S1G300-AC33-54

EC axial fan - HyBlade®

sickled blades (S series)

with guard grille for short nozzle

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Nominal data

Type	**S1G300-AC33-54**
Motor	**M1G074-CF**

Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Type of data definition		fa
Speed	min^{-1}	1830
Power input	W	80
Current draw	A	1.9
Max. back pressure	Pa	100
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	3.1 kg
Size	300 mm
Surface of rotor	Coated in black
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	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 42
Insulation class	"B"
Humidity class	F0
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
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limit - Soft start - Control input 0-10 VDC / PWM
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC interference emission	Acc. to EN 55022 (Class B)
Motor protection	Reverse polarity and locked-rotor protection
Cable exit	Lateral
Approval	GOST; UL 1004-1; CSA C22.2 Nr.77; CCC

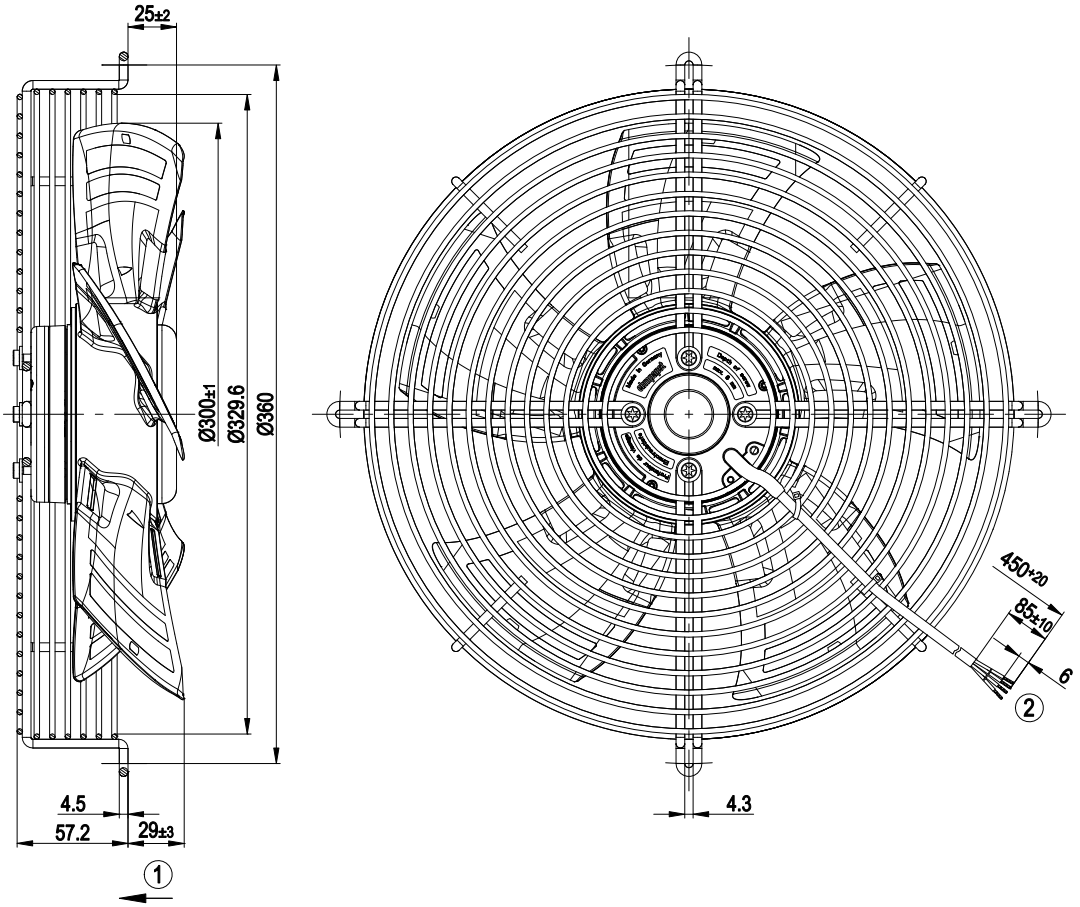
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Product drawing



1	Direction of air flow "V"
2	Connection line PVC AWG20, 4x brass lead tips crimped

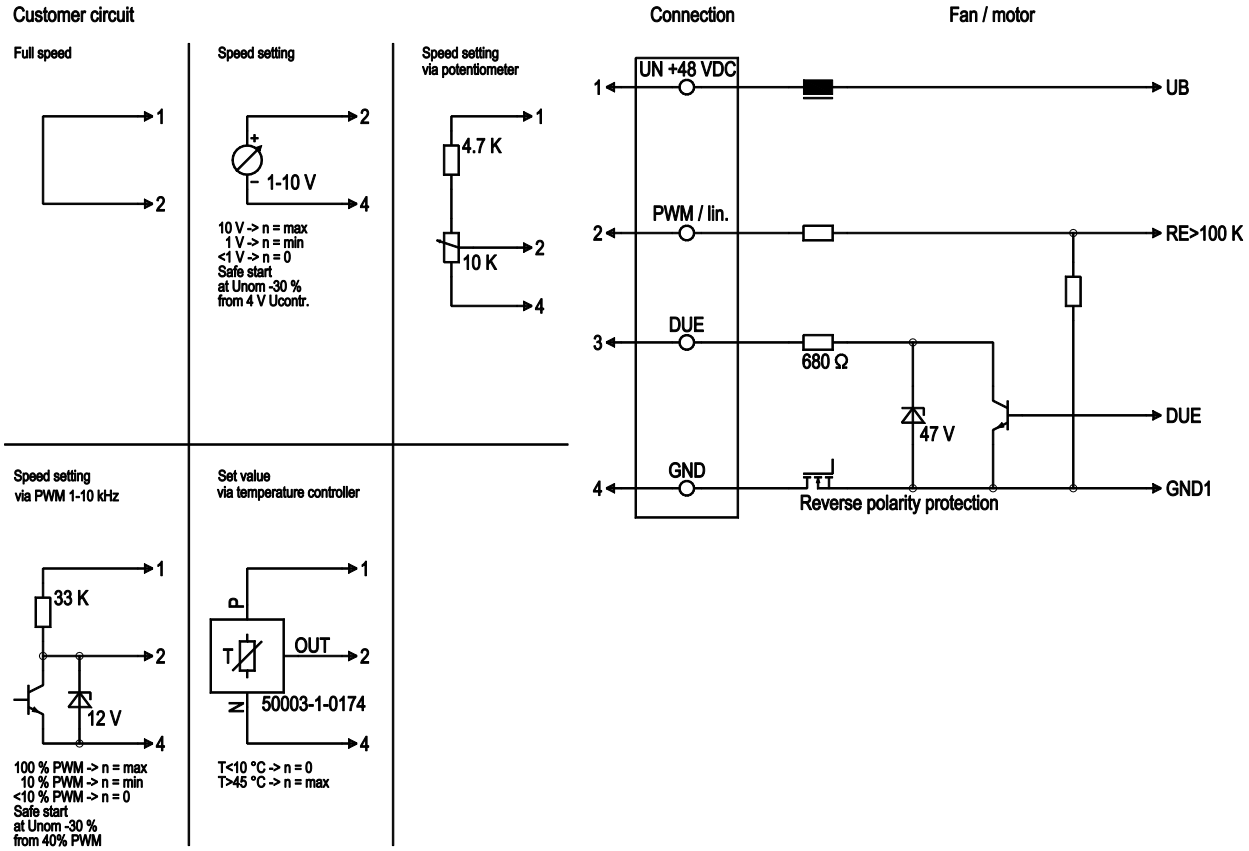
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Connection screen



Line	No.	Signal	Colour	Function / assignment
1	1	Un +48 VDC	red	Power supply 48 VDC, residual ripple 3.5 %
1	2	PWM / lin	yellow	PWM / lin. control input, 0-10 V
1	3	Tach	white	Speed monitoring output, 3 pulses per rotation, Isink max = 10 mA
1	4	GND	blue	Reference mass

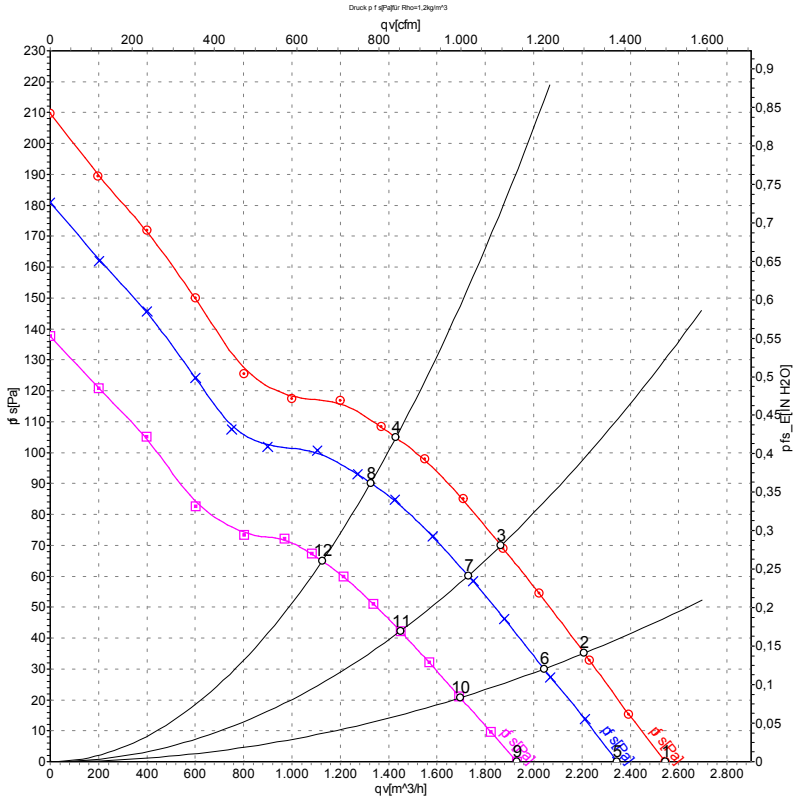
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Charts: Air flow



Measurement: LU-114670
Measurement: LU-114667
Measurement: LU-114671

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	n	P_{ed}	I	LpA_{in}	LwA_{in}	qv	p_{fs}
	V	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa
1	57	2030	109	2.18	62	69	2545	0
2	57	1950	111	2.25	61	68	2210	35
3	57	1895	112	2.30	60	67	1865	70
4	57	1820	115	2.39	65	73	1430	105
5	48	1870	87	2.00	61	68	2345	0
6	48	1805	90	2.10	59	67	2045	30
7	48	1765	91	2.13	59	67	1730	60
8	48	1695	92	2.19	61	69	1325	90
9	36	1550	50	1.57			1930	0
10	36	1505	53	1.66			1695	21
11	36	1480	55	1.72			1450	42
12	36	1435	58	1.81			1125	65

U = Supply voltage · 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

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