R1G310-AA17-19

EC centrifugal fan

backward curved, single inlet

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Nominal data

Type	**R1G310-AA17-19**	
Motor	**M1G074-CF**	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Type of data definition		fa
Speed	min-1	1600
Power input	W	115
Current draw	A	3.0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	50

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

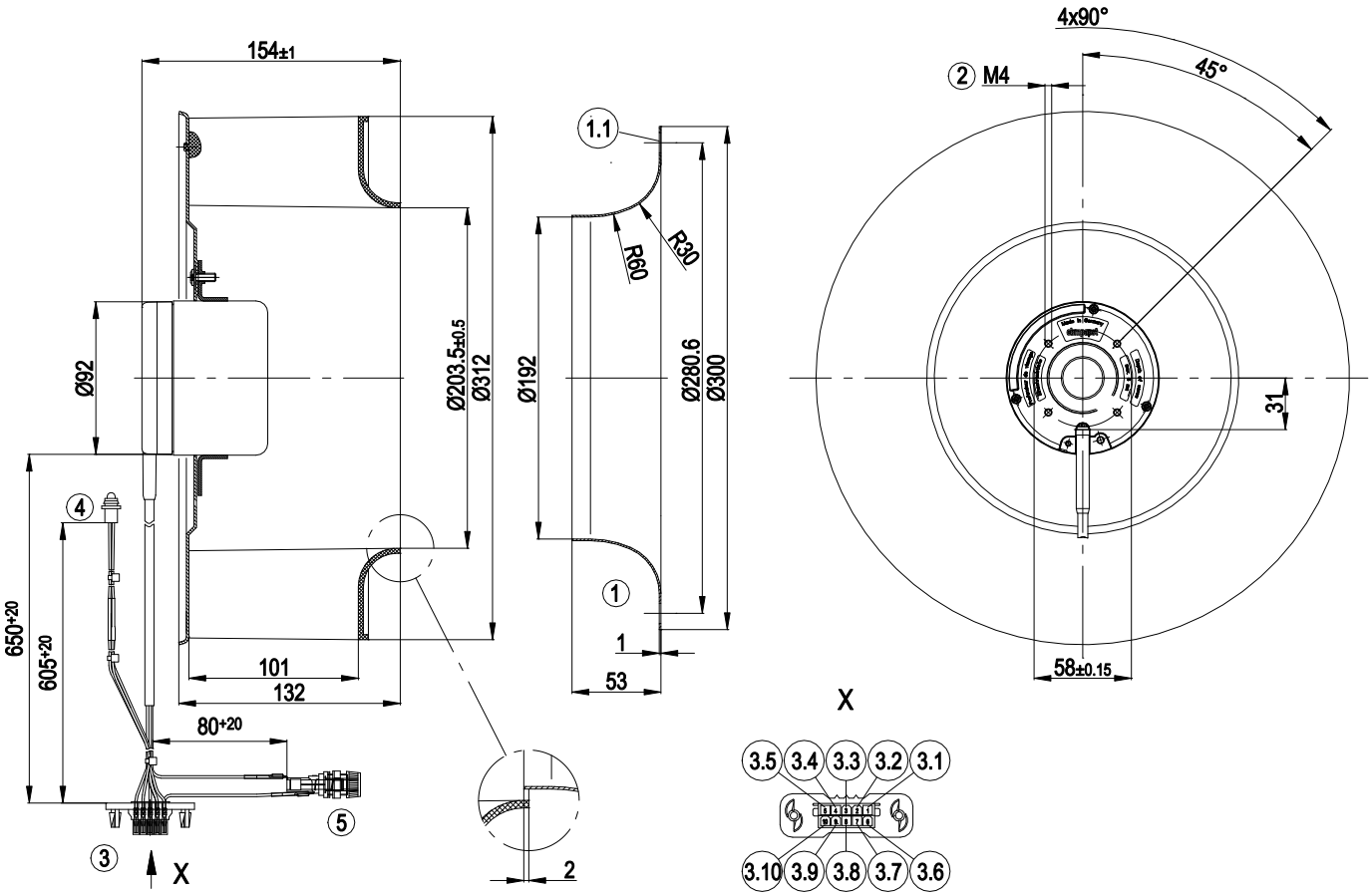
Mass	2.6 kg
Size	310 mm
Surface of rotor	Coated in black
Material of impeller	PA plastic
Number of blades	6
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 42
Insulation class	"B"
Humidity (F)/environmental protection class (H)	F0
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
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 55022 (Class B, household environment)
Electrical leads	With plug
Motor protection	Reverse polarity and locked-rotor protection
Cable exit	Variable
Product conforming to standard	EN 60950-1
Approval	CSA C22.2 No.77; UL 1004-1

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Product drawing



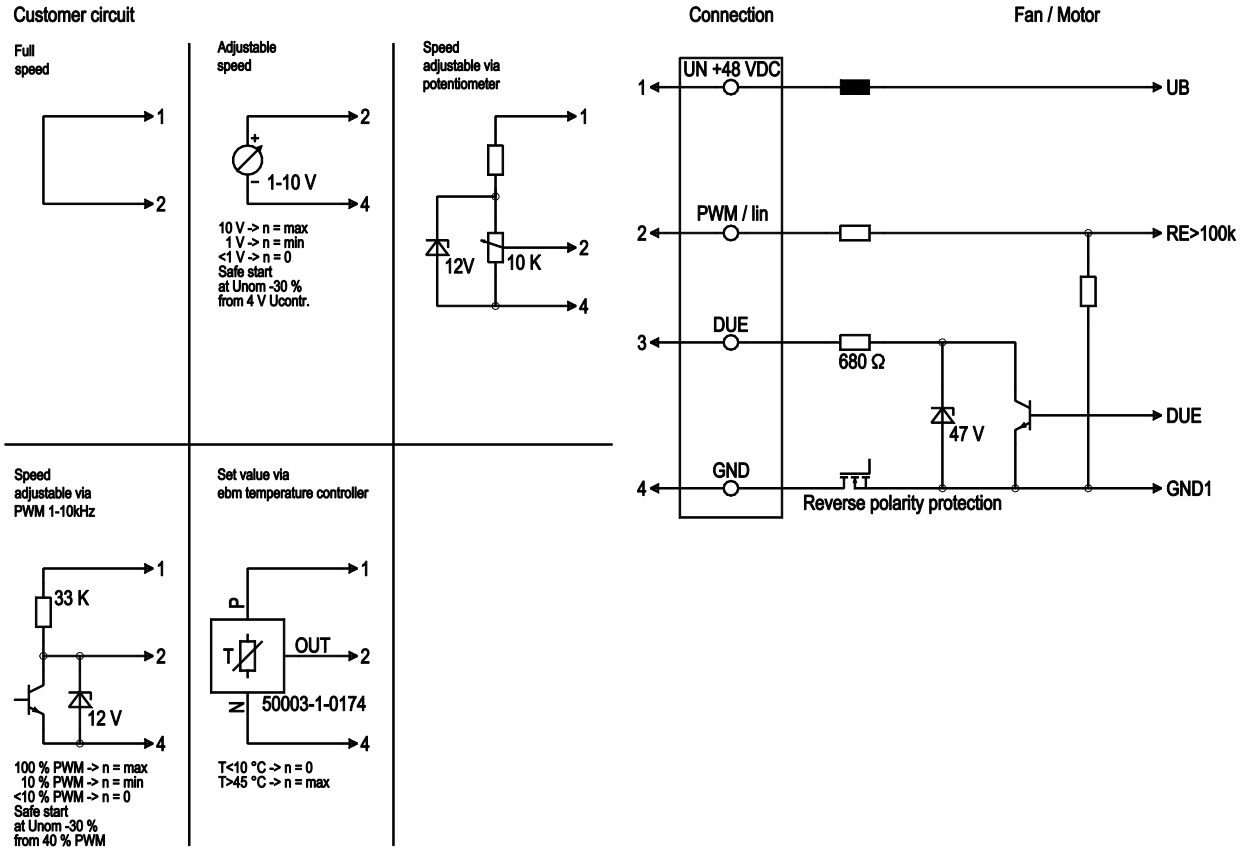
1	Accessory part: Inlet nozzle 97512-2-4013, not included in the standard scope of delivery
1.1	6 slotted holes 7x12
2	Depth of screw max. 6 mm
3	Connection line PVC AWG20 with connector shell Molex No. 15-06-0101; 3x female terminals Molex No. 39-00-0059 and 1x receptacle for tabs AMP No. 170324-1 crimped
3.1	LED (black)
3.2	Control input (yellow)
3.3	s (white)
3.4	LED (black)
3.5	LED (red)
3.6	+ (red)
3.7	– (blue)
3.8	Not assigned
3.9	Not assigned
3.10	Not assigned
4	Connection line AWG24 with LED SSI-LXH9GD-300; 3x female terminals Molex No. 39-00-0065 crimped
5	Connection line Raychem AWG20 with fuse holder and cap HTB-621-R and fuse T6.25A; 1x female terminals Molex No. 39-00-0059 and 1x receptacle for tabs AMP No. 170324-1 crimped

