R1G250-AQ21-42

EC centrifugal fan

backward curved, single inlet

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Nominal data

Type	**R1G250-AQ21-42**	
Motor	**M1G074-CF**	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Type of data definition		fa
Speed (rpm)	min^{-1}	2540
Power input	W	93
Current draw	A	4.3
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

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Technical features

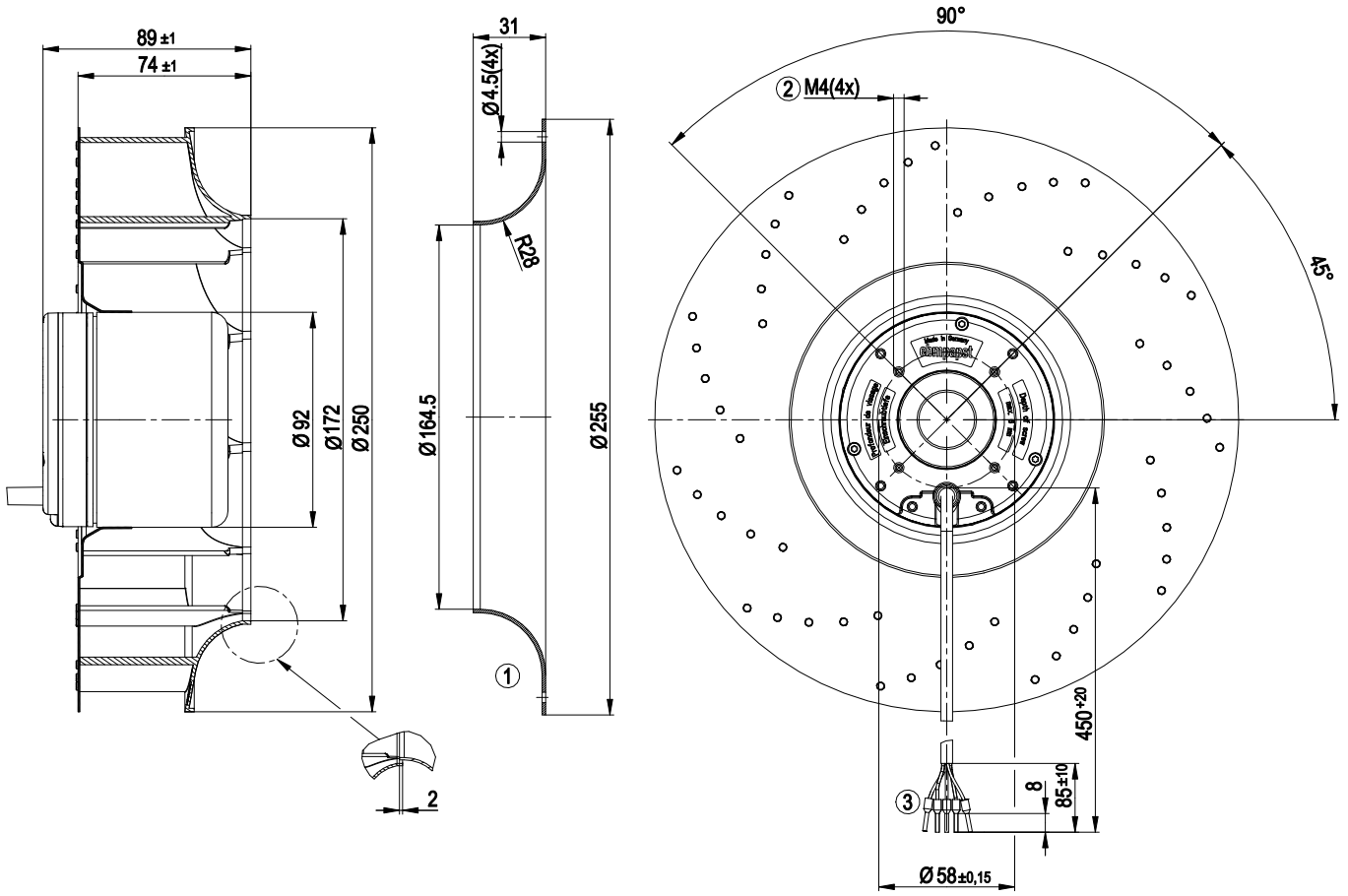
Mass	2.2 kg
Size	250 mm
Material of impeller	Plastic impeller made of PA 6.6 GV, round sheet-metal plate
Number of blades	11
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44
Insulation class	"B"
Humidity (F)/environmental protection class (H)	F5
Mounting position	Shaft horizontal or rotor on bottom
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Technical features	Control input 0-10 VDC / PWM, tach output
Motor protection	Reverse polarity and locked-rotor protection
Cable exit	Variable
Approval	EAC; CSA C22.2 No.77; UL 1004-1

