

■ Specification for all models

□ Casing

With motor support manufactured from galvanised sheet steel.

□ Impeller

Highly efficient, profiled blade impeller, dynamically balanced and manufactured from impact resistant polymers. Suitable for -30 to +60 °C. Deviation for ex-models.

□ Pitch angle

The impeller blades are adjustable for the optimal coverage of the operating point (except HQW 710/6 and explosion proof). The pitch angle is set at the factory (according to the

order) and fixed. The motor allocation takes place using the maximum power pursuant to the information in the table below. The specified pitch angle shown for each motor must not be exceeded.

□ Motor

Totally enclosed motor protected to IP 55. Maintenance-free and interference-free, Humidity protection of tropicalized windings. Deviation for ex-models.

□ Motor protection

All models (except pole switching and explosion proof) have thermal contacts or PTC thermistors and according to footnotes in the table to protect

through the following full motor protection units:

- ¹⁾MW/MD, Ref. no. 1579/5849
- ²⁾MSA, Ref. no. 1289 (for PTC thermistor temp. sens)
- ³⁾M4, Ref. no. 1571

All other models have to be protected by a conventional circuit breaker on site.

□ Guard

Hot-dipped or powder-coated as standard for HQ and AVD DK according to DIN EN ISO 13857.

□ Electrical connection

Terminal box protected to IP 54 mounted on motor. Outside of piping for HRF. Deviation for ex-models.

□ Speed control

Partial through voltage reduction, see the "transformer controller" column. Regulated performance curve upon request. Possible allocations of frequency inverters for all types (except pole-switch and ex-proof). The planned use of a frequency inverter without Sine filter must be stated when ordering. This requires a change of fan design and potential additional costs.

□ Reversed operation

All models are reversible when wired to a reversing switch. For reverse air flow direction allow a loss in performance of approx. 1/3.

□ Installation

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

□ Dimensions

Pole-switch and explosion proof models may deviate from the adjacent information. Motor build lengths vary. Note dimension B projection.

□ Sound levels

The sound power levels are specified through the frequency and as sum levels above the characteristic curves. Deviation for ex-models.

R.P.M.	Air flow volume (FID)	Motor power (nominal)*	Voltage	Power con. nom. volt./ (control)*	max. pitch angle	Wiring diagram	max. air flow temp.	Weight net ³⁾	Model			Dim. B motor projection	Transformer controller for 5 speed pole switch				
									HQ incl. guard	Ref. no.	AVD DK incl. guard		Ref. no.	HRFD, AVD RK	Ref. no.	Model	Ref. no.
min ⁻¹	∇ m ³ /h	kW	V	A	°	No.	+°C	kg				mm					
1 Phase motor, 230 Volt / 50 Hz, capacitor motor, protection to IP 55																	
910	14200	0.60	230	2.6	25	965	40	40.0	HQW 710/6 ¹⁾	5047	—	—	—	—	MWS 5 ⁴⁾	1949	
3 Phase motor, 400 Volt / 50 Hz, squirrel cage motor protection to IP 55																	
690	13330	0.29	400	0.9	20	469	40	57.0	HQD 710/8 ¹⁾	5599	AVD DK 710/8 ¹⁾	5251	HRFD 710/8 ¹⁾	6930	95	RDS 2 ⁴⁾	1315
940	15560/19170	1.1*	230/400	5.1*	35	499	40	60.0	HQD 710/6 ¹⁾	5603	AVD DK 710/6 ¹⁾	5255	HRFD 710/6 ¹⁾	6934	135	RDS 7 ⁴⁾	1578
1445	26420	3.00*	400/690	6.2*	30	776	40	88.0	HQD 710/4 ²⁾	5606	AVD DK 710/4 ²⁾	5258	HRFD 710/4 ²⁾	6937	180	—	—
Two-speed, 3 ph., 400 V, 50 Hz, protection to IP 55																	
730/890	13550/16090	0.4/0.75*	400/400	1.1/2.3*	25	520	40	55.0	HQD 710/6/6 ³⁾	5602	AVD DK 710/6/6 ³⁾	5254	HRFD 710/6/6 ³⁾	6933	95	RDS 4 ⁴⁾	1316
1120/1360	16140/19670	0.95/1.55*	400/400	2.4/4.2*	20	520	40	60.0	HQD 710/4/4 ³⁾	5604	AVD DK 710/4/4 ³⁾	5256	HRFD 710/4/4 ³⁾	6935	135	RDS 7 ⁴⁾	1578
1030/1340	19370/23280	1.5/2.2*	400/400	3.0/5.2*	26	520	40	75.0	HQD 710/4/4 ³⁾	5605	AVD DK 710/4/4 ³⁾	5257	HRFD 710/4/4 ³⁾	6936	180	RDS 7 ⁴⁾	1578
2 speed motor, pole-switching, Dahlander windings, 400 Volt, 50 Hz, protection to IP 54																	
685/1430	10810/22090	0.5/2.0*	400/400	2.0/4.7	23	471	40	82.0	HQD 710/8/4/..	5611	AVD DK 710/8/4/..	5263	HRFD 710/8/4/..	6942	180	PDA 12 ⁵⁾	5081
720/1440	14155/29020	0.9/3.6*	400/400	2.9/8.3	30	471	40	108.0	HQD 710/8/4/..	5612	AVD DK 710/8/4/..	5264	AVD RK 710/8/4/..	6943	210	PDA 12 ⁵⁾	5081
Explosion proof Ex e II, 3 ph., 400 Volt, 50 Hz, protection to IP 55, temp. class T1-T3																	
700	10450	0.55*	400	2.2*	35	470	40	68.0	HQD 710/8 Ex	5618	AVD DK 710/8 Ex	5270	HRFD 710/8 Ex	6948	125	not permitted	
930	13480	0.55*	400	1.8*	25	470	40	67.0	HQD 710/6 Ex	5620	AVD DK 710/6 Ex	5272	HRFD 710/6 Ex	6949	95	not permitted	
930	16770	0.95*	400	2.7*	35	470	40	77.0	HQD 710/6 Ex	5621	AVD DK 710/6 Ex	5273	HRFD 710/6 Ex	6950	135	not permitted	
1420	20540	2.00*	400	4.7*	25	470	40	82.0	HQD 710/4 Ex	5623	AVD DK 710/4 Ex	5275	AVD RK 710/4 Ex	6951	180	not permitted	
1420	26160	3.60*	400/690	8.1*	35	498	40	102.0	HQD 710/4 Ex	5624	AVD DK 710/4 Ex	5276	AVD RK 710/4 Ex	6952	200	not permitted	

