

EC centrifugal fan

forward-curved, single-intake

with housing (flange)

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	G3G225-CD29-72	
Motor	M3G084-FA	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 277
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min ⁻¹	1815
Power consumption	W	545
Current draw	A	3.5
Min. back pressure	Pa	300
Min. back pressure	in. wg	1.2
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	45

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

		Actual	Req. 2015			
01 Overall efficiency η_{es}	%	48.1	34.7	09 Power consumption P_{ed}	kW	0.34
02 Measurement category		A		09 Air flow q_v	m ³ /h	910
03 Efficiency category		Static		09 Pressure increase p_{fs}	Pa	583
04 Efficiency grade N		57.4	44	10 Speed (rpm) n	min ⁻¹	2020
05 Variable speed drive		Yes		11 Specific ratio*		1.01

Data obtained at optimum efficiency level.

The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

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

LU-111997



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Technical description

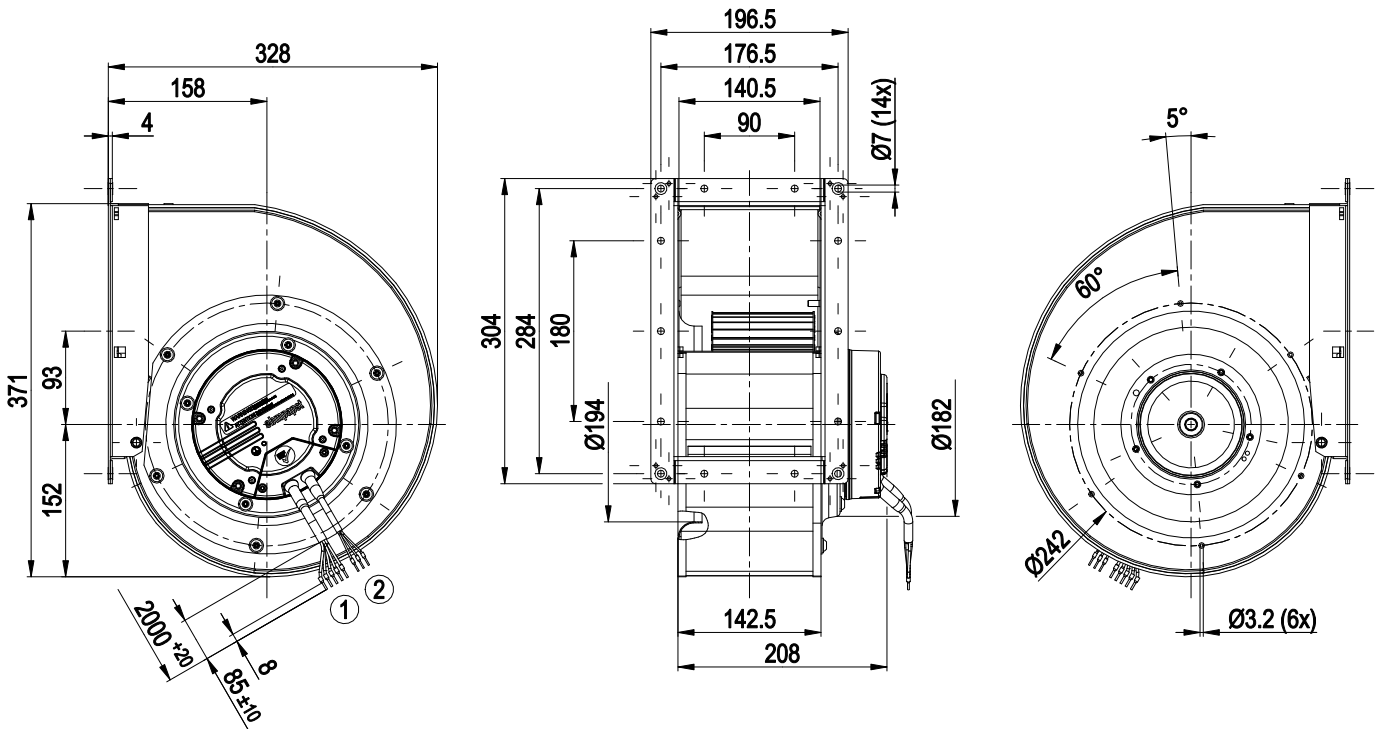
Weight	9.7 kg
Fan size	225 mm
Rotor surface	Painted black
Electronics housing material	Die-cast aluminum
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	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	None
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 limitation - PFC, passive - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Thermal overload protection for electronics/motor - Line undervoltage detection
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 61800-5-1; CE
Approval	CSA C22.2 No. 77; UL 1004-3



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Product drawing



- | | |
|---|---|
| 1 | Cable halogen-free, BETAtans® 3 GKW flex, 5G 1.0 mm ² , 5x crimped ferrules |
| 2 | Cable halogen-free, BETAtans® 3 GKW flex, 3x 0.33 mm ² , 3x crimped ferrules |

