

**ebm-papst Mulfingen GmbH & Co. KG**

Bachmühle 2

74673 Mulfingen

Phone: +49 7938 81-0

Fax: +49 7938 81-110

www.ebmpapst.com

info1@de.ebmpapst.com

**Nominal data**

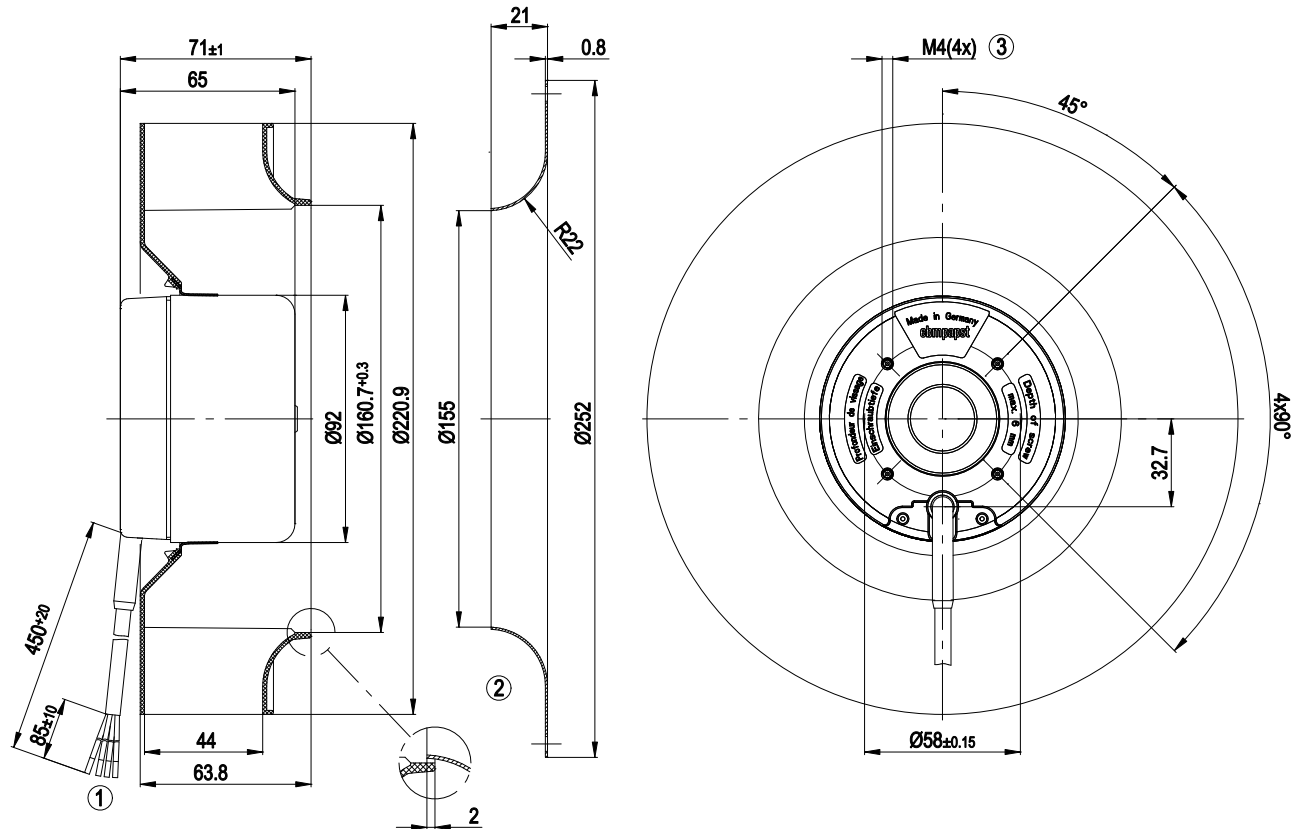
Type	R1G220-AB35-52	
Motor	M1G074-BF	
Nominal voltage	[VDC]	24
Nominal voltage range	[VDC]	16 .. 28
Type of data definition		rfa
Speed	[min <sup>-1</sup> ]	3150
Power input	[W]	106
Current draw	[A]	5.0
Min. ambient temperature	[°C]	- 25
Max. ambient temperature	[°C]	+60

