W1G172-EC95-12

EC axial fan - ESM

sickle-shaped blades (S series)

ESM fan housing

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Nominal data

Type	**W1G172-EC95-12**
Motor	**M1G055-BD**

Phase		1~	1~
Nominal voltage	VAC	115	115
Nominal voltage range	VAC	115 .. 127	
Frequency	Hz	50/60	50/60
Method of obtaining data		ml	
Speed (rpm)	min^{-1}	2400	1600
Power consumption	W	18	-
Current draw	A	0.26	
Min. ambient temperature	°C	-30	-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	0.9 kg
Fan size	172 mm
Impeller 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	- Speed selection max./min. - 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
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; EAC; VDE; CSA C22.2 No. 77

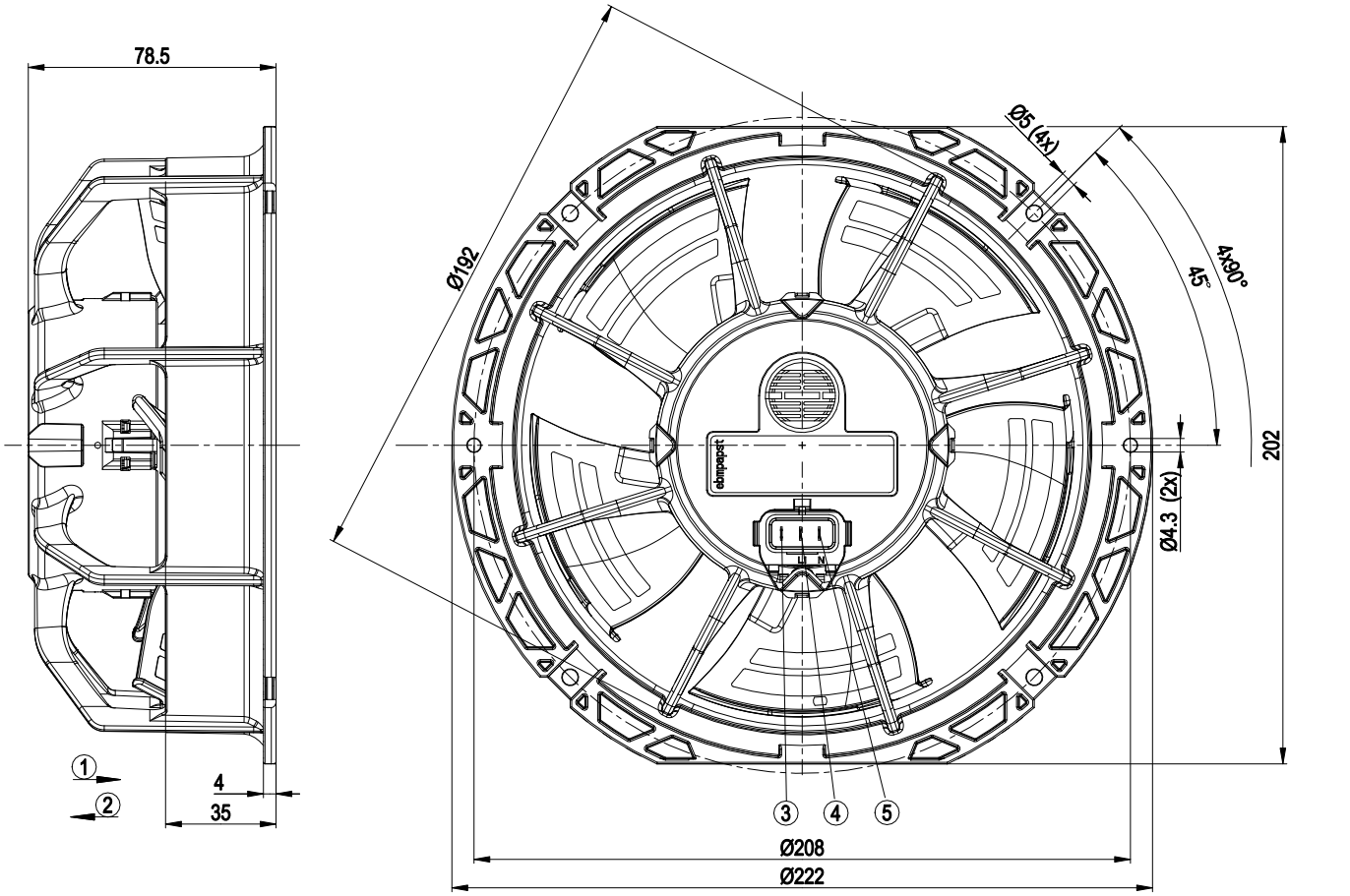
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Product drawing



1	Airflow direction "A" when switched on for 30 sec. n = 1600 rpm, then automatic switchover to airflow direction "V"
2	Direction of air flow "V"
3	Pin S, speed selection (flat plug 2.8 x 0.5)
4	Pin L1, phase (flat plug 2.8 x 0.5)
5	Pin N, neutral conductor (flat plug 2.8 x 0.5)

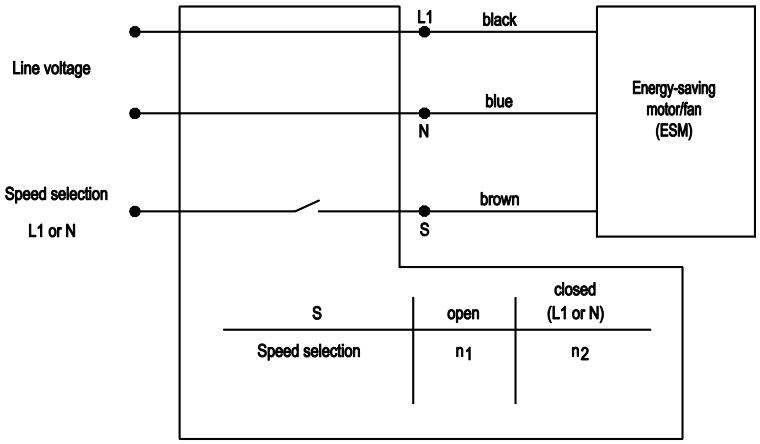
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Connection diagram



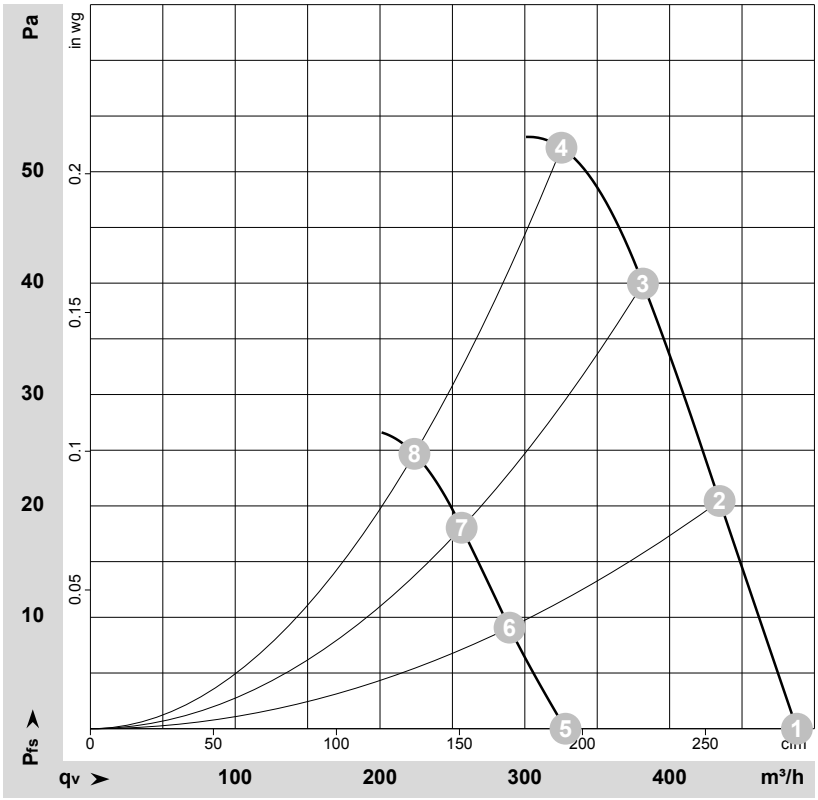
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-124699-1
Measurement: LU-177960-1

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	LpA_{in}	LwA_{in}	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	CFM	inH2O
1	115	50	2400	17	0.23			490	0	285	0.00
2	115	50	2400	18	0.26			435	20	255	0.08
3	115	50	2400	19	0.26			380	40	225	0.16
4	115	50	2400	18	0.26			325	53	190	0.21
5	115	50	1600	8.0	0.12	45	54	330	0	195	0.00
6	115	50	1600	8.0	0.13	45	53	290	9	170	0.04
7	115	50	1600	8.0	0.13	46	54	255	18	150	0.07
8	115	50	1600	8.0	0.13	48	57	225	25	130	0.10

U = Power supply · 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
qv = Air flow · p_{fs} = Pressure increase

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