R3G220-RC11-13

EC centrifugal fan - RadiCal

backward curved, single inlet

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Nominal data

Type	**R3G220-RC11-13**
Motor	**M3G055-BI**

Phase		1~
Nominal voltage	VAC	115
Nominal voltage range	VAC	100 .. 130
Frequency	Hz	50/60
Type of data definition		ml
Speed (rpm)	min^{-1}	2330
Power input	W	65
Current draw	A	0.95
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

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Technical features

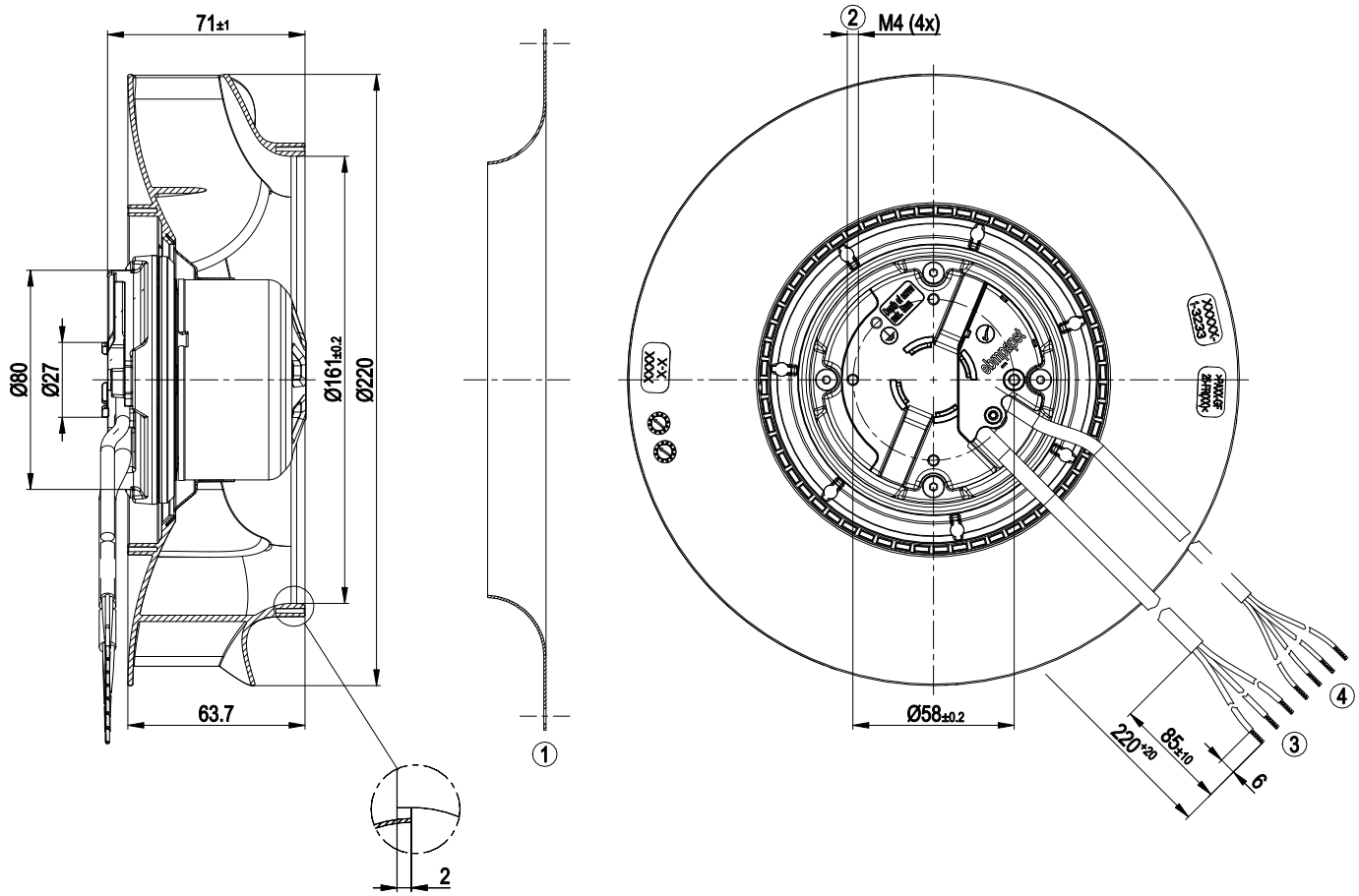
Mass	1.1 kg
Size	220 mm
Surface of rotor	Thick layer passivated
Material of impeller	PA plastic
Number of blades	7
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None, open rotor
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Output limit - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Over-temperature protected motor
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	UL 2111; CSA C22.2 No.77

