R3G225-AD29-71

EC centrifugal fan

forward curved, single inlet



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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**R3G225-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
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_{fs} / 100 000 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 definition with optimum efficiency. LU-111997
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

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Technical features

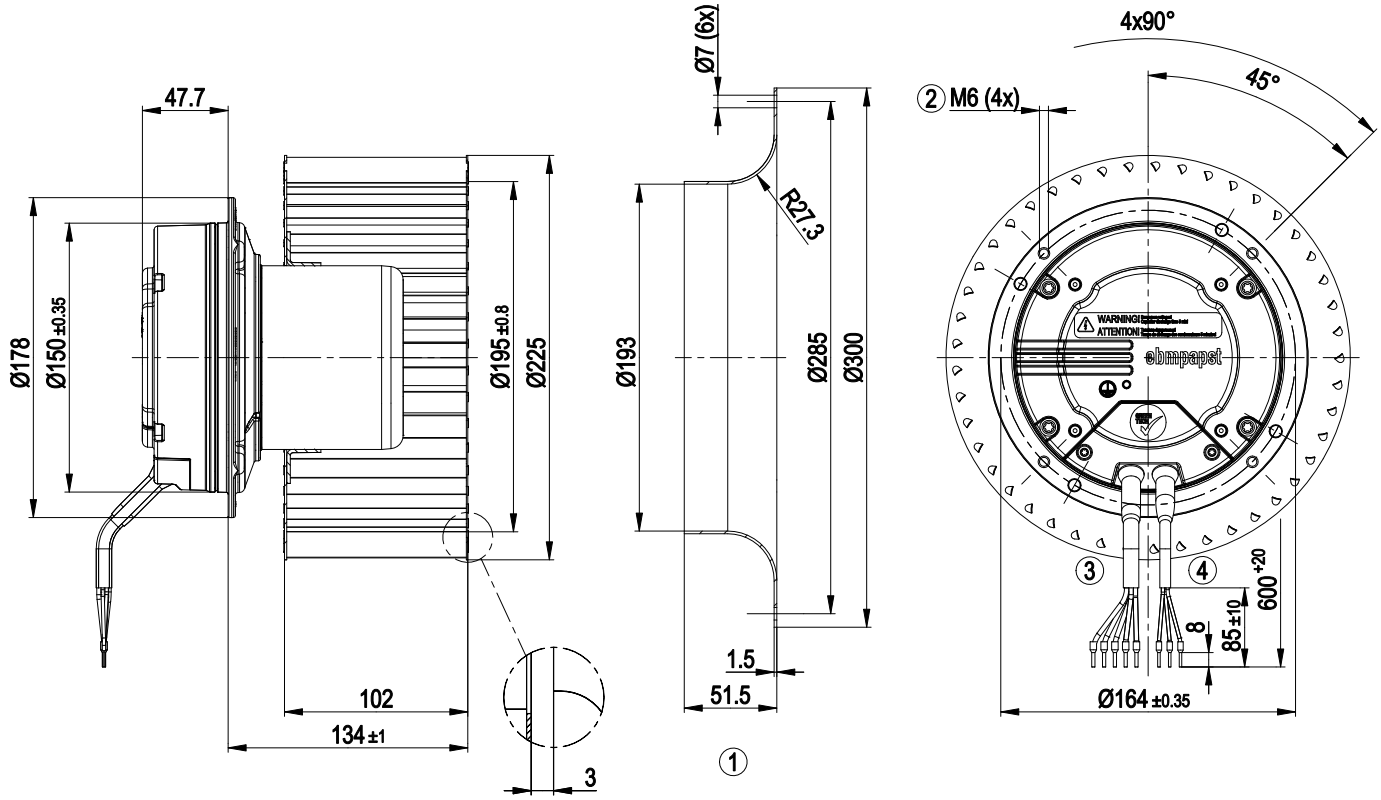
Mass	4.9 kg
Size	225 mm
Surface of rotor	Coated in black
Material of electronics housing	Die-cast aluminium
Material of impeller	Sheet steel, galvanised
Number of blades	45
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Humidity class	F3-1
Max. permissible 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 interference emission	Acc. to EN 61000-6-4 (industrial 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 61800-5-1; CE
Approval	CSA C22.2 Nr.77; EAC; UL 2111

