R1G225-AF11-21

EC centrifugal fan

backward-curved, single-intake



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Nominal data

Type	**R1G225-AF11-21**	
Motor	**M1G074-BF**	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Method of obtaining data		fa
Speed (rpm)	min^{-1}	2700
Power consumption	W	95
Current draw	A	2.2
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

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Technical description

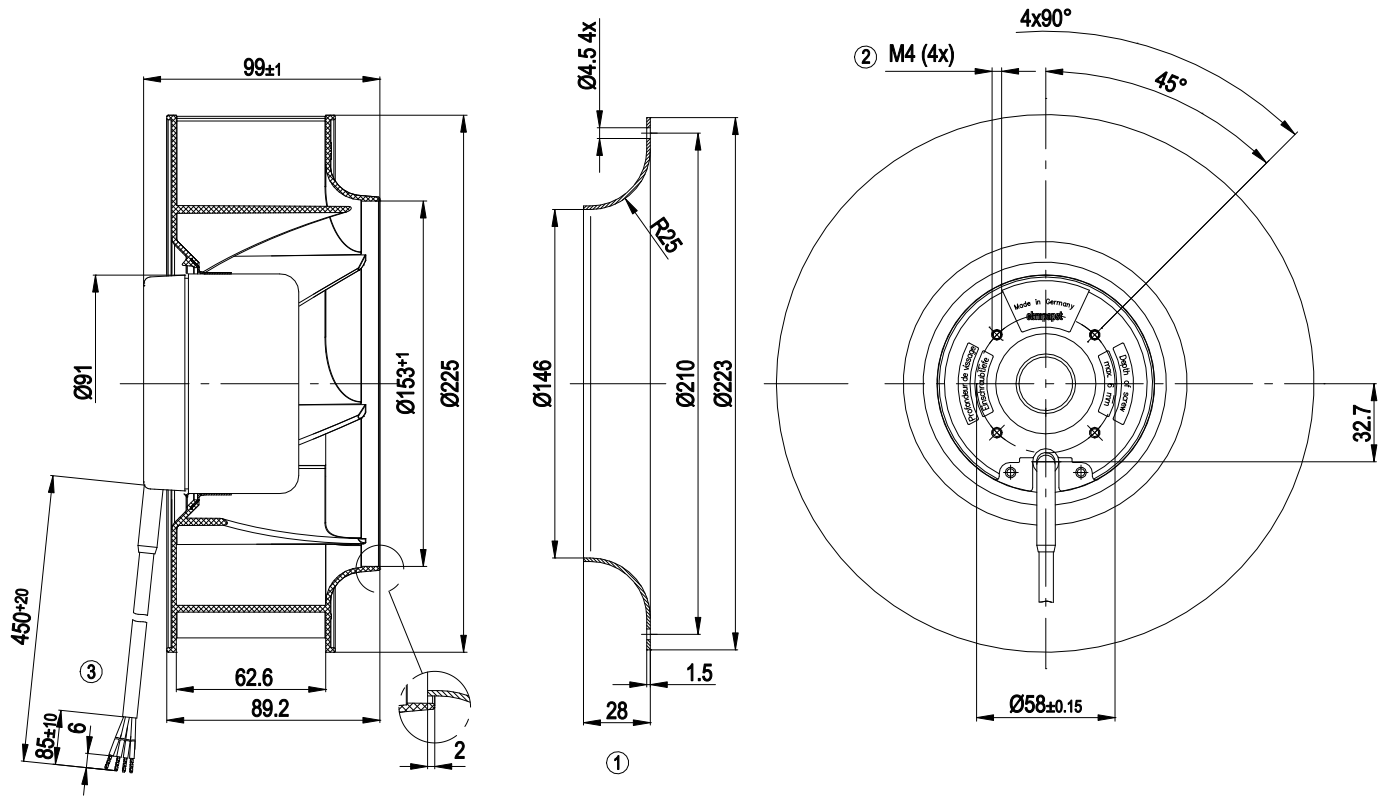
Weight	1.5 kg
Fan size	225 mm
Rotor surface	Painted black
Impeller material	PA66 plastic, glass-fiber reinforced, sheet-metal plate painted black
Number of blades	7
Strength	Salt fog resistant per TELCORDIA GR-487-CORE, release no. 2, March 2000
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F4-2
Max. permitted ambient temp. for motor (transport/storage)	+80 °C
Min. permitted ambient temp. for motor (transport/storage)	-40 °C
Installation position	Any
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Technical features	- Control input 0-10 VDC / PWM - Tach output - Motor current limitation - Soft start
EMC immunity to interference	According to EN 61000-6-2
EMC interference emission	According to EN 61000-6-3
Motor protection	Reverse polarity and locked-rotor protection
With cable	Variable
Conformity with standards	EN 60950-1
Approval	UL 1004-1; CCC; CSA C22.2 No. 77