^{*)} Nominal motor amounts, Ex see info p. 16.

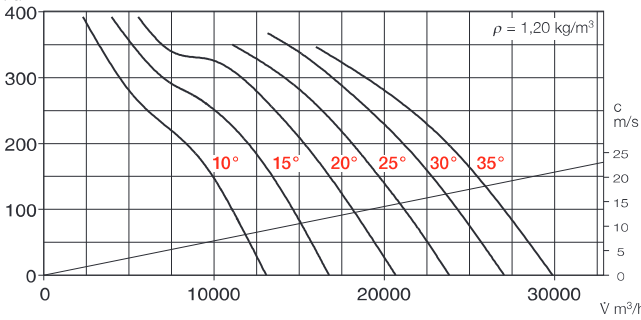
^{1) to 3)} full motor protection unit, see "Motor protection" desc.

^{**)} Weights apply for type ..DK and ..RK, HRF and HQ less approx. 15 kg.

⁴⁾ Incl. full motor protection.

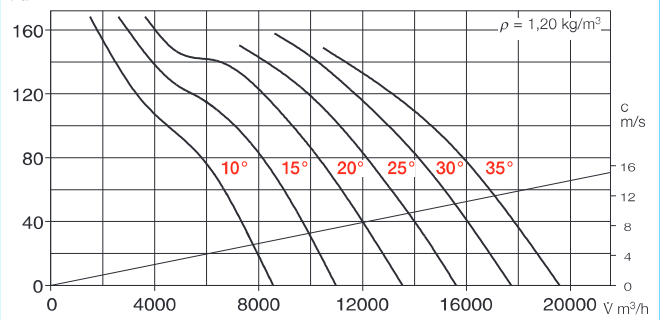
710/4 R.P.M. = 1450

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA} 15°	dB(A)	87	71	72	79	82	83	79	72
L _{WA} 25°	dB(A)	89	73	74	81	84	85	81	74
L _{WA} 35°	dB(A)	91	75	76	83	86	87	83	76



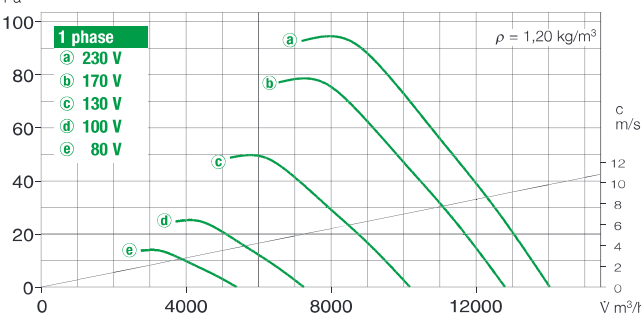
710/6 Three-phase R.P.M. = 950

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA} 15°	dB(A)	79	63	65	71	74	74	71	63
L _{WA} 25°	dB(A)	81	65	67	73	76	76	73	65
L _{WA} 35°	dB(A)	83	67	69	75	78	78	75	67



