

# EC centrifugal fan - RadiCal

backward curved, single inlet

R3G220-RC05-11 ebmpapst Datasheet

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## Nominal data

Type	R3G220-RC05-11	
Motor	M3G055-BI	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Type of data definition		ml
Speed (rpm)	min <sup>-1</sup>	1850
Power input	W	35
Current draw	A	0.35
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

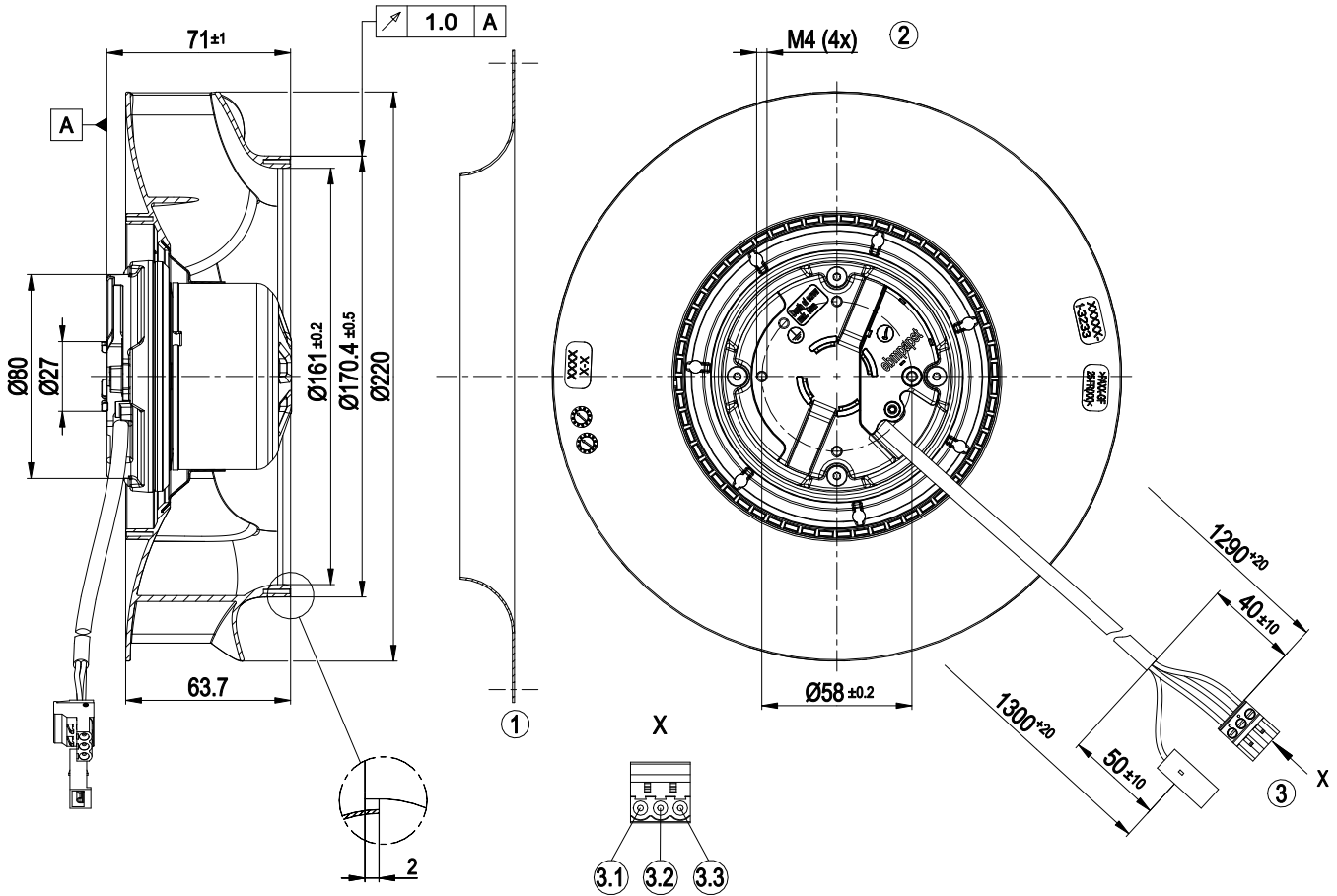
ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit  
Subject to alterations



### Technical features

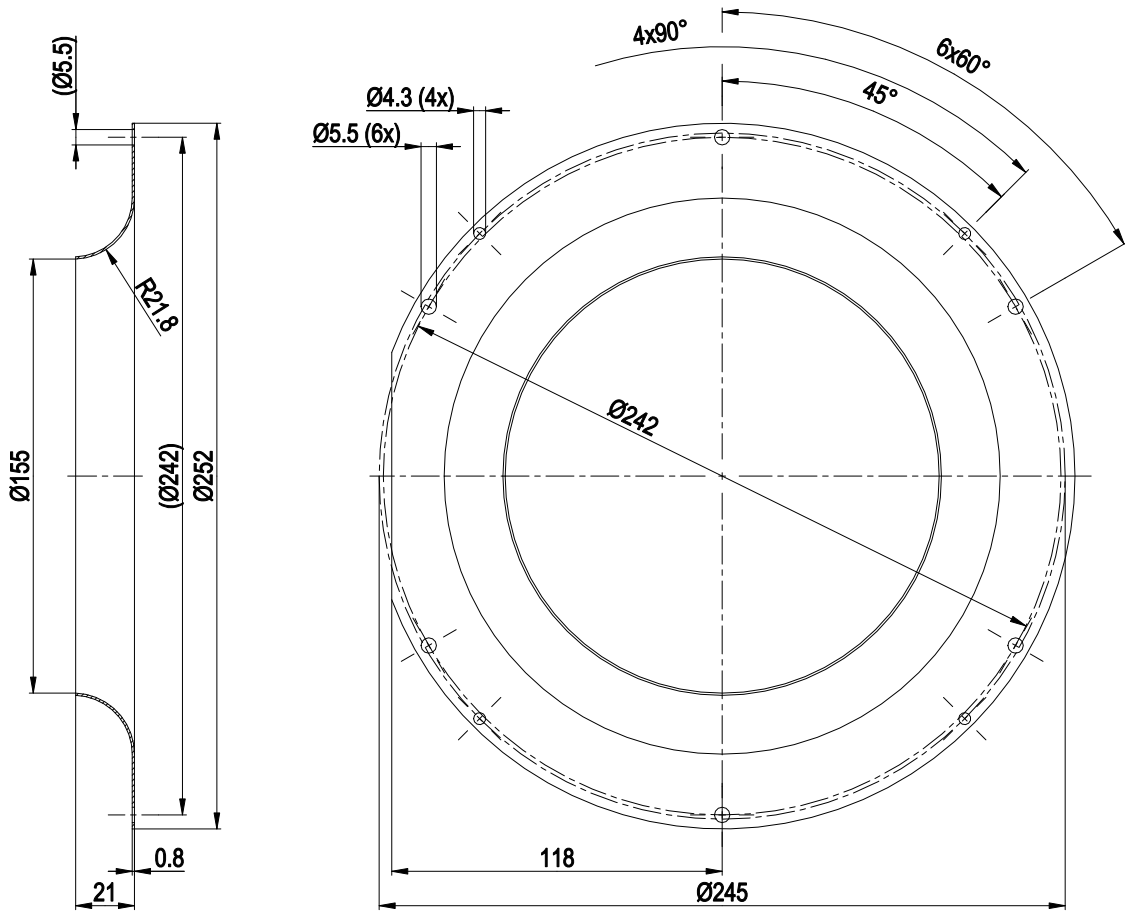
Mass	1.2 kg
Size	220 mm
Surface of rotor	Thick layer passivated
Material of electronics housing	Die-cast aluminium
Material of impeller	PA plastic
Number of blades	7
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None, open rotor
Operation mode	S1
Motor bearing	Ball bearing
Speed steps	2
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	Locked-rotor protection
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE

Product drawing



1	Accessory part: Inlet nozzle 09609-2-4013 not included in scope of delivery
2	Thread reach max. 5 mm
3	Connection line PVC 4G 0.5 mm², connector housing SAURO 3-pole CIF03005
3.1	L (black)
3.2	N (blue)
3.3	SL (brown)
3.4	PE (green/yellow), threaded pin 6.3x0.8 with connector housing

