

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 types H..W 315/6 and all 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/HW (HQ Ex galvanised), and plastic for HS. 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.

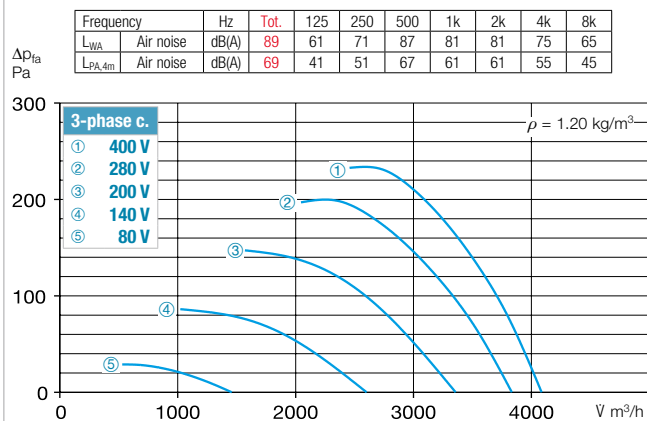
Speed	Flow rate free-blowing	Power consump.	Current consump.		Wiring diagram	Max. air flow temp.		Weight net appr.	Design type							
			at rated voltage	max. with control		at rated voltage	with control		HQ incl. protection grille	Ref. no.	HW incl. protection grille	Ref. no.	HS incl. protection grille	Ref. no.	HRF	Ref. no.
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																
920	1330	33	0.25	0.35	317 ¹⁾	60	40	9.0	HQW 315/6	01105	—	HSW 315/6	00142	HRFW 315/6¹⁾	00202	
1390	2080	104	0.45	0.47	475 ¹⁾	60	40	8.0	HQW 315/4	01106	HWW 315/4	01004	HSW 315/4	00143	HRFW 315/4²⁾	00203
Three-phase current, 400 Volt, 50 Hz, Squirrel-cage rotor, protection category IP55																
950	1370	68	0.27	0.32	469	60	40	9.0	HQD 315/6	01117	—	—	—	—	—	
1330	1960	84	0.24	0.26	469	60	40	9.0	HQD 315/4	01118	HWD 315/4	01019	HSD 315/4	00158	HRFD 315/4	00223
2760	4080	527	1.10	1.23	469	50	40	11.0	HQD 315/2	01119	HWD 315/2	01020	—	HRFD 315/2	00224	
Two-speed, three-phase current, 400 V, 50 Hz, √3 connection, protection category IP55																
1040/1280	1530/1980	56/87	0.11/0.22	—	520	60	—	10.5	HQD 315/4/4	01460	—	—	—	HRFD 315/4/4	01462	
Pole-changeable, 2 speeds, three-phase current, Dahlander winding, 400 Volt, 50 Hz, protection category IP55																
720/1445	980/2060	49/115	0.20/0.43	—	472	60	—	12.0	HQD 315/8/4	01129	—	HSD 315/8/4	00346	HRFD 315/8/4	00391	
1445/2845	2100/4190	106/558	0.45/1.32	—	472	50	—	12.5	HQD 315/4/2	01131	—	HSD 315/4/2	00348	HRFD 315/4/2	00393	
	Ex	Explosion-proof, II 2G Ex h IIB T3 Gb, Motor Ex d, alternating current 230 Volt, 50 Hz, protection category IP55														
1370	2070	60*	1.25*	—	757	40	—	13.0	HQW 315/4 Ex	00442	—	—	—	HRFW 315/4 Ex	00439	
	Ex	Explosion-proof, II 2G Ex h IIB + H₂ T3 Gb, Motor Ex e, three-phase current 400 Volt, 50 Hz, protection category IP55														
920	1400	250*	0.97*	—	470	40	—	23.0	HQD 315/6 Ex	01098	—	—	—	—	—	
1355	2140	120*	0.37*	—	470	40	—	14.0	HQD 315/4 Ex	01147	—	—	—	HRFD 315/4 Ex	00473	
2900	4130	550*	1.31*	—	470	40	—	8.0	HQD 315/2 Ex	01148	—	—	—	HRFD 315/2 Ex	00474	

* Motor ratings, Ex see information on page 20.

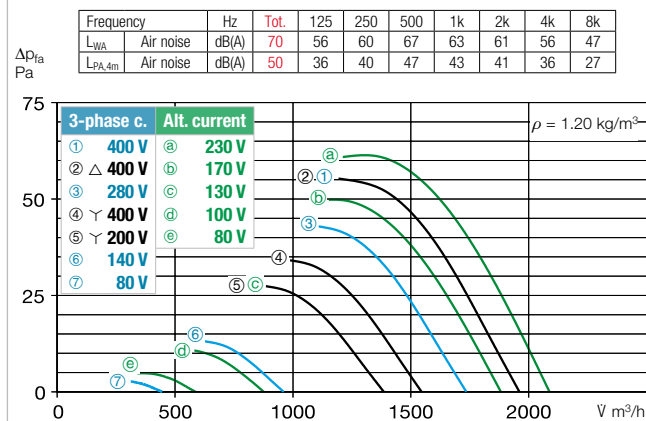
¹⁾ Type HRFW../6: Connection according to wiring diagram no. 963. ²⁾ Type HRFW../4: Connection according to wiring diagram no. 965.

