W1G200-HH77-52

EC axial compact fan

sickled blades (S series)



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Nominal data

Type	**W1G200-HH77-52**
Motor	**M1G074-BF**

Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Type of data definition		fa
Speed (rpm)	min^{-1}	2950
Power input	W	55
Current draw	A	2.6
Max. back pressure	Pa	120
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

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Technical features

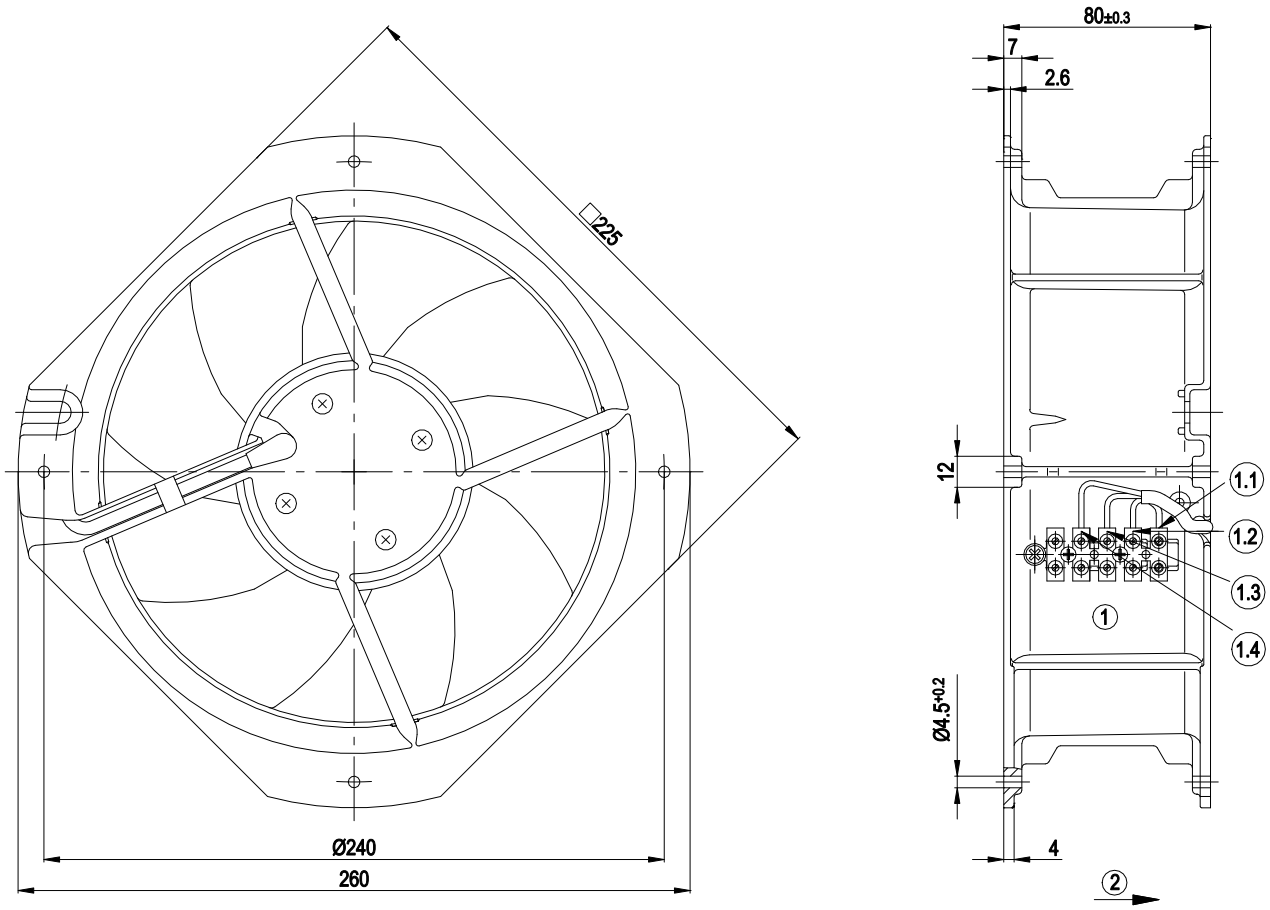
Mass	2.12 kg
Size	200 mm
Motor size	74
Surface of rotor	Coated in black
Material of blades	Sheet steel, coated in black
Material of wall ring	Die-cast aluminium
Number of blades	9
Direction of air flow	V
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP42
Insulation class	"B"
Humidity (F) / environmental protection class (H)	H0 - dry environment
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensation drainage holes	None
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limit - Soft start - Control input 0-10 VDC / PWM
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC interference emission	Acc. to EN 55022 (Class B)
Electrical connection	Terminal strip
Motor protection	Reverse polarity and locked-rotor protection
Safety classification	III; Requires supply with safety extra-low voltage SELV. This component to be built-in can have several local safety classifications. This specification relates to the basic design of this component. The final protection class is based on the intended installation and connection of the components.
Product conforming to standard	EN 60335-1
Approval	CSA C22.2 no. 77; EAC; UL 1004-1

