R1G220-AB35-99

EC centrifugal fan

backward curved, single inlet



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Nominal data

Type	**R1G220-AB35-99**	
Motor	**M1G074-BF**	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Type of data definition		fa
Speed	min-1	3150
Power input	W	106
Current draw	A	5.0
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

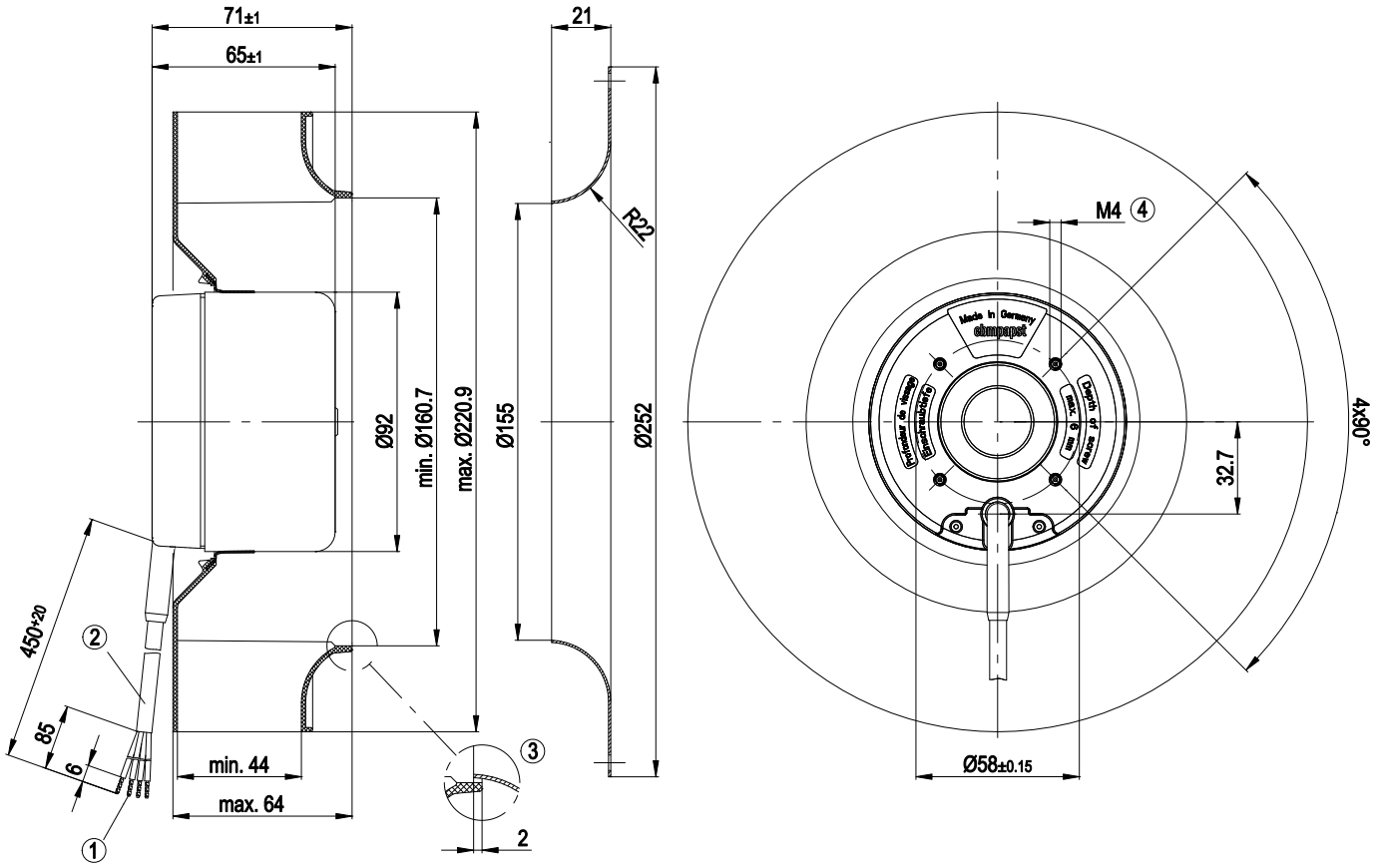
Mass	1.48 kg
Size	220 mm
Surface of rotor	Coated in black
Material of impeller	PA plastic 6.6, fiberglass-reinforced, round sheet-metal plate coated in black
Number of blades	11
Stability	Salt fog resistant in accordance with TELCORDIA GR-487-CORE, release No. 2, March 2000
Direction of rotation	Clockwise, 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	- Control input 0-10 VDC / PWM - Tach output
EMC interference immunity	Acc. to EN 61000-6-2
EMC interference emission	Acc. to EN 55022 (Class B)
Motor protection	Reverse polarity and locked-rotor protection
Cable exit	Variable
Product conforming to standard	EN 60950-1
Approval	CSA C22.2 Nr.77; UL 1004-1

