S4E400-AR01-51

AC axial fan

sickle-shaped blades (S series)

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Nominal data

Type	**S4E400-AR01-51**
Motor	**M4E074-GA**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	1420	1650
Power consumption	W	200	275
Current draw	A	0.98	1.20
Capacitor	µF	7	7
Capacitor voltage	VDB	400	400
Max. back pressure	Pa	75	95
Max. back pressure	in. wg	0.3	0.38
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	60	70
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

Data according to Commission Regulation (EU) 327/2011 (EN 17166)

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	30	29.7
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		40.3	40
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.23
09 Air flow q_v	m^3/h	2700
09 Pressure increase p_{fs}	Pa	97
10 Speed (rpm) n	min^{-1}	1390
11 Specific ratio*		1.00

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

* Specific ratio = 1 + p_{fs} / 100 000 Pa

LU-175142

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Technical description

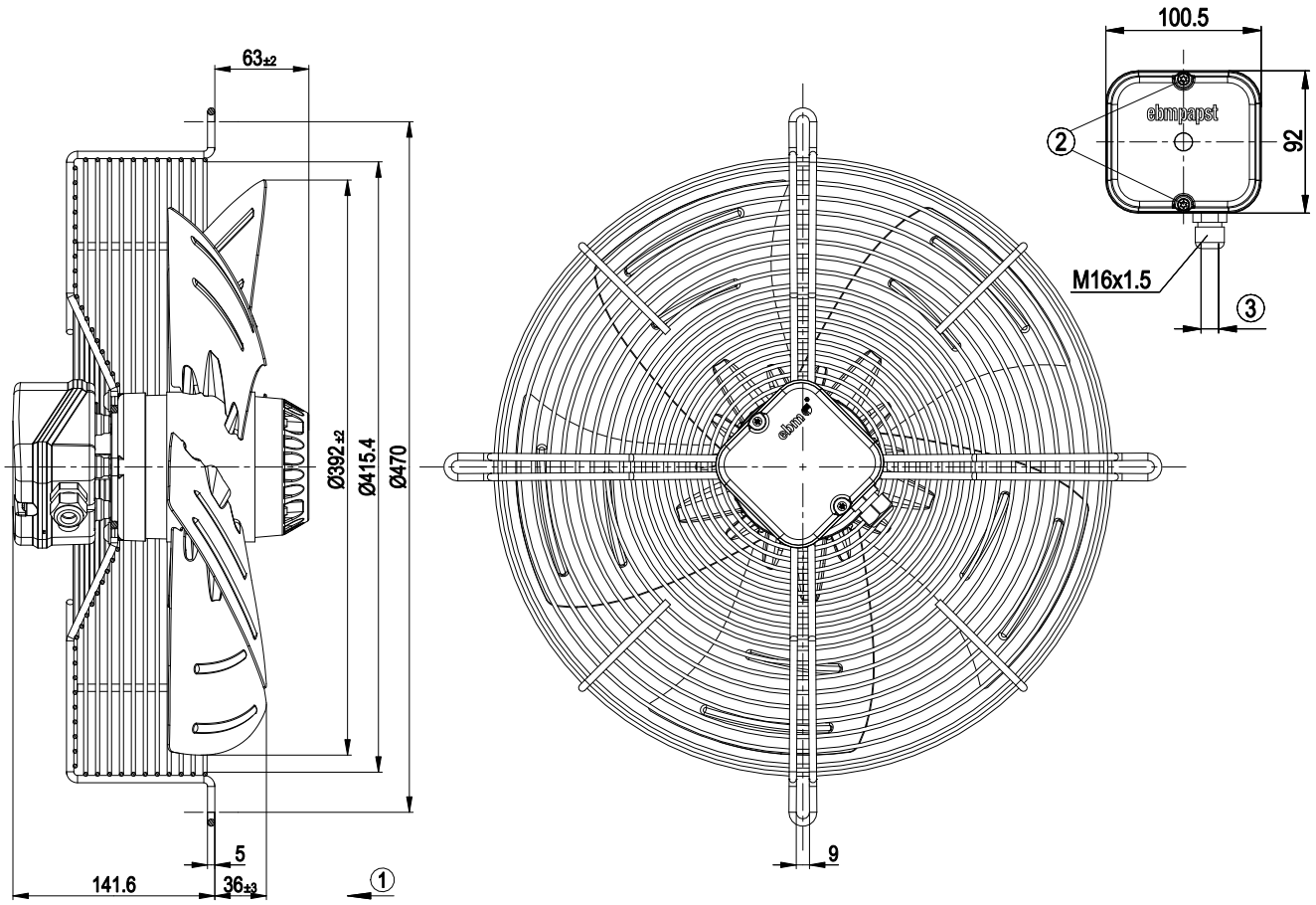
Weight	6.74 kg
Size	400 mm
Motor size	74
Rotor surface	Painted black
Terminal box material	PC/ABS plastic, black
Blade material	Sheet steel, painted black
Guard grille material	Steel, phosphated and coated in black plastic
Number of blades	5
Airflow direction	V
Direction of rotation	Counterclockwise, 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	H1+
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
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
Conformity with standards	EN 60335-1; CE
Approval	CSA C22.2 No. 100; UL 1004-1; EAC

