

R1G225-AF11-14

# EC centrifugal fan

backward curved, single inlet



## 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  
County court Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen  
County court Stuttgart · HRB 590142

## Nominal data

Type	R1G225-AF11-14	
Motor	M1G074-BF	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Frequency	Hz	-
Type of data definition		fa
Speed	min <sup>-1</sup>	2700
Power input	W	95
Current draw	A	2.2
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

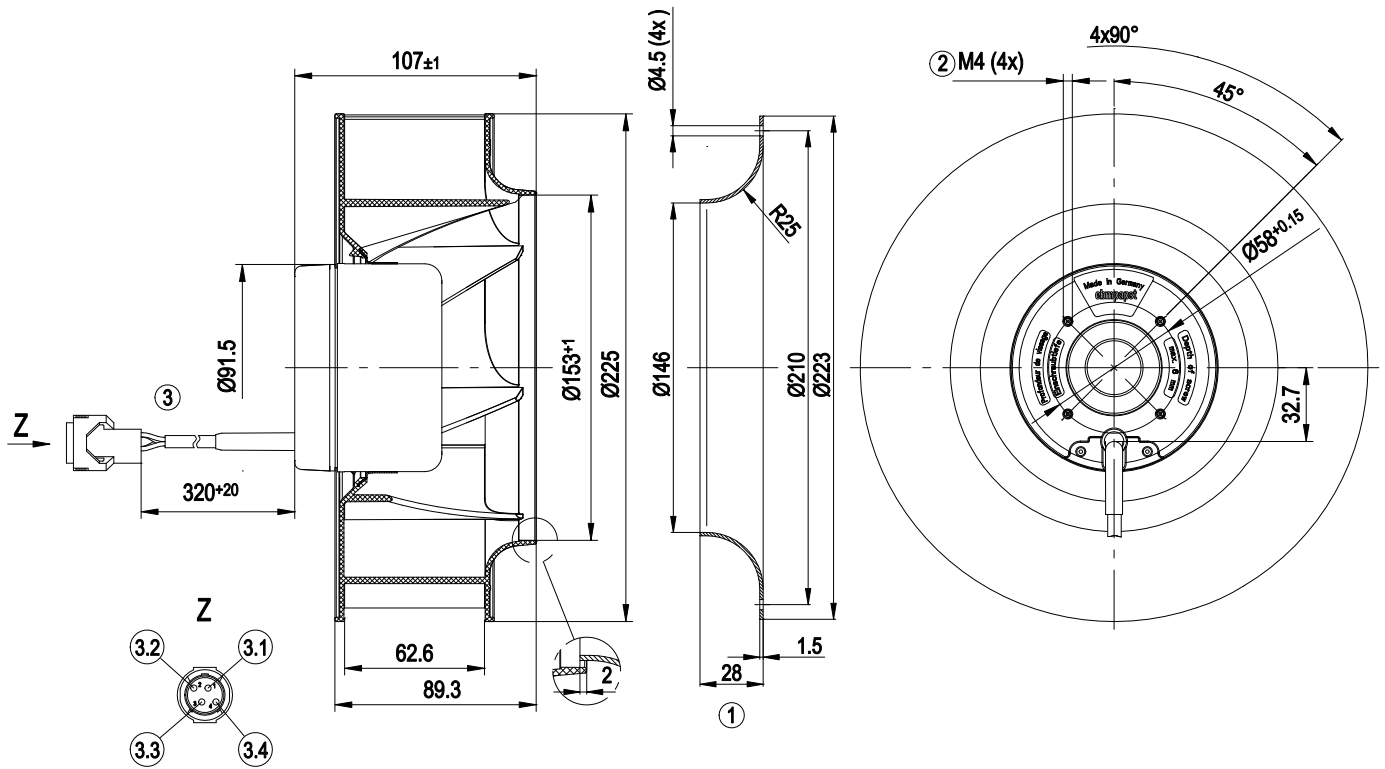
ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit  
Subject to alterations



## Technical features

<b>Mass</b>	1.6 kg
<b>Size</b>	225 mm
<b>Surface of rotor</b>	Coated in black
<b>Material of impeller</b>	PA plastic
<b>Number of blades</b>	7
<b>Direction of rotation</b>	Clockwise, seen on rotor
<b>Type of protection</b>	IP 44
<b>Insulation class</b>	"B"
<b>Humidity class</b>	F4-1
<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>- Tach output</li> <li>- Motor current limit</li> <li>- Soft start</li> <li>- PWM control input</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, household environment)
<b>Electrical leads</b>	With plug
<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>	UL 1004-1; CSA C22.2 Nr.77

