R1G175-AF17-12

EC centrifugal fan

backward curved

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Nominal data

Type	**R1G175-AF17-12**	
Motor	**M1G055-CF**	
Nominal voltage	[VDC]	24
Nominal voltage range	[VDC]	16 .. 28
Type of data definition		rfa
Speed	[min^{-1}]	2600
Power input	[W]	19
Current draw	[A]	1.0
Min. ambient temperature	[°C]	- 25
Max. ambient temperature	[°C]	70

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

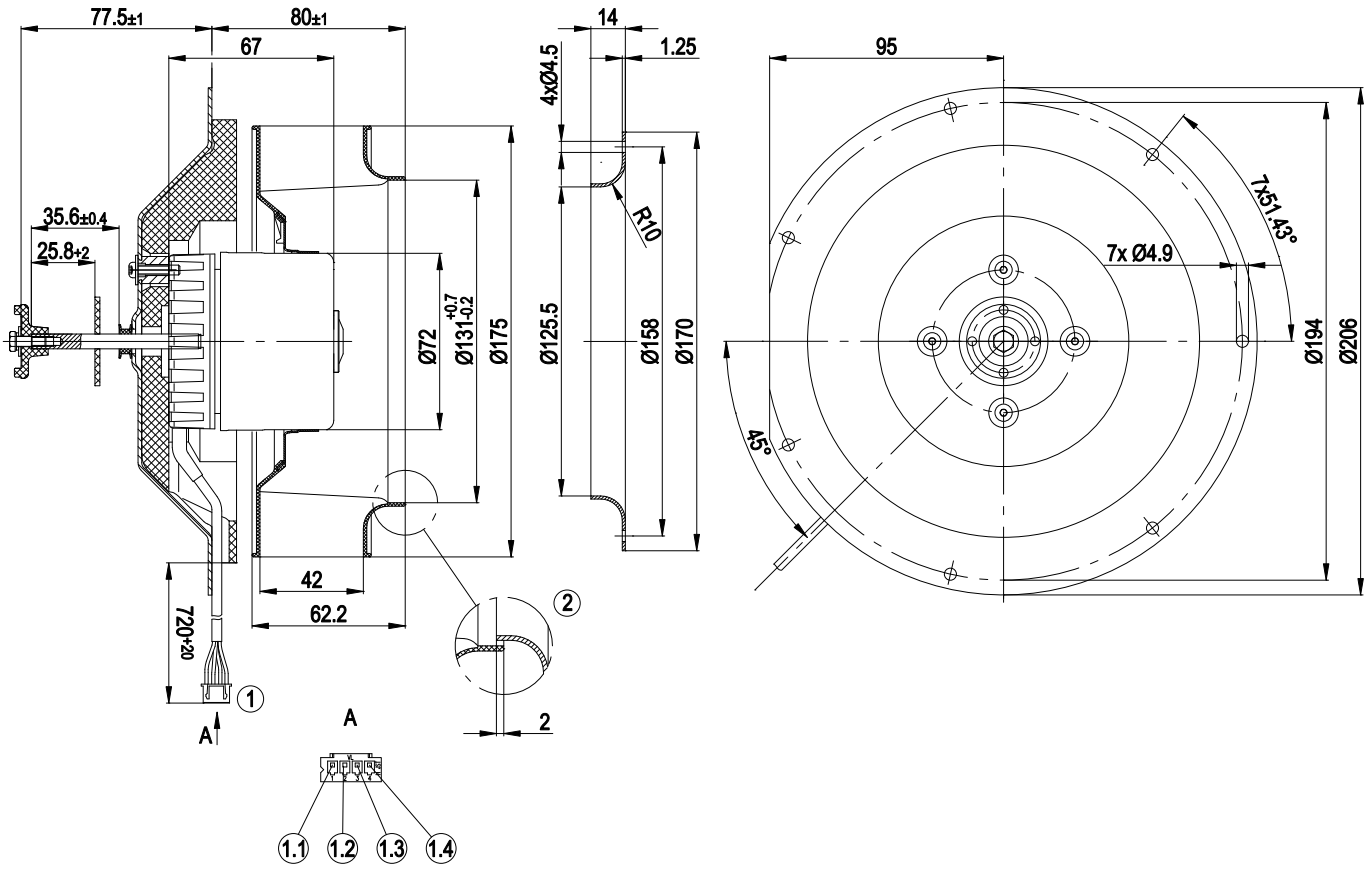
Leackage current	<= 0,25 mA
Size	175 mm
Operation mode	S1
Direction of rotation	Clockwise, seen on rotor
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Electrical leads	With plug
EMC interference emission	Acc. to EN 61000-6-3 (household environment)
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
Insulation class	"B"
Cable exit	Lateral
Condensate discharge holes	Rotor-side
Bearing motor	Ball bearing
Mass	1.5 kg
Material of impeller	Plastic PA66, fibreglass-reinforced
Motor protection	Locked-rotor protection
Product conforming to standard	EN 60950
Surface of rotor	Thick layer passivated
Number of blades	7
Type of protection	IP 20
Technical features	- Control input 0-10 VDC / PWM - Tach output - Motor current limit - Soft start
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C

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Product drawing



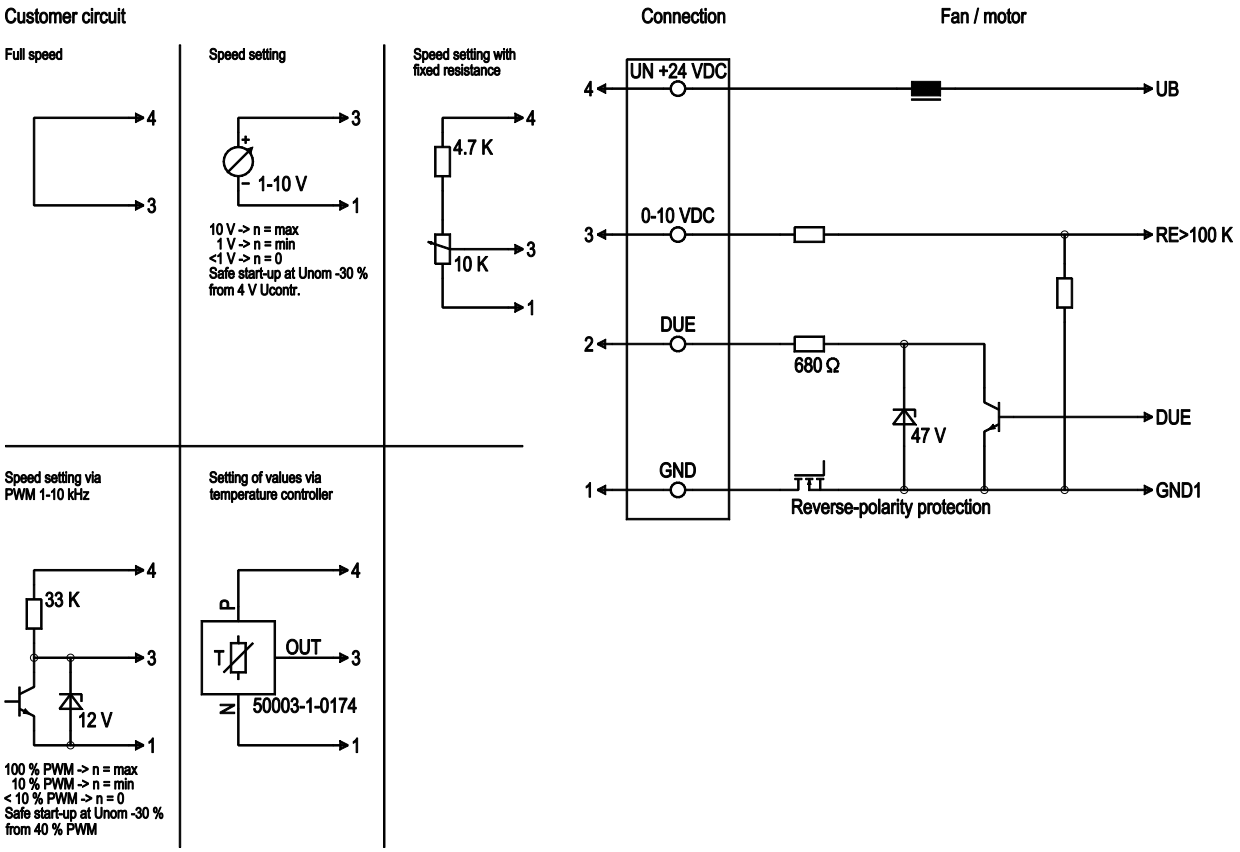
1	Connector housing JST No. XHP-4, mating connector not included in the standard scope of delivery, connection line AWG20, 4 x female terminal JST No. SXH-001T-P0.6 crimped
1.1	blue
1.2	red
1.3	white
1.4	yellow
2	Accessory part: Inlet nozzle 09576-2-4013, not included in the standard scope of delivery

