF 40/20 G4 No. 8720 Type KLF 40/20 F7 No. 8644

Bag filter with a large cross section area. Galvanised steel casing with flanges on both sides.

#### Electric heater battery

Type EHR-K 6/40/20 No 8702 Type EHR-K 15/40/20 No. 8703

Heating elements enclosed in a galvanised steel casing with connecting flanges on both sides.

# Temperature control system for electric heater battery

Type EHSD 16 Ref. no. 5003

Warm water heater battery
Type WHR 2/40/20 No. 8782
Type WHR 4/40/20 No. 8783
For in-duct installation.

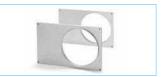
Temperature control system for warm water heater battery

Type WHS HE Ref. no. 8319

























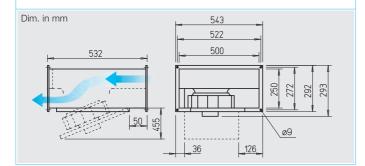






Suitable for polluted air.





#### ■ Features of KR EC and SKR EC

- ☐ Highly efficient EC-motor for lowest operating costs.
- ☐ High pressure and high volume with high efficiency centrifugal fan.
- Particularly easy to service (cleaning) thanks to the swingout motor impeller unit.
- ☐ For cleaning, easy access and therefore suitable for extraction of polluted air.
- ☐ Straight through-flow.
- Compact design, convenient installation.

#### ■ Special features of SKR EC

Lowest sound levels for intake and case breakout at higher power density.

#### Specification

#### □ Casing KR EC

Made of galvanised steel. Flanged (20 mm) on both ends for in-duct installation.

#### ☐ Casing SKR EC

As above, but with additional sound insulation with 50 mm thick mineral fibre board, inside lined with a sound deadening perforated plate.

#### Common features of KR EC and SKR EC

#### Impeller

Centrifugal, backward curved impeller made of polymer. Aero-dynamically optimised, intake air flow by means of an inlet nozzle.

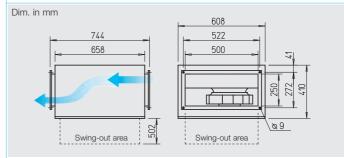
#### SKR EC - Sound insulated

#### **acousticline**

#### Lowest sound levels for intake and case breakout at higher power density.

Use in extract and fresh air systems with specific requirements for low noise levels.





#### ■ Motor

Energy-saving, speed controllable EC-external rotor motors with highest efficiency, protection to IP 44 (SKR EC IP 54). With ball bearings, maintenance-free and interference-free. Motor and impeller are dynamically balanced.

#### ■ Motor protection

Integrated electronic temperature monitoring for EC-motor and electronics.

#### □ Speed control

Stepless speed control with potentiometer or stepless speed control with universal control system (see table). Duties at different speeds are exemplarily given in the performance curve.

#### ■ Electrical connection

Terminal box (IP 54) fitted to flying lead.

#### ☐ Installation

Installation in any position. Allowance must be made for the motor swing out access.

#### Sound levels

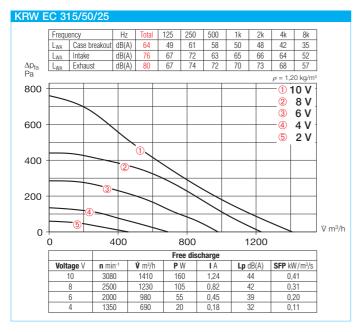
- Sound level case breakout
- Sound level intake
- Sound level exhaust In the table below as well as underneath the performance curve you can find additionally the sound pressure level at 4 m (free field conditions).

Туре	Ref. no.	Air flow volume (FID)	Nominal R.P.M.	Sound press. case breakout	Motor power	Current	Wiring diagram	max.air flow temperature			versal I system		Speed-pot ish	entiometer surf	
		Ÿ m³/h	min <sup>-1</sup>	dB(A) in 4 m	kW	Α	No.	+ °C	kg	Туре	Ref. no.	Туре	Ref. no.	Туре	Ref. no.
Single Phase, 230 V, 5	0/60 Hz, EC m	notor, protec	tion to IP 44												
KRW EC 315/50/25	8170	1410	3080	44	0.16	1.24	979	60	13.8	EUR EC	1) <b>2)</b> 1347	PU 10 <sup>1)</sup>	1734	PA 10 <sup>1)</sup>	1735
Sound insulated mode	I SKR EC – si	ngle phase,	230 V, 50/60	Hz, EC moto	r, protection	to IP 54									
SKRW EC 315/50/25	8182	2600	2020	47	0.36	1.57	1066	60	34.0	EUR EC	1347	PU 10 <sup>1)</sup>	1734	PA 10 <sup>1)</sup>	1735

<sup>1)</sup> Multiple EC fans can normally be connected 2) alternative electronic differential pressure/temp. controller (EDR/ETR, No. 1437/1438) or three-step speed controller (SU/SA, No. 4266/4267), s. accessories







#### SKRW EC 315/50/25 Hz Total 125 250 500 1k 2k 4k 8k Frequency L<sub>WA</sub> Case breakout dB(A) 58 68 66 72 52 57 47 50 Intake dR(A) 49 48 $L_{WA}$ L<sub>WA</sub> Exhaus 71 80 69 66 63 59 56 dB(A) ρ = 1,20 ka/m ∆p<sub>fa</sub> Pa 10 V 2 8 V 600 3 6 V 4 V (5) 2 V 400 200 V m³/h 0 500 1500 2000 2500 1000 Free discharge n min-1 SFP kW/m³/s $\textbf{Voltage} \ \lor$ **℣** m³/h PW IA Lp dB(A) 2020 2600 310 1.30 47 0.43 1650 2140 1730 170 0.74 43 0,29 0,21 100 0,45 1130 0,20 32 0,11



#### Accessory details Page

Shutters, grilles
and louvres 420, 487 on
Filters, heater batteries
and attenuators 421 on
Temperature control systems
for heater batteries 427, 432 on
Universal control system,
electronic controller,
speed-potentiometer 539 on

#### Accessories

Gravity shutter

Type VK 50/25 Ref. no. 0875 Air stream operated louvres, light grey polymer.



Type WSG 50/25 Ref. no. 0110

Heavy duty construction made from profile anodised aluminium extrusion.



Casing with flanges on both sides. The control mechanism is outside the airstream. For electrical drive, see STM, accessory.

Circular spigot

Type FSK 50/25 Ref. no. 0833

For cost effective adaption of rectangular fans into circular ducting systems with Ø 250 mm.



Flexible in-duct connector with flanges on both sides.

Counterflange

Type GF 50/25 Ref. no. 6920 Flange frames made of galvanised

Flange frames made of galvanised steel for connection to ducting.

Rectangular attenuator
Type KSD 50/25-30 No. 8729

For in-duct installation on intake or exhaust side.

Air-duct filter

Type KLF 50/25-30 G4 No. 8721 Type KLF 50/25-30 F7 Nor. 8645

Bag filter with a large cross section area. Galvanised steel casing with flanges on both sides.

Electric heater battery

Type EHR-K 8/50/25-30 No. 8704

Type EHR-K 24/50/25-30 No. 8705

Heating elements enclosed in a galvanised steel casing with connecting flanges on both sides.

Temperature control system for electric heater battery

Type EHSD 16 Ref. no. 5003

Warm water heater battery
Type WHR 2/50/25-30 No. 8784
Type WHR 4/50/25-30 No. 8785
For in-duct installation.

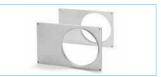
Temperature control system for warm water heater battery

Type WHS HE Ref. no. 8319

























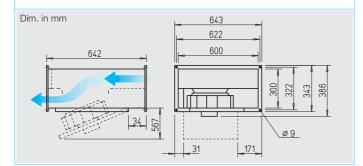




#### KR EC

Suitable for polluted air.





#### ■ Features of KR EC and SKR EC

- ☐ Highly efficient EC-motor for lowest operating costs.
- ☐ High pressure and high volume with high efficiency centrifugal fan.
- Particularly easy to service (cleaning) thanks to the swingout motor impeller unit.
- ☐ For cleaning, easy access and therefore suitable for extraction of polluted air.
- ☐ Straight through-flow.
- Compact design, convenient installation.

#### ■ Special features of SKR EC

Lowest sound levels for intake and case breakout at higher power density.

#### Specification

#### ☐ Casing KR EC

Made of galvanised steel. Flanged (20 mm) on both ends for in-duct installation.

#### ☐ Casing SKR EC

As above, but with additional sound insulation with 50 mm thick mineral fibre board, inside lined with a sound deadening perforated plate.

#### Common features of KR EC and SKR EC

#### Impeller

Centrifugal, backward curved impeller made of polymer. Aero-dynamically optimised, intake air flow by means of an inlet nozzle.

#### SKR EC - Sound insulated

#### **acousticline**

#### Lowest sound levels for intake and case breakout at higher power density.

Use in extract and fresh air systems with specific requirements for low noise levels.





#### ■ Motor

Energy-saving, speed controllable EC-external rotor motors with highest efficiency, protection to IP 44. With ball bearings, maintenance-free and interference-free. Motor and impeller are dynamically balanced.

#### ■ Motor protection

Integrated electronic temperature monitoring for EC-motor and electronics.

#### □ Speed control

Stepless speed control with potentiometer or stepless speed control with universal control system (see table). Duties at different speeds are exemplarily given in the performance curve.

#### □ Electrical connection

Terminal box (IP 54) fitted to flying lead.

#### ☐ Installation

Installation in any position. Allowance must be made for the motor swing out access.

#### Sound levels

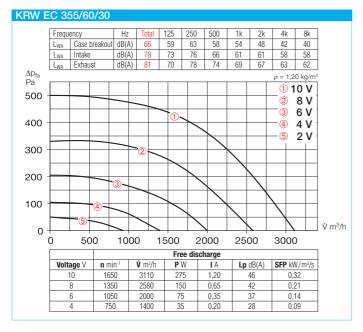
- Sound level case breakout
- Sound level intake
- Sound level exhaust In the table below as well as underneath the performance curve you can find additionally the sound pressure level at 4 m (free field conditions).

Туре	Ref. no.	Air flow volume (FID)	Nominal R.P.M.	Sound press. case breakout	Motor power	Current	Wiring diagram	max.air flow temperature			versal I system	flu	Speed-pot ish	entiometer surf	
		V m³∕h	min <sup>-1</sup>	dB(A) in 4 m	kW	А	No.	+ °C	kg	Туре	Ref. no.	Туре	Ref. no.	Туре	Ref. no.
Single Phase, 230 V,	50/60 Hz, EC n	notor, protec	tion to IP 54												
KRW EC 355/60/30	8171	3110	1650	46	0.37	1.59	1066	60	25.0	EUR EC	1) <b>2)</b> 1347	PU 10 <sup>1)</sup>	1734	PA 10 <sup>1)</sup>	1735
Sound insulated mod	lel SKR EC – s	ingle phase,	230 V, 50/60	Hz, EC moto	r, protection	to IP 54									
SKRW EC 355/60/30	8176	3950	2200	51	0.84	3.94	982	60	44.5	EUR EC	1347	PU 10 <sup>1)</sup>	1734	PA 10 <sup>1)</sup>	1735
Sound insulated mod	lel SKR EC – tl	ree phase, 4	100 V, 50/60	Hz, EC motor	, protection	to IP 54									
SKRD EC 355/60/30	8296	4550	2500	52	1.16	1.81	1005	60	44.5	EUR EC	1) <b>2)</b> 1347	PU 10 <sup>1)</sup>	1734	PA 10 <sup>1)</sup>	1735

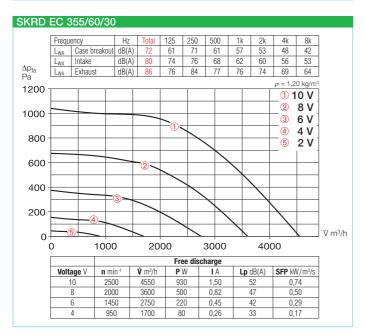
<sup>1)</sup> Multiple EC fans can normally be connected 2) alternative electronic differential pressure/temp. controller (EDR/ETR, No. 1437/1438) or three-step speed controller (SU/SA, No. 4266/4267), s. accessories







#### SKRW EC 355/60/30 Hz Total 125 250 500 1k 2k 4k 8k Frequency L<sub>WA</sub> Case breakout dB(A) 58 72 71 75 52 49 58 56 55 64 Intake dR(A) $L_{WA}$ ∆p<sub>fa</sub> Pa 74 83 73 72 69 65 61 L<sub>WA</sub> Exhaus dB(A) $\rho$ = 1,20 ka/m 1000 **10 V** 2 8 V 800 3 6 V -4 4 V (5) 2 V 600 400 200 V m³/h 0-1000 3000 4000 2000 Free discharge n min-1 **V** m³/h $\textbf{Voltage} \ \lor$ PW IA Lp dB(A) SFP kW/m³/s 2200 3950 670 3,10 0.61 3200 2400 1750 360 1,70 0,74 0.41 1300 160 40 850 1550 60 0,36



#### Accessories

#### Gravity shutter

Type VK 60/30 Ref. no. 0877 Air stream operated louvres, light grey polymer.

