W1G250-CH37-52

EC axial fan - ESM

sickled blades (S series)

with full round nozzle

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Nominal data

Type	**W1G250-CH37-52**	
Motor	**M1G074-BF**	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Type of data definition		fa
Speed	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	2.85 kg
Size	250 mm
Surface of rotor	Coated in black
Material of electronics housing	Die-cast aluminium, coated in black
Material of blades	Sheet steel, coated in black
Material of wall ring	Sheet steel, pre-galvanised and coated in black plastic
Material of guard grille	Steel, phosphated and coated in black plastic
Number of blades	7
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 42
Insulation class	"B"
Humidity class	F0
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Any
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Control input 0-10 VDC / PWM - Tach output - Motor current limit - Soft start
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC interference emission	Acc. to EN 55022 (Class B)
Motor protection	Reverse polarity and locked-rotor protection
Cable exit	Lateral
Product conforming to standard	EN 60950-1
Approval	CSA C22.2 Nr.77; UL 1004-1

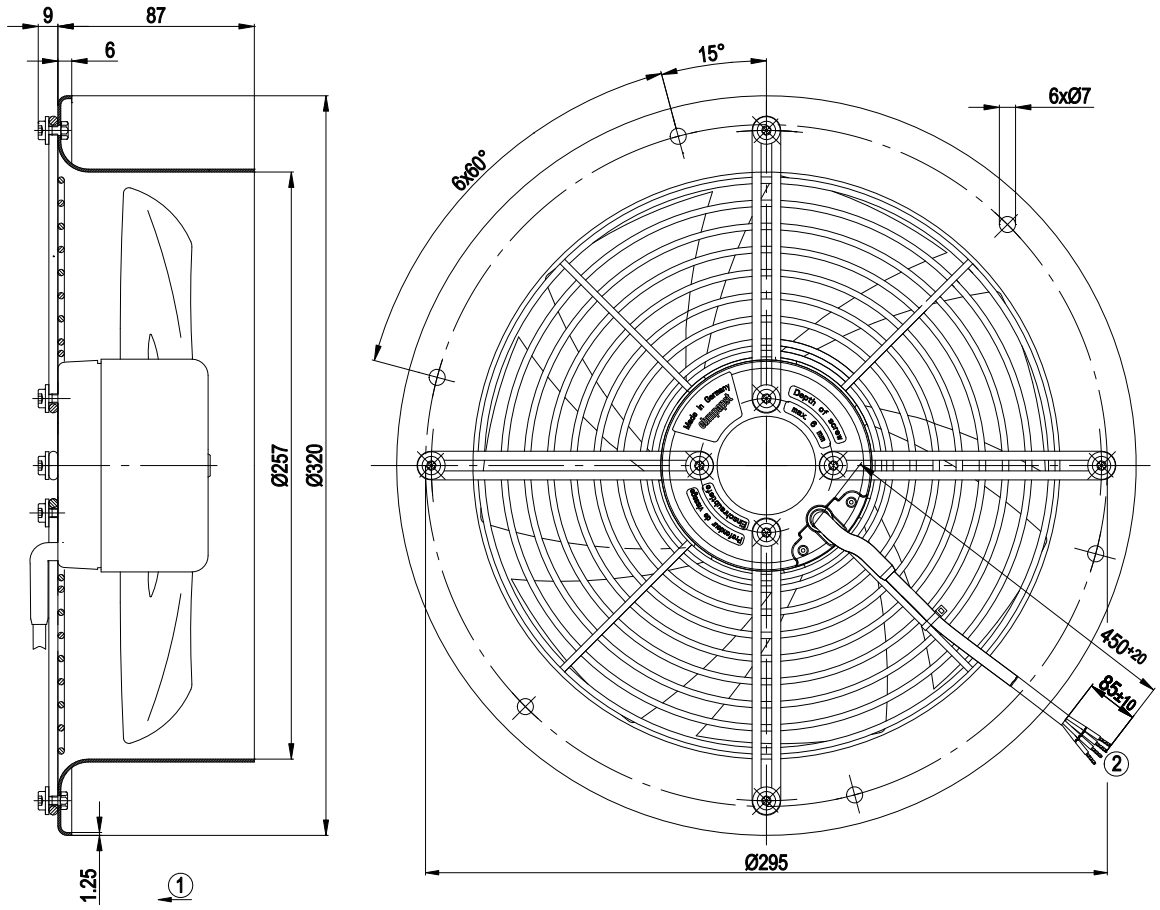
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Product drawing



