

Description for all types

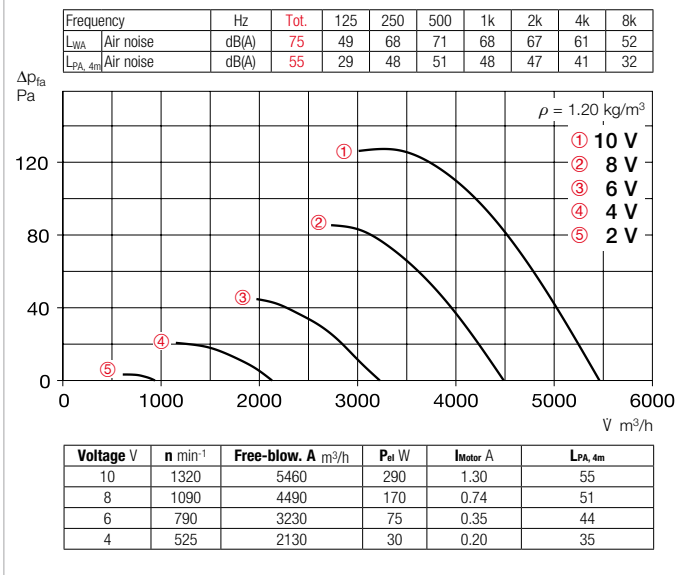
- **Casing**
 Made of galvanised steel sheet, types HQ and HW have additional two layer lacquer coating in papyrus white.
- **Impeller**
 High performance characteristics with profiled blades made of plastic, aerodynamically optimised for application, dynamically balanced.
- **Drive**
 Energy-saving, speed-control-lable external rotor EC motor in protection category IP54 with the highest level of efficiency. Maintenance-free and radio interference-free, excellent electromagnetic compatibility (EMC), 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.

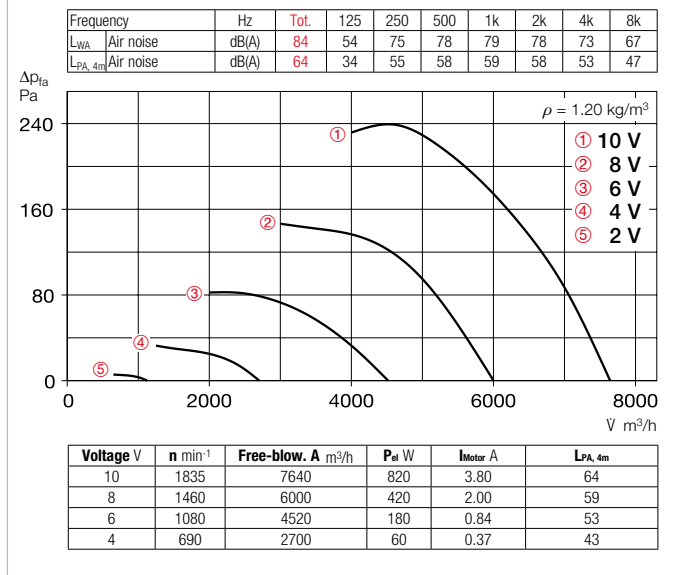
- **Installation**
 Installation possible in any position.
- **Noise levels**
 The total level and range for the sound power level and sound pressure level at 4 m free field conditions are specified above the performance diagram for the average operating point on the inlet/outlet side. The total sound 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 consump.	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	V m ³ /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

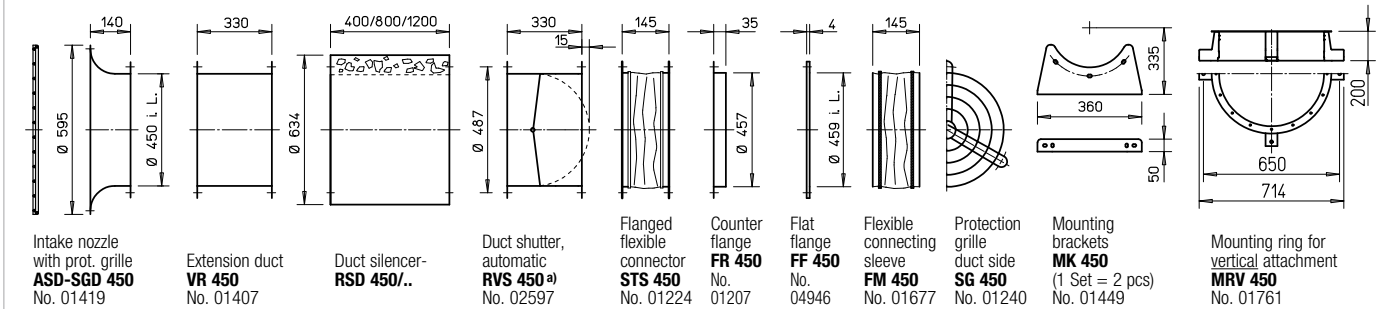
Performance curves HQ EC / HW EC / HRF EC 450 A



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



Accessories for HRF EC 450 Description see page 276 ff.



a) Shutter, motorised see Accessories product pages.

References	Page	Other accessories	Page
Techn. description	180	Filters and silencers	481 ff.
Selection table	181	Shutters and ventilation grilles	561 ff.
Planning information	14 ff.	Universal control system, electronic controller, Speed potentiometer	613 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.

Universal control system		Speed potentiometer		Three level speed switch		Electronic pressure difference controller/ actuator		Electronic temperature controller/actuator					
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.