

EC centrifugal fan

forward curved, single inlet
with housing (without flange)

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Nominal data

Type	G3G225-AD29-71	
Motor	M3G084-FA	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 277
Frequency	Hz	50/60
Type of data definition		ml
Valid for approval / standard		UL
Speed	min ⁻¹	1815
Power input	W	545
Current draw	A	3.5
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 according to ErP directive

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

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

	Actual	Request 2013	Request 2015
Overall efficiency η_{es}	48.1	27.7	34.7
Efficiency grade N	57.4	37	44
Power input P_{ed}	kW	0.34	
Air flow q_v	m ³ /h	910	
Pressure increase p_{fs}	Pa	583	
Speed n	min ⁻¹	2020	

Data established at point of optimum efficiency



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Technical features

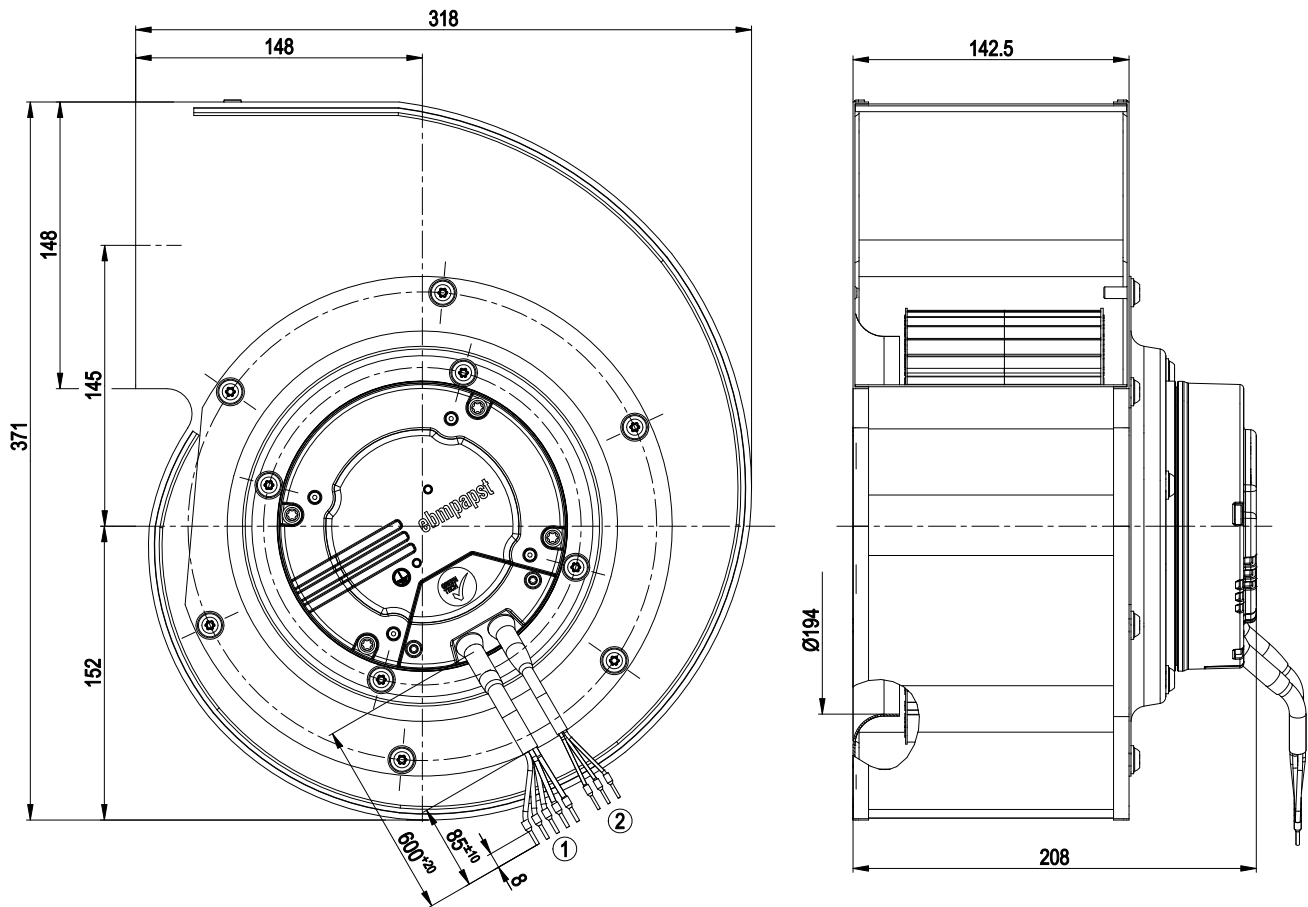
Mass	8.2 kg
Size	225 mm
Surface of rotor	Coated in black
Material of electronics housing	Die-cast aluminium
Material of impeller	Sheet steel, galvanised
Housing material	Sheet steel, galvanised
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Humidity class	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	Continuous operation (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
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	UL 2111; CCC; CSA C22.2 Nr.77



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Product drawing



- | | |
|---|--|
| 1 | Connection line PVC AWG18, 5x crimped core-end sleeves |
| 2 | Connection line PVC AWG22, 3x crimped core-end sleeves |

