

S4E450-8317078900

AC axial fan

sickle-shaped blades (S series)
with guard grille for short nozzle

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Nominal data

Type	S4E450-8317078900		
Motor	M4E074-GA		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Speed (rpm)	min ⁻¹	1400	1600
Power consumption	W	245	355
Current draw	A	1.1	1.53
Capacitor	μF	8	8
Capacitor voltage	VDB	400	400
Max. back pressure	Pa	85	35
Max. back pressure	in. wg	0.34	0.14
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	40	20
Starting current	A	2.8	2.6

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



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Technical description

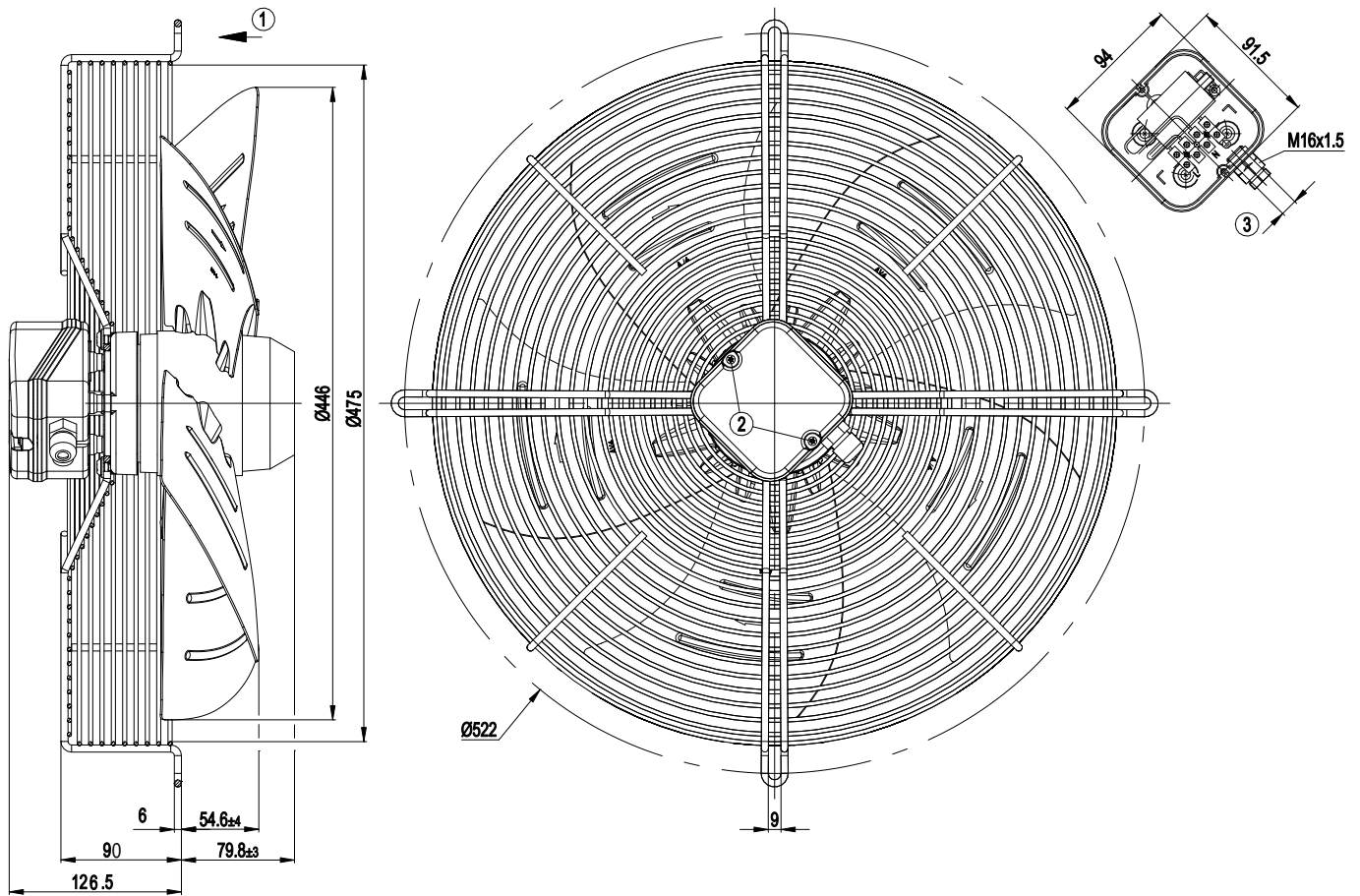
Weight	7.3 kg
Size	450 mm
Motor size	74
Rotor surface	Painted black
Terminal box material	ABS plastic, black
Blade material	Sheet steel, painted black
Guard grille material	Steel, phosphated and coated with black plastic
Number of blades	5
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1
Max. permitted ambient temp. for motor (transport/storage)	+ 70 °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 with low-temperature lubricant
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	Terminal box; Via terminal box, capacitor integrated and connected
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S0
Approval	CCC

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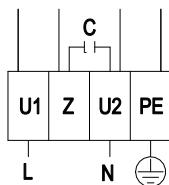
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Product drawing



