G3G108-BB01-13

EC centrifugal fan

forward curved, single inlet

with housing (flange)

G3G108-BB01-13 ebmpapst Datasheet
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County court Stuttgart · HRA 590344

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Nominal data

Type	**G3G108-BB01-13**
Motor	**M3G055-BD**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Type of data definition		fa
Speed	min^{-1}	2800
Power input	W	50
Current draw	A	0.38
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	1.72 kg
Size	108 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 44; Depending on installation and position as per EN 60034-5
Insulation class	"B"
Humidity class	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Over-temperature protected motor
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	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1

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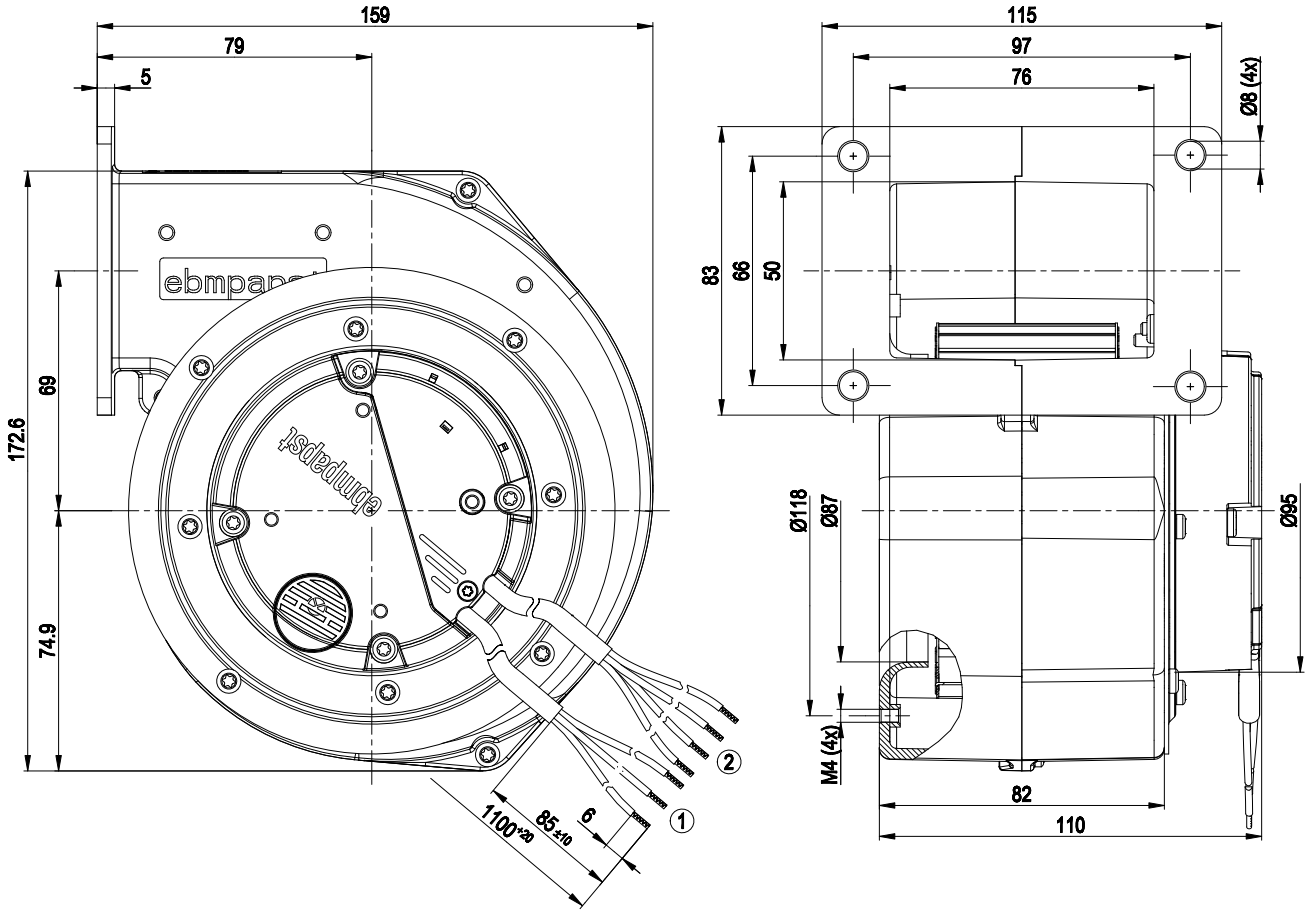
Product drawing



