EC axial fan

sickle-shaped blades (S series)

ESM fan housing

Limited partnership · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**W1G300-EB19-20**
Motor	**M1G055-BI**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz		50/60
Method of obtaining data			ml
Speed (rpm)	min^{-1}	900	1300
Power consumption	W		38
Current draw	A		0.3
Max. back pressure	Pa		41
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	1.8 kg
Size	300 mm
Motor size	55
Blade material	PA plastic
Fan housing material	Sheet steel, galvanized and coated with pebble-gray plastic (RAL 7032)
Number of blades	5
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP55; only with suitable plug, to be installed by customer
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)
Electrical hookup	Plug
Motor protection	Thermal overload protector (TOP) internally connected
Protection class	II
Conformity with standards	EN 60335-1; EN 60335-2-24; EN 60335-2-80; EN 60335-2-89; CE
Approval	VDE; CSA C22.2 No. 77; UL 1004-3

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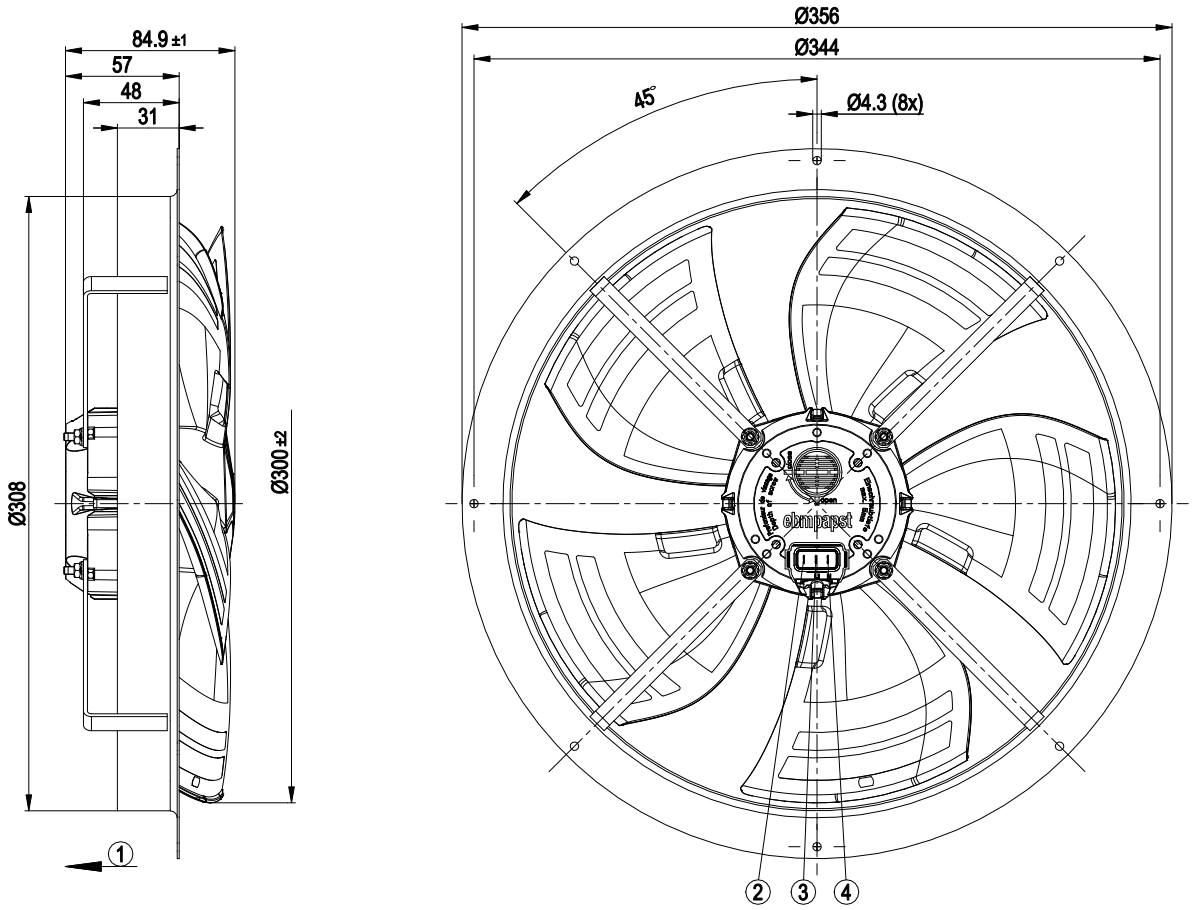
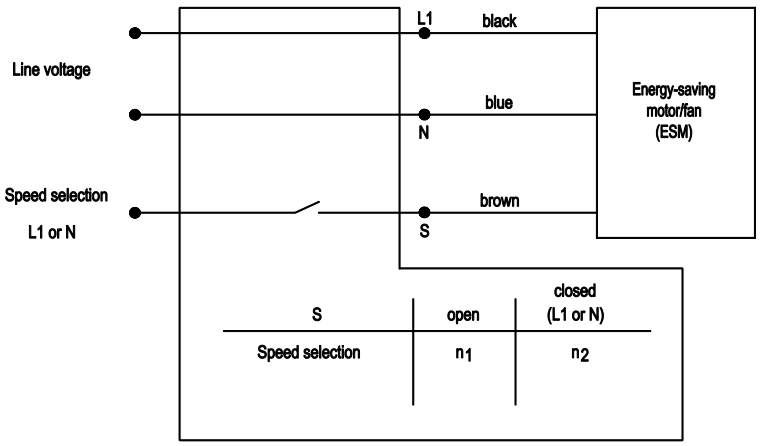
Product drawing



