W1G230-EB91-05

EC axial fan - ESM

sickle-shaped blades (S series)

ESM fan housing



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Nominal data

Type	**W1G230-EB91-05**	
Motor	**M1G055-BD**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	1600
Power consumption	W	30
Current draw	A	0.24
Min. ambient temperature	°C	-25
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	0.9 kg
Fan size	230 mm
Blade material	PA plastic
Fan housing material	PP plastic
Number of blades	5
Airflow direction	"V"
Direction of rotation	Right and left
Degree of protection	IP54; 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	- Selection of direction of rotation left/right - Thermal overload protection for motor - Soft start
EMC immunity to interference	According to EN 61000-6-2
EMC circuit feedback	According to EN 61000-3-2/3
EMC interference emission	According to EN 61000-6-3 (household environment)
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	CSA C22.2 No. 77; CCC; UL 1004-3; VDE

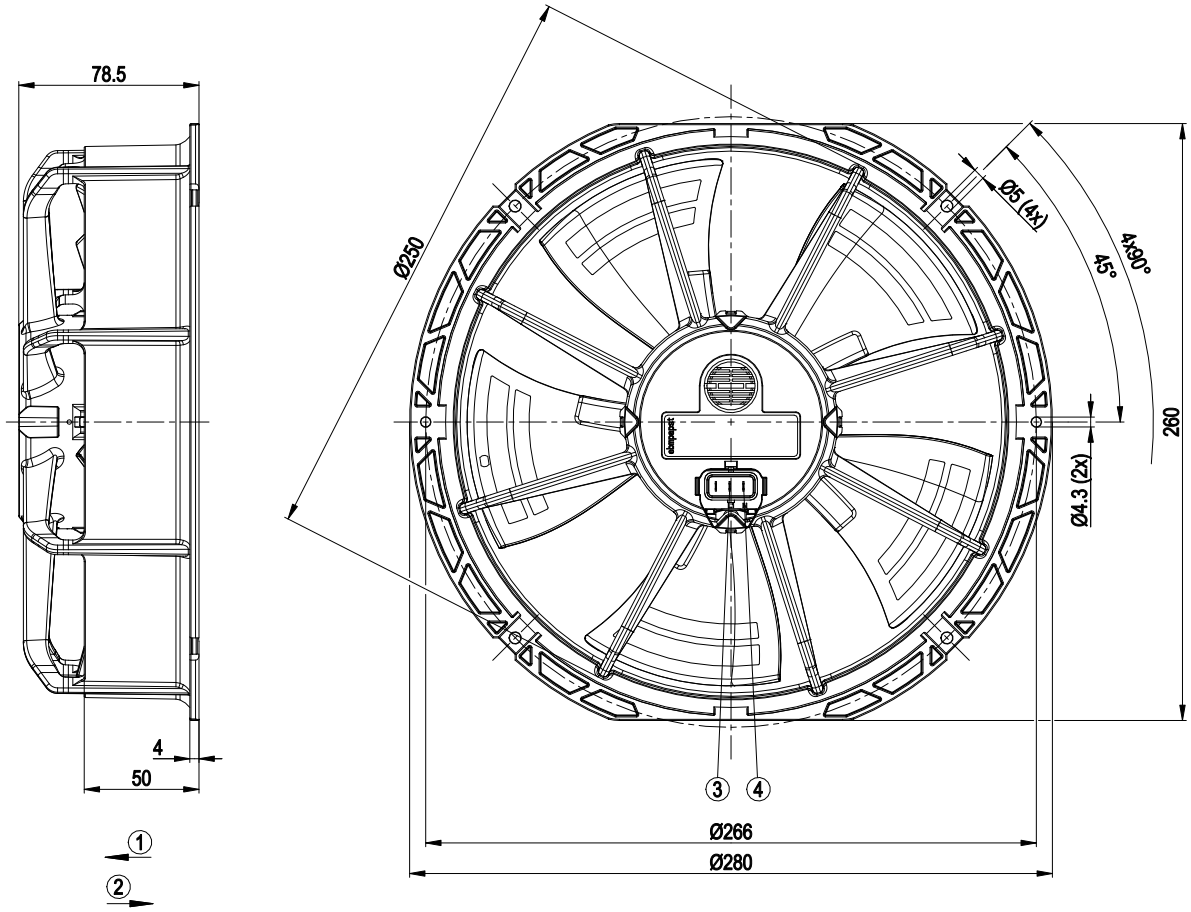
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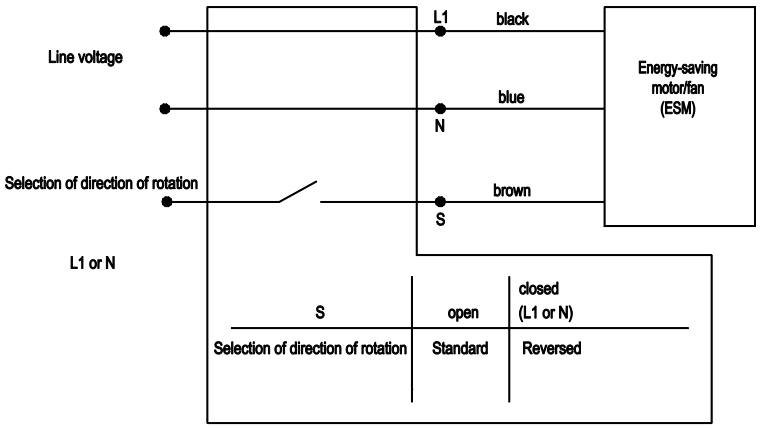
ESM fan housing

