

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)

| | | Actual | Req. 2015 | | | |
|-----------------------------------|---|--------|-----------|-------------------------------|-------------------|------|
| 01 Overall efficiency η_{es} | % | 41.5 | 32.8 | 09 Power consumption P_e | kW | 0.73 |
| 02 Measurement category | | A | | 09 Air flow q_v | m ³ /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.

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

LU-210452

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 ebmpapst. 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).

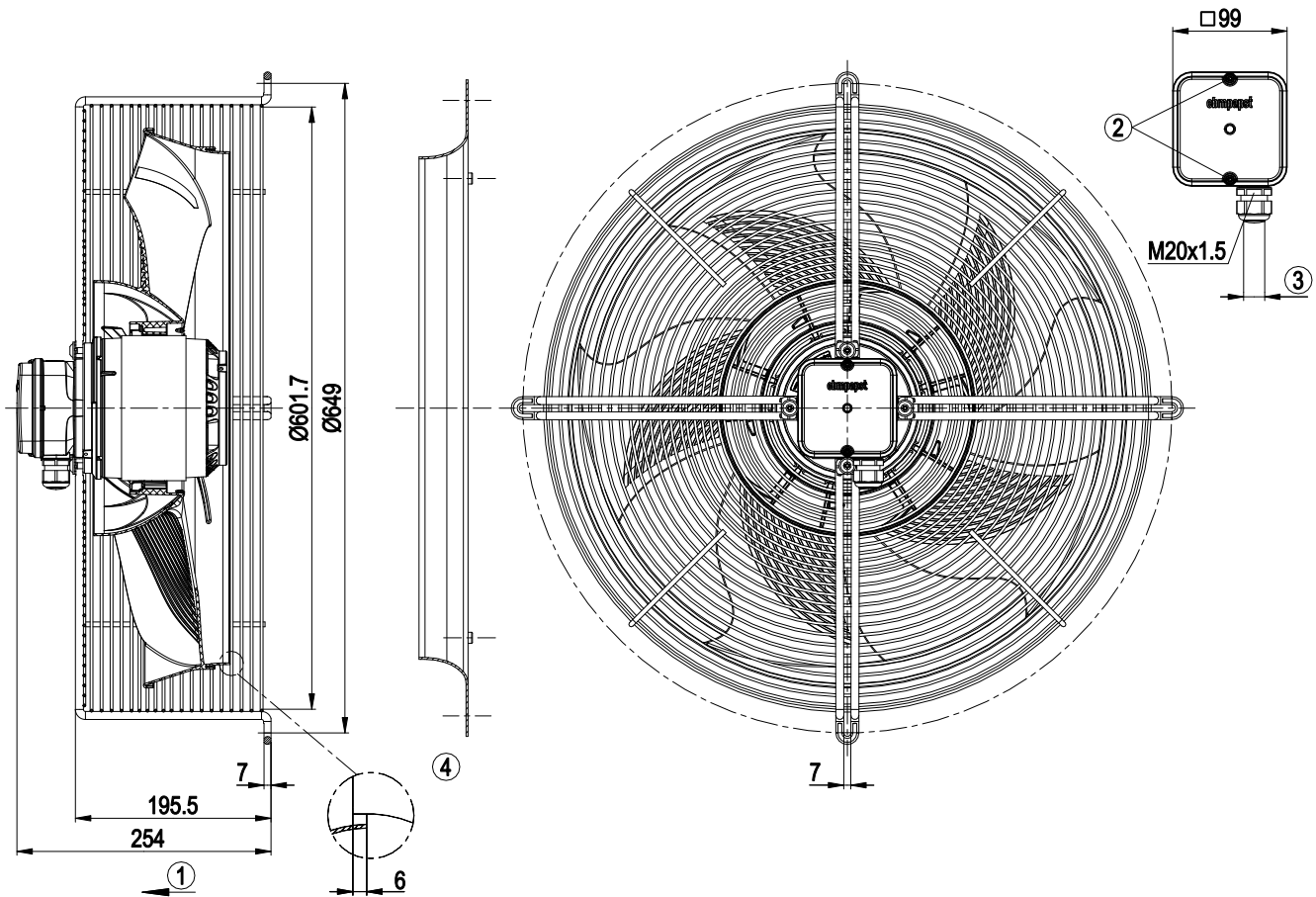
with guard grille

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 |

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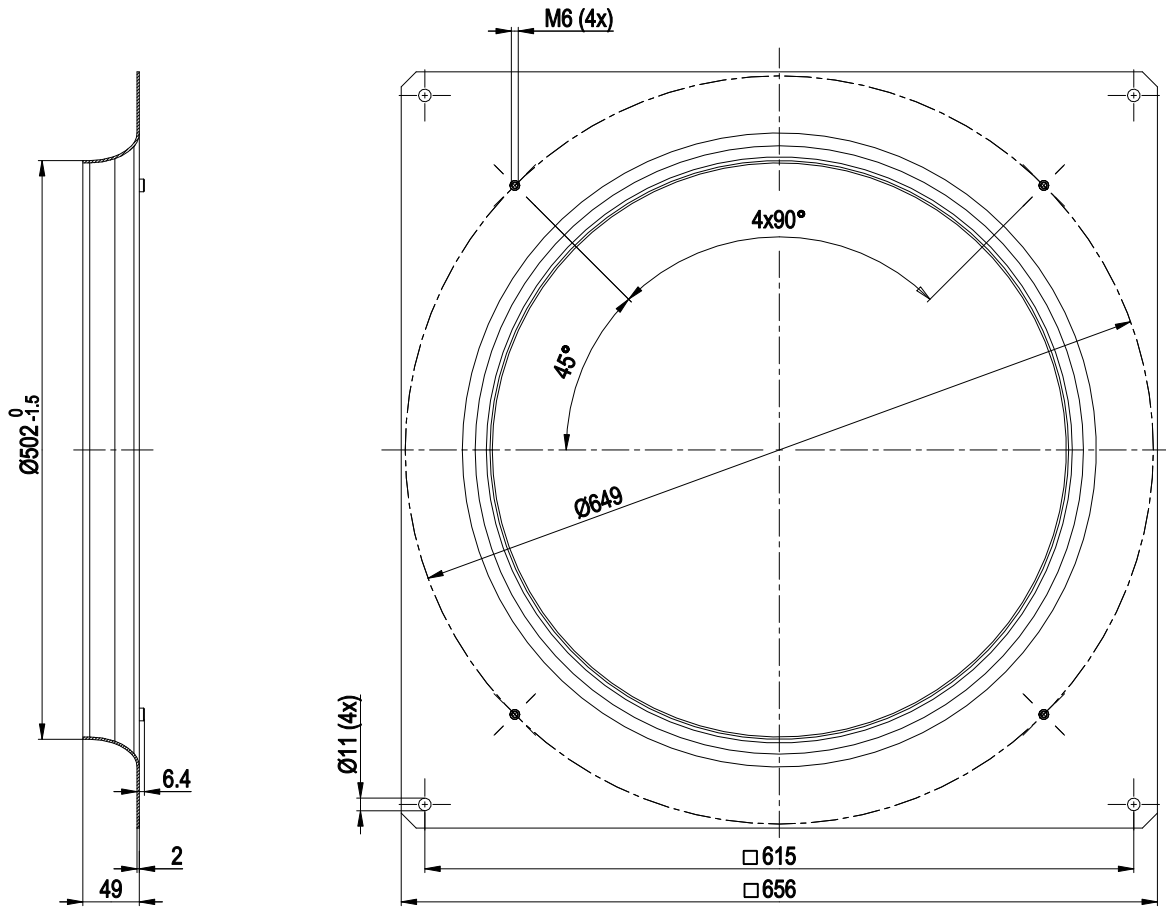
Product drawing



| | |
|---|---------------------------------------------------------------------------|
| 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 |

with guard grille

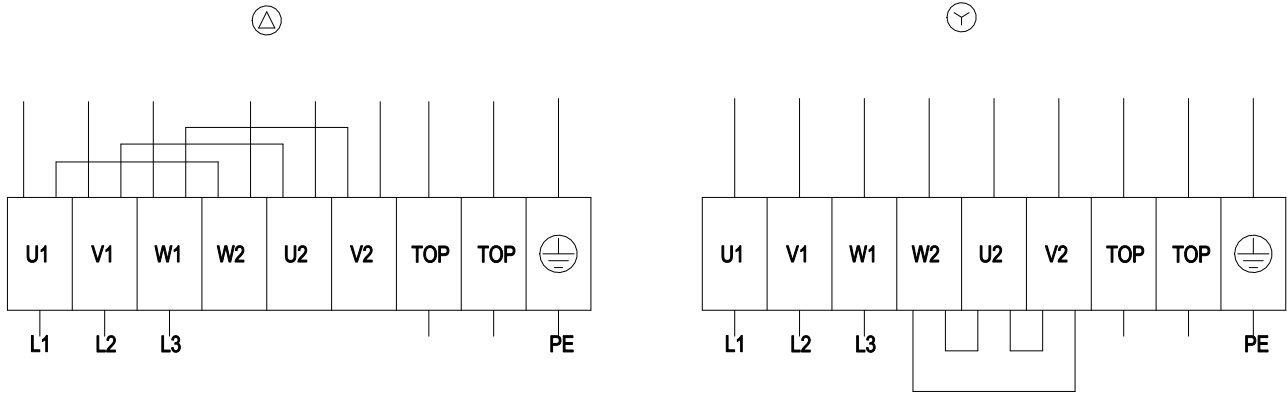
Accessory part



Inlet ring 50100-2-4013

with guard grille

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 | | | | |