S3G300-AY06-62

EC axial fan - HyBlade

sickled blades (S series), single inlet

with guard grille for short nozzle

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Nominal data

Type	**S3G300-AY06-62**	
Motor	**M3G074-DF**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Type of data definition		ml
Speed (rpm)	min^{-1}	2100
Power input	W	165
Current draw	A	1.37
Max. back pressure	Pa	130
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

Data according to ErP directive

		Actual	Request 2015
01 Overall efficiency η_{es}	%	43.7	28.6
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		55.1	40
05 Variable speed drive		Yes	

09 Power input P_{ed}	kW	0.16
09 Air flow q_v	m^3/h	1805
09 Pressure increase p_{fs}	Pa	127
10 Speed (rpm) n	min^{-1}	2090
11 Specific ratio*		1.00

Data definition with optimum efficiency.
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

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

LU-173022

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Technical features

Mass	3.5 kg
Size	300 mm
Surface of rotor	Coated in black
Material of terminal box	ABS plastic
Material of blades	Press-fitted sheet steel blank, sprayed with PP plastic
Material of guard grille	Steel, coated in black plastic (RAL9005)
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	Shaft horizontal or rotor on bottom; rotor on top on request
Condensate discharge holes	None, open rotor
Cooling bore / aperture	Rotor-side
Operation mode	S1
Motor bearing	Ball bearings made of stainless steel
Technical features	- Output 10 VDC, max. 10 mA - Tach output - Output limit - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Overvoltage detection - Over-temperature protected electronics / motor - Line undervoltage detection
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Electrical leads	Via terminal box
Motor protection	PTC resistor
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE

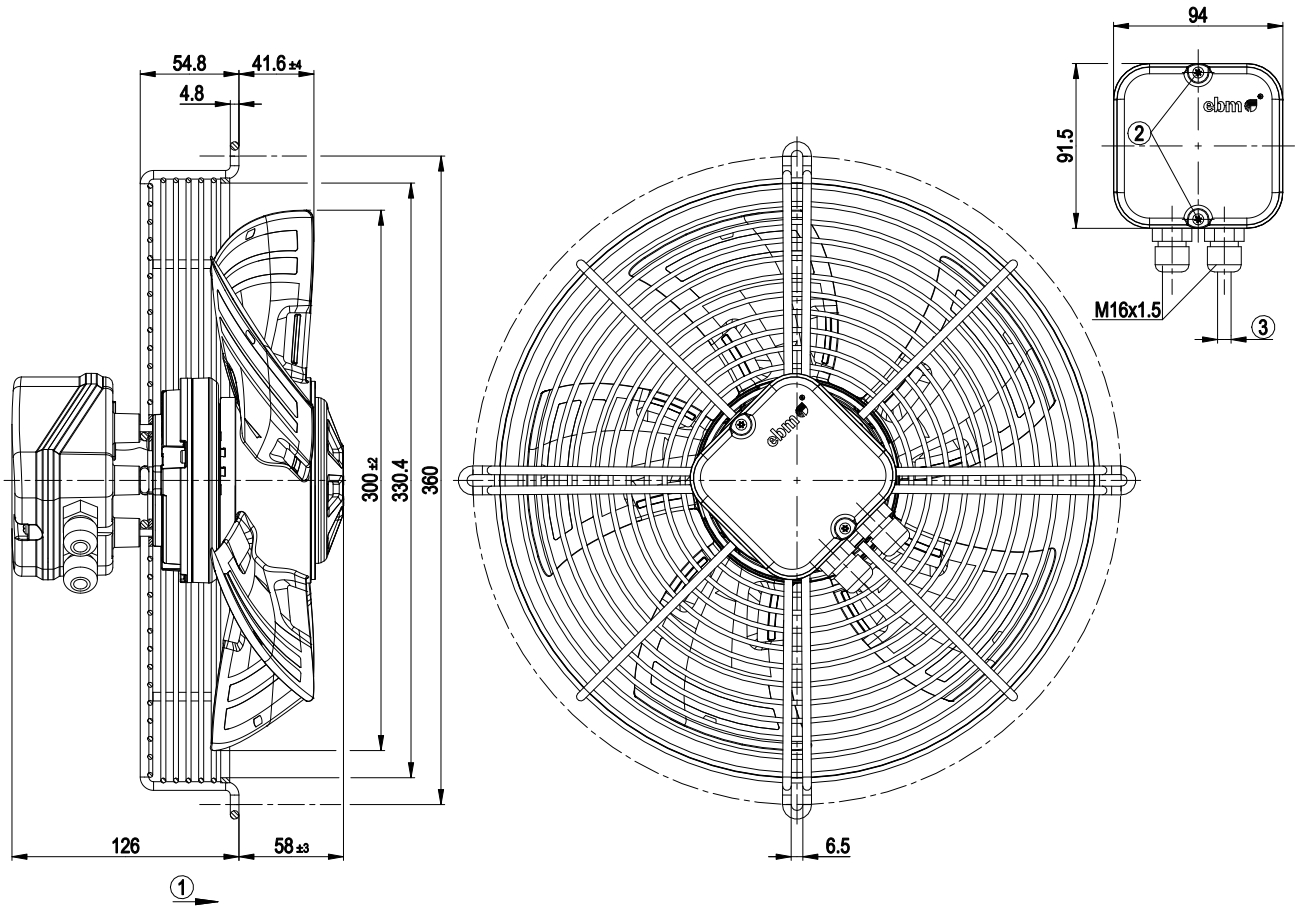
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Product drawing



1	Direction of air flow "A"
2	Tightening torque 0.5±0.1 Nm
3	Cable diameter max. 10 mm, tightening torque 3±0.4 Nm

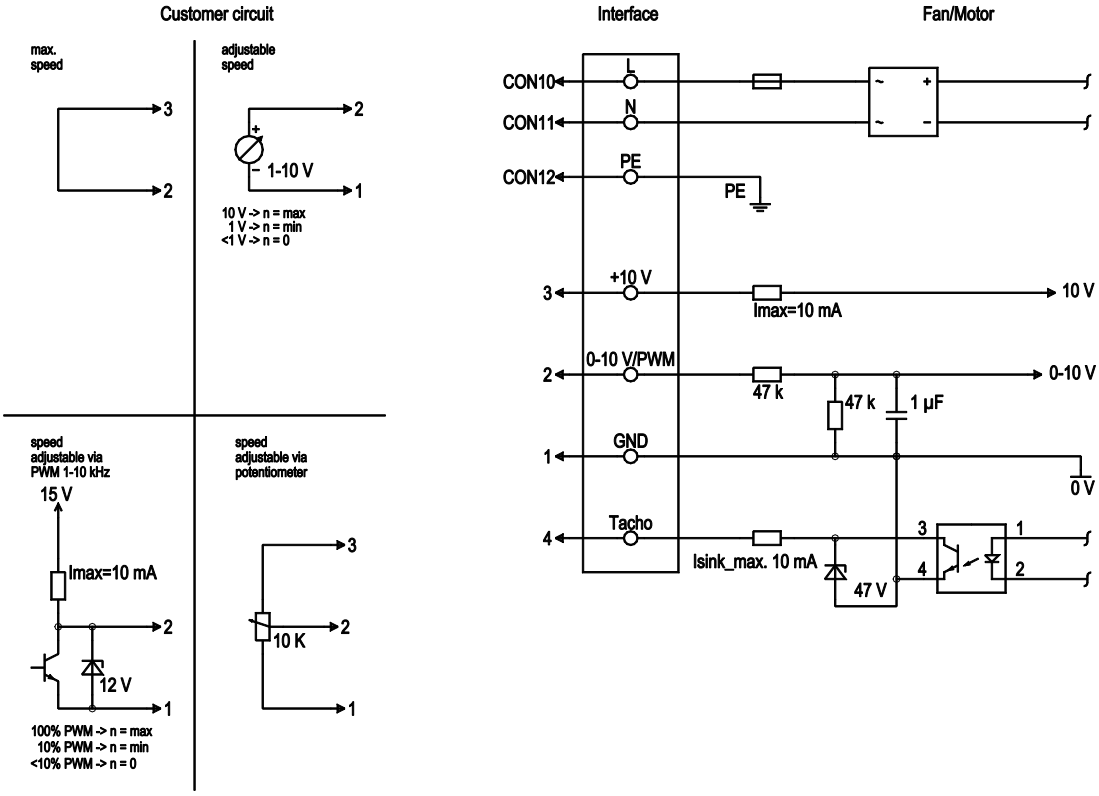
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Connection screen



