



**Series specification**

**■ Specification RD**

Centrifugal roof fan with horizontal discharge and efficiency-optimised aluminium casing and newly developed high-performance centrifugal impeller.

**■ Specification VD**

Centrifugal roof fan with vertical discharge and efficiency-optimised aluminium casing and newly developed high-performance centrifugal impeller.

**Specification for all series**

**■ Casing**

Casing made from seawater-resistant aluminium with integrated protection. Motor base plate and base plate with inlet cone made from galvanised steel. Base plate with threaded bolt for connection of intake air accessories (hole pattern according to DIN 24155).

**■ Impeller**

High performance backward curved centrifugal impeller made of polymer. Dynamically balanced according to DIN ISO 1940-1.

**■ Motor**

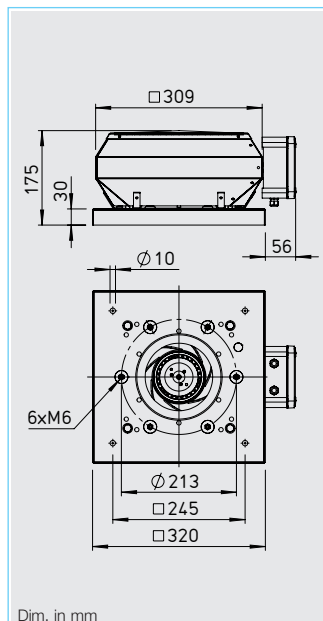
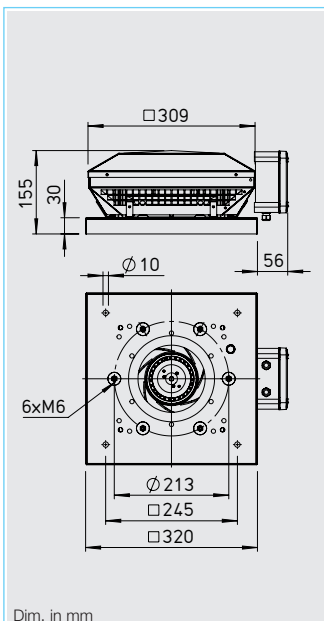
Totally enclosed speed controllable external rotor (IP 44). Ball bearing mounted with moisture protection. Maintenance-free and interference-free.

**■ Motor protection**

Through built-in thermal contacts, which are wired in series with the winding and automatically switch off at high motor temperatures and back on again after cooling.

**■ Electrical connection**

To external terminal box IP 65. Isolator available (see accessories).



**■ Guard**

Standard on the exhaust side according to DIN EN ISO 13857.

**■ Speed control**

All types are steplessly speed controllable in the range from 0 – 100 % by electronic speed controller or 5-step controller. See type table for assignment.

**■ Sound levels**

The sum levels and spectrum figures are specified above the performance curve for:  
 – Sound level intake  
 – Sound level exhaust

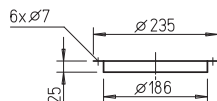
The horizontal sound pressure level at 4 m (free field conditions) is also specified in the type table as well as the table below the performance curve.

**■ Delivery**

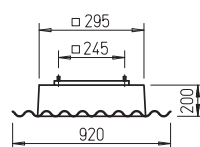
Ready-to-connect, completely pre-assembled in shipping carton.

**Accessories for Type RD / VD**

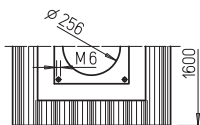
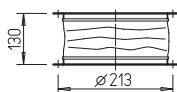
**Counterflange FR 180** Ref. no. 1200



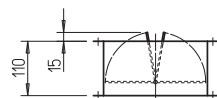
**Corrugated roof base, profile 5 WDS 180** Ref. no. 1559



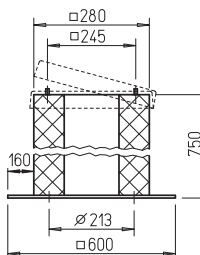
**Flanged flexible connector STS 180** Ref. no. 1217



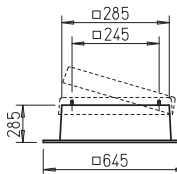
**Automatic backdraught shutter DVS 180** Ref. no. 1247



**Hinged base attenuator SSD 180** Ref. no. 5289



**Hinged flat roof base FDS 180** Ref. no. 1377

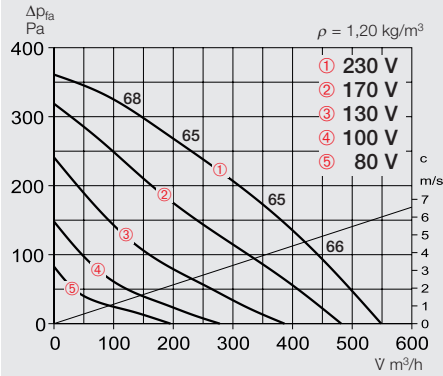


Dim. in mm

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### RDW 180/2

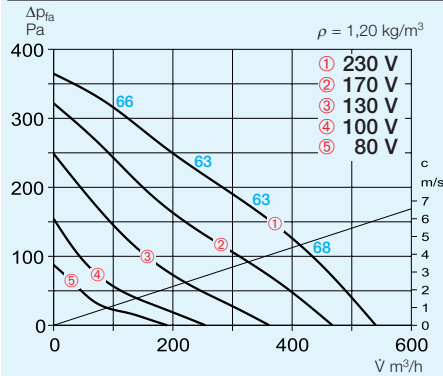
Frequency		Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub>	Intake	dB(A)	61	37	48	53	56	55	54
L <sub>WA</sub>	Exhaust	dB(A)	65	38	52	58	62	57	54



Type	Ref. no.	R.P.M.	Air flow volume (FID)	Sound pressure level	Motor power	Current full load	Current control	Wiring diagram	max. air flow full load	max. air flow temp. control	Weight net	Full motor protection device	5-step speed switch		
		min <sup>-1</sup>	m <sup>3</sup> /h	dB(A) in 4m	W	A	A	No.	°C	°C	kg	Type	Ref. no.	Type	Ref. no.
<b>Single phase motor 230 V, 50 Hz, capacitor motor, protection to IP 44</b>															
<b>RDW 180/2</b>	7122	2330	550	48	66	0.3	0.3	923	60	60	4.5	—	—	<b>TSW 1,5</b>	1495

### VDW 180/2

Frequency		Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub>	Intake	dB(A)	60	36	47	52	55	54	53
L <sub>WA</sub>	Exhaust	dB(A)	63	38	51	56	59	57	52



Type	Ref. no.	R.P.M.	Air flow volume (FID)	Sound pressure level	Motor power	Current full load	Current control	Wiring diagram	max. air flow full load	max. air flow temp. control	Weight net	Full motor protection device	5-step speed switch		
		min <sup>-1</sup>	m <sup>3</sup> /h	dB(A) in 4m	W	A	A	No.	°C	°C	kg	Type	Ref. no.	Type	Ref. no.
<b>Single phase motor 230 V, 50 Hz, capacitor motor, protection to IP 44</b>															
<b>VDW 180/2</b>	7120	2330	540	46	66	0.3	0.3	923	60	60	5.0	—	—	<b>TSW 1,5</b>	1495



**Series specification**

**■ Specification RD**

Centrifugal roof fan with horizontal discharge and efficiency-optimised aluminium casing and newly developed high-performance centrifugal impeller.

**■ Specification VD**

Centrifugal roof fan with vertical discharge and efficiency-optimised aluminium casing and newly developed high-performance centrifugal impeller.

**Specification for all series**

**■ Casing**

Casing made from seawater-resistant aluminium with integrated protection. Motor base plate and base plate with inlet cone made from galvanised steel (inlet cone ex-proof version made from aluminium). Base plate with threaded bolt for connection of intake air accessories (hole pattern according to DIN 24155).

**■ Impeller**

High performance backward curved centrifugal impeller made of galvanised sheet steel (ex-proof version made from aluminium). Dynamically balanced according to DIN ISO 1940-1.

**■ Motor**

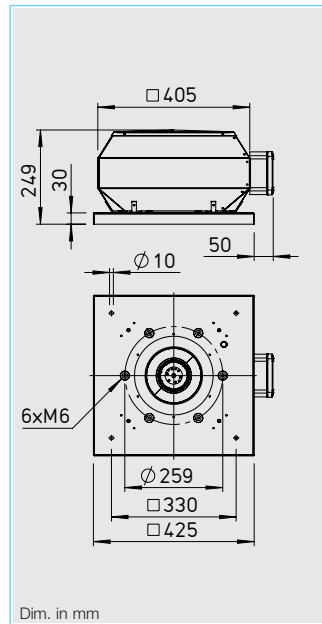
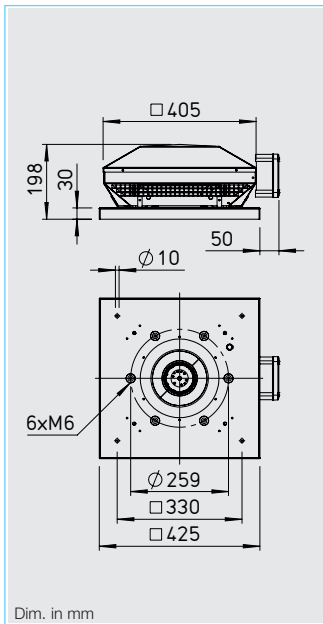
Totally enclosed speed controllable external rotor (IP 44). Ball bearing mounted with moisture protection. Maintenance-free and interference-free.

**■ Motor protection**

Through built-in thermal contacts, which are wired in series with the winding and automatically switch off at high motor temperatures and back on again after cooling. Ex-proof version with thermal motor protection from built-in PTC thermistor.

**■ Electrical connection**

To external terminal box IP 65. Isolator available (see accessories).



**■ Guard**

Standard on the exhaust side according to DIN EN ISO 13857.

**■ Speed control**

All types are steplessly speed controllable in the range from 0 – 100 % by electronic speed controller or 5-step controller. See type table for assignment.

**■ Sound levels**

The sum levels and spectrum figures are specified above the performance curve for:  
 – Sound level intake  
 – Sound level exhaust

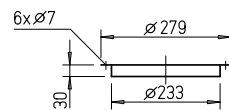
The horizontal sound pressure level at 4 m (free field conditions) is also specified in the type table as well as the table below the performance curve.

**■ Delivery**

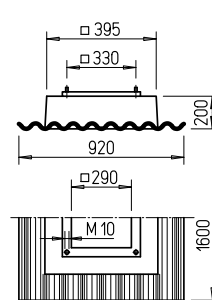
Ready-to-connect, completely pre-assembled in shipping carton.

**Accessories for Type RD / VD**

**Counterflange DFR 200** Ref. no. 1201

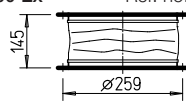


**Corrugated roof base, profile 5 WDS 200** Ref. no. 1560

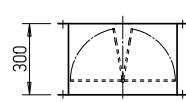


**Flanged flexible connector DSTS 200** Ref. no. 1218

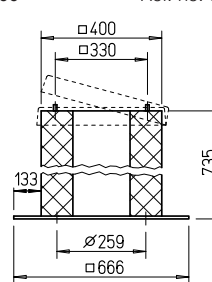
For ex-proof fans  
**DSTS 200 Ex** Ref. no. 2500



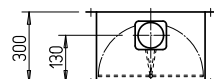
**Automatic backdraught shutter DRVS 200** Ref. no. 2591



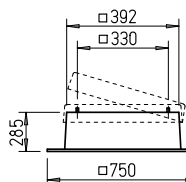
**Hinged base attenuator SSD 200** Ref. no. 5290



**Motorised backdraught shutter DRVM 200** Ref. no. 2575



**Hinged flat roof base FDS 200** Ref. no. 1378

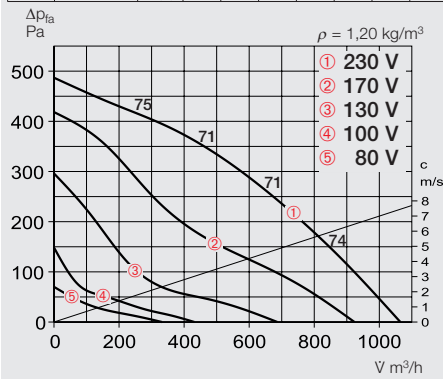


Dim. in mm

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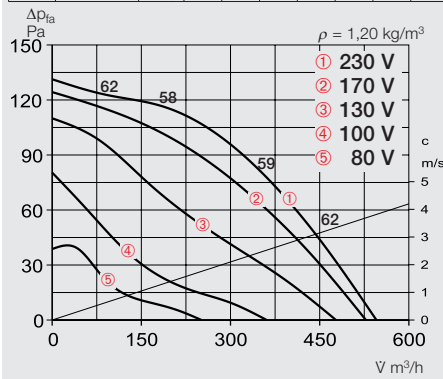
### RDW 200/2

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 68	44	57	61	63	60	60
L <sub>WA</sub> Exhaust		dB(A) 71	45	62	66	65	62	62



### RDW 200/4

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 56	32	45	49	51	48	48
L <sub>WA</sub> Exhaust		dB(A) 59	33	50	54	53	50	50

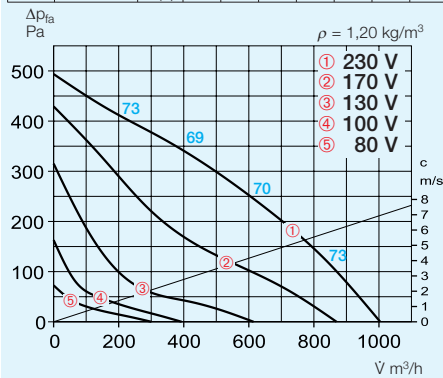


Type	Ref. no.	R.P.M.	Air flow volume (FID)	Sound pressure level	Motor power	Current full load	Current control	Wiring diagram	max. air flow temp. full load	Weight net	Full motor protection device		5-step speed switch		
											Type	Ref. no.	Type	Ref. no.	
		min <sup>-1</sup>	m <sup>3</sup> /h	dB(A) in 4m	W	A	A	No.	°C	°C	kg				
<b>Single phase motor 230 V, 50 Hz, capacitor motor, protection to IP 44</b>															
RDW 200/4	7177	1375	545	42	34	0.16	0.16	923	70	70	7.0	—	—	TSW 1,5	1495
RDW 200/2	7176	2430	1070	54	125	0.56	0.56	923	70	70	7.5	—	—	TSW 1,5	1495
<b>Explosion-proof, three phase motor 400 V, 50 Hz, protection to IP 44, temp. class T1-T3</b>															
RDD 200/4 Ex <sup>1)</sup>	7191	1465	770	42	75	0.32	0.32	1129	40	40	7.0	MSA	1289	TSD 0,8	1500

1) Performance curve on www.HeliosSelect.de

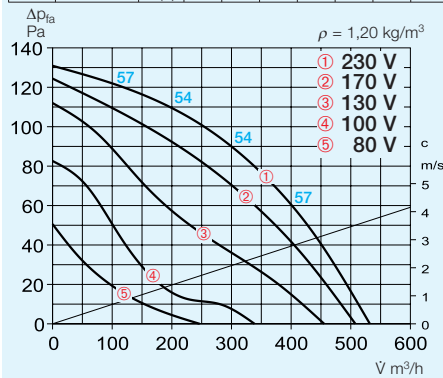
### VDW 200/2

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 68	43	58	60	63	61	60
L <sub>WA</sub> Exhaust		dB(A) 70	46	63	64	63	62	61



### VDW 200/4

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 52	35	41	47	46	44	44
L <sub>WA</sub> Exhaust		dB(A) 54	38	47	49	46	46	45



Type	Ref. no.	R.P.M.	Air flow volume (FID)	Sound pressure level	Motor power	Current full load	Current control	Wiring diagram	max. air flow temp. full load	Weight net	Full motor protection device		5-step speed switch		
											Type	Ref. no.	Type	Ref. no.	
		min <sup>-1</sup>	m <sup>3</sup> /h	dB(A) in 4m	W	A	A	No.	°C	°C	kg				
<b>Single phase motor 230 V, 50 Hz, capacitor motor, protection to IP 44</b>															
VDW 200/4	7134	1375	535	37	34	0.16	0.16	923	70	70	7.5	—	—	TSW 1,5	1495
VDW 200/2	7126	2430	1000	53	125	0.56	0.56	923	70	70	8.0	—	—	TSW 1,5	1495
<b>Explosion-proof, three phase motor 400 V, 50 Hz, protection to IP 44, temp. class T1-T3</b>															
VDD 200/4 Ex <sup>1)</sup>	7178	1465	750	37	75	0.32	0.32	1129	40	40	7.5	MSA	1289	TSD 0,8	1500

1) Performance curve on www.HeliosSelect.de



**Series specification**

**■ Specification RD**

Centrifugal roof fan with horizontal discharge and efficiency-optimised aluminium casing and newly developed high-performance centrifugal impeller.

**■ Specification VD**

Centrifugal roof fan with vertical discharge and efficiency-optimised aluminium casing and newly developed high-performance centrifugal impeller.

**Specification for all series**

**■ Casing**

Casing made from seawater-resistant aluminium with integrated protection. Motor base plate and base plate with inlet cone made from galvanised steel (inlet cone ex-proof version made from aluminium). Base plate with threaded bolt for connection of intake air accessories (hole pattern according to DIN 24155).

**■ Impeller**

High performance backward curved centrifugal impeller made of galvanised sheet steel (ex-proof version made from aluminium). Dynamically balanced according to DIN ISO 1940-1.

**■ Motor**

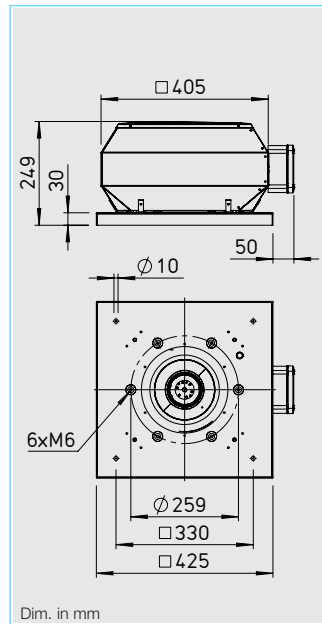
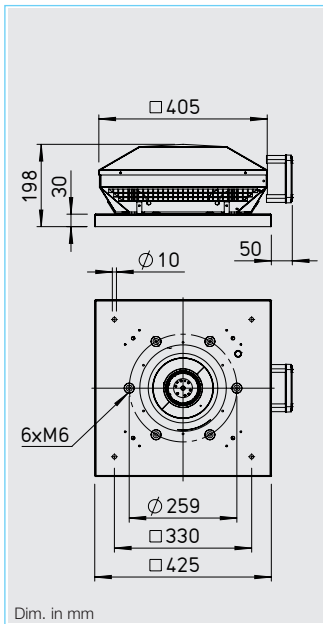
Totally enclosed speed controllable external rotor (IP 44). Ball bearing mounted with moisture protection. Maintenance-free and interference-free.

