D1G160-DA33-15

EC centrifugal fan

forward curved, dual inlet

with housing (without 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	**D1G160-DA33-15**
Motor	**M1G074-CF**

Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Frequency	Hz	-
Type of data definition		fa
Speed	min^{-1}	1250
Power input	W	112
Current draw	A	2.9
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

Mass	3.9 kg
Size	160 mm
Surface of rotor	Coated in black
Material of impeller	Sheet steel, hot-galvanised
Housing material	Sheet steel, hot-galvanised
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 42
Insulation class	"B"
Humidity class	F0
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Control input 0-10 VDC / PWM - Tach output Motor current limit - Soft start
EMC interference immunity	Acc. to EN 61000-6-2
EMC interference emission	Acc. to EN 55022 (Class B)
Electrical leads	With plug
Motor protection	Reverse polarity and locked-rotor protection
Cable exit	Variable
Approval	CCC; CSA C22.2 Nr.77; UL 1004-1

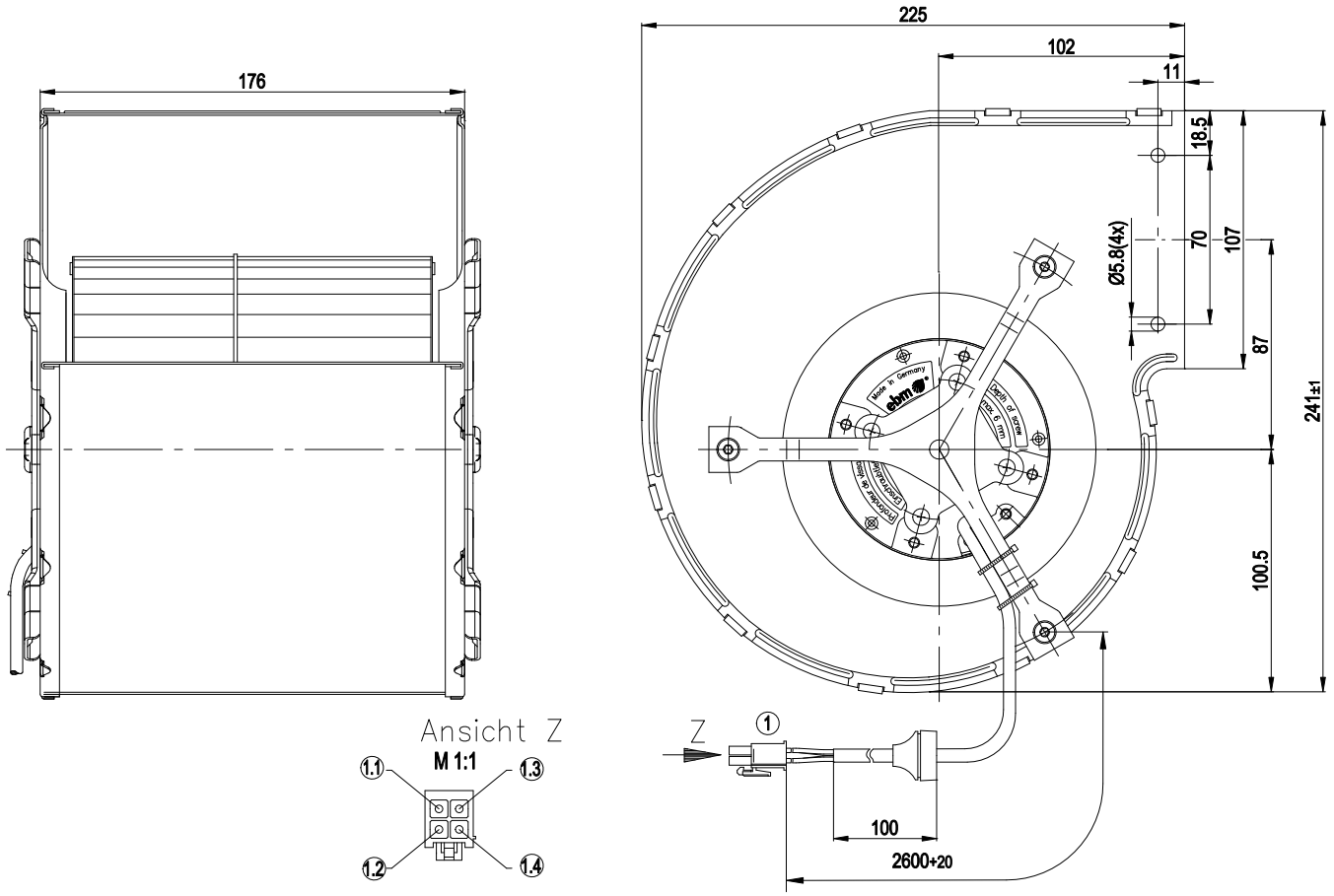
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Product drawing



