

This chart is enables the easy selection of rectangular fans by combining the parameters of static pressure increase Δp_{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 vo	olumes V m ³	/h against st	atic pressur	е								
Туре	L _{PA} dB(A)	L _{PA} dB(A)	(ΔP _{fa}) in F	Pa Pa											
	in 4 m	in 4 m	0	50	100	150	200	250	300	350	400	500	600	700	800
KV - with forward curv															
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		10.10						
KVD 225/4/50/25	43	52	1920	1820	1710	1590	1460	1290	1040	4000					
KVD 250/4/50/30	42	56	2020	2700	2020	2110	1970	1810	1610	1320	0000	2000			
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	3300	4300	4040	3320	
KVD 355/8/70/40	35	47	4790	4410	4000	3520	2850	1000	0000	0100					
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 backware	d curved imp	ellers / SKR	EC - with	sound isol	ated casing	I									
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		
KRD EC 500/80/50 A	51	62	8810	8520	8230	7940	7630	7260	6890	6560	6120	5300	4170	2590	
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	60	69	14410	14120	13830	13530	13230	12950	12670	12410	12130	11550	10970	10360	9620
SKRW EC 315/50/25	47	54	2600	2500	2400	2270	2140	2020	1860	1720	1500	1040	0.400	0070	E00
SKRW EC 355/60/30	51	58 56	3950	3840	3720	3590	3480	3370	3250	3120	3000 3170	2750	2460 2560	2070 1990	580
SKRW EC 400/60/35 SKRW EC 450/70/40	51 45	56 54	4200 5420	4100 5130	4000 4900	3890 4620	3760 4330	3620 4050	3480 3770	3330 3420	3060	2880 2280	1010	1990	
SKRD EC 355/60/30	52	60	4550	4450	4360	4230	4330	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	1200	OOLO
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	urved impelle	ers / SKR – v	with sound	isolated ca	asing										
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	39	51	1760	1580	1390	1110	840	370							
KRW 355/4/60/35	42	55	3600	3370	3130	2900	2590	2090	1330	570					
KRW 400/4/70/40	44	54	4970	4710	4400	4110	3730	3320	2750	2090	1160	0000			
KRW 450/4/70/40	51	59	6650	6360	6010	5710	5430	5120	4730	4280	3850	2290	0000		
KRW 500/4/80/50	52	62	9700	9380	9040	8670	8310	7920	7460	6890	6260	4590	2290		
KRD 355/4/60/35	37 47	50 57	2840 5830	2640	2410 5320	2110 5060	1860 4810	1510 4550	1050 4230	450 3930	3610	2840	1840		
KRD 450/4/70/40 KRD 500/4/80/50 A	47 52	57 58	5830 8430	5570 8120	7810	7490	7110	4550 6670	6300	5870	5420	2840 4530	3560	1330	
KRD 560/6/80/50 A	41	53	7460	6940	6300	5630	5110	4290	3490	2410	400	4000	3300	1550	
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	0110	2320	070
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	5510		0030	0020	5510		22.0	
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						
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				

Helios

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 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 characteristic curve.

☐ Air flow direction

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.

V = 920 - 8500 m³/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.

 $\dot{V}=540-14\,410~m^3/h$. 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.







- 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.

280

502

□ 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

422

400

Swing-out area

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).

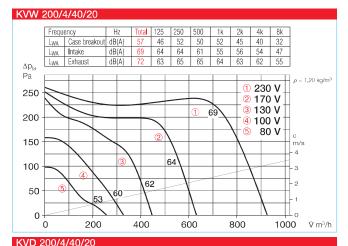
Installation

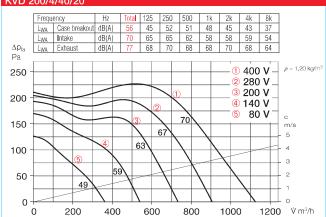
Possible in any position. Attention should be paid to accessibility/swing out.

