EC centrifugal fan - RadiCal

backward-curved

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Nominal data

Type	**R3G225-RH17-S01**
Motor	**M3G055-CF**

Phase		1~
Nominal voltage	VAC	230V
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		fa
Speed (rpm)	min^{-1}	2200
Power consumption	W	60
Current draw	A	0.42
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	50

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

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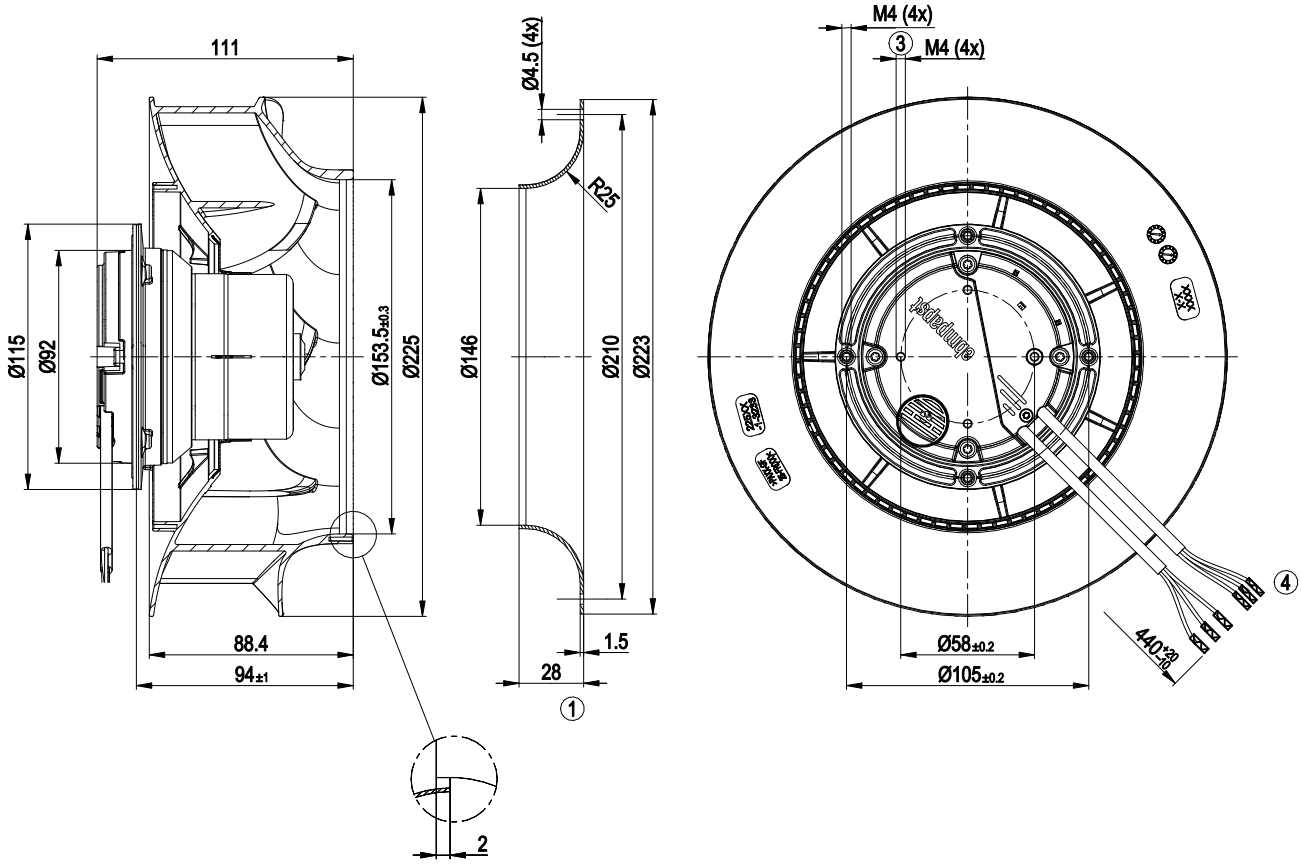
Technical description

Weight	1.5 kg
Fan size	225 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	IP44
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F3-1
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	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limitation - Soft start - PWM control input
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	With plug
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Approval	CCC;UL

