

EC axial fan - ESM

sickle-shaped blades (S series)

ESM guard grille



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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	S1G300-CA23-02		
Motor	M1G055-BI		
Phase		1~	1~
Nominal voltage	VAC	115	115
Frequency	Hz	50/60	50/60
Method of obtaining data		ml	
Speed (rpm)	min ⁻¹	1250	900
Power consumption	W	35	
Current draw	A	0.56	
Max. back pressure	Pa	35	
Max. back pressure	in. wg	0.14	
Min. ambient temperature	°C	-30	-30
Max. ambient temperature	°C	50	50

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

Subject to change



Technical description

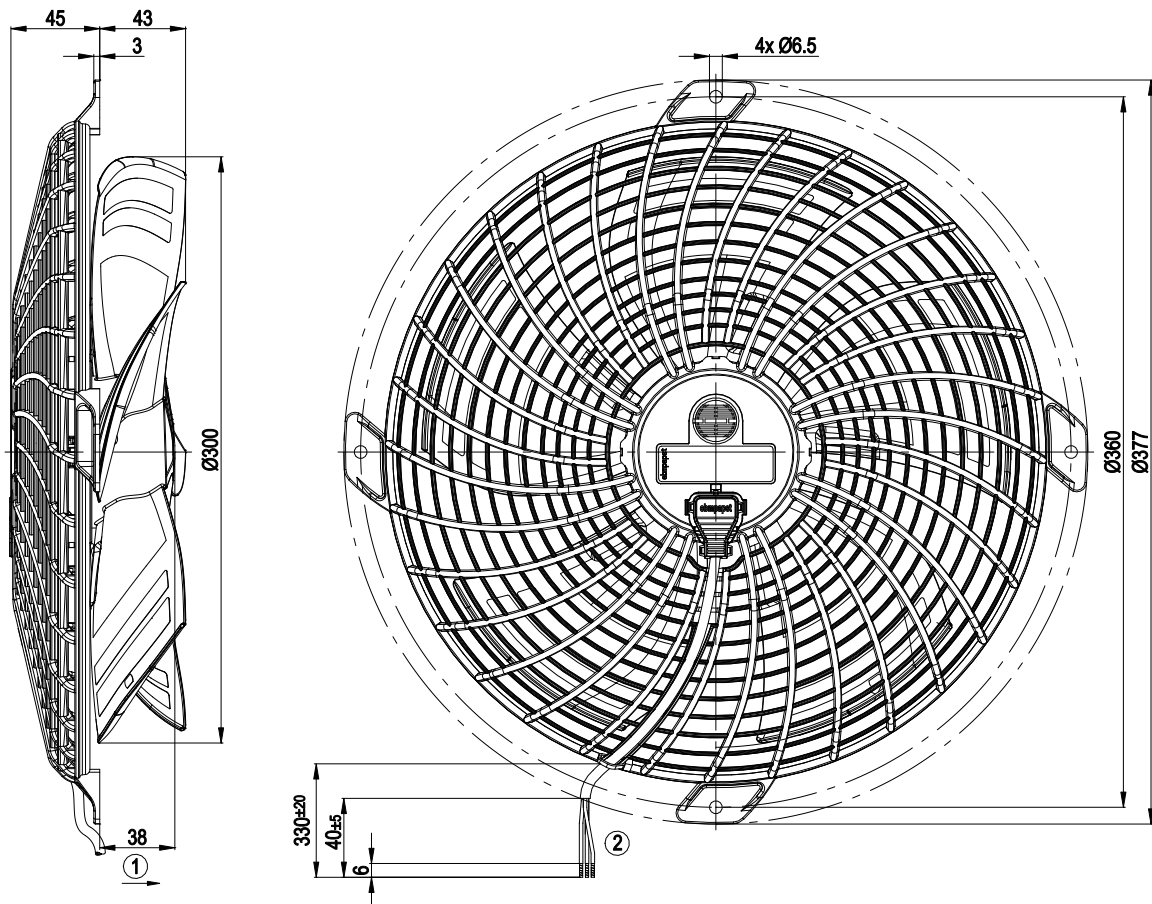
Weight	1.4 kg
Size	300 mm
Motor size	55
Blade material	PA plastic
Guard grille material	PP plastic
Number of blades	5
Airflow direction	A
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP55
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1+
Max. 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	None
Mode	S1
Motor bearing	Ball bearing
Technical features	- Thermal overload protection for motor - Soft start - Speed selection max./min.
Speed levels	2
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC circuit feedback	According to EN 61000-3-2/3
EMC interference emission	According to EN 61000-6-3 (household environment)
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Lateral
Protection class	II
Conformity with standards	EN 60335-1; EN 60335-2-24; EN 60335-2-80; EN 60335-2-89; CE
Approval	VDE; CSA C22.2 No. 77; EAC; UL 1004-3

