

EC axial fan - HyBlade®

sickled blades (S series), single inlet
with guard grille for short nozzle

S3G300-AK13-32 ebmpapst Datasheet
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Nominal data

Type	S3G300-AK13-32	
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	min ⁻¹	1500
Power input	W	85
Current draw	A	0.7
Max. back pressure	Pa	85
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



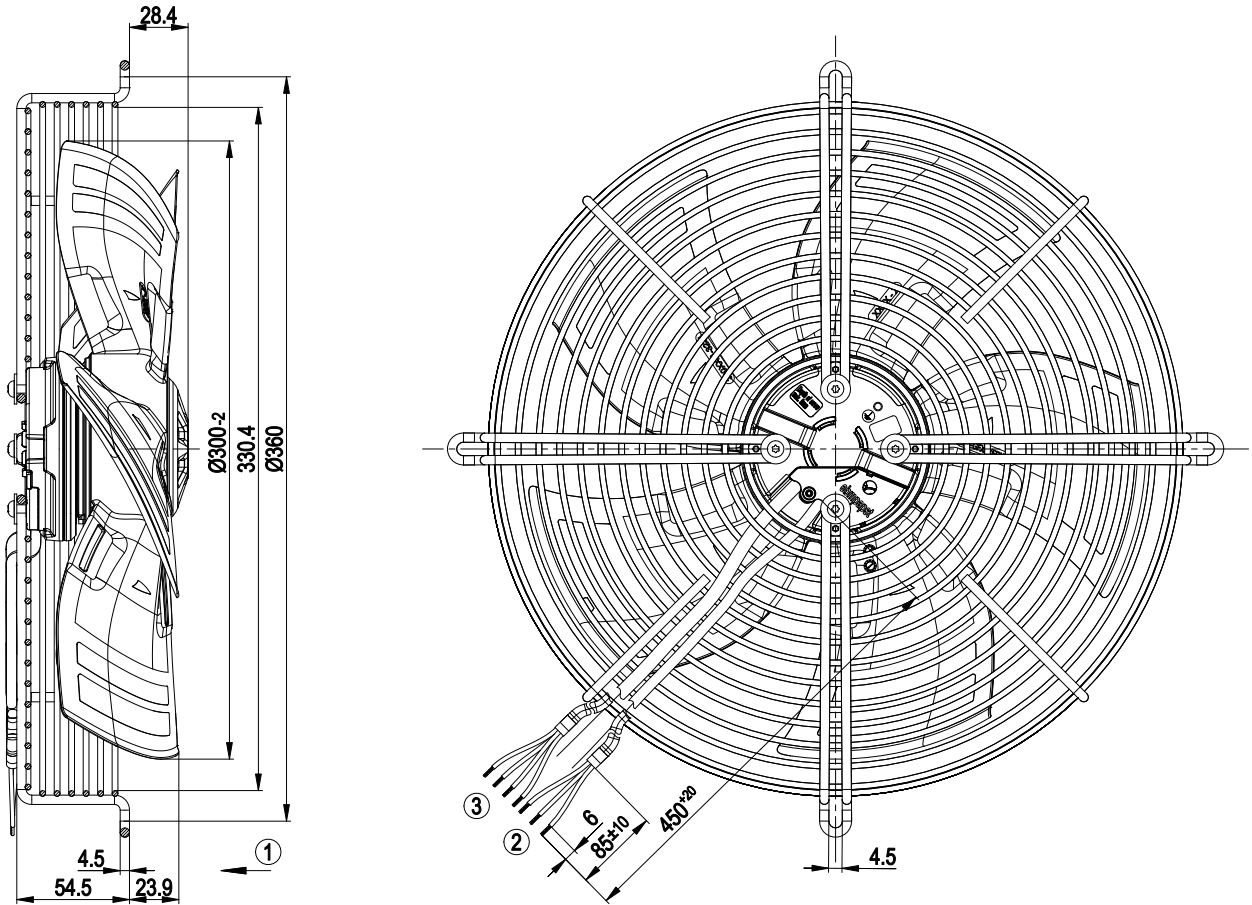
Technical features

Mass	2.4 kg
Size	300 mm
Surface of rotor	Thick layer passivated
Material of electronics housing	Die-cast aluminium
Material of impeller	PP plastic
Material of guard grille	Steel, coated in black plastic (RAL9005)
Number of blades	5
Direction of air flow	"V"
