S3G350-ZF03-10

EC axial fan - AxiEco

with guard grille

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Nominal data

Type	**S3G350-ZF03-10**
Motor	**M3G074-DF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Status		prelim.
Speed (rpm)	min^{-1}	1450
Power consumption	W	165
Current draw	A	1.4
Max. back pressure	Pa	150
Max. back pressure	in. wg	0.6
Min. ambient temperature	°C	-25
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 (EN 17166)

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	45.1	28.7
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		56.4	40
05 Variable speed drive		Yes	

09 Power consumption P_{ed}	kW	0.16
09 Air flow q_v	m^3/h	2230
09 Pressure increase p_{fs}	Pa	105
10 Speed (rpm) n	min^{-1}	1465
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-204124

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Technical description

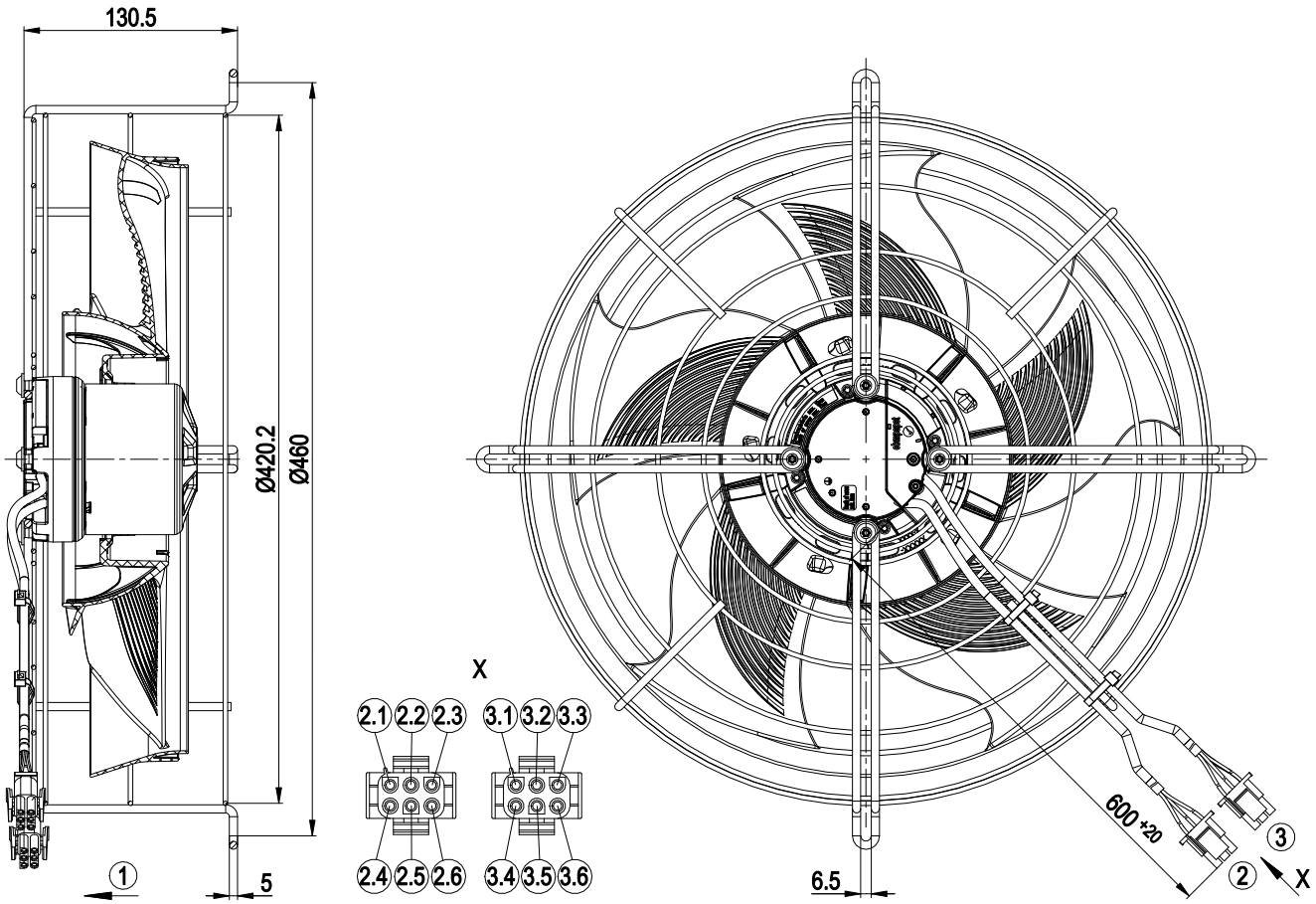
Weight	5.5 kg
Size	350 mm
Motor size	74
Rotor surface	Thick-film passivated
Impeller material	PP plastic, galvanized sheet-metal plate
Support ring material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	V
Direction of rotation	Clockwise, viewed toward rotor
Degree of 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 with low-temperature lubricant; (sealed, without air gap)
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 60034-1; EN 60204-1; EN 60335-1; CE
Approval	CSA C22.2 No. 77 + CAN/CSA-E60730-1; EAC; UL 1004-7 + 60730-1

