

AC axial fan

sickle-shaped blades (S series), single-intake
with guard grille for full nozzle

S4E450-BP03-71 ebmpapst Datasheet

sales@fansco.com

www.fansco.com

Limited partnership · Headquarters Muldingen

Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Muldingen GmbH · Headquarters Muldingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	S4E450-BP03-71	
Motor	M4E074-GA	
Phase		1~
Nominal voltage	VAC	115
Frequency	Hz	60
Method of obtaining data		fa
Valid for approval/standard		CE
Speed (rpm)	min ⁻¹	1600
Power consumption	W	320
Current draw	A	2.80
Capacitor	µF	25
Capacitor voltage	VDB	220
Capacitor standard		S2 (CE)
Max. back pressure	Pa	35
Max. back pressure	inH ₂ O	0.14
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	45
Starting current	A	4.9

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



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Technical description

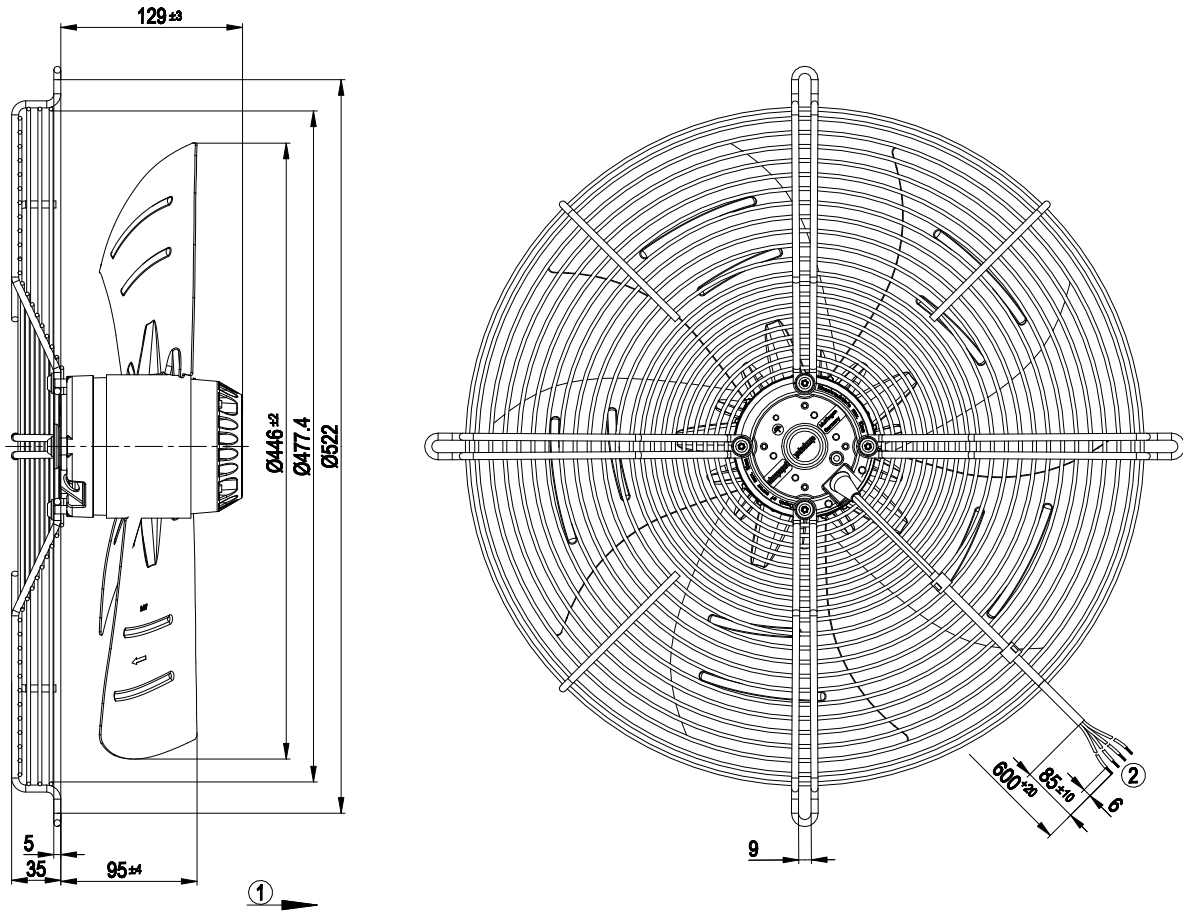
Weight	6.6 kg
Fan size	450 mm
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	"A"
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
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
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S2
Conformity with standards	EN 60335-1; CE
Approval	CSA C22.2 No. 100; UL 1004-1



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Product drawing



- 1 Direction of air flow "A"
- 2 Cable PFA AWG20, 4x crimped splices

Connection diagram



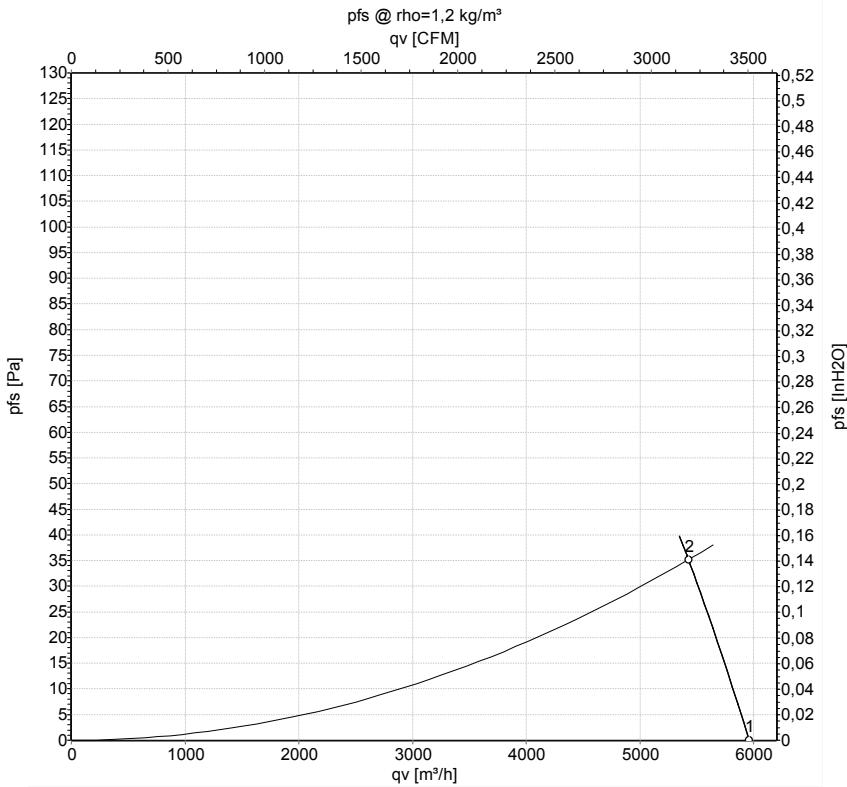
U1	blue	Z	brown	U2	black
PE	green/yellow				



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Curves: Air performance 60 Hz



Measurement: LU-50340-1

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	q _v	p _{fs}	q _v	p _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa	cfm	inH2O
1	115	60	1600	320	2.80	5960	0	3505	0.00
2	115	60	1545	345	3.00	5425	35	3195	0.14

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