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Product drawing



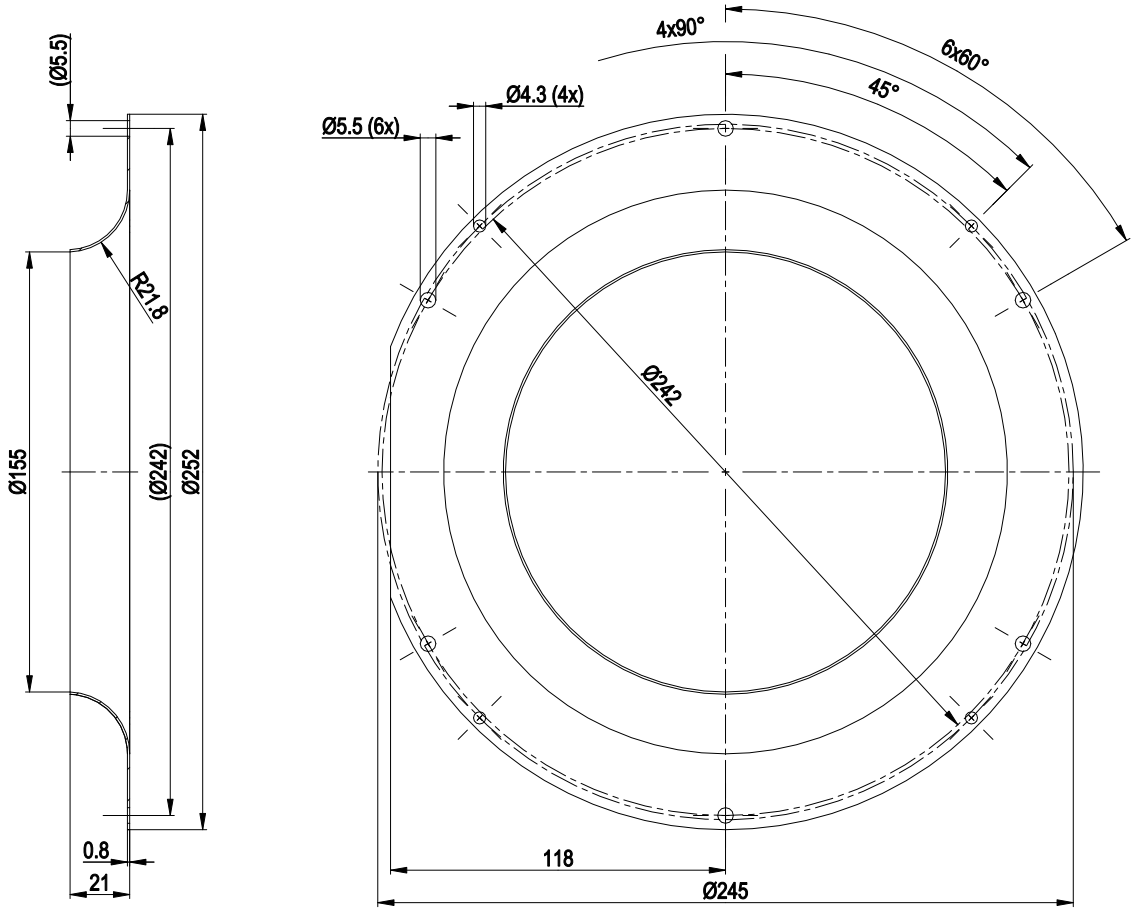
1	Accessory part: Inlet nozzle 09609-2-4013 not included in scope of delivery
2	Thread reach max. 5 mm
3	Connection line PVC AWG20, 3x lead tips crimped
4	Connection line PVC AWG22, 4x lead tips crimped