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Product drawing



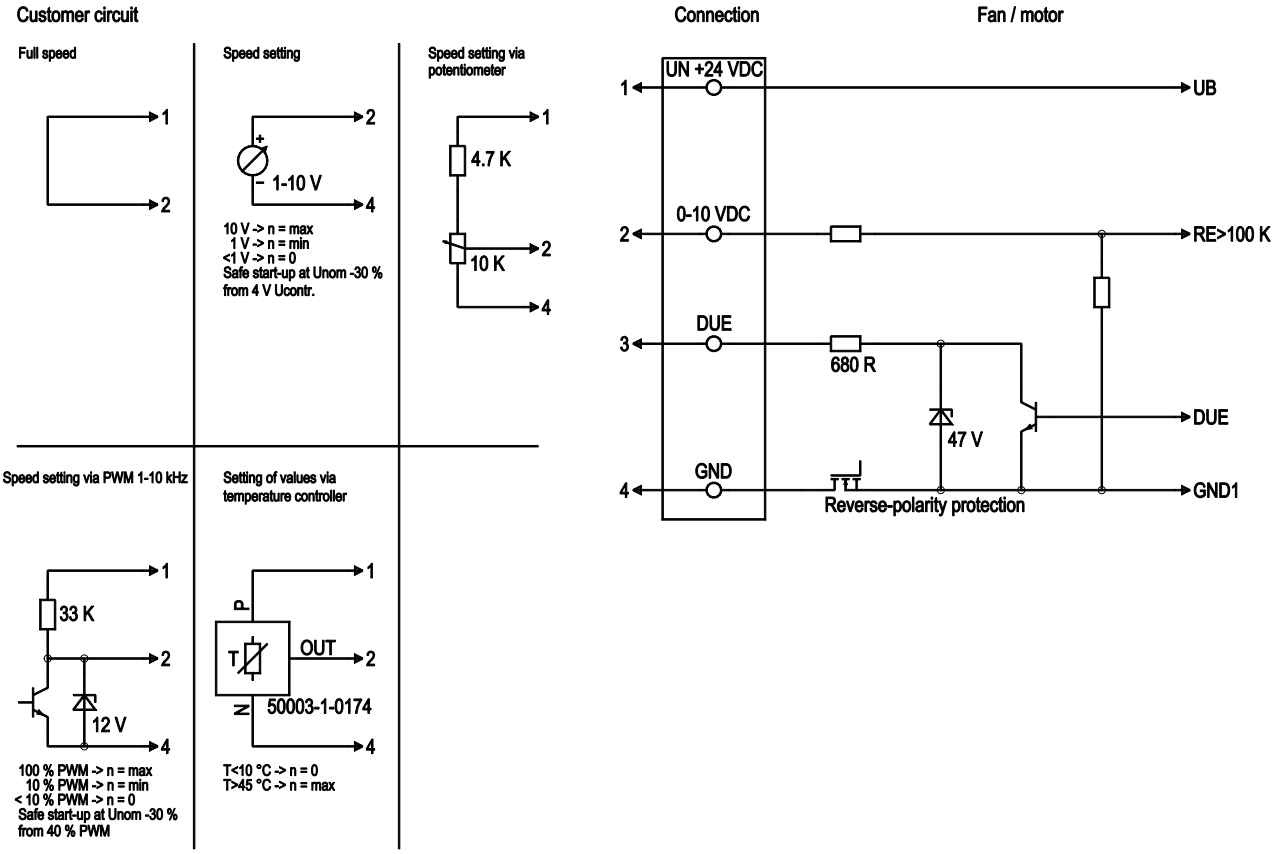
1	Brass lead tips
2	Connection line 4 x AWG20
3	Accessory part: Inlet nozzle 09609-2-4013, not included in the standard scope of delivery
4	Depth of screw max. 6 mm

