R1G190-AB25-20

EC centrifugal fan

backward curved, single inlet



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Nominal data

Type	**R1G190-AB25-20**	
Motor	**M1G055-CF**	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Type of data definition		fa
Speed	min-1	2950
Power input	W	51
Current draw	A	1.2
Min. ambient temperature	°C	- 25
Max. ambient temperature	°C	+40

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

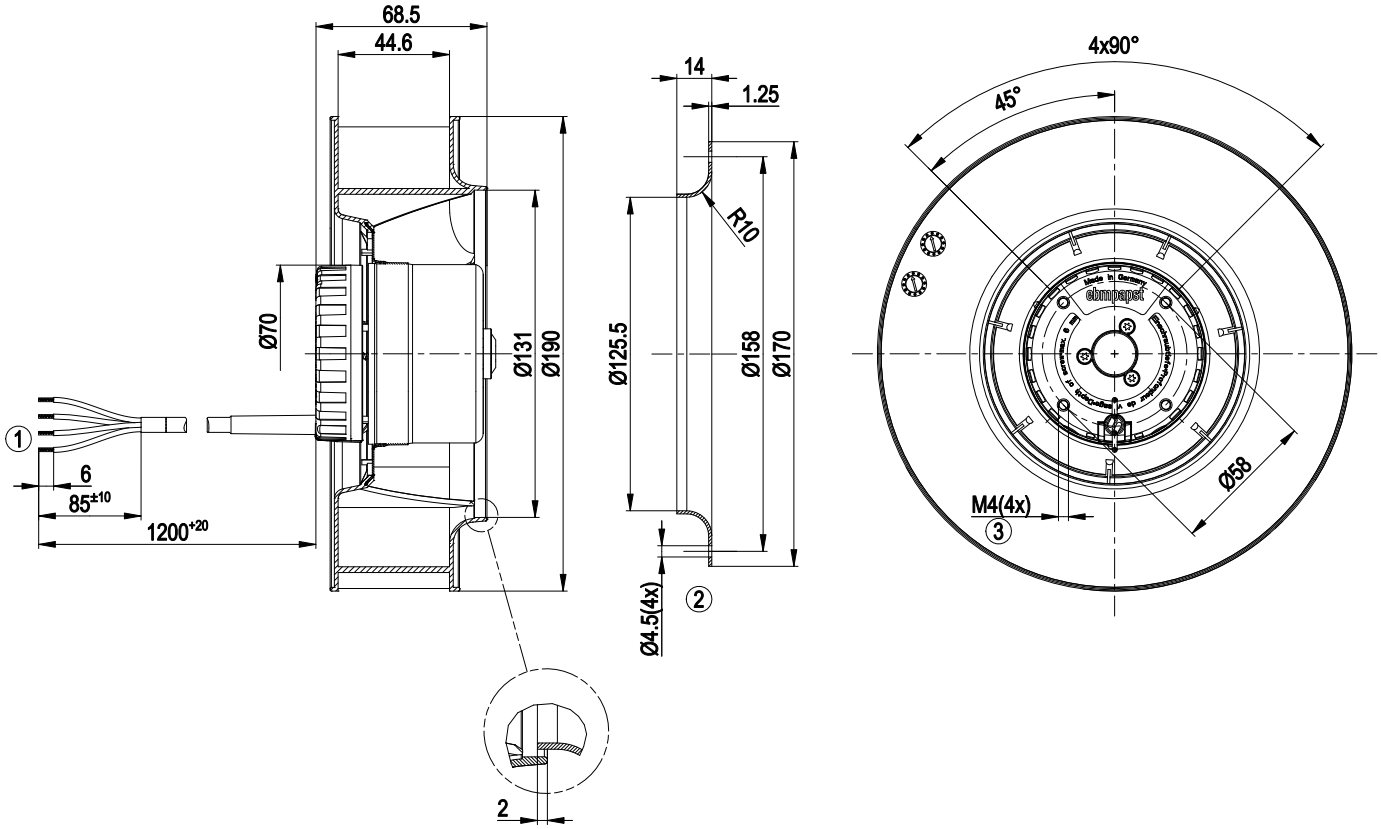
Mass	1.1 kg
Size	190 mm
Surface of rotor	Coated in black
Material of impeller	Plastic PA66, fibreglass-reinforced
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position
Insulation class	"B"
Humidity class	F5
Max. permissible ambient motor temp. (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	- Tach output - Motor current limit - Soft start - Control input 0-10 VDC / PWM
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC interference emission	Acc. to EN 61000-6-3 (household environment)
Motor protection	Reverse polarity and locked-rotor protection
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1

