

EC centrifugal fan

backward-curved, single-intake

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Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	R1G310-AA19-52	
Motor	M1G074-CF	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Method of obtaining data		fa
Speed (rpm)	min ⁻¹	1520
Power consumption	W	95
Current draw	A	4.6
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	40

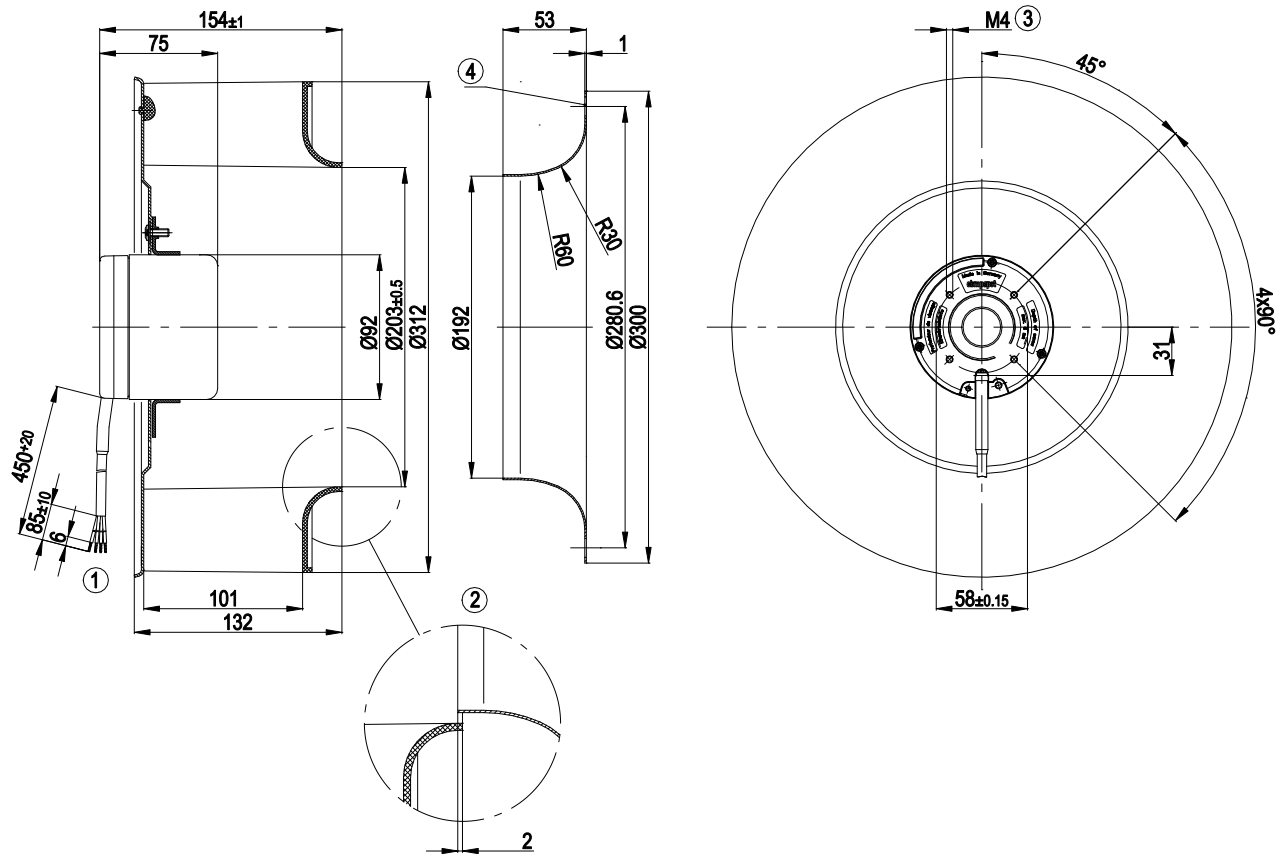
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change



