R1G280-AE17-44

EC centrifugal fan

backward curved, single inlet

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Nominal data

Type	**R1G280-AE17-44**
Motor	**M1G074-CF**

Nominal voltage	VDC	54
Nominal voltage range	VDC	36 .. 60
Type of data definition		fa
Speed	min^{-1}	1860
Power input	W	120
Current draw	A	2.6
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

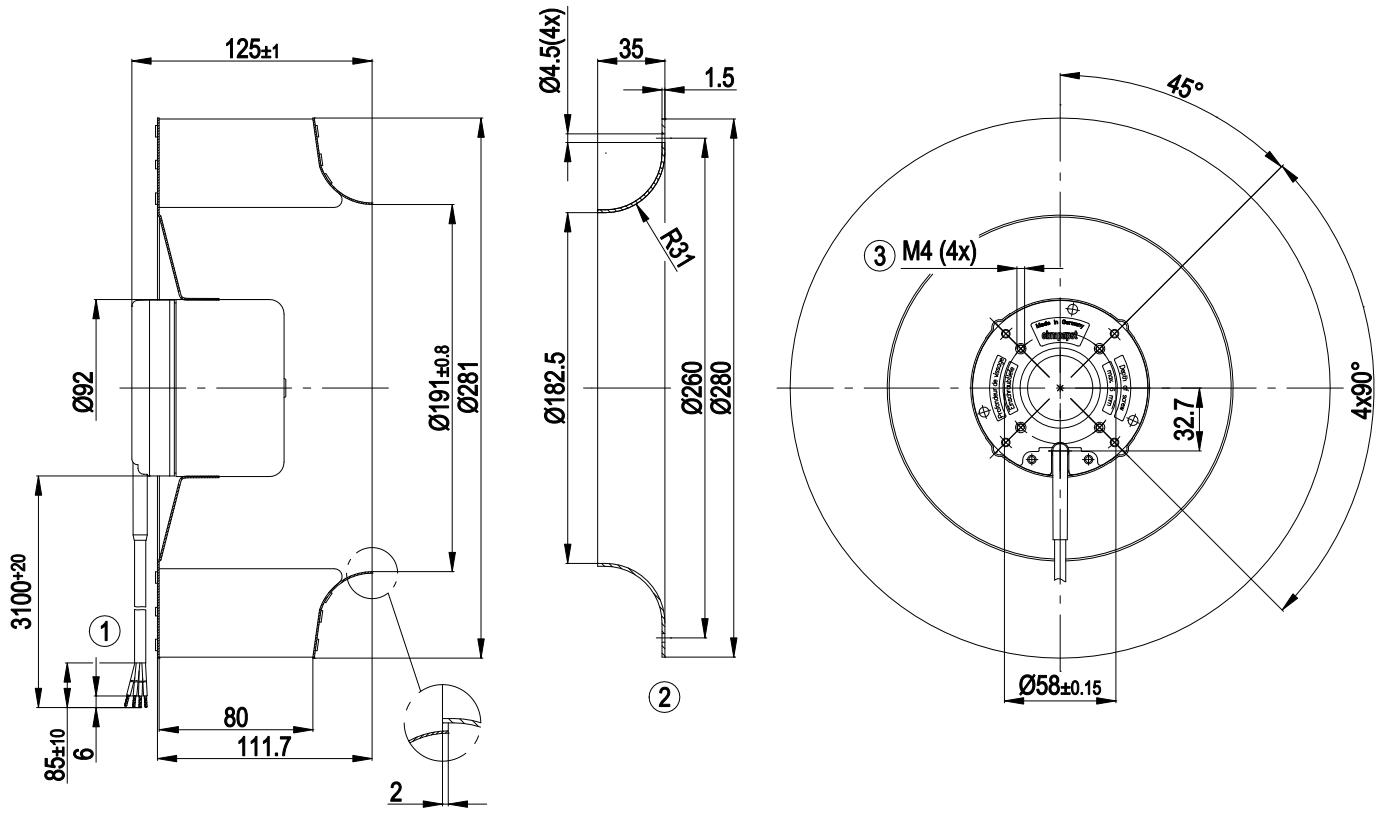
Mass	3.04 kg
Size	280 mm
Surface of rotor	Coated in black
Material of impeller	Sheet steel, coated in black
Number of blades	11
Stability	Salt fog resistant in accordance with TELCORDIA GR-487-CORE, release No. 2, March 2000
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44
Insulation class	"B"
Humidity class	F4-1
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	- Tach output - Motor current limit - Control input 0-10 VDC / PWM - Cable break detection with control line
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC interference emission	Acc. to EN 55022 (Class B)
Motor protection	Reverse polarity and locked-rotor protection
Cable exit	Lateral
Approval	UL 1004-1; CSA C22.2 Nr.77; CCC

