R3G225-RD05-09

EC centrifugal fan - RadiCal

backward-curved, single-intake

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Nominal data

Type	**R3G225-RD05-09**
Motor	**M3G055-CF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	2200
Power consumption	W	82
Current draw	A	0.7
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

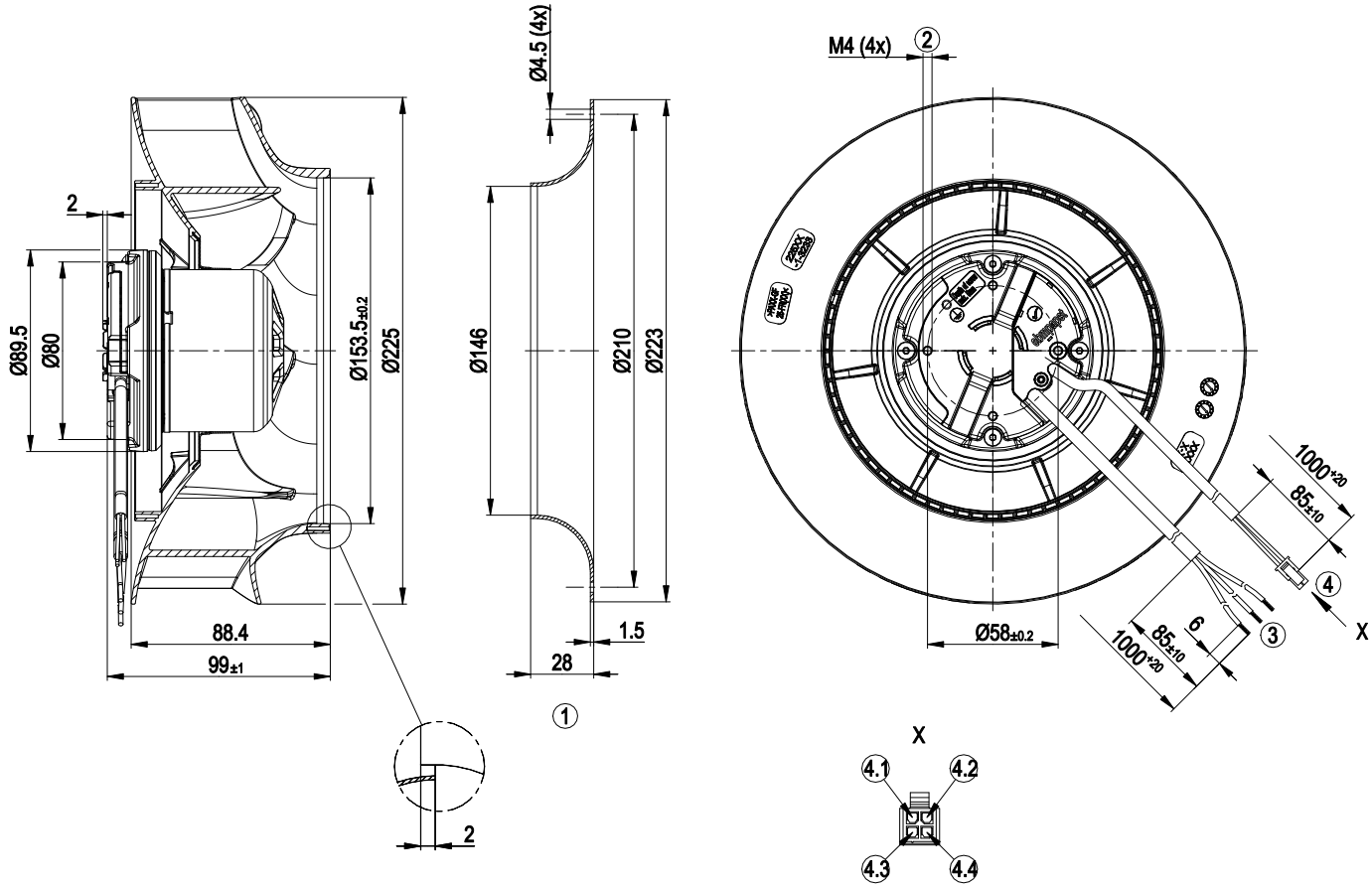
Weight	1.4 kg
Fan size	225 mm
Electronics housing material	Die-cast aluminum
Impeller material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None, open rotor
Mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Power limiter - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Overvoltage detection - Thermal overload protection for electronics/motor - Line undervoltage detection
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

