

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 <sup>-1</sup> ]	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

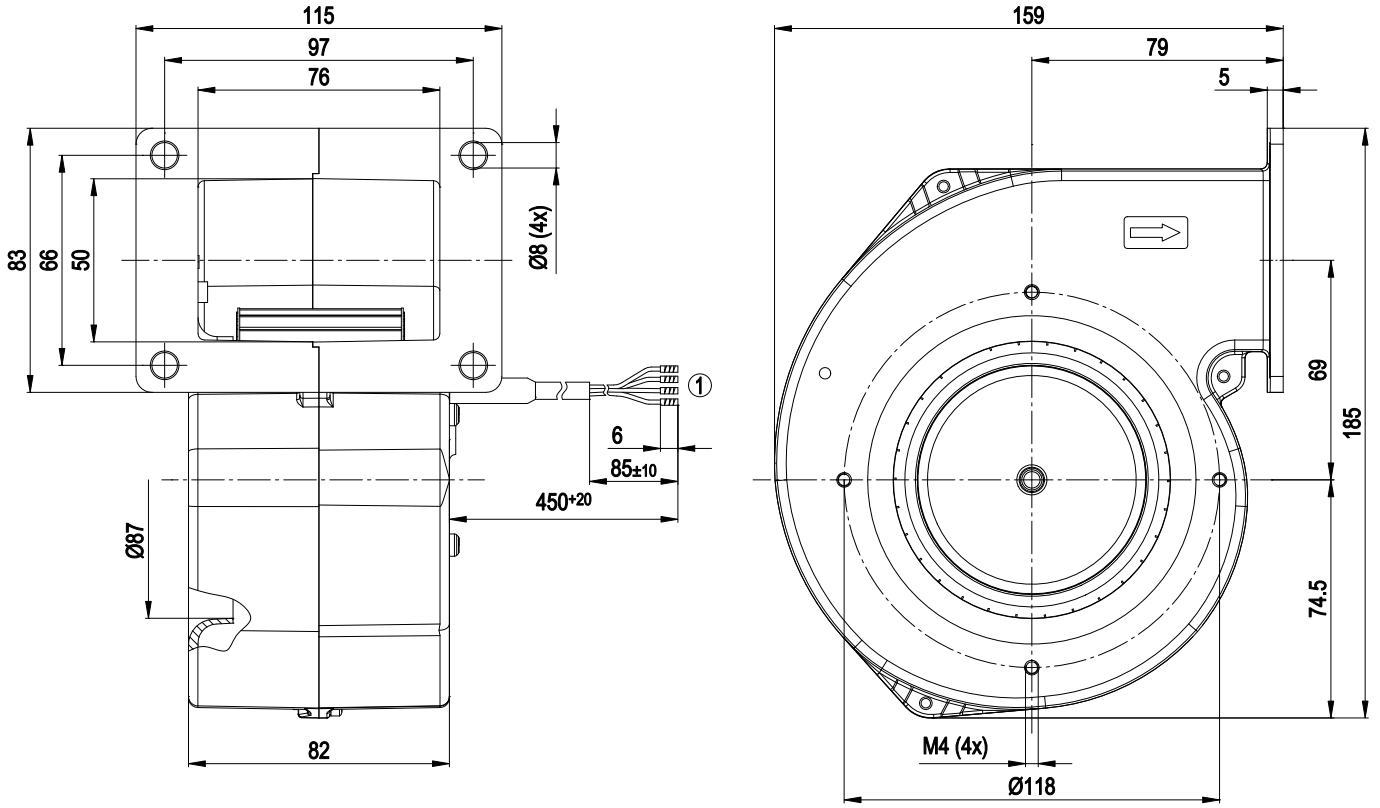
<b>General description</b>	Integrated electronics
<b>Size</b>	108 mm
<b>Operation mode</b>	S1
<b>Direction of rotation</b>	Clockwise, seen on rotor
<b>Mounting position</b>	Any
<b>EMC interference emission</b>	Acc. to EN 61000-6-3 (household environment)
<b>EMC interference immunity</b>	Acc. to EN 61000-6-2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

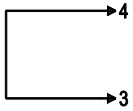
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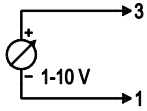
## Connection screen

