

with guard grille

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Nominal data

Type	S4D500-ZL09-01				
Motor	M4E110-GF				
Phase		3~	3~	3~	3~
Nominal voltage	VAC	400	400	480	480
Wiring		Δ	Y	Δ	Y
Frequency	Hz	50	50	60	60
Method of obtaining data		ml	ml	ml	ml
Valid for approval/standard		CE	CE	CE	CE
Speed (rpm)	min ⁻¹	1310	1010	1540	1140
Power consumption	W	780	505	1180	725
Current draw	A	1.5	0.85	1.8	1.0
Max. back pressure	Pa	240	145	240	135
Max. back pressure	in. wg	0.96	0.58	0.96	0.54
Min. ambient temperature	°C	-40	-40	-40	-40
Max. ambient temperature	°C	60	60	45	40
Starting current	A	5.5	1.7	6.0	1.9

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 (prEN 17166)

01 Overall efficiency η_{es}	%	Actual 41.5	Req. 2015 32.8	09 Power consumption P_e	kW	0.73
02 Measurement category		A		09 Air flow q_v	m³/h	6345
03 Efficiency category		Static		09 Pressure increase p_{fs}	Pa	181
04 Efficiency grade N		48.7	40	10 Speed (rpm) n	min ⁻¹	1325
05 Variable speed drive		No		11 Specific ratio*		1.00

Data obtained at optimum efficiency level.
The efficiency values displayed for achieving conformity with the Ecodesign Regulation EU 327/2011 has been reached with defined air duct components (e.g. inlet rings).
The dimensions must be requested from ebm-papst. If other air conduction geometries are used on the installation side, the ebm-papst evaluation loses its validity/the conformity must be confirmed again.
The product does not fall within the scope of Regulation (EU) 2019/1781 due to the exception specified in Article 2 (2a) (motors completely integrated into a product).

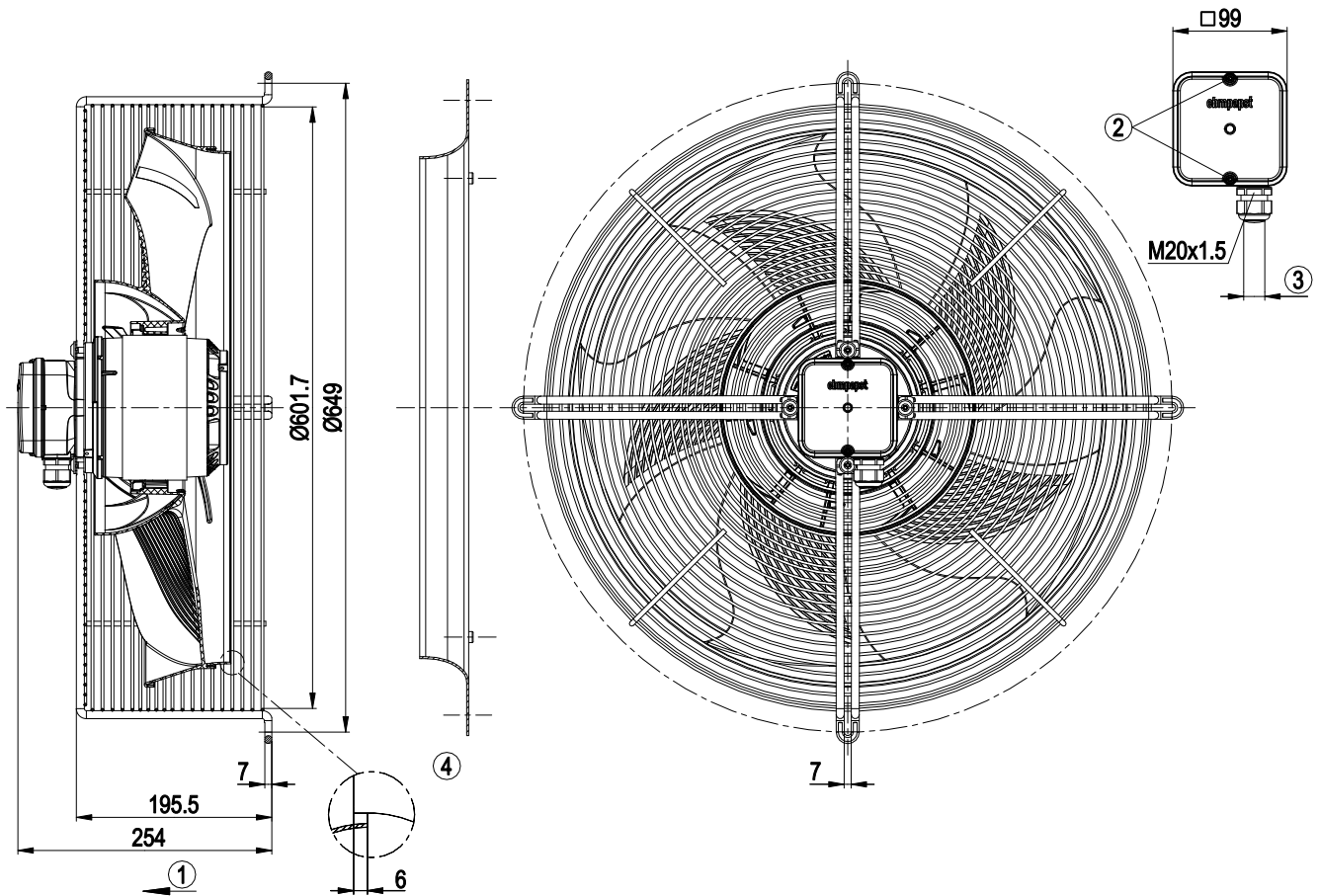
* Specific ratio = $1 + p_{fs} / 100\,000\text{ Pa}$ LU-210452

