

AC axial fan

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

S6E400-BP10-31 ebmpapst Datasheet

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Nominal data

Type	S6E400-BP10-31		
Motor	M6E074-DF		
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 ⁻¹	940	1080
Power consumption	W	120	170
Current draw	A	0.55	0.75
Capacitor	µF	3	3
Capacitor voltage	VDB	450	400
Max. back pressure	Pa	50	40
Max. back pressure	in. wg	0.2	0.16
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	50	40
Starting current	A	0.9	0.88

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



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Technical description

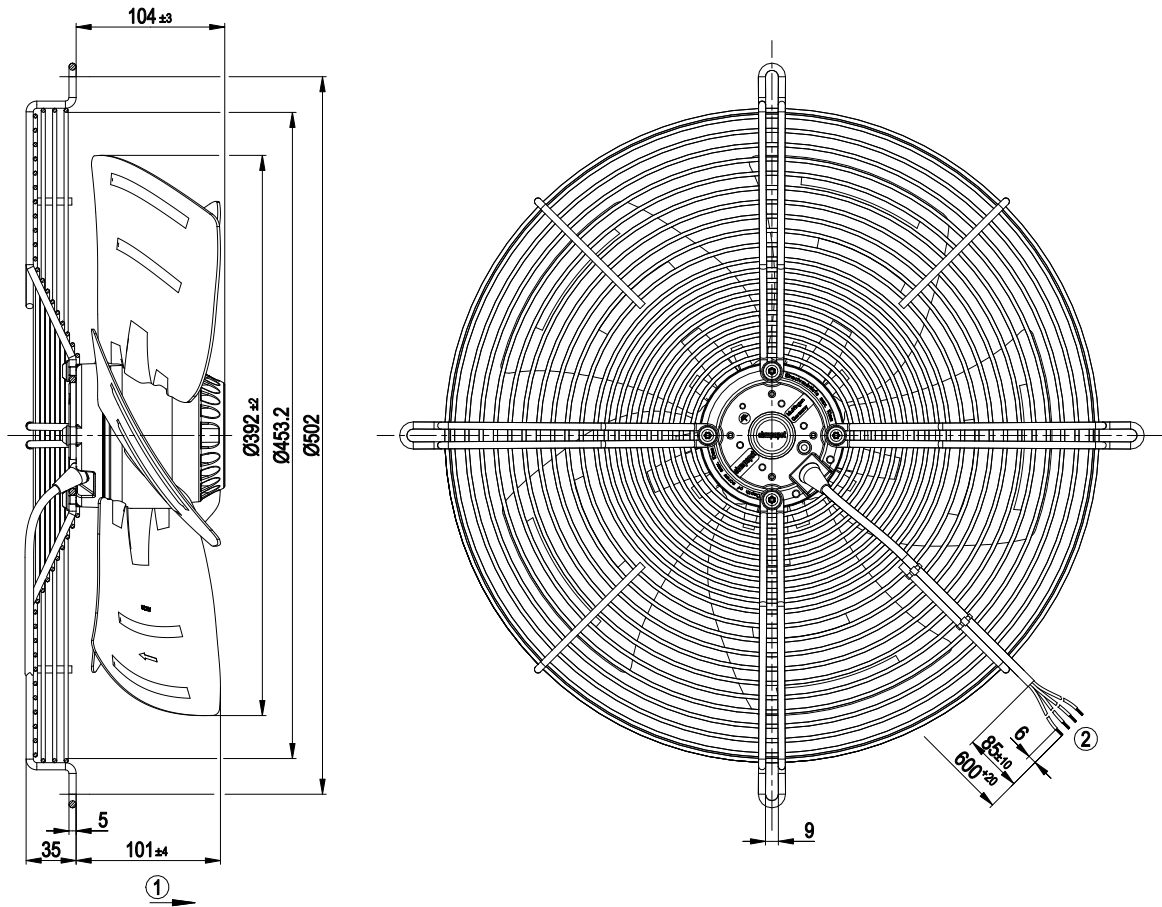
Weight	5.11 kg
Size	400 mm
Motor size	74
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	A
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H1
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)
Approval	CCC



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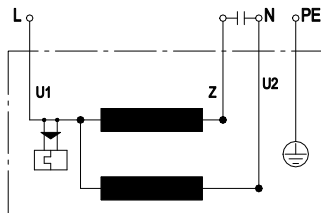
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Product drawing



