S4E500-AD03-01

AC axial fan

sickle-shaped blades (S series)

with guard grille for short nozzle

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Nominal data

Type	**S4E500-AD03-01**
Motor	**M4E110-GF**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		ml
Valid for approval/standard		-
Speed (rpm)	min^{-1}	1270
Power consumption	W	760
Current draw	A	3.33
Capacitor	µF	14
Capacitor voltage	VDB	400
Max. back pressure	Pa	130
Max. back pressure	inH2O	0.52
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	60
Starting current	A	6.5

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	15.5 kg
Fan size	500 mm
Rotor surface	Cast in aluminum
Terminal box material	ABS 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	Any
Condensation drainage holes	On rotor and stator sides
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, capacitor integrated and connected
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Axial
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S0
Conformity with standards	EN 61800-5-1
Approval	VDE; EAC

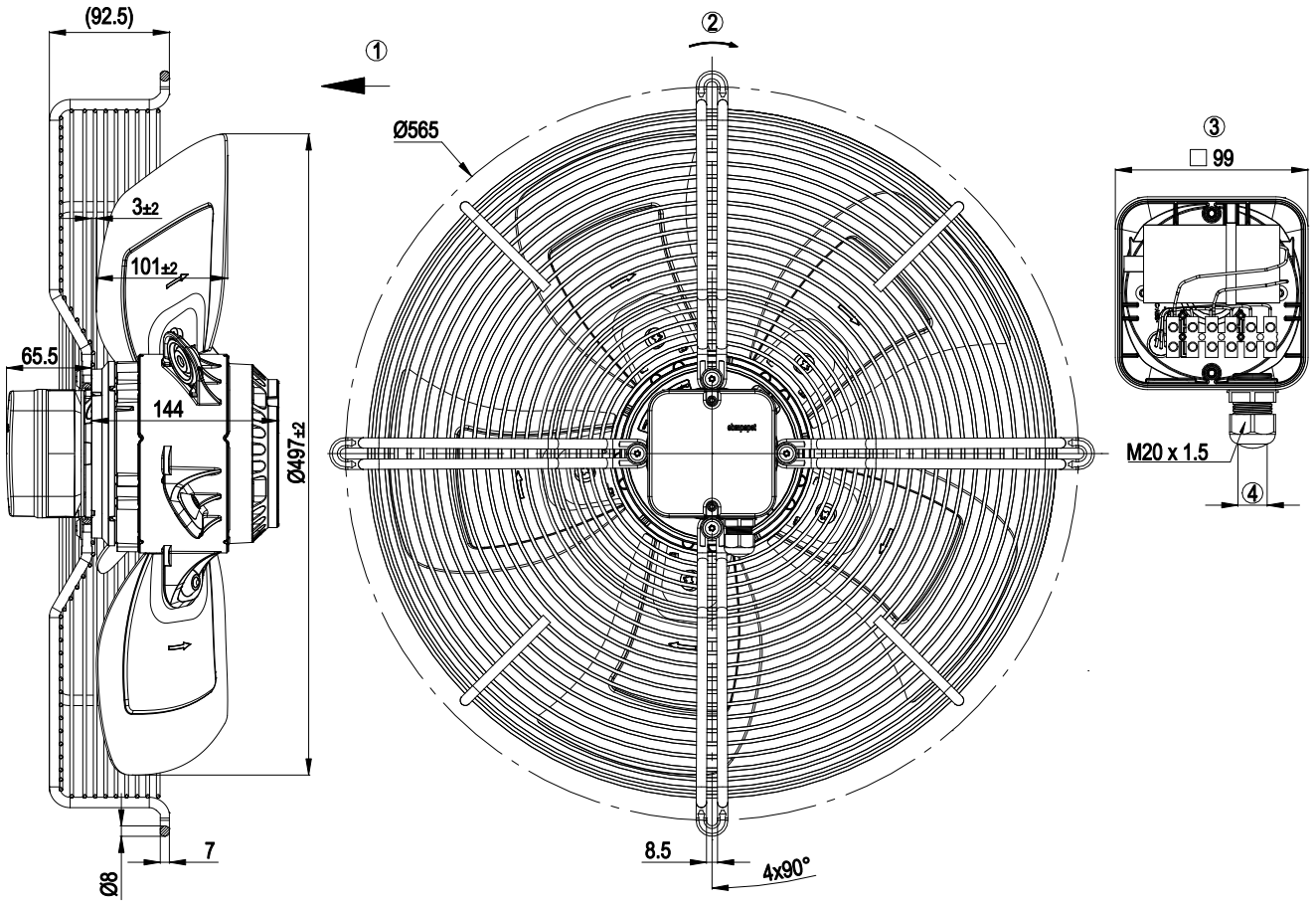
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Product drawing



1	Direction of air flow "V"
2	Direction of rotation counterclockwise, viewed toward rotor
3	Shown without terminal box cover
4	Cable diameter: min. 6 mm, max. 12 mm

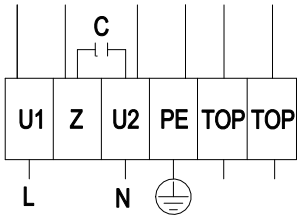
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Connection diagram



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

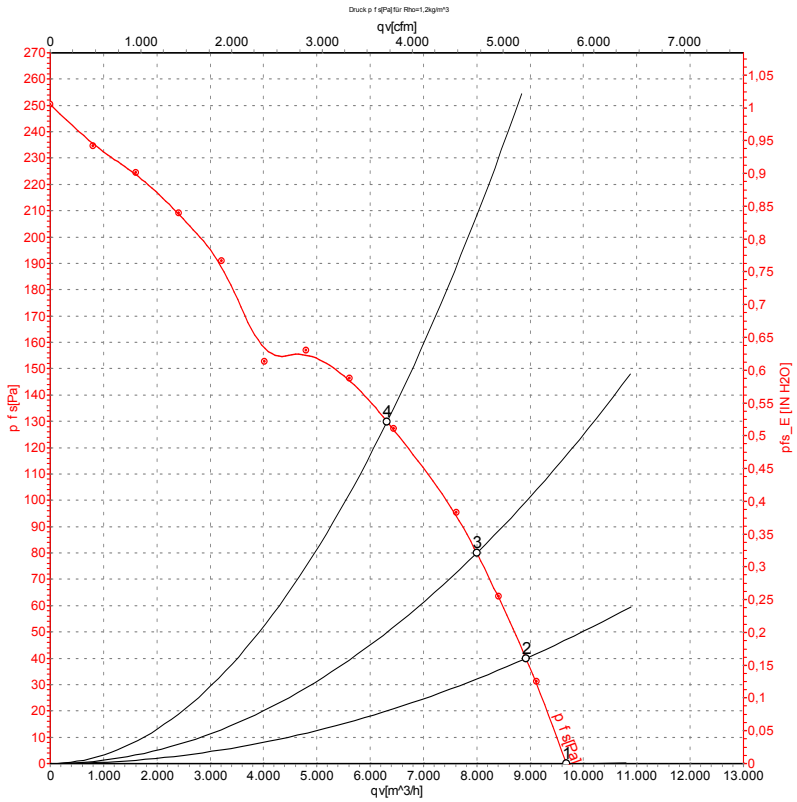
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Curves: Air performance 50 Hz



Measurement: LU-71075-1

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

	U	f	n	P_e	I	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	230	50	1340	643	2.81	9680	0	5695	0.00
2	230	50	1320	682	2.99	8920	40	5250	0.16
3	230	50	1305	713	3.13	8000	80	4710	0.32
4	230	50	1270	760	3.33	6315	130	3720	0.52

U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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