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Product drawing



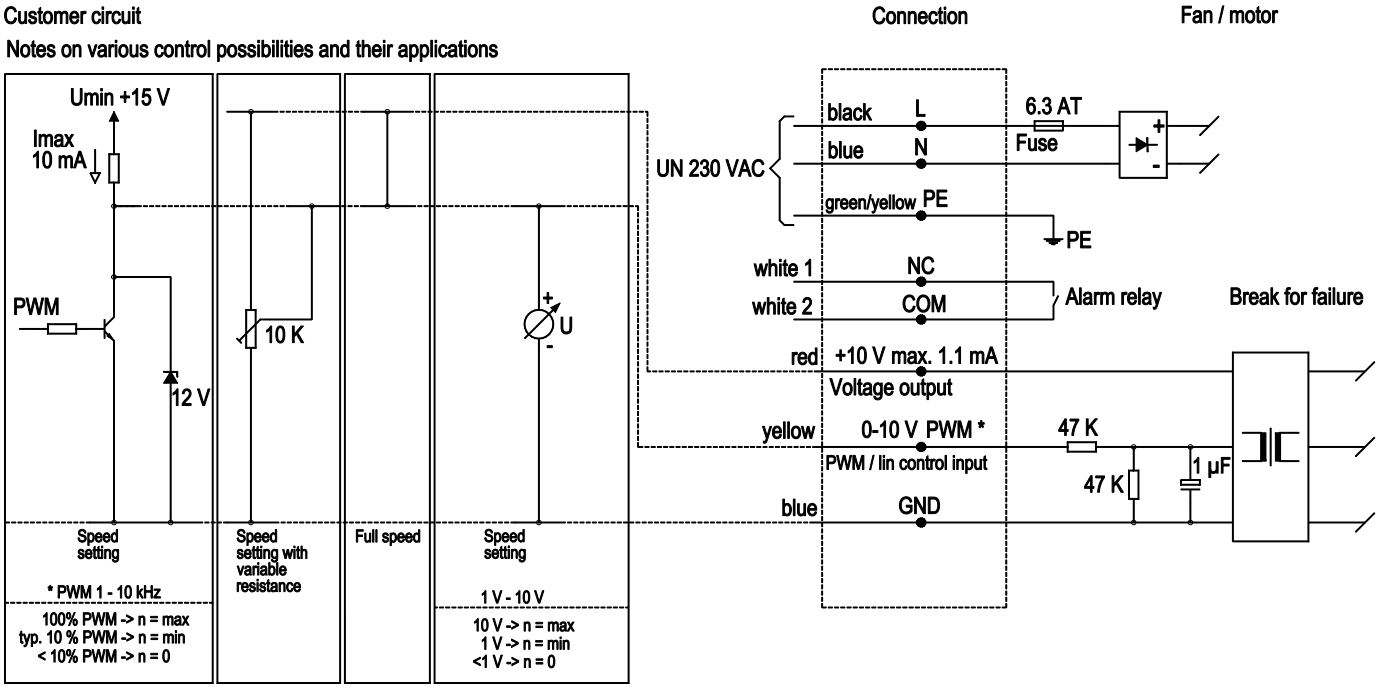
1	Accessory part: Inlet nozzle 25010-2-4013 not included in scope of delivery
2	Depth of screw max. 10 mm
3	Connection line PVC AWG18, 5x crimped core-end sleeves
4	Connection line PVC AWG22, 3x crimped core-end sleeves

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Connection screen

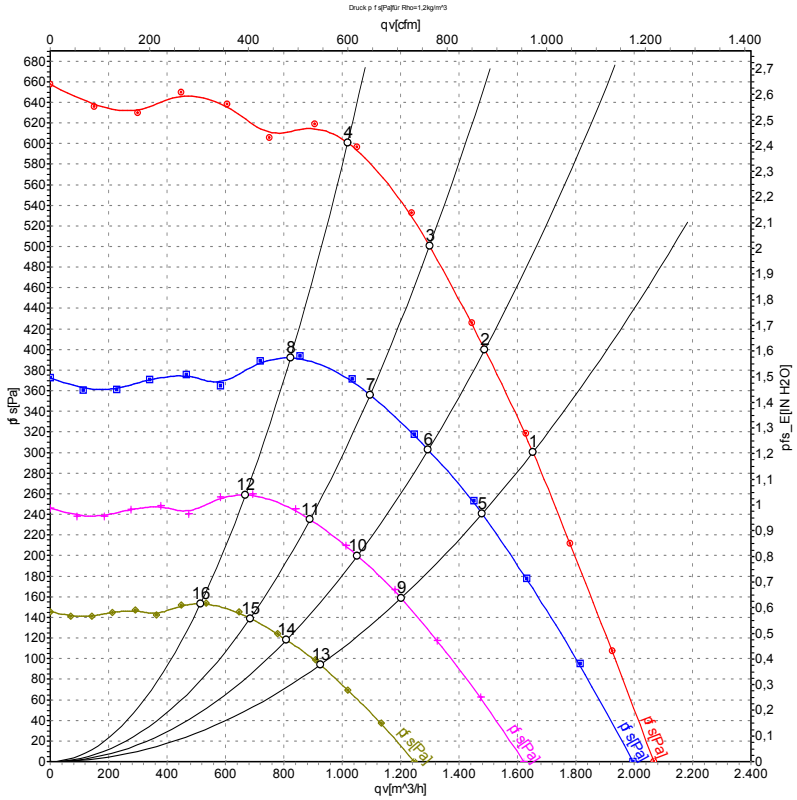


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Charts: Air flow



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

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