EC centrifugal fan

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	**G1G160-BH29-14**
Motor	**M1G074-BF**

Nominal voltage	VDC	24
Nominal voltage range	VDC	18 .. 31
Type of data definition		fa
Speed	min^{-1}	1750
Power input	W	105
Current draw	A	5.8
Min. ambient temperature	°C	- 25
Max. ambient temperature	°C	+60

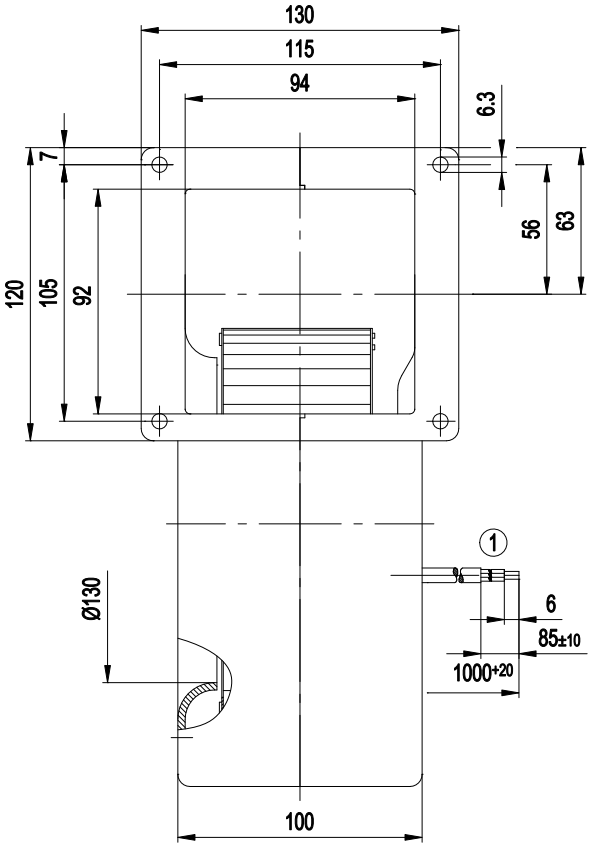
ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

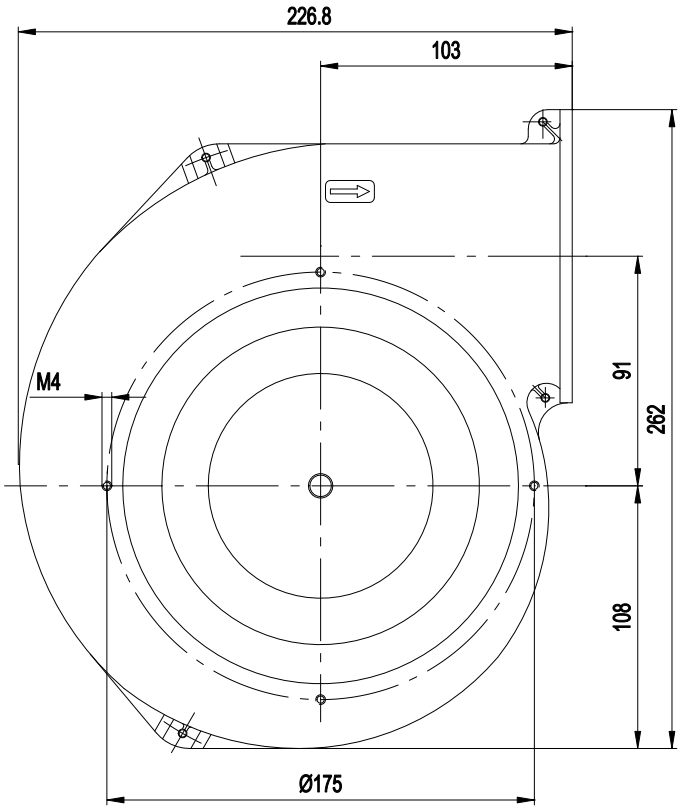
Technical features

Mass	2.84 kg
Size	160 mm
Surface of rotor	Coated in black
Material of impeller	Sheet steel, galvanised
Housing material	Die-cast aluminium
Number of blades	48
Direction of rotation	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	Shaft horizontal or rotor on bottom; rotor on top on request
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limit - Soft start - Control input 0-10 VDC / PWM
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC interference emission	Acc. to EN 55022 (Class B, household environment)
Motor protection	Reverse polarity and locked-rotor protection
Cable exit	Variable
Product conforming to standard	EN 60950-1
Approval	UL 1004-1; CSA C22.2 Nr.77