Direction of rotation	Counter-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	<ul style="list-style-type: none"> - Output 10 VDC, max. 1.1 mA - Tach output - 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
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC harmonics	Acc. to EN 61000-3-2/3
EMC interference emission	Acc. to EN 55022 (Class B, household environment), on account of the installation conditions, ferritic damping in the connection line may be required for the application.
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	CCC

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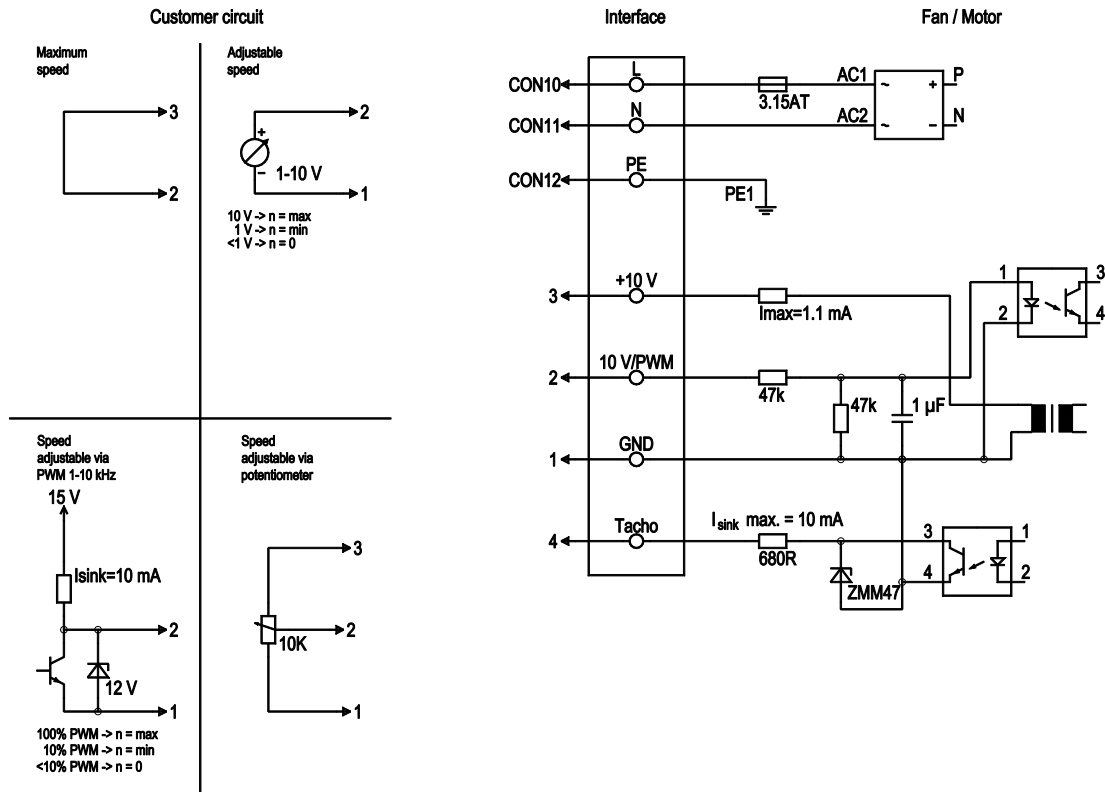
Product drawing



- | | |
|---|--|
| 1 | Direction of air flow "V" |
| 2 | Connection line PVC 3X AWG20, 3x brass lead tips crimped |
| 3 | Connection line PVC 4X AWG22, 4x brass lead tips crimped |

