



Impeller
 High-performance centrifugal impeller with backward curved blades made of plastic (T120 and explosion-proof version made of aluminium). Dynamically balanced according to DIN ISO 21940-11 – quality grade 6.3.

Drive
 Speed-controllable external rotor motor in closed design (IP54) (explosion-proof version in IP44). Flange motor with self-ventilation (T120 version) in IP54. Ball bearing mounted with moisture protection. Maintenance-free and radio interference-free.

Motor protection
 Through built-in thermal contacts or built-in PTC thermistors, which must be connected to a motor protection circuit breaker. Assignment see type table.

Electrical connection
 No dismantling of casing, to external isolator switch (explosion-proof version to terminal box) in protection category IP65.

Protection grille
 On the outlet side as standard according to DIN EN ISO 13857.

Power control

All 1~ types have continuously variable speed control in the range from 0 – 100 % through electronic speed controllers or five-step control units. All 3~ types have continuously variable speed control in the range 0 – 100 % with a frequency inverter with integrated, all-pole effective sine filter (except for explosion-proof version) or five-step control units. Assignment see type table.

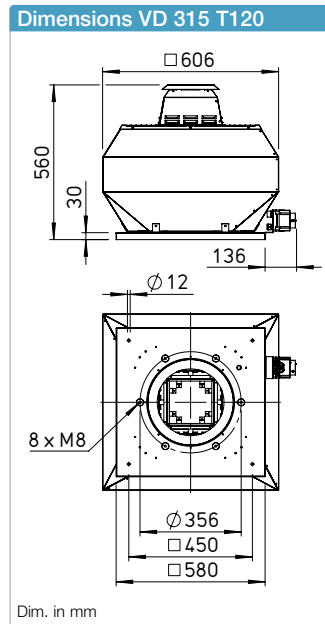
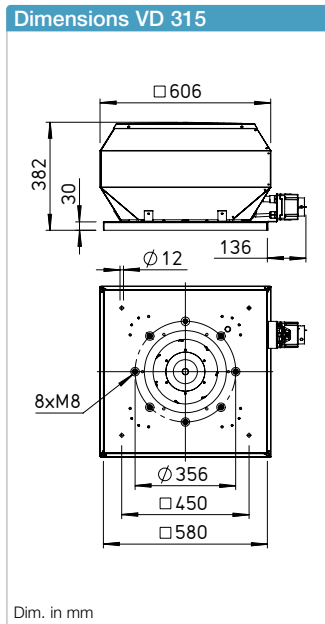
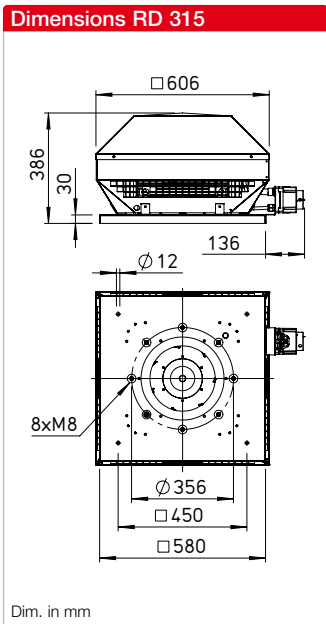
Delivery
 Units are ready-for-connection, fully pre-assembled in the shipping box.

Noise
 The total level and range are specified above the performance diagram for:

- Inlet side sound power
- Outlet side sound power.

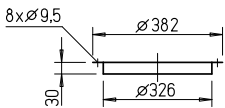
The horizontally case-radiated noise as sound pressure at 4 m (free field conditions) is also specified in the type table. Hood silencer see Accessories.

References	Page
Planning information	14 ff.
Technical description	500 f.
Selection table	502 f.
Accessories, details	558 f.
Speed controllers, controllers and switches	599 ff.



