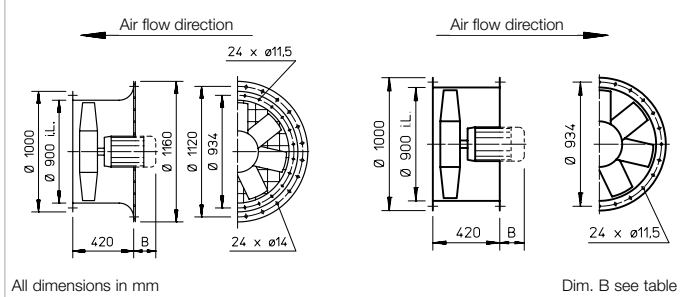


AVD DK 900 and HRF/AVD RK 900



Dimensions AVD DK 900 and HRF/AVD RK 900



- Casing**  
With motor bracket made from galvanised sheet steel.
- Impeller**  
High performance characteristics with 5 or 7 polymer blades, dynamically balanced.
- Pitch angle**  
The impeller blades are adjustable (except explosion-proof) for optimal coverage of the operating point. The adjustment is carried out ex works (in accordance with order) and fixed. The motor allocation takes place using the maximum power pursuant to the information in the table below. The specified position must not be exceeded.
- Motor**  
Totally enclosed motor IP55 or IP54. Maintenance-free and interference-free. Tropicalised winding with humidity protection impregnation.
- Motor protection**  
All types (except pole switching and explosion proof) have thermal contacts or PTC resistors and must be protected by the following full motor protection devices pursuant to the footnotes in the tables:  
<sup>4</sup>MSA, Ref. no. 01289 (for PTC temperature sensors)  
<sup>5</sup>M4, Ref. no. 01571  
 All other types must be protected by a conventional circuit breaker on site.

- Electrical connection**  
Terminal box protection class IP54 mounted to motor.
- Guard**  
According to DIN EN ISO 13857, hot-dip galvanised, as standard for AVD DK.
- Speed control**  
Some types are speed controllable voltage reduction, see column "Transformer speed controller". 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.
- Reversed operation**  
All types are reversible by means of a reversing switch. There is a performance reduction of 1/3 in the abnormal airflow direction.
- 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.

Speed	Air flow volume (FID)	Motor power (nom.) (output)	Nominal voltage	Power consumption (control*)	Max. pitch angle	Wiring diagram	Max. air flow temp.	Net weight approx. 4)	Fan type		Dim. B Motor protrusion	Transformer controller for 5 speed pole switch					
									AVD DK incl. guard motor power in kW	HRFD, AVD RK motor power in kW		Type	Ref. no.				
min <sup>-1</sup>	V m <sup>3</sup> /h	kW	V	A	°	No.	+°C	kg	Type	Ref. no.	mm	Type	Ref. no.				
<b>40° 3 phase motor, 50 Hz, squirrel-cage rotor, protection class IP54</b>																	
950	37300	3.0*	400/690	6.2*	34	776	40	130	AVD DK 900/6 <sup>5)</sup>	3.0	05369	AVD RK 900/6 <sup>5)</sup>	3.0	06985	290	—	—
1445	35030	4.0*	400/690	8.3*	16	776	40	118	AVD DK 900/4 <sup>5)</sup>	4.0	05370	AVD RK 900/4 <sup>5)</sup>	4.0	06986	210	—	—
1450	48995	7.5*	400/690	14.5*	27	776(030)	40	142	AVD DK 900/4 <sup>5)</sup>	7.5	05371	AVD RK 900/4 <sup>5)</sup>	7.5	06987	325	—	—
1470	57720	11.0*	400/690	20.0*	34	776(030)	40	186	AVD DK 900/4 <sup>5)</sup>	11.0	05372	AVD RK 900/4 <sup>5)</sup>	11.0	06988	385	—	—
<b>40° 2 speed, 3 phase motor, 400 V, 50 Hz, Y/Δ circuit, protection class IP55</b>																	
755/930	18390/22660	0.71*/1.32*	400/400	2.1*/4.0*	19	520	40	90	AVD DK 900/6/6 <sup>6)</sup>	0.71/1.32	05367	AVD RK 900/6/6 <sup>6)</sup>	0.71/1.32	06983	180	RDS 7 <sup>7)</sup>	01578
770/920	25990/31060	1.38*/2.37*	400/400	3.9*/7.1*	27	520	40	115	AVD DK 900/6/6 <sup>6)</sup>	1.38/2.37	05368	AVD RK 900/6/6 <sup>6)</sup>	1.38/2.37	06984	210	RDS 11 <sup>7)</sup>	01332
<b>40° Pole-switching, 2 speed, 3 phase motor, 50 Hz, protection class IP54</b>																	
700/1435	18270/37450	1.10*/4.50*	400/400	2.9*/9.6*	18	471	40	120	AVD DK 900/8/4 <sup>1)</sup>	1.1/4.5	05379	AVD RK 900/8/4 <sup>1)</sup>	1.1/4.5	06995	290	PDA 12 <sup>9)</sup>	05081
715/1450	22390/45410	1.80*/6.50*	400/400	5.7*/14.5*	24	471	40	148	AVD DK 900/8/4 <sup>1)</sup>	1.8/6.5	05380	AVD RK 900/8/4 <sup>1)</sup>	1.8/6.5	06996	325	PDA 25	05060
<b>Ex Explosion-proof Ex e II, 3 phase motor, 50 Hz, protection class IP54, temperature class T1-T3</b>																	
700	24470	0.95*	400	2.8*	27	470	40	110	AVD DK 900/8 Ex	0.95	05386	AVD RK 900/8 Ex	0.95	06899	180	not permitted	
725	28470	1.30*	400	3.9*	34	470	40	130	AVD DK 900/8 Ex	1.3	05387	AVD RK 900/8 Ex	1.3	06900	210	not permitted	
950	30550	1.90*	400	4.7*	25	470	40	135	AVD DK 900/6 Ex	1.9	05389	AVD RK 900/6 Ex	1.9	06901	210	not permitted	
960	38040	3.50*	400/690	7.4*	35	498	40	160	AVD DK 900/6 Ex	3.5	05390	AVD RK 900/6 Ex	3.5	06902	290	not permitted	
1450	46630	6.80*	400/690	13.6*	25	498	40	175	AVD DK 900/4 Ex	6.8	05392	AVD RK 900/4 Ex	6.8	06903	325	not permitted	
1465	55240	10.00*	400/690	19.8*	32	498	40	235	AVD DK 900/4 Ex	10.0	05393	AVD RK 900/4 Ex	10.0	06904	385	not permitted	