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Product drawing



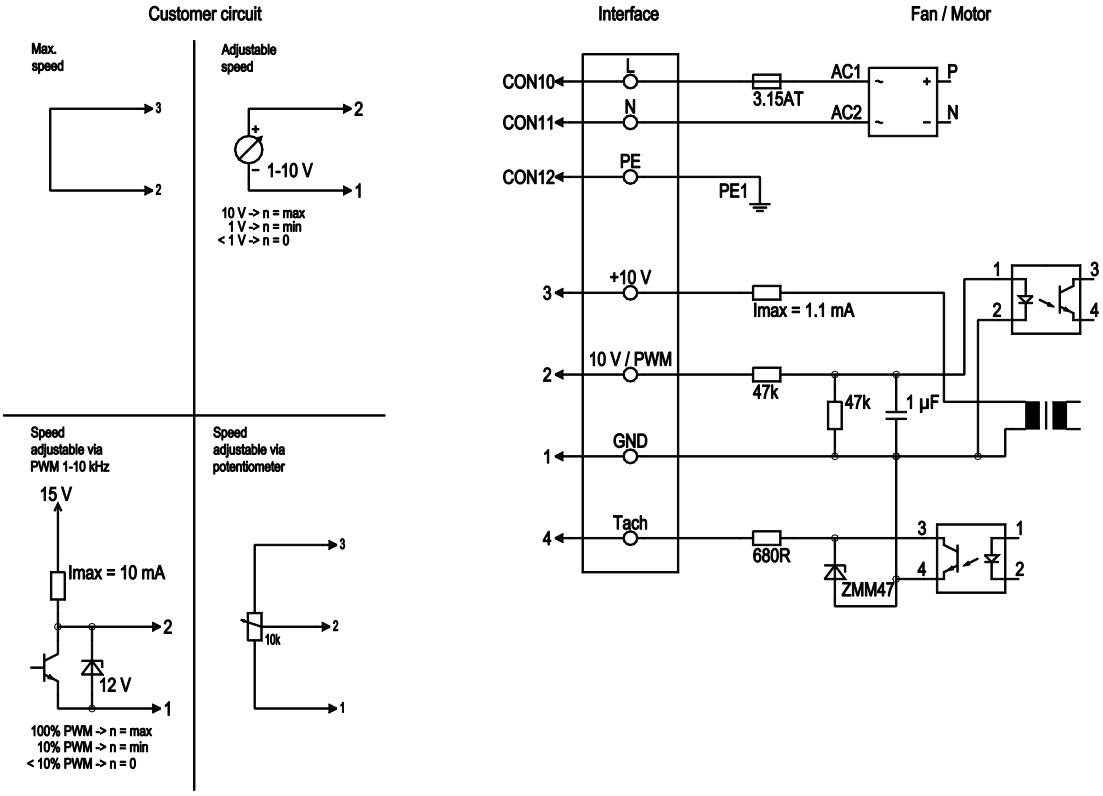
1	Accessory part: inlet ring 96358-2-4013 not included in scope of delivery
2	Max. clearance for screw 5 mm
3	Cable PVC 3x AWG20, 3x crimped splices
4	Cable 4x AWG22, connector housing Molex no. 43025-04000
4.1	white
4.2	blue
4.3	empty
4.4	yellow

