W1G250-BB17-09

EC axial fan

sickle-shaped blades (S series)

ESM fan housing with guard grille

W1G250-BB17-09 ebmpapst Datasheet
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Nominal data

Type	**W1G250-BB17-09**
Motor	**M1G055-BI**

Phase		1~	1~
Nominal voltage	VAC	230	230
Nominal voltage range	VAC	207 .. 253	
Frequency	Hz	50/60	50/60
Method of obtaining data		ml	
Speed (rpm)	min^{-1}	1700	1200
Power consumption	W	32	
Current draw	A	0.24	- (0V)
Max. back pressure	Pa		-
Min. ambient temperature	°C	-25	-25
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	1.6 kg
Size	250 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 setting input (230 V) - 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)
Electrical hookup	Connector with cable
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Lateral
Protection class	II
Conformity with standards	EN 60034-1; EN 60204-1; EN 60335-1; CE
Approval	VDE; CSA C22.2 No. 77; EAC; UL 1004-3

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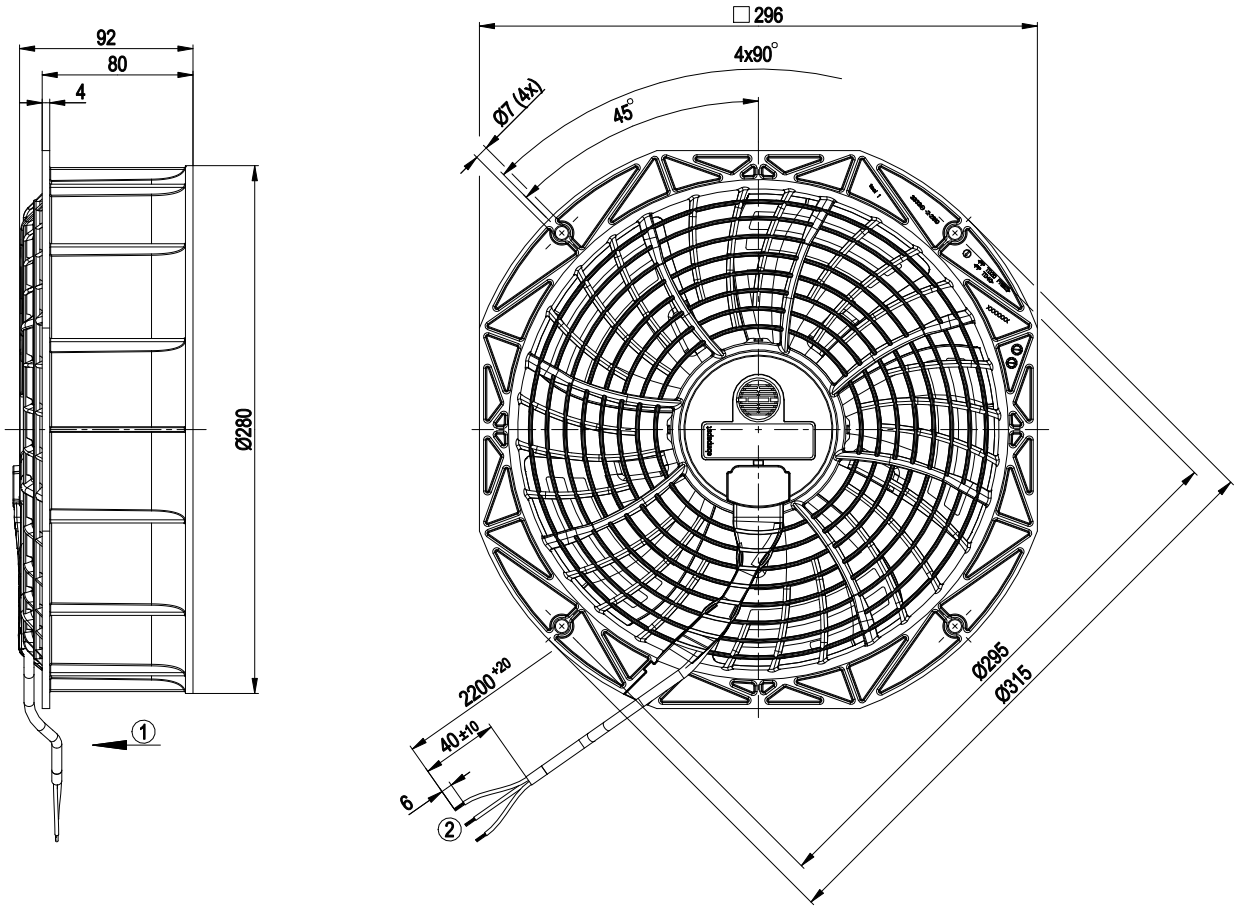
Product drawing



