

R1G220-AB73-A6

# EC centrifugal fan

backward curved, single inlet



R1G220-AB73-A6 ebmpapst Datasheet

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Limited partnership · Headquarters Mulfingen  
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County court Stuttgart · HRB 590142

## Nominal data

Type	R1G220-AB73-A6	
Motor	M1G074-BF	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Type of data definition		fa
Speed	min <sup>-1</sup>	3100
Power input	W	100
Current draw	A	2.4
Min. ambient temperature	°C	- 25
Max. ambient temperature	°C	+65

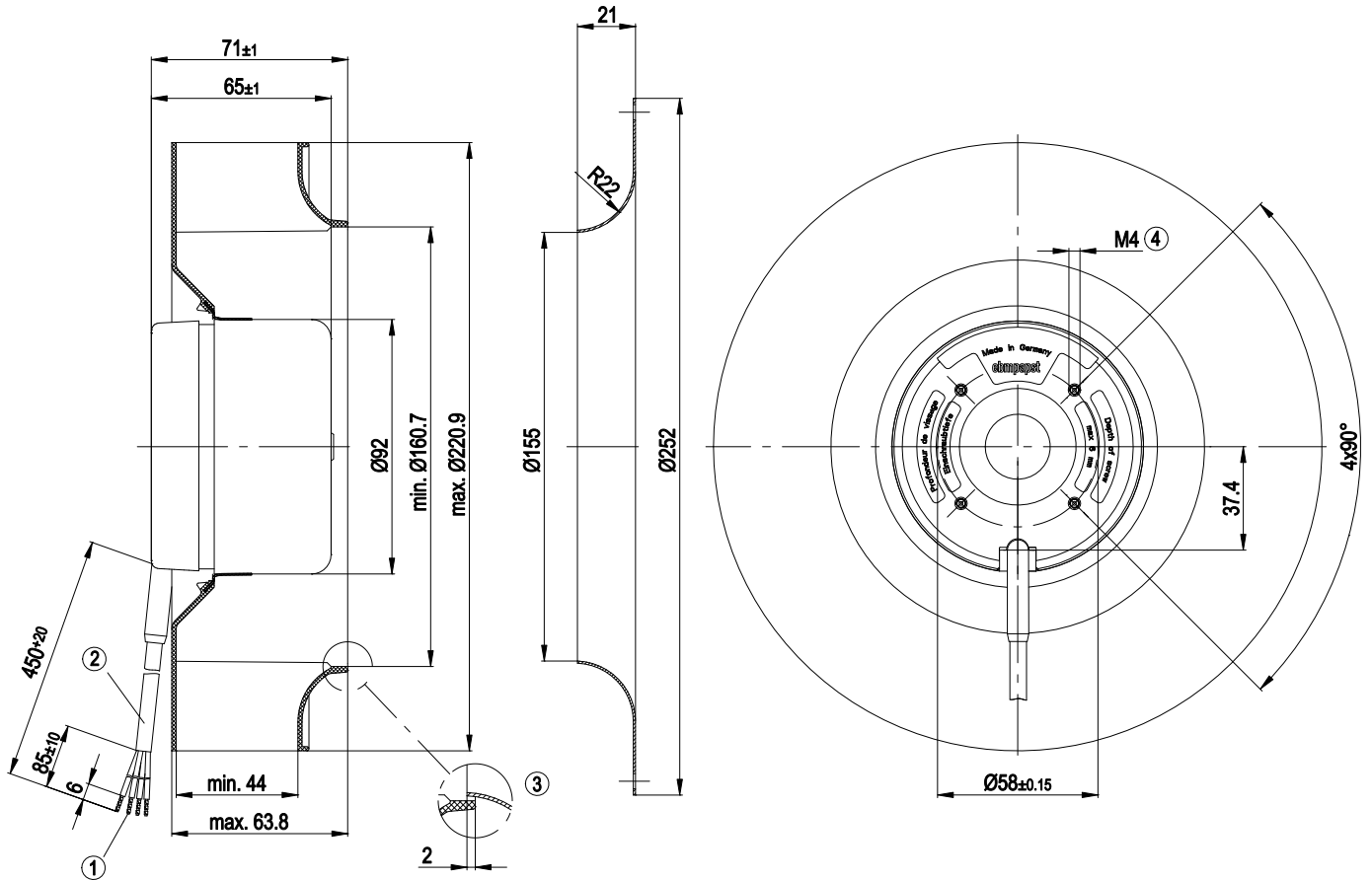
ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit  
Subject to alterations



