

# AC axial fan

sickle-shaped blades (S series)

with guard grille for short nozzle

S6E630-AP03-01 ebmpapst Datasheet

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## Nominal data

Type	S6E630-AP03-01	
Motor	M6E110-IA	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		ml
Valid for approval/standard		-
Speed (rpm)	min <sup>-1</sup>	860
Power consumption	W	780
Current draw	A	3.44
Capacitor	µF	16
Capacitor voltage	VDB	450
Capacitor standard		S0 (CE)
Max. back pressure	Pa	105
Max. back pressure	in. wg	0.42
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	50
Starting current	A	5.2

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



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## Technical description

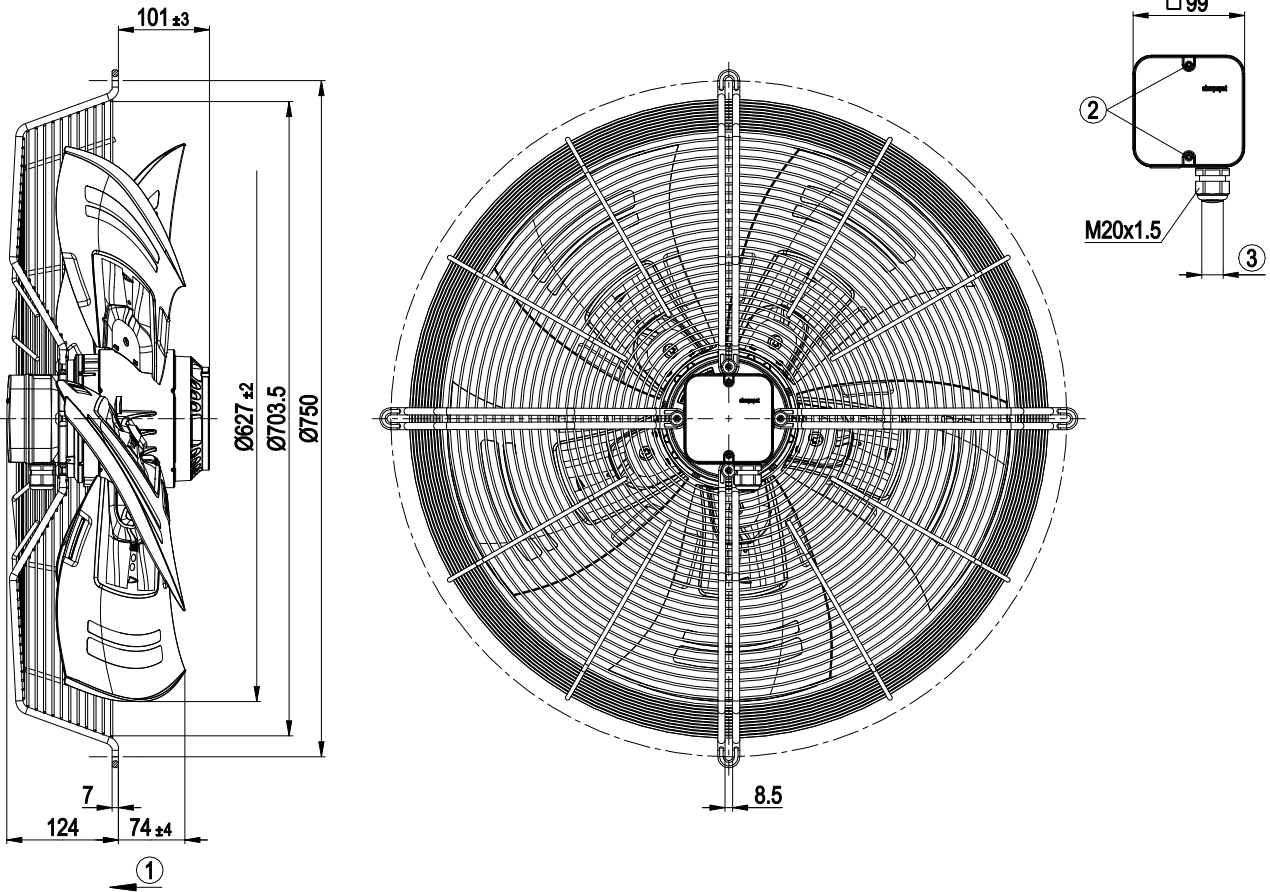
Weight	16.65 kg
Size	630 mm
Motor size	110
Rotor surface	Cast in aluminum
Terminal box material	PP plastic
Blade material	Sheet aluminum insert, sprayed with PP plastic
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Blade pitch	0°
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H2
Ambient temperature note	Occasional start-up at temperatures between -40°C and -25°C is permitted. For continuous operation at ambient temperatures below -25°C (such as refrigeration applications), use must be made of a fan design with special low-temperature bearings.
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	Terminal box
Motor protection	Thermal overload protector (TOP) with basic insulation
Protection class	I (if protective earth is connected by customer to the housing's connection point)
Motor capacitor according to EN 60252-1 in safety protection class	S0
Conformity with standards	EN 60034-1 (2010)
Approval	EAC; VDE



