

■ Specification for all models

□ Casing

Manufactured in galvanised sheet steel. Model HQ have an additional two-layer finishing in papyrus white. Ex-models without paint.

□ Impeller

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

□ Motor

Totally enclosed motor with a die-cast aluminium casing, protected to IP 55. Ball bearing mounted. Maintenance-free and interference-free. Humidity protection of windings. For maximum air flow temperature see table below. Deviation for ex-models.

□ Motor protection

All models (except explosion proof) have thermal contacts as standard which must be connected to a motor protection unit (see below) for effective motor protection.

□ Electrical connection

Terminal box (IP 55) mounted on rear of motor as standard. Also on outside of piping for HRF. Deviation for ex-models.

□ Guard

Powder-coated steel wire for HQ (Ex-models galvanised) according to DIN EN ISO 13857.

□ Speed control

For all speed controllable models the current are identified with a value in the "speed controlled" column of the table below which must be used when selecting a controller. Possible allocations of frequency inverters are specified in the table below. 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.

The air flow rates are shown in the performance curves.

□ 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 information above.

□ Sound levels

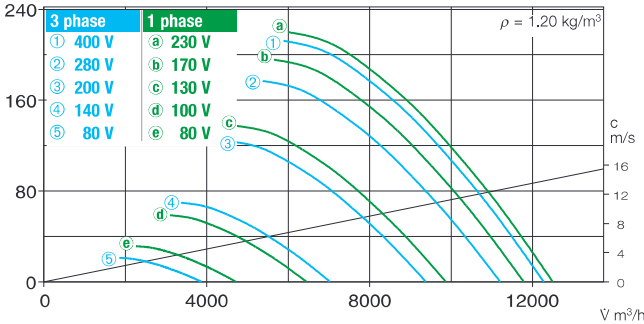
See characteristic curve. The sound power and sound pressure are specified at 4 m distances under free field conditions, for average operating point suction/pressure side. See page 10 on for sound emission and acoustics. Deviation for ex-models.

R.P.M.	Air flow volume (FID)	Motor power (nominal)*	Current*		Wiring diagram	max. air flow temp.		Weight net	Model				Transformer controller for 5 speed pole switch		Electronic controller, stepless flush/surt.	
			standard-supply	max. controlled		standard supply	speed controlled		°C	°C	HQ incl. guard	Ref. no.	HRF	Ref. no.	Model	Ref. no.
1 Phase motor, 230 Volt / 50 Hz, capacitor motor, protection to IP 55																
935	8130	0.27	1.40	2.00	475 ¹⁾	60	40	24.0	HQW 560/6	0385	HRFW 560/6 ¹⁾	0380	MWS 3 ²⁾	1948	ESU 3/ESA 3	0237/0239
1370	12180	0.89	4.15	5.00	965	60	40	31.0	HQW 560/4	5054	HRFW 560/4	5055	MWS 7,5 ²⁾	1950	ESU 5/ESA 5	1296/1299
3 Phase motor, 400 Volt / 50 Hz, squirrel cage motor protection to IP 55																
965	8180	0.28	0.79	1.00	469	60	40	26.0	HQD 560/6	0386	HRFD 560/6	0381	RDS 2 ²⁾	1315	ESD 5 ²⁾	0501
1365	12250	0.88	1.71	1.80	469	40	40	29.0	HQD 560/4	0387	HRFD 560/4	0382	RDS 2 ²⁾	1315	ESD 5 ²⁾	0501
2 speed motor, pole-switching, Dahlander windings, 400 Volt, 50 Hz, protection to IP 55																
470/955	4000/8130	0.089/0.298	0.55/0.74	—	472	60	—	24.0	HQD 560/12/6	0389	HRFD 560/12/6	0384	Pole switch			
720/1365	6400/12130	0.20/0.92	0.80/1.77	—	472	40	—	26.0	HQD 560/8/4	0388	HRFD 560/8/4	0383	PDA 12 ³⁾	5081	—	—
Explosion proof Ex e II, 3 ph., 400 Volt, 50 Hz, protection to IP 55, temp. class T1-T3																
920	8090	0.25*	0.97*	—	470	40	—	23.0	HQD 560/6 Ex	0378	HRFD 560/6 Ex	0376	not permitted			
1390	12890	0.75*	2.00*	—	470	40	—	24.0	HQD 560/4 Ex	0379	HRFD 560/4 Ex	0377	not permitted			

* Ex-models: for nominal value of motor see information on page 16 ¹⁾ Type HRFW: connect using wiring diagram no. SS-965 ²⁾ Incl. full motor protection ³⁾ see switch product page for flush mounted version

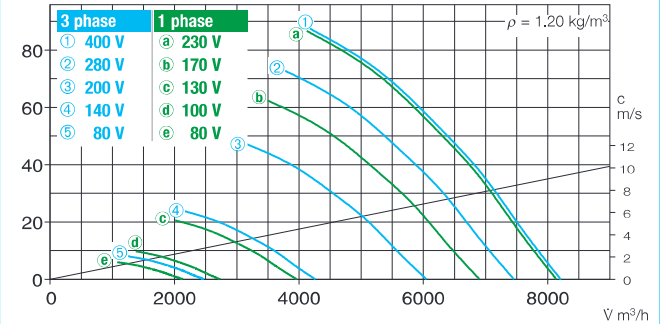
560/4

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
ΔP_{fa}	L_{WA}	Air noise	dB(A)	82	66	68	74	78	78	68
Pa	$L_{PA,4m}$	Air noise	dB(A)	65	46	48	54	58	54	48



