HQ 560



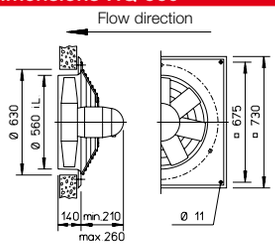
Also available in version: Ex

HRF 560



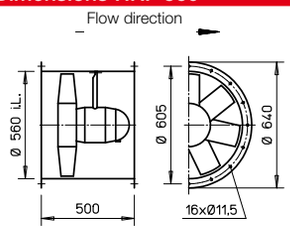
Also available in version: Ex

Dimensions HQ 560



Dim. in mm

Dimensions HRF 560



Dim. in mm

Description for all types

Casing
Made of galvanised steel sheet. Type HQ has additional two layer lacquer coating in papyrus white. Explosion-proof types have no lacquer coating.

Impeller
High performance characteristics with profiled blades made of plastic, dynamically balanced. Different for explosion-proof types.

Drive
Closed die-cast aluminium casing. Protection category IP55. Ball bearing mounted. Maintenance-free and radio interference-free. Winding with moisture proof coating. See type table for max. air flow temperature. Different for explosion-proof types.

Motor protection
All types (except for explosion-proof, see page 190) are equipped with thermal contacts. These should be wired with the motor protection circuit breaker (see type table) for effective motor protection.

Electrical connection
Standard terminal box (IP55) on back of motor. Additionally on outside of duct for HRF types. Different for explosion-proof types.

Protection grille
Made of powder-coated steel wire for HQ (Ex types galvanised). In accordance with DIN EN ISO 13857.

Power control
The voltage-controllable types are identified in the “Current consumption max. with control” column with a value which must be observed when determining the controller (see speed controller column). Possible assignments of frequency inverters to fans are shown in the type table. The planned use of a frequency inverter without a sine filter should be indicated when placing the order. This requires a change of fan version and additional costs, if necessary. The flow rates are shown in the performance diagram.

Reverse operation
All types are reversible using a reverser switch. Performance reduction of approx. 1/3 in abnormal flow direction.

Installation
Installation possible in any position, but be aware of any condensate drain holes depending on usage.

Dimensions
Pole-changeable and explosion-proof types may differ from the above information.

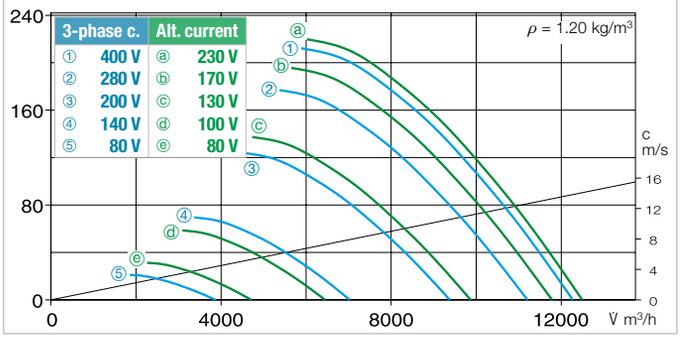
Noise levels
See performance diagram. The sound power and sound pressure at 4 m distance under free field conditions are specified for the average operating point on the inlet/outlet side. See page 14 f for noise emissions and room acoustics.
Different for explosion-proof types.