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Product drawing



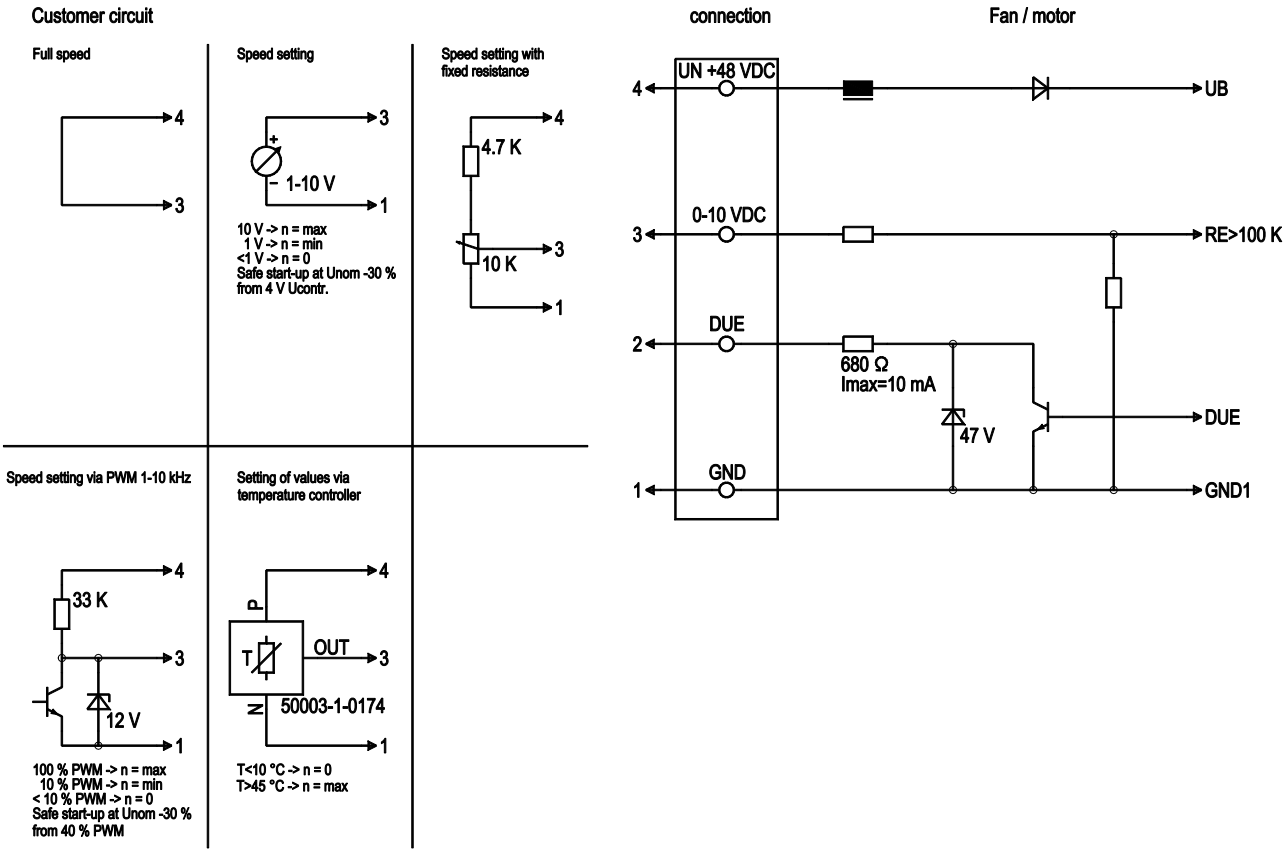
1	Connection line AWG20 4X 0.5mm², 4 x brass lead tips crimped
2	Accessory part: Inlet nozzle 09576-2-4013, not included in the standard scope of delivery
3	Depth of screw max. 6 mm