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Product drawing



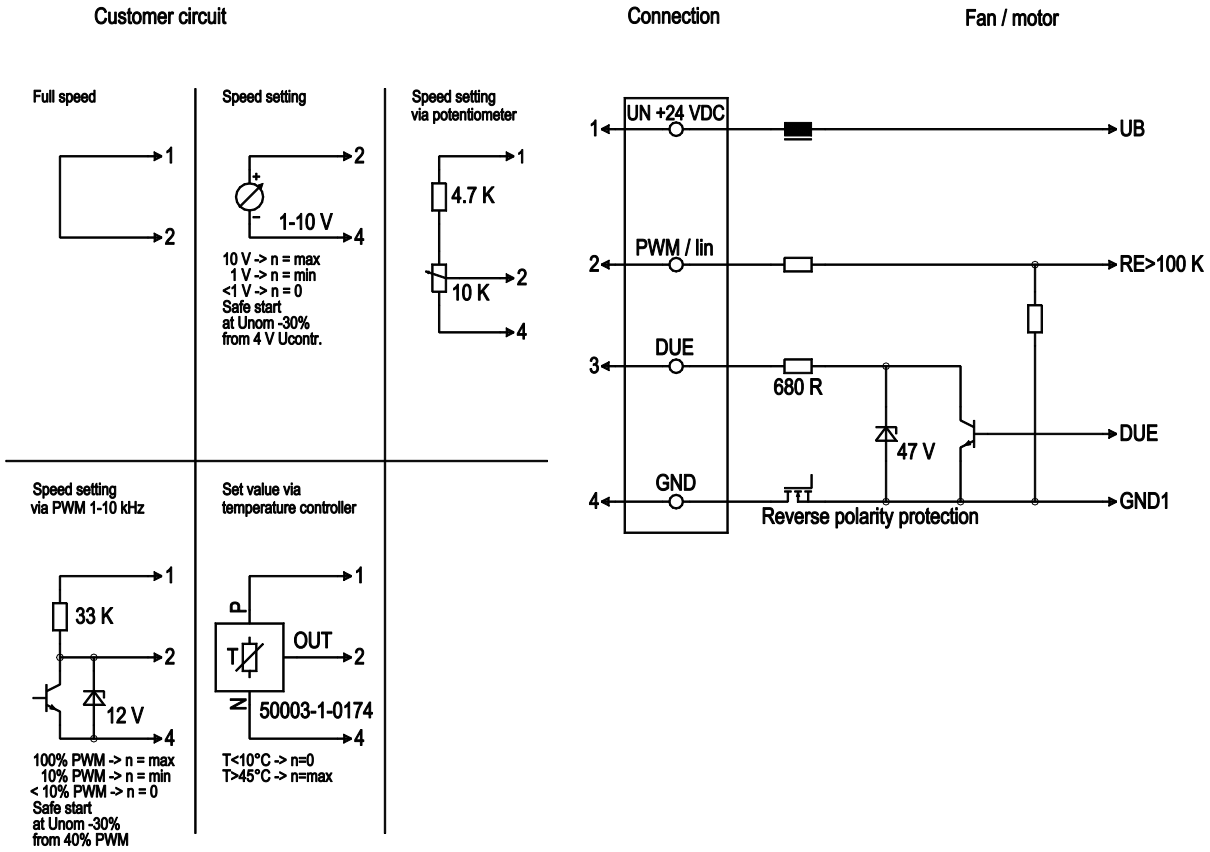
1	Accessory part: inlet nozzle 96359-2-4013 not included in the standard scope of delivery; other inlet nozzles on request
2	Depth of screw max. 6 mm
3	Connection line AWG 20, 4 x brass lead tips crimped

