R1G190-AC37-54

EC centrifugal fan

backward curved, single inlet



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Nominal data

Type	**R1G190-AC37-54**	
Motor	**M1G074-BF**	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Type of data definition		fa
Speed	min^{-1}	3250
Power input	W	80
Current draw	A	3.7
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

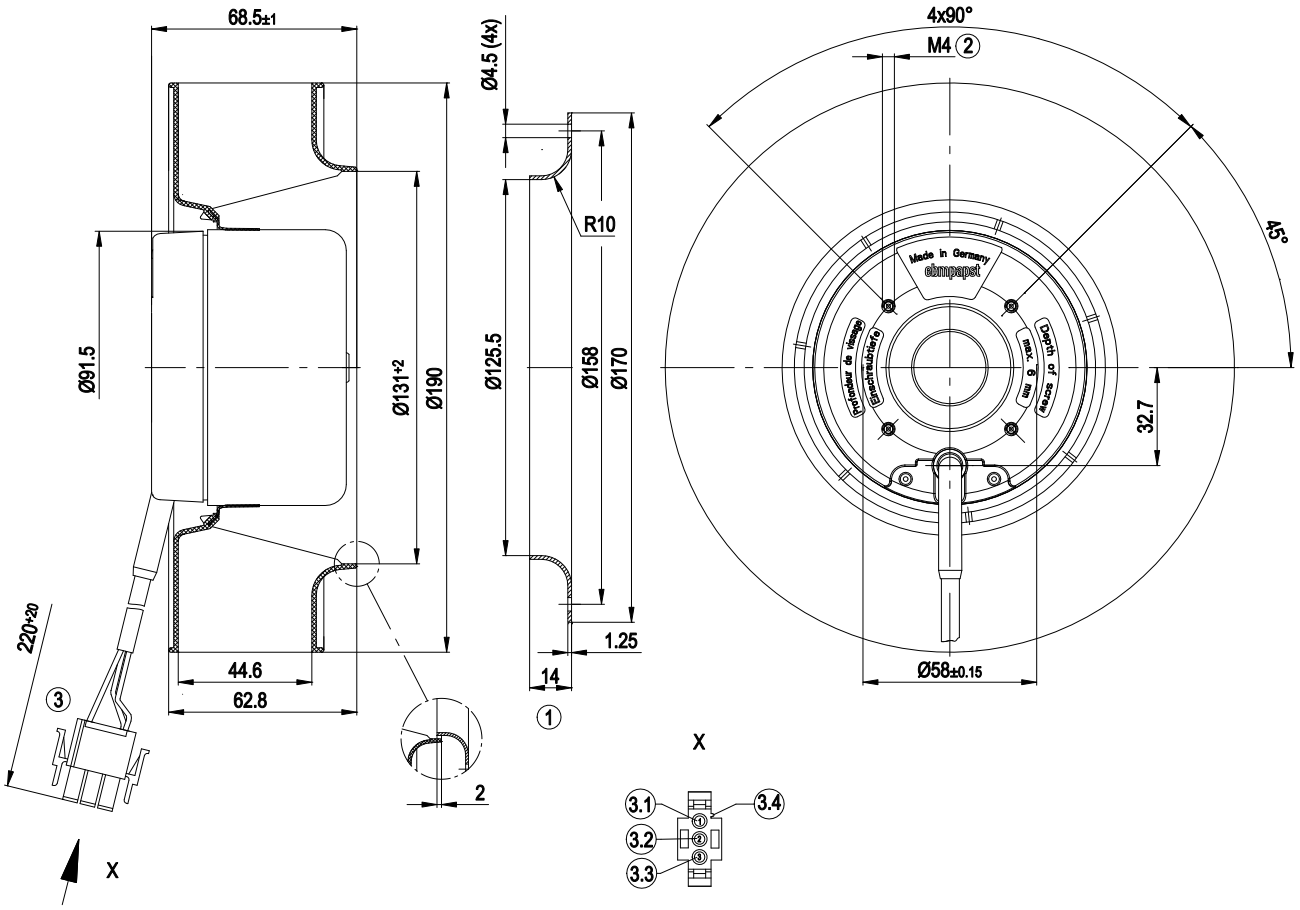
Mass	1.3 kg
Size	190 mm
Surface of rotor	Coated in black
Material of impeller	PA plastic
Number of blades	7
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 42
Insulation class	"B"
Humidity class	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Any
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- 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 55022 (Class B, household environment)
Motor protection	Reverse polarity and locked-rotor protection
Cable exit	Variable
Product conforming to standard	EN 60950-1

