G3G120-BB01-06

EC centrifugal fan

forward curved, single inlet

with housing (flange)

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Nominal data

Type	**G3G120-BB01-06**
Motor	**M3G055-BD**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Type of data definition		ml
Speed (rpm)	min^{-1}	2130
Power input	W	38
Current draw	A	0.3
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

Mass	1.9 kg
Size	120 mm
Surface of rotor	Thick layer passivated
Material of impeller	Sheet steel, galvanised
Housing material	Die-cast aluminium
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Humidity (F)/environmental protection class (H)	H0 - dry environment
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None, open rotor
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 10 mA - Tach output - Output limit - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Overvoltage detection - Over-temperature protected electronics / motor - Line undervoltage detection
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC harmonics	Acc. to EN 61000-3-2/3
EMC interference emission	Acc. to EN 61000-6-3 (household environment)
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Locked-rotor protection
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	C22.2 Nr.77 + CAN/CSA-E60730-1; UL 1004-7 + 60730; EAC

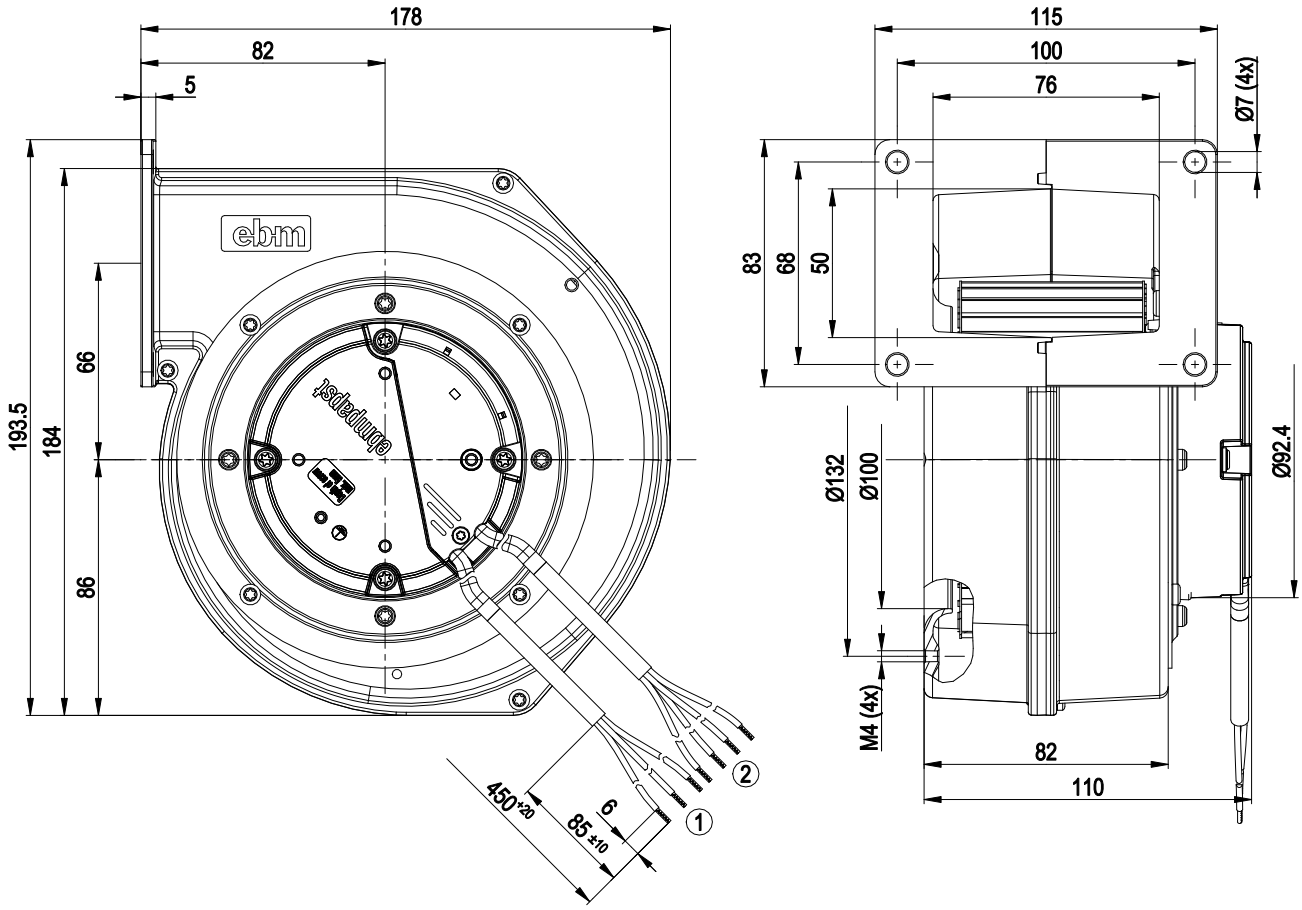
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Product drawing



