R1G108-AB41-02

EC centrifugal fan

forward-curved, single-intake

R1G108-AB41-02 ebmpapst Datesheet

sales@fansco.com

www.fansco.com

Nominal data

Type	**R1G108-AB41-02**
Motor	**M1G055-BD**

Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Method of obtaining data		fa
Speed (rpm)	min^{-1}	3000
Power consumption	W	42
Current draw	A	1.0
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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Technical description

Weight	0.7 kg
Size	108 mm
Motor size	55
Rotor surface	Painted black
Impeller material	Sheet steel, galvanized
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP22
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
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 60034-1; EN 60204-1; EN 60335-1
Approval	EAC

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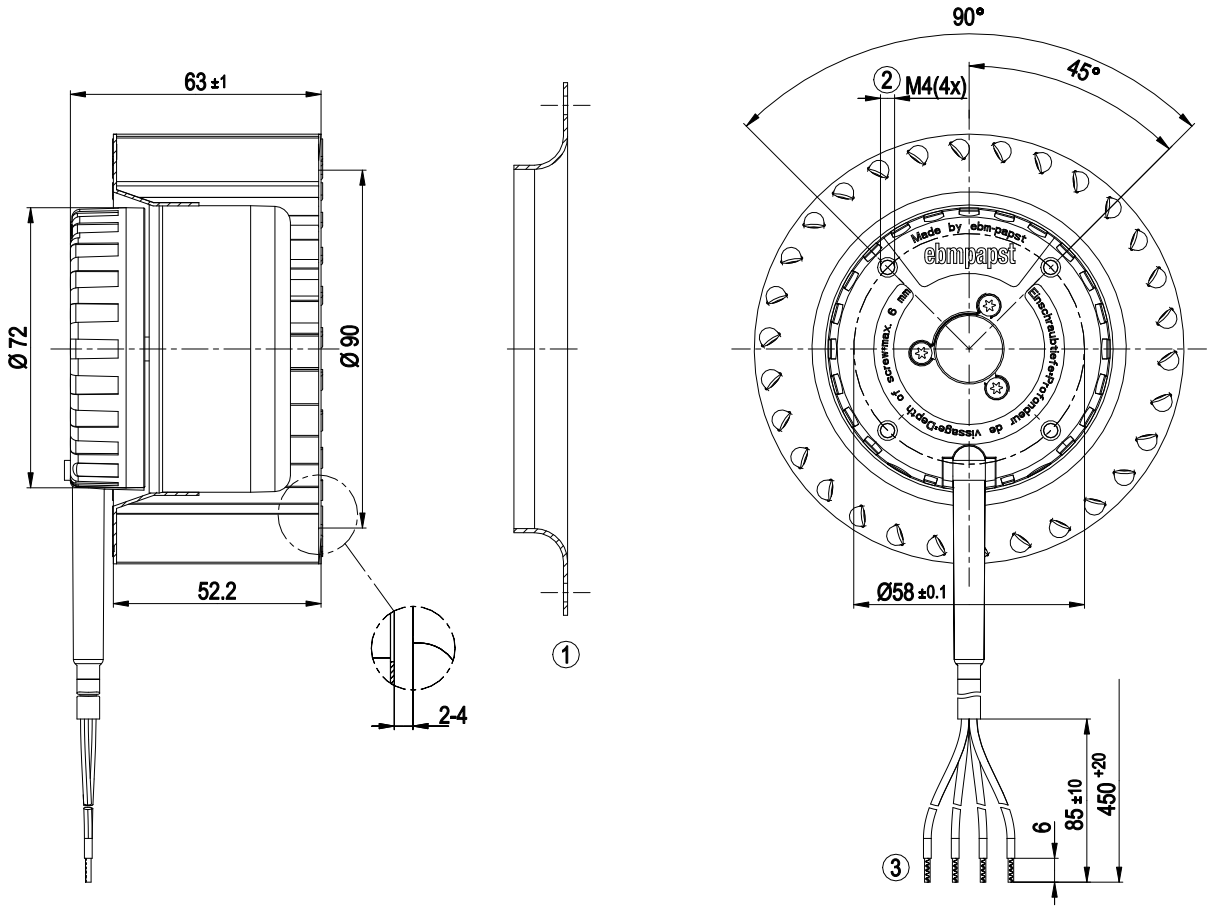
Product drawing



1	Accessory part: Inlet ring 09566-2-4013 not included in scope of delivery
2	Max. clearance for screw 6 mm
3	Cable PVC AWG20
	4x splice