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Product drawing



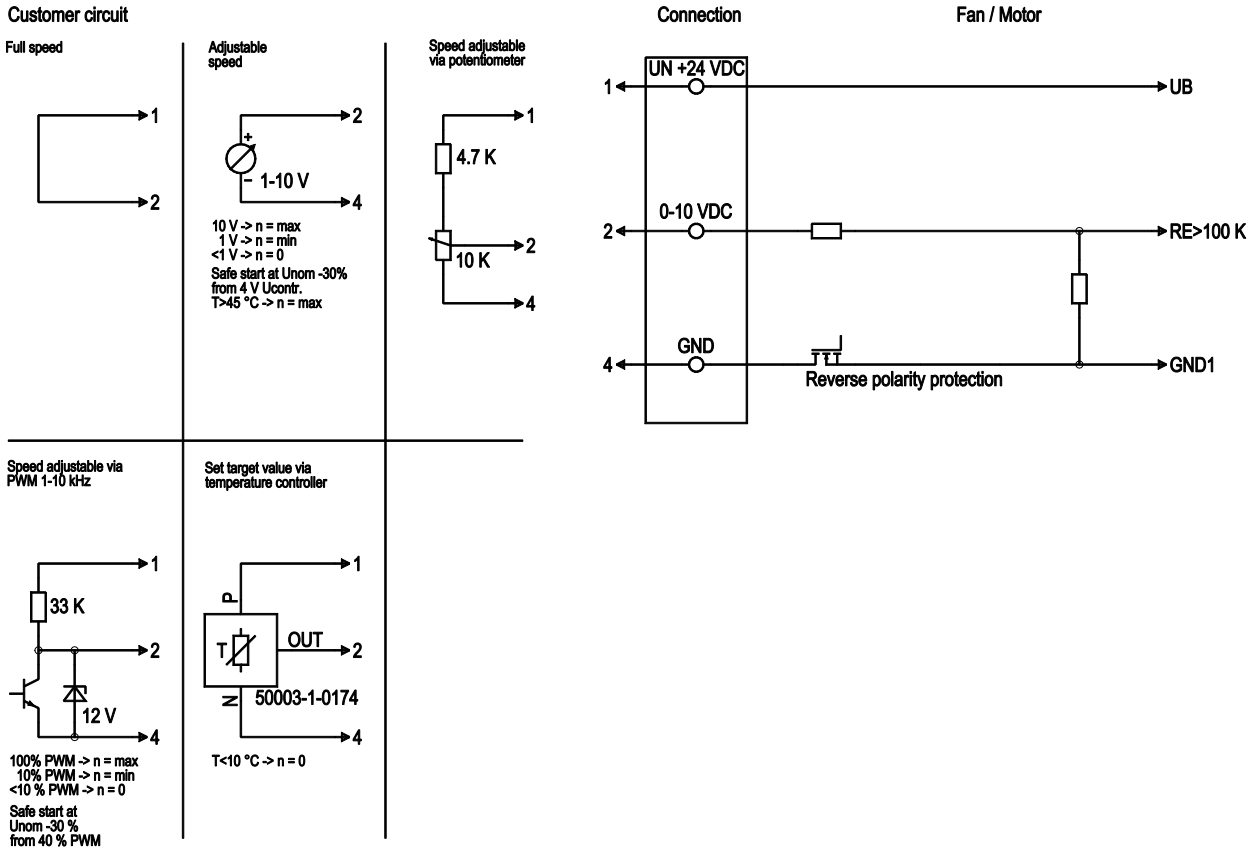
1	Accessory part: Inlet nozzle 09576-2-4013, not included in the standard scope of delivery
2	Depth of screw max. 6 mm
3	Connection line XLPO 3x 0.5 mm² with connector housing AMP no. 350766-4, 1x plug pin AMP no. 350538-1 and 1x plug pin AMP no. 926885-1 crimped
3.1	- (blue)
3.2	not used
3.3	+ (red) and control input (yellow)
3.4	Polarising rib

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Connection screen



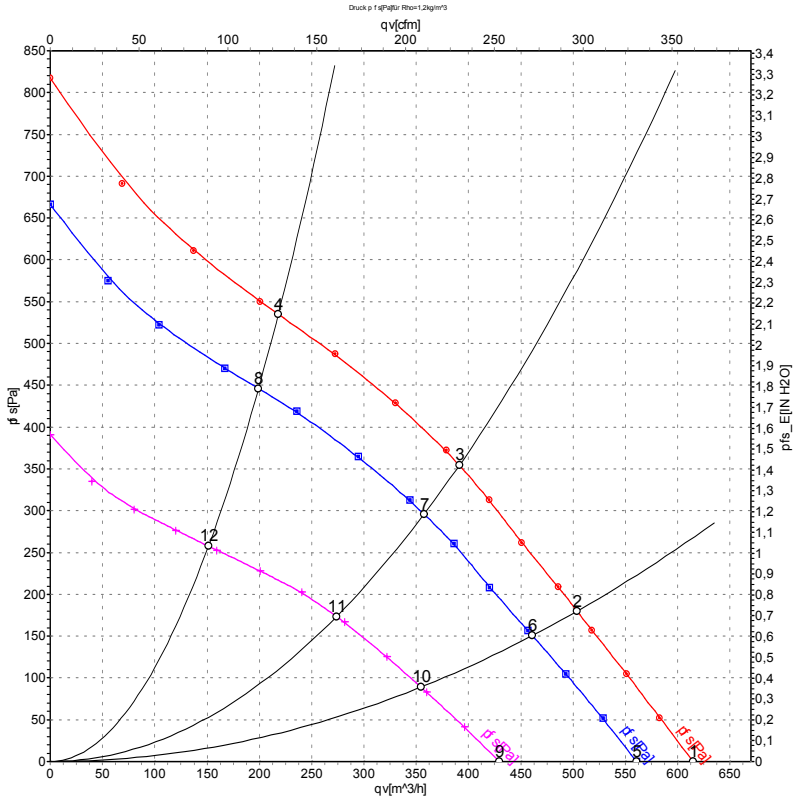
Line	No.	Signal	Colour	Function / assignment
1	1	Un +24 VDC	red	Power supply 24 VDC, residual ripple 3.5 %
1	2	0-10 VDC	yellow	Control input Re > 100 k
1	4	GND	blue	Reference mass

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Charts: Air flow



Measurement: LU-75809
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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	28	3630	103	4.14	615	0
2	28	3540	107	4.30	505	180
3	28	3600	104	4.19	390	354
4	28	3705	100	4.01	220	535
5	24	3250	80	3.70	560	0
6	24	3230	82	3.82	460	150
7	24	3290	80	3.71	360	300
8	24	3380	76	3.53	200	450
9	16	2515	38	2.72	430	0
10	16	2470	39	2.80	355	89
11	16	2515	38	2.70	275	174
12	16	2560	36	2.61	150	258

U = Supply voltage · n = Speed · P_{ed} = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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