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Туре	Ref. no.	Air flow volume, free discharge	Nominal R.P.M.	Sound press. case breakout	Power consumption		Wiring diagram	Max. air flow temperature at Nom. vol. Control		Weight net approx.	Speed contr without motor protect, unit		troller 5-step with motor protect. unit		Motor full protection device to connect built-in thermal cont	
		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, 23	0 V, 50 Hz, ca	pacitor moto	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, 23	0/400 V, 50 H	z, 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 ∅ 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



























- 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., 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

544

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

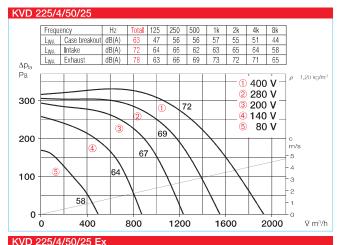
Possible in any position.
Attention should be paid to accessibility/swing out.

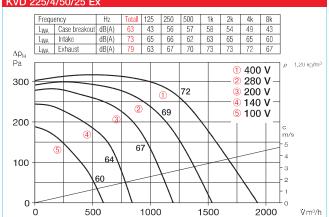
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■ Explosion-proof models

Туре	Ref. no.	Air flow volume, free discharge	Nominal R.P.M.	Sound press. case breakout	Power consumption		Wiring diagram	Max. air flow temperature at Nom. vol. Control		Weight net approx.	Speed cont without motor protect, unit		troller 5-step with motor protect. unit		Motor full protection device to connect built-in thermal conta	
		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 ph. motor, 230/40	0 V, 50 Hz, p	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 Ex	c 6810	1900	1280	43	0.53	0.92	899	40	40	17	TSD 1,5	1501	_	_	MSA	1289







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

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



























- Low-noise centrifugal impellers in aerodynamic galvanised steel casing for high pressure levels.
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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., 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

544

522 500

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

- Sound level case breakout
- Sound level intake
 - Sound level exhaust
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 In the table below you can also find:
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Installation

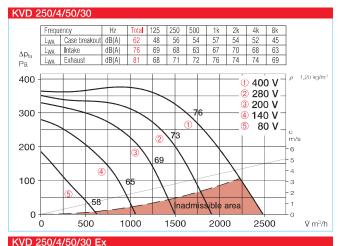
Possible in any position.
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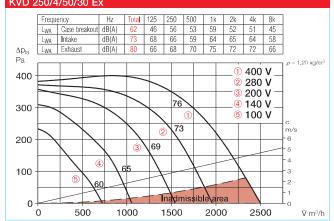
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□ Explosion-proof models

Туре	Ref. no.	Air flow volume, free discharge	Nominal R.P.M.	Sound press. case breakout	Power consumption		Wiring diagram	Max. air flow temperature at Nom. vol. Control		Weight net approx.	net without		roller 5-step with motor protect, unit		Motor full protection device to connect built-in thermal contac	
		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	/400 V, 50 H	z, 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 Ex	6811	2300	1240	42	0.74	1.5	899	40	40	21	TSD 1,5	1501	_	_	MSA	1289







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 50/30 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



























- 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., 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 find:
- Case breakout sound level at 4 m (free field conditions).

Installation

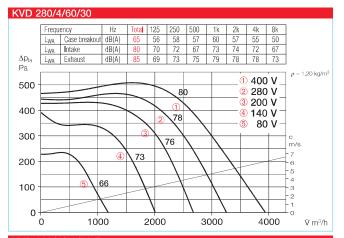
Possible in any position.
Attention should be paid to accessibility/swing out.