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Product drawing



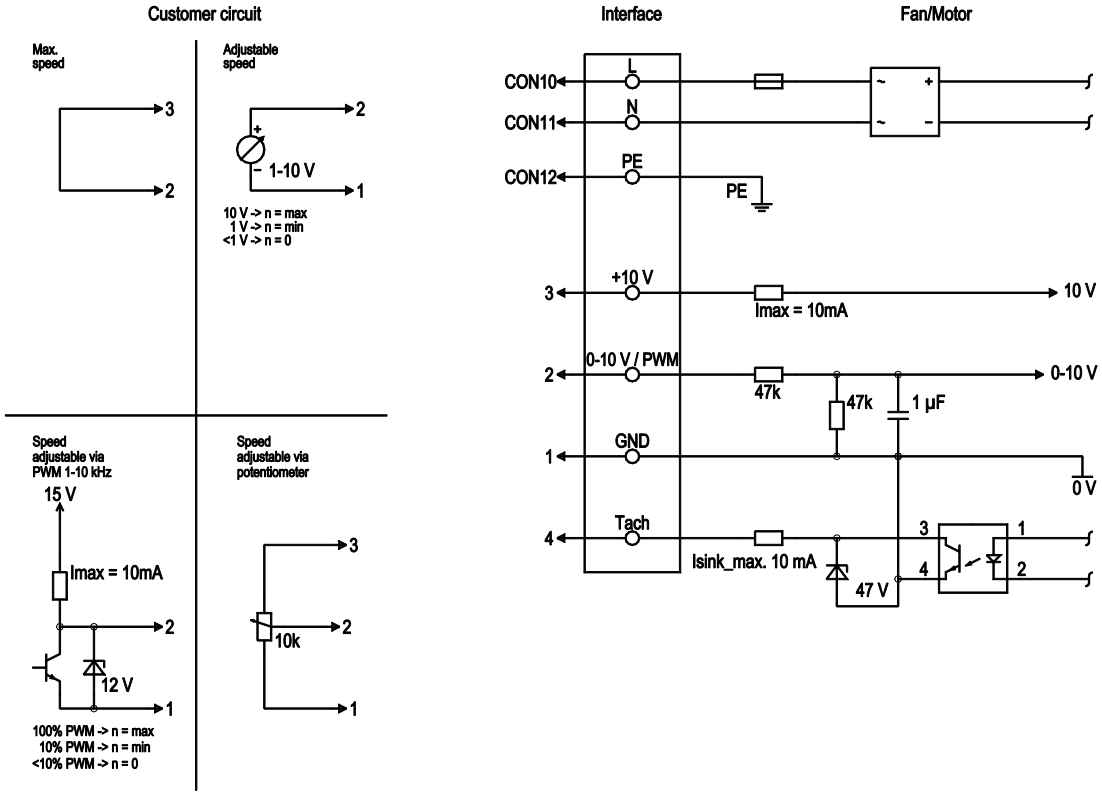
1	Airflow direction "V"
2	Cable PVC AWG20
	6-pole connector housing TE 1-480704-9, 3x plug pin TE 926885-1, 1x seal TE 794276-1, 1x seal TE 794275-1
2.1	L
2.2	N
2.3	PE
2.4	not used
2.5	not used
2.6	not used
3	Cable PVC AWG22
	6-pole connector housing TE 1-480704-9, 4x plug pin TE 926885-1, 1x seal TE 794276-1, 1x seal TE 794275-1
3.1	not used
3.2	not used
3.3	Tach
3.4	GND
3.5	0-10 V/PWM
3.6	+10 V

