

W1G250-BB17-01

## EC axial fan - ESM

sickle-shaped blades (S series)  
ESM fan housing with guard grille



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### Nominal data

Type	W1G250-BB17-01		
Motor	M1G055-BI		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50/60	50/60
Method of obtaining data		ml	
Speed (rpm)	min <sup>-1</sup>	1700	1200
Power consumption	W	32	
Current draw	A	0.24	
Max. back pressure	Pa	40	
Max. back pressure	inH <sub>2</sub> O	0.16	
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

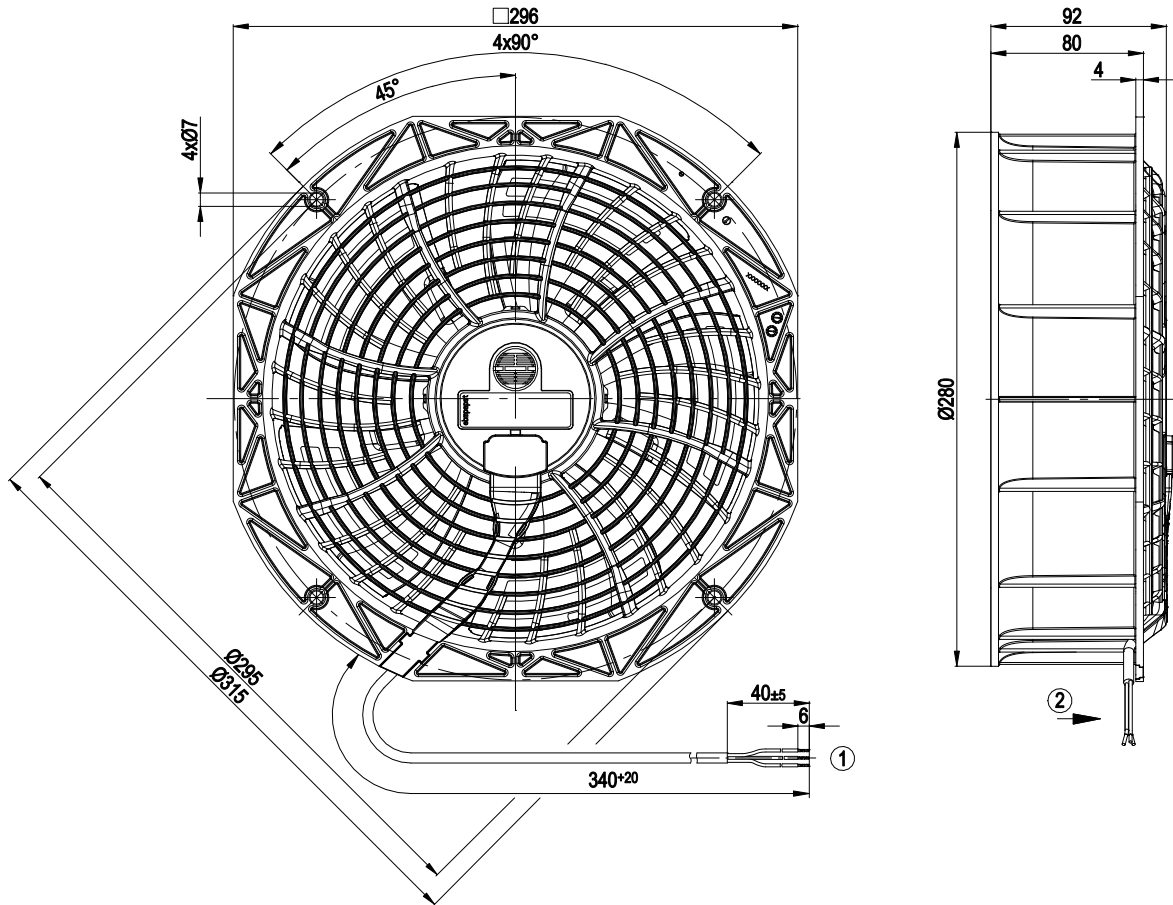
<b>Weight</b>	1.5 kg
<b>Fan size</b>	250 mm
<b>Blade material</b>	PA plastic
<b>Fan housing material</b>	PP plastic
<b>Number of blades</b>	5
<b>Airflow direction</b>	"V"
<b>Direction of rotation</b>	Counterclockwise, viewed toward rotor
<b>Degree of protection</b>	IP54
<b>Insulation class</b>	"B"
<b>Moisture (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>- Thermal overload protection for motor</li> <li>- Soft start</li> <li>- Speed selection max./min.</li> </ul>
<b>Speed levels</b>	2
<b>EMC immunity to interference</b>	According to EN 61000-6-2 (industrial environment)
<b>EMC circuit feedback</b>	According to EN 61000-3-2/3
<b>EMC interference emission</b>	According to EN 61000-6-3 (household environment)
<b>Motor protection</b>	Thermal overload protector (TOP) internally connected
<b>With cable</b>	Lateral
<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; CE
<b>Approval</b>	CSA C22.2 No. 77; VDE; UL 1004-3; EAC