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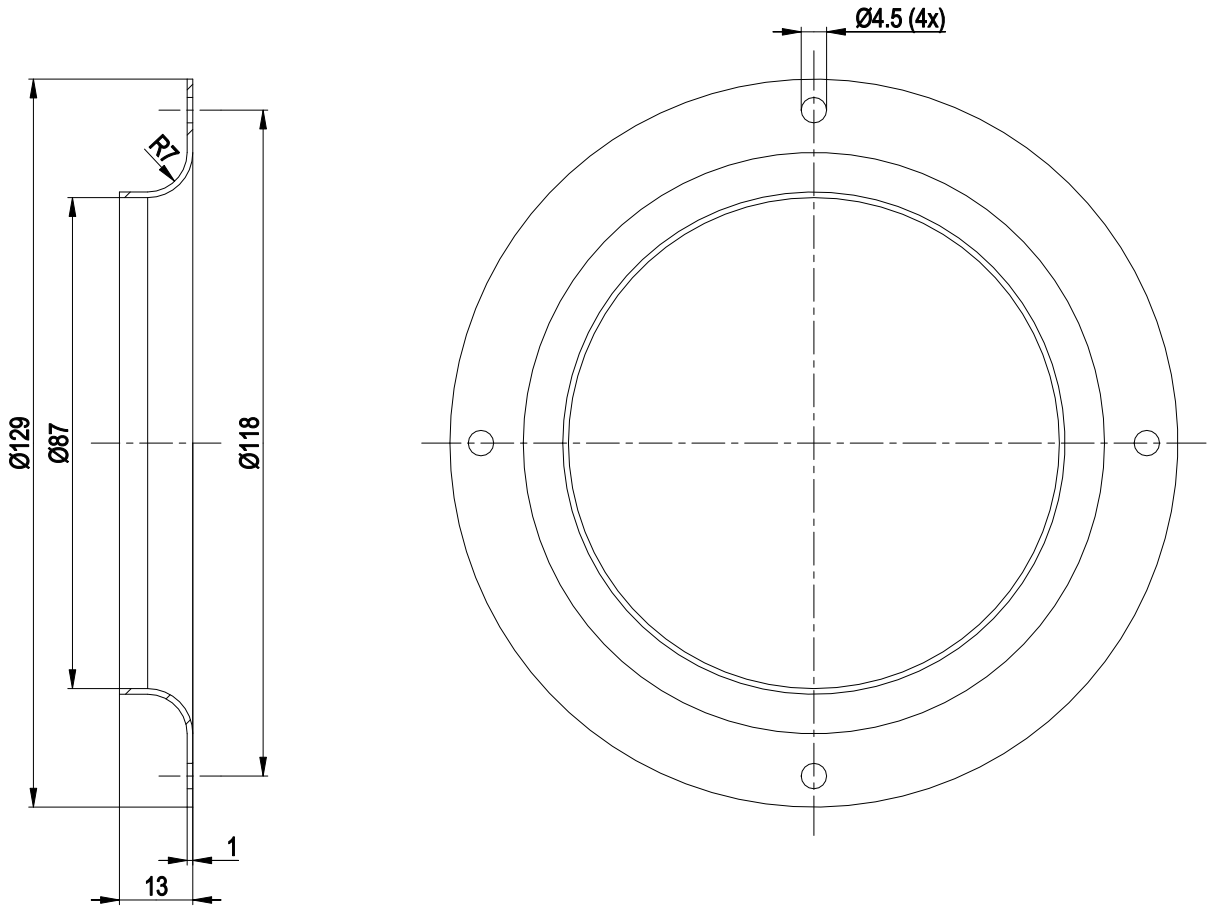
Accessory part



Inlet ring 09566-2-4013

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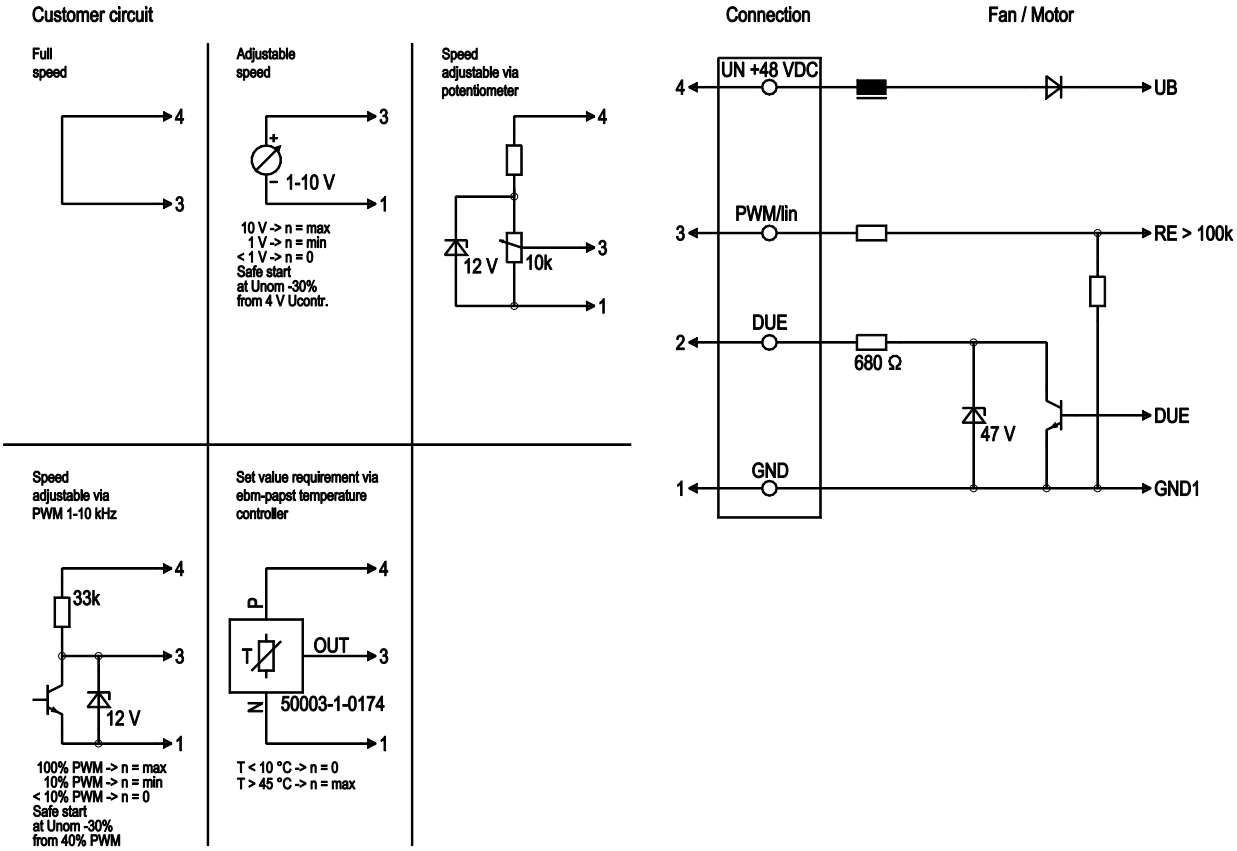
Connection diagram



