W1G208-BA35-52

EC diagonal compact fan

sickle-shaped blades (S series)



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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**W1G208-BA35-52**	
Motor	**M1G074-BF**	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Method of obtaining data		fa
Speed (rpm)	min-1	3500
Power consumption	W	96
Current draw	A	4.4
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

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Technical description

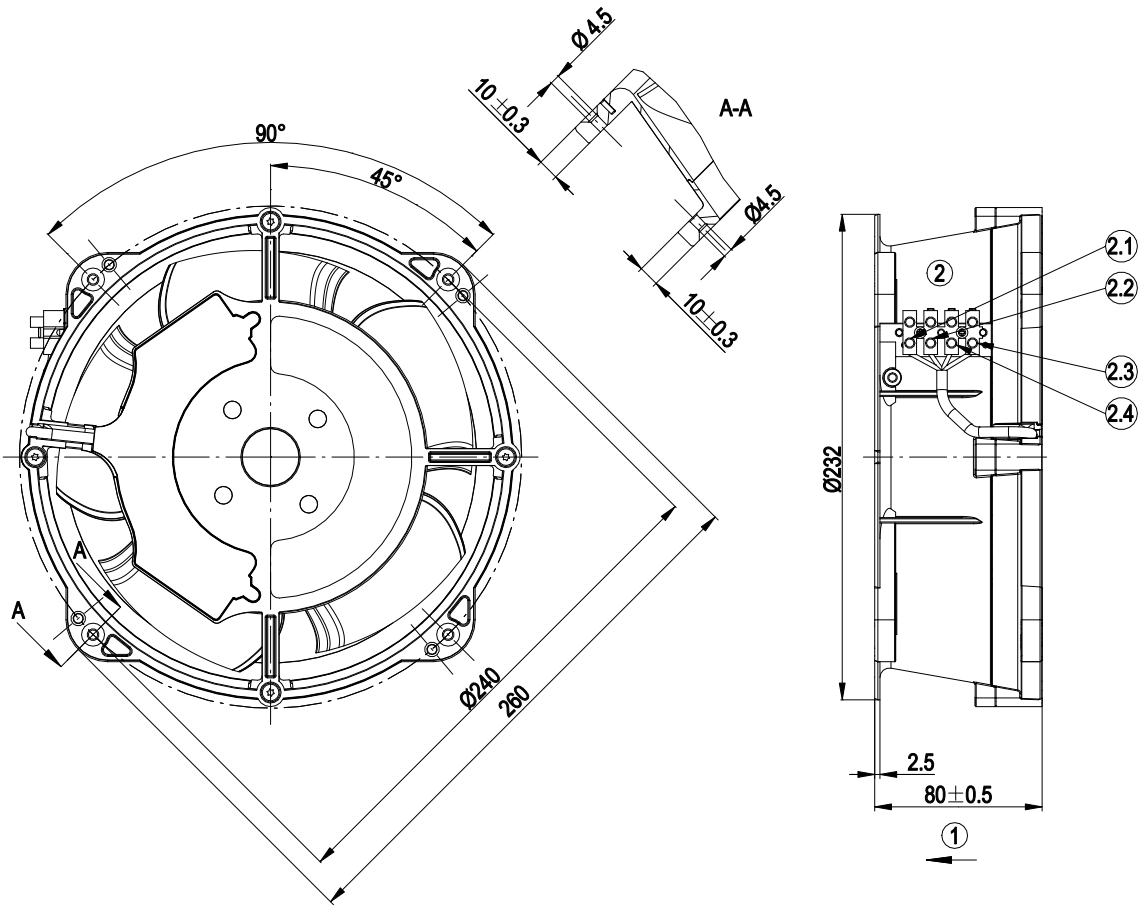
Weight	2.3 kg
Fan size	208 mm
Rotor surface	Painted black
Impeller material	PA plastic
Fan housing material	Die-cast aluminum, painted black
Number of blades	5
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP20
Insulation class	"B"
Moisture (F) / 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)
Electrical hookup	Via terminal strip
Motor protection	Reverse polarity and locked-rotor protection
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60950-1
Approval	CSA C22.2 No. 113; EAC; UL 507; VDE

