

EC centrifugal fan

forward curved, single inlet

with housing (flange)

G3G225-DD29-74 ebmpapst Datasheet

sales@fansco.com

www.fansco.com

Limited partnership · Headquarters Muldingen
County court Stuttgart · HRA 590344

General partner Elektrobau Muldingen GmbH · Headquarters Muldingen
County court Stuttgart · HRB 590142

Nominal data

Type	G3G225-DD29-74	
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 (rpm)	min ⁻¹	1790
Power input	W	531
Current draw	A	3.4
Min. back pressure	Pa	300
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	45

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

Data in accordance with ecodesign regulation EU 327/2011

		Actual	Request 2015		
01 Overall efficiency η_{es}	%	46.9	35	09 Power input P_{ed}	kW
02 Measurement category		A		09 Air flow q_v	m ³ /h
03 Efficiency category		Static		09 Pressure increase p_{fs}	Pa
04 Efficiency grade N		55.9	44	10 Speed (rpm) n	min ⁻¹
05 Variable speed drive		Yes		11 Specific ratio [*]	
					1.01

Data definition with optimum efficiency.
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

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

LU-69139



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Technical features

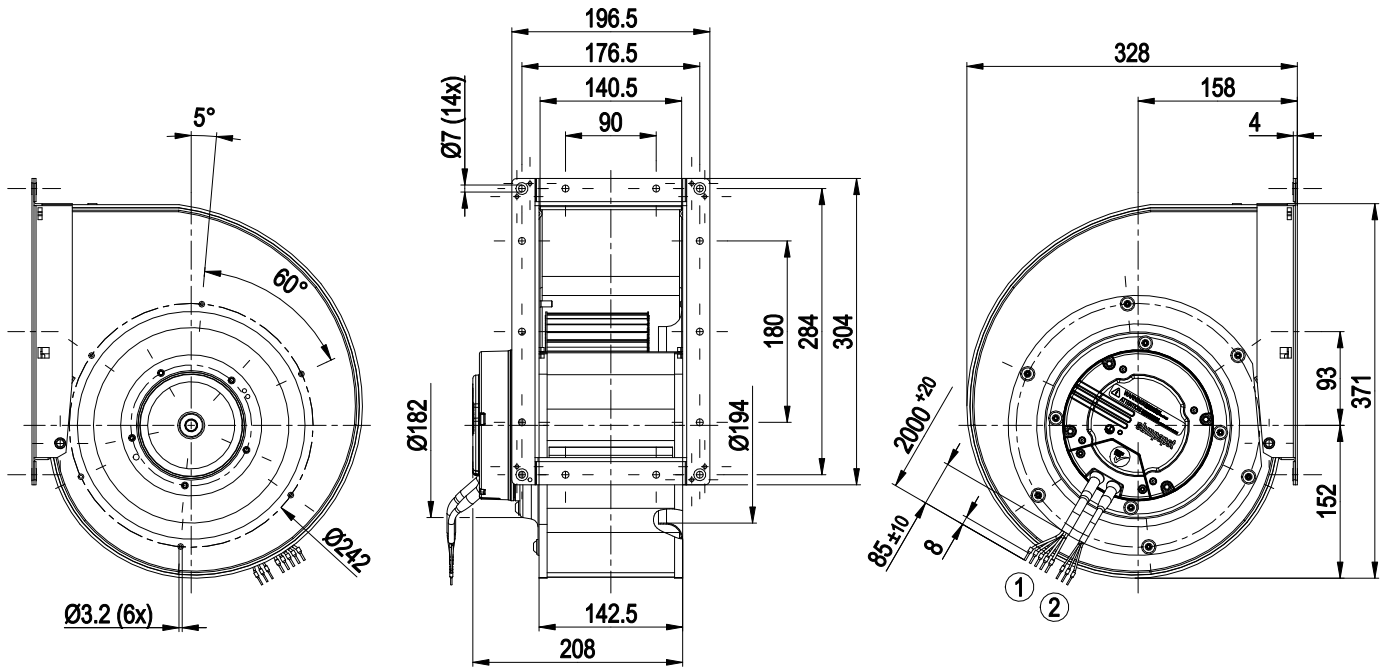
Mass	9.7 kg
Size	225 mm
Motor size	84
Surface of rotor	Coated in black
Material of electronics housing	Die-cast aluminium
Material of impeller	Sheet steel, galvanised
Housing material	Sheet steel, galvanised
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP54
Insulation class	"B"
Humidity (F) / environmental protection class (H)	H1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensation drainage holes	None
Operation mode	S1
Motor bearing	Ball bearing
Technical features	<ul style="list-style-type: none"> - Output 10 VDC, max. 1.1 mA - Alarm relay - Motor current limit - PFC, passive - 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
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 61800-5-1; CE
Approval	UL 1004-3 + 60730-1; EAC; CSA C22.2 no. 77 + CAN/CSA-E60730-1



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Product drawing



- | | |
|---|--|
| 1 | Connection line halogen-free, BETAtrans® 3 GWK flex, 5G 1.0 mm ² , 5x crimped core-end sleeves |
| 2 | Connection line halogen-free, BETAtrans® 3 GWK flex, 3x 0.33 mm ² , 3x crimped core-end sleeves |



