A3G250-AC71-10

EC axial fan

sickled blades (S series)

A3G250-AC71-10 ebmpapst Datasheet
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Nominal data

Type	**A3G250-AC71-10**
Motor	**M3G074-CF**

Phase		1~
Nominal voltage	VAC	115
Nominal voltage range	VAC	100 .. 130
Frequency	Hz	50/60
Type of data definition		me
Speed	min^{-1}	2730
Power input	W	160
Current draw	A	2
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

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	2.2 kg
Size	250 mm
Surface of rotor	Coated in black
Material of electronics housing	Die-cast aluminium
Material of blades	Sheet steel, coated in black
Number of blades	7
Direction of rotation	"V"
Type of protection	IP 44
Insulation class	"B"
Humidity class	F3-1
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
Technical features	- Control input 0-10 VDC / PWM - Output 10 VDC, max. 1.1 mA - Tach output - Over-temperature protected motor - Motor current limit - Soft start
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 0.25 mA
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
Approval	VDE; CCC; UL 2111; CSA C22.2 Nr.77

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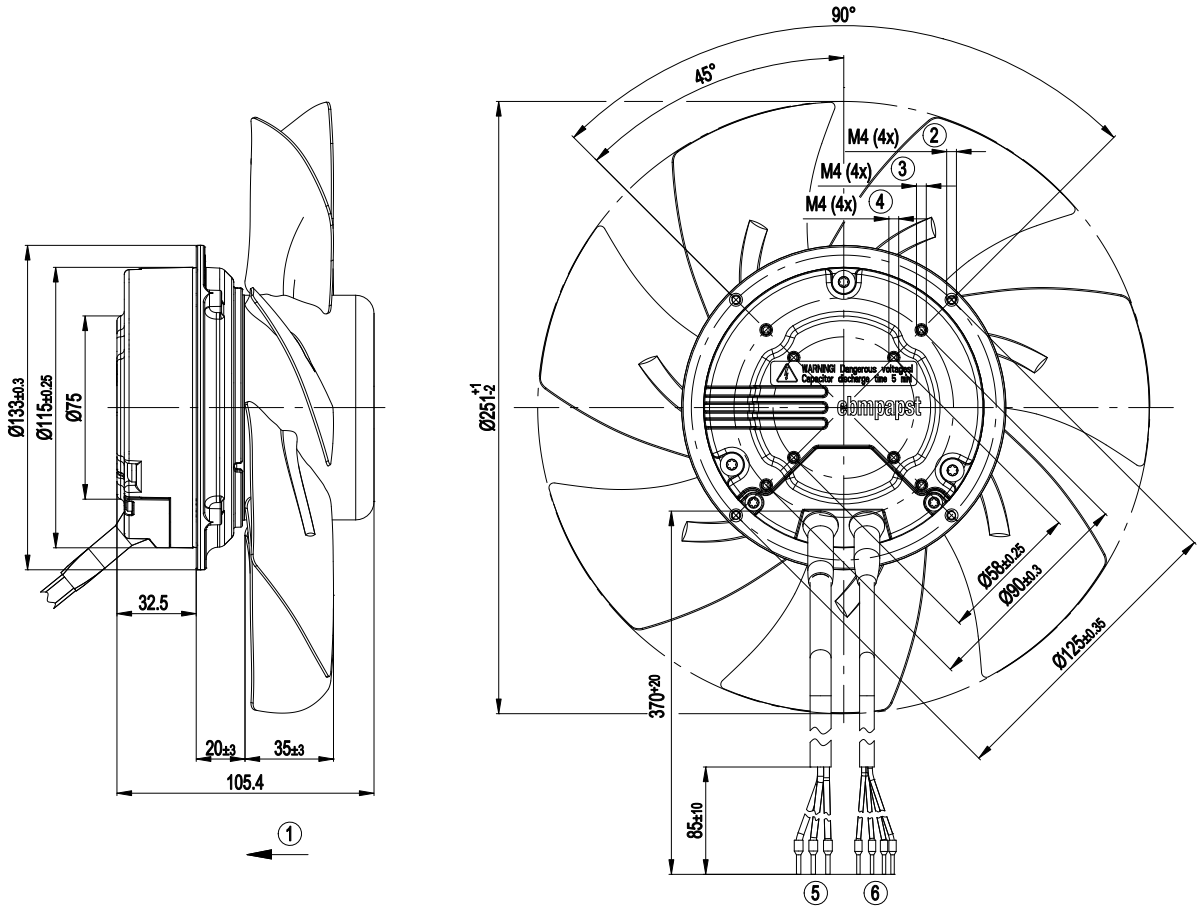
Product drawing



