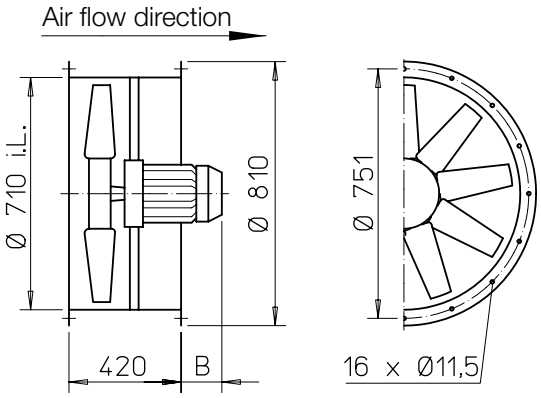
AVD DK 710

Dimensions AVD DK 710



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. Explosion-proof types may vary.

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.

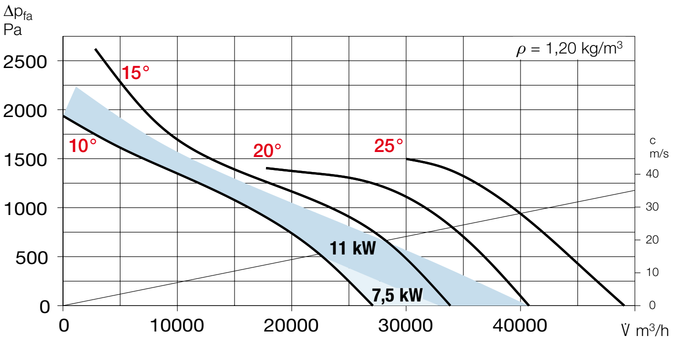
Type	Ref. no.	Speed	Motor power (nom.) (output)	Nominal voltage	Power consumption	Max. pitch angle[2]	Dim. B Motor protrusion	Wiring diagram	Max. air flow temp.	Net weight approx.	Frequency inverter[3] Type	Ref. no.
		min^{-1}	kW	V	A	°	mm	No.	+°C	kg		
60° 3 phase motor, 400 V, 50 Hz, squirrel-cage rotor, protection class IP55												
AVD RK 710/6 1,1 kW	40266	955	1.1	400	2.7	28	100	796	60	81	**FU-BS 5**	05460
AVD RK 710/6 1,5 kW	40257	955	1.5	400	3.6	37	150	796	60	87	**FU-BS 5**	05460
AVD RK 710/6 2,2 kW	40258	970	2.2	400	5.1	45	180	796	60	93	**FU-BS 8**	05461
AVD RK 710/4 2,2 kW	40259	1455	2.2	400	4.6	20	150	796	60	87	**FU-BS 5**	05460
AVD RK 710/4 3 kW	40260	1440	3.0	400	6.0	24	150	776	60	92	**FU-BS 8**	05461
AVD RK 710/4 4 kW	40261	1460	4.0	400	8.0	29	180	776	60	94	**FU-BS 8**	05461
AVD RK 710/4 5,5 kW	40262	1470	5.5	400	10.7	38	200	776	60	117	**FU-CS 14**	05875
AVD RK 710/2 7,5 kW	40263	2940	7.5	400	13.5	–	200	776	60	110	**FU-CS 14**	05875
AVD RK 710/2 11 kW	40267	2950	11.0	400	19.6	11	220	776	60	110	**FU-CS 22**	05470
60° Pole-switching, 2 speed, 3 phase motor, Dahlander winding Y/YY, 400 V, 50 Hz, protection class IP55												
AVD RK 710/8/4 0,55/2 kW[1]	40264	680/1440	0.55/2	400/400	2/4.6	19	100	777	60	79	—	
AVD RK 710/8/4 0,9/3,2 kW[1]	06943	680/1420	0.9/3.2	400/400	3.2/7.2	26	120	777	60	88	—	
AVD RK 710/8/4 1,5/6,3 kW[1]	40265	680/1440	1.5/6.3	400/400	4.6/12.3	43	200	777	60	109	—	
Ex Explosion-proof Ex e II, 3 phase motor, 400 V, 50 Hz, protection class IP54, temperature class T1-T3												
AVD RK 710/6 Ex 2,2 kW	40876	955	2.2	400	5.2	45	105	796	40	100	not permitted	
AVD RK 710/4 Ex 4 kW	40877	1455	4.0	400	8.25	29	105	776	40	100	not permitted	
AVD RK 710/4 Ex 5,5 kW	40878	1455	5.5	400	11.7	39	160	776	40	115	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 710/2

n=2950 1/min

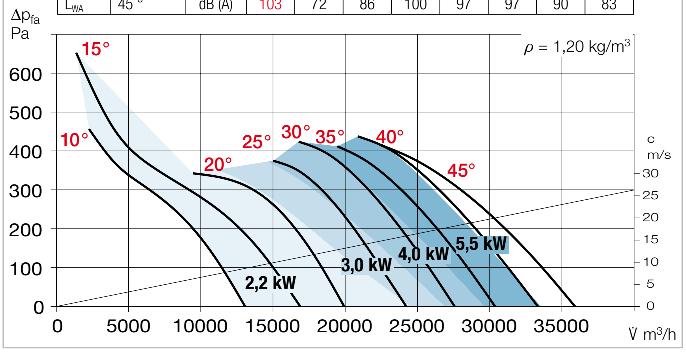
Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	15 °	dB (A)	113	87	86	100	109	110	105	96
L_{WA}	25 °	dB (A)	113	82	91	102	109	108	103	98
L_{WA}	35 °	dB (A)	117	92	94	104	113	112	108	101