Speed	Flow rate free-blowing	Power consump.	Current consump.		Wiring dia-gram	Max. air flow temp.		Weight net aprx.	Design type				Frequency inverter with integrated sine filter		Transformer speed controller 5-step, pole changing switch, speed ch., pole changing switch	
			at rated voltage	max. with control		at rated voltage	with control		HQ incl. prot. grille	Ref. no.	HRF	Ref. no.				
min^{-1}	V̇ m³/h	W	A	A	No.	+ °C	+ °C	kg					Type	Ref. no.	Type	Ref. no.
Single-phase alternating current.230 Volt, 50 Hz, Capacitor motor, protection category IP55																
935	8130	0.27	1.40	2.00	475[1]	60	40	24.0	**HQW 560/6**	00385	**HRFW 560/6**[1]	00380	—		**MWS 3**[2]	01948
1370	12180	0.89	4.15	5.00	965	60	40	31.0	**HQW 560/4**	05054	**HRFW 560/4**	05055	—		**MWS 7.5**[2]	01950
Three-phase current, 400 Volt, 50 Hz, Squirrel-cage rotor, protection category IP55																
965	8180	0.28	0.79	1.00	469	60	40	26.0	**HQD 560/6**	00386	**HRFD 560/6**	00381	**FU-BS 2.5**[2]	05459	**RDS 2**[2]	01315
1365	12250	0.88	1.71	1.80	469	40	40	29.0	**HQD 560/4**	00387	**HRFD 560/4**	00382	**FU-BS 2.5**[2]	05459	**RDS 2**[2]	01315
Pole-changeable, 2 speeds, three-phase current, Dahlander winding, 400 Volt, 50 Hz, protection category IP55															Pole changing switch	
470/955	4000/8130	0.089/0.298	0.55/0.74	—	472	60	—	24.0	**HQD 560/12/6**	00389	**HRFD 560/12/6**	00384	—		**PDA 12**[3]	05081
720/1365	6400/12130	0.20/0.92	0.80/1.77	—	472	40	—	26.0	**HQD 560/8/4**	00388	**HRFD 560/8/4**	00383	—		**PDA 12**[3]	05081
Ex **Explosion-proof, II 2G Ex h IIB + H_2 T3 Gb, Motor Ex e, three-phase current 400 Volt, 50 Hz, protection category IP55**																
925	8090	0.25*	0.80*	—	470	40	—	23.0	**HQD 560/6 Ex**	00378	**HRFD 560/6 Ex**	00376	—		Not permitted	
1445	12890	0.75*	3.20*	—	470	40	—	24.0	**HQD 560/4 Ex**	00379	**HRFD 560/4 Ex**	00377	—		Not permitted	

* For Ex types: Motor ratings see information on page 20. [1] Type HRFW: Connection according to wiring diagram no. 965. [2] Incl. motor protection circuit breaker. [3] Flush-m. version see Switch product page.

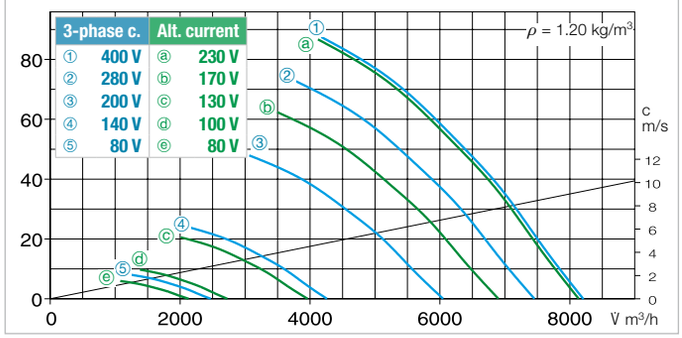
Performance curves 560/4

Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	82	66	68	74	78	78	74	68
$L_{PA,4m}$	Air noise	dB(A)	62	46	48	54	58	58	54	48



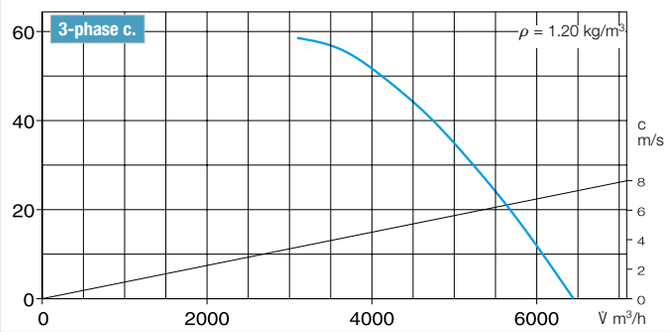
Performance curves 560/6

Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	72	52	59	66	68	67	63	53
$L_{PA,4m}$	Air noise	dB(A)	52	32	39	46	48	47	43	33



