S4D400-ZX14-01

AC axial fan - AxiEco

with guard grille

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**S4D400-ZX14-01**
Motor	**M4D074-EI**

Phase		3~	3~	3~
Nominal voltage	VAC	230	400	460
Wiring		Δ	Y	Y
Frequency	Hz	50	50	60
Method of obtaining data		ml	ml	ml
Valid for approval/standard		CE	CE	CE
Speed (rpm)	min^{-1}	1300	1300	1500
Power consumption	W	245	245	380
Current draw	A	0.8	0.47	0.58
Max. back pressure	Pa	150	150	185
Max. back pressure	in. wg	0.6	0.6	0.74
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	60	60	30
Starting current	A	2.3	1.3	1.5

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

Data according to Commission Regulation (EU) 327/2011 (EN 17166)

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	34.9	29.7
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		45.2	40
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.23
09 Air flow q_v	m^3/h	2755
09 Pressure increase p_{fs}	Pa	110
10 Speed (rpm) n	min^{-1}	1335
11 Specific ratio*		1.00

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

* Specific ratio = 1 + p_{fs} / 100 000 Pa

LU-211502

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Technical description

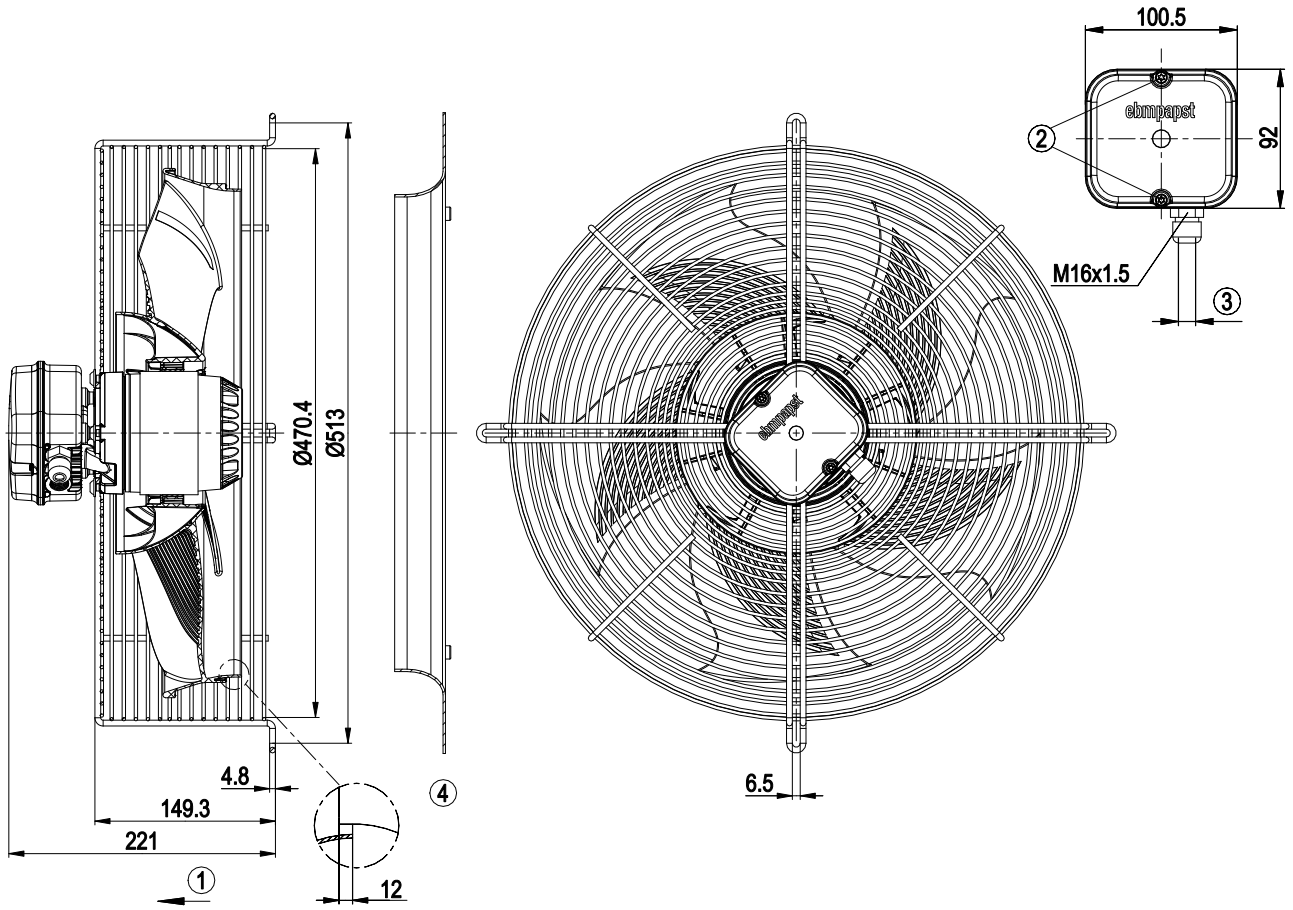
Size	400 mm
Motor size	74
Rotor surface	Painted black
Terminal box material	PP plastic
Impeller material	PP plastic, galvanized sheet-metal plate
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	V
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H1+
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	Terminal box
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60034-1; EN 60204-1; EN 60335-1; CE
Approval	CSA C22.2 No. 100; EAC; UL 1004-1

