

# EC axial fan

sickle-shaped blades (S series)

ESM fan housing

W1G154-EG57-05 ebmpapst Datasheet

sales@fansco.com

www.fansco.com

## Nominal data

<b>Type</b>	<b>W1G154-EG57-05</b>		
<b>Motor</b>	<b>M1G055-AI</b>		
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 <sup>-1</sup>	1600	1400
Power consumption	W	4	
Current draw	A	0.07	
Max. back pressure	Pa	18	
Max. back pressure	in. wg	0.07	
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	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	<ul style="list-style-type: none"> <li>- Speed selection max./min.</li> <li>- Power limiter</li> <li>- Motor current limitation</li> <li>- Soft start</li> <li>- Thermal overload protection for motor</li> </ul>
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; VDE; CSA C22.2 No. 77

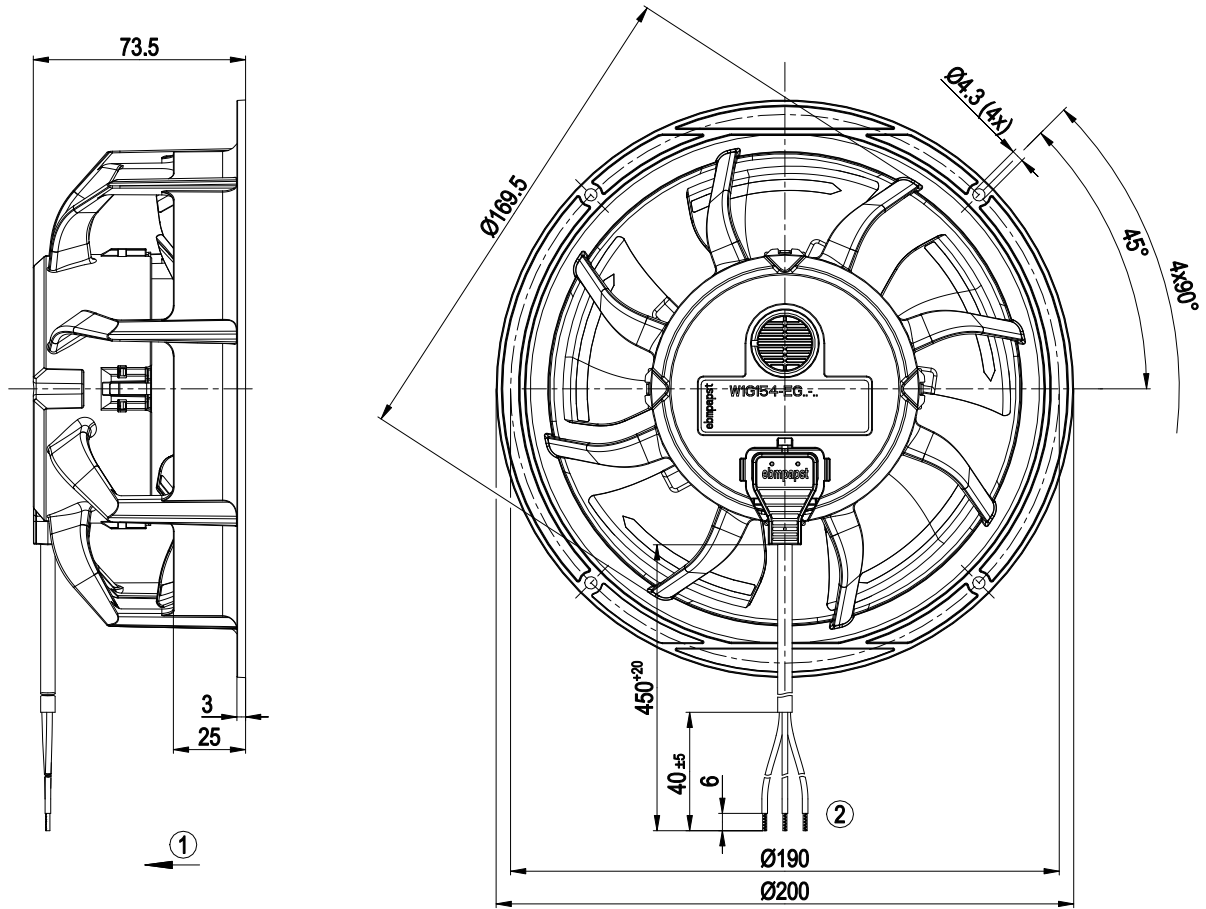
W1G154-EG57-05

# EC axial fan

sickle-shaped blades (S series)

