R1G250-AQ37-52

EC centrifugal fan

backward curved, single inlet



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Nominal data

Type	**R1G250-AQ37-52**	
Motor	**M1G074-CF**	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Type of data definition		fa
Speed (rpm)	min^{-1}	2600
Power input	W	105
Current draw	A	2.55
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

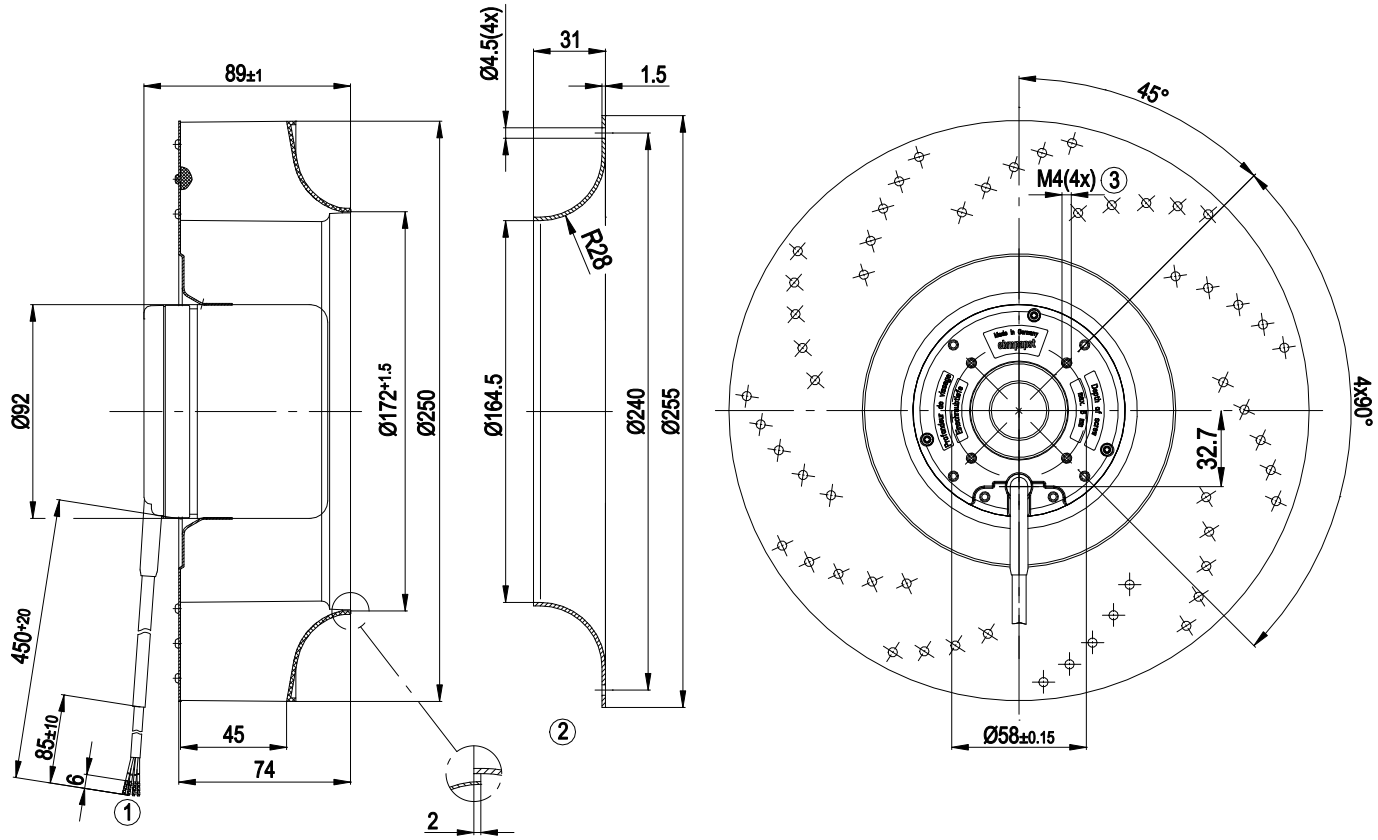
Mass	2 kg
Size	250 mm
Surface of rotor	Coated in black
Material of impeller	Plastic PA66, fibreglass-reinforced
Number of blades	11
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 42
Insulation class	"B"
Humidity (F)/environmental protection class (H)	F0
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Any
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limit - Soft start - Control input 0-10 VDC / PWM
Motor protection	Reverse polarity and locked-rotor protection
Cable exit	Variable
Product conforming to standard	EN 60950-1
Approval	CCC; EAC; UL 1004-1; CSA C22.2 No.77

