W1G172-EC91-20

EC axial fan

sickled blades (S series), single inlet

ESM wall ring

ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.com

Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
County court Stuttgart · HRB 590142

Nominal data

Type	**W1G172-EC91-20**
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 blades	PA plastic
Material of wall ring	PP plastic
Number of blades	5
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 54
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	- Speed adjustment input (230 V) - ESM+ extensible with plug-in module - Soft start - Over-temperature protected motor
Speed steps	2
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC harmonics	Acc. to EN 61000-3-2/3
EMC interference emission	Acc. to EN 61000-6-3 (household environment)
Electrical leads	With plug
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Lateral
Protection class	II
Approval	CSA C22.2 No.77; UL 1004-3

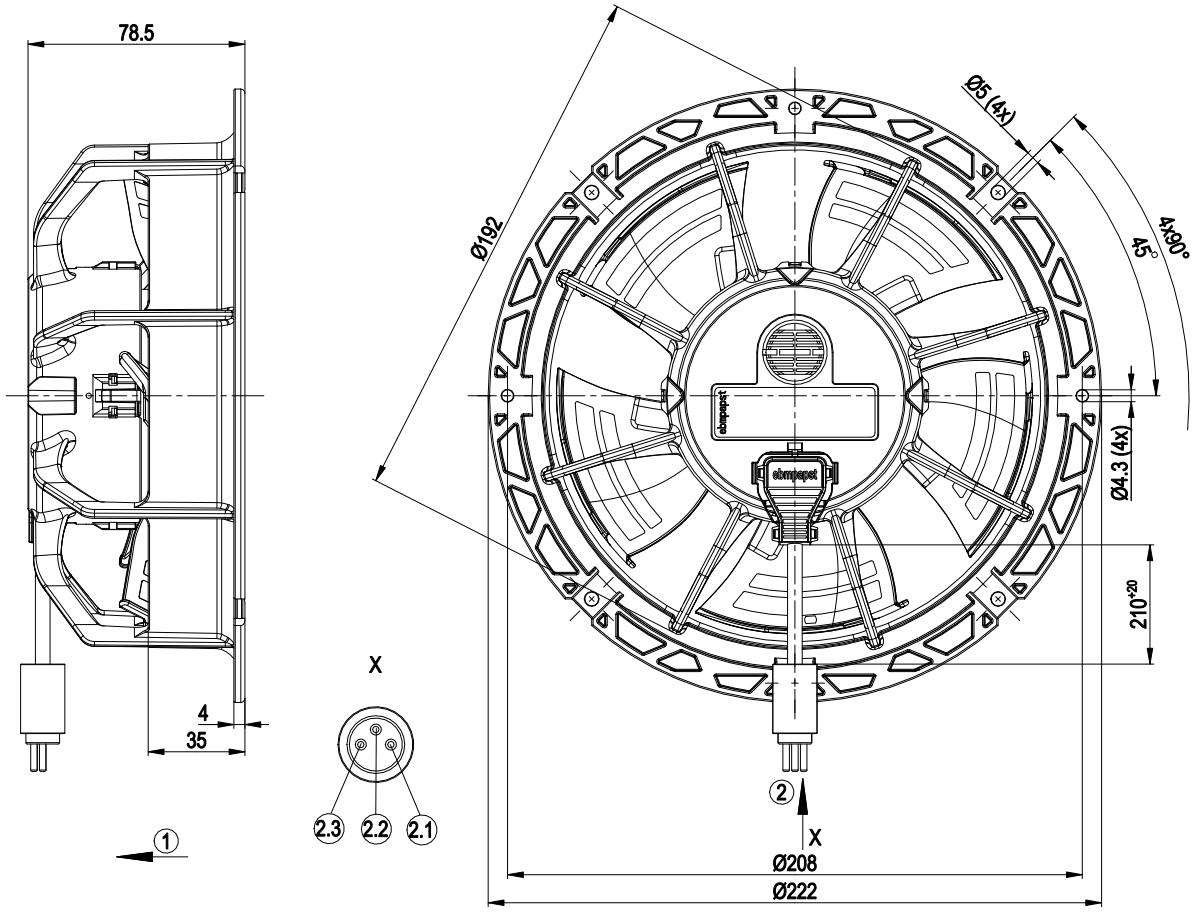
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Product drawing



1	Direction of air flow "V"
2	Connection line PVC AWG18, connector housing 3-pole EMF Corporation P-3-4-100, 3x plug contact HS United European 52 310 140
2.1	L (black)
2.2	Speed selection (brown)
2.3	N (blue)

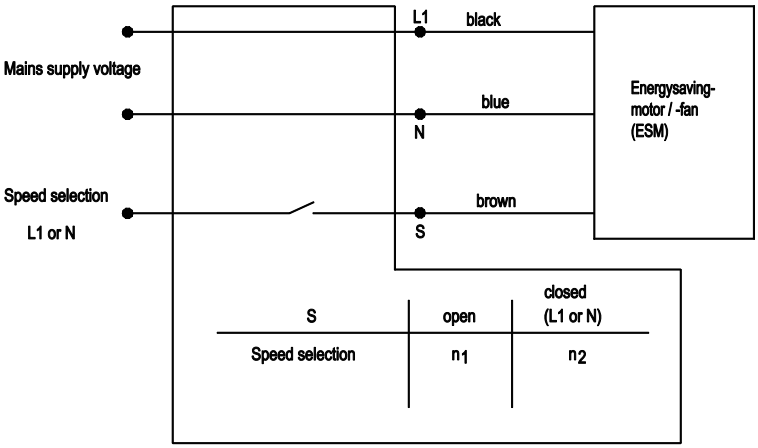
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Connection screen



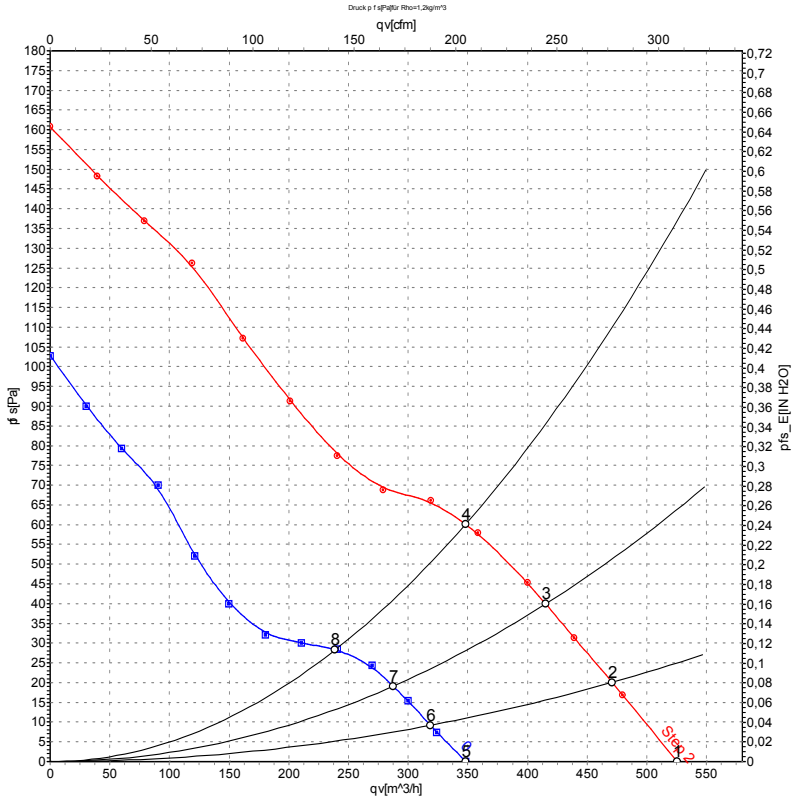
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Charts: Air flow 50 Hz



Measurement: LU-117884-1
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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	21	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	415	40	245	0.16
4	2	230	50	2500	22	0.18	54	63	350	60	205	0.24
5	1	230	50	1700	8.8	0.07	45	54	350	0	205	0.00
6	1	230	50	1700	10	0.08	44	53	320	9	190	0.04
7	1	230	50	1700	11	0.08	44	53	285	19	170	0.08
8	1	230	50	1700	9.9	0.08	45	54	240	28	140	0.11

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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