S3G400-ZF03-01

EC axial fan - AxiEco

with guard grille

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Nominal data

Type	**S3G400-ZF03-01**
Motor	**M3G074-DF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml/ce
Status		prelim.
Speed (rpm)	min^{-1}	1200
Power consumption	W	165
Current draw	A	1.3
Max. back pressure	Pa	135
Max. back pressure	in. wg	0.54
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

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}	%	48.2	28.7
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		59.5	40
05 Variable speed drive		Yes	

09 Power consumption P_{ed}	kW	0.16
09 Air flow q_v	m^3/h	2615
09 Pressure increase p_{fs}	Pa	98
10 Speed (rpm) n	min^{-1}	1255
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-205311

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Technical description

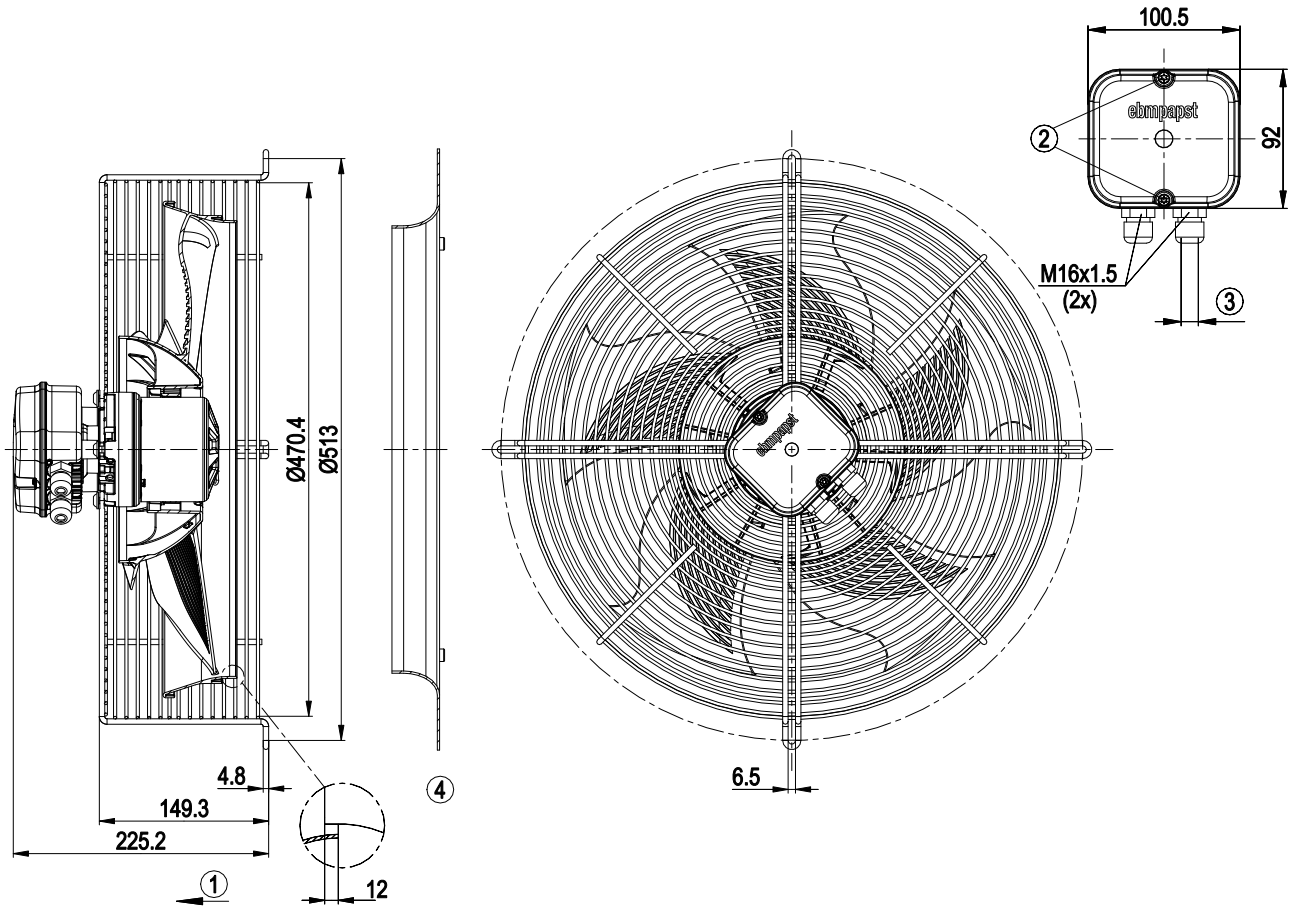
Size	400 mm
Motor size	74
Rotor surface	Thick-film passivated
Terminal box material	PP plastic
Impeller material	PP plastic, galvanized sheet-metal plate
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	V
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1
Max. permitted ambient temp. for motor (transport/storage)	+ 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
Cooling hole/opening	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 10 mA - Tach output - Power limiter - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Overvoltage detection - Thermal overload protection for electronics/motor - Line undervoltage detection
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	Terminal box
Motor protection	Electronic motor protection
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60034-1; EN 60204-1; EN 60335-1; CE
Approval	CSA C22.2 No. 77 + CAN/CSA-E60730-1; UL 1004-7 + 60730-1; EAC