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Connection diagram



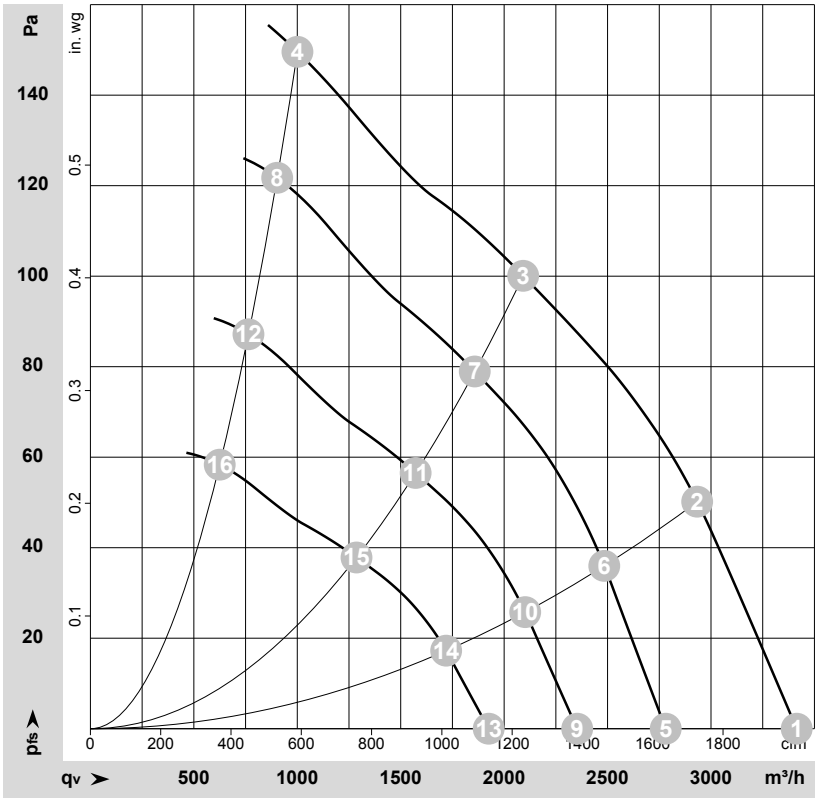
No.	Conn.	Designation	Color	Function/assignment
	CON10	L	black	Supply connection, power supply, phase, see nameplate for voltage range
	CON11	N	blue	Supply connection, power supply, neutral conductor, see nameplate for voltage range
	CON12	PE	green/yellow	Ground connection
	2	0- 10V PWM	yellow	0-10 V / 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-204225-1

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}	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	in. wg
1	1~	230	50	1595	153	1.36	63	70	3415	0	2010	0.00
2	1~	230	50	1535	165	1.40	62	68	2935	50	1725	0.20
3	1~	230	50	1465	165	1.40	59	66	2090	100	1230	0.40
4	1~	230	50	1450	165	1.40	63	70	1000	150	590	0.60
5	1~	230	50	1300	83	0.73	58	65	2780	0	1635	0.00
6	1~	230	50	1300	99	0.87	57	64	2485	36	1460	0.14
7	1~	230	50	1300	117	1.03	56	63	1860	79	1095	0.32
8	1~	230	50	1300	123	1.09	60	68	905	124	530	0.50
9	1~	230	50	1100	50	0.44	54	61	2355	0	1385	0.00
10	1~	230	50	1100	60	0.53	53	60	2100	26	1235	0.10
11	1~	230	50	1100	71	0.62	52	59	1570	57	925	0.23
12	1~	230	50	1100	75	0.66	56	63	765	89	450	0.36
13	1~	230	50	900	27	0.24	49	56	1925	0	1135	0.00
14	1~	230	50	900	33	0.29	48	55	1720	17	1010	0.07
15	1~	230	50	900	39	0.34	47	54	1285	38	755	0.15
16	1~	230	50	900	41	0.36	51	58	625	59	370	0.24

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
q_V = Air flow · p_{fs} = Pressure increase

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