



Hybrid



Electric

Explore our Technologies

AC Motor Controller

Gen4 Size 10

AC Motor Controller Gen4 (Size 10)

An AC motor controller designed to meet the high performance requirements of on-road and off-road Electric (EV) and Hybrid Electric Vehicles (HEV).

The Gen4 Size 10 is capable of operation up to 800 VDC and up to 450 A rms phase current.

Features

- Advanced Field Oriented Control
- AC Permanent Magnet Synchronous motor control, including salient, non-salient and BLDC motors
- AC induction motor control
- CAN communications bus allows for easy interconnection of controllers and devices such as Battery Management Systems, displays and VCUs
- CANopen and J1939 protocols
- Configurable as a vehicle control master or as a motor control slave
- Integrated logic circuit, 12 V or 24 V nominal
- Up to 800 VDC supply voltage
- Up to 300 kW peak power output
- Up to 150 kW continuous power output
- Includes an additional dedicated safety supervisory processor
- Safety interlock pulsed enable signal
- Highly configurable

Integrated I/O

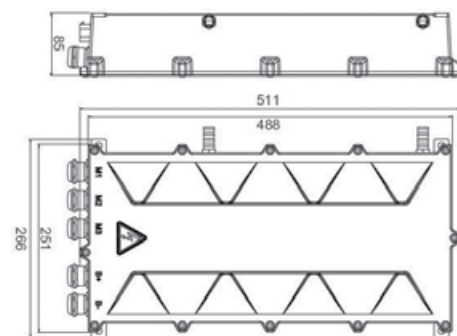
Gen4 Size 10 includes a fully-integrated set of inputs and outputs (I/O) designed to handle a wide range of vehicle requirements. This eliminated the need for additional external I/O modules or vehicle controllers and connectors.

- All I/O protected to 40 V
- 4 analogue inputs 0 - 10 V
- 4 digital inputs
- 3 power supplies 0 - 10 V 100 mA
- 3 contactor/solenoid outputs max 2 A
- Motor temperature sensor input
- Programmable 5 V to 10 V encoder supply
- Motor encoders supported include Resolver, UVW hall effect sensors, Sin/Cos sensors and incremental AB encoders

Key Parameters

- Operating voltage range at full current 50 V to 800 V
- Output motor phase current:
 - 400 A rms (2 min)
 - 200 A rms (Continuous)
- Water/Glycol coolant (oil cooling available for custom applications)
- Weight: 10.9 kg

Dimensions



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