W1G200-EA91-45

EC axial fan - ESM

sickle-shaped blades (S series)

ESM fan housing



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
Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**W1G200-EA91-45**
Motor	**M1G055-BD**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50/60	50/60
Method of obtaining data		ml	
Speed (rpm)	min^{-1}	2200	1500
Power consumption	W	28.1	-
Current draw	A	0.21	
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

EC axial fan - ESM

sickle-shaped blades (S series)

ESM fan housing

Technical description

Weight	1 kg
Fan size	200 mm
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Fan housing material	PP plastic
Number of blades	5
Direction of rotation	"V"
Degree of protection	IP54
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	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	- Speed selection max./min. - 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)
With cable	Lateral
Protection class	II
Conformity with standards	EN 60335-1; EN 60335-1; EN 60335-2-24; EN 60335-2-80; EN 60335-2-89; CE
Approval	UL 1004-3; CSA C22.2 No. 77; CCC; EAC; VDE

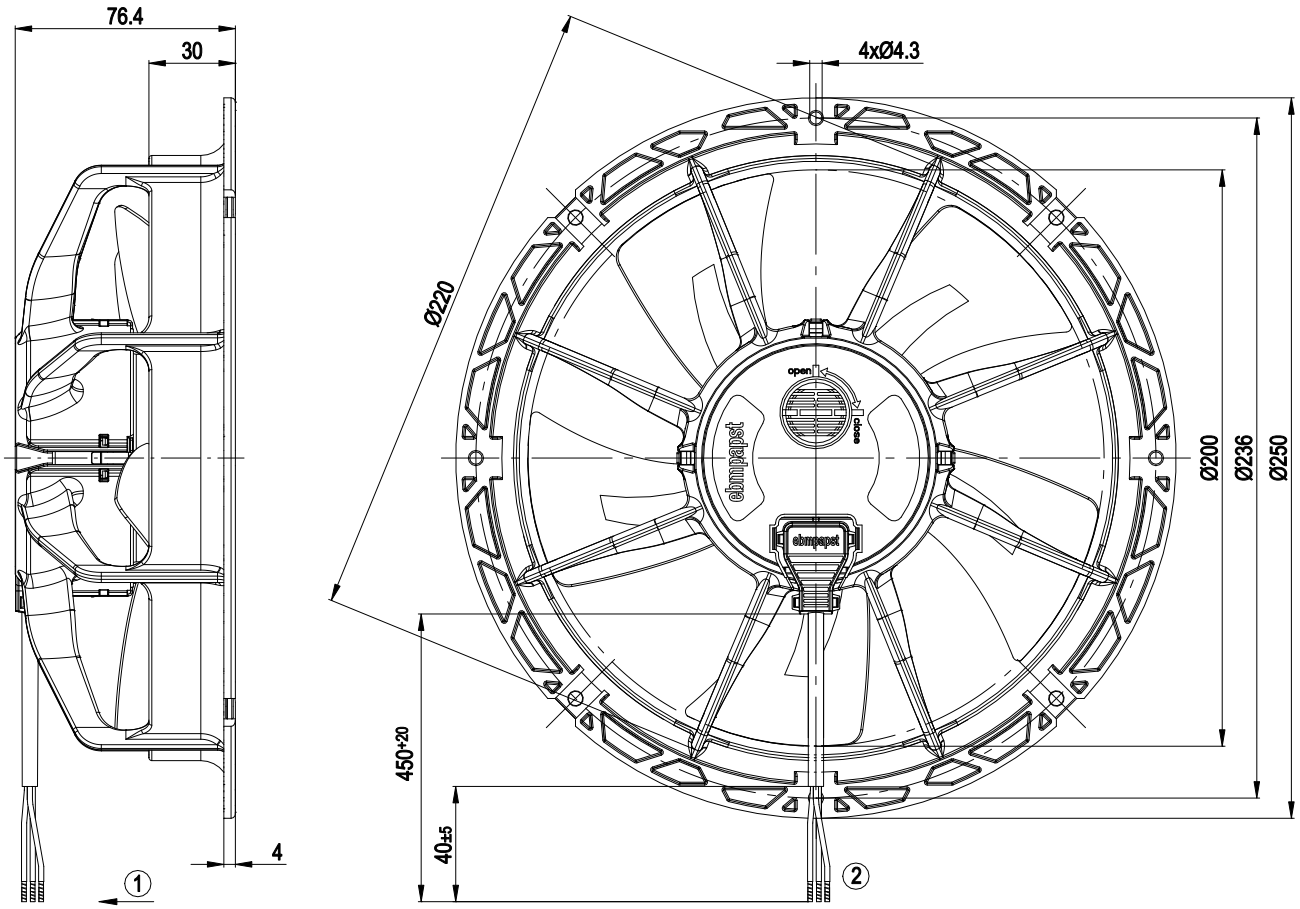
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC axial fan - ESM

sickle-shaped blades (S series)

