S3G300-AK13-53

EC axial fan - ESM

sickled blades (S series)

with guard grille for short nozzle

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Nominal data

Type	**S3G300-AK13-53**
Motor	**M3G055-CF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Type of data definition		ml
Speed (rpm)	min^{-1}	1500
Power input	W	85
Current draw	A	0.8
Max. back pressure	Pa	85
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	55

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	2.4 kg
Size	300 mm
Surface of rotor	Thick layer passivated
Material of terminal box	ABS plastic
Material of blades	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	Any
Condensate discharge holes	None, open rotor
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 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	Locked-rotor protection
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE

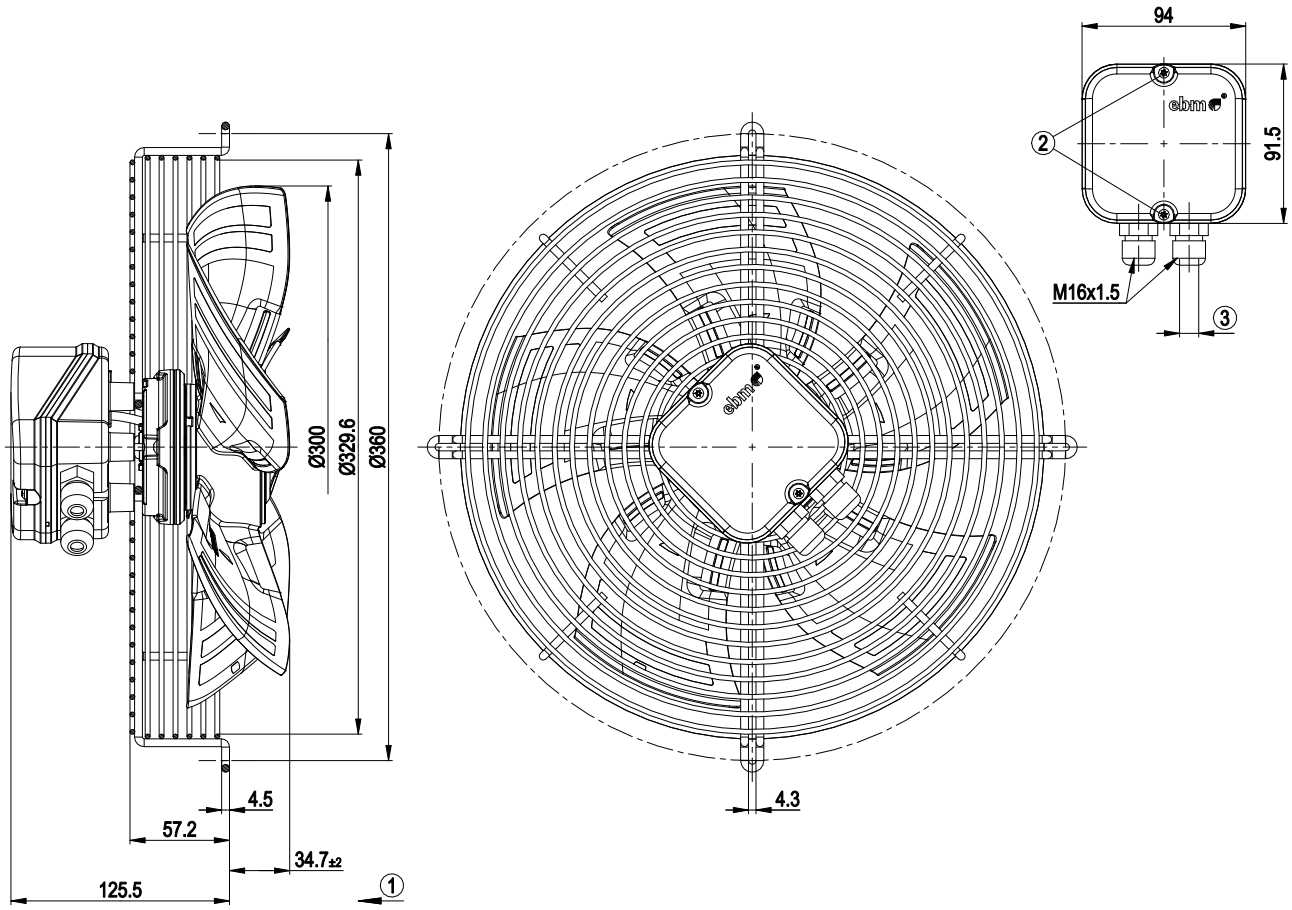
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Product drawing



