

## Eaton 48V DC-DC Converter



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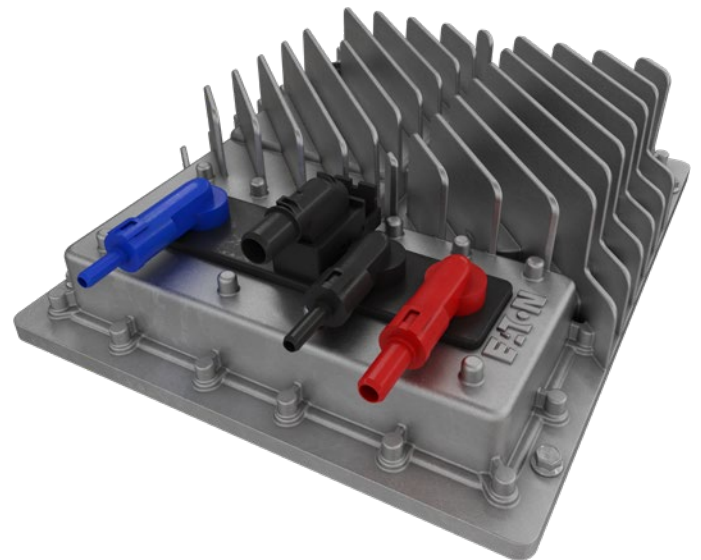
Eaton's family of 48V DC/DC converters offer high efficiency, bi-directional operation, and air-cooled design, specifically designed for the demands of commercial vehicle electrical systems.

### Features & Benefits

- Allows use of 12V or 24V electrical components in a 48V electrical system
- Natural convection, air-cooled design for ease of integration
- CAN FD or CAN 2.0 (250k or 500k) compatible
- Low Power wake-up (< 2mA sleep quiescent current)
- Voltage regulation of +/- 100mV

### Key Differentiators

- Operation at ambient temperatures up to 85°C
- 97% efficient design, optimized to provide low power loss over a wide operating range
- IP6k9k sealed, including power and control connectors
- Digital control architecture, flexible control modes through firmware adaptation
- Compatible with ASIL B functional safety requirements
- Family of converters allows OEMs to choose a DC-DC Converter similar to alternator specification

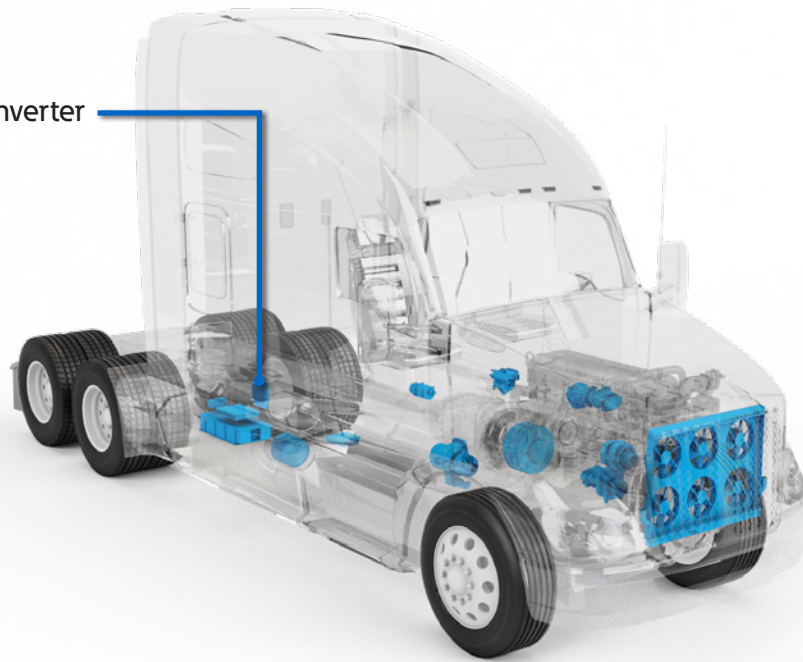


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## DC-DC Converter

<b>Maximum Current</b>	Up to 240A on the low-voltage side from 6V to 26V
<b>Max High-side (48V) voltage</b>	60V continuous Zener clamped – 100V tolerant design
<b>Max Low-side (12V or 24V) voltage</b>	26V continuous Zener clamped – 60V tolerant design
<b>Input voltage range</b>	High side: 16V-60V* Low-side: 6-26V
<b>Operating Temperature:</b>	-40C to 125C
<b>Storage Temperature:</b>	-55C to 125C
<b>Ambient Air Temperature:</b>	-40C to 85C
<b>Power Connectors:</b>	Royal Power Solutions HPLB RD8 (fully sealed w/CPA)
<b>Control Connector:</b>	TE HDSCS 12-pin

\* The voltage on the high side (48V) must always be greater than the low-side.

## 48V DC-DC Converter Models

	2-Phase	3-Phase	4-Phase	6-Phase
<b>Rated Current</b>	80A	120A	160A	240A
<b>Dimensions</b>				
<b>Length</b>	271mm	271mm	313mm	371mm
<b>Width</b>	243mm	243mm	243mm	243mm
<b>Height</b>	75mm	75mm	75mm	99mm
<b>Weight</b>	2.4 kg	2.4 kg	2.9 kg	4.7 kg



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