W1G300-EB19-22

EC axial fan - ESM

sickle-shaped blades (S series), single-intake

ESM fan housing

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Nominal data

Type	**W1G300-EB19-22**
Motor	**M1G055-BI**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	1300
Power consumption	W	35
Current draw	A	0.3
Max. back pressure	Pa	40
Max. back pressure	in. wg	0.16
Min. ambient temperature	°C	-30
Max. ambient temperature	°C	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	2 kg
Size	300 mm
Motor size	55
Blade material	PA plastic
Fan housing material	Sheet steel, pre-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
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
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Lateral
Protection class	II
Conformity with standards	EN 60335-1; EN 60335-2-24; EN 60335-2-80; EN 60335-2-89; CE
Approval	UL 1004-3; CSA C22.2 No. 77; VDE

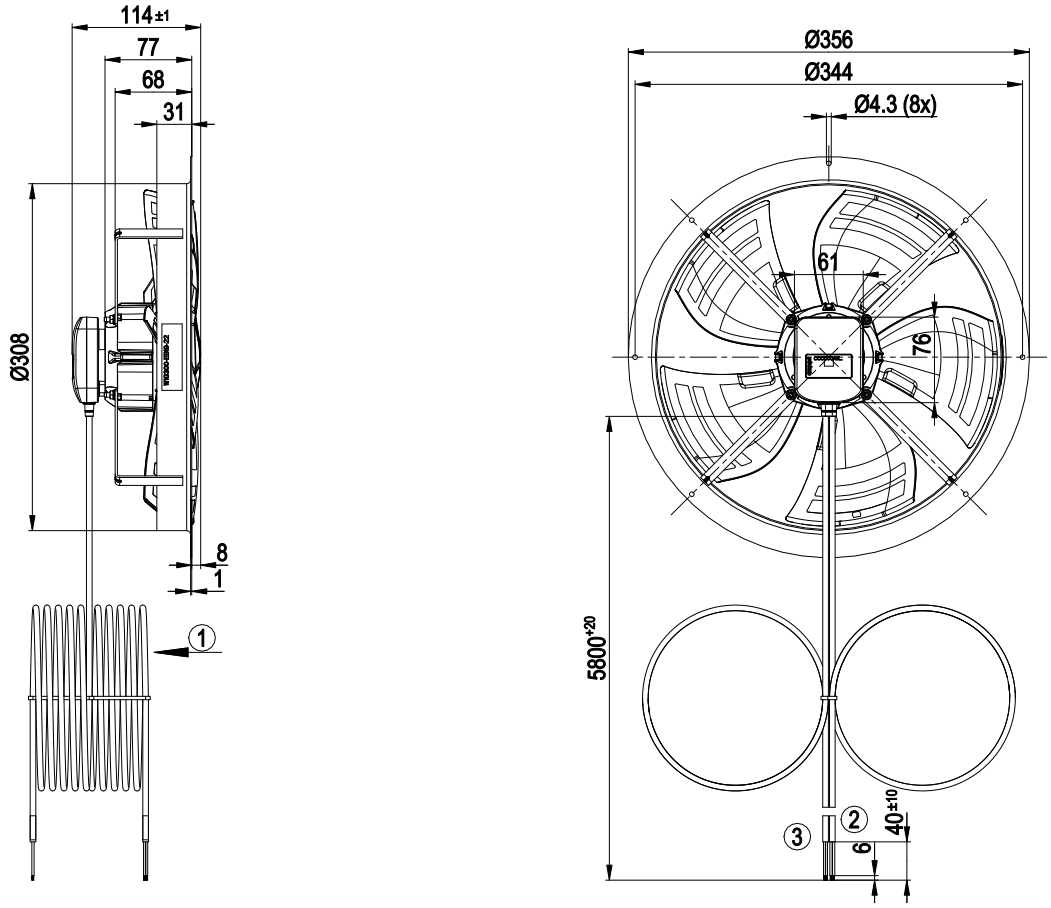
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Product drawing



