G3G108-BB01-12

EC centrifugal fan

forward-curved, single-intake

with housing (flange)

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Nominal data

Type	**G3G108-BB01-12**
Motor	**M3G055-BD**

Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Method of obtaining data		fa
Speed (rpm)	min^{-1}	2800
Power consumption	W	50
Current draw	A	0.38
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

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Technical description

Weight	1.9 kg
Fan size	108 mm
Rotor surface	Thick-film passivated
Impeller material	Sheet steel, galvanized
Housing material	Die-cast aluminum
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F3-1
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Thermal overload protection for motor
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC circuit feedback	According to EN 61000-3-2/3
EMC interference emission	According to EN 61000-6-3 (household environment)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1
Approval	EAC

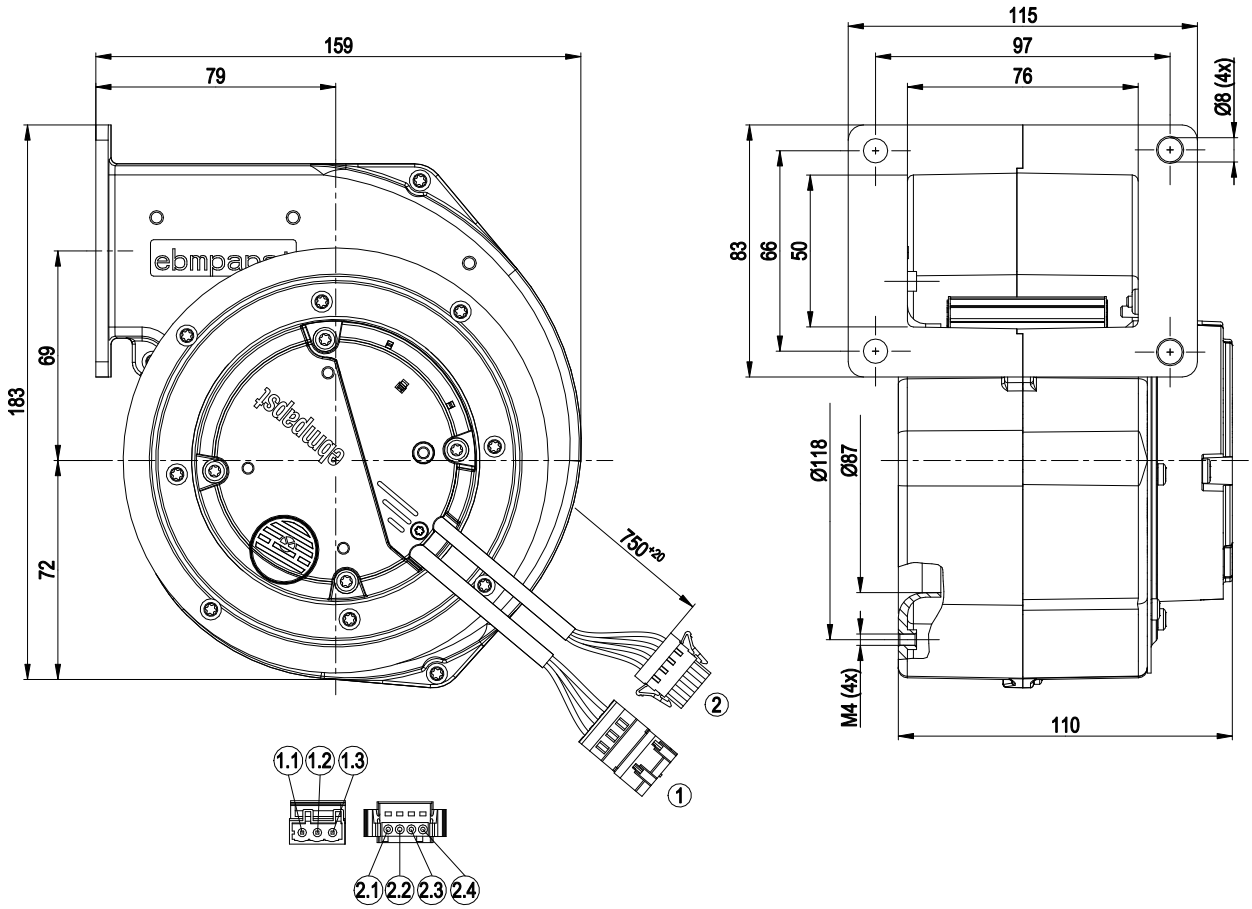
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Product drawing



