

S6E450-BP08-07

# AC axial fan

sickle-shaped blades (S series)

with guard grille for full nozzle



S6E450-BP08-07 ebmpapst Datasheet

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Limited partnership · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

## Nominal data

Type	S6E450-BP08-07		
Motor	M6E074-GA		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		-	-
Speed (rpm)	min <sup>-1</sup>	910	1020
Power consumption	W	140	190
Current draw	A	0.65	0.84
Capacitor	µF	4	4
Capacitor voltage	VDB	400	400
Max. back pressure	Pa	70	40
Max. back pressure	inH <sub>2</sub> O	0.28	0.16
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	65	60

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



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## Technical description

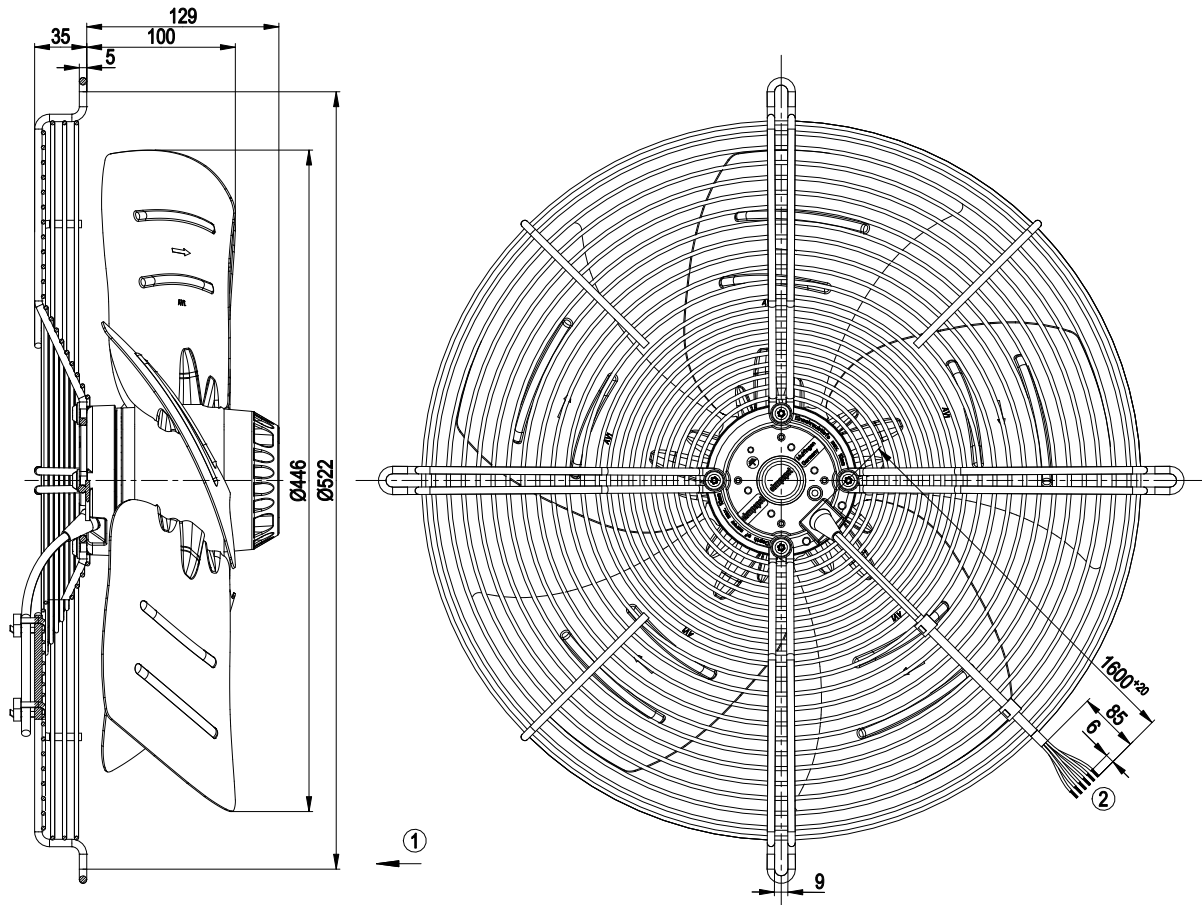
Weight	6.7 kg
Fan size	450 mm
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Number of blades	5
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
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
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



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## Product drawing



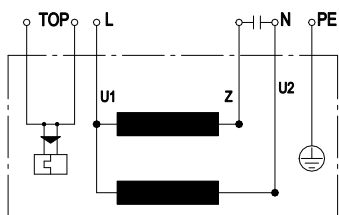
1	Direction of air flow "V"
2	Cable silicone 6G 0.5 mm <sup>2</sup> , 6x crimped splices



