

R1G160-AH39-52 ebmpapst Datasheet

sales@fansco.com

www.fansco.com

Nominal data

Type	R1G160-AH39-52	
Motor	M1G074-BF	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Method of obtaining data		fa
Speed (rpm)	min ⁻¹	1750
Power consumption	W	105
Current draw	A	2.9
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

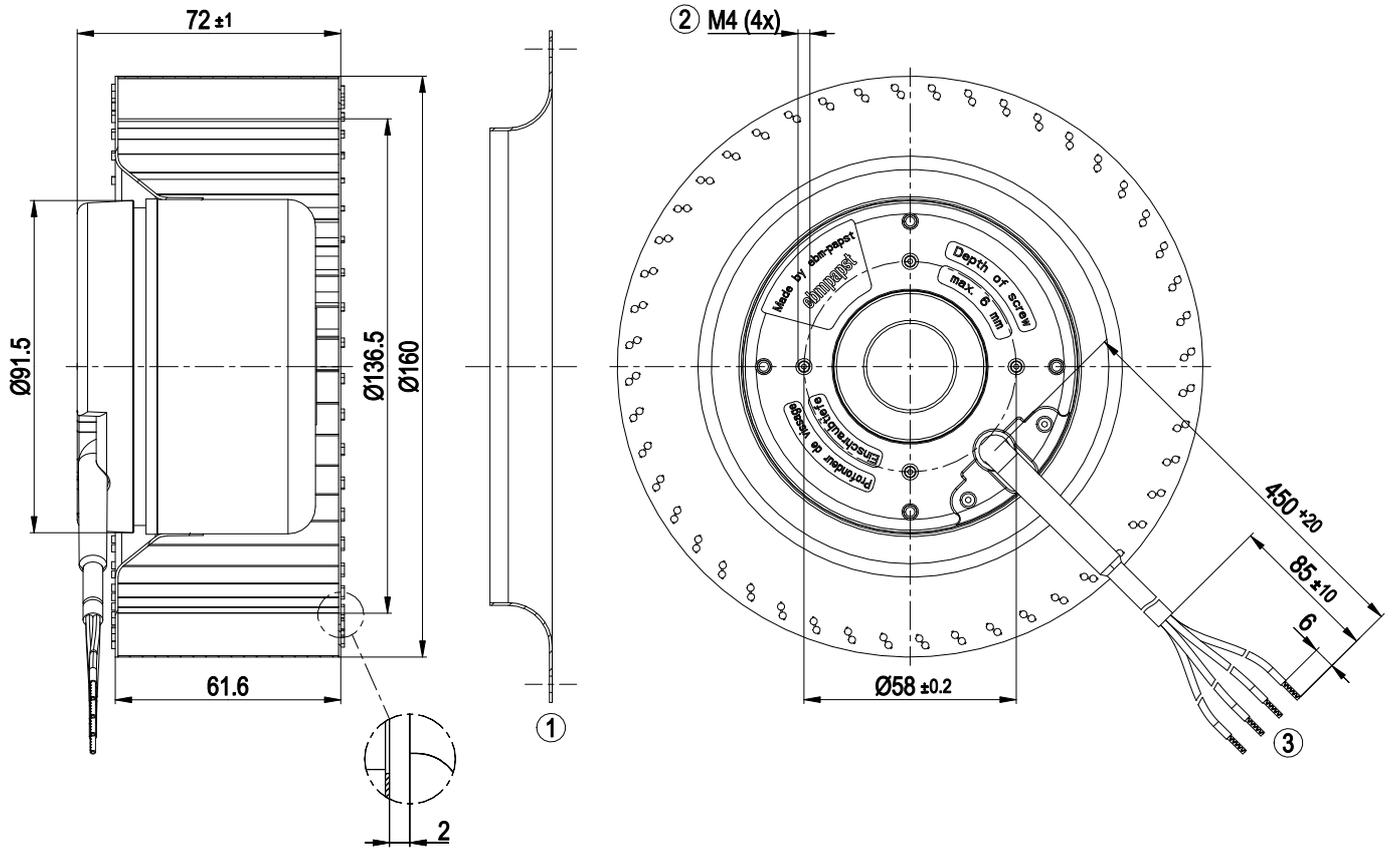
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change



Technical description

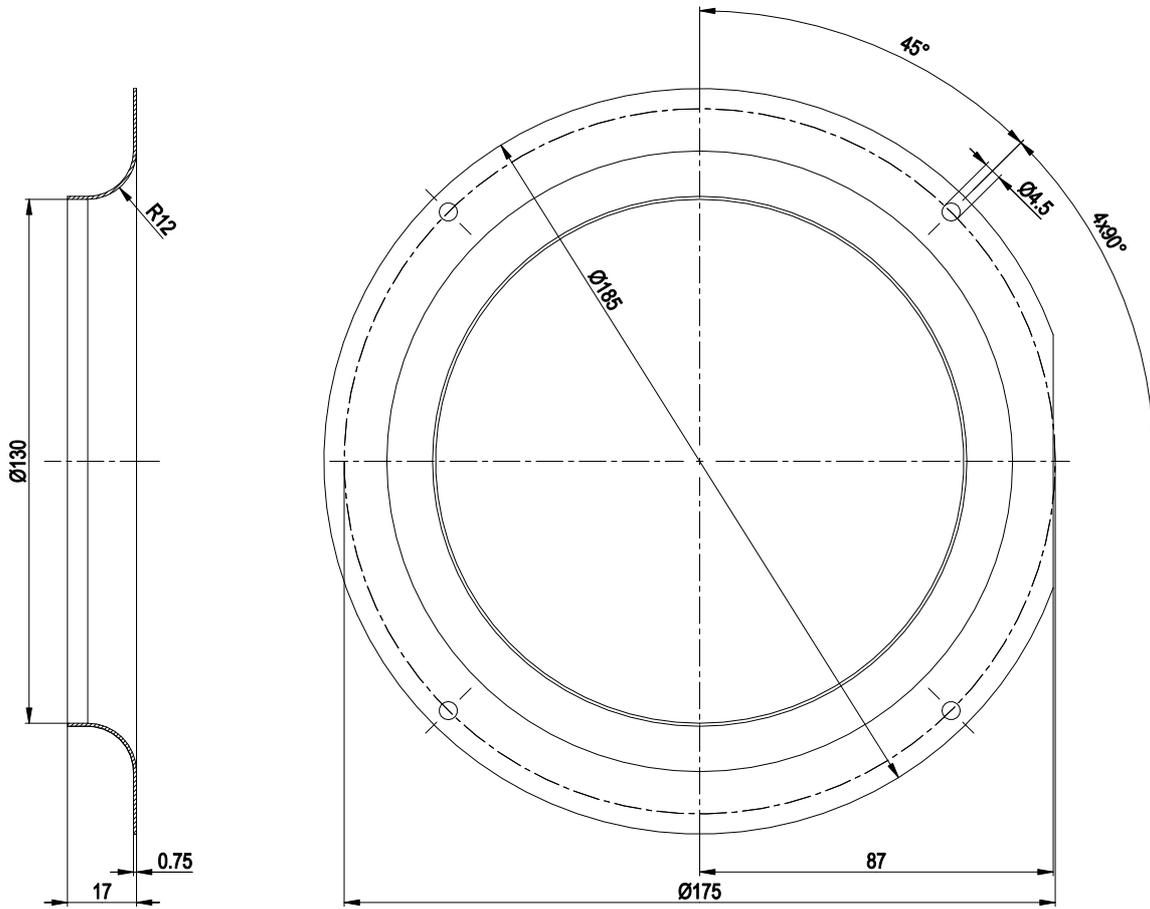
Weight	1.3 kg
Size	160 mm
Motor size	74
Rotor surface	Painted black
Impeller material	Sheet steel, galvanized
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP42
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
Max. permitted ambient 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	<ul style="list-style-type: none"> - Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Reverse polarity protection
With cable	Variable
Protection class assignment	<p>III; Requires supply with safety extra-low voltage SELV.</p> <p>This component for installation may have several local protection classes. This information relates to this component's basic design.</p> <p>The final protection class is based on the component's intended installation and connection. If there is a PE connection point on the housing, it must not be visible after installation.</p>
Conformity with standards	EN 60335-1; EN 60034-1; EN 60204-1
Comment on CE	Ecodesign Directive 2009/125/EC + Fan Directive (EC) No. 327/2011 does not apply, as power consumption <125W.
Approval	CSA C22.2 No. 77; EAC; UL 1004-1

Product drawing



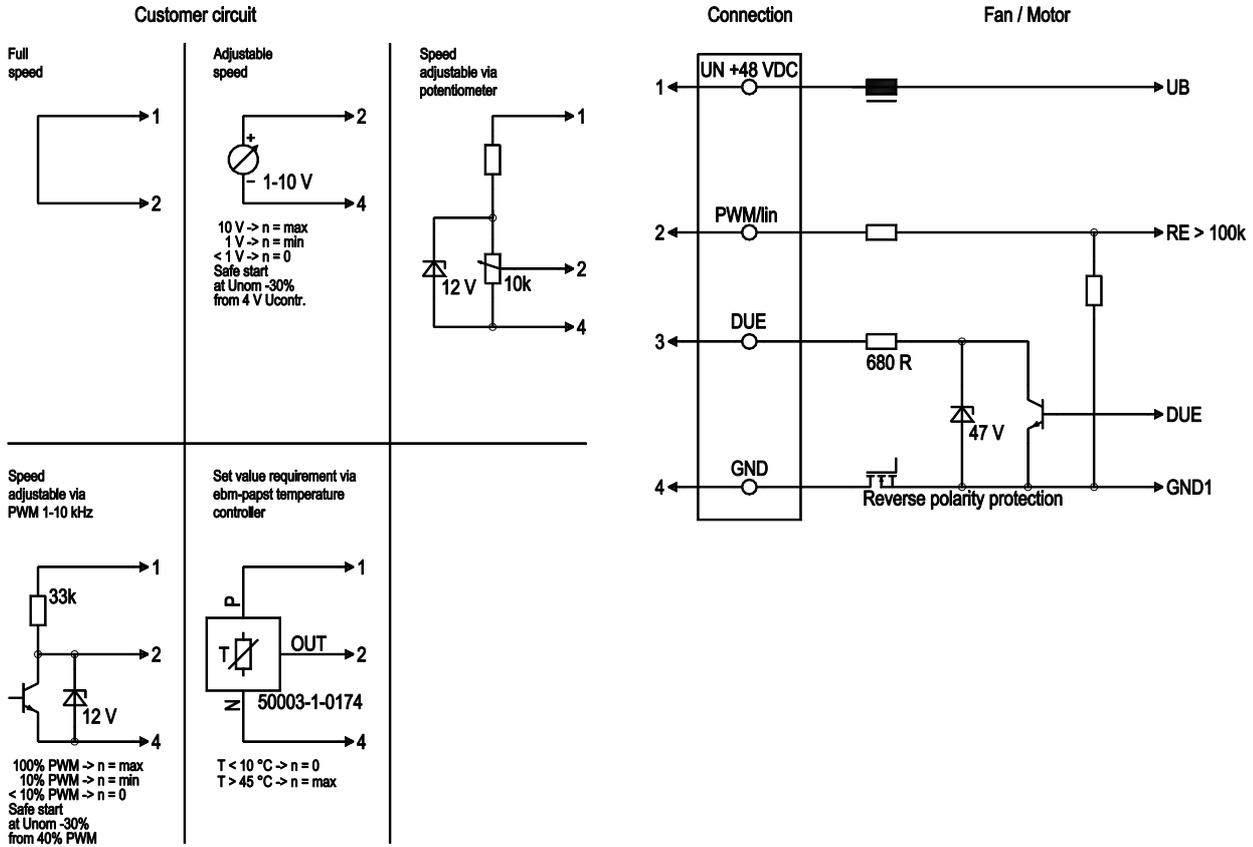
1	Accessory part: Inlet ring 09588-2-4013 (not included in scope of delivery)
2	Max. clearance for screw 5 mm
3	Cable PVC AWG20
	4x splice

Accessory part



Inlet ring 09588-2-4013

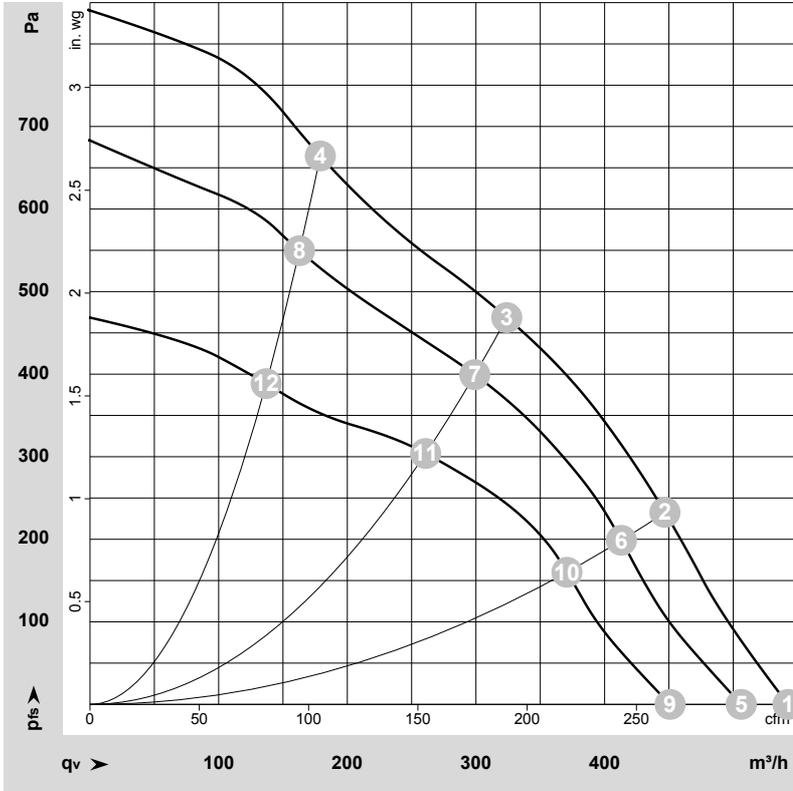
Connection diagram



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



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-60109-1
 Measurement: LU-60108-1
 Measurement: LU-60110-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. 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	57	1890	134	3.27	545	0	320	0.00
2	57	2150	120	2.76	445	233	265	0.94
3	57	2510	110	2.36	325	469	190	1.88
4	57	2935	103	2.07	180	662	105	2.66
5	48	1750	105	2.90	505	0	300	0.00
6	48	1985	97	2.50	415	200	245	0.80
7	48	2315	90	2.18	300	400	175	1.61
8	48	2680	80	1.86	165	550	95	2.21
9	36	1580	72	2.35	450	0	265	0.00
10	36	1800	67	2.11	370	160	220	0.64
11	36	2025	57	1.78	260	304	155	1.22
12	36	2255	47	1.47	135	389	80	1.56

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

