S6D630-AO03-13

AC axial fan - HyBlade®

sickled blades (S series)

with guard grille for short nozzle

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

Nominal data

Type	**S6D630-AO03-13**
Motor	**M6D110-GF**

Phase		3~	3~	3~	3~
Nominal voltage	VAC	230	277	400	480
Connection		Δ	Δ	Y	Y
Frequency	Hz	50	60	50	60
Type of data definition		ml	ml	ml	ml
Valid for approval / standard		CE	CE	CE	CE
Speed	min^{-1}	900	1050	900	1050
Power input	W	500	810	500	810
Current draw	A	1.9	2.28	1.1	1.32
Max. back pressure	Pa	110	150	110	150
Max. ambient temperature	°C	80	55	80	55

ml = max. load · me = max. efficiency · rfa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

AC axial fan - HyBlade®

sickled blades (S series)

with guard grille for short nozzle

Technical features

Leakage current	<= 3.5 mA
Size	630 mm
Operation mode	S1
Direction of rotation	Counter-clockwise, seen on rotor
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Electrical leads	Via terminal box
Humidity class	F3-1
Blade angle	-10°
Direction of air flow	"V"
Insulation class	"F"
Cable exit	Axial
Condensate discharge holes	Rotor-side
Motor bearing	Ball bearing
Mass	15 kg
Material of terminal box	PP plastic, black
Material of blades	Aluminium sheet insert, sprayed with PP plastic
Material of guard grille	Steel, phosphated and coated in black plastic
Motor protection	Thermal overload protector (TOP) brought out
Product conforming to standard	CE; EN 61800-5-1
Surface of rotor	Cast in aluminium
Number of blades	5
Type of protection	IP 54
Protection class	I
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Approval	CSA C22.2 Nr.100; GOST; UL 1004-1

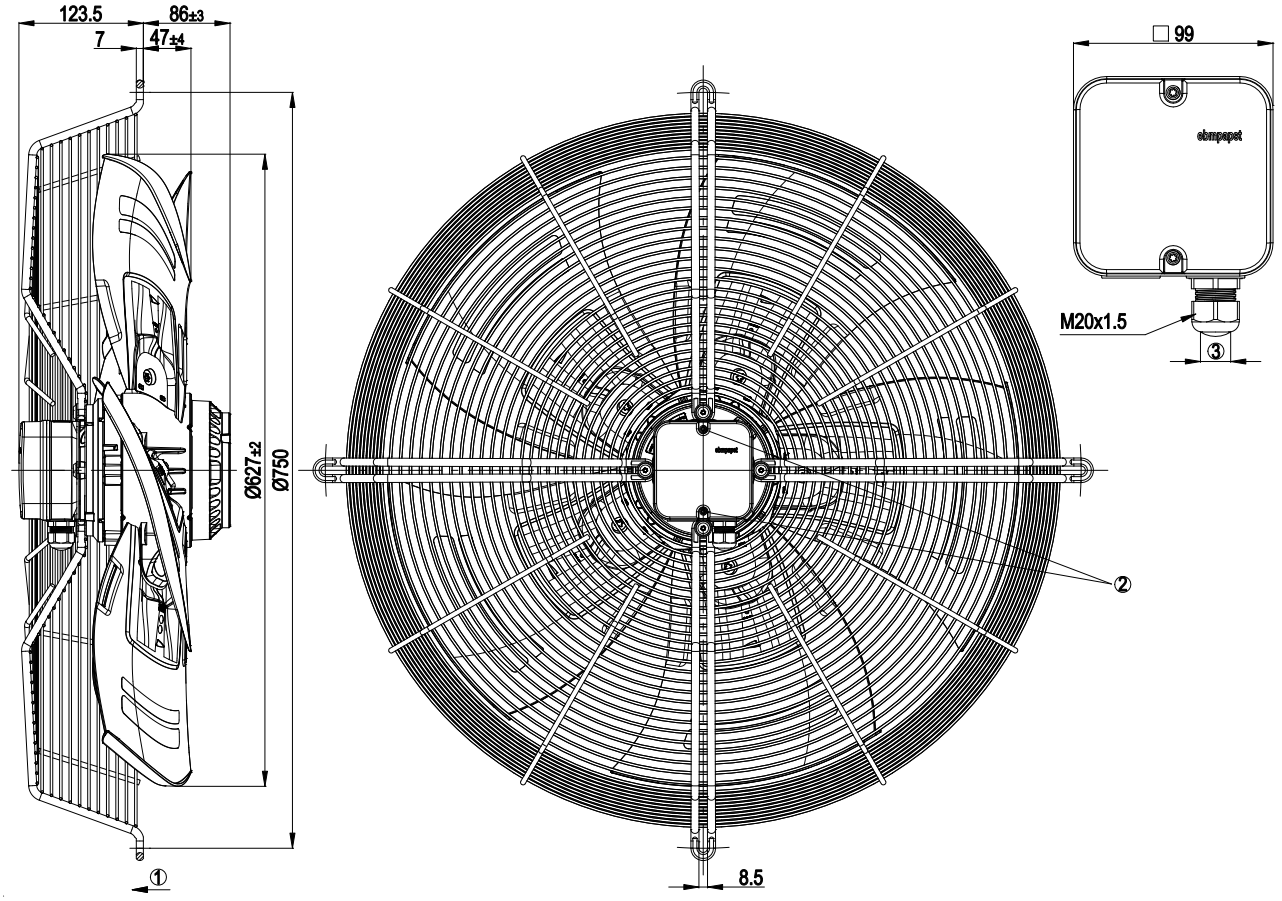
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 7938 81-0 · Fax +49 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