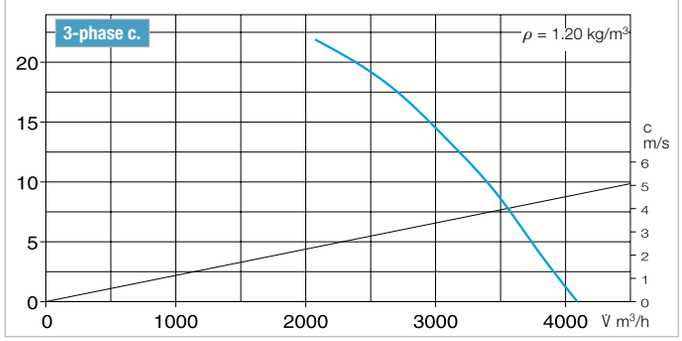
Performance curve 560/8

Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	66	47	53	60	62	61	57	48
$L_{PA,4m}$	Air noise	dB(A)	46	27	33	40	42	41	37	28

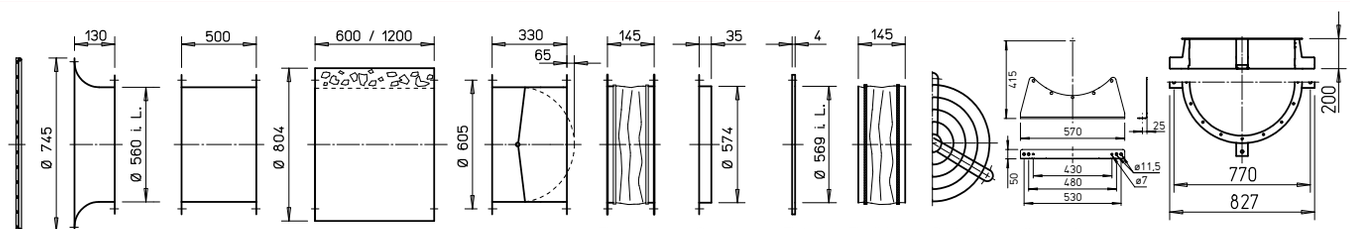


Performance curve 560/12

Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	54	36	45	50	50	47	40	31
$L_{PA,4m}$	Air noise	dB(A)	34	16	25	30	30	27	20	11



Accessories for HRF 560 Description see page 280 ff.



Intake nozzle with prot. grille **ASD-SGD 560** No. 01421

Extension duct **VR 560** No. 01409

Duct silencer **RSD 560/..**

Duct shutter, automatic **RVS 560** a) No. 02599

Flanged flexible connector **STS 560** b) No. 01226

Counter flange **FR 560** No. 01209

Flat flange **FF 560** No. 04948

Flexible connecting sleeve **FM 560** b) No. 01679

Protection grille duct side **SG 560** No. 01242

2 mounting brackets **1 x MK 560** (= 2 pcs) No. 00675

Mounting ring for vertical attachment **MRV 560** No. 01741

a) Shutter, motorised see Accessories product pages.

b) See below for types for explosion-proof fans.

	Electronic speed controller, continuously variable flush-m./surface-m.		Motor protection circuit breaker for connecting built-in thermal contacts		Reverser switch	
	Type	Ref. no.	**Type**	Ref. no.	**Type**	Ref. no.
	ESU 3/ESA 3	00237/00239	**MW**	01579	**WS**	01271
	ESU 5/ESA 5	01296/01299	**MW**	01579	**WS**	01271
	ESD 5 2)	00501	**MD**	05849	**WS**	01271
	ESD 5 2)	00501	**MD**	05849	**WS**	01271
	—		**M 3** 4)	01293	**PWDA**	01282
	—		**M 3** 4)	01293	**PWDA**	01282
	not permitted		—		—	
	not permitted		—		—	

4) Incl. speed pole changing switch.

Reference **Page**

Techn. description 190
Selection table 191
Planning information 14 ff.

Special design

Different voltage, protection category, air flow direction, higher air flow temperature, acid protection and impeller made of cast aluminium upon request.

The technical information on p. 19 ff. must be observed.

Other accessories **Page**

b) Access. for expl.-proof fans

Flanged flexible connector STS 560 Ex Ref. no. 02508

Silencers 498 ff.
Shutters and ventilation grilles 565 ff.
Speed controllers, controllers and switches 603 ff.

Flexible connecting sleeve FM 560 Ex Ref. no. 01695