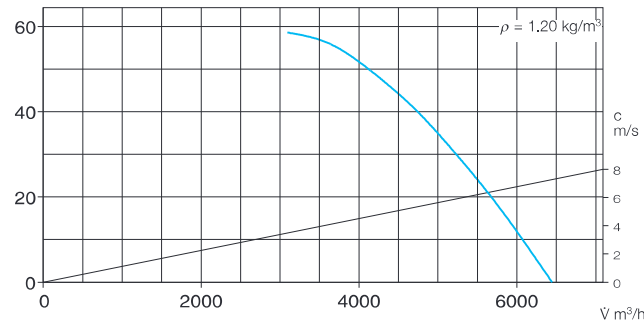
560/6

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
ΔP_{fa}	L_{WA}	Air noise	dB(A)	72	52	59	66	68	67	53
Pa	$L_{PA,4m}$	Air noise	dB(A)	52	32	39	46	48	47	33



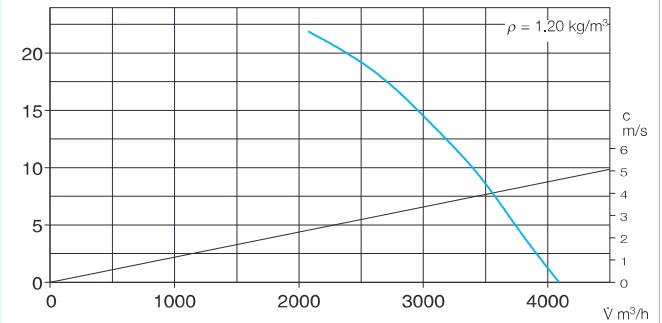
560/8

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
ΔP_{fa}	L_{WA}	Air noise	dB(A)	82	66	68	74	78	74	68
Pa	$L_{PA,4m}$	Air noise	dB(A)	65	46	48	54	58	54	48

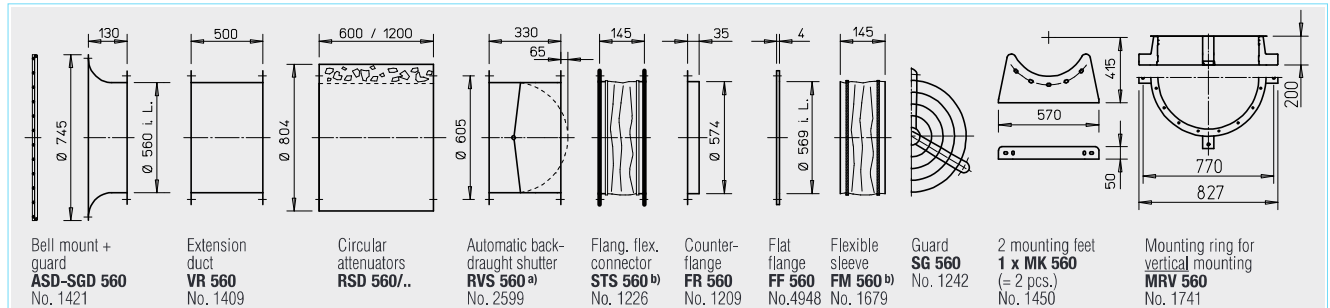


560/12

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
ΔP_{fa}	L_{WA}	Air noise	dB(A)	72	52	59	66	68	67	53
Pa	$L_{PA,4m}$	Air noise	dB(A)	52	32	39	46	48	47	33



Accessories for HRF Description see page 230 on



^{a)} For motorised shutters see accessory page

^{b)} Models for ex-proof fans see below

Electronic controller for stepless control		Full motor protection starter using the motor thermal contacts		Reversing switch	
Model	Ref. no.	Model	Ref. no.	Model	Ref. no.
—	—	MW	1579	WS	1271
—	—	MW	1579	WS	1271
FU-BS 2,5 ²⁾	5459	MD	5849	WS	1271
FU-BS 2,5 ²⁾	5459	MD	5849	WS	1271
—	—	M 3 ⁴⁾	1293	PWDA	1282
—	—	M 3 ⁴⁾	1293	PWDA	1282
—	—	—	—	—	—
—	—	—	—	—	—

⁴⁾ Incl. pole switch

Information	Page	Other accessories	Page
Techn. description	140	^{b)} Accessories for explosion proof fans	
Selection chart	141	Flanged flexible connector	
Information for planning	10 on	Type STS 560 Ex	Ref. no. 2508
Made to order designs		Flexible sleeve	
Alternative voltages, protection classes, air flow direction, air flow temperature, acid protection and cast aluminium impellers are available on request.		Type FM 560 Ex	Ref. no. 1695
Note the technical information on page 15 on.		Attenuators	434 on
		Shutter and grilles	487 on
		Speed controllers and switches	525 on