

# AC axial fan

sickle-shaped blades (S series)  
with guard grille for short nozzle

S6D630-AD01-01 ebmpapst Datasheet  
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## Nominal data

<b>Type</b>	<b>S6D630-AD01-01</b>		
<b>Motor</b>	<b>M6D110-GF</b>		
Phase		3~	3~
Nominal voltage	VAC	400	400
Wiring		Δ	Y
Frequency	Hz	50	50
Method of obtaining data		ml	ml
Valid for approval/standard		-	-
Speed (rpm)	min <sup>-1</sup>	860	630
Power consumption	W	710	430
Current draw	A	1.34	0.75
Max. back pressure	Pa	100	50
Max. back pressure	inH <sub>2</sub> O	0.4	0.2
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	55	55
Starting current	A	4	1.15

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment  
Subject to change



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## Technical description

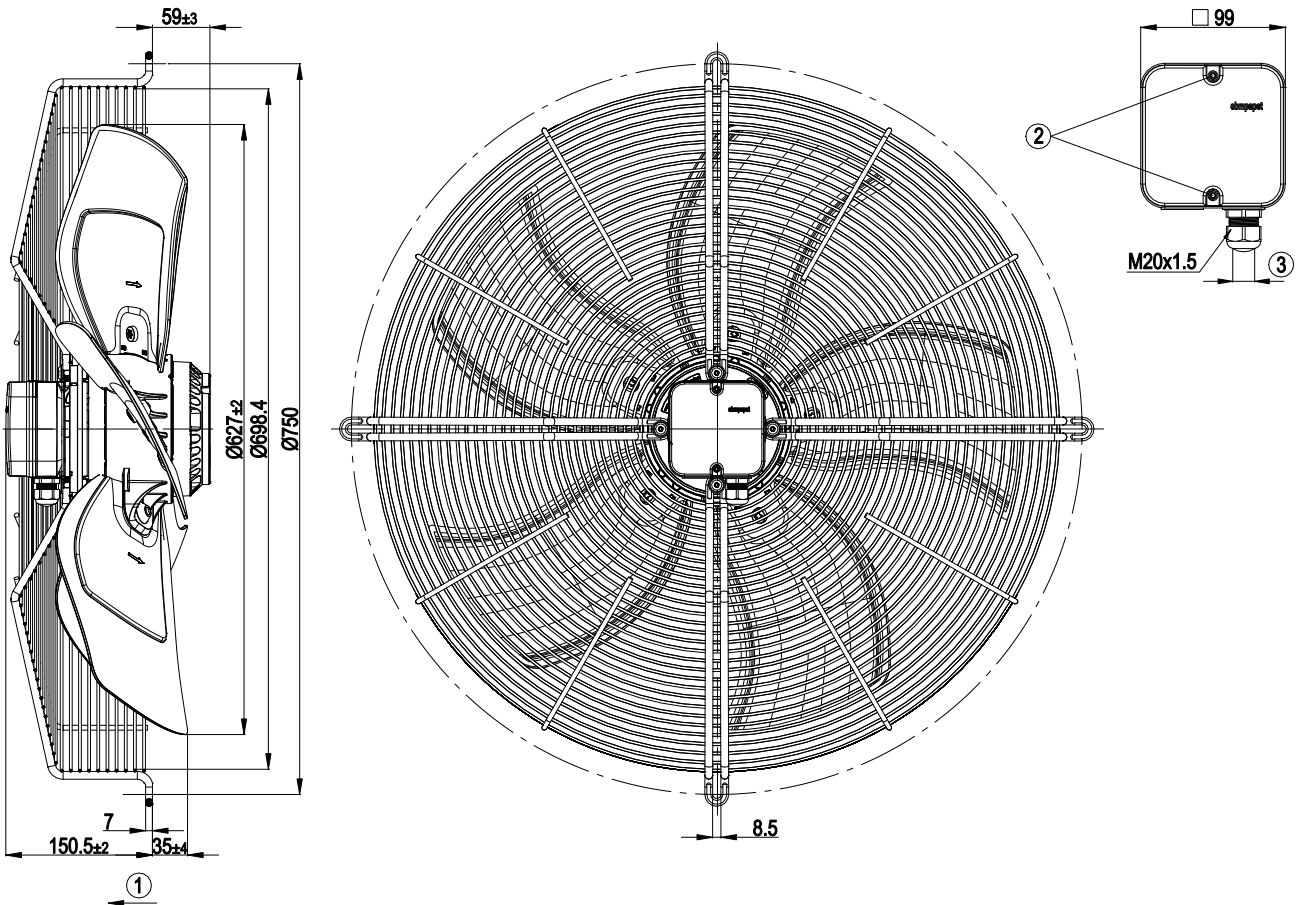
Weight	15.6 kg
Fan size	630 mm
Rotor surface	Cast in aluminum
Terminal box material	PP plastic
Blade material	Sheet aluminum
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Blade pitch	0°
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F3-1
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
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	Via terminal box
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 61800-5-1
Approval	EAC; VDE



