

G3G200-BL29-72 ebmpapst Datasheet

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Nominal data

Type	G3G200-BL29-72	
Motor	M3G084-FA	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 277
Frequency	Hz	50/60
Type of data definition		ml
Speed	min ⁻¹	1850
Power input	W	510
Current draw	A	3.15
Min. back pressure	Pa	150
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

Data according to ErP directive

Installation category	A
Efficiency category	Static
Variable speed drive	Yes
Specific ratio*	1.01

* Specific ratio = $1 + p_{fs} / 100\,000\text{ Pa}$

	Actual	Request 2013	Request 2015
Overall efficiency η_{es}	48	27.6	34.6
Efficiency grade N	57.4	37	44
Power input P_{ed}	kW	0.33	
Air flow q_v	m ³ /h	1055	
Pressure increase p_{fs}	Pa	493	
Speed n	min ⁻¹	2000	

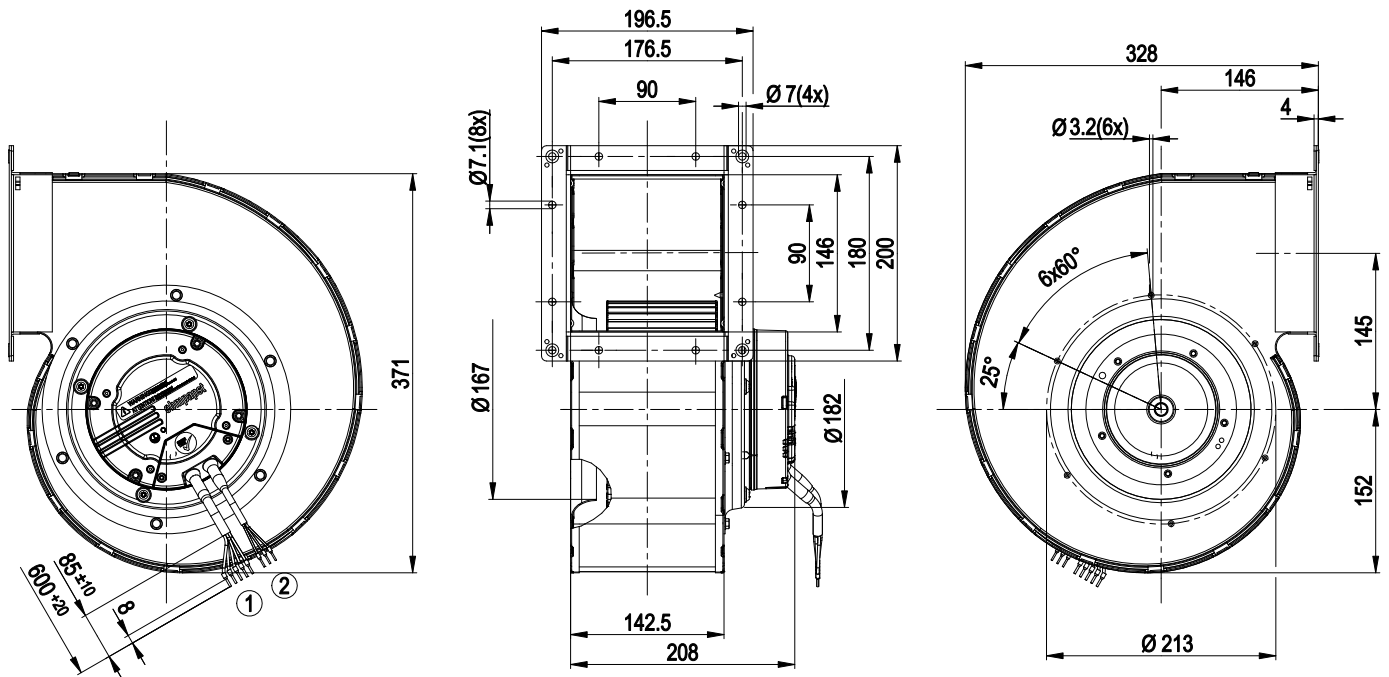
Data established at point of optimum efficiency



Technical features

Mass	9.1 kg
Size	200 mm
Surface of rotor	Coated in black
Material of electronics housing	Die-cast aluminium
Material of impeller	Sheet steel, galvanised
Housing material	Sheet steel, galvanised
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
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	Shaft horizontal or rotor on top; rotor on bottom on request
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Alarm relay - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - 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	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Product conforming to standard	EN 61800-5-1; CE
Approval	UL 2111; CSA C22.2 Nr.77

