R3G220-RC09-08

EC centrifugal fan - RadiCal

backward-curved, single-intake



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Nominal data

Type	**R3G220-RC09-08**
Motor	**M3G055-BI**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Status		prelim.
Speed (rpm)	min^{-1}	2070
Power consumption	W	51
Current draw	A	0.47
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

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Technical description

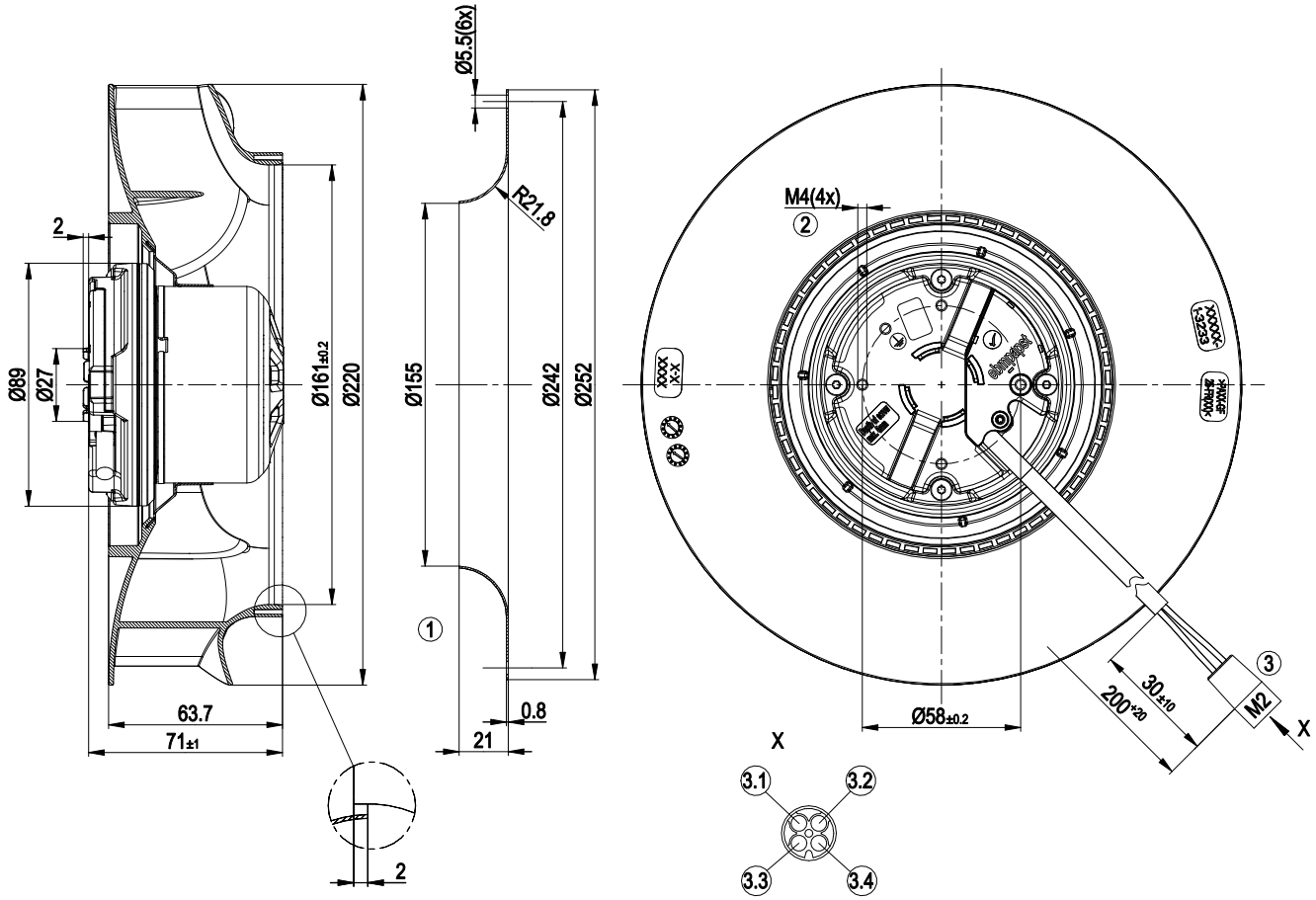
Weight	1.1 kg
Fan size	220 mm
Rotor surface	Unpainted
Impeller material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None, open rotor
Mode	S1
Motor bearing	Ball bearing
Technical features	- Speed setting input (230 V) - Motor current limitation - Soft start - Thermal overload protection for electronics/motor
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC circuit feedback	According to EN 61000-3-2/3
EMC interference emission	According to EN 61000-6-3 (household environment)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	STK
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	CCC; UL 2111; CSA C22.2 No. 77

