EC centrifugal fan

backward curved, single inlet

Nominal data

Type	**R1G175-AB63-59**	
Motor	**M1G055-BD**	
Nominal voltage	[VDC]	24
Nominal voltage range	[VDC]	16 .. 28
Type of data definition		rfa
Speed	[min^{-1}]	3100
Power input	[W]	34
Current draw	[A]	1.6
Max. ambient temperature	[°C]	60
Air flow	[m^3/h]	565
Back pressure	[Pa]	0

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

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Technical features

Leackage current	<= 0,25 mA
Size	175 mm
Operation mode	S1
Mounting position	Any
EMC interference emission	Acc. to EN 61000-6-3
EMC interference immunity	Acc. to EN 61000-6-2
Direction of rotation	Clockwise, seen on rotor
Insulation class	"B"
Cable exit	Variable
Condensate discharge holes	None
Bearing-motor	Ball bearing
Mass	0.85 kg
Material of impeller	PA plastic 6.6, fiberglass-reinforced, round sheet-metal plate coated in black
Motor protection	Reverse polarity and locked-rotor protection
Surface of rotor	Coated in black
Number of blades	7
Type of protection	IP 44
Technical features	- Control input 0-10 VDC / PWM - Tach output - Soft start

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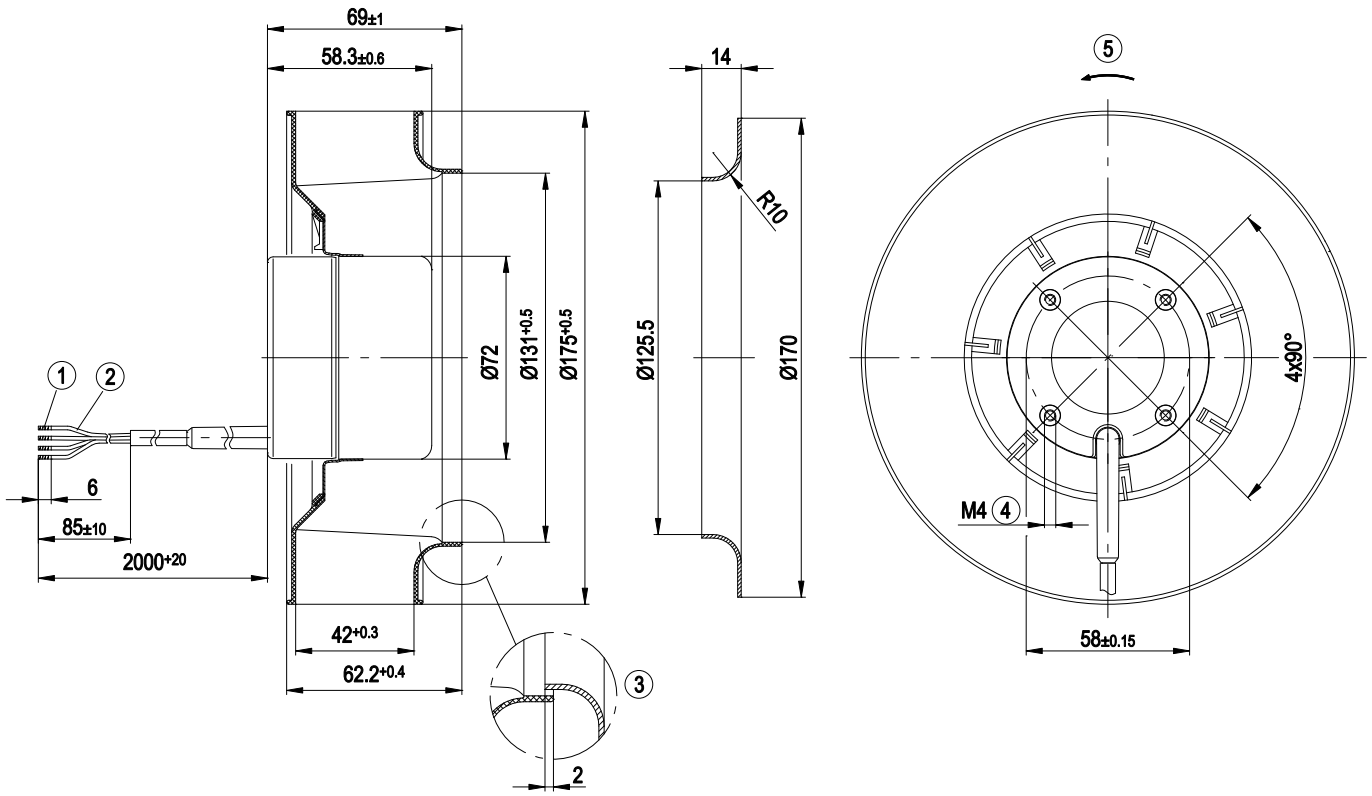
Product drawing



1	Brass lead tips
2	Connection line 4 x AWG20
3	Accessory part: Inlet nozzle 09576-2-4013, not included in the standard scope of delivery
4	Screw depth max. 6 mm
5	Direction of rotation clockwise, seen on rotor

