W1G172-EC87-18

EC axial fan

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

ESM fan housing

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Nominal data

Type	**W1G172-EC87-18**
Motor	**M1G055-BD**

Phase		1~	1~
Nominal voltage	VAC	230	230
Method of obtaining data		ml	
Speed (rpm)	min^{-1}	1300	700
Power consumption	W	5	
Current draw	A	0.05	
Max. back pressure	Pa	14	
Max. back pressure	inH2O	0.06	
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	0.9 kg
Fan size	172 mm
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	IP54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1
Max. permitted ambient temp. for motor (transport/storage)	+ 70 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing with low-temperature lubricant
Technical features	- Speed setting input (230 V) - ESM+ expandable with plug-in module - Soft start - Thermal overload protection for motor
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)
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	VDE; UL 1004-3; EAC; CSA C22.2 No. 77

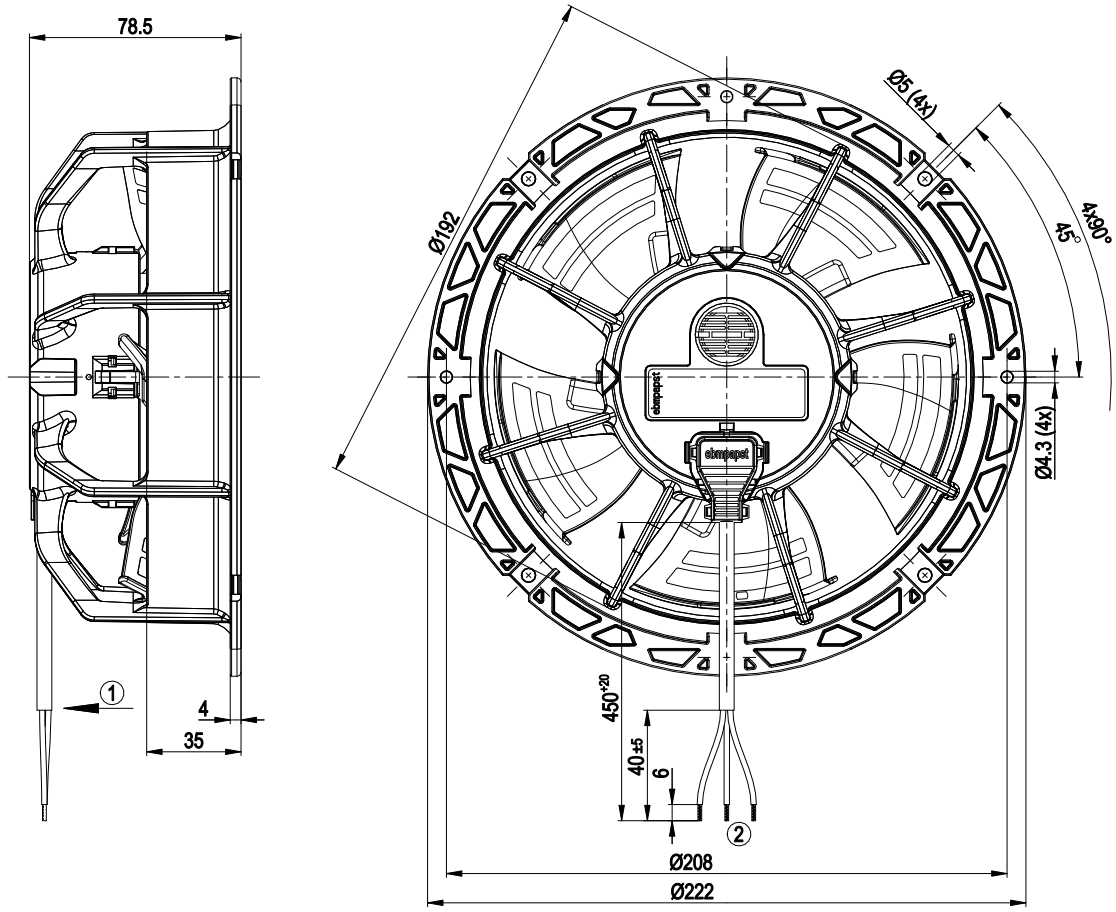
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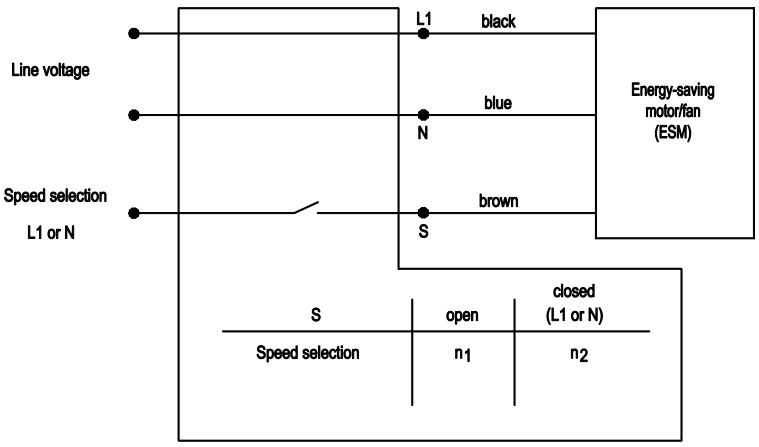
ESM fan housing

Product drawing



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

Connection diagram



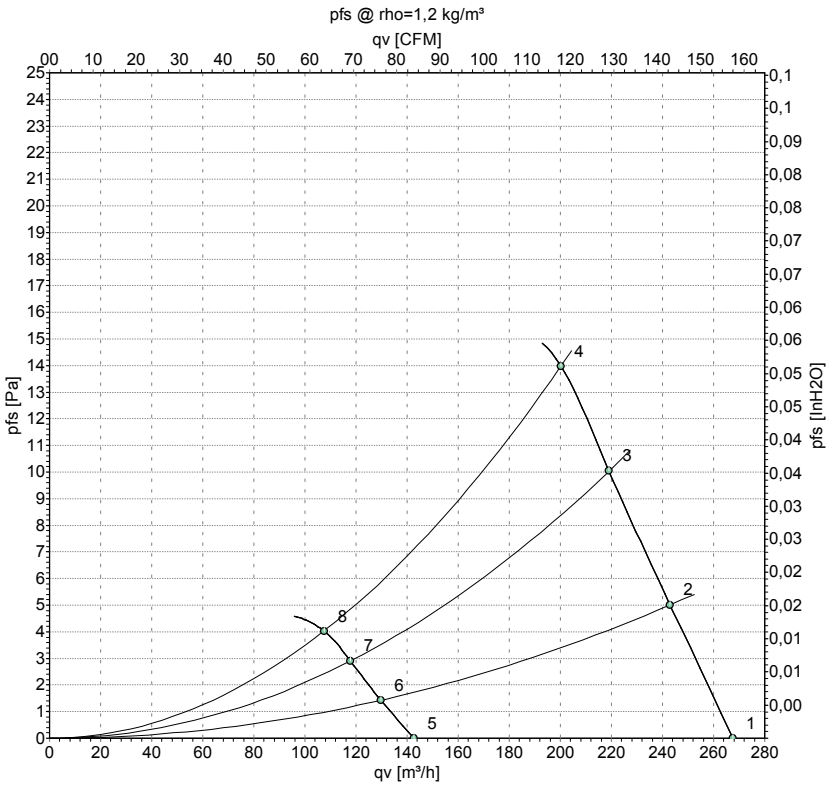
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Curves: Air performance 50 Hz



Measurement: LU-157687-1
Measurement: LU-157688-1

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	1300	5.0	0.05	270	0	160	0.00
2	230	50	1300	5.0	0.05	245	5	145	0.02
3	230	50	1300	5.0	0.05	220	10	130	0.04
4	230	50	1300	5.0	0.05	200	14	120	0.06
5	230	50	700	2.00	0.03	145	0	85	0.00
6	230	50	700	2.00	0.03	130	1	75	0.00
7	230	50	700	2.00	0.03	120	3	70	0.01
8	230	50	700	2.00	0.03	105	4	65	0.02

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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