W1G200-HH01-52

EC axial compact fan

sickle-shaped blades (S series)

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**W1G200-HH01-52**	
Motor	**M1G074-BF**	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Frequency	Hz	-
Method of obtaining data		fa
Speed (rpm)	min^{-1}	2950
Power consumption	W	55
Current draw	A	1.3
Max. back pressure	Pa	120
Max. back pressure	in. wg	0.48
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

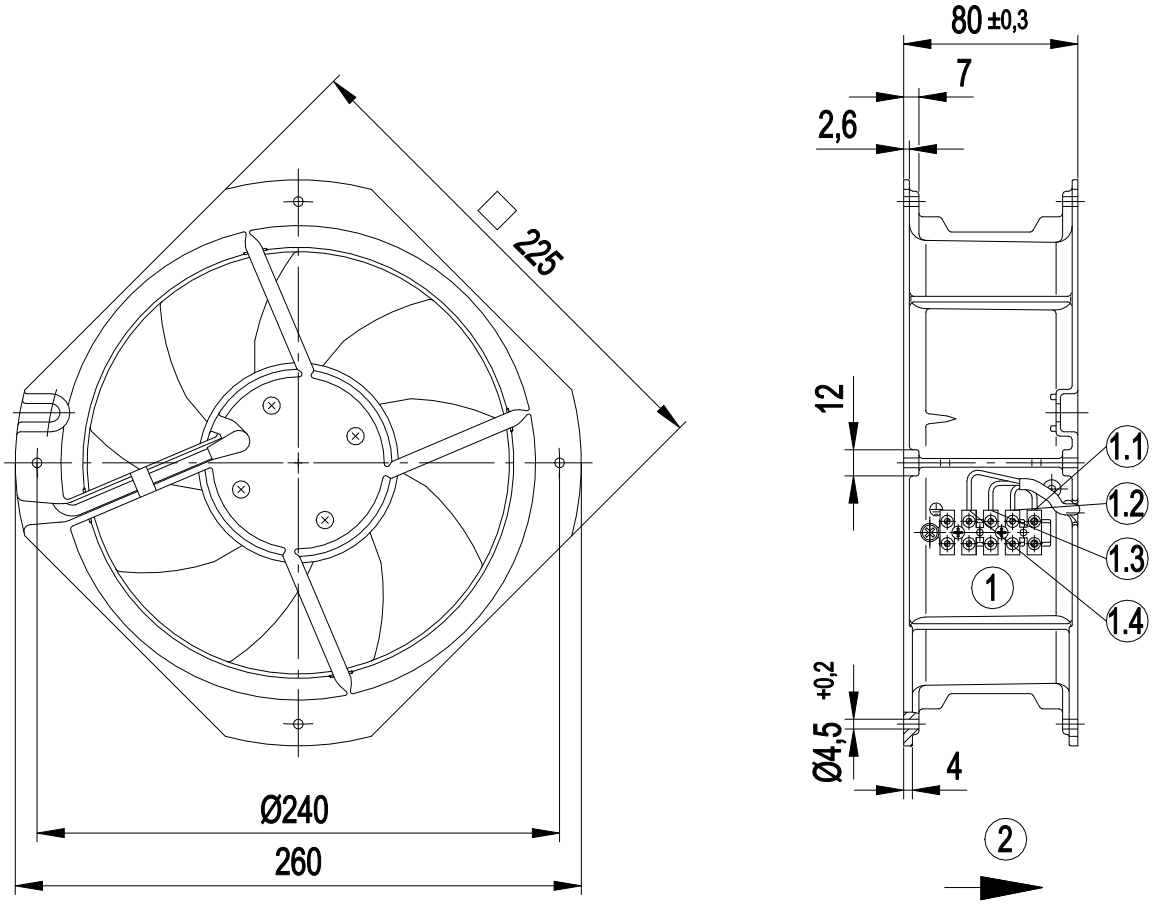
Weight	2.1 kg
Size	200 mm
Motor size	74
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Fan housing material	Die-cast aluminum
Number of blades	9
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP42
Insulation class	"B"
Moisture (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	- Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC interference emission	According to EN 55022 (Class B)
Electrical hookup	Via terminal strip
Motor protection	Reverse polarity and locked-rotor protection
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60950-1
Approval	CSA C22.2 No. 77; CCC; EAC; UL 1004-1

