

EC axial fan - ESM

sickle-shaped blades (S series)

ESM guard grille


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General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	S1G200-CA91-02		
Motor	M1G055-BD		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50/60	50/60
Method of obtaining data		ml	
Speed (rpm)	min ⁻¹	2000	1500
Power consumption	W	34	
Current draw	A	0.26	
Max. back pressure	Pa	45	
Max. back pressure	in. wg	0.18	
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

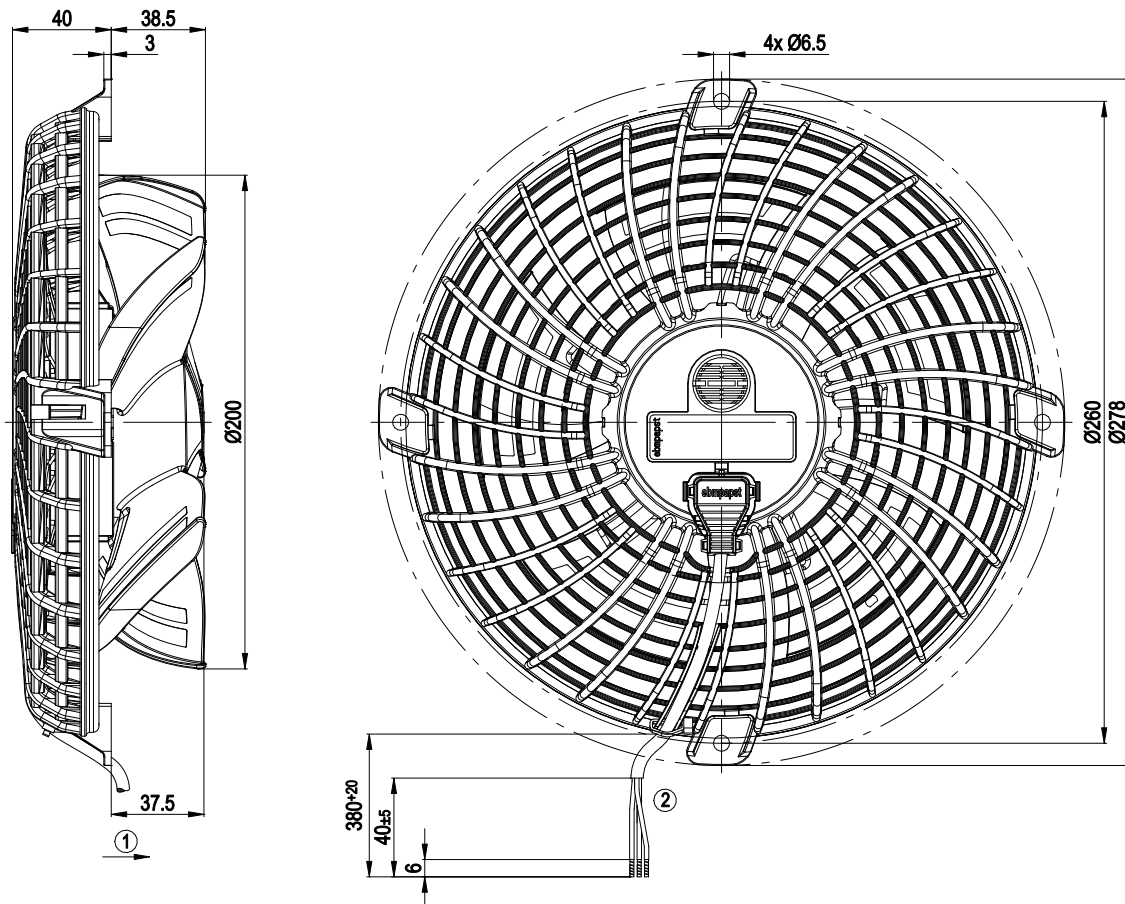
Weight	1 kg
Fan size	200 mm
Blade material	PA plastic
Guard grille material	Epylen GT50 plastic
Number of blades	5
Airflow direction	"A"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP55
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1
Max. 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	CSA C22.2 No. 77; CCC; UL 1004-3; VDE; EAC

