G3G200-BF01-03

EC centrifugal fan

forward-curved, single-intake

with housing (flange)

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Nominal data

Type	**G3G200-BF01-03**
Motor	**M3G074-CF**

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}	1120
Power consumption	W	165
Current draw	A	1.28
Min. back pressure	Pa	0
Min. back pressure	in. wg	0
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

Data according to Commission Regulation (EU) 327/2011 (EN 17166)

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	49.2	32.2
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		61	44
05 Variable speed drive		Yes	

09 Power consumption P_{ed}	kW	0.13
09 Air flow q_v	m^3/h	705
09 Pressure increase p_{fs}	Pa	305
10 Speed (rpm) n	min^{-1}	1545
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-138850

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Technical description

Weight	6.2 kg
Size	200 mm
Motor size	74
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
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	Any
Condensation drainage holes	None, open rotor
Mode	S1
Motor bearing	Hybrid bearing
Technical features	- Output 10 VDC, max. 10 mA - Tach output - Power limiter - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Overvoltage detection - Thermal overload protection for electronics/motor - Line undervoltage detection
Motor protection	Electronic motor protection
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	CE

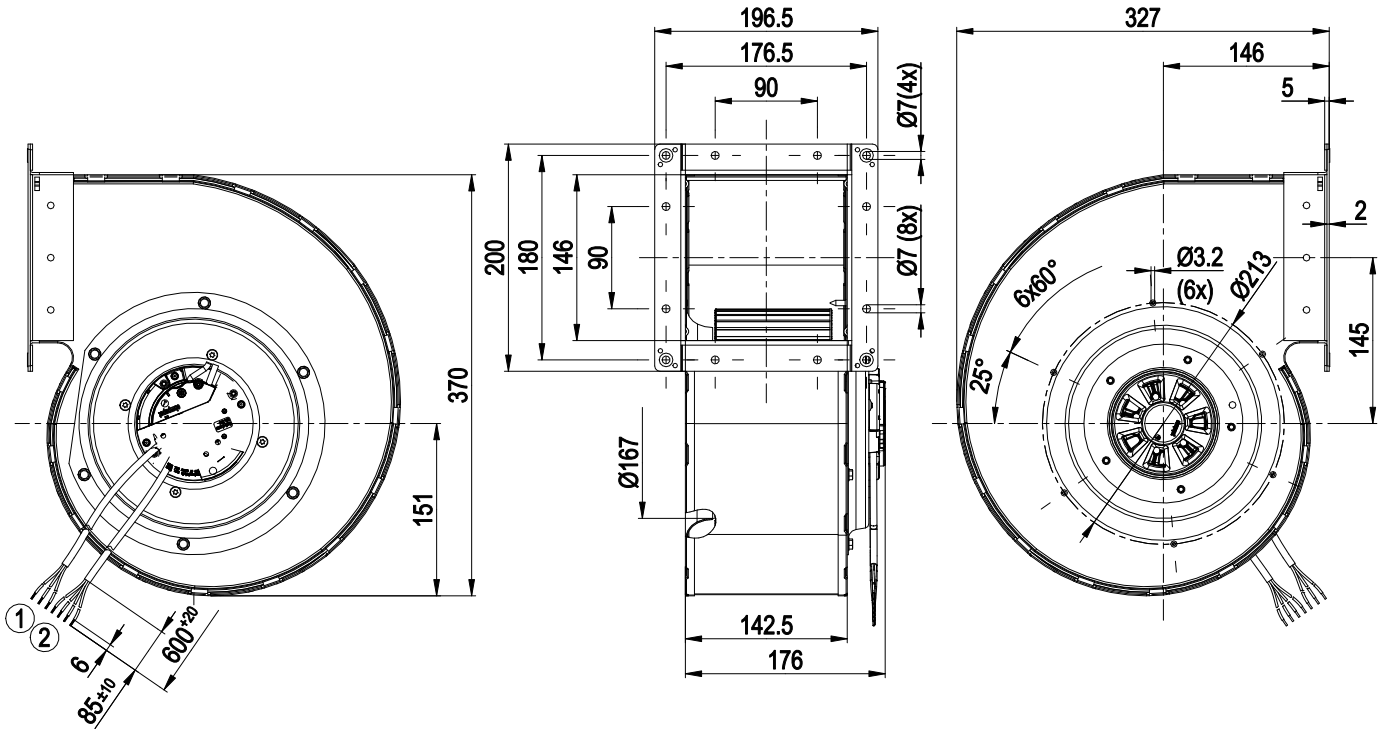
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Product drawing