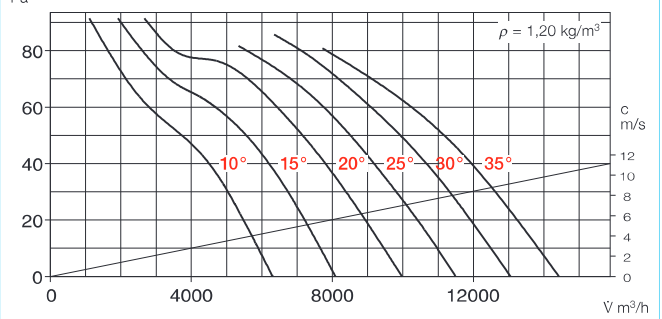
710/6 Single phase

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA} 15°	dB(A)	79	63	65	71	74	74	71	63
L _{WA} 25°	dB(A)	81	65	67	73	76	76	73	65
L _{WA} 35°	dB(A)	83	67	69	75	78	78	75	67



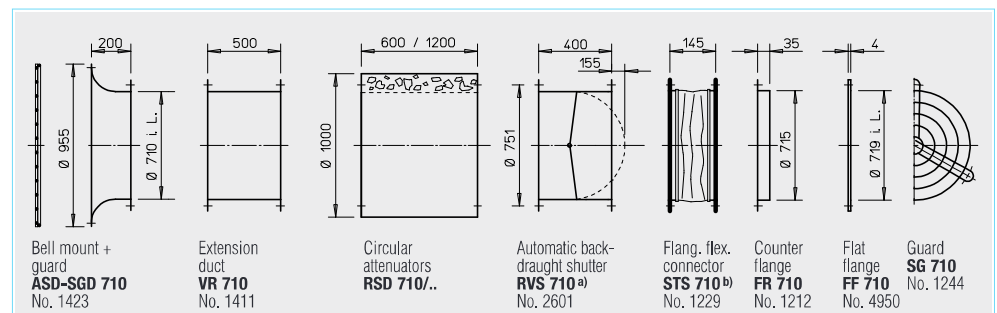
710/8 R.P.M. = 700

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA} 15°	dB(A)	72	53	58	65	68	67	63	54
L _{WA} 25°	dB(A)	74	55	60	67	70	69	65	56
L _{WA} 35°	dB(A)	76	57	62	69	72	71	67	58



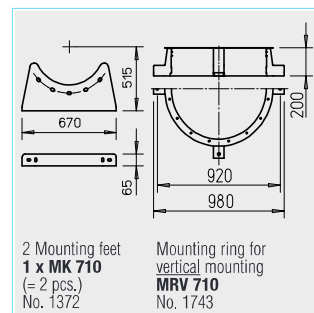
Accessories for HRF / AVD RK Description see page 230 on

Electronic controller, stepless Frequency inverter with Sine filter	Vibration dampers nominal size		
Model	Ref. no.	Model	Ref. no.
ESD 5 ⁴⁾	0501	..1/.1	1452/1454
ESD 11,5 ⁴⁾	0502	..1/.1	1452/1454
FU-BS 8,0 ⁴⁾	5461	..2/.2	1453/1455
ESD 5 ⁴⁾	0501	..1/.1	1452/1454
ESD 5 ⁴⁾	0501	..1/.1	1452/1454
ESD 11,5 ⁴⁾	0502	..1/.2	1452/1455
—	—	..2/.2	1453/1455
—	—	..2/.2	1453/1455
not permitted	—	..1/.2	1452/1455
not permitted	—	..1/.2	1452/1455
not permitted	—	..1/.2	1452/1455
not permitted	—	..2/.2	1453/1455
not permitted	—	..2/.2	1453/1455



a) For motorised shutters see accessory page

b) Models for ex-proof fans see below



Information	Page	Other accessories	Page
Techn. description	140	b) Accessories for explosion proof fans	
Selection chart	141	Flanged flexible connector Type STS 710 Ex Ref. no. 2510	
Information for planning	10 on	Attenuators	434 on
Made to order designs		Shutter and grilles	487 on
Alternative voltages, protection classes, air flow direction, air flow temperature, acid protection and cast aluminium impellers are available on request.		Speed controllers and switches	525 on

⁴⁾ see switch product page for flush mounted version.