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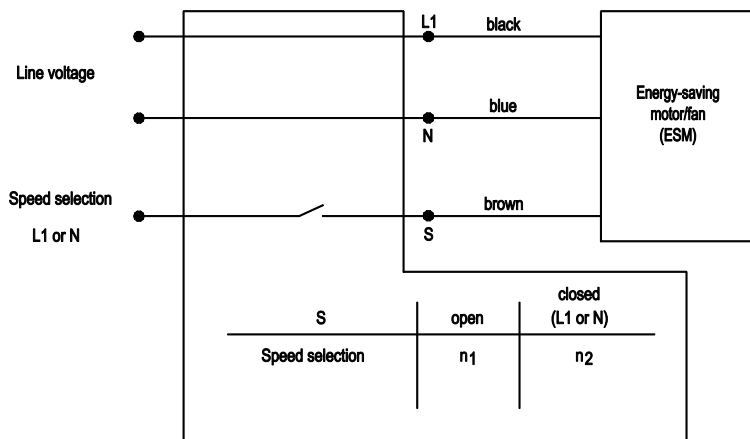
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Product drawing

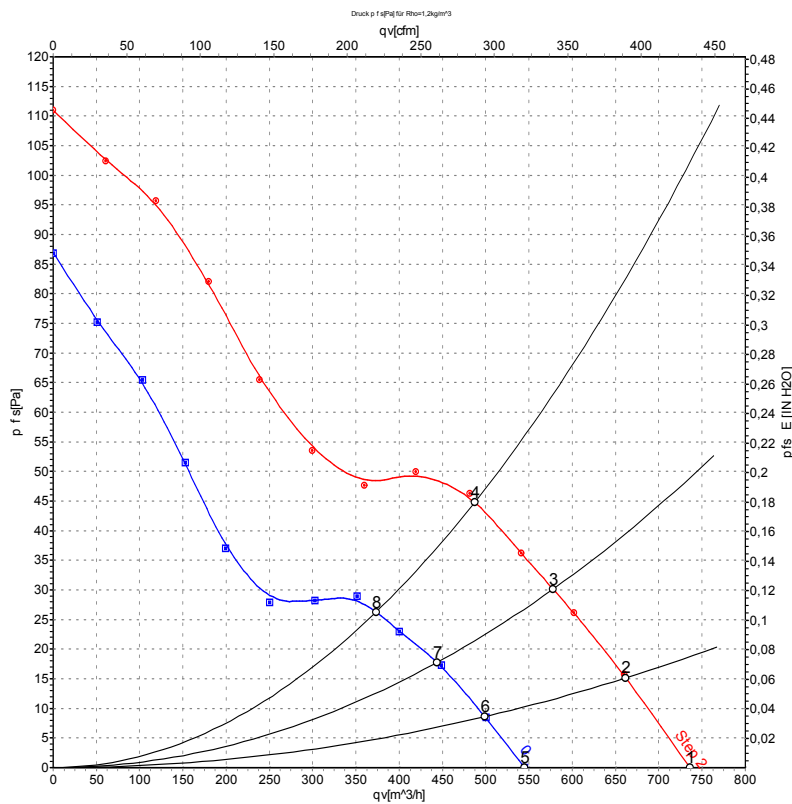


- 1 Direction of air flow "A"
- 2 Cable AWG20; 3x crimped splices

Connection diagram



Curves: Air performance 50 Hz



Measurement: LU-113009-1
Measurement: LU-113010-1

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	LpA _{in}	LwA _{in}	q _v	p _{fs}	q _v	p _{fs}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m ³ /h	Pa	cfm	in. wg
1	2	230	50	2000	32	0.24	54	64	735	0	435	0.00
2	2	230	50	2000	33	0.25	54	64	660	15	390	0.06
3	2	230	50	2000	33	0.26	53	63	580	30	340	0.12
4	2	230	50	2000	34	0.26	54	64	485	45	285	0.18
5	2	230	50	1500	18	0.16	50	59	545	0	320	0.00
6	2	230	50	1500	19	0.16	50	58	500	9	295	0.04
7	2	230	50	1500	19	0.16	49	58	445	18	260	0.07
8	2	230	50	1500	20	0.16	50	59	375	26	220	0.10

U = Power supply · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
q_v = Air flow · p_{fs} = Pressure increase