

■ Specification for all models

□ Casing

Manufactured in galvanised sheet steel. Model HQ and HW 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 temp. see table below. Deviation for ex-models.

□ Motor protection

All models (3~ explosion proof excluded) have thermal contacts as standard which must be connected to a motor protection unit (see below). 1 ph. ex-proof fans have automatic resetting thermal contacts wired in series with the motor windings.

□ 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 and HW (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	Current*		Wiring diagram	max. air flow temp.		Weight net	Model						
			standard-supply	max. controlled		standard supply	speed controlled		HQ incl. guard	Ref. no.	HW incl. guard	Ref. no.	HRF	Ref. no.	
min ⁻¹	∇ m ³ /h	W	A	A	No.	+°C	+°C	kg							
1 Phase motor, 230 Volt / 50 Hz, capacitor motor, protection to IP 55															
960	1940	75	0.47	0.47	475 ¹⁾	60	40	12	HQW 355/6	1107	—	—	HRFW 355/6 ¹⁾	0204	
1345	2850	130	0.60	0.65	475 ¹⁾	60	40	11	HQW 355/4	1108	HWW 355/4	1006	HRFW 355/4 ¹⁾	0205	
3 Phase motor, 400 Volt / 50 Hz, squirrel cage motor protection to IP 55															
960	1970	70	0.27	0.29	469	60	40	9.5	HQD 355/6	1120	—	—	—	—	
1375	2900	130	0.35	0.35	469	60	40	11.0	HQD 355/4	1121	HWD 355/4	1022	HRFD 355/4	0226	
2670	5710	825	1.60	1.60	469	60	40	15.0	HQD 355/2	1122	HWD 355/2	1023	HRFD 355/2	0227	
Two-speed, 3 ph., 400 V, 50 Hz, Y/Δ switch, protection to IP 55															
1120/1350	2460/2860	90/132	0.17/0.32		520	60	—	11.0	HQD 355/4/4	1463	—	—	HRFD 355/4/4	1464	
2 speed motor, pole-switching, Dahlander windings, 400 Volt, 50 Hz, protection to IP 55															
700/1395	1430/2920	45/145	0.14/0.35		472	60	—	11.0	HQD 355/8/4	1132	—	—	HRFD 355/8/4	0394	
1430/2840	3050/6150	250/950*	0.63/2.30*		472	40	—	16.0	HQD 355/4/2	1134	—	—	HRFD 355/4/2	0396	
Explosion proof Ex d II B, 1 ph., 230 Volt, 50 Hz, protection to IP 55, temp. class T1-T3															
1370	2940	180*	1.25*		757	40	—	18.0	HQW 355/4 Ex	0444	—	—	HRFW 355/4 Ex	0443	
Explosion proof Ex e II, 3 ph., 400 Volt, 50 Hz, protection to IP 55, temp. class T1-T3															
920	2010	250*	0.97*		470	40	—	25.0	HQD 355/6 Ex	1101	—	—	—	—	
1350	3060	120*	0.37*		470	40	—	18.0	HQD 355/4 Ex	1150	—	—	HRFD 355/4 Ex	0476	
2830	5910	1100*	2.60*		470	40	—	12.5	HQD 355/2 Ex	1261	—	—	HRFD 355/2 Ex	0136	

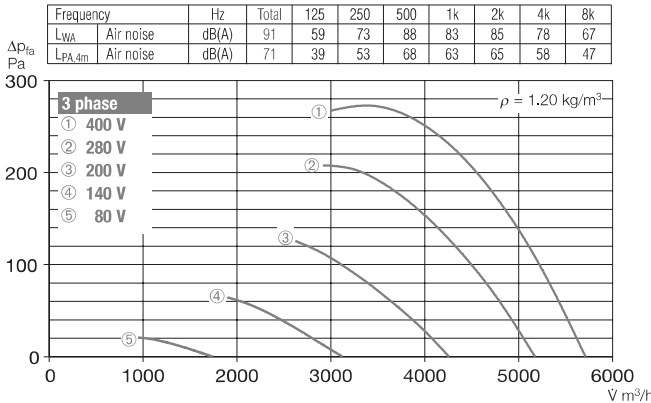
* Motor nominal values, Ex see info page 16.

¹⁾ Type HRFW: connect using wiring diagram no. SS-965.

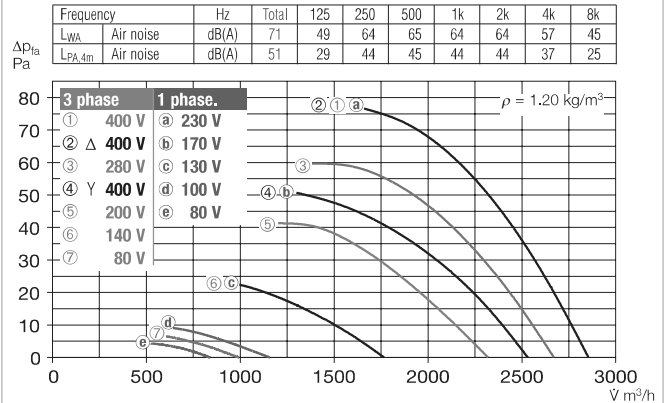
²⁾ Incl. full motor protection.

