A4E450-AO11-10

AC axial fan

sickle-shaped blades (S series)

ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.com

Limited partnership · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**A4E450-AO11-10**
Motor	**M4E094-HA**

Phase		1~
Nominal voltage	VAC	208
Frequency	Hz	60
Method of obtaining data		ml
Valid for approval/standard		CE
Speed (rpm)	min^{-1}	1210
Power consumption	W	510
Current draw	A	2.53
Capacitor	µF	10
Capacitor voltage	VDB	400
Max. back pressure	Pa	95
Max. back pressure	in. wg	0.38
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60
Starting current	A	2.9

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

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Technical description

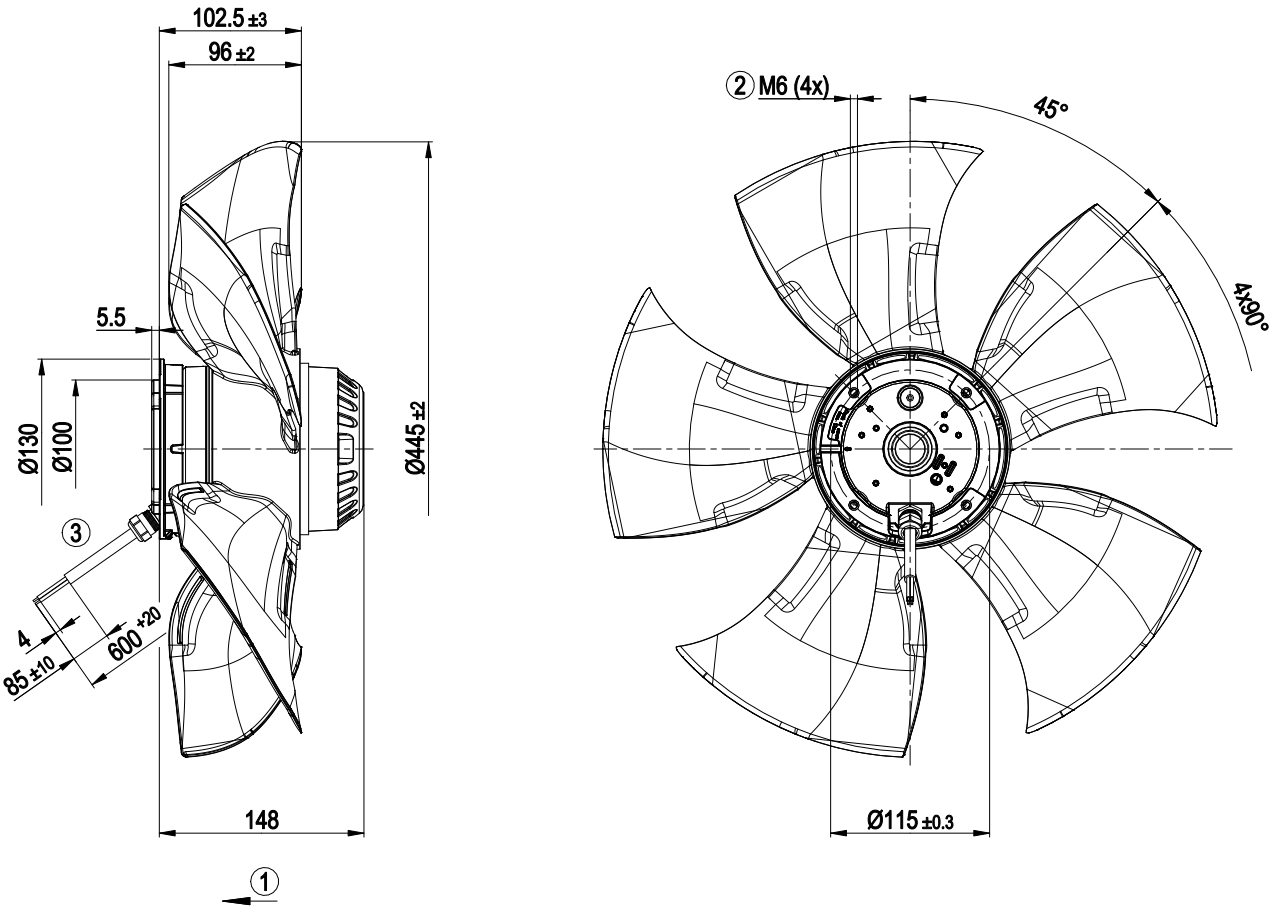
Weight	7.2 kg
Size	450 mm
Motor size	94
Rotor surface	Painted black
Blade material	Press-fitted sheet steel blank, sprayed with PP plastic
Number of blades	5
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H2
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
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Variable
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 60034-1 (2004); CE
Approval	UL 1004-1; CSA C22.2 No. 100; EAC

