S4E250-AI02-05

AC axial fan

sickled blades (S series)

with guard grille for short nozzle

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Nominal data

Type	**S4E250-AI02-05**
Motor	**M4E068-BF**

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}	1400	1630
Power input	W	42	45
Current draw	A	0.19	0.20
Motor capacitor	µF	1.5	1.5
Capacitor voltage	VDB	400	400
Capacitor standard		P0 (CE)	
Max. back pressure	Pa	80	100
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	55	70
Starting current	A	0.33	0.32

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

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Technical features

Mass	2.3 kg
Size	250 mm
Surface of rotor	Coated in black
Material of terminal box	ABS plastic
Material of blades	Sheet steel, coated in black
Material of guard grille	Steel, phosphated and coated in black plastic
Number of blades	9
Direction of air flow	"A"
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	"B"
Humidity class	F2-2
Max. permissible ambient motor temp. (transp./ storage)	+ 70 °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
Electrical leads	Via terminal box, integrated capacitor connected via terminal box
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE

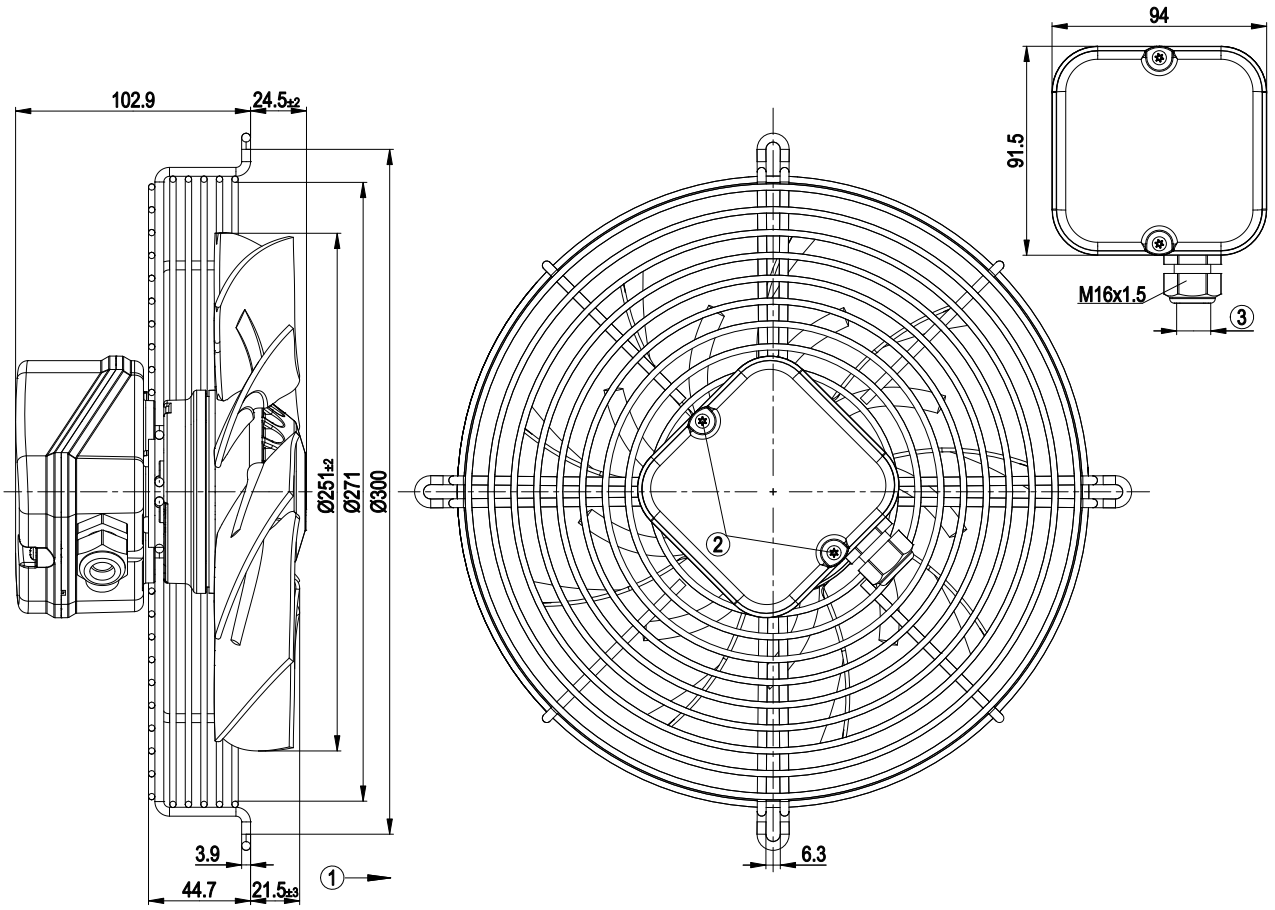
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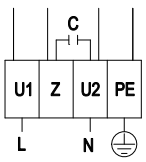
with guard grille for short nozzle

