

S4D500-AM03-01

# AC axial fan with short square nozzle

sickled blades (S series)

**ebm-papst Mulfingen GmbH & Co. KG**

Bachmühle 2  
74673 Mulfingen  
Phone: +49 7938 81-0  
Fax: +49 7938 81-110  
[www.ebmpapst.com](http://www.ebmpapst.com)  
[info1@de.ebmpapst.com](mailto:info1@de.ebmpapst.com)

## Nominal data

Type	S4D500-AM03-01				
Motor	M4D110-GF				
Phase		3~	3~	3~	3~
Nominal voltage	[V]	400	400	400	460
Connection		Δ	Y	Δ	Δ
Frequency	[Hz]	50	50	60	60
Type of data definition		ml	ml	ml	ml
Valid for approval / standard		CE	CE	CE	CE
Speed	[min <sup>-1</sup> ]	1390	1180	1590	1640
Power input	[W]	720	550	1020	1060
Current draw	[A]	1.41	0.95	1.7	1.64
Max. back pressure	[Pa]	140	100	130	138
Max. ambient temperature	[°C]	65	65	50	60
Air flow	[m <sup>3</sup> /h]	9195	0	10690	10920
Back pressure	[Pa]	0	0	0	0
Sound pressure level	[dB(A)]	68			

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

S4D500-AM03-01

## AC axial fan with short square nozzle sickled blades (S series)

### Technical features

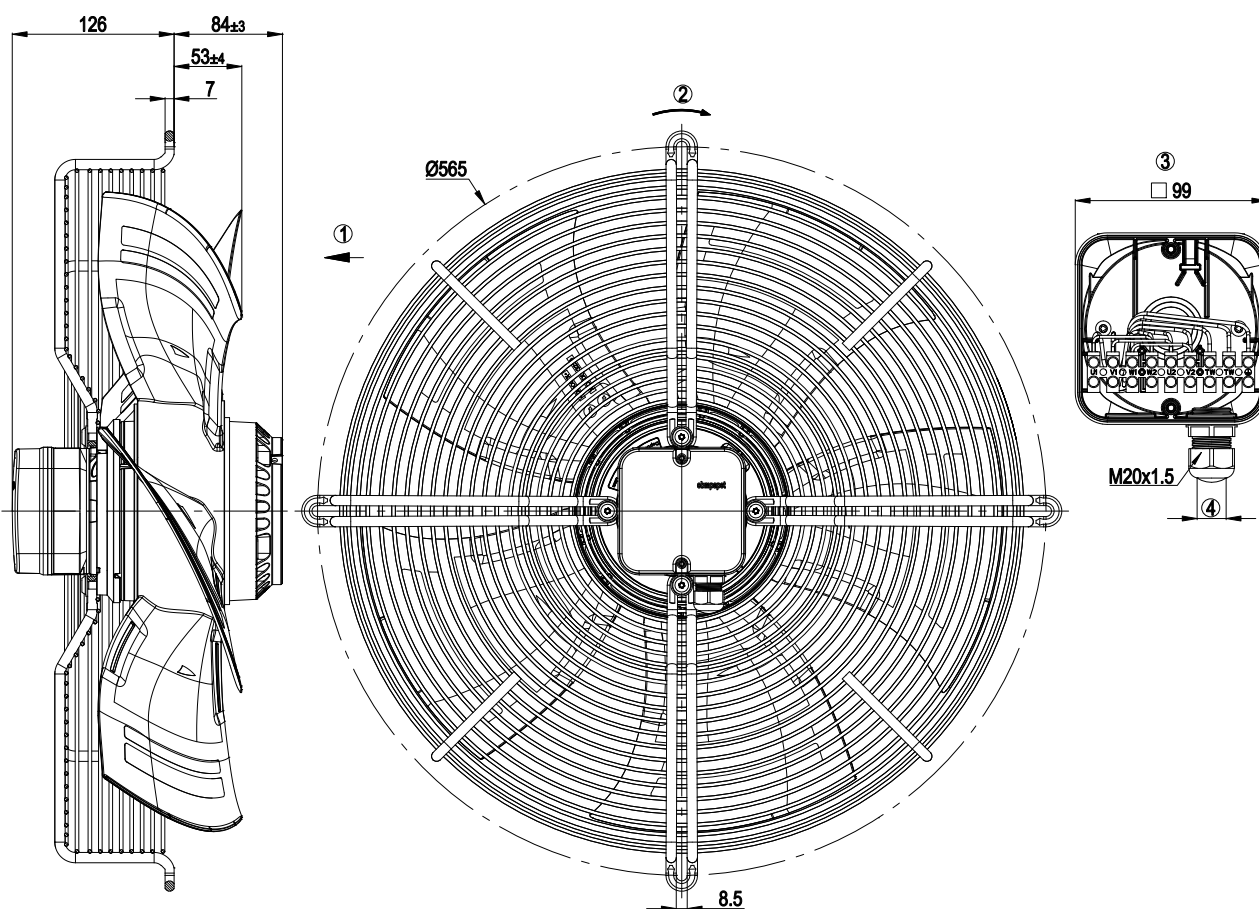
Leakage current	<= 3,5 mA
Size	500 mm
Line	HyBlade
Operation mode	S1
Mounting position	Any
Electrical leads	Via terminal box
Direction of air flow	"V"
Insulation class	"F"
Cable exit	Axial
Condensate discharge holes	On rotor and stator sides
Bearing-motor	Ball bearing
Mass	13.8 kg
Material of terminal box	ABS plastic, black
Material of blades	Press-fitted sheet steel blank, 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	Coated in black
Number of blades	5
Type of protection	IP 54
Protection class	I
Approval	GOST; VDE

S4D500-AM03-01

# AC axial fan with short square nozzle

sickled blades (S series)

## Product drawing



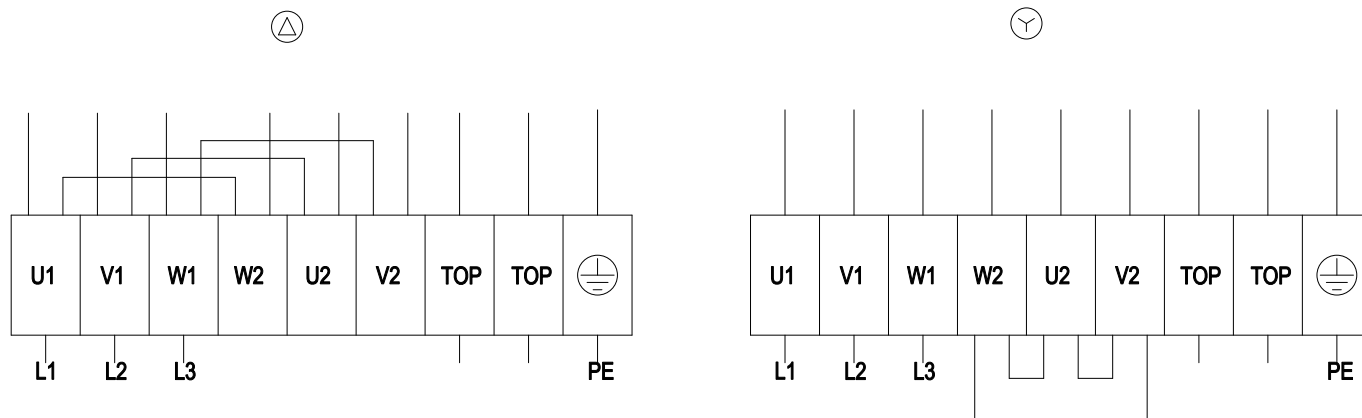
1	Direction of air flow "V"
2	Direction of rotation counter-clockwise, seen on rotor
3	Shown without terminal box cover
4	Cable diameter: min. 6 mm, max. 12 mm

S4D500-AM03-01

# AC axial fan with short square nozzle

sickled blades (S series)

## Connection screen



Note: Direction of rotation changes when two phases are reversed

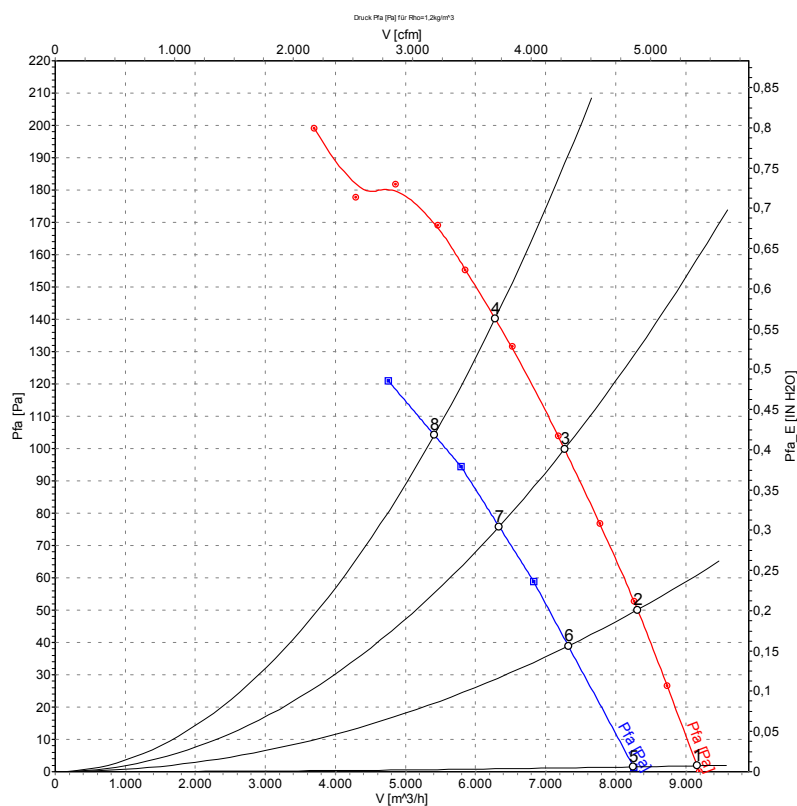
Δ	Delta connection	Y	Star connection	L1	= U1 = black
L2	= V1 = blue	L3	= W1 = brown	W2	yellow
U2	green	V2	white	TOP	2 x gray
PE	green / yellow				

S4D500-AM03-01

# AC axial fan with short square nozzle

sickled blades (S series)

## Charts: Air flow 50 Hz



	Conn.	U	f	n	P <sub>1</sub>	I	LpA <sub>ss</sub>	LpA <sub>ds</sub>	LwA <sub>ss</sub>	LwA <sub>ds</sub>	η <sub>TL</sub>	$\dot{V}$	P <sub>fa</sub>
		[V]	[Hz]	[min <sup>-1</sup> ]	[W]	[A]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[%]	[m <sup>3</sup> /h]	[Pa]
1	Δ	400	50	1420	540	1.21	68	60	75	75	74	9195	0
2	Δ	400	50	1410	603	1.28	66	57	72	73	74	8315	50
3	Δ	400	50	1400	659	1.34	64	55	71	71	70	7270	100
4	Δ	400	50	1390	720	1.41	65	55	71	71	63	6280	140
5	Y	400	50	1275	433	0.71		58	72	73	78	8255	0
6	Y	400	50	1245	476	0.78		55	70	70	77	7325	39
7	Y	400	50	1215	515	0.84		52	68	68	73	6335	76
8	Y	400	50	1180	550	0.95		52	68	68	67	5410	104