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Connection screen



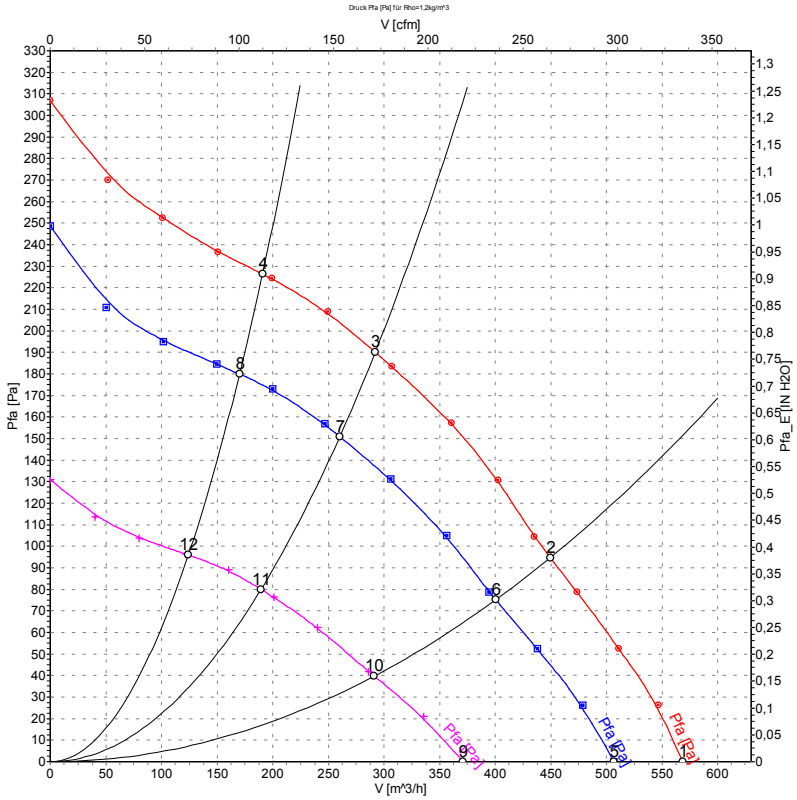
Line	No.	Signal	Colour	Function / assignment
1	1	GND	blue	Reference mass
1	2	DUE	white	Speed monitoring output, 2 pulses per rotation, Isink max = 10 mA
1	3	0-10 VDC	yellow	Control input Re > 100 K
1	4	Un +24 VDC	red	Power supply 24 VDC, residual ripple 3.5 %

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Charts: Air flow



Measurement: LU-68891
Measurement: LU-68890
Measurement: LU-68892

Measured values

	U	n	P_1	I	$\dot{V}$	p_{fa}
	[V]	[min^{-1}]	[W]	[A]	[m^3/h]	[Pa]
1	28	2895	26	1.05	570	0
2	28	2810	30	1.20	450	95
3	28	2715	33	1.31	290	190
4	28	2760	32	1.27	190	227
5	24	2600	19	1.00	505	0
6	24	2495	22	1.05	400	75
7	24	2450	24	1.13	260	151
8	24	2475	23	1.10	170	180
9	16	1895	9	1.00	370	0
10	16	1830	10	0.95	290	40
11	16	1785	11	0.92	190	80
12	16	1780	10	0.93	125	96

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