No.	Conn.	Designation	Color	Function/assignment
1	1	GND	blue	Reference ground
1	2	DUE	white	Tach output, 2 pulses per revolution, Isink max = 10 mA
1	3	PWM/LIN	yellow	Control input Re > 100k
1	4	Un +48 VDC	red	Power supply 48 VDC, maximum ripple 3.5%

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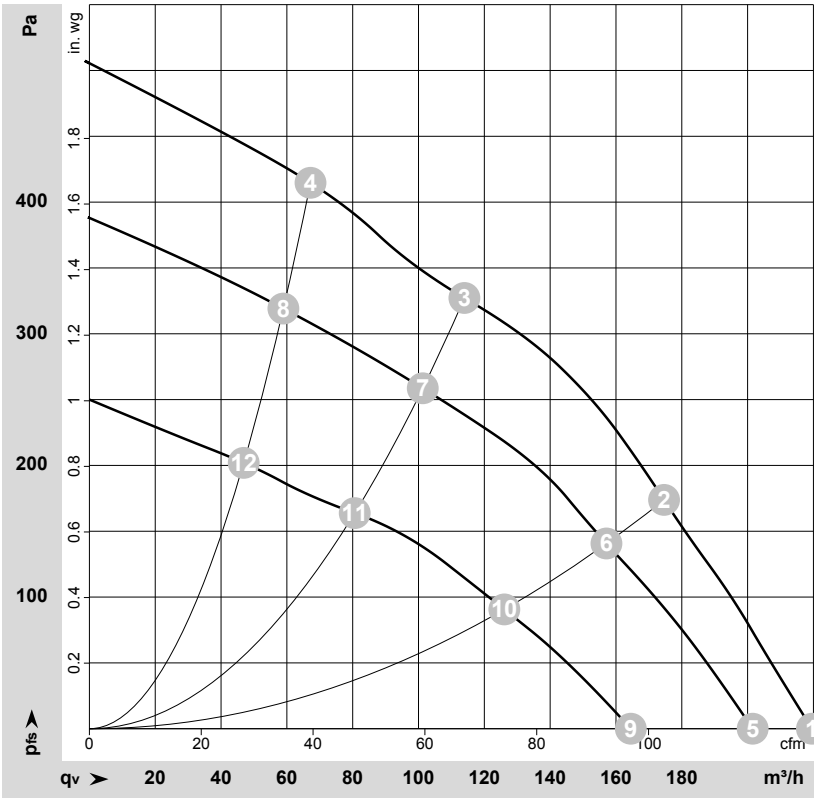
Curves: Air performance



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-53526-1
Measurement: LU-53525-1
Measurement: LU-53527-1

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	57	3200	52	1.04	220	0	130	0.00
2	57	3520	47	0.92	175	174	105	0.70
3	57	3875	40	0.76	115	327	65	1.31
4	57	4100	34	0.66	65	415	40	1.67
5	48	3000	42	1.00	200	0	120	0.00
6	48	3170	34	0.79	155	140	90	0.56
7	48	3450	28	0.64	100	260	60	1.04
8	48	3620	24	0.56	60	320	35	1.28
9	36	2425	23	0.70	165	0	95	0.00
10	36	2595	19	0.59	125	91	75	0.37
11	36	2780	16	0.50	80	164	50	0.66
12	36	2905	14	0.45	45	203	30	0.81

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