R1G220-AB73-49

EC centrifugal fan

backward curved, single inlet



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Nominal data

Type	**R1G220-AB73-49**	
Motor	**M1G074-BF**	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Type of data definition		fa
State		prelim.
Speed	min^{-1}	3100
Power input	W	100
Current draw	A	2.4
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

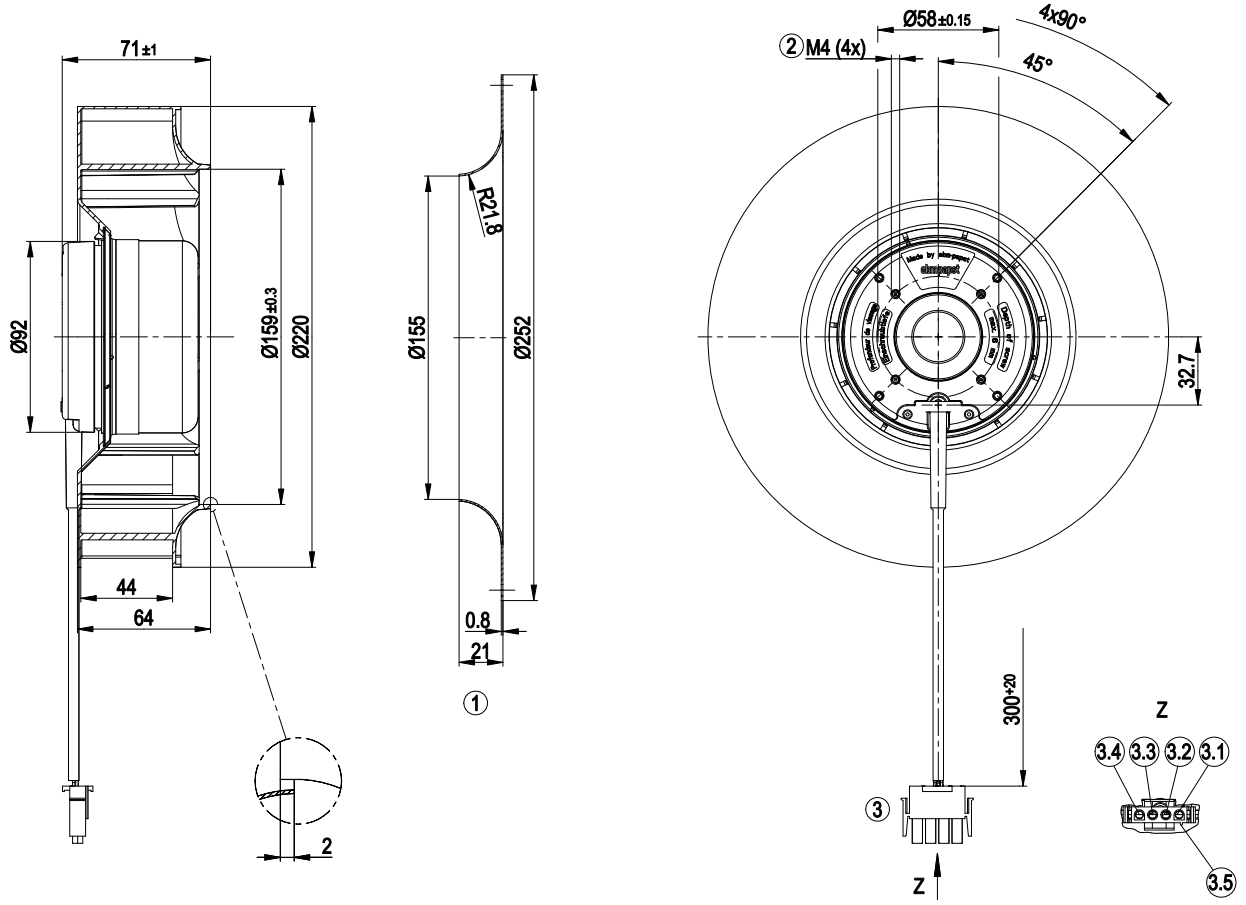
Mass	1.4 kg
Size	220 mm
Surface of rotor	Coated in black
Material of impeller	PA plastic
Number of blades	11
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 42; Depending on installation and position
Insulation class	"B"
Humidity class	F3-1
Max. permissible ambient motor temp. (transp./ 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
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC interference emission	Acc. to EN 55022 (Class B)
Electrical leads	With plug
Motor protection	Reverse polarity and locked-rotor protection
Cable exit	Variable
Product conforming to standard	EN 60950-1
Approval	UL 1004-1; CSA C22.2 Nr.77

