

R3G250-RD43-01

# EC centrifugal fan - RadiCal

backward curved



R3G250-RD43-01 ebmpapst Datasheet

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## Nominal data

Type	R3G250-RD43-01	
Motor	M3G055-CF	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Type of data definition		ml
Speed	min <sup>-1</sup>	1955
Power input	W	80
Current draw	A	0.7
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	+60

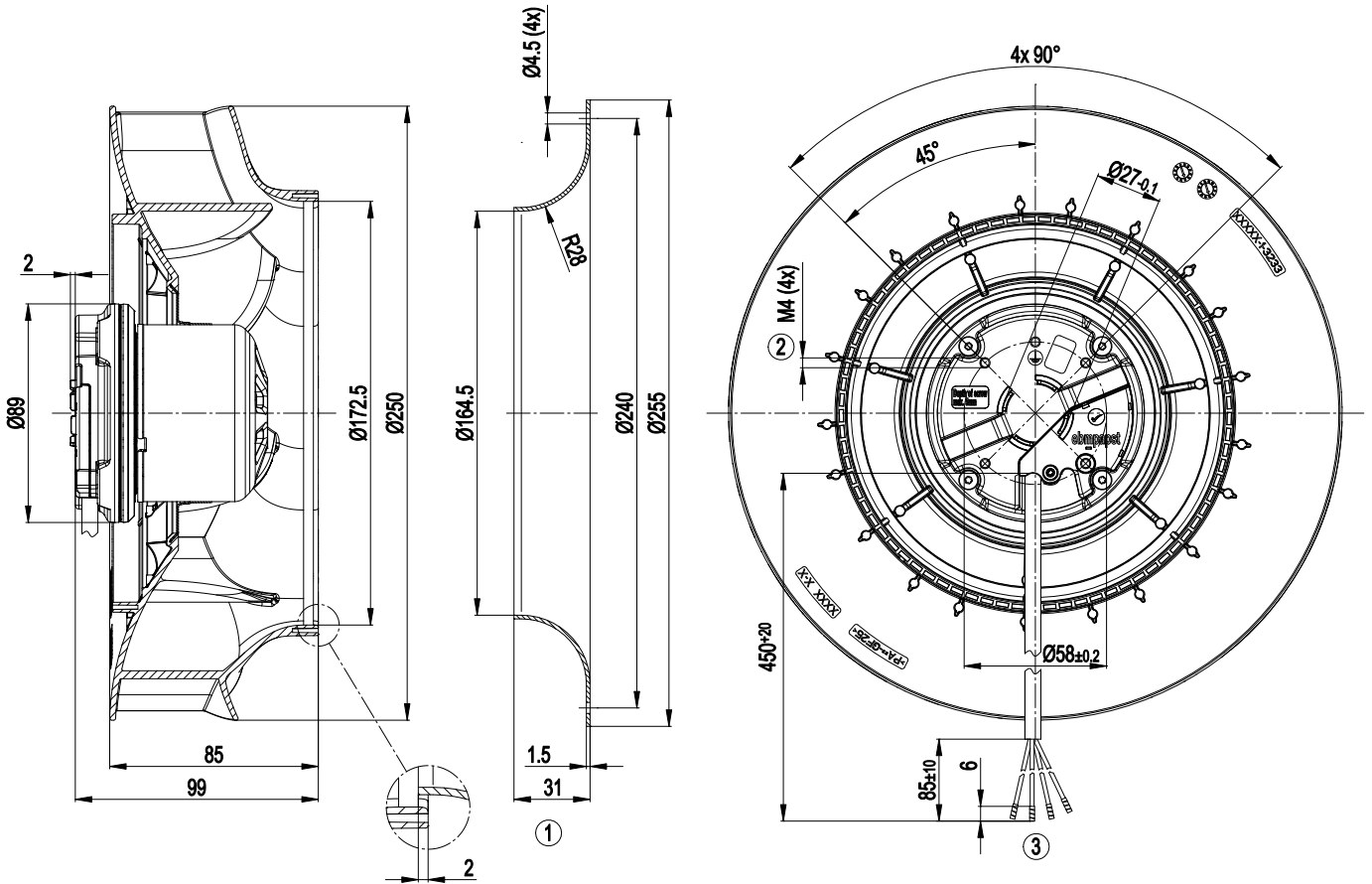
ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit  
Subject to alterations



## Technical features

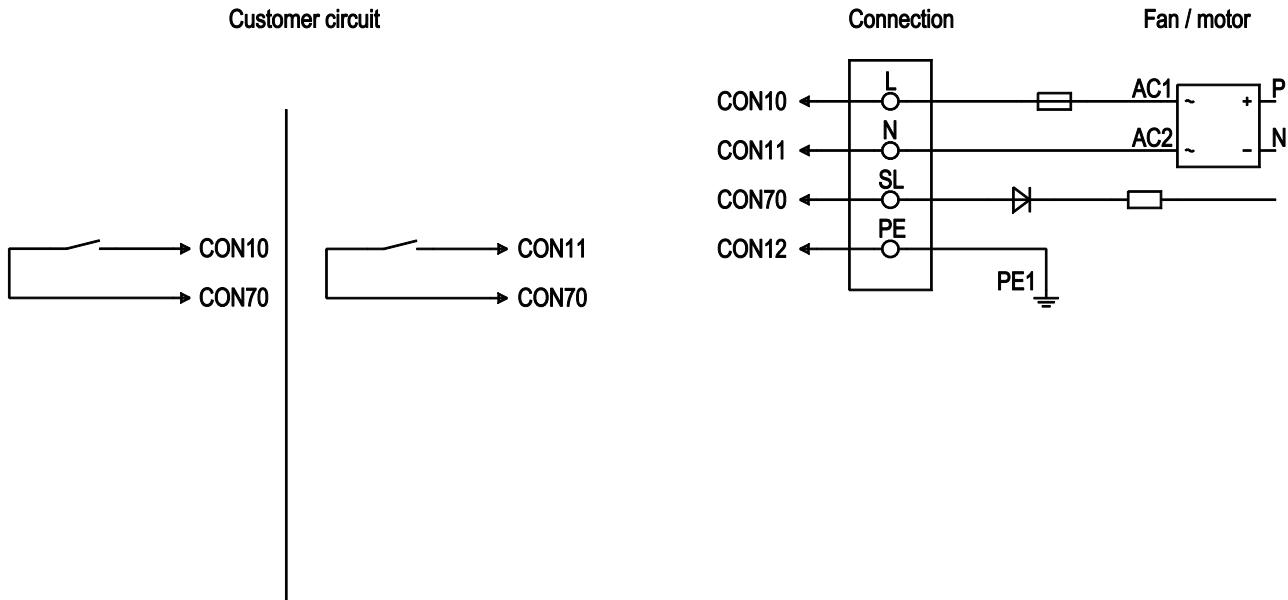
<b>Mass</b>	1.5 kg
<b>Size</b>	250 mm
<b>Surface of rotor</b>	Thick layer passivated
<b>Material of impeller</b>	Plastic PA6, fibreglass-reinforced
<b>Number of blades</b>	7
<b>Direction of rotation</b>	Clockwise, seen on rotor
<b>Type of protection</b>	IP 54
<b>Insulation class</b>	"B"
<b>Max. permissible ambient motor temp. (transp./ storage)</b>	+ 80 °C
<b>Min. permissible ambient motor temp. (transp./storage)</b>	- 40 °C
<b>Mounting position</b>	Shaft horizontal or rotor on top; rotor on bottom on request
<b>Condensate discharge holes</b>	None, open rotor
<b>Operation mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Technical features</b>	<ul style="list-style-type: none"> <li>- Speed adjustment input (230 V)</li> <li>- Motor current limit</li> <li>- Soft start</li> <li>- Over-temperature protected electronics</li> </ul>
<b>Speed steps</b>	2
<b>EMC interference immunity</b>	Acc. to EN 61000-6-2
<b>EMC harmonics</b>	Acc. to EN 61000-3-2/3
<b>EMC interference emission</b>	Acc. to EN 61000-6-3 (household environment)
<b>Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)</b>	<= 3.5 mA
<b>Motor protection</b>	Locked-rotor protection
<b>Cable exit</b>	Variable
<b>Protection class</b>	I (if protective earth is connected by customer)

