

R1G175-AF29-04

EC centrifugal fan

backward curved, single inlet



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Nominal data

Type	R1G175-AF29-04	
Motor	M1G055-CF	
Nominal voltage	[VDC]	48
Nominal voltage range	[VDC]	36 .. 52
Type of data definition		rfa
Speed	[min ⁻¹]	4000
Power input	[W]	75
Current draw	[A]	1.75
Min. ambient temperature	[°C]	- 25
Max. ambient temperature	[°C]	+40

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

R1G175-AF29-04

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Technical features

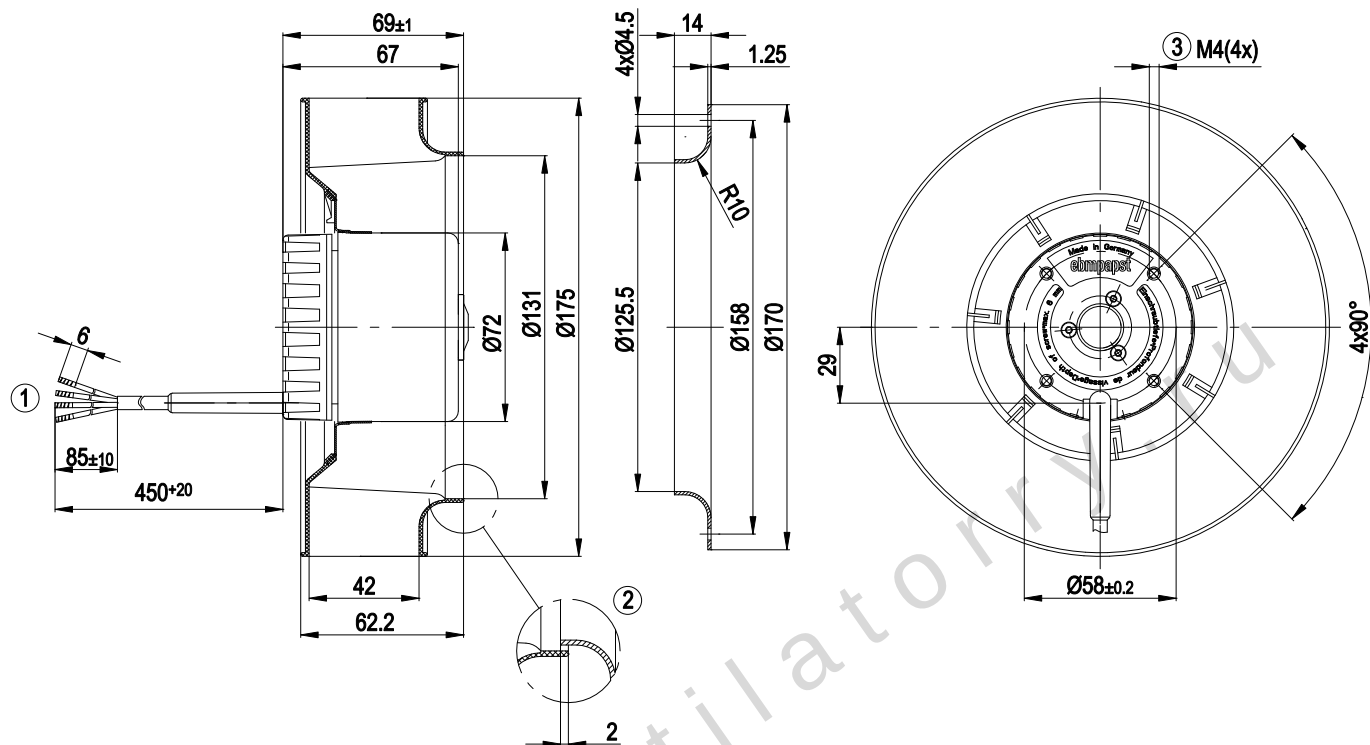
Size	175 mm
Operation mode	S1
Direction of rotation	Clockwise, seen on rotor
Mounting position	Any
EMC interference emission	Acc. to EN 55022 (Class B)
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
Humidity class	F0
Insulation class	"B"
Cable exit	Variable
Cooling bore / aperture	Rotor-side
Bearing motor	Ball bearing
Mass	1.0 kg
Material of electronics housing	Die-cast aluminium
Material of impeller	Plastic PA66, fibreglass-reinforced
Motor protection	Reverse polarity and locked-rotor protection
Product conforming to standard	EN 60950-1
Surface of rotor	Coated in black
Number of blades	7
Type of protection	IP 22
Protection class	I
Technical features	- Tach output - Motor current limit - Soft start - Control input 0-10 VDC / PWM
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Approval	CCC