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Product drawing



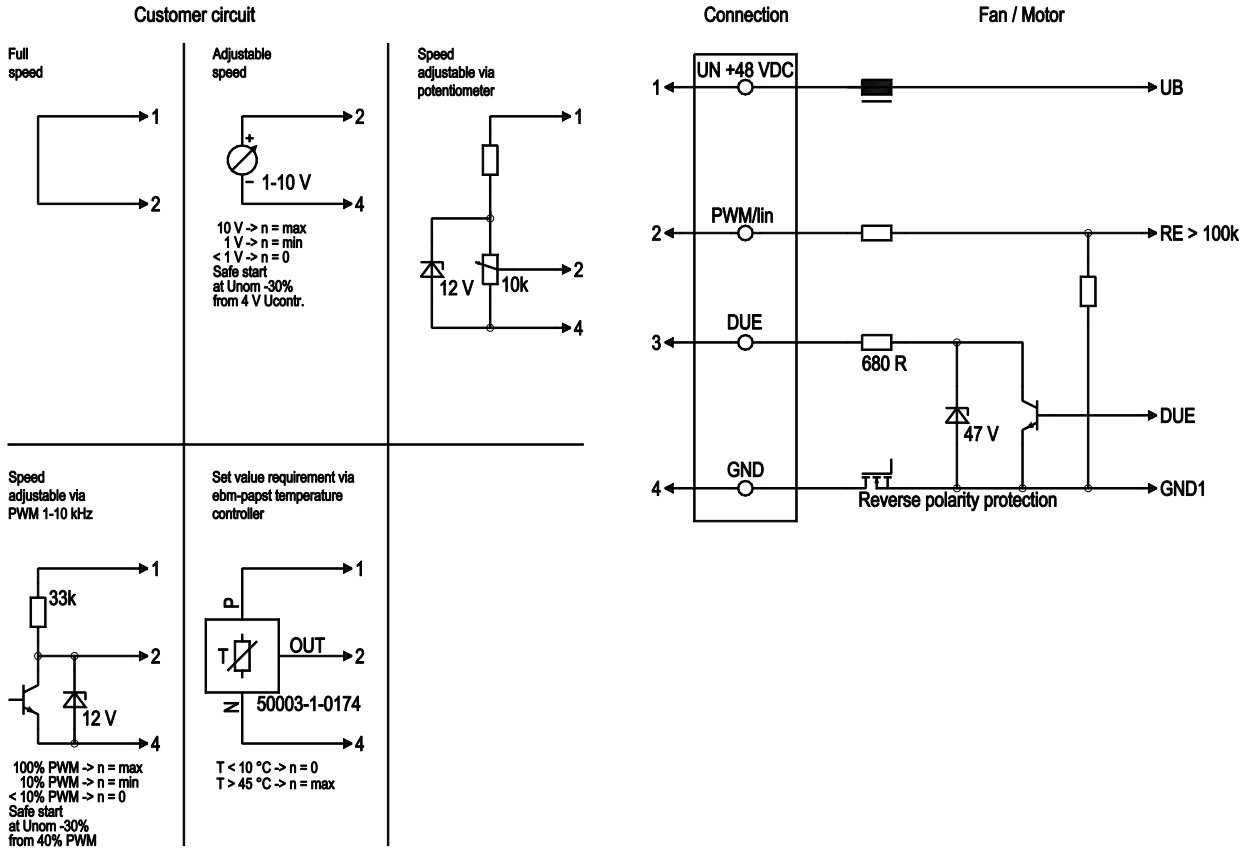
1	Cable AWG20, 4x crimped splices
2	Accessory part: inlet ring 96358-2-4013 not included in scope of delivery
3	Max. clearance for screw 6 mm

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Connection diagram



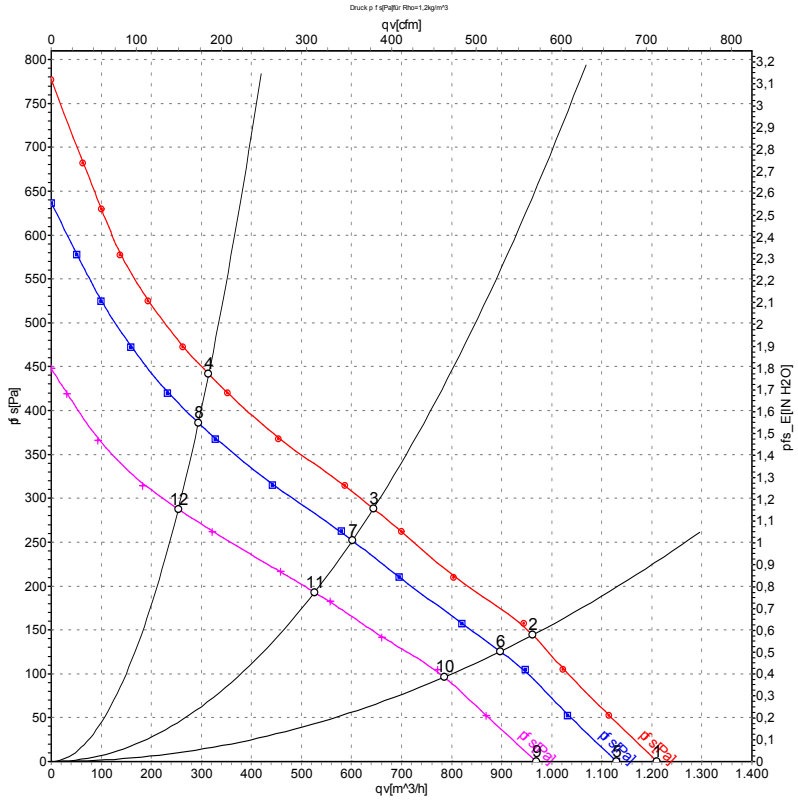
No.	Conn.	Designation	Color	Function/assignment
1	1	Un +48 VDC	red	Power supply 48 VDC, maximum ripple 3.5%
1	2	0-10 VDC	yellow	Control input Re > 100k
1	3	Tach	white	Tach output, 3 pulses per revolution, Isink max = 10 mA
1	4	GND	blue	Reference ground

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Curves: Air performance



Measurement: LU-53006-1
Measurement: LU-53007-1
Measurement: LU-53005-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	U	n	P_{ed}	I	qv	p_{fs}	qv	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	57	2780	112	2.39	1210	0	715	0.00
2	57	2635	116	2.52	960	146	565	0.59
3	57	2580	117	2.58	645	288	380	1.16
4	57	2755	113	2.42	315	442	185	1.77
5	48	2600	91	2.20	1130	0	665	0.00
6	48	2475	93	2.28	895	125	530	0.50
7	48	2410	95	2.34	600	250	355	1.00
8	48	2580	92	2.21	295	385	175	1.55
9	36	2235	59	1.84	970	0	570	0.00
10	36	2150	63	1.96	785	98	460	0.39
11	36	2115	64	2.00	525	193	310	0.77
12	36	2230	59	1.84	255	288	150	1.16

U = Power supply · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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