S1G250-AH79-49

EC axial fan

sickle-shaped blades (S series)

with guard grille for short nozzle

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Nominal data

Type	**S1G250-AH79-49**	
Motor	**M1G074-BF**	
Nominal voltage	VDC	12
Nominal voltage range	VDC	8 .. 14
Method of obtaining data		fa
Speed (rpm)	min-1	2440
Power consumption	W	75
Current draw	A	6.8
Max. back pressure	Pa	110
Max. back pressure	inH2O	0.44
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

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Technical description

Weight	2.2 kg
Fan size	250 mm
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Guard grille material	Steel, phosphated and coated with black plastic
Number of blades	7
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP42; installation- and position-dependent as per EN 60034-5
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F3-1
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	- Control input 0-10 VDC / PWM - Tach output - Motor current limitation - Soft start
EMC immunity to interference	According to EN 61000-6-2
EMC interference emission	According to EN 55022 (Class B)
Motor protection	Reverse polarity and locked-rotor protection
With cable	Lateral
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60950-1
Approval	CSA C22.2 No. 77; UL 1004-1

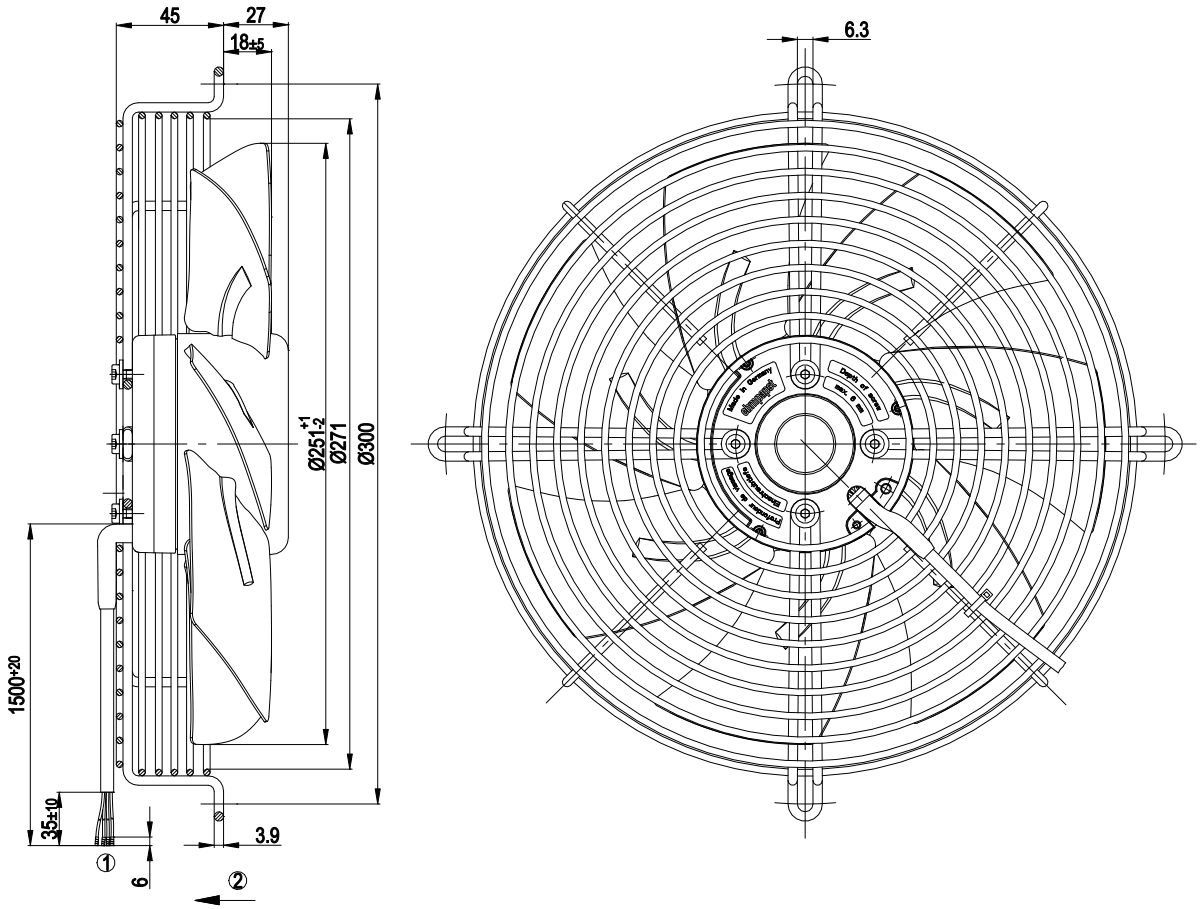
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Product drawing



