

G1G146-BA07-53

EC centrifugal fan

forward-curved, single-intake
with housing (flange)



G1G146-BA07-53 ebmpapst Datasheet
sales@fansco.com
www.fansco.com

Nominal data

Type	G1G146-BA07-53	
Motor	M1G074-BF	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Method of obtaining data		fa
Speed (rpm)	min ⁻¹	2200
Power consumption	W	100
Current draw	A	5.0
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

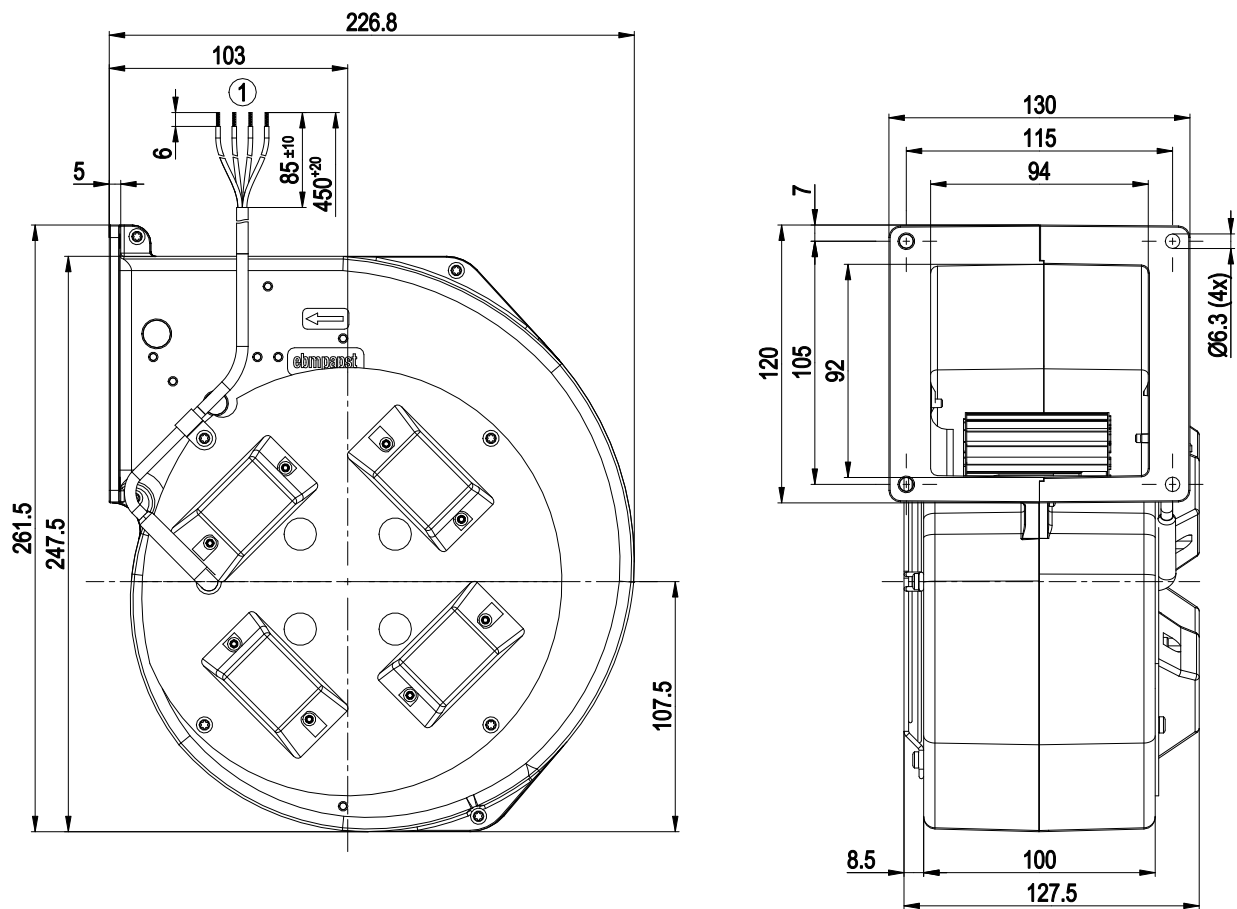
Weight	3.06 kg
Size	146 mm
Motor size	74
Rotor surface	Painted black
Impeller material	Sheet steel, galvanized
Housing material	Die-cast aluminum
Guard grille material	Steel, coated with white-aluminum plastic (RAL 9006)
Motor suspension	Motor vibration-damped on one side
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP42
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0+
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	- Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Reverse polarity protection
With cable	Axial
Conformity with standards	EN 62368-1
Approval	UL 1004-1; CSA C22.2 No. 77