1	Connector housing Mate-N-Lok 172167-1, socket contact 170362-1, pluggable with 172159-1
1.1	red (+)
1.2	yellow (control input)
1.3	white (s)
1.4	blue (-)

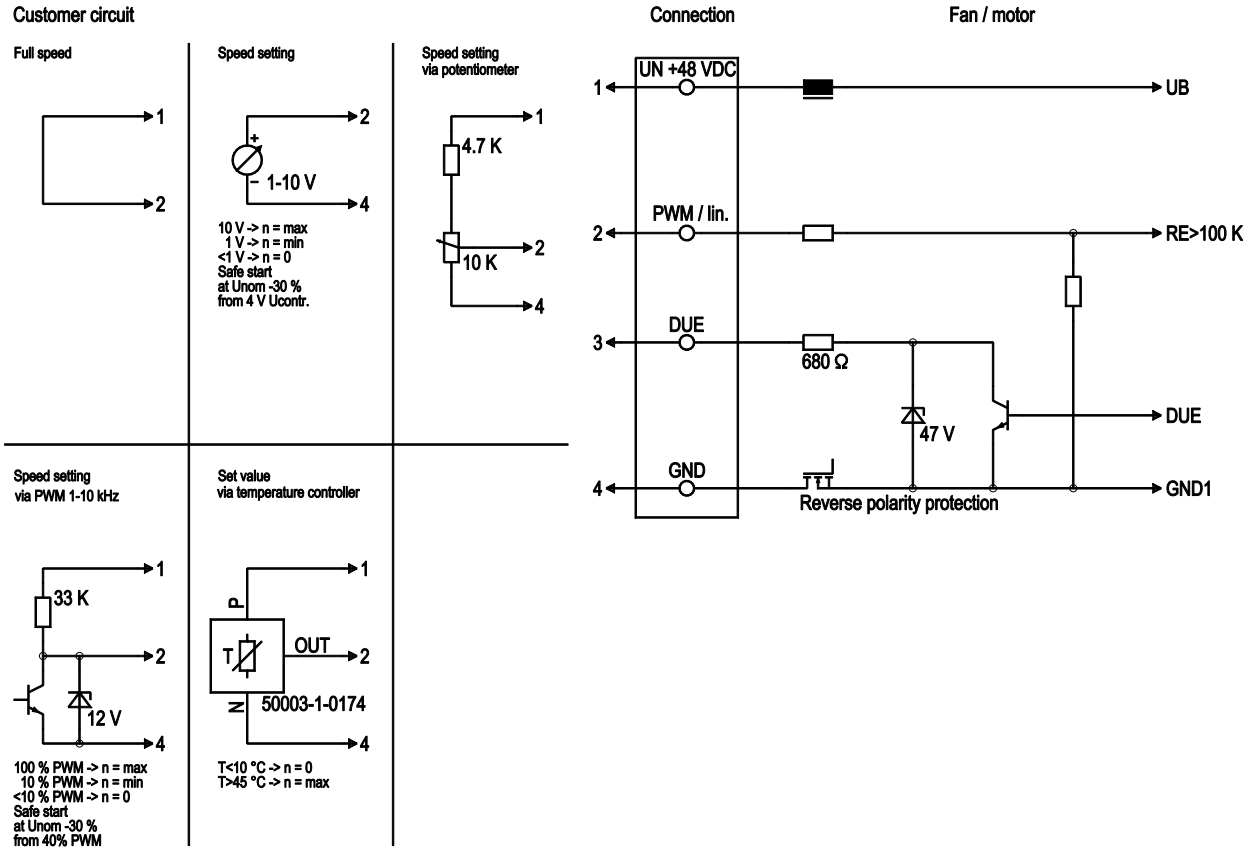
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Connection screen