**■ Motor protection**

Through built-in thermal contacts, which are wired in series with the winding and automatically switch off at high motor temperatures and back on again after cooling. Ex-proof version with thermal motor protection from built-in PTC thermistor.

**■ Electrical connection**

To external terminal box IP 65. Isolator available (see accessories).



**■ Guard**

Standard on the exhaust side according to DIN EN ISO 13857.

**■ Speed control**

All types are steplessly speed controllable in the range from 0 – 100 % by electronic speed controller or 5-step controller. See type table for assignment.

**■ Sound levels**

The sum levels and spectrum figures are specified above the performance curve for:  
 – Sound level intake  
 – Sound level exhaust

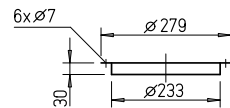
The horizontal sound pressure level at 4 m (free field conditions) is also specified in the type table as well as the table below the performance curve.

**■ Delivery**

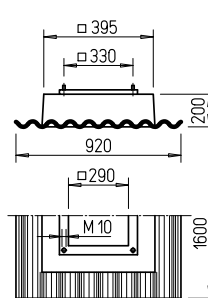
Ready-to-connect, completely pre-assembled in shipping carton.

**Accessories for Type RD / VD**

**Counterflange FR 225** Ref. no. 1201

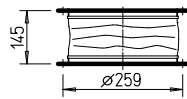


**Corrugated roof base, profile 5 WDS 225** Ref. no. 1560

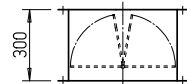


**Flanged flexible connector STS 225** Ref. no. 1218

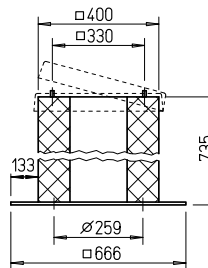
For ex-proof fans  
**STS 225 Ex** Ref. no. 2500



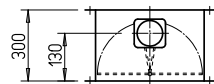
**Automatic backdraught shutter RVS 225** Ref. no. 2591



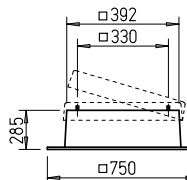
**Hinged base attenuator SSD 225** Ref. no. 5290



**Motorised backdraught shutter RVM 225** Ref. no. 2575



**Hinged flat roof base FDS 225** Ref. no. 1378

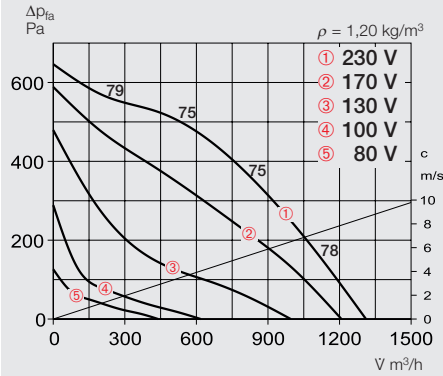


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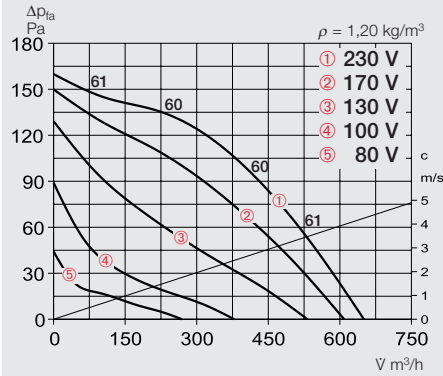
### RDW 225/2

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake	dB(A)	72	46	62	65	67	64	64
L <sub>WA</sub> Exhaust	dB(A)	75	50	65	69	70	67	66



### RDW 225/4

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake	dB(A)	56	39	45	50	51	48	48
L <sub>WA</sub> Exhaust	dB(A)	60	40	51	57	53	49	49

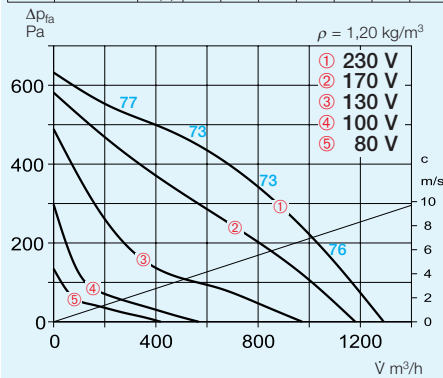


Type	Ref. no.	R.P.M.	Air flow volume (FID)	Sound pressure level	Motor power	Current full load	Current control	Wiring diagram	max. air flow temp. full load	Weight net	Full motor protection device	5-step speed switch
		min <sup>-1</sup>	m <sup>3</sup> /h	dB(A) in 4m	W	A	A	No.	°C	kg	Type Ref. no.	Type Ref. no.
<b>Single phase motor 230 V, 50 Hz, capacitor motor, protection to IP 44</b>												
RDW 225/4	7235	1340	650	43	43	0.2	0.2	923	70	6.5	—	TSW 1,5 1495
RDW 225/2	7234	2635	1330	58	208	0.9	1	923	70	7.5	—	TSW 1,5 1495
<b>Explosion-proof, three phase motor 400 V, 50 Hz, protection to IP 44, temp. class T1-T3</b>												
RDD 225/4 Ex <sup>1)</sup>	7239	1450	1050	43	80	0.35	0.35	1129	40	6.5	MSA 1289	TSD 0,8 1500

1) Performance curve on www.HeliosSelect.de

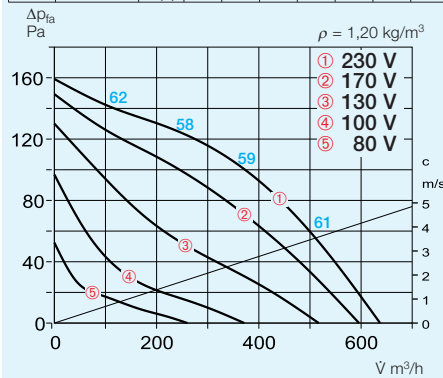
### VDW 225/2

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake	dB(A)	71	47	61	64	66	63	63
L <sub>WA</sub> Exhaust	dB(A)	73	50	64	66	66	67	65



### VDW 225/4

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake	dB(A)	57	33	47	50	52	49	49
L <sub>WA</sub> Exhaust	dB(A)	59	36	50	52	52	53	51



Type	Ref. no.	R.P.M.	Air flow volume (FID)	Sound pressure level	Motor power	Current full load	Current control	Wiring diagram	max. air flow temp. full load	Weight net	Full motor protection device	5-step speed switch
		min <sup>-1</sup>	m <sup>3</sup> /h	dB(A) in 4m	W	A	A	No.	°C	kg	Type Ref. no.	Type Ref. no.
<b>Single phase motor 230 V, 50 Hz, capacitor motor, protection to IP 44</b>												
VDW 225/4	7221	1340	640	42	43	0.2	0.2	923	70	8.0	—	TSW 1,5 1495
VDW 225/2	7196	2635	1295	56	208	0.9	1	923	70	9.0	—	TSW 1,5 1495
<b>Explosion-proof, three phase motor 400 V, 50 Hz, protection to IP 44, temp. class T1-T3</b>												
VDD 225/4 Ex <sup>1)</sup>	7237	1450	1025	42	80	0.35	0.35	1129	40	8.0	MSA 1289	TSD 0,8 1500

1) Performance curve on www.HeliosSelect.de





**Series specification**

**■ Specification RD**

Centrifugal roof fan with horizontal discharge and efficiency-optimised aluminium casing and newly developed high-performance centrifugal impeller.

**■ Specification VD**

Centrifugal roof fan with vertical discharge and efficiency-optimised aluminium casing and newly developed high-performance centrifugal impeller.

**Specification for all series**

**■ Casing**

Casing made from seawater-resistant aluminium with integrated protection. Motor base plate and base plate with inlet cone made from galvanised steel (inlet cone ex-proof version made from aluminium). Base plate with threaded bolt for connection of intake air accessories (hole pattern according to DIN 24155).

**■ Impeller**

High performance backward curved centrifugal impeller made of galvanised sheet steel (ex-proof version made from aluminium). Dynamically balanced according to DIN ISO 1940-1.

**■ Motor**

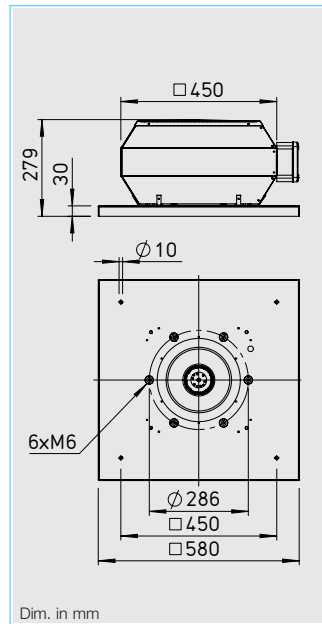
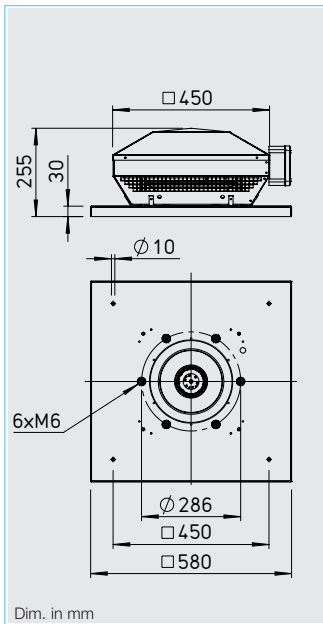
Totally enclosed speed controllable external rotor (IP 44). Ball bearing mounted with moisture protection. Maintenance-free and interference-free.

**■ Motor protection**

Through built-in thermal contacts, which are wired in series with the winding and automatically switch off at high motor temperatures and back on again after cooling. Ex-proof version with thermal motor protection from built-in PTC thermistor.

**■ Electrical connection**

To external terminal box IP 65. Isolator available (see accessories).



**■ Guard**

Standard on the exhaust side according to DIN EN ISO 13857.

**■ Speed control**

All types are steplessly speed controllable in the range from 0 – 100 % by electronic speed controller or 5-step controller. See type table for assignment.

**■ Sound levels**

The sum levels and spectrum figures are specified above the performance curve for:  
– Sound level intake  
– Sound level exhaust

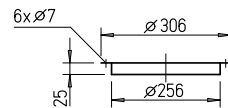
The horizontal sound pressure level at 4 m (free field conditions) is also specified in the type table as well as the table below the performance curve.

**■ Delivery**

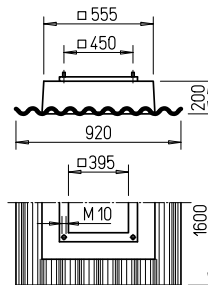
Ready-to-connect, completely pre-assembled in shipping carton.

**Accessories for Type RD / VD**

**Counterflange FR 250** Ref. no. 1203

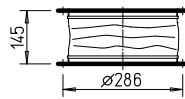


**Corrugated roof base, profile 5 WDS 250** Ref. no. 1561

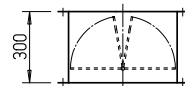


**Flanged flexible connector STS 250** Ref. no. 1220

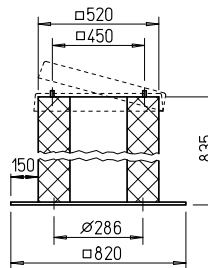
For ex-proof fans  
**STS 250 Ex** Ref. no. 2501



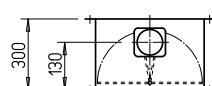
**Automatic backdraught shutter RVS 250** Ref. no. 2592



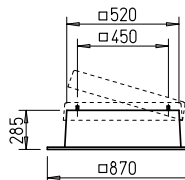
**Hinged base attenuator SSD 250** Ref. no. 5292



**Motorised backdraught shutter RVM 250** Ref. no. 2576



**Hinged flat roof base FDS 250** Ref. no. 1379

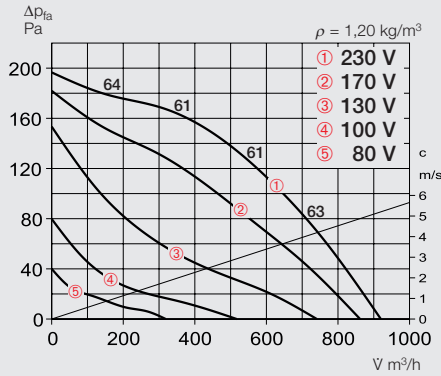


Dim. in mm

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### RDW 250/4

Frequency	Hz	Total	125	250	500	1k	2k	4k	
L <sub>WA</sub> Intake		dB(A)	58	46	48	52	52	50	50
L <sub>WA</sub> Exhaust		dB(A)	61	50	52	55	54	54	52

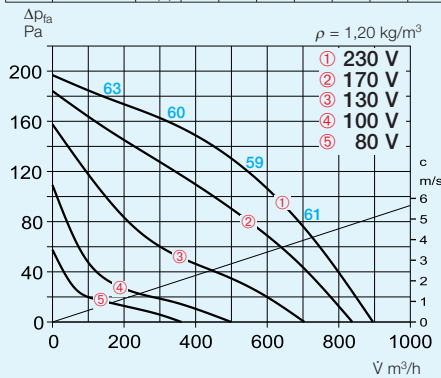


Type	Ref. no.	R.P.M.	Air flow volume (FID)	Sound pressure level	Motor power	Current full load	Current control	Wiring diagram	max. air flow temp. full load	Weight net	Full motor protection device	5-step speed switch
		min <sup>-1</sup>	m <sup>3</sup> /h	dB(A) in 4m	W	A	A	No.	°C	kg	Type	Ref. no.
<b>Single phase motor 230 V, 50 Hz, capacitor motor, protection to IP 44</b>												
RDW 250/4	7264	1340	920	44	63	0.28	0.28	923	70	11.0	—	TSW 1,5 1495
<b>Explosion-proof, three phase motor 400 V, 50 Hz, protection to IP 44, temp. class T1-T3</b>												
RDD 250/4 Ex <sup>1)</sup>	7273	1390	1480	44	121	0.36	0.36	1129	40	11.0	MSA 1289	TSD 0,8 1500

1) Performance curve on [www.HeliosSelect.de](http://www.HeliosSelect.de)

### VDW 250/4

Frequency	Hz	Total	125	250	500	1k	2k	4k	
L <sub>WA</sub> Intake		dB(A)	58	40	49	51	52	51	51
L <sub>WA</sub> Exhaust		dB(A)	60	47	52	54	53	52	52



Type	Ref. no.	R.P.M.	Air flow volume (FID)	Sound pressure level	Motor power	Current full load	Current control	Wiring diagram	max. air flow temp. full load	Weight net	Full motor protection device	5-step speed switch
		min <sup>-1</sup>	m <sup>3</sup> /h	dB(A) in 4m	W	A	A	No.	°C	kg	Type	Ref. no.
<b>Single phase motor 230 V, 50 Hz, capacitor motor, protection to IP 44</b>												
VDW 250/4	7244	1340	900	43	63	0.28	0.28	923	70	11.5	—	TSW 1,5 1495
<b>Explosion-proof, three phase motor 400 V, 50 Hz, protection to IP 44, temp. class T1-T3</b>												
VDD 250/4 Ex <sup>1)</sup>	7265	1390	1440	43	121	0.36	0.36	1129	40	11.5	MSA 1289	TSD 0,8 1500

1) Performance curve on [www.HeliosSelect.de](http://www.HeliosSelect.de)



**Series specification**

**■ Specification RD**

Centrifugal roof fan with horizontal discharge and efficiency-optimised aluminium casing and newly developed high-performance centrifugal impeller.

**■ Specification VD**

Centrifugal roof fan with vertical discharge and efficiency-optimised aluminium casing and newly developed high-performance centrifugal impeller.

**■ Special feature VD T120**

Designed for moving process air up to +120 °C. Encapsulated motor located outside of air flow.

**Specification for all series**

**■ Casing**

Casing made from seawater-resistant aluminium with integrated protection. Motor base plate and base plate with inlet cone made from galvanised steel (inlet cone ex-proof version made from aluminium). Base plate with threaded bolt for connection of intake air accessories (hole pattern according to DIN 24155).

**■ Impeller**

High performance backward curved centrifugal impeller made of polymer (T120 and ex-proof version made from aluminium). Dynamically balanced according to DIN ISO 1940-1.

**■ Motor**

Totally enclosed speed controllable external rotor motor IP 54 (Ex-proof version in IP 44). Flange motor with self-ventilation (T120 version) in IP 54. Ball bearing mounted with moisture protection. Maintenance-free and interference-free.

**■ Motor protection**

Through built-in thermal contacts or built-in PTC thermistor, which must be connected to a full motor protection device. See type table for assignment.

**■ Electrical connection**

Without dismantling the casing, to external isolator (ex-proof version to terminal box) protected to IP 65.

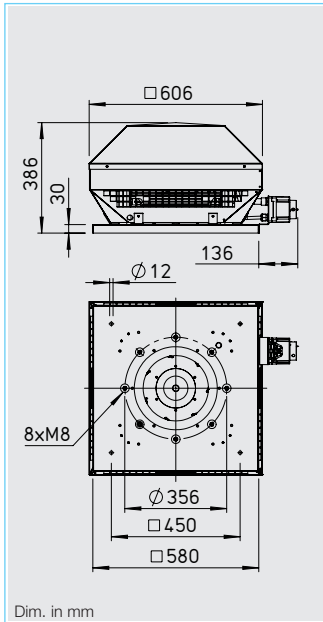
**■ Guard**

Standard on the exhaust side according to DIN EN ISO 13857.

**■ Speed control**

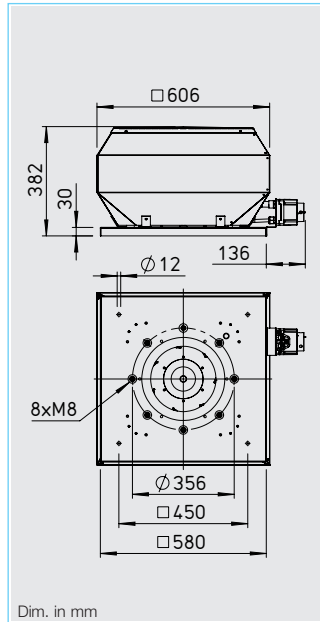
All 1~ types are steplessly speed controllable in the range from 0 – 100 % through electronic speed switch or five-step controller. All 3~ types are steplessly speed controllable in the range from 0 – 100 % with a frequency inverter with integrated all-pole Sine filter (except ex-proof version) or

**Horizontal discharge RD**



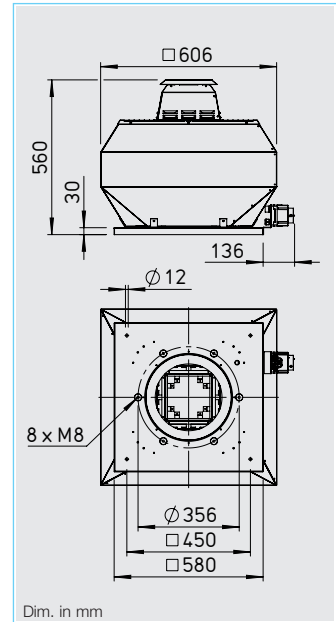
Dim. in mm

**Vertical discharge VD**



Dim. in mm

**VD T120**

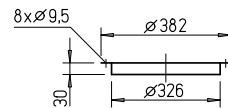


Dim. in mm

**Accessories for Type RD / VD\***

**Counterflange FR 315**

Ref. no. 1204

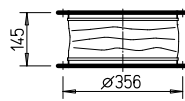


**Flanged flexible connector STS 315**

Ref. no. 1221

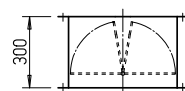
For ex-proof fans

**STS 315 Ex** Ref. no. 2503



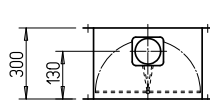
**Automatic backdraught shutter RVS 315**

Ref. no. 2594



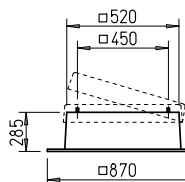
**Motorised backdraught shutter RVM 315**

Ref. no. 2578



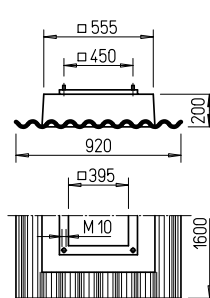
**Hinged flat roof base FDS 315**

Ref. no. 1379



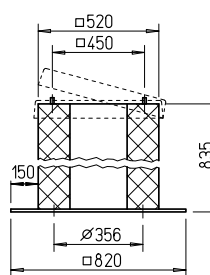
**Corrugated roof base, profile 5 WDS 315**

Ref. no. 1561



**Hinged base attenuator SSD 315**

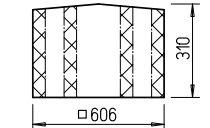
Ref. no. 5292



**Roof fan attenuator HSDV 315**

Ref. no. 7476

only for type VD



Dim. in mm

five-step controllers. See table for assignment.

**■ Sound levels**

The sum levels and spectrum figures are specified above the performance curve for:  
– Sound level intake  
– Sound level exhaust

The horizontal sound pressure level at 4 m (free field conditions) is also specified in the type table as well as the table below the performance curve.

**■ Delivery**

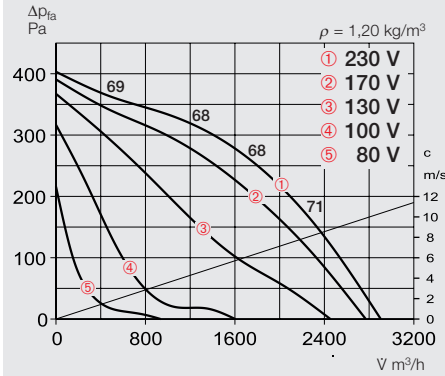
Ready-to-connect, completely pre-assembled in shipping carton.

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\* Accessory VD T120 see installation accessories p. 485 Other accessories upon request.

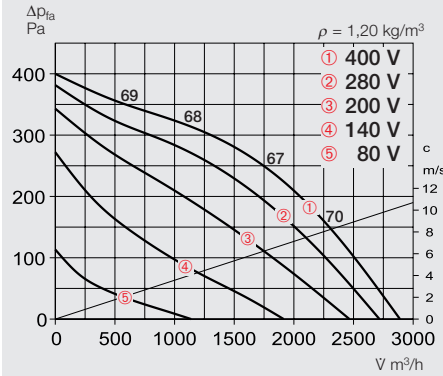
### RDW 315/4

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 66	54	58	60	58	59	58
L <sub>WA</sub> Exhaust		dB(A) 68	55	62	63	62	58	50



### RDD 315/4

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 66	53	57	59	57	58	57
L <sub>WA</sub> Exhaust		dB(A) 68	55	61	62	61	57	49

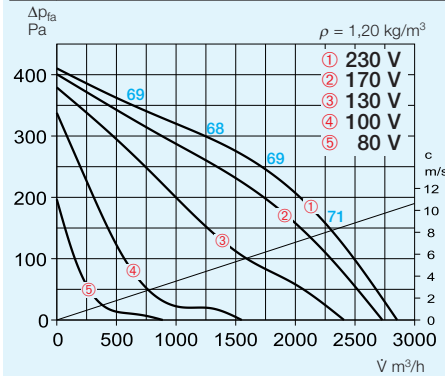


Type	Ref. no.	R.P.M.	Air flow volume (FID)	Sound pressure level	Motor power	Current full load	Current control	Wiring diagram	max. air flow temp. full load	Weight net	Full motor protection device	5-step speed switch
		min <sup>-1</sup>	m <sup>3</sup> /h	dB(A) in 4m	W	A	A	No.	°C	kg	Type Ref. no.	Type Ref. no.
<b>Single phase motor 230 V, 50 Hz, capacitor motor, protection to IP 54</b>												
RDW 315/4	7287	1385	2900	51	300	1.5	2.0	1128	60	20.5	MW 1579	MWS 3 <sup>2)</sup> 1948
<b>Three phase motor 400 V, 50 Hz, squirrel-cage rotor, protection to IP 54</b>												
RDD 315/4	7288	1385	2890	51	290	0.67	0.67	1129	65	19.5	MD 5849	RDS 1 <sup>2)</sup> 1314
<b>Explosion-proof, three phase motor 400 V, 50 Hz, protection to IP 44, temp. class T1-T3</b>												
RDD 315/4 Ex <sup>1)</sup>	7303	1380	2980	51	320	0.74	0.74	1129	40	19.5	MSA 1289	TSD 1,5 1501

1) Performance curve on www.HeliosSelect.de 2) includes full motor protection device

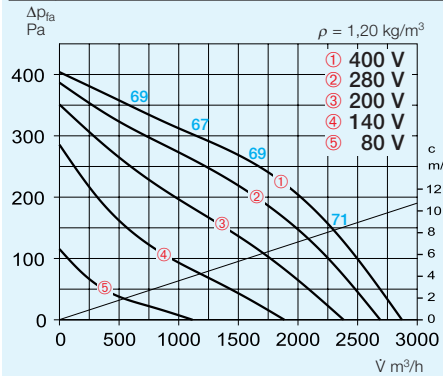
### VDW 315/4

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 66	53	57	59	57	58	57
L <sub>WA</sub> Exhaust		dB(A) 69	58	61	62	63	58	53



### VDD 315/4

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 65	53	57	59	57	58	57
L <sub>WA</sub> Exhaust		dB(A) 68	58	61	62	63	58	52



Type	Ref. no.	R.P.M.	Air flow volume (FID)	Sound pressure level	Motor power	Current full load	Current control	Wiring diagram	max. air flow temp. full load	Weight net	Full motor protection device	5-step speed switch
		min <sup>-1</sup>	m <sup>3</sup> /h	dB(A) in 4m	W	A	A	No.	°C	kg	Type Ref. no.	Type Ref. no.
<b>Single phase motor 230 V, 50 Hz, capacitor motor, protection to IP 54</b>												
VDW 315/4	7279	1385	2860	52	300	1.5	2.0	1128	60	21.0	MW 1579	MWS 3 <sup>2)</sup> 1948
<b>Three phase motor 400 V, 50 Hz, squirrel-cage rotor, protection to IP 54</b>												
VDD 315/4	7282	1385	2880	51	290	0.67	0.67	1129	65	20.0	MD 5849	RDS 1 <sup>2)</sup> 1314
<b>Explosion-proof, three phase motor 400 V, 50 Hz, protection to IP 44, temp. class T1-T3</b>												
VDD 315/4 Ex <sup>1)</sup>	7293	1380	2930	52	320	0.74	0.74	1129	40	20.0	MSA 1289	TSD 1,5 1501
<b>Three phase motor 400 V, 50 Hz, squirrel-cage rotor, protection to IP 54</b>												
VDD 315/4 T120 <sup>1)</sup>	7315	1445	2855	52	350	0.9	1.1	1129	120	25.0	MD 5849	RDS 2 <sup>2)</sup> 1315

1) Performance curve on www.HeliosSelect.de 2) includes full motor protection device

**Series specification**

**■ Specification RD**

Centrifugal roof fan with horizontal discharge and efficiency-optimised aluminium casing and newly developed high-performance centrifugal impeller.

**■ Specification VD**

Centrifugal roof fan with vertical discharge and efficiency-optimised aluminium casing and newly developed high-performance centrifugal impeller.

**■ Special feature VD T120**

Designed for moving process air up to +120 °C. Encapsulated motor located outside of air flow.

**Specification for all series**

**■ Casing**

Casing made from seawater-resistant aluminium with integrated protection. Motor base plate and base plate with inlet cone made from galvanised steel (inlet cone ex-proof version made from aluminium). Base plate with threaded bolt for connection of intake air accessories (hole pattern according to DIN 24155).

**■ Impeller**

High performance backward curved centrifugal impeller made of polymer (T120 and ex-proof version made from aluminium). Dynamically balanced according to DIN ISO 1940-1.

**■ Motor**

Totally enclosed speed controllable external rotor motor IP 54 (Ex-proof version in IP 44). Flange motor with self-ventilation (T120 version) in IP 54. Ball bearing mounted with moisture protection. Maintenance-free and interference-free.

**■ Motor protection**

Through built-in thermal contacts or built-in PTC thermistor, which must be connected to a full motor protection device. See type table for assignment.

**■ Electrical connection**

Without dismantling the casing, to external isolator (ex-proof version to terminal box) protected to IP 65.

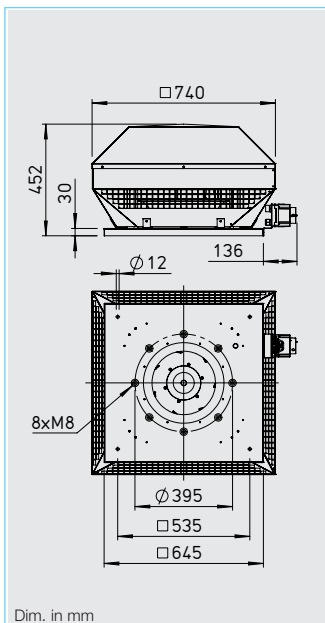
**■ Guard**

Standard on the exhaust side according to DIN EN ISO 13857.

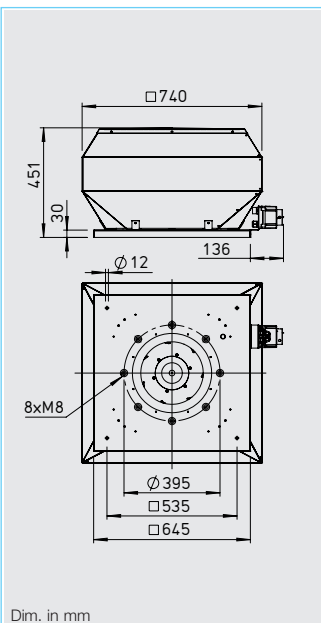
**■ Speed control**

All 1~ types are steplessly speed controllable in the range from 0 – 100 % through electronic speed switch or five-step controller. All 3~ types are steplessly speed controllable in the range from 0 – 100 % with a frequency inverter with integrated all-pole Sine filter (except ex-proof version) or

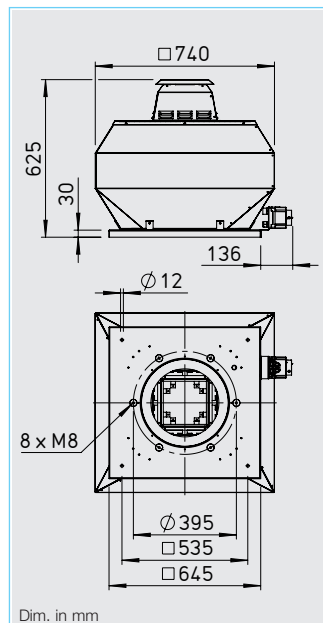
Horizontal discharge RD



Vertical discharge VD

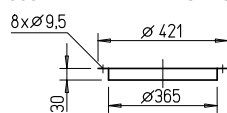


VD T120



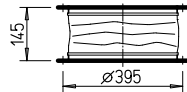
**Accessories for Type RD / VD\***

**Counterflange FR 355** Ref. no. 1205

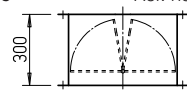


**Flanged flexible connector STS 355** Ref. no. 1222

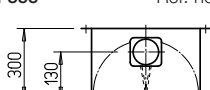
For ex-proof fans **STS 355 Ex** Ref. no. 2504



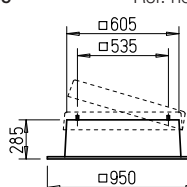
**Automatic backdraught shutter RVS 355** Ref. no. 2595



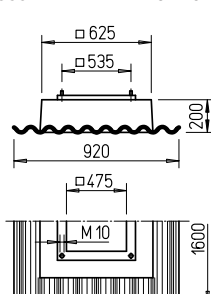
**Motorised backdraught shutter RVM 355** Ref. no. 2579



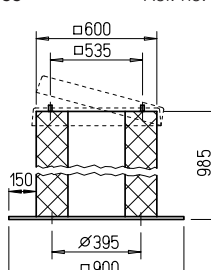
**Hinged flat roof base FDS 355** Ref. no. 1380



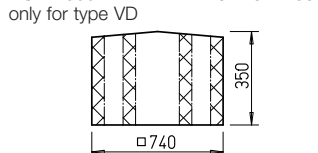
**Corrugated roof base, profile 5 WDS 355** Ref. no. 1562



**Hinged base attenuator SSD 355** Ref. no. 5024



**Roof fan attenuator HSDV 355** Ref. no. 7480



five-step controllers. See table for assignment.

**■ Sound levels**

The sum levels and spectrum figures are specified above the performance curve for:  
– Sound level intake  
– Sound level exhaust

The horizontal sound pressure level at 4 m (free field conditions) is also specified in the type table as well as the table below the performance curve.

**■ Delivery**

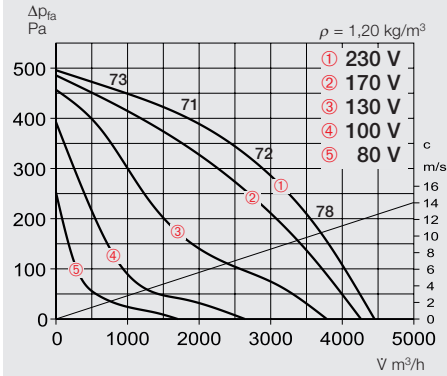
Ready-to-connect, completely pre-assembled in shipping carton.

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\* Accessory VD T120 see installation accessories p. 485 Other accessories upon request.