1	Direction of air flow "A"
2	Cable silicone 4G 0.5 mm ² , 4x crimped splices

Connection diagram



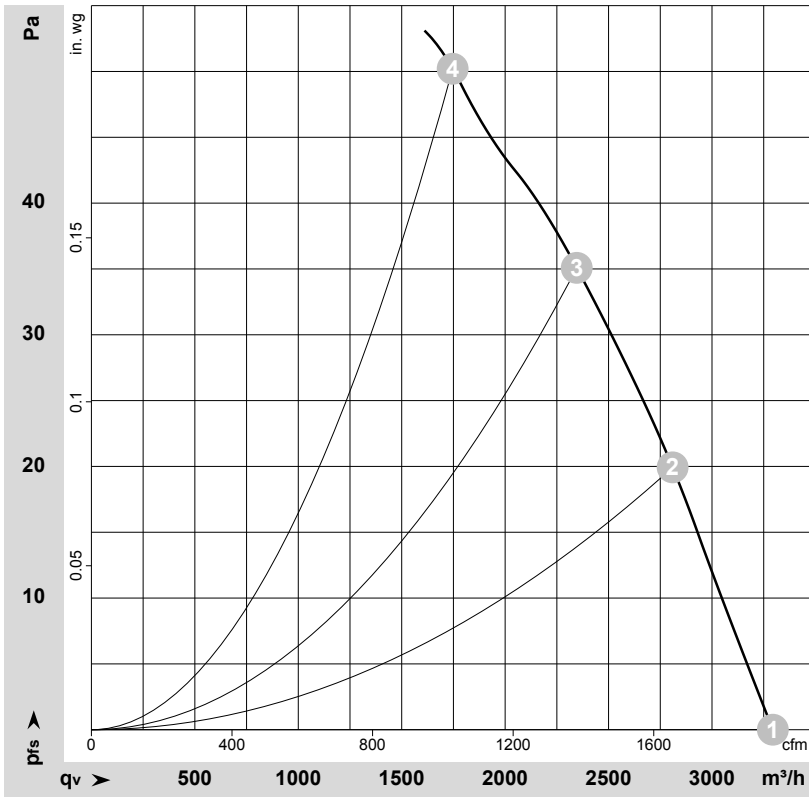
U1	blue	Z	brown	U2	black
PE	green/yellow				



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Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-27954-1

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

	Wired	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	in. wg
1	1~	230	50	940	120	0.55	3295	0	1940	0.00
2	1~	230	50	930	127	0.57	2810	20	1655	0.08
3	1~	230	50	915	131	0.59	2345	35	1380	0.14
4	1~	230	50	895	139	0.62	1745	50	1030	0.20

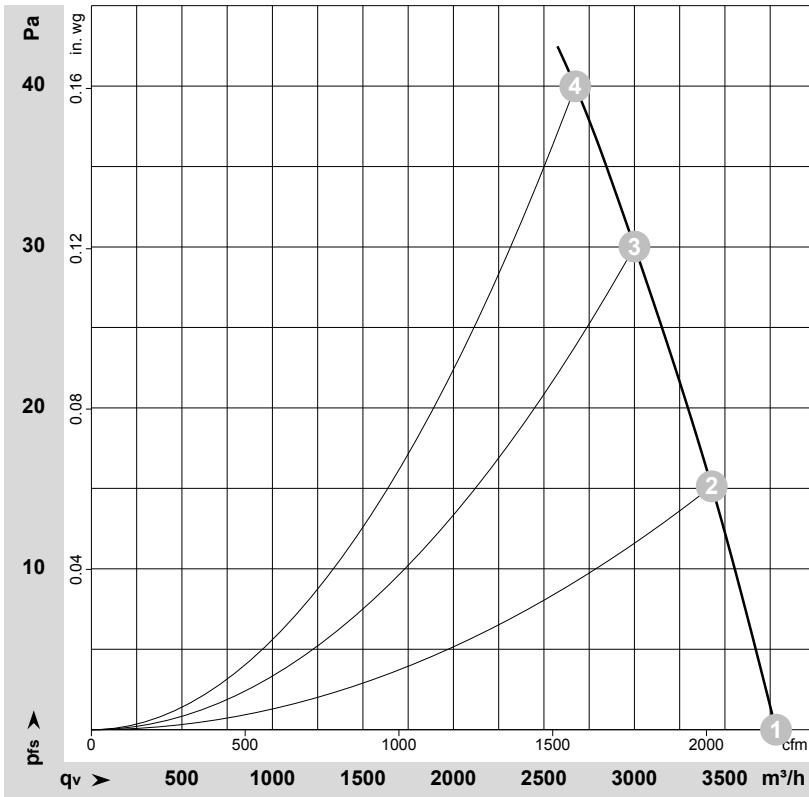
Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · P_{fs} = Pressure increase



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Curves: Air performance 60 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-27955-1

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

	Wired	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	in. wg
1	1~	230	60	1080	170	0.75	3780	0	2225	0.00
2	1~	230	60	1060	171	0.75	3425	15	2015	0.06
3	1~	230	60	1035	176	0.77	3000	30	1765	0.12
4	1~	230	60	1015	178	0.78	2675	40	1575	0.16

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

