W1G250-BB17-01

EC axial fan - ESM

sickled blades (S series)

ESM wall ring with guard grille



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	**W1G250-BB17-01**
Motor	**M1G055-BI**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50/60	50/60
Type of data definition		ml	
Speed (rpm)	min^{-1}	1700	1200
Power input	W	32	
Current draw	A	0.24	
Max. back pressure	Pa	40	
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

EC axial fan - ESM

sickled blades (S series)

ESM wall ring with guard grille

Technical features

Mass	1.5 kg
Size	250 mm
Motor size	55
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	IP55
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
Condensation drainage holes	None
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Speed selection max/min - 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 connection	Connector with connection line
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Lateral
Protection class	II
Product conforming to standard	EN 60335-1; EN 60335-2-24; EN 60335-2-80; EN 60335-2-89; CE
Approval	VDE; CSA C22.2 no. 77; EAC; UL 1004-3

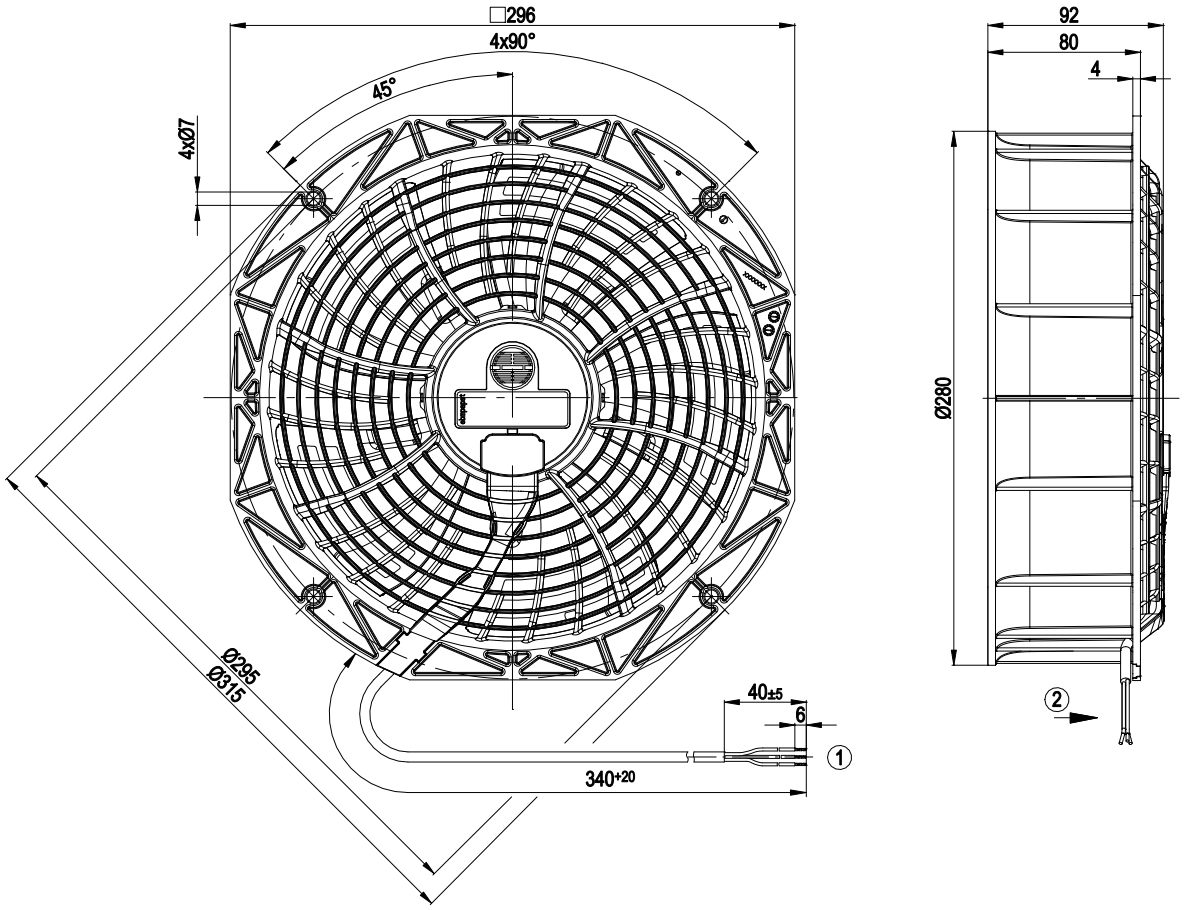
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC axial fan - ESM

sickled blades (S series)