1	Connection line PVC AWG20, 3x lead tips crimped
2	Connection line PVC AWG22, 4x lead tips crimped

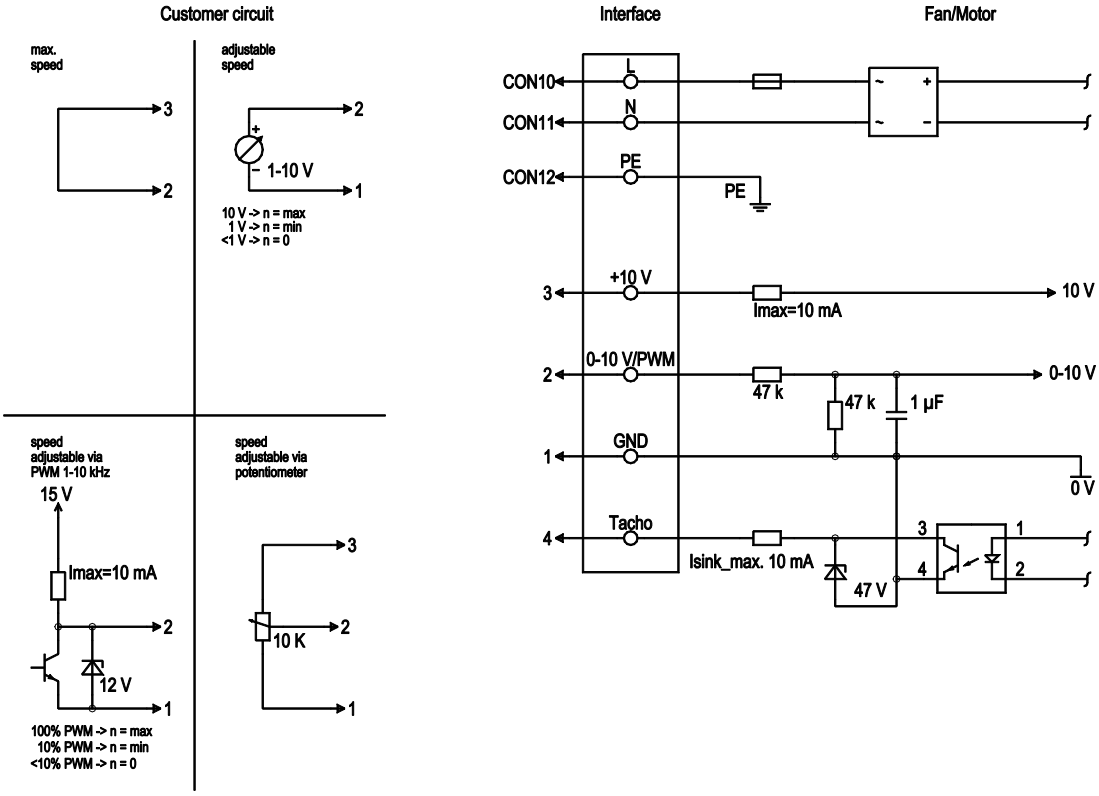
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Connection screen



