

R1G220-AB73-95

EC centrifugal fan

backward-curved, single-intake



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Nominal data

Type	R1G220-AB73-95	
Motor	M1G074-BF	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Method of obtaining data		fa
Speed (rpm)	min ⁻¹	3100
Power consumption	W	100
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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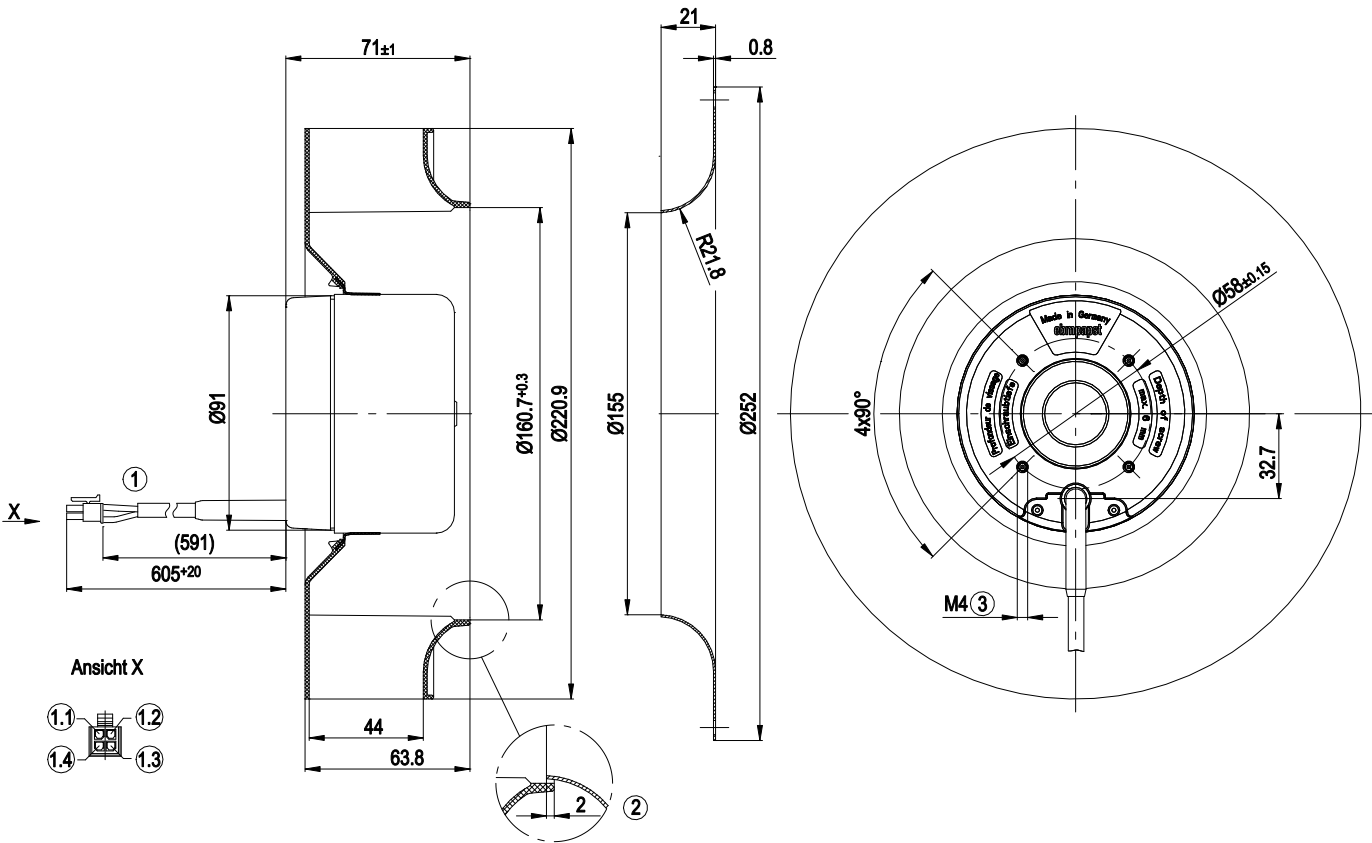
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Technical description

