

EC centrifugal fan

forward-curved, single-intake

with housing (without flange)

G3G200-DJ01-10 ebmpapst Datasheet

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Nominal data

Type	G3G200-DJ01-10	
Motor	M3G055-DF	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min ⁻¹	1040
Power consumption	W	83
Current draw	A	0.8
Min. back pressure	Pa	0
Min. back pressure	inH ₂ O	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	55

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change



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Technical description

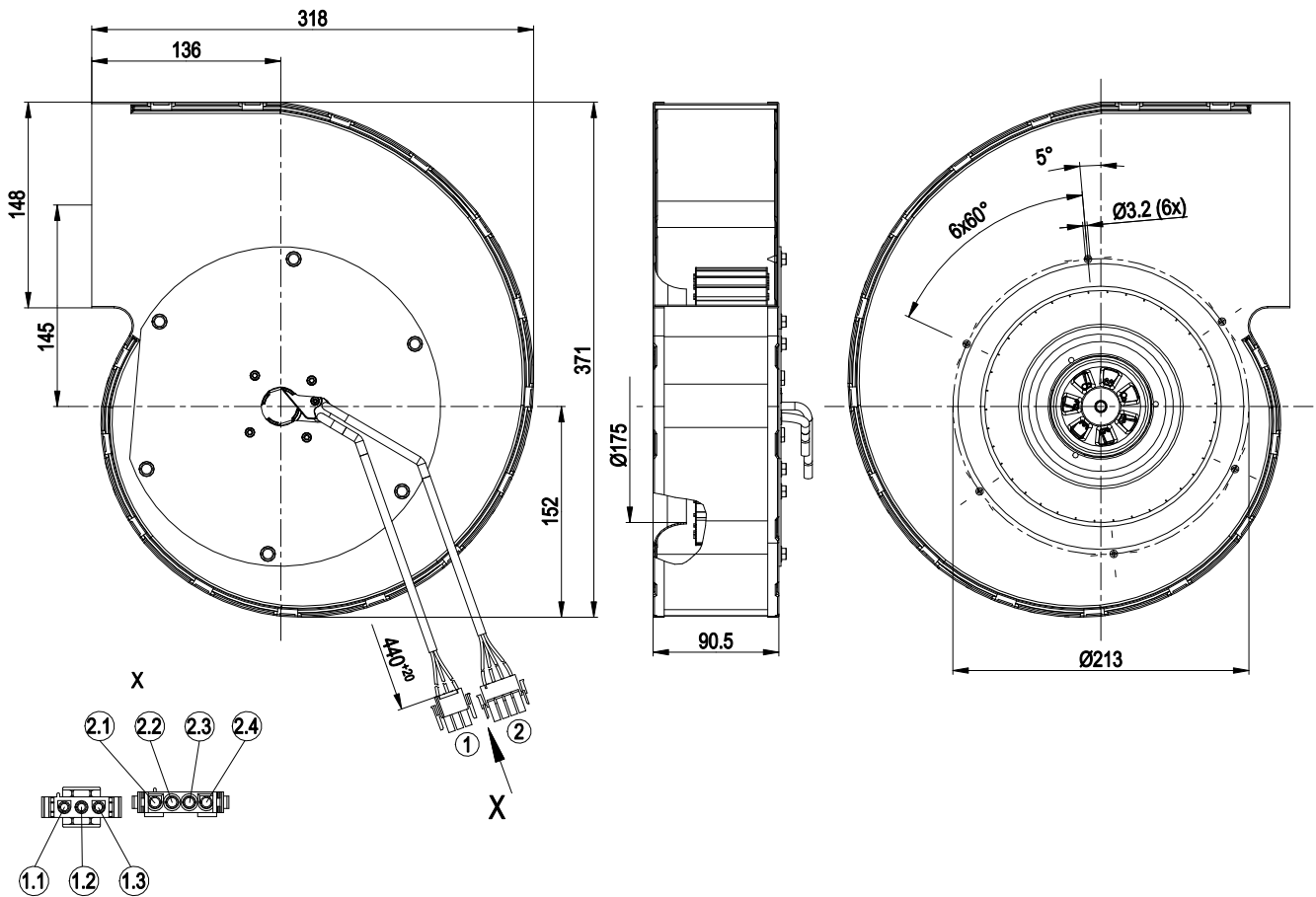
Weight	3.92 kg
Fan size	200 mm
Rotor surface	Unpainted
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None, open rotor
Mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 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
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), on account of the installation conditions, ferritic damping in the cable may be required for the application.
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Locked-rotor protection
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE



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Product drawing

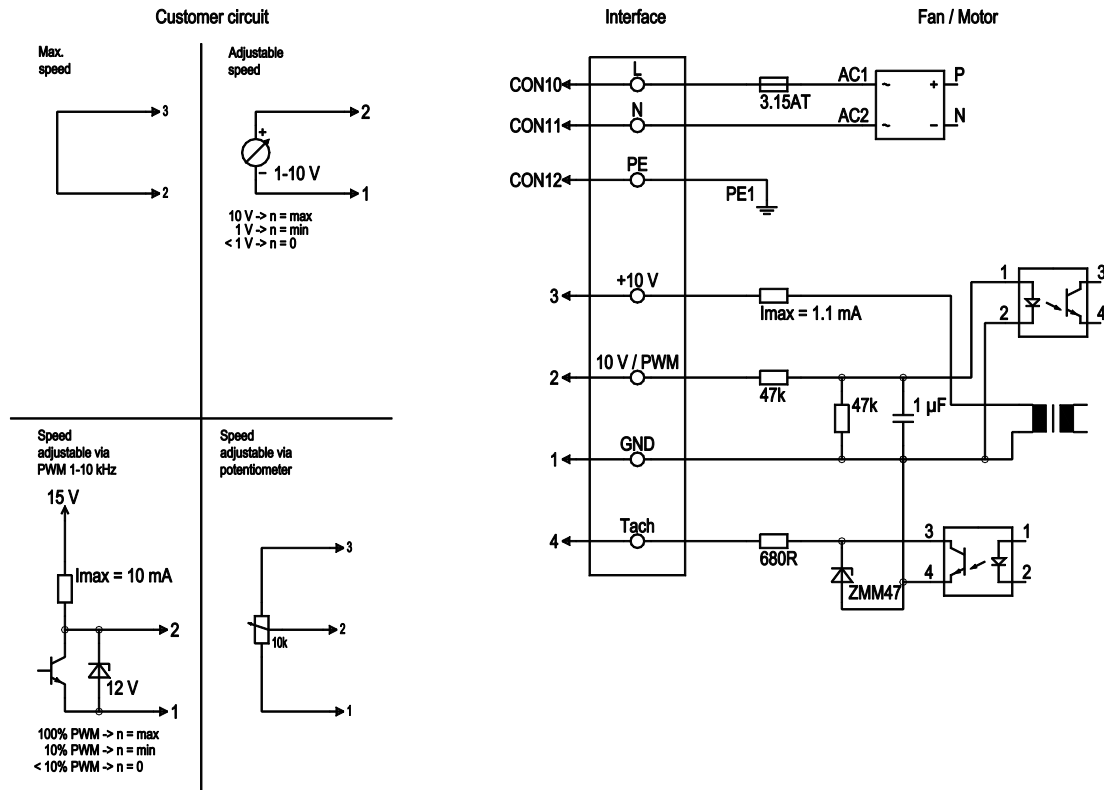


1	Cable PVC AWG20, 3-pole connector housing tyco 1-480700-0, 3x plug pin 350218-1 crimped
1.1	brown
1.2	blue
1.3	green/yellow
2	Cable PVC AWG22, 4-pole connector housing tyco 926298-7, 4x plug pin tyco 926885-1
2.1	+10 V (red)
2.2	0-10 V PWM (yellow)
2.3	GND (blue)
2.4	Tach (white)