Product drawing



1	Accessory part: Inlet nozzle 96359-2-4013, not included in the standard scope of delivery
2	Depth of screw max. 5 mm
3	Connection line PVC 4G 0.5 mm <sup>2</sup> , 4x brass lead tips crimped

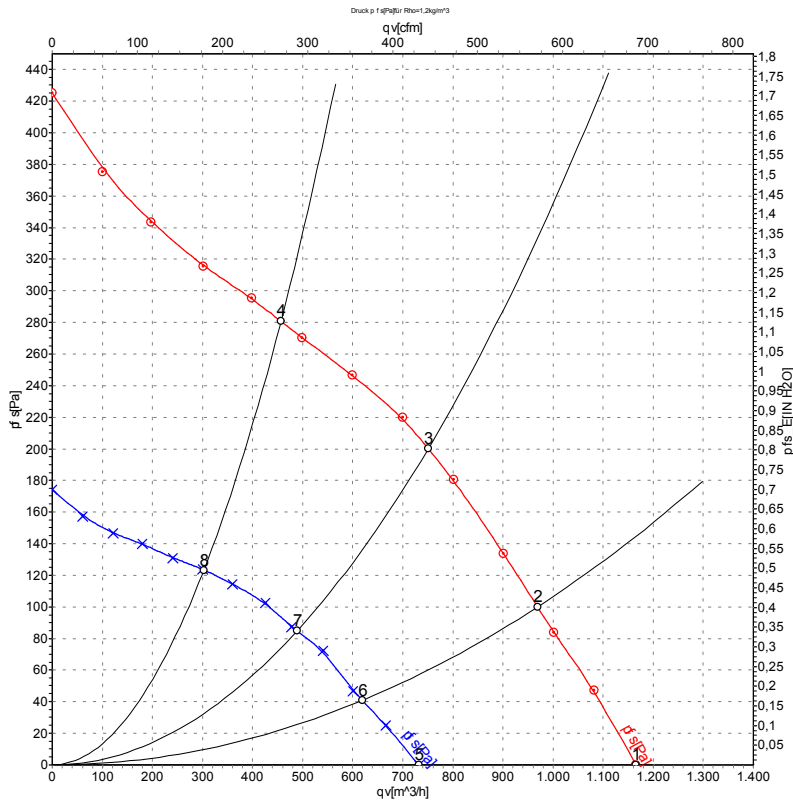
Connection screen



Line	No.	Signal	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



## Charts: Air flow 50 Hz



Measurement: LU-131208  
Measurement: LU-131212

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 <sub>ed</sub>	I	LpA <sub>in</sub>	LwA <sub>in</sub>	qv	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	dB(A)	dB(A)	m <sup>3</sup> /h	Pa
1	230	50	2050	70	0.60	61	69	1165	0
2	230	50	1975	80	0.68	58	66	970	100
3	230	50	1955	80	0.70	53	61	750	200
4	230	50	1985	79	0.66	57	65	455	280
5	230	50	1325	22	0.23	52	60	730	0
6	230	50	1295	25	0.26	49	57	620	41
7	230	50	1290	26	0.28	45	53	490	85
8	230	50	1325	26	0.26	49	57	305	124

U = Supply voltage · f = Frequency · n = Speed · P<sub>ed</sub> = Power input · I = Current draw · LpA<sub>in</sub> = Sound pressure level inlet side · LwA<sub>in</sub> = Sound power level inlet side · qv = Air flow  
p<sub>fs</sub> = Pressure increase