### Technical features

<b>Mass</b>	1.4 kg
<b>Size</b>	220 mm
<b>Surface of rotor</b>	Coated in black (with cooling holes)
<b>Material of impeller</b>	PA plastic 6.6, fibreglass-reinforced
<b>Number of blades</b>	11
<b>Direction of rotation</b>	Clockwise, seen on rotor
<b>Type of protection</b>	IP 20
<b>Insulation class</b>	"B"
<b>Humidity class</b>	F0
<b>Max. permissible ambient motor temp. (transp./ storage)</b>	+80 °C
<b>Min. permissible ambient motor temp. (transp./storage)</b>	-40 °C
<b>Mounting position</b>	Rotor on bottom
<b>Condensate discharge holes</b>	Rotor-side
<b>Cooling bore / aperture</b>	Rotor-side
<b>Operation mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Technical features</b>	- Control input 0-10 VDC / PWM - Tach output
<b>EMC interference immunity</b>	Acc. to EN 61000-6-2
<b>EMC interference emission</b>	Acc. to EN 61000-6-3
<b>Motor protection</b>	Reverse polarity and locked-rotor protection
<b>Cable exit</b>	Variable
<b>Product conforming to standard</b>	EN 60950-1
<b>Approval</b>	CSA C22.2 Nr.77; UL 1004-1