1	Direction of air flow "V"
2	Cable PVC AWG20
	3x splice

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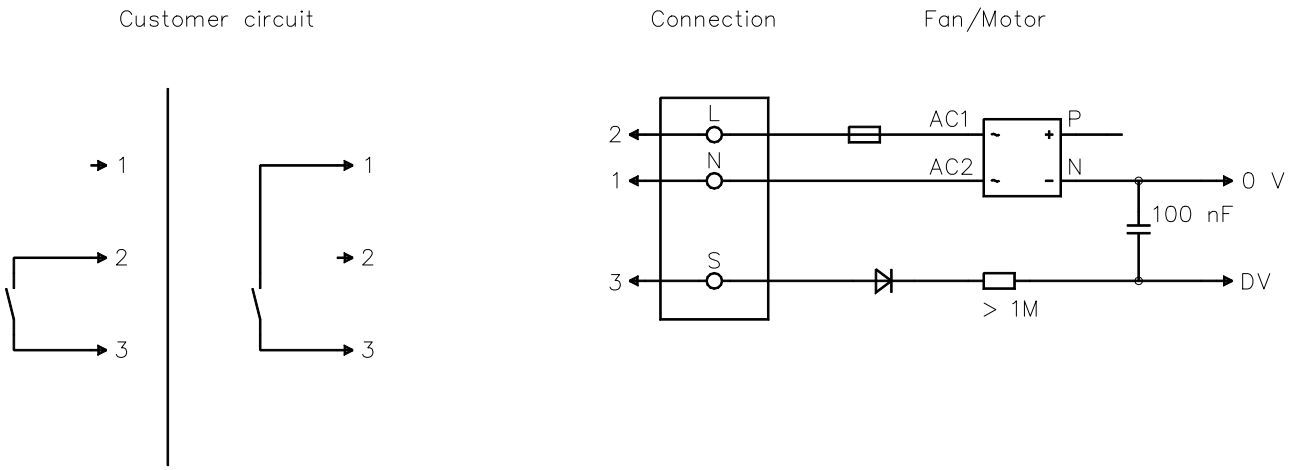
Connection diagram



No.	Conn.	Designation	Color	Function/assignment
1	N		blue	Neutral conductor
2	L		black	Power supply 230 VAC, 50-60 Hz, see nameplate for voltage range
3	S		brown	Speed selection: switch open speed 1 (fast), switch closed speed 2 (slow)

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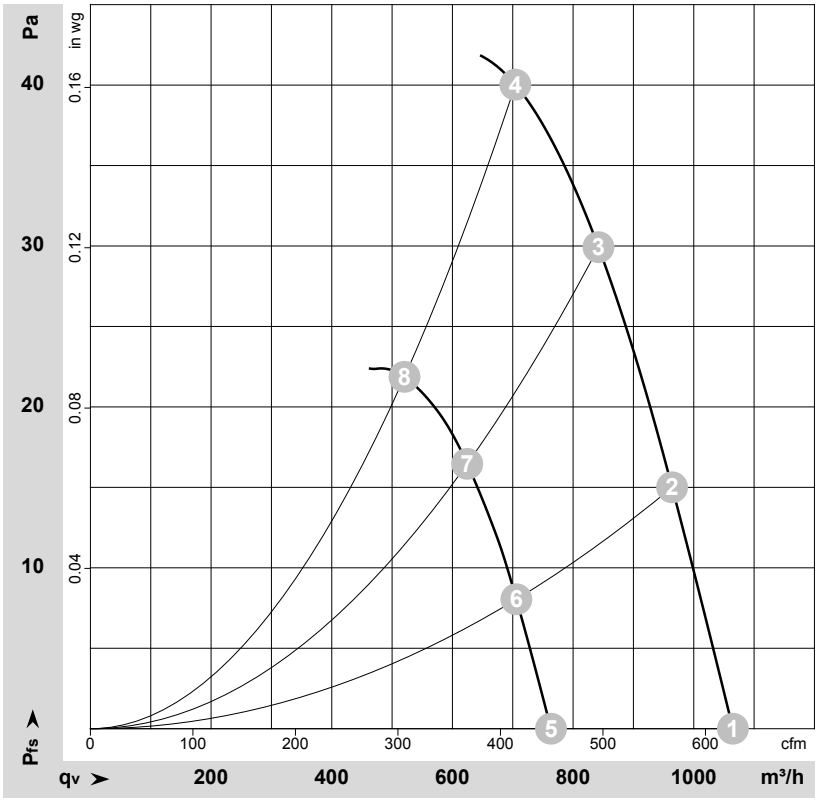
Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

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_{ed}	I	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	in. wg
1	1	230	50	1700	31	0.24	55	62	1065	0	625	0.00
2	1	230	50	1700	32	0.24	56	63	965	15	565	0.06
3	1	230	50	1700	32	0.24	56	64	840	30	495	0.12
4	1	230	50	1700	32	0.24	57	66	705	40	415	0.16
5	2	230	50	1200	14	0.12	46	53	765	0	450	0.00
6	2	230	50	1200	15	0.13	46	54	705	8	415	0.03
7	2	230	50	1200	16	0.14	47	55	625	16	370	0.06
8	2	230	50	1200	17	0.14	48	57	520	22	305	0.09

U = Voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
q_V = Air flow · p_{fs} = Pressure increase