

R1G175-AB41-02

EC centrifugal fan

backward curved, single inlet

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Nominal data

Type	R1G175-AB41-02	
Motor	M1G055-BD	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Type of data definition		fa
Speed	min ⁻¹	3100
Power input	W	34
Current draw	A	0.8
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

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Technical features

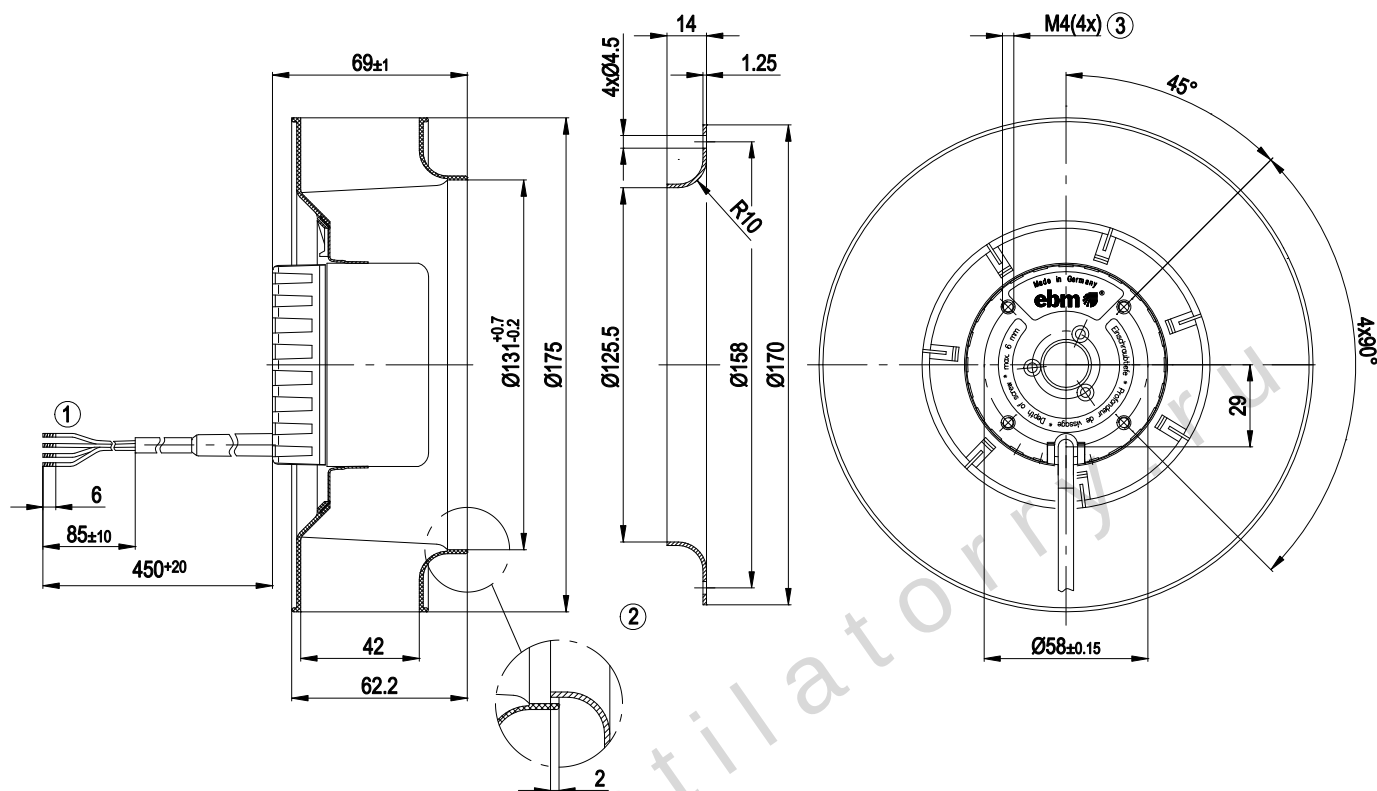
Mass	0.74 kg
Size	175 mm
Surface of rotor	Thick layer passivated
Material of impeller	PA plastic 6.6, fiberglass-reinforced
Number of blades	7
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 22
Insulation class	"B"
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Any
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Technical features	Control input 0-10 VDC / PWM, tach output
EMC interference immunity	Acc. to EN 61000-6-2
EMC interference emission	Acc. to EN 61000-6-3
Motor protection	Reverse polarity and locked-rotor protection
Cable exit	Variable
Product conforming to standard	EN 60950-1
Approval	CCC; CSA C22.2 Nr.113; UL 507; VDE

