R1G220-RB73-10

EC centrifugal fan - RadiCal

backward curved, single inlet

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Nominal data

Type	**R1G220-RB73-10**	
Motor	**M1G074-BF**	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Type of data definition		fa
Speed (rpm)	min^{-1}	3050
Power input	W	105
Current draw	A	2.6
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

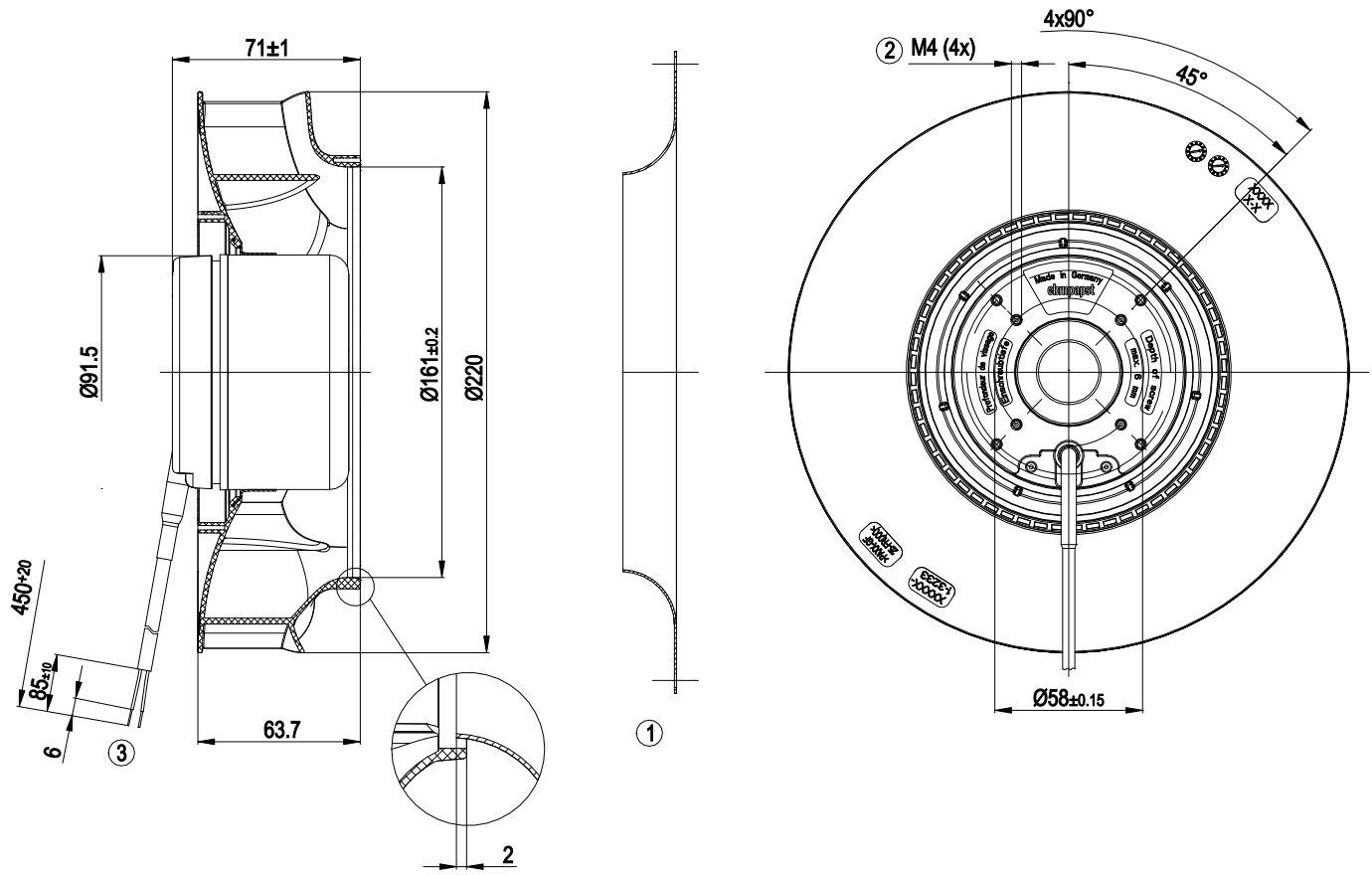
Mass	1.5 kg
Size	220 mm
Motor size	74
Surface of rotor	Coated in black
Material of impeller	PA plastic
Number of blades	7
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP42; Depending on installation and position
Insulation class	"B"
Humidity (F) / environmental protection class (H)	H0 - dry environment
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Any
Condensation drainage 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
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60950-1
Approval	EAC; UL 1004-1; CSA C22.2 no. 100