1	Connection line PVC 3G 0.5 mm², 3x brass lead tips crimped
2	Connection line PVC 4x 0.25 mm²; 4 x brass lead tips crimped

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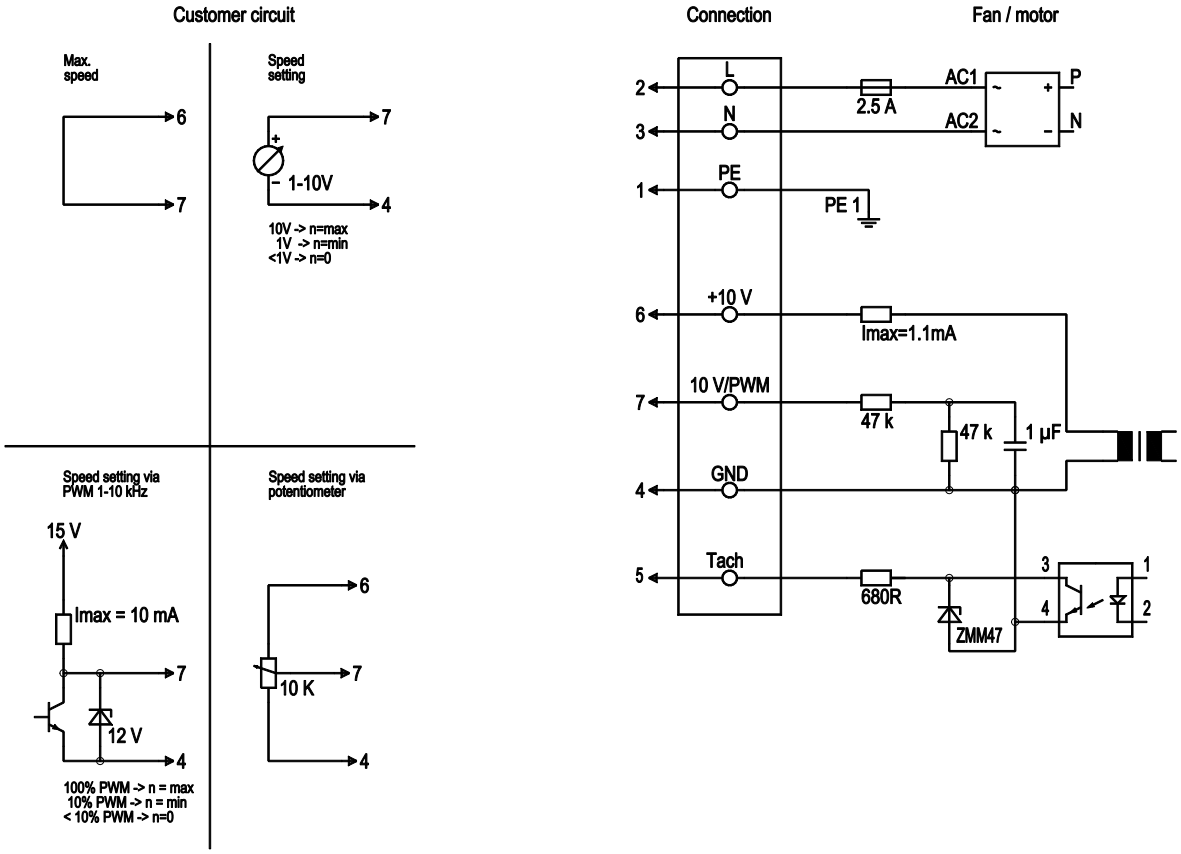
Connection screen



Line	No.	Signal	Colour	Function / assignment
	2	L	brown	Power supply 230 VAC, 50-60 Hz, see type plate for voltage range
	3	N	blue	Neutral conductor
	1	PE	green/yellow	Protective earth
	7	0-10 V PWM	yellow	Control input 0 - 10 V or PWM, electrically isolated
	5	Tach	white	Tach output: Open Collector, 1 pulse per revolution, electrically isolated
	6	10V / max. 1.1 mA	red	Voltage output 10V / 1.1mA, electrically isolated, not short-circuit-proof
	4	GND	blue	GND - Connection for control interface

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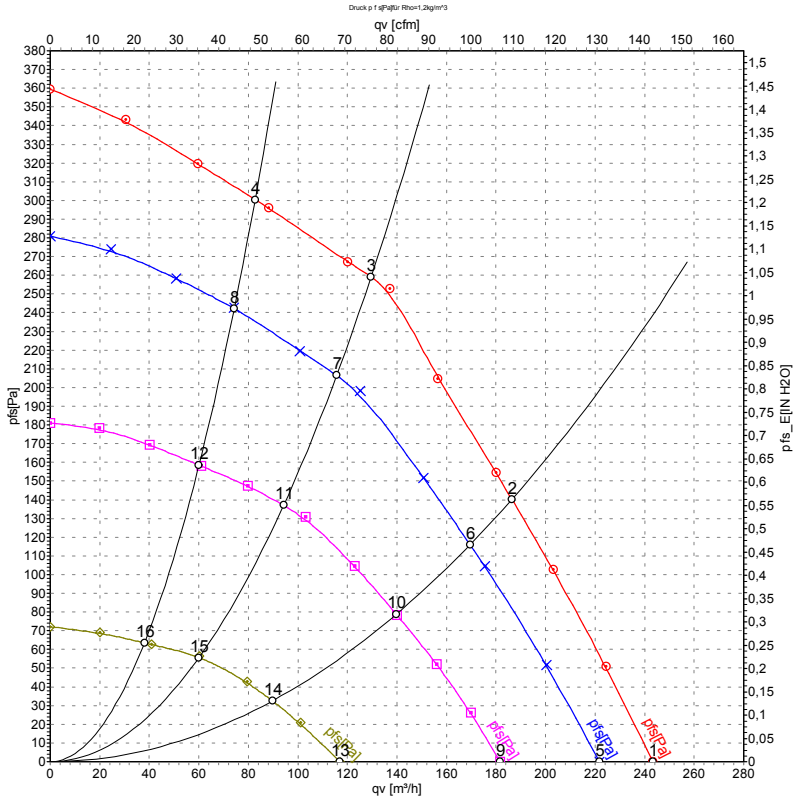
Charts: Air flow 50 Hz



Measurement: LU-67473
Measurement: LU-64003
Measurement: LU-64004
Measurement: LU-64005

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	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	230	50	2800	50	0.38	245	0
2	230	50	2980	40	0.31	185	140
3	230	50	3150	31	0.24	130	260
4	230	50	3265	25	0.19	85	300
5	230	50	2565	38	0.28	220	0
6	230	50	2700	31	0.23	170	116
7	230	50	2850	23	0.18	115	207
8	230	50	2930	19	0.15	75	243
9	230	50	2145	23	0.18	180	0
10	230	50	2235	19	0.15	140	79
11	230	50	2335	15	0.12	95	137
12	230	50	2395	12	0.10	60	158
13	230	50	1400	9.1	0.08	115	0
14	230	50	1455	7.7	0.07	90	32
15	230	50	1495	6.5	0.06	60	56
16	230	50	1535	6.0	0.06	40	64

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