W1G200-EA91-45

EC axial panel fan - ESM

sickle-shaped blades (S series)

ESM fan housing



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Nominal data

Type	**W1G200-EA91-45**		
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}	2200	1500
Power consumption	W	28	
Current draw	A	0.21	
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

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Technical description

Weight	0.998 kg
Size	200 mm
Motor size	55
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Fan housing material	PP plastic
Number of blades	5
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP54
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	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	- Speed selection max./min. - Soft start - Thermal overload protection for motor
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)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 0.25 mA
Motor protection	Thermal switch auto reset, internally connected
With cable	Lateral
Protection class assignment	II; The built-in component has several local protection class assignments. The final protection class is determined by the intended installation.
Conformity with standards	EN 60335-1; EN 60335-1; EN 60335-2-24; EN 60335-2-80; EN 60335-2-89; CE
Comment on CE	Ecodesign Directive 2009/125/EC + Fan Directive (EC) No. 327/2011 does not apply, as power consumption <125W.
Approval	CCC; UL 1004-3; EAC; CSA C22.2 No. 77; VDE

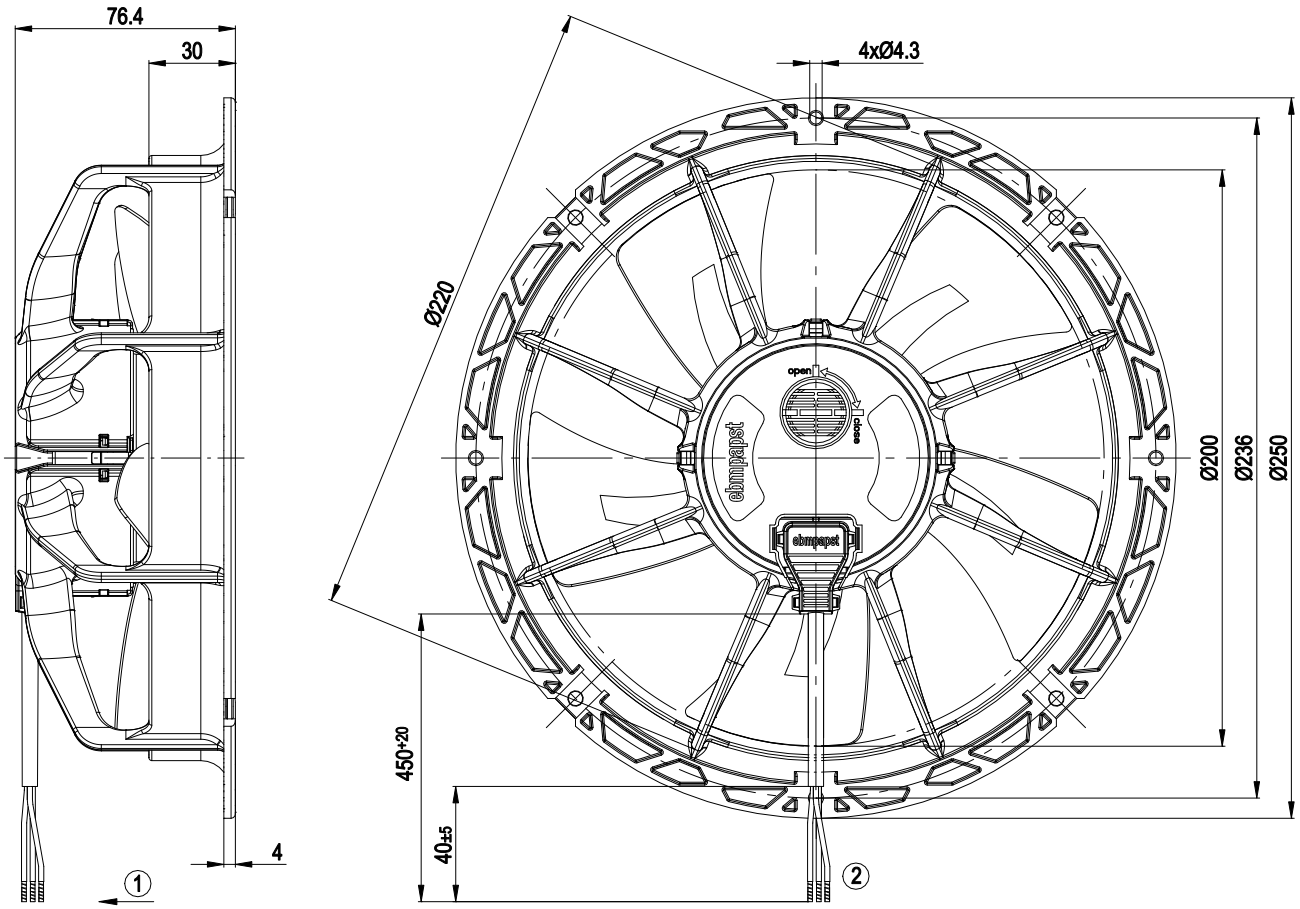
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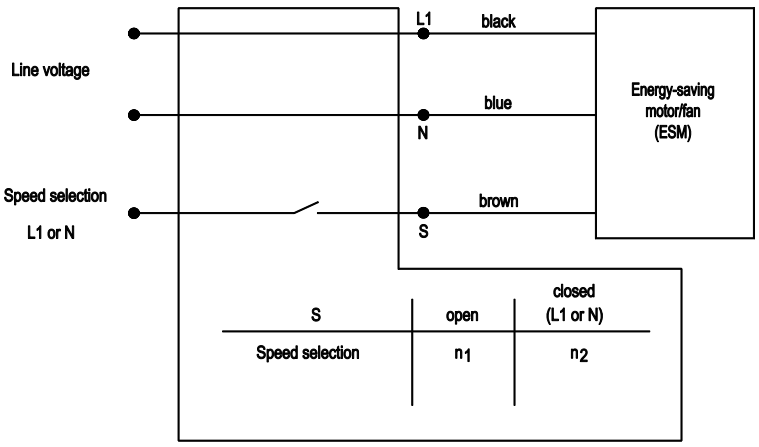
ESM fan housing