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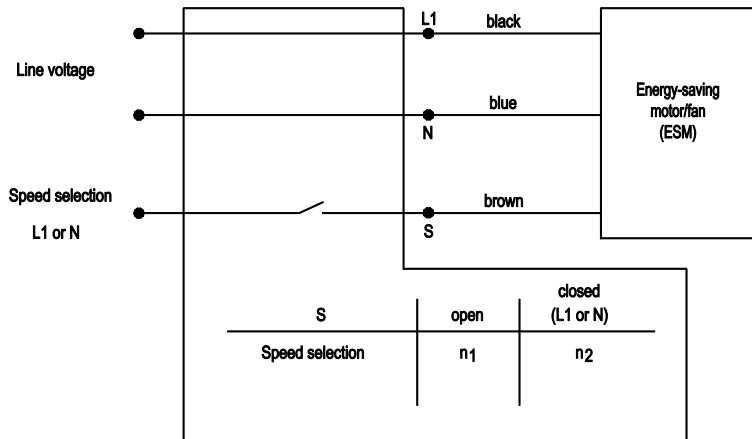
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## Product drawing



- 1 Cable AWG20, 3x crimped splices
- 2 Direction of air flow "V"

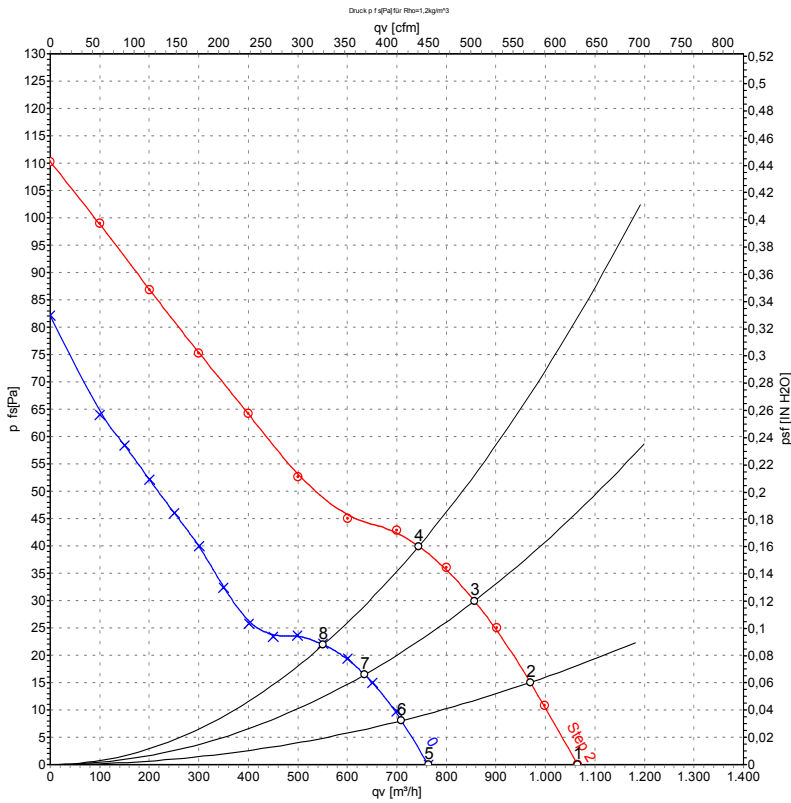
## Connection diagram



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## Curves: Air performance 50 Hz



Measurement: LU-112960-1  
Measurement: LU-112961-1

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	LpA <sub>in</sub>	LwA <sub>in</sub>	q <sub>v</sub>	P <sub>fs</sub>	q <sub>v</sub>	P <sub>fs</sub>
		V	Hz	min <sup>-1</sup>	W	A	dB(A)	dB(A)	m <sup>3</sup> /h	Pa	cfm	inH <sub>2</sub> O
1	2	230	50	1700	30	0.24	55	62	1065	0	625	0.00
2	2	230	50	1700	31	0.24	56	63	970	15	570	0.06
3	2	230	50	1700	32	0.24	56	64	855	30	505	0.12
4	2	230	50	1700	32	0.24	57	65	745	40	440	0.16
5	1	230	50	1200	14	0.12	46	53	765	0	450	0.00
6	1	230	50	1200	15	0.13	46	54	710	8	415	0.03
7	1	230	50	1200	16	0.14	47	55	635	16	375	0.06
8	1	230	50	1200	17	0.14	49	57	550	22	325	0.09

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

