

G3G120-BB13-02

# EC centrifugal fan

forward curved, single inlet

with housing (flange)

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## Nominal data

Type	G3G120-BB13-02	
Motor	M3G055-BD	
Phase		1~
Nominal voltage	VAC	115
Frequency	Hz	50/60
Type of data definition		ml
State		prelim.
Speed	min <sup>-1</sup>	2320
Power input	W	46
Current draw	A	0.70
Min. back pressure	Pa	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit  
Subject to alterations



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## Technical features

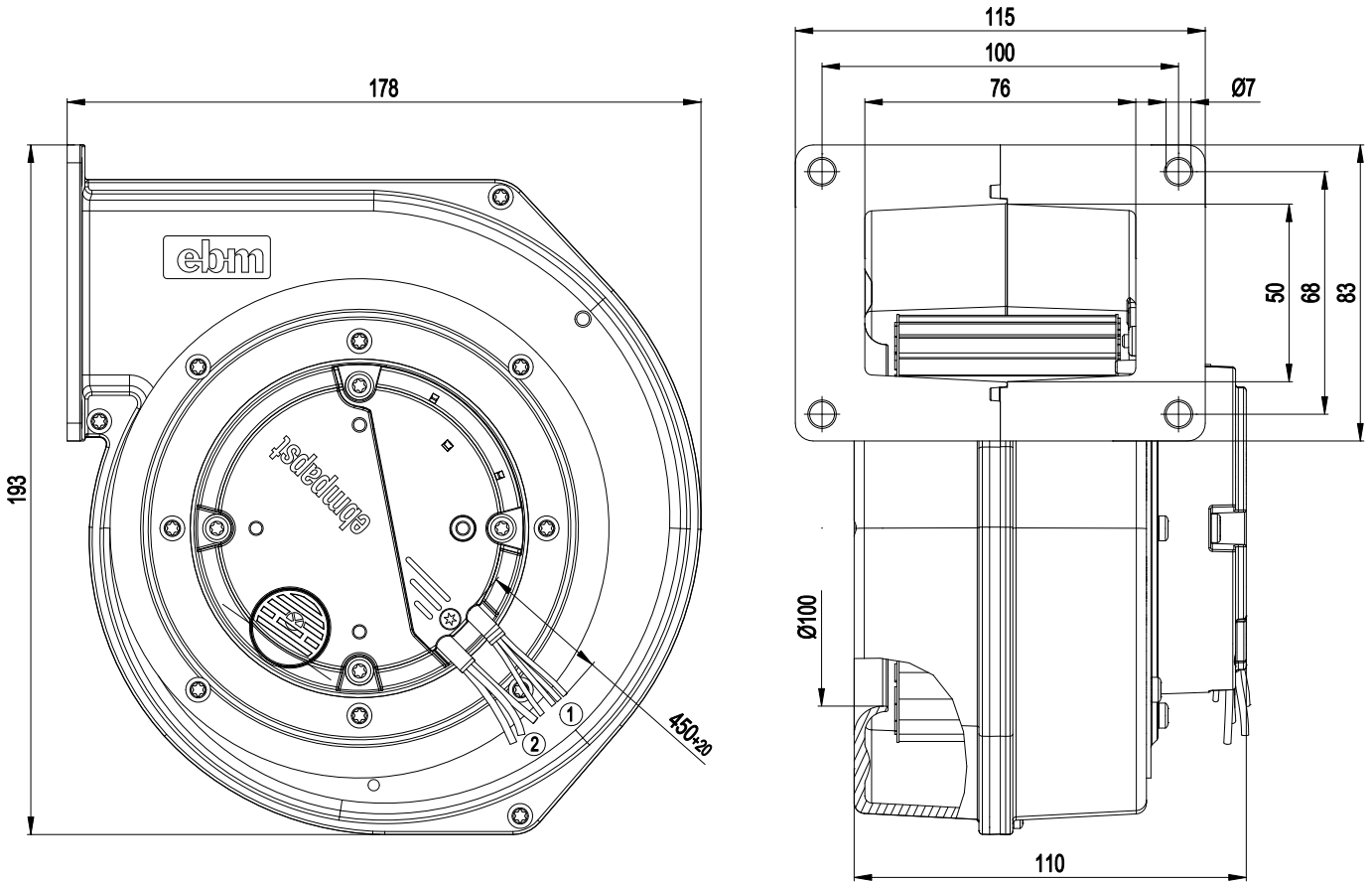
<b>Mass</b>	1.8 kg
<b>Size</b>	120 mm
<b>Surface of rotor</b>	Galvanised
<b>Material of electronics housing</b>	Die-cast aluminium
<b>Material of impeller</b>	Hot-dip galvanized sheet steel
<b>Housing material</b>	Die-cast aluminium
<b>Direction of rotation</b>	Clockwise, seen on rotor
<b>Type of protection</b>	IP 44
<b>Insulation class</b>	"B"
<b>Humidity class</b>	F3-1
<b>Max. permissible ambient motor temp. (transp./ storage)</b>	+ 80 °C
<b>Min. permissible ambient motor temp. (transp./storage)</b>	- 40 °C
<b>Mounting position</b>	Shaft horizontal or rotor on bottom; rotor on top on request
<b>Condensate discharge holes</b>	Rotor-side
<b>Operation mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Technical features</b>	Control input 0-10 VDC / PWM, output 10 VDC max. 1.1 mA, tach output, locked rotor protection
<b>EMC interference immunity</b>	Acc. to EN 61000-6-2
<b>EMC interference emission</b>	Acc. to EN 61000-6-3 (household environment)
<b>Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)</b>	<= 3.5 mA
<b>Motor protection</b>	Thermal overload protector (TOP) wired internally
<b>Cable exit</b>	Variable
<b>Protection class</b>	I (if protective earth is connected by customer)
<b>Product conforming to standard</b>	EN 60335-1
<b>Approval</b>	GOST; UL 2111



