

D1G133-DC17-52

EC centrifugal fan

forward curved, dual inlet
with housing (without flange)



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Nominal data

Type	D1G133-DC17-52	
Motor	M1G074-CF	
Nominal voltage	[VDC]	48
Nominal voltage range	[VDC]	36 .. 57
Frequency	[Hz]	-
Type of data definition		rfa
Speed	[min ⁻¹]	1580
Power input	[W]	118
Current draw	[A]	3.0
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

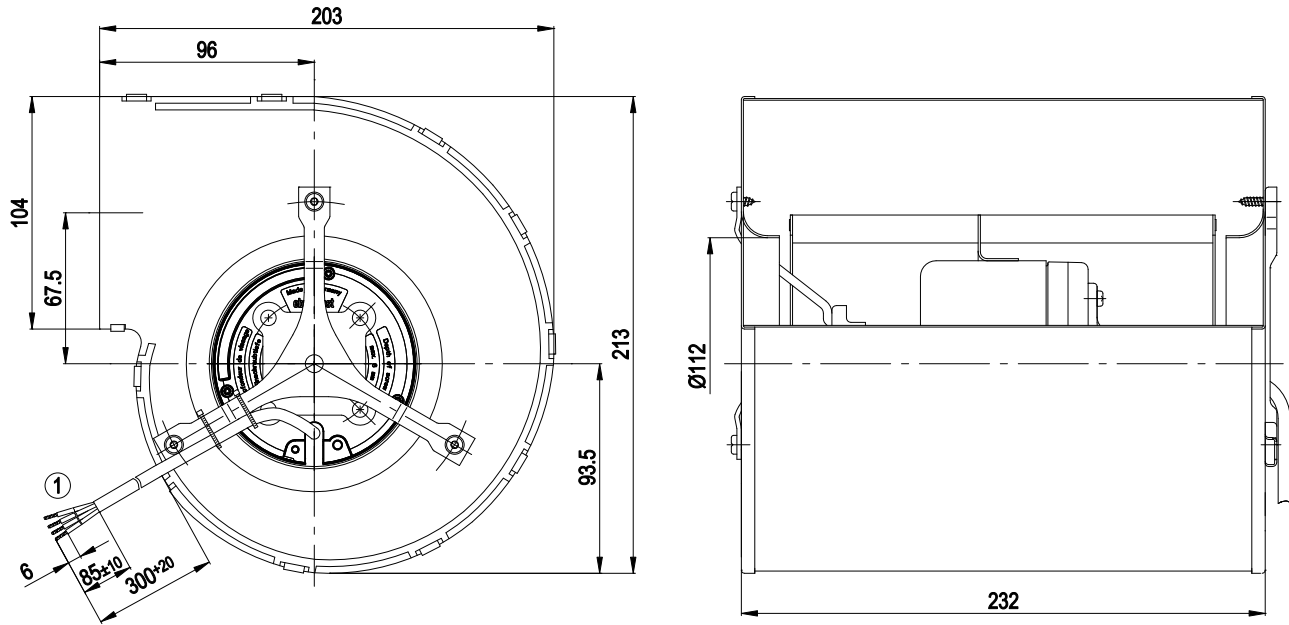
Size	133 mm
Operation mode	S1
Direction of rotation	Clockwise, seen on rotor
Mounting position	Any
EMC interference emission	Acc. to EN 55022 (Class B)
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
Humidity class	F0
Insulation class	"B"
Cable exit	Variable
Condensate discharge holes	None
Motor bearing	Ball bearing
Mass	3.39 kg
Housing material	Sheet steel, hot-galvanised
Material of impeller	Sheet steel, hot-galvanised
Motor suspension	Motor anti-vibration mounted on both sides
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 42
Technical features	<ul style="list-style-type: none"> - Control input 0-10 VDC / PWM - Tach output - Motor current limit - Soft start
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, 4x brass lead tips crimped

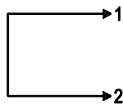
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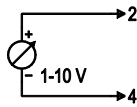
Connection screen

