

R1G225-AF11-39

# EC centrifugal fan

backward curved, single inlet



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## Nominal data

Type	R1G225-AF11-39	
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



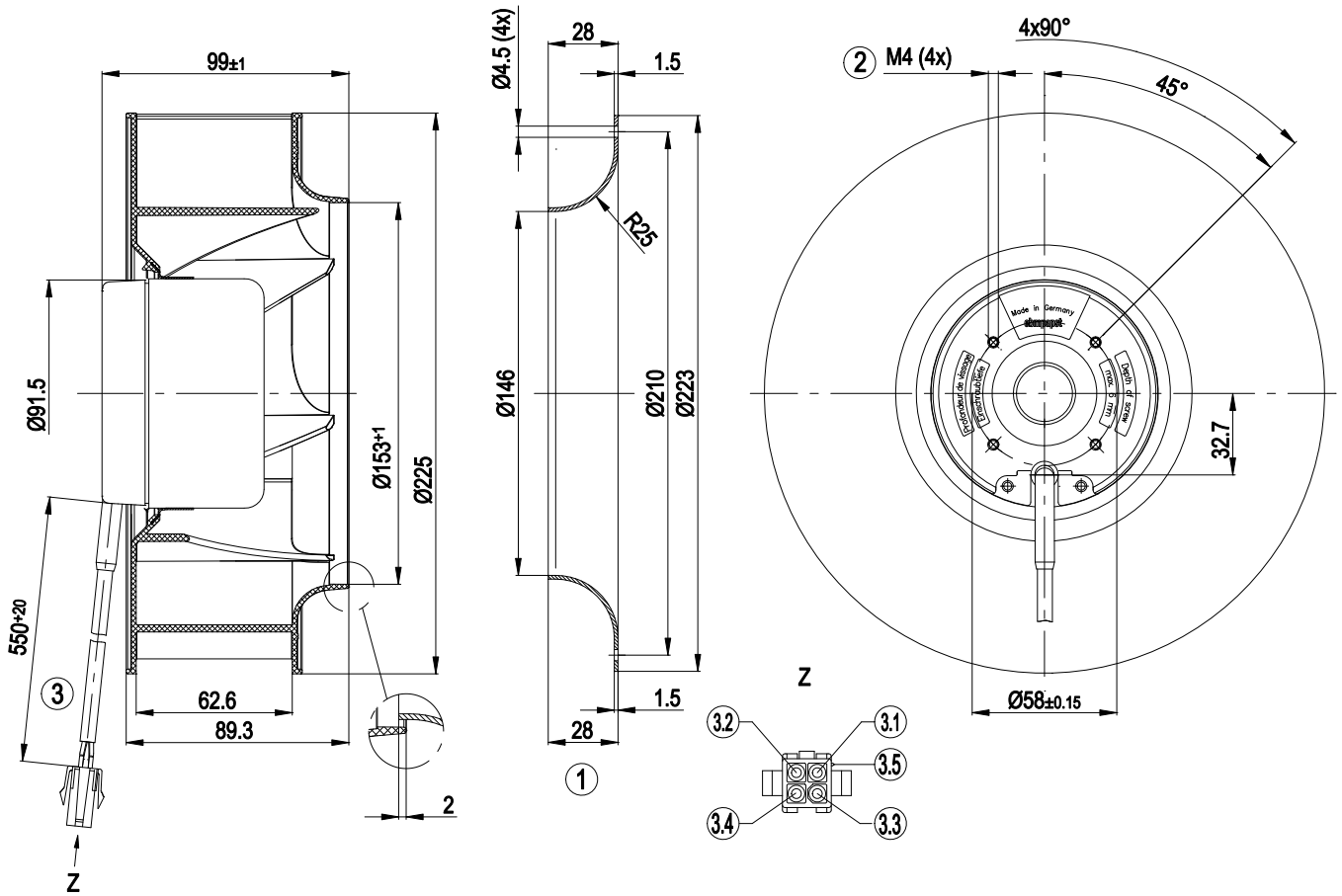
## Technical features

<b>Mass</b>	1.5 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 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>- Tach output</li> <li>- Motor current limit</li> <li>- Soft start</li> <li>- Control input 0-10 VDC / PWM</li> </ul>
<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>	CSA C22.2 Nr.77; UL 1004-1

