HQ 315



Also available in version:

HW 315



HS 315

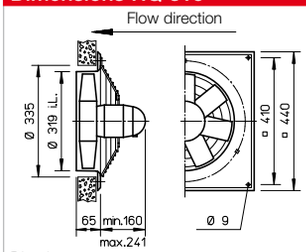


HRF 315



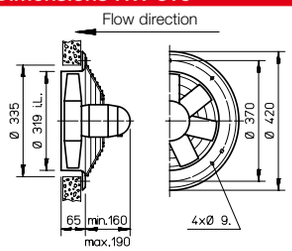
Also available in version:

Dimensions HQ 315



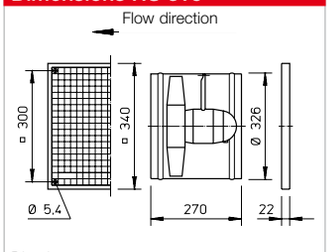
Dim. in mm

Dimensions HW 315



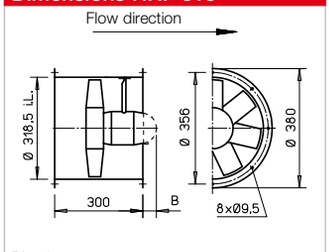
Dim. in mm

Dimensions HS 315



Dim. in mm

Dimensions HRF 315



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~ explo-si-on-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.
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.

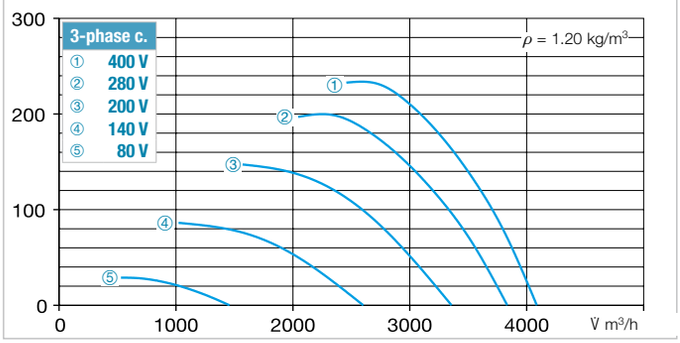
Noise levels
See performance diagram. The sound power and sound pressure at 4 m distance under free field conditions are specified for the average operating point on the inlet/outlet side. See page 14 f for noise emissions and room acoustics.
Different for explosion-proof types.

Speed	Flow rate free-blowing	Power consump.	Current consump.		Wiring dia-gram	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.	**HS** incl. protection grille	Ref. no.	**HRF**	Ref. no.
min^{-1}	V̇ m³/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 315/6**[1]	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 315/4**[2]	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, ⟡/△ 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 + H_2 T3 Gb, Motor Ex e, three-phase current 400 Volt, 50 Hz, protection category IP55**																
925	1400	250*	0.80*		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.

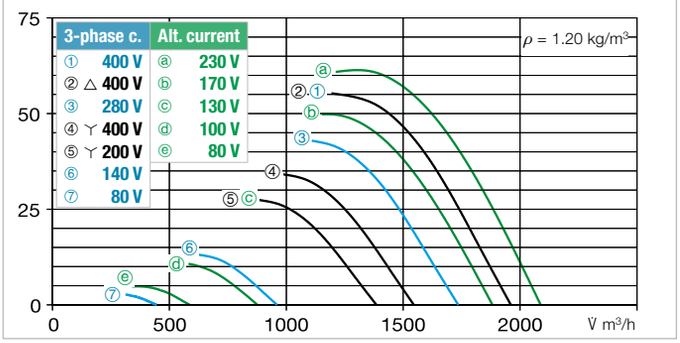
Performance curves 315/2

Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	89	61	71	87	81	81	75	65
$L_{PA,4m}$	Air noise	dB(A)	69	41	51	67	61	61	55	45



