

S4E400-AR01-68

AC axial panel fan

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



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	S4E400-AR01-68		
Motor	M4E074-GA		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		ce	ce
Valid for approval/standard		CE	CE
Speed (rpm)	min ⁻¹	1390	1590
Power consumption	W	225	315
Current draw	A	1.05	1.38
Capacitor	µF	7	7
Capacitor voltage	VDB	400	400
Min. ambient temperature	°C	-30	-30
Max. ambient temperature	°C	70	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 (prEN 17166)

		Actual		Req. 2015					
01 Overall efficiency η_{es}	%	30		29.7		09 Power consumption P_e	kW	0.23	
02 Measurement category		A				09 Air flow q_v	m³/h	2700	
03 Efficiency category		Static				09 Pressure increase p_{fs}	Pa	97	
04 Efficiency grade N		40.3	40			10 Speed (rpm) n	min ⁻¹	1390	
05 Variable speed drive		No				11 Specific ratio*		1.00	

Data obtained at optimum efficiency level.

The efficiency values displayed for achieving conformity with the Ecodesign Regulation EU 327/2011 has been reached with defined air duct components (e.g. inlet rings).

The dimensions must be requested from ebm-papst. If other air conduction geometries are used on the installation side, the ebm-papst evaluation loses its validity/the conformity must be confirmed again.

The product does not fall within the scope of Regulation (EU) 2019/1781 due to the exception specified in Article 2 (2a) (motors completely integrated into a product).

* Specific ratio = $1 + p_b / 100\,000\text{ Pa}$

LU-175142

AC axial panel fan

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

Technical description

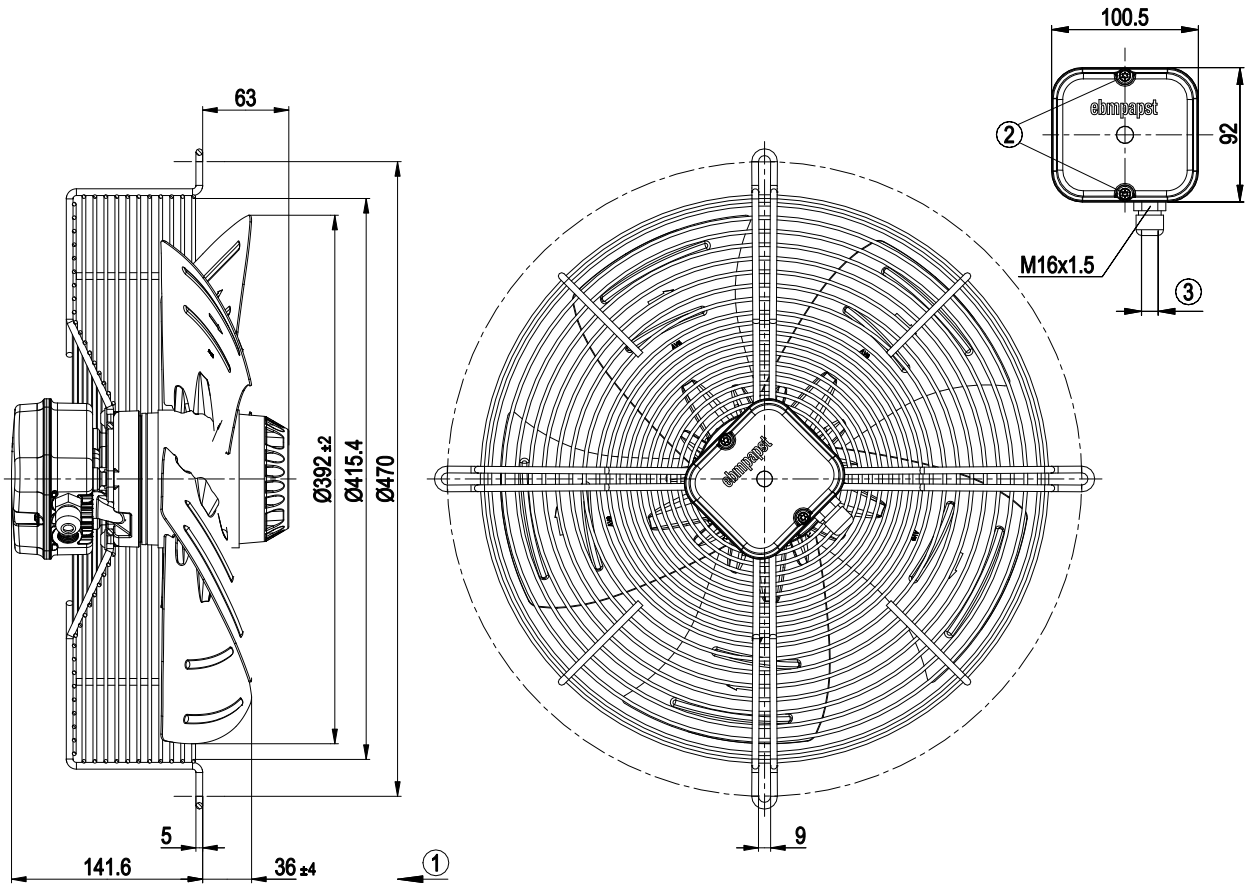
Weight	6.83 kg
Size	400 mm
Motor size	74
Rotor surface	Painted black
Terminal box material	PP plastic
Blade material	Sheet steel, painted black
Guard grille material	Steel, phosphated and coated with black plastic
Number of blades	5
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; 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; Capacitor integrated and connected
Motor protection	Thermal switch auto reset, lead out, with basic insulation
With cable	Variable
Protection class assignment	I; If a protective earth is connected. The built-in component has several local protection class assignments. The final protection class is determined by the intended installation.
Motor capacitor according to EN 60252-1 in safety protection class	S0
Conformity with standards	EN 60335-1; EN 60034-1; EN 60204-1; CE; UKCA
Approval	EAC; UL 1004-1; CSA C22.2 No. 100