Product drawing

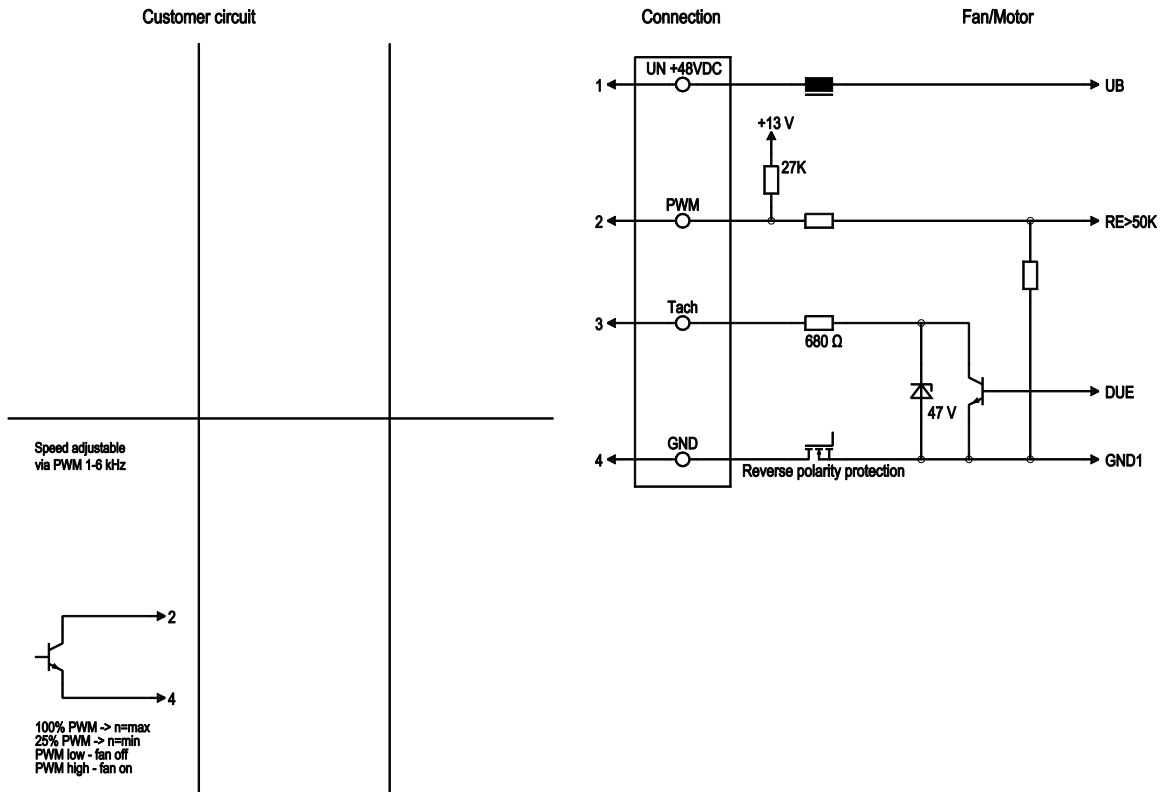


1	Accessory part: inlet nozzle 96358-2-4013 not included in scope of delivery
2	Depth of screw max. 6 mm
3	Connection line PVC AWG20 with connector housing 4-pole AMP 207571-1
3.1	UN +48 VDC (red)
3.2	GND (blue)
3.3	PWM (black)
3.4	Fan good / fan bad (white)

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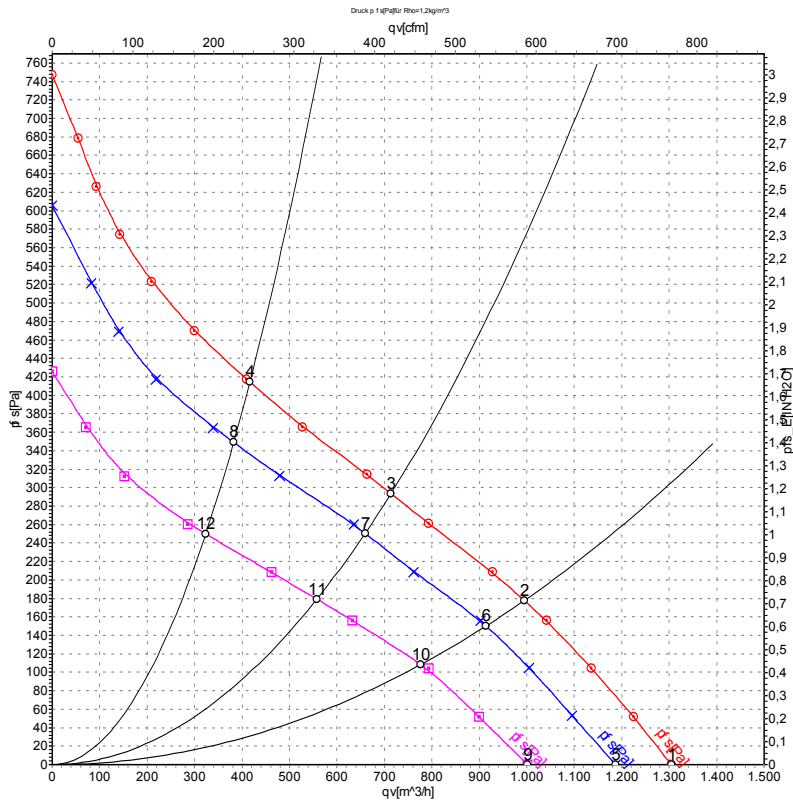
## Connection screen



Line	No.	Signal	Colour	Function / assignment
1	1	UN +48 VDC	red	Power supply 48 VDC, maximum ripple 3.5%
1	2	PWM	black	Control input PWM
1	3	Tach	white	Fan good / fan bad evaluation, n<1510 rpm = high (fan bad), n>1620 rpm = low (fan good), Isink max=10 mA
1	4	GND	blue	Reference ground



## Charts: Air flow



Measurement: LU-54451  
 Measurement: LU-54450  
 Measurement: LU-54452

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 <sub>ed</sub>	I	qv	p <sub>fs</sub>
	V	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	57	2865	118	2.52	1305	0
2	57	2690	123	2.68	995	178
3	57	2605	126	2.75	715	294
4	57	2705	123	2.66	415	414
5	48	2600	90	2.20	1185	0
6	48	2495	94	2.36	915	150
7	48	2405	99	2.49	660	250
8	48	2485	95	2.39	380	350
9	36	2200	53	1.75	1000	0
10	36	2105	58	1.93	775	110
11	36	2050	60	1.99	560	179
12	36	2110	58	1.92	325	249

U = Supply voltage · n = Speed · P<sub>ed</sub> = Power input · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase



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