A6E450-AG05-09

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	**A6E450-AG05-09**
Motor	**M6E074-GA**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		-	-
Speed (rpm)	min^{-1}	890	990
Power consumption	W	142	190
Current draw	A	0.65	0.84
Capacitor	µF	4	4
Capacitor voltage	VDB	400	400
Max. back pressure	Pa	45	50
Max. back pressure	inH2O	0.18	0.2
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	50	40

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

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Technical description

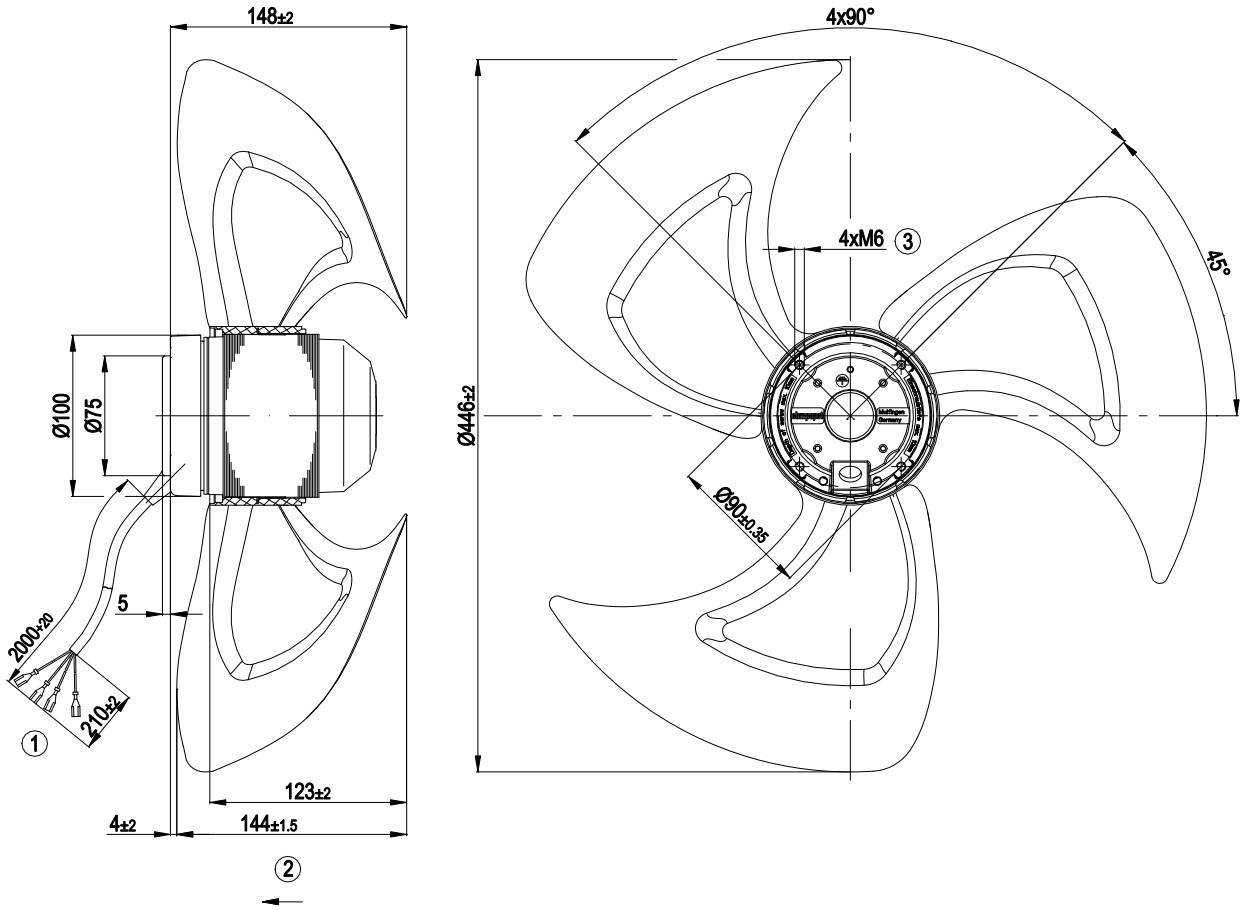
Weight	4.2 kg
Fan size	450 mm
Rotor surface	Painted black
Impeller material	PP plastic
Number of blades	3
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H0+
Max. permitted 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)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1

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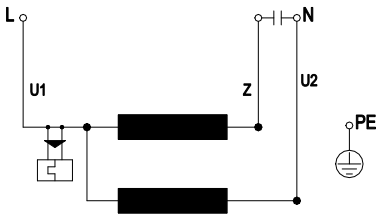
sickle-shaped blades (S series)

Product drawing



1	Cable silicone 4G 0.5 mm², 4x flat push-on receptacles crimped
2	Direction of air flow "V"
3	Max. clearance for screw 10 mm