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Product drawing



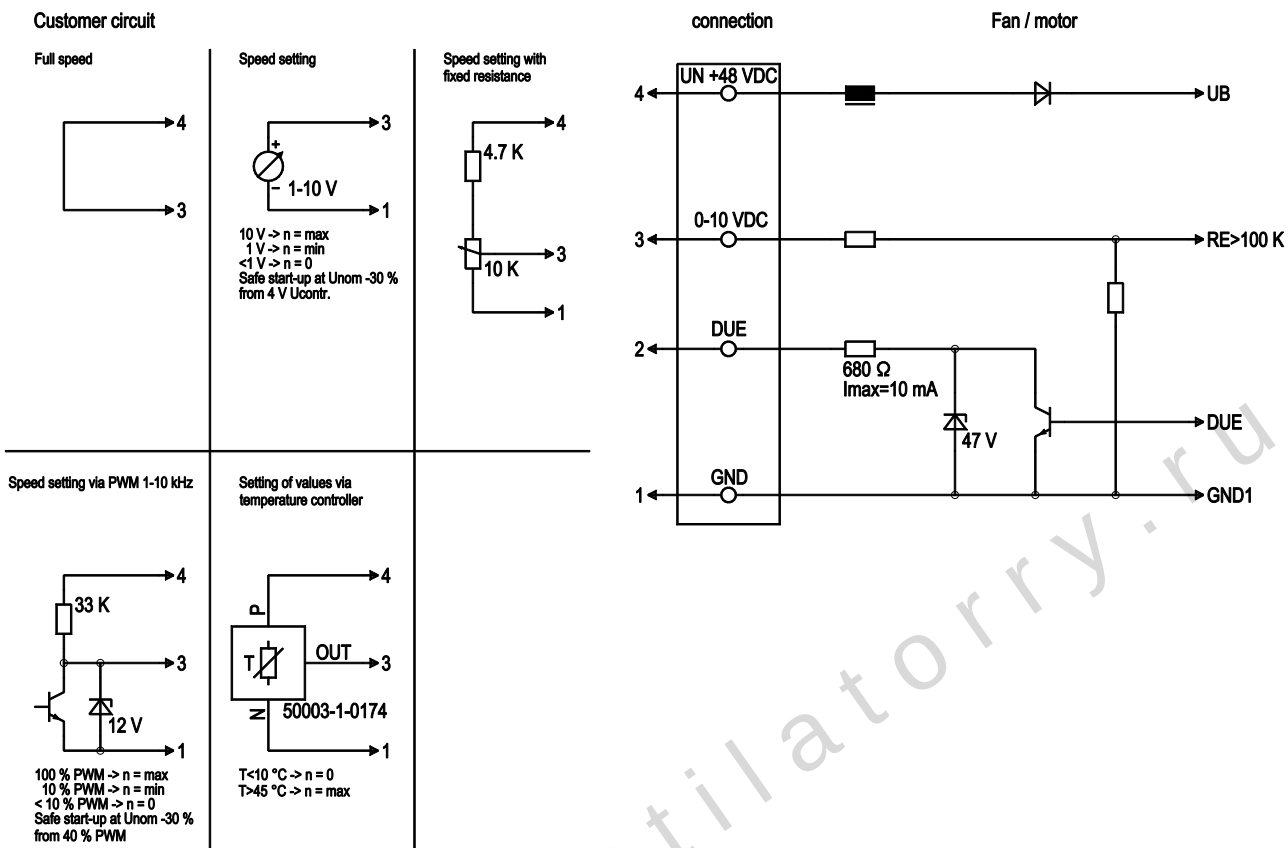
1	Connection line AWG20, 4 x brass lead tips crimped
2	Accessory part: Inlet nozzle 09576-2-4013, not included in the standard scope of delivery
3	Depth of screw max. 6 mm

