W1G300-BB19-01

EC axial panel fan - ESM

sickle-shaped blades (S series)

ESM fan housing with guard grille



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Nominal data

Type	**W1G300-BB19-01**		
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}	1300	900
Power consumption	W	35	
Current draw	A	0.27	
Max. back pressure	Pa	35	
Max. back pressure	in. wg	0.14	
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	1.7 kg
Size	300 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; UKCA; CE
Comment on CE	Ecodesign Directive 2009/125/EC + Fan Directive (EC) No. 327/2011 does not apply, as power consumption <125W.
Approval	UL 1004-3; CCC; EAC; CSA C22.2 No. 77; VDE

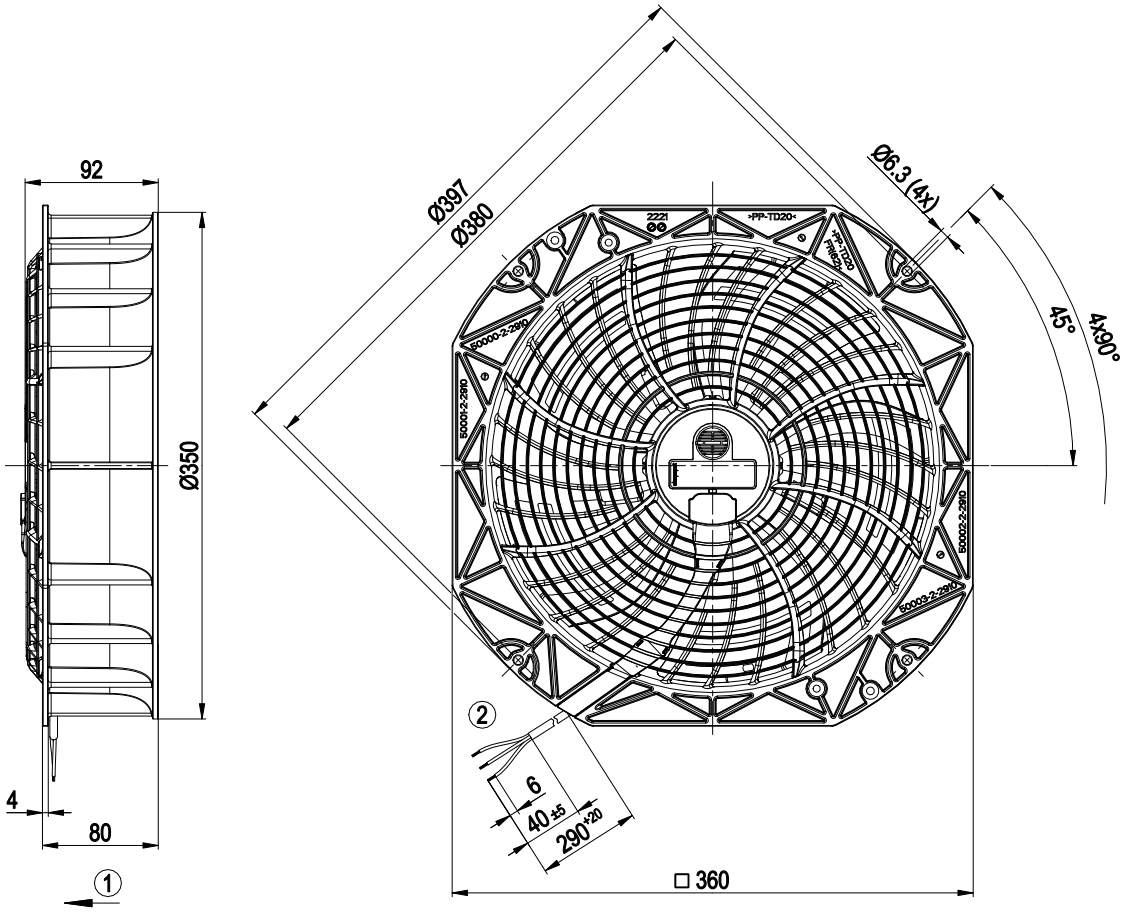
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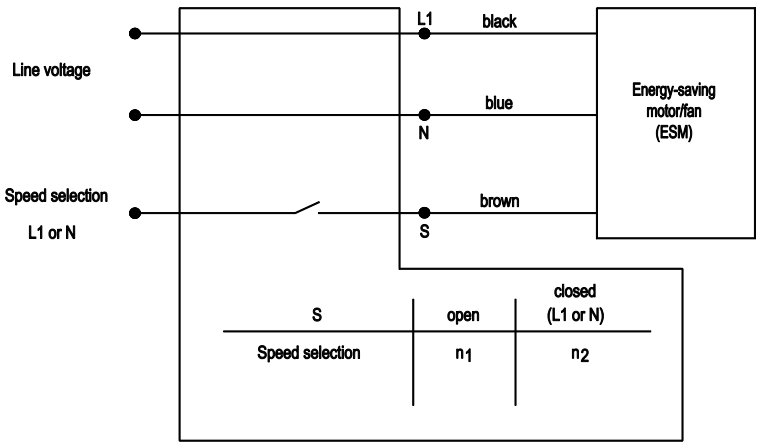
ESM fan housing with guard grille

