R1G250-RC75-03

EC centrifugal fan - RadiCal

forward-curved, single-intake

Automotive



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Nominal data

Type	**R1G250-RC75-03**	
Motor	**M1G074-CF**	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Method of obtaining data		fa
Status		prelim.
Speed	min^{-1}	2550
Power consumption	W	130
Current draw	A	7.1
Min. ambient temperature	°C	-40
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	2.0 kg
Fan size	250 mm
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	IP24 KM; Electronics IP66 / 69K
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H4
Ambient temperature note	Occasional start-up between -40°C and -25°C is permissible. For continuous operation at temperatures below -25°C (e.g. refrigeration applications) we recommend our fan design with special low-temperature bearings.
Max. permitted ambient temp. for motor (transport/storage)	+70 °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 storage	Ball bearing; (sealed)
Technical features	- Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Overvoltage detection - Thermal overload protection for electronics
Motor protection	Reverse polarity and locked-rotor protection
With cable	Axial
Approval	EAC

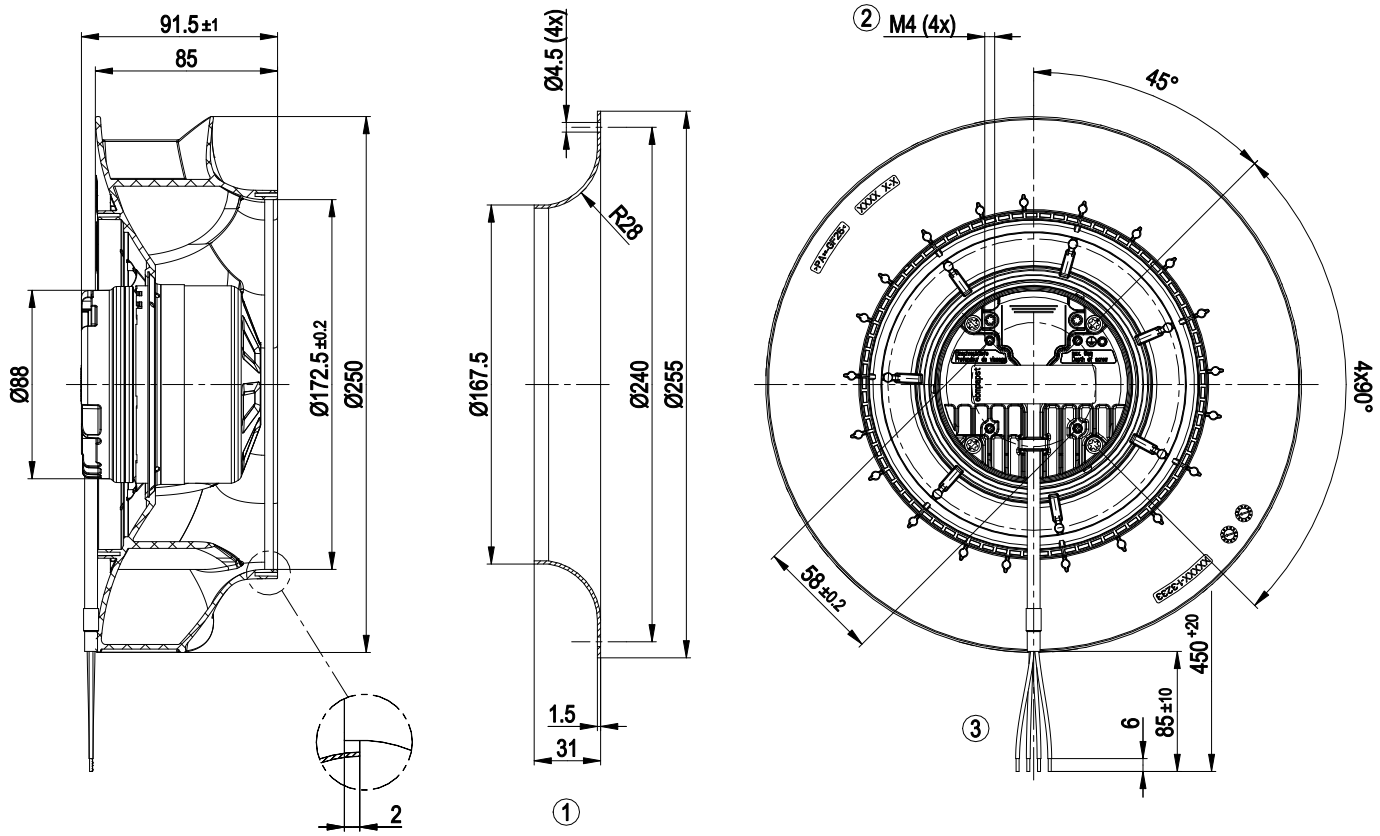
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Product drawing



1	Accessory part: inlet ring 96359-2-4013 not included in scope of delivery
2	Max. clearance for screw 6 mm
3	Cable FLRYW 4x 0.75 mm², 4x crimped splices

