

**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 performance diagram. 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 min <sup>-1</sup>	Flow rate free-blowing V m <sup>3</sup> /h	Power consump. W	Current consump.		Wiring diagram No.	Max. air flow temp.		Weight net appr. kg	Design type							
			at rated voltage A	max. with control A		at rated voltage + °C	with control + °C		HQ incl. protection grille	Ref. no.	HW incl. protection grille	Ref. no.	HRF	Ref. no.	Dim. B Motor protrusion in mm	
<b>Single-phase alternating current, 230 Volt, 50 Hz, Capacitor motor, protection category IP55</b>																
960	1940	75	0.47	0.47	475 <sup>1)</sup>	60	40	12	HQW 355/6	01107	—	—	HRFW 355/6 <sup>1)</sup>	00204	—	
1345	2850	130	0.60	0.65	475 <sup>1)</sup>	60	40	11	HQW 355/4	01108	HWW 355/4	01006	HRFW 355/4 <sup>1)</sup>	00205	10	
<b>Three-phase current, 400 Volt, 50 Hz, Squirrel-cage rotor, protection category IP55</b>																
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	—	
<b>Two-speed, three-phase current, 400 V, 50 Hz, <math>\gamma/\Delta</math> connection, protection category IP55</b>																
1120/1350	2460/2860	90/132	0.17/0.32	—	520	60	—	11.0	HQD 355/4/4	01463	—	—	HRFD 355/4/4	01464	—	
<b>Pole-changeable, 2 speeds, three-phase current, Dahlander winding, 400 Volt, 50 Hz, protection category IP55</b>																
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	<b>Explosion-proof, II 2G Ex h IIB T3 Gb, Motor Ex d, alternating current 230 Volt, 50 Hz, protection category IP55</b>															
1370	2940	180*	1.25*	—	757	40	—	18.0	HQW 355/4 Ex	00444	—	—	HRFW 355/4 Ex	00443	30	
Ex	<b>Explosion-proof, II 2G Ex h IIB + H<sub>2</sub> T3 Gb, Motor Ex e, three-phase current 400 Volt, 50 Hz, protection category IP55</b>															
920	2010	250*	0.97*	—	470	40	—	25.0	HQD 355/6 Ex	01101	—	—	—	—	—	
1350	3060	120*	0.37*	—	470	40	—	18.0	HQD 355/4 Ex	01150	—	—	HRFD 355/4 Ex	00476	—	
2830	5910	1100*	2.60*	—	470	40	—	12.5	HQD 355/2 Ex	01151	—	—	HRFD 355/2 Ex	00477	—	

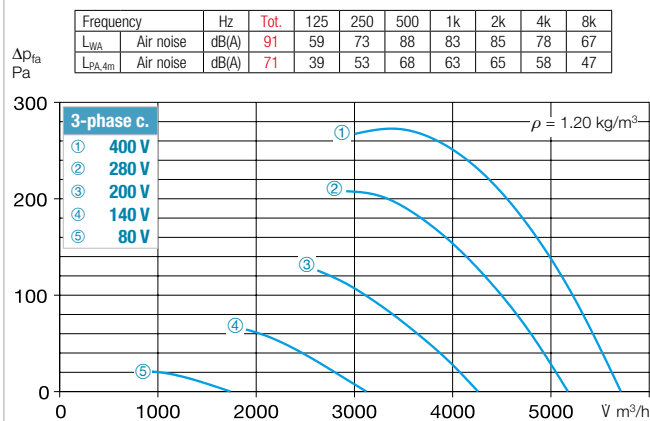
\* Motor ratings, Ex see information on page 20.

<sup>1)</sup> Type HRFW: Connection according to wiring diagram no. 965.

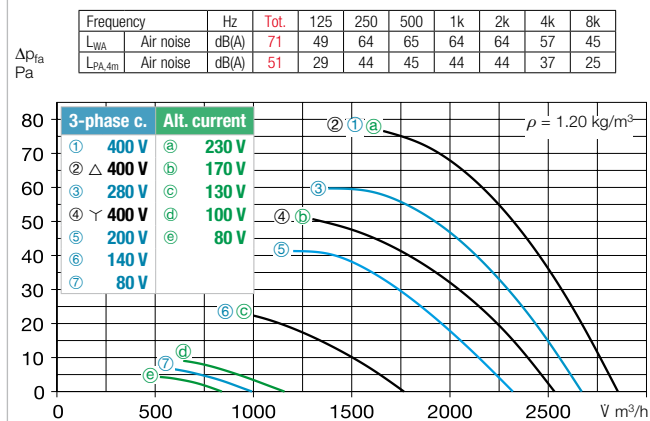
<sup>2)</sup> Incl. motor protection circuit breaker.

<sup>3)</sup> Incl. speed pole changing switch.