#### External louvre

Type WSG 60/30 Ref. no. 0112

Heavy duty construction made from profile anodised aluminium extrusion.

#### Vol. control damper for ducting Type JVK 60/30 Ref. no. 6913

Casing with flanges on both sides. The control mechanism is outside the airstream. For electrical drive, see STM, accessory.

#### Circular spigot

Type FSK 60/30 Ref. no. 0834

For cost effective adaption of rectangular fans into circular ducting systems with Ø 315 mm.

#### Flexible connectors Type VS 60/30 Ref. no. 5697

Flexible in-duct connector with flanges on both sides.

#### Counterflange

Type GF 60/30 Ref. no. 6922 Flange frames made of galvanised steel for connection to ducting.

Rectangular attenuator
Type KSD 60/30-35 No. 8730
For in-duct installation on intake or

#### Air-duct filter

exhaust side.

Type KLF 60/30-35 G4 No. 8722 Type KLF 60/30-35 F7 No. 8646

Bag filter with a large cross section area. Galvanised steel casing with flanges on both sides.

# Electric heater battery Type EHR-K 15/60/30-35 No. 8706 Type EHR-K 30/60/30-35 No. 8707

Heating elements enclosed in a galvanised steel casing with connecting flanges on both sides.

Temperature control system for electric heater battery

Type EHSD 16 Ref. no. 5003

Warm water heater battery
Type WHR 2/60/30-35 No. 8786
Type WHR 4/60/30-35 No. 8787
For in-duct installation.

Temperature control system for warm water heater battery

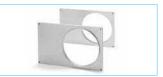
Type WHS HE<sup>1)</sup> Ref. no. 8319

 $^{\rm 1)}$  In model WHR 4/60/30-35 the heat output is reduced to 2200 I/h.

























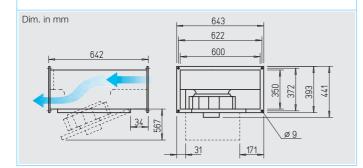






Suitable for polluted air.





#### ■ Features of KR EC and SKR EC

- ☐ Highly efficient EC-motor for lowest operating costs.
- ☐ High pressure and high volume with high efficiency centrifugal fan.
- Particularly easy to service (cleaning) thanks to the swingout motor impeller unit.
- ☐ For cleaning, easy access and therefore suitable for extraction of polluted air.
- ☐ Straight through-flow.
- ☐ Compact design, convenient installation.

#### ■ Special features of SKR EC

Lowest sound levels for intake and case breakout at higher power density.

#### Specification

#### ☐ Casing KR EC

Made of galvanised steel. Flanged (20 mm) on both ends for in-duct installation.

#### ☐ Casing SKR EC

As above, but with additional sound insulation with 50 mm thick mineral fibre board, inside lined with a sound deadening perforated plate.

#### Common features of KR EC and SKR EC

#### Impeller

Centrifugal, backward curved impeller made of polymer. Aero-dynamically optimised, intake air flow by means of an inlet nozzle.

#### SKR EC - Sound insulated

#### **■ ⊗ acousticline**

#### Lowest sound levels for intake and case breakout at higher power density.

Use in extract and fresh air systems with specific requirements for low noise levels.





#### ■ Motor

Energy-saving, speed controllable EC-external rotor motors with highest efficiency, protection to IP 44 (SKR EC IP 54). With ball bearings, maintenance-free and interference-free. Motor and impeller are dynamically balanced.

#### ■ Motor protection

Integrated electronic temperature monitoring for EC-motor and electronics.

#### □ Speed control

Stepless speed control with potentiometer or stepless speed control with universal control system (see table). Duties at different speeds are exemplarily given in the performance curve.

#### ■ Electrical connection

Terminal box (IP 54) fitted to flying lead.

#### ☐ Installation

Installation in any position. Allowance must be made for the motor swing out access.

#### Sound levels

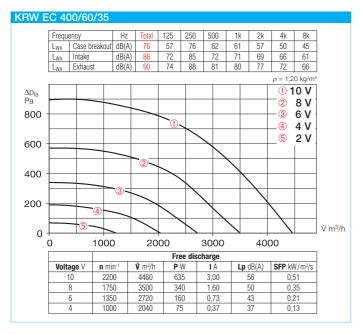
- Sound level case breakout
- Sound level intake
- Sound level exhaust In the table below as well as underneath the performance curve you can find additionally the sound pressure level at 4 m (free field conditions).

Туре	Ref. no.	Air flow volume (FID)	Nominal R.P.M.	Sound press. case breakout	Motor power	Current	Wiring diagram	max.air flow temperature	Weight net approx.		versal I system	flu	Speed-pot ish	entiometer surf	
		V m³∕h	min <sup>-1</sup>	dB(A) in 4 m	kW	А	No.	+ °C	kg	Type	Ref. no.	Type	Ref. no.	Туре	Ref. no.
Single Phase, 230 V, 5	0/60 Hz, EC n	notor, protec	tion to IP 54												
KRW EC 400/60/35	8172	4460	2200	56	0.88	4.04	982	60	30.4	EUR EC	<b>1) 2)</b> 1347	PU 10 <sup>1)</sup>	1734	PA 10 <sup>1)</sup>	1735
Sound insulated mod	el SKR EC – 1	-phase, 1~, 2	230 V, 50/60	Hz, EC motor	, protection	to IP 54									
SKRW EC 400/60/35	8177	4200	2200	51	0.84	3.92	982	60	46.0	EUR EC	<b>1) 2)</b> 1347	PU 10 <sup>1)</sup>	1734	PA 10 <sup>1)</sup>	1735
Sound insulated mod	el SKR EC – 3	-phase, 3~, 4	100 <b>V</b> , 50/60	Hz, EC motor	, protection	to IP 54									
SKRD EC 400/60/35	8297	5000	2500	51	1.17	1.81	1005	60	46.0	<b>EUR EC</b>	<b>1) 2)</b> 1347	PU 10 <sup>1)</sup>	1734	PA 10 <sup>1)</sup>	1735

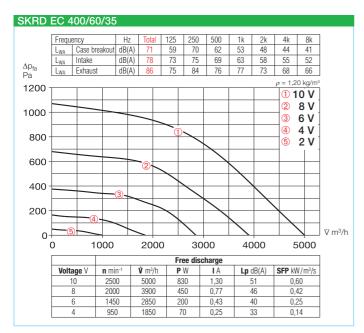
<sup>1)</sup> Multiple EC fans can normally be connected 2) alternative electronic differential pressure/temp. controller (EDR/ETR, No. 1437/1438) or three-step speed controller (SU/SA, No. 4266/4267), s. accessories







#### SKRW EC 400/60/35 Hz Total 125 250 500 1k 2k 4k 8k Frequency L<sub>WA</sub> Case breakout dB(A) 55 69 70 74 53 49 63 53 50 Intake dR(A) 56 48 $L_{WA}$ 71 82 70 71 69 63 60 L<sub>WA</sub> Exhaus dB(A) $\Delta p_{\text{fa}}$ $\rho = 1,20 \text{ kg/m}$ 10 V 800 2 8 V 3 6 V 1 4 4 V 600 (5) 2 V 400 200 V m³/h 0-1000 2000 3000 4000 Free discharge $\textbf{Voltage} \ \lor$ n min-1 **V** m³/h PW IA Lp dB(A) SFP kW/m³/s 2200 4200 600 2.90 0.51 1800 3400 350 1,70 0,71 46 0,37 1300 2500 150 850 60 0,34 33



#### Accessories

#### Gravity shutter

Type VK 60/35 Ref. no. 0878 Air stream operated louvres, light grey polymer.

#### External louvre

Type WSG 60/35 Ref. no. 0113

Heavy duty construction made from profile anodised aluminium extrusion.

#### Vol. control damper for ducting Type JVK 60/35 Ref. no. 6914

Casing with flanges on both sides. The control mechanism is outside the airstream. For electrical drive, see STM, accessory.

#### Circular spigot

Type FSK 60/35 Ref. no. 0835

For cost effective adaption of rectangular fans into circular ducting systems with Ø 355 mm.

#### Flexible connectors

Type VS 60/35 Ref. no. 5698 Flexible in-duct connector with

flanges on both sides.

#### Counterflange

Type GF 60/35 Ref. no. 6923

Flange frames made of galvanised steel for connection to ducting.

### Rectangular attenuator Type KSD 60/30-35 No. 8730

For in-duct installation on intake or exhaust side.

#### Air-duct filter

Type KLF 60/30-35 G4 No. 8722 Type KLF 60/30-35 F7 No. 8646

Bag filter with a large cross section area. Galvanised steel casing with flanges on both sides.

# Electric heater battery Type EHR-K 15/60/30-35 No. 8706 Type EHR-K 30/60/30-35 No. 8707

Heating elements enclosed in a galvanised steel casing with connecting flanges on both sides.

Temperature control system for electric heater battery

Type EHSD 16 Ref. no. 5003

Warm water heater battery
Type WHR 2/60/30-35 No. 8786
Type WHR 4/60/30-35 No. 8787
For in-duct installation.

Temperature control system for warm water heater battery

Type WHS HE<sup>1)</sup> Ref. no. 8319

1) In model WHR 4/60/30-35 the heat output is reduced to 2200 l/h.

























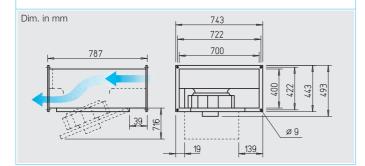




#### KR EC

Suitable for polluted air.





#### ■ Features of KR EC and SKR EC

- ☐ Highly efficient EC-motor for lowest operating costs.
- ☐ High pressure and high volume with high efficiency centrifugal fan.
- Particularly easy to service (cleaning) thanks to the swingout motor impeller unit.
- ☐ For cleaning, easy access and therefore suitable for extraction of polluted air.
- ☐ Straight through-flow.
- Compact design, convenient installation.

#### ■ Special features of SKR EC

Lowest sound levels for intake and case breakout at higher power density.

#### Specification

#### ☐ Casing KR EC

Made of galvanised steel. Flanged (20 mm) on both ends for in-duct installation.

#### ☐ Casing SKR EC

As above, but with additional sound insulation with 50 mm thick mineral fibre board, inside lined with a sound deadening perforated plate.

#### Common features of KR EC and SKR EC

#### Impeller

Centrifugal, backward curved impeller made of polymer. Aero-dynamically optimised, intake air flow by means of an inlet nozzle.

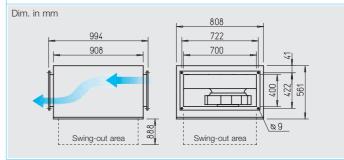
#### SKR EC - Sound insulated

#### **■ ⊗ acousticline**

#### Lowest sound levels for intake and case breakout at higher power density.

Use in extract and fresh air systems with specific requirements for low noise levels.





#### ■ Motor

Energy-saving, speed controllable EC-external rotor motors with highest efficiency, protection to IP 44 (SKR EC IP 54). With ball bearings, maintenance-free and interference-free. Motor and impeller are dynamically balanced.