S4E400-AR01-68

AC axial panel fan

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

Product drawing

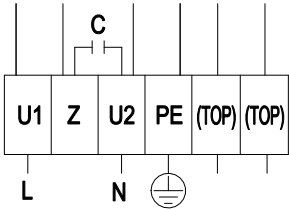


- | | |
|---|--|
| 1 | Direction of air flow "V" |
| 2 | Tightening torque 1.5 ± 0.2 Nm |
| 3 | Cable diameter min. 4 mm, max. 10 mm, tightening torque 2.5 ± 0.4 Nm |

AC axial panel fan

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

Connection diagram



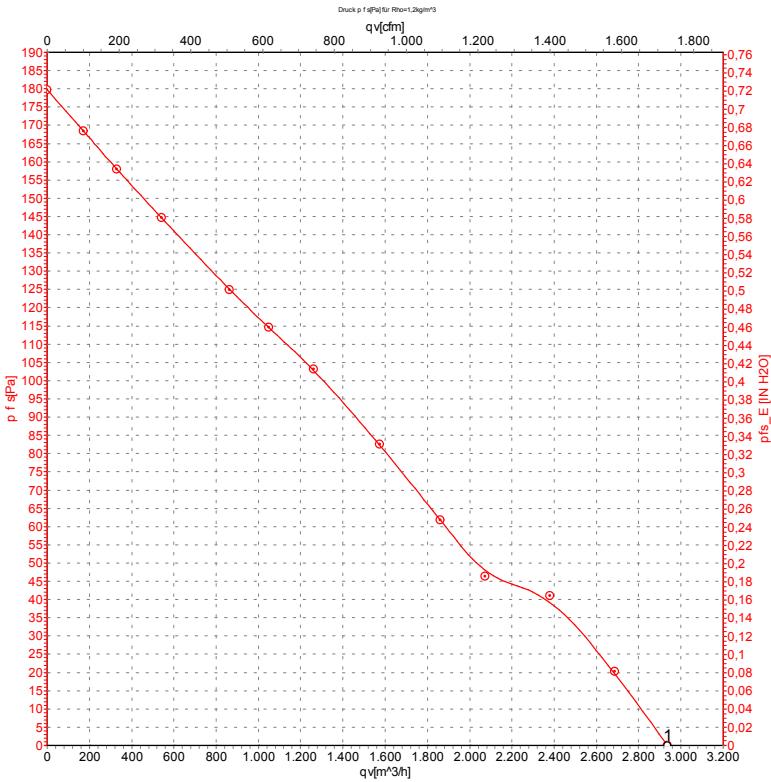
L	= U1 = blue	Z	brown	N	= U2 = black
PE	green/yellow	TOP	white		

S4E400-AR01-68

AC axial panel fan

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

Curves: Air performance 50 Hz



Measurement: LU-40107-1
Date: 1999-06-30

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	1390	225	1.05	2935	1725	0.00

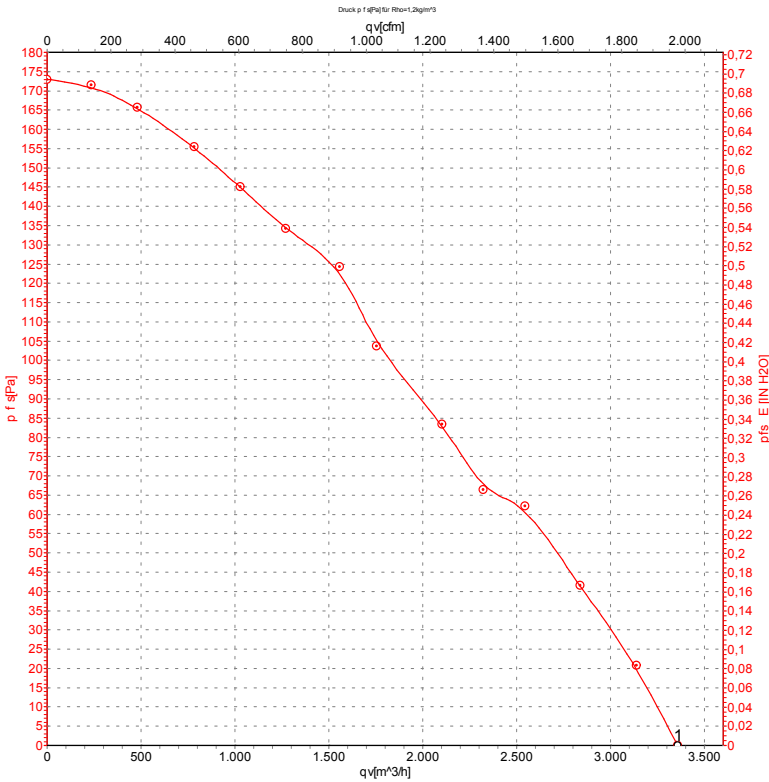
U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow

S4E400-AR01-68

AC axial panel fan

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

Curves: Air performance 60 Hz



Measurement: LU-40108-1
Date: 1999-06-30

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	1590	315	1.38	3355	1975	0.00

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