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Product drawing



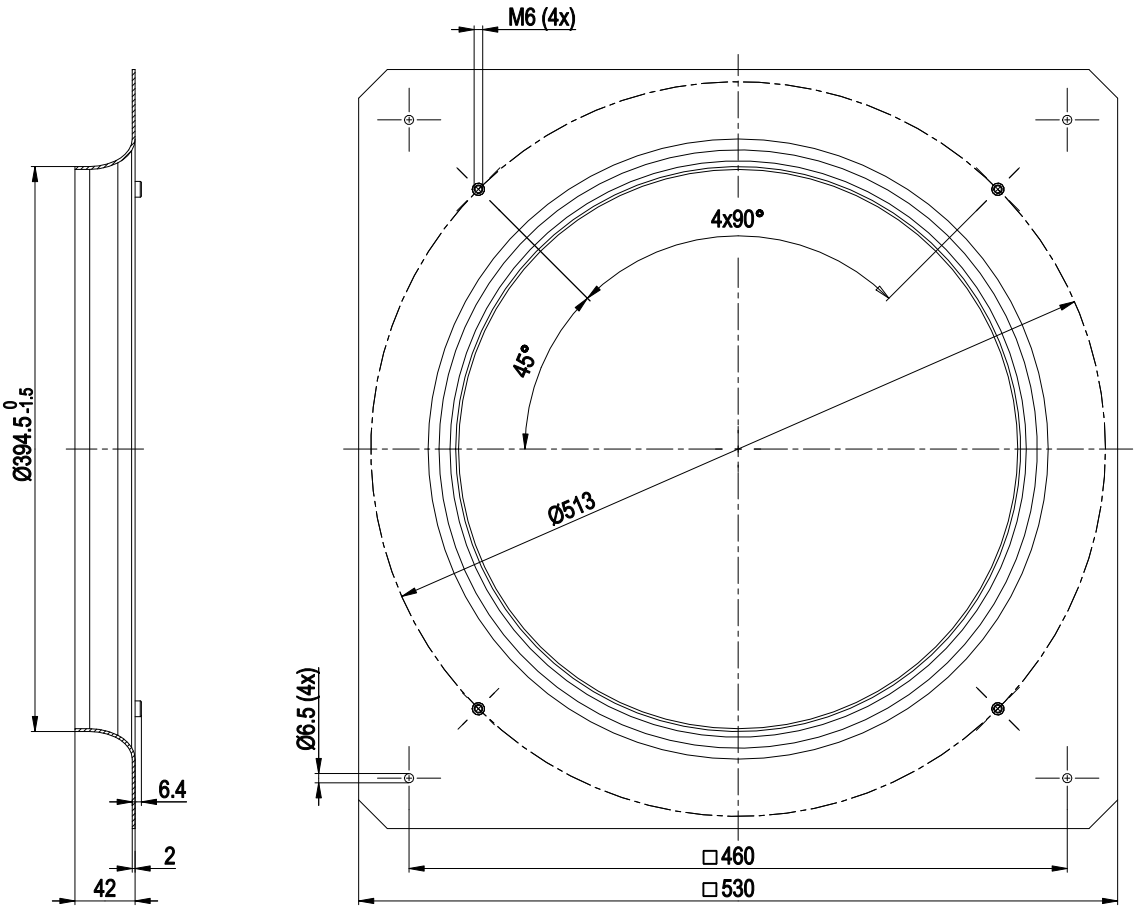
1	Airflow direction "V"
2	Tightening torque 1.5 ± 0.2 Nm
3	Cable diameter max. 7.5 mm, tightening torque 1.3 ± 0.2 Nm
4	Accessory part: Inlet ring 40100-2-4013 not included in scope of delivery

