R3G225-RE07-01

EC centrifugal fan - RadiCal®

backward curved, single inlet



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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**R3G225-RE07-01**	
Motor	**M3G055-DF**	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Type of data definition		ml
Speed	min^{-1}	2860
Power input	W	170
Current draw	A	1.4
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*	1.00

* Specific ratio = 1 + p_{fs} / 100 000 Pa

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}	%	61.7	39.1	43.1
Efficiency grade N		80.6	58	62
Power input P_{ed}	kW	0.16		
Air flow q_v	m^3/h	705		
Pressure increase p_{fs}	Pa	458		
Speed n	min^{-1}	2865		

Data definition with optimum efficiency. LU-127001
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

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Technical features

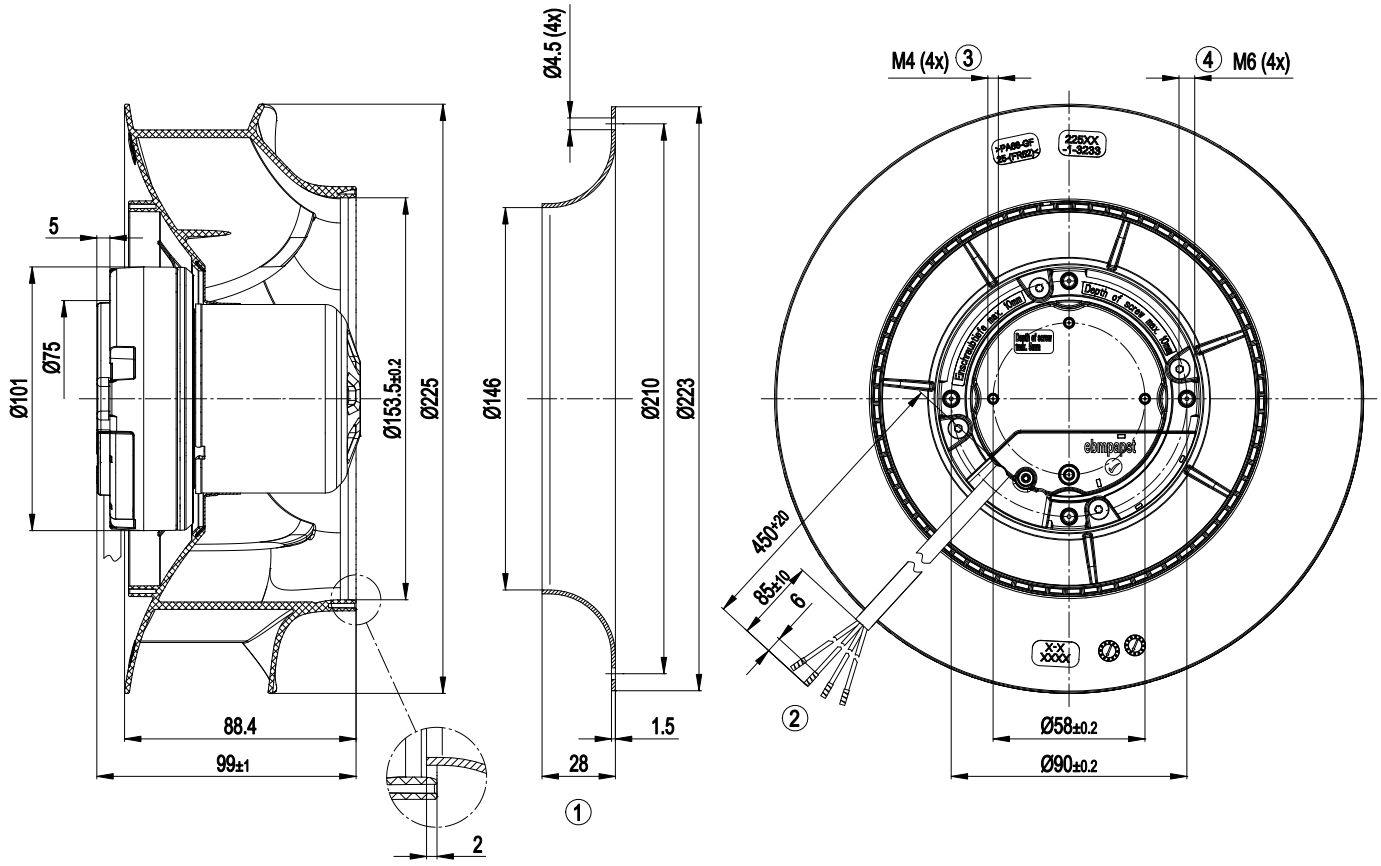
Mass	1.7 kg
Size	225 mm
Surface of rotor	Thick layer passivated
Material of electronics housing	Die-cast aluminium
Material of impeller	PA plastic
Number of blades	7
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensate discharge holes	None, open rotor
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Speed adjustment input (230 V) - Motor current limit - Soft start - Over-temperature protected electronics / motor - Line undervoltage detection
Speed steps	2
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Locked-rotor protection
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	CCC; CSA C22.2 Nr.77; UL 2111