Dimensions Accessories for RD / VD 315*

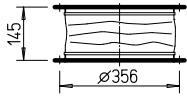
Counter flange FR 315 Ref. no. 01204



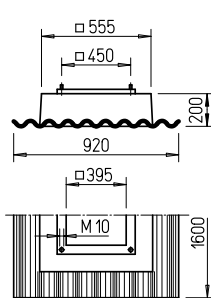
Flanged flexible connector* STS 315 Ref. no. 01221

For explosion-proof fans

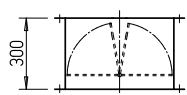
STS 315 Ex Ref. no. 02503



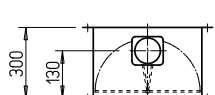
Corrugated roof base, profile 5 WDS 315 Ref. no. 01561



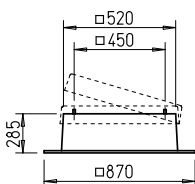
Shutter, automatic RVS 315 Ref. no. 02594



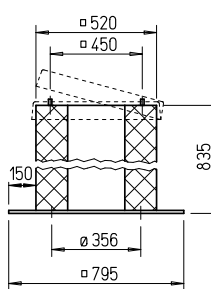
Shutter, motorised RVM 315 Ref. no. 02578



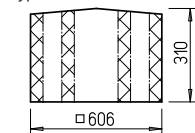
Flat roof base, hinged FDS 315 Ref. no. 01379



Base silencer, hinged SSD 315 Ref. no. 05292



Hood silencer HSDV 315 Ref. no. 07476
 only for type VD



Description RD

Horizontal outlet roof fan with efficiency-optimised aluminium casing and newly developed high-performance centrifugal impeller.

Description VD

Vertical outlet roof fan with efficiency-optimised aluminium casing and newly developed high-performance centrifugal impeller.

Description VD T120

Designed for the delivery of process air up to +120 °C. Enclosed motor located outside of the air flow. Compliant with VDI 2052.

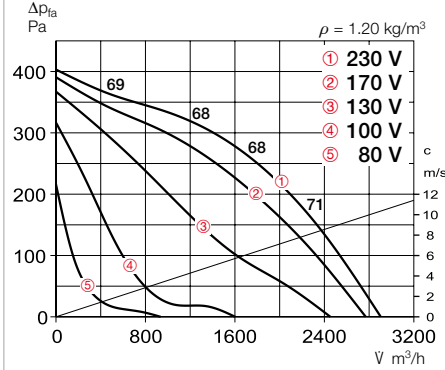
Description of all series

Casing
 Casing made of sea water-resistant aluminium with integrated tamper protection. Motor support plate and base plate with inlet nozzle made of galvanised steel (explosion-proof version inlet nozzle made of aluminium). Base plate with threaded screws for attachment of inlet-side accessories (hole pattern according to DIN 24155).

* Accessories VD T120 see installation accessories p. 559 f. Other accessories upon request.

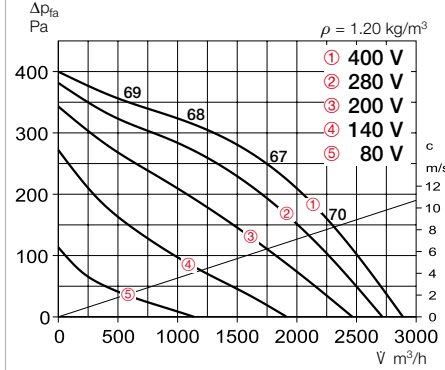
Performance curves RDW 315/4

Frequency	Hz	Tot.	125	250	500	1k	2k	4k	8k	
L _{WA} Inlet side		dB(A)	66	54	58	60	58	59	58	47
L _{WA} Outlet side		dB(A)	68	55	62	63	62	58	50	46



Performance curves RDD 315/4

Frequency	Hz	Tot.	125	250	500	1k	2k	4k	8k	
L _{WA} Inlet side		dB(A)	66	53	57	59	57	58	57	46
L _{WA} Outlet side		dB(A)	68	55	61	62	61	57	49	46