AC axial fan - HyBlade®

sickled blades (S series)

with guard grille for short nozzle

Product drawing



1	Direction of air flow "V"
2	Tightening torque 1.5±0.2 Nm
3	Cable diameter: min. 6 mm, max. 12 mm, tightening torque: 2±0.3 Nm

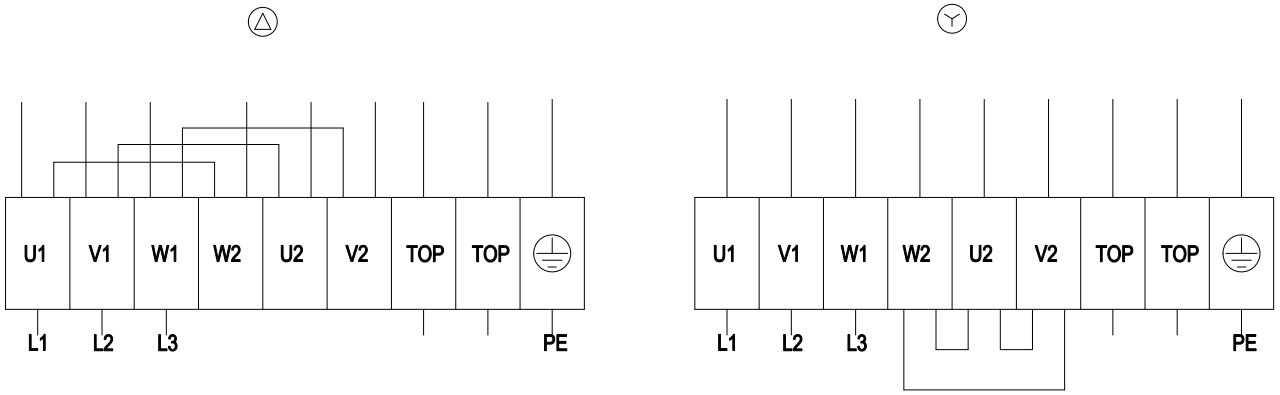
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 7938 81-0 · Fax +49 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

AC axial fan - HyBlade®

sickled blades (S series)

with guard grille for short nozzle

Connection screen



Note: Direction of rotation changes when two phases are reversed

Δ	Delta-connection	Y	Star connection	L1	= U1 = black
L2	= V1 = blue	L3	= W1 = brown	W2	yellow
U2	green	V2	white	TOP	2 x grey
PE	green / yellow				

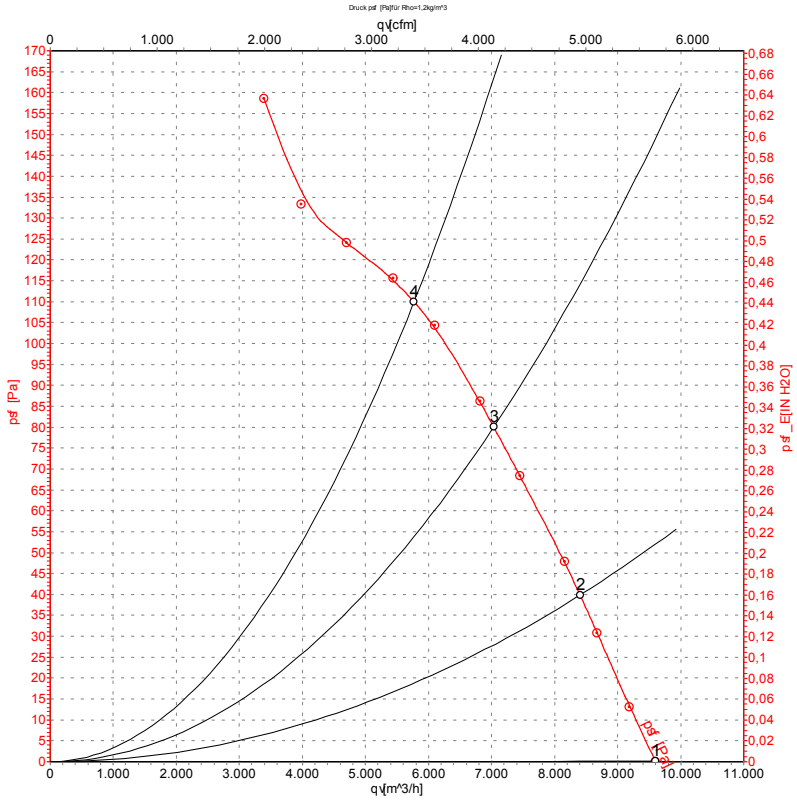
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 7938 81-0 · Fax +49 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

