W1G172-EC91-32

EC axial fan - ESM

sickled blades (S series), single inlet

ESM wall ring

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Nominal data

Type	**W1G172-EC91-32**
Motor	**M1G055-BD**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50/60	50/60
Type of data definition		ml	
Speed (rpm)	min^{-1}	2500	1700
Power input	W	22	
Current draw	A	0.18	
Max. back pressure	Pa	60	
Min. ambient temperature	°C	-30	-30
Max. ambient temperature	°C	50	50

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

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Technical features

Mass	0.9 kg
Size	172 mm
Material of impeller	PA plastic
Material of wall ring	PP plastic
Number of blades	5
Direction of air flow	"V"
Direction of rotation	Right and left
Type of protection	IP 54; Only with suitable connector, which has to be fitted by the customer
Insulation class	"B"
Humidity (F)/environmental protection class (H)	H1
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Any
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Direction of rotation selection counter-clockwise / clockwise - ESM+ extensible with plug-in module - Soft start - Over-temperature protected motor
Speed steps	2
Motor protection	Thermal overload protector (TOP) wired internally
Protection class	II
Product conforming to standard	EN 60335-1; EN 60335-2-24; EN 60335-2-80; EN 60335-2-89; CE
Approval	CSA C22.2 No.77; VDE; UL 1004-3

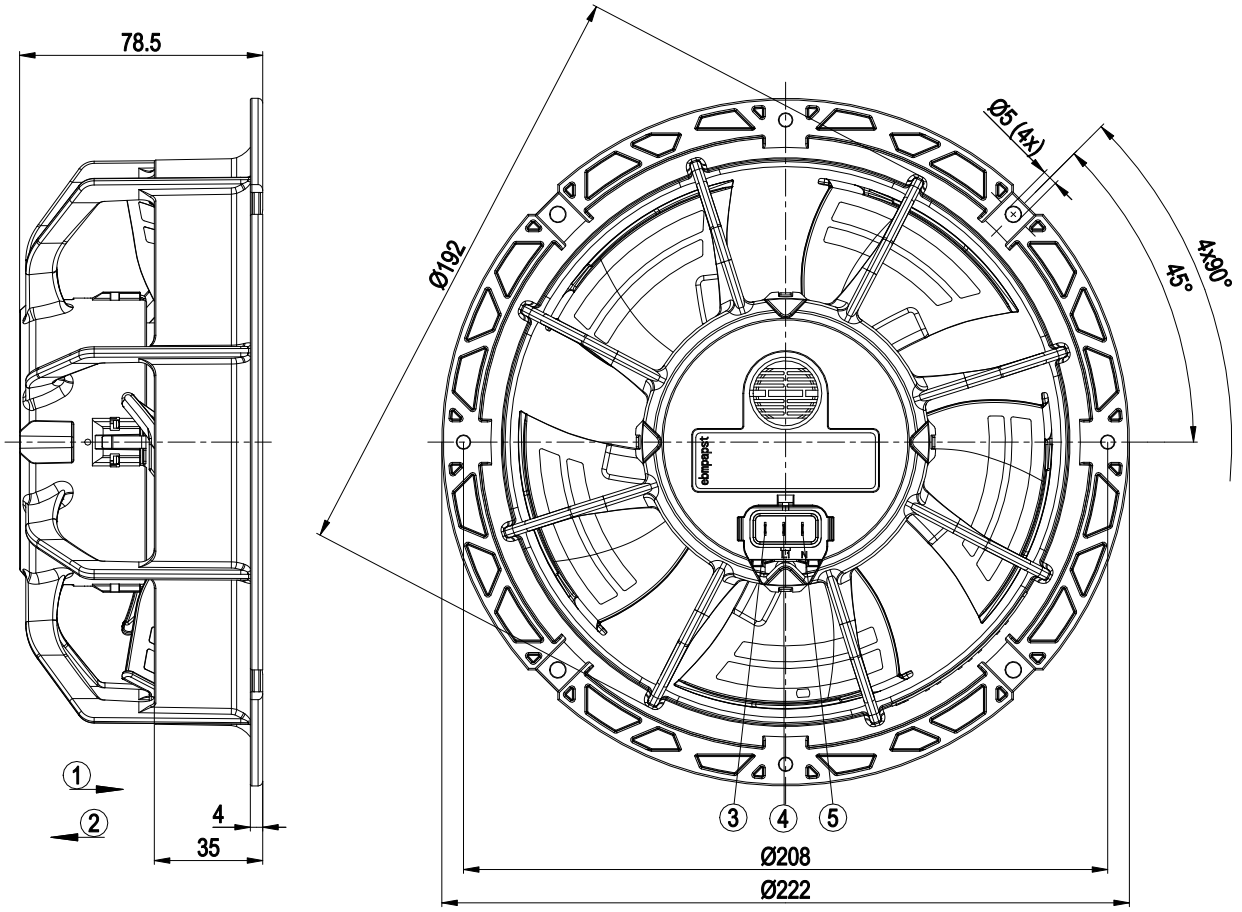
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Product drawing