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Product drawing



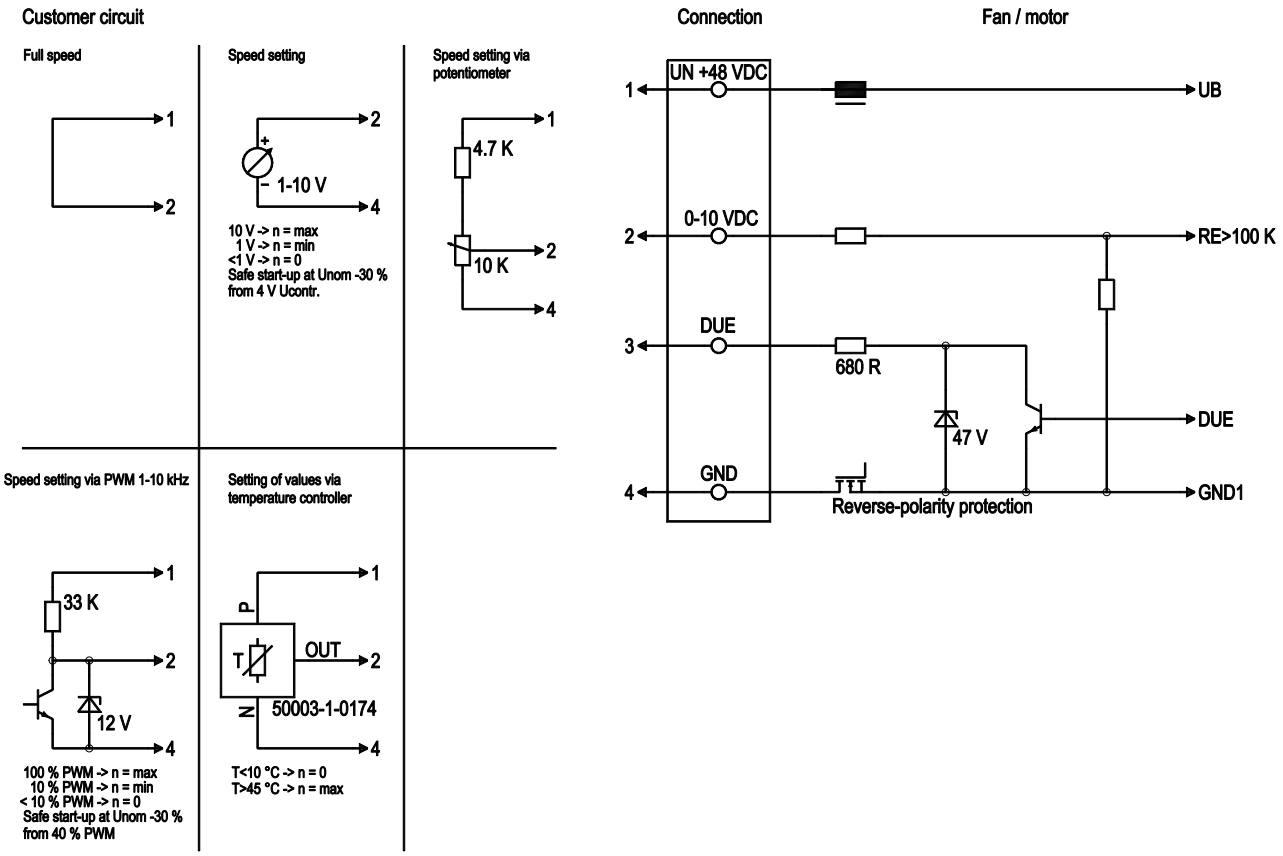
1	Accessory part: Inlet nozzle 09609-2-4013, not included in the standard scope of delivery
2	Depth of screw max. 6 mm
3	Connector housing 4-pole (AMP 350779-1), 4 x female terminal (AMP 350536-2)
3.1	(+) red
3.2	Yellow control input
3.3	Speed monitoring, white
3.4	(-) blue
3.5	Polarising rib