No.	Conn.	Designation	Color	Function/assignment
	1			Cable H03VV-F3G 0.5; with WAGO header 721-603/000-042
	1.1	L	brown	Power supply 230 VAC, 50-60 Hz, see nameplate for voltage range
	1.2	PE	green/yellow	Protective earth
	1.3	N	blue	Neutral conductor
	2			Cable A03VV-F4x0.25; with Wago strip 734-204/037-000
	2.1	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated
	2.2	10V / max. 1.1mA	red	Voltage output 10 V / 1.1 mA, electrically isolated, not short-circuit-proof.
	2.3	0-10 V PWM	yellow	Control input 0-10 V or PWM, electrically isolated
	2.4	GND	blue	GND connection for control interface

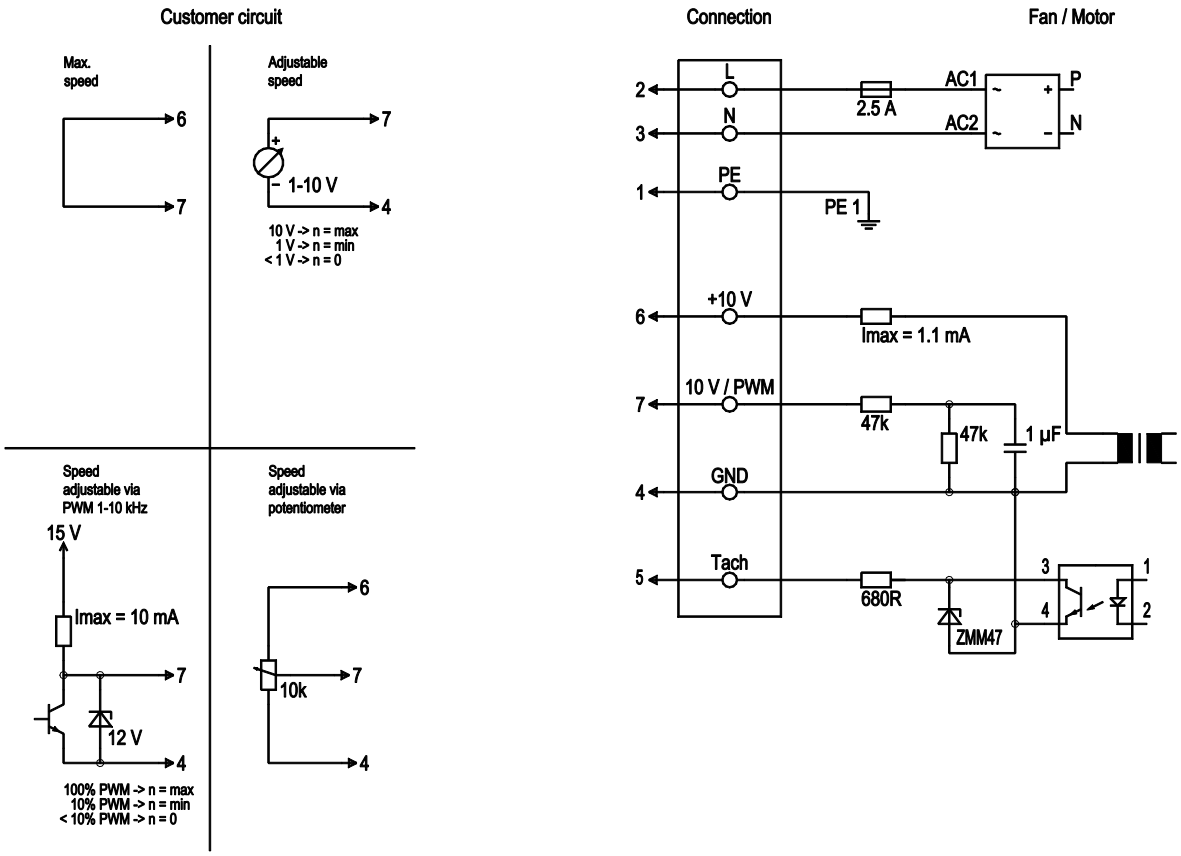
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	2	L	brown	Power supply 230 VAC, 50-60 Hz, see nameplate 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 10 V / 1.1 mA, electrically isolated, not short-circuit-proof
	4	GND	blue	GND connection for control interface