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Product drawing

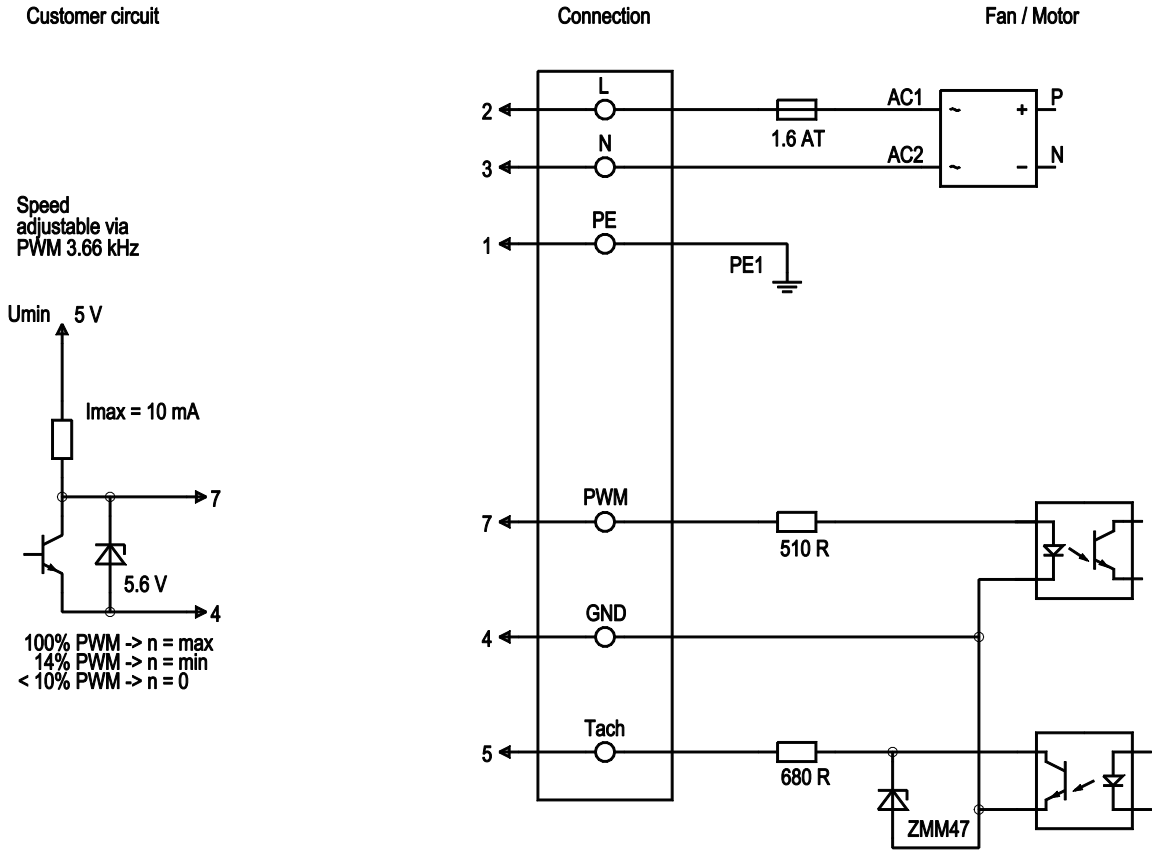


1	Accessory part: inlet ring 96358-2-4013 not included in scope of delivery
3	Max. clearance for screw 5 mm
4	Cable 3xAWG20 and 3xAWG22 with brass lead tips
4.1	PE (green/yellow)
4.2	L (brown)
4.3	N (blue)
4.4	Control input (yellow)
4.5	Tach (white)
4.6	GND (blue)

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Connection diagram



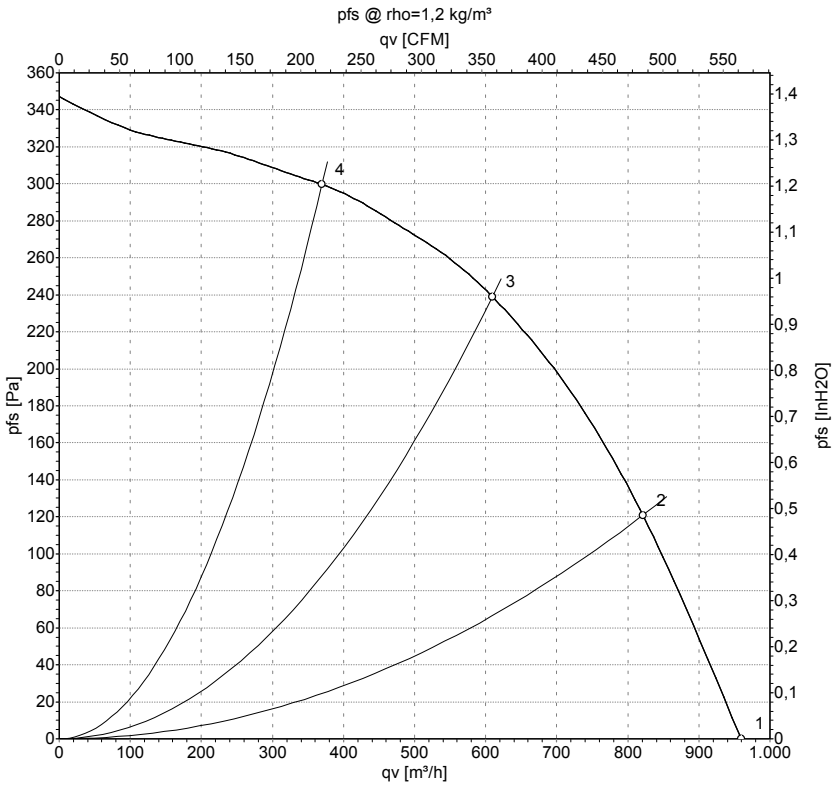
No.	Conn.	Designation	Color	Function/assignment
	1	PE	green/yellow	Protective earth
	2	L	brown	Power supply 230 VAC, 50 - 60 Hz
	3	N	blue	Neutral conductor
	4	GND	blue	GND connection for control interface
	5	Tach	white	Tach output: Open collector, 1 pulse per revolution, electrically isolated
	7	PWM	yellow	Control input PWM, electrically isolated

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Curves: Air performance 50 Hz



Measurement: LU-144891-1

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	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	230	50	2200	60	0.42	960	0	565	0.00
2	230	50	2205	79	0.63	820	120	485	0.48
3	230	50	2200	81	0.64	610	240	360	0.96
4	230	50	2200	69	0.56	370	300	220	1.20

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

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