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Product drawing



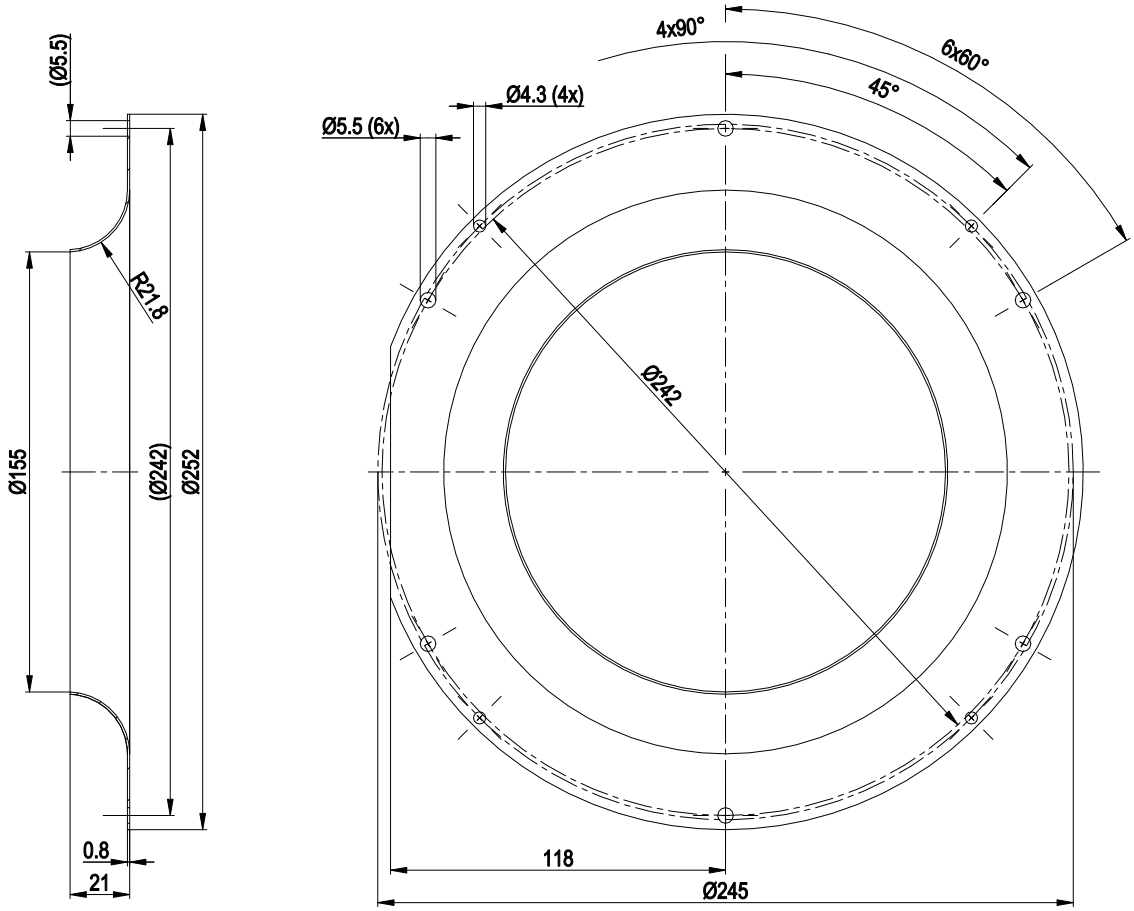
1	Accessory part: Inlet nozzle 09609-2-4013 not included in scope of delivery
2	Thread reach max. 6 mm
3	Connection line PVC AWG20, 4x lead tips crimped

