

R1G225-RD59-02

EC centrifugal fan - RadiCal

backward-curved, single-intake



R1G225-RD59-02 ebmpapst Datasheet

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Nominal data

Type	R1G225-RD59-02	
Motor	M1G074-BF	
Nominal voltage	VDC	12
Nominal voltage range	VDC	8 .. 16
Method of obtaining data		fa
Status		prelim.
Speed (rpm)	min ⁻¹	2350
Power consumption	W	85
Current draw	A	8.0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	70

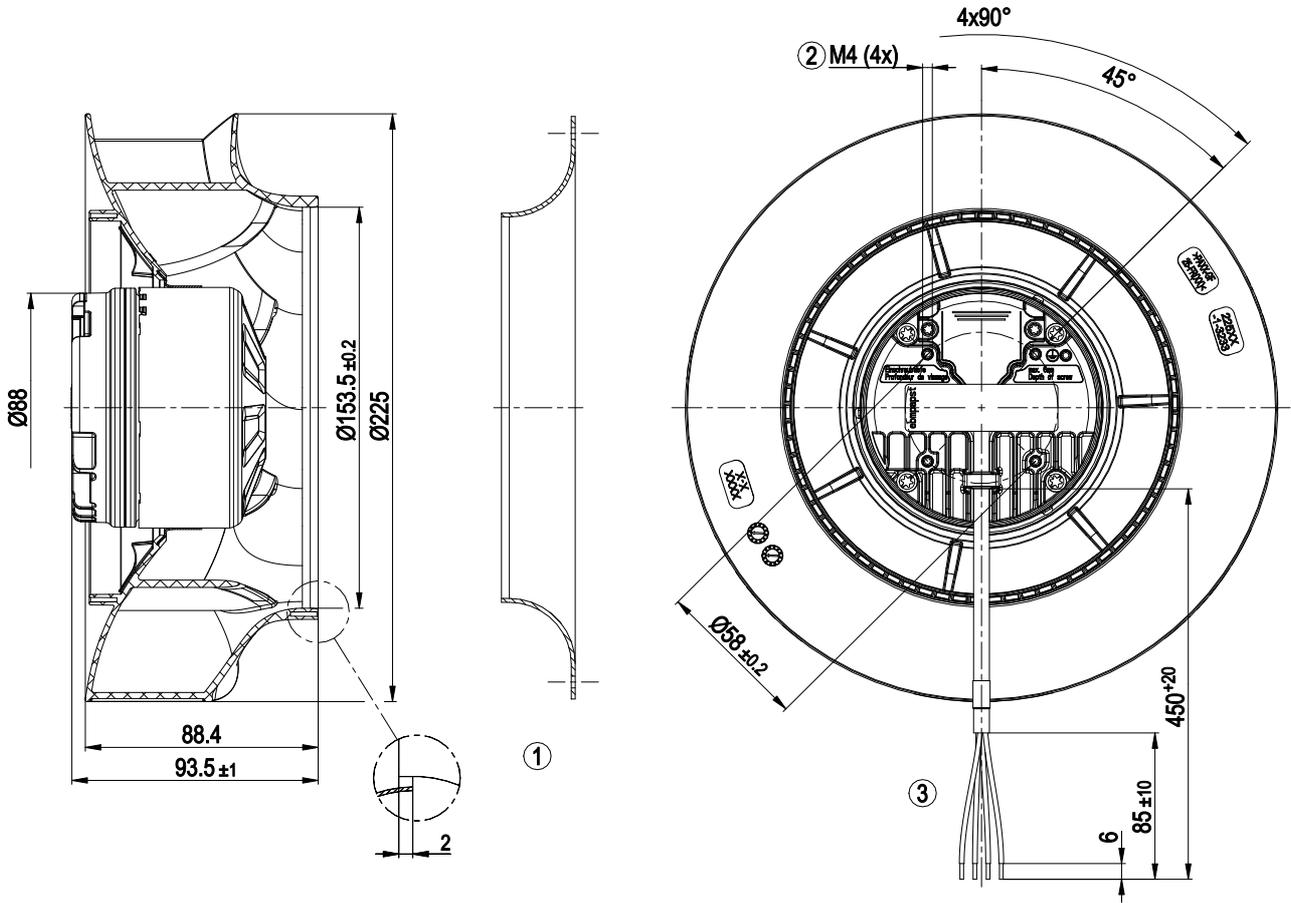
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change



