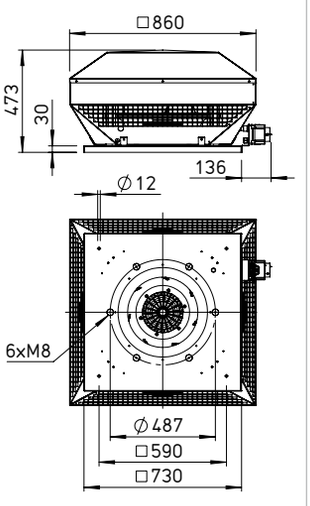
Horiz. outlet RD EC 450



Verti. outlet VD EC 450

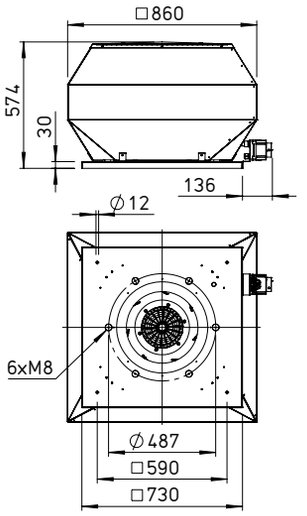


Dimensions RD EC 450



Dim. in mm

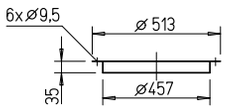
Dimensions VD EC 450



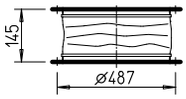
Dim. in mm

Dimensions Accessories for RD EC 450 / VD EC 450

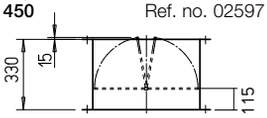
Counter flange
FR 450 Ref. no. 01207



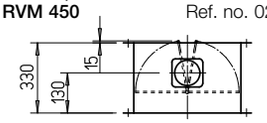
Flanged flexible connector
STS 450 Ref. no. 01224



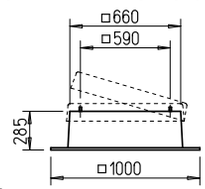
Shutter, automatic
RVS 450 Ref. no. 02597



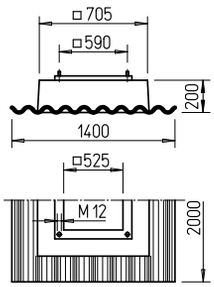
Shutter, motorised
RVM 450 Ref. no. 02581



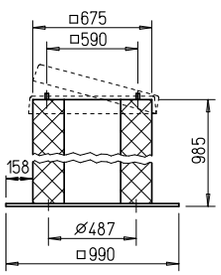
Flat roof base, hinged
FDS 450 Ref. no. 01381



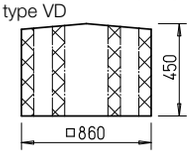
Corrugated roof base, profile 5
WDS 450 Ref. no. 01563



Base silencer, hinged
SSD 450 Ref. no. 05288



Hood silencer
HSDV 450 Ref. no. 07482
only for type VD



Dim. in mm

Description RD EC

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

Description VD EC

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

Common features RD EC and VD EC

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

Impeller
High-performance centrifugal impeller with backward curved blades made of plastic. Dynamically balanced according to DIN ISO 21940-11 – quality grade 6.3.

Drive
Energy-saving, speed-controllable EC external rotor motor with a high level of efficiency. Maintenance-free and ball bearing mounted.

Motor protection
Integrated electronic temperature monitoring system for EC motor and electronics.

Electrical connection
ND 315 – 630 to external terminal box and isolator in protection category IP65.

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

Power control
Continuously variable speed control via internal (delivery) or external potentiometer or continuously variable speed control with universal control system.

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

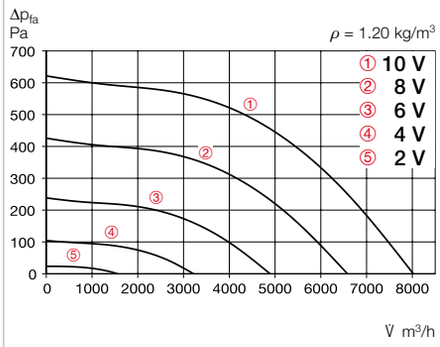
Noise
The total level and range are specified above the performance diagram for:
- ☐ Inlet side sound power
- ☐ Outlet side sound power.

