

# Medium Duty Truck EV System

## Class 5/6/7

Our Modular Power Control System (MPCS) offers a compact and lightweight design in a configuration customized for the commercial truck market. The MPCS delivers premium power and performance, utilizing BAE Systems' power electronics to offer a straightforward solution.

The MD-MPCS incorporates all the key features needed in a battery electric Medium Duty (MD) truck.

- Multi-pack battery combiner
- DC plug-in charging input
- Traction inverter
- AC & DC ground fault monitoring
- HVDC heater port
- HV accessory power output



**MD-MPCS**

Using our modular slice technology, we can customize the power control system to suit your needs.

Coupling the Eaton MD 4-speed EV transmission with the BAE Systems GPM-5 motor creates a solution designed to meet the demands of the medium duty truck market. With almost 6000Nm of torque delivered to the rear axle and a 1:1 top gear ratio, launching at GVWR and cruising on the highway are no problem.

The MD-E41Drive provides for a compact traction package solution that is easily compatible with existing platforms.

- Eaton MD 4-speed EV transmission
- BAE Systems GPM-5 traction motor



**MD-E41Drive**

BAE Systems and Eaton combine products and expertise for a compact solution with performance, simplicity and efficiency.

### MD-MPCS Features & Specifications

- Reduced system components and complexity
- Rugged, compact design for commercial vehicles
- Advanced inverter technology w/silicon carbide switches
- 3 x 300A battery input ports
- 200ADC charge input port (CCS1)
- 300kW SiC traction inverter
- 60ADC heater port
- 300ADC accessory power output
- 52kg total weight

### MD-E41Drive Features & Specifications

- Central drive for easy integration, installation and service
- 4-spd. EV transmission with integrated electronic shift actuation
- Direct drive top gear for highway cruising efficiency
- All aluminium housings for reduced weight
- 5800Nm peak output torque
- 230 kW peak power
- 275kg total weight

**North America**  
BAE Systems  
1098 Clark Street  
Endicott, NY 13760  
USA

[www.gettozero.com](http://www.gettozero.com)

**Rest of World**  
BAE Systems  
Marconi Way  
Rochester, Kent ME1 2XX  
UK

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