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Connection diagram



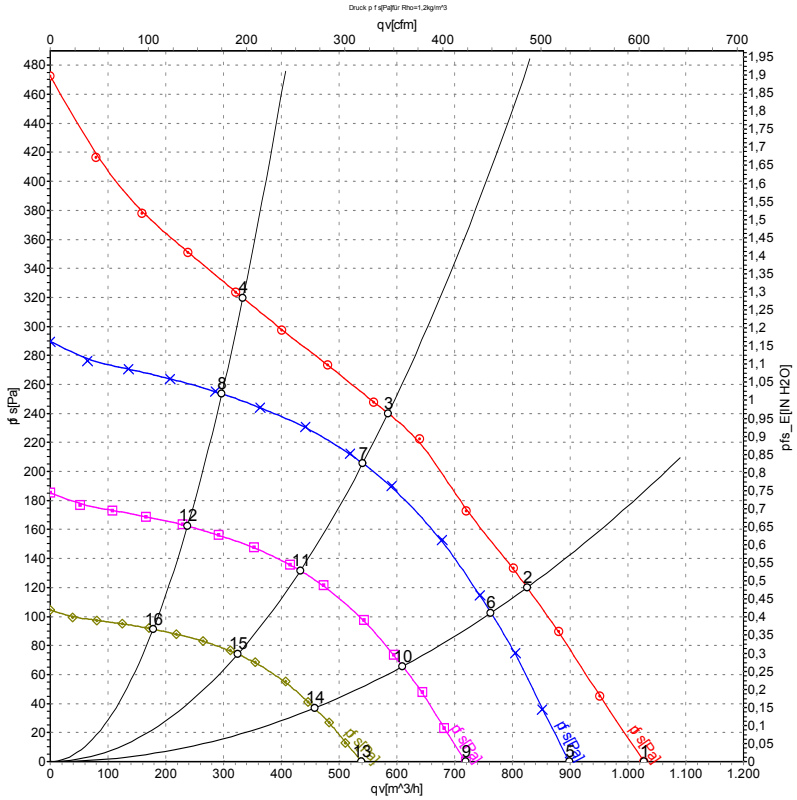
No.	Conn.	Designation	Color	Function/assignment
	CON10	L	black	Power supply 230 VAC, 50-60 Hz, see nameplate for voltage range
	CON11	N	blue	Neutral conductor
	CON12	PE	green/yellow	Protective earth
	1	GND	blue	GND connection for control interface
	2	0-10V PWM	yellow	Control input 0-10 V or PWM, electrically isolated
	3	10 V / max. 1,1 mA	red	Voltage output 10 VDC 1.1 mA, electrically isolated, short-circuit-proof
	4	Tacho	white	Tach output: open collector, 1 pulse per revolution, electrically isolated

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Curves: Air performance 50 Hz



Measurement: LU-128059-1

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	LpA_{in}	LwA_{in}	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	CFM	inH2O
1	230	50	2285	70	0.62	62	69	1030	0	605	0.00
2	230	50	2165	77	0.66	57	64	825	120	485	0.48
3	230	50	2200	82	0.70	52	60	585	240	345	0.96
4	230	50	2245	72	0.61	59	67	335	320	195	1.28
5	230	50	2000	47	0.41	59	66	900	0	530	0.00
6	230	50	2000	62	0.52	55	63	765	102	450	0.41
7	230	50	2000	62	0.52	51	58	540	206	320	0.83
8	230	50	2000	51	0.44	56	65	295	254	175	1.02
9	230	50	1600	24	0.21	54	62	720	0	425	0.00
10	230	50	1600	32	0.27	50	58	610	66	360	0.26
11	230	50	1600	32	0.27	46	54	435	132	255	0.53
12	230	50	1600	26	0.22	51	60	240	162	140	0.65
13	230	50	1200	10	0.09	48	55	540	0	315	0.00
14	230	50	1200	13	0.11	44	52	460	37	270	0.15
15	230	50	1200	13	0.11	39	47	325	74	190	0.30
16	230	50	1200	11	0.09	45	53	180	91	105	0.37

U = Power supply · f = Frequency · n = Speed (rpm) · 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

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