

W1G172-EC91-01

EC axial fan - ESM

sickled blades (S series)

ESM wall ring



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General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

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Nominal data

Type	W1G172-EC91-01	
Motor	M1G055-BD	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Type of data definition		ml
Speed	min ⁻¹	2500
Power input	W	22
Current draw	A	0.18
Max. back pressure	Pa	60
Min. ambient temperature	°C	-30
Max. ambient temperature	°C	50

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



Technical features

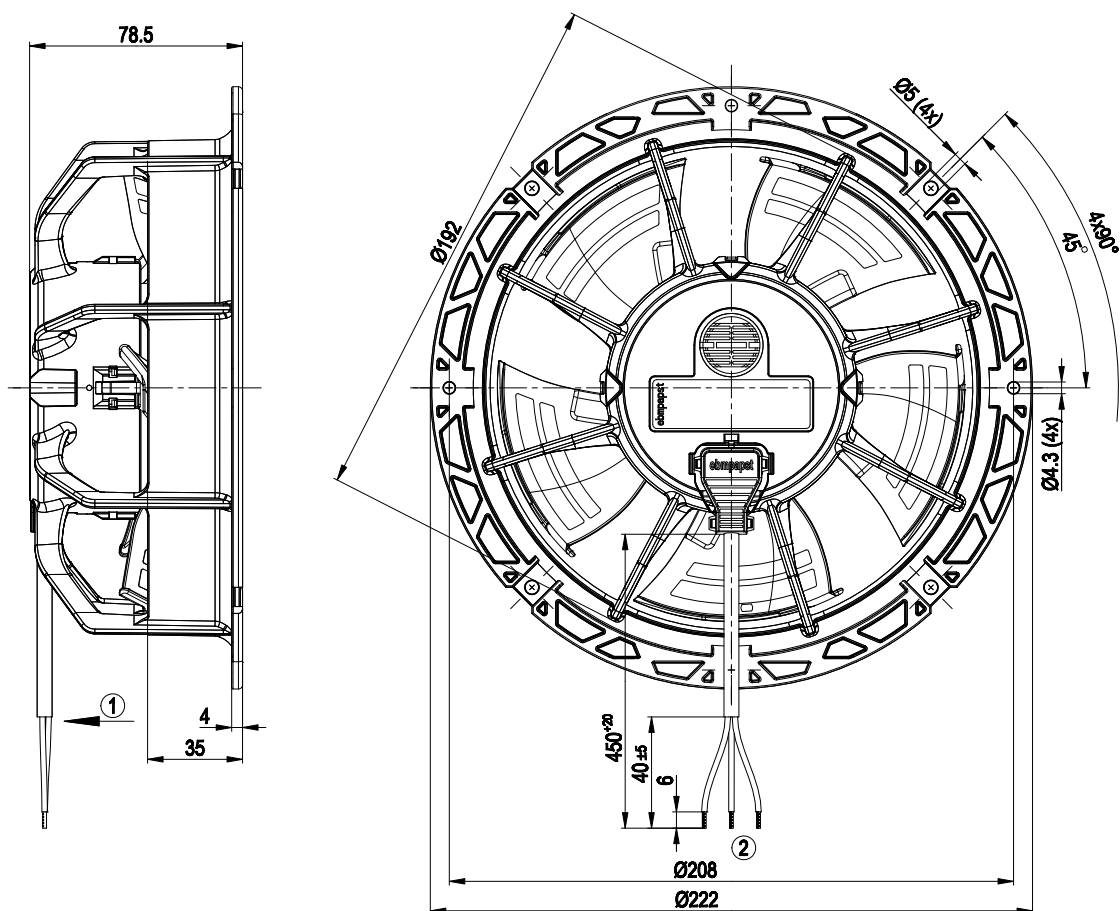
Mass	0.848 kg
Size	172 mm
Material of impeller	PA plastic 6, fibreglass-reinforced
Material of wall ring	Plastic, PPTD 20
Number of blades	5
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Humidity class	F3-1
Max. permissible 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	- Over-temperature protected motor - Soft start - Speed selection max/min
Speed steps	2
EMC interference immunity	Acc. to EN 61000-6-2
EMC harmonics	Acc. to EN 61000-3-2/3
EMC interference emission	Acc. to EN 61000-6-3
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Lateral
Protection class	II
Product conforming to standard	CE
Approval	CSA C22.2 Nr.77; EAC; UL 2111; VDE

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Product drawing



- | | |
|---|--|
| 1 | Direction of air flow "V" |
| 2 | Connection line AWG20; 3 x brass lead tips crimped |