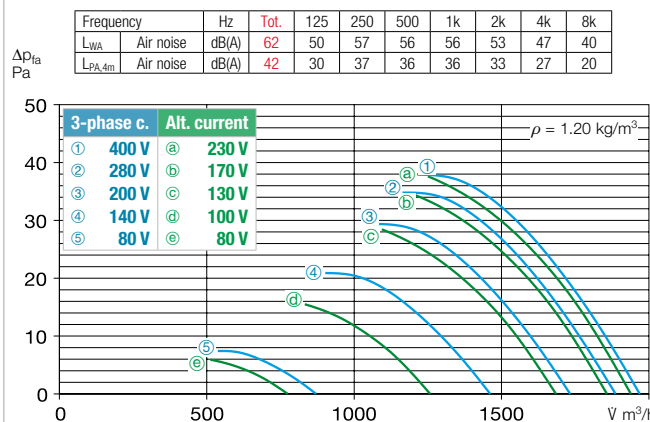
Performance curves 355/2



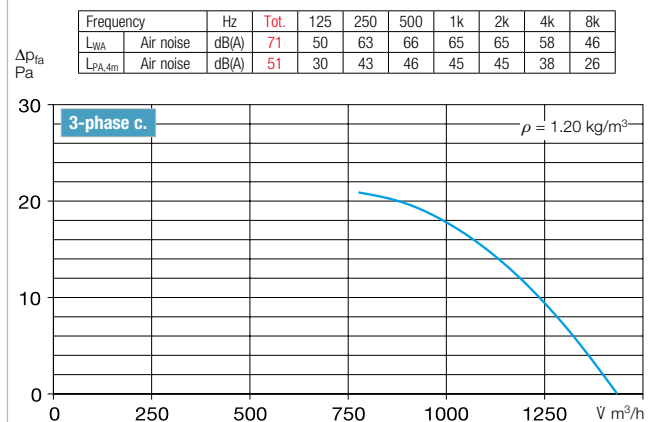
Performance curves 355/4



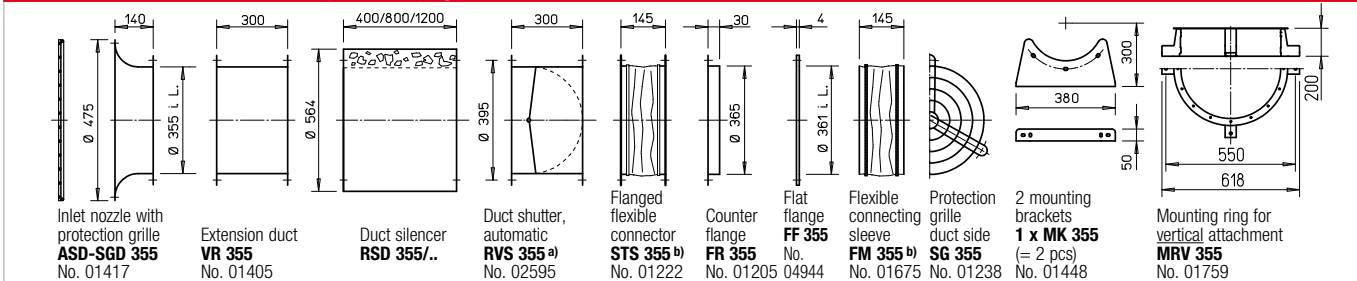
Performance curves 355/6



Performance curve 355/8



Accessories for HRF 355 Description see page 276 ff.



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.				
—	MWS 1.5 <sup>2)</sup>	01947	ESU 1/ESA 1	00236/00238	MW	01579	WS	01271	
—	MWS 1.5 <sup>2)</sup>	01947	ESU 1/ESA 1	00236/00238	MW	01579	WS	01271	
FU-BS 2.5 <sup>2)</sup>	05459	RDS 1 <sup>2)</sup>	01314	—	MD	05849	WS	01271	
FU-BS 2.5 <sup>2)</sup>	05459	RDS 1 <sup>2)</sup>	01314	—	MD	05849	WS	01271	
FU-BS 2.5 <sup>2)</sup>	05459	RDS 2 <sup>2)</sup>	01315	ESD 5	00501	MD	05849	WS	01271
—	—	Speed changeover switch	—	—	—	—	—	—	
—	—	DS 2	01351	—	M 4 <sup>3)</sup> /MD	01571/05849	WS	01271	
—	—	Pole changing switch	—	—	—	—	—	—	
—	—	PDA 12 <sup>4)</sup>	05081	—	M 3 <sup>3)</sup>	01293	PWDA	01282	
—	—	PDA 12 <sup>4)</sup>	05081	—	MSA	01289	PWDA	01282	
—	—	not permitted	—	not permitted	—	—	—	—	
—	—	not permitted	—	not permitted	—	—	—	—	
—	—	not permitted	—	not permitted	—	—	—	—	
—	—	not permitted	—	not permitted	—	—	—	—	

<sup>4)</sup> Flush-m. version see Switch product page.

Other accessories Page

- <sup>b)</sup> 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.