W1G200-FA91-12

EC axial fan - ESM

sickle-shaped blades (S series), single-intake

ESM fan housing

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Nominal data

Type	**W1G200-FA91-12**
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}	2100	1500
Power consumption	W	31	
Current draw	A	0.22	
Max. back pressure	Pa	55	
Max. back pressure	in. wg	0.22	
Min. ambient temperature	°C	-25	-25
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	0.9 kg
Size	200 mm
Motor size	55
Blade material	PA plastic
Fan housing material	PP plastic
Number of blades	5
Airflow direction	A
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP55; only with suitable plug, to be installed by customer
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	- Speed setting input (230 V) - ESM+ expandable with plug-in module - Soft start - Thermal overload protection for motor
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)
Electrical hookup	Plug
Motor protection	Thermal overload protector (TOP) internally connected
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; UL 1004-3; VDE

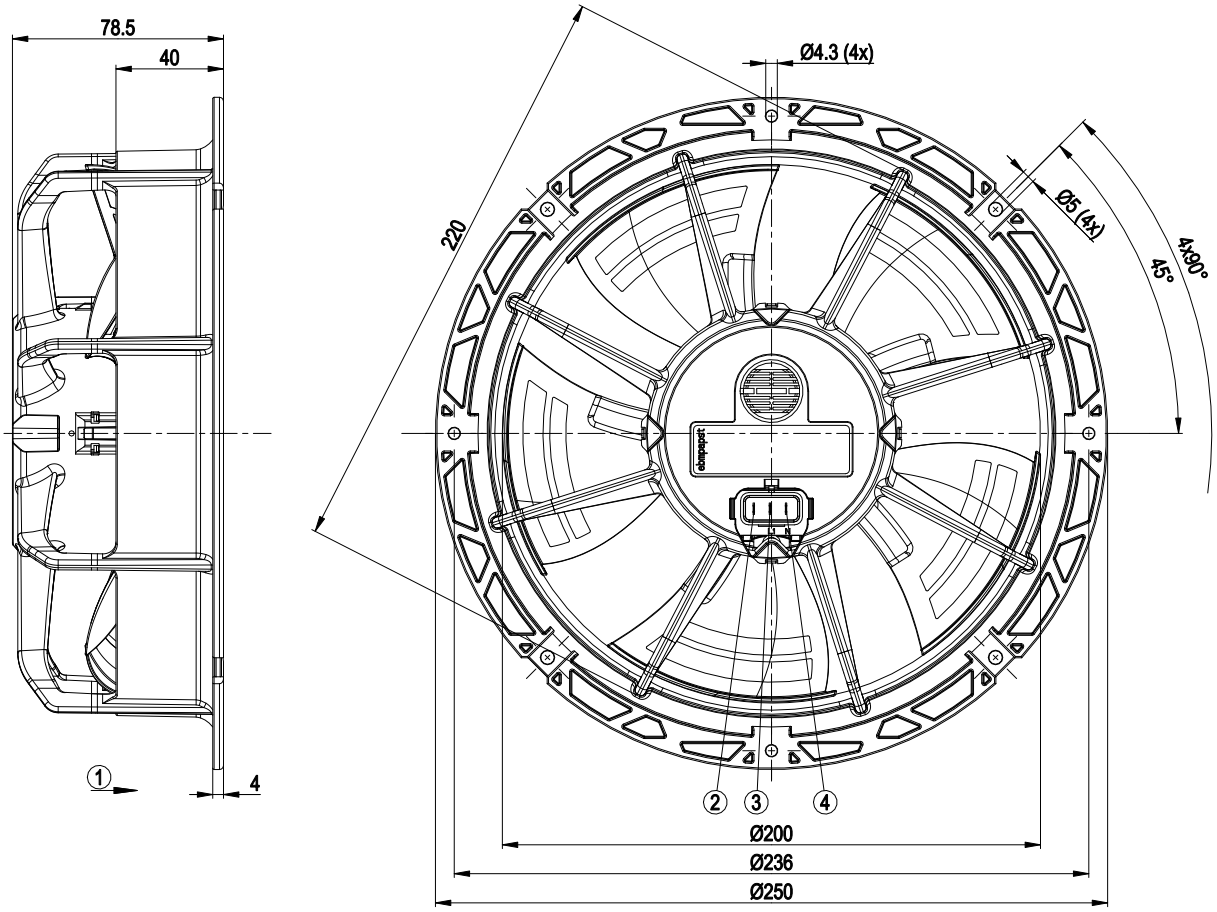
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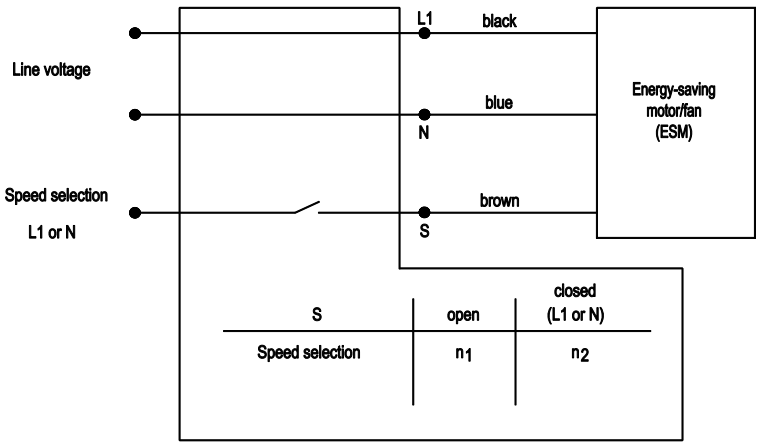
ESM fan housing