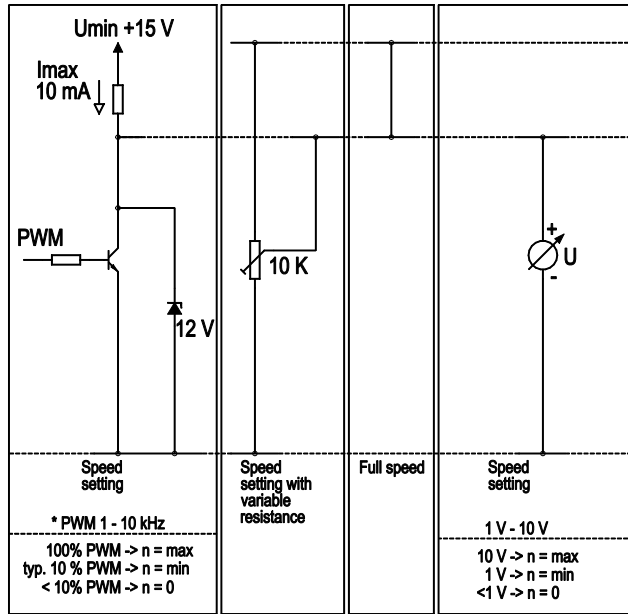
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Connection screen

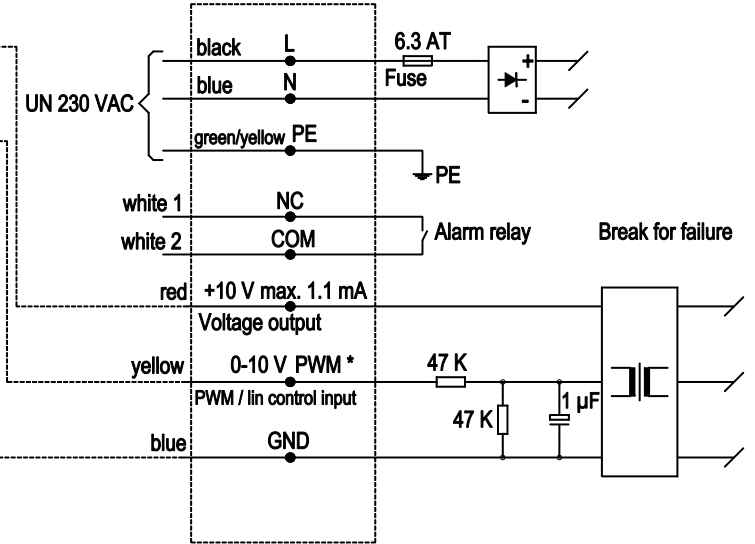
Customer circuit

Notes on various control possibilities and their applications



Connection

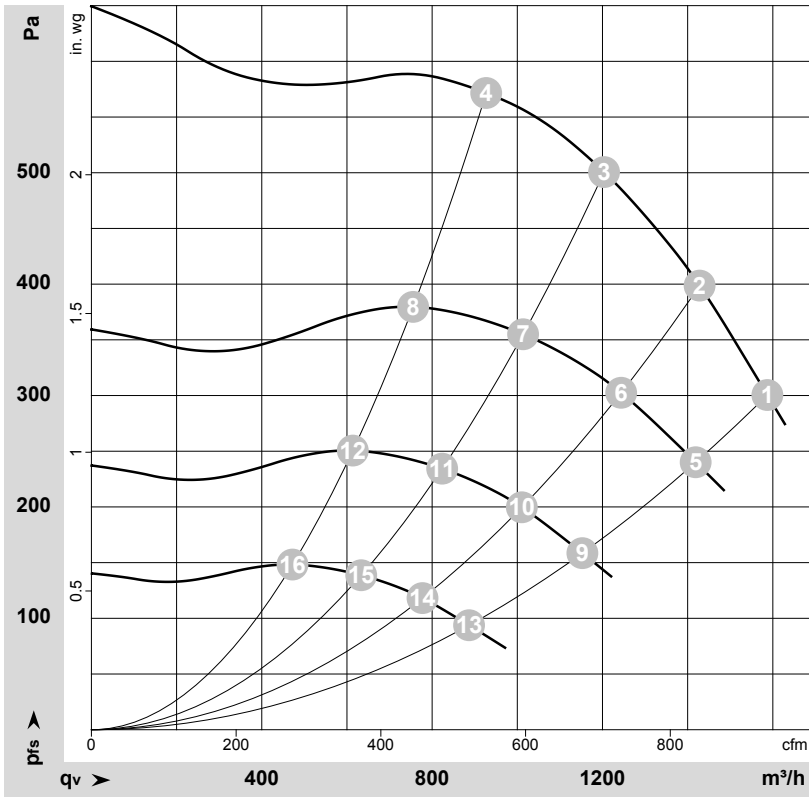
Fan / motor



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Charts: Air flow



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-69139-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebmpapst. 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	n	P _{ed}	I	q _v	p _{fs}	q _v	p _{fs}
	V	min ⁻¹	W	A	m ³ /h	Pa	cfm	in. wg
1	230	1790	531	3.40	1585	300	935	1.20
2	230	1835	483	3.11	1430	400	840	1.61
3	230	1900	433	2.77	1205	500	710	2.01
4	230	1960	355	2.28	925	570	545	2.29
5	230	1600	380	2.43	1420	241	835	0.97
6	230	1600	319	2.05	1245	304	730	1.22
7	230	1600	258	1.66	1015	356	595	1.43
8	230	1600	193	1.23	755	380	445	1.53
9	230	1300	204	1.31	1155	159	680	0.64
10	230	1300	171	1.10	1010	201	595	0.81
11	230	1300	139	0.89	825	235	485	0.94
12	230	1300	103	0.66	615	251	360	1.01
13	230	1000	93	0.59	885	94	520	0.38
14	230	1000	78	0.50	775	119	455	0.48
15	230	1000	63	0.40	635	139	375	0.56
16	230	1000	47	0.30	470	149	280	0.60

U = Supply voltage · n = Speed (rpm) · P_{ed} = Power input · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase

