

EC axial fan

sickled blades (S series)

A3G300-AL23-08 ebmpapst Datasheet

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Nominal data

Type	A3G300-AL23-08	
Motor	M3G055-DF	
Phase		1~
Nominal voltage	VAC	115
Nominal voltage range	VAC	100 .. 130
Frequency	Hz	50/60
Type of data definition		ml
State		prelim.
Speed (rpm)	min ⁻¹	1650
Power input	W	110
Current draw	A	1.6
Max. back pressure	Pa	105
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	50

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

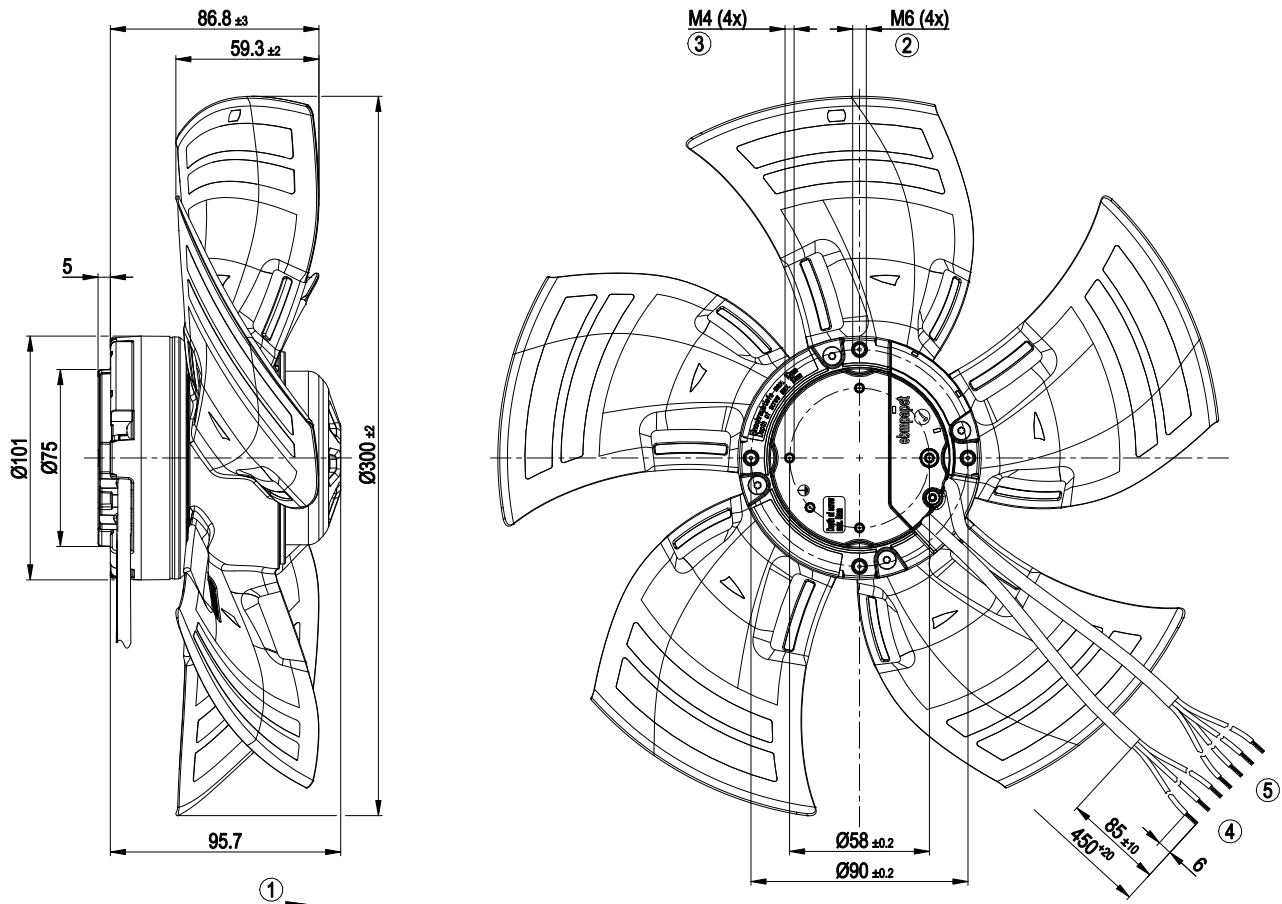
Mass	1.7 kg
Size	300 mm
Surface of rotor	Thick layer passivated
Material of blades	Press-fitted sheet steel blank, sprayed with PP plastic
Number of blades	5
Direction of air flow	"A"
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None, open rotor
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 10 mA - Output limit - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Over-temperature protected electronics / motor - Line undervoltage detection
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Locked-rotor protection
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	C22.2 Nr.77 + CAN/CSA-E60730-1; UL 1004-7 + 60730



