W1G208-BA73-52

EC axial compact fan



ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.com

Limited partnership · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**W1G208-BA73-52**	
Motor	**M1G074-BF**	
Nominal voltage	VDC	48
Method of obtaining data		fa
Speed (rpm)	min^{-1}	3500
Power consumption	W	96
Current draw	A	2.2
Max. back pressure	Pa	230
Max. back pressure	inH2O	0.92
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	72

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

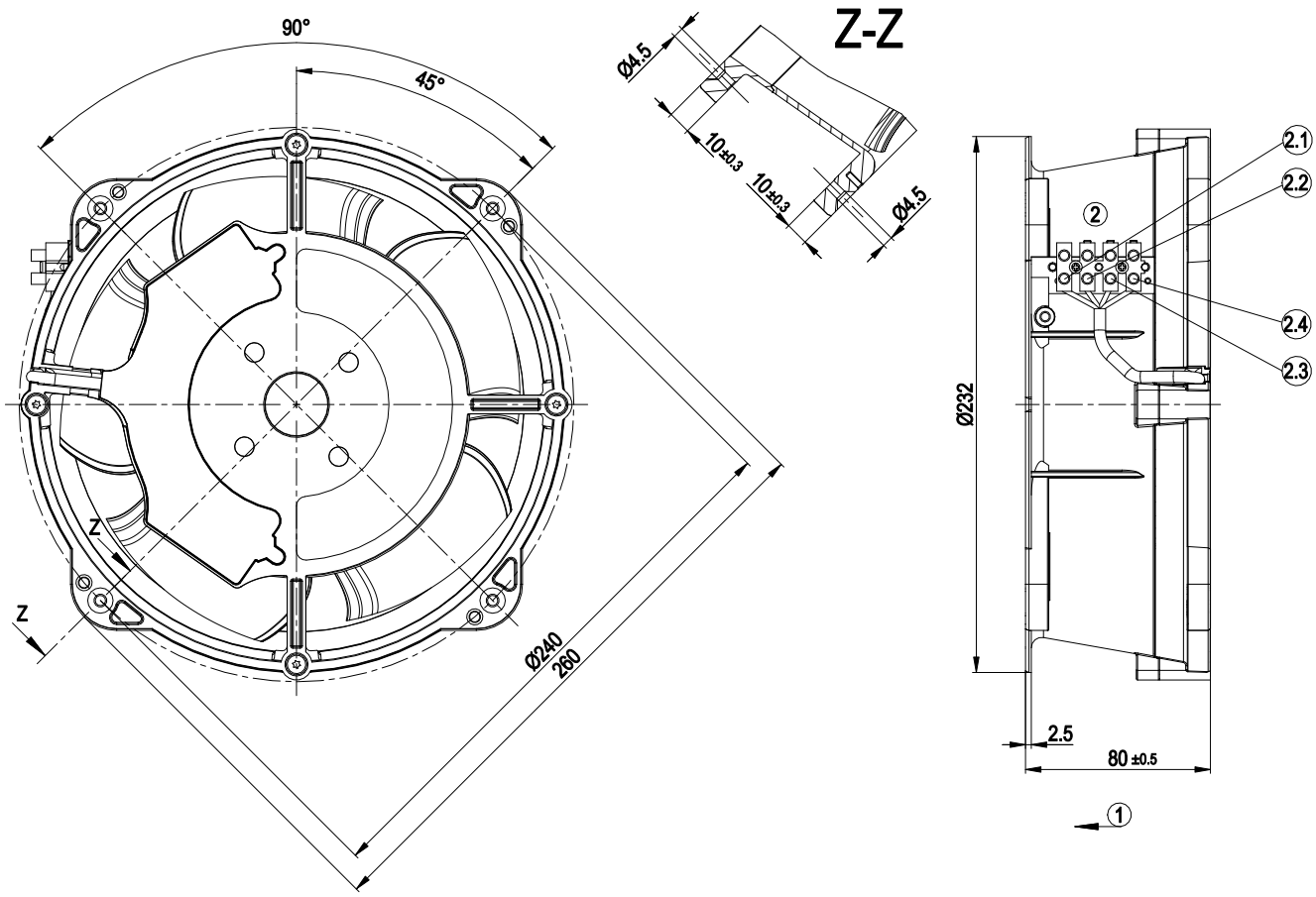
EC axial compact fan

Technical description

Weight	2.3 kg
Fan size	208 mm
Rotor surface	Painted black
Impeller material	PA66 plastic, glass-fiber reinforced
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	IP20
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F0
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, household environment)
Electrical hookup	Via terminal strip
Motor protection	Reverse polarity and locked-rotor protection
With cable	Lateral
Conformity with standards	EN 60950-1
Approval	CSA C22.2 No. 113; EAC; UL 507; VDE