#### ■ Motor protection

Integrated electronic temperature monitoring for EC-motor and electronics.

#### □ Speed control

Stepless speed control with potentiometer or stepless speed control with universal control system (see table). Duties at different speeds are exemplarily given in the performance curve.

#### ■ Electrical connection

Terminal box (IP 54) fitted to flying lead.

#### ☐ Installation

Installation in any position. Allowance must be made for the motor swing out access.

#### Sound levels

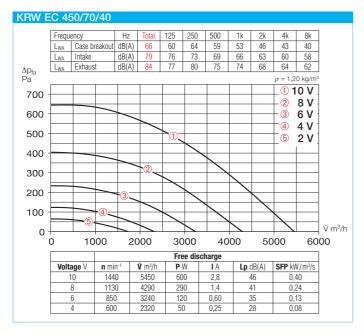
- Sound level case breakout
- Sound level intake
  - Sound level exhaust In the table below as well as underneath the performance curve you can find additionally the sound pressure level at 4 m (free field conditions).

Туре	Ref. no.	Air flow volume (FID)	Nominal R.P.M.	Sound press. case breakout	Motor power	Current	Wiring diagram	max.air flow temperature	Weight net approx.		niversal ol system		Speed-pot sh	entiometer surf	
		Ÿ m³/h	min <sup>-1</sup>	dB(A) in 4 m	kW	Α	No.	+ °C	kg	Type	Ref. no.	Туре	Ref. no.	Туре	Ref. no.
Single Phase, 230 V,	50/60 Hz, EC 1	motor, protec	tion to IP 54												
KRW EC 450/70/40	6127	5450	1420	46	0.72	3.29	982	60	40.0	EUR E	C <sup>1) 2)</sup> 1347	PU 10 <sup>1)</sup>	1734	PA 10 <sup>1)</sup>	1735
Three Phase, 400 V, 5	0/60 Hz, EC n	notor, protect	ion to IP 54												
KRD EC 450/70/40	8173	7480	2300	54	1.50	2.30	1005	60	40.0	EUR E	C <sup>1) 2)</sup> 1347	PU 10 <sup>1)</sup>	1734	PA 10 <sup>1)</sup>	1735
Sound insulated mod	lel SKR EC – 1	-phase, 230	V, 50/60 Hz,	EC motor, pro	tection to I	P 54									
SKRW EC 450/70/40	<sup>3)</sup> 6129	5420	1410	45	0.71	3.24	982	60	60.0	EUR E	C <sup>1) 2)</sup> 1347	PU 10 <sup>1)</sup>	1734	PA 10 <sup>1)</sup>	1735
Sound insulated mod	lel SKR EC – 3	3-phase, 400	V, 50/60 Hz,	EC motor, pro	tection to I	P 54									
SKRD EC 450/70/40 A	<b>A</b> 8178	7500	1800	51	1.44	2.24	1005	60	60.0	EUR E	C <sup>1) 2)</sup> 1347	PU 10 <sup>1)</sup>	1734	PA 10 <sup>1)</sup>	1735

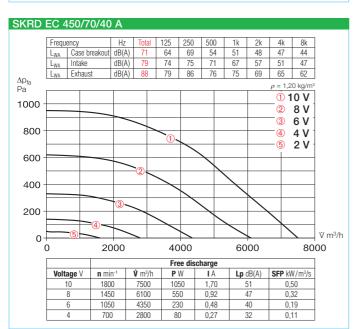
<sup>1)</sup> Multiple EC fans can normally be connected 2) alternative electronic differential pressure/temp. controller (EDR/ETR, No. 1437/1438) or three-step speed controller (SU/SA, No. 4266/4267), s. accessories 3) Characteristic curve diagram on www.HeliosSelect.de







#### KRD EC 450/70/40 Hz Total 125 250 500 1k 2k Frequency L<sub>WA</sub> Case breakout dB(A) 63 79 72 85 68 77 61 53 71 76 Intake dR(A) 66 $L_{WA}$ 80 89 82 83 75 70 66 L<sub>WA</sub> Exhaus dB(A) = 1.20 kg/m ∆p<sub>fa</sub> Pa 10 V 8 V 1000 3 6 V 4 V 800 **5** 2 V 600 400 200 V m³/h 0 2000 4000 6000 8000 Free discharge n min-1 **Voltage** V **V** m³/h PW IA Lp dB(A) SFP kW/m³/s 2300 7480 1060 1.66 0.51 1550 6175 605 0.97 46 0,35 1080 250 0,44 40 3130 85 0,10



#### Accessories

#### Gravity shutter

Type VK 70/40 Ref. no. 0879 Air stream operated louvres, light grey polymer.

#### External louvre

Type WSG 70/40 Ref. no. 0114

Heavy duty construction made from profile anodised aluminium extrusion.

#### Vol. control damper for ducting Type JVK 70/40 Ref. no. 6915

Casing with flanges on both sides. The control mechanism is outside the airstream. For electrical drive, see STM, accessory.

#### Circular spigot

Type FSK 70/40 Ref. no. 0840

For cost effective adaption of rectangular fans into circular ducting systems with Ø 400 mm.

#### Flexible connectors Type VS 70/40 Ref. no. 5699

Flexible in-duct connector with flanges on both sides.

#### Counterflange

Type GF 70/40 Ref. no. 6924 Flange frames made of galvanised steel for connection to ducting.

# Rectangular attenuator Type KSD 70/40 Ref. no. 8731 For in-duct installation on intake or exhaust side

#### Air-duct filter

**Type KLF 70/40 G4** No. 8723 **Type KLF 70/40 F7** No. 8647

Bag filter with a large cross section area. Galvanised steel casing with flanges on both sides.

#### Warm water heater battery

**Type WHR 2/70/40** No. 8788 **Type WHR 4/70/40** No. 8789

For in-duct installation.

# Temperature control system for warm water heater battery Type WHS HE<sup>1)</sup> Ref. no. 8319

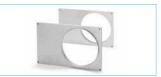
1) In model WHR 4/70/40 the heat output is reduced to 2200 l/h.























#### Accessory details Page

Shutters, grilles and louvres 420, 487 on Filters, heater batteries and attenuators 421 on Temperature control systems for heater batteries 427, 432 on Universal control system, electronic controller, speed-potentiometer 539 on

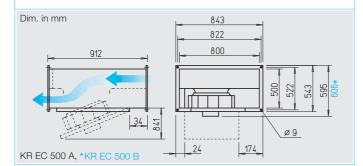




#### KR EC

Suitable for polluted air.





#### ■ Features of KR EC and SKR EC

- ☐ Highly efficient EC-motor for lowest operating costs.
- ☐ High pressure and high volume with high efficiency centrifugal fan.
- Particularly easy to service (cleaning) thanks to the swingout motor impeller unit.
- ☐ For cleaning, easy access and therefore suitable for extraction of polluted air.
- ☐ Straight through-flow.
- Compact design, convenient installation.

#### ■ Special features of SKR EC

Lowest sound levels for intake and case breakout at higher power density.

#### Specification

#### ☐ Casing KR EC

Made of galvanised steel. Flanged (20 mm) on both ends for in-duct installation.

#### ☐ Casing SKR EC

As above, but with additional sound insulation with 50 mm thick mineral fibre board, inside lined with a sound deadening perforated plate.

#### ■ Common features of KR EC and SKR EC

#### Impeller

Centrifugal, backward curved impeller made of polymer. Aero-dynamically optimised, intake air flow by means of an inlet nozzle.

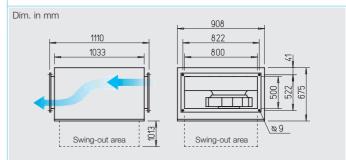
#### SKR EC - Sound insulated

#### **acousticline**

#### Lowest sound levels for intake and case breakout at higher power density.

Use in extract and fresh air systems with specific requirements for low noise levels.





#### ■ Motor

Energy-saving, speed controllable EC-external rotor motors with highest efficiency, protection to IP 44 (SKR EC IP 54). With ball bearings, maintenance-free and interference-free. Motor and impeller are dynamically balanced.

#### ■ Motor protection

Integrated electronic temperature monitoring for EC-motor and electronics.

#### □ Speed control

Stepless speed control with potentiometer or stepless speed control with universal control system (see table). Duties at different speeds are exemplarily given in the performance curve.

#### ■ Electrical connection

Terminal box (IP 54) fitted to flying lead.

#### ☐ Installation

Installation in any position. Allowance must be made for the motor swing out access.

#### Sound levels

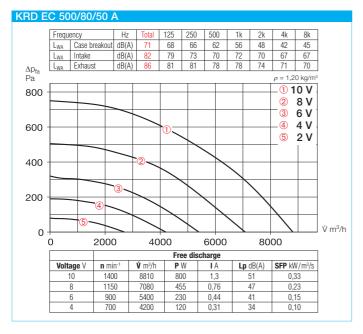
- Sound level case breakout
- Sound level intake
- Sound level exhaust In the table below as well as underneath the performance curve you can find additionally the sound pressure level at 4 m (free field conditions).

Туре	Ref. no.	Air flow volume (FID)	Nominal R.P.M.	Sound press. case breakout	Motor power	Current	Wiring diagram	max.air flow temperature		Universal control system		Speed-pot flush		tentiometer surface	
		Ÿ m³/h	min <sup>-1</sup>	dB(A) in 4 m	kW	Α	No.	+ °C	kg	Туре	Ref. no.	Туре	Ref. no.	Туре	Ref. no.
Three phase, 400 V, 50/60 Hz, EC motor, protection to IP 54															
KRD EC 500/80/50 A	8174	8810	1400	51	1.26	1.96	1005	60	55.6	EUR EC 1)	<b>2)</b> 1347	PU 10 <sup>1)</sup>	1734	PA 10 <sup>1)</sup>	1735
KRD EC 500/80/50 B 3)	6128	10400	1800	60	2.57	3.92	1005	60	55.0	EUR EC 1)	<b>2)</b> 1347	PU 10 <sup>1)</sup>	1734	PA 10 <sup>1)</sup>	1735
Sound insulated model SKR EC – 3-phase, 400 V, 50/60 Hz, EC motor, protection to IP 54															
SKRD EC 500/80/50 A	8299	8600	1400	48	1.20	1.87	1005	60	67.5	EUR EC 1)	<b>2)</b> 1347	PU 10 <sup>1)</sup>	1734	PA 10 <sup>1)</sup>	1735
SKRD EC 500/80/50 B	8179	10650	1800	55	2.42	3.68	1005	60	79.5	EUR EC 1)	<b>2)</b> 1347	PU 10 <sup>1)</sup>	1734	PA 10 <sup>1)</sup>	1735

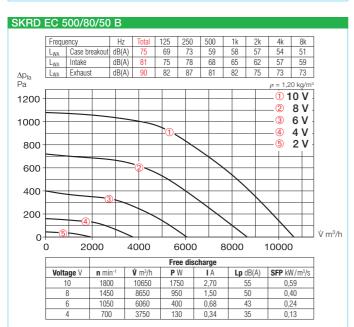
<sup>1)</sup> Multiple EC fans can normally be connected 2) alternative electronic differential pressure/temp. controller (EDR/ETR, No. 1437/1438) or three-step speed controller (SU/SA, No. 4266/4267), s. accessories 3) Characteristic curve diagram on www.HeliosSelect.de







#### SKRD EC 500/80/50 A Hz Total 125 250 500 1k 2k 4k 8k Frequency L<sub>WA</sub> Case breakout dB(A) 67 76 52 58 52 56 48 54 60 Intake dR(A) 64 50 $L_{WA}$ 79 76 72 73 67 66 66 L<sub>WA</sub> Exhaus dB(A) = 1.20 kg/m10 V 2 8 V 3 6 V 600 4 V ⑤ 2 V 400 200 V m³/h O. 2000 4000 6000 8000 Free discharge n min-1 **V** m³/h $\textbf{Voltage} \ \lor$ PW Lp dB(A) SFP kW/m³/s 1400 8600 780 1.30 48 0.33 1150 7000 400 0,72 0,41 0,21 0,13 38 180 530 3200 60 0,26 0,10



#### Accessories

#### Gravity shutter

Type VK 80/50 Ref. no. 0880 Air stream operated louvres, light grey polymer.