No.	Conn.	Designation	Colour	Function / assignment
	CON10	L	brown	Mains connection, power supply, phase, see type plate for voltage range
	CON11	N	blue	Mains connection, power supply, neutral conductor, see type plate for voltage range
	CON12	PE	green/yellow	Earth connection
	2	0- 10V PWM	yellow	0-10 V/PWM control input, Ri=100 kΩ, SELV
	4	Tach	white	Speed monitoring 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. potentiometer), SELV
	1	GND	blue	Signal ground for control interface, SELV

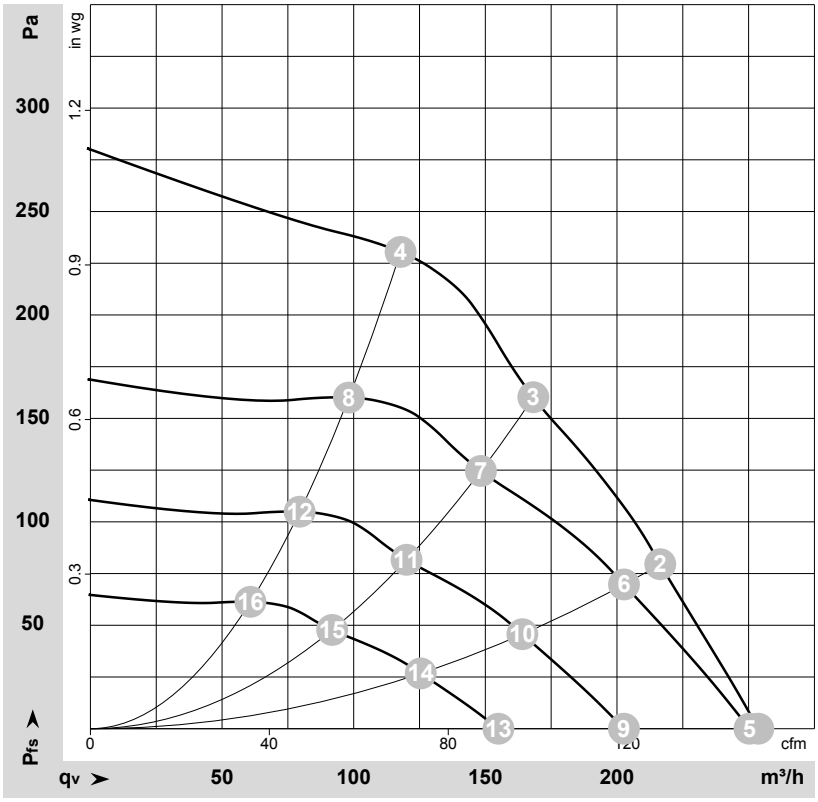
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Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-172500-1

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_{ed}	I	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	230	50	2130	38	0.30	255	0	150	0.00
2	230	50	2240	33	0.26	215	80	125	0.32
3	230	50	2380	28	0.22	170	160	100	0.64
4	230	50	2520	22	0.18	120	230	70	0.92
5	230	50	2100	37	0.28	250	0	145	0.00
6	230	50	2100	27	0.21	205	70	120	0.28
7	230	50	2100	19	0.15	150	124	85	0.50
8	230	50	2100	13	0.10	100	161	60	0.65
9	230	50	1700	19	0.15	205	0	120	0.00
10	230	50	1700	15	0.11	165	46	95	0.18
11	230	50	1700	10.0	0.08	120	82	70	0.33
12	230	50	1700	7.0	0.06	80	106	45	0.43
13	230	50	1300	9.0	0.07	155	0	90	0.00
14	230	50	1300	7.0	0.05	125	27	75	0.11
15	230	50	1300	5.0	0.04	90	48	55	0.19
16	230	50	1300	3.00	0.02	60	62	35	0.25

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power input · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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