EC centrifugal fan

backward curved, single inlet

for railway applications

R1G200-AA11-12 ebmpapst Datasheet
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County court Stuttgart · HRA 590344

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Nominal data

Type	**R1G200-AA11-12**	
Motor	**M1G074-CF**	
Nominal voltage	VDC	24
Type of data definition		fa
Speed (rpm)	min^{-1}	3200
Power input	W	105
Current draw	A	4.8
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	2.2 kg
Size	200 mm
Surface of rotor	Coated in black
Material of electronics housing	Die-cast aluminium, coated in black
Material of impeller	Sheet steel, galvanised and coated in black
Number of blades	11
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44
Insulation class	"B"
Humidity (F)/environmental protection class (H)	H1
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 - 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
Approval	CSA C22.2 No.77; UL 1004-1; EAC

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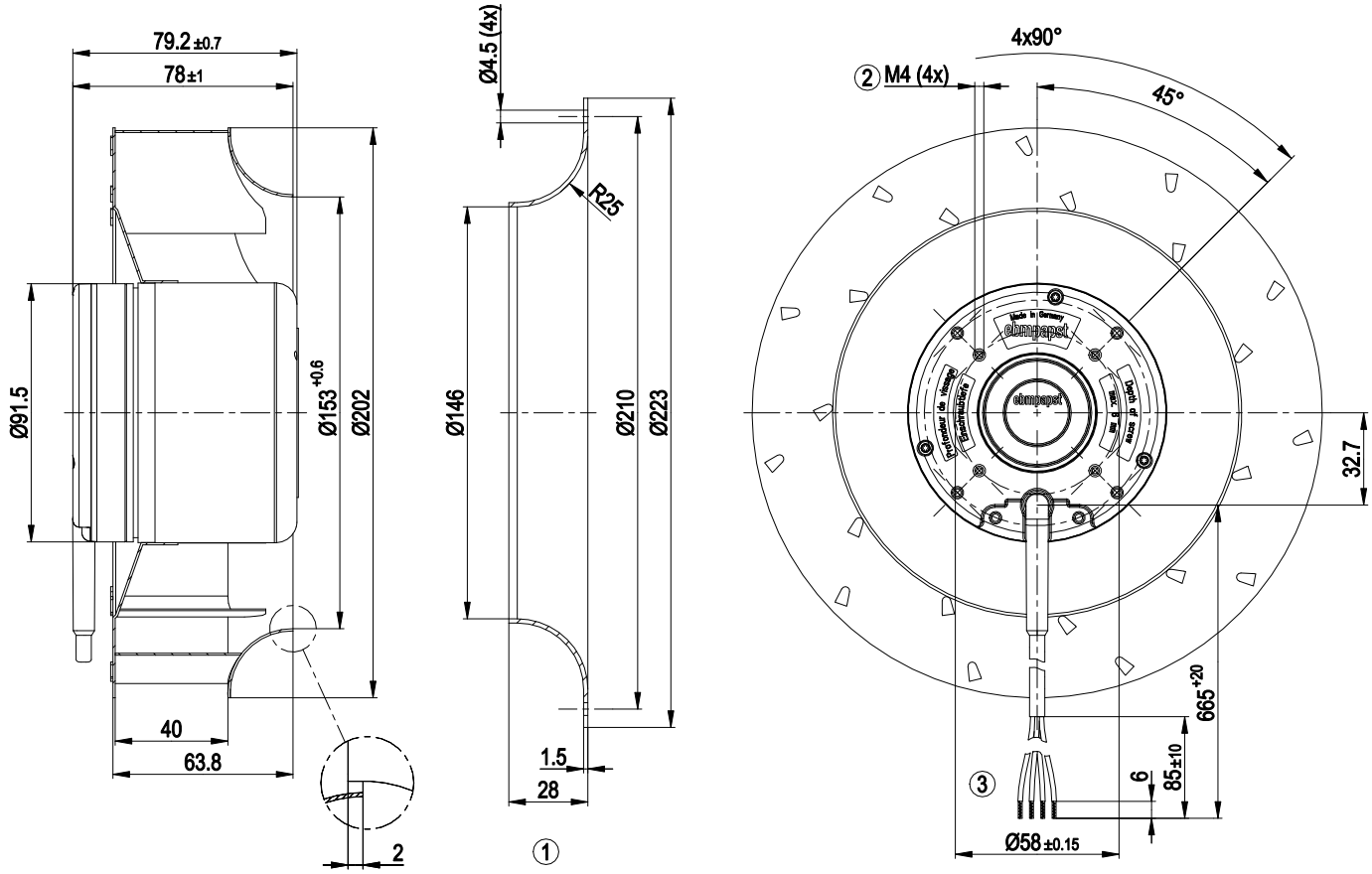
Product drawing



1	Accessory part: Inlet nozzle 96358-2-4013 not included in scope of delivery
2	Thread reach max. 6 mm
3	Connection line PVC AWG20, 4x lead tips crimped

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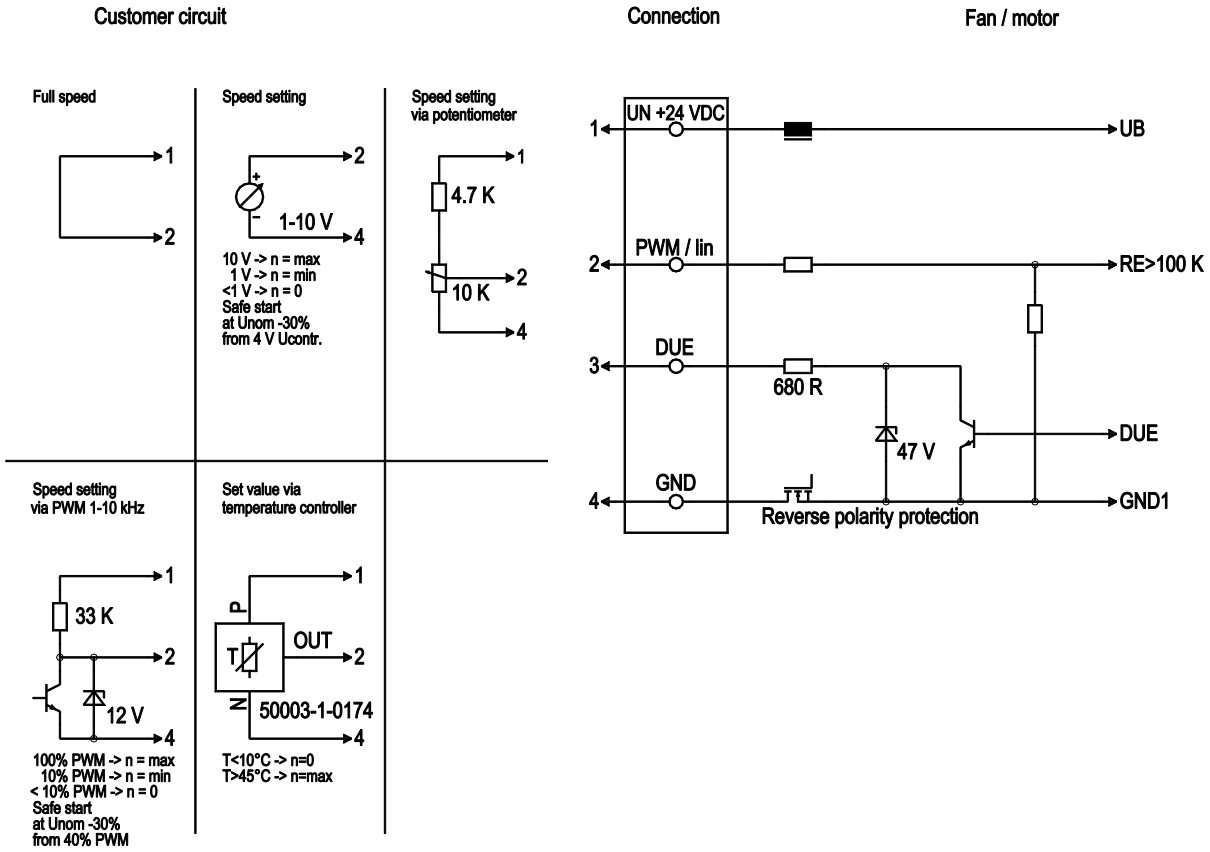
Connection screen



