

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

Bachmühle 2 · D-74673 Mulfingen

Phone +49 7938 81-0

Fax +49 7938 81-110

info1@de.ebmpapst.com

www.ebmpapst.com

Limited partnership · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

**Nominal data**

<b>Type</b>	<b>W1G200-HH01-52</b>	
<b>Motor</b>	<b>M1G074-BF</b>	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Frequency	Hz	-
Method of obtaining data		fa
Speed (rpm)	min <sup>-1</sup>	2950
Power consumption	W	55
Current draw	A	1.3
Max. back pressure	Pa	120
Max. back pressure	in. wg	0.48
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

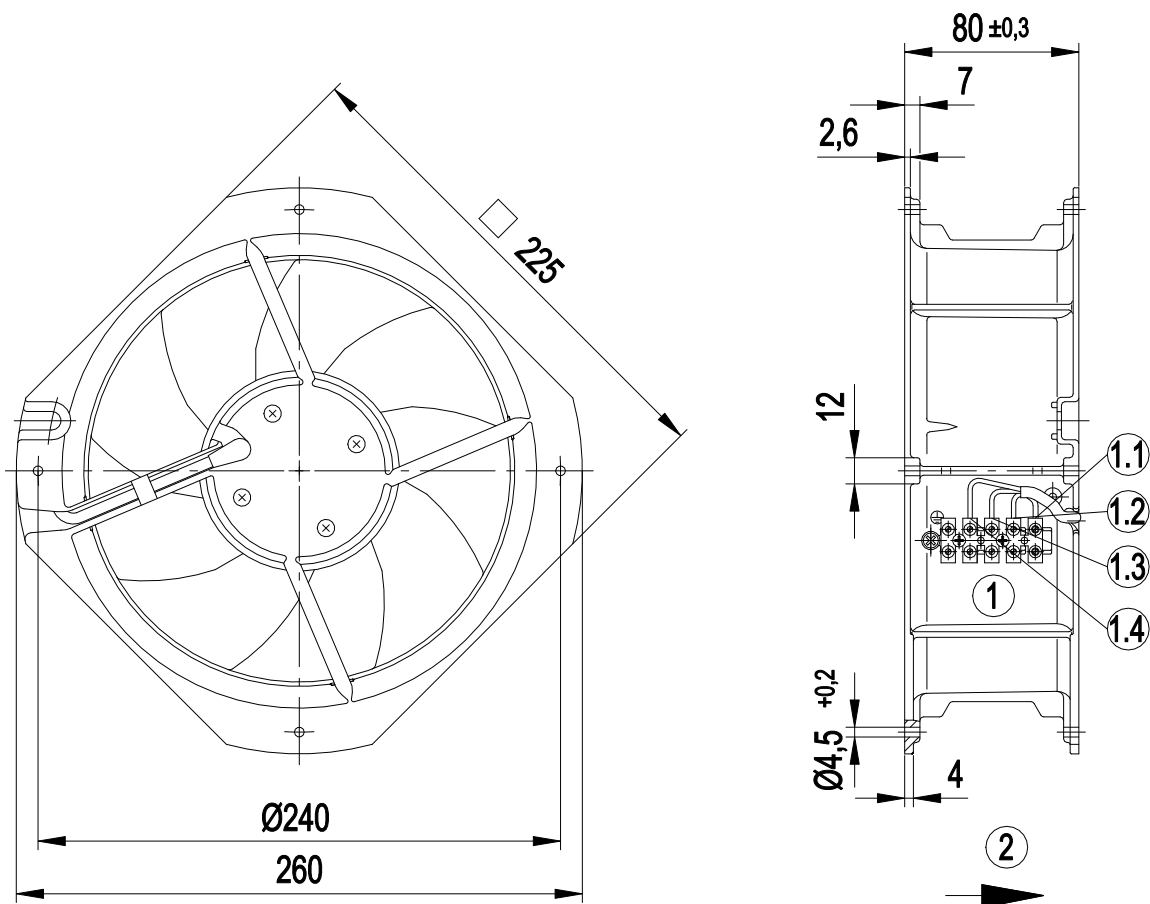
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment  
Subject to change



### Technical description

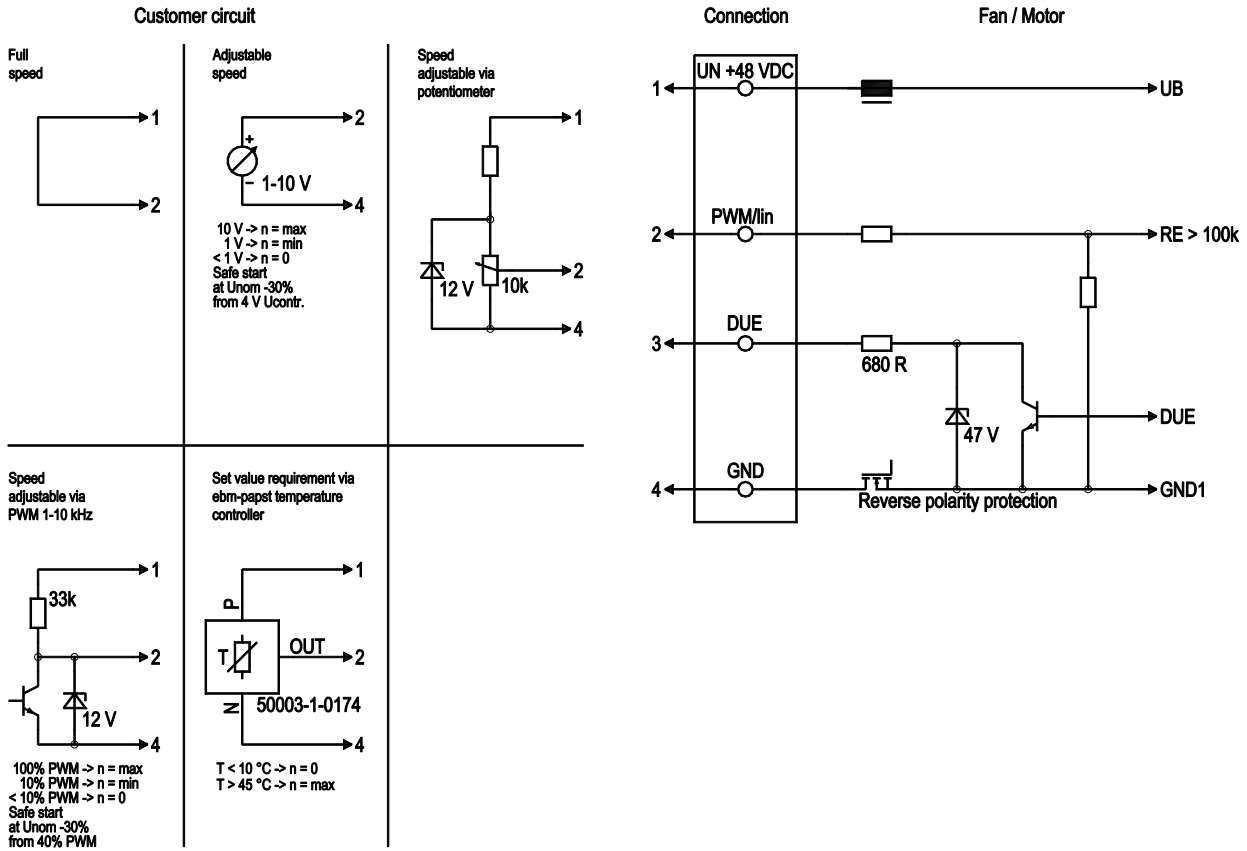
<b>Weight</b>	2.1 kg
<b>Size</b>	200 mm
<b>Motor size</b>	74
<b>Rotor surface</b>	Painted black
<b>Blade material</b>	Sheet steel, painted black
<b>Fan housing material</b>	Die-cast aluminum
<b>Number of blades</b>	9
<b>Airflow direction</b>	V
<b>Direction of rotation</b>	Counterclockwise, viewed toward rotor
<b>Degree of protection</b>	IP42
<b>Insulation class</b>	"B"
<b>Moisture (F) / Environmental (H) protection class</b>	H0 - dry environment
<b>Max. permitted ambient temp. for motor (transport/storage)</b>	+ 80 °C
<b>Min. permitted ambient temp. for motor (transport/storage)</b>	- 40 °C
<b>Installation position</b>	Any
<b>Condensation drainage holes</b>	None
<b>Mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Technical features</b>	<ul style="list-style-type: none"> <li>- Tach output</li> <li>- Motor current limitation</li> <li>- Soft start</li> <li>- Control input 0-10 VDC / PWM</li> </ul>
<b>EMC immunity to interference</b>	According to EN 61000-6-2 (industrial environment)
<b>EMC interference emission</b>	According to EN 55022 (Class B)
<b>Electrical hookup</b>	Terminal strip
<b>Motor protection</b>	Reverse polarity and locked-rotor protection
<b>Protection class</b>	I (with customer connection of protective earth)
<b>Conformity with standards</b>	EN 62368-1
<b>Approval</b>	CCC; UL 1004-1; CSA C22.2 No. 77; EAC