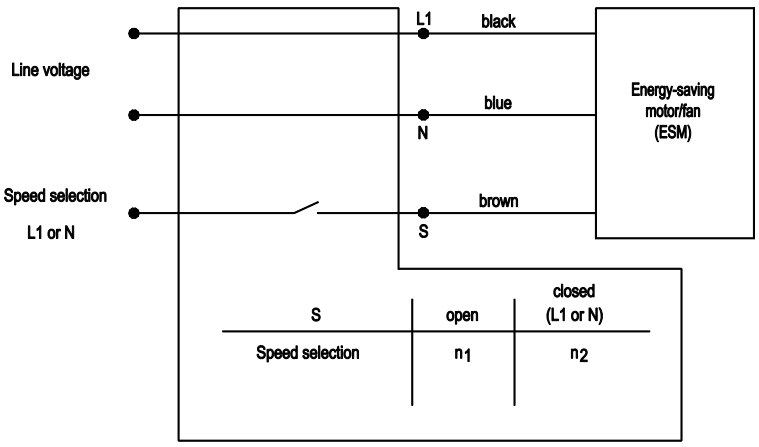
ESM fan housing

Product drawing



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

Connection diagram



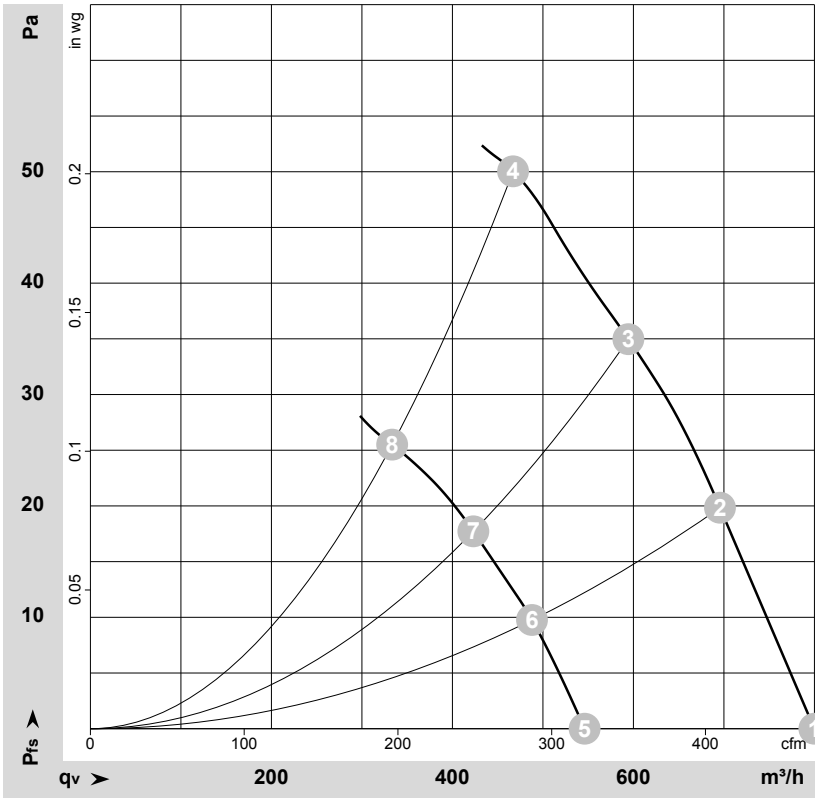
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC axial fan - ESM

sickle-shaped blades (S series)

ESM fan housing

Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-121648-1
Measurement: LU-68033-1

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

	Stage	U	f	n	P_{ed}	I	qv	p_{fs}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	2	230	50	2200	25	0.19	800	0	470	0.00
2	2	230	50	2200	27	0.21	695	20	410	0.08
3	2	230	50	2200	28	0.21	595	35	350	0.14
4	2	230	50	2200	28	0.21	465	50	275	0.20
5	1	230	50	1500	13	0.10	545	0	320	0.00
6	1	230	50	1500	13	0.10	490	10	285	0.04
7	1	230	50	1500	14	0.10	425	18	250	0.07
8	1	230	50	1500	15	0.11	335	26	195	0.10

U = Power supply · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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