#### External louvre

Type WSG 80/50 Ref. no. 0115

Heavy duty construction made from profile anodised aluminium extrusion.

#### Vol. control damper for ducting Type JVK 80/50 Ref. no. 6916

Casing with flanges on both sides. The control mechanism is outside the airstream. For electrical drive, see STM, accessory.

#### Circular spigot

Type FSK 80/50 Ref. no. 0842

For cost effective adaption of rectangular fans into circular ducting systems with Ø 500 mm.

#### Flexible connectors

Type VS 80/50 Ref. no. 5700

Flexible in-duct connector with flanges on both sides.

#### Counterflange

Type GF 80/50 Ref. no. 6925

Flange frames made of galvanised steel for connection to ducting.

#### Rectangular attenuator

**Type KSD 80/50** Ref. no. 8732

For in-duct installation on intake or exhaust side.

#### Air-duct filter

Type KLF 80/50 G4 No. 8670 Type KLF 80/50 F7 No. 8654

Bag filter with a large cross section area. Galvanised steel casing with flanges on both sides.

#### Warm water heater battery

Type WHR 2/80/50 No. 8795

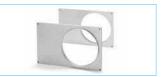
Type WHR 4/80/50 No. 8796 For in-duct installation.























Accessory details Page Shutters, grilles 420, 487 on and louvres Filters, heater batteries and attenuators 421 on Universal control system, electronic controller. speed-potentiometer 539 on

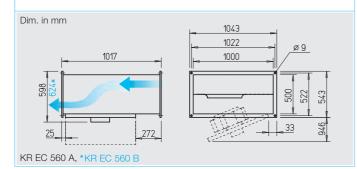




#### KR EC

Suitable for polluted air.





#### ■ Features of KR EC and SKR EC

- ☐ Highly efficient EC-motor for lowest operating costs.
- ☐ High pressure and high volume with high efficiency centrifugal fan.
- Particularly easy to service (cleaning) thanks to the swingout motor impeller unit.
- For cleaning, easy access and therefore suitable for extraction of polluted air.
- ☐ Straight through-flow.
- Compact design, convenient installation.

#### ■ Special features of SKR EC

Lowest sound levels for intake and case breakout at higher power density.

#### Specification

#### □ Casing KR EC

Made of galvanised steel. Flanged (20 mm) on both ends for in-duct installation.

#### ☐ Casing SKR EC

As above, but with additional sound insulation with 50 mm thick mineral fibre board, inside lined with a sound deadening perforated plate.

#### Common features of KR EC and SKR EC

#### Impeller

Centrifugal, backward curved impeller made of polymer. Aero-dynamically optimised, intake air flow by means of an inlet nozzle.

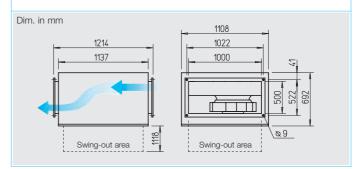
#### SKR EC - Sound insulated

#### **■ (20) acoust**icline

#### Lowest sound levels for intake and case breakout at higher power density.

Use in extract and fresh air systems with specific requirements for low noise levels.





#### ■ Motor

Energy-saving, speed controllable EC-external rotor motors with highest efficiency, protection to IP 44 (SKR EC IP 54). With ball bearings, maintenance-free and interference-free. Motor and impeller are dynamically balanced.

#### ■ Motor protection

Integrated electronic temperature monitoring for EC-motor and electronics.

#### □ Speed control

Stepless speed control with potentiometer or stepless speed control with universal control system (see table). Duties at different speeds are exemplarily given in the performance curve.

#### ■ Electrical connection

Terminal box (IP 54) fitted to flying lead.

#### ☐ Installation

Installation in any position. Allowance must be made for the motor swing out access.

#### Sound levels

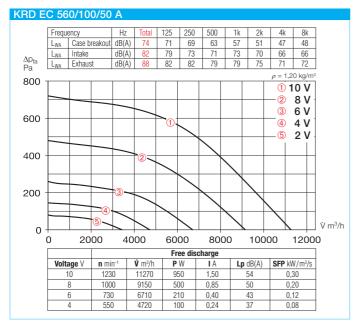
- Sound level case breakout
- Sound level intake
- Sound level exhaust In the table below as well as underneath the performance curve you can find additionally the sound pressure level at 4 m (free field conditions).

Туре	Ref. no.	Air flow volume (FID)	Nominal R.P.M.	Sound press. case breakout	Motor power	Current	Wiring diagram	max.air flow temperature		control system		Speed-pot flush		tentiometer surface	
		V m³∕h	min <sup>-1</sup>	dB(A) in 4 m	kW	Α	No.	+ °C	kg	Туре	Ref. no.	Туре	Ref. no.	Туре	Ref. no.
Three phase, 400 V, 50/60 Hz, EC motor, protection to IP 54															
KRD EC 560/100/50 A	8167	11270	1230	54	1.57	2.45	1005	60	70.8	EUR EC	1) 2) 1347	PU 10 <sup>1)</sup>	1734	PA 10 <sup>1)</sup>	1735
KRD EC 560/100/50 B	8175	14410	1630	60	3.45	5.20	1005	60	83.0	EUR EC	1) 2) 1347	PU 10 <sup>1)</sup>	1734	PA 10 <sup>1)</sup>	1735
Sound insulated model SKR EC – 3-phase, 400 V, 50/60 Hz, EC motor, protection to IP 54															
SKRD EC 560/100/50	<b>A<sup>3)</sup></b> 6130	10070	1230	48	1.48	2.30	1005	60	98.0	EUR EC	1) 2) 1347	PU 10 <sup>1)</sup>	1734	PA 10 <sup>1)</sup>	1735
SKRD EC 560/100/50	<b>B</b> 8180	13700	1630	56	3.26	4.98	1005	60	100.0	<b>EUR EC</b>	1) 2) 1347	PU 10 <sup>1)</sup>	1734	PA 10 <sup>1)</sup>	1735

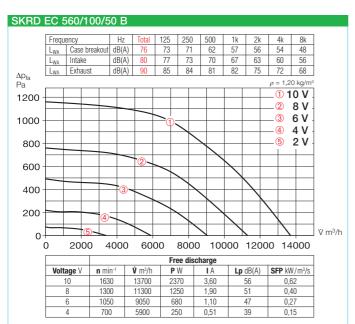
<sup>1)</sup> Multiple EC fans can normally be connected 2) alternative electronic differential pressure/temp. controller (EDR/ETR, No. 1437/1438) or three-step speed controller (SU/SA, No. 4266/4267), s. accessories 3) Characteristic curve diagram on www.HeliosSelect.de







#### KRD EC 560/100/50 B Hz Total 125 250 500 1k 2k Frequency L<sub>WA</sub> Case breakout dB(A) 74 73 68 56 74 84 82 81 81 Intake dR(A) 78 $L_{WA}$ L<sub>WA</sub> Exhaus 96 89 91 87 88 84 80 74 dB(A) $\Delta p_{\text{fa}}$ $\rho = 1,20 \text{ kg/m}$ 10 V 1200 2 8 V 3 6 V 4 V (5) 2 V 800 400 V m³/h 0 4000 8000 12000 Free discharge n min-1 $\textbf{Voltage} \ \lor$ **V** m³/h PW Lp dB(A) SFP kW/m³/s 1630 14410 2270 3.45 60 0.57 1350 11950 1300 2,00 0,91 0,39 1000 650 5780 170 0,30 41



### Accessories

## Gravity shutter

Type VK 100/50 Ref. no. 0881 Air stream operated louvres, light grey polymer.

## External louvre

## Type WSG 100/50 Ref. no. 0116

Heavy duty construction made from profile anodised aluminium extrusion.

## Vol. control damper for ducting Type JVK 100/50 Ref. no. 6917

Casing with flanges on both sides. The control mechanism is outside the airstream. For electrical drive, see STM, accessory.

## Circular spigot

## Type FSK 100/50 Ref. no. 0843

For cost effective adaption of rectangular fans into circular ducting systems with Ø 500 mm.

## Flexible connectors

## **Type VS 100/50** Ref. no. 5701

Flexible in-duct connector with flanges on both sides.

## Counterflange

## Type GF 100/50 Ref. no. 6926

Flange frames made of galvanised steel for connection to ducting.

## Rectangular attenuator

## Type KSD 100/50 Ref. no. 8733

For in-duct installation on intake or exhaust side.

## Air-duct filter

## Type KLF 100/50 G4

No. 8671 Type KLF 100/50 F7 No. 8655

Bag filter with a large cross section area. Galvanised steel casing with flanges on both sides.

## Warm water heater battery

No. 8797 Type WHR 2/100/50

Type WHR 4/100/50 No. 8798

For in-duct installation.













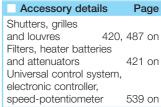






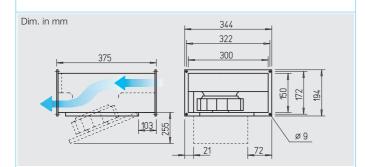












Rectangular EC centrifugal fan with backward curved impeller and swing-out motor impeller unit.

- Highly efficient high performance impellers.
- Use in extract and fresh air systems for conveying higher air flow volume.
- Suitable for extraction of polluted air.

## ■ Special features

- High pressure and high volume specific centrifugal fan with high efficiency.
- ☐ Particularly easy to service (cleaning) thanks to the swing-out motor impeller unit.
- ☐ For cleaning, easy access and therefore suitable for extraction of polluted air.
- For cleaning, easy access and therefore suitable for extraction of polluted air.

## Specification

### □ Casing

Made of galvanised steel. Flanged (20 mm) on both ends for in-duct installation.

## ☐ Impeller

Centrifugal, backward curved impeller made of polymer. Aero-dynamically optimised, intake air flow by means of an inlet nozzle.

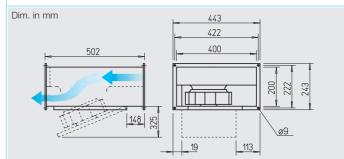
## ☐ Motor

Energy saving, speed controllable EC-external rotor motors with highest efficiency, protection to IP 44. With ball bearings, maintenance-free and interference-free. Motor and impeller are dynamically balanced.

## KR 225

Suitable for polluted air.





## ■ Motor protection

Automatic resetting through built-in thermal contacts with winding connected in series.

## ■ Speed control

Stepless speed control with potentiometer or stepless speed control with universal control system (see table). Duties at different speeds are exemplarily given in the performance curve.

## ☐ Electrical connection

Terminal box (IP 54) fitted to flying lead.

## Installation

Installation in any position.
Allowance must be made for the motor swing out access.

## Sound Levels

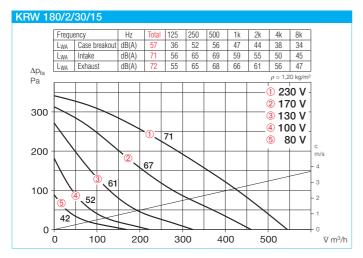
Above the performance curve, total values and spectrum are given for:

- Sound level case breakout
- Sound level intake
- Sound level exhaust
   The sound power level (on intake) is additionally shown within the performance curve for corresponding control voltages.
   In the table below you can also find:
- Case breakout sound level at 4 m (free field conditions).