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Connection screen



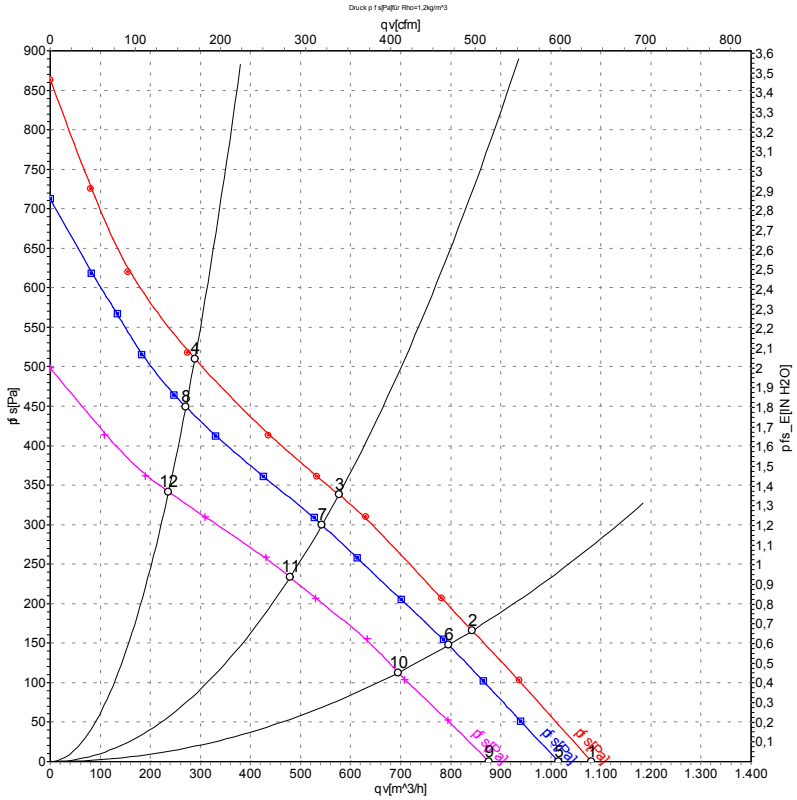
Line	No.	Signal	Colour	Function / assignment
1	1	Un +48 VDC	red	Power supply 48 VDC, residual ripple 3.5 %
1	2	0-10 VDC	yellow	Control input Re > 100 K
1	3	Tach	white	Speed monitoring output, 3 pulses per rotation, Isink max = 10 mA
1	4	GND	blue	Reference mass

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Charts: Air flow



Measurement: LU-47146
Measurement: LU-47145
Measurement: LU-47147

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}
	V	min^{-1}	W	A	m^3/h	Pa
1	56	3305	118	2.54	1080	0
2	56	3095	122	2.72	845	166
3	56	2975	126	2.85	575	338
4	56	3155	122	2.68	290	508
5	48	3100	100	2.40	1015	0
6	48	2915	102	2.51	795	150
7	48	2805	104	2.59	545	300
8	48	2980	101	2.45	270	450
9	36	2665	64	1.96	875	0
10	36	2545	68	2.10	695	112
11	36	2480	71	2.20	480	233
12	36	2600	66	2.03	235	341

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

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