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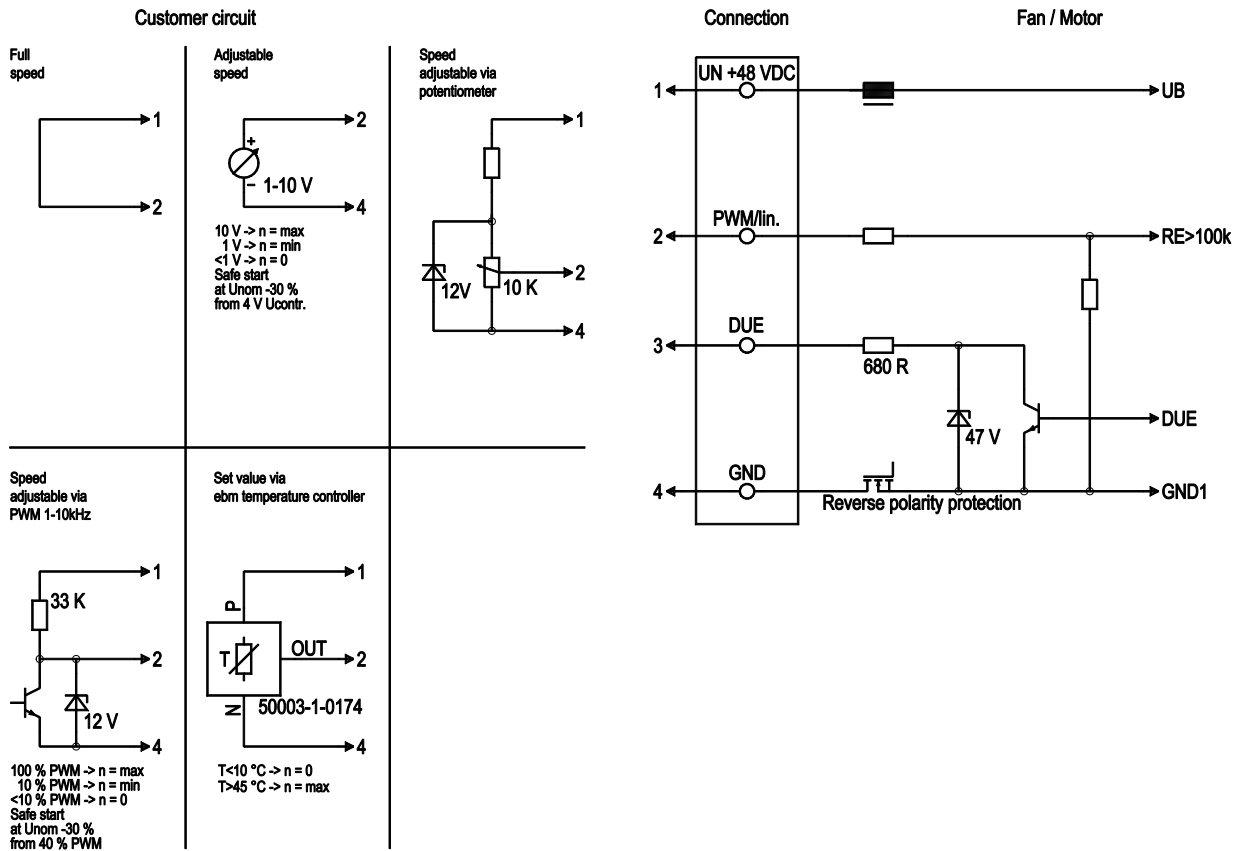
## Product drawing



1	Accessory part: Inlet nozzle 96358-2-4013 not included in scope of delivery
2	Thread reach max. 6 mm
3	Connection line PVC AWG20 with connector housing 4-pole tyco 172159-1, 4x plug pin tyco 170360-3
3.1	UN +48 VDC (red)
3.2	GND (blue)
3.3	Tach (white)
3.4	PWM/LIN (yellow)
3.5	Polarising rib

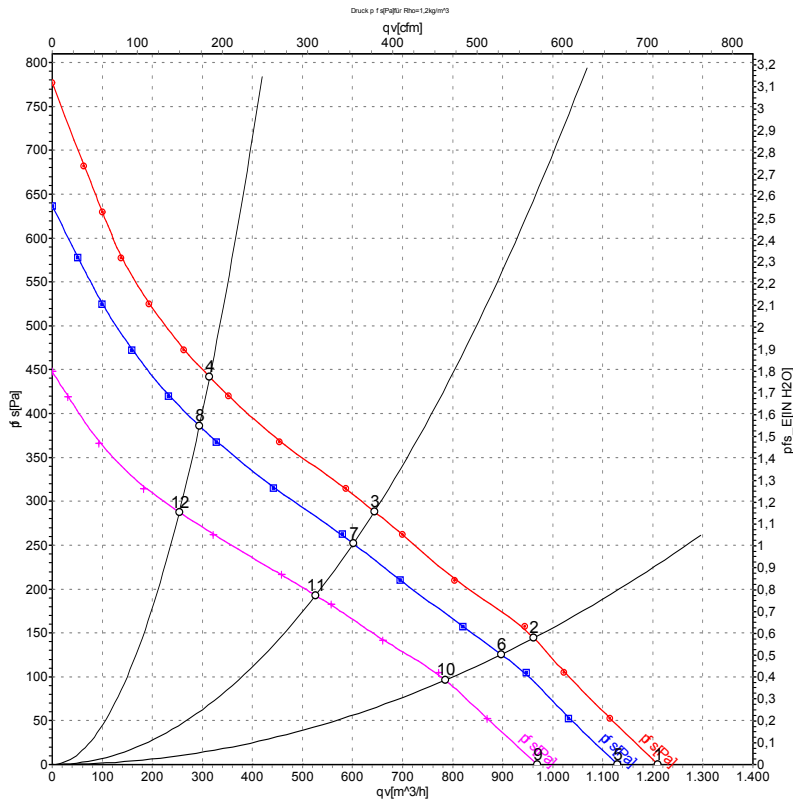


## Connection screen



No.	Conn.	Designation	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	Tach	white	Speed monitoring output, 3 pulses per rotation, Isink max = 10 mA
1	4	GND	blue	Reference mass

## Charts: Air flow



Measurement: LU-53006  
 Measurement: LU-53007  
 Measurement: LU-53005

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>ed</sub>	I	qv	p <sub>fs</sub>
	V	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	57	2780	112	2.39	1210	0
2	57	2635	116	2.52	960	146
3	57	2580	117	2.58	645	288
4	57	2755	113	2.42	315	442
5	48	2600	91	2.20	1130	0
6	48	2475	93	2.28	895	125
7	48	2410	95	2.34	600	250
8	48	2580	92	2.21	295	385
9	36	2235	59	1.84	970	0
10	36	2150	63	1.96	785	98
11	36	2115	64	2.00	525	193
12	36	2230	59	1.84	255	288

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