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Туре	Ref. no.	Air flow volume (FID)	Nominal R.P.M.	Sound press. case breakout	Motor	power	Wiring diagram	max. a tempera full load	ature at	Weight net approx.	5-step tran	nsformer		controller electronic	flush, el	ectronic
		V m³/h	min-1	dB(A) in 4 m	kW	Α	No.	+°C	+°C	kg	Туре	Ref. no.	Туре	Ref. no.	Туре	Ref. no.
Single phase, capac	citor mot	or, 230 V, 50	Hz, prote	ction to IP 44												
KRW 180/2/30/15	8885	540	2460	37	0.06	0.35	508	70	70	5.5	TSW 1,5	1495	ESA 1	0238	ESU 1	0236
KRW 225/2/40/20	8886	1020	2530	40	0.12	0.46	508	70	70	9.8	TSW 1,5	1495	ESA 1	0238	ESU 1	0236





### KRW 225/2/40/20 Total 125 250 500 1k 2k 4k 8k 60 42 54 58 53 52 46 32 72 60 68 68 65 60 60 49 Frequency 54 58 53 68 68 65 L<sub>WA</sub> Case breakout dB(A) Intake dB(A) dB(A) 75 61 70 71 66 69 65 53 L<sub>WA</sub> Exhaust $\Delta p_{\text{fa}}$ $\rho = 1,20 \text{ kg/n}$ 1 230 V 2 170 V 400 3 130 V 4 100 V 300 6 80 V 72 200 69 63 100 47 0 0 200 600 800 1000 400 V m³/h

## Accessory details Page

Shutters, grilles
and louvres 420, 487 on
Filters, heater batteries
and attenuators 421 on
Temperature control systems
for heater batteries 427, 432 on
Speed controller and full motor
protection devices 525 on

### Accessories

Gravity shutter

Type VK 30/15
Type VK 40/20
Air stream operated louvres, light grey polymer.

Ref. no. 0735
Ref. no. 0874
louvres, light

External louvre

Type WSG 30/15 Ref. no. 0108 Type WSG 40/20 Ref. no. 0109

Heavy duty construction made from profile aluminium extrusion.

Vol. control damper for ducting
Type JVK 30/15 Ref. no. 6927
Type JVK 40/20 Ref. no. 6910
Casing with flanges on both sides.
For electrical drive, see STM, accessory.

Circular spigot

Type FSK 30/15 Ref. no. 0831 Type FSK 40/20 Ref. no. 0832

For adaption of rectangular fans into circular ducting systems with Ø 160 or 200 mm.

Flexible connectors

Type VS 30/15 Ref. no. 6928 Type VS 40/20 Ref. no. 5694 Flexible in-duct connector with flanges on both sides.

Counterflange

Type GF 30/15 Ref. no. 6918 Type GF 40/20 Ref. no. 6919 Flange frames made of galvanised

steel for connection to ducting.

Rectangular attenuator
Type KSD 40/20 Ref. no. 8728
For in-duct installation on intake or exhaust side.

Air-duct filter

**Type KLF 40/20 G4** No. 8720 **Type KLF 40/20 F7** No. 8644

Bag filter with a large cross section area. Galvanised steel casing with flanges on both sides.

Electric heater battery

Type EHR-K 6/40/20 No. 8702

Type EHR-K 15/40/20 No. 8703

Heating elements enclosed in a galvanised steel casing with connecting flanges on both sides.

Temperature control system for electric heater battery

Type EHSD 16 Ref. no. 5003

Warm water heater battery
Type WHR 2/40/20 No. 8782
Type WHR 4/40/20 No. 8783
For in-duct installation.

Temperature control system for warm water heater battery Type WHS HE Ref. no. 8319

















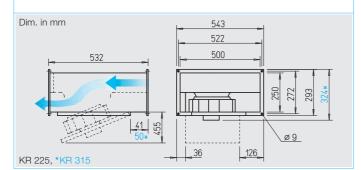












- ☐ High pressure and high volume with high efficiency centrifugal
- ☐ Particularly easy to service (cleaning) thanks to the swingout motor impeller unit.
- For cleaning, easy access and therefore suitable for extraction of polluted air.
- ☐ Straight through-flow.
- Compact design, convenient installation.

## ■ Special features of SKR

Lowest sound levels for intake and case breakout at higher power density.

## ■ Specification

## ☐ Casing KR

Made of galvanised steel. Flanged (20 mm) on both ends for in-duct installation.

## ☐ Casing SKR

As above, but with additional sound insulation with 50 mm thick mineral fibre board, inside lined with a sound deadening perforated plate.

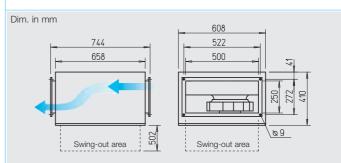
### SKR - Sound insulated

# **acousticline**

## Lowest sound levels for intake and case breakout at higher power density.

Use in extract and fresh air systems with specific requirements for low noise levels.





## Common features of KR and SKR

## ☐ Impeller

Centrifugal, backward curved impeller made of polymer. Aero-dynamically optimised, intake air flow by means of an inlet nozzle.

### ■ Motor

Through maintenance-free external-rotor motor, on which the impeller is mounted. Closed design. Protection to IP 54 (KR 225 IP 33). Winding with moisture impregnation. Ball bearing mounted, interference-free. Motor and im-

peller are dynamically balanced.

## ■ Motor protection

Through built-in thermal contacts via a tripping unit (accessories). In case of KRW 225 through built-in therm. contacts, with winding connected in series, automatic resetting.

## Speed control

possible through voltage reduction by means of 5-step transformer or electronic (stepless). Duties at different speeds are exemplarily given in the performance curve.

### Electrical connection

Terminal box (IP 54) fitted to flying lead.

## Installation

Installation in any position.

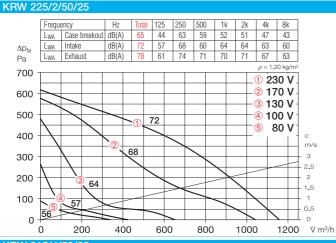
Allowance must be made for the motor swing out access. (Exception: KRW 225 may only be installed with inspection flap facing downwards or to the side.)

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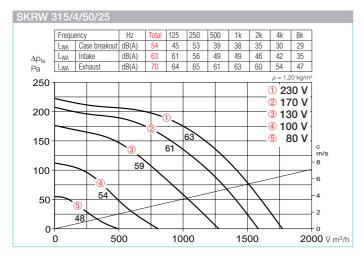
Туре	Ref. no.	Air flow volume (FID)	Nominal R.P.M.	Sound press. case breakout	Motor	power	Wiring diagram	max. a tempera full load		Weight net approx.	5-step trans	sformer	Speed consumate surface, e	ontroller electronic	flush, ele	ectronic
		Ÿ m³/h	min-1	dB(A) in 4 m	kW	А	No.	+°C	+°C	kg	Type F	lef. no.	Туре	Ref. no.	Туре	Ref. no.
Single phase, capa	citor mot	or, 230 V, 50	Hz, prote	ction to IP 33	(225), IP 54	(315)										
KRW 225/2/50/25	8873	1160	2680	45	0.17	0.73	508	70	60	15.0	TSW 1,5 <sup>1)</sup>	1495	ESA 1 <sup>1)</sup>	0238	ESU 1 <sup>1)</sup>	0236
KRW 315/4/50/25	6149	1760	1390	39	0.18	0.95	536.1	60	60	16.8	TSW 1,5 <sup>1)</sup>	1495	ESA 3 1)	0239	ESU 3 <sup>1)</sup>	0237
Sound insulated m	odel SKR	– Single ph	ase, 230 V	, 50 Hz, capac	itor motor,	protection	to IP 54				Transforme	er speed o	controller	Full r	notor protect	tion
SKRW 315/4/50/25	6142	1770	1390	34	0.19	0.97	536.1	60	60	33.1	MWS 1,5		1947	MW		1579

<sup>1)</sup> Full motor protection device required, Type MW, No. 1579, see accessories.





#### KRW 315/4/50/2 125 250 500 1k 2k 4k 8k L<sub>WA</sub> Case breakout dB(A) 59 59 47 55 52 51 49 44 34 71 64 65 62 62 60 56 48 L<sub>WA</sub> Intake dB(A) $\Delta p_{fa}$ 63 69 69 66 59 52 L<sub>WA</sub> Exhaust dB(A) 300 ① 230 V 2 170 V 250 3 130 V 4 100 V 200 71 5 80 V 69 150 66 100 60 3 2 50 0 0 V m³/h 0 300 1200 1500 1800 600 900



Accessory details

Filters, heater batteries

Temperature control systems

for heater batteries 427, 432 on

Speed controller and full motor

Shutters, grilles

and attenuators

protection devices

and louvres

Page

421 on

525 on

420, 487 on

## ☐ Sound Levels

Above the performance curve, total values and spectrum are given for:

- Sound level case breakout
- Sound level intake
- Sound level exhaust The sound power level (on intake) is additionally shown within the performance curve for corresponding control voltages. In the table below you can also find:
- Case breakout sound level at 4 m (free field conditions).

## Type VK 50/25

Gravity shutter

Accessories

Ref. no. 0875 Air stream operated louvres, light grey polymer.

## External louvre

Type WSG 50/25 Ref. no. 0110

Heavy duty construction made from profile anodised aluminium extrusion.

## Vol. control damper for ducting Type JVK 50/25 Ref. no. 6911

Casing with flanges on both sides. The control mechanism is outside the airstream. For electrical drive, see STM, accessory.

## Circular spigot

Type FSK 50/25 Ref. no. 0833

For adaption of rectangular fans into circular ducting systems with Ø 250 mm.

## Flexible connectors

Type VS 50/25 Ref. no. 5695

Flexible in-duct connector with flanges on both sides.

## Counterflange

Type GF 50/25 Ref. no. 6920

Flange frames made of galvanised steel for connection to ducting.

### Rectangular attenuator Type KSD 50/25-30 No. 8729

For in-duct installation on intake or exhaust side.

## Air-duct filter

Type KLF 50/25-30 G4 No. 8721 Type KLF 50/25-30 F7 No. 8645

Bag filter with a large cross section area. Galvanised steel casing with flanges on both sides.

## Electric heater battery Type EHR-K 8/50/25-30 No. 8704 Type EHR-K 24/50/25-30 No. 8705

Heating elements enclosed in a galvanised steel casing with connecting flanges on both sides.

Temperature control system for electric heater battery Type EHSD 16 Ref. no. 5003

Warm water heater battery Type WHR 2/50/25-30 No. 8784 Type WHR 4/50/25-30 No. 8785 For in-duct installation.

Temperature control system for warm water heater battery Ref. no. 8319 Type WHS HE























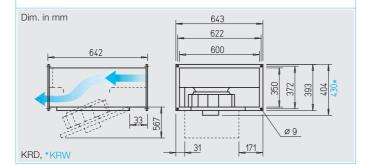






Suitable for polluted air.





### ■ Features of KR and SKR

- High pressure and high volume with high efficiency centrifugal fan.
- ☐ Particularly easy to service (cleaning) thanks to the swingout motor impeller unit.
- ☐ For cleaning, easy access and therefore suitable for extraction of polluted air.
- ☐ Straight through-flow.
- ☐ Compact design, convenient installation.

## ■ Special features of SKR

Lowest sound levels for intake and case breakout at higher power density.

## Specification

### ☐ Casing KR

Made of galvanised steel. Flanged (20 mm) on both ends for in-duct installation.

## ☐ Casing SKR

As above, but with additional sound insulation with 50 mm thick mineral fibre board, inside lined with a sound deadening perforated plate.

## Common features of KR and SKR

## ☐ Impeller

Centrifugal, backward curved impeller made of polymer. Aero-dynamically optimised, intake air flow by means of an inlet nozzle.

### SKR - Sound insulated

## **acousticline**

# Lowest sound levels for intake and case breakout at higher power density.

Use in extract and fresh air systems with specific requirements for low noise levels.





## ■ Motor

Through maintenance-free external-rotor motor, on which the impeller is mounted. Closed design. Protection to IP 54. Winding with moisture impregnation. Ball bearing mounted, interference-free. Motor and impeller are dynamically balanced.

### ■ Motor protection

Through built-in thermal contacts via a tripping unit (accessories).

## ☐ Speed control

possible through voltage reduction by means of 5-step transformer or electronic (stepless). Duties at different speeds are exemplarily given in the performance curve.

□ Electrical connection Terminal box (IP 54) fitted to flying lead.

## Installation

Installation in any position.
Allowance must be made for the motor swing out access.

