EC centrifugal fan

forward-curved, single-intake

R1G160-AH29-52 ebmpapst Datesheet

sales@fansco.com

www.fansco.com

Nominal data

Type	**R1G160-AH29-52**
Motor	**M1G074-BF**

Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Method of obtaining data		fa
Speed (rpm)	min^{-1}	1750
Power consumption	W	105
Current draw	A	5.8
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	1.4 kg
Size	160 mm
Motor size	74
Rotor surface	Painted black
Impeller material	Sheet steel, painted black
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	- Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Reverse polarity protection
With cable	Variable
Protection class assignment	III; Requires supply with safety extra-low voltage SELV. This component for installation may have several local protection classes. This information relates to this component's basic design. 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.
Conformity with standards	EN 62368-1; 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

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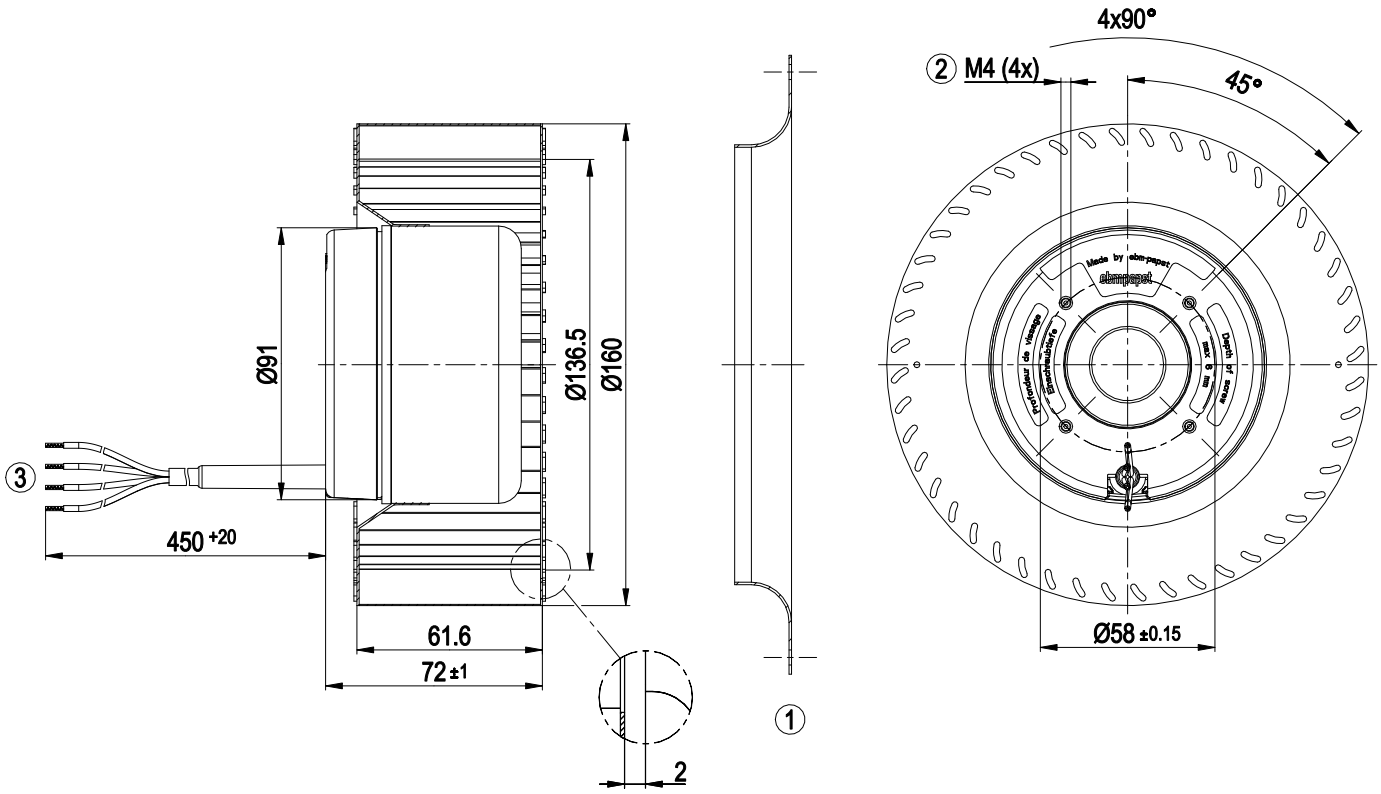
Product drawing



1	Accessory part: Inlet ring 09588-2-4013 (not included in scope of delivery)
2	Max. clearance for screw 6 mm
3	Cable PVC AWG20
	4x splice