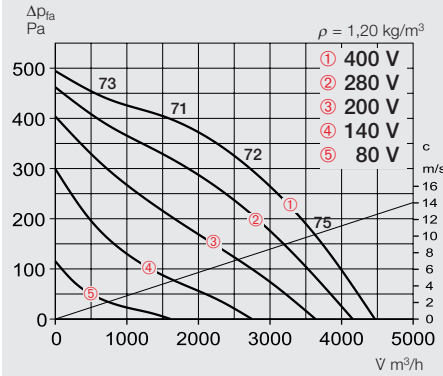
### RDW 355/4

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 66	56	61	60	58	56	53
L <sub>WA</sub> Exhaust		dB(A) 72	63	66	66	66	62	53



### RDD 355/4

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 66	56	61	60	58	56	53
L <sub>WA</sub> Exhaust		dB(A) 72	63	66	66	66	62	53

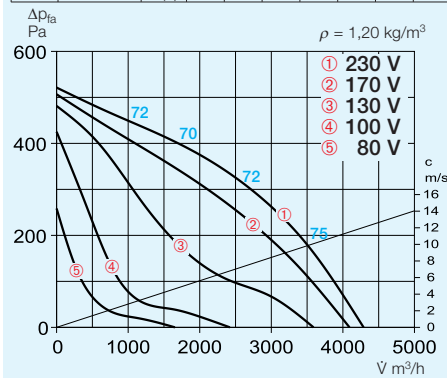


Type	Ref. no.	R.P.M.	Air flow volume (FID)	Sound pressure level	Motor power	Current full load	Current control	Wiring diagram	max. air flow temp. full load	Weight net	Full motor protection device	5-step speed switch
		min <sup>-1</sup>	m <sup>3</sup> /h	dB(A) in 4m	W	A	A	No.	°C	kg	Type Ref. no.	Type Ref. no.
<b>Single phase motor 230 V, 50 Hz, capacitor motor, protection to IP 54</b>												
RDW 355/4	7323	1400	4480	55	520	2.55	3.4	1128	70	55	MW 1579	MWS 5 <sup>2)</sup> 1949
<b>Three phase motor 400 V, 50 Hz, squirrel-cage rotor, protection to IP 54</b>												
RDD 355/4	7326	1350	4470	55	460	0.9	3.5	1129	60	60	MD 5849	RDS 7 <sup>2)</sup> 1578
<b>Explosion-proof, three phase motor 400 V, 50 Hz, protection to IP 44, temp. class T1-T3</b>												
RDD 355/4 Ex <sup>1)</sup>	7329	1360	3960	55	650	1.5	1.5	1129	40	40	MSA 1289	TSD 3 1502

1) Performance curve on [www.HeliosSelect.de](http://www.HeliosSelect.de) 2) includes full motor protection device

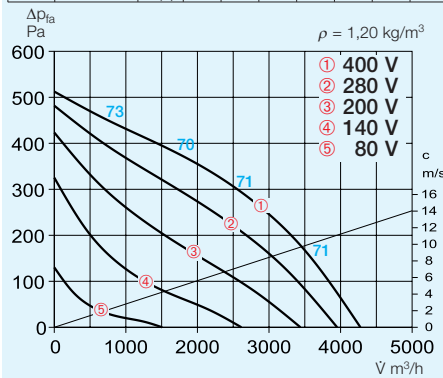
### VDW 355/4

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 66	56	61	60	58	56	53
L <sub>WA</sub> Exhaust		dB(A) 71	61	65	65	65	62	53



### VDD 355/4

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 66	56	61	60	58	56	53
L <sub>WA</sub> Exhaust		dB(A) 71	61	64	64	64	60	52



Type	Ref. no.	R.P.M.	Air flow volume (FID)	Sound pressure level	Motor power	Current full load	Current control	Wiring diagram	max. air flow temp. full load	Weight net	Full motor protection device	5-step speed switch
		min <sup>-1</sup>	m <sup>3</sup> /h	dB(A) in 4m	W	A	A	No.	°C	kg	Type Ref. no.	Type Ref. no.
<b>Single phase motor 230 V, 50 Hz, capacitor motor, protection to IP 54</b>												
VDW 355/4	7317	1400	4300	54	520	2.55	3.4	1128	70	55	MW 1579	MWS 5 <sup>2)</sup> 1949
<b>Three phase motor 400 V, 50 Hz, squirrel-cage rotor, protection to IP 54</b>												
VDD 355/4	7318	1350	4290	54	460	0.9	3.5	1129	60	60	MD 5849	RDS 7 <sup>2)</sup> 1578
<b>Explosion-proof, three phase motor 400 V, 50 Hz, protection to IP 44, temp. class T1-T3</b>												
VDD 355/4 Ex <sup>1)</sup>	7327	1360	3880	54	650	1.5	1.5	1129	40	40	MSA 1289	TSD 3 1502
<b>Three phase motor 400 V, 50 Hz, squirrel-cage rotor, protection to IP 54</b>												
VDD 355/4 T120 <sup>1)</sup>	7336	1420	4315	54	540	1.7	1.8	1129	120	100	MD 5849	RDS 4 <sup>2)</sup> 1316

1) Performance curve on [www.HeliosSelect.de](http://www.HeliosSelect.de) 2) includes full motor protection device

**Series specification**

**■ Specification RD**

Centrifugal roof fan with horizontal discharge and efficiency-optimised aluminium casing and newly developed high-performance centrifugal impeller.

**■ Specification VD**

Centrifugal roof fan with vertical discharge and efficiency-optimised aluminium casing and newly developed high-performance centrifugal impeller.

**■ Special feature VD T120**

Designed for moving process air up to +120 °C. Encapsulated motor located outside of air flow.

**Specification for all series**

**■ Casing**

Casing made from seawater-resistant aluminium with integrated protection. Motor base plate and base plate with inlet cone made from galvanised steel (inlet cone ex-proof version made from aluminium). Base plate with threaded bolt for connection of intake air accessories (hole pattern according to DIN 24155).

**■ Impeller**

High performance backward curved centrifugal impeller made of polymer (T120 and ex-proof version made from aluminium). Dynamically balanced according to DIN ISO 1940-1.

**■ Motor**

Totally enclosed speed controllable external rotor motor IP 54 (Ex-proof version in IP 44). Flange motor with self-ventilation (T120 version) in IP 54. Ball bearing mounted with moisture protection. Maintenance-free and interference-free.

**■ Motor protection**

Through built-in thermal contacts or built-in PTC thermistor, which must be connected to a full motor protection device. See type table for assignment.

**■ Electrical connection**

Without dismantling the casing, to external isolator (ex-proof version to terminal box) protected to IP 65.

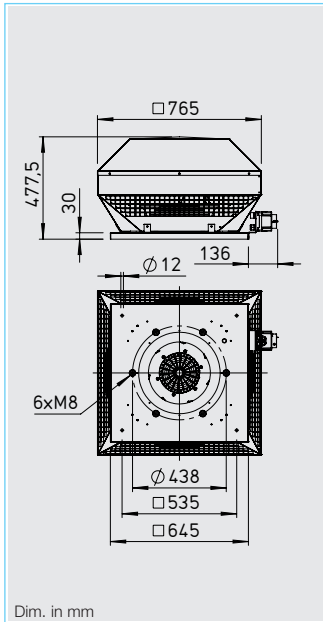
**■ Guard**

Standard on the exhaust side according to DIN EN ISO 13857.

**■ Speed control**

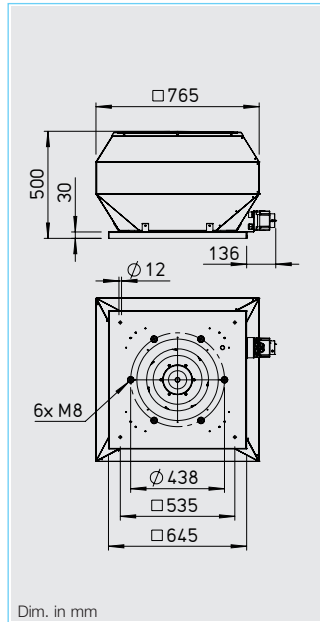
All 1~ types are steplessly speed controllable in the range from 0 – 100 % through electronic speed switch or five-step controller. All 3~ types are steplessly speed controllable in the range from 0 – 100 % with a frequency inverter with integrated all-pole Sine filter (except ex-proof version) or

Horizontal discharge RD



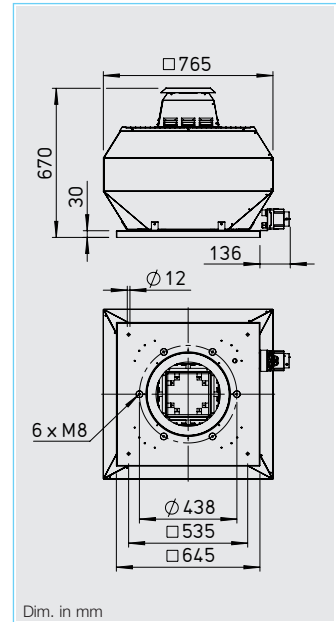
Dim. in mm

Vertical discharge VD



Dim. in mm

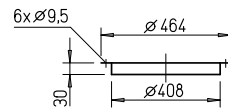
VD T120



Dim. in mm

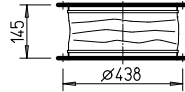
**Accessories for Type RD / VD\***

**Counterflange FR 400** Ref. no. 1206

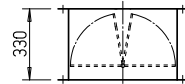


**Flanged flexible connector STS 400** Ref. no. 1223

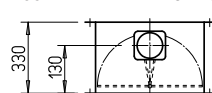
For ex-proof fans **STS 400 Ex** Ref. no. 2505



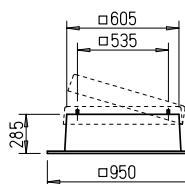
**Automatic backdraught shutter RVS 400** Ref. no. 2596



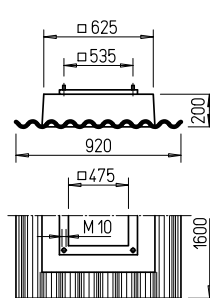
**Motorised backdraught shutter RVM 400** Ref. no. 2580



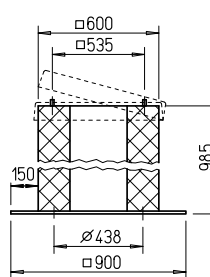
**Hinged flat roof base FDS 400** Ref. no. 1380



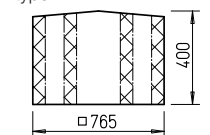
**Corrugated roof base, profile 5 WDS 400** Ref. no. 1562



**Hinged base attenuator SSD 400** Ref. no. 5291



**Roof fan attenuator HSDV 400** Ref. no. 7481  
only for type VD



Dim. in mm

five-step controllers. See table for assignment.

**■ Sound levels**

The sum levels and spectrum figures are specified above the performance curve for:  
– Sound level intake  
– Sound level exhaust

The horizontal sound pressure level at 4 m (free field conditions) is also specified in the type table as well as the table below the performance curve.

**■ Delivery**

Ready-to-connect, completely pre-assembled in shipping carton.

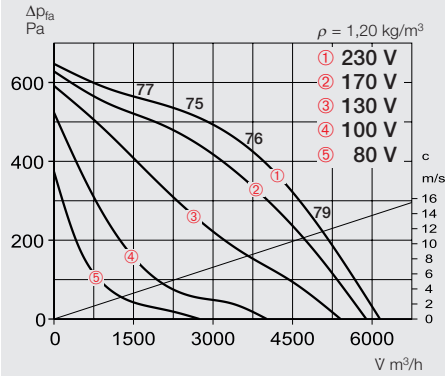
Information	Page
Information for planning	10 on
Technical description	438
Selection chart	441
Accessories, details	485
Speed controller and switch	525 on

\* Accessory VD T120 see installation accessories p. 485 Other accessories upon request.



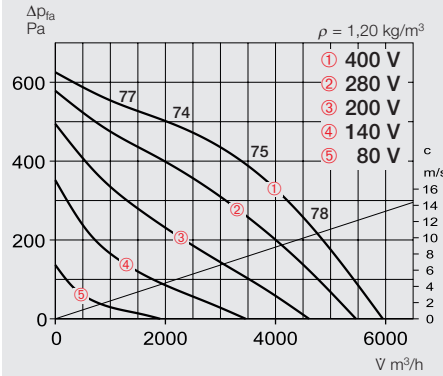
### RDW 400/4

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 71	61	65	66	63	62	56
L <sub>WA</sub> Exhaust		dB(A) 76	67	70	70	70	66	59



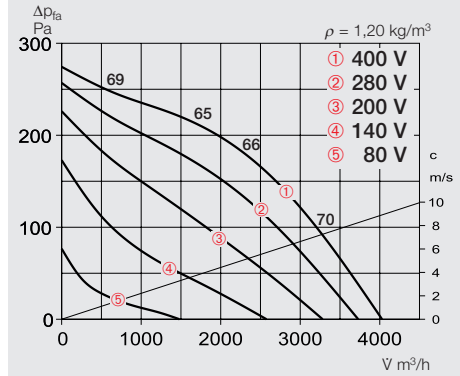
### RDD 400/4

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 70	60	64	65	62	61	55
L <sub>WA</sub> Exhaust		dB(A) 75	66	69	69	69	65	58



### RDD 400/6

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 61	51	55	56	53	52	46
L <sub>WA</sub> Exhaust		dB(A) 66	57	60	60	60	56	49

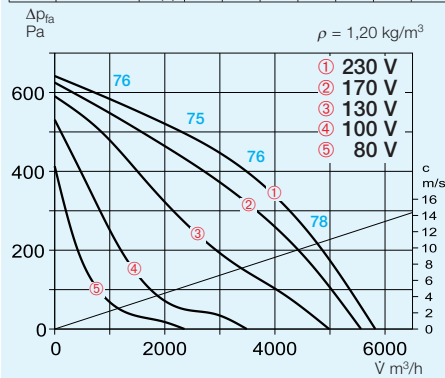


Type	Ref. no.	R.P.M.	Air flow volume (FID)	Sound pressure level	Motor power	Current full load	Current control	Wiring diagram	max. air flow temp. full load	Weight net	Full motor protection device	5-step speed switch
		min <sup>-1</sup>	m <sup>3</sup> /h	dB(A) in 4m	W	A	A	No.	°C	kg	Type	Ref. no.
<b>Single phase motor 230 V, 50 Hz, capacitor motor, protection to IP 54</b>												
RDW 400/4	7350	1405	6150	59	875	4.3	6.0	1128	60	40	MW	1579 MSW 7,5 <sup>2)</sup> 1950
<b>Three phase motor 400 V, 50 Hz, squirrel-cage rotor, protection to IP 54</b>												
RDD 400/6	7352	905	4030	49	260	0.6	0.6	1129	60	60	MD	5849 RDS 1 <sup>2)</sup> 1314
RDD 400/4	7351	1375	5970	58	765	1.55	1.6	1129	60	55	MD	5849 RDS 2 <sup>2)</sup> 1315
<b>Explosion-proof, three phase motor 400 V, 50 Hz, protection to IP 44, temp. class T1-T3</b>												
RDD 400/6 Ex <sup>1)</sup>	7363	935	4325	49	300	0.77	0.83	1129	40	40	MSA	1289 TSD 1,5 1501
RDD 400/4 Ex <sup>1)</sup>	7358	1375	5700	58	1000	2.1	2.2	1129	40	40	MSA	1289 TSD 1,5 1501

1) Performance curve on www.HeliosSelect.de 2) includes full motor protection device

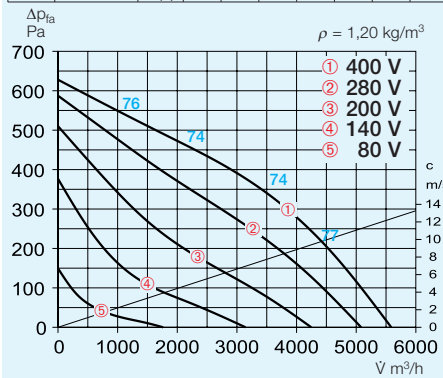
### VDW 400/4

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 71	61	65	66	63	62	56
L <sub>WA</sub> Exhaust		dB(A) 76	63	71	70	70	66	60



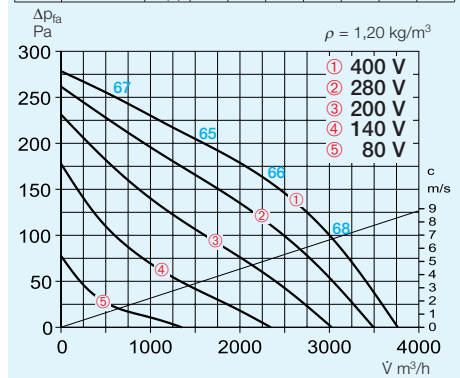
### VDD 400/4

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 69	59	63	64	61	60	54
L <sub>WA</sub> Exhaust		dB(A) 74	61	69	68	68	64	58



### VDD 400/6

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 61	51	55	56	53	52	46
L <sub>WA</sub> Exhaust		dB(A) 66	53	61	60	60	56	50



Type	Ref. no.	R.P.M.	Air flow volume (FID)	Sound pressure level	Motor power	Current full load	Current control	Wiring diagram	max. air flow temp. full load	Weight net	Full motor protection device	5-step speed switch
		min <sup>-1</sup>	m <sup>3</sup> /h	dB(A) in 4m	W	A	A	No.	°C	kg	Type	Ref. no.
<b>Single phase motor 230 V, 50 Hz, capacitor motor, protection to IP 54</b>												
VDW 400/4	7338	1405	5830	59	875	4.3	6.0	1128	60	40	MW	1579 MWS 7,5 <sup>2)</sup> 1950
<b>Three phase motor 400 V, 50 Hz, squirrel-cage rotor, protection to IP 54</b>												
VDD 400/6	7343	905	3780	49	260	0.6	0.6	1129	60	60	MD	5849 RDS 1 <sup>2)</sup> 1314
VDD 400/4	7342	1375	5590	57	765	1.55	1.6	1129	60	55	MD	5849 RDS 2 <sup>2)</sup> 1315
<b>Explosion-proof, three phase motor 400 V, 50 Hz, protection to IP 44, temp. class T1-T3</b>												
VDD 400/6 Ex <sup>1)</sup>	7359	935	3865	49	300	0.77	0.83	1129	40	40	MSA	1289 TSD 1,5 1501
VDD 400/4 Ex <sup>1)</sup>	7353	1375	5350	57	1000	2.1	2.2	1129	40	40	MSA	1289 TSD 3 1502
<b>Three phase motor 400 V, 50 Hz, squirrel-cage rotor, protection to IP 54</b>												
VDD 400/6 T120 <sup>1)</sup>	7366	930	4170	49	360	1.0	1.0	1129	120	100	MD	5849 RDS 2 <sup>2)</sup> 1315
VDD 400/4 T120 <sup>1)</sup>	7370	1350	6050	57	880	1.8	1.8	1129	120	100	MD	5849 RDS 4 <sup>2)</sup> 1316

1) Performance curve on www.HeliosSelect.de 2) includes full motor protection device

**Series specification**

**■ Specification RD**

Centrifugal roof fan with horizontal discharge and efficiency-optimised aluminium casing and newly developed high-performance centrifugal impeller.

**■ Specification VD**

Centrifugal roof fan with vertical discharge and efficiency-optimised aluminium casing and newly developed high-performance centrifugal impeller.

**■ Special feature VD T120**

Designed for moving process air up to +120 °C. Encapsulated motor located outside of air flow.

**Specification for all series**

**■ Casing**

Casing made from seawater-resistant aluminium with integrated protection. Motor base plate and base plate with inlet cone made from galvanised steel (inlet cone ex-proof version made from aluminium). Base plate with threaded bolt for connection of intake air accessories (hole pattern according to DIN 24155).

**■ Impeller**

High performance backward curved centrifugal impeller made of polymer (T120 and ex-proof version made from aluminium). Dynamically balanced according to DIN ISO 1940-1.

**■ Motor**

Totally enclosed speed controllable external rotor motor IP 54 (Ex-proof version in IP 44). Flange motor with self-ventilation (T120 version) in IP 54. Ball bearing mounted with moisture protection. Maintenance-free and interference-free.

**■ Motor protection**

Through built-in thermal contacts or built-in PTC thermistor, which must be connected to a full motor protection device. See type table for assignment.

**■ Electrical connection**

Without dismantling the casing, to external isolator (ex-proof version to terminal box) protected to IP 65.