ESM fan housing

## Product drawing



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

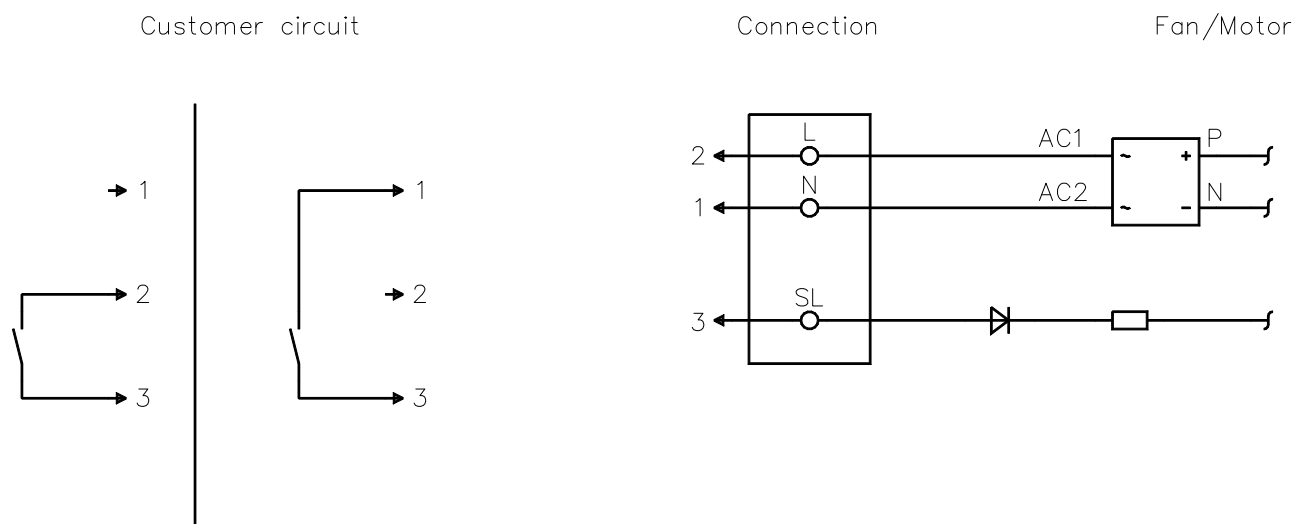


# EC axial fan

sickle-shaped blades (S series)

ESM fan housing

## Connection diagram



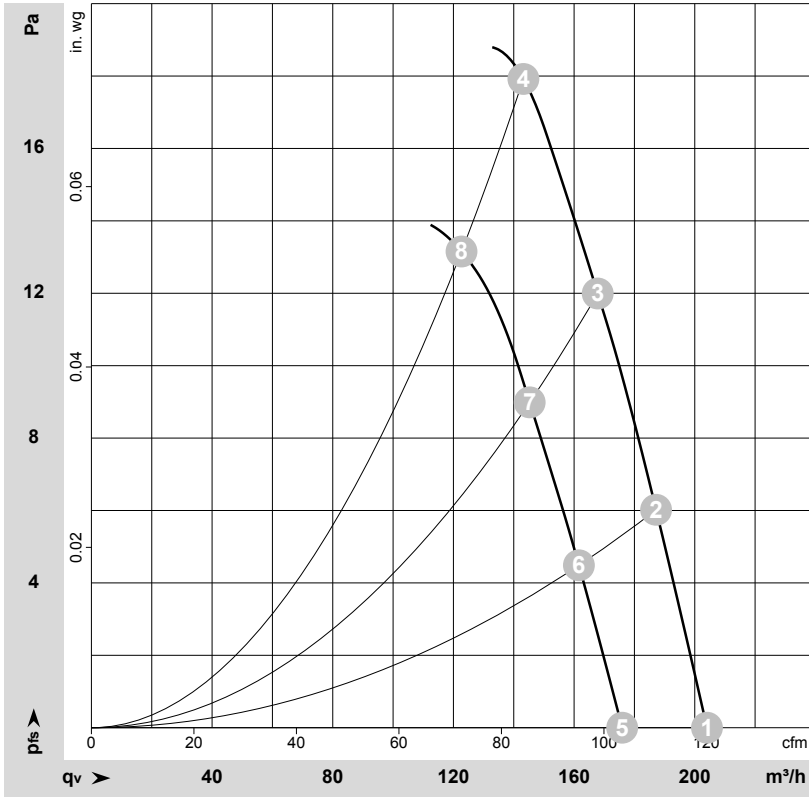
No.	Conn.	Designation	Color	Function/assignment
1	N		blue	Power supply, neutral conductor, see nameplate for voltage range
2	L		black	Power supply, phase, see nameplate for voltage range
3	SL		brown	Speed selection: switch open speed 1, switch closed speed 2

# EC axial fan

sickle-shaped blades (S series)

ESM fan housing

## Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-196191-1  
Measurement: LU-196192-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. 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 <sub>ed</sub>	I	q <sub>v</sub>	p <sub>fs</sub>	q <sub>v</sub>	p <sub>fs</sub>
			V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	cfm	in. wg
1	1	1~	115	50	1600	4.0	0.06	205	0	120	0.00
2	1	1~	115	50	1600	4.0	0.07	185	6	110	0.02
3	1	1~	115	50	1600	4.0	0.07	170	12	100	0.05
4	1	1~	115	50	1600	4.0	0.07	145	18	85	0.07
5	2	1~	115	50	1400	3.00	0.05	175	0	105	0.00
6	2	1~	115	50	1400	3.00	0.06	160	5	95	0.02
7	2	1~	115	50	1400	3.00	0.06	145	9	85	0.04
8	2	1~	115	50	1400	3.00	0.06	125	13	70	0.05

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P<sub>ed</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase

