W1G180-AB47-15

EC axial compact fan

sickle-shaped blades (S series)

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Amtsgericht (court of registration) Stuttgart · HRA 590344

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Nominal data

Type	**W1G180-AB47-15**	
Motor	**M1G074-BF**	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 72
Method of obtaining data		fa
Speed (rpm)	min-1	4600
Power consumption	W	95
Current draw	A	2.27
Max. back pressure	Pa	275
Max. back pressure	in. wg	1.1
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

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Technical description

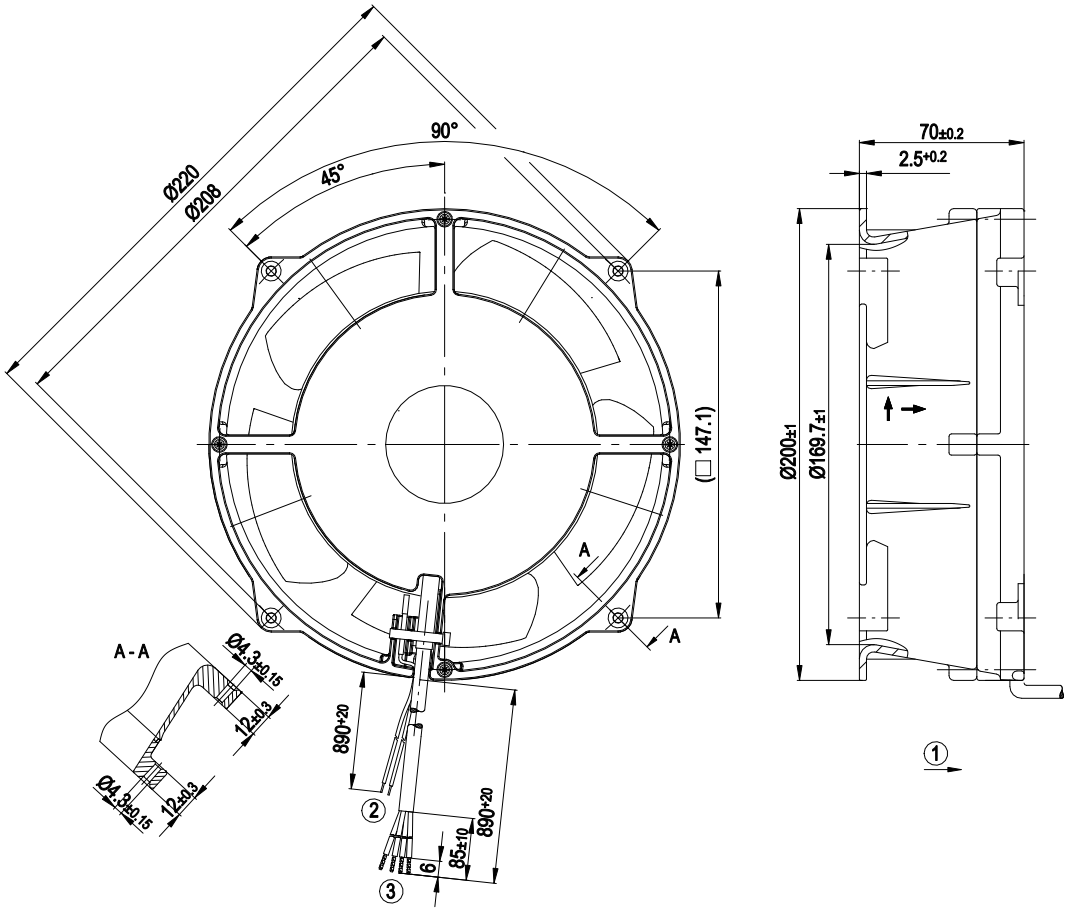
Weight	2.0 kg
Size	180 mm
Motor size	74
Rotor surface	Painted black
Impeller material	PA plastic
Fan housing material	Die-cast aluminum, painted black
Number of blades	5
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H2
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	- Fault output (open collector) - Motor current limitation - Soft start - Reverse polarity protection
Motor protection	Reverse polarity and locked-rotor protection
With cable	Lateral
Conformity with standards	EN 60034-1; EN 60204-1; EN 60335-1
Approval	UL 507; CCC; CSA C22.2 No. 113