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Product drawing



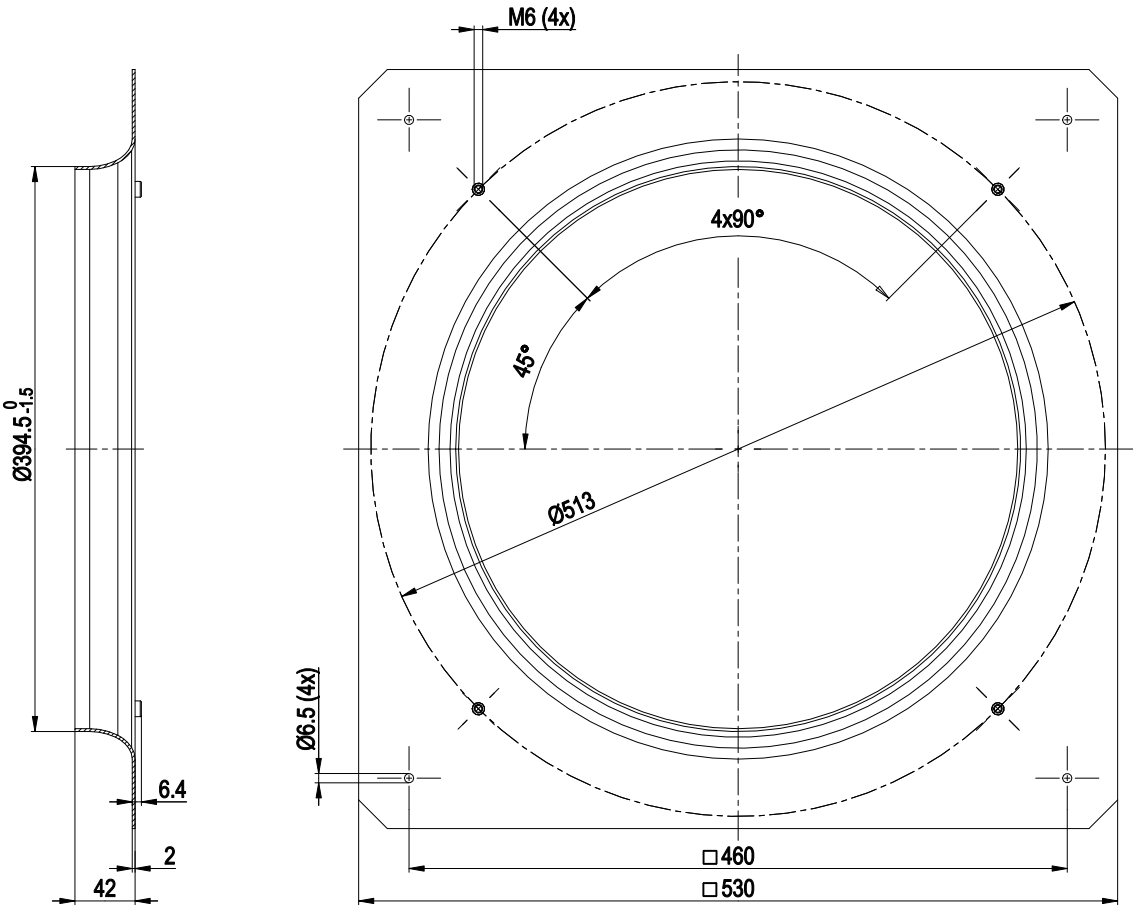
1	Airflow direction "V"
2	Tightening torque 1.5 ± 0.2 Nm
3	Cable diameter max. 7.5 mm, tightening torque 1.3 ± 0.2 Nm
4	Accessory part: Inlet ring 40100-2-4013 not included in scope of delivery

