

EC axial fan

sickle-shaped blades (S series)
with support ring

S3G400-EO03-15 ebmpapst Datasheet
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Nominal data

Type	S3G400-EO03-15	
Motor	M3G074-DF	
Phase		1~
Nominal voltage	VAC	200
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min ⁻¹	1200
Power consumption	W	165
Current draw	A	1.5
Max. back pressure	Pa	60
Max. back pressure	in. wg	0.24
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	40

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

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	33.7	28.7
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		45	40
05 Variable speed drive		Yes	

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

09 Power consumption P_{ed}	kW	0.16
09 Air flow q_v	m³/h	2800
09 Pressure increase p_{fs}	Pa	62
10 Speed (rpm) n	min ⁻¹	1180
11 Specific ratio*		1.00

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

LU-194550



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Technical description

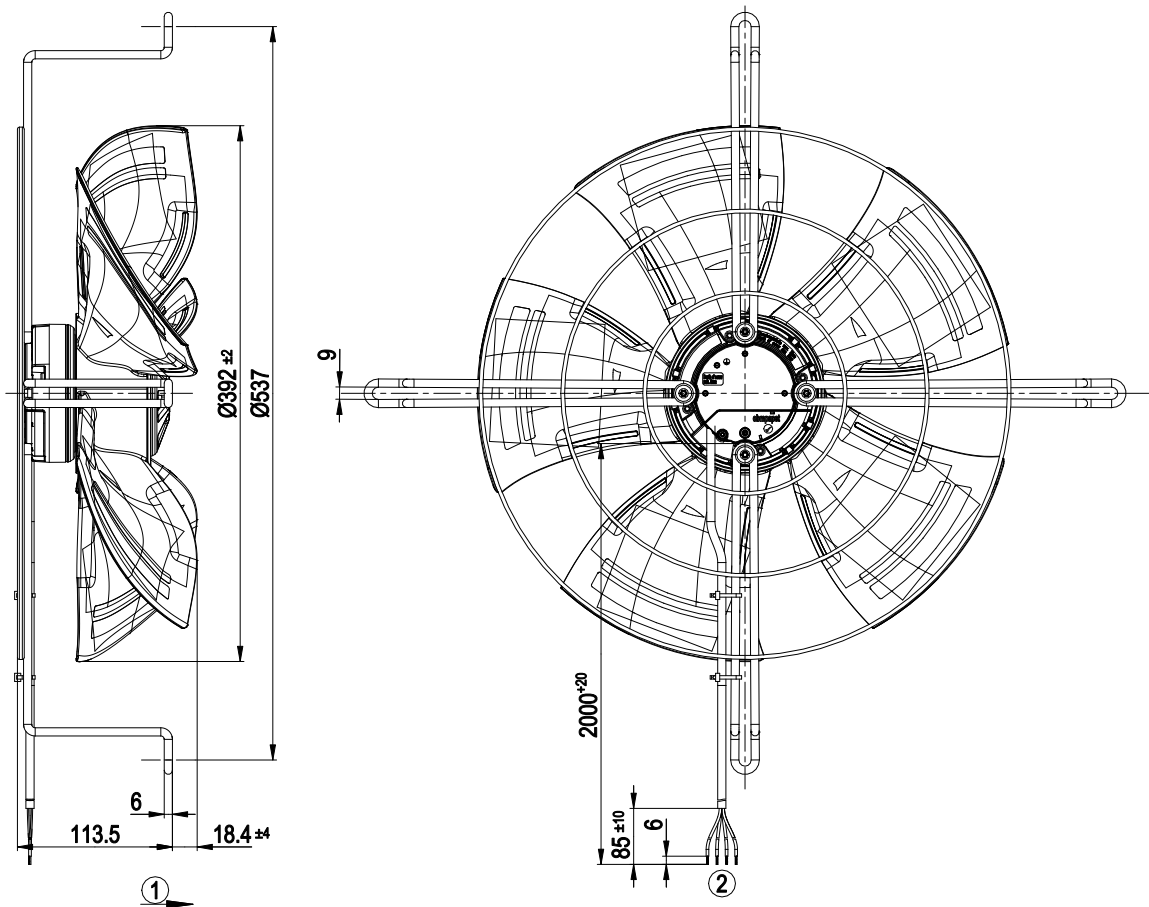
Weight	4.8 kg
Size	400 mm
Motor size	74
Rotor surface	Thick-film passivated
Blade material	Press-fitted sheet steel blank, sprayed with PP plastic
Support ring material	Steel, galvanized and coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	A
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
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	Any
Condensation drainage holes	None, open rotor
Cooling hole/opening	On rotor side
Mode	S1
Motor bearing	Ball bearing with low-temperature lubricant
Technical features	- Speed setting input (230 V) - Power limiter - Motor current limitation - Soft start - Overvoltage detection - Thermal overload protection for electronics/motor - Line undervoltage detection
Speed levels	2
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC interference emission	According to EN 61000-6-4 (industrial environment)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Electronic motor protection
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE



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Product drawing



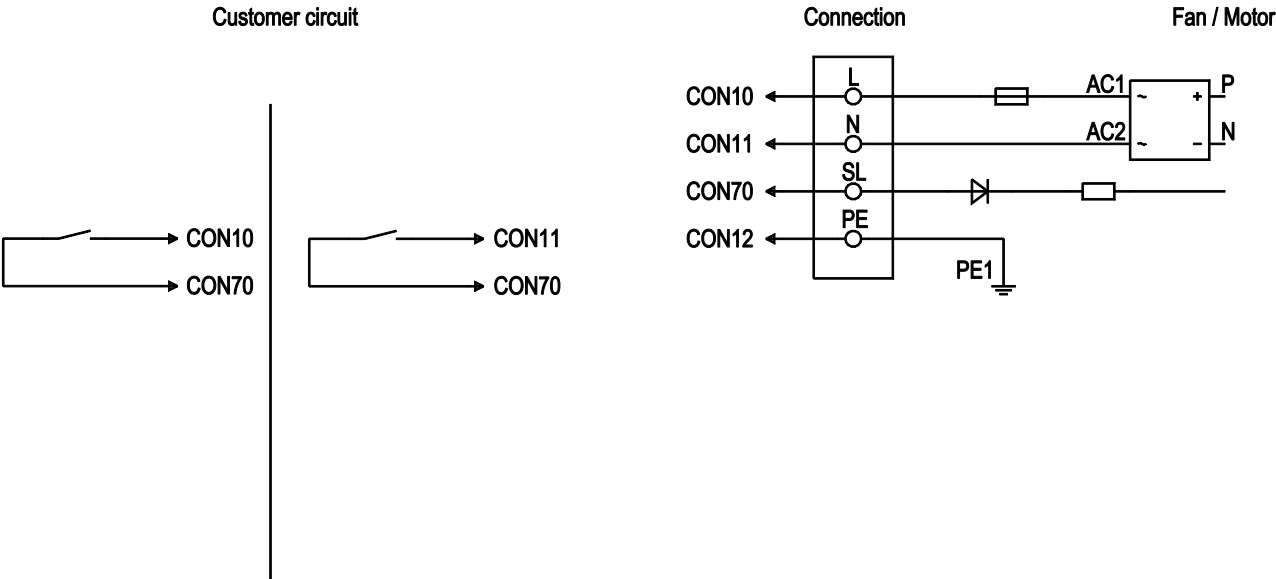
1	Direction of air flow "A"
2	Cable PVC 4G 0.5 mm²
	4x splice



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Connection diagram



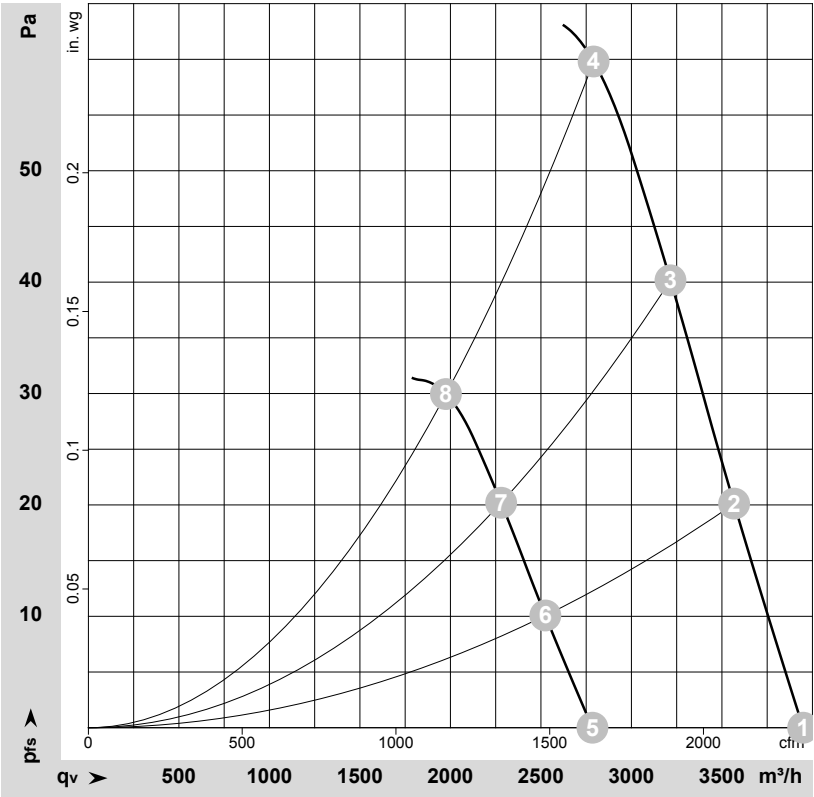
No.	Conn.	Designation	Color	Function/assignment
	CON 10	L	black	Power supply 230 VAC, 50-60 Hz, see nameplate for voltage range
	CON 11	N	blue	Neutral conductor
	CON 12	PE	green/yellow	Protective earth
	CON 70	SL	brown	Speed selection: switch open speed 1; switch closed speed 2



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Curves: Air performance 50 Hz



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

Measurement: LU-194550-1
Measurement: LU-194593-1

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

	Stage	Wired	U	f	n	P _{ed}	I	q _v	p _{fs}	q _v	p _{fs}
			V	Hz	min ⁻¹	W	A	m³/h	Pa	cfm	in. wg
1	2	1~	200	50	1200	159	1.50	3950	0	2325	0.00
2	2	1~	200	50	1200	165	1.50	3565	20	2100	0.08
3	2	1~	200	50	1200	165	1.50	3215	40	1895	0.16
4	2	1~	200	50	1200	165	1.50	2790	60	1645	0.24
5	1	1~	200	50	840	57	0.60	2785	0	1640	0.00
6	1	1~	200	50	840	59	0.61	2525	10	1485	0.04
7	1	1~	200	50	840	59	0.61	2280	20	1340	0.08
8	1	1~	200	50	840	58	0.61	1975	31	1160	0.12

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