Technical description

Weight	15.26
Size	500 mm
Motor size	110
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	IP54
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H2
Ambient temperature note	Occasional start-up at temperatures between -40°C and -25°C is permitted. For continuous operation at ambient temperatures below -25°C (such as refrigeration applications), use must be made of a fan design with special low-temperature bearings.
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)	> 3.5 mA
Electrical hookup	Terminal box
Motor protection	Thermal switch auto reset, lead out, with basic insulation
With cable	Axial
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S0
Conformity with standards	EN 60034-1; CE; UKCA
Approval	UL 1004-1; EAC; CSA C22.2 No. 100

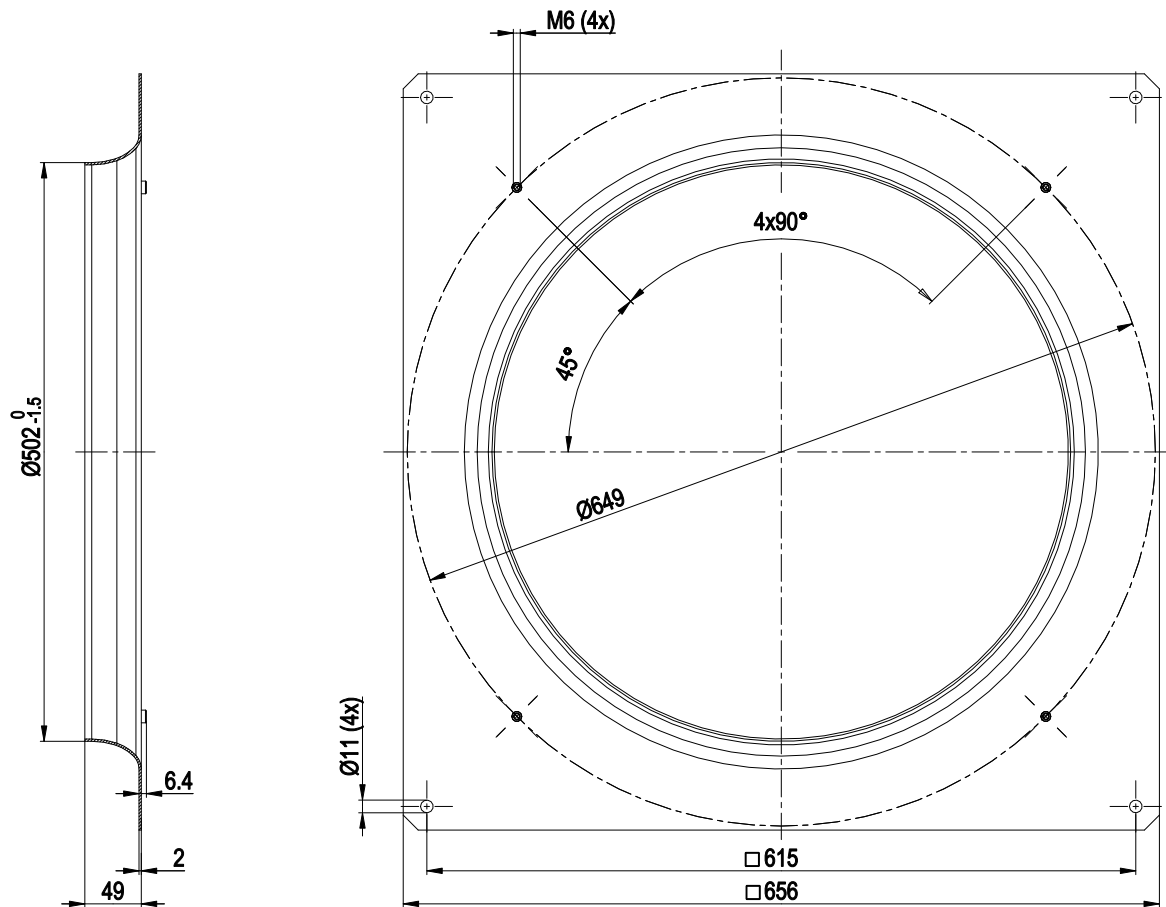
with guard grille

Product drawing



1	Airflow direction "V"
2	Tightening torque 1.5 ± 0.2 Nm
3	Cable diameter min. 6 mm, max. 12 mm, tightening torque 2 ± 0.3 Nm
4	Accessory part: Inlet ring 50100-2-4013 not included in scope of delivery

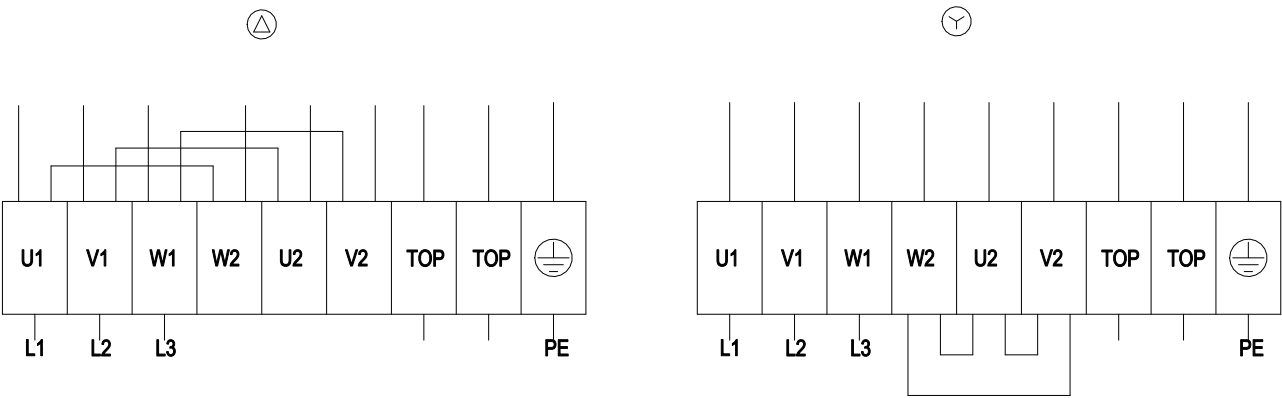
Accessory part



Inlet ring 50100-2-4013

with guard grille

Connection diagram



△	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				