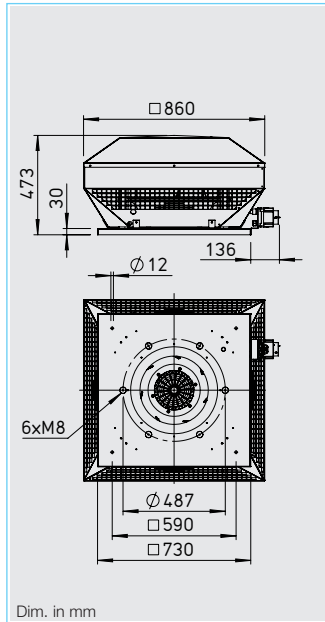
**■ Guard**

Standard on the exhaust side according to DIN EN ISO 13857.

**■ Speed control**

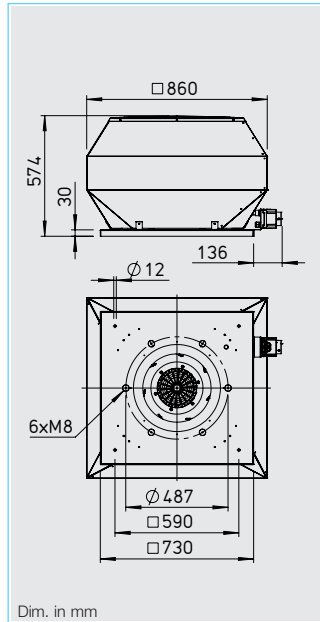
All 1~ types are steplessly speed controllable in the range from 0 – 100 % through electronic speed switch or five-step controller. All 3~ types are steplessly speed controllable in the range from 0 – 100 % with a frequency inverter with integrated all-pole Sine filter (except ex-proof version) or

Horizontal discharge RD



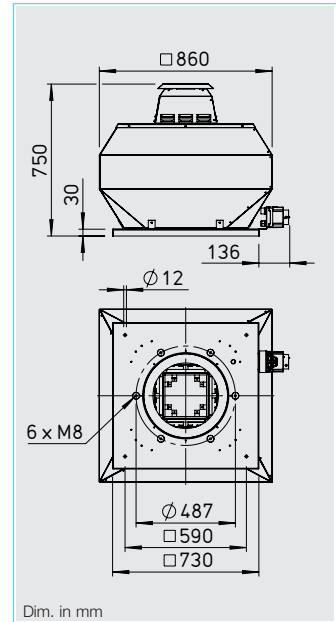
Dim. in mm

Vertical discharge VD



Dim. in mm

VD T120

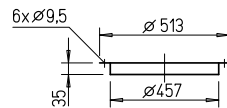


Dim. in mm

**Accessories for Type RD / VD\***

**Counterflange FR 450**

Ref. no. 1207



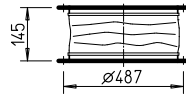
**Flanged flexible connector STS 450**

Ref. no. 1224

For ex-proof fans

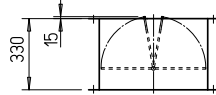
**STS 450 Ex**

Ref. no. 2506



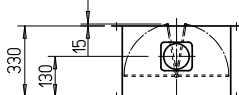
**Automatic backdraught shutter RVS 450**

Ref. no. 2597



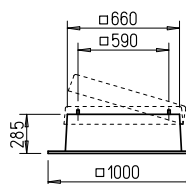
**Motorised backdraught shutter RVM 450**

Ref. no. 2581



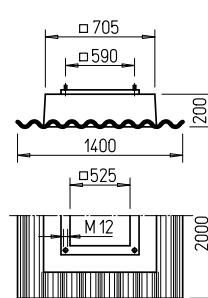
**Hinged flat roof base FDS 450**

Ref. no. 1381



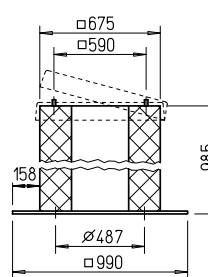
**Corrugated roof base, profile 5 WDS 450**

Ref. no. 1563



**Hinged base attenuator SSD 450**

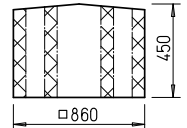
Ref. no. 5288



**Roof fan attenuator HSDV 450**

Ref. no. 7482

only for type VD



Dim. in mm

five-step controllers. See table for assignment.

**■ Sound levels**

The sum levels and spectrum figures are specified above the performance curve for:  
– Sound level intake  
– Sound level exhaust

The horizontal sound pressure level at 4 m (free field conditions) is also specified in the type table as well as the table below the performance curve.

**■ Delivery**

Ready-to-connect, completely pre-assembled in shipping carton. Simple positioning with stand crane hooks.

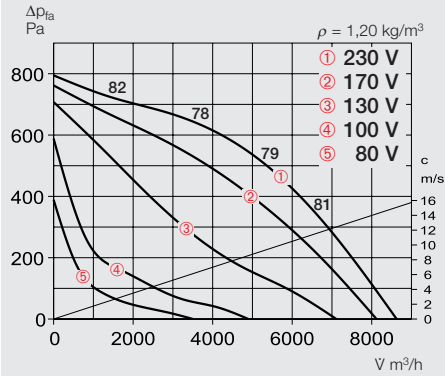
Information	Page
Information for planning	10 on
Technical description	438
Selection chart	441
Accessories, details	485
Speed controller and switch	525 on

\* Accessory VD T120 see installation accessories p. 485 Other accessories upon request.



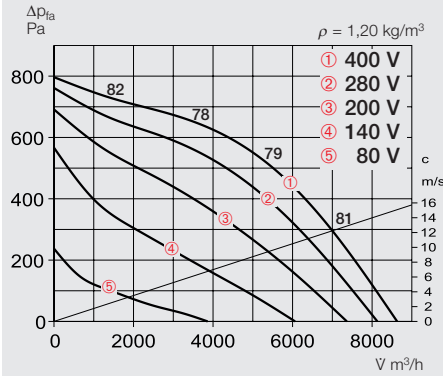
### RDW 450/4

Frequency	Hz	Total	125	250	500	1k	2k	4k	
L <sub>WA</sub> Intake		dB(A)	74	63	68	68	67	66	61
L <sub>WA</sub> Exhaust		dB(A)	79	69	70	70	74	69	62



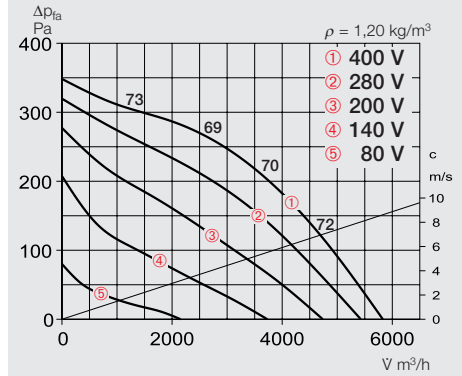
### RDD 450/4

Frequency	Hz	Total	125	250	500	1k	2k	4k	
L <sub>WA</sub> Intake		dB(A)	74	63	68	68	67	66	61
L <sub>WA</sub> Exhaust		dB(A)	79	69	70	70	74	69	62



### RDD 450/6

Frequency	Hz	Total	125	250	500	1k	2k	4k	
L <sub>WA</sub> Intake		dB(A)	65	54	59	59	58	57	52
L <sub>WA</sub> Exhaust		dB(A)	70	60	61	61	65	60	53

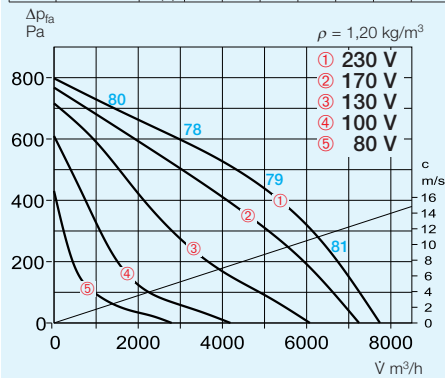


Type	Ref. no.	R.P.M.	Air flow volume (FID)	Sound pressure level	Motor power	Current full load	Current control	Wiring diagram	max. air flow temp. full load	Weight net	Full motor protection device	5-step speed switch
		min <sup>-1</sup>	m <sup>3</sup> /h	dB(A) in 4m	W	A	A	No.	°C	kg	Type Ref. no.	Type Ref. no.
<b>Single phase motor 230 V, 50 Hz, capacitor motor, protection to IP 54</b>												
RDW 450/4	7377	1385	8650	62	1470	6.6	8.7	1128	60	40	MW 1579	MWS 10 <sup>2)</sup> 1946
<b>Three phase motor 400 V, 50 Hz, squirrel-cage rotor, protection to IP 54</b>												
RDD 450/6	7385	905	5850	53	425	1.1	1.1	1129	60	60	MD 5849	RDS 2 <sup>2)</sup> 1315
RDD 450/4	7384	1400	8650	62	1350	2.6	2.9	1129	70	70	MD 5849	RDS 7 <sup>2)</sup> 1316
<b>Explosion-proof, three phase motor 400 V, 50 Hz, protection to IP 44, temp. class T1-T3</b>												
RDD 450/6 Ex <sup>1)</sup>	7391	860	5850	53	520	0.95	0.95	1129	40	40	MSA 1289	TSD 1,5 1501
RDD 450/4 Ex <sup>1)</sup>	7390	1400	8780	62	1550	3.8	3.8	1129	40	40	MSA 1289	TSD 5,5 1503

1) Performance curve on www.HeliosSelect.de 2) includes full motor protection device

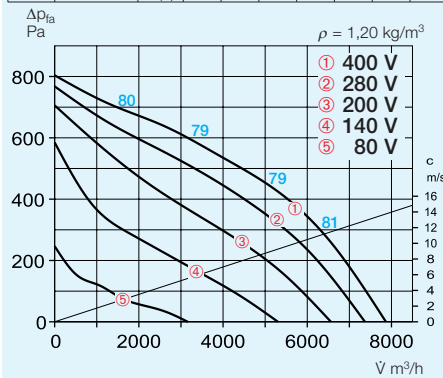
### VDW 450/4

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A)	73	62	67	66	65	60
L <sub>WA</sub> Exhaust		dB(A)	79	69	70	74	69	62



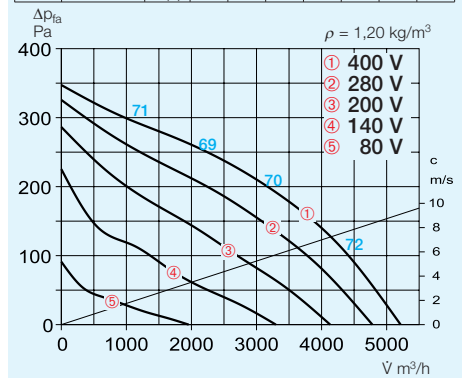
### VDD 450/4

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A)	73	62	67	66	65	60
L <sub>WA</sub> Exhaust		dB(A)	79	70	71	71	75	63



### VDD 450/6

Frequency	Hz	Total	125	250	500	1k	2k	4k	
L <sub>WA</sub> Intake		dB(A)	64	53	58	58	57	56	51
L <sub>WA</sub> Exhaust		dB(A)	70	60	61	61	65	60	53



Type	Ref. no.	R.P.M.	Air flow volume (FID)	Sound pressure level	Motor power	Current full load	Current control	Wiring diagram	max. air flow temp. full load	Weight net	Full motor protection device	5-step speed switch
		min <sup>-1</sup>	m <sup>3</sup> /h	dB(A) in 4m	W	A	A	No.	°C	kg	Type Ref. no.	Type Ref. no.
<b>Single phase motor 230 V, 50 Hz, capacitor motor, protection to IP 54</b>												
VDW 450/4	7372	1385	7750	62	1470	6.6	8.7	1128	60	40	MW 1579	MWS 10 <sup>2)</sup> 1946
<b>Three phase motor 400 V, 50 Hz, squirrel-cage rotor, protection to IP 54</b>												
VDD 450/6	7380	905	5200	53	425	1.1	1.1	1129	60	60	MD 5849	RDS 2 <sup>2)</sup> 1315
VDD 450/4	7379	1400	7900	62	1350	2.6	2.9	1129	70	70	MD 5849	RDS 7 <sup>2)</sup> 1316
<b>Explosion-proof, three phase motor 400 V, 50 Hz, protection to IP 44, temp. class T1-T3</b>												
VDD 450/6 Ex <sup>1)</sup>	7387	860	5230	53	520	0.95	0.95	1129	40	40	MSA 1289	TSD 1,5 1501
VDD 450/4 Ex <sup>1)</sup>	7386	1400	7700	62	1550	3.8	3.8	1129	40	40	MSA 1289	TSD 5,5 1503
<b>Three phase motor 400 V, 50 Hz, squirrel-cage rotor, protection to IP 54</b>												
VDD 450/6 T120 <sup>1)</sup>	7399	900	5570	53	490	1.4	1.4	1129	120	100	MD 5849	RDS 2 <sup>2)</sup> 1315
VDD 450/4 T120 <sup>1)</sup>	7398	1390	8600	62	1330	3.8	3.8	1129	120	100	MD 5849	RDS 7 <sup>2)</sup> 1578

1) Performance curve on www.HeliosSelect.de 2) includes full motor protection device

**Series specification**

**■ Specification RD**

Centrifugal roof fan with horizontal discharge and efficiency-optimised aluminium casing and newly developed high-performance centrifugal impeller.

**■ Specification VD**

Centrifugal roof fan with vertical discharge and efficiency-optimised aluminium casing and newly developed high-performance centrifugal impeller.

**■ Special feature VD T120**

Designed for moving process air up to +120 °C. Encapsulated motor located outside of air flow.

**Specification for all series**

**■ Casing**

Casing made from seawater-resistant aluminium with integrated protection. Motor base plate and base plate with inlet cone made from galvanised steel (inlet cone ex-proof version made from aluminium). Base plate with threaded bolt for connection of intake air accessories (hole pattern according to DIN 24155).

**■ Impeller**

High performance backward curved centrifugal impeller made of polymer (T120 and ex-proof version made from aluminium). Dynamically balanced according to DIN ISO 1940-1.

**■ Motor**

Totally enclosed speed controllable external rotor motor IP 54 (Ex-proof version in IP 44). Flange motor with self-ventilation (T120 version) in IP 54/55. Ball bearing mounted with moisture protection. Maintenance-free and interference-free.

**■ Motor protection**

Through built-in thermal contacts or built-in PTC thermistor, which must be connected to a full motor protection device. See type table for assignment.

**■ Electrical connection**

Without dismantling the casing, to external isolator (ex-proof version to terminal box) protected to IP 65.

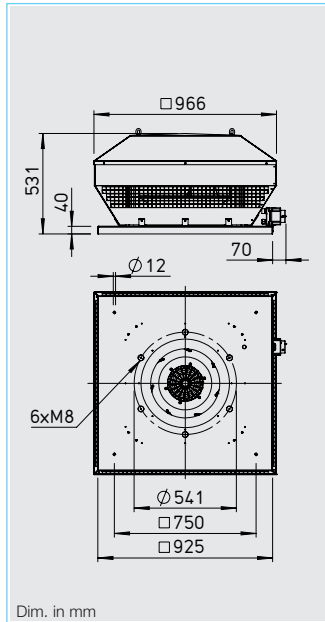
**■ Guard**

Standard on the exhaust side according to DIN EN ISO 13857.

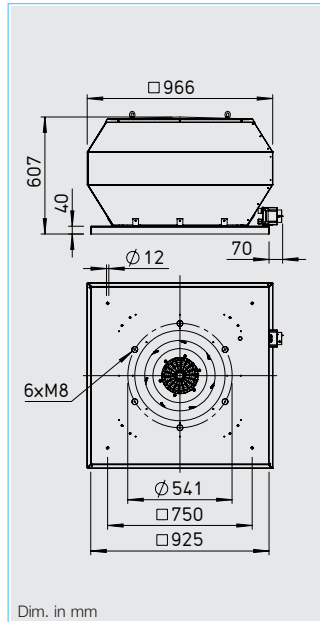
**■ Speed control**

All types are steplessly speed controllable in the range from 0 – 100 % with a frequency inverter with an integrated, all-pole sine filter (except ex-proof version) or five-step controllers (except devices with FU). See table for assignment.

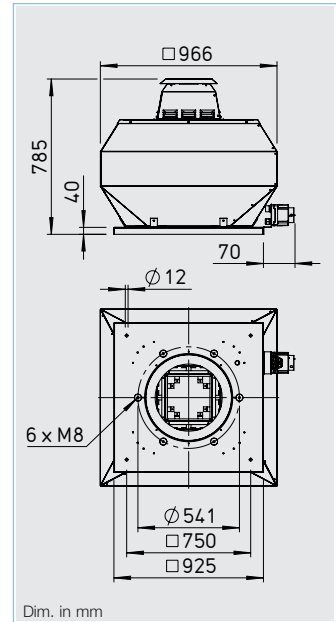
Horizontal discharge RD



Vertical discharge VD



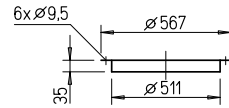
VD T120



**Accessories for Type RD / VD\***

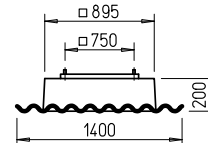
**Counterflange FR 500**

Ref. no. 1208



**Corrugated roof base, profile 5 WDS 500**

Ref. no. 1564



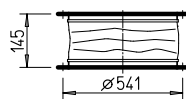
**Flanged flexible connector STS 500**

Ref. no. 1225

For ex-proof fans

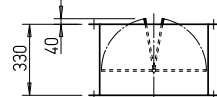
**STS 500 Ex**

Ref. no. 2507



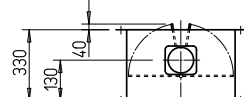
**Automatic backdraught shutter RVS 500**

Ref. no. 2598



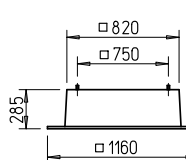
**Motorised backdraught shutter RVM 500**

Ref. no. 2582



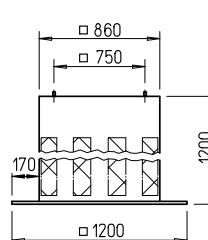
**Flat roof base FDS 500**

Ref. no. 1382



**Base attenuator SSD 500**

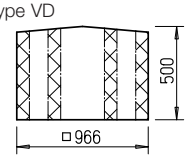
Ref. no. 5017



**Roof fan attenuator HSDV 500**

Ref. no. 7483

only for type VD



**■ Sound levels**

The sum levels and spectrum figures are specified above the performance curve for:  
 – Sound level intake  
 – Sound level exhaust

The horizontal sound pressure level at 4 m (free field conditions) is also specified in the type table as well as the table below the performance curve.

