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Limited partnership · Headquarters Mulfingen  
County court Stuttgart · HRA 590344General partner: Elektrobau Mulfingen GmbH · Headquarters Mulfingen  
County court Stuttgart · HRB 590142**Nominal data**

<b>Type</b>	<b>W1G250-HH67-52</b>	
<b>Motor</b>	<b>M1G074-BF</b>	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Type of data definition		fa
Speed	min <sup>-1</sup>	2750
Power input	W	105
Current draw	A	2.6
Max. back pressure	Pa	140
Min. ambient temperature	°C	- 25
Max. ambient temperature	°C	+60

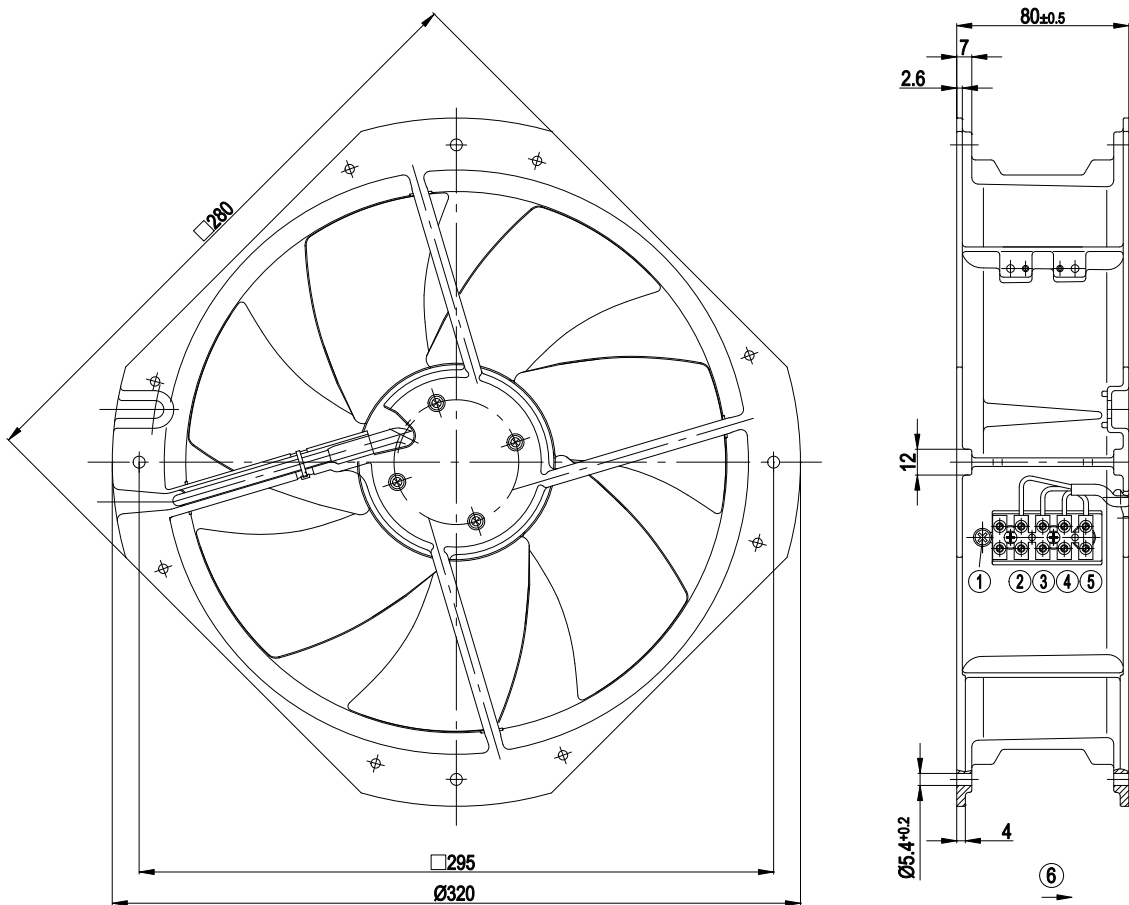
ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit  
Subject to alterations