Product drawing



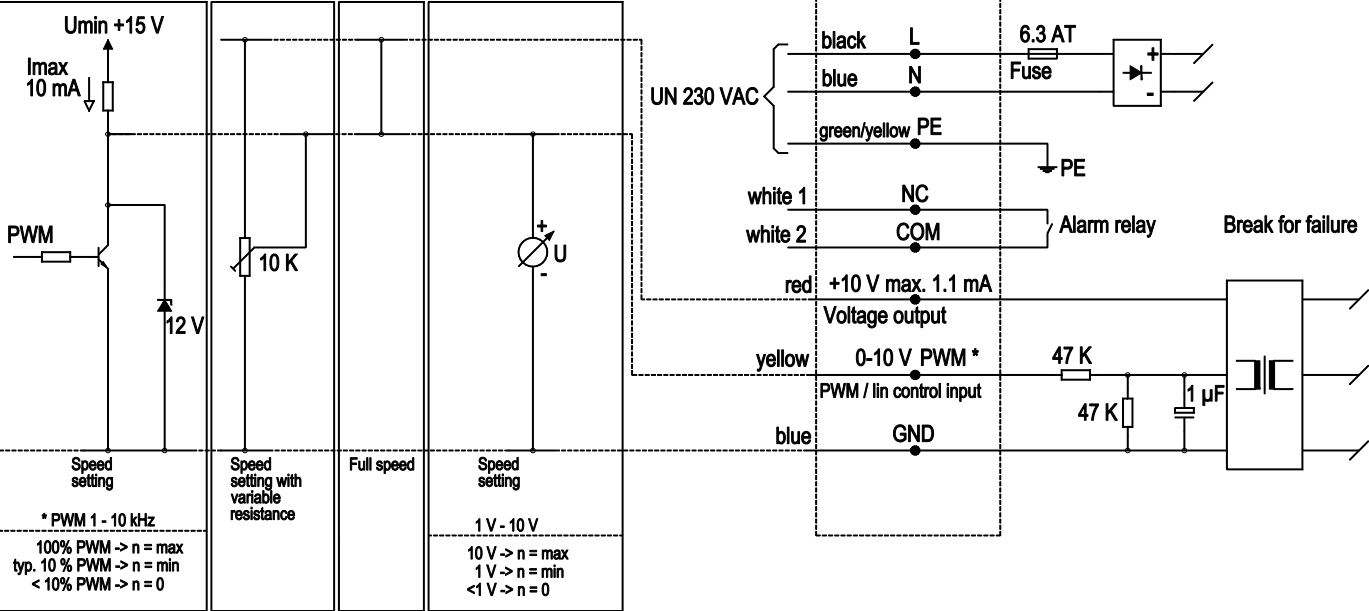
- | | |
|---|---|
| 1 | Connection line PVC AWG 18, 5x crimped core-end sleeves |
| 2 | Connection line PVC AWG 22, 3x crimped core-end sleeves |

EC centrifugal fan

forward curved, single inlet

Connection screen

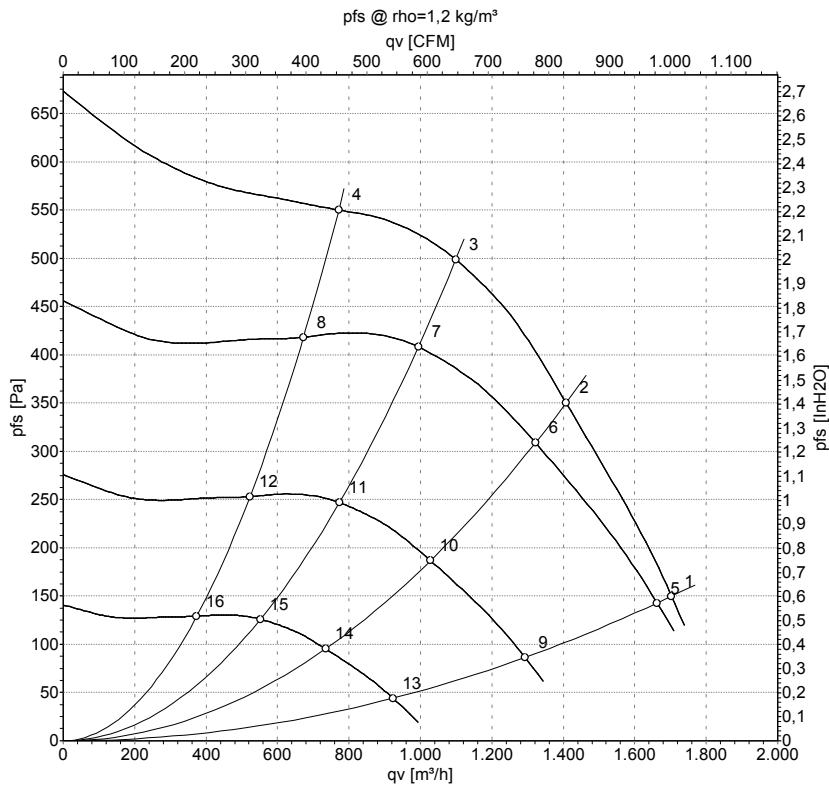
Customer circuit
Notes on various control possibilities and their applications



EC centrifugal fan

forward curved, single inlet

Charts: Air flow 50 Hz



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	m³/h	Pa
1	230	50	1850	510	3.15	1705	150
2	230	50	1915	439	2.76	1410	350
3	230	50	1990	347	2.18	1100	500
4	230	50	2065	265	1.69	770	550
5	230	50	1800	478	3.00	1660	143
6	230	50	1800	364	2.29	1320	309
7	230	50	1800	257	1.62	995	409
8	230	50	1800	176	1.12	670	418
9	230	50	1400	225	1.41	1295	86
10	230	50	1400	171	1.08	1030	187
11	230	50	1400	121	0.76	775	247
12	230	50	1400	83	0.53	525	253
13	230	50	1000	82	0.52	925	44
14	230	50	1000	62	0.39	735	95
15	230	50	1000	44	0.28	550	126
16	230	50	1000	30	0.19	375	129

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