1	Cable PVC 3x AWG20, 3x crimped splices
2	Cable PVC 4x AWG22, 4x crimped splices

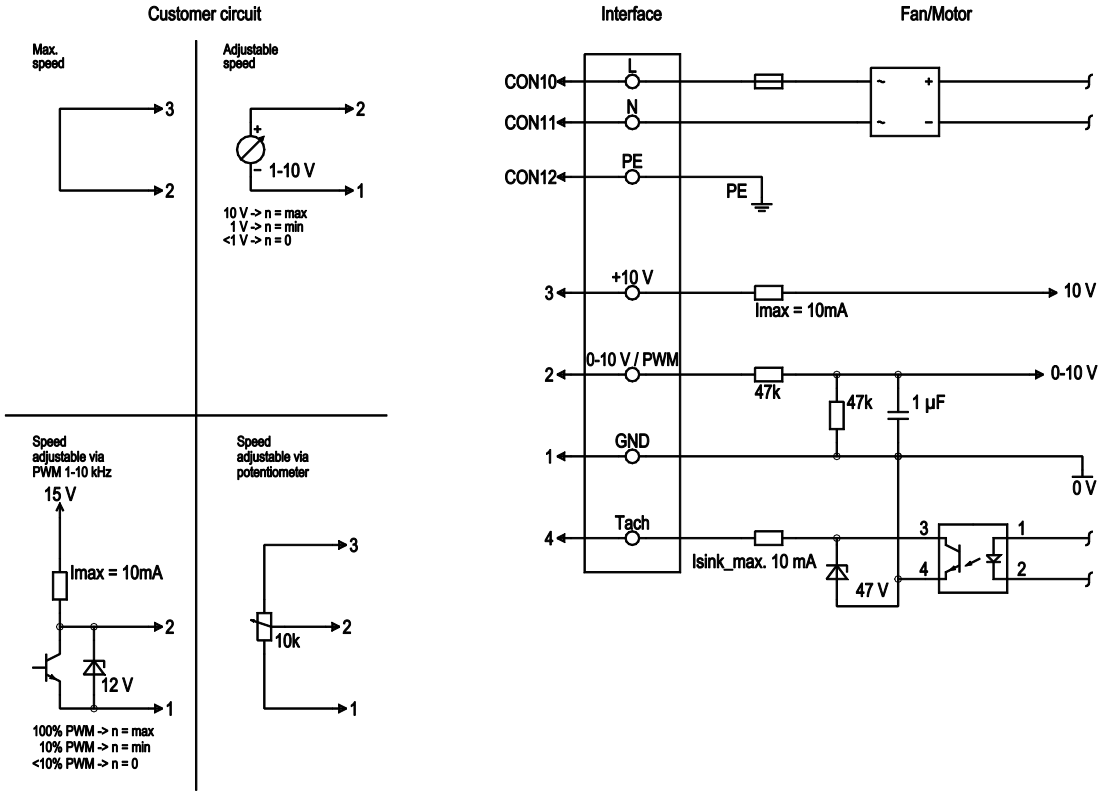
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Connection diagram



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

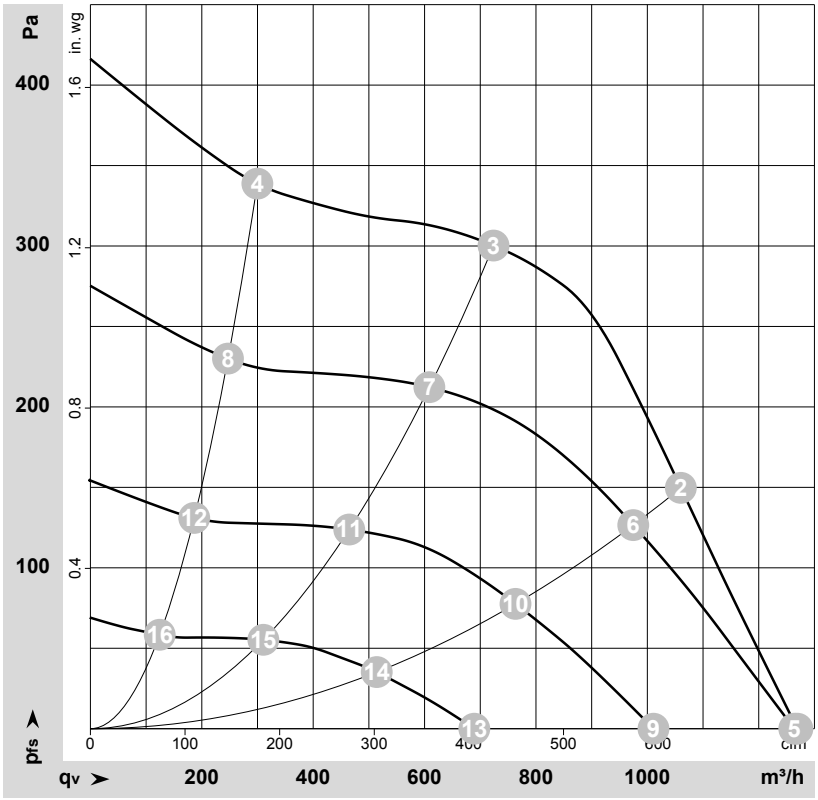
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-138850-1
Measurement: LU-138852-1
Measurement: LU-138853-1
Measurement: LU-138854-1

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	1120	165	1.28	65	71	1270	0	745	0.00
2	1~	230	50	1305	165	1.28	63	69	1060	150	625	0.60
3	1~	230	50	1535	141	1.12	63	68	725	300	425	1.20
4	1~	230	50	1665	84	0.70	62	68	300	340	175	1.36
5	1~	230	50	1115	164	1.30			1265	0	745	0.00
6	1~	230	50	1200	127	1.03			975	127	575	0.51
7	1~	230	50	1305	86	0.73			610	213	360	0.86
8	1~	230	50	1385	50	0.44			245	230	145	0.92
9	1~	230	50	900	84	0.70			1010	0	595	0.00
10	1~	230	50	950	63	0.55			765	78	450	0.31
11	1~	230	50	1005	41	0.38			465	124	275	0.50
12	1~	230	50	1050	25	0.25			185	130	110	0.52
13	1~	230	50	625	29	0.26			690	0	405	0.00
14	1~	230	50	650	23	0.22			515	35	305	0.14
15	1~	230	50	685	16	0.16			310	55	185	0.22
16	1~	230	50	710	11	0.11			125	58	75	0.23

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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