EC axial fan

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Nominal data

Type	**W1G180-AB11-33**
Motor	**M1G074-BF**

Nominal voltage	VDC	48
Nominal voltage range	VDC	32 .. 60
Speed (rpm)	min^{-1}	3200
Power consumption	W	35
Current draw	A	0.82
Max. ambient temperature	°C	60

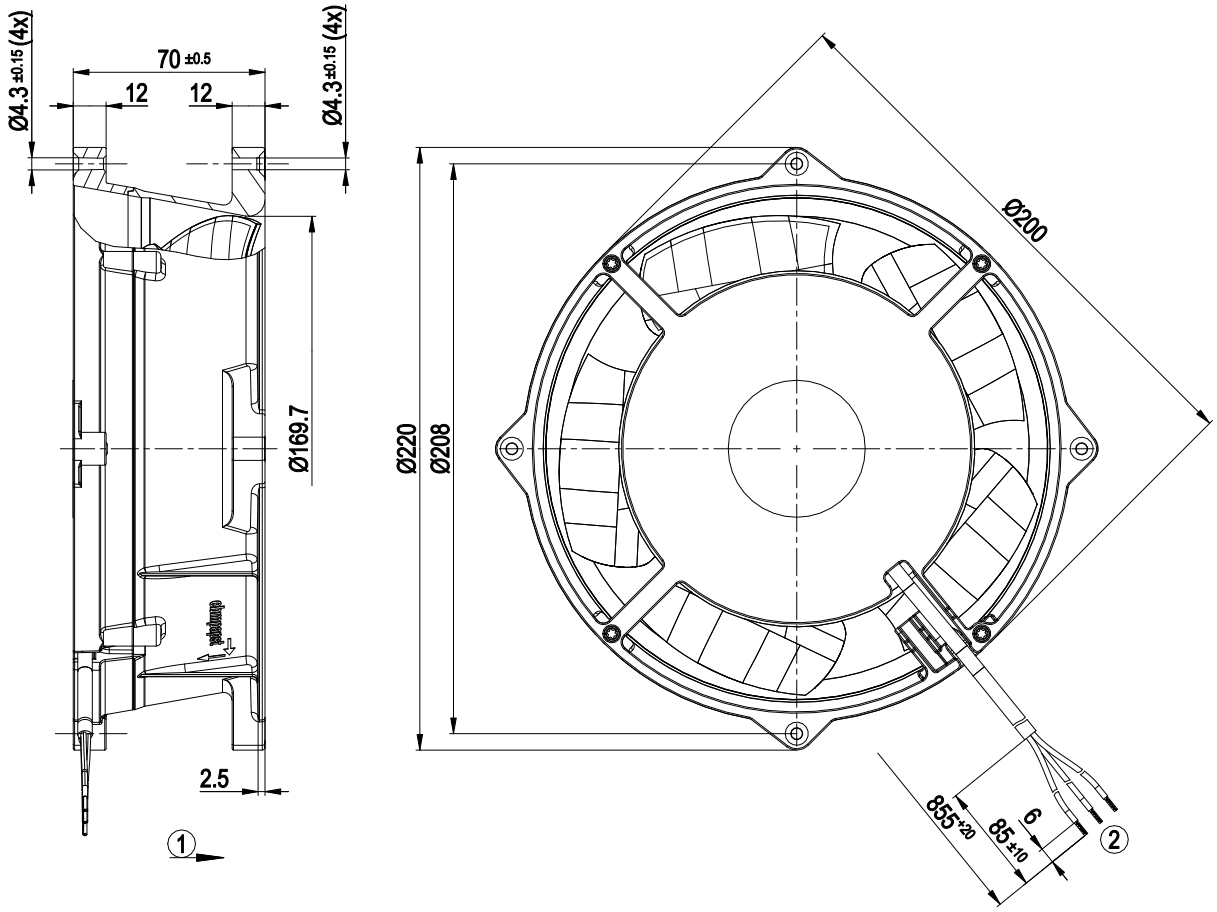
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

Technical description

Weight	1.8 kg
Size	180 mm
Motor size	74
Rotor surface	Painted black
Impeller material	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; H0 - dry environment
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	- Motor current limitation - Soft start - PWM control input - Reverse polarity protection
Motor protection	Reverse polarity and locked-rotor protection
With cable	Lateral
Conformity with standards	EN 60950-1
Approval	CSA C22.2 No. 77; UL 1004-1

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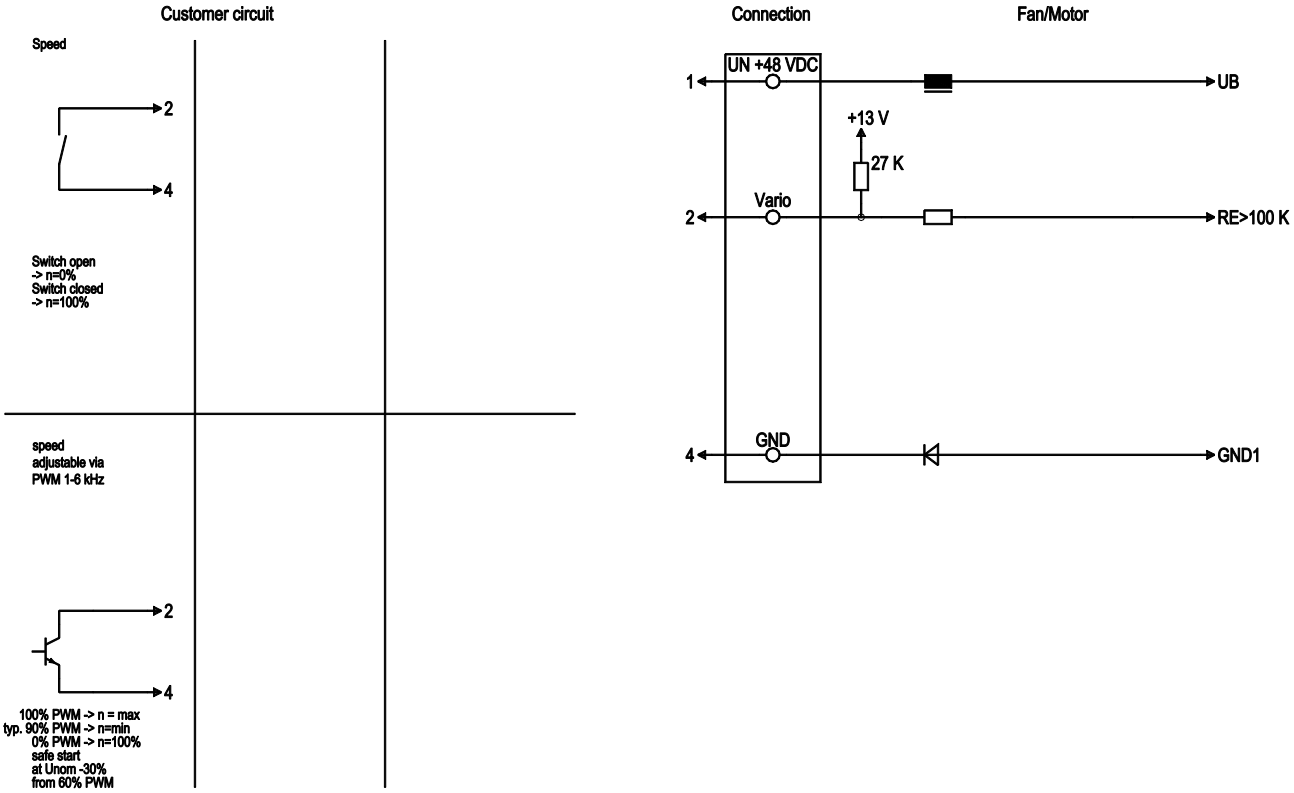
Product drawing



1	Airflow direction "V"
2	Cable PVC AWG20
	3x splice

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Connection diagram

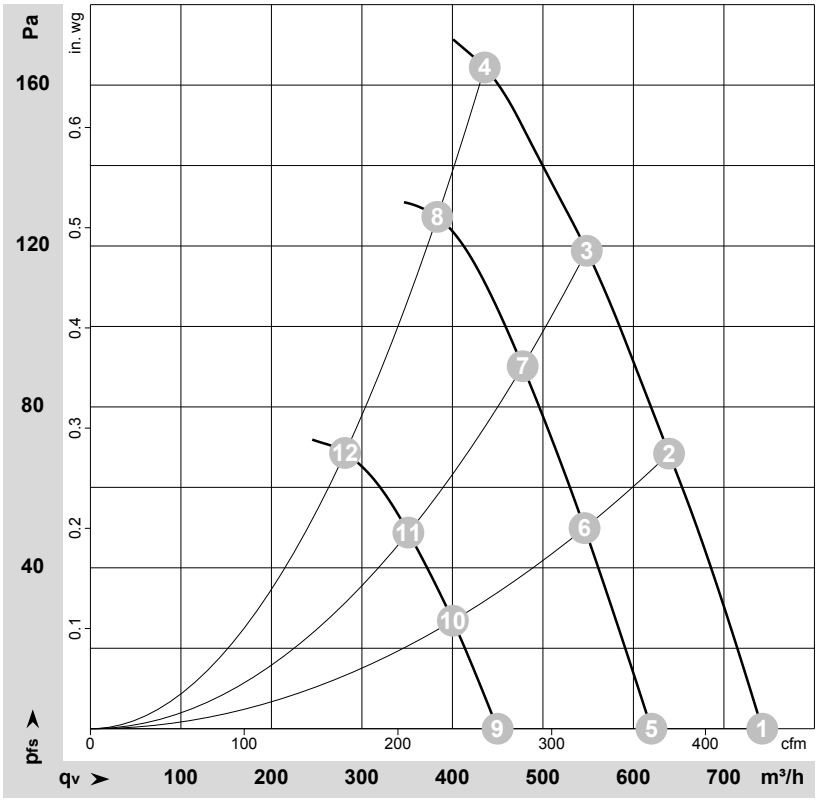


No.	Conn.	Designation	Color	Function/assignment
1		UN +48 VDC	red	Power supply 48 VDC, see nameplate for voltage range, maximum ripple 3.5%
2		Vario	yellow	Control input Re > 100k
4		GND	blue	Reference ground

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Curves: Air performance



ρ = 1.15 kg/m³ ± 2 %

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	q_V	p_{fs}	q_V	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	60	3760	56	1.05	740	0	435	0.00
2	60	3595	58	1.13	640	68	375	0.27
3	60	3485	59	1.17	550	119	325	0.48
4	60	3505	59	1.17	435	165	255	0.66
5	48	3200	35	0.82	620	0	365	0.00
6	48	3135	39	0.90	545	50	320	0.20
7	48	3085	41	0.96	480	90	280	0.36
8	48	3080	41	0.96	385	130	225	0.52
9	32	2340	15	0.53	450	0	265	0.00
10	32	2305	16	0.57	400	27	235	0.11
11	32	2275	17	0.60	350	49	205	0.20
12	32	2275	17	0.60	280	69	165	0.28

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

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