Product drawing



1	Direction of air flow "V"
2	Cable AWG20, 3x crimped splices

Connection diagram



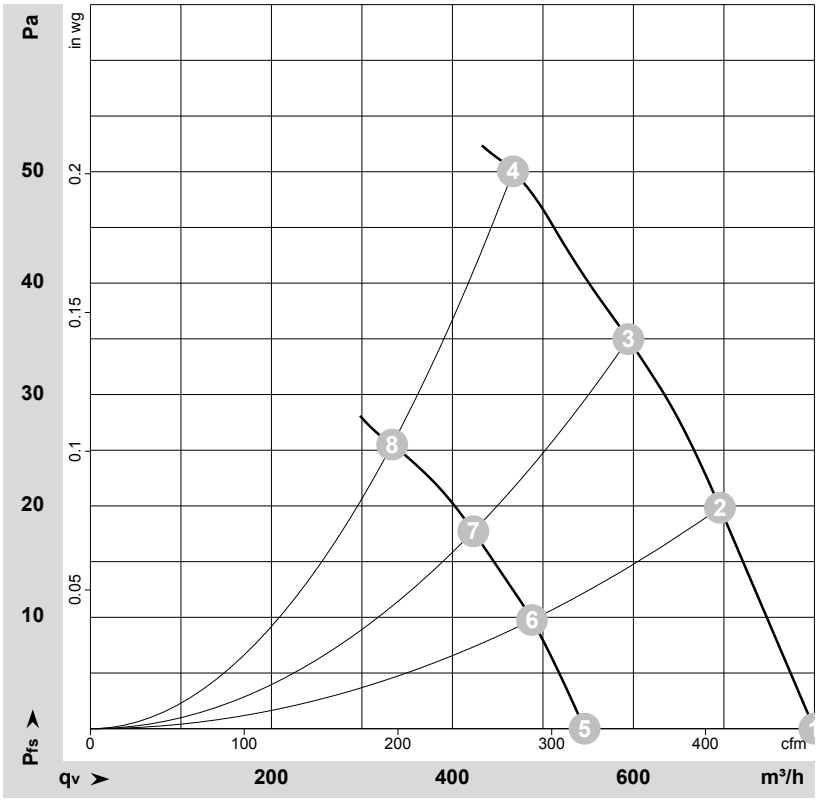
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-121648-1
Date: 2009-10-05
Housing: 38389-2-2910

Measurement: LU-68033-1
Date: 2005-04-14

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	230	50	2200	25	0.19	800	0	470	0.00
2	2	230	50	2200	27	0.21	695	20	410	0.08
3	2	230	50	2200	28	0.21	595	35	350	0.14
4	2	230	50	2200	28	0.21	465	50	275	0.20
5	1	230	50	1500	13	0.10	545	0	320	0.00
6	1	230	50	1500	13	0.10	490	10	285	0.04
7	1	230	50	1500	14	0.10	425	18	250	0.07
8	1	230	50	1500	15	0.11	335	26	195	0.10

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

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