EC axial fan

sickle-shaped blades (S series)

ESM fan housing

W1G154-EG57-02 ebmpapst Datasheet
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Amtsgericht (court of registration) Stuttgart · HRA 590344

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Nominal data

Type	**W1G154-EG57-02**
Motor	**M1G055-AI**

Phase		1~	1~
Nominal voltage	VAC	115	115
Nominal voltage range	VAC	100 .. 240	100 .. 240
Frequency	Hz	50/60	50/60
Method of obtaining data		ml	
Speed (rpm)	min^{-1}	2700	2200
Power consumption	W	14	
Current draw	A	0.2	
Max. back pressure	Pa	50	
Max. back pressure	in. wg	0.2	
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
Size	154 mm
Motor size	55
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	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	- Speed selection max./min. - Power limiter - Motor current limitation - 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)
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	UL 1004-3; EAC; CSA C22.2 No. 77; VDE

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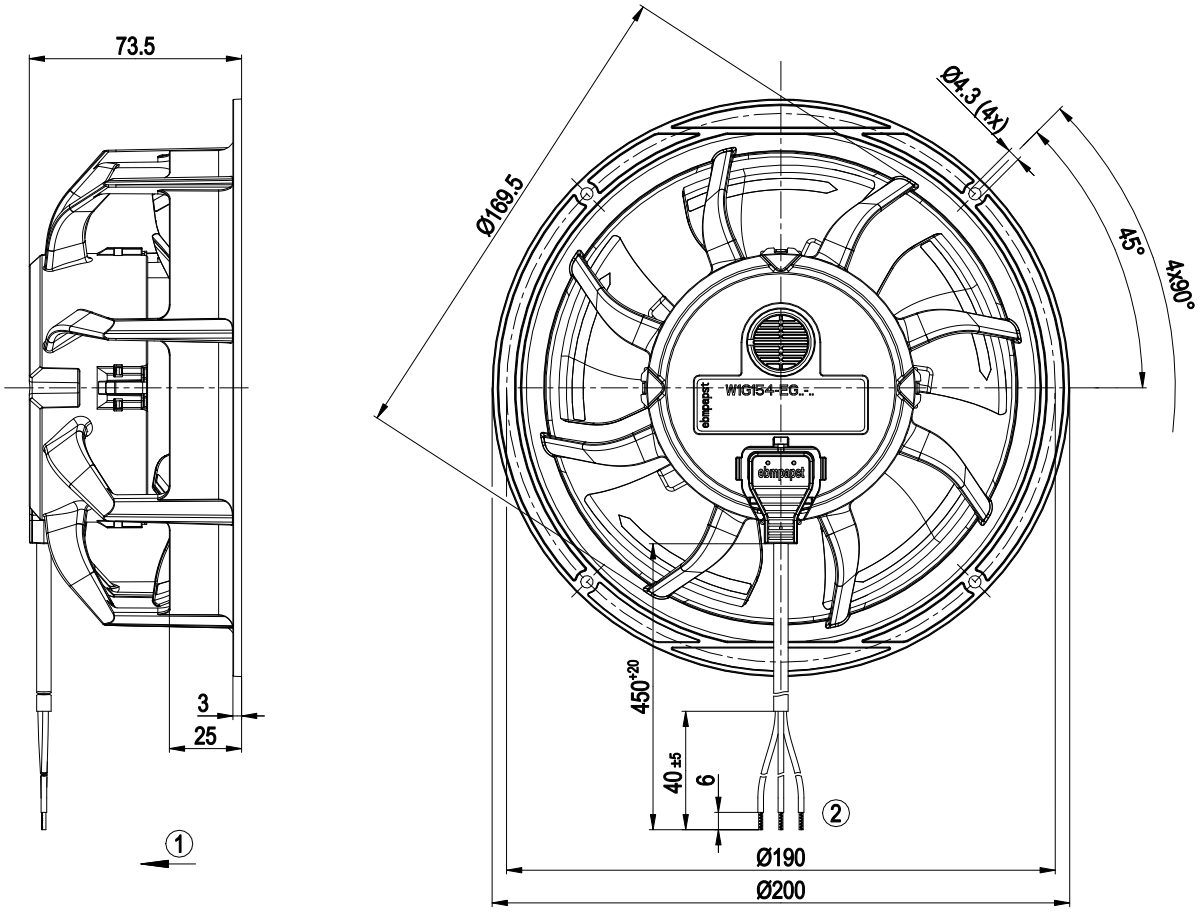
Product drawing