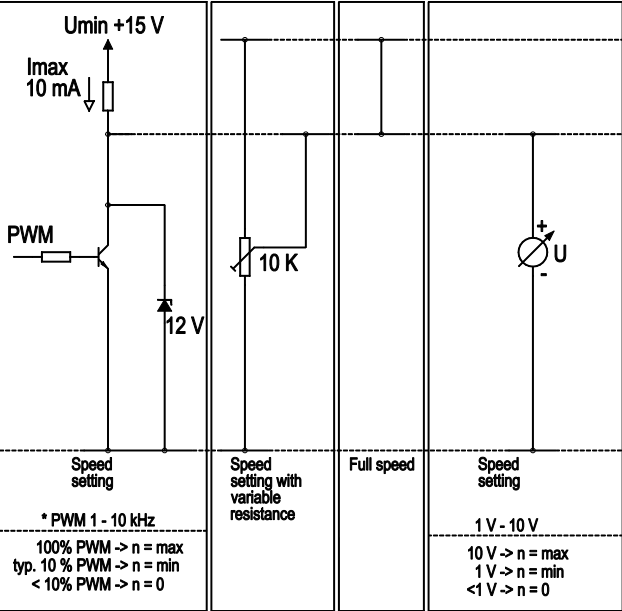
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Connection screen

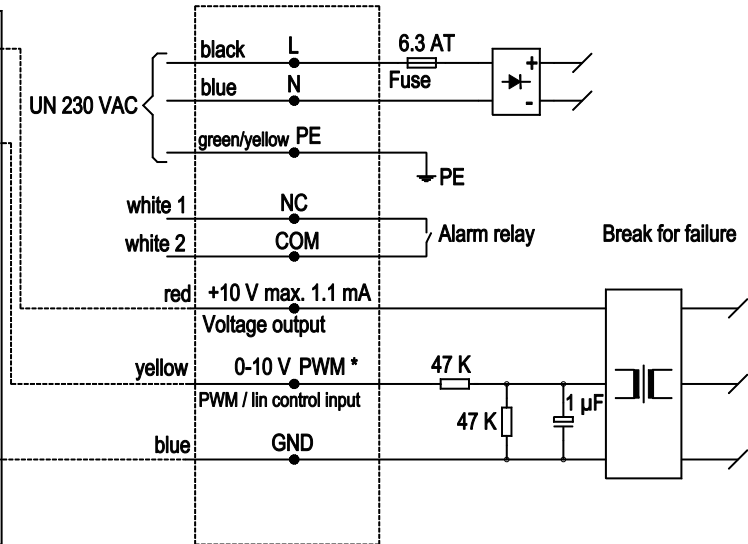
Customer circuit

Notes on various control possibilities and their applications



Connection

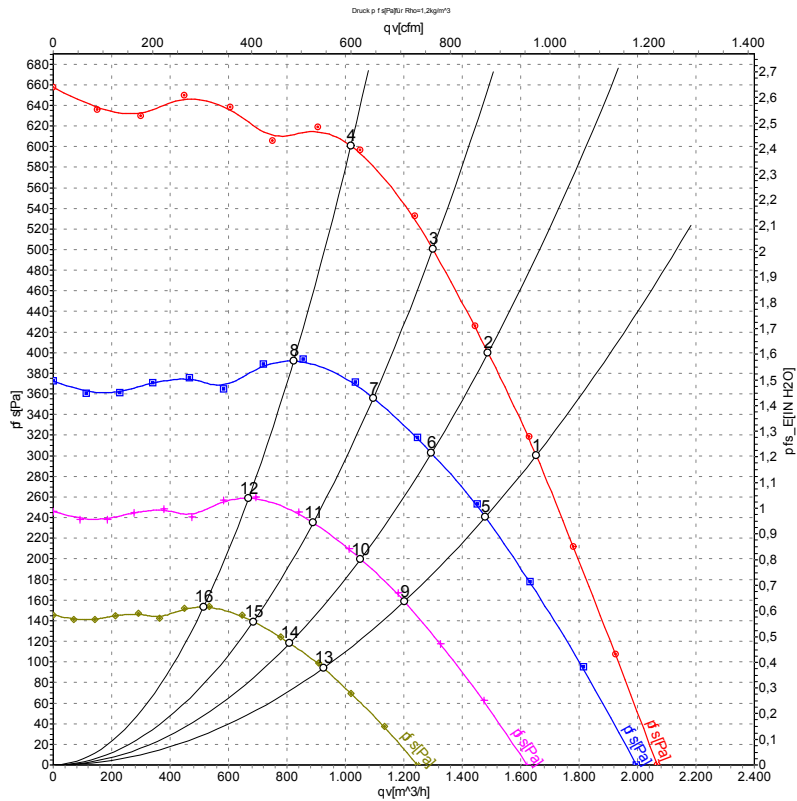
Fan / motor



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Charts: Air flow



Measurement: LU-111997

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	n	P _{ed}	I	LpA _{in}	LwA _{in}	qv	P _{fs}
	V	min ⁻¹	W	A	dB(A)	dB(A)	m ³ /h	Pa
1	230	1815	545	3.50	75	80	1655	300
2	230	1840	502	3.33	74	79	1490	400
3	230	1895	457	3.01	73	79	1300	500
4	230	1980	385	2.52	73	79	1020	600
5	230	1600	393	2.61	72	78	1480	242
6	230	1600	331	2.19	71	76	1295	303
7	230	1600	275	1.81	70	75	1095	356
8	230	1600	204	1.33	69	74	825	393
9	230	1300	211	1.40	68	73	1200	160
10	230	1300	178	1.18	66	71	1050	200
11	230	1300	147	0.97	65	71	890	235
12	230	1300	109	0.71	64	70	670	259
13	230	1000	96	0.64	62	67	925	94
14	230	1000	81	0.54	60	66	810	118
15	230	1000	67	0.44	59	65	685	139
16	230	1000	50	0.33	58	64	515	154

U = Supply voltage · n = Speed · P_{ed} = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · qv = Air flow · P_{fs} = Pressure increase