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## Connection diagram



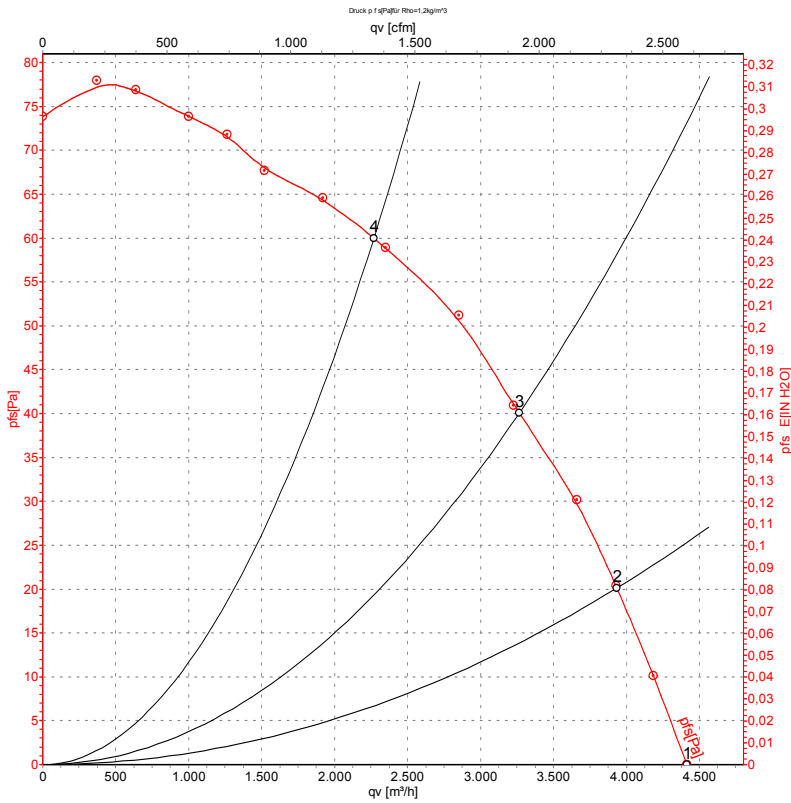
U1	blue	Z	brown	U2	black
PE	green/yellow	TOP	2x white		



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## Curves: Air performance 50 Hz



Measurement: LU-47222-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. 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 <sub>e</sub>	I	qv	p <sub>fs</sub>	qv	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	CFM	inH <sub>2</sub> O
1	230	50	910	140	0.65	4415	0	2595	0.00
2	230	50	900	150	0.68	3930	20	2315	0.08
3	230	50	875	159	0.72	3265	40	1920	0.16
4	230	50	845	172	0.78	2270	60	1335	0.24

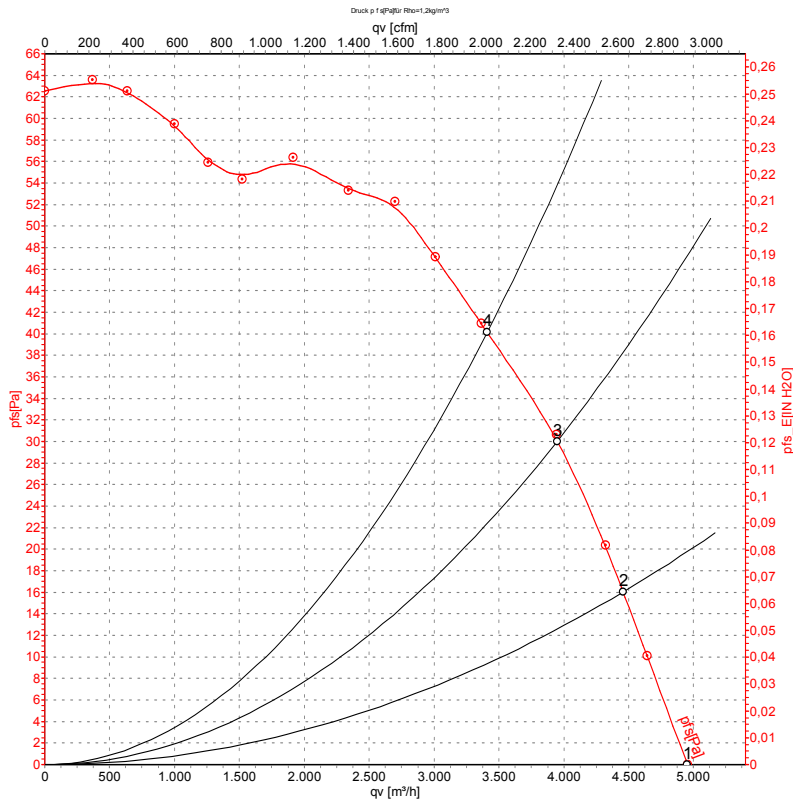
U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase



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## Curves: Air performance 60 Hz



Measurement: LU-47223-1

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 <sub>e</sub>	I	q <sub>v</sub>	p <sub>fs</sub>	q <sub>v</sub>	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	CFM	inH <sub>2</sub> O
1	230	60	1020	190	0.84	4950	0	2915	0.00
2	230	60	980	197	0.86	4455	16	2625	0.06
3	230	60	945	201	0.88	3950	30	2325	0.12
4	230	60	900	204	0.90	3410	40	2005	0.16

U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase