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Accessory part



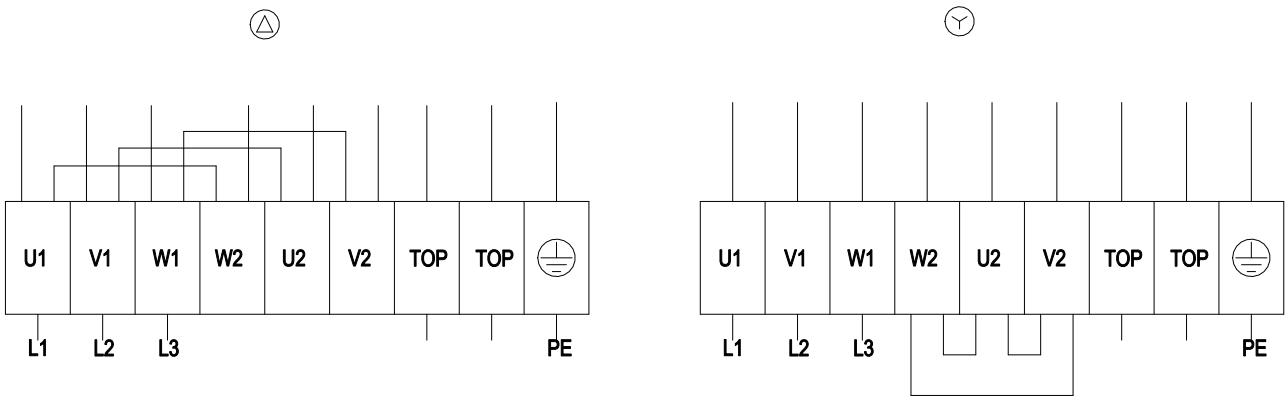
Inlet ring 40100-2-4013

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Connection diagram



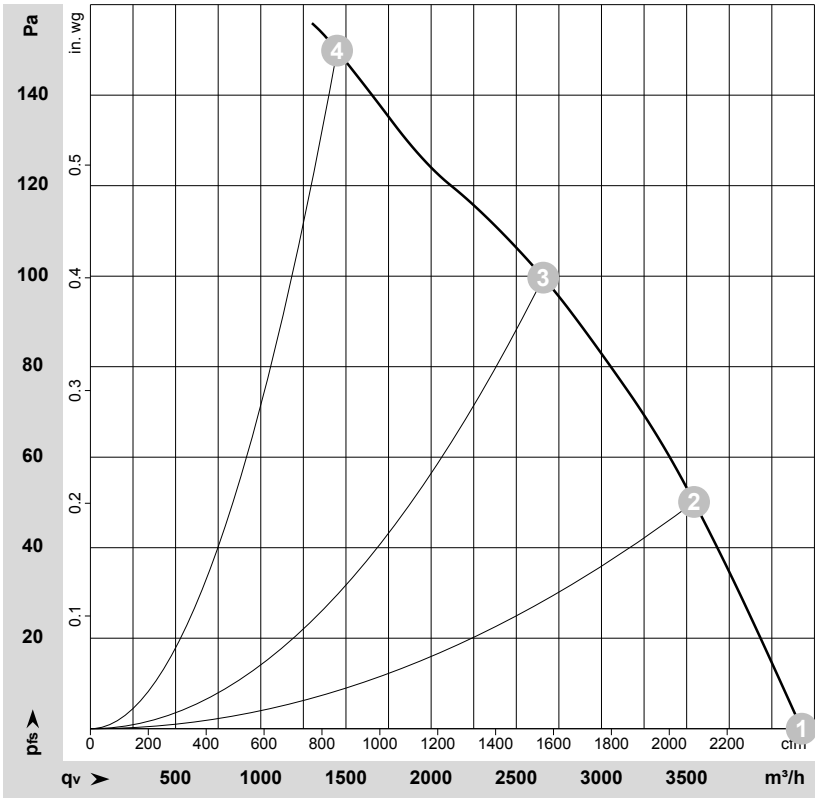
Δ	Delta connection	Y	Star connection	L1	= U1 = black
L2	= V1 = blue	L3	= W1 = brown	W2	yellow
U2	green	V2	white	TOP	2x gray
PE	green/yellow				

