S6E450-BP08-07

AC axial fan

sickled blades (S series)

with guard grille for full nozzle



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ErP2013 EXCEEDS THE NORM

Nominal data

Type	**S6E450-BP08-07**
Motor	**M6E074-GA**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		fa	fa
Valid for approval / standard		CE	CE
Speed	min^{-1}	910	1020
Power input	W	140	190
Current draw	A	0.65	0.84
Motor capacitor	µF	4	4
Capacitor voltage	VDB	400	400
Max. back pressure	Pa	70	40
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	65	60

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

Data according to ErP directive

Installation category	A
Efficiency category	Static
Variable speed drive	No
Specific ratio*	1.00

* Specific ratio = 1 + p_{fs} / 100 000 Pa

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}		24.6	24.6	28.6
Efficiency grade N		36	36	40
Power input P_e	kW	0.16		
Air flow q_v	m^3/h	2855		
Pressure increase p_{fs}	Pa	50		
Speed n	min^{-1}	865		

Data established at point of optimum efficiency

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Technical features

Mass	6.7 kg
Size	450 mm
Surface of rotor	Coated in black
Material of blades	Sheet steel, coated in black
Number of blades	5
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"F"
Humidity class	F1-2
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) brought out
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE

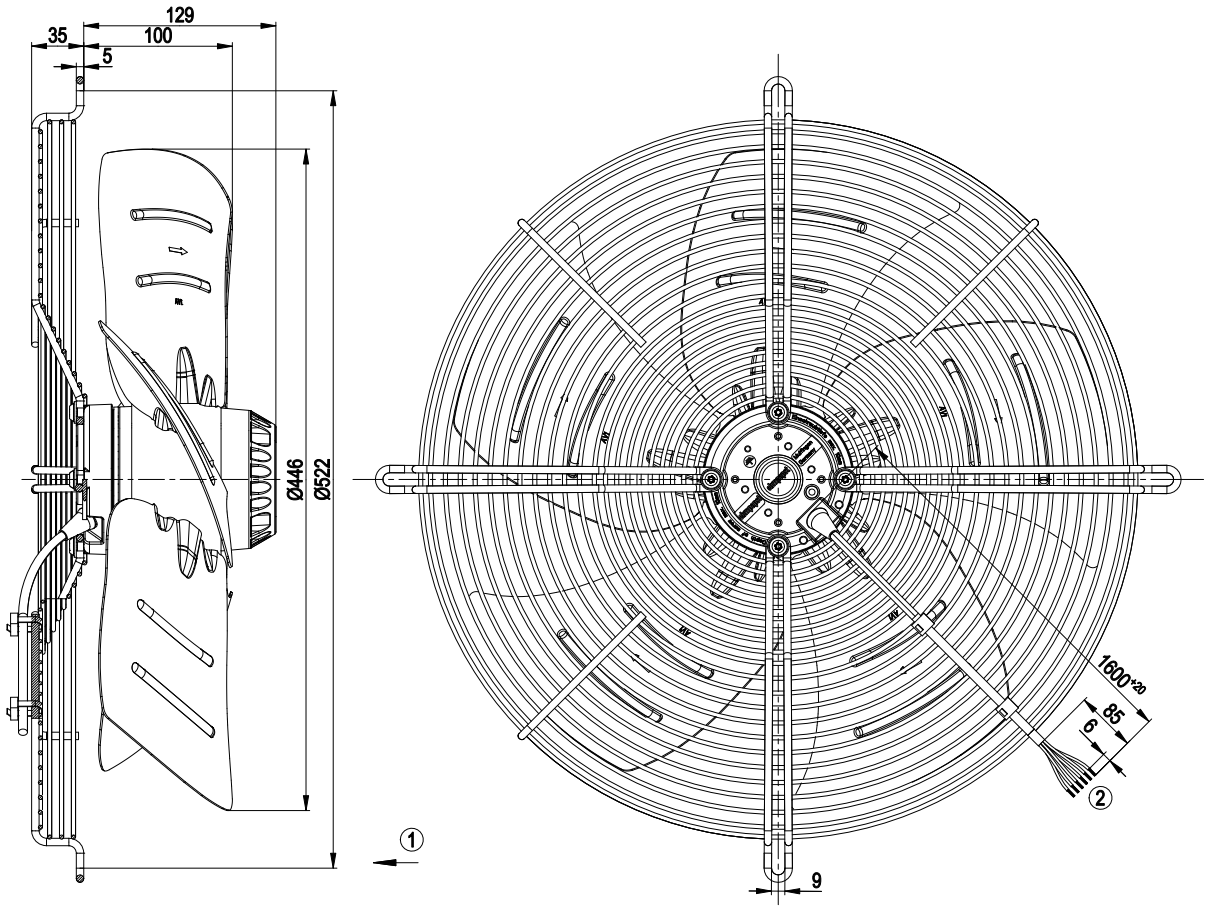
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Product drawing