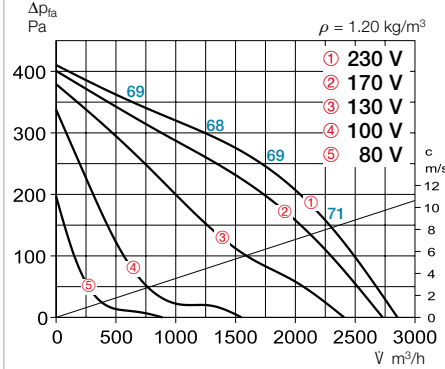
Type	Ref. no.	Speed	Flow rate Free blowing	Noise sound pressure	Power consump.	Current consump.		Wiring diagram	Max. air flow temp.		Weight net	Motor protection circuit breaker		Speed controller 5-step	
						at rated voltage	with control		at rated voltage	with control		Type	Ref. no.	Type	Ref. no.
Single phase alternating current, 1~, 230 V, 50 Hz, Capacitor motor, protection category IP54															
RDW 315/4	07287	1385	2900	51	300	1.47	2.0	1128	60	60	16.0	MW	01579	MWS 3 ²⁾	01948
Three phase current, 3~, 400 V, 50 Hz, Squirrel-cage rotor, Protection category IP54															
RDD 315/4	07288	1385	2890	51	290	0.67	0.67	1129	60	60	19.0	MD	05849	RDS 1 ²⁾	01314
Ex Explosion-proof, II 2G Ex h IIB + H ₂ T3 Gb, Motor Ex e, Three phase current, 3~, 400 V, 50 Hz, Protection category IP44															
RDD 315/4 Ex ¹⁾	07303	1390	2890	51.5	340	0.73	0.73	1157	40	40	19.0	MSA	01289	TSD 1.5	01501

1) Performance diagram at www.HeliosSelect.de.

2) Includes motor protection circuit breaker.

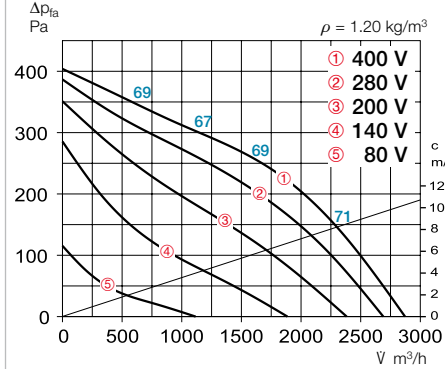
Performance curves VDW 315/4

Frequency	Hz	Tot.	125	250	500	1k	2k	4k	8k	
L _{WA} Inlet side		dB(A)	66	53	57	59	57	58	57	46
L _{WA} Outlet side		dB(A)	69	58	61	62	63	58	53	45



Performance curves VDD 315/4

Frequency	Hz	Tot.	125	250	500	1k	2k	4k	8k	
L _{WA} Inlet side		dB(A)	65	53	57	59	57	58	57	46
L _{WA} Outlet side		dB(A)	68	58	61	62	63	58	52	42



Type	Ref. no.	Speed	Flow rate Free blowing	Noise sound pressure	Power consump.	Current consump.		Wiring diagram	Max. air flow temp.		Weight net	Motor protection circuit breaker		Speed controller 5-step	
						at rated voltage	with control		at rated voltage	with control		Type	Ref. no.	Type	Ref. no.
Single phase alternating current, 1~, 230 V, 50 Hz, Capacitor motor, protection category IP54															
VDW 315/4	07279	1385	2860	52	300	1.47	2.0	1128	60	50	21.0	MW	01579	MWS 3 ²⁾	01948
Three phase current, 3~, 400 V, 50 Hz, Squirrel-cage rotor, Protection category IP54															
VDD 315/4	07282	1385	2880	51	290	0.67	0.67	1129	60	60	20.0	MD	05849	RDS 1 ²⁾	01314
Ex Explosion-proof, II 2G Ex h IIB + H ₂ T3 Gb, Motor Ex e, Three phase current, 3~, 400 V, 50 Hz, Protection category IP44															
VDD 315/4 Ex ¹⁾	07293	1390	2770	50.5	330	0.71	1.71	1157	40	40	19.5	MSA	01289	TSD 1.5	01501
T120 Three phase current, 3~, 400 V, 50 Hz, Squirrel-cage rotor, Protection category IP54															
VDD 315/4 T120 ¹⁾	07315	1450	3372	55	395	0.89	1.1	1264	120	100	25.0	MD	05849	RDS 2 ²⁾	01315

1) Performance diagram at www.HeliosSelect.de.

2) Includes motor protection circuit breaker.