

G1G108-AB17-02

EC centrifugal fan

forward curved, single inlet
with housing (flange)



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Nominal data

Type	G1G108-AB17-02	
Motor	M1G055-BD	
Nominal voltage	[VDC]	24
Nominal voltage range	[VDC]	16 .. 28
Frequency	[Hz]	-
Type of data definition		rfa
Speed	[min ⁻¹]	3000
Power input	[W]	42
Current draw	[A]	2.0
Min. ambient temperature	[°C]	- 25
Max. ambient temperature	[°C]	+60

ml = max. load · me = max. efficiency · rfa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

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Technical features

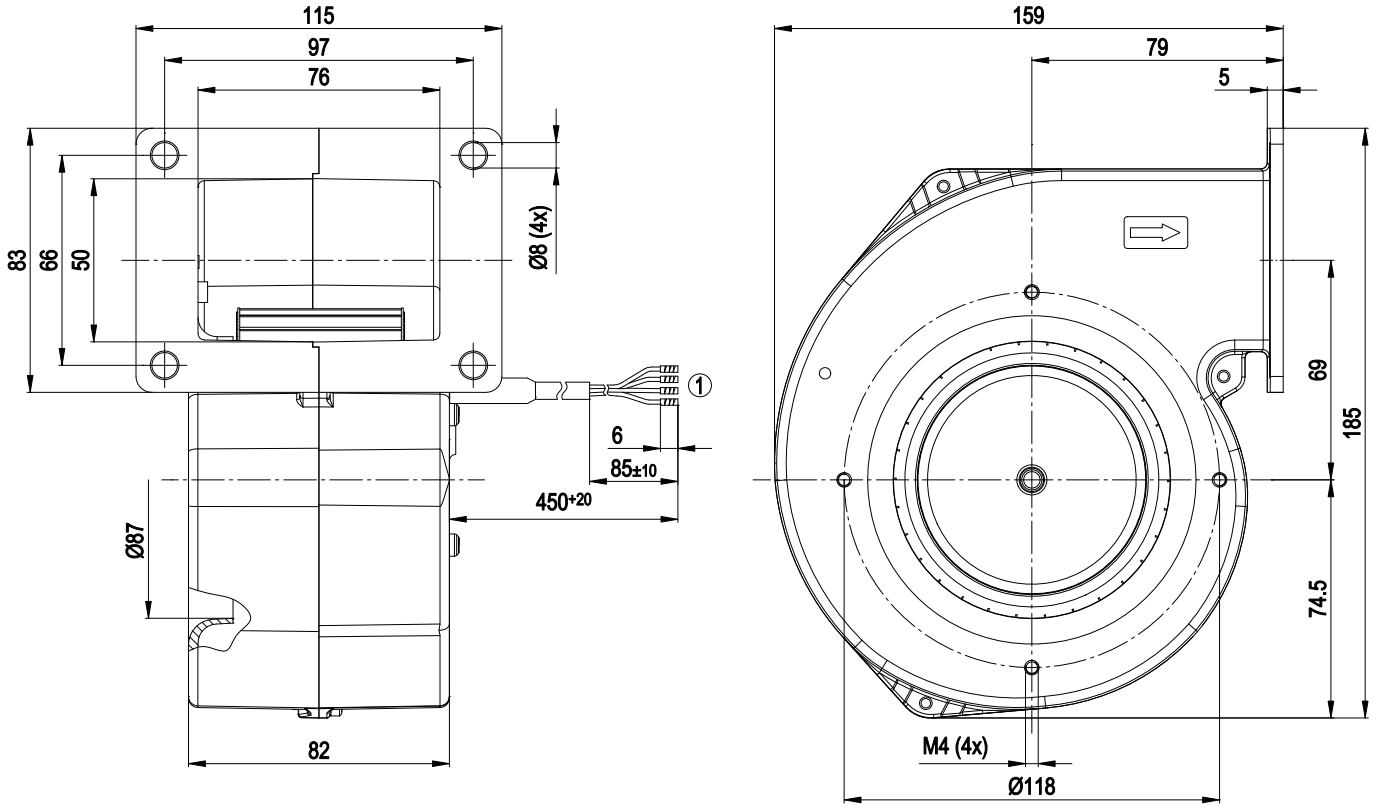
General description	Integrated electronics
Size	108 mm
Operation mode	S1
Direction of rotation	Clockwise, seen on rotor
Mounting position	Any
EMC interference emission	Acc. to EN 61000-6-3 (household environment)
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
Insulation class	"B"
Cable exit	Axial
Condensate discharge holes	None
Bearing motor	Ball bearing
Mass	1.4 kg
Material of electronics housing	Die-cast aluminium
Housing material	Die-cast aluminium
Material of impeller	Sheet steel, hot-galvanised
Motor protection	Reverse polarity and locked-rotor protection
Product conforming to standard	EN 60950-1
Surface of rotor	Coated in black
Type of protection	IP 22
Technical features	<ul style="list-style-type: none"> - Tach output - Motor current limit - Soft start - Control input 0-10 VDC / PWM
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Approval	CSA C22.2 Nr.77; UL 1004-1

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Product drawing



1 Connection line PVC AWG20, 4 x brass lead tips crimped

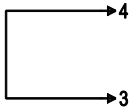
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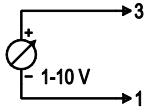
Connection screen