## ☐ Sound Levels

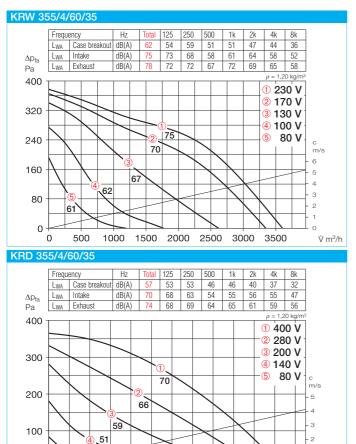
Above the performance curve, total values and spectrum are given for:

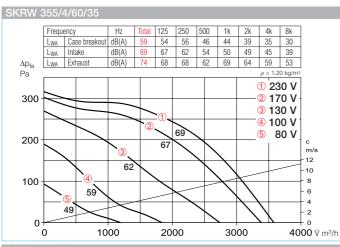
- Sound level case breakout
- Sound level intake
- Sound level exhaust
  The sound power level (on intake) is additionally shown within the performance curve for corresponding control voltages.
  In the table below you can also find:
- Case breakout sound level at 4 m (free field conditions).

Туре	Ref. no.	Air flow volume (FID)	Nominal R.P.M.	Sound press. case breakout	Motor	r power	Wiring diagram	max. a tempera full load	ature at	Weight net approx.	Speed control with full motor		Full motor prote connection thermal	of built-in
		Ÿ m³/h	min-1	dB(A) in 4 m	kW	Α	No.	+°C	+°C	kg	Туре	Ref. no.	Туре	Ref. no.
Single phase, 230	V, 50 Hz, c	apacitor m	otor, prote	ction to IP 54										
KRW 355/4/60/35	8692	3600	1390	42	0.37	1.90	536.1	60	60	28.4	MWS 3	1948	MW	1579
Three phase, 230/4	100 V, 50 H	lz, protectio	n to IP 54	}										
KRD 355/4/60/35	8584	2840	1330	37	0.25	0.80/0.46	860	60	60	27.2	RDS 1	1314	MD	5849
Sound insulated m	odel SKR	– Single ph	ase motor	; 230 V, 50 Hz,	capacitor	motor, prote	ection to IP	54						
SKRW 355/4/60/35	8681	3580	1400	39	0.35	1.82	536.1	60	60	48.8	MWS 3	1948	MW	1579
Sound insulated m	odel SKR	- Three ph	ase motor	, 230/400 <b>V</b> , 50	Hz, prote	ction to IP 5	4							
SKRD 355/4/60/35	8181	2800	1330	34	0.24	0.78/0.45	860	60	60	49.0	RDS 1	1314	MD	5849



0 +

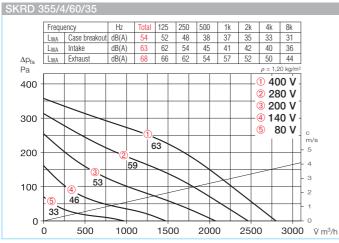




1500

2000

2500



### Accessories

## Gravity shutter

Type VK 60/35 Ref. no. 0878 Air stream operated louvres, light grey polymer.

## External louvre

## Type WSG 60/35 Ref. no. 0113

Heavy duty construction made from profile anodised aluminium extrusion.

# Vol. control damper for ducting Type JVK 60/35 Ref. no. 6914

Casing with flanges on both sides. The control mechanism is outside the airstream. For electrical drive, see STM, accessory.

## Circular spigot

## Type FSK 60/35 Ref. no. 0835

For cost effective adaption of rectangular fans into circular ducting systems with Ø 355 mm.

## Flexible connectors

## **Type VS 60/35** Ref. no. 5698

Flexible in-duct connector with flanges on both sides.

## Counterflange

3000

V m³/h

## Type GF 60/35 Ref. no. 6923

Flange frames made of galvanised steel for connection to ducting.

# Rectangular attenuator Type KSD 60/30-35 No. 8730

For in-duct installation on intake or exhaust side.

## Air-duct filter

## Type KLF 60/30-35 G4 No. 8722 Type KLF 60/30-35 F7 No. 8646

Bag filter with a large cross section area. Galvanised steel casing with flanges on both sides.

# Electric heater battery Type EHR-K 15/60/30-35 No. 8706 Type EHR-K 30/60/30-35 No. 8707

Heating elements enclosed in a galvanised steel casing with connecting flanges on both sides.

# Temperature control system for electric heater battery Type EHSD 16 Ref. no. 5003

Warm water heater battery
Type WHR 2/60/30-35 No. 8786
Type WHR 4/60/30-35 No. 8787
For in-duct installation.

Temperature control system for warm water heater battery

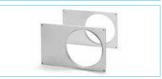
Type WHS HE<sup>1)</sup> Ref. no. 8319

1) In model WHR 4/60/30-35 the heat output is reduced to 2200 l/h.























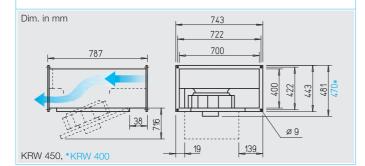






Suitable for polluted air.





### ■ Features of KR and SKR

- High pressure and high volume with high efficiency centrifugal fan.
- ☐ Particularly easy to service (cleaning) thanks to the swingout motor impeller unit.
- ☐ For cleaning, easy access and therefore suitable for extraction of polluted air.
- ☐ Straight through-flow.
- Compact design, convenient installation.

## ■ Special features of SKR

Lowest sound levels for intake and case breakout at higher power density.

## Specification

### ☐ Casing KR

Made of galvanised steel. Flanged (20 mm) on both ends for in-duct installation.

## ☐ Casing SKR

As above, but with additional sound insulation with 50 mm thick mineral fibre board, inside lined with a sound deadening perforated plate.

## Common features of KR and SKR

## ☐ Impeller

Centrifugal, backward curved impeller made of polymer. Aero-dynamically optimised, intake air flow by means of an inlet nozzle.

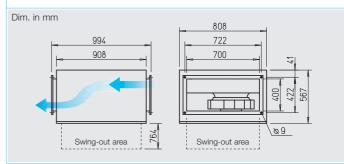
### SKR – Sound insulated

## **acousticline**

## Lowest sound levels for intake and case breakout at higher power density.

Use in extract and fresh air systems with specific requirements for low noise levels.





## ■ Motor

Through maintenance-free external-rotor motor, on which the impeller is mounted. Closed design. Protection to IP 54. Winding with moisture impregnation. Ball bearing mounted, interference-free. Motor and impeller are dynamically balanced.

### ■ Motor protection

Through built-in thermal contacts via a tripping unit (accessories).

## ☐ Speed control

possible through voltage reduction by means of 5-step transformer or electronic (stepless). Duties at different speeds are exemplarily given in the performance curve.

## □ Electrical connection

Terminal box (IP 54) fitted to flying lead.

## ☐ Installation

Installation in any position.
Allowance must be made for the motor swing out access.

## ☐ Sound Levels

Above the performance curve, total values and spectrum are given for:

- Sound level case breakout
- Sound level intake
- Sound level exhaust
   The sound power level (on intake) is additionally shown within the performance curve for corresponding control voltages.

sponding control voltages.

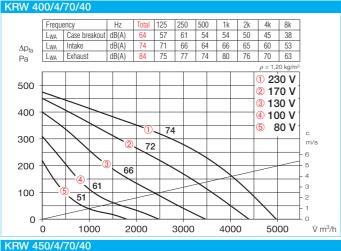
In the table below you can also find:

 Case breakout sound level at 4 m (free field conditions).

Туре	Ref. no.	Air flow volume (FID)	Nominal R.P.M.	Sound press. case breakout	Motor	power	Wiring diagram	max. a tempera full load	ature at	Weight net approx.	Speed contro with full moto		Full motor prote connection thermal of	of built-in
		Ÿ m³/h	min-1	dB(A) in 4 m	kW	А	No.	+°C	+°C	kg	Туре	Ref. no.	Type	Ref. no.
Single phase, 230 \	, 50 Hz, c	apacitor m	otor, prote	ction to IP 54										
KRW 400/4/70/40	6150	4970	1320	44	0.57	2.60	536.1	60	60	39,0	MWS 5	1949	MW	1579
KRW 450/4/70/40	6151	6650	1390	51	1.04	4.80	536.1	60	60	38,7	MWS 7,5	1950	MW	1579
Three phase, 230/4	00 V, 50 I	lz, protectio	on to IP 54	1										
KRD 450/4/70/40 <sup>1)</sup>	<b>2)</b> 8694	5830	1430	47	0.82	2.80/1.60	860	60	40	48,5	RDS 4	1316	MD	5849
Sound insulated m	odel SKR	– Single ph	ase motor	, 230 V, 50 Hz,	capacitor	motor, prote	ection to IP	54						
SKRW 400/4/70/40	6143	4940	1330	42	0.53	2.40	536.1	60	60	62,0	MWS 5	1949	MW	1579
Sound insulated me	odel SKR	– Three pha	ase motor,	230/400 V, 50	Hz, protec	tion to IP 5	i4							
SKRD 450/4/70/40	8196	5430	1430	46	0.82	2.70/1.60	860	60	40	69,3	RDS 4	1316	MD	5849
SKRD 500/6/70/40 <sup>1</sup>	8197	4620	920	36	0.40	1.40/0.82	860	60	60	64,1	RDS 2	1315	MD	5849

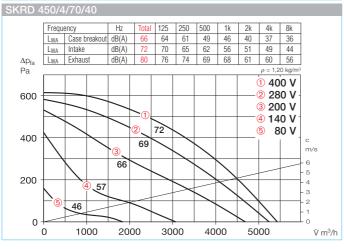
<sup>1)</sup> Characteristic curve diagram on www.HeliosSelect.de 2) Dimensional drawing on www.HeliosSelect.de





### Total 125 | 250 | 500 | 1k | 2k | 4k | 8k L<sub>WA</sub> Case breakout dB(A) L<sub>WA</sub> Intake dB(A) 71 61 70 62 59 53 49 44 79 74 73 70 70 69 66 58 L<sub>WA</sub> Exhaust 80 83 81 84 81 76 68 230 V 600 2 170 V 3 130 V 500 4 100 V 79 80 V 400 300 74 200 68 100 0 1000 3000 5000 6000 7000 2000 4000

### SKRW 400/4/70/40 Frequency H<sub>7</sub> Total 125 250 500 1k 2k 4k 8k tt dB(A) 62 58 59 47 44 40 36 34 dB(A) 69 68 61 58 53 51 46 42 dB(A) 79 73 71 67 73 70 65 58 L<sub>WA</sub> Case breakout dB(A) L<sub>WA</sub> Intake Pa L<sub>WA</sub> Exhaust 500 1 230 V 2 170 V 400 3 130 V 4 100 V 6 80 V 300 68 200 12 8 56 6 100 4 1000 2000 4000 V m³/h 0 3000 5000



### Accessories

## Gravity shutter

**Type VK 70/40** Ref. no. 0879 Air stream operated louvres, light grey polymer.

## External louvre

Type WSG 70/40 Ref. no. 0114

Heavy duty construction made from profile anodised aluminium extrusion.

## Vol. control damper for ducting Type JVK 70/40 Ref. no. 6915

Casing with flanges on both sides. The control mechanism is outside the airstream. For electrical drive, see STM, accessory.

## Circular spigot

Type FSK 70/40 Ref. no. 0840

For cost effective adaption of rectangular fans into circular ducting systems with Ø 400 mm.

# Flexible connectors Type VS 70/40 Ref. no. 5699

Flexible in-duct connector with flanges on both sides.

## Counterflange

Type GF 70/40 Ref. no. 6924

Flange frames made of galvanised steel for connection to ducting.

# Rectangular attenuator Type KSD 70/40 Ref. no. 8731 For in-duct installation on intake or exhaust side

### Air-duct filter

**Type KLF 70/40 G4** No. 8723 **Type KLF 70/40 F7** No. 8647

Bag filter with a large cross section area. Galvanised steel casing with flanges on both sides.

## Warm water heater battery

Type WHR 2/70/40 No. 8788 Type WHR 4/70/40 No. 8789

For in-duct installation.

# Temperature control system for warm water heater battery Type WHS HE<sup>1)</sup> Ref. no. 8319

1) In model WHR 4/70/40 the heat output is reduced to 2200 l/h.

















