S1G300-BC19-54

EC axial fan

sickled blades (S series)

with guard grille for full nozzle

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Nominal data

Type	**S1G300-BC19-54**	
Motor	**M1G074-CF**	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Type of data definition		fa
Speed	min-1	1830
Power input	W	80
Current draw	A	3.8
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	2.3 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, phosphated and coated in black plastic
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
Product conforming to standard	EN 60950-1
Approval	CSA C22.2 Nr.77; EAC; UL 1004-1

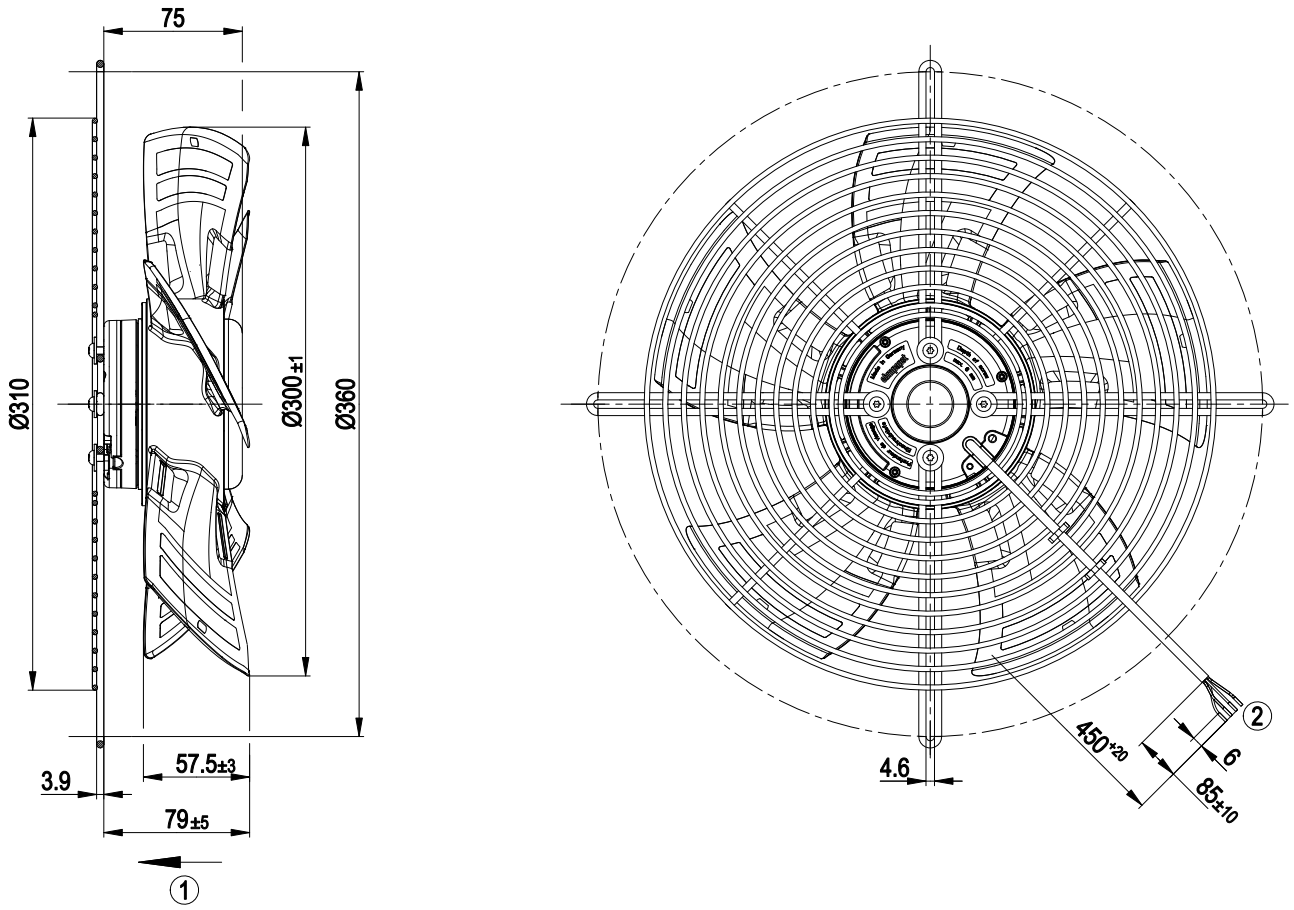
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Product drawing