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## Product drawing



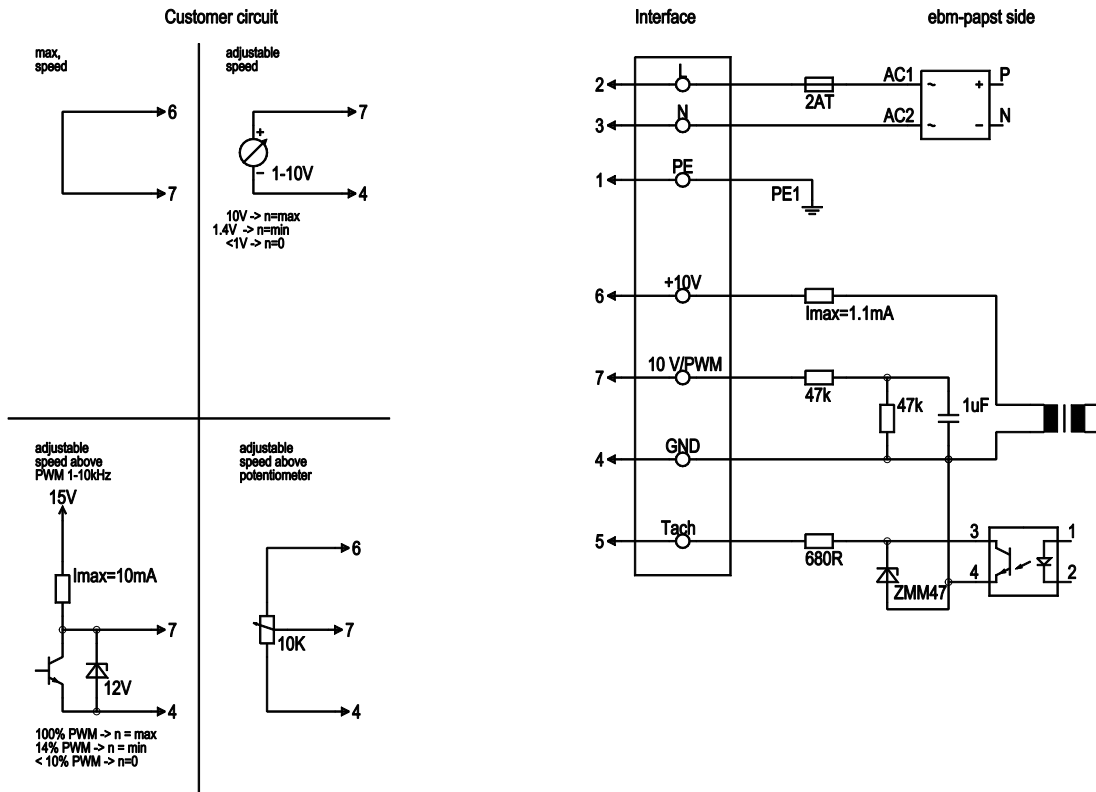
- |   |   |
|---|---|
| 1 | Connection line, special arrangement, 4x receptacle crimped |
| 2 | Connection line, special arrangement, 3x receptacle crimped |