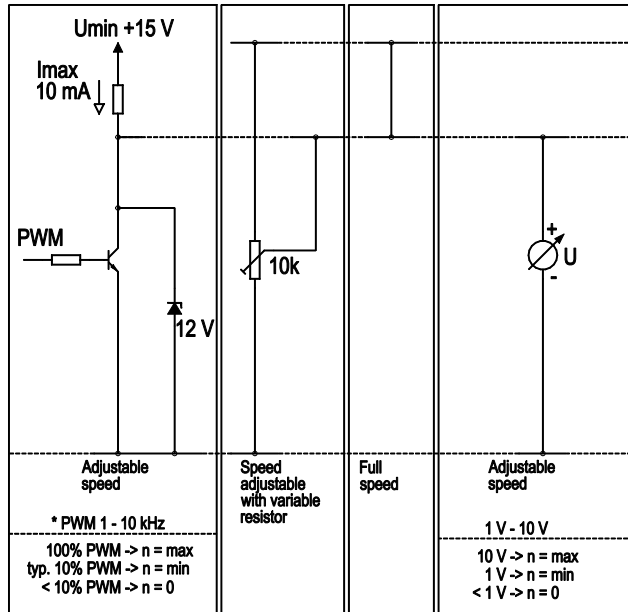
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Connection diagram

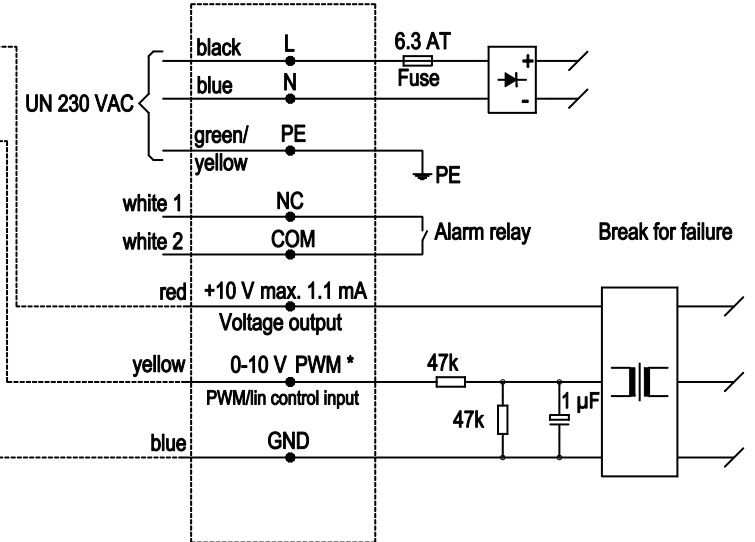
Customer circuit

Application notes for various control options



Connection

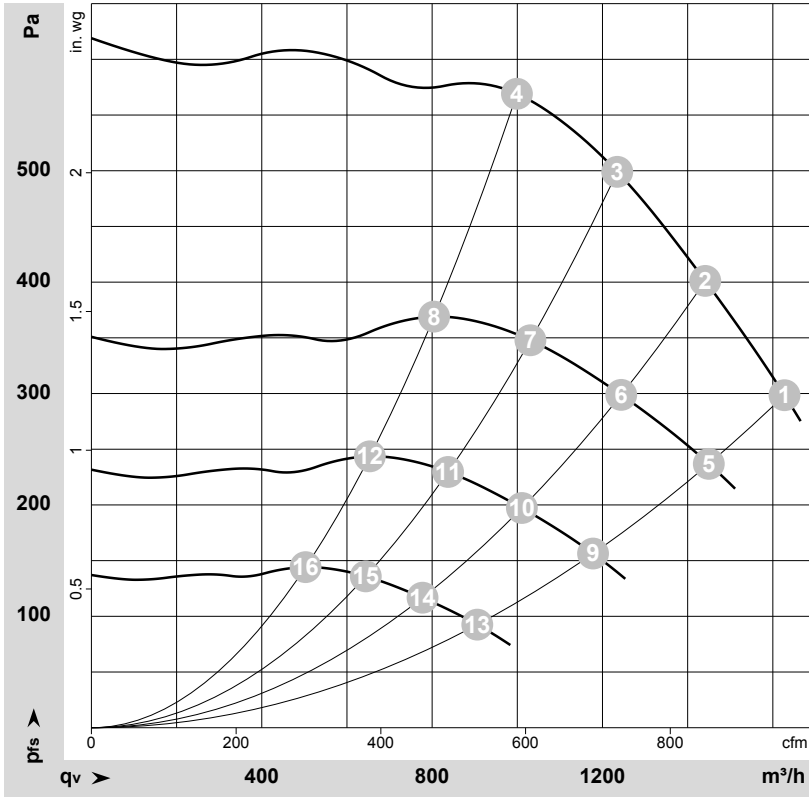
Fan / Motor



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Curves: Air performance 50 Hz



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

Measurement: LU-111997-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. 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)	m ³ /h	Pa	cfm	in. wg
1	230	50	1815	545	3.50	75	80	1625	300	960	1.20
2	230	50	1855	489	3.24	73	79	1440	400	850	1.61
3	230	50	1915	443	2.91	73	79	1235	500	725	2.01
4	230	50	1985	378	2.47	73	79	1000	570	590	2.29
5	230	50	1600	383	2.54	72	77	1450	239	855	0.96
6	230	50	1600	315	2.08	70	75	1245	300	730	1.20
7	230	50	1600	258	1.69	69	74	1030	351	605	1.41
8	230	50	1600	198	1.29	68	74	805	369	475	1.48
9	230	50	1300	205	1.36	66	72	1180	158	695	0.63
10	230	50	1300	169	1.12	64	70	1010	198	595	0.79
11	230	50	1300	138	0.91	63	69	840	231	495	0.93
12	230	50	1300	106	0.69	62	68	655	244	385	0.98
13	230	50	1000	93	0.62	60	65	905	93	535	0.37
14	230	50	1000	77	0.51	58	63	775	117	455	0.47
15	230	50	1000	63	0.41	57	62	645	137	380	0.55
16	230	50	1000	48	0.32	56	62	505	144	295	0.58

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



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