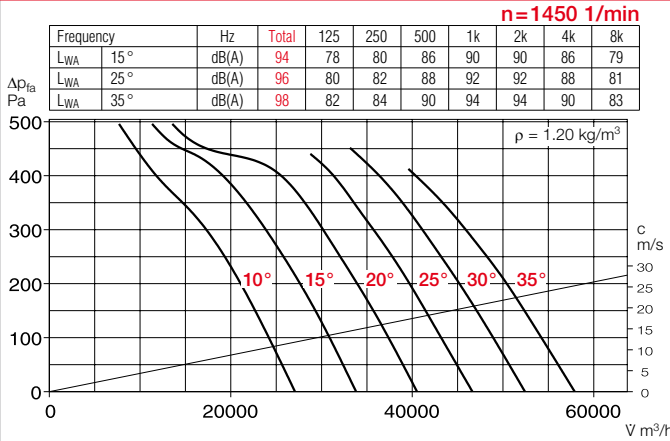
The flow volume and pressure increase information is required to determine the pitch angle.

<sup>1)</sup> Dahlander winding    <sup>2)</sup> Separate winding    <sup>3)</sup> Flush-mounted version see Switch product page

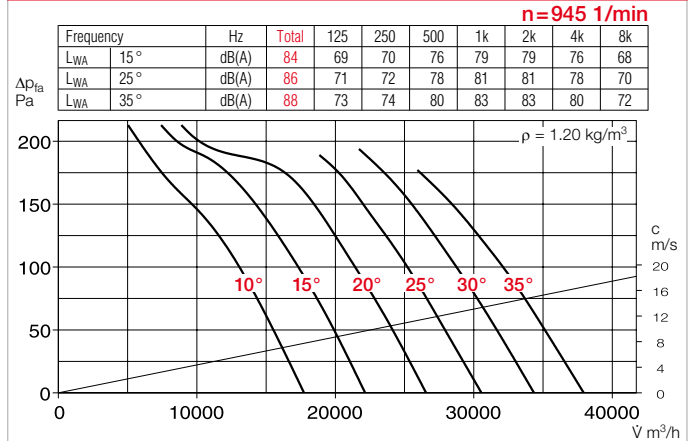
<sup>4)</sup> Weights apply for types .DK and .RK, HRF less approx. 15 kg

<sup>5)</sup> and <sup>6)</sup> Full motor protection devices, see description "Motor protection"

