R1G220-AB05-48

EC centrifugal fan

backward curved, single inlet



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Nominal data

Type	**R1G220-AB05-48**	
Motor	**M1G074-BF**	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Type of data definition		fa
Speed	min^{-1}	2850
Power input	W	75
Current draw	A	2
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

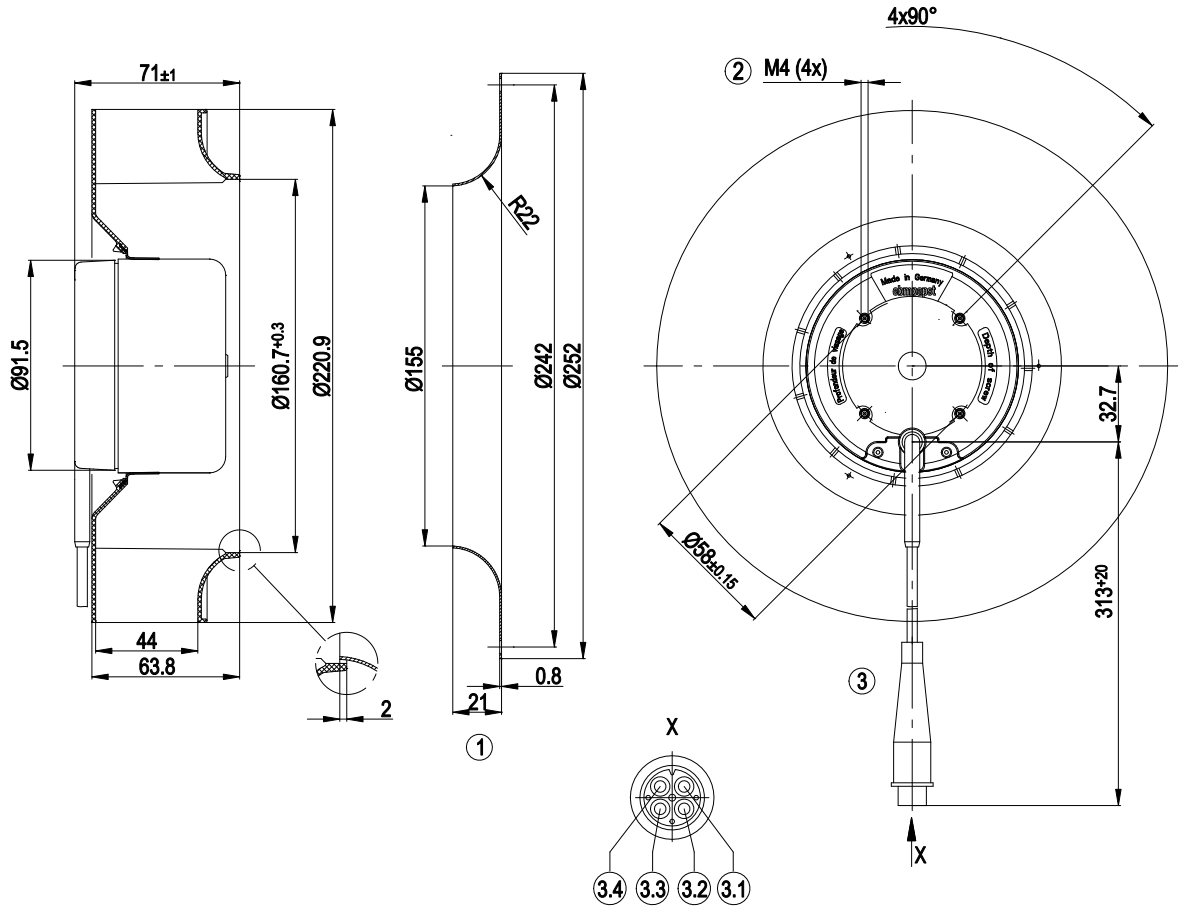
Mass	1.5 kg
Size	220 mm
Surface of rotor	Coated in black
Material of impeller	PA plastic
Number of blades	11
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44
Insulation class	"B"
Humidity class	F4-2
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible 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 - PWM control input
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC interference emission	Acc. to EN 55022 (Class B, household environment)
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



