

# EC axial fan - ESM

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

ESM fan housing

W1G200-EC95-51 ebmpapst Datasheet

[sales@fansco.com](mailto:sales@fansco.com)

[www.fansco.com](http://www.fansco.com)

Limited partnership · Headquarters Muldingen

Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Muldingen GmbH · Headquarters Muldingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

## Nominal data

Type	W1G200-EC95-51		
Motor	M1G055-BD		
Phase		1~	1~
Nominal voltage	VAC	115	115
Frequency	Hz	50/60	50/60
Method of obtaining data		ml	ml
Speed (rpm)	min <sup>-1</sup>	1500	2100
Power consumption	W	-	31
Current draw	A	-	0.46
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

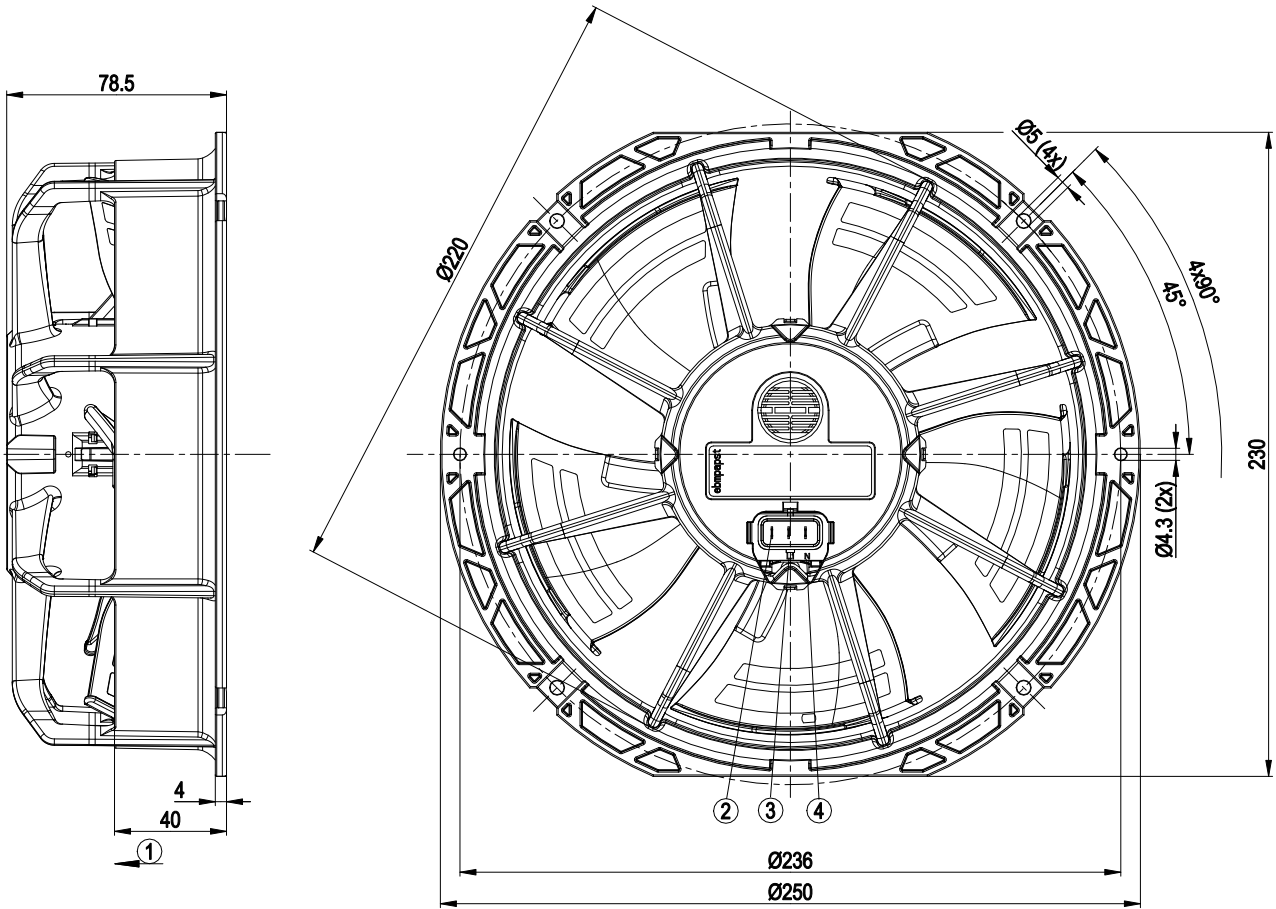
<b>Weight</b>	0.9 kg
<b>Fan size</b>	200 mm
<b>Blade material</b>	PA plastic
<b>Fan housing material</b>	PP plastic
<b>Airflow direction</b>	"V"
<b>Direction of rotation</b>	Counterclockwise, viewed toward rotor
<b>Degree of protection</b>	IP54; only with suitable plug, to be installed by customer
<b>Insulation class</b>	"B"
<b>Moisture (F) / Environmental (H) protection class</b>	H1
<b>Max. permitted ambient temp. for motor (transport/storage)</b>	+ 80 °C
<b>Min. permitted ambient temp. for motor (transport/storage)</b>	- 40 °C
<b>Installation position</b>	Any
<b>Condensation drainage holes</b>	None
<b>Mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Technical features</b>	<ul style="list-style-type: none"> <li>- Speed selection max./min.</li> <li>- ESM+ expandable with plug-in module</li> <li>- Soft start</li> <li>- Thermal overload protection for motor</li> </ul>
<b>Speed levels</b>	2
<b>EMC immunity to interference</b>	According to EN 61000-6-2 (industrial environment)
<b>EMC interference emission</b>	According to EN 61000-6-3 (household environment)
<b>Motor protection</b>	Thermal overload protector (TOP) internally connected
<b>Protection class</b>	II
<b>Conformity with standards</b>	EN 60335-1; EN 60335-2-24; EN 60335-2-80; EN 60335-2-89
<b>Approval</b>	EAC; VDE; UL 1004-3; CSA C22.2 No. 77