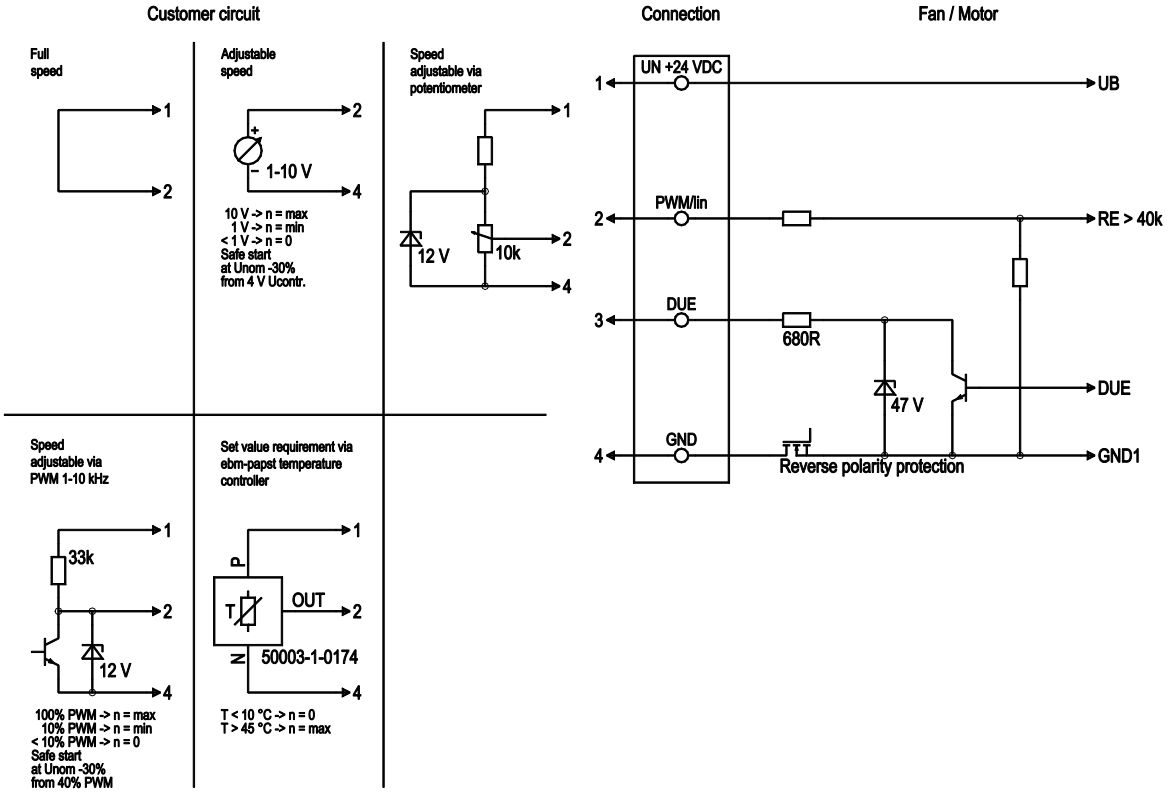
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	1	UN +24 VDC	red	Power supply 24 VDC, maximum ripple 3.5%
	2	PWM/LIN	yellow	Control input Re > 40k
	3	DUE	white	Tach output, 3 pulses per revolution, Isink max = 10 mA
	4	GND	blue	Reference ground

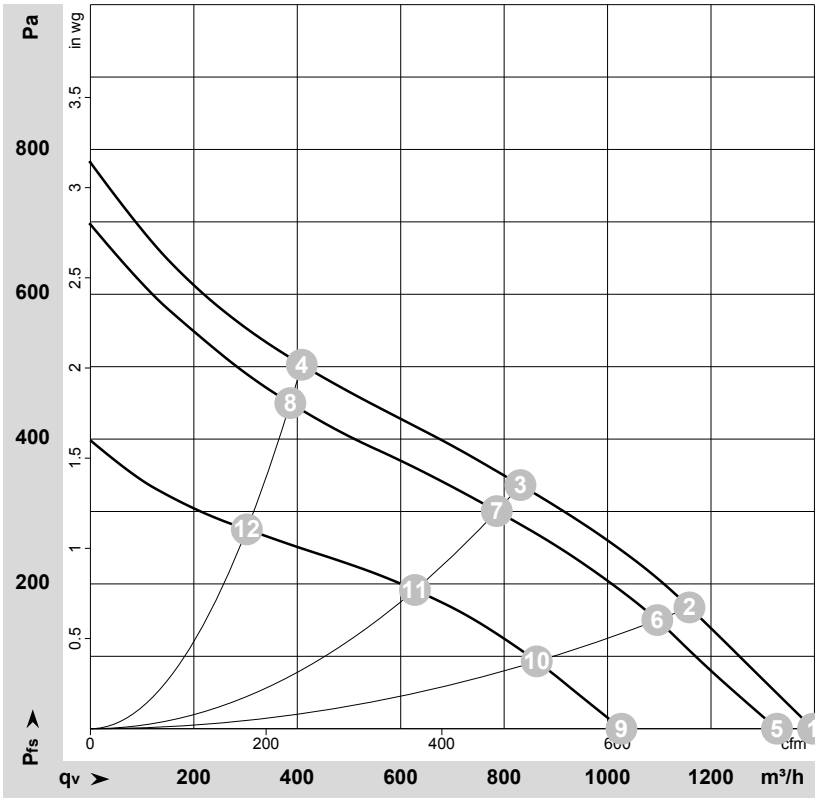
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Curves: Air performance



ρ = 1,15 kg/m³ ± 2%

Measurement: LU-164866
Measurement: LU-164801
Measurement: LU-164863

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	n	P_{ed}	I	LpA_{in}	LwA_{in}	qv	p_{fs}
	V	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa
1	28	2695	153	7.84			1395	0
2	28	2580	162	8.43			1160	168
3	28	2510	164	8.66			830	337
4	28	2655	157	8.07			410	502
5	24	2550	130	7.10	68	76	1325	0
6	24	2440	131	7.46	64	71	1095	150
7	24	2370	134	7.74	61	69	785	300
8	24	2510	129	7.22	65	73	385	450
9	16	1980	59	4.78			1025	0
10	16	1925	63	5.11			865	93
11	16	1895	67	5.38			630	192
12	16	1965	60	4.88			300	275

U = Power supply · 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

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