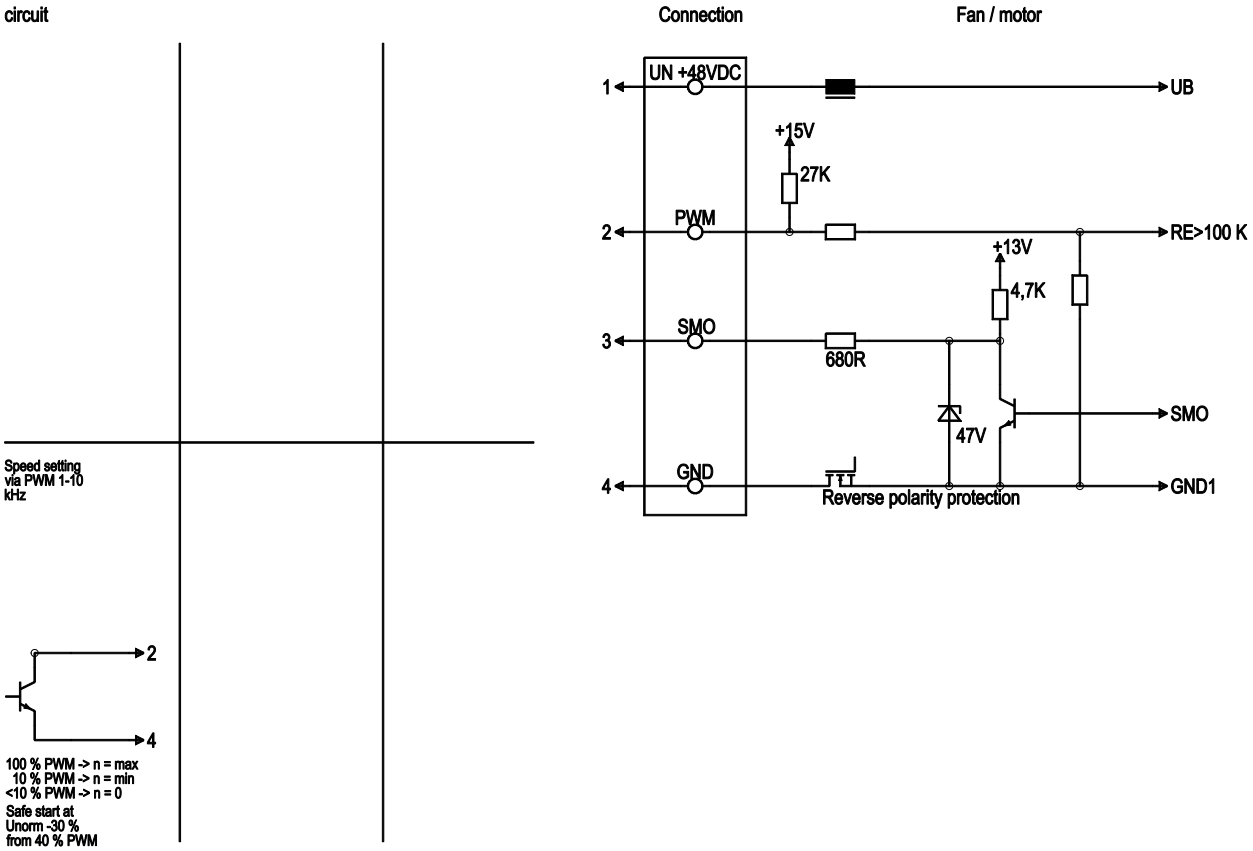
1	Accessory part: Inlet nozzle 09609-2-4013 not included in scope of delivery
2	Depth of screw max. 6 mm
3	Connection line PVC AWG20 with connector housing 4-pole Tyco 0-925076-0, 4x female connector Tyco 163554-6
3.1	UN +48 VDC (red)
3.2	GND (blue)
3.3	PWM (black)
3.4	Tach (white)

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Connection screen



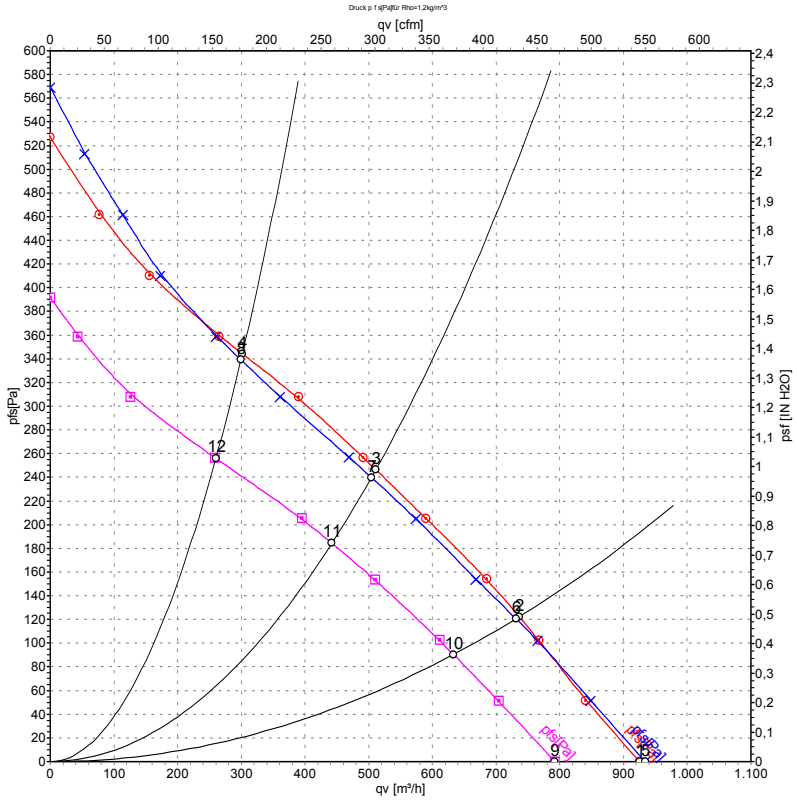
No.	Conn.	Designation	Colour	Function / assignment
	1	Un +48 VDC	red	Power supply 48 VDC, for voltage range refer to rating plate, residual ripple 3.5%
	2	PWM	black	PWM control input
	3	Tach	white	Tacho output, 3 pulses per revolution, Isink max = 10 mA
	4	GND	Blue	Reference ground

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Charts: Air flow



Measurement: LU-44004
Measurement: LU-44003
Measurement: LU-44006

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	2800	72	1.69	925	0
2	56	2630	79	1.89	735	122
3	56	2560	83	2.01	510	246
4	56	2625	79	1.90	300	344
5	48	2850	75	2.00	935	0
6	48	2610	77	2.00	730	120
7	48	2515	78	2.01	505	240
8	48	2600	77	1.96	300	340
9	36	2375	47	1.52	790	0
10	36	2265	51	1.65	635	91
11	36	2210	53	1.73	440	184
12	36	2250	51	1.66	260	256

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

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