TM4® CO150
Motor Controller / Inverter

Features
- Operating voltage: 320-750 Vdc
- Max output current: 575 Arms
- Reflex™ gate driver technology

Benefits
- High power & current densities
- Multiple terminal options
- Compatible with third party PM motors
- Compatible with brushless resolvers (Tamagawa, LTN, and others)

Ideal for a Variety of Electric & Hybrid Vehicle, Motor/Generator control and Variable Frequency DC-AC Converter.
TM4® CO150 Motor Controller / Inverter

Introducing TM4 CO150 motor controller/inverter designed for electric and hybrid vehicles. This inverter uses the latest technology of automotive grade insulated-gate bipolar transistors (IGBT) to deliver the industry’s highest specific power and current densities. It is embedded with advanced control algorithms for optimal power module usage and efficiency. Combining hardware and software innovations, the Reflex™ gate driver technology anticipates a voltage peak on the IGBT, and it ensures that it never reaches the voltage limit.

Hardware Features
- 3-phase motor controller/inverter
- High power and current densities
- Uses Reflex™ gate driver technology
- Multiple resolver/encoder compatibility
- Four-quadrant operation
- High efficiency
- Variable switching frequency

Software Features
- Sinusoidal motor current
- Temperature sensing for system derating and alarms
- Communication fault detection
- CAN 2.0b communication interface
- Torque or speed control
- Advanced control algorithm for optimal power module usage and efficiency
- Compatible with TM4’s ODIN advanced diagnostic software suite

Other
- The TM4 CO150 is also offered as an auxiliary inverter

<table>
<thead>
<tr>
<th>INVERTER</th>
<th>Max electrical output power</th>
<th>Max output current</th>
<th>Max blocked rotor current</th>
<th>Max electrical frequency</th>
<th>Performance voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO150</td>
<td>180 kW(^1)</td>
<td>615 Arms</td>
<td>650 Adc</td>
<td>1.25 kHz</td>
<td>320-450 Vdc</td>
</tr>
<tr>
<td>CO150HV</td>
<td>200 kW(^2)</td>
<td>425 Arms</td>
<td>450 Adc</td>
<td>750 Hz</td>
<td>500-750 Vdc</td>
</tr>
</tbody>
</table>

Specifications are subject to change.
\(^1\) 450 Vdc, 30 seconds, 65°C
\(^2\) 750 Vdc, 30 seconds, 65°C

Multi-phase Option
TM4 also offers its CO200 6 phase and CO300 9 phase inverters as an alternative for high power electric & hybrid vehicle motor / generator control needs.