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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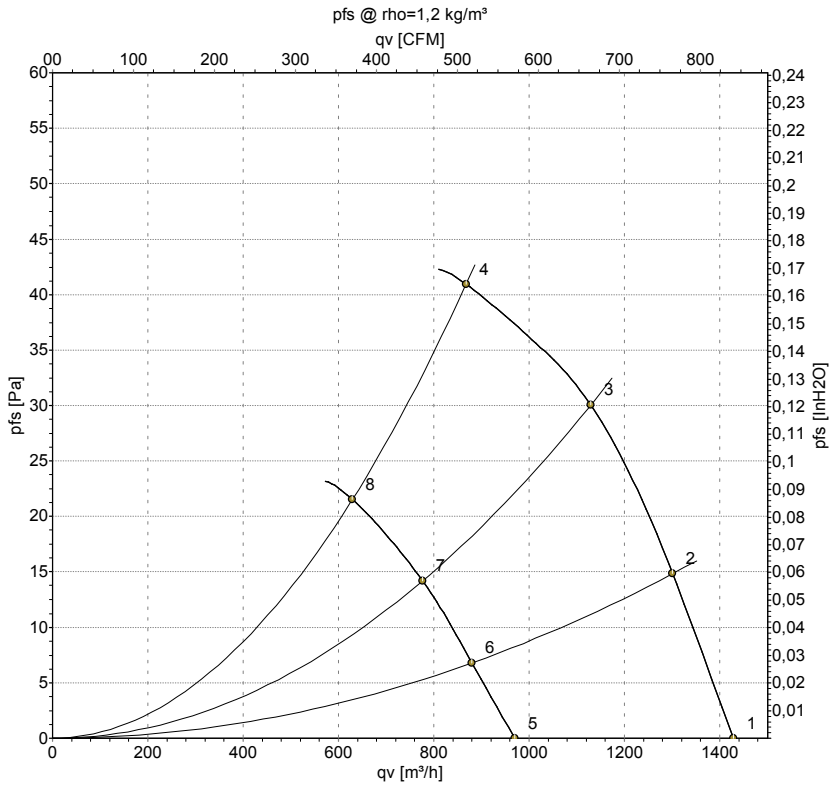
Curves: Air performance 50 Hz



Measurement: LU-157545-1
Measurement: LU-142414-1

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

	U	f	n	P_{ed}	I	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	230	50	1300	28	0.24	1430	0	840	0.00
2	230	50	1300	32	0.27	1300	15	765	0.06
3	230	50	1300	35	0.30	1130	30	665	0.12
4	230	50	1300	38	0.30	865	41	510	0.16
5	230	50	900	11	0.11	970	0	570	0.00
6	230	50	900	14	0.13	880	7	520	0.03
7	230	50	900	14	0.14	775	14	455	0.06
8	230	50	900	17	0.16	630	22	370	0.09

U = Voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase