EC axial fan - AxiEco

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	**A3G500-ZS08-10**
Motor	**M3G074-DF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	560
Power consumption	W	72
Current draw	A	0.65
Max. back pressure	Pa	40
Max. back pressure	in. wg	0.16
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

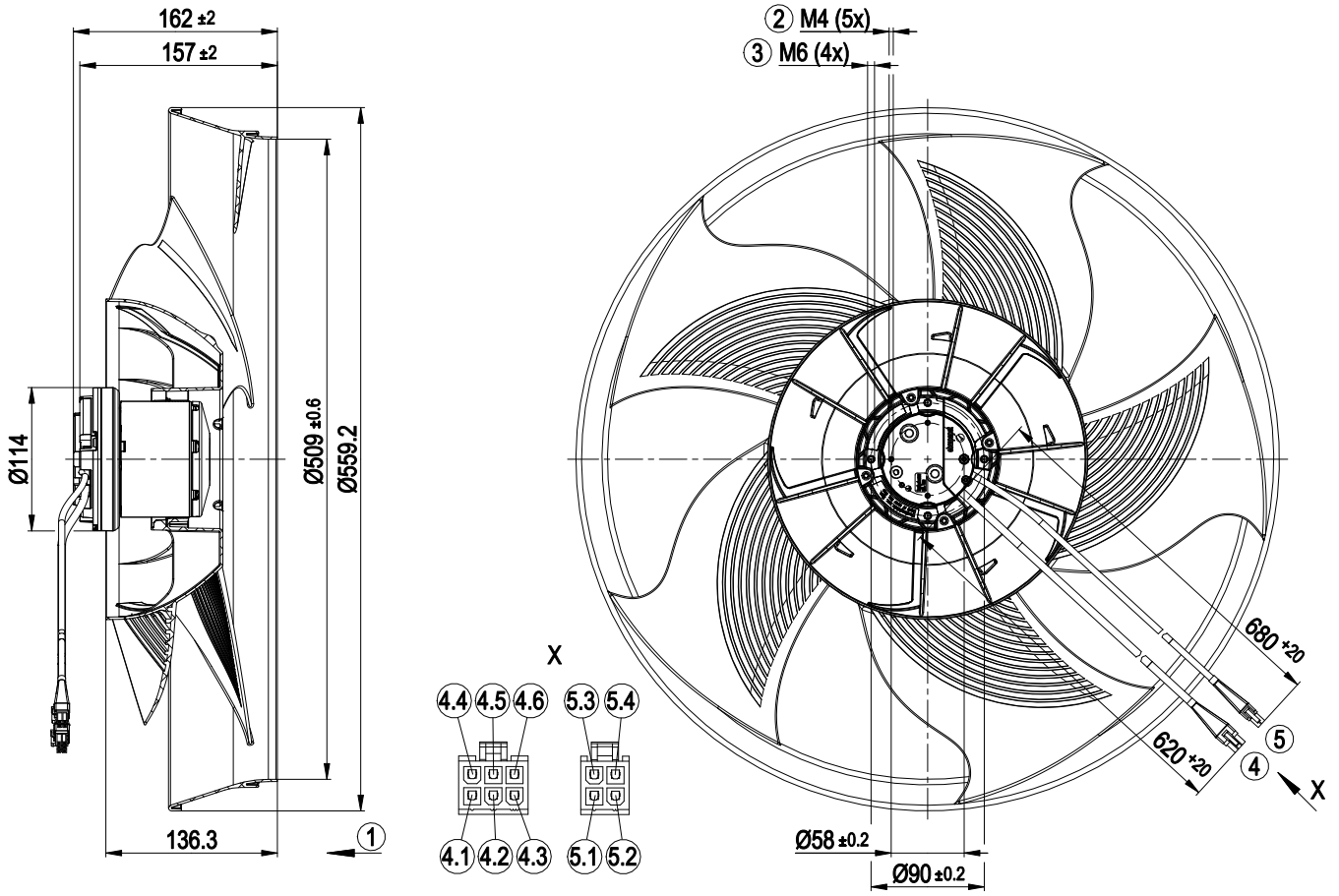
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

Technical description

Weight	3.54 kg
Size	500 mm
Motor size	74
Rotor surface	Galvanically zinc-nickel-coated
Impeller material	PP plastic, sheet-metal plate painted black
Number of blades	5
Airflow direction	V
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H2
Max. permitted ambient temp. for motor (transport/storage)	+80 °C
Min. permitted ambient temp. for motor (transport/storage)	-40 °C
Installation position	Shaft horizontal, cable on bottom
Cooling hole/opening	On rotor side
Mode	S1
Motor bearing	Ball bearing made of stainless steel; (sealed, without air gap)
Technical features	- Auto-addressing can be activated by BUS - Power limiter - Motor current limitation - RS-485 MODBUS-RTU - Soft start - EEPROM write cycles: 100,000 maximum - Control interface with SELV potential safely disconnected from the mains - Overvoltage detection - Thermal overload protection for electronics/motor - Line undervoltage detection
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC circuit feedback	According to EN 61000-3-2/3
EMC interference emission	According to EN 61000-6-3 (household environment)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Electronic motor protection
With cable	Variable
Protection class assignment	I; If a protective earth is connected by the customer This component for installation may have several local protection classes. This information relates to this component's basic design. The final protection class is based on the component's intended installation and connection.
Conformity with standards	EN 60034-1; EN 60204-1; EN 60335-1; CE

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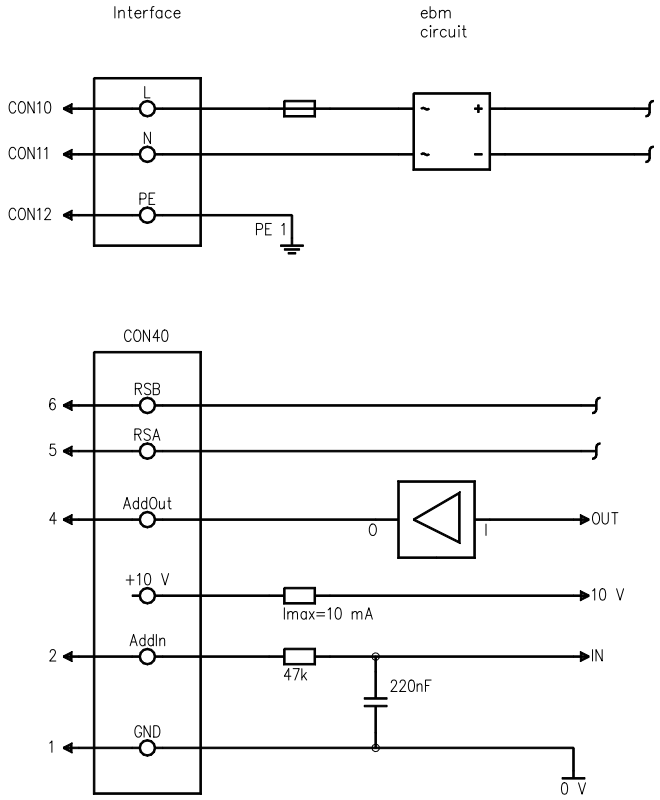
Product drawing



1	Airflow direction "V"
2	Max. clearance for screw 5 mm
3	Max. clearance for screw 10 mm
4	Cable PVC AWG20
	6-pole connector housing Molex 46992-0610, 3x socket Molex 39-00-0059
4.1	L
4.2	N
4.3	PE
4.4	not used
4.5	not used
4.6	not used
5	Cable PVC AWG22
	4-pole connector housing Molex 46992-0410, 4x socket Molex 39-00-0059
5.1	not used
5.2	GND
5.3	RSA
5.4	RSB

