

EC centrifugal fan

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

G1G140-AG29-10 ebmpapst Datasheet

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Nominal data

Type	G1G140-AG29-10	
Motor	M1G074-CF	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Method of obtaining data		fa
Speed (rpm)	min ⁻¹	2000
Power consumption	W	118
Current draw	A	5.5
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

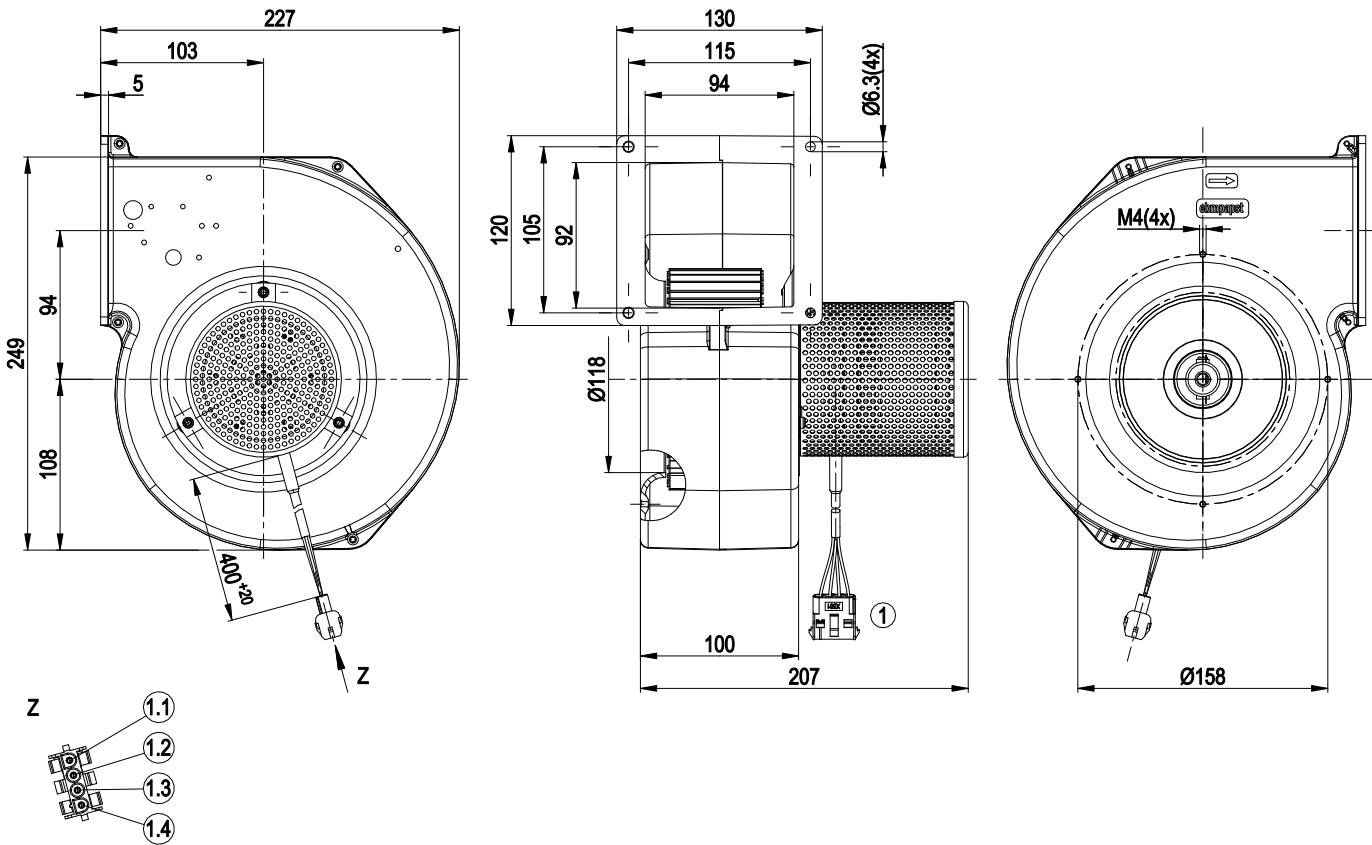
Weight	2.9 kg
Fan size	140 mm
Rotor surface	Painted black
Impeller material	Sheet steel, galvanized
Housing material	Die-cast aluminum
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP20; installation- and position-dependent
Insulation class	"B"
Moisture (F) / Environmental (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	Any
Mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM
Electrical hookup	With plug
Motor protection	Reverse polarity and locked-rotor protection
With cable	Lateral
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1



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Product drawing



1	Cable PVC AWG20 with 4-pole connector housing tyco 350780-1, 4x plug pin tyco 926886-1
1.1	+ (red)
1.2	Control input (yellow)
1.3	s (white)
1.4	- (blue)



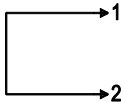
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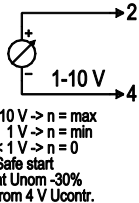
Connection diagram

Customer circuit

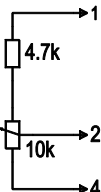
Full speed



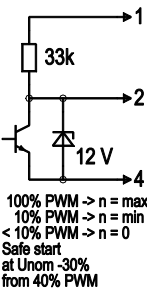
Adjustable speed



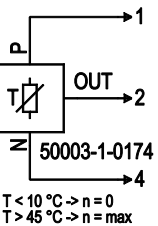
Speed adjustable via potentiometer



Speed adjustable via PWM 1-10 kHz

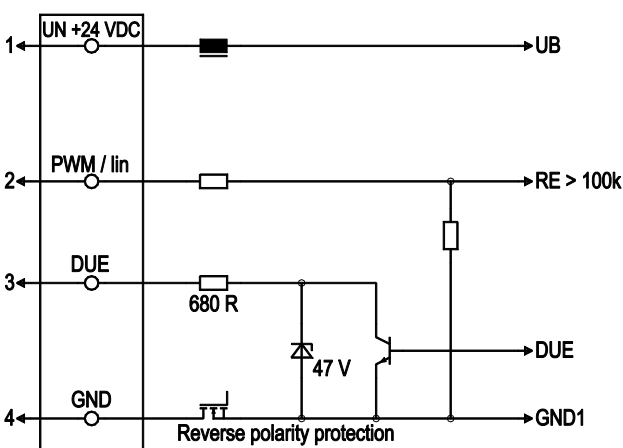


Set value requirement via temperature controller



Connection

Fan / Motor



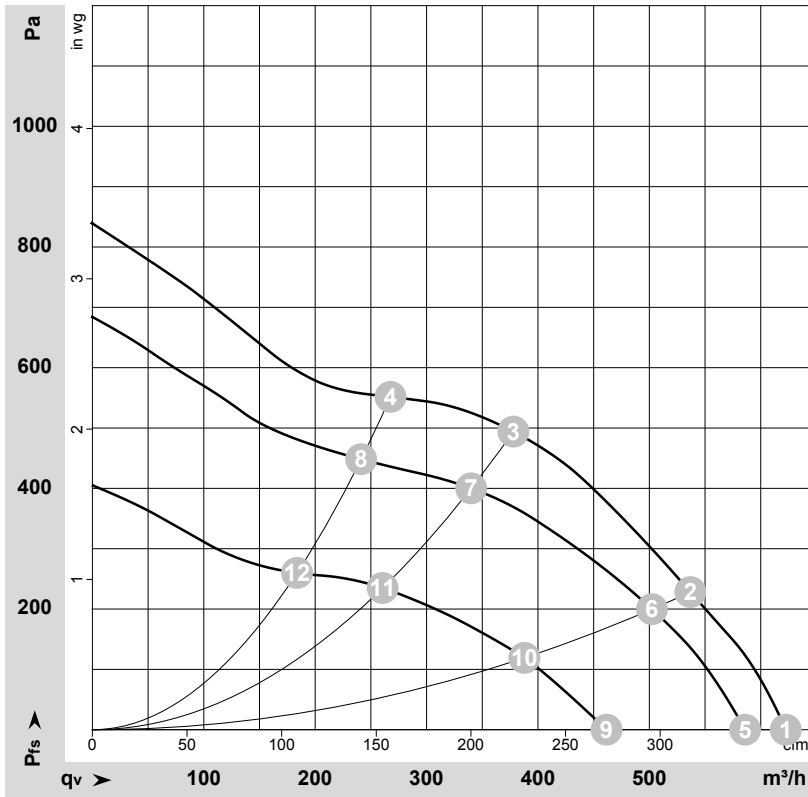
No.	Conn.	Designation	Color	Function/assignment
1	1	Un +24V	red	Power supply 24 VDC, maximum ripple 3.5%
1	2	PWM / lin	yellow	PWM / lin., control input, 0-10 V
1	3	Tach	white	Tach output, 3 pulses per revolution, Isink max = 10 mA
1	4	GND	blue	Reference ground



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Curves: Air performance



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

Measurement: LU-52406-1
Measurement: LU-52405-1
Measurement: LU-52408-1

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	qv	p _{fs}	qv	p _{fs}
	V	min ⁻¹	W	A	m ³ /h	Pa	CFM	inH ₂ O
1	28	2140	144	5.96	625	0	365	0.00
2	28	2340	136	5.50	535	228	315	0.92
3	28	2765	120	4.69	380	495	220	1.99
4	28	3000	102	4.02	270	552	160	2.22
5	24	2000	118	5.50	585	0	345	0.00
6	24	2195	112	5.17	500	200	295	0.80
7	24	2510	90	4.14	340	400	200	1.61
8	24	2715	77	3.57	240	450	140	1.81
9	16	1595	60	4.19	460	0	270	0.00
10	16	1705	53	3.73	390	120	230	0.48
11	16	1930	43	3.12	260	236	155	0.95
12	16	2080	37	2.89	185	259	110	1.04

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