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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-211964-1

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_e	I	LpA_{in}	LwA_{in}	LwA_{out}	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	dB(A)	m^3/h	Pa	cfm	in. wg
1	Y	400	50	1375	189	0.41	61	69	72	4175	0	2455	0.00
2	Y	400	50	1345	214	0.43	59	66	70	3545	50	2085	0.20
3	Y	400	50	1325	234	0.45	58	65	70	2660	100	1565	0.40
4	Y	400	50	1300	245	0.47	63	70	74	1450	150	850	0.60

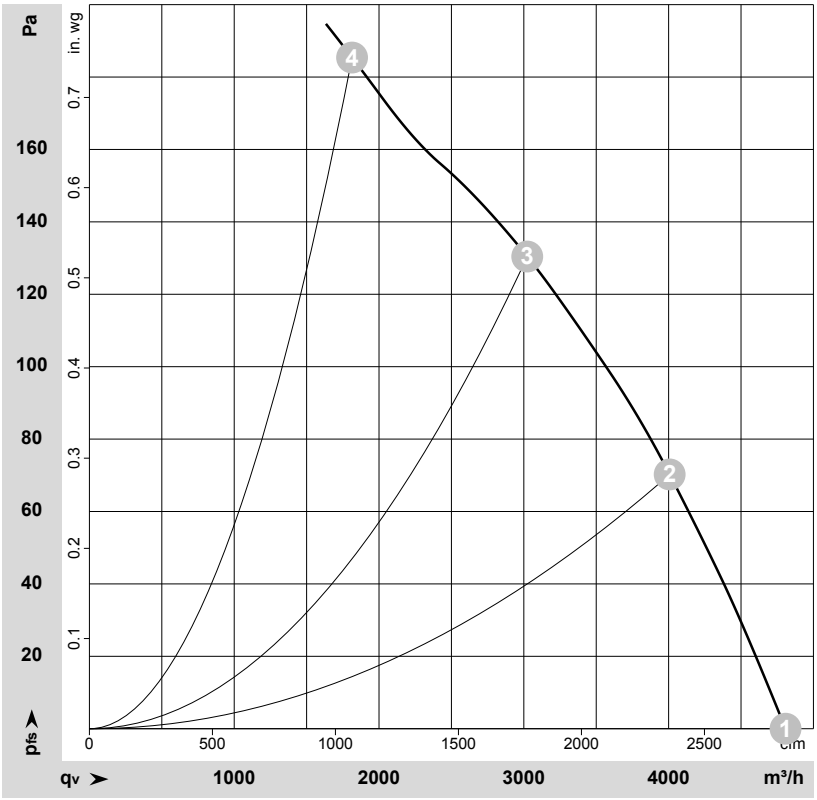
Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
LwA_{out} = Sound power level outlet side · q_V = Air flow · p_{fs} = Pressure increase

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Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-212608-1

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_e	I	LpA_{in}	LwA_{in}	LwA_{out}	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	dB(A)	m^3/h	Pa	cfm	in. wg
1	Y	460	60	1585	294	0.47	65	72	76	4805	0	2830	0.00
2	Y	460	60	1540	339	0.52	62	69	73	4005	70	2360	0.28
3	Y	460	60	1510	367	0.55	61	68	73	3025	130	1780	0.52
4	Y	460	60	1500	380	0.58	65	72	78	1815	185	1070	0.74

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = 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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