S4D450-BP03-12

AC axial fan

sickle-shaped blades (S series), single-intake

with guard grille for full nozzle

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Nominal data

Type	**S4D450-BP03-12**
Motor	**M4D074-GA**

Phase		3~	3~
Nominal voltage	VAC	460	460
Wiring		Y	Y
Frequency	Hz	50	60
Method of obtaining data		cs	cs
Valid for approval/standard		-	-
Speed (rpm)	min^{-1}	1330	1460
Power consumption	W	285	380
Current draw	A	0.54	0.6
Max. back pressure	Pa	80	75
Max. back pressure	inH2O	0.32	0.3
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	65	55

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

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Technical description

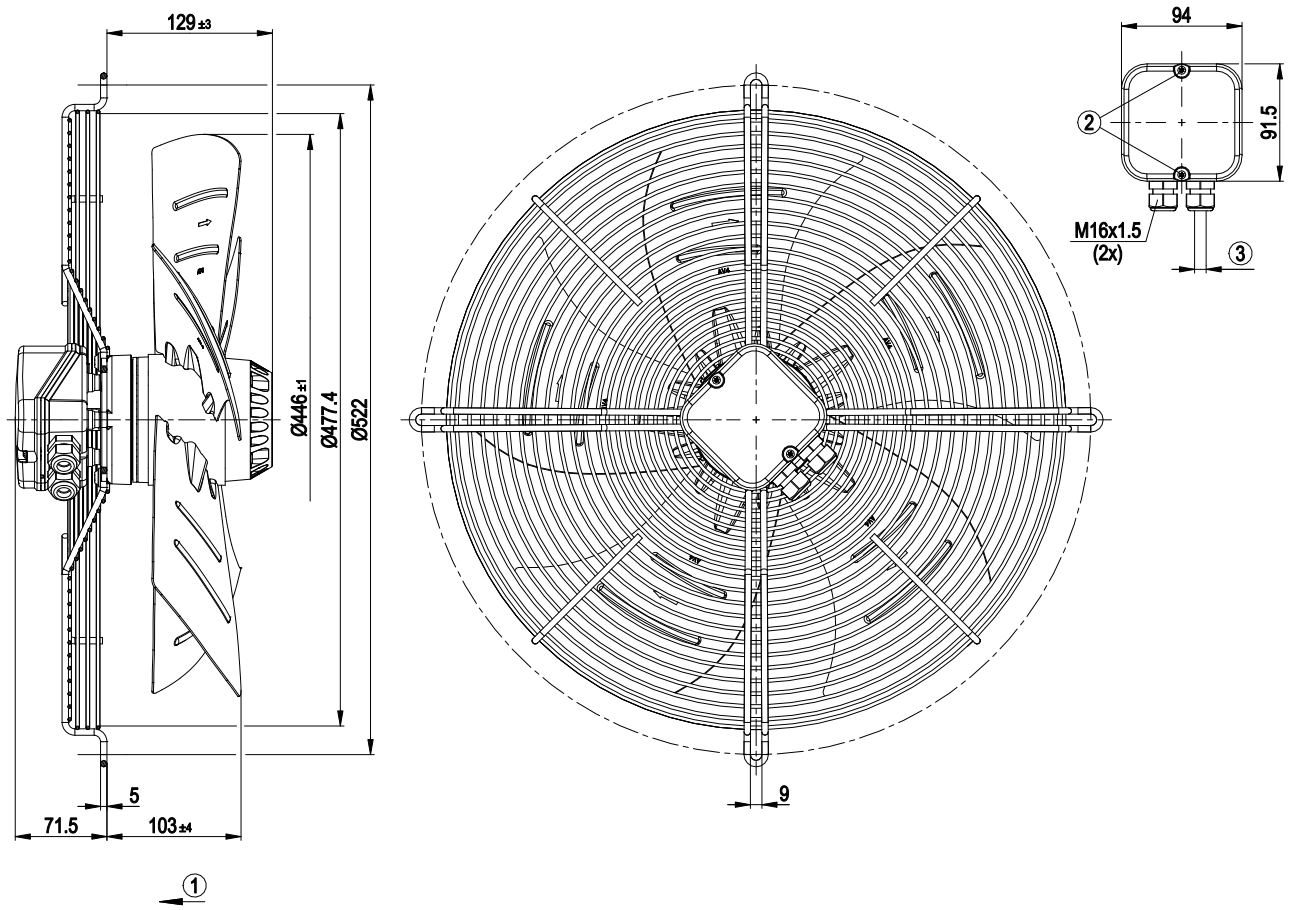
Weight	6.7 kg
Fan size	450 mm
Rotor surface	Painted black
Terminal box material	PC/ABS plastic
Blade material	Sheet steel, painted black
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H0+
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	Via terminal box
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1
Approval	CSA C22.2 No. 100; UL 1004-1

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Product drawing



1	Direction of air flow "V"
2	Tightening torque 0.5 ± 0.1 Nm
3	Cable diameter min. 5 mm, max. 10 mm, tightening torque 2 ± 0.3 Nm