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□ Explosion-proof models

Туре	Ref. no.	Air flow volume, free discharge	Nominal R.P.M.	Sound press. case breakout	Power consumption		Wiring diagram	Max. air flow temperature at Nom. vol. Control		Weight net approx.	Speed conti without motor protect, unit		roller 5-step with motor protect, unit		Motor full protectio device to connect 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.
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 1	1 – T3, 3-	phase 230/4	00 V, 50 H	lz, protec	tion to IP 44	ļ.								
KVD 280/4/60/30 E	6812	3450	1340	47	1.45	2.9	899	40	40	34	TSD 5,5	1503	_	_	MSA	1289





KVD 2	280/4	/60/30 E	X										
	Freque	ency	Hz	Total	125	250	500	1k	2k	4k	8k		
	LWA	Case breakout	dB(A)	67	54	59	58	63	60	57	52		
Δp_{fa}	LWA	Intake	dB(A)	78	71	70	65	72	70	69	64		
Pa Pa	LWA	Exhaust	dB(A)	86	70	75	75	80	80	79	74		
500 -									1	400		ρ 1	,20 kg/m ³
400 -				<u> </u>	2)		80		3 4	200 140) V _) V _		
300 -				3	7	6	, ,			100) V	c m/s	
200 -		(5)	4	73			$\overline{}$					-7 -6	
100 -			68			1						- 4 - 3 - 2	
0 -			-		\ Ina	dmis	ajble a	rea				- 1 - 0	
	0	100	0	2	2000		30	000		40	00	-	Ů m³/h

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 60/30 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 \varnothing 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

arga 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 HE¹⁾ Ref. no. 8319

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



























- 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., 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 find:
- Case breakout sound level at 4 m (free field conditions).

Installation

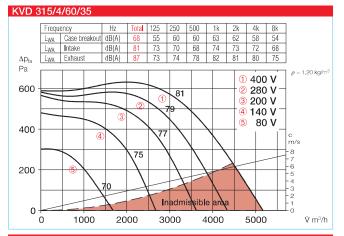
Possible in any position.
Attention should be paid to accessibility/swing out.

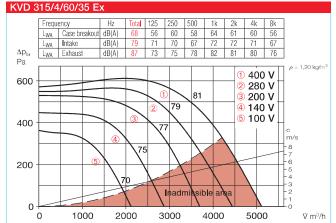
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□ Explosion-proof models

Туре	Ref. no.	Air flow volume, free discharge	Nominal R.P.M.	Sound press. case breakout	Power consumption		Wiring diagram	Max. air flow temperature at Nom. vol. Control		Weight net approx.	net without		roller 5-step with motor protect, unit		Motor full protection device to connect 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.
3-phase motor, 23	3-phase motor, 230/400 V, 50 Hz, protected to IP 44															
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	c e II, temper	ature class 1	1 – T3, 3-	phase 230/4	00 V, 50 I	lz, protec	tion to IP 44	1								
KVD 315/4/60/35 I	x 6813	4200	1370	48	2.0	4.0	899	40	40	42	TSD 5,5	1503	_	_	MSA	1289







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-fans

Type 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 HE¹⁾ Ref. no. 8319

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





























- 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., 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

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

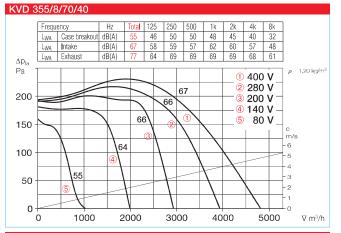
Possible in any position.
Attention should be paid to accessibility/swing out.

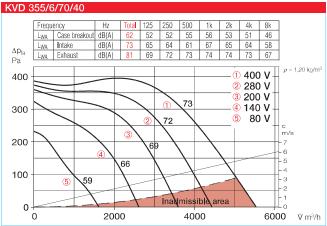
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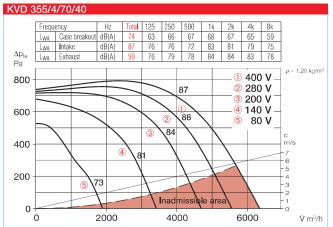
□ Explosion-proof models