- | | |
|---|----------------------------------------------------|
| 1 | Direction of air flow "V" |
| 2 | Tightening torque 0.5 Nm |
| 3 | Cable diameter max. 7.5 mm, tightening torque 2 Nm |

Connection diagram



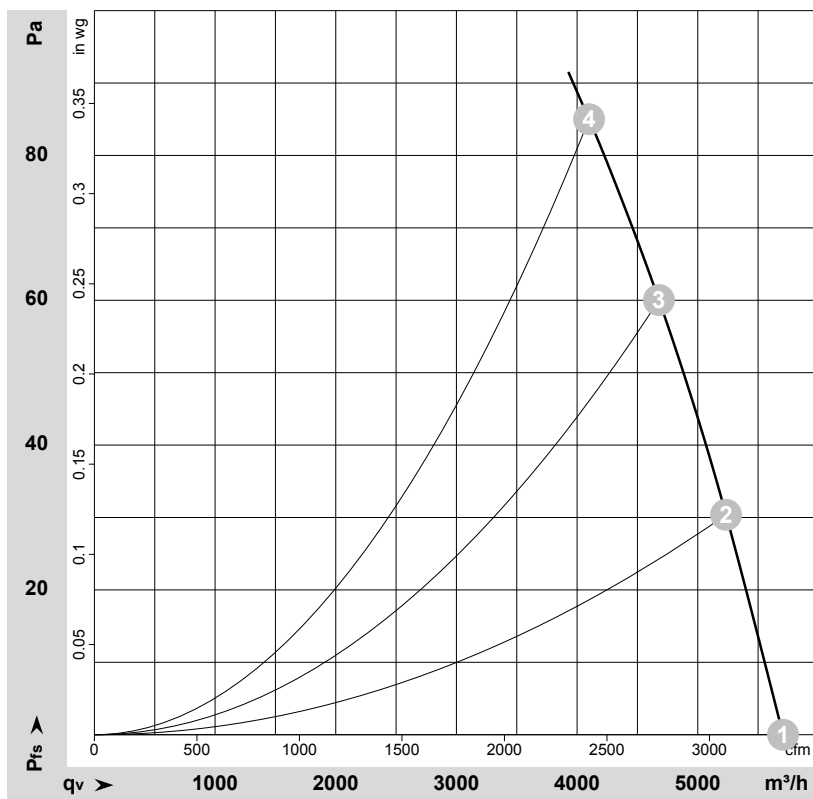
L	= U1 = blue	Z	brown	N	= U2 = black
PE	green/yellow				



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Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: 10226

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.

Fan Performance

	U	f	n	P _e	I	q _v	p _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa
1	230	50	1400	245	1.10	5471	0
2	230	50	1377	262	1.19	5001	30
3	230	50	1358	280	1.26	4600	60
4	230	50	1340	296	1.33	4085	85

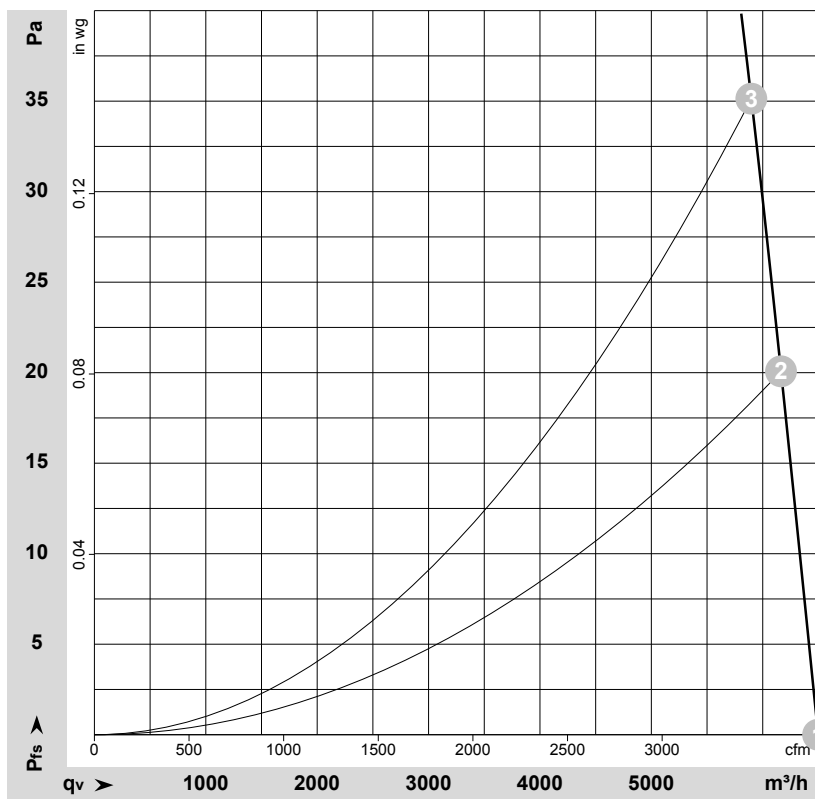
U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase



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Curves: Air performance 60 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: 10294

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.

Fan Performance

	U	f	n	P _e	I	q _v	p _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa
1	230	60	1600	355	1.53	6213	0
2	230	60	1568	358	1.57	5901	20
3	230	60	1546	369	1.61	5662	35

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

