



Hybrid



Electric

Explore our Technologies

DC Motor Controller Gen4

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The Gen4 DC sets a new standard in DC motor controller performance and reliability and is compatible with Separately Excited Motor (SEM), Permanent Magnet brushed motors and Series wound motors. It utilizes four-quadrant armature control, resulting in immediate delivery of motor torque and enhanced fault protection of the system. Integrated vehicle control functionality means that VCU functionality can be configured within the Gen4 DC unit. Speed limitation is available by use of complementary switching MOSFET operation and battery current regeneration is possible in most motor configurations.



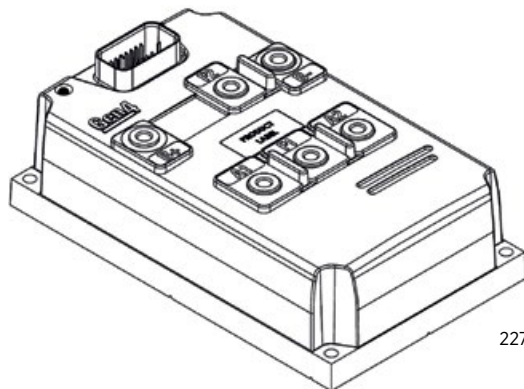
Features

- Integrated IO and logic circuit
- Supports DC SEM, PM Brushed and Series motors
- Hill decent speed limitation
- Hardware and software failsafe watchdog operation
- Integrated Capacitor pre-charge function
- CANopen communications bus allows for easy interconnection of controllers and devices such as BMS, displays and VCUs
- Configurable as a vehicle control master or as a motor control slave
- Power up auto-check system fault diagnostics
- IP66 protection

Integrated I/O

Gen4 includes a fully integrated set of inputs and outputs (I/O) with vehicle control functionality, designed to handle a wide range of system requirements and functions. This frequently eliminates the need for additional external I/O modules, vehicle control units and connectors.

- Up to 8 digital inputs
- Up to 3 analogue inputs
- Up to 4 contactor/solenoid outputs
- Dedicated 5 V, 200 mA output
- Dedicated 10 V, 200 mA output
- Single channel and AB speed encoders
- Motor temperature sensor input



227 mm (L) x 138 mm (W) x 73 mm (H), Weight 2 kg

Key Parameters

	400 A		550 A	
Nominal Battery Voltage	36 V/ 48 V	60 V/ 72 V	36 V/ 48 V	60 V/ 72 V
Maximum Operating Voltage	69 V	90 V	69 V	90 V
Minimum Operating Voltage	20 V	31 V	20 V	31 V
Peak Current (Armature/Field)	400 A/ 50 A	400 A/ 50 A	550 A/ 50 A	550 A/ 50 A
Armature Boost Current (up to 10 sec)	480 A	480 A	650 A	650 A
Armature Cont Current (60 min)	150 A	150 A	170 A	170 A

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