Product drawing



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

Connection diagram



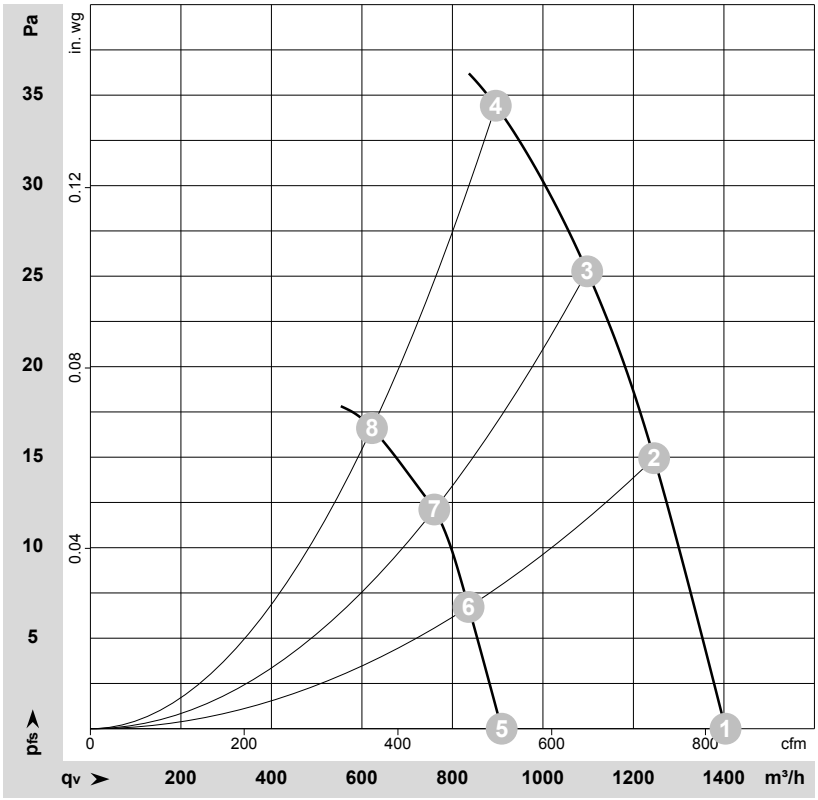
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-110298-1
Date: 2008-05-14
Housing: 50001-2-2910

Measurement: LU-110308-1
Date: 2008-05-15
Housing: 50001-2-2910

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	Wired	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	1~	230	50	1300	32	0.25	52	58	1405	0	825	0.00
2	1	1~	230	50	1300	34	0.27	52	58	1245	15	735	0.06
3	1	1~	230	50	1300	34	0.27	51	57	1100	25	645	0.10
4	1	1~	230	50	1300	35	0.27	53	59	895	35	525	0.14
5	2	1~	230	50	900	13	0.12	43	50	910	0	535	0.00
6	2	1~	230	50	900	14	0.13	42	49	835	7	490	0.03
7	2	1~	230	50	900	15	0.14	42	49	760	12	445	0.05
8	2	1~	230	50	900	16	0.15	43	50	620	17	365	0.07

Wired = Wiring · 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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