### Customer circuit

Full speed

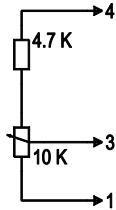


Speed setting



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



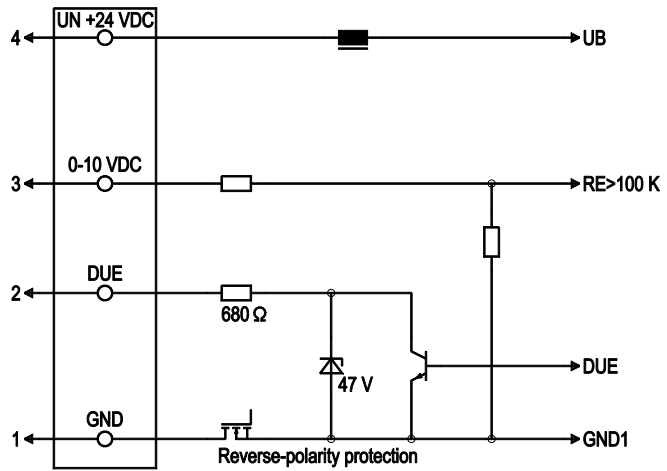
100 % PWM → n = max  
10 % PWM → n = min  
<10 % PWM → n = 0  
Safe start-up at Unom -30 %  
from 40 % PWM

Setting of values via temperature controller



### Connection

### Fan / motor

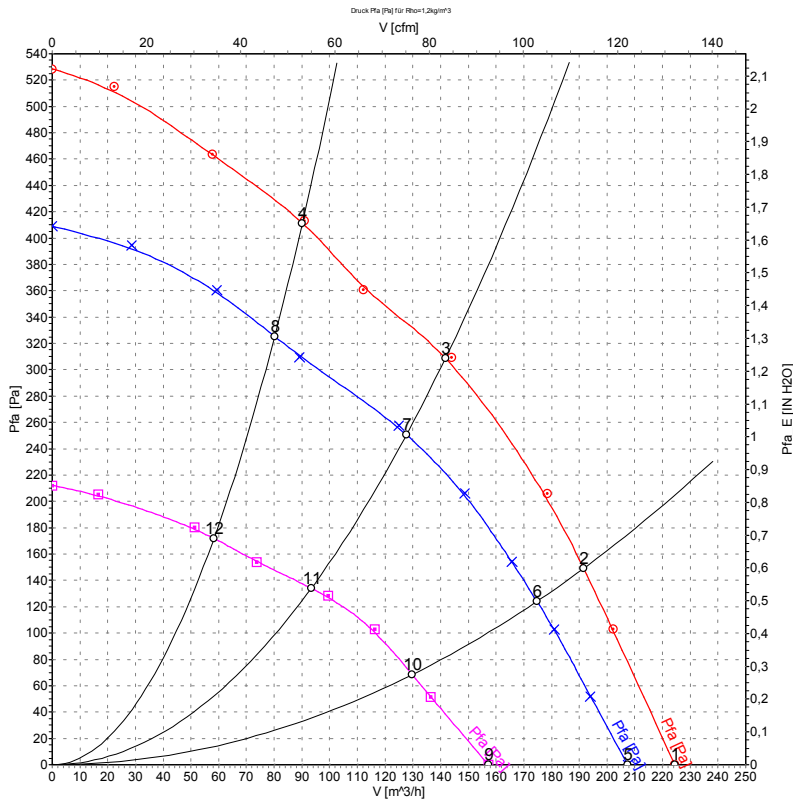


Line	No.	Signal	Colour	Function / assignment
1	1	GND	blue	Reference mass
1	2	DUE	white	Speed monitoring output, 2 pulses per rotation, Isink max = 10 mA
1	3	0-10 VDC	yellow	Control input Re > 100 K
1	4	Un +24 VDC	red	Power supply 24 VDC, residual ripple 3.5 %

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## Charts: Air flow



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

## Measured values

	U	n	P <sub>1</sub>	I	$\hat{V}$	p <sub>fa</sub>
	[V]	[min <sup>-1</sup> ]	[W]	[A]	[m <sup>3</sup> /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

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