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Product drawing



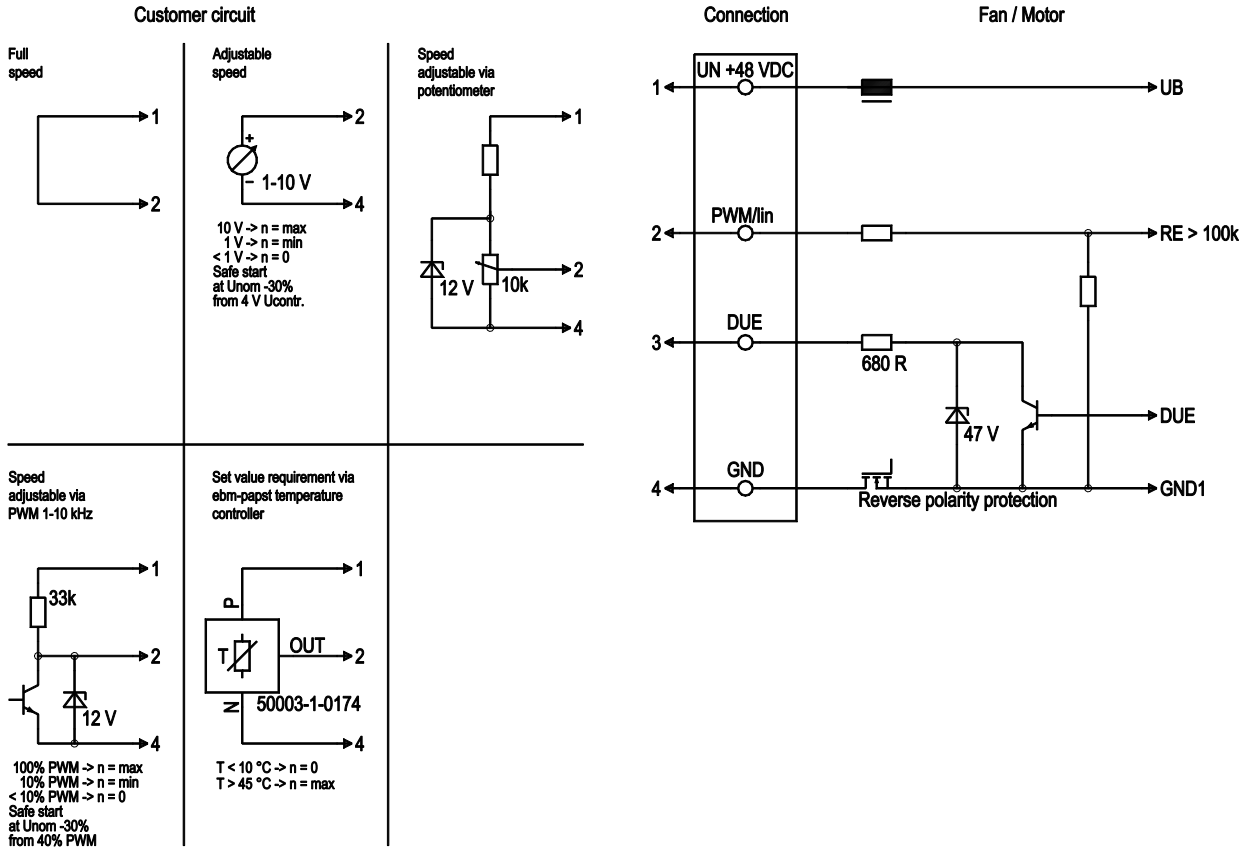
1	Connection: terminal strip with 5 terminals.
1.1	UN +48 VDC (red)
1.2	GND (blue)
1.3	DUE (white)
1.4	0-10 VDC (yellow)
2	Direction of air flow "V"

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Connection diagram



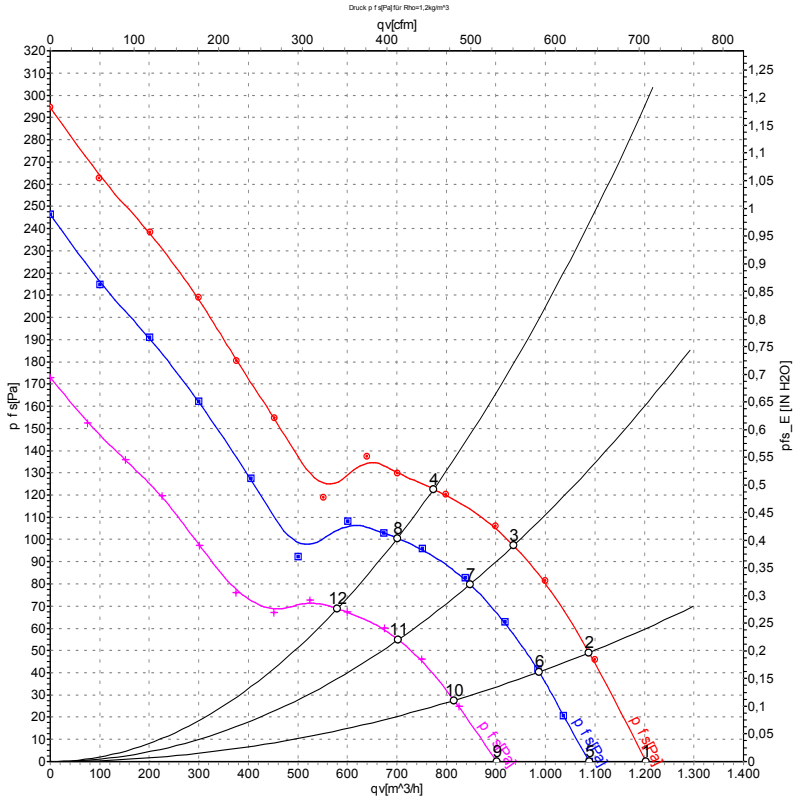
No.	Conn.	Designation	Color	Function/assignment
1	1	Un +48 VDC	red	Power supply 48 VDC, maximum ripple 3.5%
1	2	0-10 VDC	yellow	Control input Re > 100k
1	3	Tach	white	Tach output, 3 pulses per revolution, Isink max = 10 mA
1	4	GND	blue	Reference ground

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Curves: Air performance



Measurement: LU-122619-1
Measurement: LU-122613-1
Measurement: LU-122617-1

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	57	3320	72	1.42	1205	0	710	0.00
2	57	3225	76	1.49	1090	50	640	0.20
3	57	3130	80	1.57	935	97	550	0.39
4	57	3070	83	1.62	775	123	455	0.49
5	48	2950	55	1.30	1090	0	640	0.00
6	48	2880	56	1.31	985	40	580	0.16
7	48	2810	59	1.38	850	80	500	0.32
8	48	2755	61	1.42	700	100	415	0.40
9	36	2500	34	1.11	900	0	530	0.00
10	36	2420	35	1.14	815	28	480	0.11
11	36	2360	36	1.16	705	55	415	0.22
12	36	2310	37	1.18	580	69	340	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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