Explore our Technologies

Gen5 High Voltage DC/DC

for commercial vehicles

BORGWARNER

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for commercial vehicles

The Gen5 range of products is well matched to satisfy the electrification needs of automotive, commercial and construction markets. The High Voltage DC/DC converter is specifically aimed at vehicle OEM's and system integrators to offer a compact, lightweight, rugged and cost effective class leading solution.

The BorgWarner High Voltage DC/DC converter is suitable for a wide range of electric powered vehicles and are specifically designed to be fitted on-board the vehicle and connected permanently to the battery. It is designed to satisfy the current trend to use higher battery voltages between 220VDC to 800VDC which are converted to lower voltages to power ancillary loads.

The 12VDC output variant is capable of supplying up to 1.2kW power and the exact output voltage can be controlled over the CAN bus.

The High Voltage DC/DC is designed to offer full performance across the temperature range of –40°C to +80°C (air cooled). It has many protection features such as Input Under/Over Voltage Lock-Out, current limit, output short circuit and over temperature. The CAN communications features allow the units to be enabled and disabled with communications messages.

Key Parameters

— Air cooled
— Wide in put range 220VDC to 800VDC
— Output voltage configurable from 12V to 14.5V
— 1.2kW Output power per unit
— High Efficiency >92% from 50% to 100% load
— Parallel connection of multiple units for increased power or redundancy
— Environmental: –40°C to +80°C (air cooled) operation, IP67
— Controllable over CAN or digital I/O (enable and power okay signals)
— dimensions: 267mm x 176mm x 93mm weight: 4.4kg

Smart Communications

The unit can be enable, disabled and monitored using CAN communication messages if required, the functionality provided includes:

— Output enable/disable function
— Output voltage setting
— Output current setting and limiting
— Monitoring of status and operational values

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