1	Direction of air flow "V"
2	Cable PVC AWG22, 2x crimped splices
3	Cable PVC AWG22, 4x crimped splices

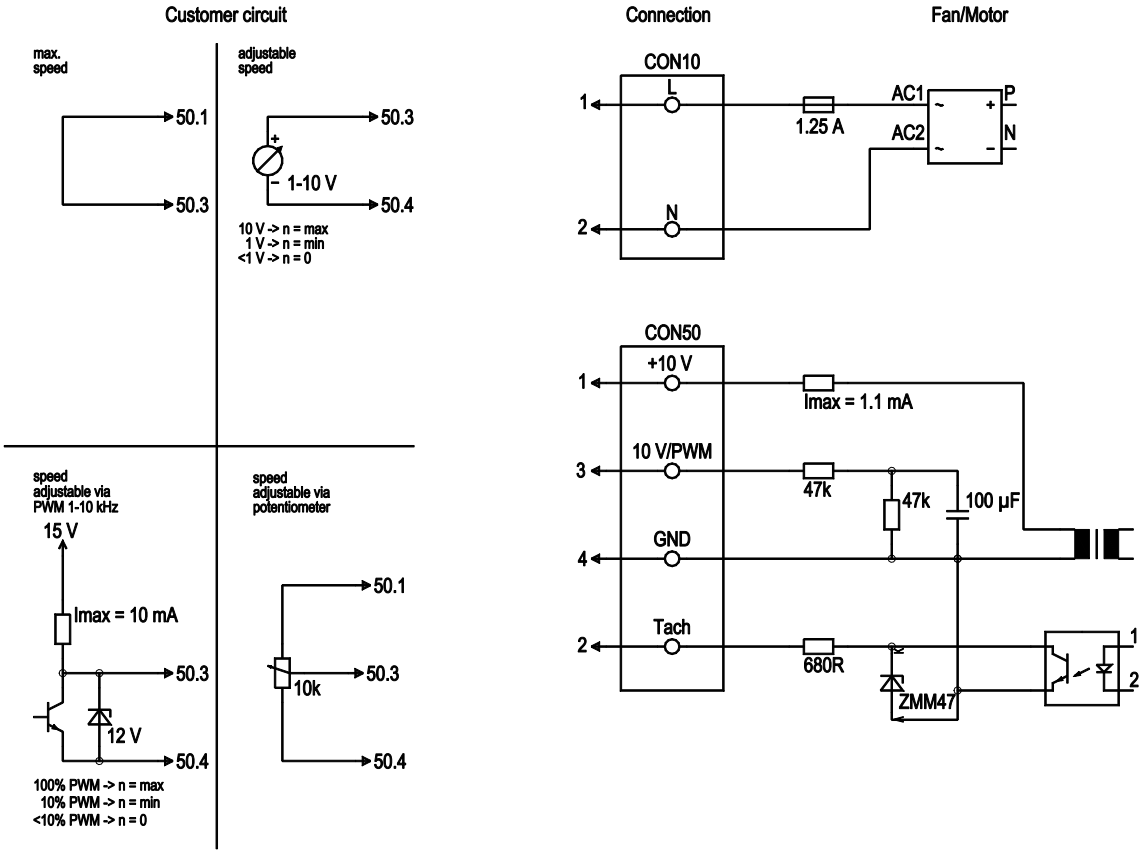
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
CON10	1	L	black	Power supply 230 VAC, 50-60 Hz, see nameplate for voltage range
CON10	2	N	blue	Neutral conductor
CON50	1	10V/max 1.1mA	red	Voltage output 10 V/1.1 mA, electrically isolated, not short-circuit-proof.
CON50	2	Tach	white	Tach output: Open collector, 1 pulse per revolution, electrically isolated
CON50	3	0-10V PWM	yellow	Control input 0-10 V or PWM, electrically isolated
CON50	4	GND	blue	GND connection for control interface

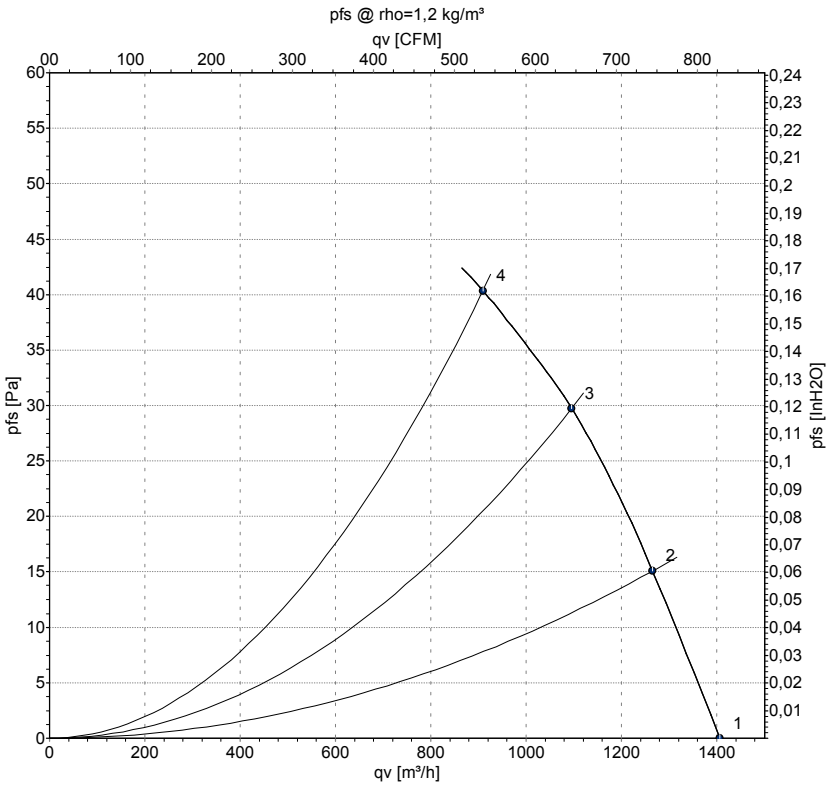
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Curves: Air performance 50 Hz



Measurement: LU-155429-1

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	27	0.23	1405	0	830	0.00
2	230	50	1300	30	0.25	1265	15	745	0.06
3	230	50	1300	35	0.28	1095	30	645	0.12
4	230	50	1300	35	0.30	910	40	535	0.16

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

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