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Connection diagram

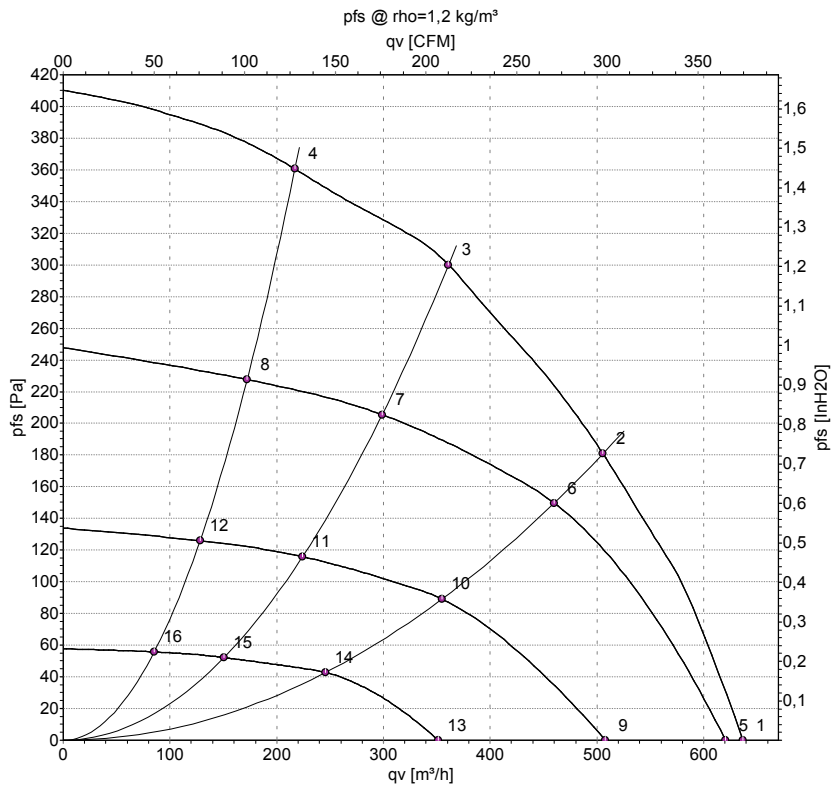


No.	Conn.	Designation	Color	Function/assignment
	CON10	L	black	Power supply 230 VAC, 50-60 Hz, see nameplate for voltage range
	CON11	N	blue	Neutral conductor
	CON12	PE	green/yellow	Protective earth
	1	GND	blue	GND connection for control interface
	2	0-10V PWM	yellow	Control input 0-10 V or PWM, electrically isolated
	3	10 V / max. 1,1 mA	red	Voltage output 10 VDC 1.1 mA, electrically isolated, short-circuit-proof
	4	Tacho	white	Tach output: open collector, 1 pulse per revolution, electrically isolated

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Curves: Air performance 50 Hz



Measurement: LU-154925-1
Measurement: LU-159776-1
Measurement: LU-159778-1
Measurement: LU-159780-1

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	LpA _{in}	LwA _{in}	q _v	p _{fs}	q _v	p _{fs}
	V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m³/h	Pa	cfm	inH2O
1	230	50	1040	83	0.80	62	68	635	0	375	0.00
2	230	50	1280	83	0.77	61	66	505	180	300	0.72
3	230	50	1570	83	0.77	61	67	360	300	210	1.20
4	230	50	1715	62	0.59	62	68	215	360	130	1.45
5	230	50	985	80	0.73	62	68	620	0	365	0.00
6	230	50	1190	62	0.57	58	64	460	151	270	0.61
7	230	50	1300	43	0.39	56	62	300	206	175	0.83
8	230	50	1370	32	0.29	56	62	170	230	100	0.92
9	230	50	810	41	0.37	56	62	510	0	300	0.00
10	230	50	910	26	0.25	51	57	355	90	210	0.36
11	230	50	985	19	0.19	48	55	225	116	130	0.47
12	230	50	1025	15	0.16	48	54	130	127	75	0.51
13	230	50	560	15	0.16	47	53	350	0	205	0.00
14	230	50	635	10.0	0.12	40	46	245	43	145	0.17
15	230	50	670	7.0	0.10	37	44	150	52	90	0.21
16	230	50	690	6.0	0.09	37	44	85	56	50	0.22

U = Power supply · 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