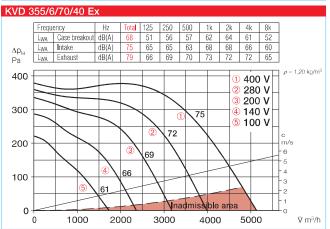
Туре	Ref. no.	Air flow volume, free discharge	Nominal R.P.M.	Sound press. case breakout	Power consumption		Wiring diagram	Max. air flow temperature at Nom. vol. Control		Weight Speed cont without approx. motor protect. unit		troller 5-step with motor protect. unit		Motor full protection device to connect built-in thermal contac		
		V m³/h	min-1	dB(A) in 4 m	kW A		No.	+°C	+°C	kg	Type	Ref. no.	Type	Ref. no.	Туре	Ref. no.
3-phase motor, 230/	phase motor, 230/400 V, 50 Hz, 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, temperature class T1 – T3, 3-phase 230/400 V, 50 Hz, protection to IP 44																
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 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

flanges on both sides.

For in-duct installation.

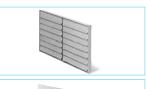
Type KLF 70/40 G4 No. 8723 Type KLF 70/40 F7 No. 8647 Bag filter with a large cross section area. Galvanised steel casing with

Warm water heater battery
Type WHR 2/70/40 No. 8788
Type WHR 4/70/40 No. 8789

Temperature control system for warm water heater battery

Type WHS HE¹⁾ Ref. no. 8319

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





















Accessory details

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





- 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) 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).

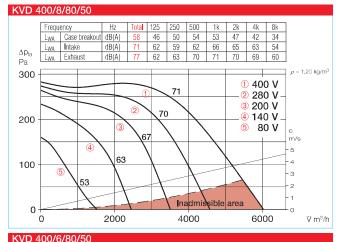
Installation

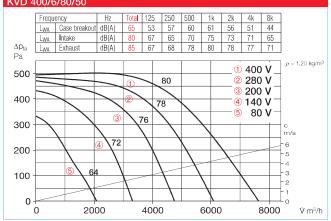
Possible in any position.
Attention should be paid to accessibility/swing out.

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Туре	Ref. no.	Air flow volume, free discharge	Nominal R.P.M.	Sound press. case breakout	. Power consumption		Wiring diagram	Max. a tempera Nom. vol.	ature at	Weight net approx.	with	Speed cont nout otect, unit	٧	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.	Туре	Ref. no.	Туре	Ref. no.
3-phase motor, 230	3-phase motor, 230/400 V, 50 Hz, 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 Shutters, grilles and

louvres 420, 487 on Filters, heaters and 421 on attenuators Speed controllers and motor full protection devices 525 on





- 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.

Dim. in mm 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

1044

1022 1000

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).

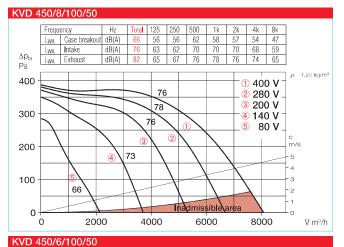
Installation

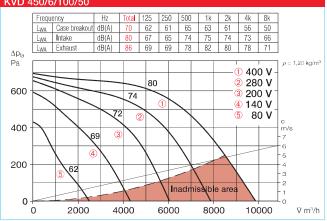
Possible in any position.
Attention should be paid to accessibility/swing out.

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Туре	Ref. no.	Air flow volume, free discharge	Nominal R.P.M.	Sound press. case breakout	. Power consumption		Wiring diagram	Max. a tempera Nom. vol.	ature at	Weight net approx.	without		troller 5-step with motor protect, unit		Motor full protection device to connect it built-in thermal conta	
		V m³/h	min-1	dB(A) in 4 m	kW	Α	No.	+°C	+°C	kg	Type	Ref. no.	Type	Ref. no.	Type	Ref. no.
3-phase motor, 230/400 V, 50 Hz, 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	RDS 11	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-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

Shutters, grilles and louvres 420, 487 on

Filters, heaters and 421 on attenuators Speed controllers and motor full protection devices 525 on

389