Customer circuit

Full speed

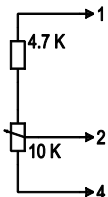


Speed setting

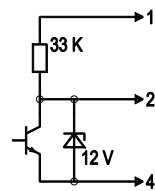


10 V → n = max
1 V → n = min
<1 V → n = 0
Safe start
at Unom -30 %
from 4 V Ucontr.

Speed setting via potentiometer

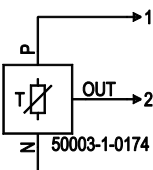


Speed setting via PWM 1-10 kHz



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

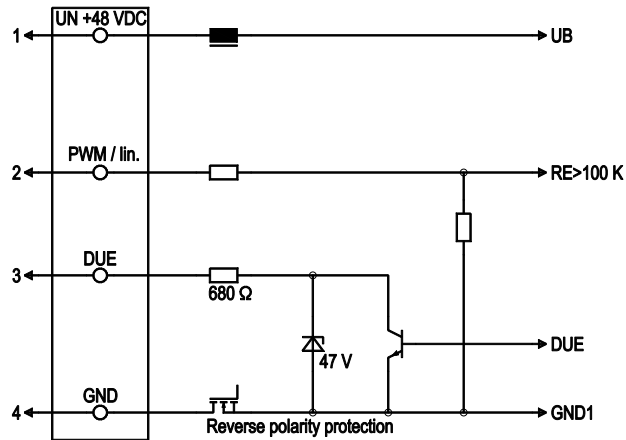
Set value via temperature controller



T < 10 °C → n = 0
T > 45 °C → n = max

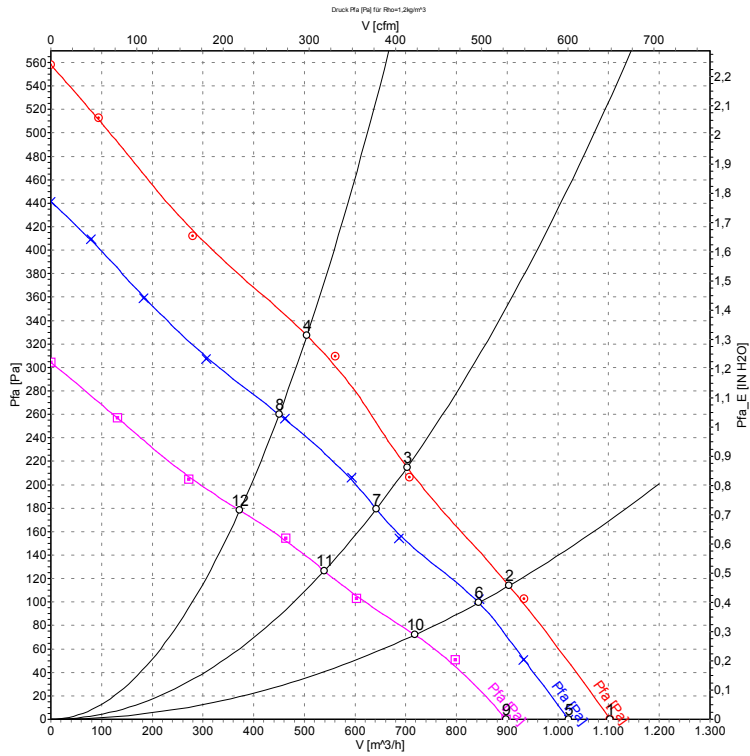
Connection

Fan / motor



Line	No.	Signal	Colour	Function / assignment
1	1	Un +48 VDC	red	Power supply 48 VDC, residual ripple 3.5 %
1	2	PWM / lin	yellow	PWM / lin. control input, 0-10 V
1	3	DUE	white	Speed monitoring output, 3 pulses per rotation, Isink max = 10 mA
1	4	GND	blue	Reference mass

Charts: Air flow



Measurement: LU-51340
Measurement: LU-51339
Measurement: LU-51341

Measured values

	U	n	P ₁	I	\hat{V}	p _{fa}
	[V]	[min ⁻¹]	[W]	[A]	[m ³ /h]	[Pa]
1	57	1700	145	3.32	1105	0
2	57	1925	134	2.94	905	117
3	57	2200	125	2.63	705	210
4	57	2520	114	2.34	505	330
5	48	1580	118	3.00	1020	0
6	48	1785	108	2.65	845	100
7	48	2040	99	2.40	640	180
8	48	2275	83	2.02	450	260
9	36	1405	79	2.50	900	0
10	36	1575	70	2.23	720	72
11	36	1725	59	1.90	540	126
12	36	1890	50	1.64	375	178