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

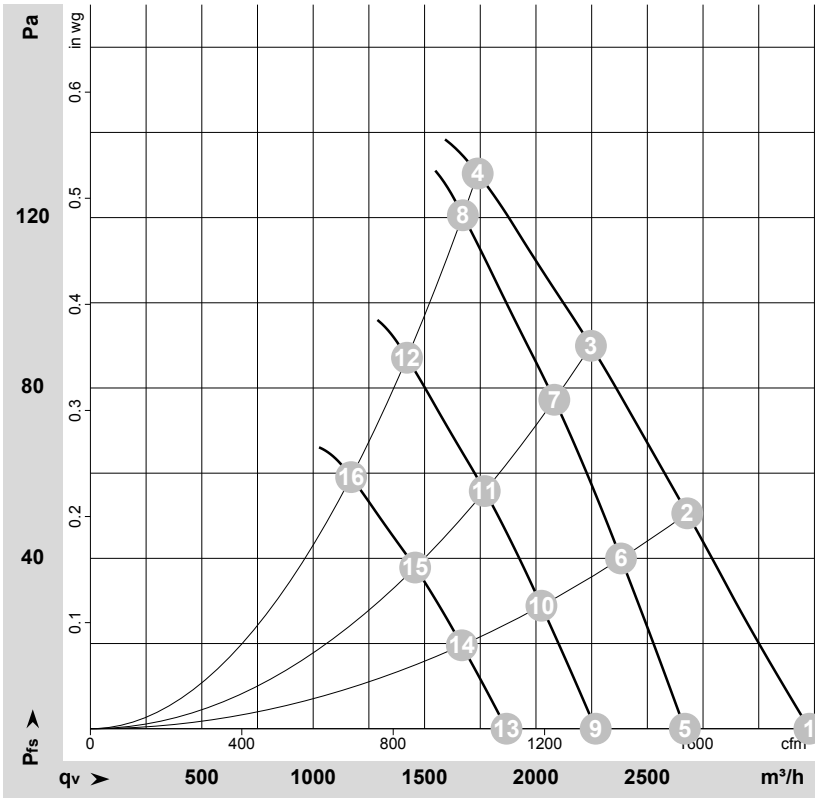
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Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-173022-1

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

	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	inH2O
1	230	50	2420	165	1.37	3225	0	1900	0.00
2	230	50	2250	165	1.37	2680	50	1575	0.20
3	230	50	2160	165	1.37	2245	90	1325	0.36
4	230	50	2100	165	1.37	1740	130	1025	0.52
5	230	50	2000	96	0.79	2670	0	1570	0.00
6	230	50	2000	117	0.96	2380	40	1400	0.16
7	230	50	2000	131	1.08	2085	78	1225	0.31
8	230	50	2000	147	1.21	1670	121	985	0.49
9	230	50	1700	59	0.48	2270	0	1335	0.00
10	230	50	1700	72	0.59	2025	29	1190	0.12
11	230	50	1700	80	0.66	1770	56	1040	0.22
12	230	50	1700	90	0.75	1420	87	835	0.35
13	230	50	1400	33	0.27	1870	0	1100	0.00
14	230	50	1400	40	0.33	1665	20	980	0.08
15	230	50	1400	45	0.37	1460	38	860	0.15
16	230	50	1400	51	0.42	1170	59	690	0.24

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

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