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Connection diagram

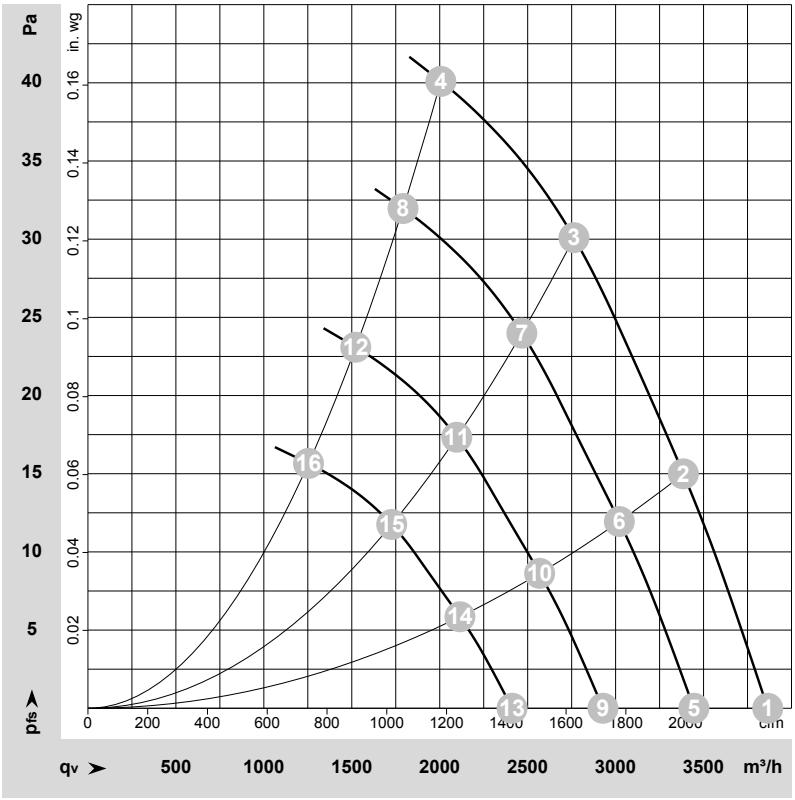


No.	Conn.	Designation	Color	Function/assignment
	CON10	L	black	Power supply, phase, see nameplate for voltage range
	CON11	N	blue	Power supply, neutral conductor, see nameplate for voltage range
	CON12	PE	green/yellow	Protective earth
CON40	6	RSB	brown	RS485 interface for MODBUS, RSB; SELV
CON40	5	RSA	white	RS485 interface for MODBUS, RSA; SELV
CON40	4	AddOut /max. 10 mA	gray	not brought out via wire
CON40	2	AddIn	yellow	not brought out via wire
CON40	1	GND	blue	Reference ground for control interface, SELV

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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-220547-1

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

	Wired	U	f	n	P_{ed}	I	LpA_{in}	LwA_{in}	LwA_{out}	LwA	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	dB(A)	dB	m^3/h	Pa	cfm	in. wg
1	1~	230	50	560	44	0.43	50	57	58	61	3865	0	2275	0.00
2	1~	230	50	560	56	0.53	47	54	56	58	3385	15	1990	0.06
3	1~	230	50	560	67	0.62	46	53	55	57	2765	30	1625	0.12
4	1~	230	50	560	72	0.65	46	53	56	58	2005	40	1180	0.16
5	1~	230	50	500	31	0.31	47	54	55	58	3445	0	2030	0.00
6	1~	230	50	500	40	0.38	44	51	53	55	3020	12	1780	0.05
7	1~	230	50	500	48	0.44	43	50	52	54	2465	24	1450	0.10
8	1~	230	50	500	51	0.47	43	50	53	55	1790	32	1055	0.13
9	1~	230	50	425	19	0.19	43	50	51	54	2930	0	1725	0.00
10	1~	230	50	425	24	0.23	40	47	49	51	2570	9	1510	0.04
11	1~	230	50	425	29	0.27	39	46	48	50	2095	17	1235	0.07
12	1~	230	50	425	32	0.29	39	46	49	51	1525	23	895	0.09
13	1~	230	50	350	11	0.11	38	45	46	49	2410	0	1420	0.00
14	1~	230	50	350	14	0.13	35	42	44	46	2115	6	1245	0.02
15	1~	230	50	350	16	0.15	34	41	43	45	1725	12	1015	0.05
16	1~	230	50	350	18	0.16	34	41	44	46	1255	16	740	0.06

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
LwA_{out} = Sound power level outlet side · q_V = Air flow · p_{fs} = Pressure increase

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