W1G180-AB19-06

EC axial fan



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Nominal data

Type	**W1G180-AB19-06**	
Motor	**M1G074-BF**	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Method of obtaining data		fa
Speed (rpm)	min^{-1}	3400
Power consumption	W	43
Current draw	A	2.07
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

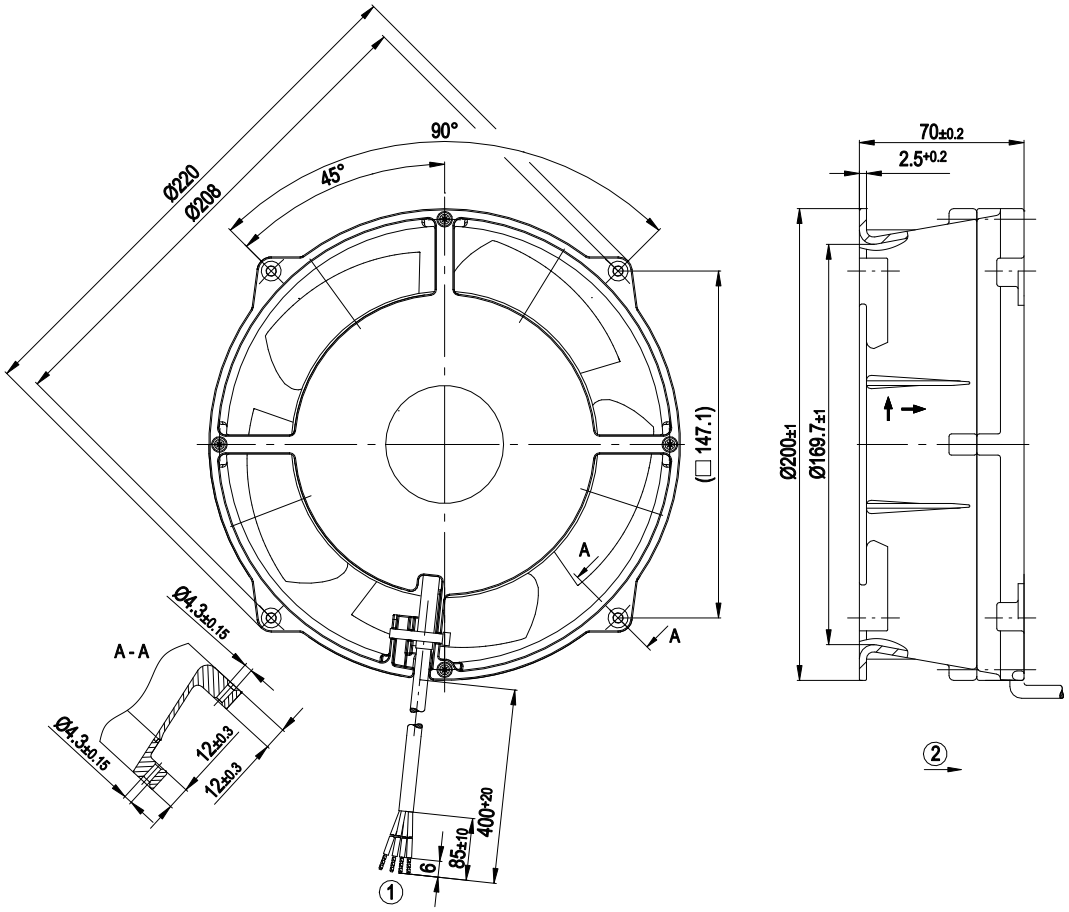
EC axial fan

Technical description

Weight	1.7 kg
Fan size	180 mm
Rotor surface	Galvanized
Impeller material	PA66 plastic, glass-fiber reinforced
Fan housing material	Die-cast aluminum, painted black
Number of blades	5
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP20
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F0
Max. permitted ambient temp. for motor (transport/storage)	+80 °C
Min. permitted ambient temp. for motor (transport/storage)	-40 °C
Installation position	Any
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Technical features	- Control input 0-10 VDC / PWM - Tach output - Motor current limitation - Soft start
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC interference emission	According to EN 55022 (Class B)
Motor protection	Reverse polarity and locked-rotor protection
With cable	Lateral
Conformity with standards	EN 60950-1
Approval	UL 1004-1; CSA C22.2 No. 77

