A6E450-AP12-13

AC axial fan

sickle-shaped blades (S series)

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**A6E450-AP12-13**
Motor	**M6E074-GA**

Phase		2~	2~
Nominal voltage	VAC	400	400
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	920	1050
Power consumption	W	170	225
Current draw	A	0.48	0.57
Capacitor	µF	1.5	1.5
Capacitor voltage	VDB	600	600
Max. back pressure	Pa	70	40
Max. back pressure	inH2O	0.28	0.16
Max. ambient temperature	°C	45	45
Starting current	A	0.85	0.73

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

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Technical description

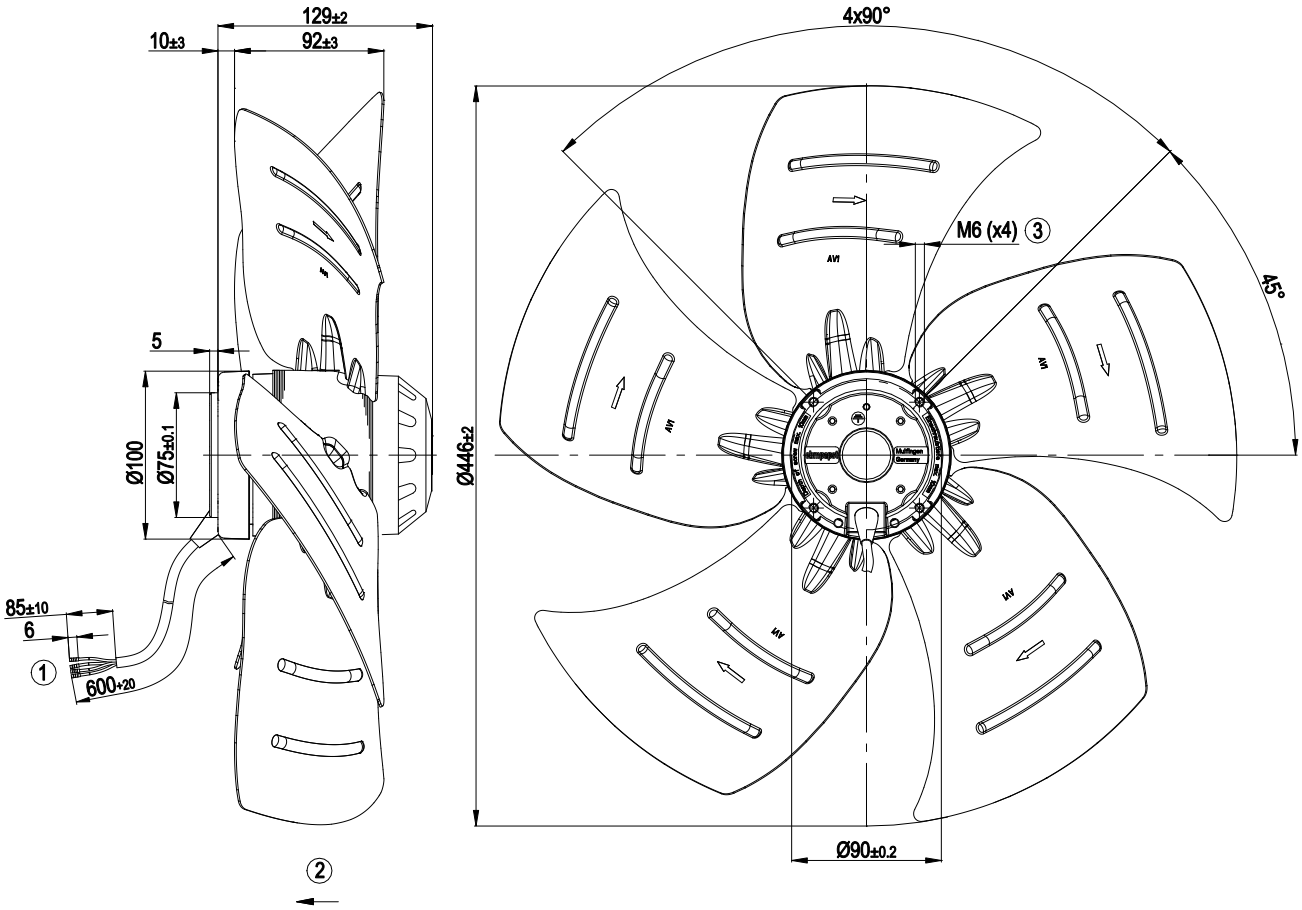
Weight	5.04 kg
Fan size	450 mm
Rotor surface	Painted black
Impeller material	Sheet steel, painted black
Number of blades	5
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"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) with basic insulation
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	CE

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Product drawing



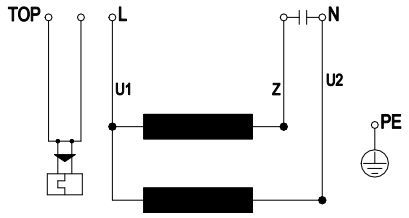
1	Cable silicone 4G 0.5 mm; 4x crimped splices
2	Airflow direction V
3	Max. clearance for screw 10 mm