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## 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



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## Connection diagram



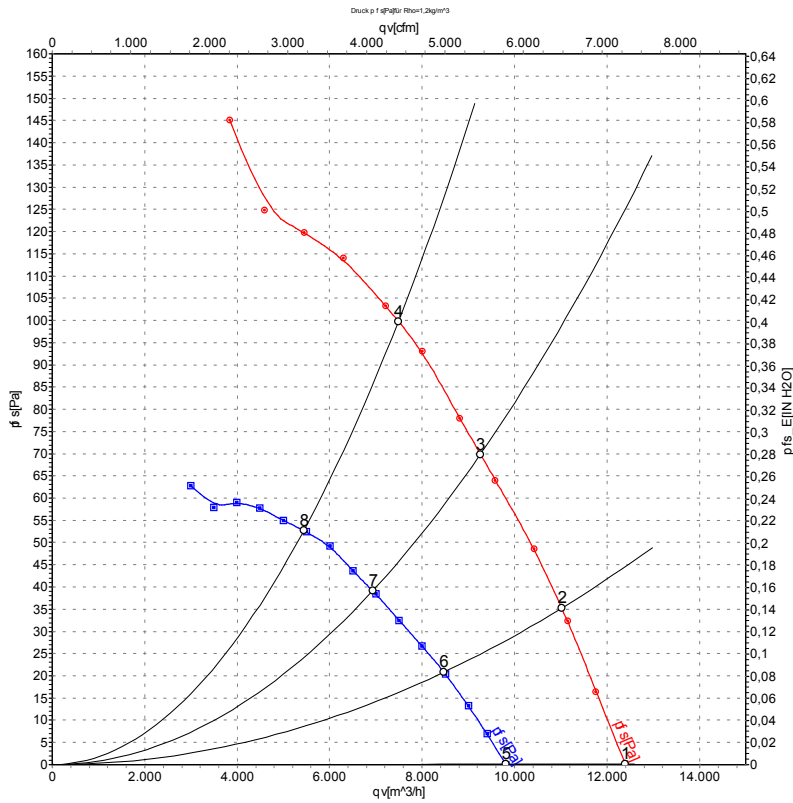
Δ	Delta connection	Y	Star connection	L1	= V1 = blue
L2	= U1 = black	L3	= W1 = brown	W2	yellow
U2	green	V2	white	TOP	2x gray
PE	green/yellow				



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## Curves: Air performance 50 Hz



Measurement: LU-103619-1  
Measurement: LU-103620-1

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

	Wired	U	f	n	P <sub>e</sub>	I	LpA <sub>in</sub>	LwA <sub>in</sub>	LwA <sub>out</sub>	qv	p <sub>fs</sub>	qv	p <sub>fs</sub>
		V	Hz	min <sup>-1</sup>	W	A	dB(A)	dB(A)	dB(A)	m <sup>3</sup> /h	Pa	CFM	inH2O
1	Δ	400	50	905	545	1.18	69	76	76	12400	0	7300	0.00
2	Δ	400	50	890	602	1.22	69	75	75	11020	35	6485	0.14
3	Δ	400	50	875	650	1.27	69	75	75	9265	70	5455	0.28
4	Δ	400	50	860	710	1.34	68	75	75	7490	100	4405	0.40
5	Y	400	50	720	372	0.64	64	71	71	9810	0	5775	0.00
6	Y	400	50	685	396	0.68	63	70	70	8470	21	4985	0.08
7	Y	400	50	655	412	0.71	62	69	69	6930	39	4080	0.16
8	Y	400	50	630	430	0.75	60	67	67	5440	50	3200	0.20

Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · LpA<sub>in</sub> = Sound pressure level intake side · LwA<sub>in</sub> = Sound power level intake side  
LwA<sub>out</sub> = Sound power level outlet side · qv = Air flow · p<sub>fs</sub> = Pressure increase