**■ Delivery**

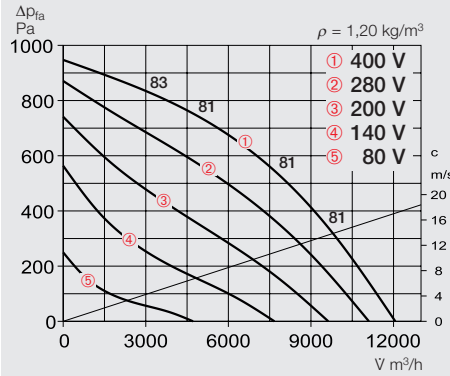
Ready-to-connect, completely pre-assembled in shipping carton. Simple positioning with stand crane hooks.

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\* Accessory VD T120 see installation accessories p. 485 Other accessories upon request.

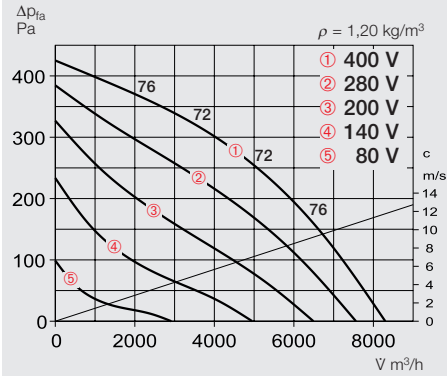
### RDD 500/4

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 76	67	71	69	69	66	62
L <sub>WA</sub> Exhaust		dB(A) 81	72	74	75	76	70	65



### RDD 500/6

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 67	58	62	60	60	57	53
L <sub>WA</sub> Exhaust		dB(A) 72	63	65	66	67	61	56

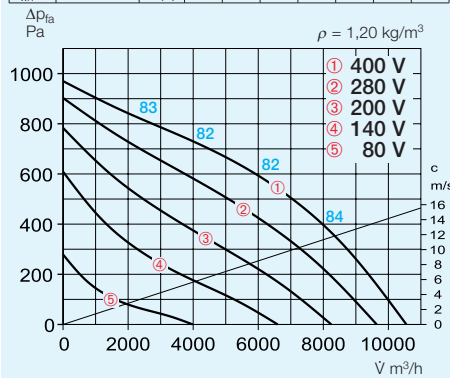


Type	Ref. no.	R.P.M.	Air flow volume (FID)	Sound pressure level	Motor power	Current full load	Current control	Wiring diagram	max. air flow temp. full load	Weight net	Full motor protection device	5-step speed switch
		min <sup>-1</sup>	m <sup>3</sup> /h	dB(A) in 4m	W	A	A	No.	°C	kg	Type Ref. no.	Type Ref. no.
<b>Three phase motor 400 V, 50 Hz, squirrel-cage rotor, protection to IP 54</b>												
RDD 500/6	7410	885	8300	55	680	1.55	1.55	1129	50	49.0	MD 5849	RDS 2 <sup>2)</sup> 1315
RDD 500/4	7409	1340	12100	64	2150	4.15	4.25	1129	55	58.0	MD 5849	RDS 7 <sup>2)</sup> 1578
<b>Explosion-proof, three phase motor 400 V, 50 Hz, protection to IP 44, temp. class T1-T3</b>												
RDD 500/6 Ex <sup>1)</sup>	7414	810	8050	55	560	1.1	1.1	1129	40	49.0	MSA 1289	TSD 1,5 1501
RDD 500/4 Ex <sup>1)</sup>	7416	1420	13030	64	2250	4.5	5.8	—	40	58.0	MSA 1289	TSD 7 1504

1) Performance curve on www.HeliosSelect.de 2) includes full motor protection device

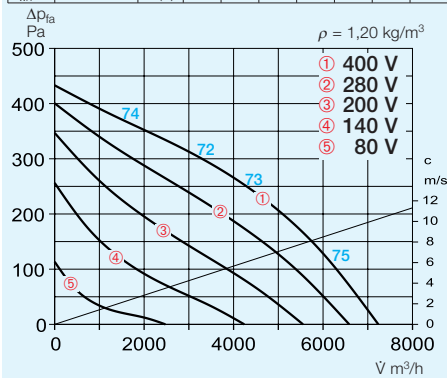
### VDD 500/4

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 76	67	71	69	69	66	62
L <sub>WA</sub> Exhaust		dB(A) 82	71	75	76	76	74	69



### VDD 500/6

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 67	58	62	60	60	57	53
L <sub>WA</sub> Exhaust		dB(A) 73	62	66	67	67	65	60



Type	Ref. no.	R.P.M.	Air flow volume (FID)	Sound pressure level	Motor power	Current full load	Current control	Wiring diagram	max. air flow temp. full load	Weight net	Full motor protection device	5-step speed switch / Frequency inverter
		min <sup>-1</sup>	m <sup>3</sup> /h	dB(A) in 4m	W	A	A	No.	°C	kg	Type Ref. no.	Type Ref. no.
<b>Three phase motor 400 V, 50 Hz, squirrel-cage rotor, protection to IP 54</b>												
VDD 500/6	7402	885	7250	56	680	1.55	1.55	1129	50	51.0	MD 5849	RDS 2 <sup>2)</sup> 1315
VDD 500/4	7401	1340	10550	65	2150	4.15	4.25	1129	55	60.0	MD 5849	RDS 7 <sup>2)</sup> 1578
<b>Explosion-proof, three phase motor 400 V, 50 Hz, protection to IP 44, temp. class T1-T3</b>												
VDD 500/6 Ex <sup>1)</sup>	7412	810	6900	56	560	1.1	1.1	1129	40	51.0	MSA 1289	TSD 1,5 1501
VDD 500/4 Ex <sup>1)</sup>	7413	1420	11400	65	2250	4.5	5.8	1129	40	60.0	MSA 1289	TSD 7 1504
<b>Three phase motor 400 V, 50 Hz, squirrel-cage rotor, protection to IP 54 or IP 55*</b>												
VDD 500/6 T120 <sup>1)</sup>	7419	910	8250	56	790	1.9	1.9	1129	120	62.0	MD 5849	RDS 4 <sup>2)</sup> 1316
VDD 500/4 T120 <sup>1)*</sup>	7418	1440	13060	65	3000	6	—	1130	120	71.0	MSA 1289	FU-BS 14 5463

1) Performance curve on www.HeliosSelect.de 2) includes full motor protection device

**Series specification**

**■ Specification RD**

Centrifugal roof fan with horizontal discharge and efficiency-optimised aluminium casing and newly developed high-performance centrifugal impeller.

**■ Specification VD**

Centrifugal roof fan with vertical discharge and efficiency-optimised aluminium casing and newly developed high-performance centrifugal impeller.

**■ Special feature VD T120**

Designed for moving process air up to +120 °C. Encapsulated motor located outside of air flow.

**Specification for all series**

**■ Casing**

Casing made from seawater-resistant aluminium with integrated protection. Motor base plate and base plate with inlet cone made from galvanised steel (inlet cone ex-proof version made from aluminium). Base plate with threaded bolt for connection of intake air accessories (hole pattern according to DIN 24155).

**■ Impeller**

High performance backward curved centrifugal impeller made of aluminium. Dynamically balanced according to DIN ISO 1940-1.

**■ Motor**

Totally enclosed speed controllable external rotor motor IP 54 (Ex-proof version in IP 44).

Flange motor with self-ventilation (T120 version) in IP 54/55. Ball bearing mounted with moisture protection. Maintenance-free and interference-free.

**■ Motor protection**

Through built-in thermal contacts or built-in PTC thermistor, which must be connected to a full motor protection device. See type table for assignment.

**■ Electrical connection**

Without dismantling the casing, to external isolator (ex-proof version to terminal box) protected to IP 65.

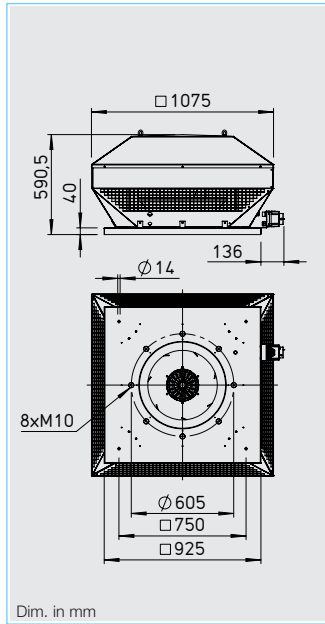
**■ Guard**

Standard on the exhaust side according to DIN EN ISO 13857.

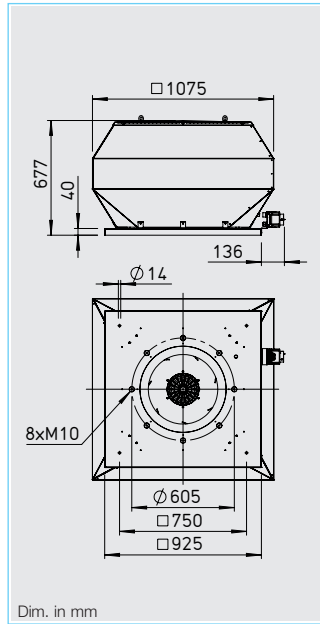
**■ Speed control**

All types are steplessly speed controllable in the range from 0 – 100 % with a frequency inverter with an integrated, all-pole sine filter (except ex-proof version) or five-step controllers (except devices with FU). See table for assignment.

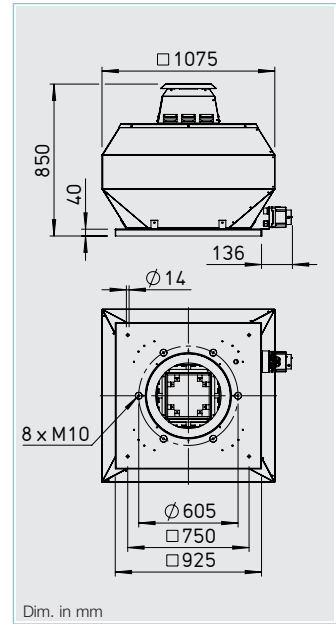
Horizontal discharge RD



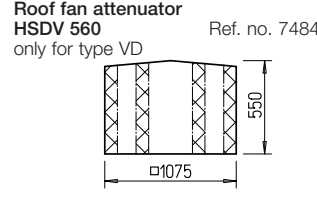
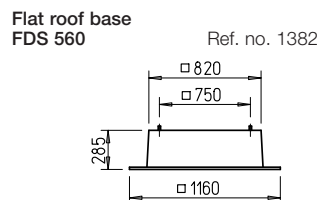
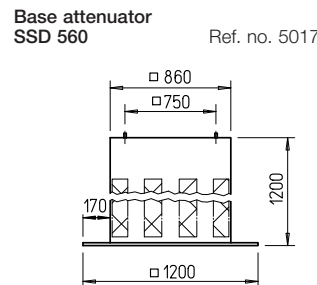
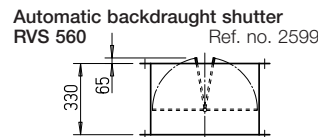
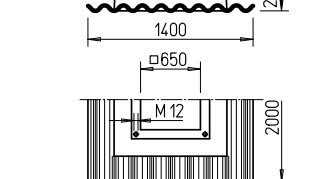
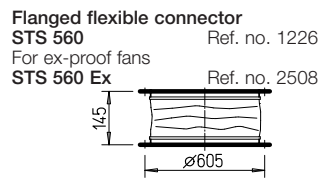
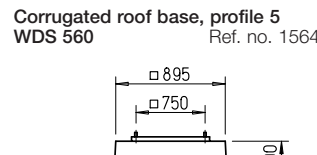
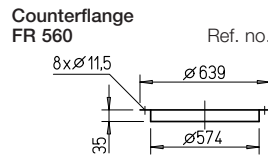
Vertical discharge VD



VD T120



**Accessories for Type RD / VD\***



**■ Sound levels**

The sum levels and spectrum figures are specified above the performance curve for:

- Sound level intake
- Sound level exhaust

The horizontal sound pressure level at 4 m (free field conditions) is also specified in the type table as well as the table below the performance curve.

**■ Delivery**

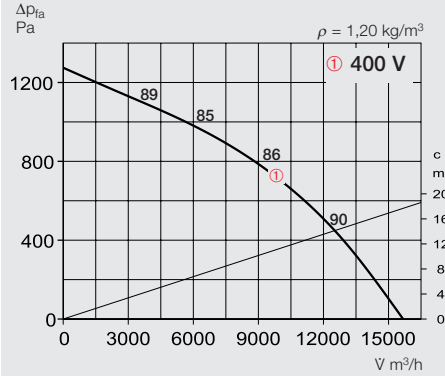
Ready-to-connect, completely pre-assembled in shipping carton. Simple positioning with stand crane hooks.

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\* Accessory VD T120 see installation accessories p. 485 Other accessories upon request.

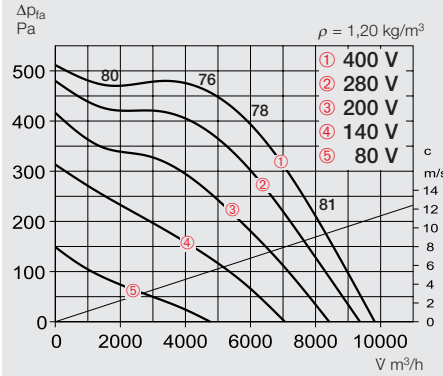
### RDD 560/4

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 81	70	72	73	74	73	69
L <sub>WA</sub> Exhaust		dB(A) 86	74	77	79	80	77	70



### RDD 560/6

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 72	62	64	65	66	65	61
L <sub>WA</sub> Exhaust		dB(A) 77	66	69	71	72	69	62

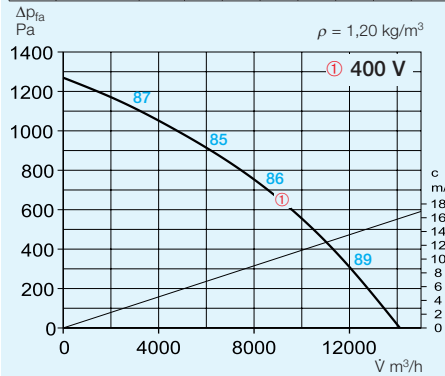


Type	Ref. no.	R.P.M.	Air flow volume (FID)	Sound pressure level	Motor power	Current full load	Current control	Wiring diagram	max. air flow temp. full load	Weight net	Full motor protection device	5-step speed switch / Frequency inverter
		min <sup>-1</sup>	m <sup>3</sup> /h	dB(A) in 4m	W	A	A	No.	°C	kg	Type Ref. no.	Type Ref. no.
<b>Three phase motor 400 V, 50 Hz, squirrel-cage rotor, protection to IP 54</b>												
RDD 560/6	7429	920	9850	60	1180	3.2	3.2	1130	65	73.0	MD 5849	RDS 7 <sup>2)</sup> 1578
RDD 560/4	7426	1385	15700	69	4430	6.4	—	1130	55	83.0	MD 5849	FU-BS 8,0 5461
<b>Explosion-proof, three phase motor 400 V, 50 Hz, protection to IP 44, temp. class T1-T3</b>												
RDD 560/6 Ex <sup>1)</sup>	7432	850	10620	60	1050	2.0	2.0	1129	40	73.0	MSA 1289	TSD 3 1502

1) Performance curve on www.HeliosSelect.de 2) includes full motor protection device

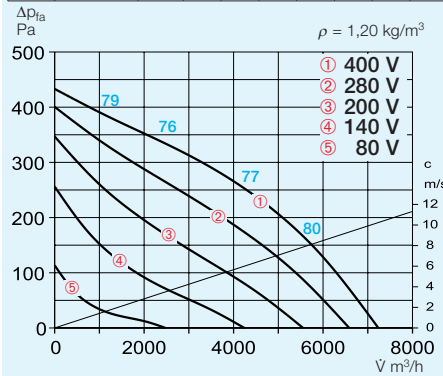
### VDD 560/4

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 82	71	73	74	75	74	70
L <sub>WA</sub> Exhaust		dB(A) 86	75	79	81	80	76	72



### VDD 560/6

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 72	61	63	64	65	64	60
L <sub>WA</sub> Exhaust		dB(A) 77	66	70	72	71	67	63



Type	Ref. no.	R.P.M.	Air flow volume (FID)	Sound pressure level	Motor power	Current full load	Current control	Wiring diagram	max. air flow temp. full load	Weight net	Full motor protection device	5-step speed switch / Frequency inverter
		min <sup>-1</sup>	m <sup>3</sup> /h	dB(A) in 4m	W	A	A	No.	°C	kg	Type Ref. no.	Type Ref. no.
<b>Three phase motor 400 V, 50 Hz, squirrel-cage rotor, protection to IP 54</b>												
VDD 560/6	7422	920	9250	60	1180	3.2	3.2	1130	65	77.0	MD 5849	RDS 7 <sup>2)</sup> 1578
VDD 560/4	7420	1385	14100	69	4430	6.4	—	1130	55	77.0	MD 5849	FU-BS 8,0 5461
<b>Explosion-proof, three phase motor 400 V, 50 Hz, protection to IP 44, temp. class T1-T3</b>												
VDD 560/6 Ex <sup>1)</sup>	7430	850	10000	60	1050	2.0	2.0	1129	40	92.0	MSA 1289	TSD 3 1502
<b>Three phase motor 400 V, 50 Hz, squirrel-cage rotor, protection to IP 54 or IP 55*</b>												
VDD 560/6 T120 <sup>1)</sup>	7439	930	12000	60	1300	3.5	3.5	1129	120	92.0	MD 5849	RDS 7 <sup>2)</sup> 1578
VDD 560/4 T120 <sup>1)</sup>	7436	1460	18830	69	5500	11.5	—	1130	120	102.0	MSA 1289	FU-BS 8,0 5461

1) Performance curve on www.HeliosSelect.de 2) includes full motor protection device



**Series specification**

**■ Specification RD**

Centrifugal roof fan with horizontal discharge and efficiency-optimised aluminium casing and newly developed high-performance centrifugal impeller.

**■ Specification VD**

Centrifugal roof fan with vertical discharge and efficiency-optimised aluminium casing and newly developed high-performance centrifugal impeller.