1	Direction of air flow "A"
2	Tightening torque 0.5±0.1 Nm
3	Cable diameter max. 7.5 mm, tightening torque 1.3±0.2 Nm

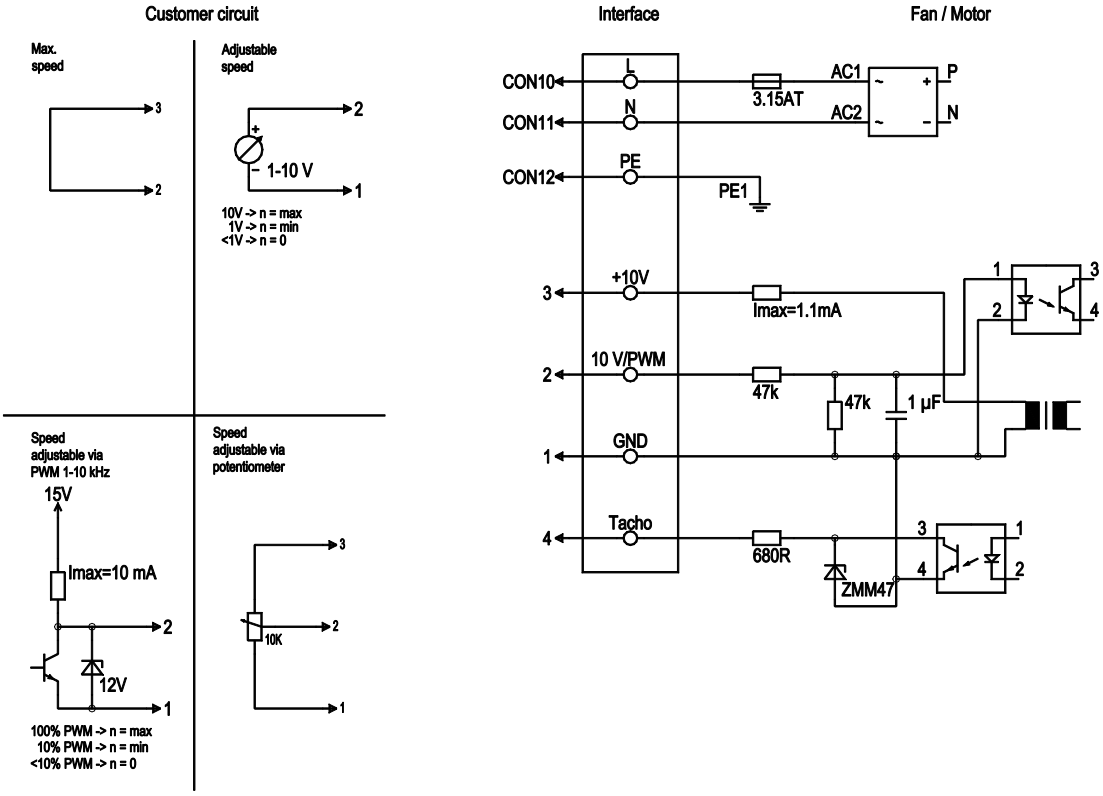
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Connection screen