Customer circuit

Full speed

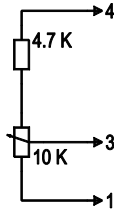


Speed setting

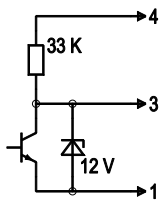


10 V → n = max
1 V → n = min
<1 V → n = 0
Safe start-up at Unom -30 %
from 4 V Ucontr.

Speed setting with fixed resistance

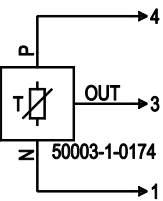


Speed setting via PWM 1-10 kHz



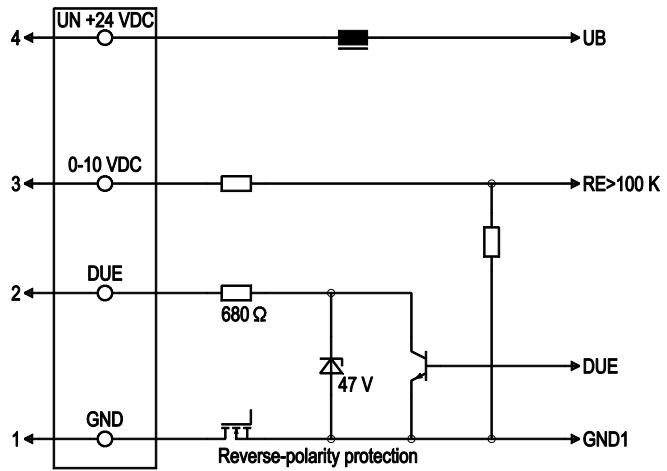
100 % PWM → n = max
10 % PWM → n = min
<10 % PWM → n = 0
Safe start-up at Unom -30 %
from 40 % PWM

Setting of values via temperature controller



Connection

Fan / motor

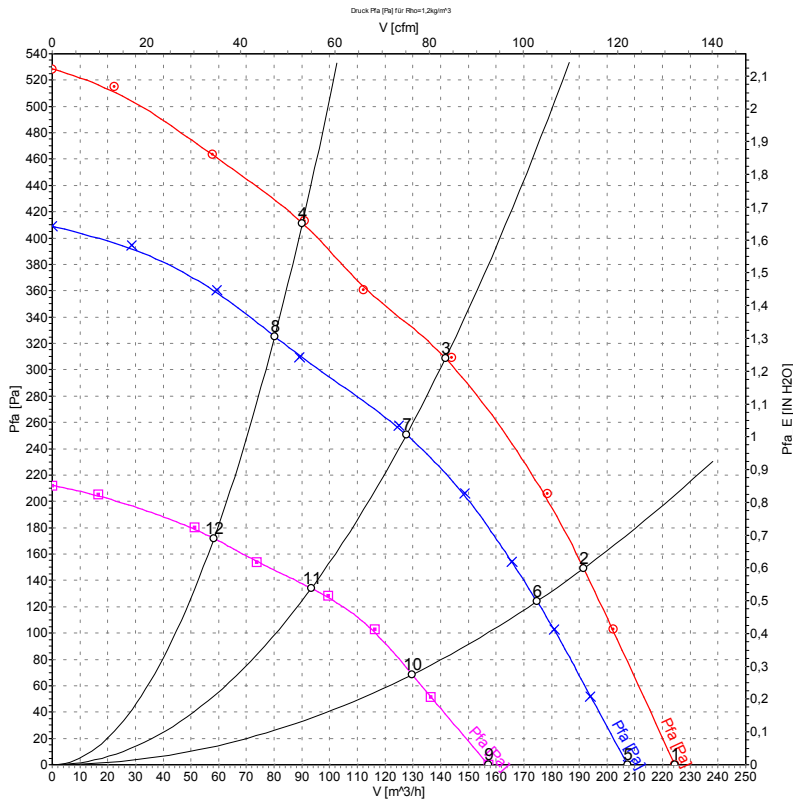


Line	No.	Signal	Colour	Function / assignment
1	1	GND	blue	Reference mass
1	2	DUE	white	Speed monitoring output, 2 pulses per rotation, Isink max = 10 mA
1	3	0-10 VDC	yellow	Control input Re > 100 K
1	4	Un +24 VDC	red	Power supply 24 VDC, residual ripple 3.5 %

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Charts: Air flow



Measurement: LU-47851
Measurement: LU-47850
Measurement: LU-47852

Measured values

	U	n	P ₁	I	\hat{V}	p _{fa}
	[V]	[min ⁻¹]	[W]	[A]	[m ³ /h]	[Pa]
1	28	3235	55	2.26	225	0
2	28	3480	51	2.06	190	149
3	28	3800	44	1.76	140	313
4	28	4055	38	1.49	90	414
5	24	3000	42	2.00	205	0
6	24	3170	39	1.80	175	125
7	24	3415	33	1.50	130	250
8	24	3625	28	1.28	80	325
9	16	2290	19	1.33	155	0
10	16	2400	17	1.19	130	68
11	16	2540	14	1.00	95	134
12	16	2670	12	0.88	60	172