### Technical features

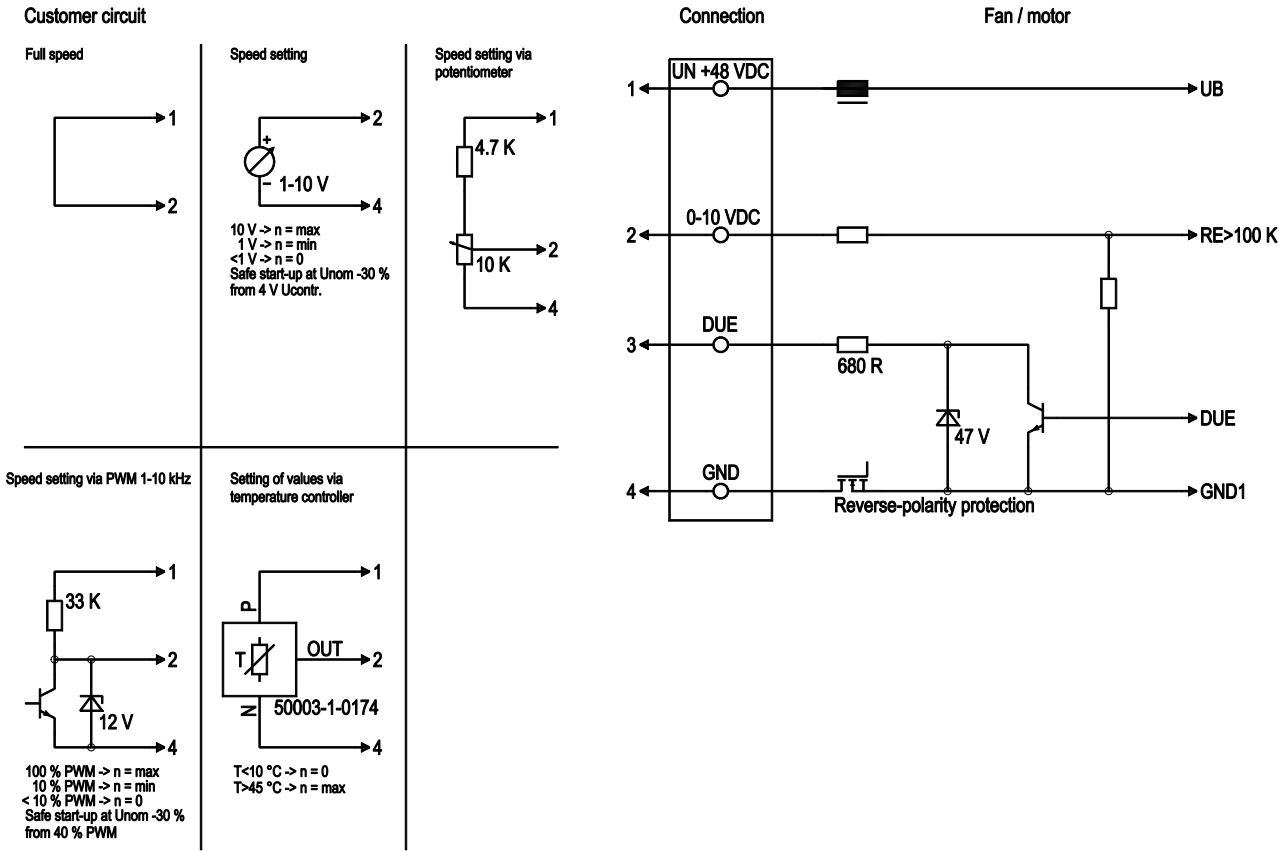
<b>Mass</b>	2.38 kg
<b>Size</b>	250 mm
<b>Surface of rotor</b>	Coated in black
<b>Material of blades</b>	Sheet steel, coated in black
<b>Material of wall ring</b>	Die-cast aluminium
<b>Number of blades</b>	7
<b>Direction of air flow</b>	"V"
<b>Direction of rotation</b>	Counter-clockwise, seen on rotor
<b>Type of protection</b>	IP 42
<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>	Any
<b>Condensate discharge holes</b>	None
<b>Operation mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<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>EMC interference immunity</b>	Acc. to EN 61000-6-2 (industrial environment)
<b>EMC interference emission</b>	Acc. to EN 55022 (Class B)
<b>Electrical leads</b>	Via terminal strip
<b>Motor protection</b>	Reverse polarity and locked-rotor protection
<b>Product conforming to standard</b>	EN 60950-1
<b>Approval</b>	VDE; UL 1004-1; CSA C22.2 Nr.77; CCC

