

# AC axial fan

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

S6D630-AB07-16 ebmpapst Datasheet

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General partner Elektrobau Muldingen GmbH · Headquarters Muldingen

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## Nominal data

Type	S6D630-AB07-16				
Motor	M6D110-IA				
Phase		3~	3~	3~	3~
Nominal voltage	VAC	208	277	360	480
Wiring		Δ	Δ	Y	Y
Frequency	Hz	60	60	60	60
Method of obtaining data		ml	ml	ml	ml
Valid for approval/standard		CE	CE	CE	CE
Speed (rpm)	min <sup>-1</sup>	930	1050	930	1050
Power consumption	W	700	860	700	860
Current draw	A	2.4	2.53	1.38	1.46
Max. back pressure	Pa	67	85	67	85
Max. back pressure	inH <sub>2</sub> O	0.27	0.34	0.27	0.34
Min. ambient temperature	°C	-40	-40	-40	-40
Max. ambient temperature	°C	55	55	55	55
Starting current	A		8.15		4.7

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

## Data according to ErP Directive

		Actual	Req. 2015			
01 Overall efficiency $\eta_{es}$	%	32.1	32.1	09 Power consumption $P_e$	kW	0.56
02 Measurement category		A		09 Air flow $q_v$	m <sup>3</sup> /h	7560
03 Efficiency category		Static		09 Pressure increase $p_{fs}$	Pa	86
04 Efficiency grade N		40	40	10 Speed (rpm) n	min <sup>-1</sup>	895
05 Variable speed drive		No		11 Specific ratio*		1.00

Data obtained at optimum efficiency level.  
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

\* Specific ratio =  $1 + p_{fs} / 100\,000\text{ Pa}$

LU-101261



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## Technical description

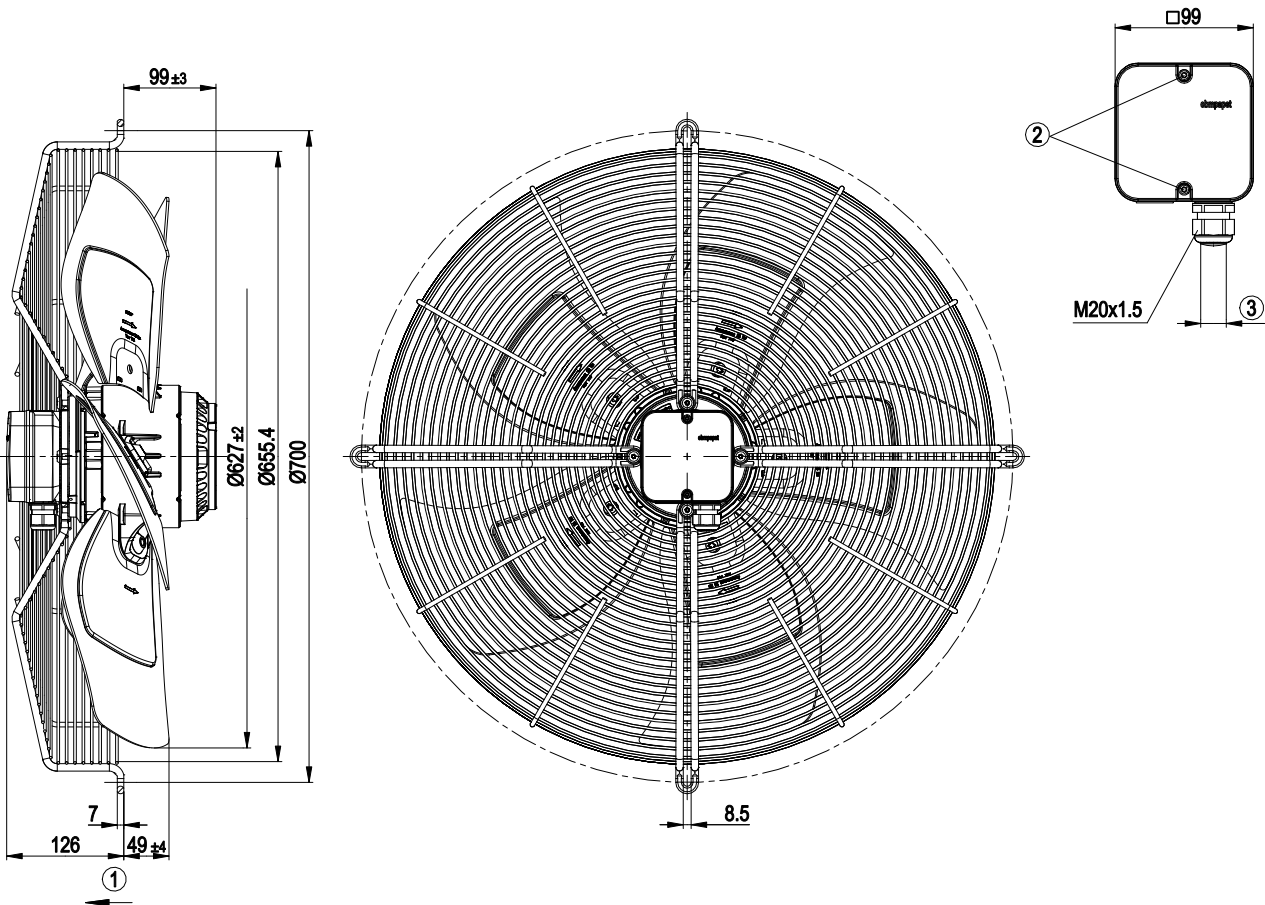
Weight	16.5 kg
Fan size	630 mm
Rotor surface	Cast in aluminum
Terminal box material	PC/ABS plastic
Blade material	Sheet aluminum
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Blade pitch	-5°
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP55
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
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 61800-5-1; CE
Approval	CSA C22.2 No. 100; UL 1004-1; VDE



