EC axial compact fan

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Nominal data

Type	**W1G180-AB11-32**	
Motor	**M1G074-BF**	
Nominal voltage	VDC	48
Nominal voltage range	VDC	32 .. 60
Method of obtaining data		fa
Speed (rpm)	min^{-1}	3200
Power consumption	W	35
Current draw	A	0.82
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

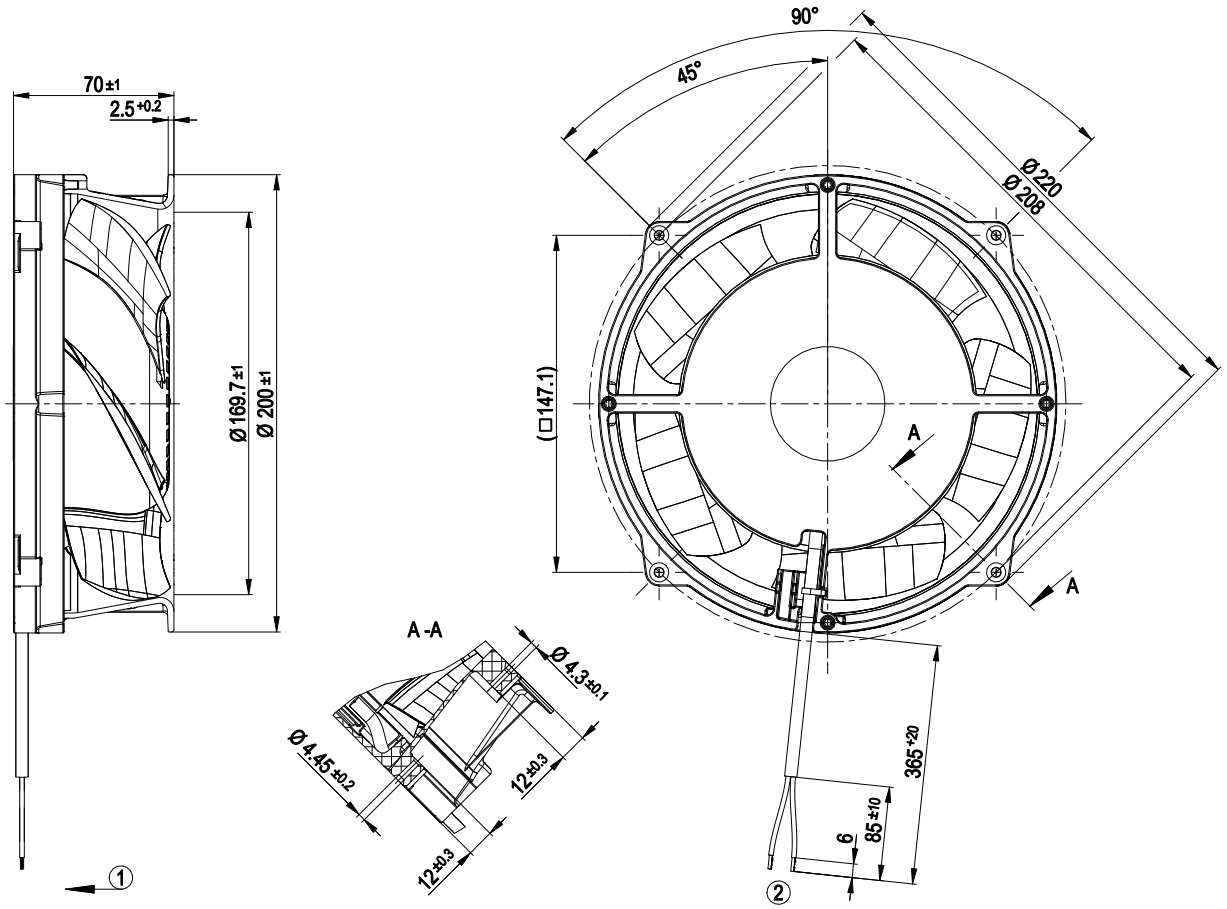
Technical description

Weight	1.89 kg
Fan size	180 mm
Rotor surface	Painted black
Impeller material	Glass-fiber reinforced PA plastic
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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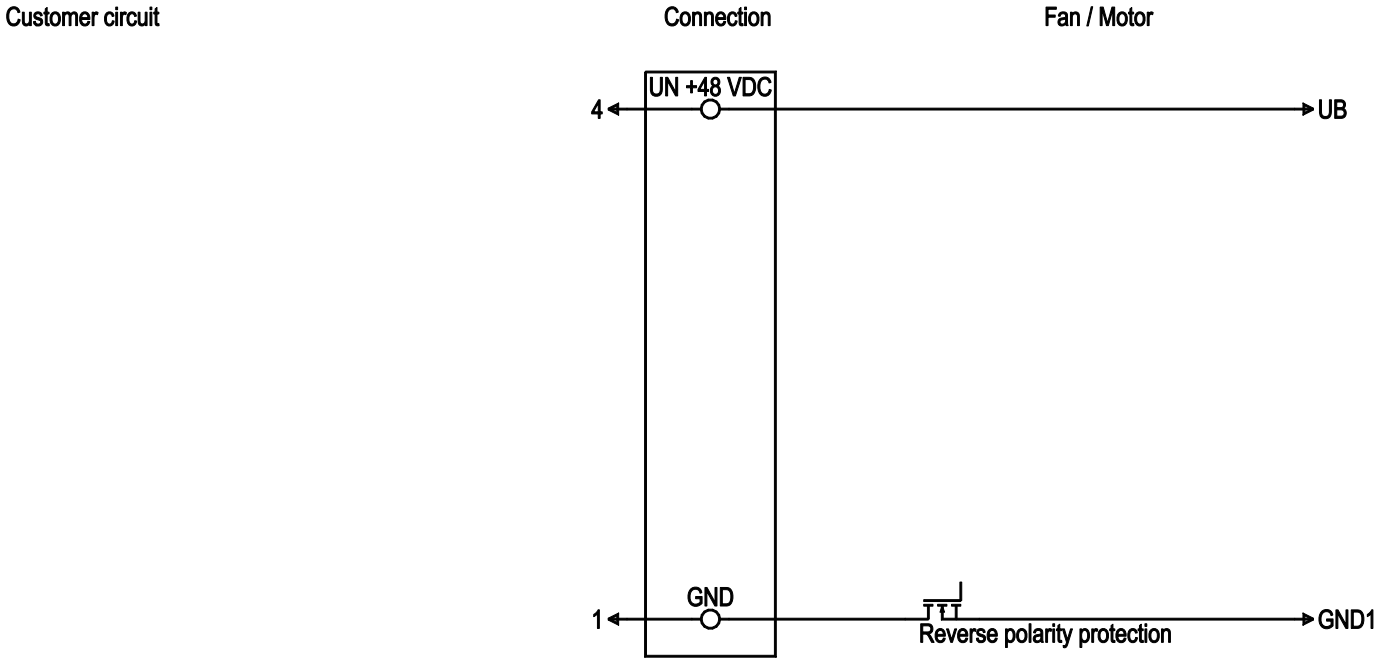
Product drawing



1	Direction of air flow "V"
2	Cable PVC AWG20, 2x crimped splices

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Connection diagram

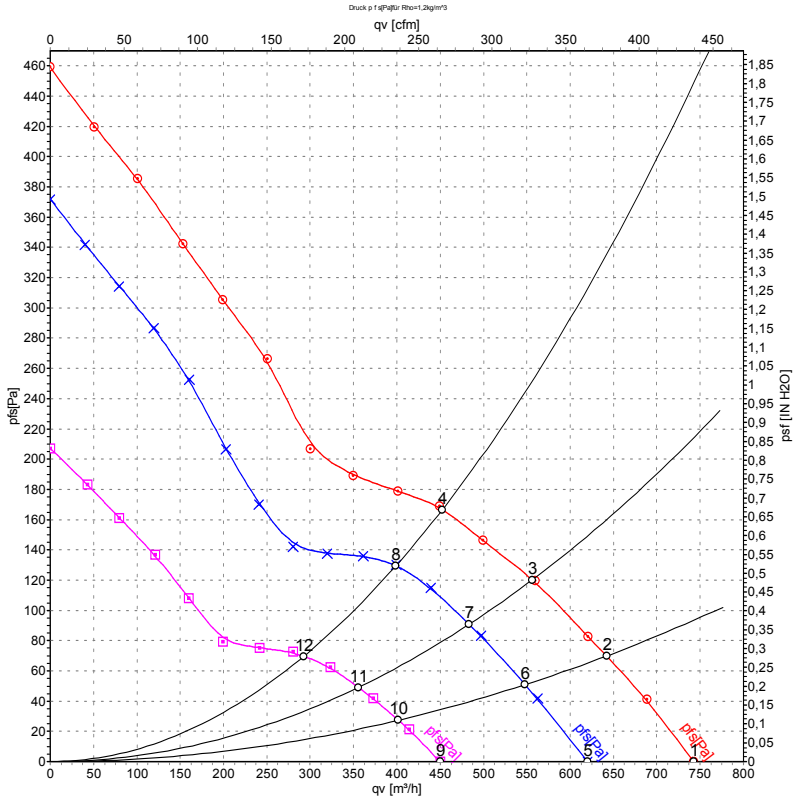


No.	Conn.	Designation	Color	Function/assignment
	1	Un +48 VDC	red	Power supply 48 VDC, maximum ripple 3.5%
	4	GND	blue	Reference ground

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Curves: Air performance



Measurement: LU-108248-1
Measurement: LU-108246-1
Measurement: LU-104438-1

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	60	3760	56	1.05	740	0	435	0.00
2	60	3600	58	1.13	640	70	380	0.28
3	60	3490	59	1.17	555	121	325	0.49
4	60	3480	59	1.18	450	168	265	0.67
5	48	3200	35	0.82	620	0	365	0.00
6	48	3135	39	0.90	550	50	325	0.20
7	48	3085	41	0.96	485	90	285	0.36
8	48	3075	42	0.97	400	130	235	0.52
9	32	2340	15	0.53	450	0	265	0.00
10	32	2305	16	0.57	400	28	235	0.11
11	32	2280	17	0.60	355	49	210	0.20
12	32	2275	17	0.61	290	70	170	0.28

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

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