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Product drawing



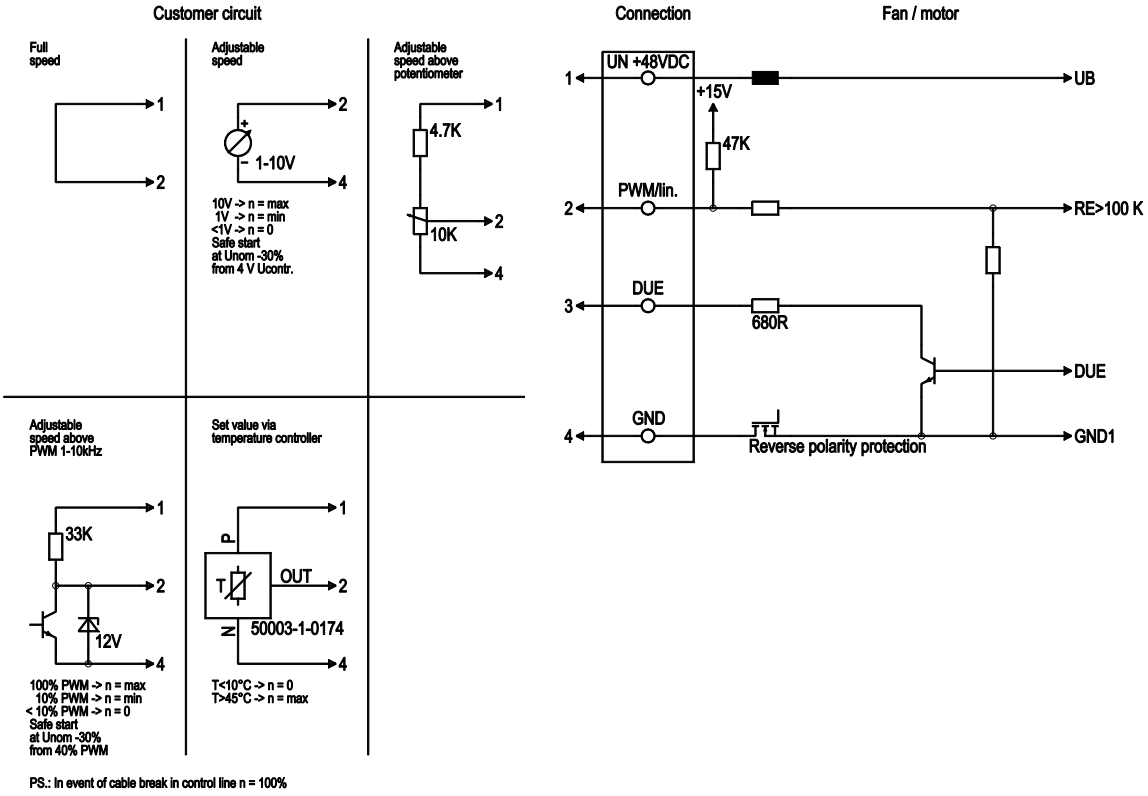
1	Connection line AWG20, 4 x brass lead tips crimped
2	Accessory part: Inlet nozzle 96360-2-4013, not included in the standard scope of delivery
3	Depth of screw max. 6 mm

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Connection screen



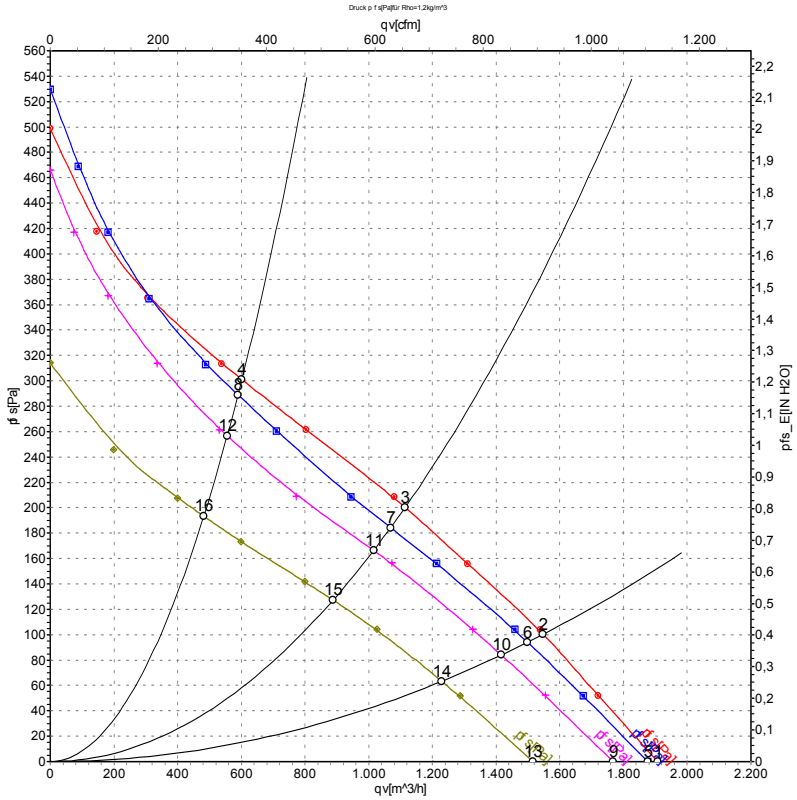
No.	Conn.	Designation	Colour	Function / assignment
1	1	Un +48 VDC	red	Power supply 48 VDC, residual ripple 3.5 %
1	2	PWM/lin	yellow	PWM / lin. control input, 0-10 V
1	3	Tach	white	Speed monitoring output, 2 pulses per revolution, Isink max = 10 mA
1	4	GND	blue	Reference mass

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Charts: Air flow



Measurement: LU-73655
Measurement: LU-73653
Measurement: LU-73658
Measurement: LU-73656

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	60	1890	126	2.63	1905	0
2	60	1770	141	3.00	1545	100
3	60	1710	150	3.21	1115	200
4	60	1810	136	2.86	600	300
5	54	1860	120	2.60	1880	0
6	54	1725	126	2.83	1500	94
7	54	1650	131	2.99	1070	184
8	54	1770	124	2.76	590	289
9	48	1765	101	2.41	1765	0
10	48	1640	106	2.60	1415	84
11	48	1570	110	2.72	1015	167
12	48	1680	104	2.54	555	256
13	36	1520	64	1.98	1515	0
14	36	1430	70	2.18	1230	64
15	36	1370	73	2.28	890	127
16	36	1460	69	2.12	480	193

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

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