**■ Special feature VD T120**

Designed for moving process air up to +120 °C. Encapsulated motor located outside of air flow.

**Specification for all series**

**■ Casing**

Casing made from seawater-resistant aluminium with integrated protection. Motor base plate and base plate with inlet cone made from galvanised steel (inlet cone ex-proof version made from aluminium). Base plate with threaded bolt for connection of intake air accessories (hole pattern according to DIN 24155).

**■ Impeller**

High performance backward curved centrifugal impeller made of aluminium. Dynamically balanced according to DIN ISO 1940-1.

**■ Motor**

Totally enclosed speed controllable external rotor motor IP 54 (Ex-proof version in IP 44). Flange motor with self-ventilation (T120 version) in IP 55. Ball bearing mounted with moisture protection. Maintenance-free and interference-free.

**■ Motor protection**

Through built-in thermal contacts or built-in PTC thermistor, which must be connected to a full motor protection device. See type table for assignment.

**■ Electrical connection**

Without dismantling the casing, to external isolator (ex-proof version to terminal box) protected to IP 65.

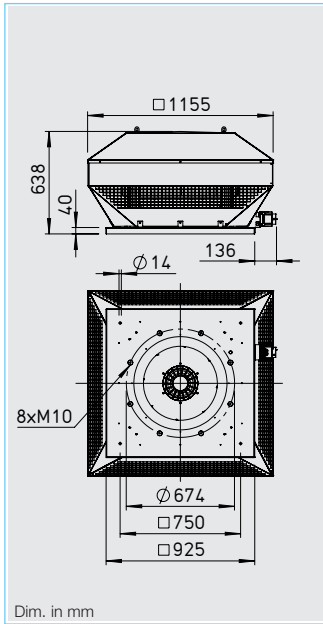
**■ Guard**

Standard on the exhaust side according to DIN EN ISO 13857.

**■ Speed control**

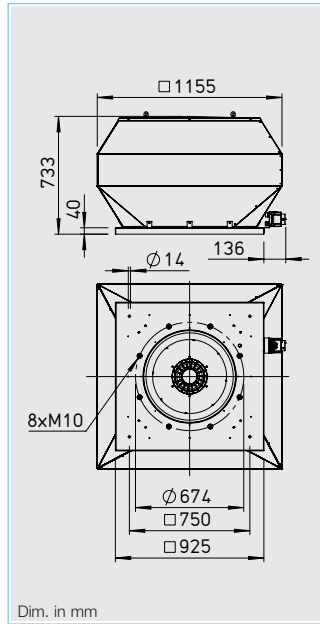
All types are steplessly speed controllable in the range from 0 – 100 % with a frequency inverter with an integrated, all-pole sine filter (except ex-proof version) or five-step controllers (except devices with FU). See table for assignment.

Horizontal discharge RD



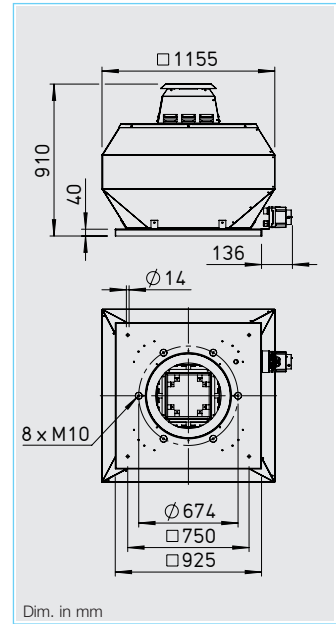
Dim. in mm

Vertical discharge VD



Dim. in mm

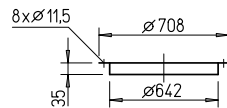
VD T120



Dim. in mm

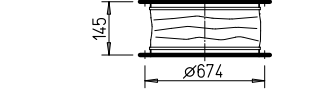
**Accessories for Type RD / VD\***

**Counterflange FR 630** Ref. no. 1211

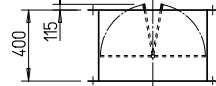


**Flanged flexible connector STS 630** Ref. no. 1228

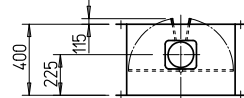
For ex-proof fans



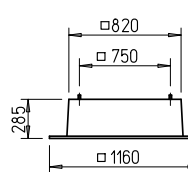
**Automatic backdraught shutter RVS 630** Ref. no. 2600



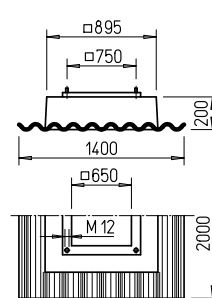
**Motorised backdraught shutter RVM 630** Ref. no. 2609



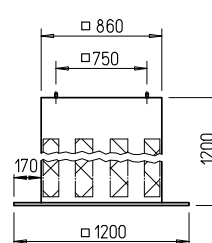
**Flat roof base FDS 630** Ref. no. 1382



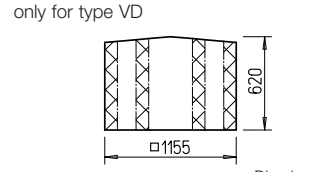
**Corrugated roof base, profile 5 WDS 630** Ref. no. 1565



**Base attenuator SSD 630** Ref. no. 5017



**Roof fan attenuator HSDV 630** Ref. no. 7489



Dim. in mm

**■ Sound levels**

The sum levels and spectrum figures are specified above the performance curve for:  
 – Sound level intake  
 – Sound level exhaust

The horizontal sound pressure level at 4 m (free field conditions) is also specified in the type table as well as the table below the performance curve.

**■ Delivery**

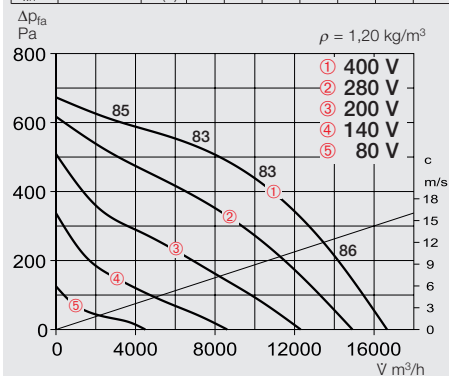
Ready-to-connect, completely pre-assembled in shipping carton. Simple positioning with stand crane hooks.

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Speed controller and switch	525 on

\* Accessory VD T120 see installation accessories p. 485 Other accessories upon request.

### RDD 630/6

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 79	62	69	73	74	72	70
L <sub>WA</sub> Exhaust		dB(A) 83	67	72	79	78	74	68

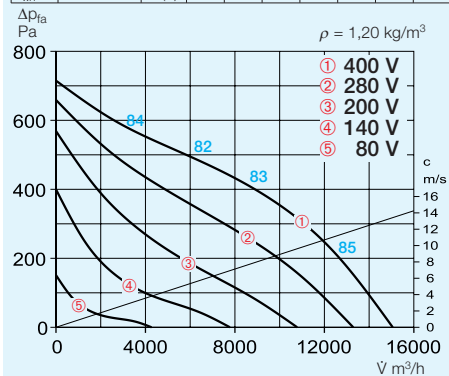


Type	Ref. no.	R.P.M.	Air flow volume (FID)	Sound pressure level	Motor power	Current full load	Current control	Wiring diagram	max. air flow temp. full load	Weight net	Full motor protection device	5-step speed switch
		min <sup>-1</sup>	m <sup>3</sup> /h	dB(A) in 4m	W	A	A	No.	°C	kg	Type Ref. no.	Type Ref. no.
<b>Three phase motor 400 V, 50 Hz, squirrel-cage rotor, protection to IP 54</b>												
RDD 630/6	7447	875	16650	66	2380	4.7	5.2	1129	55	45	MD 5849	RDS 7 <sup>2)</sup> 1578
<b>Explosion-proof, three phase motor 400 V, 50 Hz, protection to IP 44, temp. class T1-T3</b>												
RDD 630/6 Ex <sup>1)</sup>	7450	945	15660	66	2000	4.4	4.4	1129	40	40	MSA 1289	TSD 7 1504

1) Performance curve on www.HeliosSelect.de 2) includes full motor protection device

### VDD 630/6

Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 78	61	68	72	73	71	69
L <sub>WA</sub> Exhaust		dB(A) 83	67	72	79	78	74	68



Type	Ref. no.	R.P.M.	Air flow volume (FID)	Sound pressure level	Motor power	Current full load	Current control	Wiring diagram	max. air flow temp. full load	Weight net	Full motor protection device	5-step speed switch / Frequency inverter
		min <sup>-1</sup>	m <sup>3</sup> /h	dB(A) in 4m	W	A	A	No.	°C	kg	Type Ref. no.	Type Ref. no.
<b>Three phase motor 400 V, 50 Hz, squirrel-cage rotor, protection to IP 54</b>												
VDD 630/6	7441	875	15050	66	2380	4.7	5.2	1129	55	45	90.0 MD 5849	RDS 7 <sup>2)</sup> 1578
<b>Explosion-proof, three phase motor 400 V, 50 Hz, protection to IP 44, temp. class T1-T3</b>												
VDD 630/6 Ex <sup>1)</sup>	7448	945	14100	66	2000	4.4	4.4	1129	40	40	90.0 MSA 1289	TSD 7 1504
<b>Three phase motor 400 V, 50 Hz, squirrel-cage rotor, protection to IP 55</b>												
VDD 630/6 T120 <sup>1)</sup>	7456	980	16600	66	4000	10	—	1130	120	100	105.0 MSA 1289	FU-BS 14 5463

1) Performance curve on www.HeliosSelect.de 2) includes full motor protection device





**Series specification**

**■ Specification RD**

Centrifugal roof fan with horizontal discharge and efficiency-optimised aluminium casing and newly developed high-performance centrifugal impeller.

**■ Specification VD**

Centrifugal roof fan with vertical discharge and efficiency-optimised aluminium casing and newly developed high-performance centrifugal impeller.

**■ Special feature VD T120**

Designed for moving process air up to +120 °C. Encapsulated motor located outside of air flow.

**Specification for all series**

**■ Casing**

Casing made from seawater-resistant aluminium with integrated protection. Motor base plate and base plate with inlet cone made from galvanised steel. Base plate with threaded bolt for connection of intake air accessories (hole pattern according to DIN 24155).

**■ Impeller**

High performance backward curved centrifugal impeller made of aluminium. Dynamically balanced according to DIN ISO 1940-1.

**■ Motor**

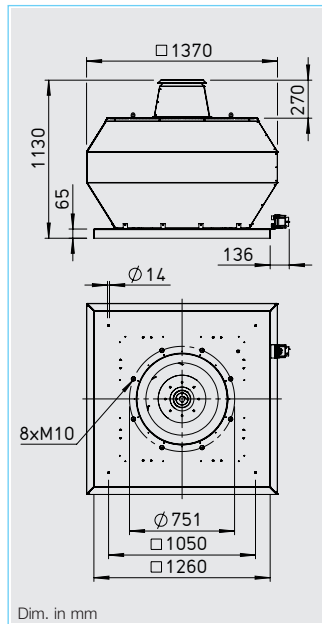
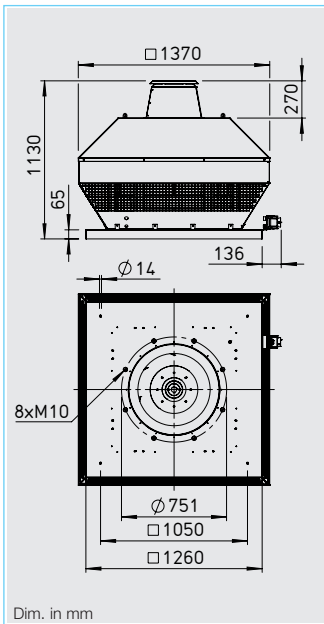
Totally enclosed speed controllable IEC standard motor with self-ventilation IP 55. Ball bearing mounted with moisture protection. Maintenance-free and interference-free.

**■ Motor protection**

Through built-in thermal contacts or built-in PTC thermistor, which must be connected to a full motor protection device. See type table for assignment.

**■ Electrical connection**

Without dismantling the casing, to external isolator protected to IP 65.



**■ Guard**

Standard on the exhaust side according to DIN EN ISO 13857.

**■ Speed control**

All types are steplessly speed controllable in the range from 0 – 100 % with a frequency inverter with an integrated, all-pole sine filter.

**■ Sound levels**

The sum levels and spectrum figures are specified above the performance curve for:  
– Sound level intake  
– Sound level exhaust

The horizontal sound pressure level at 4 m (free field conditions) is also specified in the type table as well as the table below the performance curve.

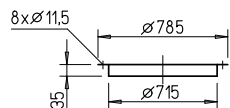
**■ Delivery**

Ready-to-connect, completely pre-assembled in shipping carton. Simple positioning with stand crane hooks.

**Accessories for Type RD / VD\***

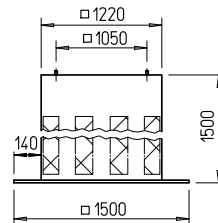
**Counterflange FR 710**

Ref. no. 1212



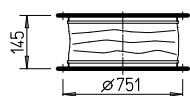
**Base attenuator SSD 710**

Ref. no. 5287



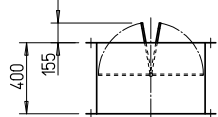
**Flanged flexible connector STS 710**

Ref. no. 1229



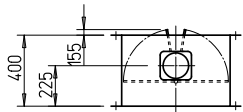
**Automatic backdraught shutter RVS 710**

Ref. no. 2601



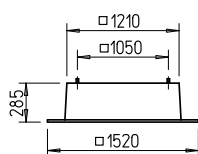
**Motorised backdraught shutter RVM 710**

Ref. no. 2610



**Flat roof base FDS 710**

Ref. no. 6658



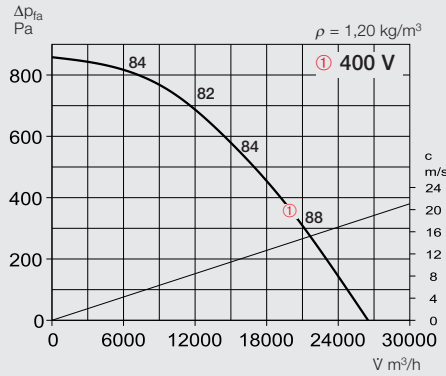
Dim. in mm

\* Accessory VD T120 see installation accessories p. 485 Other accessories upon request.

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### RDD 710/6

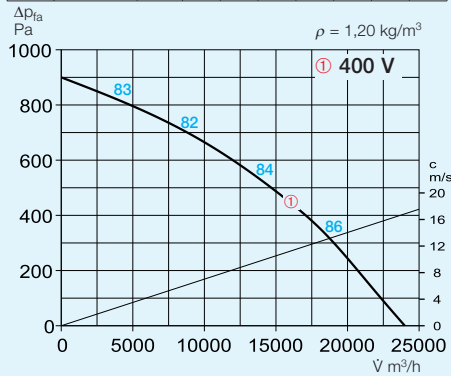
Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 79	68	71	71	72	74	68
L <sub>WA</sub> Exhaust		dB(A) 83	71	73	76	77	78	70



Type	Ref. no.	R.P.M.	Air flow volume (FID)	Sound pressure level	Motor power	Current full load	Current control	Wiring diagram	max. air flow full load	max. air flow temp. control	Weight net	Full motor protection device	5-step speed switch / Frequency inverter		
		min <sup>-1</sup>	m <sup>3</sup> /h	dB(A) in 4m	W	A	A	No.	°C	°C	kg	Type	Ref. no.	Type	Ref. no.
<b>Three phase motor 400 V, 50 Hz, squirrel-cage rotor, protection to IP 54</b>															
RDD 710/6	7460	905	26500	66	5500	12.2	—	1130	50	50	112.0	MSA	1289	FU-BS 14	5463

### VDD 710/6

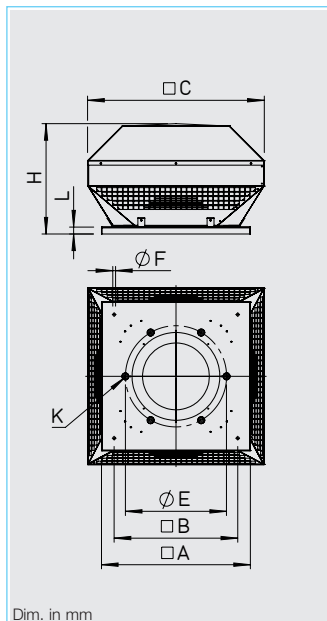
Frequency	Hz	Total	125	250	500	1k	2k	4k
L <sub>WA</sub> Intake		dB(A) 78	67	70	70	71	73	67
L <sub>WA</sub> Exhaust		dB(A) 83	71	73	76	77	78	70



Type	Ref. no.	R.P.M.	Air flow volume (FID)	Sound pressure level	Motor power	Current full load	Current control	Wiring diagram	max. air flow full load	max. air flow temp. control	Weight net	Full motor protection device	5-step speed switch / Frequency inverter		
		min <sup>-1</sup>	m <sup>3</sup> /h	dB(A) in 4m	W	A	A	No.	°C	°C	kg	Type	Ref. no.	Type	Ref. no.
<b>Three phase motor 400 V, 50 Hz, squirrel-cage rotor, protection to IP 54</b>															
VDD 710/6	7458	905	24000	66	5500	12.2	—	1130	50	50	115.0	MSA	1289	FU-BS 14	5463
<b>Three phase motor 400 V, 50 Hz, squirrel-cage rotor, protection to IP 55</b>															
VDD 710/6 T120 <sup>1)</sup>	7466	965	24000	66	5500	12.2	—	1130	120	100	130.0	MSA	1289	FU-BS 14	5463

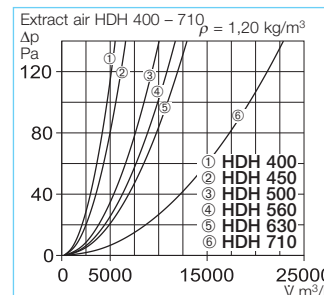
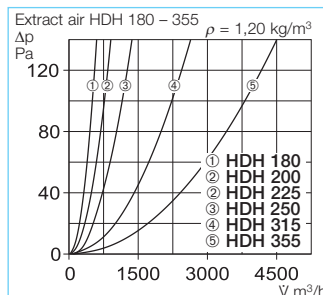
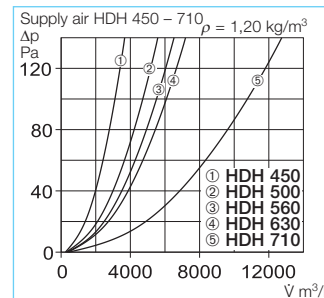
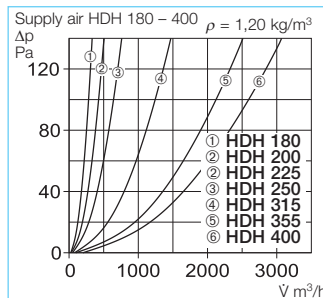
1) Performance curve on www.HeliosSelect.de

HDH



■ Roof cowl HDH

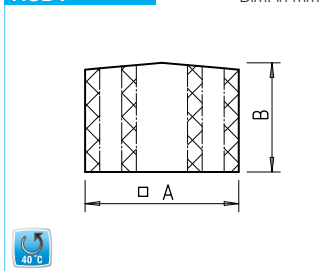
For covering the convection and supply air vents on the roof. Same design as horizontal discharge roof fans RD. When using in mechanical ventilation systems the emerging flow losses must be considered (see diagram). Accessories same as for roof fans.



