W1G180-AB47-01

EC axial compact fan



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Nominal data

Type	**W1G180-AB47-01**
Motor	**M1G074-BF**

Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Frequency	Hz	-
Type of data definition		fa
Speed	min^{-1}	4600
Power input	W	95
Current draw	A	2.30
Max. back pressure	Pa	380
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

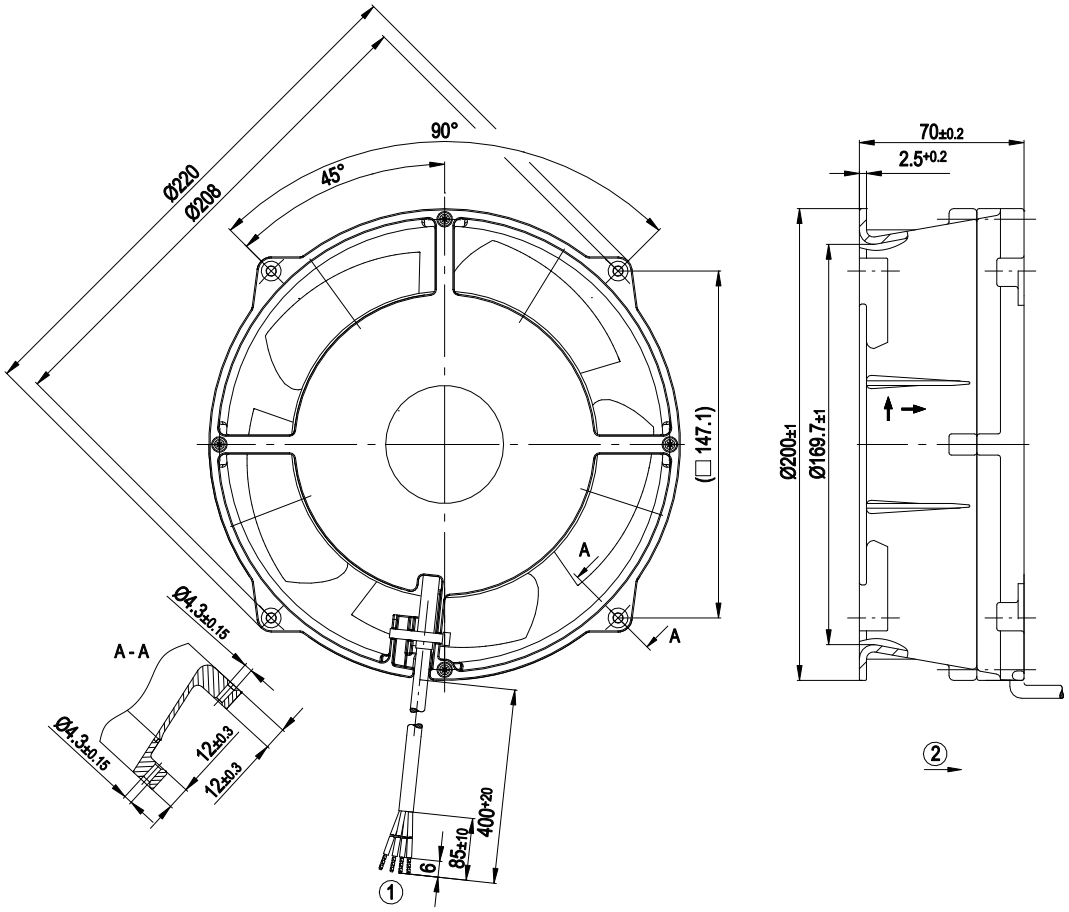
ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

Technical features

Mass	1.8 kg
Size	180 mm
Surface of rotor	Thick layer passivated
Material of impeller	PA plastic
Material of wall ring	Die-cast aluminium, coated in black
Number of blades	5
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 20
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 (industrial environment)
EMC interference emission	Acc. to EN 55022 (Class B)
Motor protection	Reverse polarity and locked-rotor protection
Cable exit	Lateral
Product conforming to standard	EN 60950-1
Approval	CCC; CSA C22.2 Nr.113; EAC; UL 507