Performance curves AVD 710/4

n=1465 1/min

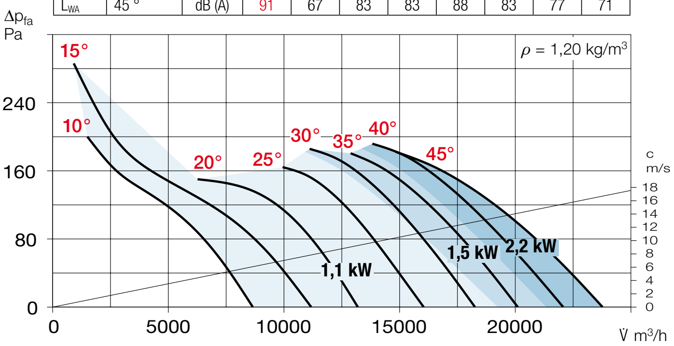
Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	15 °	dB (A)	95	63	78	89	92	88	82	75
L_{WA}	25 °	dB (A)	95	68	81	90	90	87	83	79
L_{WA}	35 °	dB (A)	99	70	82	94	95	92	87	82
L_{WA}	45 °	dB (A)	103	72	86	100	97	97	90	83



Performance curves AVD 710/6

n=970 1/min

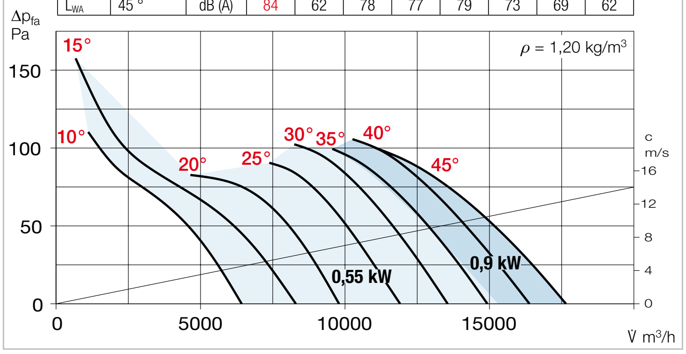
Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	15 °	dB (A)	84	61	73	80	80	74	69	62
L_{WA}	25 °	dB (A)	83	63	75	78	78	75	72	67
L_{WA}	35 °	dB (A)	88	64	80	81	83	79	75	70
L_{WA}	45 °	dB (A)	91	67	83	83	88	83	77	71



Performance curves AVD 710/8

n=720 1/min

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	15 °	dB (A)	76	55	67	72	70	65	60	53
L_{WA}	25 °	dB (A)	75	57	68	70	69	67	64	59
L_{WA}	35 °	dB (A)	80	59	72	75	74	70	67	61
L_{WA}	45 °	dB (A)	84	62	78	77	79	73	69	62



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).

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 2**	01455
SDD 2	01453	**SDZ 2**	01455
SDD 2	01453	**SDZ 2**	01455
SDD 2	01453	**SDZ 2**	01455
SDD 2	01453	**SDZ 2**	01455
SDD 2	01453	**SDZ 2**	01455
SDD 2	01453	**SDZ 2**	01455
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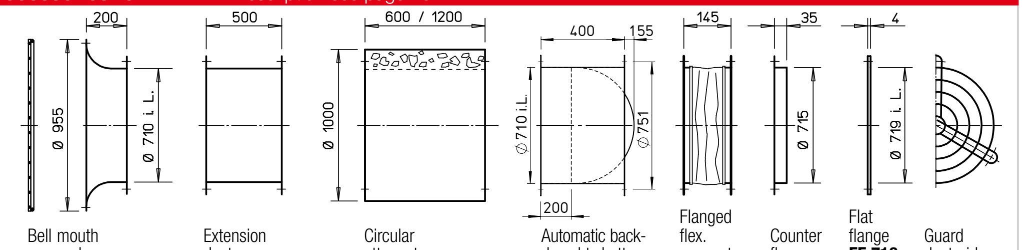
SDD 2	01453	**SDZ 2**	01455
SDD 2	01453	**SDZ 2**	01455
SDD 2	01453	**SDZ 2**	01455
SDD 2	01453	**SDZ 2**	01455
SDD 2	01453	**SDZ 2**	01455

Accessories for AVD RK Description see page 167 ff.



Bell mouth + guard **ASD-SGD 710** No. 01423

Extension duct **VR 710** No. 01411

Circular attenuator **RSD 710/..**

Automatic back-draught shutter **RVS 710** a) No. 02601

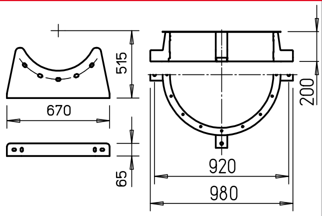
Flanged flex. connector **STS 710** b) No. 01229

Counter flange **FR 710** No. 01212

Flat flange **FF 710** No. 04950

Guard duct-side **SG 710** No. 01244

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



2 mounting brackets **1 x MK 710** (= 2 pcs) No. 01372

Mounting ring for vertical fixing **MRV 710** No. 01743

Information — Page

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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 710 Ex No. 02510

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