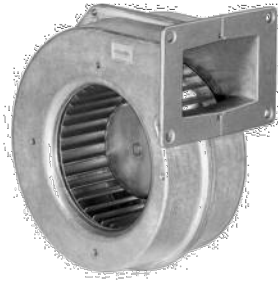


G1G120-AB67-02

# EC centrifugal fan

forward curved, single inlet  
with housing (flange)



## ebm-papst Mulfingen GmbH & Co. KG

Bachmühle 2 · D-74673 Mulfingen

Phone +49 7938 81-0

Fax +49 7938 81-110

info1@de.ebmpapst.com

www.ebmpapst.com

Limited partnership · Headquarters Mulfingen  
County court Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen  
County court Stuttgart · HRB 590142

## Nominal data

Type	G1G120-AB67-02	
Motor	M1G055-BD	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Type of data definition		fa
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 · fa = Running at free air · cs = Customer specs · cu = Customer unit  
Subject to alterations



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## Technical features

<b>Mass</b>	1.57 kg
<b>Size</b>	120 mm
<b>Surface of rotor</b>	Thick layer passivated
<b>Material of impeller</b>	Sheet steel, hot-galvanised
<b>Housing material</b>	Die-cast aluminium
<b>Direction of rotation</b>	Clockwise, seen on rotor
<b>Type of protection</b>	IP 22
<b>Insulation class</b>	"B"
<b>Humidity class</b>	F0
<b>Max. permissible ambient motor temp. (transp./ storage)</b>	+ 80 °C
<b>Min. permissible ambient motor temp. (transp./storage)</b>	- 40 °C
<b>Mounting position</b>	Any
<b>Condensate discharge holes</b>	None
<b>Operation mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<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>EMC interference immunity</b>	Acc. to EN 61000-6-2 (industrial environment)
<b>EMC interference emission</b>	Acc. to EN 61000-6-3 (household environment)
<b>Motor protection</b>	Reverse polarity and locked-rotor protection
<b>Cable exit</b>	Axial
<b>Product conforming to standard</b>	EN 60950-1
<b>Approval</b>	CSA C22.2 Nr.77; EAC; UL 1004-1

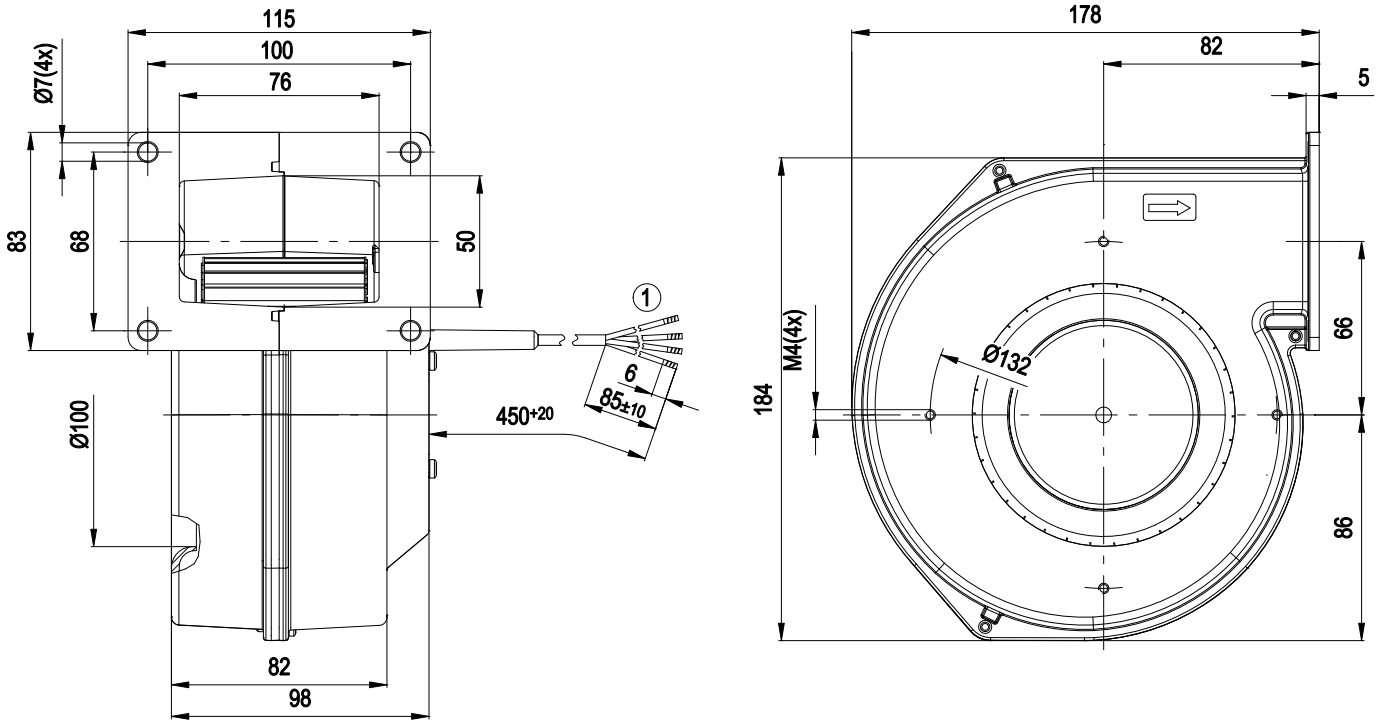


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## Product drawing



1 Connection line AWG20, 4x brass lead tips crimped



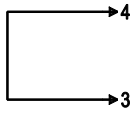
# EC centrifugal fan

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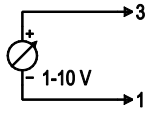
## Connection screen