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Accessory part



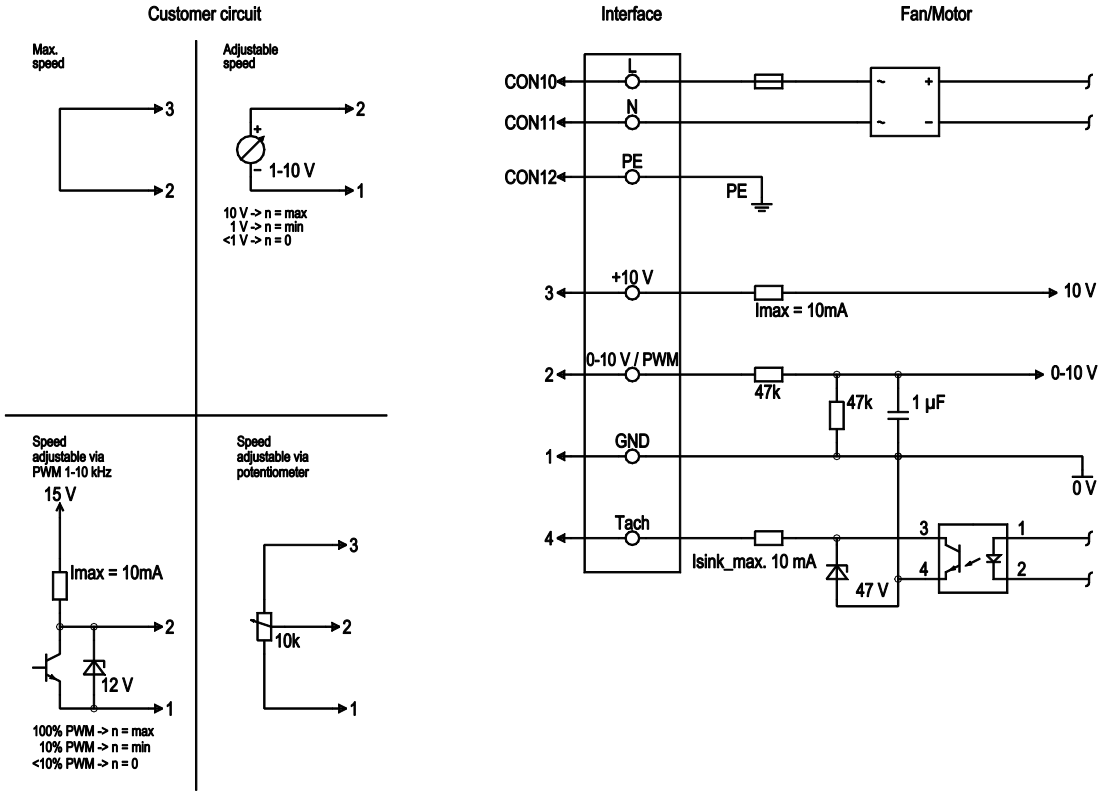
Inlet ring 40100-2-4013

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Connection diagram



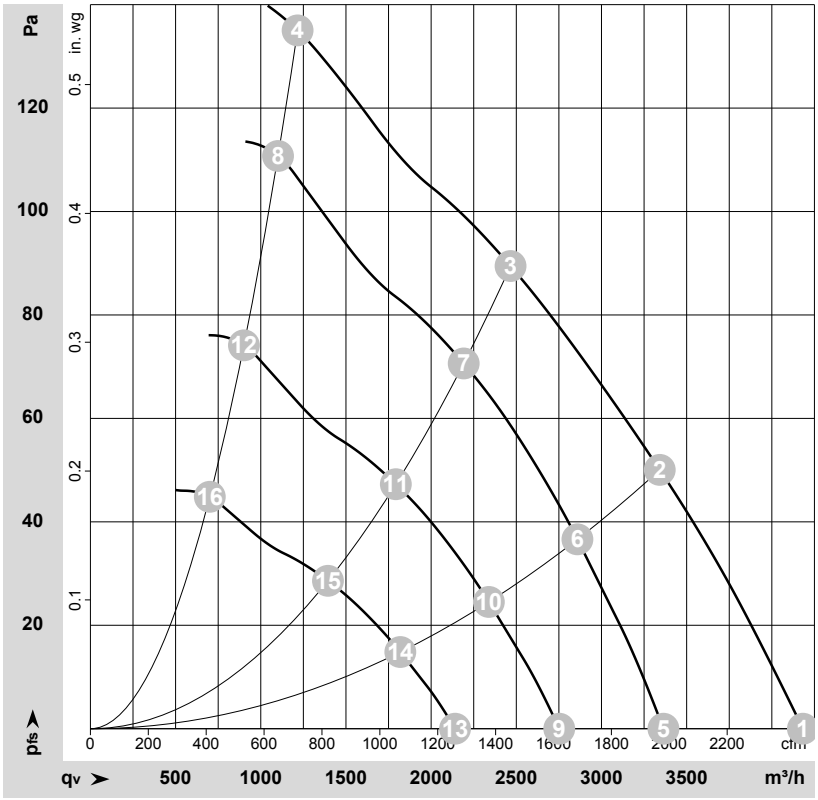
No.	Conn.	Designation	Color	Function/assignment
	CON10	L	black	Supply connection, power supply, phase, see nameplate for voltage range
	CON11	N	blue	Supply connection, power supply, neutral conductor, see nameplate for voltage range
	CON12	PE	green/yellow	Ground connection
	2	0- 10V PWM	yellow	0-10 V / PWM control input, Ri=100 kΩ, SELV
	4	Tach	white	Tach output, open collector, 1 pulse per revolution, Isink max = 10 mA, SELV
	3	+10 V	red	Fixed voltage output 10 VDC +/-3 %, Imax. 10 mA, short-circuit-proof, power supply for ext. devices (e.g. pot), SELV
	1	GND	blue	Reference ground for control interface, SELV

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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-204440-1

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