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Connection screen



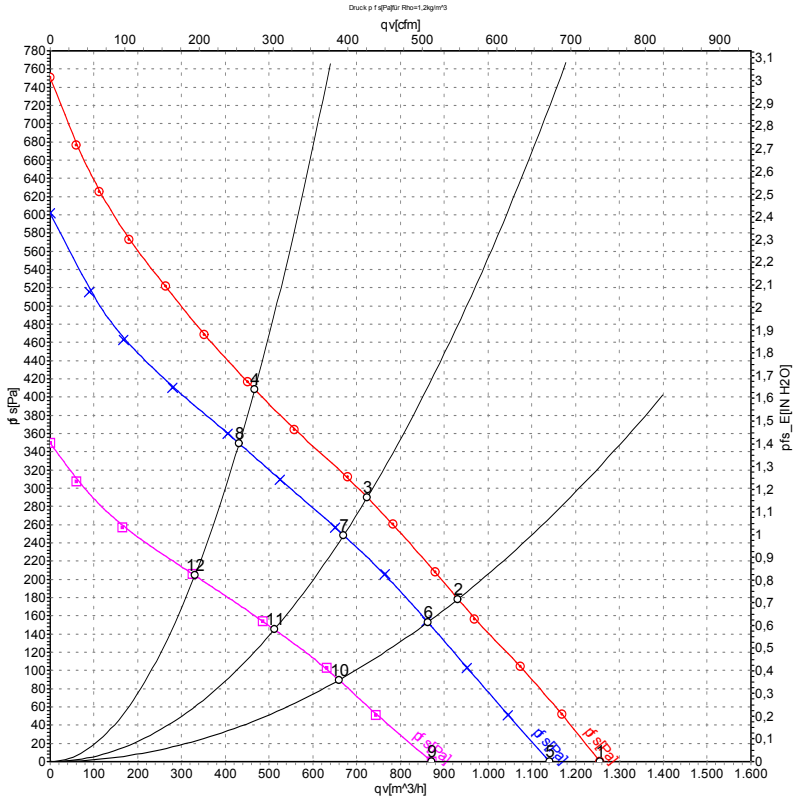
No.	Conn.	Designation	Colour	Function / assignment
1	1	Un +24V	red	Power supply 24 VDC, residual ripple 3.5 %
1	2	PWM / lin	yellow	PWM / lin, control input, 0-10 V
1	3	Tach	white	Speed monitoring output, 3 pulses per revolution, Isink max = 10 mA
1	4	GND	blue	Reference mass

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Charts: Air flow



Measurement: LU-43855-1
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Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	U	n	P_{ed}	I	qv	p_{fs}	qv	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	28	2795	124	4.92	1255	0	740	0.00
2	28	2560	132	5.34	930	178	550	0.71
3	28	2505	134	5.43	725	290	425	1.16
4	28	2550	132	5.33	465	408	275	1.64
5	24	2540	93	4.30	1140	0	670	0.00
6	24	2370	105	4.90	860	150	505	0.60
7	24	2330	108	5.02	670	250	395	1.00
8	24	2375	106	4.91	430	350	255	1.41
9	16	1935	42	3.08	870	0	515	0.00
10	16	1825	49	3.47	660	90	390	0.36
11	16	1795	50	3.57	510	145	300	0.58
12	16	1820	49	3.47	330	204	195	0.82

U = Supply voltage · n = Speed (rpm) · P_{ed} = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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