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## Connection screen



Line	No.	Signal	Colour	Function / assignment
	1	PE	green/yellow	Protective earth
	2	L	brown	Power supply 115 VAC, 50-60 Hz, see type plate for voltage range
	3	N	blue	Neutral conductor
	4	GND	blue	GND - Connection for control interface
	5	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated
	6	10V/ max. 1,1mA	red	Voltage output 10 V/ 1.1 mA, electrically isolated
	7	0-10V PWM	yellow	Control input 0 - 10 V or PWM, electrically isolated

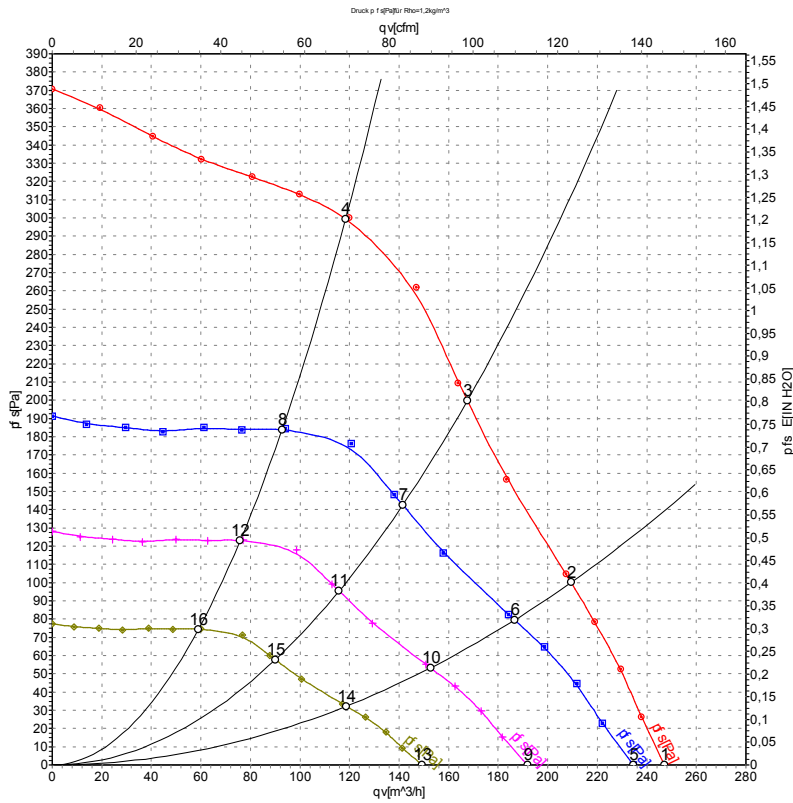


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## Charts: Air flow 50 Hz



Measurement: LU-73162

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

## Measured values

	U	f	n	P <sub>ed</sub>	I	qv	P <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	115	50	2320	46	0.70	245	0
2	115	50	2470	41	0.60	210	100
3	115	50	2605	35	0.52	170	200
4	115	50	2810	28	0.42	120	300
5	115	50	2200	39	0.57	235	0
6	115	50	2200	29	0.43	185	79
7	115	50	2200	21	0.31	140	142
8	115	50	2200	13	0.20	95	184
9	115	50	1800	21	0.31	190	0
10	115	50	1800	16	0.23	155	53
11	115	50	1800	11	0.17	115	95
12	115	50	1800	7.3	0.11	75	124
13	115	50	1400	10	0.15	150	0
14	115	50	1400	7.4	0.11	120	32
15	115	50	1400	5.4	0.08	90	58
16	115	50	1400	3.4	0.05	60	75

U = Supply voltage · f = Frequency · n = Speed · P<sub>ed</sub> = Power input · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase