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Connection screen



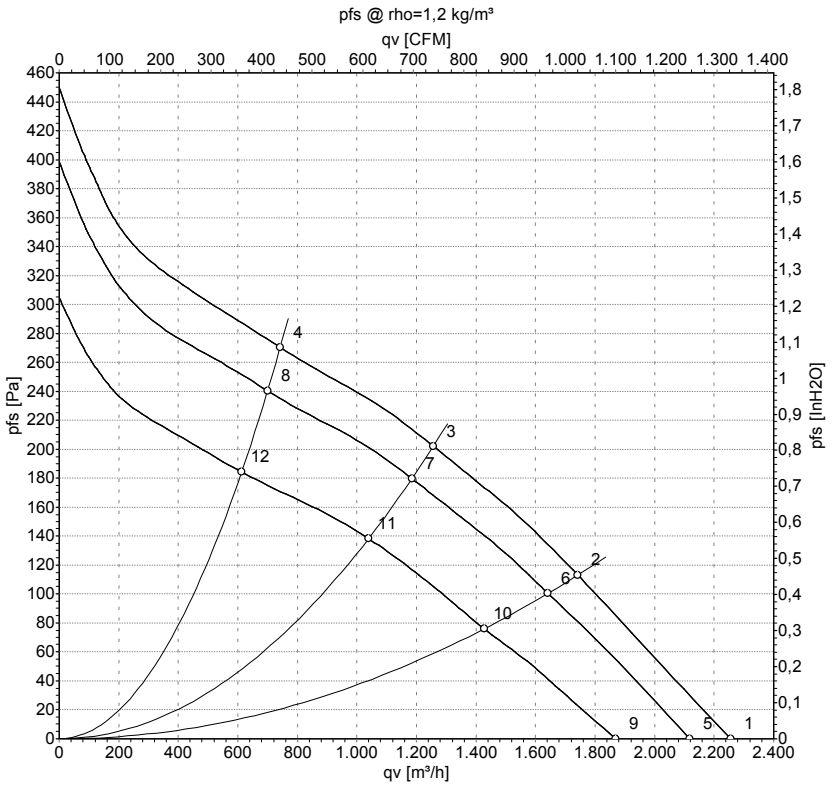
No.	Conn.	Designation	Colour	Function / assignment
1	1	Un +48 VDC	red	Power supply 48 VDC, residual ripple 3.5 %
1	2	PWM / lin	yellow	PWM / lin. control input, 0-10 V
1	3	Tach	white	Speed monitoring output, 3 pulses per rotation, Isink max = 10 mA
1	4	GND	blue	Reference mass

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Charts: Air flow



Measurement: LU-43398-1
Measurement: LU-43397-1
Measurement: LU-43399-1

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	56	1740	139	3.21	2255	0
2	56	1575	151	3.57	1740	113
3	56	1510	157	3.75	1255	202
4	56	1550	154	3.63	740	270
5	48	1600	115	3.00	2120	0
6	48	1480	121	3.20	1640	100
7	48	1425	124	3.34	1185	180
8	48	1460	123	3.24	700	240
9	36	1435	77	2.46	1870	0
10	36	1300	82	2.65	1430	76
11	36	1250	84	2.74	1040	138
12	36	1285	82	2.68	615	184

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

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