



Explore our Technologies
**AC Motor Controller
Dragon 8**

from BorgWarner

BORGWARNER

AC Motor Controller (Dragon 8) from BorgWarner

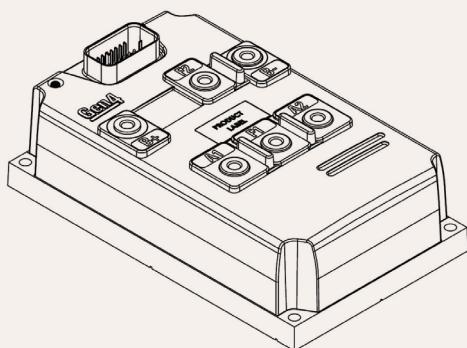
The Dragon 8 sets a new standard in AC motor controller performance and reliability.

It is compatible with a wide range of motors – Asynchronous AC Induction and Synchronous Permanent Magnet AC (PMAC) or Brushless DC (BLDC).

Dragon 8 has electrical isolation between high power battery/motor wiring and the lower voltage control signals and CANBus. This allows the IO to reference the 12V (or 24V) battery and vehicle chassis return path.

Features

- Integrated & isolated IO and logic circuit
- Supports AC Induction and PMAC/BLDC
- Isolated CAN communications bus allows for easy interconnection of controllers and devices such as Battery Management Systems, displays and VCUs
- CANopen and J1939 protocols
- Configurable as a vehicle control master or as a motor control slave
- Power up auto-check system fault diagnostics
- Programmable battery current limit
- IP66 protection
- Integrated power fuse holder



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

Integrated I/O

Dragon 8 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 6 digital inputs (3 inputs dual use as UVW encoder input)
- Up to 4 analogue input (2 analogue inputs dual use as Sin/Cos encoder input)
- Up to 2 contactor drivers
- Dedicated 5V, 200mA output
- Dedicated 10V, 200mA output
- Motor temperature sensor input
- Motor encoders supported include Resolver (programmable gain), UVW hall effect sensors, Sin/Cos sensors and incremental AB encoders

Key Parameters

96 V Version	
Nominal Battery Voltage	48 V – 96 V
Maximum Operating Voltage	139 V
Minimum Operating Voltage	20 V
Boost Phase Current (10 seconds)	400 A rms
Peak Phase Current (2 minutes)	300 A rms
Continuous Phase Current (1 hour)	110 A rms