1	Cable PVC AWG 18, 4x crimped splices
2	Airflow direction "V"

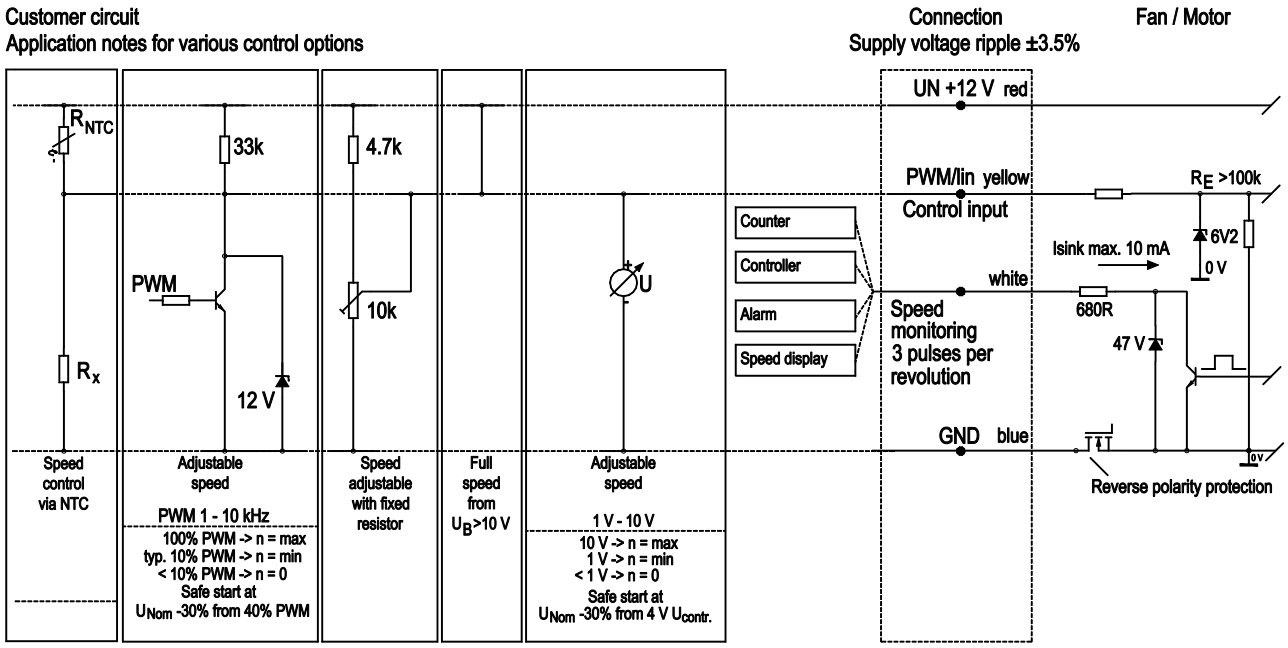
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Connection diagram



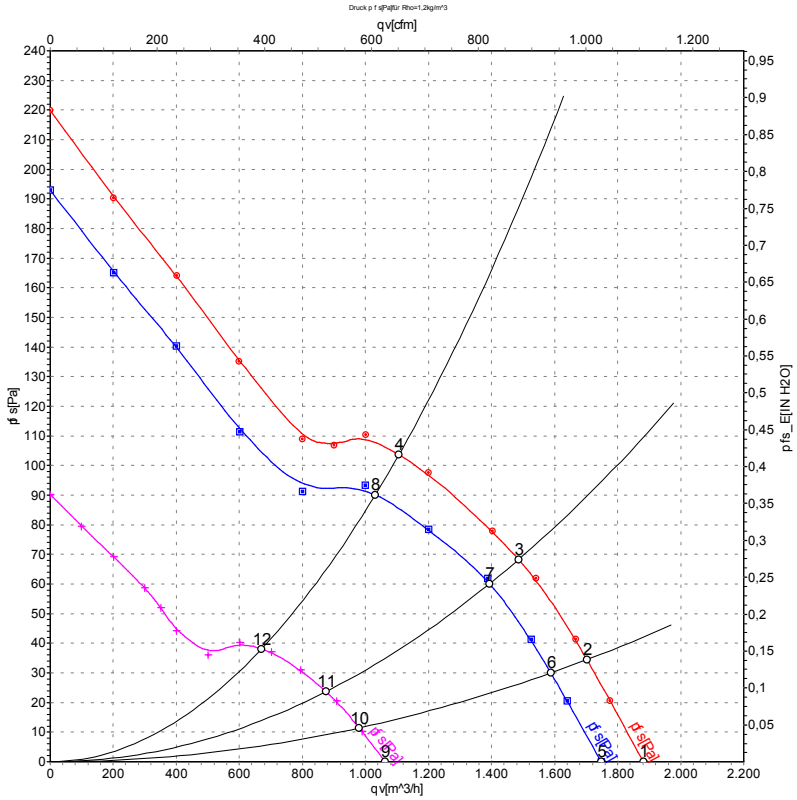
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Curves: Air performance



Measurement: LU-68874-1
Measurement: LU-68872-1
Measurement: LU-68873-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	U	n	P_{ed}	I	qv	p_{fs}	qv	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	14	2630	93	7.43	1880	0	1110	0.00
2	14	2525	95	7.64	1705	34	1000	0.14
3	14	2440	97	7.87	1485	68	875	0.27
4	14	2355	99	8.14	1105	104	650	0.42
5	12	2440	75	6.80	1750	0	1030	0.00
6	12	2355	78	7.14	1590	30	935	0.12
7	12	2275	79	7.33	1395	60	820	0.24
8	12	2200	81	7.53	1030	90	605	0.36
9	8	1525	18	2.84	1065	0	625	0.00
10	8	1490	19	3.03	980	12	575	0.05
11	8	1460	20	3.22	875	24	515	0.10
12	8	1425	22	3.43	670	38	395	0.15

U = Power supply · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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