### Customer circuit

Full speed

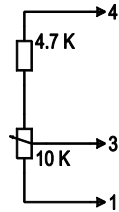


Speed setting

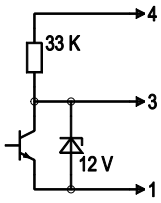


10 V → n = max  
1 V → n = min  
<1 V → n = 0  
Safe start-up at Unom -30 %  
from 4 V Ucontr.

Speed setting with fixed resistance

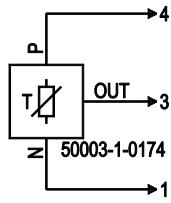


Speed setting via PWM 1-10 kHz



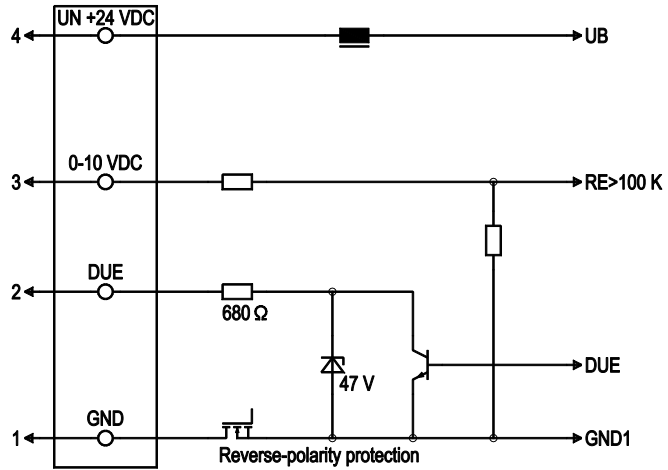
100 % PWM → n = max  
10 % PWM → n = min  
<10 % PWM → n = 0  
Safe start-up at Unom -30 %  
from 40 % PWM

Setting of values via temperature controller



### Connection

### Fan / motor



No.	Conn.	Designation	Colour	Function / assignment
1	1	GND	blue	Reference mass
1	2	Tach	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 %

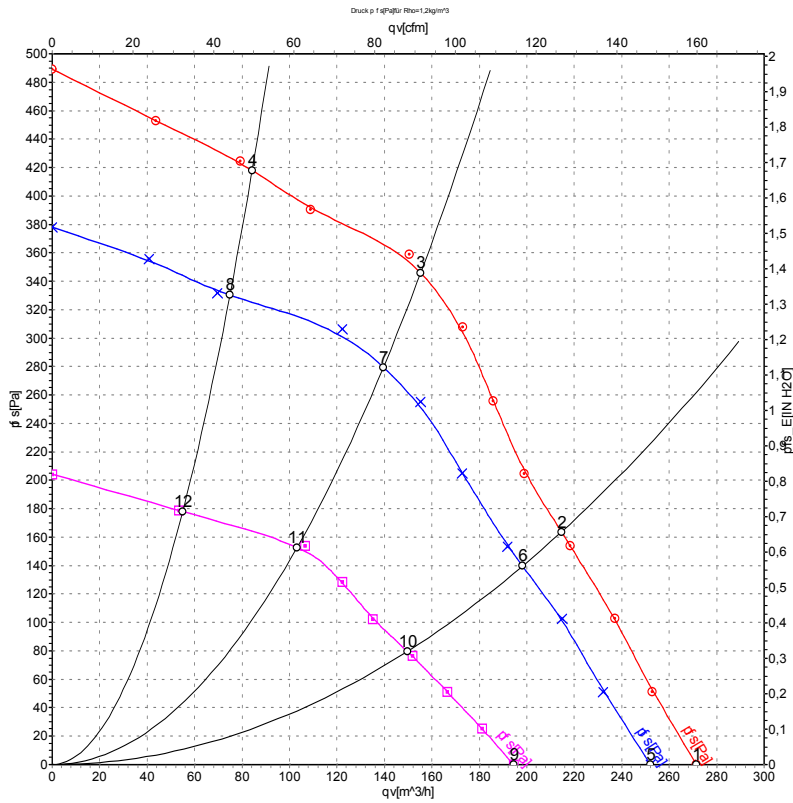


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## Charts: Air flow



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

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebmpapst. Suction-side noise levels: L<sub>WA</sub> measured as per ISO 13347 / L<sub>pA</sub> measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

## Measured values

	U	n	P <sub>ed</sub>	I	qv	p <sub>fs</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	9.9	0.78	55	178

U = Supply voltage · n = Speed · P<sub>ed</sub> = Power input · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase