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## Product drawing



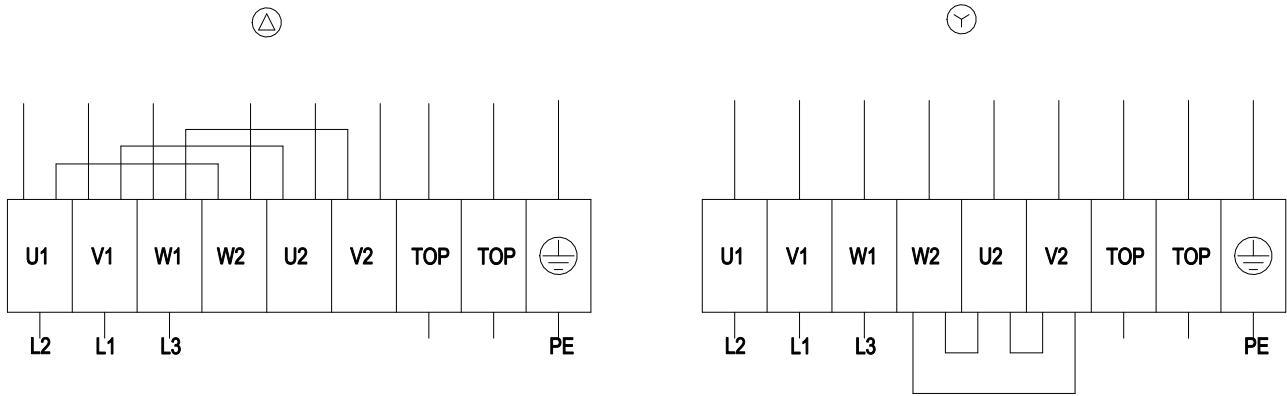
1	Direction of air flow "V"
2	Tightening torque $1.5 \pm 0.2$ Nm
3	Cable diameter min. 7 mm, max. 14 mm, tightening torque $2 \pm 0.3$ Nm



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## Connection diagram



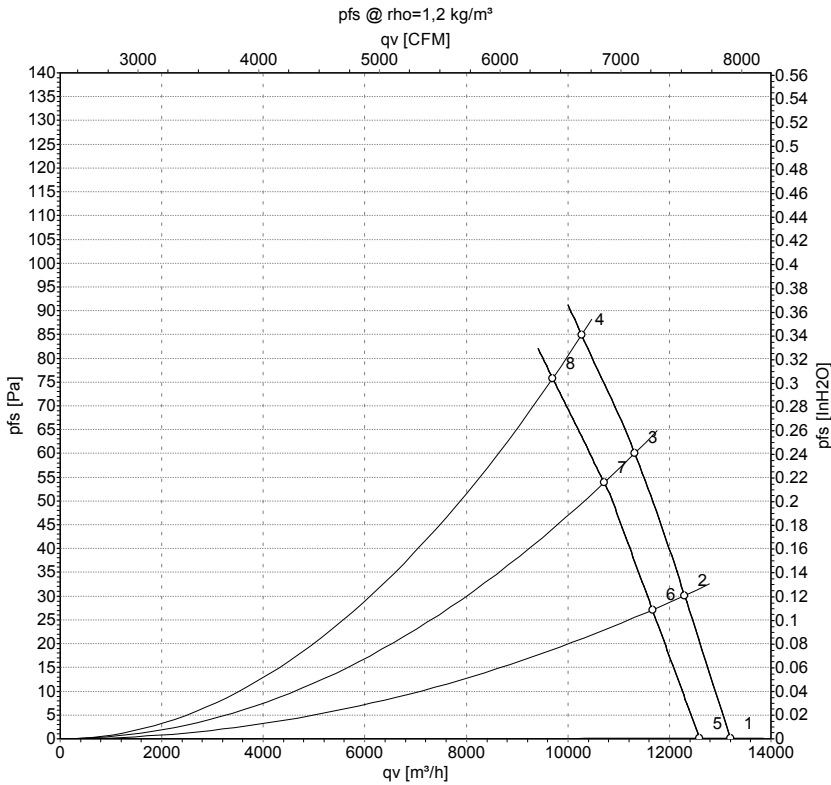
Δ	Delta connection	Y	Star connection	L1	= V1 = blue
L2	= U1 = black	L3	= W1 = brown	W2	yellow
U2	green	V2	white	TOP	2x gray
PE	green/yellow				



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## Curves: Air performance 60 Hz



Measurement: LU-101262-1  
Measurement: LU-150935-1

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>	qv	P <sub>fs</sub>	qv	P <sub>fs</sub>
		V	Hz	min <sup>-1</sup>	W	A	dB(A)	dB(A)	m <sup>3</sup> /h	Pa	CFM	inH2O
1	Y	480	60	1090	685	1.24	74	80	13205	0	7770	0.00
2	Y	480	60	1080	742	1.30	72	78	12300	30	7240	0.12
3	Y	480	60	1065	799	1.36	72	78	11315	60	6660	0.24
4	Y	480	60	1050	860	1.46	72	78	10270	85	6045	0.34
5	Y	400	60	1035	628	1.24			12595	0	7415	0.00
6	Y	400	60	1020	673	1.30			11665	27	6865	0.11
7	Y	400	60	1005	718	1.36			10720	54	6310	0.22
8	Y	400	60	980	760	1.46			9700	75	5710	0.30

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  
qv = Air flow · P<sub>fs</sub> = Pressure increase

