HQ EC 450



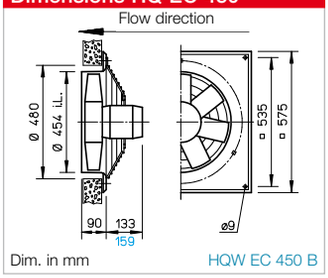
HW EC 450



HRF EC 450

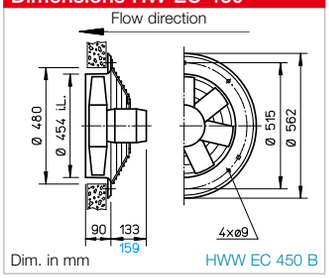


Dimensions HQ EC 450



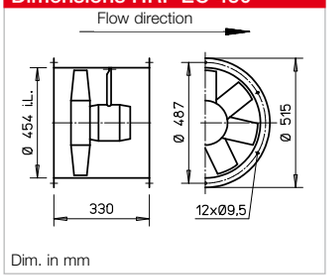
Dim. in mm HQW EC 450 B

Dimensions HW EC 450



Dim. in mm HWW EC 450 B

Dimensions HRF EC 450



Dim. in mm

Description for all types

- **Casing**
  Made of galvanised steel sheet, types HQ and HW have additional two layer lacquer coating in papyrus white.

- **Impeller**
  High performance characteristics with profiled blades made of plastic, aerodynamically optimised for application, dynamically balanced.

- **Drive**
  Energy-efficient, speed-controllable EC external rotor motor with IP54 protection. Maintenance-free and ball bearing mounted.

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

- **Electrical connection**
  Standard terminal box (protection category IP54). Mounted to external cable for HQ and HW types (version “A”) or on back of motor (version “B”). Mounted on outside of duct for HRF types.

- **Protection grille**
  Made of powder-coated steel for HQ and HW in accordance with DIN EN ISO 13857.

- **Power control**
  All types are continuously controllable via internal (delivery) or external speed potentiometer. Control is also possible via three level switch or continuously variable via universal control system or electronic differential pressure/temperature controller. See type table.
  Performance levels are shown on the performance curve as examples.

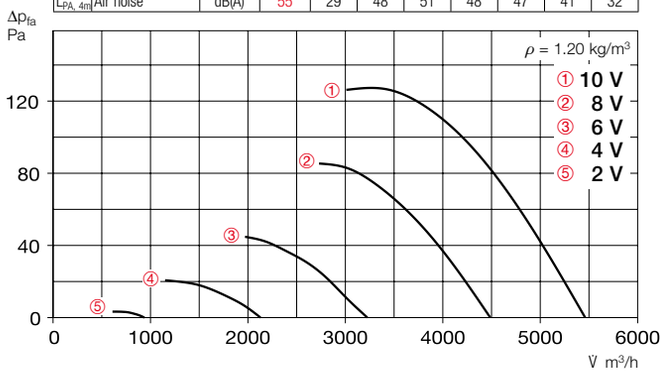
- **Installation**
  Installation possible in any position.

- **Noise levels**
  The total level and range for the sound power level and sound pressure level at 4 m free field conditions are specified above the performance diagram for the average operating point on the inlet/outlet side. The total sound pressure level at 4 m (free field conditions) is also specified in the type table, as well as the table below the performance diagram for various voltages. See page 14 f for noise emissions and room acoustics.

Speed	Flow rate-free-blowing	Power consump.	Current consum.	Sound pressure	Wiring diagram	Max. air flow temperature	Wgt net	Design type					
								HQ EC incl. protection grille	Ref. no.	**HW EC** incl. protection grille	Ref. no.	**HRF EC**	Ref. no.
min $^{-1}$	V̇ m³/h	kW	A	dB(A) at 4m	No.	+°C	ca. kg						
Alternating current, 1~, 230 Volt, 50/60 Hz, EC motor, protection category IP54													
1320	5460	0.29	1.30	55	1047	40	14.5	**HQW EC 450 A**	04928	**HWW EC 450 A**	04929	**HRFW EC 450 A**	04930
1835	7640	0.82	3.80	64	1201	40	16.5	**HQW EC 450 B**	04931	**HWW EC 450 B**	04932	**HRFW EC 450 B**	04933

Performance curves HQ EC / HW EC / HRF EC 450 A

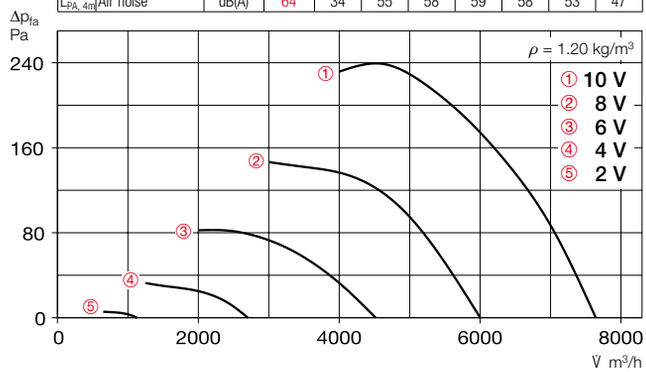
Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	75	49	68	71	68	67	61	52
$L_{PA,\ 4m}$	Air noise	dB(A)	55	29	48	51	48	47	41	32



Voltage V	n min⁻¹	Free-blow. A m³/h	P_{el} W	I_{Motor} A	$L_{PA,\ 4m}$
10	1320	5460	290	1.30	55
8	1090	4490	170	0.74	51
6	790	3230	75	0.35	44
4	525	2130	30	0.20	35

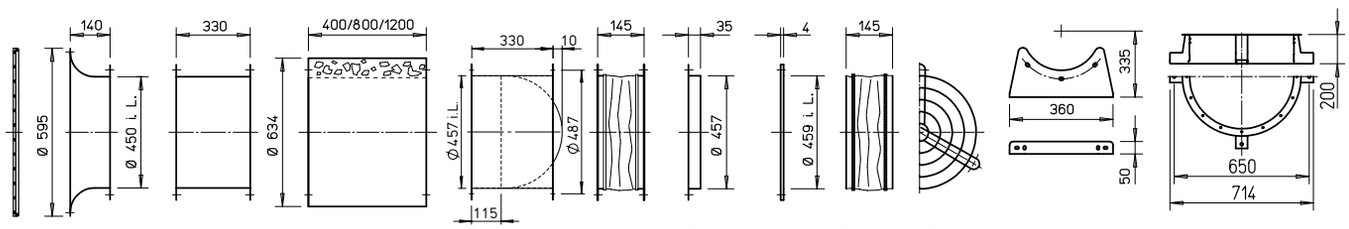
Performance curves HQ EC / HW EC / HRF EC 450 B

Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	84	54	75	78	79	78	73	67
$L_{PA,\ 4m}$	Air noise	dB(A)	64	34	55	58	59	58	53	47



Voltage V	n min⁻¹	Free-blow. A m³/h	P_{el} W	I_{Motor} A	$L_{PA,\ 4m}$
10	1835	7640	820	3.80	64
8	1460	6000	420	2.00	59
6	1080	4520	180	0.84	53
4	690	2700	60	0.37	43

Accessories for HRF EC 450 Description see page 278 ff.



Intake nozzle with prot. grille **ASD-SGD 450** No. 01419

Extension duct **VR 450** No. 01407

Duct silencer- **RSD 450/..**

Duct shutter, automatic **RVS 450** [a] No. 02597

Flanged flexible connector **STS 450** No. 01224

Counter flange **FR 450** No. 01207

Flat flange **FF 450** No. 04946

Flexible connecting sleeve **FM 450** No. 01677

Protection grille duct side **SG 450** No. 01240

Mounting brackets **MK 450** (1 Set = 2 pcs) No. 01449

Mounting ring for vertical attachment **MRV 450** No. 01761

[a] Shutter, motorised see Accessories product pages.

References	Page
Techn. description	190
Selection table	191
Planning information	14 ff.

Special design
Different voltage, air flow direction, higher air flow temperature, acid protection upon request.

The technical information on p.19 ff. must be observed.

Other accessories	Page
Filters and silencers	483 ff.
Shutters and ventilation grilles	563 ff.
Universal control system, electronic controller, Speed potentiometer	615 ff.
Five-step speed switch	610

Universal control system		Speed potentiometer flush-mounted		Speed potentiometer surface-mounted		Three level speed switch flush-mounted		Three level speed switch surface-mounted		Electronic pressure difference controller/ actuator		Electronic temperature controller/actuator	
Type	Ref. no.	**Type**	Ref. no.	**Type**	Ref. no.	**Type**	Ref. no.	**Type**	Ref. no.	**Type**	Ref. no.	**Type**	Ref. no.
EUR EC[1]	01347	**PU 10**[1]	01734	**PA 10**[1]	01735	**SU-3 10**[1]	04266	**SA-3 10**[1]	04267	**EDR**[1]	01437	**ETR**[1]	01438
EUR EC[1]	01347	**PU 10**[1]	01734	**PA 10**[1]	01735	**SU-3 10**[1]	04266	**SA-3 10**[1]	04267	**EDR**[1]	01437	**ETR**[1]	01438

[1] Multiple EC fans can normally be connected, see Accessories.