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Product drawing



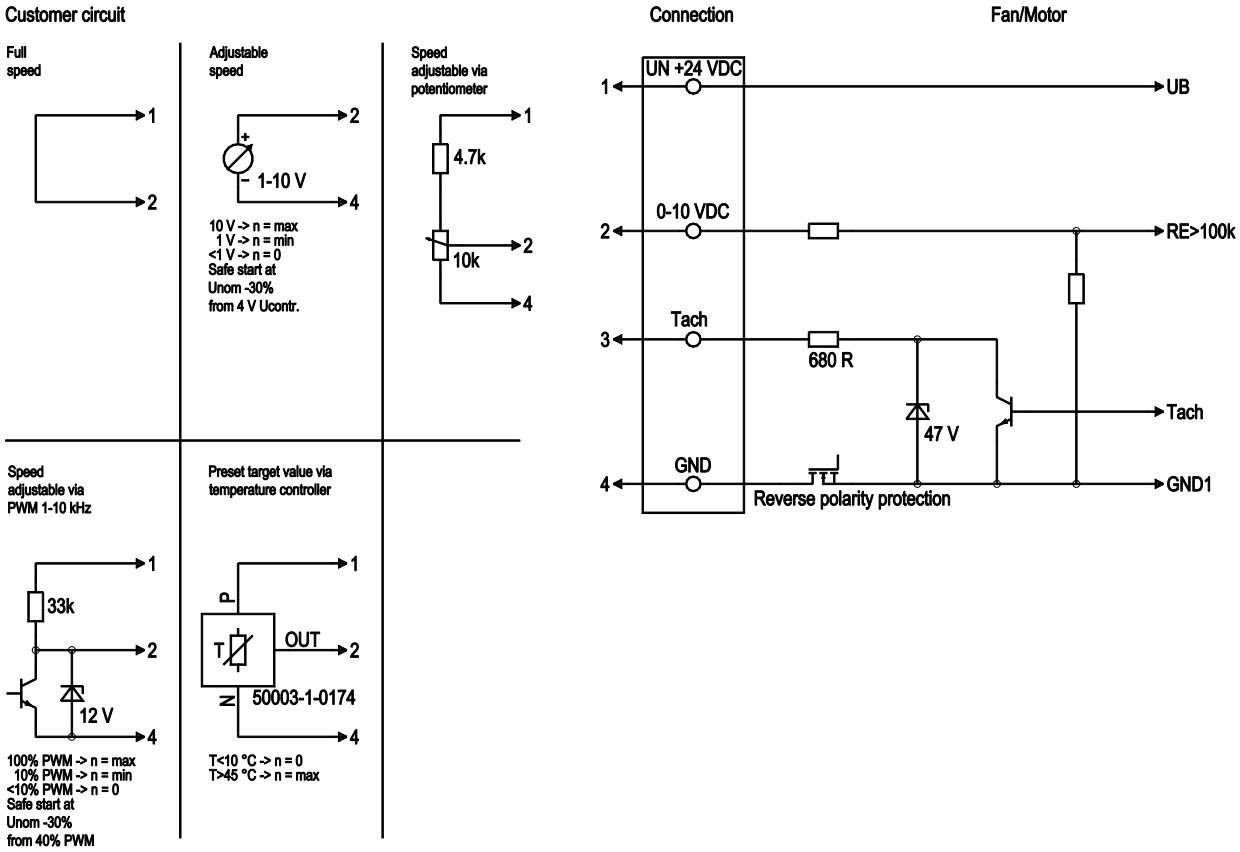
1	Connection: terminal strip with 5 terminals.
1.1	UN +24 VDC (red)
1.2	GND (blue)
1.3	DUE (white)
1.4	0-10 VDC (yellow)
2	Direction of air flow "V"