No.	Conn.	Designation	Colour	Function / assignment
1	1	Un +24V	red	Power supply 24 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 revolution, Isink max = 10 mA
1	4	GND	blue	Reference mass

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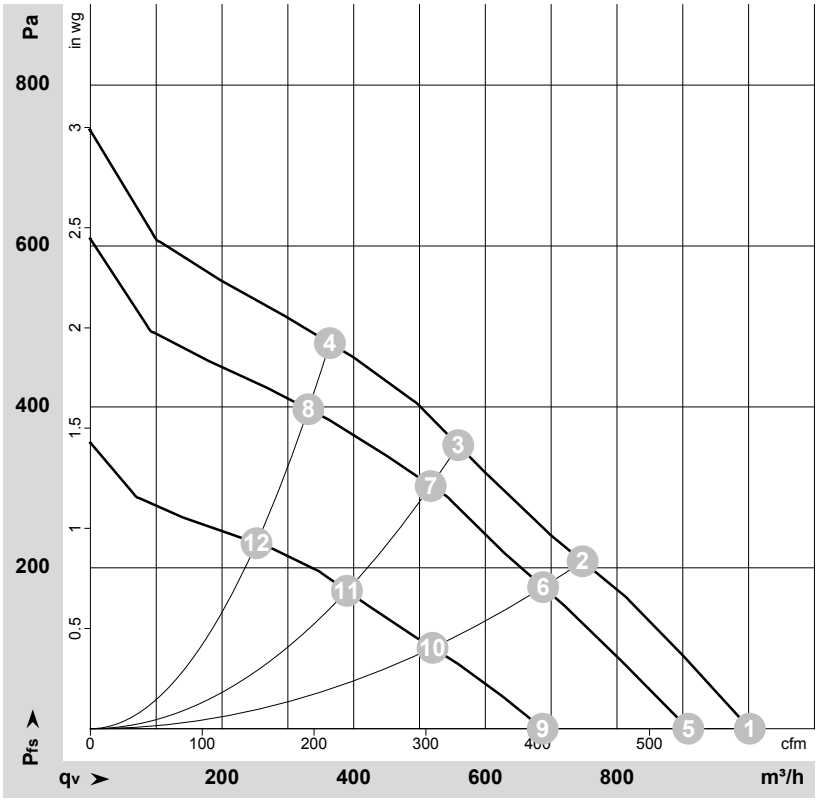
Charts: Air flow



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-176863-1
Measurement: LU-176712-1
Measurement: LU-176862-1

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	q_V	p_{fs}	q_V	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	28	3530	138	5.51	1000	0	590	0.00
2	28	3380	145	5.82	750	208	440	0.84
3	28	3380	145	5.82	560	352	330	1.41
4	28	3520	139	5.52	365	479	215	1.92
5	24	3200	105	4.80	910	0	535	0.00
6	24	3090	112	5.21	690	175	405	0.70
7	24	3095	112	5.20	515	300	305	1.20
8	24	3210	104	4.82	330	400	195	1.61
9	16	2440	48	3.44	685	0	405	0.00
10	16	2365	52	3.68	520	101	305	0.41
11	16	2360	52	3.67	390	171	230	0.69
12	16	2440	48	3.42	250	231	150	0.93

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