³⁾ Incl. motor protection circuit breaker.

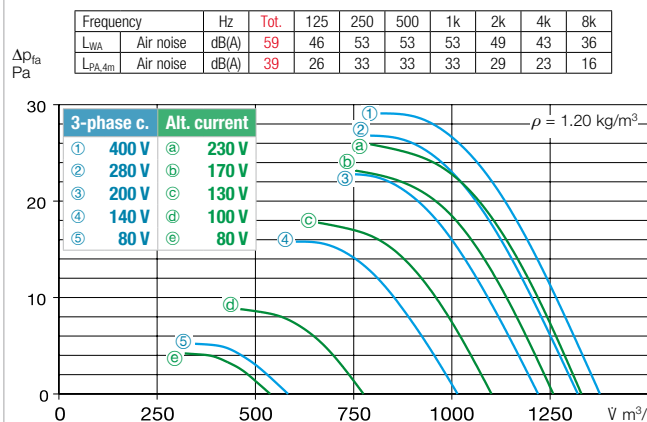
Performance curves 315/2



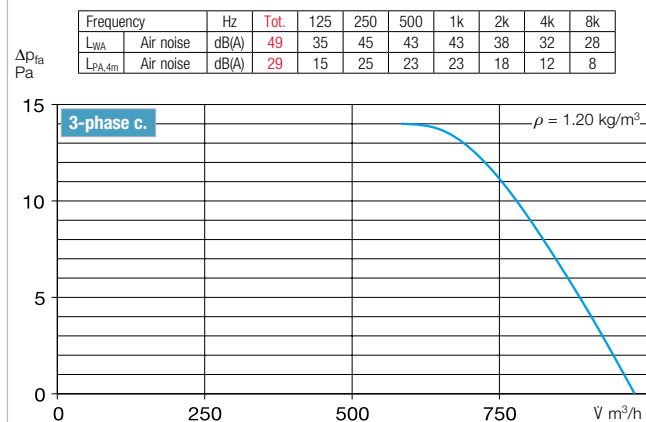
Performance curves 315/4



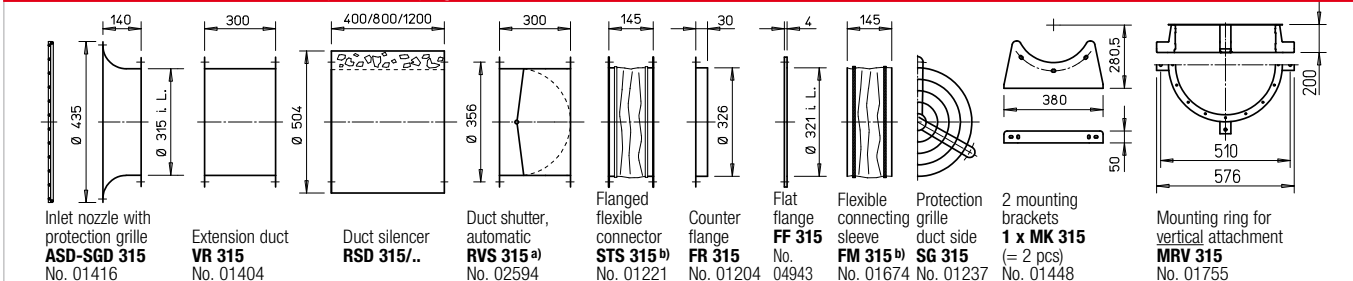
Performance curves 315/6



Performance curve 315/8



Accessories for HRF 315 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.	Type	Ref. no.	Type	Ref. no.
—	—	TSW 0.3	03608	ESU 1/ESA 1	00236/00238	—	—	WS	01271
—	—	MWS 1.5 ³⁾	01947	ESU 1/ESA 1	00236/00238	MW	01579	WS	01271
FU-BS 2.5 ³⁾	05459	RDS 1 ³⁾	01314	—	—	MD	05849	WS	01271
FU-BS 2.5 ³⁾	05459	RDS 1 ³⁾	01314	—	—	MD	05849	WS	01271
FU-BS 2.5 ³⁾	05459	RDS 2 ³⁾	01315	EDS 5	00501	MD	05849	WS	01271
Speed changeover switch									
FU-BS 2.5 ³⁾	05459	DS2	01351	—	—	M 4 ⁴⁾ / MD	01571/05849	WS	01271
Pole changing switch									
—	—	PDA 12 ⁵⁾	05081	—	—	M 3 ⁴⁾	01293	PWDA	01282
—	—	PDA 12 ⁵⁾	05081	—	—	M 3 ⁴⁾	01293	PWDA	01282
—	—	not permitted	not permitted	not permitted	not permitted	—	—	—	—
—	—	not permitted	not permitted	not permitted	not permitted	—	—	—	—
—	—	not permitted	not permitted	not permitted	not permitted	—	—	—	—
—	—	not permitted	not permitted	not permitted	not permitted	—	—	—	—

⁴⁾ Incl. speed pole changing switch. ⁵⁾ Flush-m. version see Switch product page.

Other accessories Page

- ^{b)} Access. for expl.-proof fans
- Flanged flexible connector STS 315 Ex Ref. no. 02503
- Flexible connecting sleeve FM 315 Ex Ref. no. 01690
- Extension sleeve for HS VH 315 Ref. no. 01344
- 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.