Product drawing



1	Direction of air flow "V"
2	Tightening torque 0.8±0.15 Nm
3	Cable diameter: max. 7.5 mm; tightening torque 2±0.3 Nm

Connection screen



L	= U1 = blue	Z	brown	N	= U2 = black
PE	green/yellow				

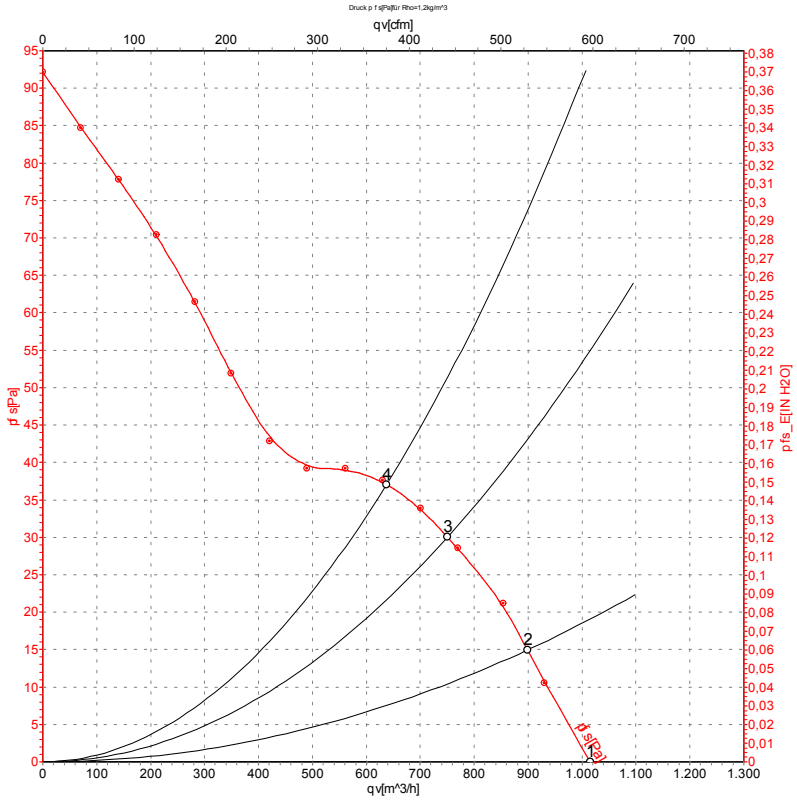
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Charts: Air flow 50 Hz



Measurement: LU-60036

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	1400	42	0.19	1015	0
2	230	50	1385	43	0.20	900	15
3	230	50	1370	44	0.20	750	30
4	230	50	1350	45	0.22	640	35

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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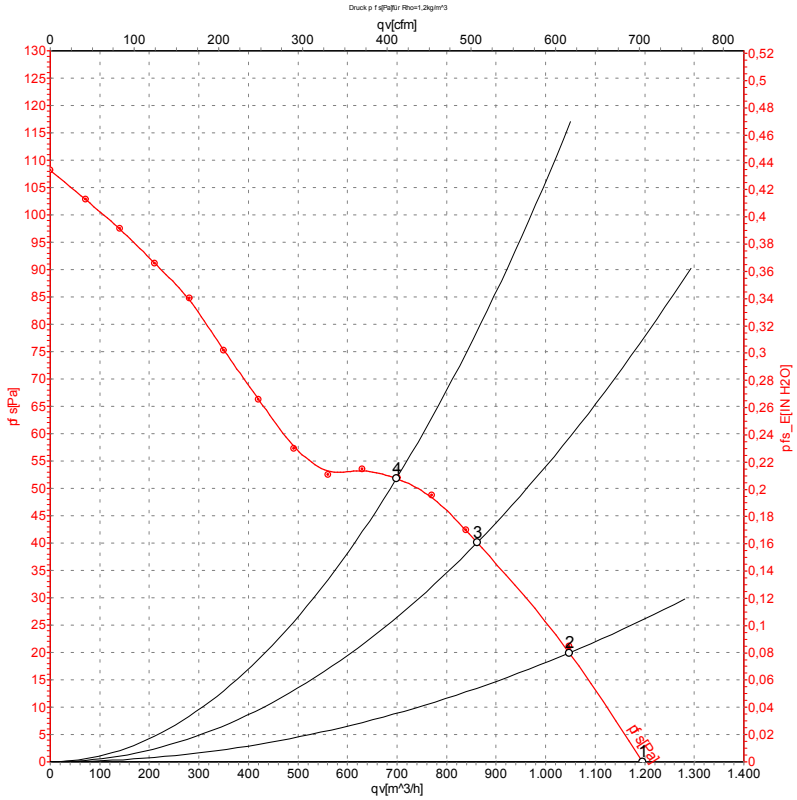
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Charts: Air flow 60 Hz



Measurement: LU-60037

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	1630	45	0.20	1200	0
2	230	60	1625	47	0.21	1045	20
3	230	60	1570	49	0.21	860	40
4	230	60	1570	50	0.23	700	50

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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