No.	Conn.	Designation	Colour	Function / assignment
	CON10	L	black	Power supply 230 VAC, 50-60 Hz, see type plate for voltage range
	CON11	N	blue	Neutral conductor
	CON12	PE	green/yellow	Protective earth
	1	GND	blue	GND connection for control interface
	2	0-10V PWM	yellow	Control input 0-10 V or PWM, electrically isolated
	3	10 V / max. 1,1 mA	red	Voltage output 10 VDC 1.1 mA, electrically isolated, short-circuit-proof
	4	Tacho	white	Tach output: Open collector, 1 pulse per revolution, electrically isolated

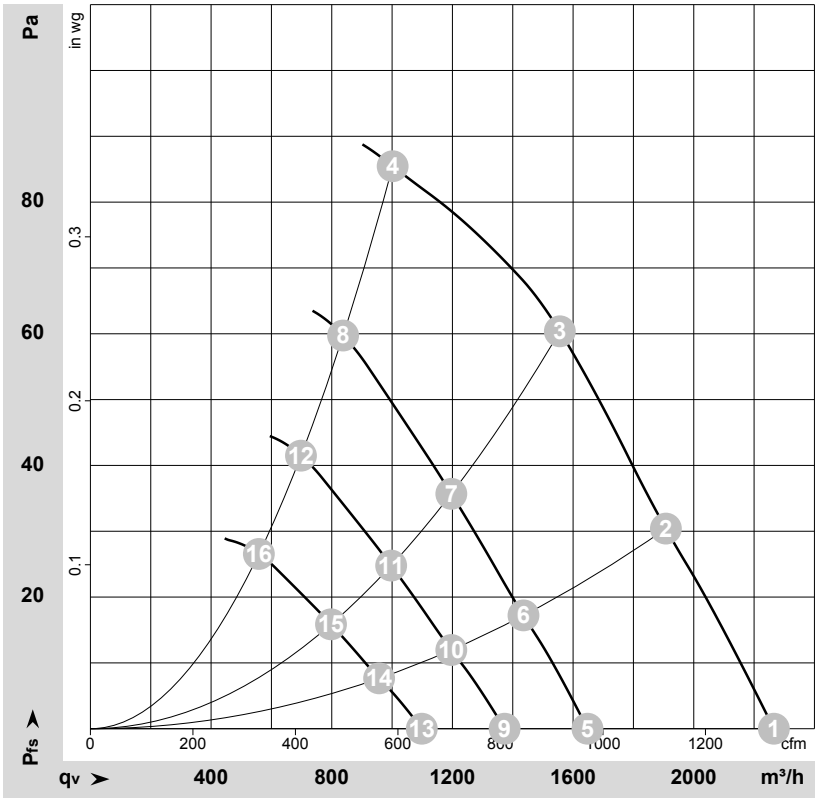
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Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-133717-1

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	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	230	50	1650	72	0.63	55	63	2265	0	1335	0.00
2	230	50	1595	79	0.67	56	63	1910	30	1125	0.12
3	230	50	1560	85	0.80	54	62	1555	60	915	0.24
4	230	50	1500	85	0.80	58	67	1000	85	590	0.34
5	230	50	1200	28	0.24	47	55	1650	0	970	0.00
6	230	50	1200	33	0.29	49	56	1435	17	845	0.07
7	230	50	1200	38	0.32	48	55	1195	36	705	0.14
8	230	50	1200	48	0.41	53	62	840	60	495	0.24
9	230	50	1000	16	0.14	43	50	1375	0	810	0.00
10	230	50	1000	19	0.17	44	51	1195	12	705	0.05
11	230	50	1000	22	0.18	43	51	995	25	585	0.10
12	230	50	1000	28	0.24	49	57	700	42	410	0.17
13	230	50	800	8.0	0.07	37	45	1100	0	645	0.00
14	230	50	800	10.0	0.08	38	46	955	8	565	0.03
15	230	50	800	11	0.09	38	45	800	16	470	0.06
16	230	50	800	14	0.12	43	51	560	27	330	0.11

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

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