

Fast Facts

ECU-Electronic Control Unit / E-Mobility

The customer specific inverter for E-drives contains the required hard and software components for controlling the synchronous engine as well as the control of the complete vehicle.

An integrated DC / DC converter supplies the 12 V vehicle system voltage for light, water pump, E-Gas reporting, dashboard etc.. The heat reduction of the power stage is done via water cooling system.



Typical applications

This customer specific inverter was developed for an all-electric motorcycle.

Special features

- Thermal management at 0.1 K/W
- Scalable power stage
- Project handling and integration of hard and software according to ISO26262 ASIL-C level
- Specific power density: 11.7 kW/kg

Application specific data

Voltage range: 200 V - 303 V
Continuous current: 39.4 Aeff
Peak current: 137.9 Aeff

Rotation speed: max. 6,600 rpm
Lifetime: 1,000 h / 10 years

Special application: KTM Freeride E Motocross Bike

KYOCERA AVX Components (Salzburg) was involved in the development of the KTM Freeride E from an early stage. The bike has already been ridden by impressed motorbike trade journalists and is scheduled for market launch in 2014. Since becoming involved in the project in 2008, KYOCERA AVX Components (Salzburg) has taken responsibility for transforming the bike's main electronic control unit from the prototype built by KTM in conjunction with its research partner into a robust and reliable module suitable for series production.