## Product drawing



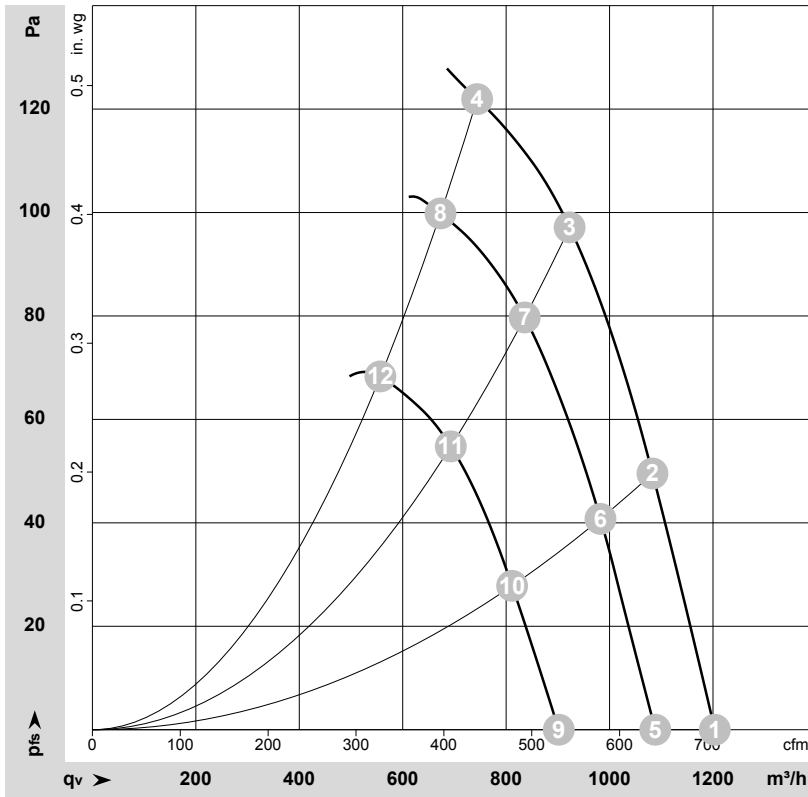
1	Connection: terminal strip with 5 terminals.
1.1	UN +48 VDC (red)
1.2	GND (blue)
1.3	DUE (white)
1.4	0-10 VDC (yellow)
2	Direction of air flow "V"

## Connection diagram



No.	Conn.	Designation	Color	Function/assignment
1	1	Un +48 VDC	red	Power supply 48 VDC, maximum ripple 3.5%
1	2	0-10 VDC	yellow	Control input Re > 100k
1	3	Tach	white	Tach output, 3 pulses per revolution, Isink max = 10 mA
1	4	GND	blue	Reference ground

## Curves: Air performance



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-122619-1  
 Measurement: LU-122613-1  
 Measurement: LU-122617-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

## Measured values

	U	n	P <sub>ed</sub>	I	q <sub>v</sub>	p <sub>fs</sub>	q <sub>v</sub>	p <sub>fs</sub>
	V	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	cfm	in. wg
1	57	3320	72	1.42	1205	0	710	0.00
2	57	3220	76	1.49	1085	50	635	0.20
3	57	3125	80	1.57	925	98	545	0.39
4	57	3060	83	1.63	745	122	440	0.49
5	48	2950	55	1.30	1090	0	640	0.00
6	48	2880	56	1.32	980	40	580	0.16
7	48	2800	59	1.38	835	80	490	0.32
8	48	2750	61	1.43	675	100	395	0.40
9	36	2500	34	1.11	900	0	530	0.00
10	36	2420	35	1.14	810	28	480	0.11
11	36	2355	36	1.17	695	55	410	0.22
12	36	2305	37	1.18	555	68	330	0.27

U = Voltage · n = Speed (rpm) · P<sub>ed</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase

