

R1G250-AQ21-42

EC centrifugal fan

backward-curved, single-intake

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General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	R1G250-AQ21-42		
Motor	M1G074-CF		
Nominal voltage	VDC	24	
Nominal voltage range	VDC	16 .. 28	
Method of obtaining data		fa	
Speed (rpm)	min ⁻¹	2540	
Power consumption	W	93	
Current draw	A	4.3	
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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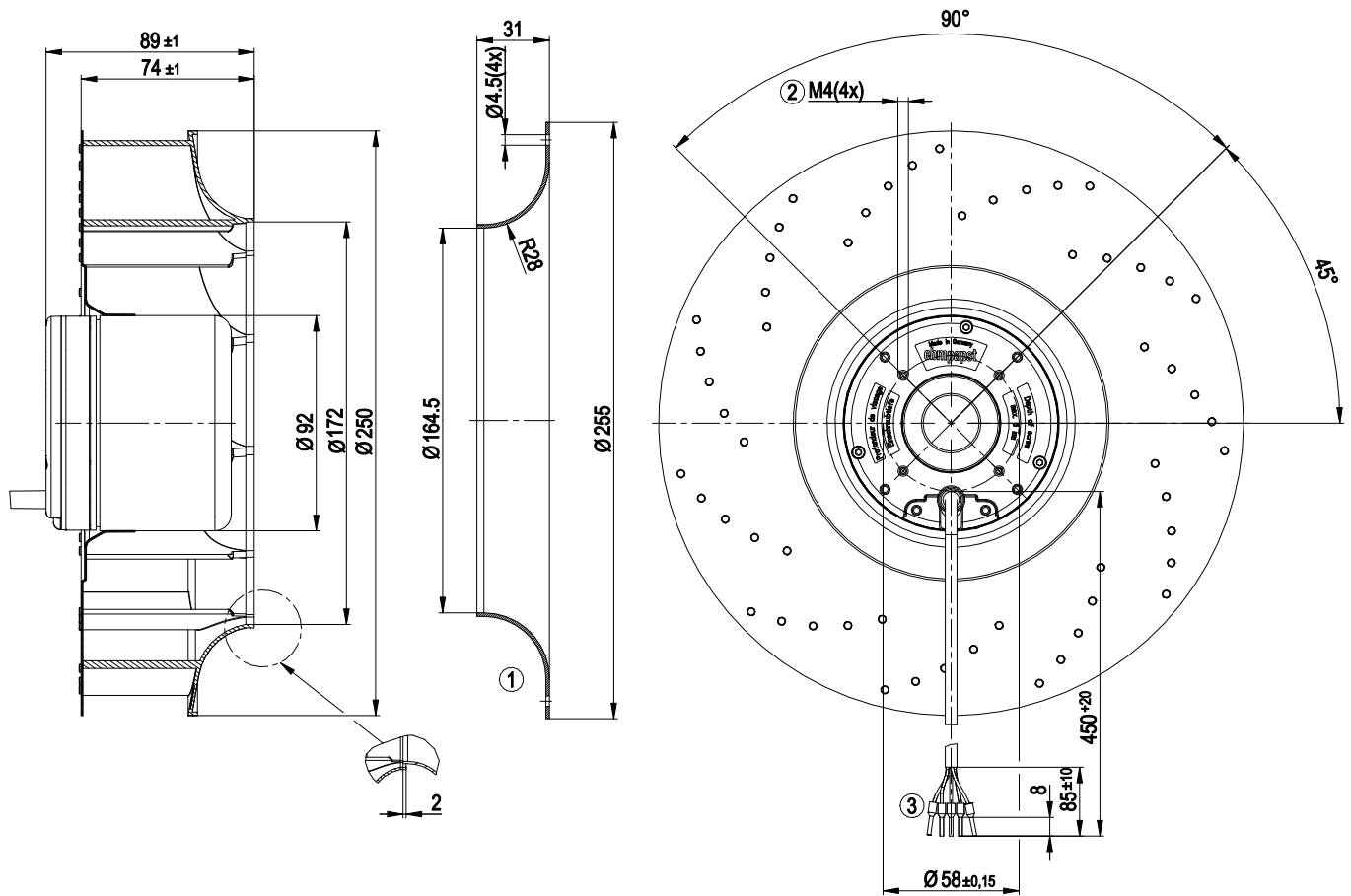
backward-curved, single-intake

Technical description

Weight	2.2 kg
Size	250 mm
Motor size	74
Impeller material	Impeller made of PA 6.6 GV plastic, sheet-metal plate
Number of blades	11
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F5
Installation position	Shaft horizontal or rotor on bottom
Condensation drainage holes	On rotor side
Mode	S1
Motor mounting	Ball bearing
Technical features	Control input 0-10 VDC / PWM, tach output
Motor protection	Reverse polarity and locked-rotor protection
With cable	Variable
Approval	EAC; CSA C22.2 No. 77; UL 1004-1