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Product drawing



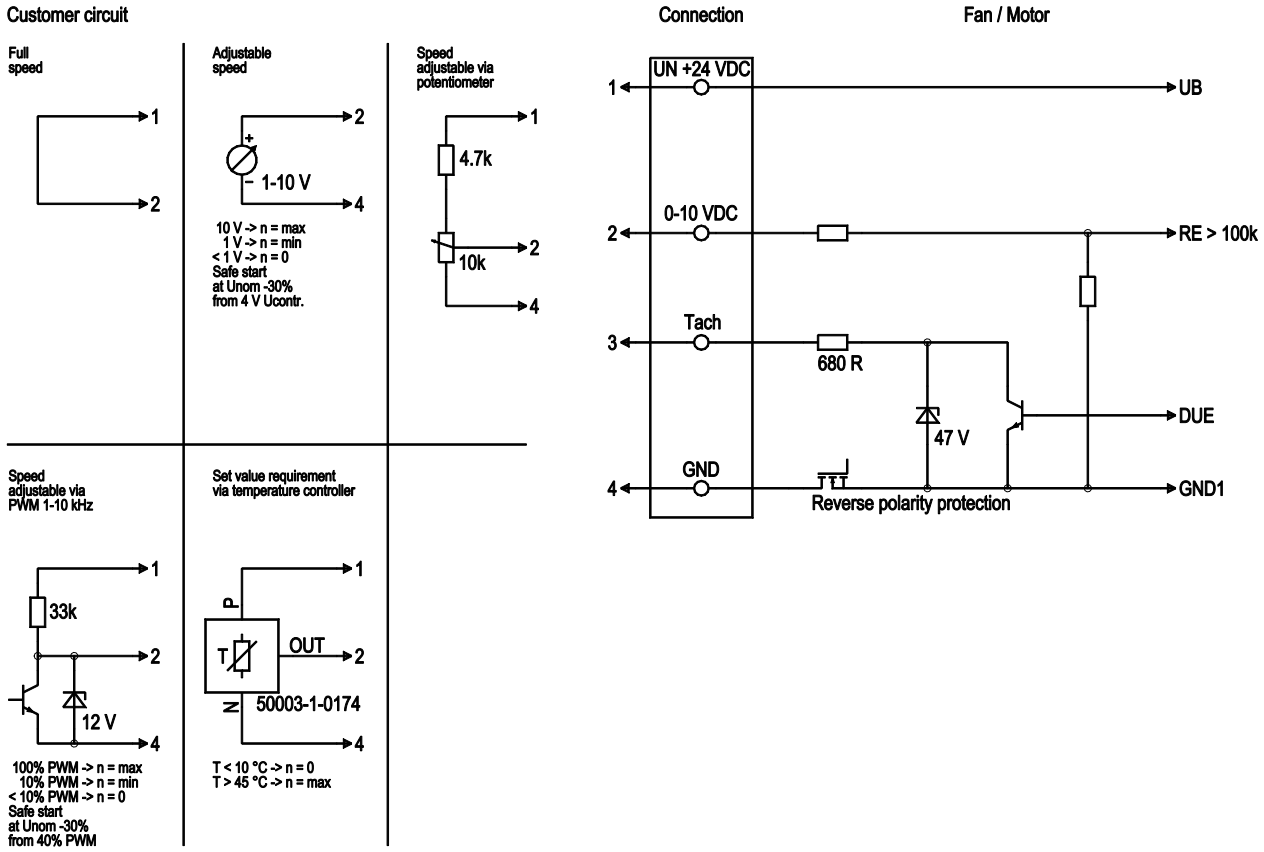
1	Direction of air flow "V"
2	Connection: terminal strip with 4 terminals
2.1	UN +24 VDC (red)
2.2	GND (blue)
2.3	0-10 VDC (yellow)
2.4	DUE (white)

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Connection diagram



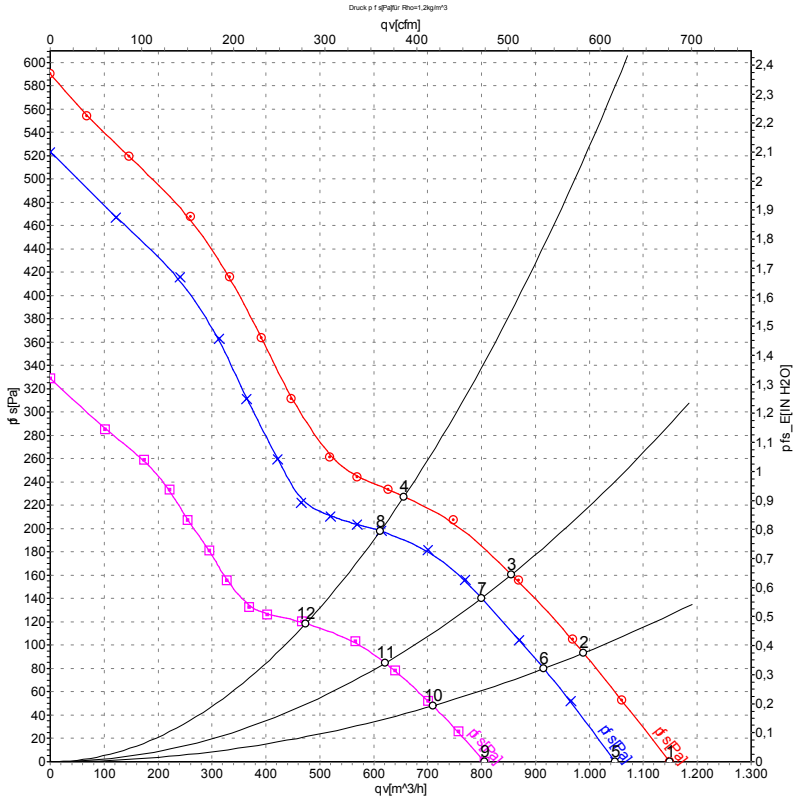
No.	Conn.	Designation	Color	Function/assignment
1	1	Un +24 VDC	red	Power supply 24 VDC, maximum ripple 3.5 %
1	2	0-10 VDC	yellow	Control input Re > 100k
1	3	Tach	white	Tach output, 3 pulses per revolution, Isink max = 10 mA
1	4	GND	blue	Reference ground

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Curves: Air performance



Measurement: LU-48146-1
Measurement: LU-48145-1
Measurement: LU-48147-1

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	28	3805	122	4.91	1150	0	675	0.00
2	28	3640	124	5.06	990	94	580	0.38
3	28	3535	125	5.16	855	161	505	0.65
4	28	3585	124	5.11	655	230	385	0.92
5	24	3500	96	4.40	1045	0	615	0.00
6	24	3375	99	4.62	915	80	540	0.32
7	24	3305	102	4.78	800	140	470	0.56
8	24	3325	102	4.74	610	200	360	0.80
9	16	2705	45	3.19	805	0	475	0.00
10	16	2630	48	3.37	710	48	420	0.19
11	16	2585	49	3.45	620	85	365	0.34
12	16	2600	49	3.42	475	119	280	0.48

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

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