HQ 355



Also available in version:

HW 355

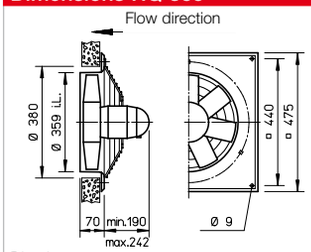


HRF 355



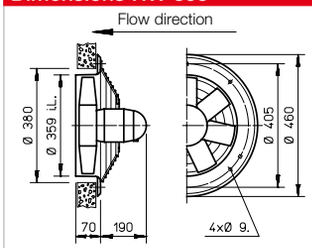
Also available in version:

Dimensions HQ 355



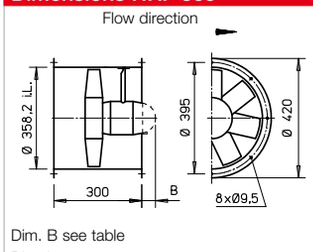
Dim. in mm

Dimensions HW 355



Dim. in mm

Dimensions HRF 355



Dim. B see table
Dim. in mm

Description for all types

Casing
Made of galvanised steel sheet, types HQ and HW have 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. Prot. cat. 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 3~ explosion-proof, see page 180) are equipped with thermal contacts. These should be wired with the motor protection circuit breaker (see type table) for effective motor protection. For 1~ explosion-proof fans, the thermal contacts are wired in series with the winding, automatic deactivation and reactivation after cool down.

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 for HQ and HW (HQ Ex 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 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.

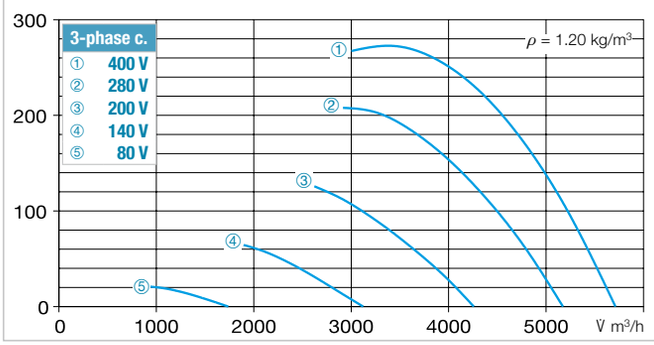
Noise levels
See performance diagram. The sound power and sound pressure at 4 m distance under free field conditions are specified for the average operating point on the inlet/outlet side. See page 14 f for noise emissions and room acoustics.
Different for explosion-proof types.

Speed	Flow rate free-blowing	Power consump.	Current consump.		Wiring diagram	Max. air flow temp.		Weight net aprx.	Design type							
			at rated voltage	max. with control		at rated voltage	with control		HQ incl. protection grille	Ref. no.	HW incl. protection grille	Ref. no.	HRF	Ref. no.	Dim. B Motor protrusion in mm	
min^{-1}	V m^3/h	W	A	A	No.	+ °C	+ °C	kg								
Single-phase alternating current.230 Volt, 50 Hz, Capacitor motor, protection category IP55																
960	1940	75	0.47	0.47	475[1]	60	40	12	**HQW 355/6**	01107	—		**HRFW 355/6[1]**	00204	—	
1345	2850	130	0.60	0.65	475[1]	60	40	11	**HQW 355/4**	01108	**HWW 355/4**	01006	**HRFW 355/4[1]**	00205	10	
Three-phase current, 400 Volt, 50 Hz, Squirrel-cage rotor, protection category IP55																
960	1970	70	0.27	0.29	469	60	40	9.5	**HQD 355/6**	01120	—		—		—	
1375	2900	130	0.35	0.35	469	60	40	11.0	**HQD 355/4**	01121	**HWD 355/4**	01022	**HRFD 355/4**	00226	—	
2670	5710	825	1.60	1.60	469	60	40	15.0	**HQD 355/2**	01122	**HWD 355/2**	01023	**HRFD 355/2**	00227	—	
Two-speed, three-phase current, 400 V, 50 Hz, Y/Δ connection, protection category IP55																
1120/1350	2460/2860	90/132	0.17/0.32		520	60	—	11.0	**HQD 355/4/4**	01463	—		**HRFD 355/4/4**	01464	—	
Pole-changeable, 2 speeds, three-phase current, Dahlander winding, 400 Volt, 50 Hz, protection category IP55																
700/1395	1430/2920	45/145	0.14/0.35		472	60	—	11.0	**HQD 355/8/4**	01132	—		**HRFD 355/8/4**	00394	10	
1430/2840	3050/6150	250/950*	0.63/2.30*		472	40	—	16.0	**HQD 355/4/2**	01134	—		**HRFD 355/4/2**	00396	35	
Ex **Explosion-proof, II 2G Ex h IIB T3 Gb, Motor Ex d, alternating current 230 Volt, 50 Hz, protection category IP55**																
1370	2940	180*	1.25*		757	40	—	18.0	**HQW 355/4 Ex**	00444	—		**HRFW 355/4 Ex**	00443	30	
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	2010	250*	0.80*		470	40	—	25.0	**HQD 355/6 Ex**	01101	—		—		—	
1355	3060	120*	0.37*		470	40	—	18.0	**HQD 355/4 Ex**	01150	—		**HRFD 355/4 Ex**	00476	—	
2900	5010	550*	1.31*		470	40	—	12.5	**HQD 355/2 Ex**	01151	—		**HRFD 355/2 Ex**	00477	—	