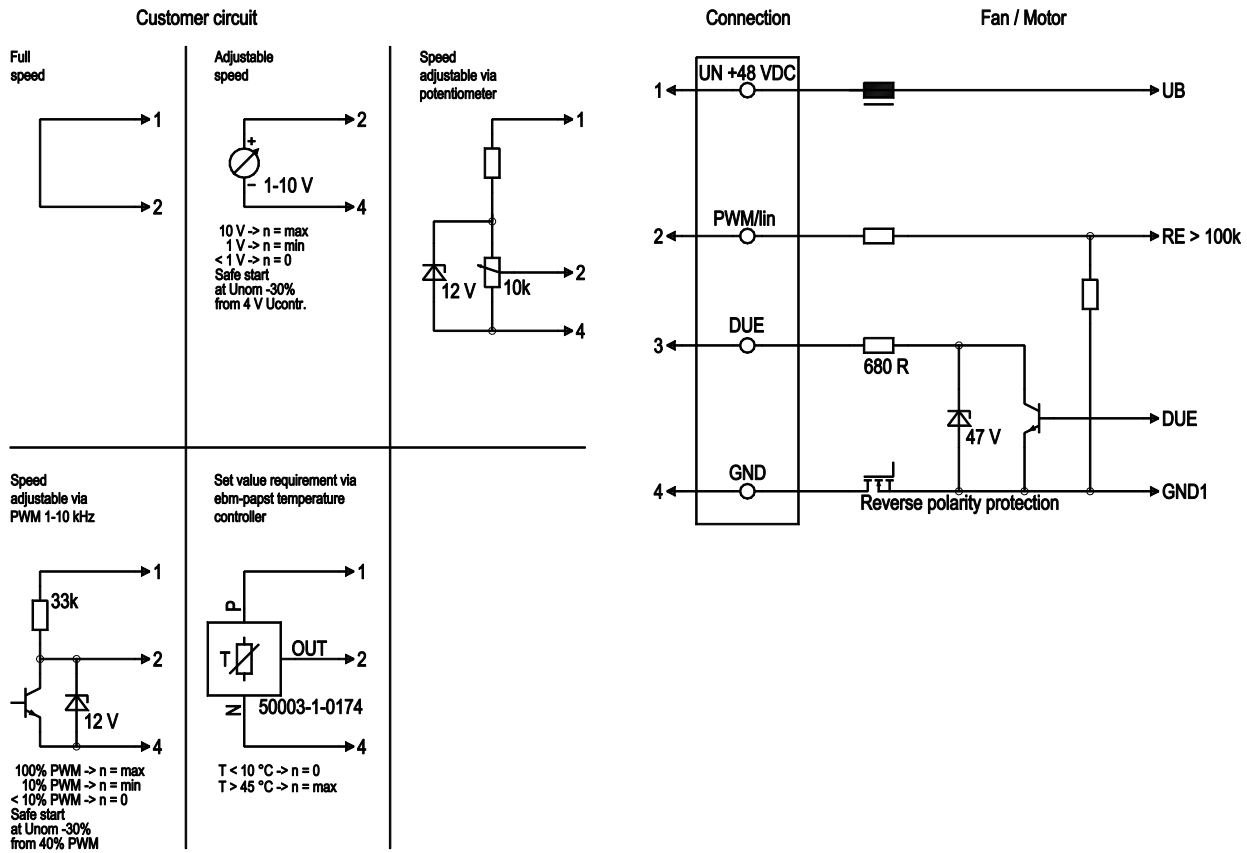
Weight	1.4 kg
Size	220 mm
Motor size	74
Rotor surface	Painted black
Impeller material	PA 6.6 plastic, glass-fiber reinforced
Number of blades	11
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP42
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F3-1
Max. 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 mounting	Ball bearing
Technical features	- Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM
Electrical hookup	Plug
Motor protection	Reverse polarity and locked-rotor protection
With cable	Variable
Conformity with standards	EN 60950-1
Approval	UL 1004-1; CSA C22.2 No. 77

Product drawing



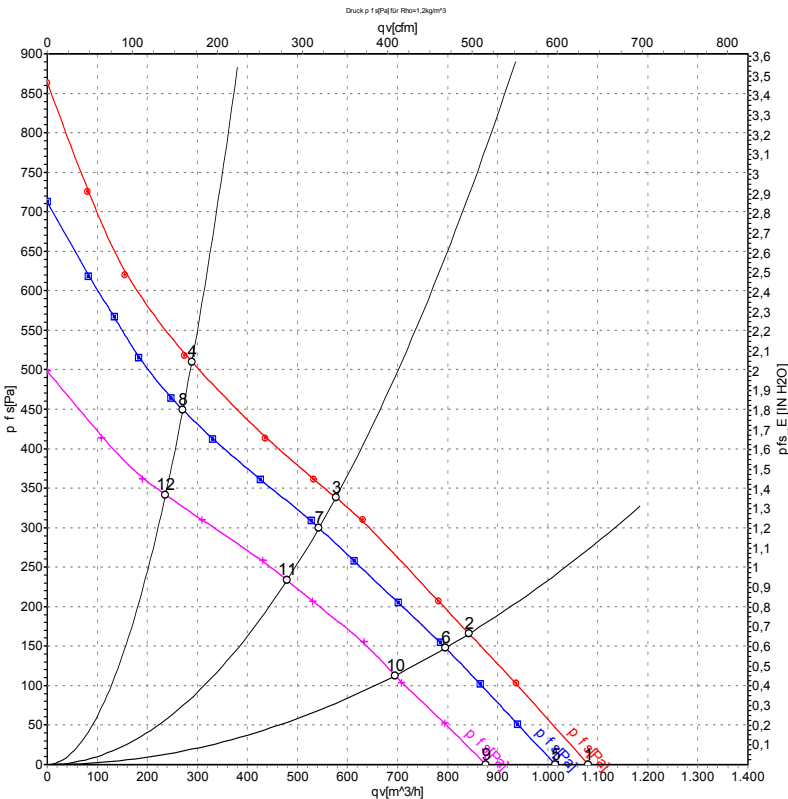
1	Connector housing Molex no. 43025-0400, cable PVC AWG20, 4 x socket Molex no. 43030-0001 crimped
1.1	(S) white
1.2	(-) blue
1.3	(+) red
1.4	Control input yellow
2	Accessory part: inlet ring 09609-2-4013 not included in scope of delivery
3	Max. clearance for screw 6 mm

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

Curves: Air performance



Measurement: LU-47146-1
Measurement: LU-47145-1
Measurement: LU-47147-1

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	q _v	p _{fs}	q _v	p _{fs}
	V	min ⁻¹	W	A	m ³ /h	Pa	cfm	in. wg
1	56	3305	118	2.54	1080	0	635	0.00
2	56	3095	122	2.72	845	166	495	0.67
3	56	2975	126	2.85	575	338	340	1.36
4	56	3155	122	2.68	290	508	170	2.04
5	48	3100	100	2.40	1015	0	595	0.00
6	48	2915	102	2.51	795	150	470	0.60
7	48	2805	104	2.59	545	300	320	1.20
8	48	2980	101	2.45	270	450	160	1.81
9	36	2665	64	1.96	875	0	515	0.00
10	36	2545	68	2.10	695	112	410	0.45
11	36	2480	71	2.20	480	233	280	0.94
12	36	2600	66	2.03	235	341	140	1.37

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