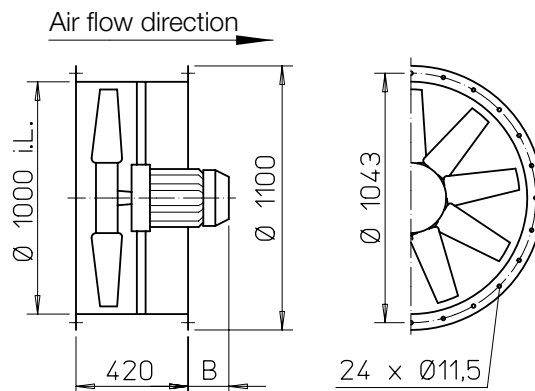


AVD DK 1000



Dimensions AVD DK 1000



All dimensions in mm

Dim. B see table

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.

Motor

Directly driven by efficient IE3 three-phase standard motor. Pole-switching fans with IEC standard motor. Protection class IP55, insulation class F.

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 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 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 Δ/Δ, 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 Explosion-proof Ex e II, 3 phase motor, 50 Hz, protection class IP54, temperature class T1-T3													
AVD RK 1000/6 Ex 7,5 kW	40887	970	7.5	400	15.11	35	440	776	40	200		not permitted	
AVD RK 1000/6 Ex 11 kW	40888	975	11.0	400	22.36	44	530	776	40	280		not permitted	
AVD RK 1000/4 Ex 18,5 kW	40889	1470	18.5	400	33.91	26	530	776	40	280		not permitted	
AVD RK 1000/4 Ex 22 kW	40890	1472	22.0	400	42.1	29	530	776	40	330		not permitted	

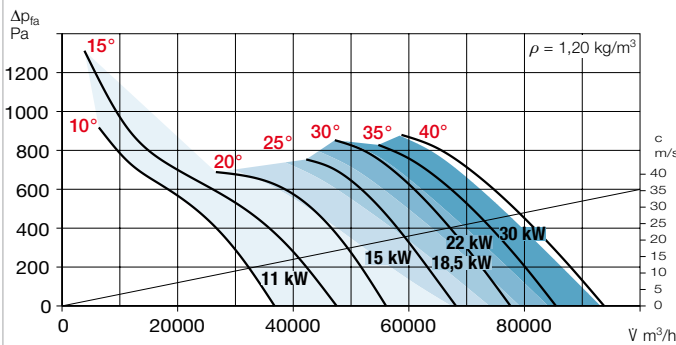
The flow volume and pressure increase information is required to determine the pitch angle.

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

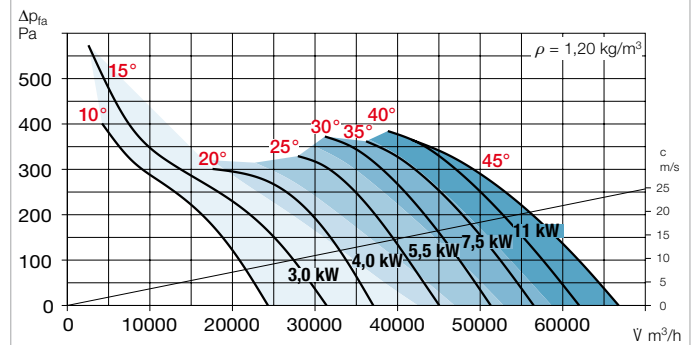
Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA}	15 °	dB (A) 105	72	88	99	101	98	91	84
L _{WA}	25 °	dB (A) 104	78	90	99	100	96	93	88
L _{WA}	35 °	dB (A) 108	79	92	103	104	101	96	91



Performance curves AVD 1000/6

n=975 1/min

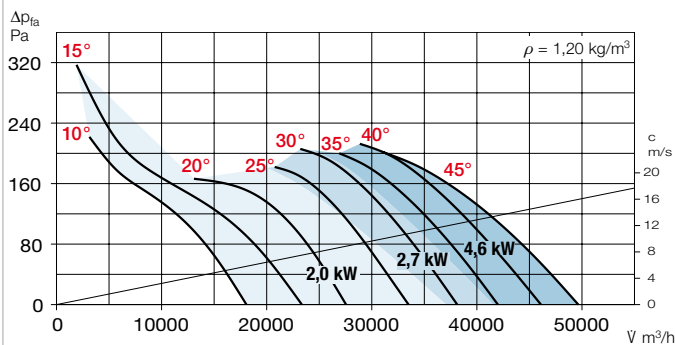
Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA}	15 °	dB (A) 93	70	82	89	89	84	78	72
L _{WA}	25 °	dB (A) 93	72	84	87	87	85	82	76
L _{WA}	35 °	dB (A) 97	74	89	91	93	88	85	80



Performance curves AVD 1000/8

n=725 1/min

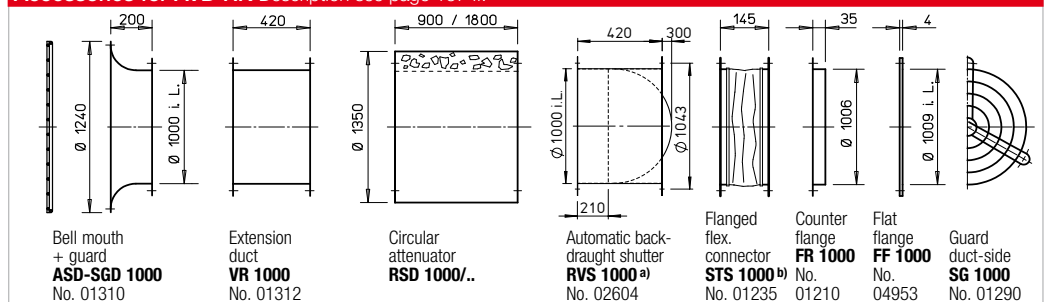
Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA}	15 °	dB (A) 85	64	77	82	80	75	70	62
L _{WA}	25 °	dB (A) 85	67	77	80	79	76	73	68
L _{WA}	35 °	dB (A) 89	68	81	85	84	80	77	71



Note for Ex types:

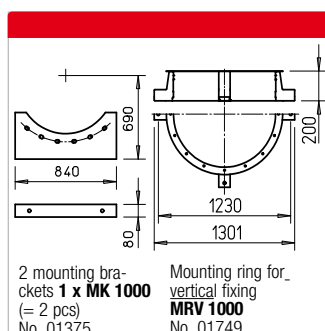
- Performance curves and sound data at www.HeliosSelect.de.
- At lower medium temperatures, power consumption increases, so an appropriate power reserve must be taken into account (e.g. +16% at -20 °C and +8% at 0 °C).

Accessories for AVD RK Description see page 167 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 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 3	01367	SDZ 3	01366
SDD 3	01367	SDZ 3	01366
SDD 3	01367	SDZ 4	01945



Information	Page
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	164 ff.
Attenuators	172
Gas warning systems, switch and control technology	174 ff.
Frequency inverter	184 ff.