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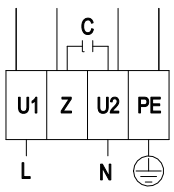
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Product drawing



1	Direction of air flow "V"
2	Tightening torque 1.5 ± 0.2 Nm
4	Cable diameter max. 7.5 mm, tightening torque 1.3 ± 0.2 Nm

Connection diagram



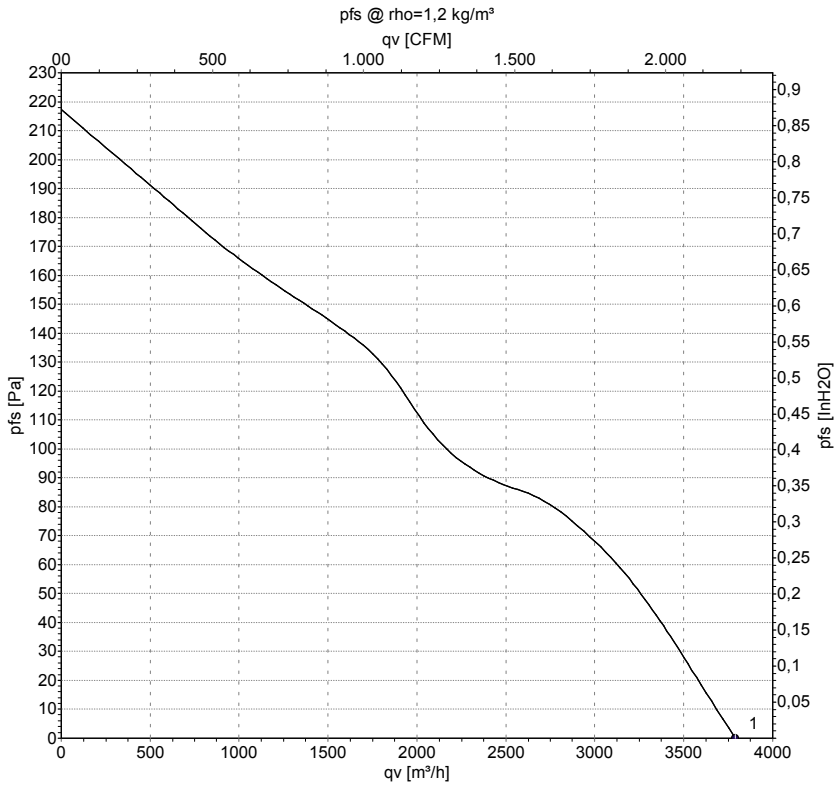
L	= U1 = blue	Z	brown	N	= U2 = black
PE	green/yellow				

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AC axial fan

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Curves: Air performance 50 Hz



Measurement: LU-69415-1

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	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	cfm	in. wg
1	230	50	1420	200	0.98	3790	2230	0.00

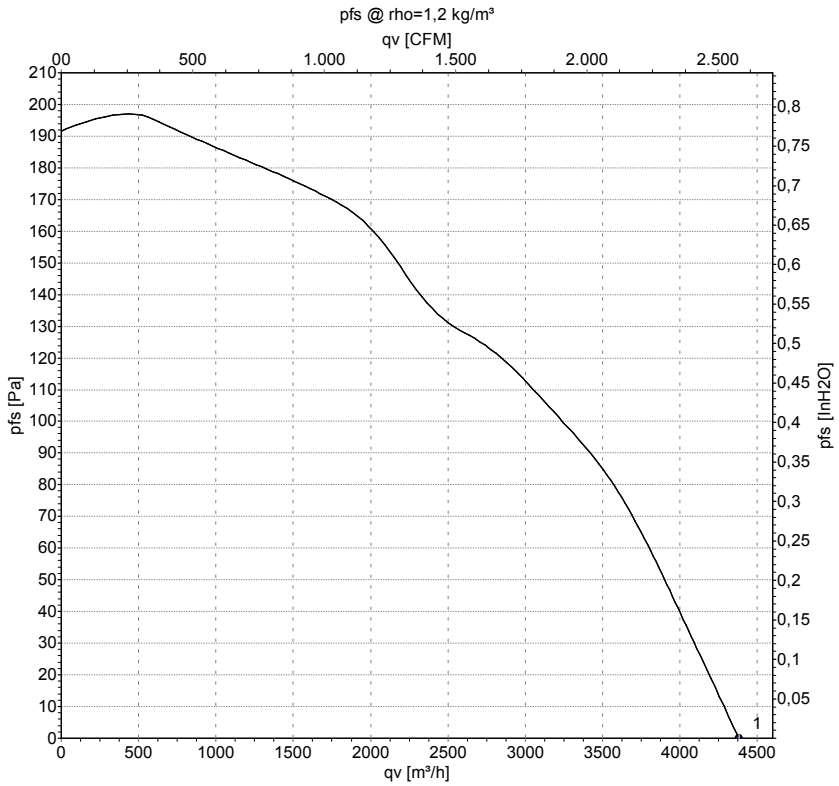
U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow

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AC axial fan

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Curves: Air performance 60 Hz



Measurement: LU-69416-1

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	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	cfm	in. wg
1	230	60	1650	275	1.20	4380	2580	0.00

U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow

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