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Product drawing

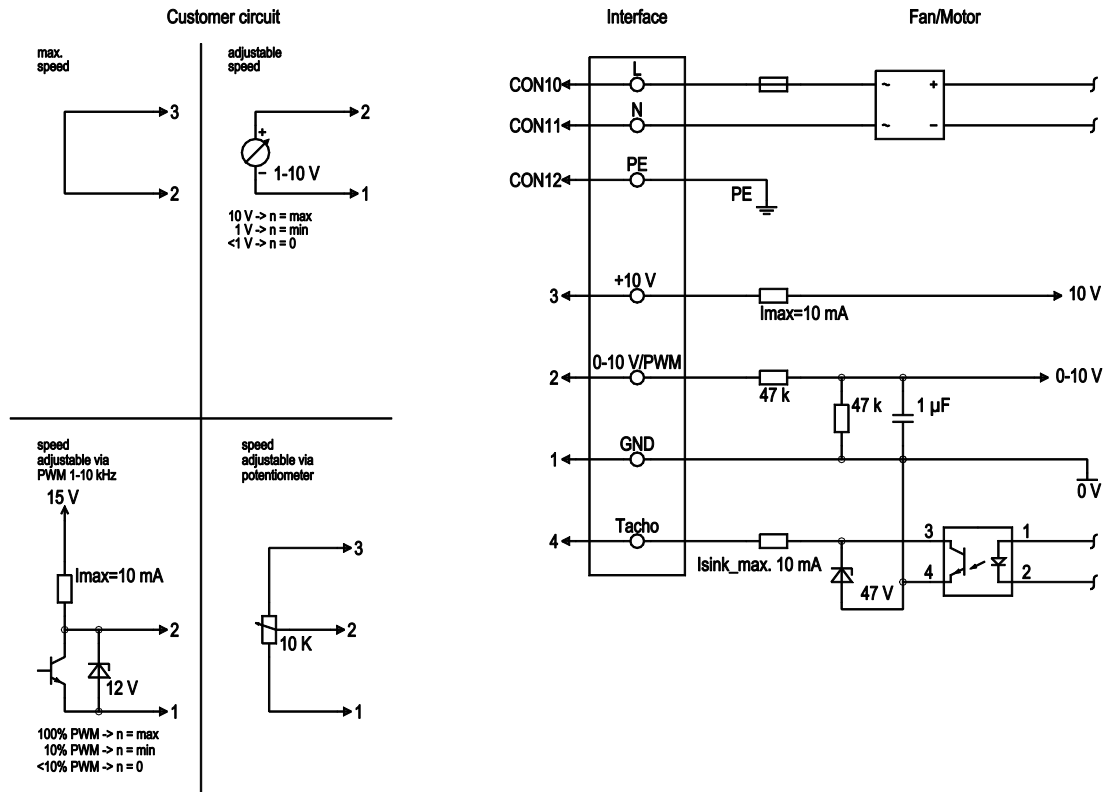


1	Direction of air flow "A"
2	Thread reach max. 10 mm
3	Thread reach max. 5 mm
4	Connection line PVC AWG20, 3x lead tips crimped
5	Connection line PVC AWG22, 4x lead tips crimped