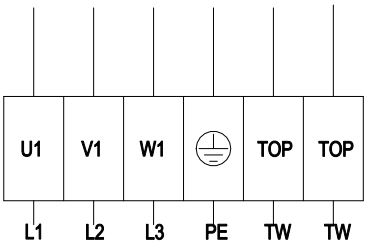
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Connection diagram



L1	= U1 = black	L2	= V1 = blue	L3	= W1 = brown
PE	green/yellow	TOP	2x gray		

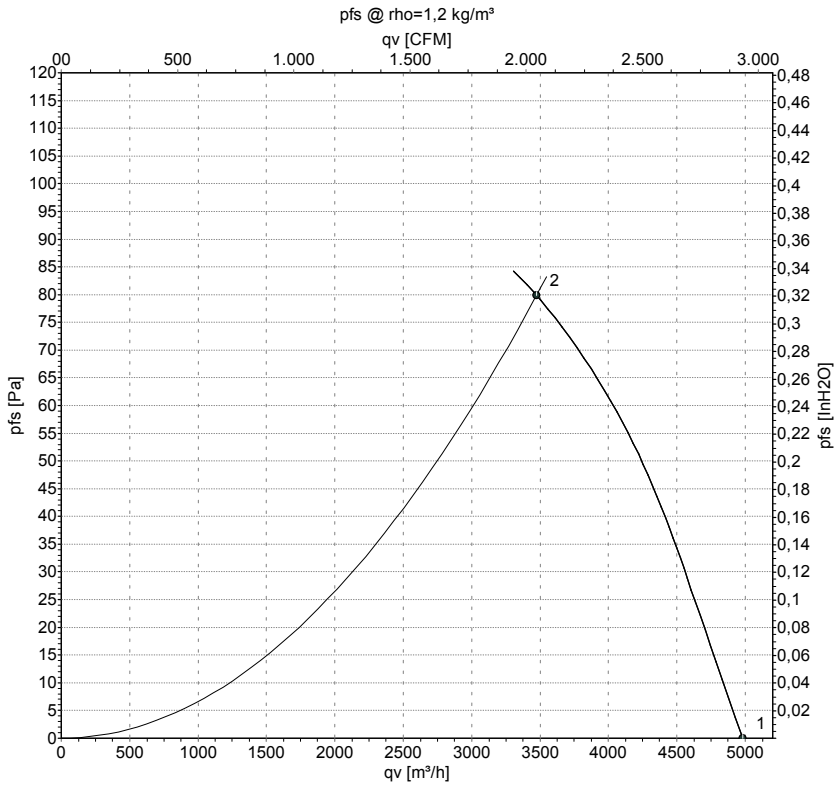
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Curves: Air performance 50 Hz



Measurement: LU-38669-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	U	f	n	P_e	I	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	460	50	1375	224	0.49	4980	0	2930	0.00
2	460	50	1330	285	0.54	3475	80	2045	0.32

U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

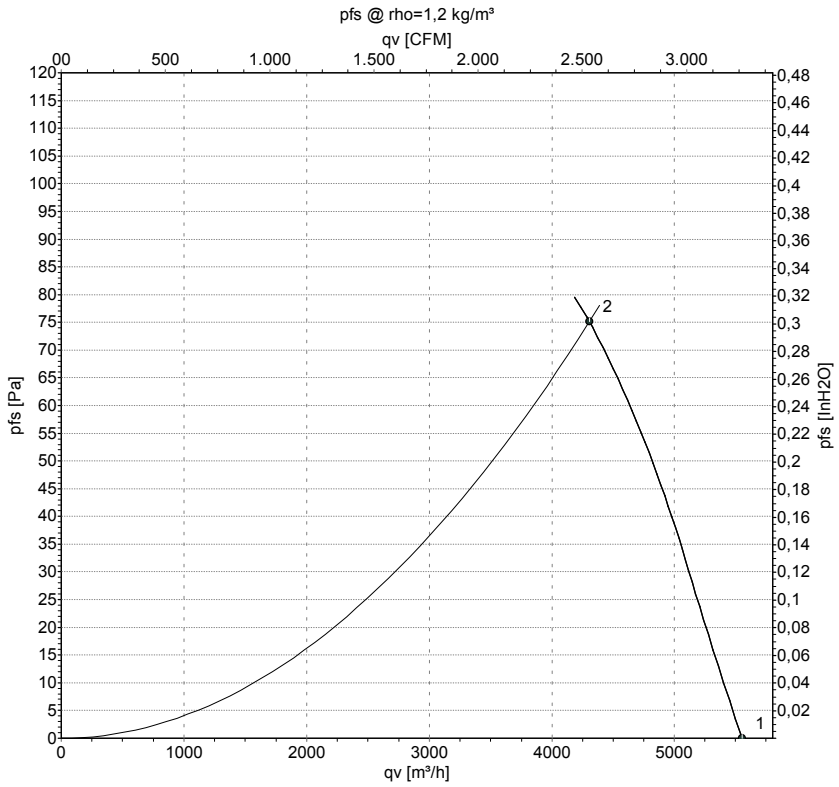
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Curves: Air performance 60 Hz



Measurement: LU-38670-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	U	f	n	P_e	I	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	460	60	1535	322	0.53	5550	0	3265	0.00
2	460	60	1460	380	0.60	4305	75	2535	0.30

U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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