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Product drawing



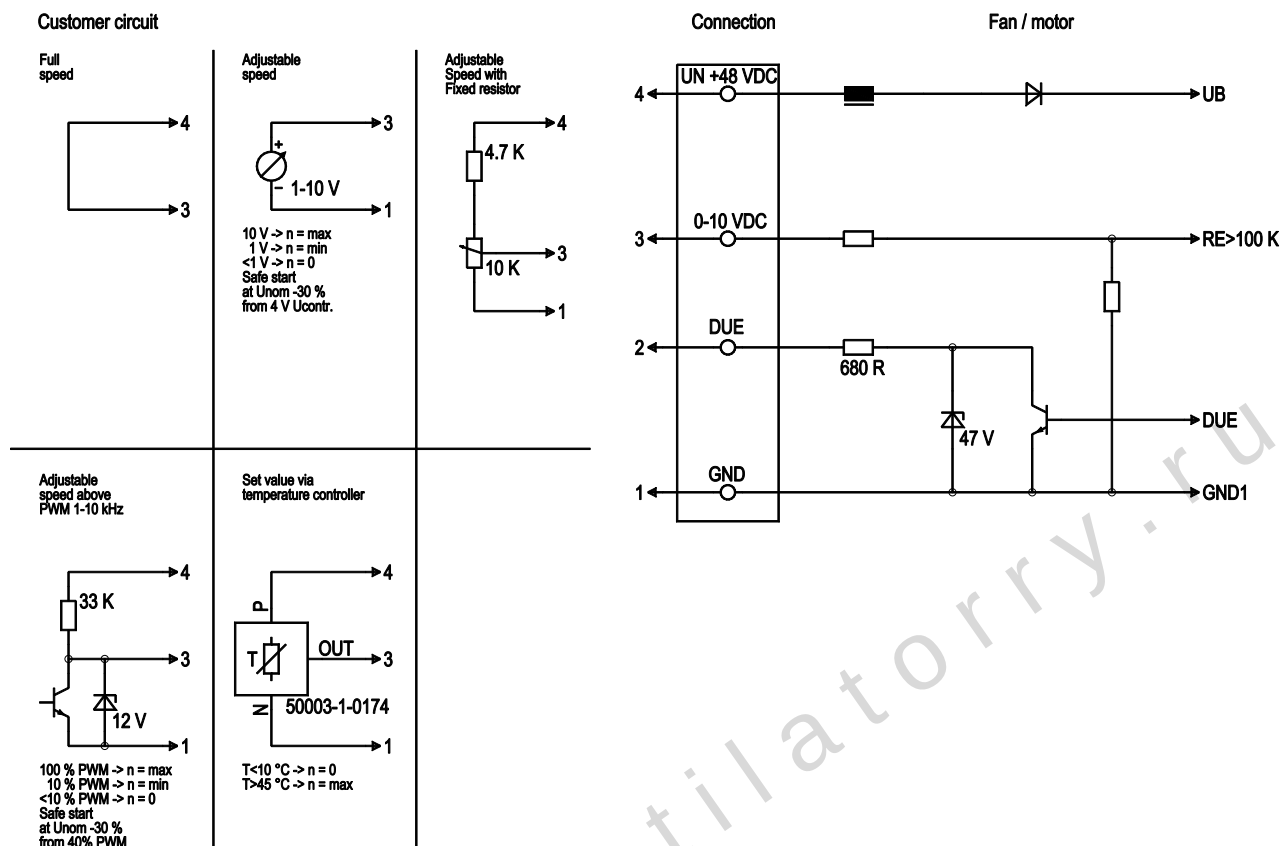
1	Connection line PVC 4X AWG20, 4x brass lead tips crimped
2	Accessory part: Inlet nozzle 09576-2-4013, not included in the standard scope of delivery
3	Depth of screw max. 6 mm

