

AVD DK 1000



■ **Casing**

With motor bracket made from galvanised sheet steel.

■ **Impeller**

Hub and blades made of corrosion-resistant aluminium alloy. 10 aerodynamically profiled blades in combination with the guide vane achieve maximum efficiency and pressure ratings. Dynamically balanced, quality level 6.3 for low-vibration operation. Blades factory adjustable, see type overview for maximum pitch angle.

Explosion-proof types: 5 or 7 blades made of plastic, dynamically balanced.

■ **Motor**

Directly driven by efficient IE3 three-phase standard motor. Pole-switching fans with IEC standard motor. Protection class IP55, insulation class F. (Explosion-proof types differ)

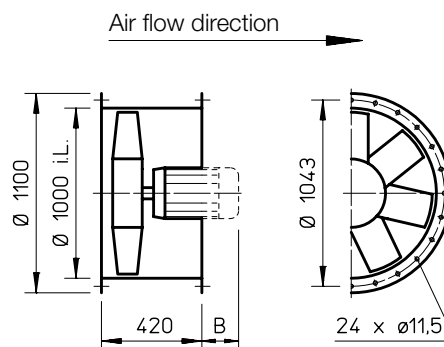
■ **Motor protrusion**

The protrudes dimension B in mm of the motor to the casing must be observed according to the type table.

■ **Motor protection**

All types (except pole switching and explosion proof) have PTC resistors and must be protected by the following full motor protection devices:
MSA, Ref. no. 01289
All other types must be protected by a conventional circuit

Dimensions AVD DK 1000



All dimensions in mm

Dim. B see table

breaker on site.

■ **Electrical connection**

Terminal box protection class IP55 mounted to casing.

■ **Speed control**

Controlled performance curves upon request.
All types are speed controllable by frequency inverter (except pole-switching and explosion-proof). The planned use of a frequency inverter without sine filter must be stated when ordering. This requires a change of fan design and possible additional costs.

■ **Installation**

Installation in any position. Ensure that the motor drainage holes face downwards.

■ **Dimensions**

Pole-switching and explosion-proof types may vary from adjacent information. Motor length may vary. Note protrusion dimension B.

■ **Noise levels**

The sound power levels are indicated by means of frequency and as sum levels above the performance curves.

Type	Ref. no.	Speed min ⁻¹	Motor power (nom.) (output) kW	Nominal voltage V	Power consumption A	Max. pitch angle ²⁾ °	Dim. B Motor protrusion mm	Wiring diagram No.	Max. air flow temp. +°C	Net weight approx. kg	Frequency inverter ³⁾ Type	Ref. no.
60° 3 phase motor, 400 V, 50 Hz, squirrel-cage rotor, protection class IP55												
AVD RK 1000/6 3 kW	05573	970	3.0	400	6.9	18	320	776	60	150	FU-BS 8,0	05461
AVD RK 1000/6 4 kW	05574	970	4.0	400	9.0	21	340	776	60	158	FU-BS 10	05462
AVD RK 1000/6 5,5 kW	05575	970	5.5	400	12.0	27	340	776	60	165	FU-CS 14	05875
AVD RK 1000/6 7,5 kW	40286	960	7.5	400	16.2	36	400	776	60	215	FU-CS 18	05469
AVD RK 1000/6 11 kW	40287	960	11.0	400	23.2	45	440	776	60	265	FU-CS 32	05471
AVD RK 1000/4 11 kW	05576	1450	11.0	400	20.7	20	400	776	60	235	FU-CS 22	05470
AVD RK 1000/4 15 kW	05577	1450	15.0	400	27.4	23	440	776	60	265	FU-CS 32	05471
AVD RK 1000/4 18,5 kW	05578	1460	18.5	400	33.6	26	480	776	60	275	FU-CS 40	05472
AVD RK 1000/4 22 kW	40288	1460	22.0	400	39.3	30	520	776	60	300	FU-CS 40	05472
AVD RK 1000/4 30 kW	40289	1470	30.0	400	57.2	38	560	776	60	360	—	
60° Pole-switching, 2 speed, 3 phase motor, Dahlander winding Y/YY, 400 V, 50 Hz, protection class IP55												
AVD RK 1000/8/4 2/8,9 kW ¹⁾	05582	730/1460	2.0/8.9	400/400	7/18	16	430	777	60	190	—	
AVD RK 1000/8/4 2,7/12 kW ¹⁾	05583	700/1460	2.7/12	400/400	7.09/24	21	430	777	60	200	—	
AVD RK 1000/8/4 4,6/18,5 kW ¹⁾	40290	730/1470	4.6/18.5	400/400	14/35	26	520	777	60	200	—	
AVD RK 1000/8/4 7/30 kW ¹⁾	40291	720/1465	7/30	400/400	17.3/59	38	540	777	60	285	—	
Ex Ex Explosion-proof Ex e II, 3 phase motor, 50 Hz, protection class IP54, temperature class T1-T3												
AVD RK 1000/6 Ex 3,5 kW	05590	960	3.5	400/690	7.4	26	325	498	40	130	not permitted	
AVD RK 1000/6 Ex 6,6 kW	05591	960	6.6	400/690	13.4	35	400	498	40	155	not permitted	

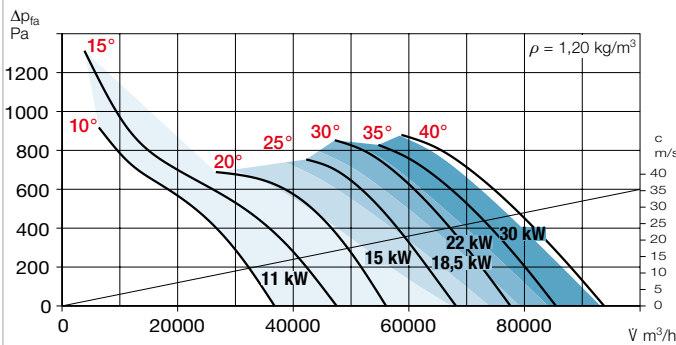
The flow volume and pressure increase information is required to determine the pitch angle.

¹⁾ Dahlander winding ²⁾ For the entire pitch angle performance curve, also higher depending on the operating point. ³⁾ Incl. full motor protection

Performance curves AVD 1000/4

n=1475 1/min

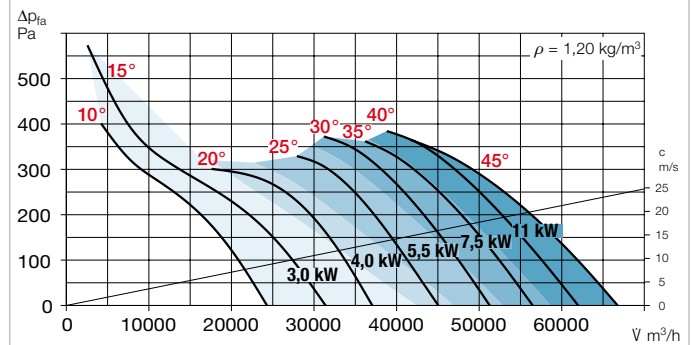
Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA} 15 °	dB (A)	105	72	88	99	101	98	91	84
L _{WA} 25 °	dB (A)	104	78	90	99	100	96	93	88
L _{WA} 35 °	dB (A)	108	79	92	103	104	101	96	91



