

R1G133-AA65-02

# EC centrifugal fan

backward curved, single inlet



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## Nominal data

Type	R1G133-AA65-02	
Motor	M1G055-BD	
Nominal voltage	[VDC]	48
Nominal voltage range	[VDC]	36 .. 57
Type of data definition		rfa
Speed	[min <sup>-1</sup> ]	3900
Power input	[W]	28
Current draw	[A]	0.7
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

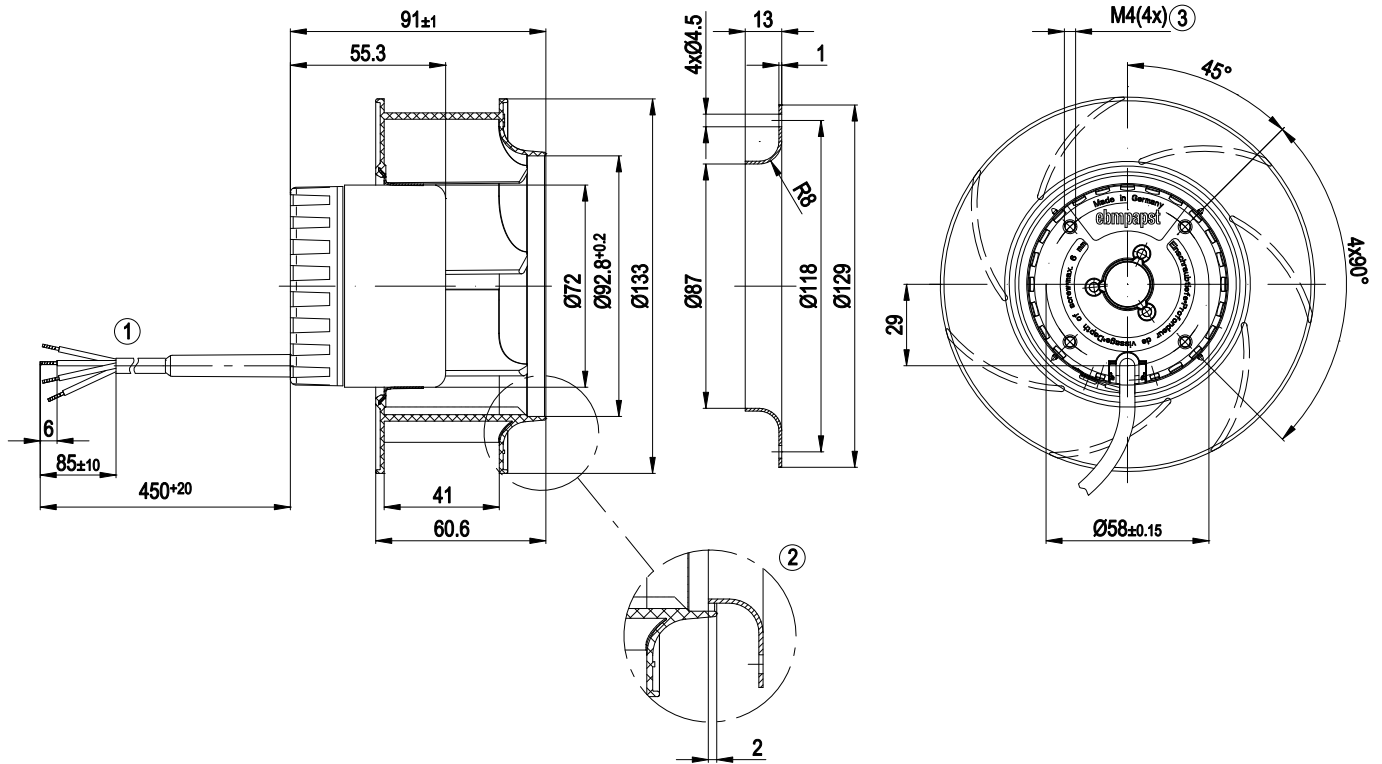
## Technical features

<b>Size</b>	133 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 61000-6-3 (household environment)
<b>EMC interference immunity</b>	Acc. to EN 61000-6-2 (industrial environment)
<b>Insulation class</b>	"B"
<b>Cable exit</b>	Variable
<b>Condensate discharge holes</b>	Rotor-side
<b>Bearing motor</b>	Ball bearing
<b>Mass</b>	0.67 kg
<b>Material of electronics housing</b>	Die-cast aluminium
<b>Material of impeller</b>	Plastic PA66, fibreglass-reinforced
<b>Motor protection</b>	Reverse polarity and locked-rotor protection
<b>Surface of rotor</b>	Thick layer passivated
<b>Number of blades</b>	7
<b>Type of protection</b>	IP 20
<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>	CCC; CSA C22.2 Nr.77; UL 1004

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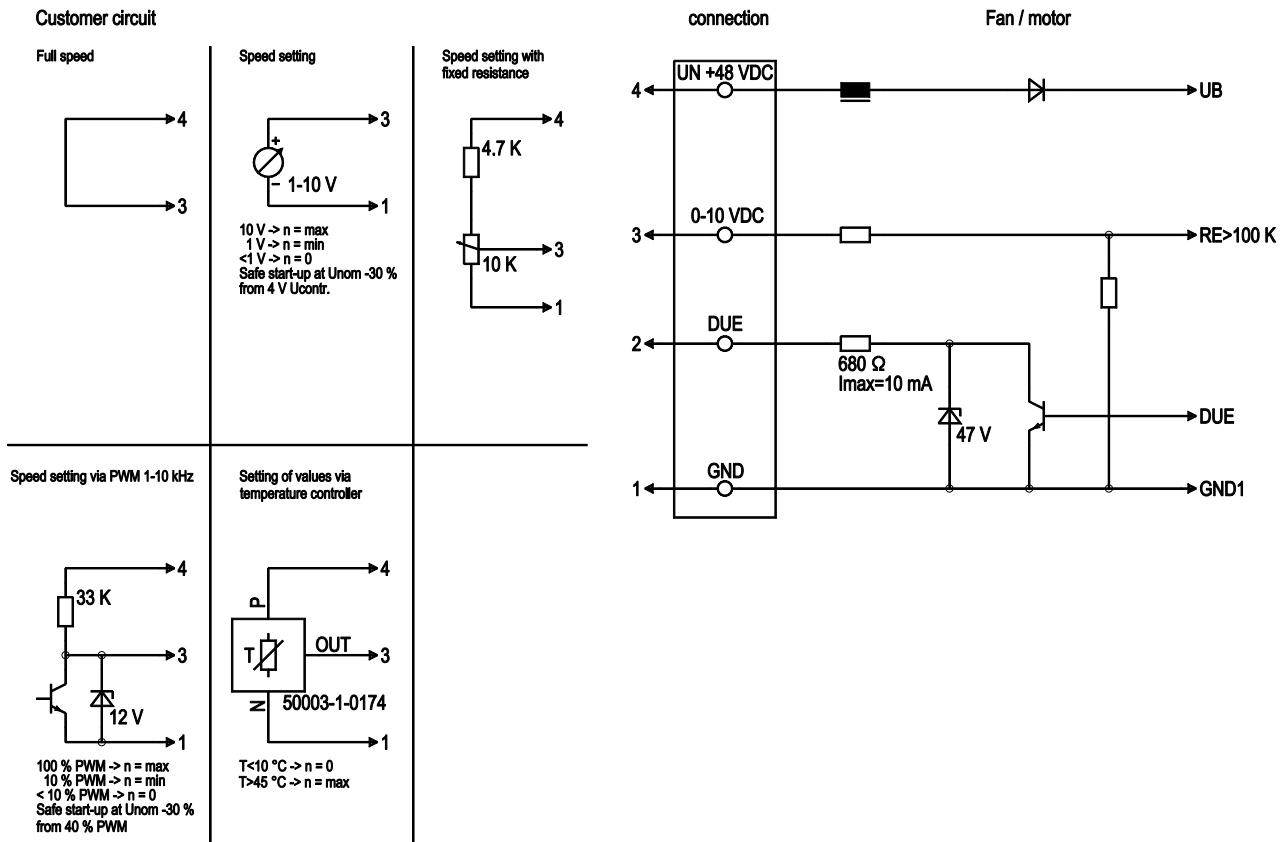
backward curved, single inlet

## Product drawing



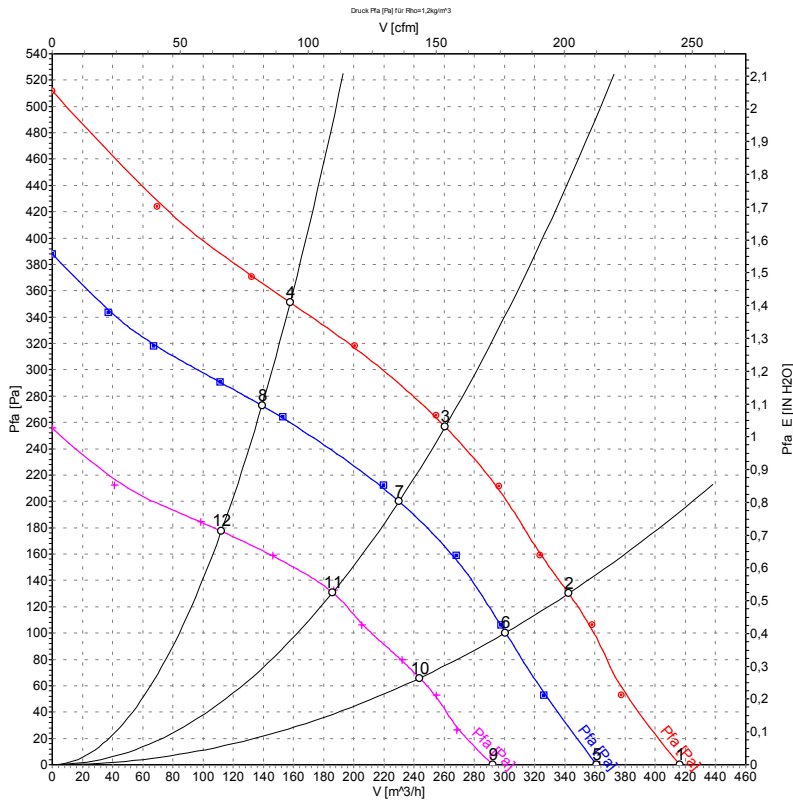
1	Connection line AWG20; 4 x brass lead tips crimped
2	Accessory part: Inlet nozzle 09566-2-4013, not included in the standard scope of delivery
3	Depth of screw max. 6 mm

## Connection screen



Line	No.	Signal	Colour	Function / assignment
1	1	GND	blue	Reference mass
1	2	DUE	white	Speed monitoring output, 2 pulses per rotation, Isink max = 10 mA
1	3	0-10 VDC	yellow	Control input Re > 100 K
1	4	Un +48 VDC	red	Power supply 48 VDC, residual ripple 3.5 %

## Charts: Air flow



Measurement: LU-54696  
 Measurement: LU-54695  
 Measurement: LU-54697

## Measured values

	U	n	P <sub>1</sub>	I	$\hat{V}$	p <sub>fa</sub>
	[V]	[min <sup>-1</sup> ]	[W]	[A]	[m <sup>3</sup> /h]	[Pa]
1	57	4445	39	0.76	415	0
2	57	4275	44	0.84	340	130
3	57	4270	44	0.85	260	258
4	57	4345	42	0.81	160	351
5	48	3900	28	0.70	360	0
6	48	3775	31	0.71	300	100
7	48	3775	31	0.72	230	200
8	48	3825	30	0.69	140	275
9	36	3150	15	0.50	290	0
10	36	3050	17	0.55	245	66
11	36	3055	17	0.54	185	133
12	36	3100	16	0.52	110	177