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Product drawing



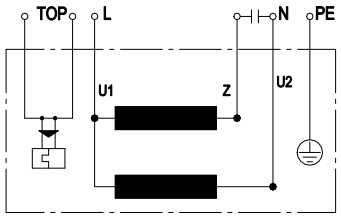
1	Airflow direction "V"
2	Max. clearance for screw 12 mm
3	Cable silicone 6G0.5, 6x crimped splices

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Connection diagram



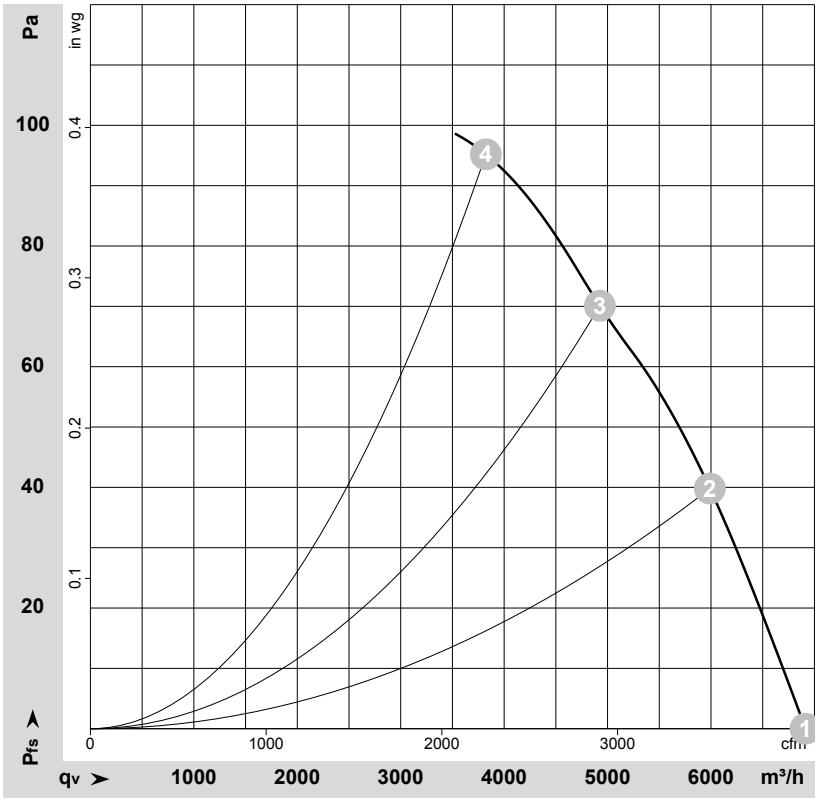
U1	blue	Z	brown	U2	black
PE	green/yellow	TOP	2x gray		

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Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-116838-1

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	in. wg
1	208	60	1395	484	2.34	6915	0	4070	0.00
2	208	60	1325	496	2.42	5990	40	3525	0.16
3	208	60	1265	505	2.47	4925	70	2900	0.28
4	208	60	1210	510	2.53	3825	95	2250	0.38

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

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