* Motor ratings, Ex see information on page 20. [1] Type HRFW: Connection according to wiring diagram no. 965. [2] Incl. motor protection circuit breaker. [3] Incl. speed pole changing switch.

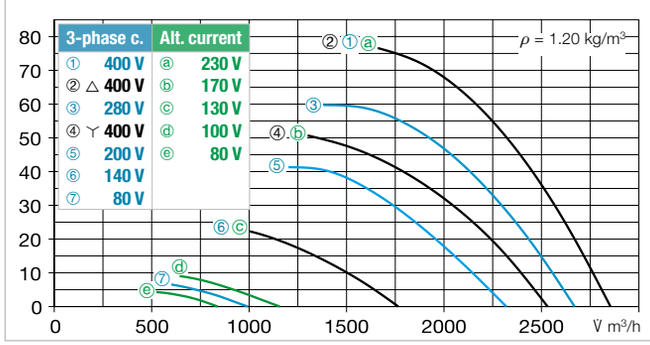
Performance curves 355/2

Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	91	59	73	88	83	85	78	67
$L_{PA,4m}$	Air noise	dB(A)	71	39	53	68	63	65	58	47



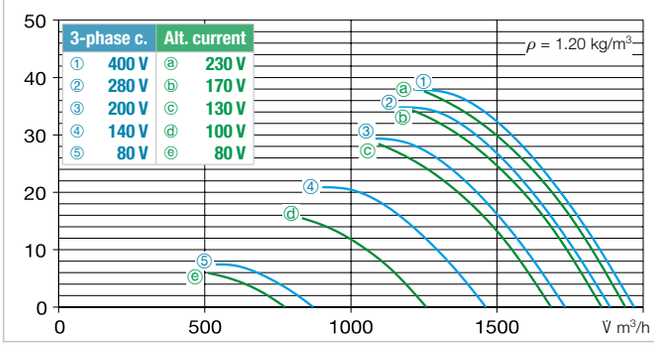
Performance curves 355/4

Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	71	49	64	65	64	64	57	45
$L_{PA,4m}$	Air noise	dB(A)	51	29	44	45	44	44	37	25



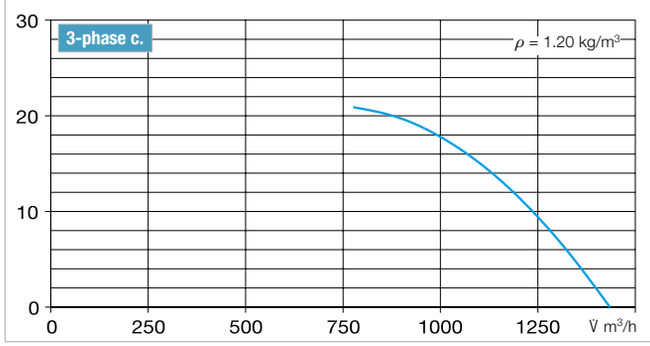
Performance curves 355/6

Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	62	50	57	56	56	53	47	40
$L_{PA,4m}$	Air noise	dB(A)	42	30	37	36	36	33	27	20