Product drawing



1	Direction of air flow "V"
2	Direction of air flow "A". With negative flank on S direction of rotation clockwise = Direction of air flow "A" for approx. 180 sec.
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



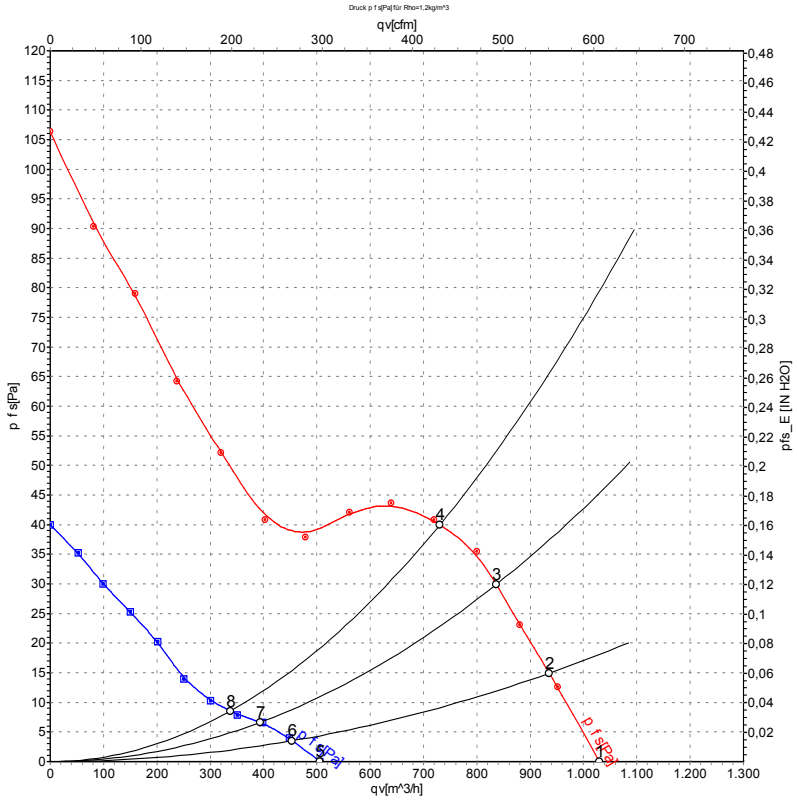
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Curves: Air performance 50 Hz



Measurement: LU-117587-1
Measurement: LU-117592-1

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	inH2O
1	230	50	1600	27	0.22	1030	0	605	0.00
2	230	50	1600	30	0.22	935	15	550	0.06
3	230	50	1600	30	0.23	835	30	490	0.12
4	230	50	1600	30	0.24	730	40	430	0.16
5	230	50	1300	8.7	0.07	505	0	300	0.00
6	230	50	1300	9.6	0.08	455	4	265	0.02
7	230	50	1300	10	0.08	395	7	230	0.03
8	230	50	1300	11	0.09	340	8	200	0.03

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

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