



# 48V DC/DC Converter

## 12V <-> 48V board net voltage conversion for the mass hybridization

For hybrid and electric vehicles, efficient, space-saving and weight-reduced alternative drives are always required. The 48 Volt H/E-Power System with integrated Engine Management System and Belt Starter Generator from Continental Engineering Services has been developed for cost-efficient mass hybridization. The 48 Volt DC/DC converter connects the 48 Volt and the 12 Volt board net. It provides a stable power supply even if the engine is switched off, for example during advanced stop-start and coasting.

### Highlights:

- › Bi-directional DC/DC converter 12V <-> 48V
- › 12V boardnet supply and stabilization in combination with 48V generator
- › Pre-charging function for 48V DC-link

### Features:

- › Robustness against water & dirt
- › Highest power density
- › Passive air-cooled
- › Self-protection by diagnosis und limitation
- › Digital voltage and current control
- › Supporting up to ASIL C
- › Flat design

### Functions:

- › Efficiency: > 95%
- › Ambient Temperature: -40 to + 90°C
- › Communication Interface: CAN
- › Power Connections: M8 bolts
- › Weight: < 2,5kg
- › Dimensions: L 235 x W 175 x H 75mm

### Buck Mode

- › Operating Range: 6V to 16V
- › Continuous Output Current: 215A
- › Peak Output Current: 224A for 10 min

### Boost Mode

- › Operating Range: 24V to 54V
- › Continuous Output Current: 58A