Product drawing



1	Direction of air flow "A"
2	PIN S, speed selection (flat plug 2.8 x 0.5)
3	PIN L1, phase (flat plug 2.8 x 0.5)
4	PIN N, neutral conductor (flat plug 2.8 x 0.5)

Connection diagram



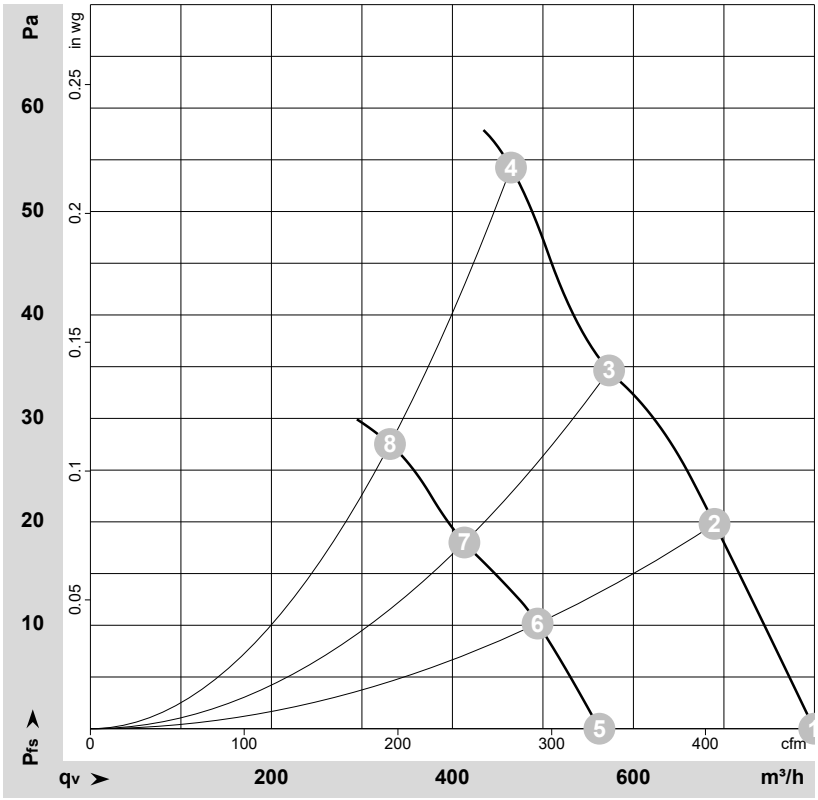
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-172820-1
Measurement: LU-172933-1

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	1	230	50	2100	31	0.22	800	0	470	0.00
2	1	230	50	2100	29	0.22	690	20	405	0.08
3	1	230	50	2100	30	0.22	575	35	335	0.14
4	1	230	50	2100	31	0.22	465	55	275	0.22
5	2	230	50	1500	15	0.13	560	0	330	0.00
6	2	230	50	1500	14	0.13	495	11	290	0.04
7	2	230	50	1500	14	0.13	415	18	245	0.07
8	2	230	50	1500	16	0.15	330	28	195	0.11

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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