Type	Ref. no.	Nominal size	□ A	□ B	□ C	Ø E	Ø F	H	K	L	Weight net
		mm	mm	mm	mm	mm	mm	mm	mm	mm	approx. kg
HDH 180	7492	180	320	245	309	213	10	155	6 x M6	30	3.5
HDH 200	7493	200	425	330	405	259	10	198	6 x M6	30	5.0
HDH 225	7495	225	425	330	405	259	10	198	6 x M6	30	5.0
HDH 250	7496	250	580	450	450	286	10	255	6 x M6	30	8.0
HDH 315	7497	315	580	450	606	356	12	386	8 x M8	30	12.5
HDH 355	7498	355	645	535	740	395	12	452	8 x M8	30	17.5
HDH 400	7499	400	645	535	765	438	12	478	6 x M8	30	17.5
HDH 450	7491	450	730	590	860	487	12	473	6 x M8	30	26.0
HDH 500	7513	500	925	750	966	541	12	531	6 x M8	40	30.0
HDH 560	7517	560	925	750	1075	605	14	591	8 x M10	40	44.0
HDH 630	7518	630	925	750	1155	674	14	633	8 x M10	40	47.0
HDH 710	7519	710	1260	1050	1370	751	14	860	8 x M10	65	52.0

HSDV

Dim. in mm



■ Roof fan attenuator HSDV for discharge-side sound insulation

Average attenuation value 8 dB. Available for series VD, nominal size 315 - 630. The construction encloses the roof fan and can be subsequently mounted without any structural alterations. Can only be mounted on VD series.

RS



■ Isolator switch RS

RS 3+1+2 Ref. no. 7536

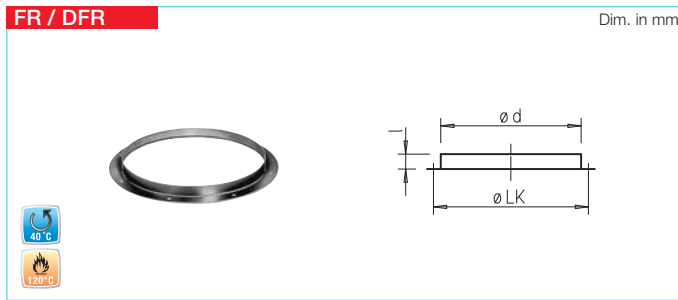
- 3 main contacts
- 1 auxiliary contact
- 2 contacts for TB/TP

For fans with direct start-up. Polymer casing for surface mounted installation. Locking options in "0 OFF" position.

Type	Ref. no.	A in mm	B in mm
HSDV 315	7476	606	310
HSDV 355	7480	740	350
HSDV 400	7481	765	400
HSDV 450	7482	860	450
HSDV 500	7483	966	500
HSDV 560	7484	1075	550
HSDV 630	7489	1155	620

Technical data

Voltage	400 V, 3-, 50/60 Hz
Operating current	20 A
Load capacity	AC-23 B, 7.5 kW
Protection class	IP 65
Protection category	II
Actuation	Rotary drive
Temperature range	-25 to +60 °C
Weight approx.	0.3 kg
Dim. mm	W 90.5 x H 90.5 x D 102
Casing	UV and weather-resistant
Wiring diagram no.	1131

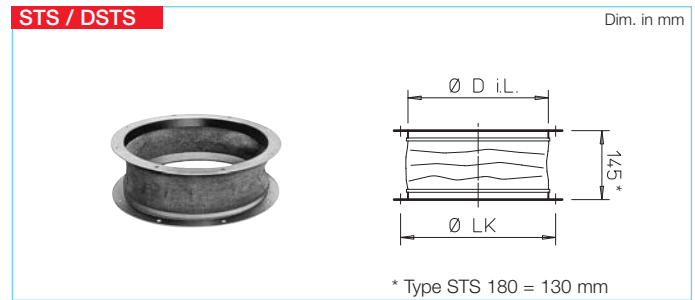


### Flange rings FR

Made of galvanised sheet steel, for intake duct connections. Can be screwed directly to the fan base plate.

Dimensions according to DIN 24 155, Pt. 2.

Type	Ref. no.	Ø LK	l	Ø d	Weight approx. kg
FR 180	1200	213	25	186	0.4
DFR 200	1201	259	30	233	0.5
FR 225	1201	259	30	233	0.5
FR 250	1203	286	25	256	0.6
FR 315	1204	356	30	326	0.9
FR 355	1205	395	30	365	1.1
FR 400	1206	438	30	408	1.2
FR 450	1207	487	35	457	1.8
FR 500	1208	541	35	511	1.8
FR 560	1209	605	35	574	2.0
FR 630	1211	674	35	642	2.2
FR 710	1212	751	35	715	3.3



### Flanged canvas connector STS

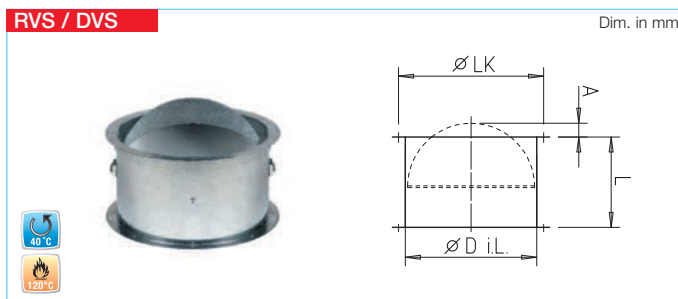
To reduce structure borne sound transmission to intake air ducting. Flanges made of galvanised sheet steel. Flexible sleeve made of polymer fabric. For ex-proof fans, type

STS Ex must be used. To be mounted directly to the fan base plate. Flange dimensions according to DIN 24 155, Pt. 2. Ambient temperature -30 °C to +80 °C.

\* Type STS 180 = 130 mm

Type	Ref. no.	Type*	Ref. no.	Ø D i.L.	Ø LK	Weight approx. kg
STS 180	1217	—	—	183	213	0.9
DSTS 200	1218	DSTS 200 Ex	2500	229	259	1.1
STS 225	1218	STS 225 Ex	2500	229	259	1.1
STS 250	1220	STS 250 Ex	2501	252	286	1.3
STS 315	1221	STS 315 Ex	2503	322	356	1.8
STS 355	1222	STS 355 Ex	2504	358	395	2.1
STS 400	1223	STS 400 Ex	2505	404	438	2.5
STS 450	1224	STS 450 Ex	2506	453	487	3.8
STS 500	1225	STS 500 Ex	2507	507	541	3.4
STS 560	1226	STS 560 Ex	2508	570	605	4.5
STS 630	1228	STS 630 Ex	2509	638	674	4.6
STS 710	1229	—	—	711	751	7.0

\* for explosion-proof fans. STSB for VD T120 version see separate catalogue.



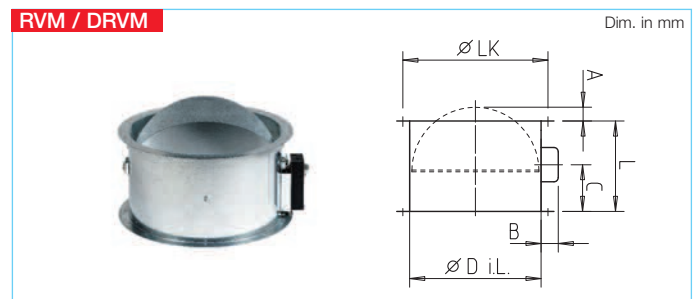
### Automatic backdraught shutter with spring reverse RVS<sup>1)</sup>

To prevent cold air backdraught when the fan is not in use. For vertical air flow from bottom-up (otherwise type RVM to be used). Auto matic opening function when the fan is in use. Spring mechanism outside the air flow. Holding force adjustable to fan power and

installation position. Flaps and casing made of galvanised sheet steel, flaps with nominal size 225 – 560 mm made of aluminium. Can be screwed directly to the fan base plate. Flanges on both sides. Holes pursuant to DIN 24155, Pt. 2. Ambient temperature -30 to +120 °C

Type	Ref. no.	Ø D i.L.	L	A	Ø LK	Weight approx. kg
DVS 180	1247	180	110	15	213	1.2
DRVS 200	2591	225	300	—	259	3.0
RVS 225	2591	225	300	—	259	3.0
RVS 250	2592	250	300	—	286	3.4
RVS 315	2594	315	300	—	356	4.3
RVS 355	2595	355	300	—	395	5.8
RVS 400	2596	400	330	—	438	7.2
RVS 450	2597	454	330	15	487	10.4
RVS 500	2598	504	330	40	541	11.7
RVS 560	2599	560	330	65	605	16.1
RVS 630	2600	630	400	115	674	19.5
RVS 710	2601	710	400	155	751	26.5

<sup>1)</sup> Pressure loss diagram see page 490.



### Motorised backdraught shutter RVM<sup>1) 2)</sup> as RVS,

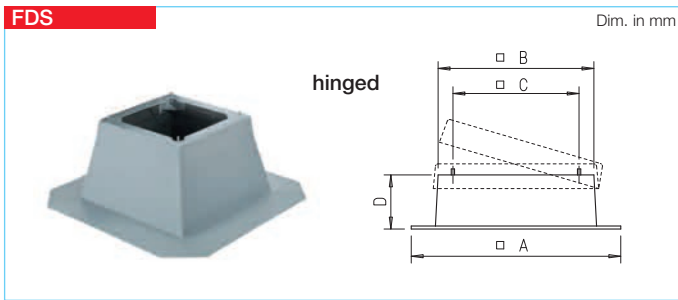
but with spring reversing motor, mounted outside the air flow and for vertical air flow in any direction. Allows natural ventilation when the fan is not in use. Control of air flow in combination with a roof cowl. To be electrically operated together with the fan;

cable length 0.9 m, closed when currentless. Ambient temperature -30 to +60 °C Protection class IP 54 Voltage/Frequency 230 V AC, 50/60 Hz Power consumption - up to Ø 560 / from Ø 630 14 W/6.5 W Valve opening time, approx. 75 sec. Wiring diagram no. 380.1

Type	Ref. no.	Ø D i.L.	B	C	L	A	Ø LK	Weight aprx. kg
DRVM 200	2575	225	95	130	300	—	259	3.3
RVM 225	2575	225	95	130	300	—	259	3.3
RVM 250	2576	250	95	130	300	—	286	3.7
RVM 315	2578	315	95	130	300	—	356	4.6
RVM 355	2579	355	95	130	300	—	395	6.1
RVM 400	2580	400	95	130	330	—	438	7.5
RVM 450	2581	454	95	130	330	15	487	10.7
RVM 500	2582	504	95	130	330	40	541	12.0
RVM 560	2583	560	95	130	330	65	605	16.4
RVM 630	2609	630	150	225	400	115	674	21.0
RVM 710	2610	710	150	225	400	155	751	28.0

<sup>2)</sup> Types DRVM/RVM not suitable for use in ex-areas.

**FDS**



**Flat roof base FDS<sup>1)</sup>**

For installation of roof fans and roof cowls on flat roofs. Horizontal installation. Application keeps cost and assembly effort to a minimum in comparison to manual design. Corrosion-resistant reinforced fibre glass design (nom. size 710 made of galvanised sheet steel) with abrasion-proof, sound and thermal insulation. Snow-secure base height.

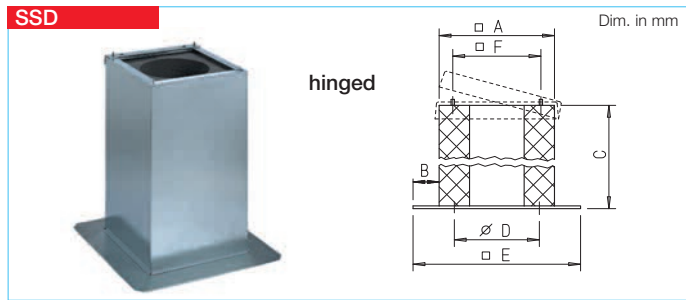
**Installation**

To be installed above the ceiling opening (roof). Roof coating to be covered completely with felt and to be sealed bitumen-fibre kit. Includes mounting screws, profile rubber and sealing between base and base plate.

Type	Ref. no.	A in mm	B in mm	C in mm	D in mm
FDS 180*	1377	645	285	245	285
FDS 200*	1378	750	392	330	285
FDS 225*	1378	750	392	330	285
FDS 250*	1379	870	520	450	285
FDS 315*	1379	870	520	450	285
FDS 355*	1380	950	605	535	285
FDS 400*	1380	950	605	535	285
FDS 450*	1381	1000	660	590	285
FDS 500	1382	1160	820	750	285
FDS 560	1382	1160	820	750	285
FDS 630	1382	1160	820	750	285
FDS 710	6658	1550	1190	1050	285

\* With hinge mechanism for simple inspection and cleaning. <sup>1)</sup> FDS B for VD T120 see separate catalogue.

**SSD**



**Hinged base attenuator SSD for intake-side sound insulation**

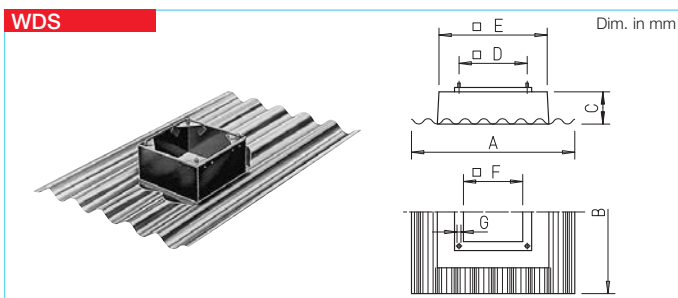
Average attenuation is 15 dB. All metal parts made of galvanised sheet steel. For installation on flat roofs in the same way as a flat roof base. Delivery includes mounting screws, profile rubber and sealing between base and base plate. For nom. size 500–710: Acoustically lined with non-flammable insulation boards, class A2,

covered with glass fibre on both sides. Nom. size 180–450: Equipped with hinges to fold the fan for maintenance purposes. Foamed material with free cross-section allows access to ducting or shaft system. Base plate is equipped with threaded holes (according to DIN 24155, Pt. 2) for connection of supply air accessories.

Type	Ref. no.	A	B	C	D	E	F
SSD 180*	5289	280	160	750	213	600	245
SSD 200*	5290	400	133	735	259	666	330
SSD 225*	5290	400	133	735	259	666	330
SSD 250*	5292	520	150	835	286	820	450
SSD 315*	5292	520	150	835	356	820	450
SSD 355*	5024	600	150	985	395	900	535
SSD 400*	5291	600	150	985	438	900	535
SSD 450*	5288	675	158	985	487	990	590
SSD 500	5017	860	170	1200	—	1200	750
SSD 560	5017	860	170	1200	—	1200	750
SSD 630	5017	860	170	1200	—	1200	750
SSD 710	5287	1220	140	1500	—	1500	1050

\* With hinge mechanism for simple inspection and cleaning.

**WDS**



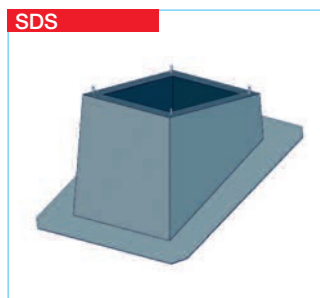
**Corrugated roof base WDS**

For installation of roof fans and roof cowls on corrugated roofs. Weather-resistant and corrosion-free design made from glass-fibre reinforced polyester, lightweight. No risk of breakage during shipment and on site. Low thermal transmittance value. Profile distance 177 mm (profile no. 5). Keeps planning costs and installation efforts to a minimum.

Rain drains on the front and rear chamfer between the square base and corrugated plate ensure the installation of corrugated roof panels regardless of the ceiling direction. Includes screws, washers and profile rubber for the mounting and sealing of the fan base plate.

Type	Ref. no.	A	B	C	D	E	F	G
WDS 180	1559	920	1600	200	245	295	Ø 256	M 6
WDS 200/225	1560	920	1600	200	330	395	290	M 10
WDS 250/315	1561	920	1600	200	450	555	395	M 10
WDS 355/400	1562	920	1600	200	535	625	475	M 10
WDS 450	1563	1400	2000	200	590	705	525	M 12
WDS 500/560	1564	1400	2000	200	750	895	650	M 12
WDS 630	1565	1400	2000	200	750	895	650	M 12

**SDS**



**Sloping roof base SDS**

For installation of roof fans and roof cowls on sloping roofs with slopes of up to 45°. Made of galvanised sheet steel, with sound and thermal insulated 50 mm thick cladding on the inside.

All SDS models are available on request. When ordering please specify the fan type or the nominal size of roof cowl, the roof pitch angle, the type of brick or the profile shape and height (for profile roofs), if necessary.

**Installation**

Base to be installed on the roof construction. The enclosing collar made of lead to be sealed. Includes mounting screws, plates and sealing between the base and base plate.

Information	Page
All centrifugal roof fans delivered without guard on intake. If there is no duct connected directly to the unit, a guard (model ASD-SGD or SG) must be used.	231
Other accessories	Page
Speed controllers, controllers and switches	525 on