Technical description

Weight	1.6 kg
Size	225 mm
Motor size	74
Rotor surface	Galvanized
Electronics housing material	Die-cast aluminum, painted black
Impeller material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	Motor IP24 KM, electronics IP6K9K (mating connector installed)
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H2+
Max. permitted ambient temp. for motor (transport/storage)	+80 °C
Min. permitted ambient temp. for motor (transport/storage)	-40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing; (sealed)
Technical features	<ul style="list-style-type: none"> - Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Overvoltage detection - Reverse polarity protection
With cable	Axial
Protection class assignment	<p>III; Requires supply with safety extra-low voltage SELV.</p> <p>This component for installation may have several local protection classes. This information relates to this component's basic design.</p> <p>The final protection class is based on the component's intended installation and connection.</p>
Approval	EAC; CSA C22.2 No. 113; UL 507

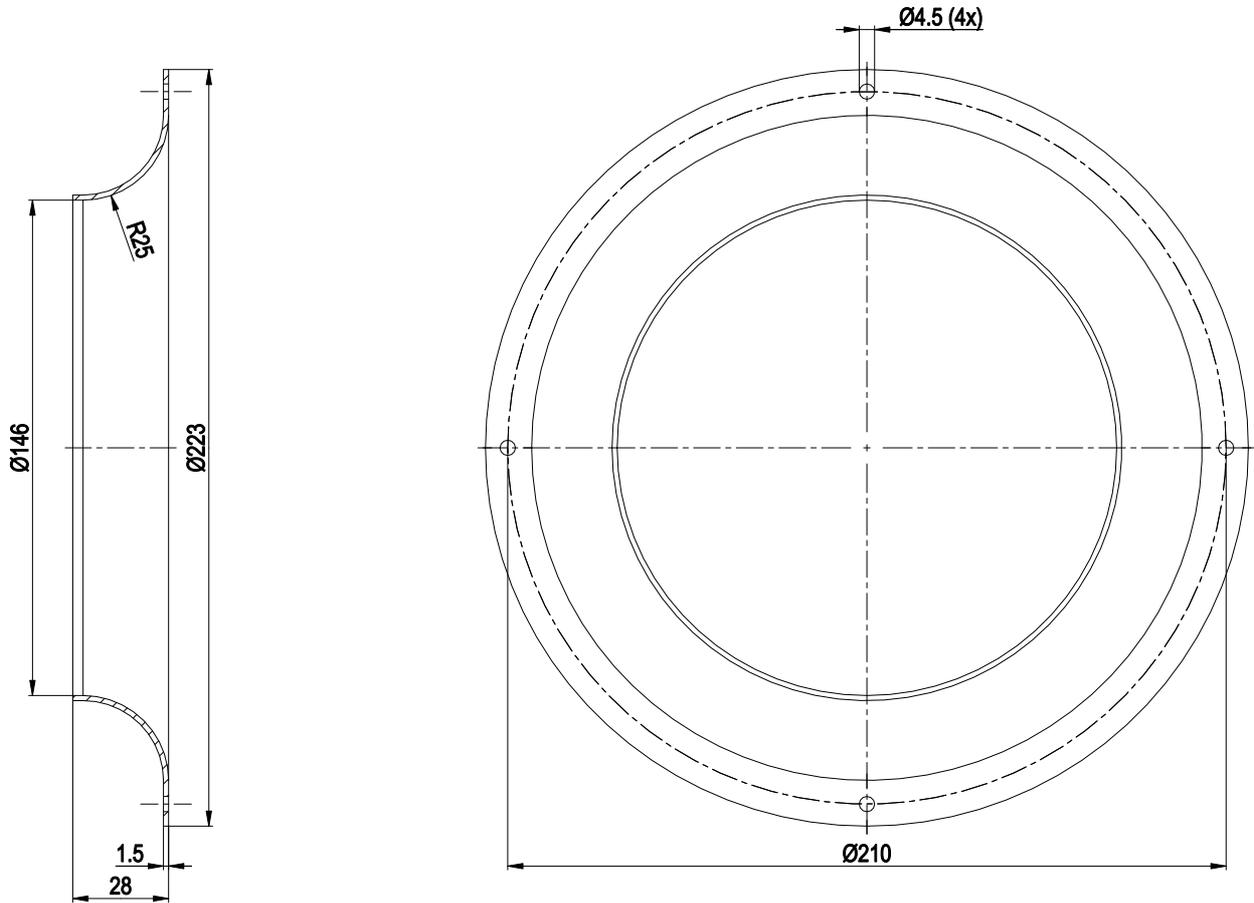
Product drawing



1	Accessory part: inlet ring 96358-2-4013 not included in scope of delivery
2	Max. clearance for screw 6 mm
3	Cable PVC 4x AWG18, insulating hose
	4x splice