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Product drawing



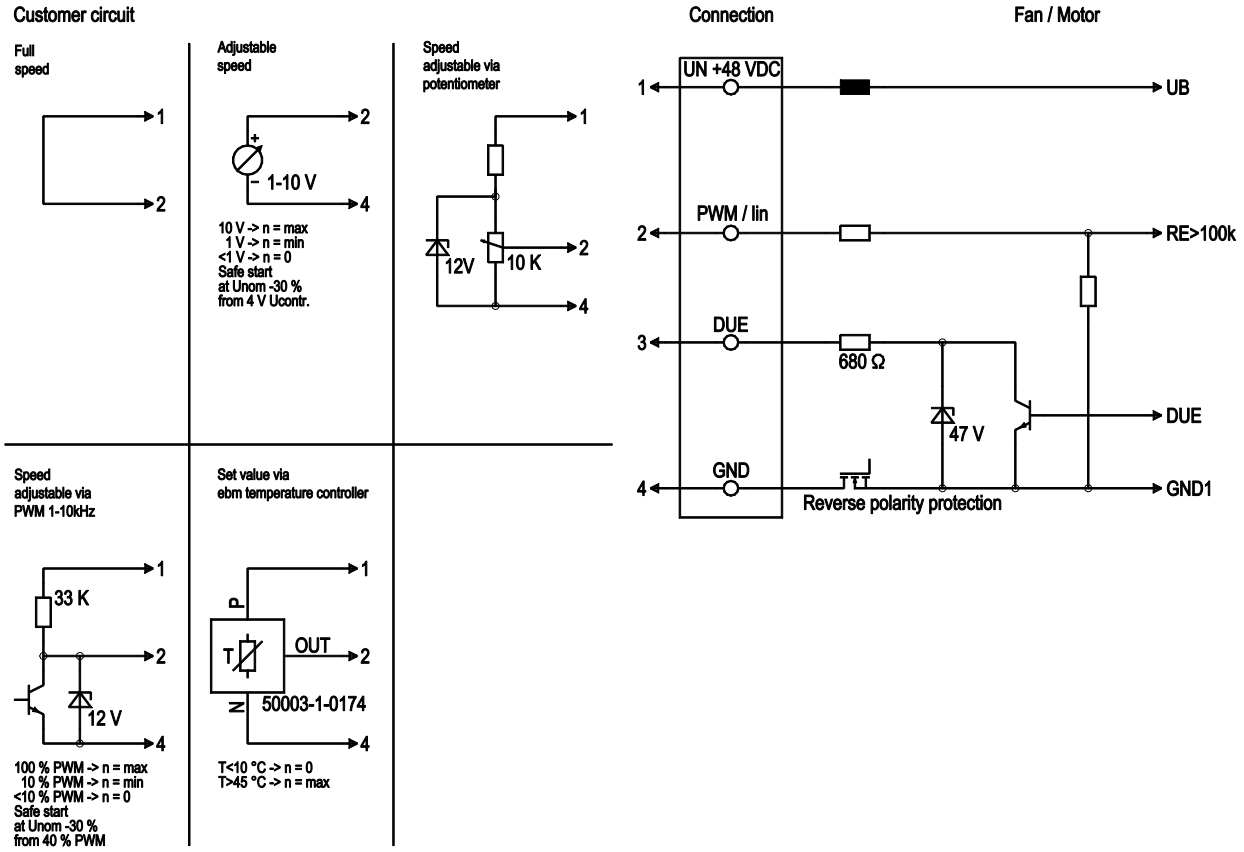
1	Connection line AWG 20, 4 x brass lead tips crimped
2	Accessory part: inlet nozzle 96359-2-4013 not included in the standard scope of delivery; other inlet nozzles on request
3	Depth of screw max. 6 mm