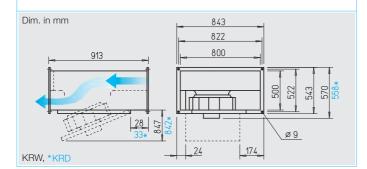


## Accessory details Page

Shutters, grilles and louvres 420, 487 on Filters, heater batteries and attenuators 421 on Temperature control systems for heater batteries 427, 432 on Speed controller and full motor protection devices 525 on







- ☐ High pressure and high volume with high efficiency centrifugal fan.
- ☐ Particularly easy to service (cleaning) thanks to the swingout motor impeller unit.
- ☐ For cleaning, easy access and therefore suitable for extraction of polluted air.
- ☐ Straight through-flow.
- ☐ Compact design, convenient installation.

## ■ Special features of SKR

Lowest sound levels for intake and case breakout at higher power density.

## Specification

### ☐ Casing KR

Made of galvanised steel. Flanged (20 mm) on both ends for in-duct installation.

## ☐ Casing SKR

As above, but with additional sound insulation with 50 mm thick mineral fibre board, inside lined with a sound deadening perforated plate.

## Common features of KR and SKR

## ☐ Impeller

Centrifugal, backward curved impeller made of polymer. Aero-dynamically optimised, intake air flow by means of an inlet nozzle.

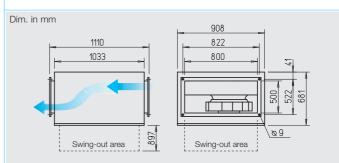
### SKR - Sound insulated

# **acousticline**

# Lowest sound levels for intake and case breakout at higher power density.

Use in extract and fresh air systems with specific requirements for low noise levels.





## ■ Motor

Through maintenance-free external-rotor motor, on which the impeller is mounted. Closed design. Protection to IP 54. Winding with moisture impregnation. Ball bearing mounted, interference-free. Motor and impeller are dynamically balanced.

## ■ Motor protection

Through built-in thermal contacts via a tripping unit (accessories).

## Speed control

possible through voltage reduction by means of 5-step transformer or electronic (stepless). Duties at different speeds are exemplarily given in the performance curve.

## ☐ Electrical connection

Terminal box (IP 54) fitted to flying lead.

### Installation

Installation in any position. Allowance must be made for the motor swing out access.

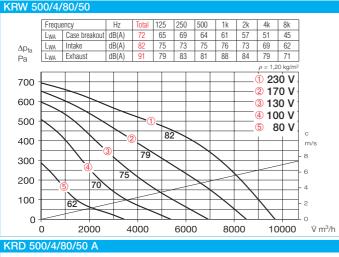
## ☐ Sound Levels

Above the performance curve, total values and spectrum are given for:

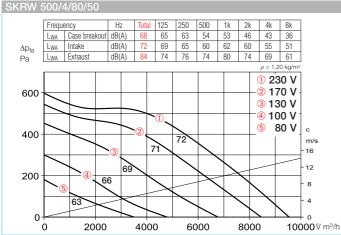
- Sound level case breakout
- Sound level intake
- Sound level exhaust
   The sound power level (on intake) is additionally shown within the performance curve for corresponding control voltages.
   In the table below you can also find:
- Case breakout sound level at 4 m (free field conditions).

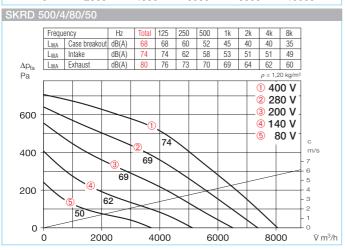
Туре	Ref. no.	Air flow volume (FID)	Nominal R.P.M.	Sound press. case breakout	Moto	rpower	Wiring diagram	max. a tempera full load		Weight net approx.	Speed contro with full moto		Full motor prote connection thermal	of built-in
		Ÿ m³/h	min-1	dB(A) in 4 m	kW	Α	No.	+°C	+°C	kg	Type	Ref. no.	Туре	Ref. no.
Single phase, 230 V	/, 50 Hz, c	apacitor m	otor, prote	ction to IP 54										
KRW 500/4/80/50	6152	9700	1370	52	1.55	6.80	536.1	60	60	66.9	MWS 10	1946	MW	1579
Three phase, 230/4	00 V, 50 H	lz, protectio	on to IP 54	,										
KRD 500/4/80/50 A	8643	8430	1360	52	1.21	4.70/2.70	860	60	60	64.2	RDS 7	1578	MD	5849
Sound insulated m	odel SKR	– Single ph	ase motor	; 230 V, 50 Hz,	capacitor	motor, prote	ection to IP	54						
SKRW 500/4/80/50	6144	9540	1360	48	1.49	6.60	536.1	60	60	93.3	MWS 10	1946	MW	1579
Sound insulated m	odel SKR	– Three ph	ase motor	, 230/400 <b>V</b> , 50	Hz, prote	ction to IP 5	4							
SKRD 500/4/80/50	8198	8050	1360	48	1.19	4.60/2.70	860	60	60	89.2	RDS 7	1578	MD	5849





### Frequency Hz Total 125 250 500 1k 2k 4k 8k Lwa Case breakout dB(A) 72 71 65 61 55 47 44 45 Lwa Intake dB(A) 78 74 72 69 68 65 64 63 L<sub>WA</sub> Exhaust 78 80 78 1 400 V 800 280 V 3 200 V 600 4 140 V 5 80 V m/s 78 400 200 65 0 0 2000 4000 6000 8000 V m³/h





### Accessories

## Gravity shutter

Type VK 80/50 Ref. no. 0880 Air stream operated louvres, light grey polymer.

## External louvre

Type WSG 80/50 Ref. no. 0115

Heavy duty construction made from profile anodised aluminium extrusion.

# Vol. control damper for ducting Type JVK 80/50 Ref. no. 6916

Casing with flanges on both sides. The control mechanism is outside the airstream. For electrical drive, see STM, accessory.

### Circular spigot

Type FSK 80/50 Ref. no. 0842

For cost effective adaption of rectangular fans into circular ducting systems with Ø 500 mm.

## Flexible connectors

**Type VS 80/50** Ref. no. 5700

Flexible in-duct connector with flanges on both sides.

## Counterflange

Type GF 80/50 Ref. no. 6925

Flange frames made of galvanised steel for connection to ducting.

# Rectangular attenuator Type KSD 80/50 Ref. no. 8732 For in-duct installation on intake or exhaust side.

### Air-duct filter

**Type KLF 80/50 G4** No. 8670 **Type KLF 80/50 F7** No. 8654

Bag filter with a large cross section area. Galvanised steel casing with flanges on both sides.

# Warm water heater battery Type WHR 2/80/50 No. 8795

**Type WHR 4/80/50** No. 8796

For in-duct installation.

















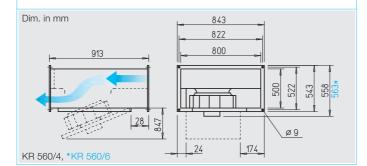
## Accessory details Page

Shutters, grilles
and louvres 420, 487 on
Filters, heater batteries
and attenuators 421 on
Speed controller and full motor
protection devices 525 on









- High pressure and high volume with high efficiency centrifugal fan.
- ☐ Particularly easy to service (cleaning) thanks to the swingout motor impeller unit.
- For cleaning, easy access and therefore suitable for extraction of polluted air.
- ☐ Straight through-flow.
- Compact design, convenient installation.

## ■ Special features of SKR

Lowest sound levels for intake and case breakout at higher power density.

## Specification

## ☐ Casing KR

Made of galvanised steel. Flanged (20 mm) on both ends for in-duct installation.

## ☐ Casing SKR

As above, but with additional sound insulation with 50 mm thick mineral fibre board, inside lined with a sound deadening perforated plate.

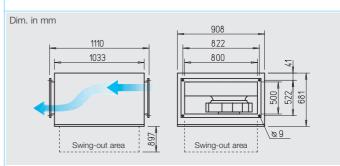
### SKR - Sound insulated

## **acousticline**

# Lowest sound levels for intake and case breakout at higher power density.

Use in extract and fresh air systems with specific requirements for low noise levels.





## Common features of KR and SKR

## ☐ Impeller

Centrifugal, backward curved impeller made of polymer. Aero-dynamically optimised, intake air flow by means of an inlet nozzle.

### ■ Motor

Through maintenance-free external-rotor motor, on which the impeller is mounted. Closed design. Protection to IP 54. Winding with moisture impregnation. Ball bearing mounted, interference-free. Motor and impeller are dynamically balanced.

## ■ Motor protection

Through built-in thermal contacts via a tripping unit (accessories).

## Speed control

possible through voltage reduction by means of 5-step transformer or electronic (stepless). Duties at different speeds are exemplarily given in the performance curve.

### ■ Electrical connection

Terminal box (IP 54) fitted to flying lead.

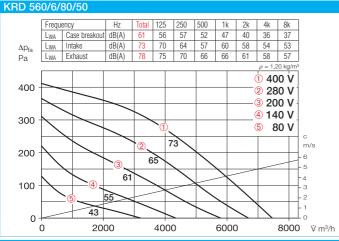
## ☐ Installation

Installation in any position.
Allowance must be made for the motor swing out access.

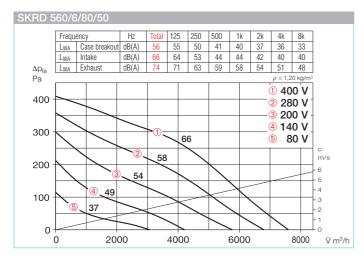
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Technical description	373
Design guidelines	10 on
Modul. system components	370

Туре	Ref. no.	Air flow volume (FID)	Nominal R.P.M.	Sound press. case breakout	Motor	Motor power		g max. air flow m temperature at full load control		Weight net approx.	Speed contr with full mot		Full motor protection device connection of built-in thermal contacts	
		Ÿ m³/h	min-1	dB(A) in 4 m	kW	Α	No.	+°C	+°C	kg	Туре	Ref. no.	Туре	Ref. no.
Three phase, 230/	400 V, 50 I	Hz, protectio	on to IP 54											
KRD 560/6/80/50	8842	7460	880	41	0.64	2.50/1.40	860	60	60	61.9	RDS 2	1315	MD	5849
KRD 560/4/80/50	6147	11970	1350	55	2.33	7.80/4.50	860	45	45	64.1	RDS 7	1578	MD	5849
Sound insulated n	Sound insulated model SKR – Three phase motor, 230/400 V, 50 Hz, protection to IP 54													
SKRD 560/6/80/50	8199	7600	880	36	0.66	2.50/1.50	860	60	60	86.9	RDS 2	1315	MD	5849





### KRD 560/4/8<u>0/50</u> Total 125 | 250 | 500 | 1k | 2k | 4k | 8k LWA Case breakout dB(A) 75 63 73 68 65 60 54 48 LWA Intake dB(A) 86 76 77 77 81 78 75 67 L<sub>WA</sub> Exhaust 81 83 1 400 V 800 280 V -3 200 V 4 140 V 600 5 80 V 86 m/s 82 400 10 78 8 74 200 65 0 0 2000 4000 6000 8000 10000 12000 $\dot{V}$ $m^3/h$



## ☐ Sound Levels

Above the performance curve, total values and spectrum are given for:

- Sound level case breakout
- Sound level intake
- Sound level exhaust The sound power level (on intake) is additionally shown within the performance curve for corresponding control voltages. In the table below you can also find:
- Case breakout sound level at 4 m (free field conditions).

### Accessories

## Gravity shutter

Type VK 80/50 Ref. no. 0880 Air stream operated louvres, light grey polymer.

## External louvre

Type WSG 80/50 Ref. no. 0115

Heavy duty construction made from profile anodised aluminium extrusion.

## Vol. control damper for ducting Type JVK 80/50 Ref. no. 6916

Casing with flanges on both sides. The control mechanism is outside the airstream. For electrical drive, see STM, accessory.

## Circular spigot

Type FSK 80/50 Ref. no. 0842

For cost effective adaption of rectangular fans into circular ducting systems with Ø 500 mm.

## Flexible connectors

Type VS 80/50 Ref. no. 5700

Flexible in-duct connector with flanges on both sides.