The case-radiated noise as sound pressure at 4 m (free field conditions) is also specified in the type table and the table below the performance curve.

References	Page
Planning information	14 ff.
Technical description	501 f.
Selection table	503 f.
Accessories, details	560 f.
Universal control systems, electronic controllers, speed potentiometer	615 ff.

Performance curves RDW EC 450

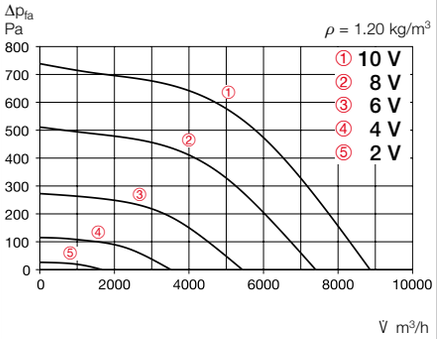
Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Inlet side	dB(A)	72	61	66	66	65	64	59	53
L_{WA}	Outlet side	dB(A)	77	67	68	68	72	67	60	53



Free blowing						
Voltage V	**n** min⁻¹	**V̇** m³/h	**P** W	**I** A	**Lp** dB(A)	**SFP** kW/m³/s
10	1300	8042	738	3.10	60	0.33
8	1074	6595	421	1.80	56	0.23
6	802	4891	191	0.91	50	0.14
4	535	3221	70	0.51	37	0.08

Performance curves RDD EC 450 A

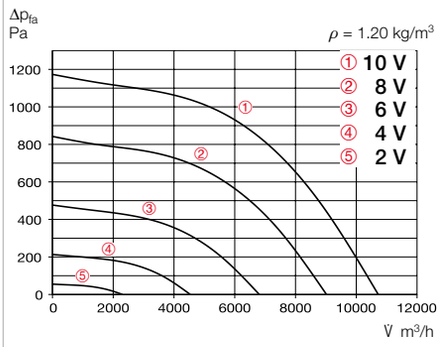
Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Inlet side	dB(A)	75	64	69	69	68	67	62	56
L_{WA}	Outlet side	dB(A)	80	70	71	71	75	70	63	56



Free blowing						
Voltage V	**n** min⁻¹	**V̇** m³/h	**P** W	**I** A	**Lp** dB(A)	**SFP** kW/m³/s
10	1430	8760	980	1.60	63	0.40
8	1190	7230	590	1.05	59	0.29
6	870	5360	265	0.50	52	0.18
4	550	3380	90	0.20	42	0.10

Performance curves RDD EC 450 B

Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Inlet side	dB(A)	81	70	75	75	74	73	68	62
L_{WA}	Outlet side	dB(A)	86	76	77	77	81	76	69	62

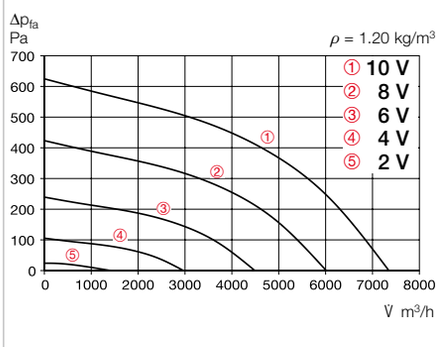


Free blowing						
Voltage V	**n** min⁻¹	**V̇** m³/h	**P** W	**I** A	**Lp** dB(A)	**SFP** kW/m³/s
10	1800	10760	2015	2.95	69	0.67
8	1490	8860	1180	1.80	65	0.48
6	1100	6430	525	0.92	58	0.29
4	700	4115	180	0.35	48	0.16

Type	Ref. no.	Speed	Flow rate Free blowing	Noise sound pressure	Power consumption	Current consump. at rated voltage	Current consump. with control	Wiring diagram	Max. air flow temp. at rated voltage	Max. air flow temp. with control	Wgt net	Speed potentiometer Flush-mounted		Speed potentiometer Surf.-mounted	
		min⁻¹	m³/h	dB(A) in 4 m	W	A	A	No.	°C	°C	kg	**Type**	Ref. no.	**Type**	Ref. no.
Single phase alternating current, 1~, 230 V, 50 Hz, EC motor, protection category IP54															
RDW EC 450	07397	1300	8050	59.5	1100	4.9	4.9	1147	40	–	39	**PU 24**	01736	**PA 24**	01737
Three phase current, 3~, 400 V, 50 Hz, EC motor, protection category IP54															
RDD EC 450 A	07382	1425	8865	62.5	1400	2.2	2.4	1148	45	–	39	**PU 24**	01736	**PA 24**	01737
RDD EC 450 B	07395	1800	10736	68.5	2810	4.3	4.2	1148	60	–	45	**PU 24**	01736	**PA 24**	01737

Performance curves VDW EC 450

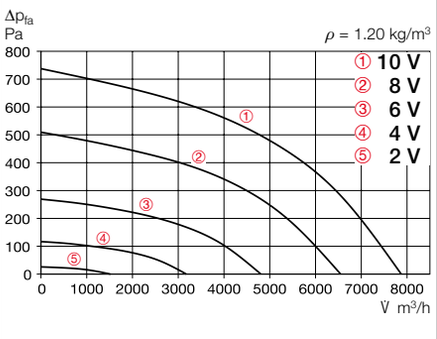
Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Inlet side	dB(A)	70	59	64	64	63	62	57	51
L_{WA}	Outlet side	dB(A)	76	67	68	68	72	67	60	53



Free blowing						
Voltage V	**n** min⁻¹	**V̇** m³/h	**P** W	**I** A	**Lp** dB(A)	**SFP** kW/m³/s
10	1300	7354	862	4,0	59	0,42
8	1068	6018	487	2,0	55	0,29
6	802	4493	217	1,0	49	0,17
4	533	2966	78	0,5	36	0,10

Performance curves VDD EC 450 A

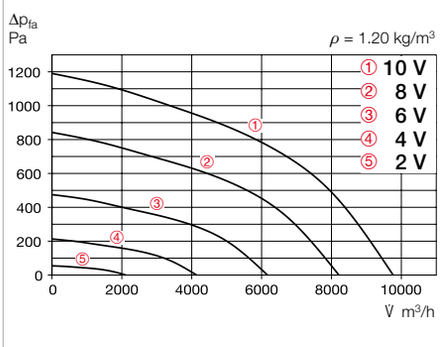
Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Inlet side	dB(A)	73	62	67	67	66	65	60	54
L_{WA}	Outlet side	dB(A)	79	70	71	71	75	70	63	56



Free blowing						
Voltage V	**n** min⁻¹	**V̇** m³/h	**P** W	**I** A	**Lp** dB(A)	**SFP** kW/m³/s
10	1430	7990	1130	1.80	62	0.51
8	1190	6690	670	1.15	58	0.36
6	870	4850	290	0.55	51	0.22
4	550	3090	95	0.20	42	0.11

Performance curves VDD EC 450 B

Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Inlet side	dB(A)	79	68	73	73	72	71	66	60
L_{WA}	Outlet side	dB(A)	85	76	77	77	81	76	69	62



Free blowing						
Voltage V	**n** min⁻¹	**V̇** m³/h	**P** W	**I** A	**Lp** dB(A)	**SFP** kW/m³/s
10	1800	9960	2250	3.3	68	0.81
8	1500	8110	1330	2.0	64	0.59
6	1090	5980	570	0.95	57	0.34
4	690	3780	190	0.38	47	0.18

Type	Ref. no.	Speed	Flow rate Free blowing	Noise sound pressure	Power consumption	Current consump. at rated voltage	Current consump. with control	Wiring diagram	Max. air flow temp. at rated voltage	Max. air flow temp. with control	Wgt net	Speed potentiometer Flush-mounted		Speed potentiometer Surf.-mounted	
		min⁻¹	m³/h	dB(A) in 4 m	W	A	A	No.	°C	°C	kg	**Type**	Ref. no.	**Type**	Ref. no.
Single phase alternating current, 1~, 230 V, 50 Hz, EC motor, protection category IP54															
VDW EC 450	07396	1300	7355	59	1120	4.7	4.7	1147	40	–	41	**PU 24**	01736	**PA 24**	01737
Three phase current, 3~, 400 V, 50 Hz, EC motor, protection category IP54															
VDD EC 450 A	07381	1410	7883	62	1450	2.2	2.3	1148	45	–	41	**PU 24**	01736	**PA 24**	01737
VDD EC 450 B	07392	1800	9771	68	2800	4.3	4.2	1148	60	–	47	**PU 24**	01736	**PA 24**	01737