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Accessory part

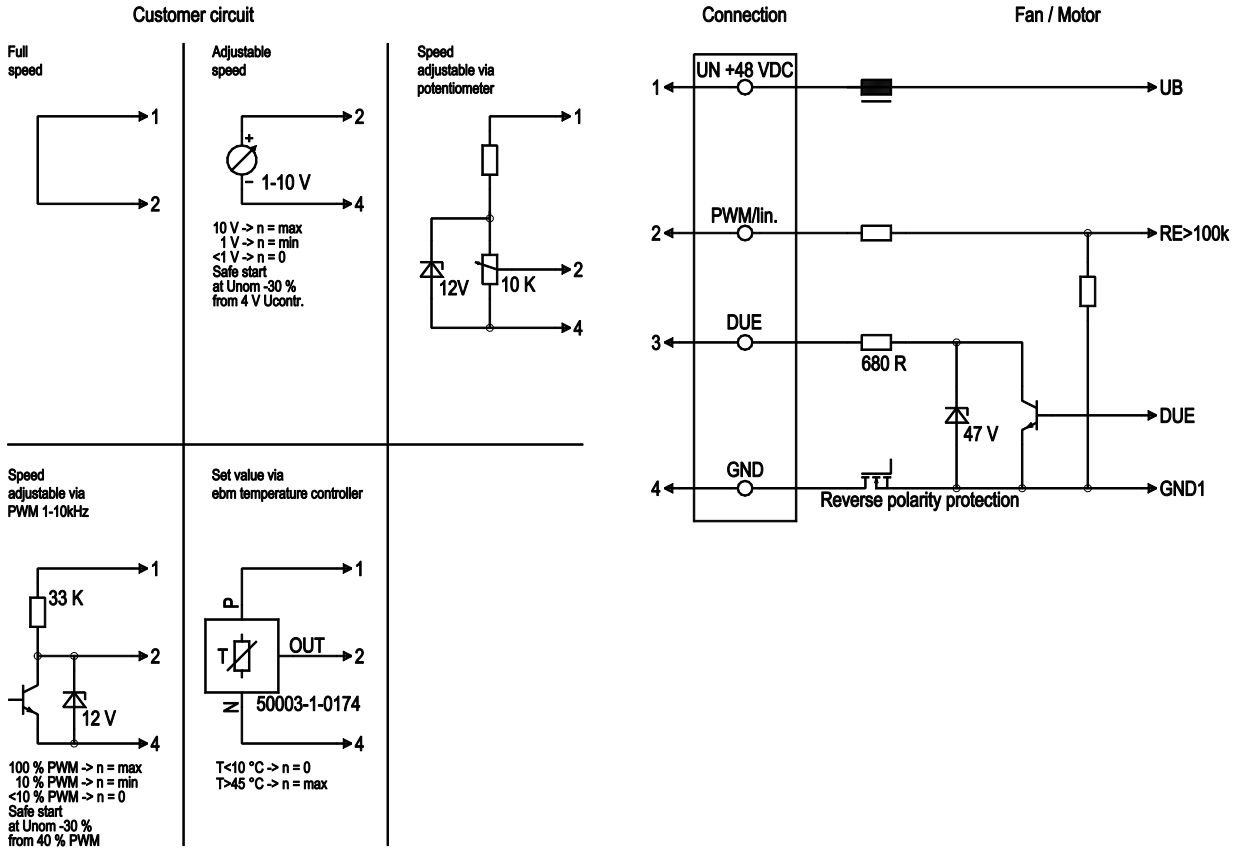


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Connection screen



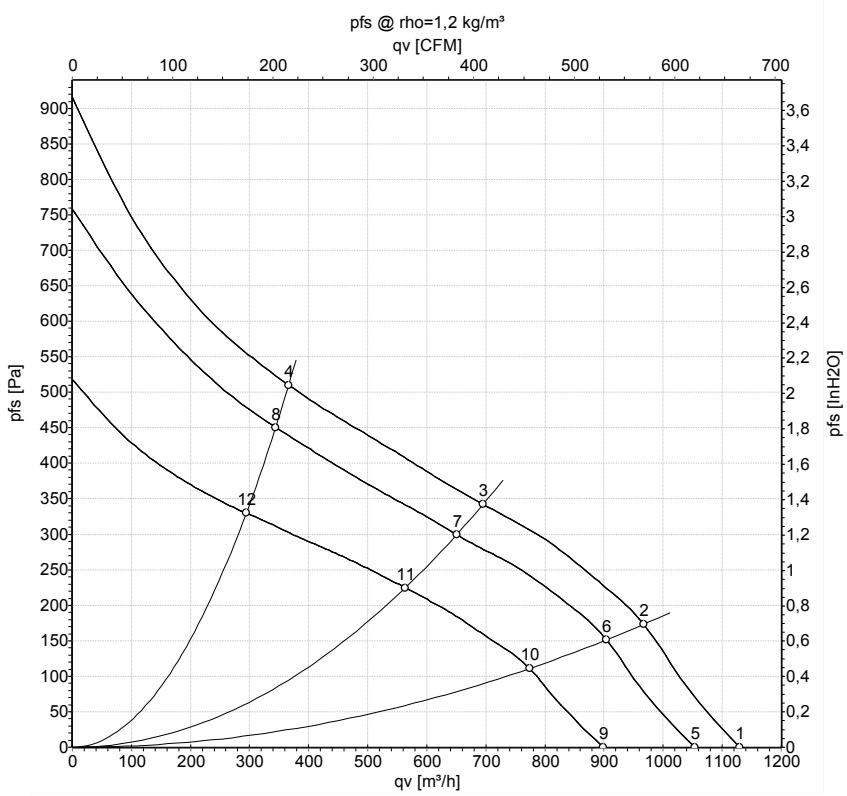
No.	Conn.	Designation	Colour	Function / assignment
1	1	Un +48 VDC	red	Power supply 48 VDC, residual ripple 3.5 %
1	2	0-10 VDC	yellow	Control input Re > 100 K
1	3	Tach	white	Speed monitoring output, 3 pulses per rotation, Isink max = 10 mA
1	4	GND	blue	Reference mass

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Charts: Air flow



Measurement: LU-164530-1
Measurement: LU-164427-1
Measurement: LU-164529-1

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	q_V	p_{fs}	q_V	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	57	3250	129	2.78	1130	0	665	0.00
2	57	3170	131	2.85	965	180	570	0.72
3	57	3040	133	2.96	695	342	410	1.37
4	57	3175	130	2.84	365	510	215	2.05
5	48	3050	105	2.60	1055	0	620	0.00
6	48	2965	107	2.61	905	150	530	0.60
7	48	2850	108	2.69	650	300	385	1.20
8	48	2975	107	2.60	345	450	200	1.81
9	36	2595	66	2.04	900	0	530	0.00
10	36	2550	68	2.11	775	114	455	0.46
11	36	2475	71	2.22	565	225	330	0.90
12	36	2560	67	2.09	295	330	175	1.32

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

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