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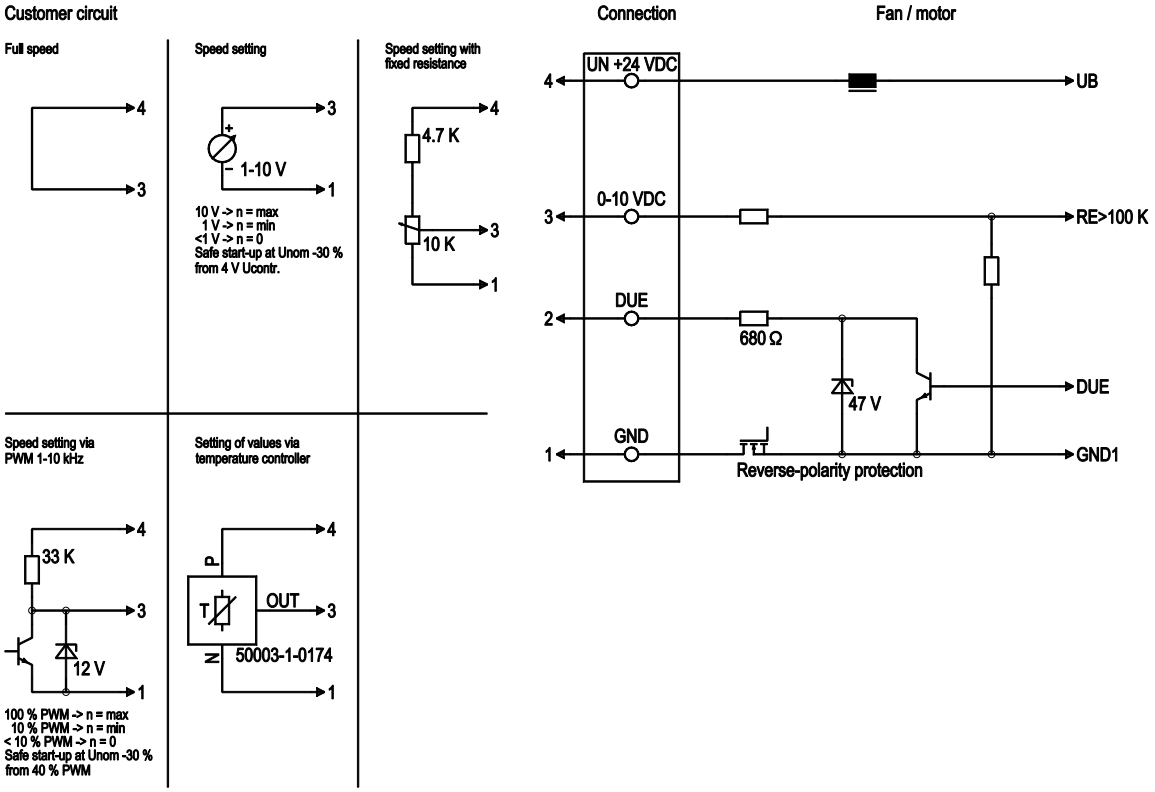
Connection screen



Line	No.	Signal	Colour	Function / assignment
1	1	GND	blue	Reference mass
1	2	DUE	white	Speed monitoring output, 2 pulses per rpm (revolutions per minute), Isink max = 10 mA
1	3	0-10 VDC	yellow	Control input Re > 100 K
1	4	Un +24 VDC	red	Power supply 24 VDC, residual ripple 3.5 %

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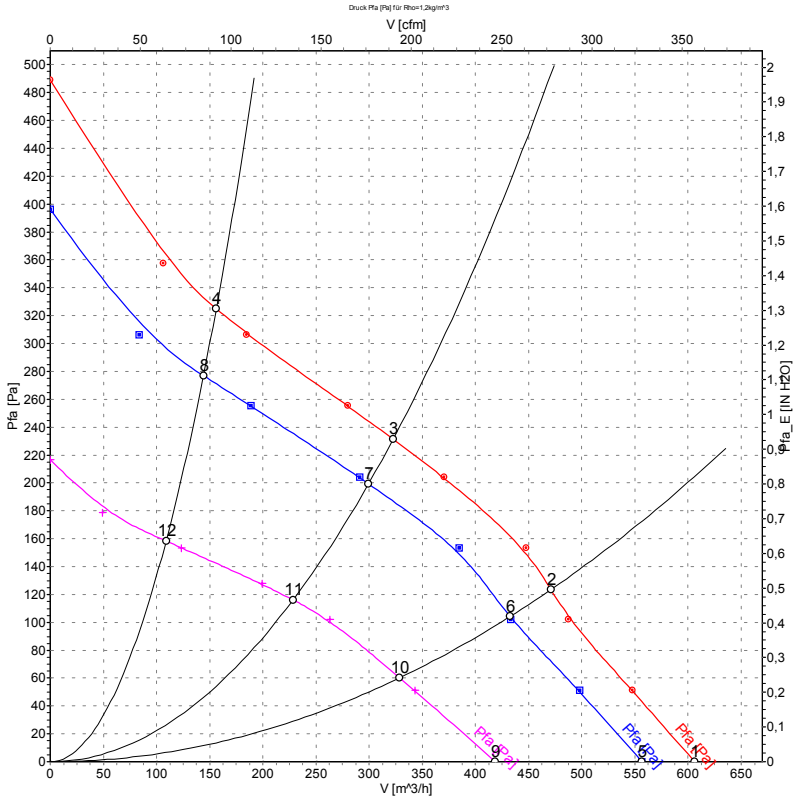
Charts: Air flow



Measured values

	U	n	P_1	I	η_{TL}	$\dot{V}$	p_{fa}
	[V]	[min^{-1}]	[W]	[A]	[%]	[m^3/h]	[Pa]
1	28	3375	46	1.83		605	0
2	28	3170	48	1.97		470	123
3	28	3105	49	2.01		325	231
4	28	3255	47	1.91		155	325
5	24	3100	34	1.60		555	0
6	24	2915	39	1.79	49	435	102
7	24	2885	39	1.82	59	300	200
8	24	3010	37	1.69	39	145	277
9	16	2320	16	1.10		420	0
10	16	2225	17	1.21		330	60
11	16	2205	18	1.24		230	116
12	16	2270	16	1.15		110	158