1	Direction of air flow "V"
2	Connecting cable AWG 20, 4 x brass lead tips crimped

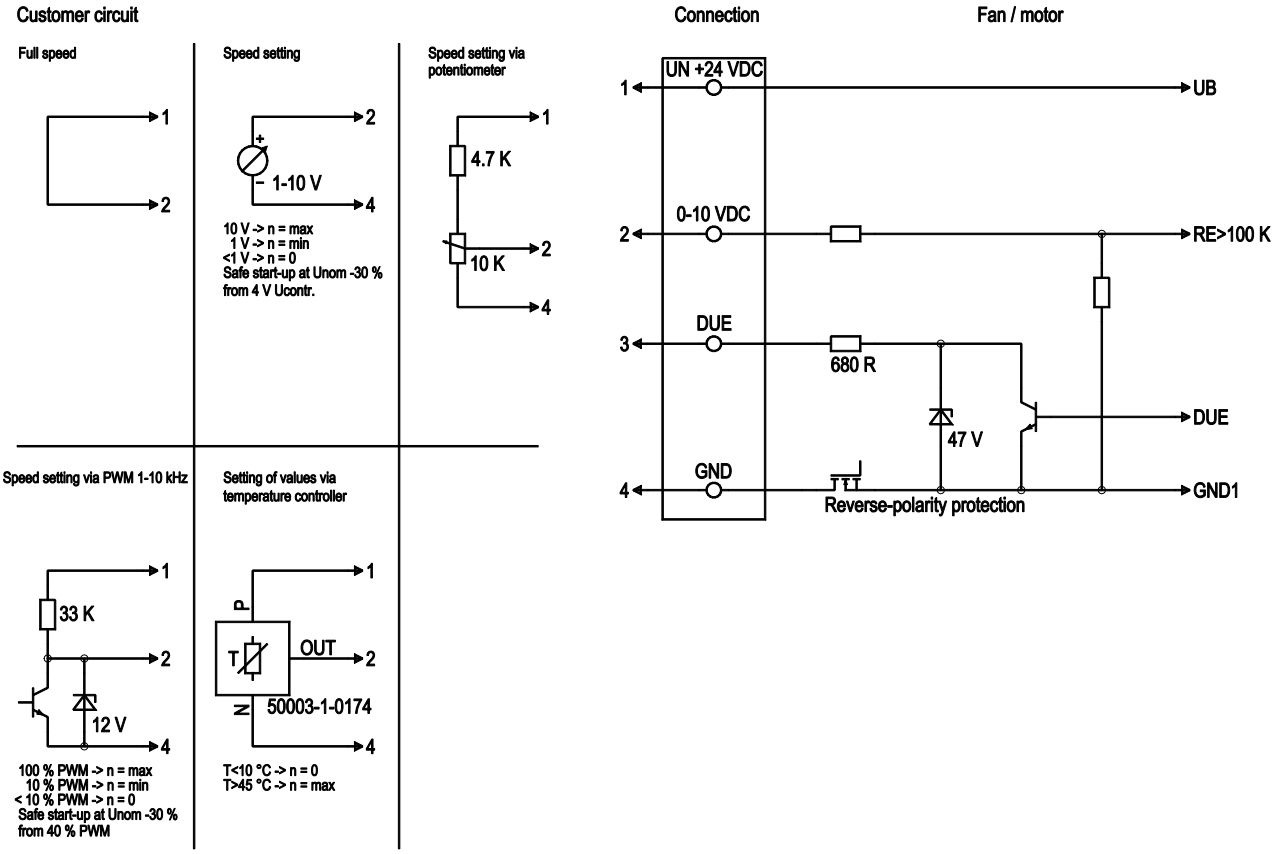
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Connection screen



Line	No.	Signal	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	DUE	white	Speed monitoring output, 3 pulses per rotation, Isink max = 10 mA
1	4	GND	blue	Reference mass

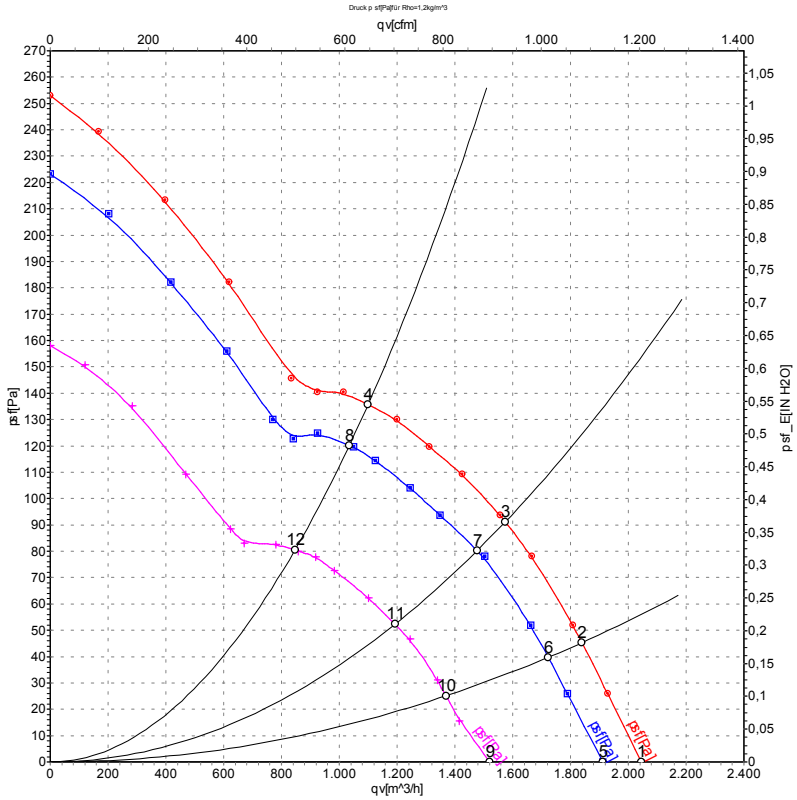
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Charts: Air flow



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

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_e	I	qv	p_{sf}
	V	min^{-1}	W	A	m^3/h	Pa
1	28	2905	125	5.31	2045	0
2	28	2785	128	5.51	1840	46
3	28	2660	131	5.76	1575	91
4	28	2580	134	5.93	1100	136
5	24	2750	105	5.00	1920	0
6	24	2615	106	5.11	1725	40
7	24	2510	108	5.29	1475	80
8	24	2420	110	5.47	1035	120
9	16	2180	53	3.74	1520	0
10	16	2120	56	3.91	1370	25
11	16	2050	59	4.12	1195	52
12	16	1995	61	4.29	845	80

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