1	Direction of air flow "V"
2	Connection line silicone 6G 0.5mm², 6x brass lead tips crimped

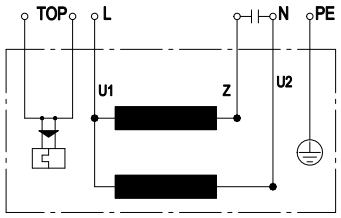
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Connection screen



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

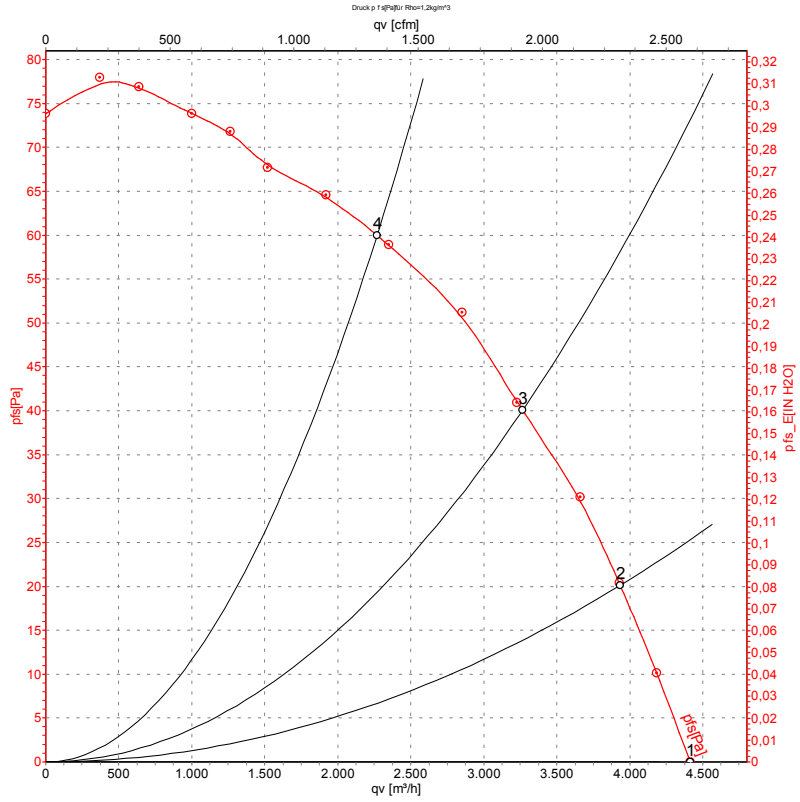
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Charts: Air flow 50 Hz



Measurement: LU-47222

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	U	f	n	P_e	I	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	230	50	910	140	0.65	4415	0
2	230	50	900	150	0.68	3930	20
3	230	50	875	159	0.72	3265	40
4	230	50	845	172	0.78	2270	60

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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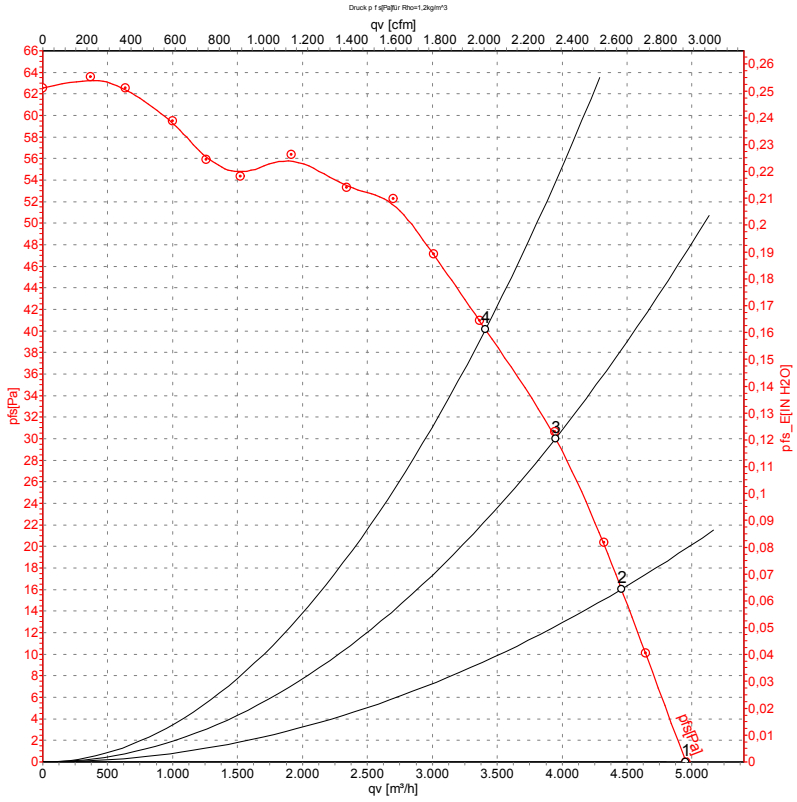
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Charts: Air flow 60 Hz



Measurement: LU-47223

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	U	f	n	P_e	I	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	230	60	1020	190	0.84	4950	0
2	230	60	980	197	0.86	4455	16
3	230	60	945	201	0.88	3950	30
4	230	60	900	204	0.90	3410	40

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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