1	Direction of air flow "A"
2	Direction of air flow "V"
3	PIN S, direction of rotation selection (flat connector 2.8x0.5)
4	PIN L1, phase (flat connector 2.8x0.5)
5	PIN N, neutral conductor (flat connector 2.8x0.5)

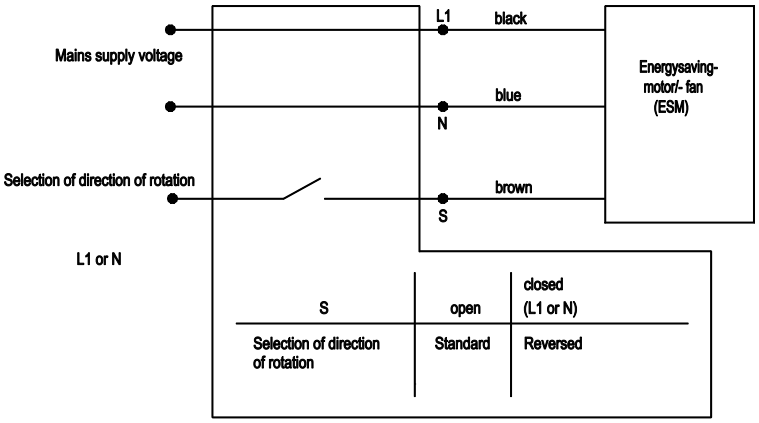
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Connection screen



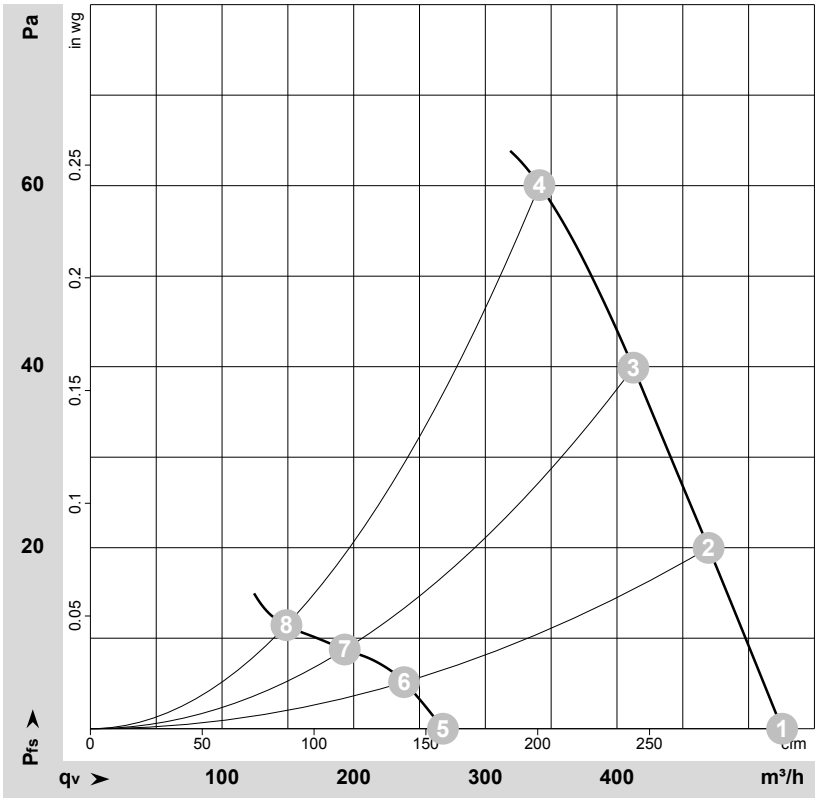
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Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-117884-1
Measurement: LU-180134-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	Stage	U	f	n	P_{ed}	I	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	2	230	50	2500	22	0.17	54	62	525	0	310	0.00
2	2	230	50	2500	22	0.18	55	63	470	20	275	0.08
3	2	230	50	2500	22	0.18	54	63	410	40	240	0.16
4	2	230	50	2500	22	0.18	55	63	340	60	200	0.24
5		230	50	1700	5.0	0.04			270	0	160	0.00
6		230	50	1700	5.0	0.04			240	5	140	0.02
7		230	50	1700	5.0	0.03			195	9	115	0.04
8		230	50	1700	5.0	0.03			150	11	90	0.04

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · q_V = Air flow
p_{fs} = Pressure increase

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