

AMD / B AMD 450



Description, Installation, Casing, Air flow direction, etc. see page 46.

Impeller

- Hub and blades made from corrosion-resistant aluminium alloy. Ten aerodynamically profiled blades achieve the highest level of efficiency and pressure ratings together with the guide vane.
- Dynamically balanced, quality class 6.3 for low-vibration operation.
- Blades can be steplessly adjusted in the factory.

Motor

- Series AMD: Direct through efficient IE3 standard three phase motor. Pole-switching fans with IEC standard motor. Protection class IP55, insulation class F.

- Series B AMD: Direct through efficient IE3 three phase motor (smoke extraction motors F300 or F400). Pole-switching fans with IEC standard motor. Protection class IP55. Insulation class H. Fire-resistant external cable with sheathing.

Motor protrusion

For some types, the motor protrudes over the casing. Protrusion dimension B in mm must be observed according to the type table.

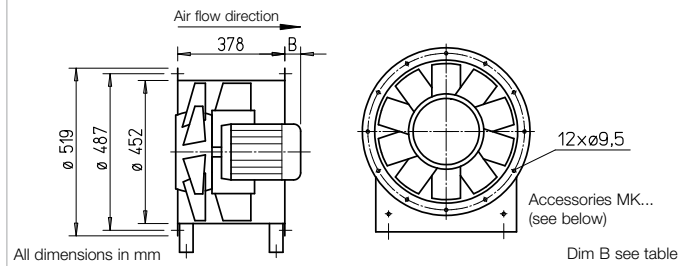
Motor protection

All types have PTC resistors from the terminal box. This must be bridged in smoke extraction mode for B AMD models.

Certification

The smoke ventilation fans B AMD have been tested according to DIN EN 12101-3. Certificate of performance reliability: F300: 0036-CPR-RG05-18 F400: 0036-CPR-RG05-19

Dimensions AMD / B AMD 450



Electrical connection

- Series AMD: Standard plastic terminal box (protection class IP55), mounted to outside of duct.
- Series B AMD: Standard aluminium die-cast terminal box (protection class IP55), mounted to outside of duct.

Air flow temperatures

- Series AMD: Suitable for supply and extract ventilation from -20 °C to +60 °C continuous temperature. Types for higher air flow temperatures upon request.
- Series B AMD: Like series AMD, but also for smoke extraction according to the temperature classification up to 300 °C/120 min. and 400 °C/120 min.

Double pressure

Mounting package MP-Z for two-stage Z unit

For arrangement of two identical fans in a row, for highest pressure ratings. Scope of delivery: Extension ducts (2 pcs.) and assembly kit. Weight: 14 kg

MP-Z 450

Ref. no. 04906

Double volume

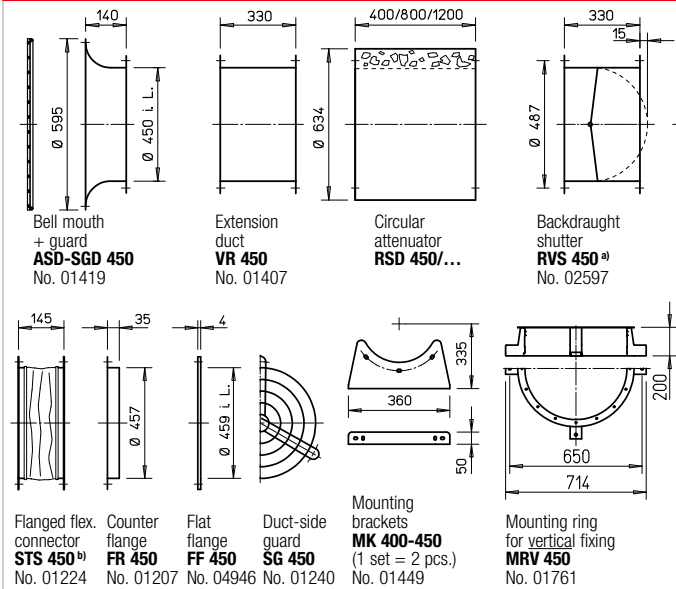
Mounting package MP-P for parallel P unit

For arrangement of two identical fans side by side, for highest flow rates. Scope of delivery: Extension ducts, backdraught shutter, mounting rails (2 pcs. each), mounting brackets (4 pcs.) and assembly kits. Weight: 43 kg

MP-P 450

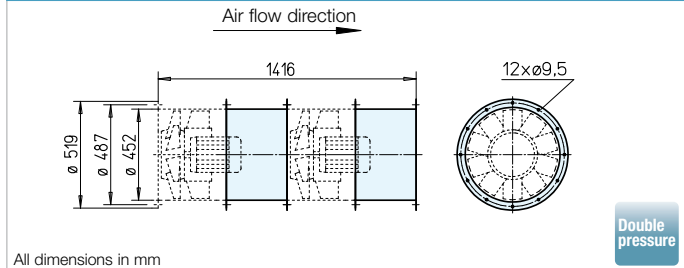
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Accessories for AMD / B AMD 450

