

R3G220-RG17-01

EC centrifugal fan - RadiCal

backward curved, single inlet

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Nominal data

Type	R3G220-RG17-01	
Motor	M3G055-CF	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Type of data definition		ml
Speed	min ⁻¹	2650
Power input	W	104
Current draw	A	0.8
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	1.4 kg
Size	220 mm
Surface of rotor	Thick layer passivated
Material of electronics housing	Die-cast aluminium
Material of impeller	Plastic PA6, fibreglass-reinforced
Number of blades	7
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44
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	Any
Cooling bore / aperture	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Technical features	<ul style="list-style-type: none"> - Output 10 VDC, max. 1.1 mA - Tach output - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Over-temperature protected electronics / motor
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	Reverse polarity and locked-rotor protection
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1

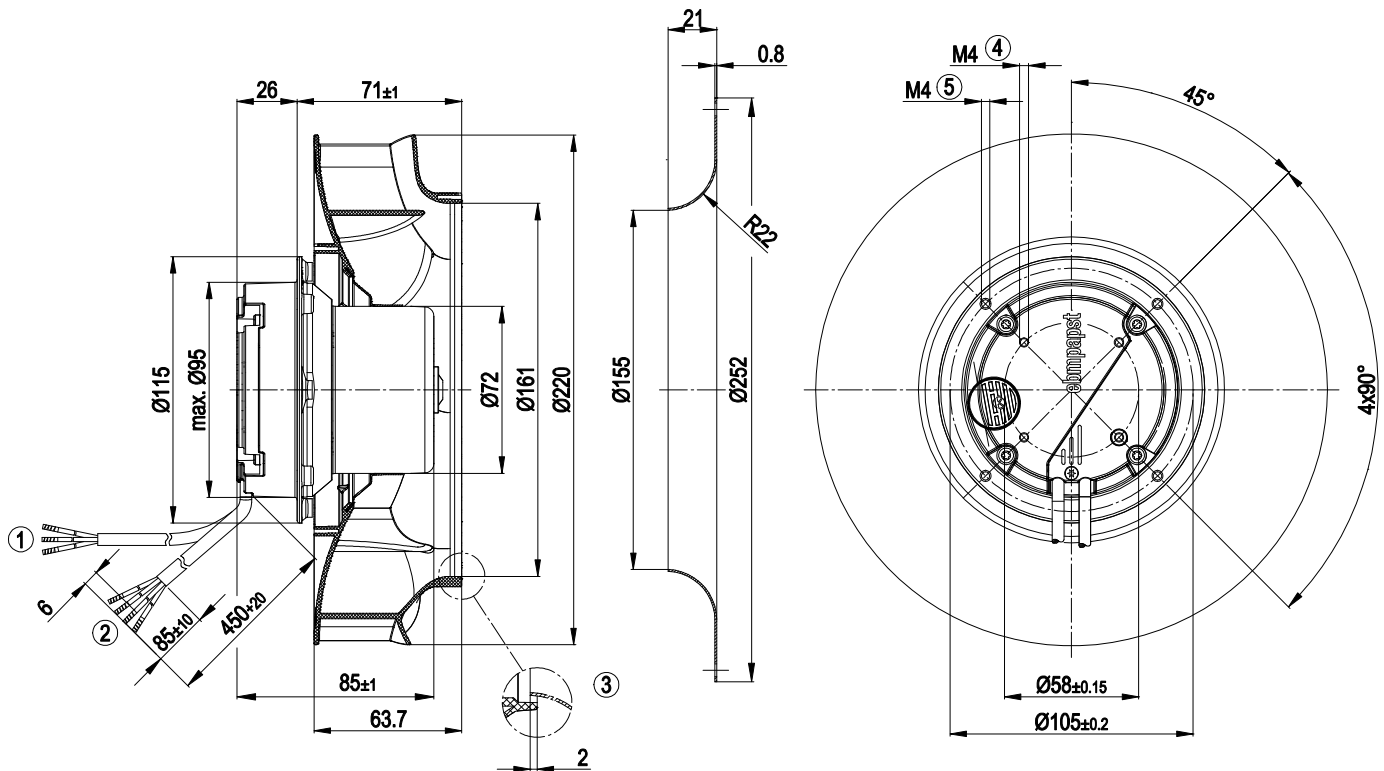


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Product drawing



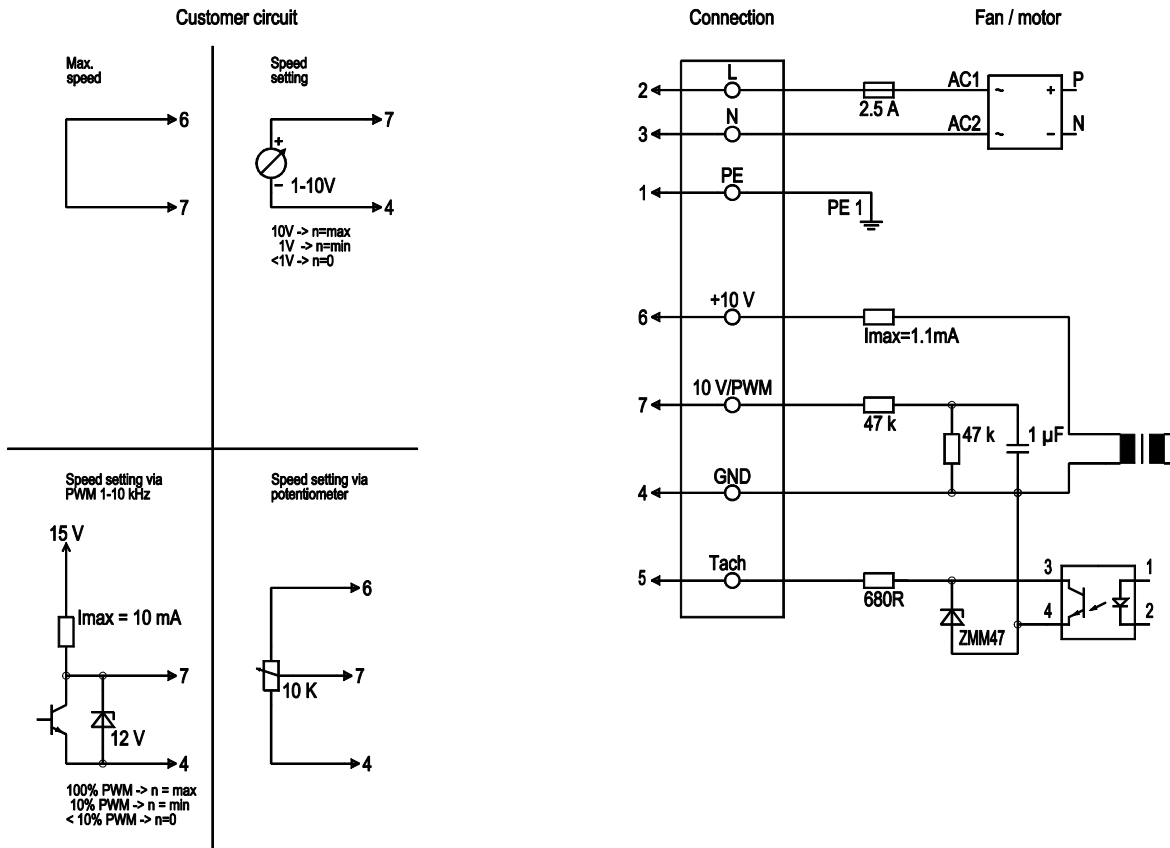
1	Connection line PVC 3G 0.5mm ² ; 3x brass lead tips crimped
2	Connection line PVC 4 x 0.25 mm ² ; 4 x brass lead tips crimped
3	Accessory part: Inlet nozzle 09576-2-4013, not included in the standard scope of delivery
4	Depth of screw max. 6 mm
5	Depth of screw max. 6 mm