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Connection screen



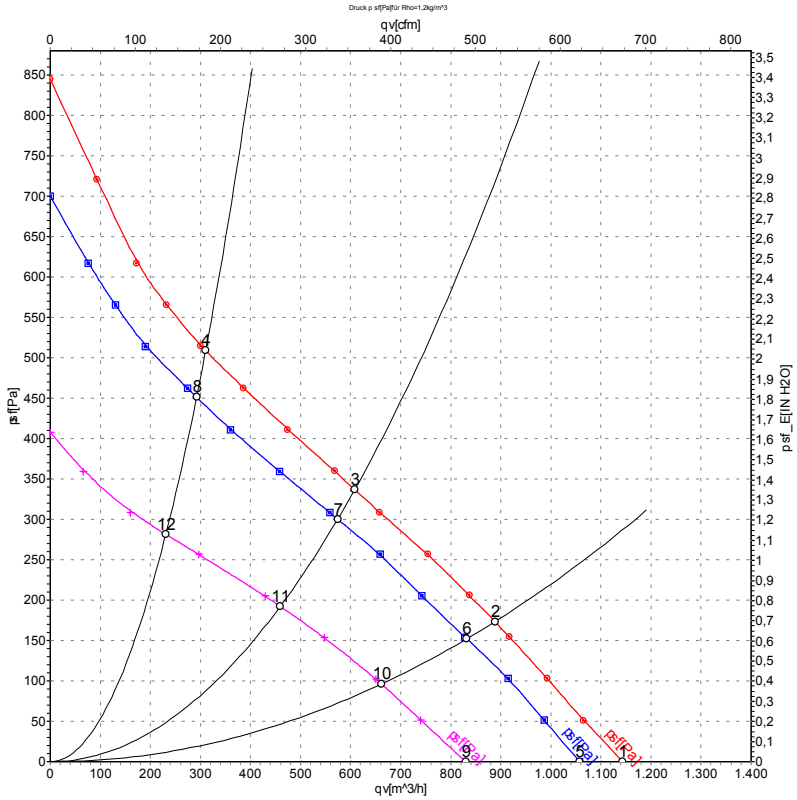
Line	No.	Signal	Colour	Function / assignment
1	1	Un +24 VDC	red	Power supply 24 VDC, residual ripple 3.5 %
1	2	0-10 VDC	yellow	Control input Re > 100 K
1	3	DUE	white	Speed monitoring output, 3 pulses per rotation, Isink max = 10 mA
1	4	GND	blue	Reference mass

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Charts: Air flow



Measurement: LU-48202
Measurement: LU-48200
Measurement: LU-48201

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_e	I	qv	p_{sf}
	V	min^{-1}	W	A	m^3/h	Pa
1	28	3405	129	5.33	1145	0
2	28	3135	134	5.71	890	173
3	28	2985	137	5.96	610	337
4	28	3175	133	5.63	310	508
5	24	3150	106	5.00	1055	0
6	24	2930	112	5.32	830	150
7	24	2810	114	5.52	575	300
8	24	2980	111	5.25	290	450
9	16	2460	50	3.50	830	0
10	16	2330	56	3.88	660	97
11	16	2260	59	4.11	460	192
12	16	2360	55	3.81	230	282

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