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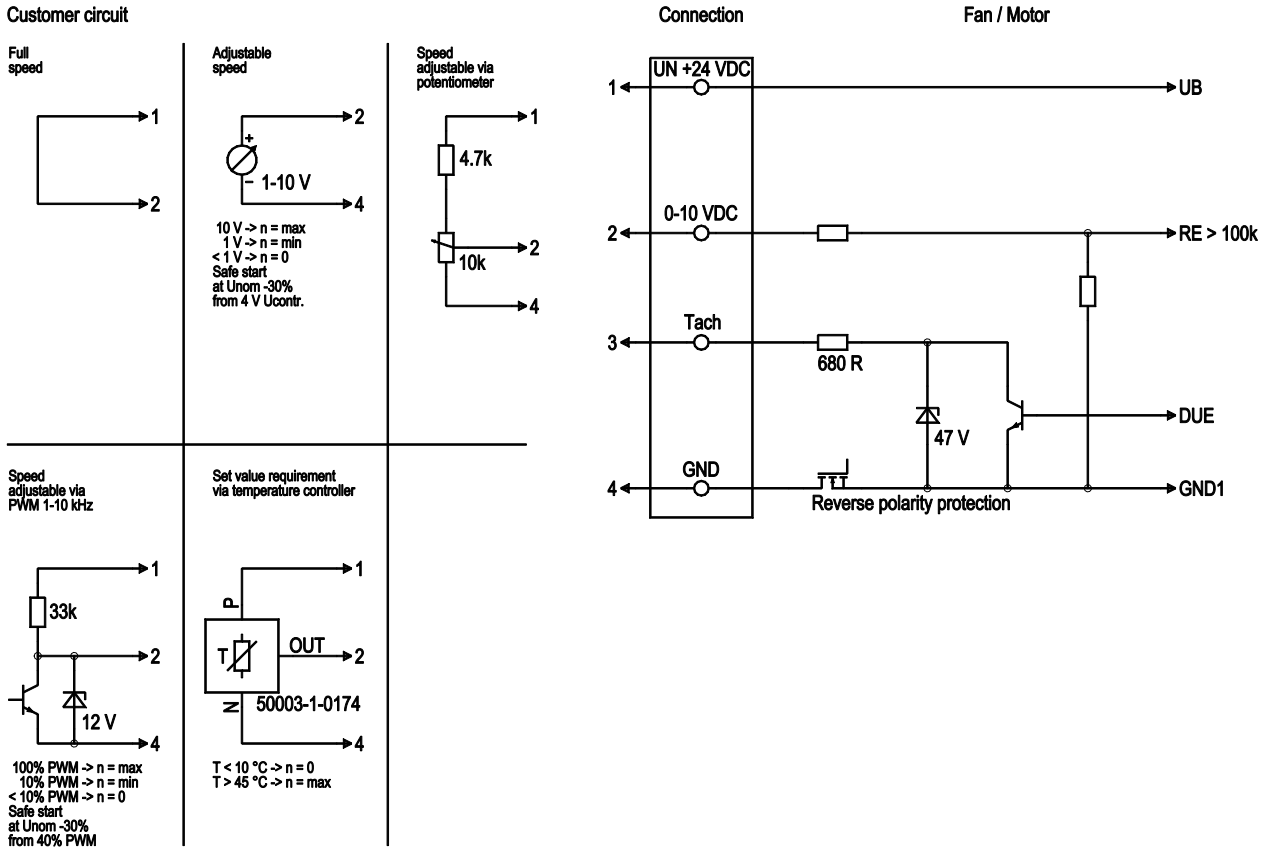
Product drawing



1	Cable AWG20, 4x crimped splices
2	Airflow direction "V"

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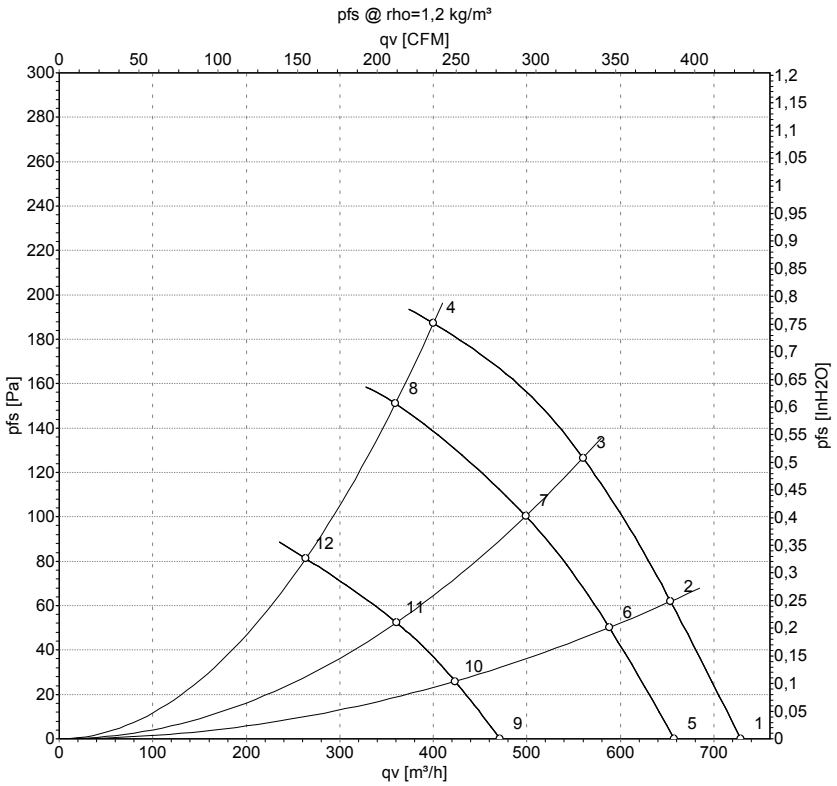
Connection diagram



No.	Conn.	Designation	Color	Function/assignment
1	1	Un +24 VDC	red	Power supply 24 VDC, maximum ripple 3.5 %
1	2	0-10 VDC	yellow	Control input Re > 100k
1	3	Tach	white	Tach output, 3 pulses per revolution, Isink max = 10 mA
1	4	GND	blue	Reference ground

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Curves: Air performance



Measurement: LU-44645-1
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Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	U	n	P_{ed}	I	qv	p_{fs}	qv	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	28	3760	55	2.23	730	0	430	0.00
2	28	3660	59	2.35	655	62	385	0.25
3	28	3570	62	2.45	560	127	330	0.51
4	28	3600	61	2.45	400	188	235	0.75
5	24	3400	43	2.07	660	0	385	0.00
6	24	3305	46	2.17	590	50	345	0.20
7	24	3205	47	2.20	500	100	295	0.40
8	24	3260	46	2.19	360	150	210	0.60
9	16	2455	20	1.74	470	0	275	0.00
10	16	2395	21	1.74	425	27	250	0.11
11	16	2330	22	1.73	360	53	210	0.21
12	16	2345	21	1.71	265	81	155	0.33

U = Power supply · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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