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Connection diagram



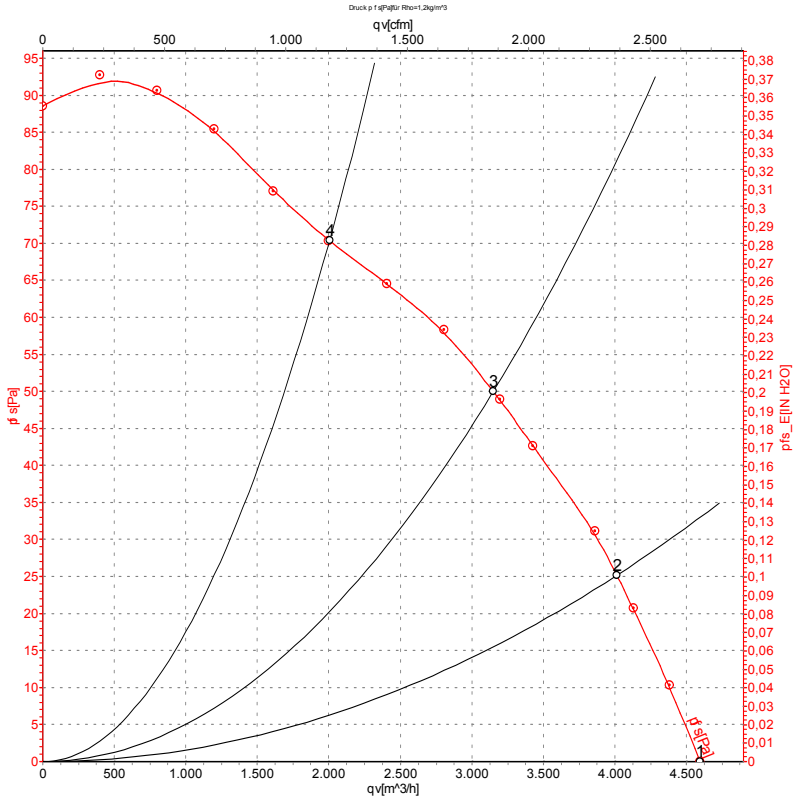
TOP	2x gray	U1	blue	Z	brown
U2	black	PE	green/yellow		

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AC axial fan

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Curves: Air performance 50 Hz



Measurement: LU-63646-1

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	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	400	50	920	170	0.48	4595	0	2705	0.00
2	400	50	910	179	0.50	4015	25	2365	0.10
3	400	50	890	191	0.52	3150	50	1855	0.20
4	400	50	835	217	0.58	2005	70	1180	0.28

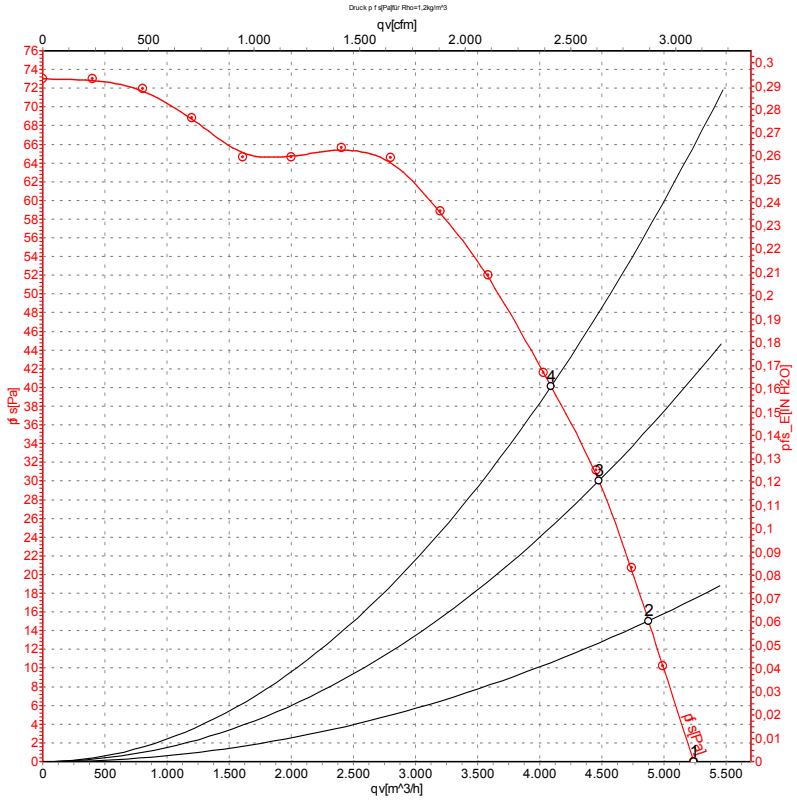
U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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AC axial fan

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Curves: Air performance 60 Hz



Measurement: LU-63647-1

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	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	400	60	1050	225	0.57	5240	0	3085	0.00
2	400	60	1030	230	0.58	4875	15	2870	0.06
3	400	60	1005	235	0.60	4475	30	2635	0.12
4	400	60	985	239	0.61	4090	40	2410	0.16

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