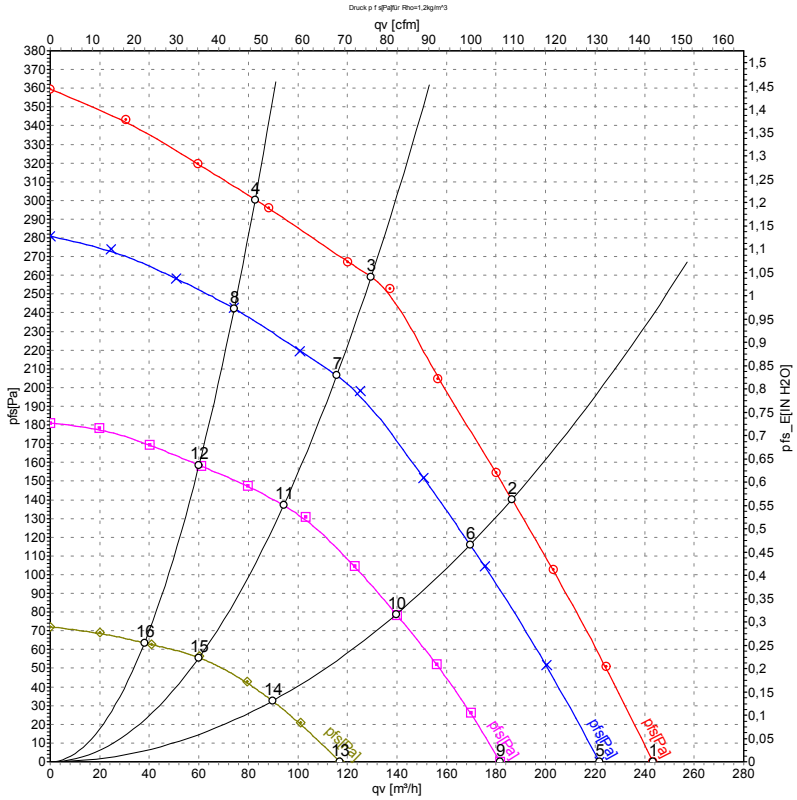
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Curves: Air performance 50 Hz



Measurement: LU-67473-1
Measurement: LU-64003-1
Measurement: LU-64004-1
Measurement: LU-64005-1

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

	U	f	n	P_{ed}	I	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	230	50	2800	50	0.38	245	0	145	0.00
2	230	50	2980	40	0.31	185	140	110	0.56
3	230	50	3150	31	0.24	130	260	75	1.04
4	230	50	3265	25	0.19	85	300	50	1.20
5	230	50	2565	38	0.28	220	0	130	0.00
6	230	50	2700	31	0.23	170	116	100	0.47
7	230	50	2850	23	0.18	115	207	70	0.83
8	230	50	2930	19	0.15	75	243	45	0.98
9	230	50	2145	23	0.18	180	0	105	0.00
10	230	50	2235	19	0.15	140	79	80	0.32
11	230	50	2335	15	0.12	95	137	55	0.55
12	230	50	2395	12	0.10	60	158	35	0.63
13	230	50	1400	9.1	0.08	115	0	70	0.00
14	230	50	1455	7.7	0.07	90	32	55	0.13
15	230	50	1495	6.5	0.06	60	56	35	0.22
16	230	50	1535	6.0	0.06	40	64	20	0.26

U = Power supply · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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