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Product drawing



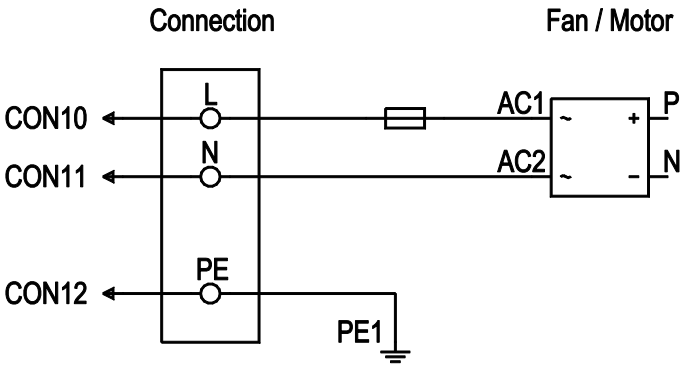
1	Accessory part: inlet ring 09609-2-4013, not included in scope of delivery
2	Max. clearance for screw 5 mm
3	Cable PVC AWG20, 4-pole connector housing tyco 925075-7, 4x plug pin tyco 163555-6
3.1	blue (N)
3.2	green/yellow (PE)
3.3	black (L)
3.4	free position

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Connection diagram



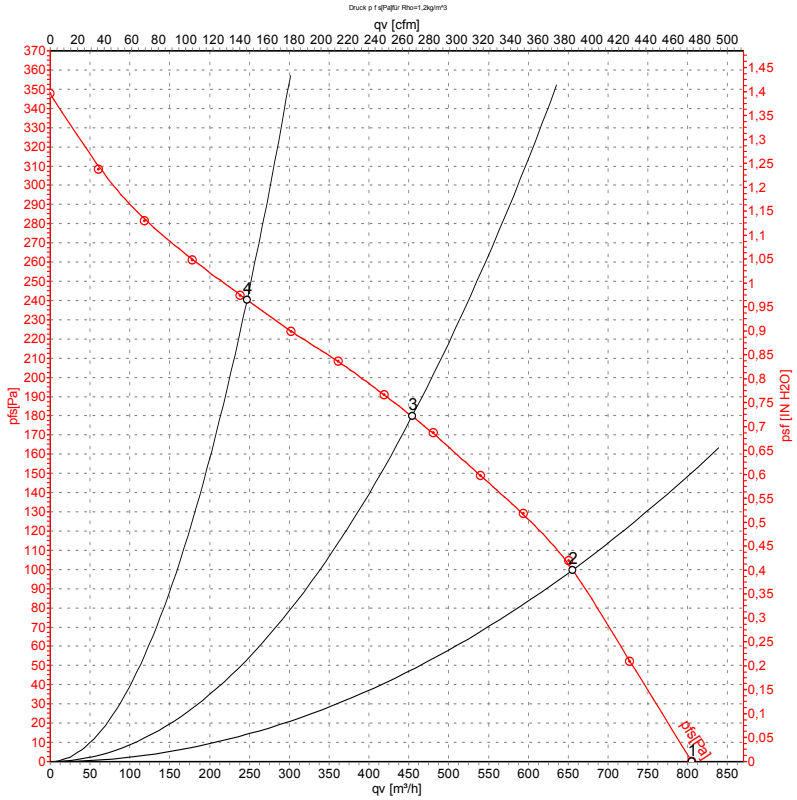
No.	Conn.	Designation	Color	Function/assignment
	CON 10	L	black	Power supply 230 VAC, 50-60 Hz, see nameplate for voltage range
	CON 11	N	blue	Neutral conductor
	CON 12	PE	green/yellow	Protective earth

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Curves: Air performance 50 Hz



Measurement: LU-127404-1

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	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	230	50	2190	44	0.43	805	0	475	0.00
2	230	50	2115	48	0.47	655	100	385	0.40
3	230	50	2070	51	0.47	455	180	265	0.72
4	230	50	2140	47	0.44	245	240	145	0.96

U = Power supply · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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