R1G175-AF29-04

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Connection screen



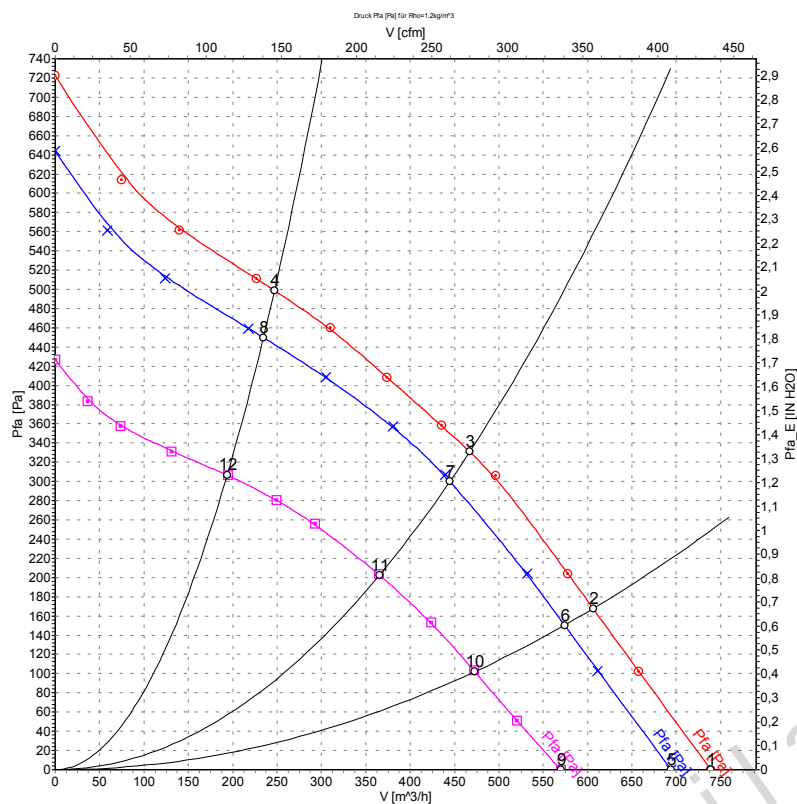
Line	No.	Signal	Colour	Function / assignment
1	1	GND	blue	Reference mass
1	2	DUE	white	Speed monitoring output, 2 pulses per revolution, Isink max = 10 mA
1	3	0-10 VDC	yellow	Control input Re > 100 k
1	4	Un +48 VDC	red	Power supply 48 VDC, see type plate for voltage range, residual ripple 3.5%

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Charts: Air flow



Measurement: LU-56258
Measurement: LU-56257
Measurement: LU-56259

Measured values

	U	n	P ₁	I	$\dot{V}$	P _{fa}
	[V]	[min ⁻¹]	[W]	[A]	[m³/h]	[Pa]
1	52	4245	88	1.88	740	0
2	52	4120	93	2.00	605	168
3	52	4040	96	2.07	465	331
4	52	4100	94	2.02	245	499
5	48	4000	75	1.75	695	0
6	48	3915	81	1.87	575	150
7	48	3860	83	1.93	445	300
8	48	3900	82	1.89	235	450
9	36	3300	42	1.31	570	0
10	36	3230	45	1.39	475	102
11	36	3180	47	1.46	365	204
12	36	3205	46	1.42	195	307