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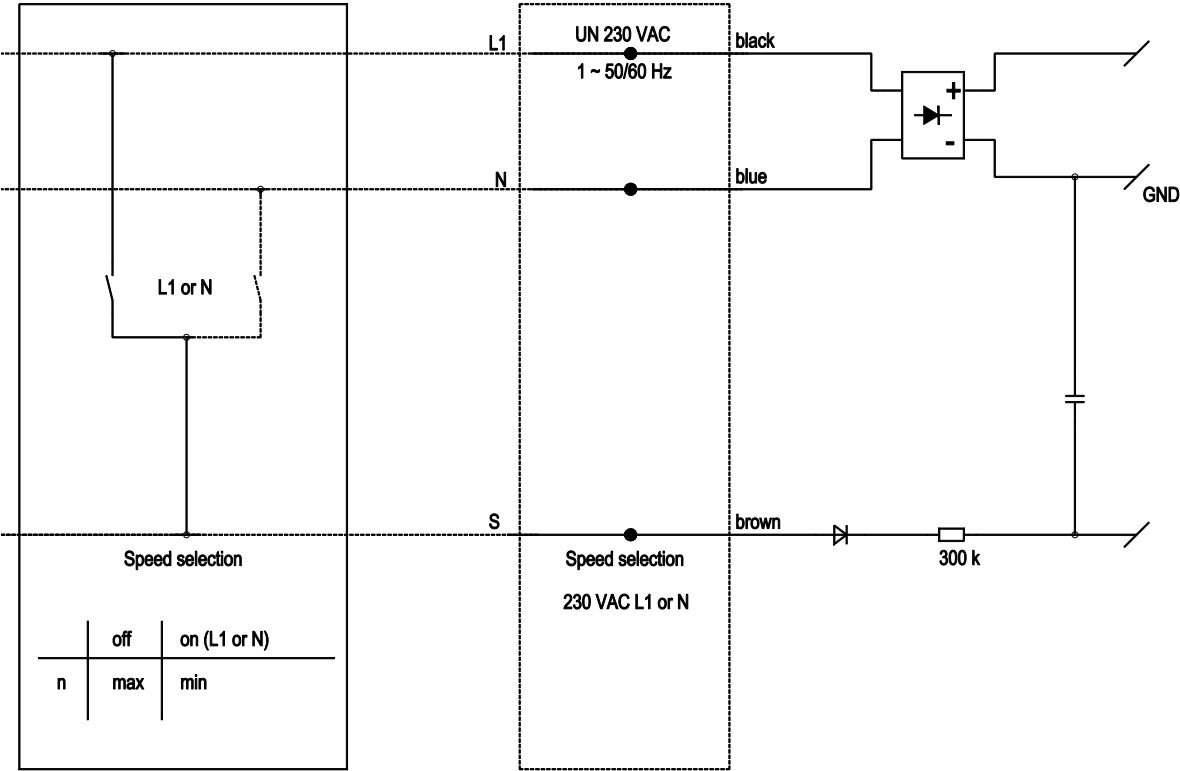
Connection screen

Customer circuit

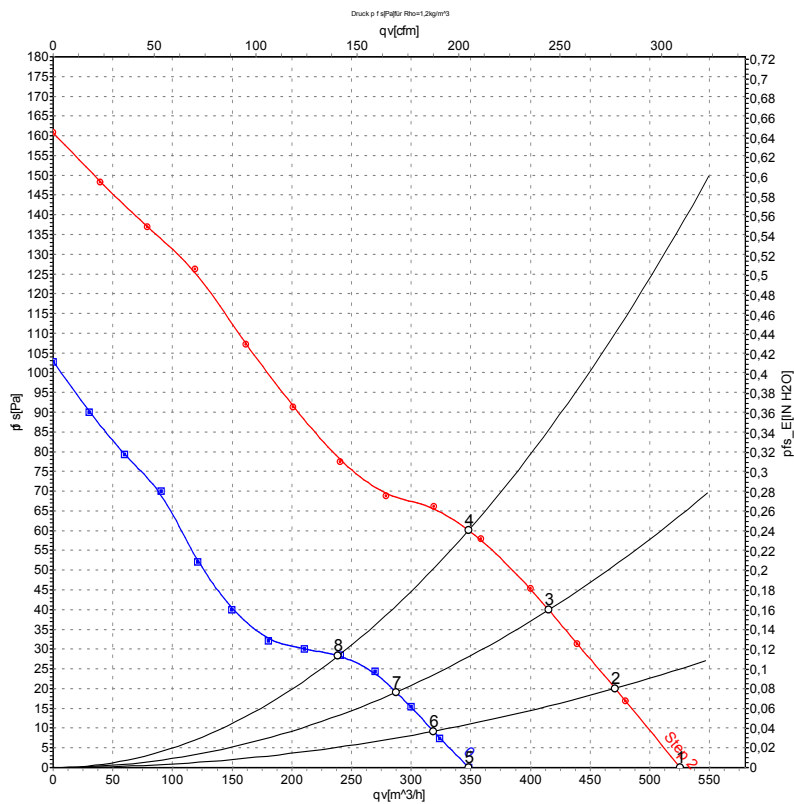
Connection

Fan / motor

Notes on 2 different speed settings and their applications



Charts: Air flow 50 Hz



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}	qv	p _{fs}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m³/h	Pa
1	2	230	50	2500	21	0.17	54	62	525	0
2	2	230	50	2500	22	0.18	55	63	470	20
3	2	230	50	2500	22	0.18	54	63	415	40
4	2	230	50	2500	22	0.18	54	63	350	60
5	1	230	50	1700	8.8	0.07	45	54	350	0
6	1	230	50	1700	10	0.08	44	53	320	9
7	1	230	50	1700	11	0.08	44	53	285	19
8	1	230	50	1700	9.9	0.08	45	54	240	28

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