Performance curves AVD 1000/6

n=975 1/min

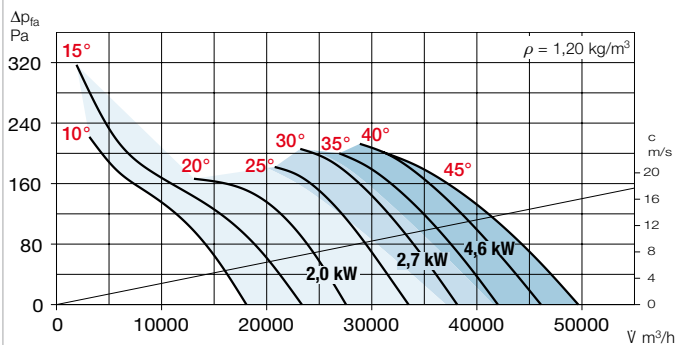
Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA}	15 °	dB (A)	93	70	82	89	89	84	78	72
L _{WA}	25 °	dB (A)	93	72	84	87	87	85	82	76
L _{WA}	35 °	dB (A)	97	74	89	91	93	88	85	80



Performance curves AVD 1000/8

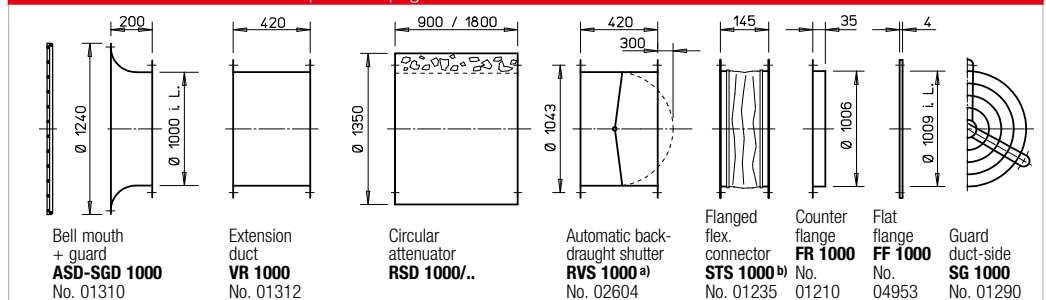
n=725 1/min

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA}	15 °	dB (A)	85	64	77	82	80	75	70	62
L _{WA}	25 °	dB (A)	85	67	77	80	79	76	73	68
L _{WA}	35 °	dB (A)	89	68	81	85	84	80	77	71



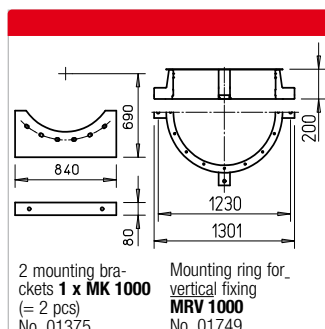
Note for Ex types: Performance curves and sound data at www.HeliosSelect.de.

Accessories for AVD RK Description see page 163 ff.



a) Motor-operated back-draught shutter see main Helios catalogue b) Types for explosion-proof fans see below

Anti-vibration mounts			
Pressure		Tensile	
Type	Ref. no.	Type	Ref. no.
SDD 2	01453	SDZ 2	01455
SDD 2	01453	SDZ 2	01455
SDD 2	01453	SDZ 3	01366
SDD 3	01367	SDZ 3	01366
SDD 3	01367	SDZ 3	01366
SDD 3	01367	SDZ 3	01366
SDD 3	01367	SDZ 3	01366
SDD 3	01367	SDZ 3	01366
SDD 3	01367	SDZ 6	01927
SDD 3	01367	SDZ 3	01366
SDD 3	01367	SDZ 3	01366
SDD 3	01367	SDZ 3	01366
SDD 3	01367	SDZ 3	01366
SDD 2	01453	SDZ 2	01455
SDD 2	01453	SDZ 2	01455



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Techn. description	22 ff.
Project planning information	10 ff.
Special design	
Alternative voltage, protection class, air flow direction, higher air flow temperature and acid protection upon request.	

Other accessories	Page
b) Access. for ex-proof fans	
Flanged flexible connector Type STS 1000 Ex	No. 02513
Mounting accessories	160 ff.
Attenuators	168
Gas warning systems, switch and control technology	170 ff.
Frequency inverter	180 ff.