EC axial compact fan

sickled blades (S series)

Automotive

W1G250-HH37-54 ebmpapst Datasheet
sales@fansco.com
www.fansco.com

Nominal data

Type	**W1G250-HH37-54**	
Motor	**M1G074-BF**	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Type of data definition		fa
Speed (rpm)	min^{-1}	2750
Power input	W	105
Current draw	A	5.0
Max. back pressure	Pa	140
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	2.6 kg
Size	250 mm
Surface of rotor	Coated in black
Material of blades	Sheet steel, coated in black
Material of wall ring	Die-cast aluminium
Number of blades	7
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44
Insulation class	"B"
Humidity (F)/environmental protection class (H)	F4-1
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Any
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limit - Soft start - Control input 0-10 VDC / PWM
Motor protection	Reverse polarity and locked-rotor protection
Product conforming to standard	EN 60950-1

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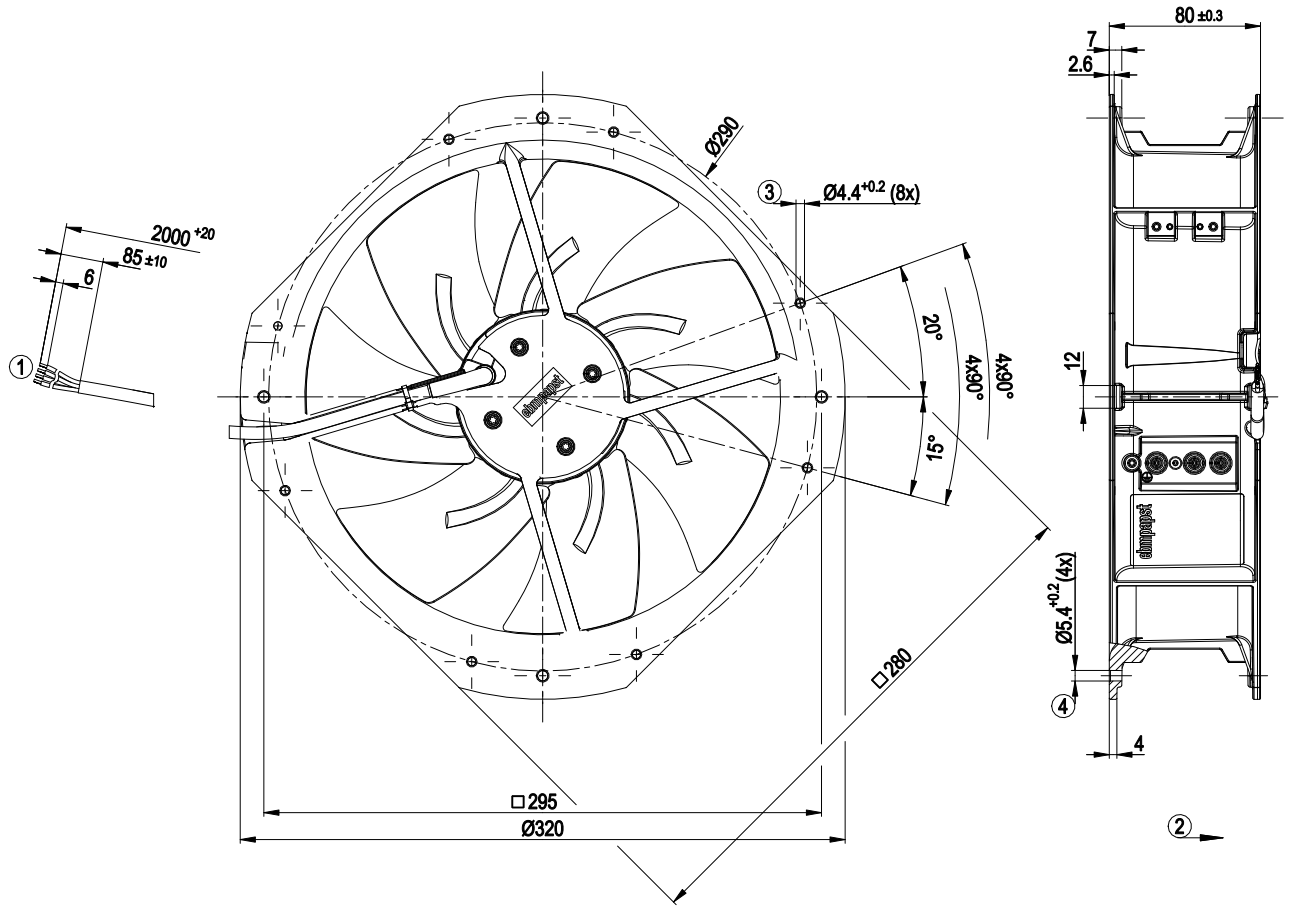
Product drawing



1	Connection line halogen-free, 4x lead tips crimped
2	Direction of air flow "V"
3	For self-tapping M5 screws
4	For self-tapping M6 screws

