CM-2-500

Permanent-magnet machine for direct drive of applications with highest speed demands.

- Special mechanical rotor construction for highest stresses
- Stator winding and core configuration for optimal efficiency despite highest rotational speeds
- Low heat generation in stator and rotor
- High-speed ball bearings with permanent lubrication
- Ideal in combination with converter CC-75-400 or CC-75-500
- Customized adaptions available

### Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pole-pair number</td>
<td>1</td>
</tr>
<tr>
<td>Rated speed</td>
<td>500,000 rpm</td>
</tr>
<tr>
<td>Rated power</td>
<td>100 W</td>
</tr>
<tr>
<td>Rated torque</td>
<td>2 mNm</td>
</tr>
<tr>
<td>Weight</td>
<td>36 g</td>
</tr>
<tr>
<td>Temperature measurement</td>
<td>Thermocouple Type K</td>
</tr>
<tr>
<td>Axial moment of inertia (rotor)</td>
<td>1.95·10^{-8} kg m^2</td>
</tr>
</tbody>
</table>
**Operating range**

![Operating range graph](image)

**Drawing in mm**

![Drawing in mm](image)

- Cooling holes 8x Ø2
- Mounting threads 4x M1.6 x 4.5 mm
- Mounting threads 4x M1.6 x 4 mm

### Rotor type Rxx
- **RM00** (standard) Without boring/thread
- **RM02** With M2 thread (right hand)
- **RD02** With 2 mm boring
- **RM10** Extended shaft stub (10.7 mm)
- **RC99** Custom specific boring/thread

### Bearing type Bxx
- **B00** (standard) Standard ball bearing
- **B01** Vacuum ball bearing
- **B99** Custom specific ball bearing

### Front flange Fxx
- **F00** (standard) Standard flange, rotor dismountable only without front load attached
- **F01** Half-shell flanges, rotor dismountable with front load attached
- **F99** Custom specific front flange

### Cooling flange Cxx (air cooling)
- **C00** (standard) no cooling flange
- **C01** Cooling flange with radial inlet
- **C02** Cooling flange with axial inlet
- **C99** Custom specific cooling flange

### Optionale Dienstleistungen für kundenspezifische Motor-Lasten
- Thermal design
- Rotordynamic design
- Balancing
- Mechanical design

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