³⁾ Incl. pole switch.

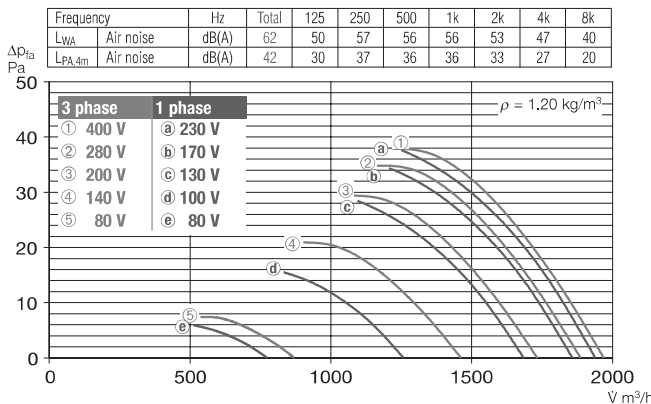
355/2



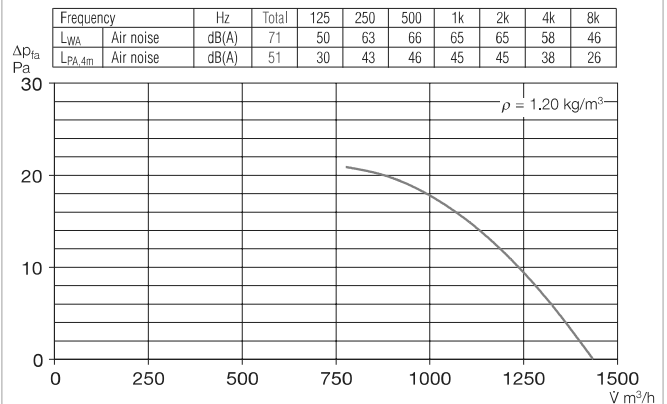
355/4



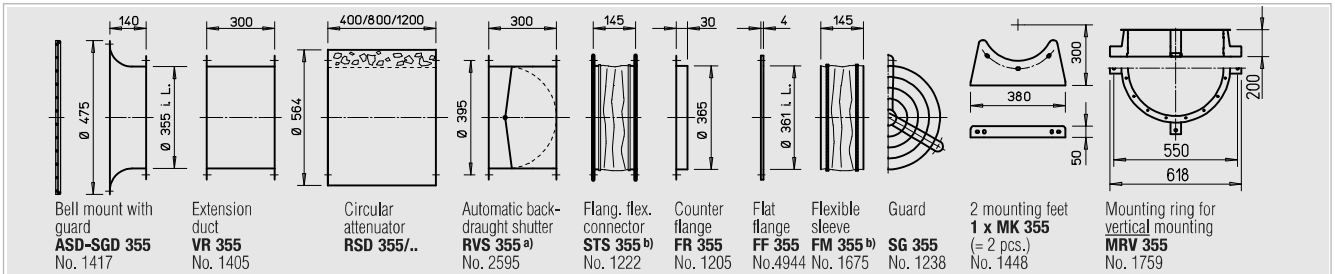
355/6



355/8



Accessories for HRF Description see page 230 on



^{a)} For motorised shutters see accessory page

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

Frequency inverter with integrated Sine filter		Transformer controller 5-speed Pole switch		Electronic controller, stepless flush/surf.		Full motor protection for connection of integrated thermal contacts		Reversing switch	
Model	Ref. no.	Model	Ref. no.	Model	Ref. no.	Model	Ref. no.	Model	Ref. no.
—	—	MWS 1,5 ²⁾	1947	ESU 1/ESA 1	0236/0238	MW	1579	WS	1271
—	—	MWS 1,5 ²⁾	1947	ESU 1/ESA 1	0236/0238	MW	1579	WS	1271
FU-BS 2,5 ²⁾	5459	RDS 1 ²⁾	1314	—	—	MD	5849	WS	1271
FU-BS 2,5 ²⁾	5459	RDS 1 ²⁾	1314	—	—	MD	5849	WS	1271
FU-BS 2,5 ²⁾	5459	RDS 2 ²⁾	1315	ESD 5	0501	MD	5849	WS	1271
Speed switch		DS 2	1351	—	—	M 4 ³⁾ /MD	1571/5849	WS	1271
Pole switch		PDA 12 ⁴⁾	5081	—	—	M 3 ³⁾	1293	PWDA	1282
—	—	PDA 12 ⁴⁾	5081	—	—	MSA	1289	PWDA	1282
—	—	not permitted	not permitted	—	—	—	—	—	—
—	—	not permitted	not permitted	—	—	—	—	—	—
—	—	not permitted	not permitted	—	—	—	—	—	—
—	—	not permitted	not permitted	—	—	—	—	—	—

⁴⁾ See switch product page for flush mounted version.

Other accessories	Page
^{b)} Accessories for explosion proof fans	
Flanged flexible connector Type STS 355 Ex	Ref. no. 2504
Flexible sleeve Type FM 355 Ex	Ref. no. 1691
Extension tube for HS Type VH 355	Ref. no. 1345
Cylindrical duct, galvanised steel, length: 150 mm.	
Attenuators	421 on
Shutters and grilles	487 on
Speed controllers and switches	525 on