

PRESS RELEASE

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Axiomatic Technologies Corporation releases new BLDC motor controllers for operation in harsh environments.

The [AX100280](#) and [AX100281](#) Axiomatic Motor Controllers are created with a highly efficient and robust design to provide precise speed control of fans, pumps, or actuators and can operate in the harsh environments of engine applications. An output power of up to 480 W is generated to drive a bidirectional or unidirectional BLDC motor integrated into a machine. Sensorless operation via back-EMF rotor position detection or Hall effect sensor feedback is available. These rugged motor controls offer flexible control with user selectable modes of open/closed loop speed, current control, position control, or PID control.



[Item # AX100281 — 4 Inputs, 480W BLDC Motor Controller, CANopen®](#)

The 480 W BLDC Motor Controllers can accept 12, 24, or 48 VDC nominal power (9 to 65 VDC), and feature CAN-based communication (SAE J1939 or CANopen®). [AX100280](#) is Axiomatic's SAE J1939-based model, user configurable using the Axiomatic Electronic Assistant KIT, [AX070506K](#). [AX100281](#) is Axiomatic's CANopen®-based model, user configurable using standard CANopen® tools. An ignition switch input turns the devices ON, with and additional 4 universal signal inputs selectable as analog (0-5 V, 0-10 V, 0-20 mA, 4-20 mA), resistive (20 Ω to 250 k Ω), digital (0.5 Hz to 15 kHz, PWM, active high, active low), or quadrature encoder.



The 4 Inputs, 480W BLDC Motor Controllers are designed with an IP67-rated, high temperature nylon TE Deutsch housing to confidently operate in moist environments up to 125 °C (257 °F). [AX100280](#) and [AX100281](#) are suitable for a variety of applications including, but not limited to, the following:

- Motor variable speed, position, and/or flow control in lift equipment
- Electric vehicles for material handling
- Hydraulic power packs, tail lifts, and winches
- Military equipment
- Mobile pumps
- Cranes and hoists
- Trucks
- Golf carts

For more details, please visit the [AX100280](#) and [AX100281](#) webpages.

These models are part of Axiomatic Technologies' [Brushless DC \(BLDC\) Motor Controllers](#) line-up.

Axiomatic offers [Brushed DC Motor Controllers](#) such as [AX102100](#) to operate the steer function in industrial lifts and [AX105000](#) to operate the drive function in industrial lifts.

You can browse through our catalog of [Motor Drives & Controllers](#) and other [Power Management](#) solutions.

Axiomatic Technologies Corporation (axiomatic.com) began the design and manufacturing of rugged electronic controls and power converters in 1991 for mining, construction, agriculture, forestry, municipal, utility, lift, material handling, autonomous vehicle, on-highway truck and bus, rail, power generator, and marine engine equipment manufacturers (OEM). Product lines include: SAE J1939, CANopen®, CAN-FD, LIN, Modbus, RS-232, RS-422, RS-485, and BLE converters; CAN routers and repeaters; CAN I/O controllers and valve drivers; Ethernet I/O; Ethernet, PoE and Automotive Ethernet switches and converters; GMSL converters; H-bridge controllers; BLDC controls; FOC drivers; RTD, PTC, and TC scanners; DC-DC converters; Power supplies; Inclinometers; and Laser receivers.

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