## Product drawing



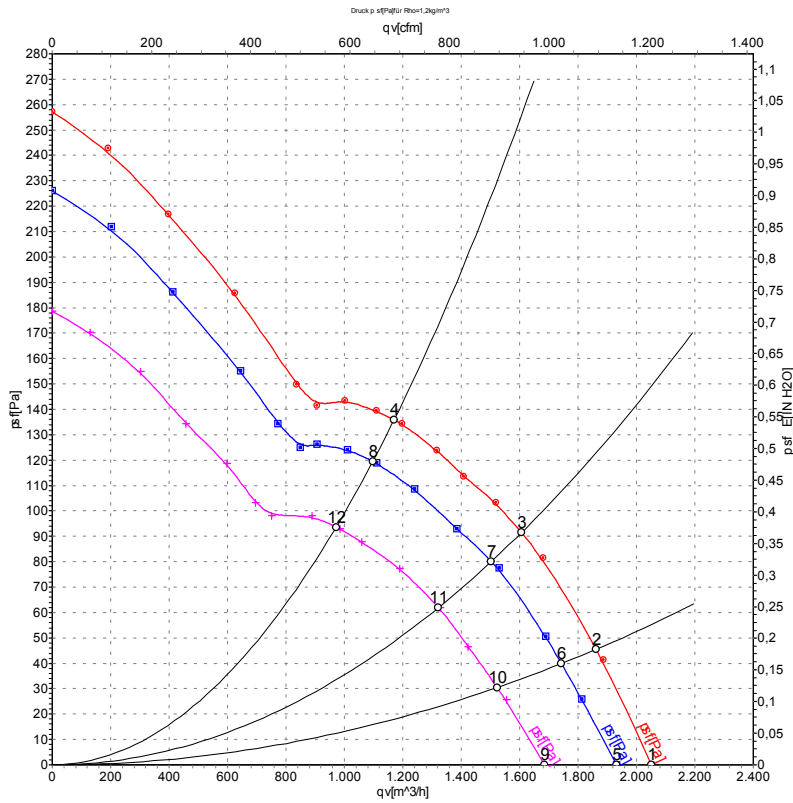
1	Protective earth
2	Yellow control input
3	Speed monitoring, white
4	(-) blue
5	(+) red
6	Direction of air flow "V"

## 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-54178  
 Measurement: LU-54177  
 Measurement: LU-54175

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: L<sub>WA</sub> measured as per ISO 13347 / L<sub>pA</sub> 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	57	2930	129	2.80	2050	0
2	57	2810	132	2.92	1860	47
3	57	2700	136	3.05	1605	92
4	57	2595	139	3.18	1170	136
5	48	2750	105	2.60	1930	0
6	48	2645	109	2.70	1745	40
7	48	2530	111	2.80	1505	80
8	48	2435	114	2.90	1095	120
9	36	2405	73	2.27	1685	0
10	36	2330	75	2.36	1525	31
11	36	2245	78	2.46	1320	62
12	36	2170	80	2.52	970	94