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Connection screen



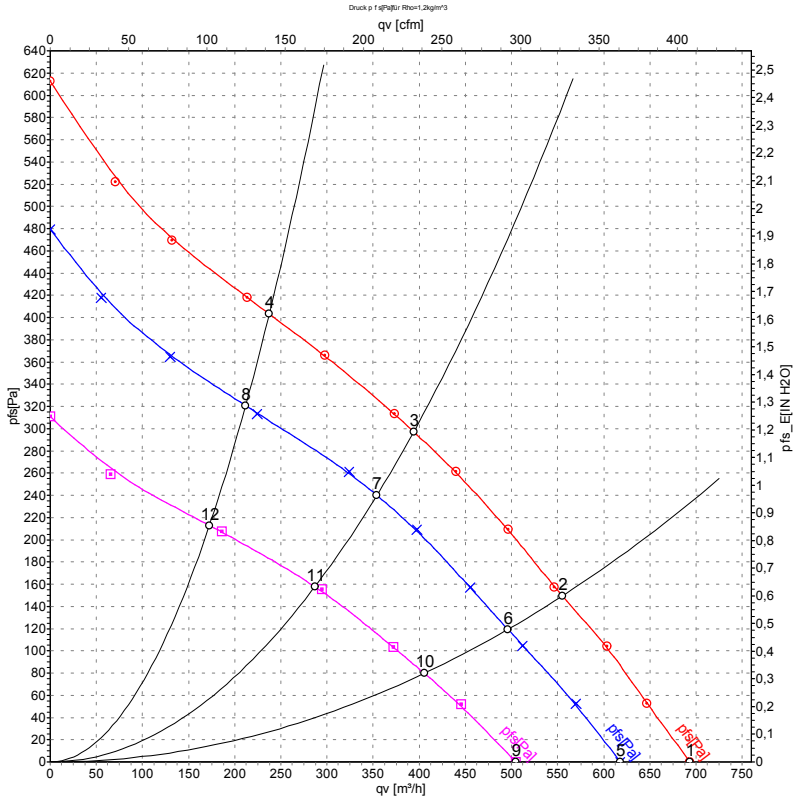
Line	No.	Signal	Colour	Function / assignment
1	1	GND	blue	Reference mass
1	2	DUE	white	Speed monitoring output, 2 pulses per rotation, Isink max = 10 mA
1	3	0-10 VDC	yellow	Control input Re > 100 K
1	4	Un +48 VDC	red	Power supply 48 VDC, residual ripple 3.5 %

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Charts: Air flow



Measurement: LU-51398
Measurement: LU-51397
Measurement: LU-51399

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_{ed}	I	qv	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa
1	57	3310	71	1.38	695	0
2	57	3215	75	1.46	555	149
3	57	3160	77	1.51	395	297
4	57	3245	74	1.44	235	403
5	48	2950	51	1.20	620	0
6	48	2875	54	1.24	495	120
7	48	2835	56	1.29	355	240
8	48	2900	53	1.21	210	320
9	36	2395	28	0.87	505	0
10	36	2335	30	0.94	405	80
11	36	2315	31	0.96	285	159
12	36	2365	29	0.91	170	213

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