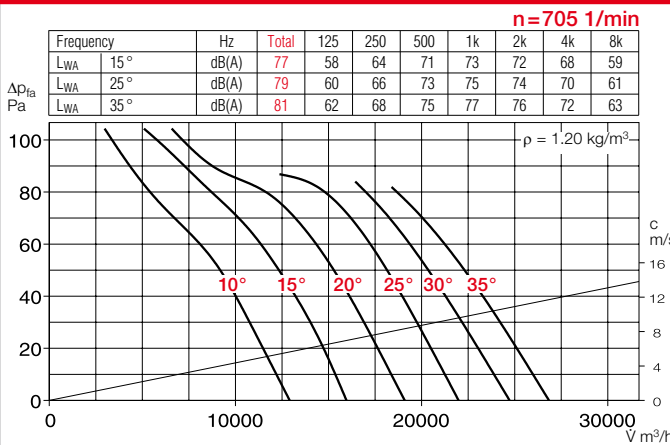
Performance curves AVD 900/4



Performance curves AVD 900/6

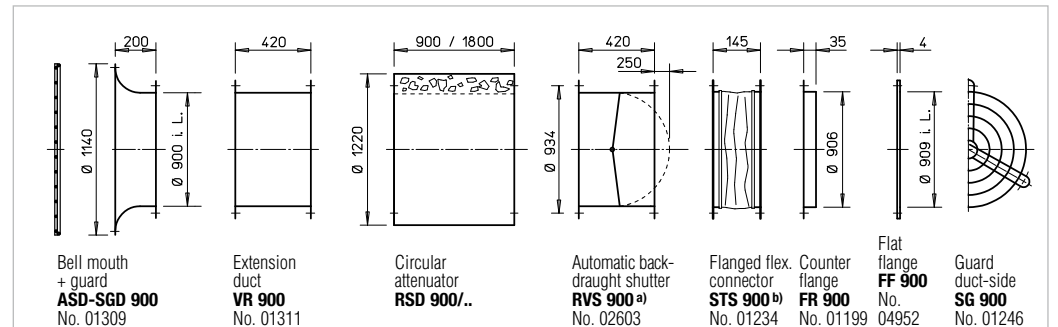


Performance curves AVD 900/8

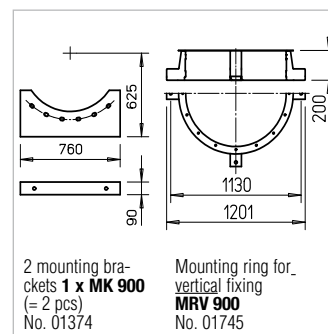


Accessories for AVD RK Description see page 151 ff.

Electronic speed controller, stepless frequency inverter		Anti vibration mounts Nominal size	
<b>SDD/SDZ</b>			
Type	Ref. no.	Type	Ref. no.
<b>FU-BS 8<sup>7)</sup></b>	05461	<b>..2/..2</b>	01453/01455
<b>FU-BS 10<sup>7)</sup></b>	05462	<b>..2/..2</b>	01453/01455
<b>FU-CS 18<sup>7)</sup></b>	05469	<b>..2/..2</b>	01453/01455
<b>FU-CS 22<sup>7)</sup></b>	05470	<b>..3/..3</b>	01367/01366
—	—	<b>..2/..2</b>	01453/01455
—	—	<b>..2/..2</b>	01453/01455
—	—	<b>..2/..2</b>	01453/01455
—	—	<b>..2/..2</b>	01453/01455
not permitted	—	<b>..2/..2</b>	01453/01455
not permitted	—	<b>..2/..2</b>	01453/01455
not permitted	—	<b>..2/..2</b>	01453/01455
not permitted	—	<b>..2/..2</b>	01453/01455
not permitted	—	<b>..2/..2</b>	01453/01455
not permitted	—	<b>..2/..3</b>	01453/1366
not permitted	—	<b>..3/..3</b>	01367/01366



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



Information	Page
Techn. description	16 ff.
Project planning information	3 ff.
Special design	
Alternative voltage, protection class, air flow direction, higher air flow temperature, acid protection and impeller made from cast aluminium upon request.	

Other accessories	Page
<sup>b)</sup> Access. for ex-proof fans	
<b>Flanged flexible connector Type STS 900 Ex</b>	No. 02512
Mounting accessories	148 ff.
Attenuators	156
Gas warning systems, switch and control technology	158 ff.
Frequency inverter	168 ff.

<sup>7)</sup> Including full motor protection