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## Product drawing



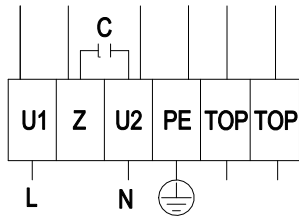
1	Direction of air flow "V"
2	Tightening torque $1.5 \pm 0.2$ Nm
4	Cable diameter min. 6 mm, max. 12 mm, tightening torque $2 \pm 0.3$ Nm



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## Connection diagram



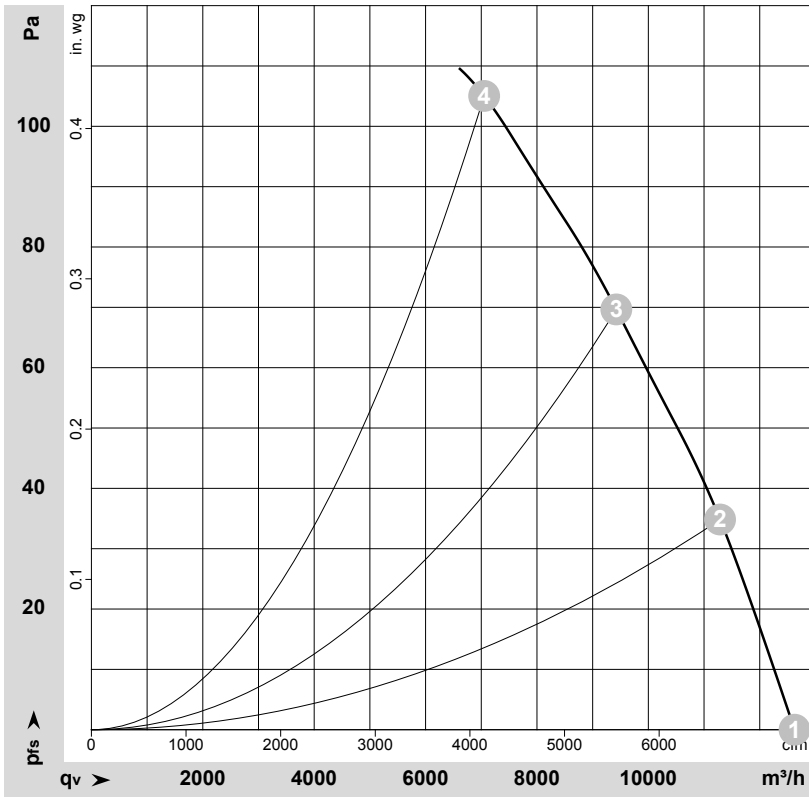
L	= U1 = blue	Z	brown	N	= U2 = black
PE	green/yellow	TOP	gray		



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## Curves: Air performance 50 Hz



$\rho = 1.192 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-107784-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. 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>	q <sub>v</sub>	p <sub>fs</sub>	q <sub>v</sub>	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	in. wg
1	1~	230	50	915	640	2.80	63	69	70	12625	0	7430	0.00
2	1~	230	50	900	691	3.03	61	67	67	11290	35	6645	0.14
3	1~	230	50	880	738	3.24	59	66	66	9425	70	5545	0.28
4	1~	230	50	860	780	3.44	64	70	71	7050	105	4150	0.42

Wired = Wiring · U = Voltage · 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 · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase

