

## Overview

The Solectria UMOC is a self-contained, microprocessor controlled, three-phase AC vector control power inverter for AC induction, DC brushless traction drive and auxiliary drive motors. The UMOC utilizes highly reliable IGBT power semiconductor switches.

## Applications

Responding to all input sensors and commands, the UMOC provides the power output necessary to operate an over-the-road vehicle. In addition to controlling the main traction motor, the UMOC can send signals to dashboard displays and exterior vehicle signal lights.

## Features

- Regenerative braking
- Automatic thermal protection
- Over and under voltage limits for batteries
- Internal contactor
- Self-contained operation
- High-speed microprocessor
- Multi-level safety systems
- Lightweight aluminum chassis
- Trenchgate IGBTs for highest possible efficiency
- High-power air cooling system

## Available and Custom Options

- Interface kit includes mating connectors, mounting hardware, 25-pin cable, accelerator/brake controller, forward/reverse switch, power saver control, and regen disable switch.
- Driver's console can be configured to operate single or multiple controllers
- Factory customized parameter settings

An engineering fee applies to all customized orders.



## Specifications

<b>Dimensions</b>	488mm x 225mm x 235mm
<b>Weight</b>	15.9kg
<b>Min. Nominal Battery Voltage</b>	216VDC
<b>Max. Nominal Battery Voltage</b>	312VDC
<b>Min. Operational Voltage</b>	160VDC
<b>Max. Operational Voltage</b>	370VDC
<b>Unit Efficiency</b>	96-98%
<b>Min./Max. Operating Temps.</b>	-40°C to 75°C
<b>Max. Current</b>	280A rms
<b>Peak Power</b>	78kW @ 312V
<b>Continuous Power</b>	38kW @ 312V
<b>Max. Voltage "On Charge"</b>	450VDC

**Battery Voltage vs. Peak Power  
UMOC445TF**



