

**ebm-papst Mulfingen GmbH & Co. KG**

Bachmühle 2 · D-74673 Mulfingen

Phone +49 7938 81-0

Fax +49 7938 81-110

info1@de.ebmpapst.com

www.ebmpapst.com

Limited partnership · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	R3G220-RC11-04	
Motor	M3G055-BI	
Phase		1~
Nominal voltage	VAC	115
Nominal voltage range	VAC	100 .. 130
Frequency	Hz	50/60
Method of obtaining data		ml
Status		prelim.
Speed	min ⁻¹	2330
Power consumption	W	65
Current draw	A	0.95
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment

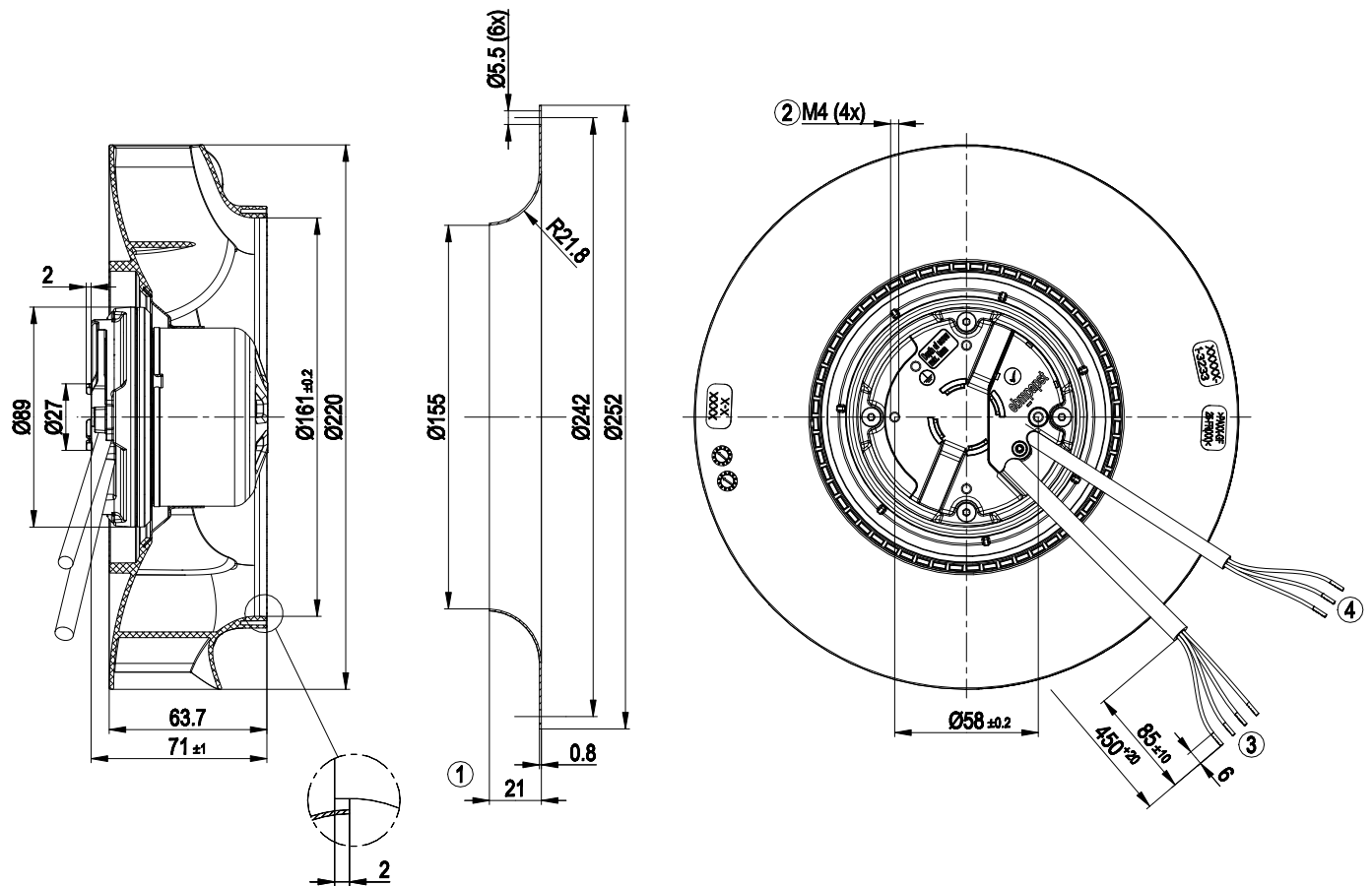
Subject to change



Technical description

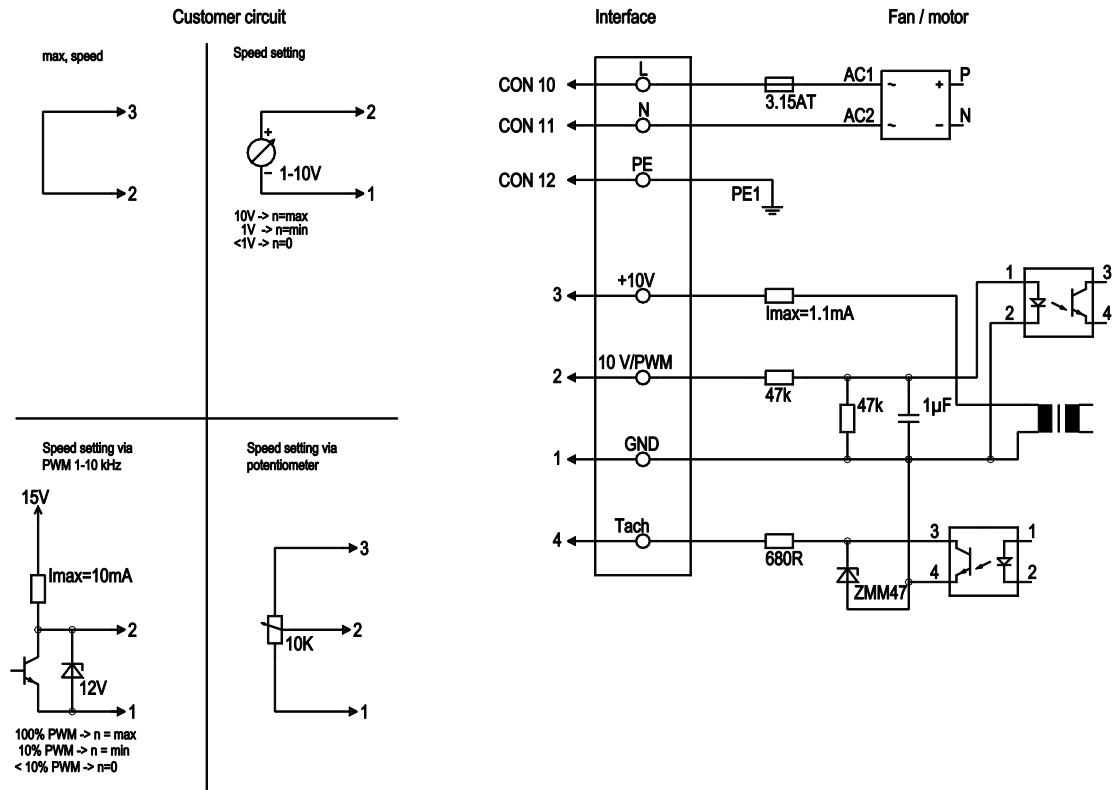
Weight	1.2 kg
Fan size	220 mm
Rotor surface	Thick-film passivated
Electronics housing material	Die-cast aluminum
Impeller material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None, open rotor
Mode	S1
Motor storage	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Thermal overload protection for electronics/motor - Line undervoltage detection
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC interference emission	According to EN 61000-6-4 (industrial environment)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Locked-rotor protection
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	CSA C22.2 No. 77; UL 2111