	Wired	U	f	n	P_{ed}	I	LpA_{in}	LwA_{in}	LwA_{out}	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	dB(A)	m^3/h	Pa	cfm	in. wg
1	1~	230	50	1370	165	1.30	61	68	72	4180	0	2460	0.00
2	1~	230	50	1285	165	1.30	57	64	68	3340	50	1965	0.20
3	1~	230	50	1240	165	1.30	56	63	67	2465	90	1450	0.36
4	1~	230	50	1200	165	1.30	61	68	72	1215	135	715	0.54
5	1~	230	50	1100	84	0.68	56	62	67	3365	0	1980	0.00
6	1~	230	50	1100	102	0.82	53	60	64	2860	37	1685	0.15
7	1~	230	50	1100	115	0.93	53	60	64	2190	71	1290	0.29
8	1~	230	50	1100	122	0.98	59	66	70	1100	112	650	0.45
9	1~	230	50	900	46	0.37	51	57	62	2750	0	1620	0.00
10	1~	230	50	900	56	0.45	48	55	59	2340	25	1375	0.10
11	1~	230	50	900	63	0.51	48	55	59	1795	47	1055	0.19
12	1~	230	50	900	67	0.54	54	61	65	900	75	530	0.30
13	1~	230	50	700	22	0.18	44	51	55	2140	0	1260	0.00
14	1~	230	50	700	26	0.21	42	48	52	1820	15	1070	0.06
15	1~	230	50	700	30	0.24	41	49	53	1395	29	820	0.12
16	1~	230	50	700	31	0.25	47	54	59	700	45	415	0.18

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side LwA_{out} = Sound power level outlet side · q_V = Air flow · p_{fs} = Pressure increase

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