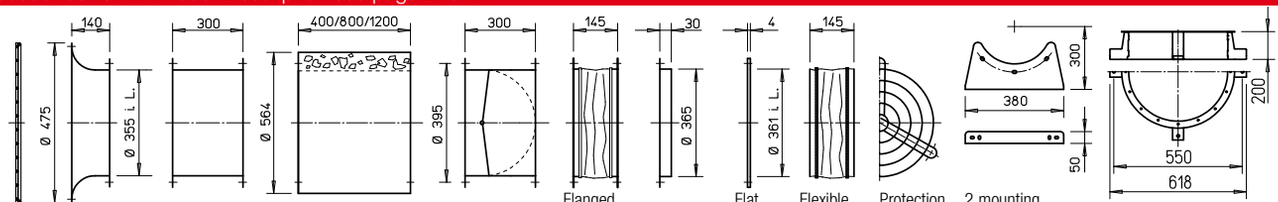


Performance curve 355/8

Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	71	50	63	66	65	65	58	46
$L_{PA,4m}$	Air noise	dB(A)	51	30	43	46	45	45	38	26



Accessories for HRF 355 Description see page 276 ff.



Inlet nozzle with protection grille **ASD-SGD 355** No. 01417

Extension duct **VR 355** No. 01405

Duct silencer **RSD 355/..**

Duct shutter, automatic **RVS 355** a) No. 02595

Flanged flexible connector **STS 355** b) No. 01222

Counter flange **FR 355** No. 01205

Flat flange **FF 355** No. 04944

Flexible connecting sleeve **FM 355** b) No. 01675

Protection grille duct side **SG 355** No. 01238

2 mounting brackets **1 x MK 355** (= 2 pcs) No. 01448

Mounting ring for vertical attachment **MRV 355** No. 01759

a) Shutter, motorised see Accessories product pages.

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

Frequency inverter with integrated sine filter		Transformer speed controller 5-step, pole changing switch		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.	**Type**	Ref. no.	**Type**	Ref. no.
—		**MWS 1.5** 2)	01947	**ESU 1 / ESA 1**	00236/00238	**MW**	01579	**WS**	01271
—		**MWS 1.5** 2)	01947	**ESU 1 / ESA 1**	00236/00238	**MW**	01579	**WS**	01271
FU-BS 2.5 2)	05459	**RDS 1** 2)	01314	—		**MD**	05849	**WS**	01271
FU-BS 2.5 2)	05459	**RDS 1** 2)	01314	—		**MD**	05849	**WS**	01271
FU-BS 2.5 2)	05459	**RDS 2** 2)	01315	**ESD 5**	00501	**MD**	05849	**WS**	01271
		Speed changeover switch							
—		**DS 2**	01351	—		**M 4** 3) **/ MD**	01571/05849	**WS**	01271
		Pole changing switch							
—		**PDA 12** 4)	05081	—		**M 3** 3)	01293	**PWDA**	01282
—		**PDA 12** 4)	05081	—		**MSA**	01289	**PWDA**	01282
—		not permitted		not permitted		—		—	
—		not permitted		not permitted		—		—	
—		not permitted		not permitted		—		—	
—		not permitted		not permitted		—		—	

4) Flush-m. version see Switch product page.

Other accessories **Page**

b) Access. for expl.-proof fans

Flanged flexible connector
STS 355 Ex Ref. no. 02504

Flexible connecting sleeve
FM 355 Ex Ref. no. 01691

Extension sleeve for HS
VH 355 Ref. no. 01345
Cylindrical pipe section, galvanised steel, 15 cm long.

Filter and silencers 481 ff.
Shutters and ventilation grilles 561 ff.
Speed controllers, controllers and switches 599 ff.