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Product drawing



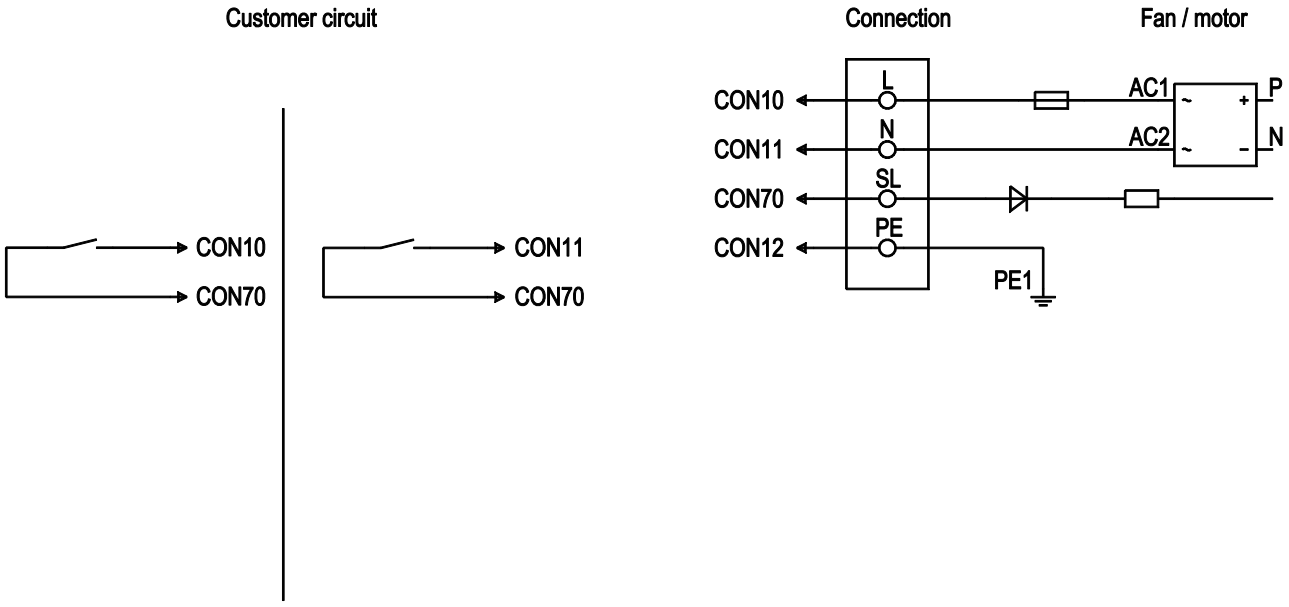
1	Accessory part: Inlet nozzle 96358-2-4013, not included in the standard scope of delivery
2	Connection line PVC 4G 0.5 mm², 4x brass lead tips crimped
3	Depth of screw max. 5 mm
4	Depth of screw max. 10 mm

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Connection screen



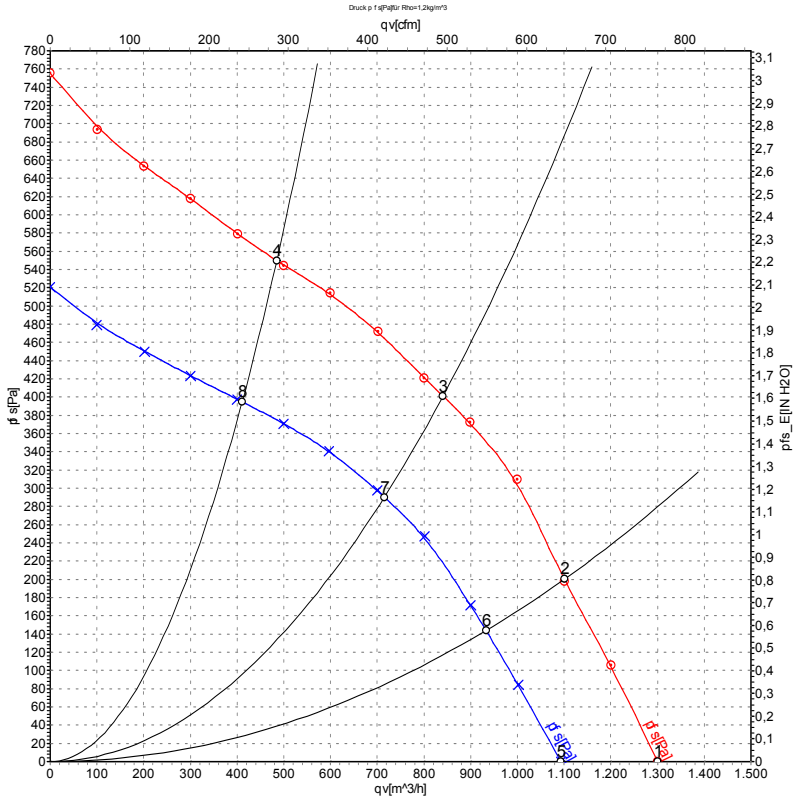
No.	Conn.	Designation	Colour	Function / assignment
	CON 10	L	black	Power supply 230 VAC, 50 - 60 Hz, see type plate for voltage range
	CON 11	N	blue	Neutral conductor
	CON 12	PE	green/yellow	Protective earth
	CON 70	SL	brown	Speed selection: switch open = speed 1; switch closed = speed 2

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Charts: Air flow 50 Hz



Measurement: LU-129100
Measurement: LU-129105

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	LpA_{in}	LwA_{in}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa
1	230	50	3030	151	1.25	70	78	1300	0
2	230	50	2910	168	1.40	66	74	1100	200
3	230	50	2860	170	1.40	60	68	840	400
4	230	50	2970	157	1.35	65	73	485	550
5	230	50	2550	91	0.83			1095	0
6	230	50	2495	104	0.94			935	144
7	230	50	2490	105	0.93			715	290
8	230	50	2525	97	0.89			410	395

U = Supply voltage · f = Frequency · 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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