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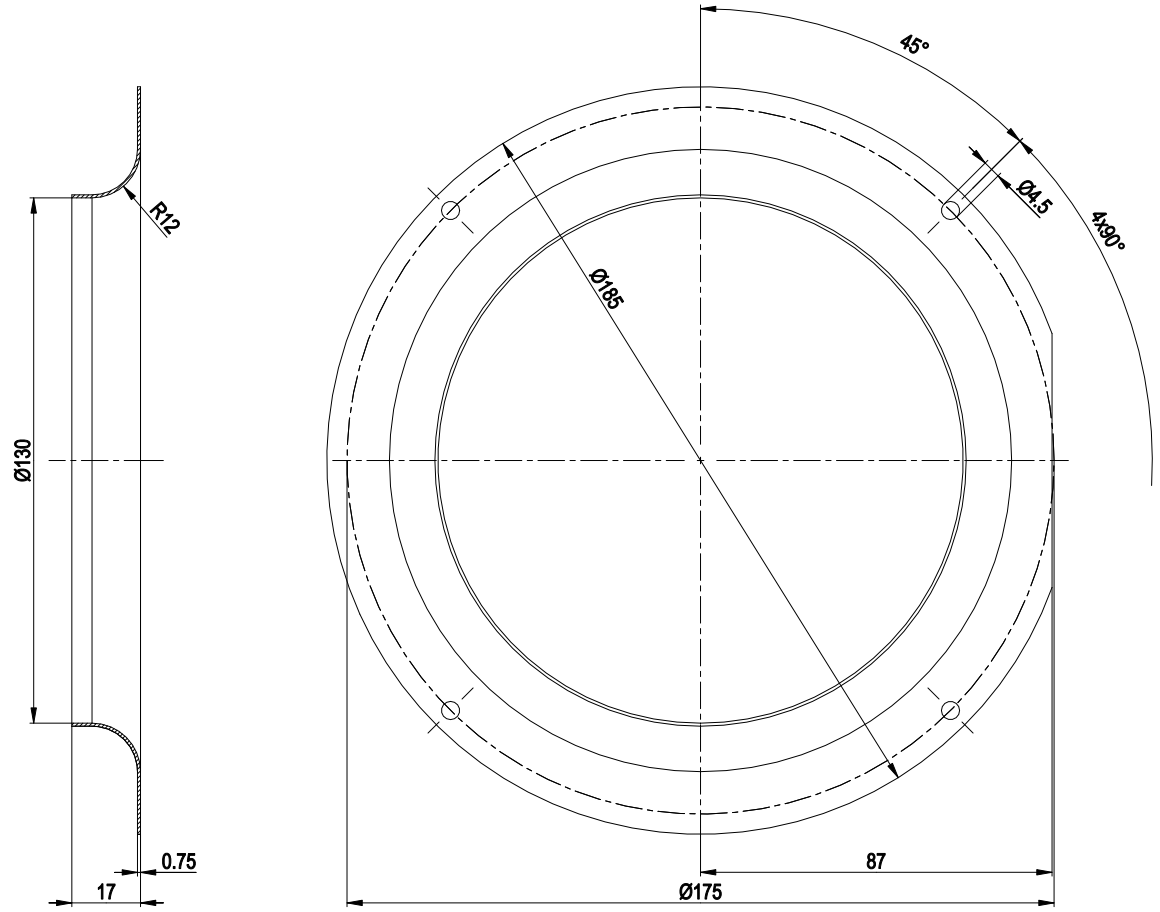
Accessory part



Inlet ring 09588-2-4013

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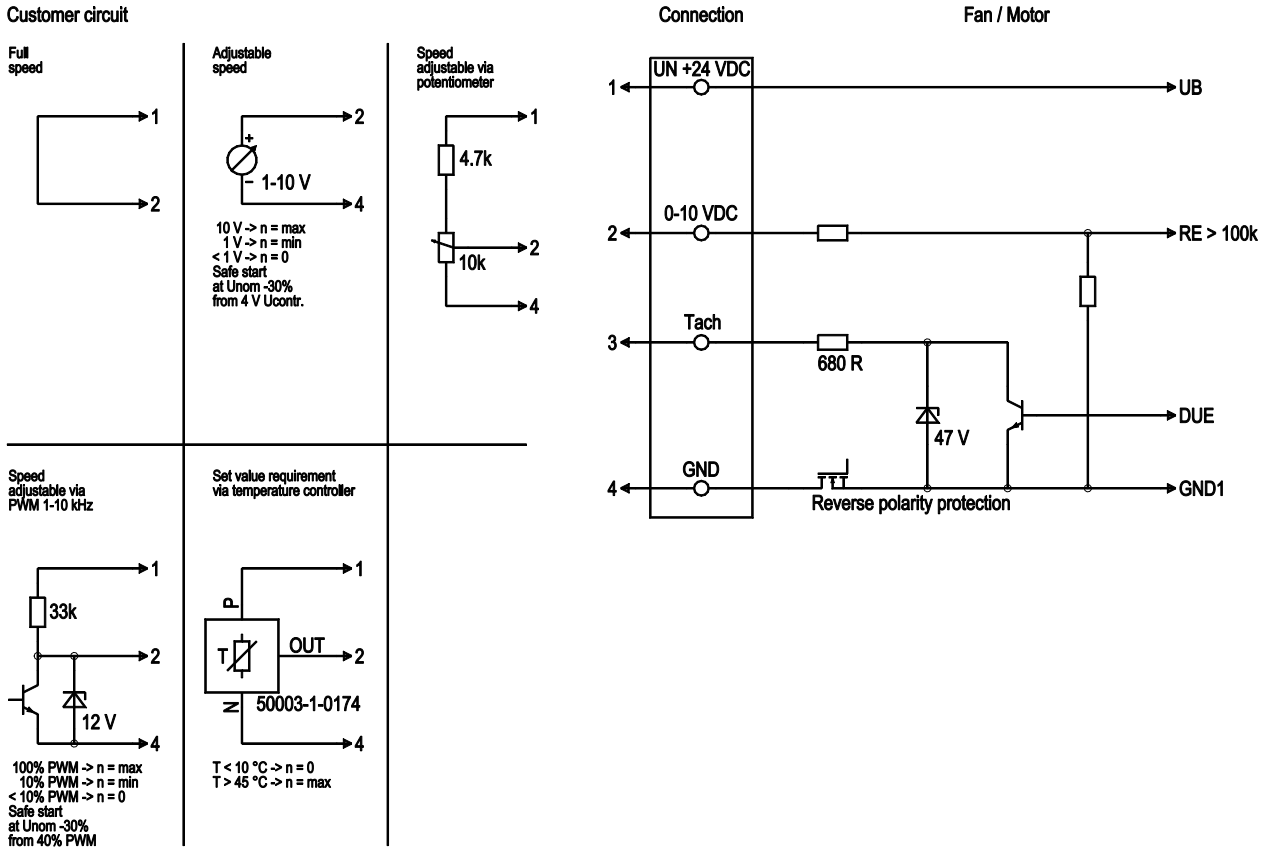
Connection diagram



No.	Conn.	Designation	Color	Function/assignment
1	1	Un +24 VDC	red	Power supply 24 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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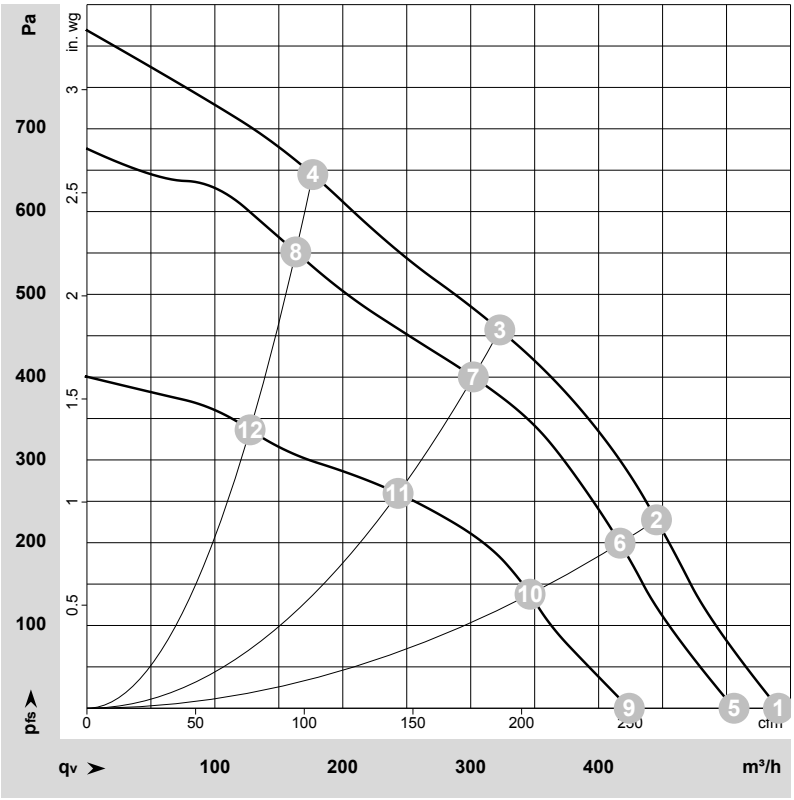
Curves: Air performance



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-59980-1
Measurement: LU-59979-1
Measurement: LU-59981-1

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	28	1870	134	6.42	540	0	320	0.00
2	28	2130	120	5.50	445	228	260	0.92
3	28	2475	109	4.71	325	457	190	1.83
4	28	2895	101	4.12	175	646	105	2.59
5	24	1750	105	5.80	505	0	300	0.00
6	24	2000	98	4.99	415	200	245	0.80
7	24	2330	90	4.33	300	400	180	1.61
8	24	2695	81	3.76	165	550	95	2.21
9	16	1485	63	4.48	425	0	250	0.00
10	16	1680	57	3.98	345	139	205	0.56
11	16	1895	48	3.33	245	260	145	1.04
12	16	2120	40	2.78	130	336	75	1.35

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