### Counterflange

Type GF 80/50 Ref. no. 6925

Flange frames made of galvanised steel for connection to ducting.

## Rectangular attenuator **Type KSD 80/50** Ref. no. 8732

For in-duct installation on intake or exhaust side.

## Air-duct filter

Type KLF 80/50 G4 No. 8670 Type KLF 80/50 F7 No. 8654

Bag filter with a large cross section area. Galvanised steel casing with flanges on both sides.

## Warm water heater battery

Type WHR 2/80/50 No. 8795 Type WHR 4/80/50 No. 8796

For in-duct installation.

















### Accessory details Page

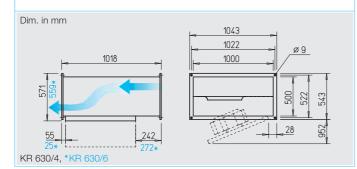
Shutters, grilles and louvres

420, 487 on Filters, heater batteries and attenuators 421 on

Speed controller and full motor 525 on protection devices







- ☐ High pressure and high volume with high efficiency centrifugal
- ☐ Particularly easy to service (cleaning) thanks to the swingout motor impeller unit.
- ☐ For cleaning, easy access and therefore suitable for extraction of polluted air.
- ☐ Straight through-flow.
- ☐ Compact design, convenient installation.

## ■ Special features of SKR

Lowest sound levels for intake and case breakout at higher power density.

## Specification

## ☐ Casing KR

Made of galvanised steel. Flanged (20 mm) on both ends for in-duct installation.

## ☐ Casing SKR

As above, but with additional sound insulation with 50 mm thick mineral fibre board, inside lined with a sound deadening perforated plate.

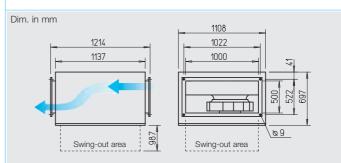
### SKR - Sound insulated

# **acousticline**

# Lowest sound levels for intake and case breakout at higher power density.

Use in extract and fresh air systems with specific requirements for low noise levels.





## Common features of KR and SKR

## ☐ Impeller

Centrifugal, backward curved impeller made of polymer. Aero-dynamically optimised, intake air flow by means of an inlet nozzle.

### ■ Motor

Through maintenance-free external-rotor motor, on which the impeller is mounted. Closed design. Protection to IP 54. Winding with moisture impregnation. Ball bearing mounted, interference-free. Motor and impeller are dynamically balanced.

## ■ Motor protection

Through built-in thermal contacts via a tripping unit (accessories).

### Speed control

possible through voltage reduction by means of 5-step transformer or electronic (stepless). Duties at different speeds are exemplarily given in the performance curve.

### Electrical connection

Terminal box (IP 54) fitted to flying lead.

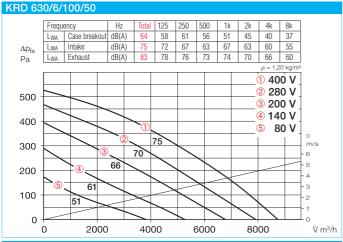
## ☐ Installation

Installation in any position.
Allowance must be made for the motor swing out access.

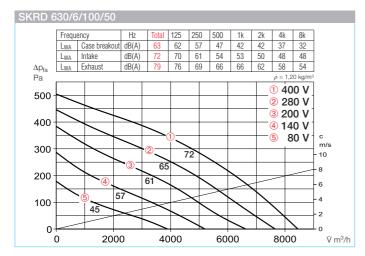
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Modul. system componen	ts 370

Туре	Ref. no.	Air flow volume (FID)	Nominal R.P.M.	Sound press. case breakout	Motor	power	Wiring diagram	max. a tempera full load	ature at	Weight net approx.	Speed contr with full mot		Full motor prote connection thermal	of built-in
		V m³/h	min-1	dB(A) in 4 m	kW	Α	No.	+°C	+°C	kg	Туре	Ref. no.	Туре	Ref. no.
Three phase, 230/4	00 V, 50 I	Hz, protectio	n to IP 54											
KRD 630/6/100/50	8846	8740	910	44	1.10	4.90/2.90	860	60	60	84.0	RDS 7	1578	MD	5849
KRD 630/4/100/50	6148	12100	1320	55	3.31	9.90/5.70	860	55	55	95.6	RDS 11	1332	MD	5849
Sound insulated m	Sound insulated model SKR – Three phase motor, 230/400 V, 50 Hz, protection to IP 54													
SKRD 630/6/100/5	8295	8450	900	43	1.17	5.00/2.90	860	60	60	112.8	RDS 7	1578	MD	5849





### KRD 630/4/100/50 Total 125 250 500 1k 2k 4k 8k LWA Case breakout dB(A) 75 67 71 70 68 61 56 50 LWA Intake dB(A) 86 77 74 79 81 78 74 66 86 84 81 72 400 V 1000 2 280 V 3 200 V 800 4 140 V 5 80 V 600 m/s 82 400 6 74 200 63 0 0 2000 4000 6000 8000 10000 12000 $\dot{V}$ $m^3/h$



## ☐ Sound Levels

Above the performance curve, total values and spectrum are given for:

- Sound level case breakout
- Sound level intake
- Sound level exhaust The sound power level (on intake) is additionally shown within the performance curve for corresponding control voltages In the table below you can also find:
- Case breakout sound level at 4 m (free field conditions).

### Accessories

### Gravity shutter

Type VK 100/50 Ref. no. 0881 Air stream operated louvres, light grey polymer.

## External louvre

## Type WSG 100/50 Ref. no. 0116

Heavy duty construction made from profile anodised aluminium extrusion.

## Vol. control damper for ducting Type JVK 100/50 Ref. no. 6917

Casing with flanges on both sides. The control mechanism is outside the airstream. For electrical drive, see STM, accessory.

## Circular spigot

## Type FSK 100/50 Ref. no. 0843

For cost effective adaption of rectangular fans into circular ducting systems with Ø 500 mm.

## Flexible connectors

## **Type VS 100/50** Ref. no. 5701

Flexible in-duct connector with flanges on both sides.

## Counterflange

## Type GF 100/50 Ref. no. 6926

Flange frames made of galvanised steel for connection to ducting.

## Rectangular attenuator Type KSD 100/50 Ref. no. 8733 For in-duct installation on intake or

exhaust side.

## Air-duct filter

#### Type KLF 100/50 G4 No. 8671 Type KLF 100/50 F7 No. 8655

Bag filter with a large cross section area. Galvanised steel casing with flanges on both sides.

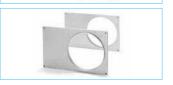
## Warm water heater battery Type WHR 2/100/50

No. 8797 Type WHR 4/100/50 No. 8798

For in-duct installation.

















#### Accessory details Page

Shutters, grilles

and louvres 420, 487 on

Filters, heater batteries

and attenuators 421 on

Speed controller and full motor

525 on protection devices



### ■ Counterflange GF

Designed for connecting rectangular fans and accessories to ducting where the flange frames are made of galvanised sheet steel.

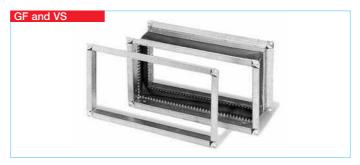
### ■ Connectors VS

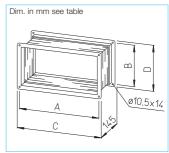
Flexible ducting connector with flange frames on both ends, made of galvanised sheet steel, with sealing lip all around; leak proof to VDI 3803, temperature resistance from –10 °C to +80 °C. The elastic sleeve in the middle section is made of plastic fibre bonded material. Designed to fit into rectangular fans

In order to prevent the vibration transmission and compensate small misalignments on site, the flexible connectors are fitted between the ducting and fan on intake and exhaust side.

For explosion proof rectangular

fans use VS Ex (explosion-proof)





Counterflange GF	Connector VS Type Ref. no.	Connector for Ex-proof fans	Fits fan duct nominal size	nominal size in mm				
Type Ref. no.		Type Ref. no.	mm	A B	C D	GF VS		
<b>GF 30/15</b> 6918	<b>VS 30/15</b> 6928		300 x 150	320 170	340 190	0.7 1.8		
<b>GF 40/20</b> 6919	<b>VS 40/20</b> 5694		400 x 200	420 220	440 240	0.8 2.3		
<b>GF 50/25</b> 6920	<b>VS 50/25</b> 5695	<b>VS 50/25 Ex</b> 0265	500 x 250	520 270	540 290	0.9 2.8		
<b>GF 50/30</b> 6921	<b>VS 50/30</b> 5696	<b>VS 50/30 Ex</b> 0266	500 x 300	520 320	540 340	1.0 2.9		
<b>GF 60/30</b> 6922	<b>VS 60/30</b> 5697	<b>VS 60/30 Ex</b> 0267	600 x 300	620 320	640 340	1.1 3.2		
<b>GF 60/35</b> 6923	<b>VS 60/35</b> 5698	VS 60/35 Ex 0268	600 x 350	620 370	640 390	1.1 3.4		
<b>GF 70/40</b> 6924	<b>VS 70/40</b> 5699	<b>VS 70/40 Ex</b> 0269	700 x 400	720 420	740 440	1.2 3.7		
<b>GF 80/50</b> 6925	<b>VS 80/50</b> 5700		800 x 500	820 520	840 540	1.5 4.5		
<b>GF 100/50</b> 6926	<b>VS 100/50</b> 5701		1000 x 500	1020 520	1040 540	1.7 5.0		

## ■ Volume control dampers JVK

types.

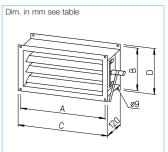
Flanged casing on both sides, made of galvanised sheet steel, designed to fit into rectangular fans. The blades are hollow and their shafts run embedded in polymer guides. The external control lever adjusts all blades equally.

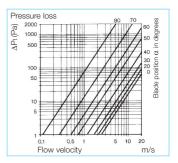
The control mechanism is also outside the airstream and secured against operational interruptions therefore unaffected by airborne contamination.

The blades create an additional pressure loss (shown in the adjacent diagram) which must be considered when designing.



Type Ref. no.	Fits fan duct nominal size mm	Duct-fan Ø mm	А	D	nsions mm C	D	Weight approx. kg
<b>JVK 30/15</b> 6927	300 x 150	180	320	170	340	190	3.5
<b>JVK 40/20</b> 6910	400 x 200	200-250	420	220	440	240	4.0
<b>JVK 50/25</b> 6911	500 x 250	315	520	270	540	290	5.0
<b>JVK 50/30</b> 6912	500 x 300	250	520	320	540	340	6.0
<b>JVK 60/30</b> 6913	600 x 300	285	620	320	640	340	7.0
<b>JVK 60/35</b> 6914	600 x 350	315-400	620	370	640	390	7.2
<b>JVK 70/40</b> 6915	700 x 400	355-450	720	420	740	440	9.0
<b>JVK 80/50</b> 6916	800 x 500	400-500	820	520	840	540	11.7
<b>JVK 100/50</b> 6917	1000 x 500	450-630	1020	520	1040	540	13.5





# AccessoriesServo motor

**STM 10 230 V** Ref. no. 8791

Electric drive for opening and closing of volume control dampers JVK. Installation in any position by using fixing clamp (for Ø 8–26 or  $\square$  8–26 mm) and fixing with the attached anti-rotation locking bracket.

Adjustment of shutter position by using the gear unlock button. Output signal available to indicate "open" or "close". Visible indication of shutter position (0 – 90°).

## Auxiliary switch

**STM 2P** Ref. no. 8794

The servo motor STM 10 230 V can also be operated with an auxiliary switch component. Two adjustable micro-switches indicate the control position. The adjustable angle settings can be set. Position indication via adjustment ring (mechanical, snapon).



### ■ Technical data

100-240 VAC Supply voltage Frequency 50/60 Hz 10 Nm Torque 0 to 95 $^{\circ}$ Rotation angle Operation 2.5 W Running time (open/close) 150 s Left/right motor rotation reversible Ambient temp. -30 to +50 °C Protection IP 54 Protection class W 80 x H 124 x D 62 Dim. mm Weight approx. 0.75 kg Wiring diagram no. 1087