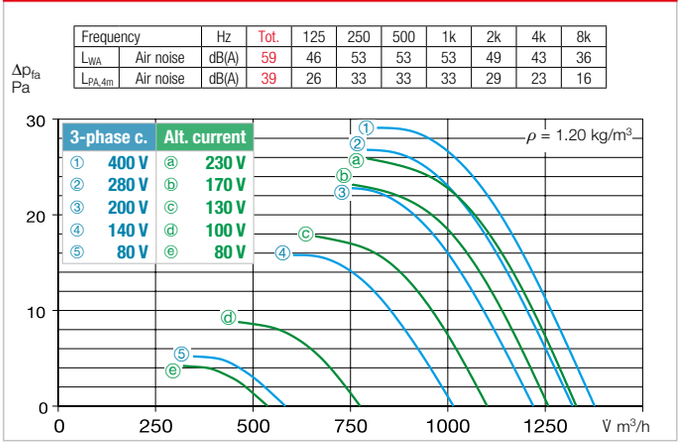
Performance curves 315/4

Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	70	56	60	67	63	61	56	47
$L_{PA,4m}$	Air noise	dB(A)	50	36	40	47	43	41	36	27



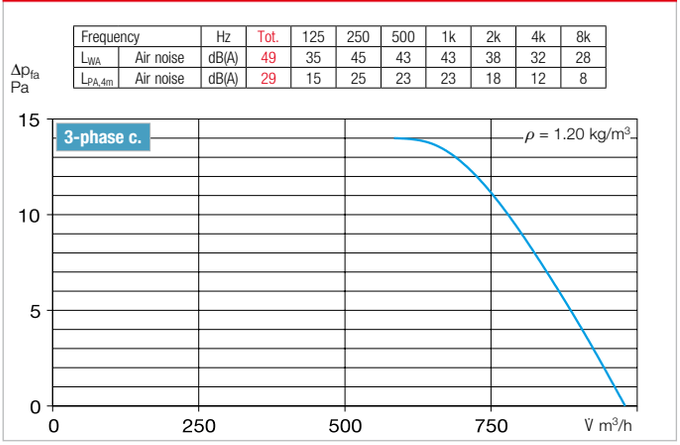
Performance curves 315/6

Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	59	46	53	53	53	49	43	36
$L_{PA,4m}$	Air noise	dB(A)	39	26	33	33	33	29	23	16

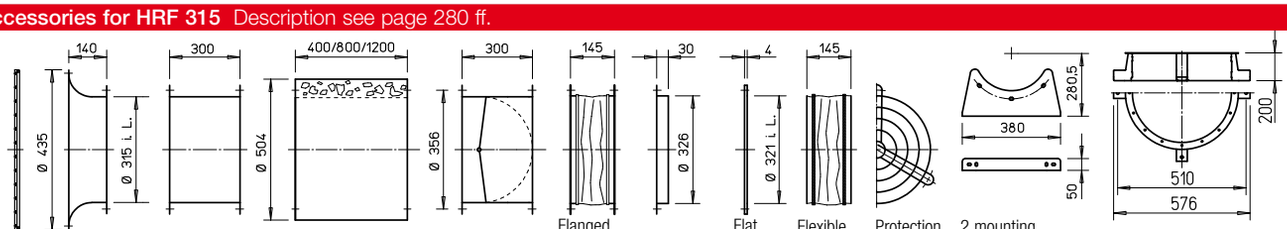


Performance curve 315/8

Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	49	35	45	43	43	38	32	28
$L_{PA,4m}$	Air noise	dB(A)	29	15	25	23	23	18	12	8



Accessories for HRF 315 Description see page 280 ff.



Inlet nozzle with protection grille **ASD-SGD 315** No. 01416

Extension duct **VR 315** No. 01404

Duct silencer **RSD 315/..**

Duct shutter, automatic **RVS 315** a) No. 02594

Flanged flexible connector **STS 315** b) No. 01221

Counter flange **FR 315** No. 01204

Flat flange **FF 315** No. 04943

Flexible connecting sleeve **FM 315** b) No. 01674

Protection grille duct side **SG 315** No. 01237

2 mounting brackets **1 x MK 315** (= 2 pcs) No. 01448

Mounting ring for vertical attachment **MRV 315** No. 01755

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		—		—	

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