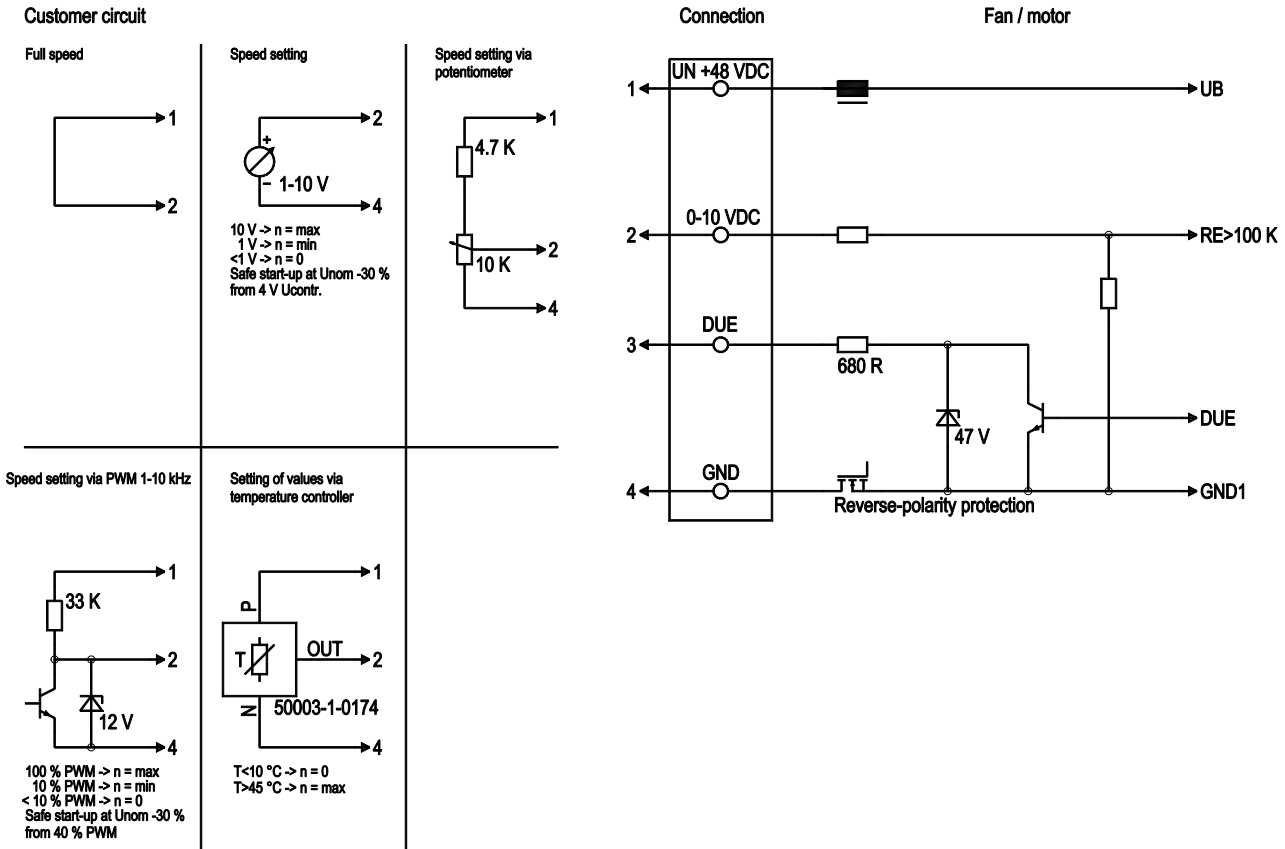
Product drawing



1	Brass lead tips
2	Connection line 4 x AWG20
3	Accessory part: Inlet nozzle 09609-2-4013, not included in the standard scope of delivery.
4	Depth of screw max. 6 mm

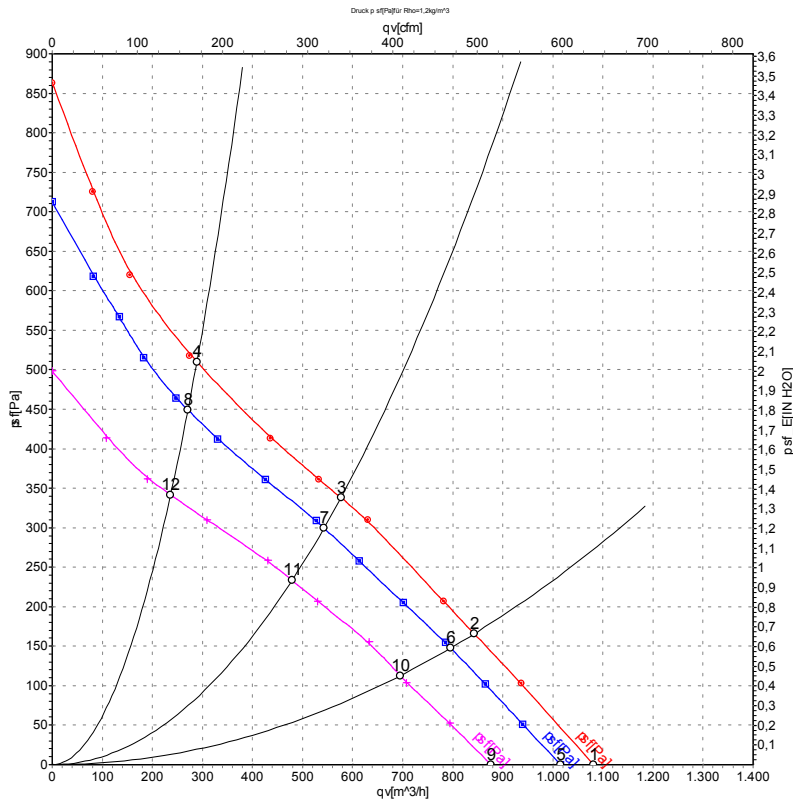


## Connection screen



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	DUE	white	Speed monitoring output, 3 pulses per rotation, Isink max = 10 mA
1	4	GND	blue	Reference mass

## 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 ebmpapst. 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 <sub>e</sub>	I	qv	P <sub>sf</sub>
	V	min <sup>-1</sup>	W	A	m <sup>3</sup> /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