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Connection screen



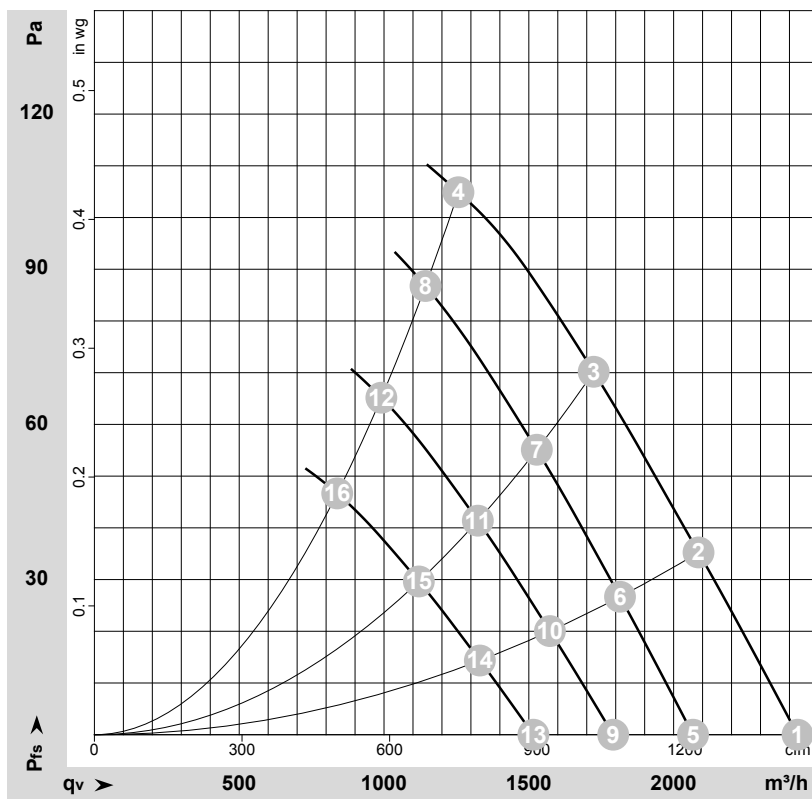
No.	Conn.	Designation	Colour	Function / assignment
	CON10	L	black	Mains connection, power supply, phase, see type plate for voltage range
	CON11	N	blue	Mains connection, power supply, neutral conductor, see type plate for voltage range
	CON12	PE	green/yellow	Earth connection
	2	0- 10V PWM	yellow	0-10 V/PWM control input, Ri=100 kΩ, SELV
	4	Tach	white	Speed monitoring output, open collector, 1 pulse per revolution, Isink max = 10 mA, SELV
	3	+10 V	red	Fixed voltage output 10 VDC +/-3 %, Imax. 10 mA, short-circuit-proof, power supply for ext. devices (e.g. potentiometer), SELV
	1	GND	blue	Signal ground for control interface, SELV



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Charts: Air flow 50 Hz



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

Measurement: LU-169337-1

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

	Stage	U	f	n	P _{ed}	I	q _v	p _{fs}	q _v	p _{fs}
		V	Hz	min ⁻¹	W	A	m ³ /h	Pa	cfm	inH ₂ O
1	2	115	50	1760	85	1.30	2430	0	1430	0.00
2	2	115	50	1725	94	1.41	2085	35	1230	0.14
3	2	115	50	1695	101	1.51	1725	70	1015	0.28
4	2	115	50	1650	110	1.60	1255	105	740	0.42
5	2	115	50	1500	53	0.80	2065	0	1215	0.00
6	2	115	50	1500	62	0.93	1815	27	1070	0.11
7	2	115	50	1500	70	1.05	1530	55	900	0.22
8	2	115	50	1500	83	1.22	1145	87	675	0.35
9	2	115	50	1300	34	0.52	1790	0	1055	0.00
10	2	115	50	1300	40	0.61	1575	20	925	0.08
11	2	115	50	1300	46	0.68	1325	41	780	0.16
12	2	115	50	1300	54	0.80	990	65	585	0.26
13	2	115	50	1100	21	0.32	1515	0	890	0.00
14	2	115	50	1100	24	0.37	1330	14	785	0.06
15	2	115	50	1100	28	0.41	1120	30	660	0.12
16	2	115	50	1100	33	0.48	840	47	495	0.19

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power input · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase