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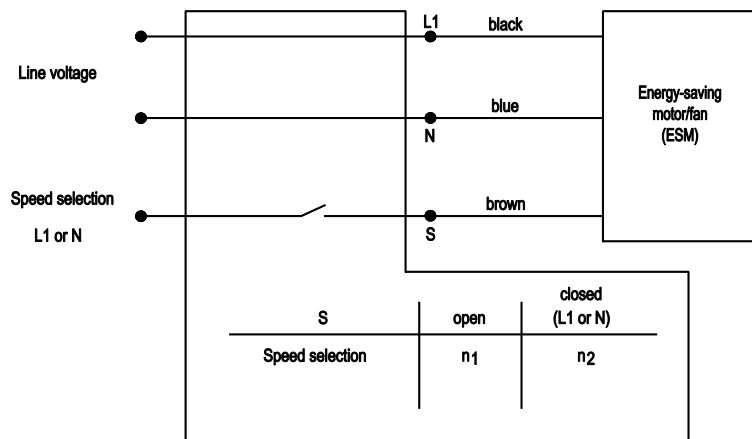
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Product drawing

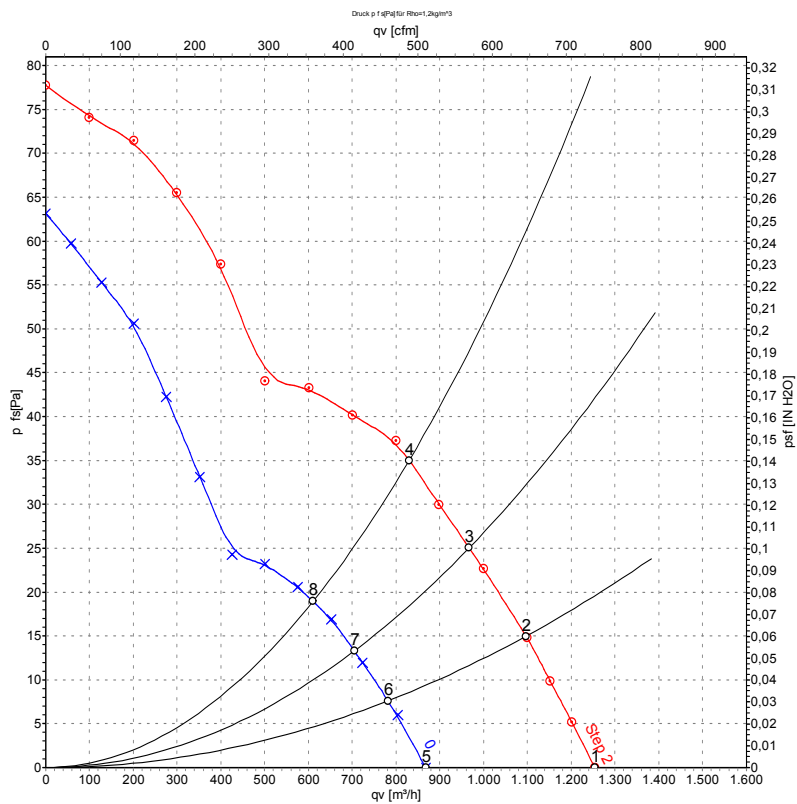


- 1 Direction of air flow "A"
- 2 Cable AWG20; 3x crimped splices

Connection diagram



Curves: Air performance 50 Hz



Measurement: LU-121053-1
Measurement: LU-121378-1

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

	Stage	U	f	n	P _{ed}	I	q _v	P _{fs}	q _v	P _{fs}
		V	Hz	min ⁻¹	W	A	m ³ /h	Pa	cfm	in. wg
1	2	115	50	1250	31	0.45	1255	0	735	0.00
2	2	115	50	1250	32	0.47	1095	15	645	0.06
3	2	115	50	1250	32	0.48	965	25	570	0.10
4	2	115	50	1250	35	0.56	830	35	490	0.14
5	1	115	50	900	13	0.24	865	0	510	0.00
6	1	115	50	900	14	0.26	780	8	460	0.03
7	1	115	50	900	16	0.30	705	13	415	0.05
8	1	115	50	900	17	0.32	610	19	360	0.08

U = Voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · q_v = Air flow · P_{fs} = Pressure increase