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

### Technical features

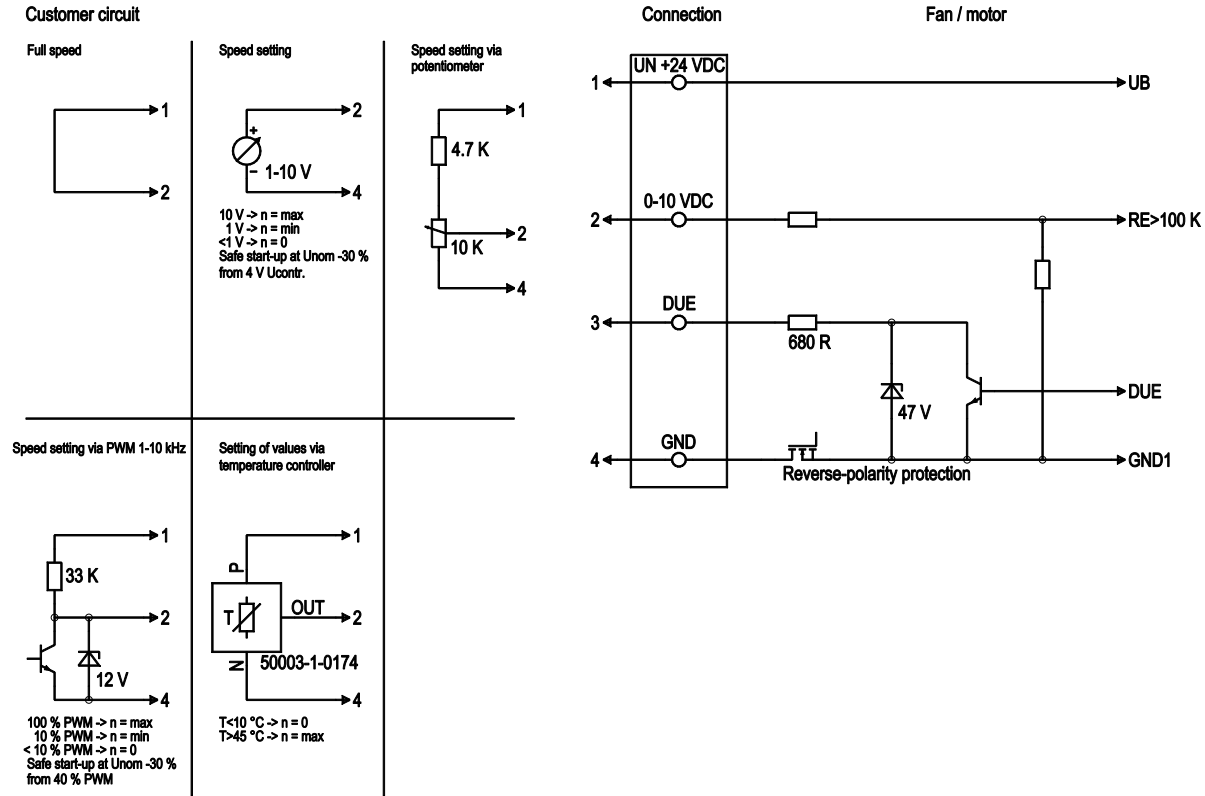
<b>Size</b>	220 mm
<b>Operation mode</b>	S1
<b>Direction of rotation</b>	Clockwise, seen on rotor
<b>Mounting position</b>	Any
<b>EMC interference emission</b>	Acc. to EN 55022 (Class B)
<b>EMC interference immunity</b>	Acc. to EN 61000-6-2
<b>Insulation class</b>	"B"
<b>Cable exit</b>	Variable
<b>Condensate discharge holes</b>	None
<b>Bearing motor</b>	Ball bearing
<b>Mass</b>	1.4 kg
<b>Material of impeller</b>	Plastic PA66, fibreglass-reinforced
<b>Motor protection</b>	Reverse polarity and locked-rotor protection
<b>Product conforming to standard</b>	EN 60950-1
<b>Surface of rotor</b>	Coated in black
<b>Number of blades</b>	11
<b>Type of protection</b>	IP 42
<b>Technical features</b>	<ul style="list-style-type: none"> <li>- Control input 0-10 VDC / PWM</li> <li>- Tach output</li> <li>- Motor current limit</li> <li>- Soft start</li> </ul>
<b>Max. permissible ambient motor temp. (transp./ storage)</b>	+80 °C
<b>Min. permissible ambient motor temp. (transp./storage)</b>	-40 °C
<b>Approval</b>	CSA C22.2 Nr.77; UL 1004

## Product drawing



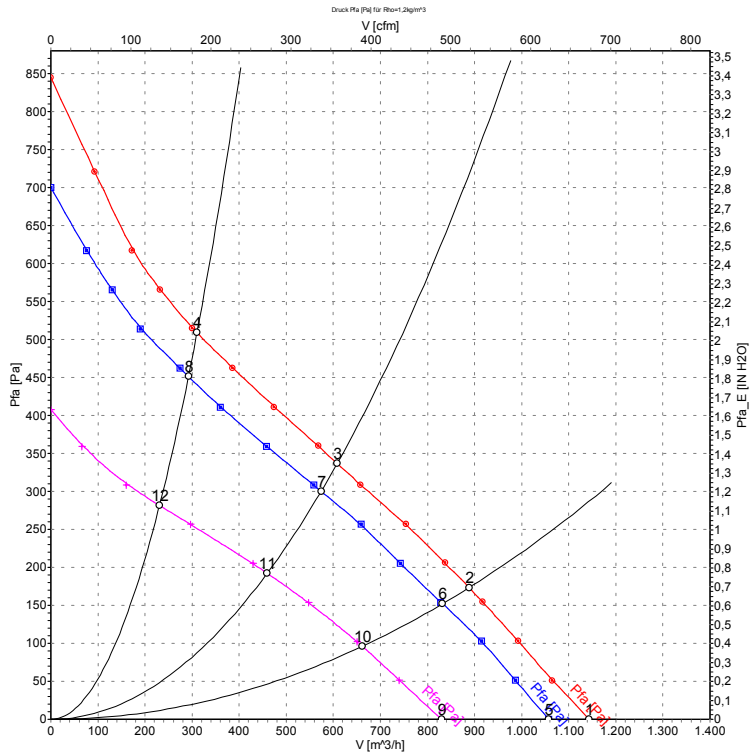
- |   |   |
|---|---|
| 1 | Connection line AWG20, 4 x brass lead tips crimped  |
| 2 | Accessory part: Inlet nozzle 09609-2-4013, not included in the standard scope of delivery |
| 3 | Depth of screw max. 6 mm  |

## 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

## Charts: Air flow



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

## Measured values

	U	n	P <sub>1</sub>	I	$\hat{V}$	p <sub>ra</sub>
	[V]	[min <sup>-1</sup> ]	[W]	[A]	[m³/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