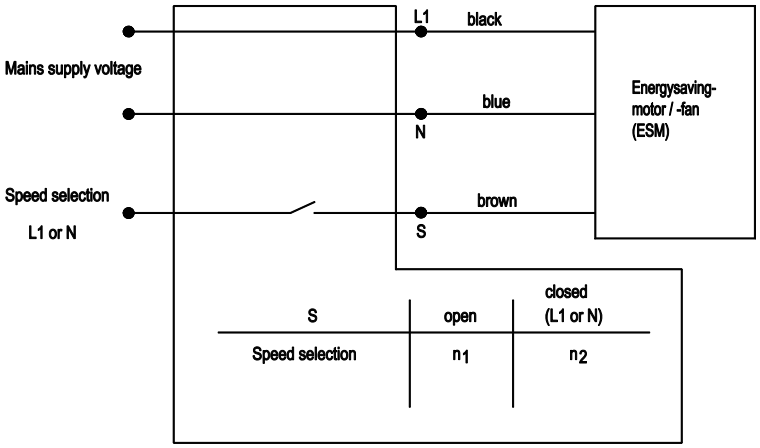
ESM wall ring with guard grille

Product drawing



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

Connection screen



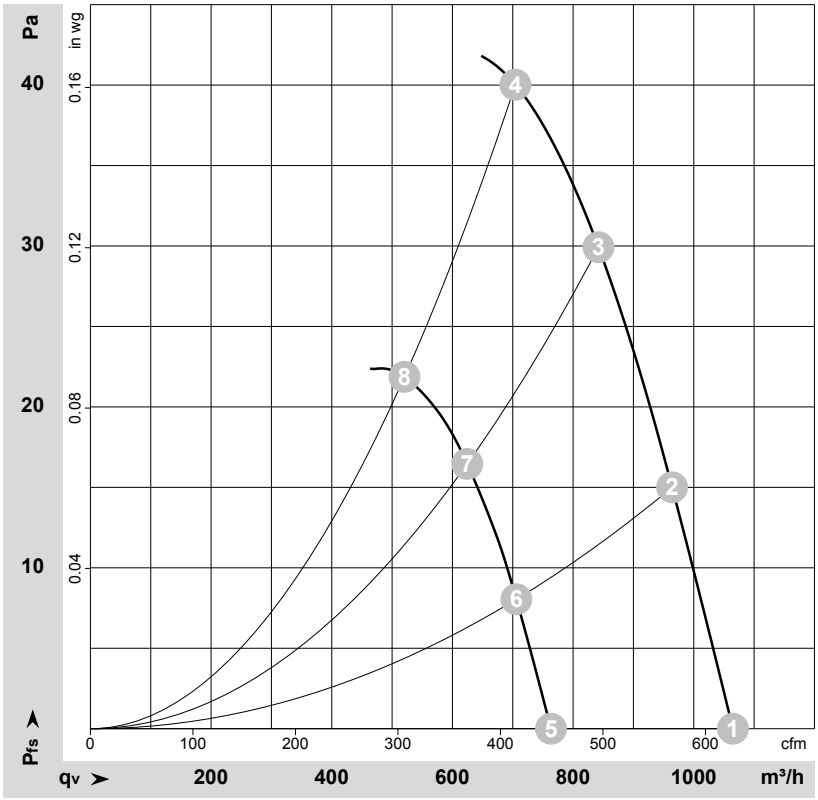
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

EC axial fan - ESM

sickled blades (S series)

ESM wall ring with guard grille

Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-112960-1
Measurement: LU-112961-1

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	in. wg
1	1	230	50	1700	31	0.24	55	62	1065	0	625	0.00
2	1	230	50	1700	32	0.24	56	63	965	15	565	0.06
3	1	230	50	1700	32	0.24	56	64	840	30	495	0.12
4	1	230	50	1700	32	0.24	57	66	705	40	415	0.16
5	2	230	50	1200	14	0.12	46	53	765	0	450	0.00
6	2	230	50	1200	15	0.13	46	54	705	8	415	0.03
7	2	230	50	1200	16	0.14	47	55	625	16	370	0.06
8	2	230	50	1200	17	0.14	48	57	520	22	305	0.09

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

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