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Product drawing



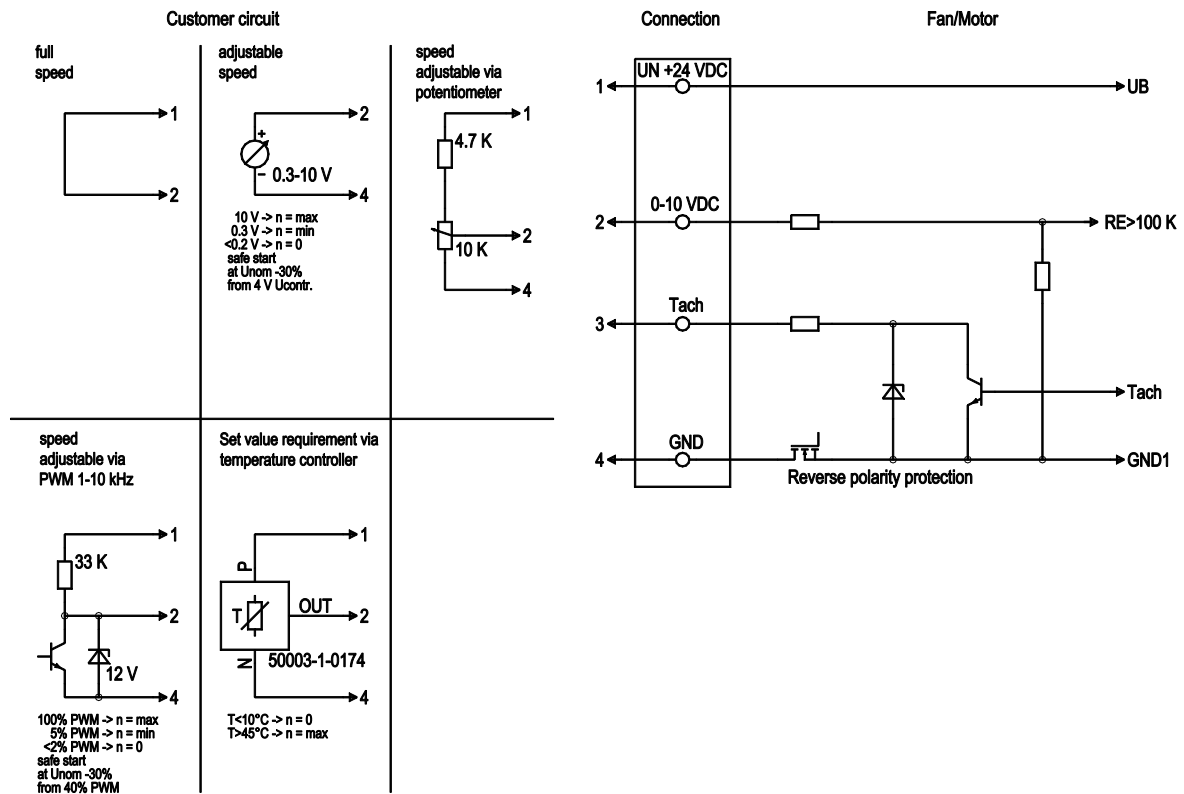
1	Cable PVC AWG20	4x splice
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Connection diagram

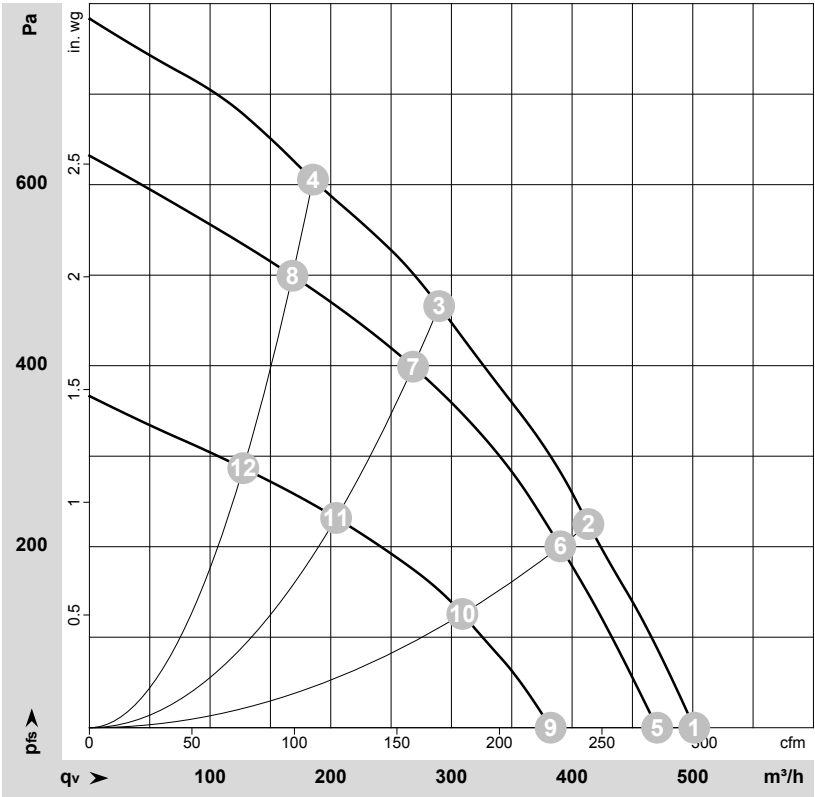


No.	Conn.	Designation	Color	Function/assignment
	1	UN +24 VDC	red	Power supply 24 VDC, maximum ripple 3.5%
	2	0-10 VDC	yellow	Special control input Re > 100k
	3	Tach	white	Tach output, 3 pulses per revolution, Isink max = 10 mA
	4	GND	blue	Reference ground

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Curves: Air performance



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

Measurement: LU-49675-1
Measurement: LU-49674-1
Measurement: LU-49676-1

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	2350	124	5.54	500	0	295	0.00
2	28	2600	117	5.00	415	224	245	0.90
3	28	3010	109	4.42	290	466	170	1.87
4	28	3370	96	3.80	185	605	110	2.43
5	24	2200	100	5.00	470	0	275	0.00
6	24	2440	97	4.64	390	200	230	0.80
7	24	2790	86	3.99	270	400	160	1.61
8	24	3070	72	3.32	170	500	100	2.01
9	16	1810	56	3.89	380	0	225	0.00
10	16	1955	50	3.43	310	126	180	0.51
11	16	2165	40	2.83	205	232	120	0.93
12	16	2350	34	2.46	130	287	75	1.15

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