No.	Conn.	Designation	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	Tach	white	Speed monitoring output, 3 pulses per rotation, Isink max = 10 mA
1	4	GND	blue	Reference mass

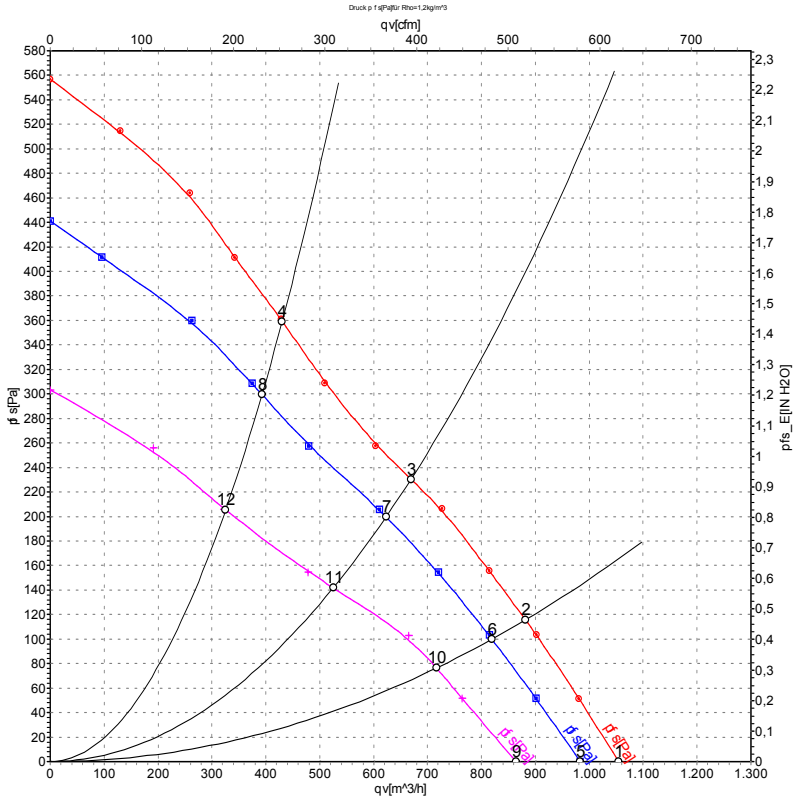
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Charts: Air flow



Measurement: LU-51358
Measurement: LU-51357
Measurement: LU-51359

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA 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_{ed}	I	qv	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa
1	57	1330	142	3.29	1055	0
2	57	1520	129	2.84	880	116
3	57	1775	116	2.45	670	230
4	57	2080	107	2.20	430	360
5	48	1250	112	2.90	985	0
6	48	1415	102	2.54	820	100
7	48	1645	93	2.25	625	200
8	48	1890	82	1.98	395	300
9	36	1105	75	2.40	865	0
10	36	1245	69	2.17	715	76
11	36	1410	59	1.85	525	142
12	36	1580	48	1.54	325	204

U = Supply voltage · n = Speed · P_{ed} = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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