

G1G120-AB67-02

## EC centrifugal fan

forward curved, single inlet  
with housing (flange)



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### Nominal data

Type	G1G120-AB67-02	
Motor	M1G055-BD	
Nominal voltage	[VDC]	24
Nominal voltage range	[VDC]	16 .. 28
Type of data definition		rfa
Speed	[min <sup>-1</sup> ]	2200
Power input	[W]	40
Current draw	[A]	1.9
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

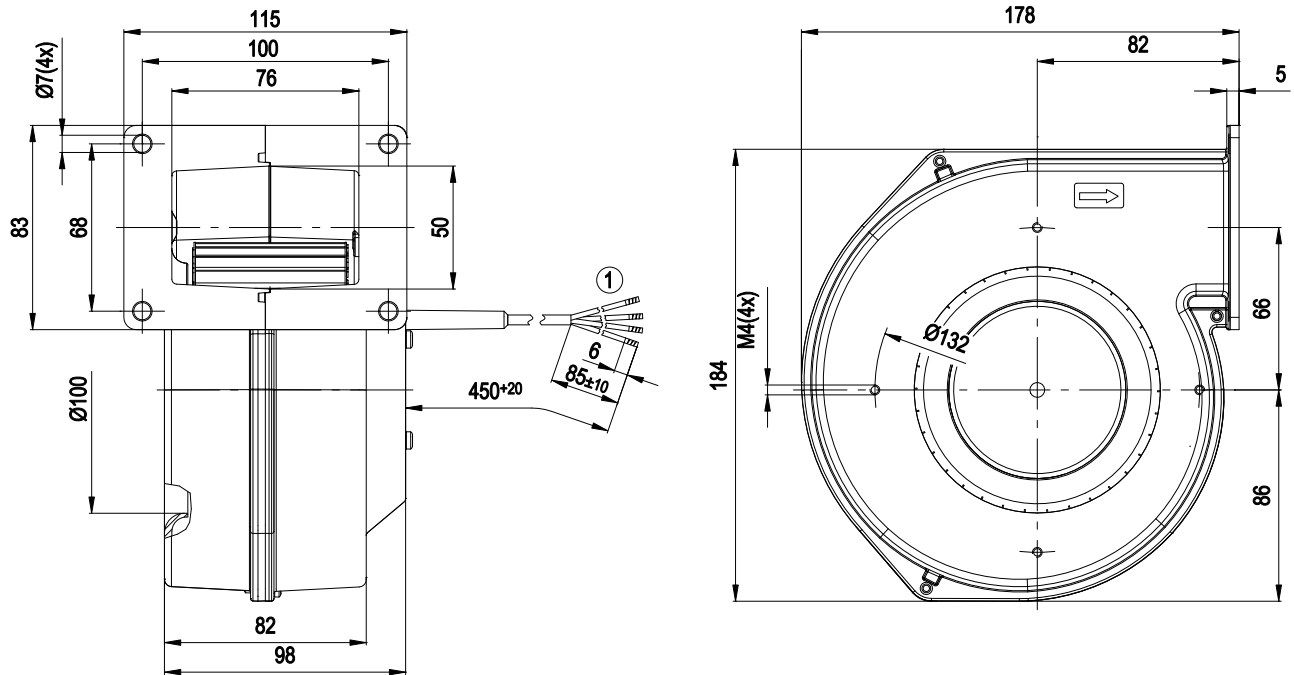
<b>Size</b>	120 mm
<b>Operation mode</b>	S1
<b>Direction of rotation</b>	Clockwise, seen on rotor
<b>Mounting position</b>	Any
<b>EMC interference emission</b>	Acc. to EN 61000-6-3 (household environment)
<b>EMC interference immunity</b>	Acc. to EN 61000-6-2 (industrial environment)
<b>Insulation class</b>	"B"
<b>Cable exit</b>	Axial
<b>Condensate discharge holes</b>	None
<b>Bearing motor</b>	Ball bearing
<b>Mass</b>	1.57 kg
<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>	Thick layer passivated
<b>Type of protection</b>	IP 22
<b>Technical features</b>	<ul style="list-style-type: none"> <li>- Control input 0-10 VDC / PWM</li> <li>- Tach output</li> <li>- Motor current limit</li> <li>- Soft start</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 AWG20, 4x brass lead tips crimped

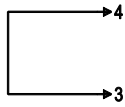
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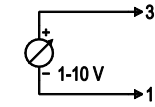
## Connection screen

### Customer circuit

#### Full speed

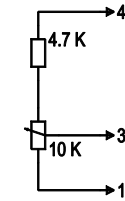


#### Speed setting

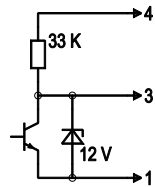


10 V → n = max  
1 V → n = min  
<1 V → n = 0  
Safe start-up at Unom -30 %  
from 4 V Ucontr.

#### Speed setting with fixed resistance

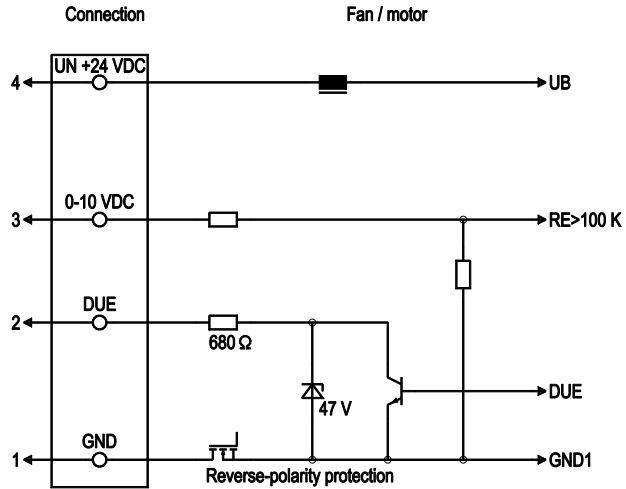
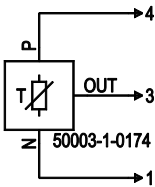


#### Speed setting via PWM 1-10 kHz



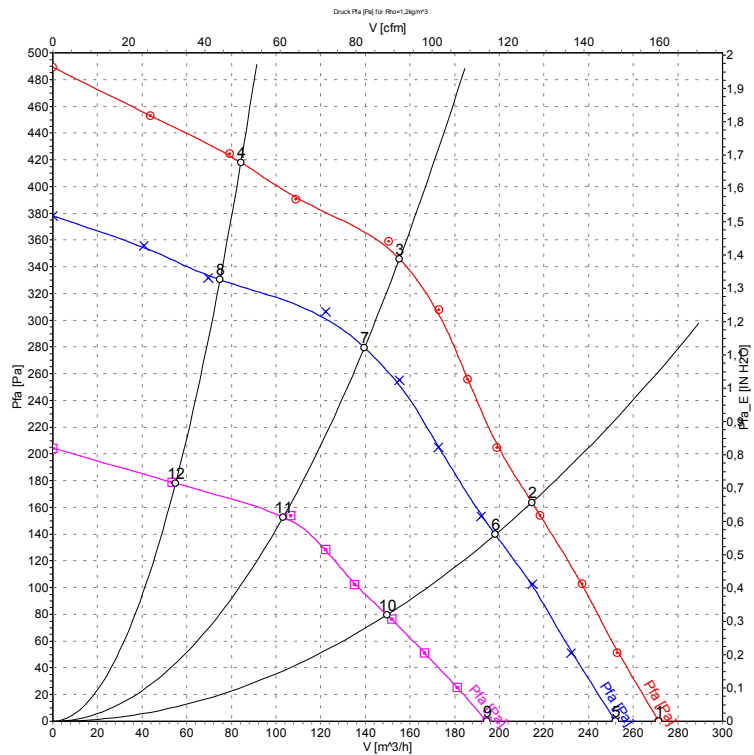
100 % PWM → n = max  
10 % PWM → n = min  
<10 % PWM → n = 0  
Safe start-up at Unom -30 %  
from 40 % PWM

#### Setting of values via temperature controller



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 %

## Charts: Air flow



Measurement: LU-48521  
Measurement: LU-48520  
Measurement: LU-48522

## 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	2380	49	2.09	270	0
2	28	2675	45	1.82	215	164
3	28	3025	39	1.54	155	348
4	28	3315	31	1.23	85	418
5	24	2200	40	1.90	250	0
6	24	2480	36	1.64	200	140
7	24	2730	29	1.34	140	280
8	24	2940	24	1.10	75	330
9	16	1750	19	1.32	195	0
10	16	1895	16	1.11	150	80
11	16	2050	13	0.92	105	155
12	16	2215	9.94	0.78	55	178