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Connection screen



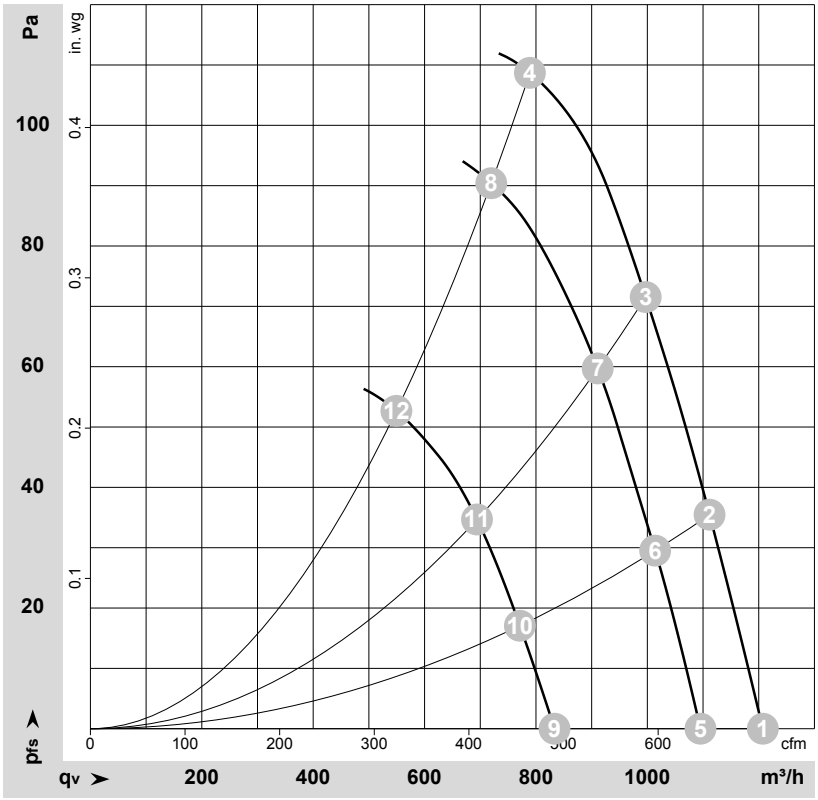
No.	Conn.	Designation	Colour	Function / assignment
1	1	Un +24 VDC	red	Power supply 24 VDC, residual ripple 3.5 %
1	2	0-10 VDC	yellow	Control input Re > 100 K
1	3	Tach	white	Speed monitoring output, 3 pulses per revolution, Isink max = 10 mA
1	4	GND	blue	Reference mass

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Charts: Air flow



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-48037-1
Measurement: LU-48036-1
Measurement: LU-48038-1

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

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	28	3285	73	2.91	1205	0	710	0.00
2	28	3200	76	3.01	1110	37	655	0.15
3	28	3140	78	3.11	995	72	585	0.29
4	28	3060	83	3.27	790	109	465	0.44
5	24	2950	55	2.60	1095	0	645	0.00
6	24	2915	57	2.67	1015	30	595	0.12
7	24	2860	60	2.77	910	60	535	0.24
8	24	2785	63	2.89	720	90	425	0.36
9	16	2285	28	2.08	835	0	490	0.00
10	16	2245	28	2.10	770	18	455	0.07
11	16	2195	29	2.13	695	35	410	0.14
12	16	2145	30	2.18	550	53	325	0.21

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

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