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Product drawing

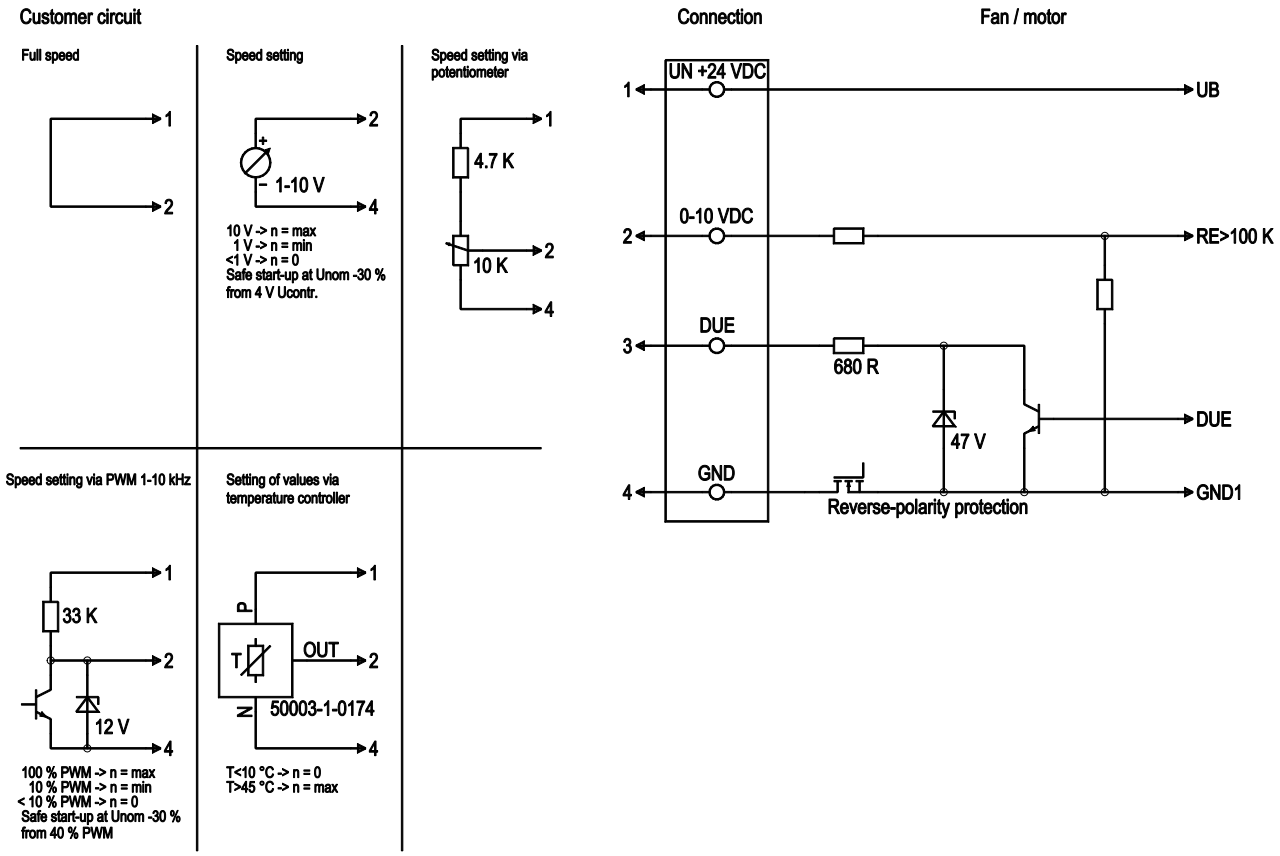




1	Connection line XLPE 4x0.5 mm², 4x lead tips crimped

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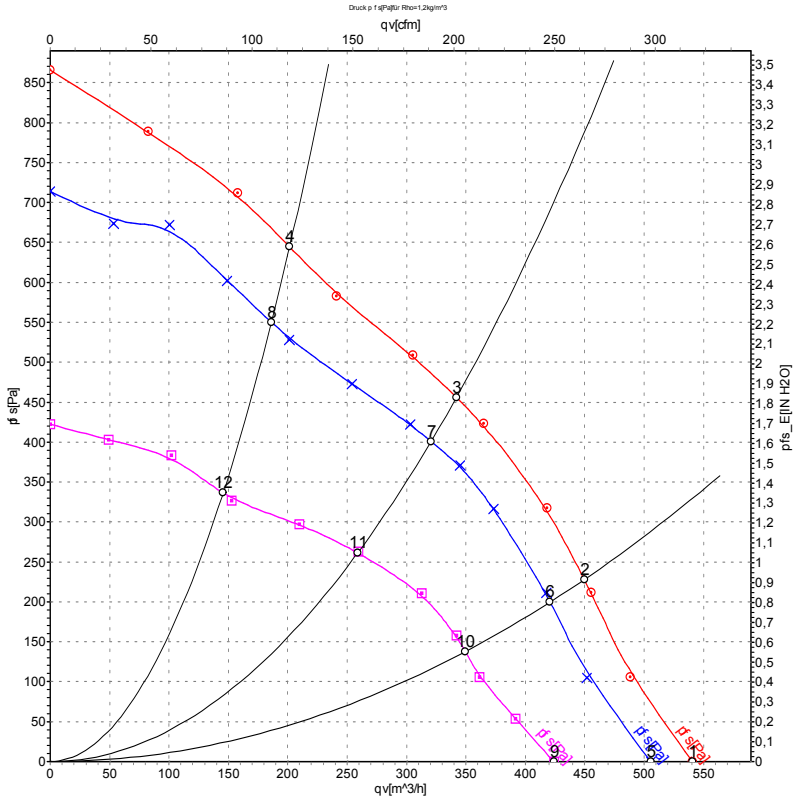
Connection screen



Line	No.	Signal	Colour	Function / assignment
1	1	Un +24 VDC	red	Power supply 24 VDC, residual ripple 3.5 %
1	2	0-10 VDC	yellow	Control input Re > 100 K
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-59980
Measurement: LU-59979
Measurement: LU-59981

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	28	1870	134	6.43	540	0
2	28	2115	121	5.54	450	229
3	28	2420	110	4.82	340	456
4	28	2825	102	4.20	200	645
5	24	1750	105	5.80	505	0
6	24	1990	99	5.02	420	200
7	24	2275	91	4.43	320	400
8	24	2655	83	3.86	185	550
9	16	1485	63	4.48	425	0
10	16	1670	57	4.01	350	138
11	16	1860	49	3.42	260	263
12	16	2085	41	2.85	145	334

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

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