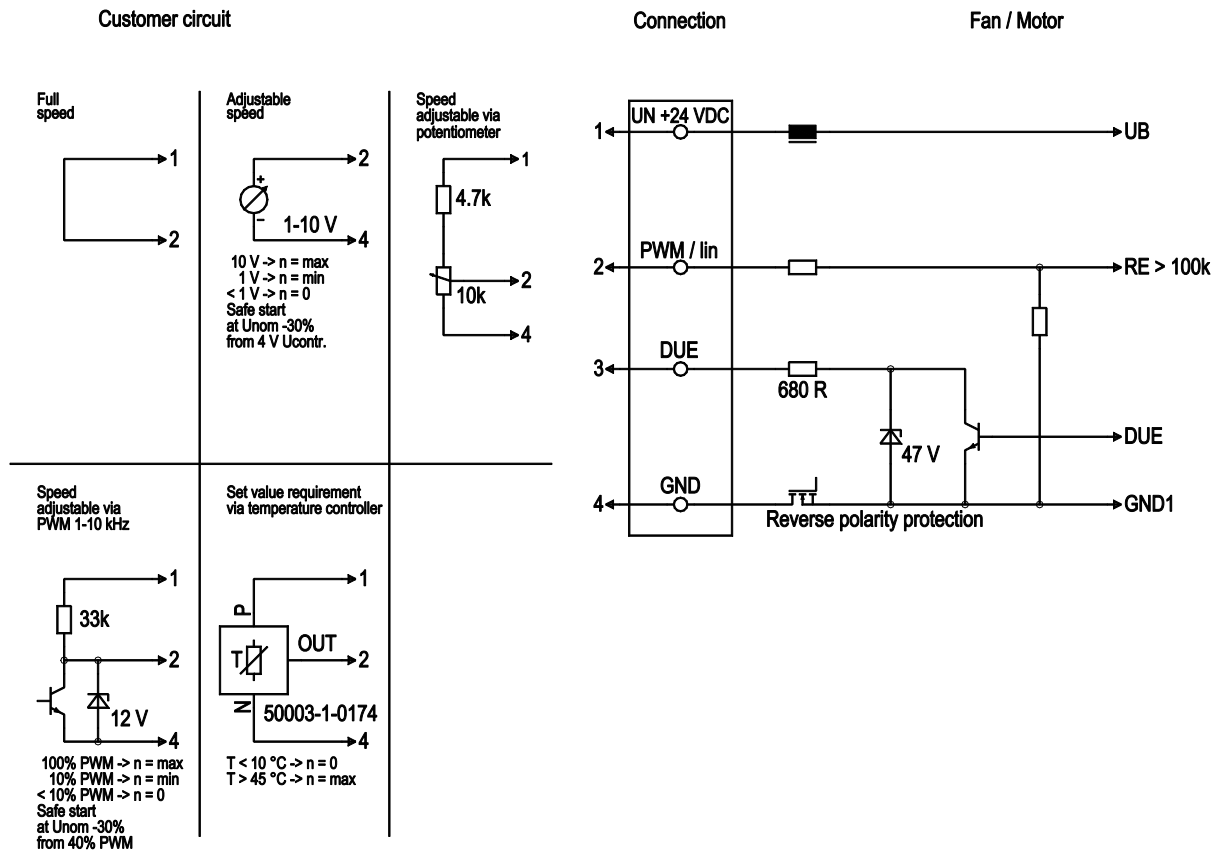
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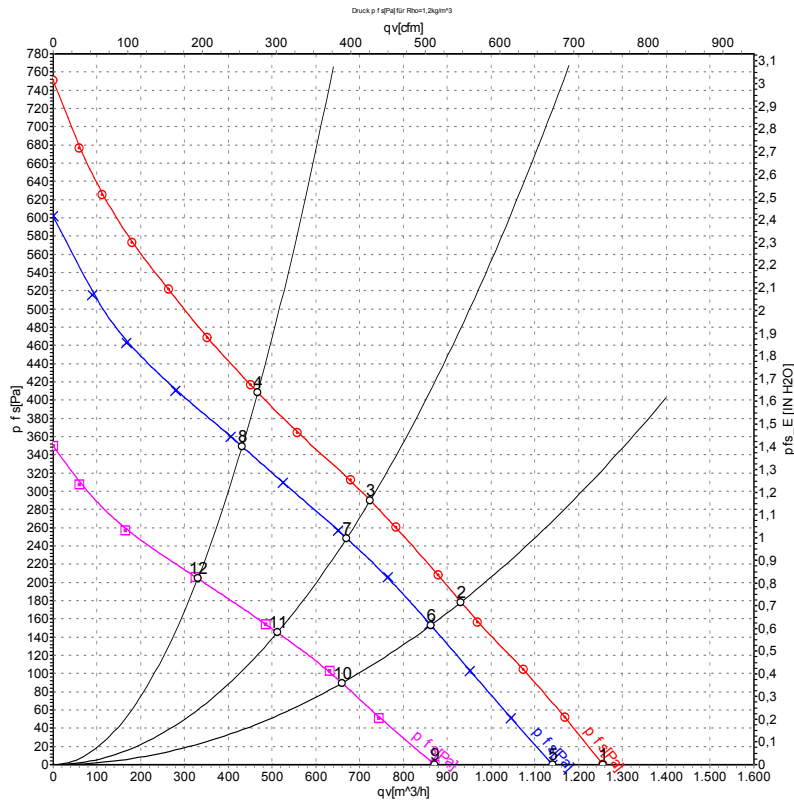
- | | |
|---|---|
| 1 | Accessory part: Inlet ring 96359-2-4013 not included in scope of delivery; other inlet rings on request |
| 2 | Max. clearance for screw 6 mm |
| 3 | Cable AWG 20, 4 x crimped splices |

Connection diagram



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

Curves: Air performance



Measurement: LU-43855-1
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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	q _V	P _{fs}	q _V	P _{fs}
	V	min ⁻¹	W	A	m ³ /h	Pa	cfm	in. wg
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 = Power supply · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase