

EC axial fan - ESM

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

ESM fan housing

W1G172-EC95-29 ebmpapst Datasheet

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General partner Elektrobau Muldingen GmbH · Headquarters Muldingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	W1G172-EC95-29		
Motor	M1G055-BD		
Phase		1~	1~
Nominal voltage	VAC	115	115
Frequency	Hz	50/60	50/60
Method of obtaining data		ml	
Speed (rpm)	min ⁻¹	2500	1700
Power consumption	W	21	
Current draw	A	0.3	
Max. back pressure	Pa	60	
Max. back pressure	inH ₂ O	0.24	
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	0.9 kg
Fan size	172 mm
Blade material	PA plastic
Fan housing material	PP plastic
Number of blades	5
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP54; 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	<ul style="list-style-type: none"> - 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 interference emission	According to EN 61000-6-3 (household environment)
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

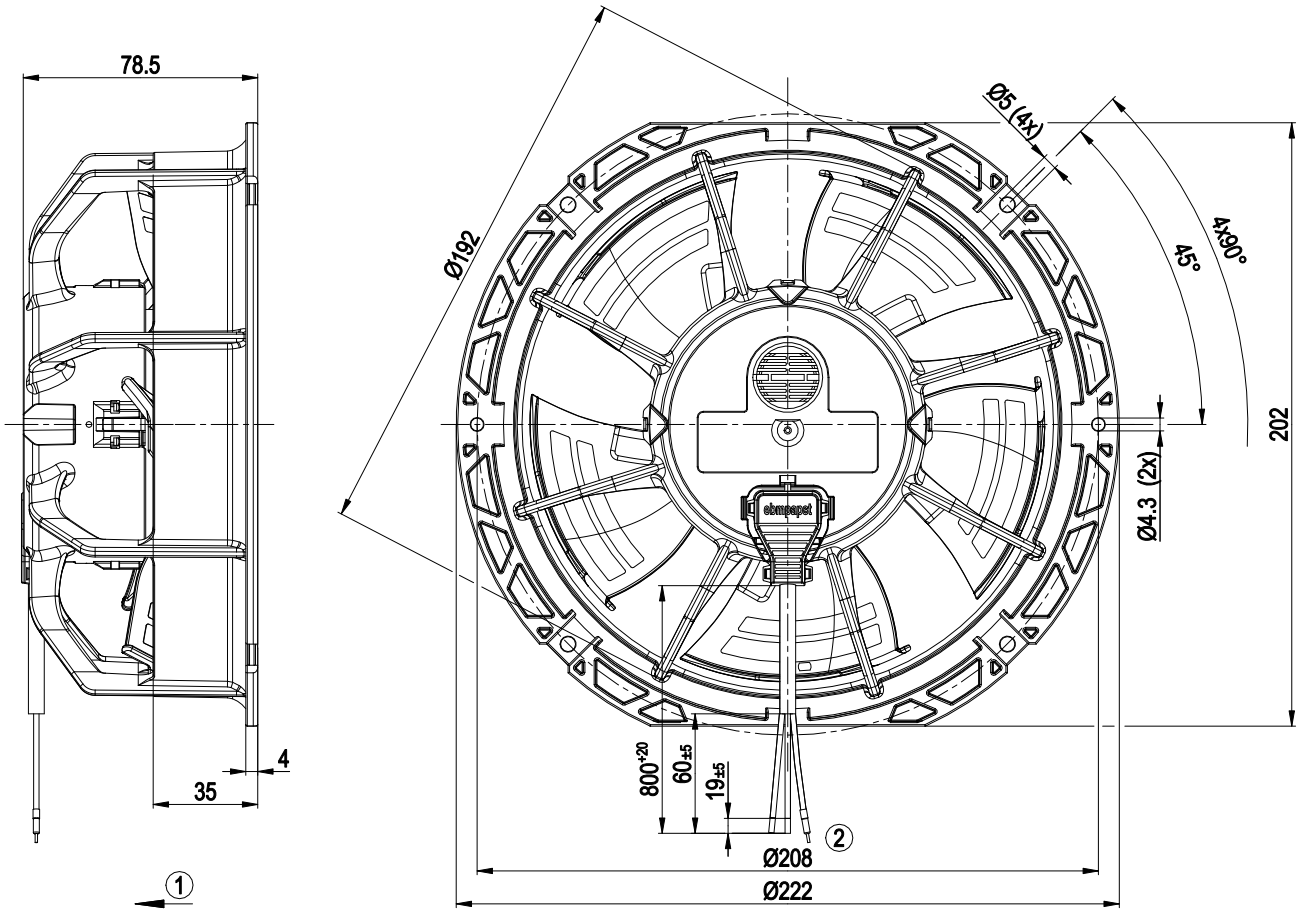


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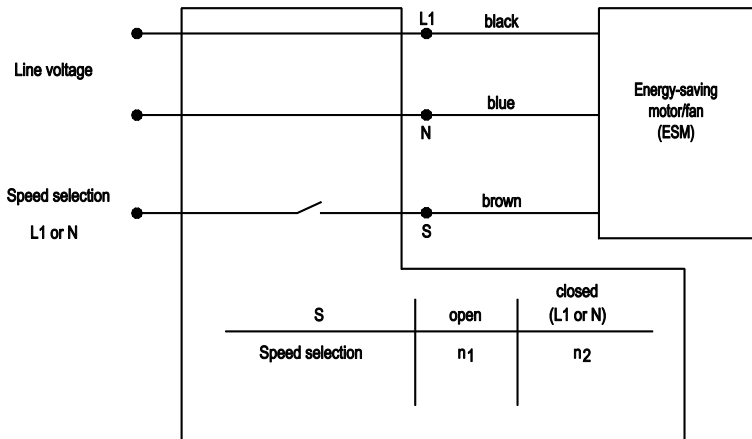
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Product drawing



- 1 Airflow direction "V"
- 2 Cable PVC AWG20

Connection diagram

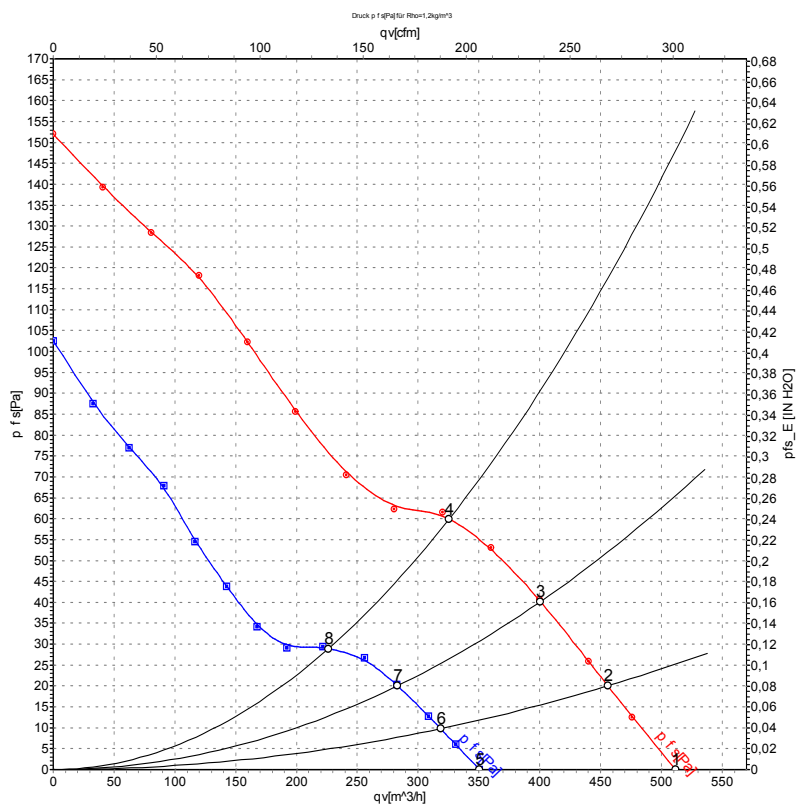


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Curves: Air performance 50 Hz



Measurement: LU-119084-1

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	inH ₂ O
1	2	115	50	2500	20	0.28	510	0	300	0.00
2	2	115	50	2500	21	0.30	455	20	270	0.08
3	2	115	50	2500	21	0.30	400	40	235	0.16
4	2	115	50	2500	21	0.30	325	60	190	0.24
5	2	115	50	1700	9.0	0.14	350	0	205	0.00
6	2	115	50	1700	10.0	0.16	320	10	185	0.04
7	2	115	50	1700	11	0.16	285	20	165	0.08
8	2	115	50	1700	10.0	0.16	225	29	135	0.12

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

