W1G250-BB17-01

EC axial panel 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^{-1}	1700	1200
Power consumption	W	32	
Current draw	A	0.24	
Max. back pressure	Pa	40	
Max. back pressure	in. wg	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

Weight	1.46 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) - ESM+ expandable with plug-in module - 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)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 0.25 mA
Motor protection	Thermal switch auto reset, internally connected
With cable	Lateral
Protection class assignment	II; The built-in component has several local protection class assignments. The final protection class is determined by the intended installation.
Conformity with standards	EN 60034-1; EN 60204-1; EN 60335-1; EN 60335-2-24; EN 60335-2-80; EN 60335-2-89; CE
Comment on CE	Ecodesign Directive 2009/125/EC + Fan Directive (EC) No. 327/2011 does not apply, as power consumption <125W.
Approval	EAC; UL 1004-3; CCC; CSA C22.2 No. 77; VDE

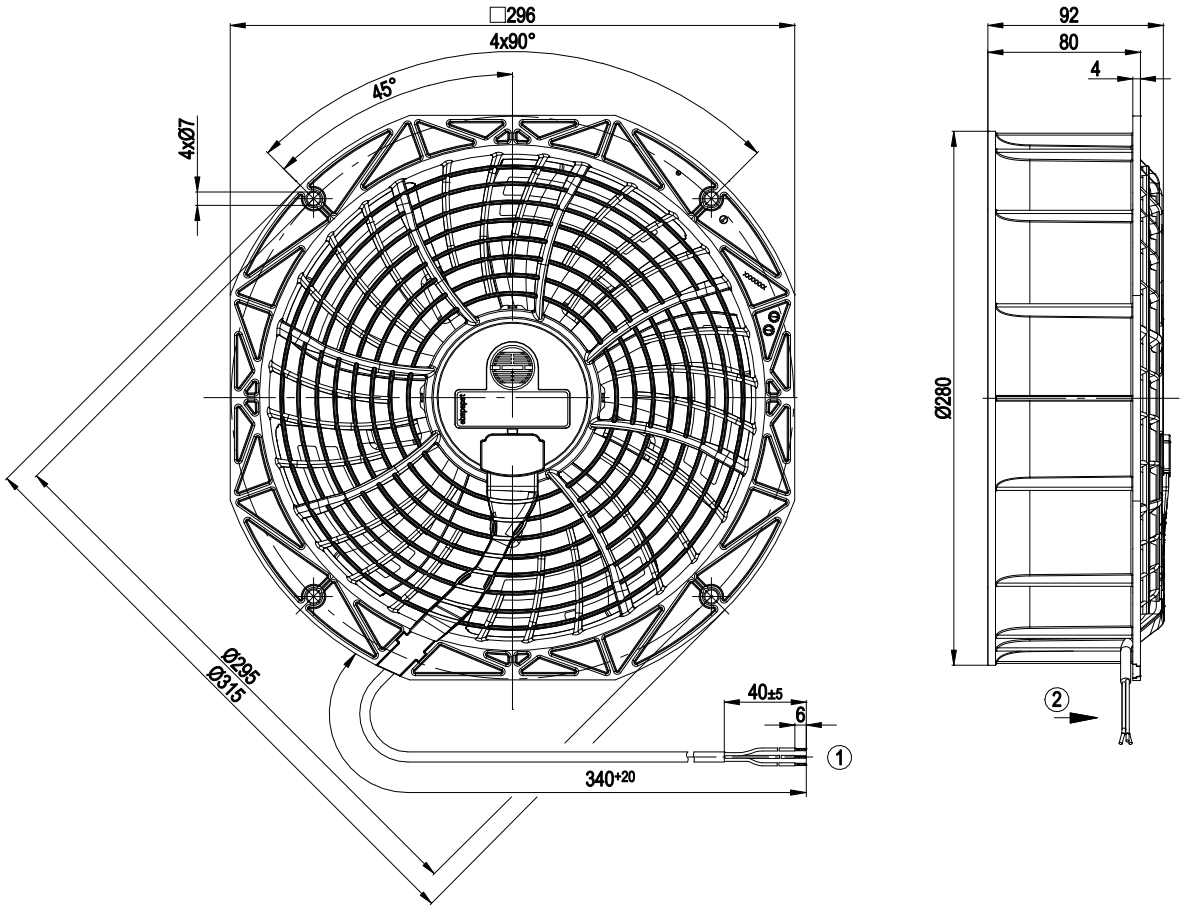
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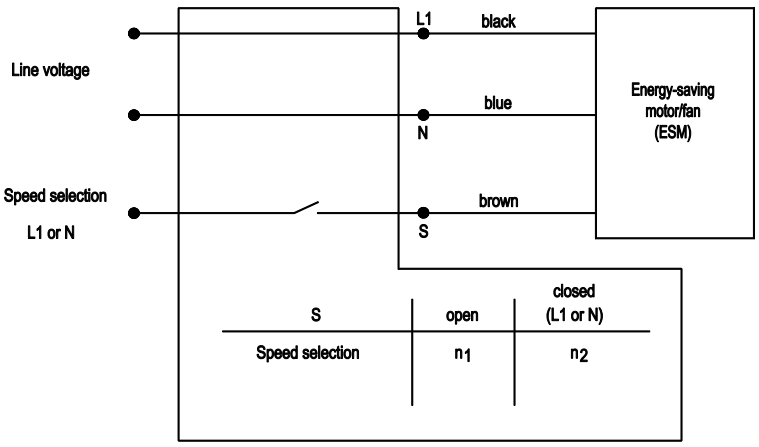
ESM fan housing with guard grille

Product drawing



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

Connection diagram



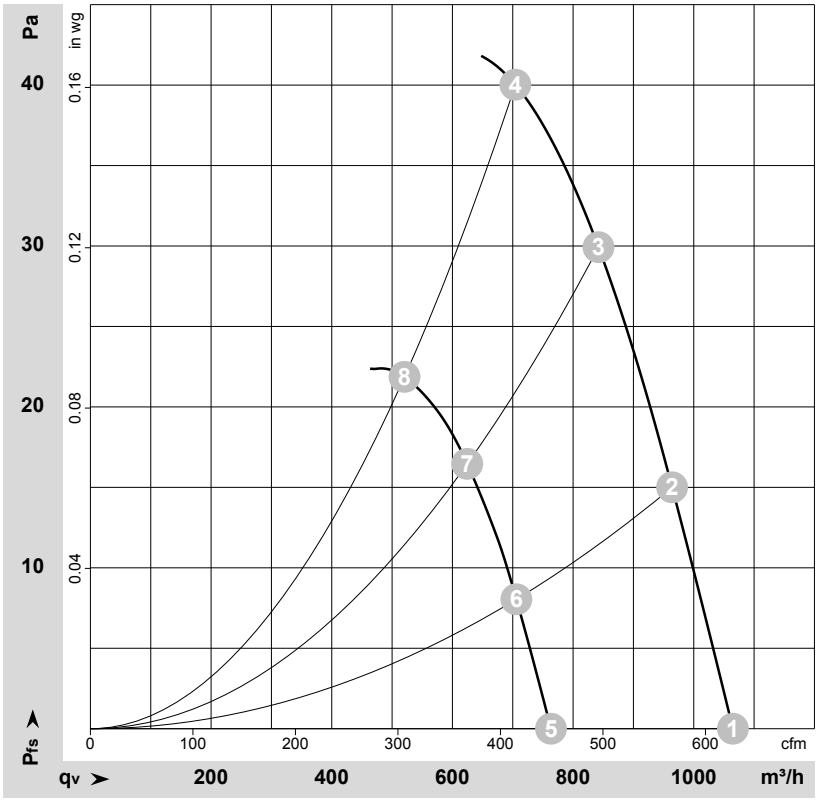
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-112960-1
Date: 2008-09-10
Housing: 33330-2-2910

Measurement: LU-112961-1
Date: 2008-09-10
Housing: 33330-2-2910

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

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