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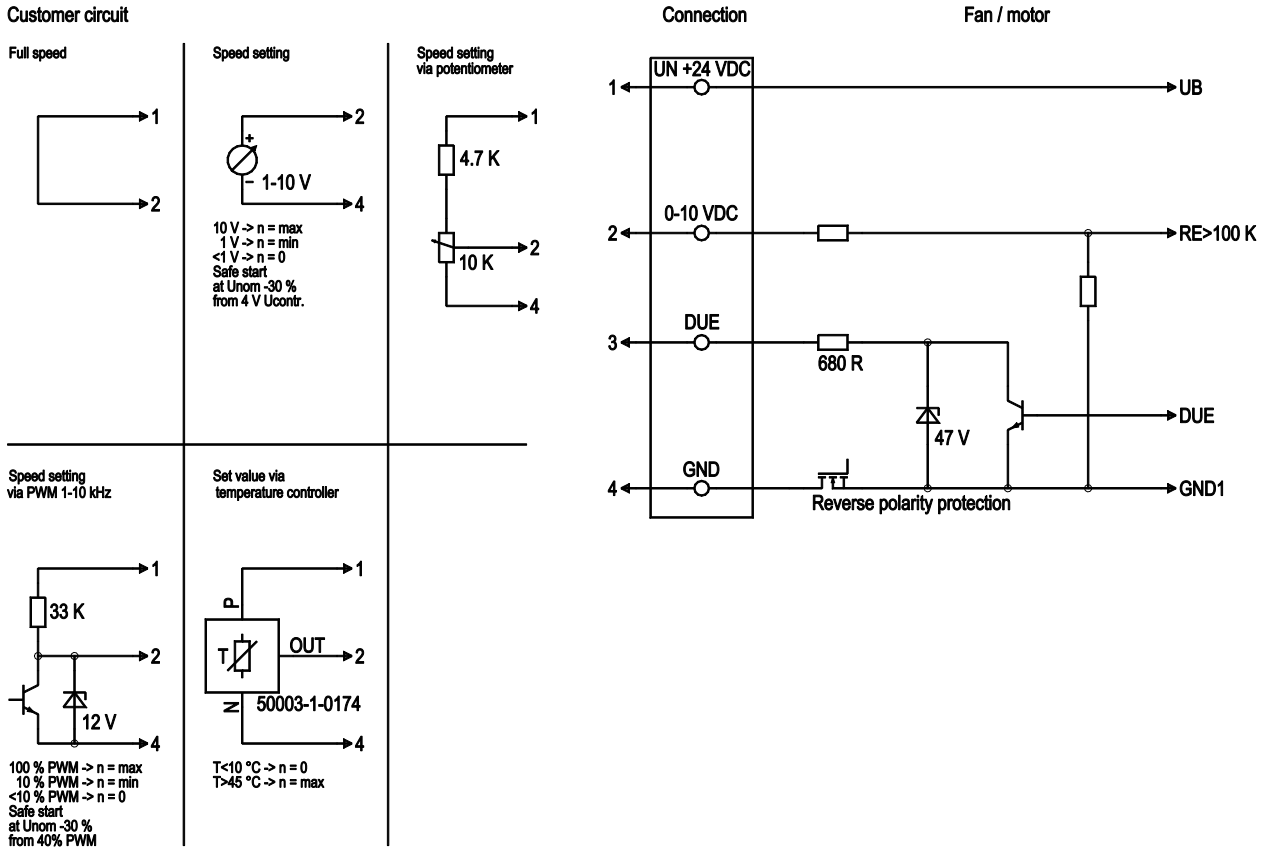
Connection screen



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

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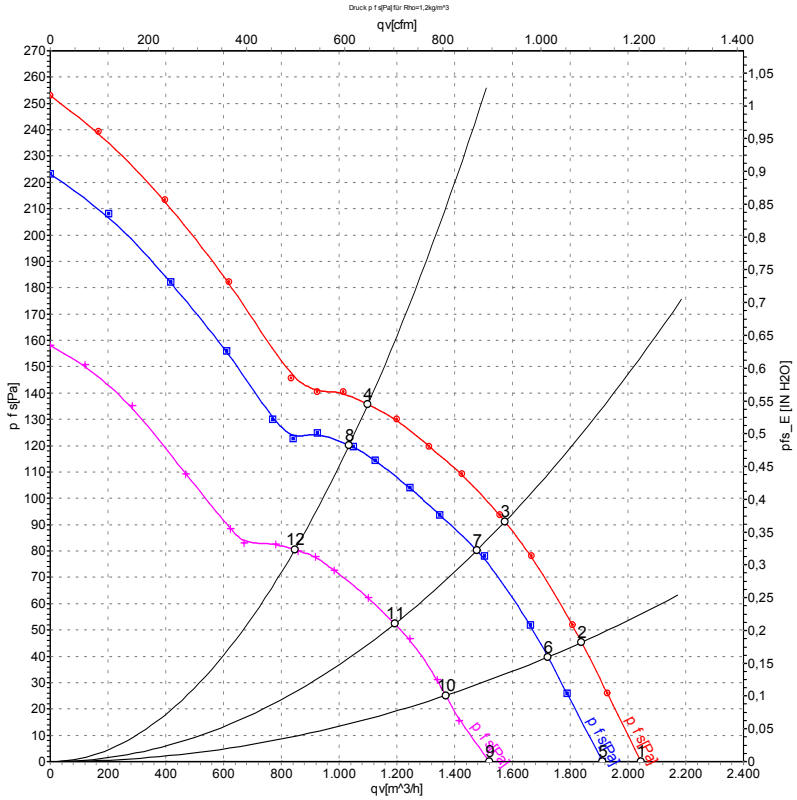
Charts: Air flow



Measurement: LU-54187-1
Measurement: LU-54186-1
Measurement: LU-54185-1

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	inH2O
1	28	2905	125	5.31	2045	0	1205	0.00
2	28	2785	128	5.51	1840	46	1080	0.18
3	28	2660	131	5.76	1575	91	925	0.37
4	28	2580	134	5.93	1100	136	645	0.55
5	24	2750	105	5.00	1920	0	1130	0.00
6	24	2615	106	5.11	1725	40	1015	0.16
7	24	2510	108	5.29	1475	80	870	0.32
8	24	2420	110	5.47	1035	120	610	0.48
9	16	2180	53	3.74	1520	0	895	0.00
10	16	2120	56	3.91	1370	25	805	0.10
11	16	2050	59	4.12	1195	52	700	0.21
12	16	1995	61	4.29	845	80	500	0.32

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