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Product drawing

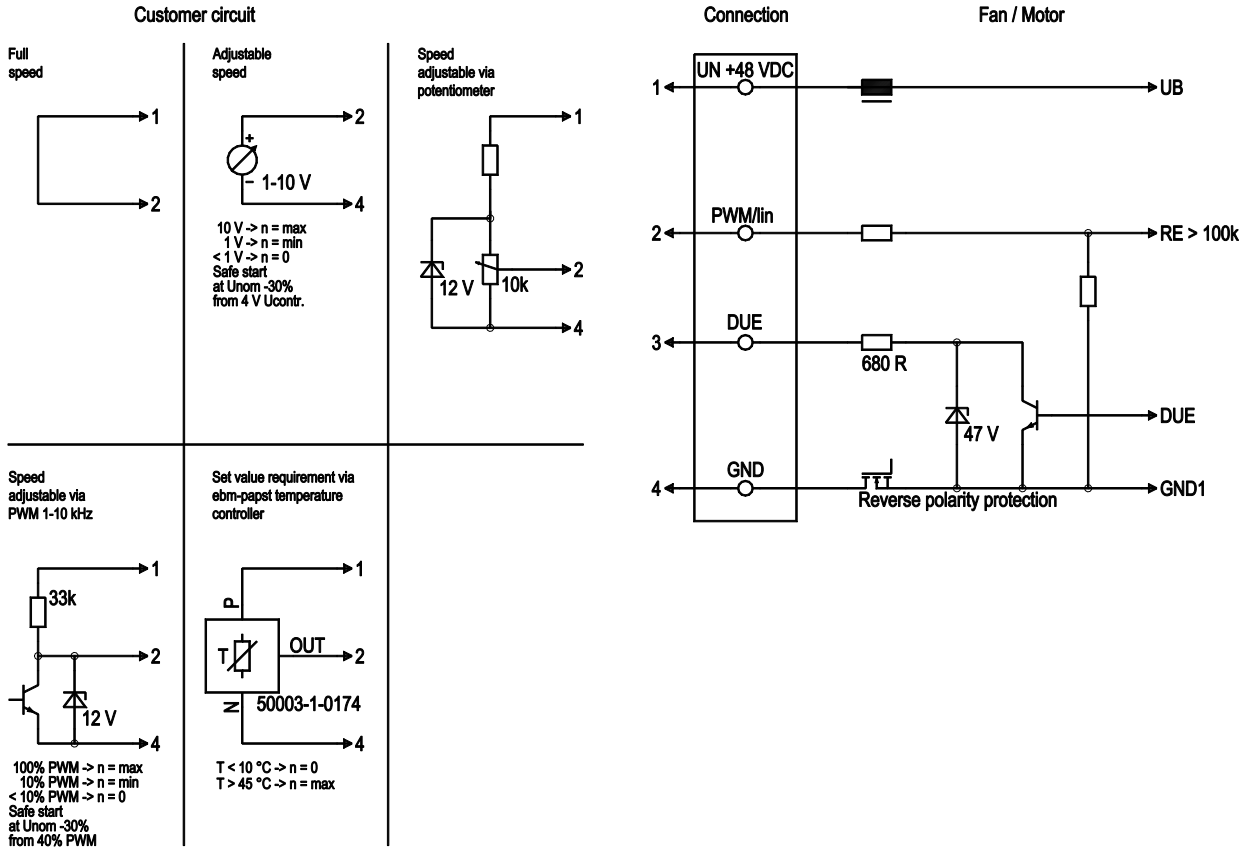


1	Direction of air flow "V"
2	Cable AWG20 with terminal strip (Weco 323-V-HDS/04-VO)
2.1	UN +48 VDC (red)
2.2	GND (blue)
2.3	Tach (white)
2.4	0-10 VDC (yellow)

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Connection diagram

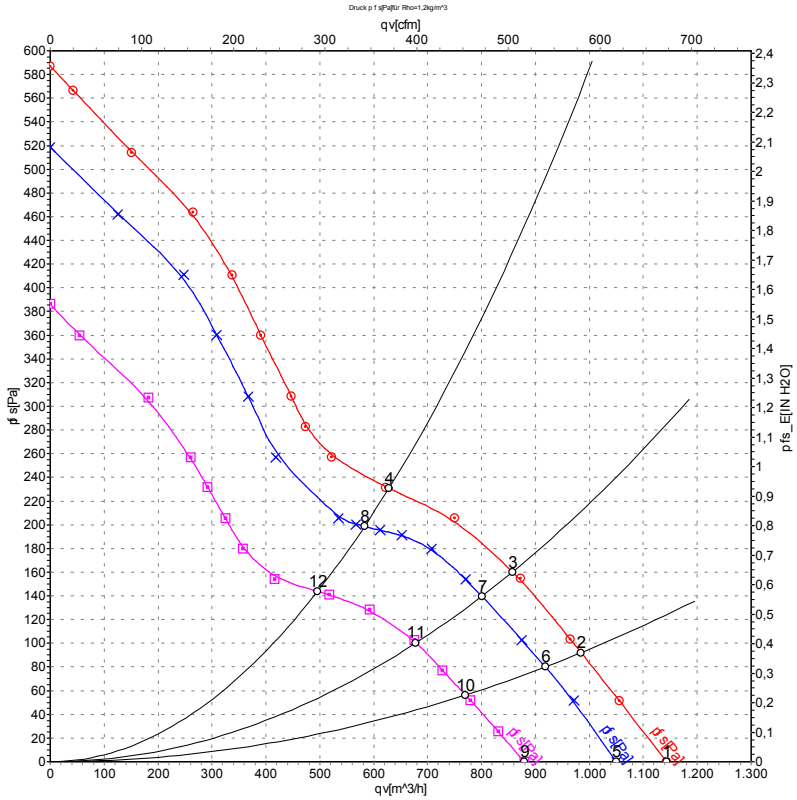


No.	Conn.	Designation	Color	Function/assignment
1	1	Un +48 VDC	red	Power supply 48 VDC, maximum ripple 3.5%
1	2	0-10 VDC	yellow	Control input Re > 100k
1	3	Tach	white	Tach output, 3 pulses per revolution, Isink max = 10 mA
1	4	GND	blue	Reference ground

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Curves: Air performance



Measurement: LU-48132-1
Measurement: LU-48131-1
Measurement: LU-48133-1

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	qv	p_{fs}	qv	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	56	3815	120	2.45	1145	0	675	0.00
2	56	3645	122	2.53	985	92	580	0.37
3	56	3545	123	2.58	855	161	505	0.65
4	56	3600	122	2.55	630	230	370	0.92
5	48	3500	96	2.20	1050	0	620	0.00
6	48	3390	99	2.33	920	80	540	0.32
7	48	3315	103	2.42	800	140	470	0.56
8	48	3365	101	2.37	585	200	345	0.80
9	36	2945	57	1.76	880	0	515	0.00
10	36	2865	60	1.85	770	56	455	0.22
11	36	2815	62	1.93	680	102	400	0.41
12	36	2840	61	1.89	495	144	290	0.58

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

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