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Connection screen



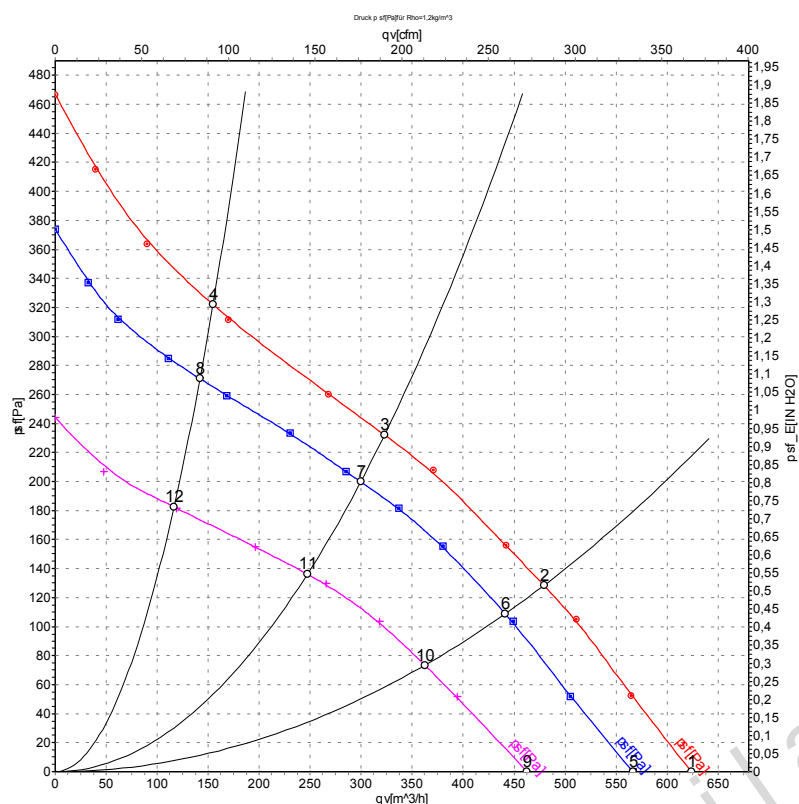
Line	No.	Signal	Colour	Function / assignment
1	1	GND	blue	Reference mass
1	2	DUE	white	Speed monitoring output, 2 pulses per rotation, Isink max = 10 mA
1	3	0-10 VDC	yellow	Control input Re > 100 K
1	4	Un +48 VDC	red	Power supply 48 VDC, residual ripple 3.5 %

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Charts: Air flow



Measurement: LU-45688
Measurement: LU-45687
Measurement: LU-45689

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 _e	I	qv	P _{st}
	V	min ⁻¹	W	A	m ³ /h	Pa
1	56	3410	46	0.92	625	0
2	56	3210	48	0.98	480	128
3	56	3105	50	1.01	325	232
4	56	3260	48	0.96	155	321
5	48	3100	34	0.83	565	0
6	48	2960	39	0.89	440	110
7	48	2880	40	0.93	300	200
8	48	3005	38	0.87	140	270
9	36	2530	20	0.63	465	0
10	36	2440	22	0.69	360	74
11	36	2385	24	0.72	245	136
12	36	2455	22	0.67	115	182