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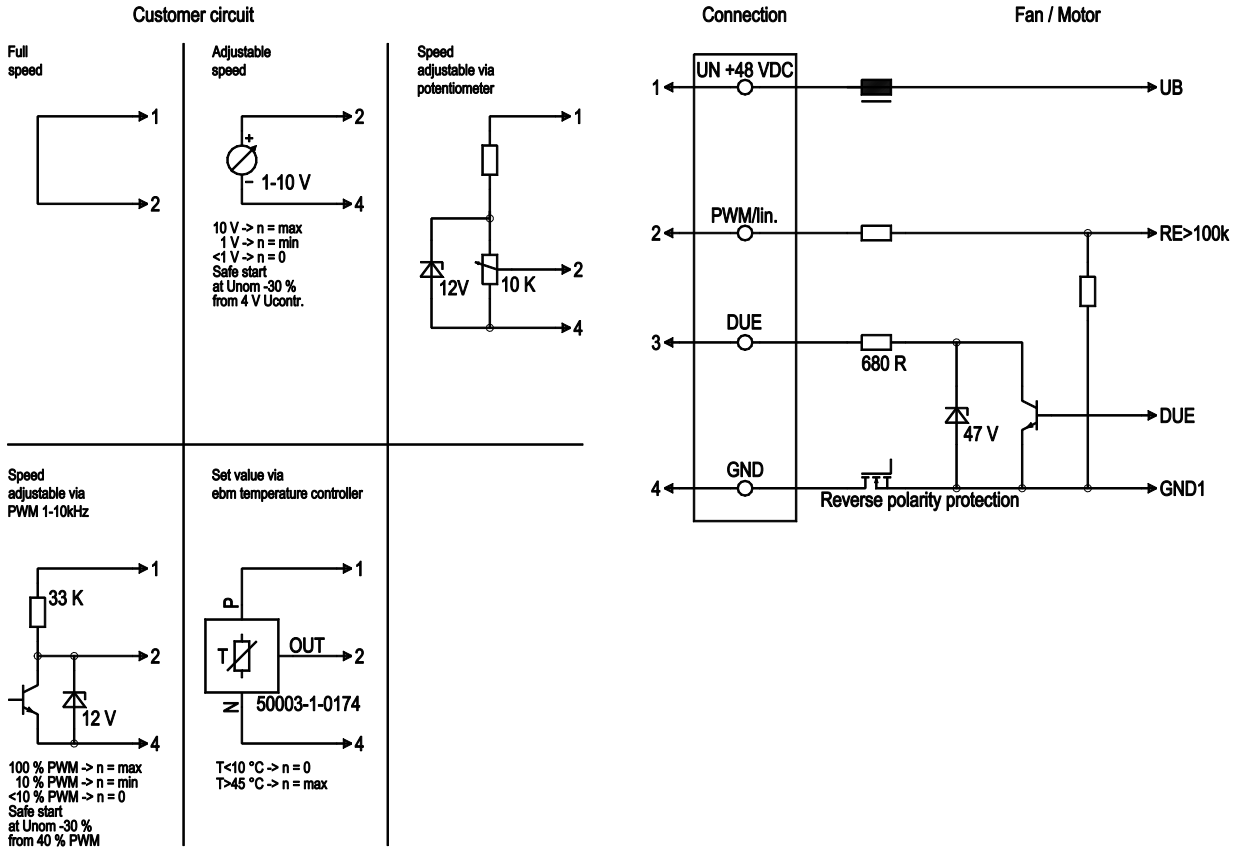
Product drawing



1	Connecting cable AWG 20, 4x brass lead tips crimped
2	Direction of air flow "V"

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Connection screen

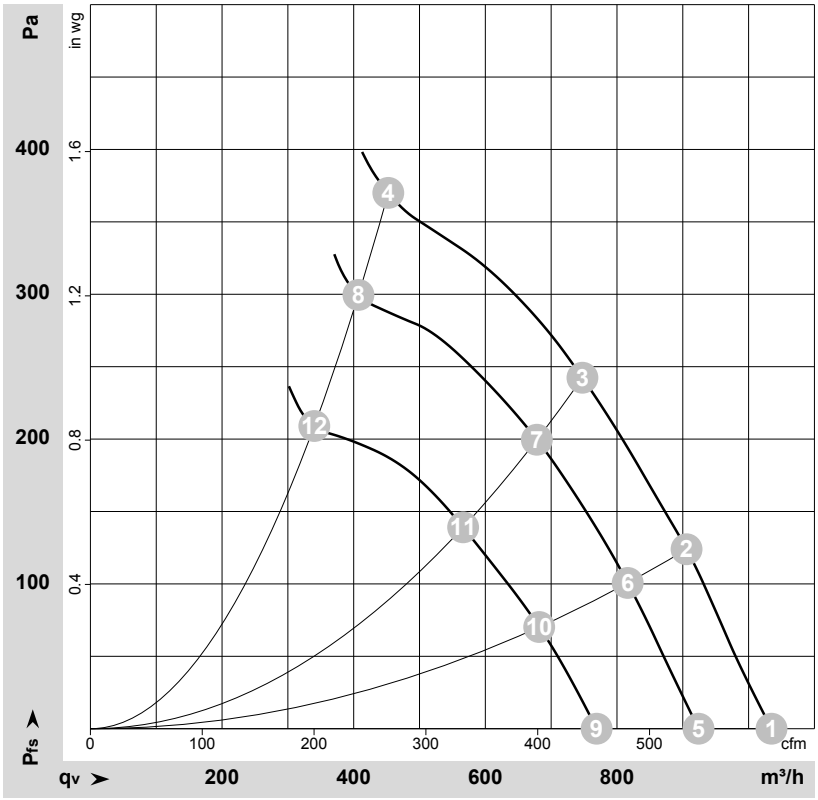


No.	Conn.	Designation	Colour	Function / assignment
1	1	Un +48 VDC	red	Power supply 48 VDC, residual ripple 3.5 %
1	2	0-10 VDC	yellow	Control input Re > 100 K
1	3	Tach	white	Speed monitoring output, 3 pulses per rotation, Isink max = 10 mA
1	4	GND	blue	Reference mass

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Charts: Air flow



ρ = 1,15 kg/m³ ± 2%

Measurement: LU-50668
Measurement: LU-50667
Measurement: LU-50670

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	5170	134	2.65	1035	0
2	57	4980	141	2.83	905	125
3	57	4800	147	2.96	750	243
4	57	5000	141	2.81	455	369
5	48	4600	95	2.30	925	0
6	48	4505	106	2.47	815	100
7	48	4370	112	2.63	680	200
8	48	4555	105	2.45	405	300
9	36	3900	60	1.89	770	0
10	36	3780	64	2.00	680	71
11	36	3685	67	2.10	565	139
12	36	3820	63	1.96	340	207

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

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