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Connection screen



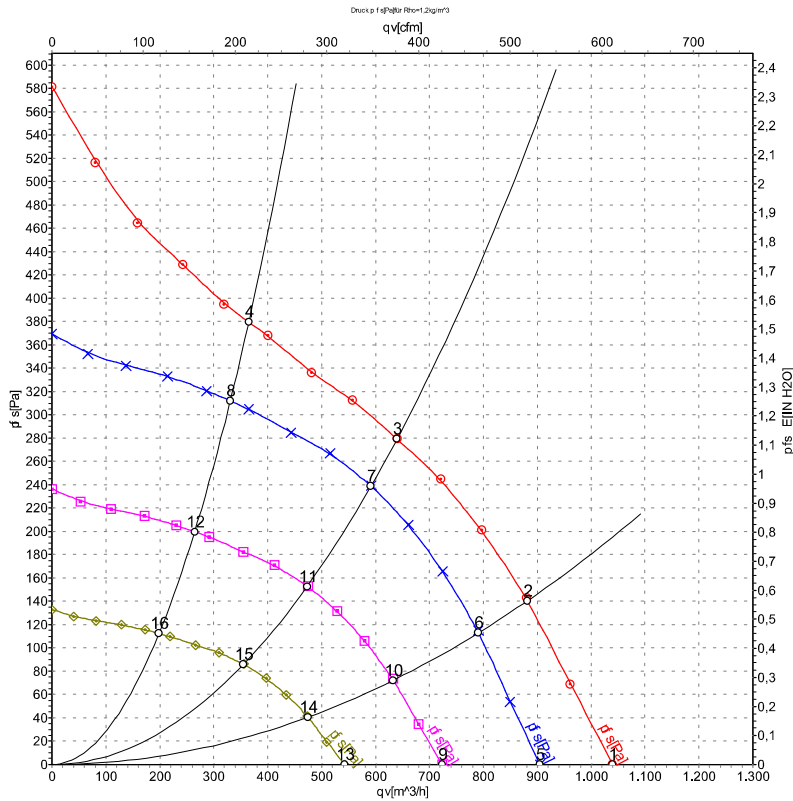
Line	No.	Signal	Colour	Function / assignment
	2	L	brown	Power supply 230 VAC, 50-60 Hz, see type plate for voltage range
	3	N	blue	Neutral conductor
	1	PE	green/yellow	Protective earth
	7	0-10 V PWM	yellow	Control input 0 - 10 V or PWM, electrically isolated
	5	Tach	white	Tach output: Open Collector, 1 pulse per revolution, electrically isolated
	6	10V / max. 1.1 mA	red	Voltage output 10V / 1.1mA, electrically isolated, not short-circuit-proof
	4	GND	blue	GND - Connection for control interface

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Charts: Air flow 50 Hz



Measurement: LU-132486

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: L_{wA} measured as per ISO 13347 / L_{pA} 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	L _{pA_{in}}	L _{wA_{in}}	qv	p _{ts}
	V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m ³ /h	Pa
1	230	50	2875	93	0.73	63	71	1040	0
2	230	50	2785	99	0.77	59	67	880	140
3	230	50	2650	104	0.80	57	65	640	280
4	230	50	2760	100	0.80	60	69	365	380
5	230	50	2500	61	0.48	60	68	905	0
6	230	50	2500	71	0.56	57	65	790	115
7	230	50	2500	83	0.65	55	64	590	240
8	230	50	2500	75	0.59	58	66	330	312
9	230	50	2000	31	0.25	55	63	725	0
10	230	50	2000	37	0.29	52	60	630	73
11	230	50	2000	43	0.33	51	59	475	153
12	230	50	2000	38	0.30	53	61	265	200
13	230	50	1500	13	0.10	49	57	545	0
14	230	50	1500	15	0.12	46	54	475	41
15	230	50	1500	18	0.14	44	53	355	86
16	230	50	1500	16	0.13	46	55	200	112

U = Supply voltage · f = Frequency · n = Speed · P_{ed} = Power input · I = Current draw · L_{pA_{in}} = Sound pressure level inlet side · L_{wA_{in}} = Sound power level inlet side · qv = Air flow
 p_s = Pressure increase