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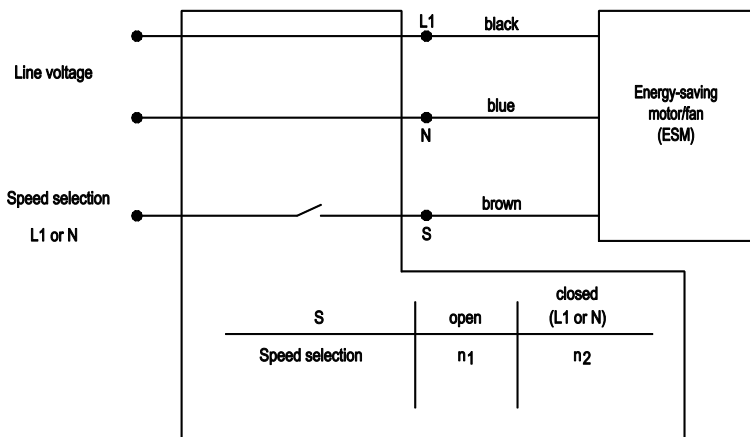
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## Product drawing



1	Direction of air flow "V"
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

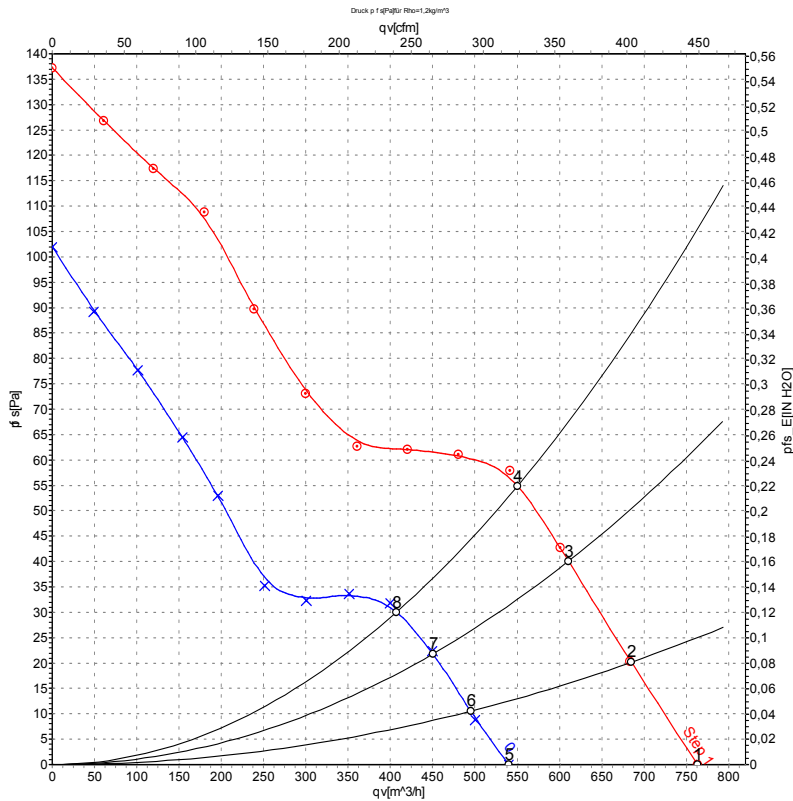


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## Curves: Air performance 50 Hz



Measurement: LU-127262-1  
Measurement: LU-127268-1

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 <sub>ed</sub>	I	LwA <sub>in</sub>	qv	p <sub>fs</sub>	qv	p <sub>fs</sub>
		V	Hz	min <sup>-1</sup>	W	A	dB(A)	m <sup>3</sup> /h	Pa	CFM	inH <sub>2</sub> O
1	1	115	50	2100	28	0.42	62	765	0	450	0.00
2	1	115	50	2100	30	0.45	61	685	20	405	0.08
3	1	115	50	2100	31	0.46	60	610	40	360	0.16
4	1	115	50	2100	31	0.46	62	550	55	325	0.22
5	1	115	50	1500	14	0.22	54	540	0	320	0.00
6	1	115	50	1500	15	0.22	54	495	10	290	0.04
7	1	115	50	1500	16	0.26	53	450	22	265	0.09
8	1	115	50	1500	16	0.26	55	405	30	240	0.12

U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>ed</sub> = Power consumption · I = Current draw · LwA<sub>in</sub> = Sound power level intake side · qv = Air flow · p<sub>fs</sub> = Pressure increase