AC axial fan - HyBlade®

sickled blades (S series)

with guard grille for short nozzle

Charts: Air flow 50 Hz



Measurement: LU-134368

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

	Conn.	U	f	n	P_e	I	LpA_{in}	LwA_{in}	LwA_{out}	qv	p_{sf}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	dB(A)	m^3/h	Pa
1	Y	400	50	945	320	0.91	63	69	68	9600	0
2	Y	400	50	930	395	0.96	60	66	65	8405	40
3	Y	400	50	910	458	1.02	61	67	66	7035	80
4	Y	400	50	900	500	1.10	61	68	67	5770	110

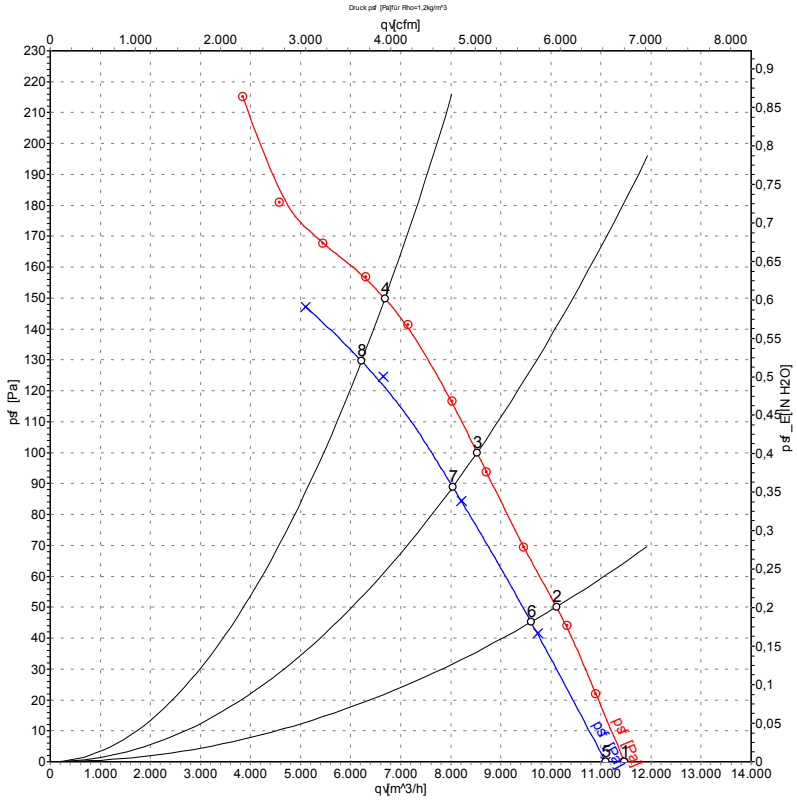
ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 7938 81-0 · Fax +49 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

AC axial fan - HyBlade®

sickled blades (S series)

with guard grille for short nozzle

Charts: Air flow 60 Hz



Measurement: LU-134374
Measurement: LU-134636

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

	Conn.	U	f	n	P_e	I	LpA_{in}	LwA_{in}	LwA_{out}	qv	p_{sf}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	dB(A)	m^3/h	Pa
1	Y	480	60	1120	516	1.00	67	73	72	11470	0
2	Y	480	60	1095	622	1.11	64	70	69	10110	50
3	Y	480	60	1070	716	1.21	64	71	69	8525	100
4	Y	480	60	1050	810	1.32	65	72	72	6685	150
5	Y	400	60	1080	471	0.95	66	73	71	11090	0
6	Y	400	60	1045	567	1.08	63	70	68	9605	46
7	Y	400	60	1010	651	1.21	63	69	68	8040	89
8	Y	400	60	990	710	1.34	65	72	71	6215	130

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