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Accessory part

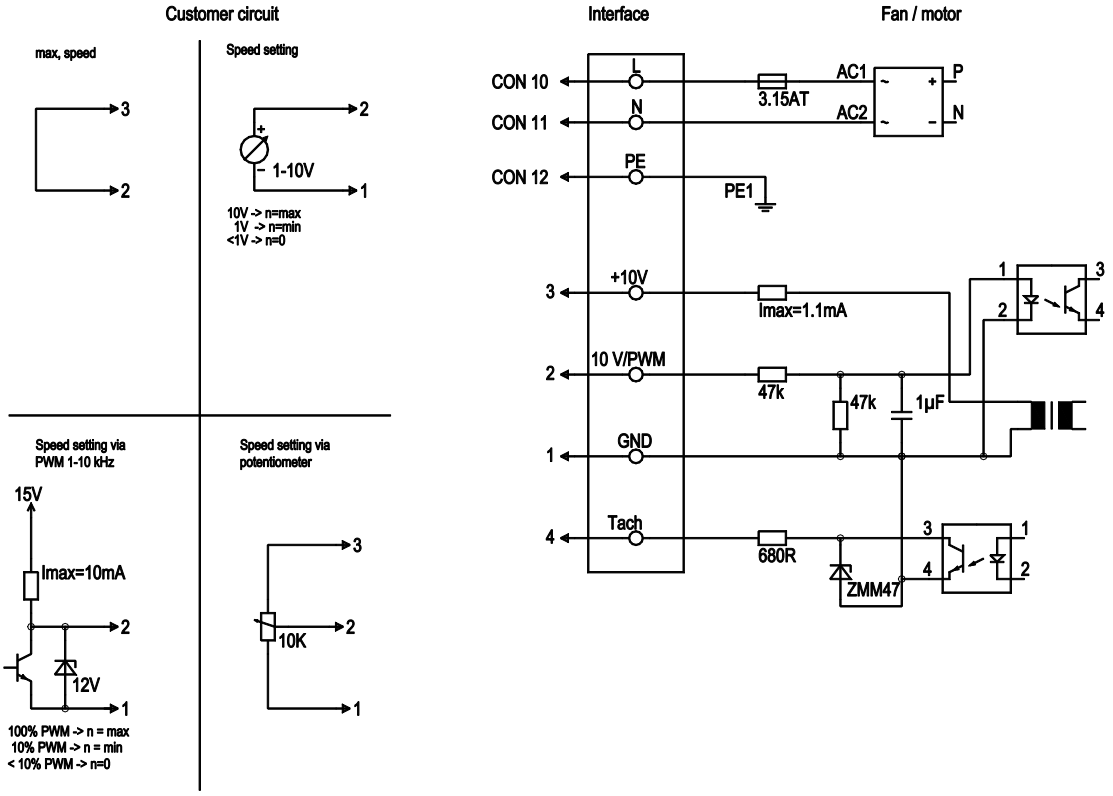


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Connection screen



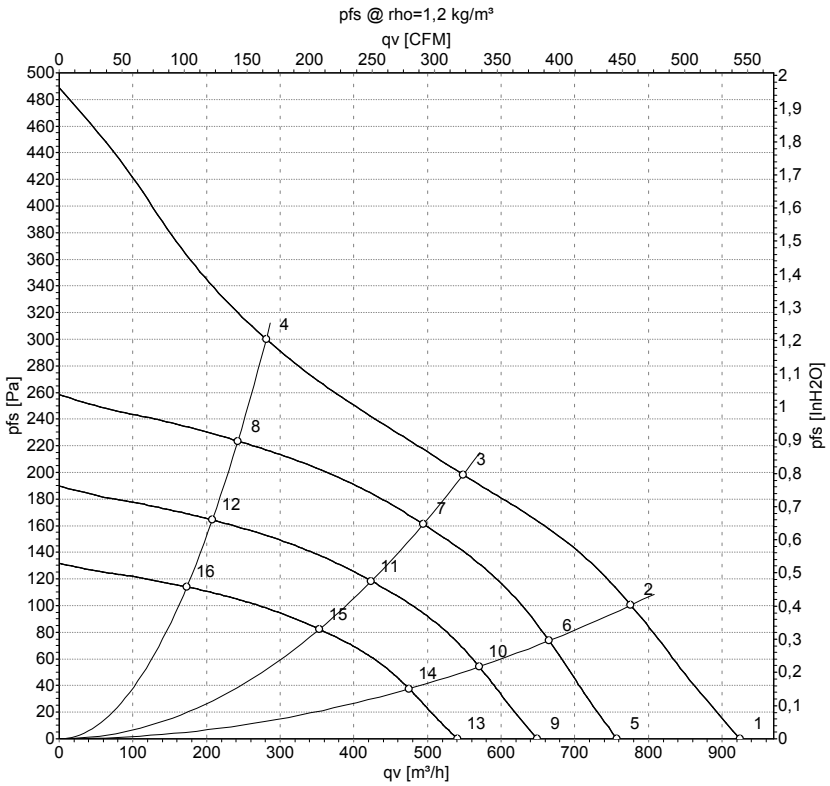
No.	Conn.	Designation	Colour	Function / assignment
	CON10	L	black	Power supply 115 VAC, 50- 60 Hz, for voltage range refer to rating plate
	CON11	N	blue	Neutral conductor
	CON12	PE	green/yellow	Protective earth
	3	10V/ max 1.1mA	red	Voltage output 10V/ 1.1mA, electrically isolated, not short-circuit-proof.
	2	0- 10V PWM	yellow	Control input 0 - 10 V or PWM, electrically isolated
	1	GND	blue	GND - Connection for control interface
	4	Tacho	white	Tach output: open collector, 1 pulse per revolution, electrically isolated

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Charts: Air flow 50 Hz



Measurement: LU-147073-1

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}	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	115	50	2565	65	0.95	62	69	925	0	545	0.00
2	115	50	2450	65	0.95	58	66	775	100	455	0.40
3	115	50	2330	65	0.95	55	62	550	200	325	0.80
4	115	50	2430	65	0.95	59	67	280	300	165	1.20
5	115	50	2100	36	0.52	57	64	755	0	445	0.00
6	115	50	2100	41	0.60	54	62	665	74	390	0.30
7	115	50	2100	48	0.69	52	60	495	161	290	0.65
8	115	50	2100	42	0.61	54	62	245	224	145	0.90
9	115	50	1800	23	0.33	53	60	650	0	380	0.00
10	115	50	1800	26	0.38	50	58	570	54	335	0.22
11	115	50	1800	30	0.44	48	56	425	119	250	0.48
12	115	50	1800	26	0.39	50	58	210	164	120	0.66
13	115	50	1500	13	0.19	48	56	540	0	320	0.00
14	115	50	1500	15	0.22	46	53	475	38	280	0.15
15	115	50	1500	17	0.25	43	51	355	82	210	0.33
16	115	50	1500	15	0.22	46	53	175	114	100	0.46

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · q_V = Air flow
p_{fs} = Pressure increase

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