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Product drawing



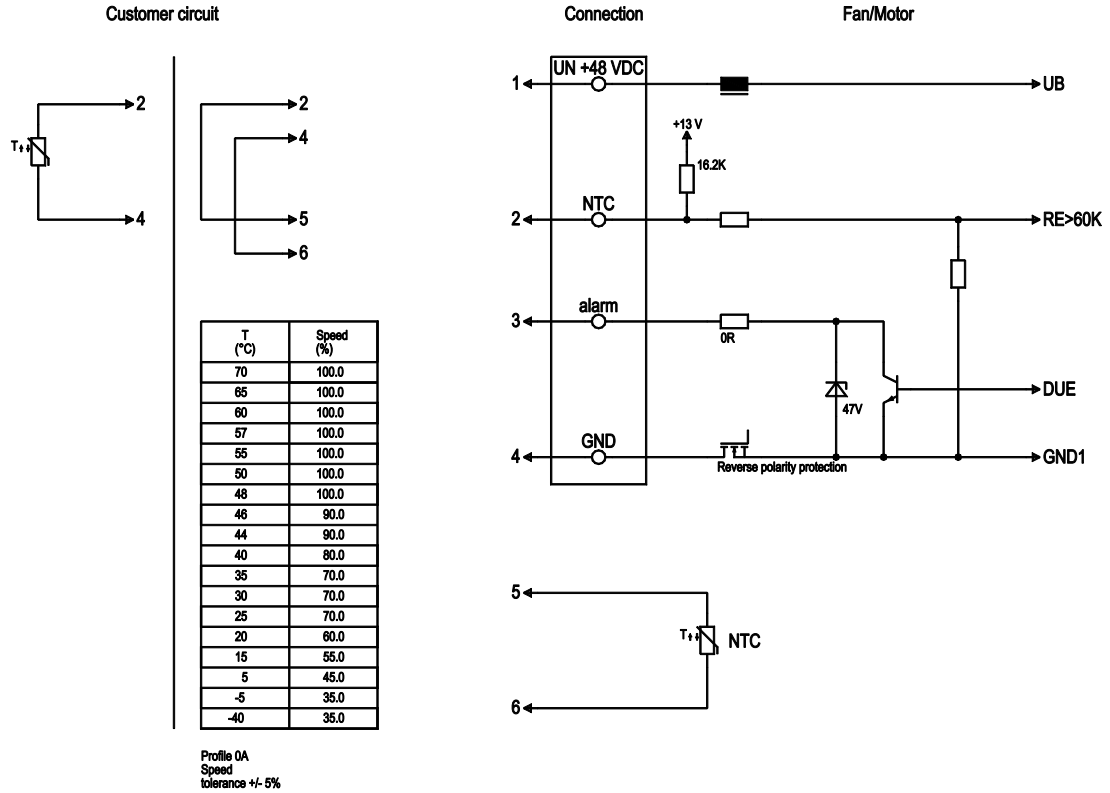
1	Airflow direction "V"
2	Cable AWG22
	2x splice
3	Cable PVC AWG20
	4x splice

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Connection diagram



T (°C)	Speed (%)
70	100.0
65	100.0
60	100.0
57	100.0
55	100.0
50	100.0
48	100.0
46	90.0
44	90.0
40	80.0
35	70.0
30	70.0
25	70.0
20	60.0
15	55.0
5	45.0
-5	35.0
-40	35.0

Profile 0A
Speed
tolerance +/- 5%

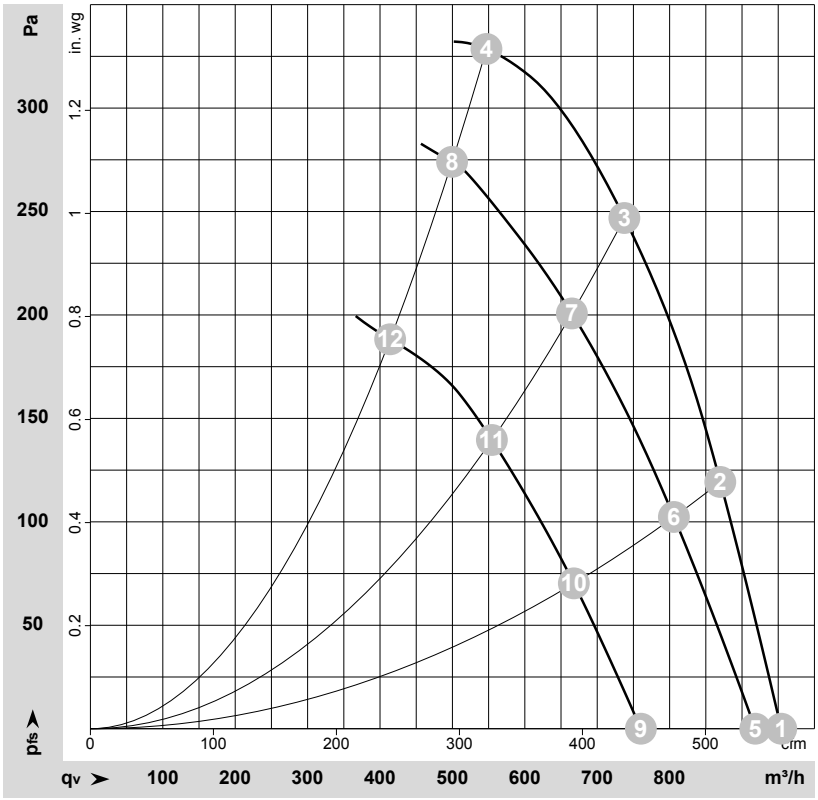
No.	Conn.	Designation	Color	Function/assignment
	1	UN +48 VDC	red	Power supply, see nameplate for voltage range, maximum ripple 3.5%
	2	NTC	yellow	NTC control input
	3	alarm	white	Status output, open collector, fan good = high, Isink max = 10 mA
	4	GND	blue	Reference ground for control interface
	5	NTC	black	NTC
	6	NTC	black	NTC

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Curves: Air performance



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-44620-1
Measurement: LU-44618-1
Measurement: LU-44617-1

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	72	4810	109	2.21	955	0	560	0.00
2	72	4820	131	2.56	870	121	510	0.49
3	72	4815	148	2.84	735	247	435	0.99
4	72	4800	142	2.75	545	331	320	1.33
5	48	4600	95	2.27	920	0	540	0.00
6	48	4485	103	2.42	805	100	475	0.40
7	48	4345	109	2.56	665	200	390	0.80
8	48	4390	106	2.50	500	275	295	1.10
9	36	3845	57	1.80	760	0	445	0.00
10	36	3745	61	1.93	670	70	395	0.28
11	36	3650	66	2.05	555	140	325	0.56
12	36	3700	64	2.00	415	188	245	0.75

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

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