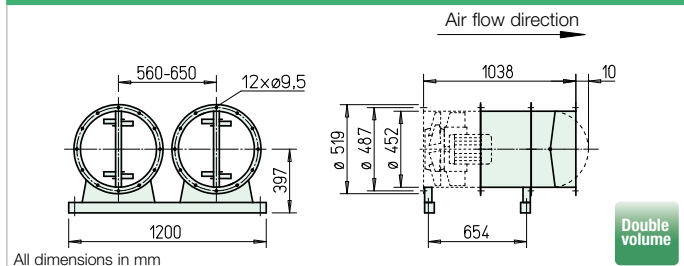


^{a)} Backdraught shutter, motorised, for ventilation, see main Helios catalogue. ^{b)} Type for B AMD: STSB 450 F400, No. 14742

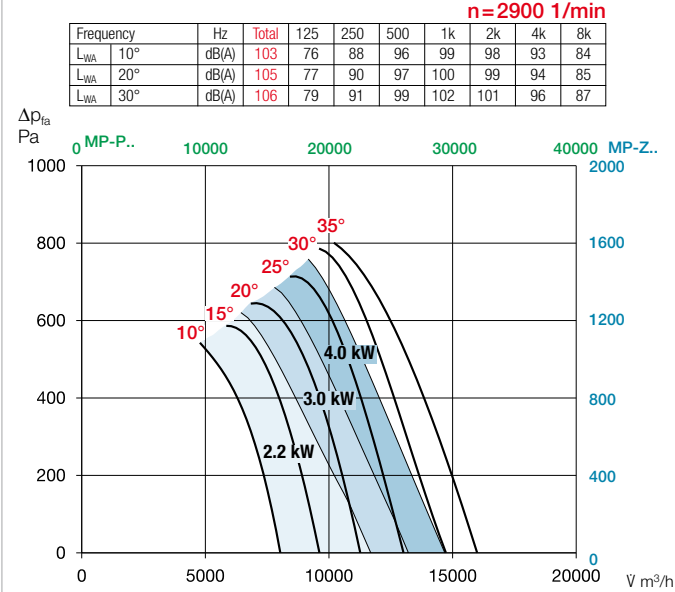
Dimensions MP-Z 450



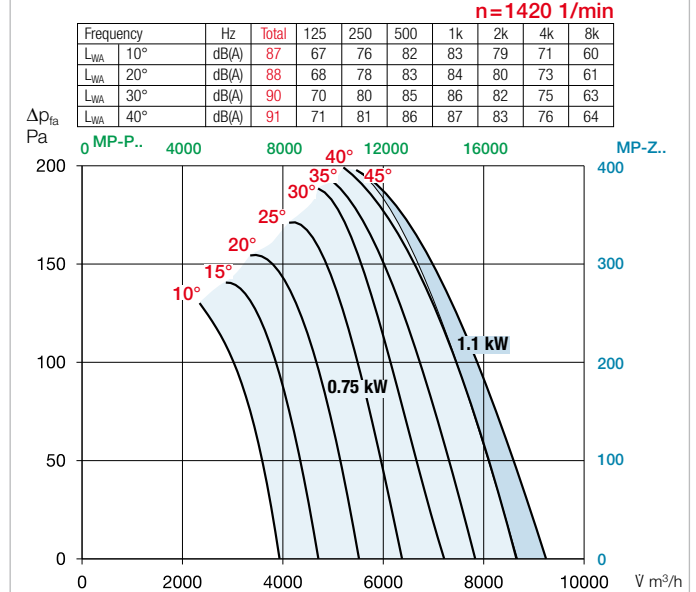
Dimensions MP-P 450



Performance curves AMD / B AMD 450/2 n=2900 1/min



Performance curves AMD / B AMD 450/4 n=1420 1/min



Information	Page	Accessory details	Page
Techn. description	56	Mounting accessories	161 ff.
Project planning information	13 ff.	Attenuators	166 ff.
Special designs		Gas warning systems, switch and control technology	168 ff.
Special design with inspection open. (add. cost) upon request.		Frequency inverters	178 ff.

Type	Ref. no.	Speed	Nominal motor power (output)	Nominal voltage	Nominal current	Dim. B motor protrusion	Wiring diagram	max. air flow temp. ¹⁾	Net weight approx.	Full motor protection or Smoke exhaust fan control system	Anti-vibration mounts ²⁾				
											Pressure	Tensile			
		min ⁻¹	kW	V	A	mm	No.	+°C	kg	Type	Ref. no.	Type	Ref. no.	Type	Ref. no.
60° Three phase motor, 400 V, 50 Hz, protection class IP55											Full motor protection				
AMD 450/4 0.75 kW	03109	1430	0.75	400	1.8	15	796	60	40	MSA 01289	SDD 1	01452	SDZ 1	01454	
AMD 450/4 1.1 kW	03110	1440	1.1	400	2.5	40	796	60	44	MSA 01289	SDD 1	01452	SDZ 1	01454	
AMD 450/2 2.2 kW	03106	2890	2.2	400	4.3	65	796	60	47	MSA 01289	SDD 1	01452	SDZ 1	01454	
AMD 450/2 3 kW	03107	2895	3	400 ³⁾	5.7	105	776	60	54	MSA 01289	SDD 1	01452	SDZ 1	01454	
AMD 450/2 4 kW	03108	2910	4	400 ³⁾	7.4	155	776	60	57	MSA 01289	SDD 1	01452	SDZ 1	01454	
60° Pole-switching, 2 speed, three phase motor, Dahlander winding γ/Δ, 400 V, 50 Hz, protection class IP55											Smoke exhaust fan control system				
AMD 450/4/2 0.65/2.5 kW	03121	1380/2855	0.65/2.5	400	1.9/5.0	40	777	60	61	—	SDD 1	01452	SDZ 2	01455	
AMD 450/4/2 0.8/3.1 kW	03111	1380/2860	0.8/3.1	400	2.1/6.1	65	777	60	61	—	SDD 1	01452	SDZ 2	01455	
AMD 450/4/2 1.1/4.4 kW	03113	1390/2860	1.1/4.4	400	3.0/8.7	155	777	60	67	—	SDD 1	01452	SDZ 2	01455	
F300 Three phase motor, 400 V, 50 Hz, protection class IP55											Smoke exhaust fan control system				
B AMD 450/4 0.75 kW F300	03356	1430	0.75	400	1.8	0	776	60/300	42	EVS-D 001 04594	SDD 1F	01942	SDZ 1 F	01943	
B AMD 450/4 1.1 kW F300	03357	1440	1.1	400	2.5	16	776	60/300	47	EVS-D 001 04594	SDD 1F	01942	SDZ 1 F	01943	
B AMD 450/2 2.2 kW F300	03353	2890	2.2	400	4.3	41	776	60/300	48	EVS-D 001 04594	SDD 1F	01942	SDZ 1 F	01943	
B AMD 450/2 3 kW F300	03354	2895	3	400 ³⁾	5.7	77	776	60/300	57	EVS-SD 001 04586	SDD 1F	01942	SDZ 1 F	01943	
B AMD 450/2 4 kW F300	03355	2910	4	400 ³⁾	7.4	95	776	60/300	68	EVS-SD 001 04586	SDD 1F	01942	SDZ 1 F	01943	
F300 Pole-switching, 2 speed, three phase motor, Dahlander winding γ/Δ, 400 V, 50 Hz, protection class IP55											Smoke exhaust fan control system				
B AMD 450/4/2 0.5/2.2 kW F300	03358	1420/2845	0.5/2.2	400	1.5/4.6	41	777	60/300	48	EVS-DA 001 04548	SDD 1F	01942	SDZ 1F	01943	
B AMD 450/4/2 0.8/3.1 kW F300	03359	1430/2890	0.8/3.1	400	2.0/6.2	77	777	60/300	59	EVS-DA 001 04548	SDD 1F	01942	SDZ 1F	01943	
F400 Three phase motor, 400 V, 50 Hz, protection class IP55											Smoke exhaust fan control system				
B AMD 450/4 0.75 kW F400	03205	1430	0.75	400	1.8	0	776	60/400	41	EVS-D 001 04594	SDD 1F	01942	SDZ 1F	01943	
B AMD 450/4 1.1 kW F400	03206	1440	1.1	400	2.5	16	776	60/400	48	EVS-D 001 04594	SDD 1F	01942	SDZ 1F	01943	
B AMD 450/2 2.2 kW F400	03198	2890	2.2	400	4.3	41	776	60/400	47	EVS-D 001 04594	SDD 1F	01942	SDZ 1F	01943	
B AMD 450/2 3 kW F400	03199	2895	3	400 ³⁾	5.7	77	776	60/400	60	EVS-SD 001 04586	SDD 1F	01942	SDZ 1F	01943	
B AMD 450/2 4 kW F400	03200	2910	4	400 ³⁾	7.4	95	776	60/400	70	EVS-SD 001 04586	SDD 1F	01942	SDZ 1F	01943	
F400 Pole-switching, 2 speed, three phase motor, Dahlander winding γ/Δ, 400 V, 50 Hz, protection class IP55											Smoke exhaust fan control system				
B AMD 450/4/2 0.5/2.2 kW F400	03207	1420/2845	0.5/2.2	400	1.5/4.6	41	777	60/400	48	EVS-DA 001 04548	SDD 1 F	01942	SDZ 1 F	01943	
B AMD 450/4/2 0.8/3.1 kW F400	03208	1430/2890	0.8/3.1	400	2.0/6.2	77	777	60/400	59	EVS-DA 001 04548	SDD 1 F	01942	SDZ 1 F	01943	

The flow volume and pressure increase information is required to determine the pitch angle.
²⁾ For Z/P version due to higher total weight Type allocation according to tables on page 157.

¹⁾ For ventilation / smoke extraction (once 120 min.).
³⁾ γ/Δ start-up.