Connection diagram



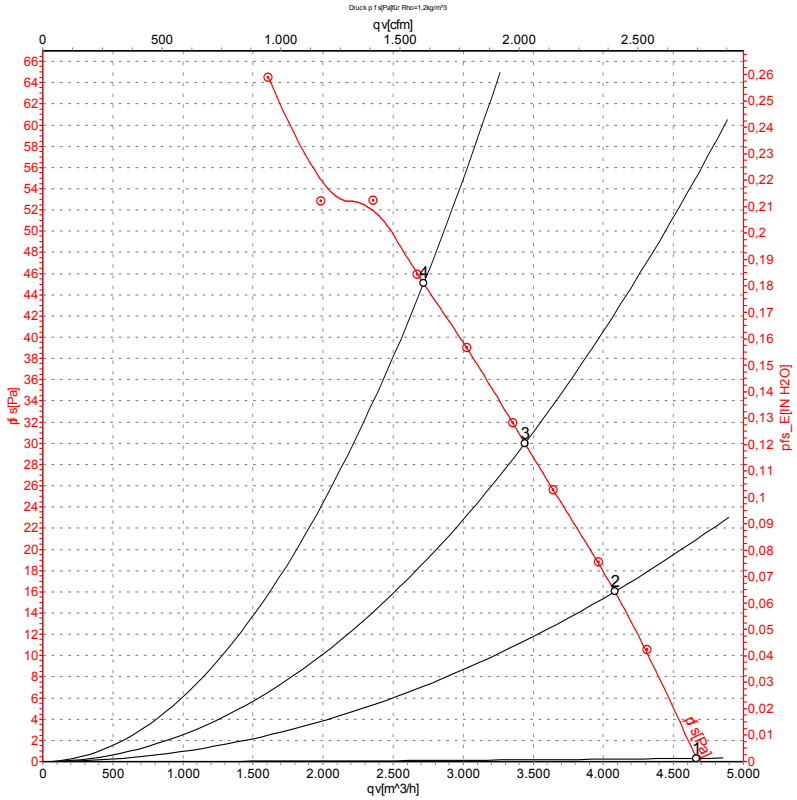
U1	blue	Z	brown	U2	black
PE	green/yellow				

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AC axial fan

sickle-shaped blades (S series)

Curves: Air performance 50 Hz



Measurement: LU-126629-1

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	LpA_{in}	LwA_{in}	LwA_{out}	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	dB(A)	m^3/h	Pa	CFM	inH2O
1	230	50	890	142	0.65	54	60	59	4665	0	2745	0.00
2	230	50	885	150	0.68	50	56	56	4080	16	2400	0.06
3	230	50	870	156	0.71	48	55	54	3440	30	2025	0.12
4	230	50	855	162	0.73	48	55	55	2720	45	1600	0.18

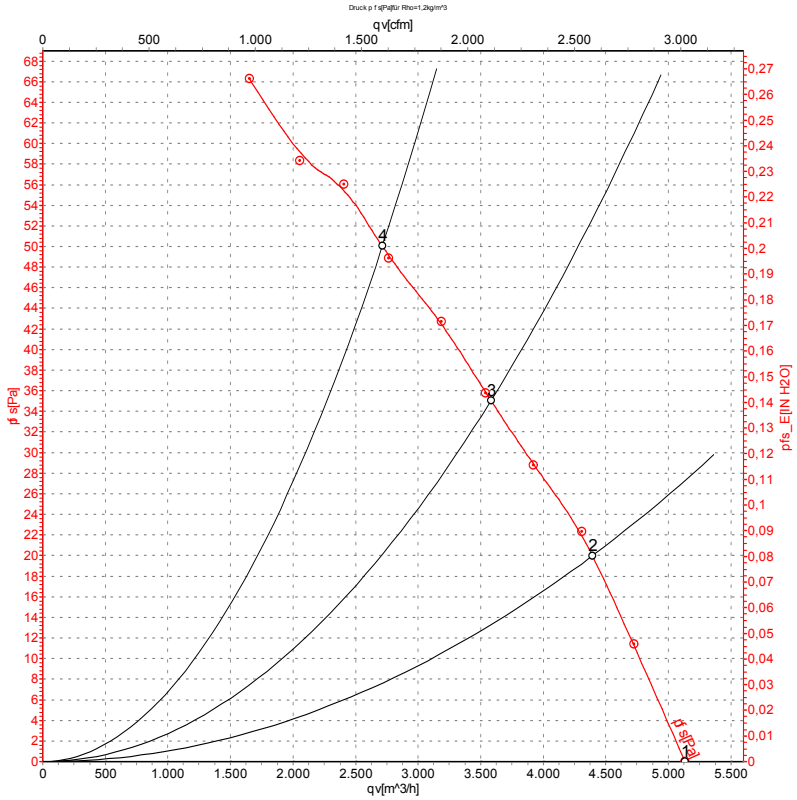
U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
LwA_{out} = Sound power level outlet side · qv = Air flow · p_{fs} = Pressure increase

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Curves: Air performance 60 Hz



Measurement: LU-126631-1

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	LpA_{in}	LwA_{in}	LwA_{out}	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	dB(A)	m^3/h	Pa	CFM	inH2O
1	230	60	990	190	0.84	56	62	61	5130	0	3020	0.00
2	230	60	960	198	0.87	52	58	58	4395	20	2585	0.08
3	230	60	920	202	0.89	50	56	57	3580	35	2110	0.14
4	230	60	880	205	0.90	50	57	57	2715	50	1595	0.20

U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
LwA_{out} = Sound power level outlet side · qv = Air flow · p_{fs} = Pressure increase

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