1	Direction of air flow "V"
2	Depth of screw 8 - 10 mm
3	Core removing hole prepared for self-tapping screw M4, depth of screw max. 6 mm
4	Core removing hole prepared for self-tapping screw M4, depth of screw max. 8 mm
5	Connection line AWG 18, 3 x crimped core-end sleeve - UL/cUL style 2517/1569 Ø1.9 2.3
6	Connection line AWG 22, 4 x crimped core-end sleeve - UL/cUL style 2464/1061 Ø1.2 1.35

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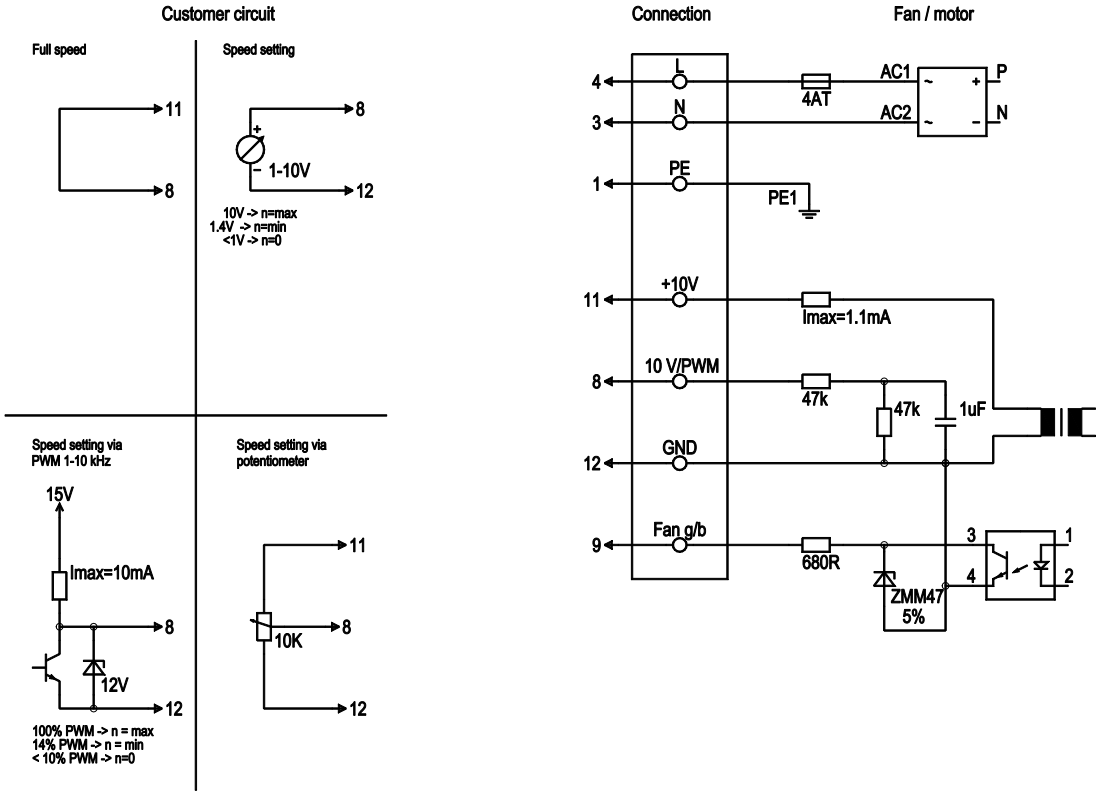
Connection screen



Line	No.	Signal	Colour	Function / assignment
	4	L	black	Power supply 115 VAC, 50-60 Hz, see type plate for voltage range
	3	N	blue	Neutral conductor
	1	PE	green/yellow	Protective earth
	8	0-10 V PWM	yellow	Control input 0 - 10 V or PWM, electrically isolated
	9	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated
	11	10V / max. 1.1 mA	red	Voltage output 10 V / max. 1.1 mA, electrically isolated
	12	GND	blue	GND - Connection for control interface

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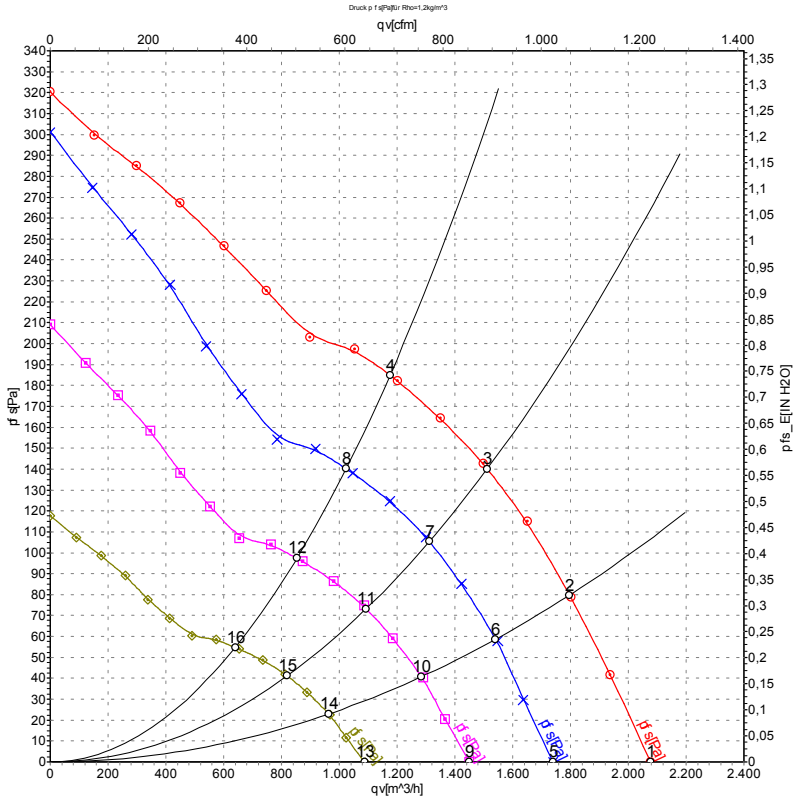
Charts: Air flow 50 Hz



Measurement: LU-127641

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_{ed}	I	LpA_{in}	LwA_{in}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa
1	115	50	2865	139	1.83	70	77	2080	0
2	115	50	2795	151	1.96	72	79	1795	80
3	115	50	2765	157	2.05	73	80	1510	140
4	115	50	2730	160	2.00	74	81	1175	185
5	115	50	2400	81	1.07	66	73	1740	0
6	115	50	2400	95	1.24	68	75	1540	60
7	115	50	2400	102	1.34	70	77	1310	106
8	115	50	2400	104	1.36	71	78	1025	140
9	115	50	2000	47	0.62	62	69	1450	0
10	115	50	2000	55	0.72	64	71	1285	41
11	115	50	2000	59	0.77	66	73	1095	74
12	115	50	2000	60	0.79	67	74	855	97
13	115	50	1500	20	0.26	56	63	1085	0
14	115	50	1500	23	0.30	58	65	965	23
15	115	50	1500	25	0.33	60	67	820	41
16	115	50	1500	26	0.33	61	68	640	55

U = Supply voltage · f = Frequency · n = Speed · P_{ed} = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · qv = Air flow
p_{fs} = Pressure increase