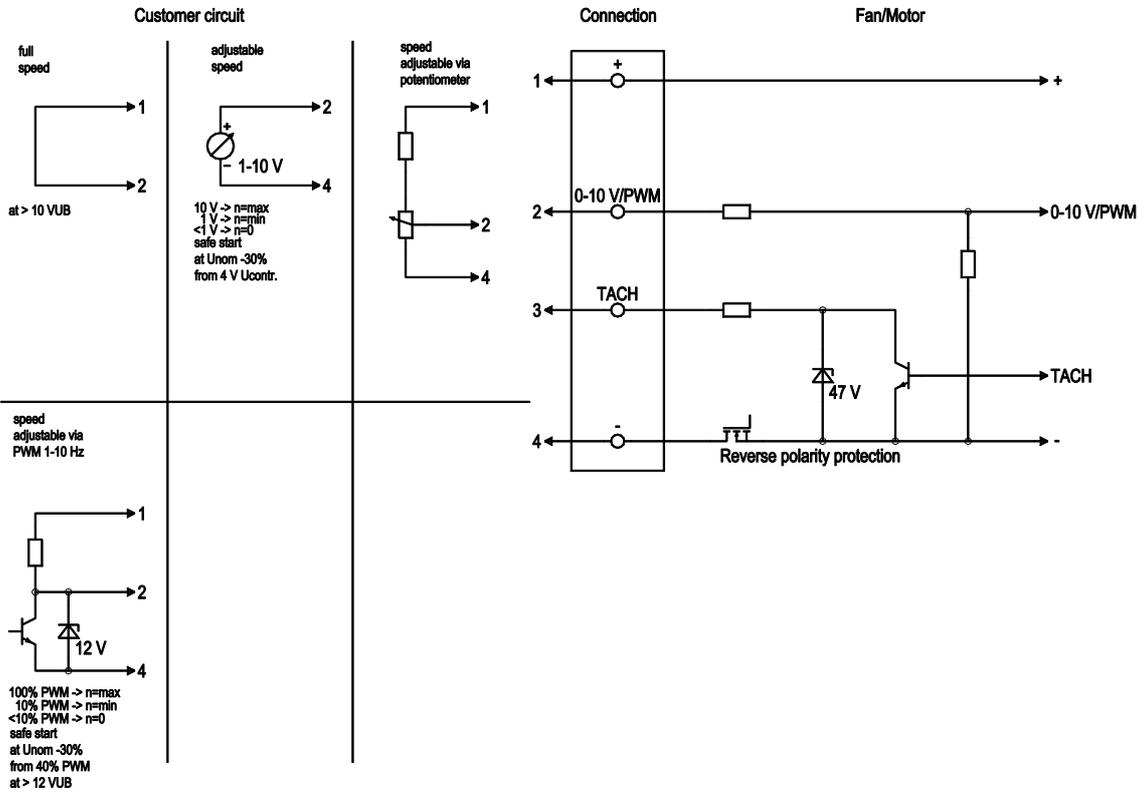


Accessory part



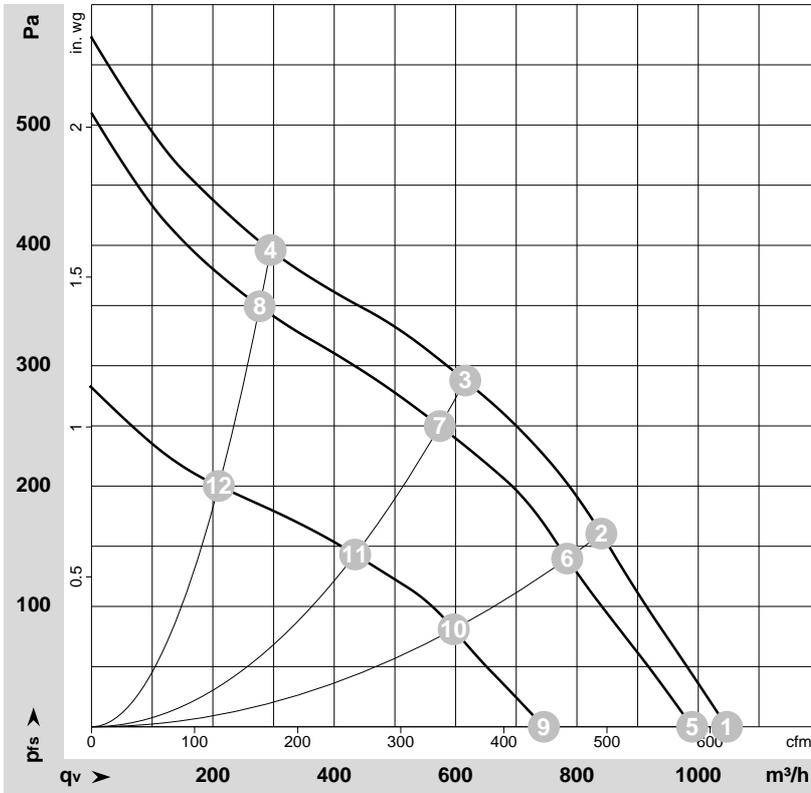
Inlet ring 96358-2-4013 not included in scope of delivery

Connection diagram



No.	Conn.	Designation	Color	Function/assignment
1	Un +12VDC		red	Power supply 12 VDC, see nameplate for voltage range, maximum ripple 3.5%
2	PWM/LIN		yellow	Control input Re > 40k (PWM 1-10 kHz / 0-10 V)
3	Tacho		white	Tach output, 3 pulses per revolution, Isink max = 10 mA
4	GND		blue	Reference ground

Curves: Air performance



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-184582-1
 Measurement: LU-184545-1
 Measurement: LU-184581-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. 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	n	P _{ed}	I	q _v	p _{fs}	q _v	p _{fs}
	V	min ⁻¹	W	A	m ³ /h	Pa	cfm	in. wg
1	16	2490	100	7.89	1045	0	615	0.00
2	16	2410	105	8.37	840	161	495	0.65
3	16	2405	108	8.57	615	288	365	1.16
4	16	2530	98	7.69	295	395	175	1.59
5	12	2350	85	8.00	990	0	585	0.00
6	12	2245	89	8.54	785	140	460	0.56
7	12	2245	89	8.56	575	250	340	1.00
8	12	2380	82	7.80	275	350	165	1.41
9	8	1780	39	5.64	745	0	440	0.00
10	8	1720	41	5.98	595	81	350	0.33
11	8	1715	41	5.98	435	143	255	0.57
12	8	1805	38	5.50	210	200	125	0.80

U = Voltage · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase