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

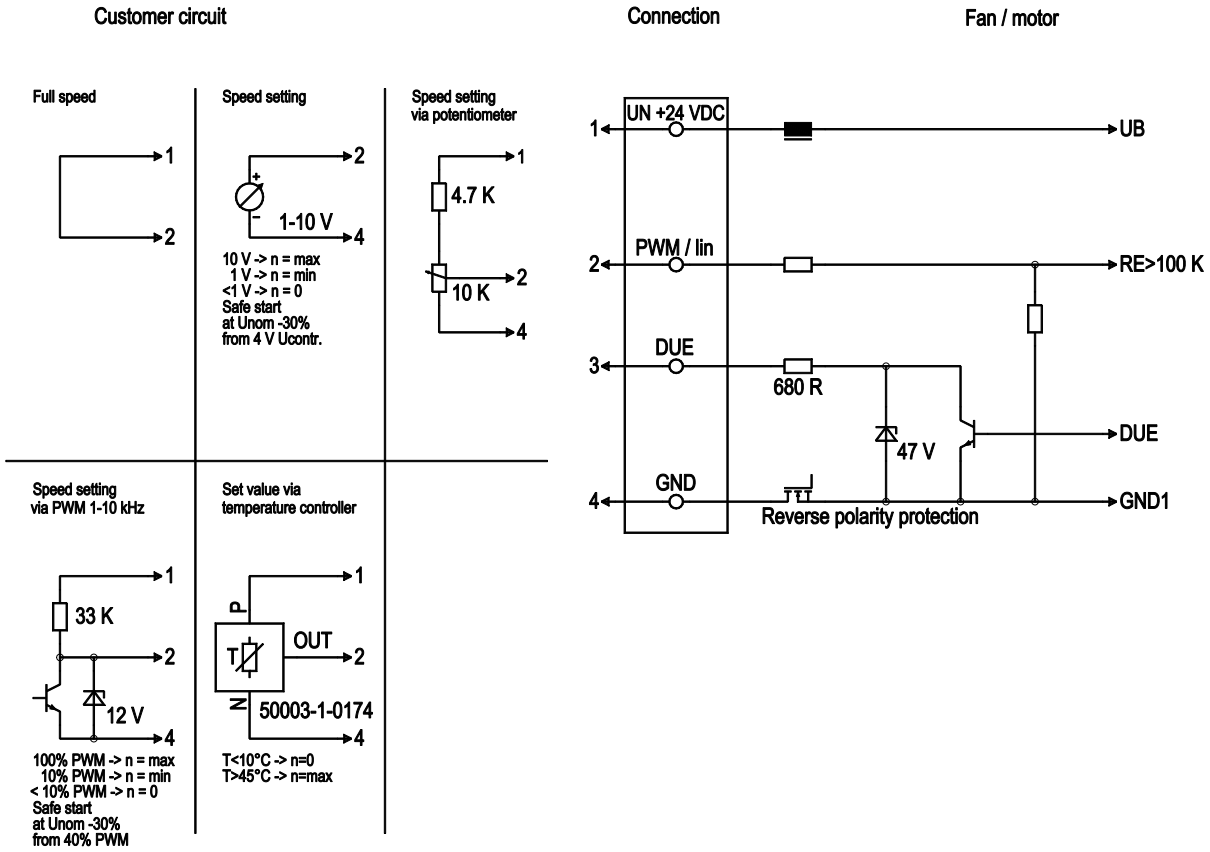
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Connection screen



No.	Conn.	Designation	Colour	Function / assignment
1	1	Un +24V	red	Power supply 24 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 revolution, Isink max = 10 mA
1	4	GND	blue	Reference mass

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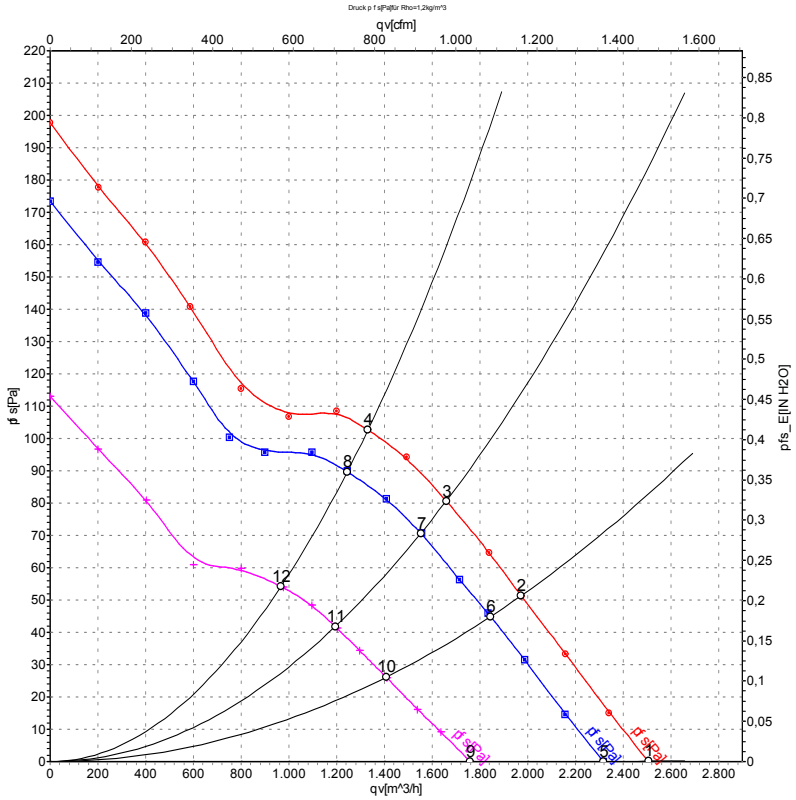
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Charts: Air flow



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	28	1965	102	4.11	61	69	2505	0
2	28	1855	105	4.31	60	67	1975	51
3	28	1805	107	4.42	59	67	1660	81
4	28	1745	109	4.56	63	71	1330	103
5	24	1810	80	3.80	60	67	2320	0
6	24	1730	86	4.03	58	67	1845	45
7	24	1690	87	4.10	57	66	1555	70
8	24	1635	89	4.21	62	70	1245	90
9	16	1380	37	2.63	52	60	1760	0
10	16	1330	40	2.82	51	58	1410	26
11	16	1305	41	2.92	51	59	1195	42
12	16	1280	43	3.04	56	64	965	54

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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