1	Airflow direction "V"
2	Cable PVC AWG20
	3x splice

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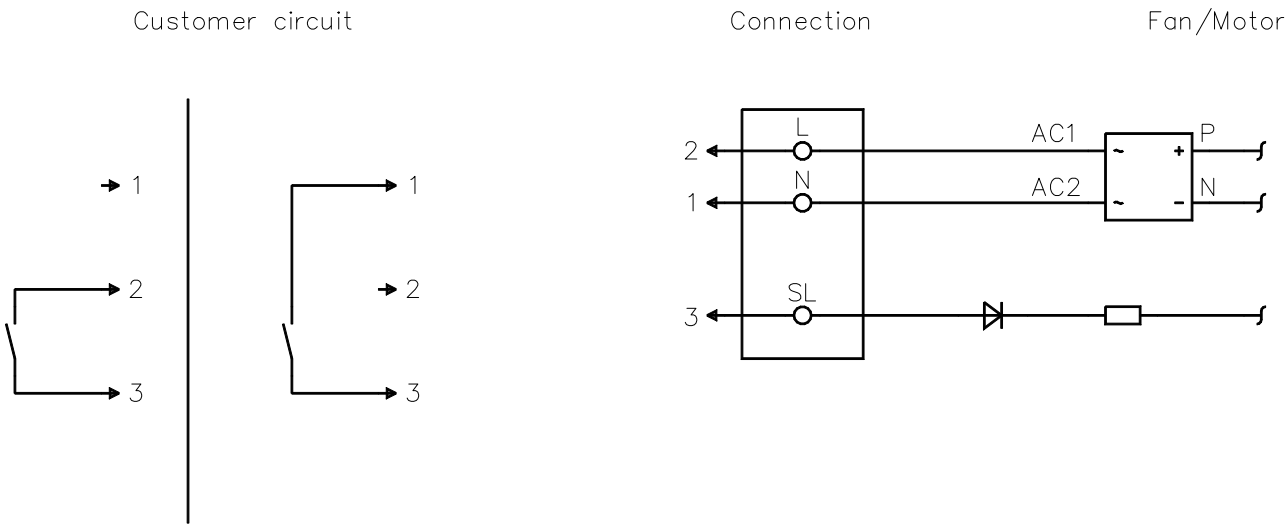
Connection diagram



No.	Conn.	Designation	Color	Function/assignment
1	N		blue	Power supply, neutral conductor, see nameplate for voltage range
2	L		black	Power supply, phase, see nameplate for voltage range
3	SL		brown	Speed selection: switch open speed 1, switch closed speed 2

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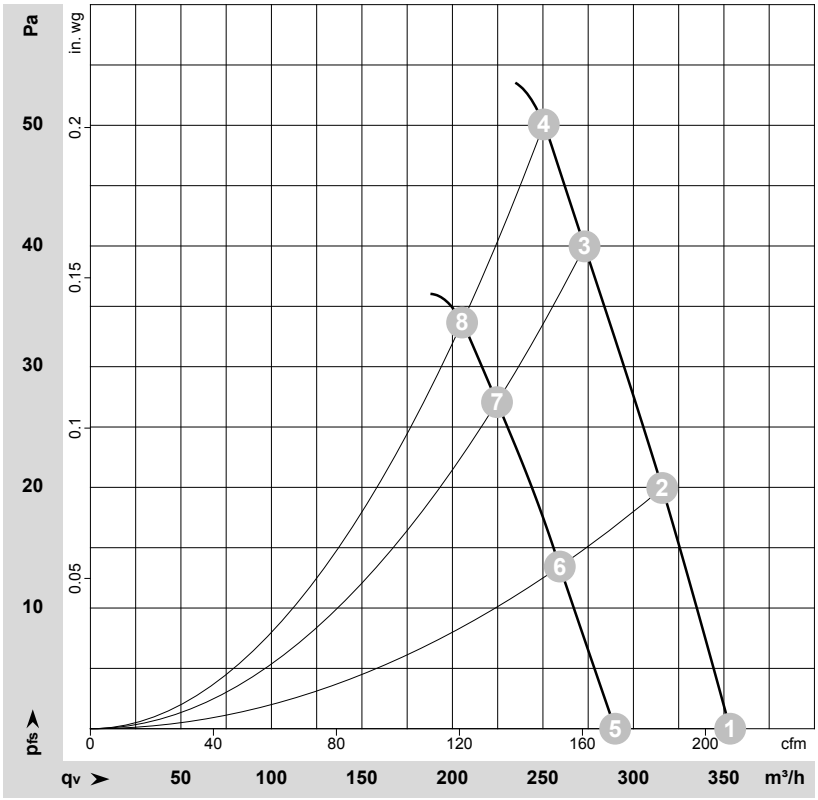
Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-196208-1

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	Wired	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	1~	115	50	2700	11	0.17	355	0	210	0.00
2	1	1~	115	50	2700	12	0.18	315	20	185	0.08
3	1	1~	115	50	2700	13	0.19	275	40	160	0.16
4	1	1~	115	50	2700	14	0.20	250	50	145	0.20
5	2	1~	115	50	2200	7.0	0.09	290	0	170	0.00
6	2	1~	115	50	2200	7.0	0.10	260	13	150	0.05
7	2	1~	115	50	2200	8.0	0.11	225	27	130	0.11
8	2	1~	115	50	2200	8.0	0.11	205	34	120	0.14

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