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Connection screen



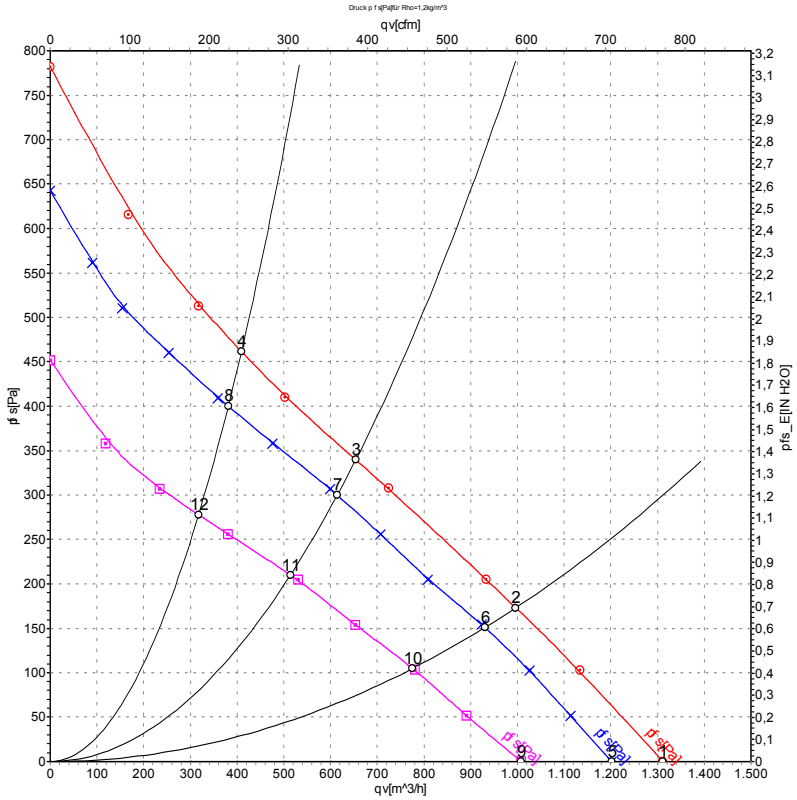
No.	Conn.	Designation	Colour	Function / assignment
1	1	Un +48 VDC	red	Power supply 48 VDC, residual ripple 3.5 %
1	2	PWM / lin	yellow	PWM / lin. control input, 0-10 V
1	3	Tach	white	Speed monitoring output, 3 pulses per rotation, Isink max = 10 mA
1	4	GND	blue	Reference mass

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Charts: Air flow



Measurement: LU-47074-1
Measurement: LU-47073-1
Measurement: LU-47075-1

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	56	2850	134	2.78	1310	0	770	0.00
2	56	2625	139	2.93	995	173	585	0.69
3	56	2550	141	2.98	655	340	385	1.36
4	56	2650	138	2.91	410	461	240	1.85
5	48	2600	105	2.55	1200	0	705	0.00
6	48	2450	114	2.74	930	150	545	0.60
7	48	2380	116	2.81	615	300	360	1.20
8	48	2460	113	2.71	380	400	225	1.61
9	36	2180	60	1.94	1010	0	595	0.00
10	36	2040	67	2.16	775	106	455	0.43
11	36	2005	70	2.24	515	210	305	0.84
12	36	2060	66	2.13	320	278	185	1.12

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

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