Technical description

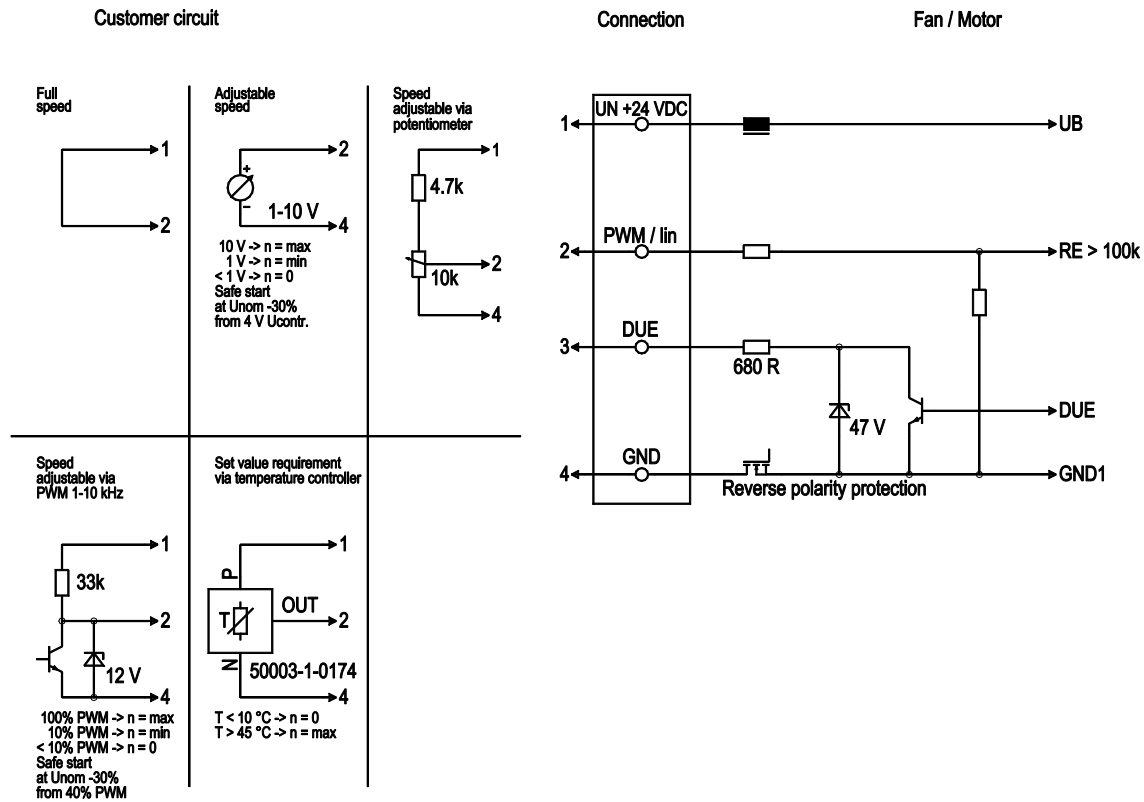
Weight	2.6 kg
Fan size	310 mm
Rotor surface	Painted black
Impeller material	PA6 plastic, glass-fiber reinforced
Number of blades	6
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP42
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F0
Max. permitted ambient temp. for motor (transport/storage)	+80 °C
Min. permitted ambient temp. for motor (transport/storage)	-40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Technical features	<ul style="list-style-type: none"> - Control input 0-10 VDC / PWM - Tach output - Motor current limitation - Soft start
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC interference emission	According to EN 55022 (Class B)
Motor protection	Reverse polarity and locked-rotor protection
With cable	Variable
Approval	CSA C22.2 No. 77; UL 1004-1

Product drawing



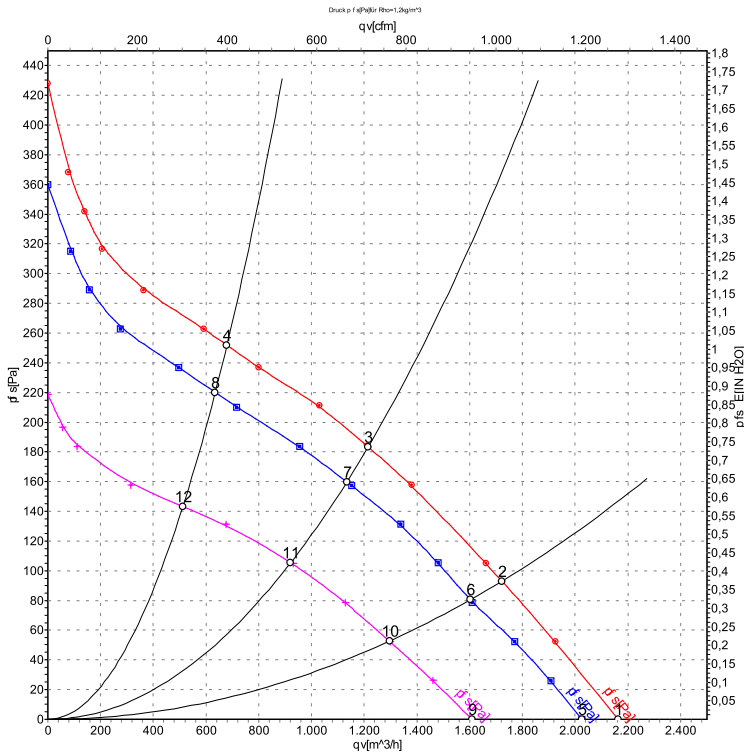
1	Cable AWG20, 4 x crimped splices
2	Accessory part: inlet ring 97512-2-4013 not included in scope of delivery
3	Max. clearance for screw 6 mm
4	6 slots 7x12

Connection diagram



No.	Conn.	Designation	Color	Function/assignment
1	1	Un +24V	red	Power supply 24 VDC, maximum ripple 3.5%
1	2	PWM / lin	yellow	PWM / lin., control input, 0-10 V
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-54140-1
 Measurement: LU-54137-1
 Measurement: LU-54143-1

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	inH ₂ O
1	28	1620	116	4.81	2165	0	1275	0.00
2	28	1490	123	5.26	1720	93	1015	0.37
3	28	1420	128	5.54	1215	184	715	0.74
4	28	1475	124	5.31	680	252	400	1.01
5	24	1520	95	4.60	2025	0	1190	0.00
6	24	1390	99	4.78	1605	80	945	0.32
7	24	1330	103	5.00	1135	160	665	0.64
8	24	1380	100	4.82	635	220	375	0.88
9	16	1200	47	3.25	1610	0	945	0.00
10	16	1125	52	3.60	1295	53	765	0.21
11	16	1080	55	3.80	920	106	540	0.43
12	16	1115	53	3.64	510	143	300	0.57

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