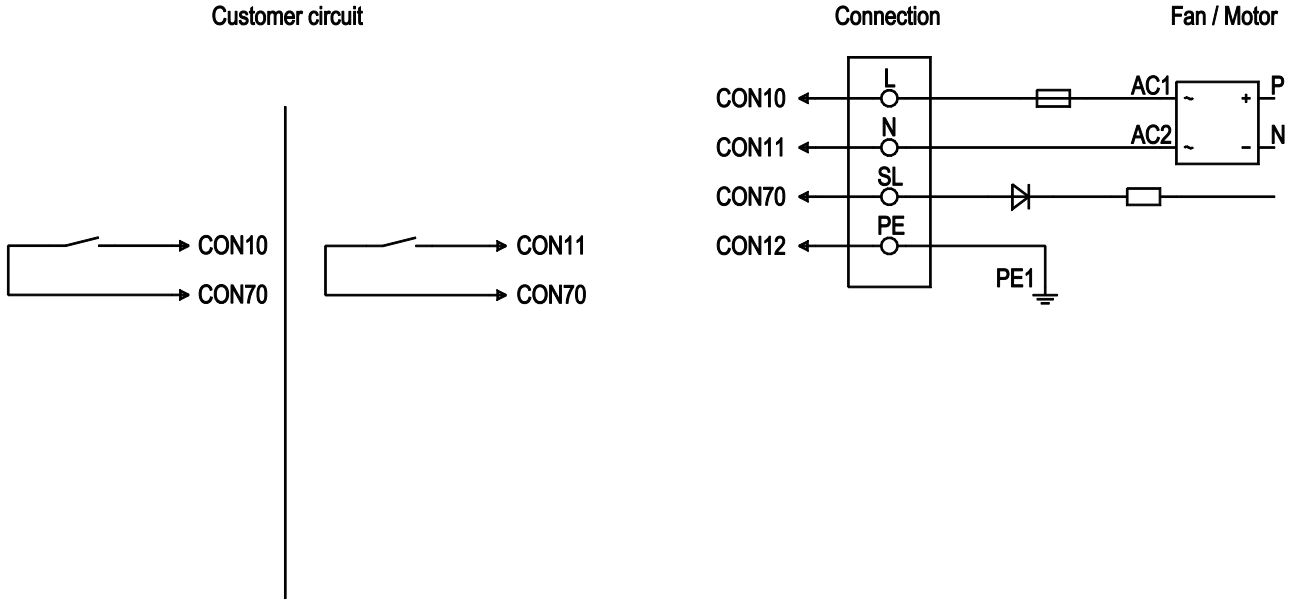
## Accessory part



Inlet nozzle 09609-2-4013 not included in scope of delivery

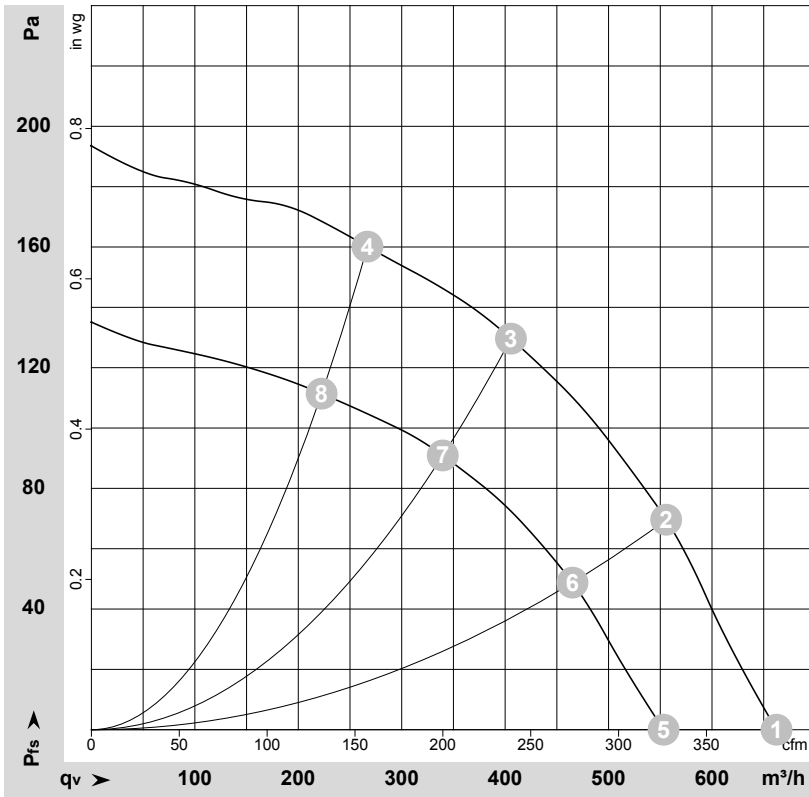


## Connection screen



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 (slow); switch closed = speed 2 (fast)

## Charts: Air flow 50 Hz



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

Measurement: LU-167052-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebmpapst. 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	q <sub>v</sub>	P <sub>fs</sub>	q <sub>v</sub>	P <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	cfm	inH2O
1	230	50	1850	26	0.27	660	0	390	0.00
2	230	50	1850	30	0.31	555	70	325	0.28
3	230	50	1850	35	0.35	405	130	240	0.52
4	230	50	1850	32	0.32	265	160	155	0.64
5	230	50	1550	15	0.16	555	0	325	0.00
6	230	50	1550	18	0.18	465	49	275	0.20
7	230	50	1550	20	0.20	340	91	200	0.37
8	230	50	1550	18	0.19	225	111	130	0.45

U = Supply voltage · f = Frequency · n = Speed (rpm) · P<sub>ed</sub> = Power input · I = Current draw · q<sub>v</sub> = Air flow · P<sub>fs</sub> = Pressure increase