Product drawing



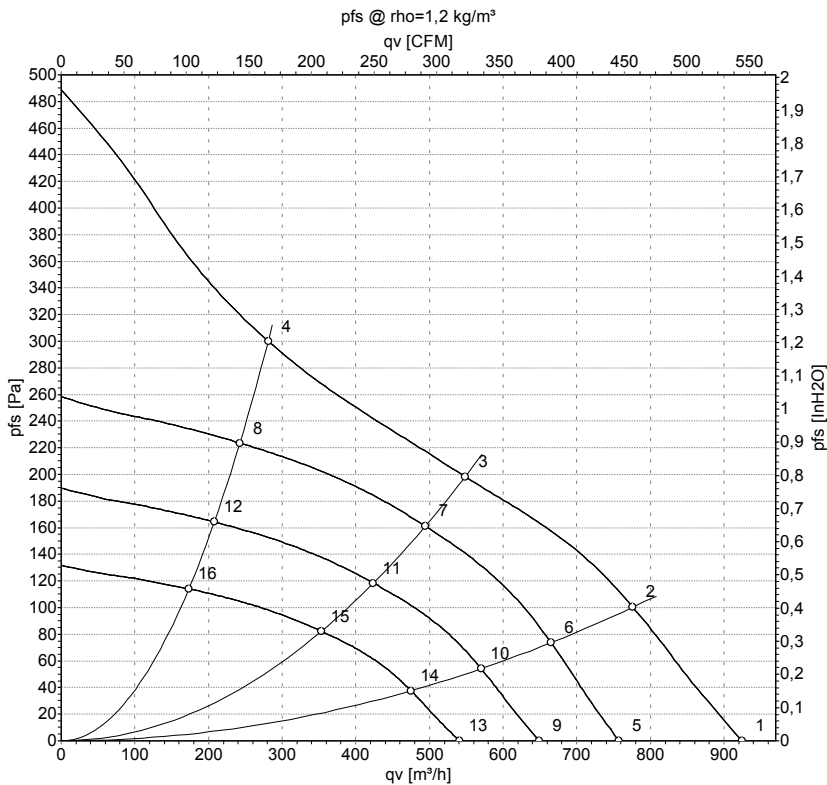
1	Accessory part: inlet ring 09609-2-4013, not included in scope of delivery
2	Max. clearance for screw 6 mm
3	Cable PVC 3G 0.5 mm ² , 3x crimped splices
4	Cable PVC 4x 0.25 mm ² , 4x crimped splices

Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	CON10	L	black	Power supply 115 VAC, 50-60 Hz, see nameplate for voltage range
	CON11	N		Neutral conductor
	CON12	PE		Protective earth
	3	10V/ max 1.1mA	red	Voltage output 10 V / 1.1 mA, 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		Tach output: open collector, 1 pulse per revolution, electrically isolated

Curves: Air performance 50 Hz



Measurement: LU-147073

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

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)	m³/h	Pa
1	115	50	2565	65	0.95	62	69	925	0
2	115	50	2450	65	0.95	58	66	775	100
3	115	50	2330	65	0.95	55	62	550	200
4	115	50	2430	65	0.95	59	67	280	300
5	115	50	2100	36	0.52	57	64	755	0
6	115	50	2100	41	0.60	54	62	665	74
7	115	50	2100	48	0.69	52	60	495	161
8	115	50	2100	42	0.61	54	62	245	224
9	115	50	1800	23	0.33	53	60	650	0
10	115	50	1800	26	0.38	50	58	570	54
11	115	50	1800	30	0.44	48	56	425	119
12	115	50	1800	26	0.39	50	58	210	164
13	115	50	1500	13	0.19	48	56	540	0
14	115	50	1500	15	0.22	46	53	475	38
15	115	50	1500	17	0.25	43	51	355	82
16	115	50	1500	15	0.22	46	53	175	114

U = Power supply · f = Frequency · n = Speed · P_{ed} = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
 qv = Air flow · p_{fs} = Pressure increase