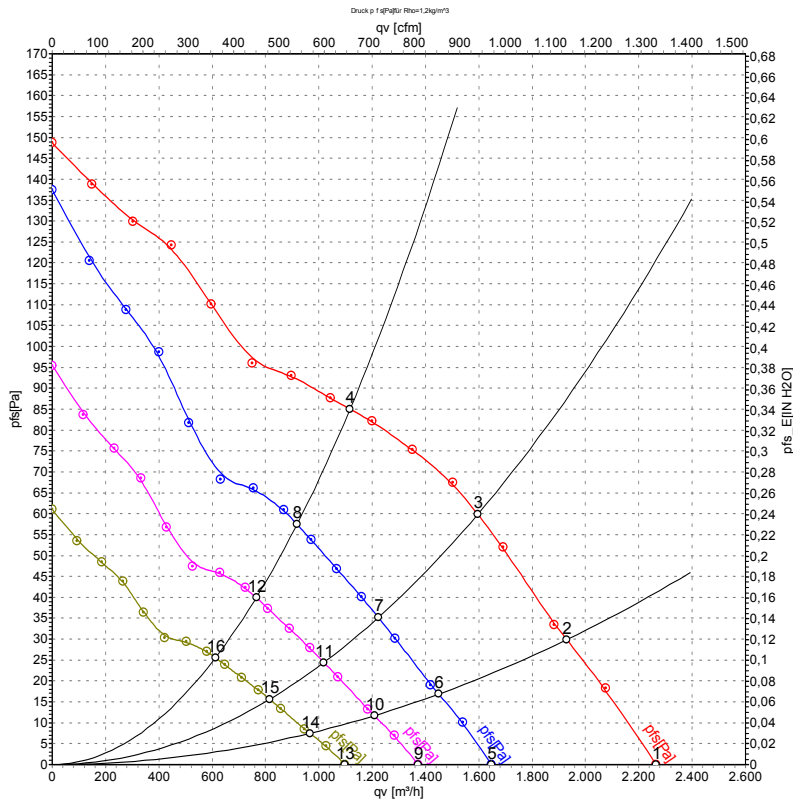


Connection screen



No.	Conn.	Designation	Colour	Function / assignment
	CON10	L	black	Power supply 230 VAC, 50-60 Hz, for voltage range refer to rating plate
	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	10V/ max 1.1mA	red	Voltage output 10 V / 1.1 mA, electrically isolated, not short-circuit-proof
	4	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated, Isink max = 10 mA

Charts: Air flow 50 Hz



Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebmpapst. Suction-side noise levels: L_{wA} measured as per ISO 13347 / L_{pA} 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	L _{pA_{in}}	L _{wA_{in}}	qv	p _f
	V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m ³ /h	Pa
1	230	50	1650	72	0.65	55	63	2265	0
2	230	50	1595	78	0.70	56	63	1930	30
3	230	50	1580	83	0.70	55	62	1595	60
4	230	50	1500	85	0.70	56	64	1115	85
5	230	50	1200	28	0.24	49	56	1650	0
6	230	50	1200	33	0.28	50	57	1450	17
7	230	50	1200	37	0.32	49	56	1225	35
8	230	50	1200	46	0.39	51	60	920	58
9	230	50	1000	16	0.14	45	52	1375	0
10	230	50	1000	19	0.16	46	53	1210	12
11	230	50	1000	22	0.18	45	53	1020	24
12	230	50	1000	26	0.23	47	56	765	40
13	230	50	800	8.2	0.07	40	47	1100	0
14	230	50	800	9.8	0.08	41	48	965	8
15	230	50	800	11	0.09	40	48	815	16
16	230	50	800	14	0.12	43	51	610	26

U = Supply voltage · f = Frequency · n = Speed · P_{ed} = Power input · I = Current draw · L_{pA_{in}} = Sound pressure level inlet side · L_{wA_{in}} = Sound power level inlet side · qv = Air flow
p_f = Pressure increase

