



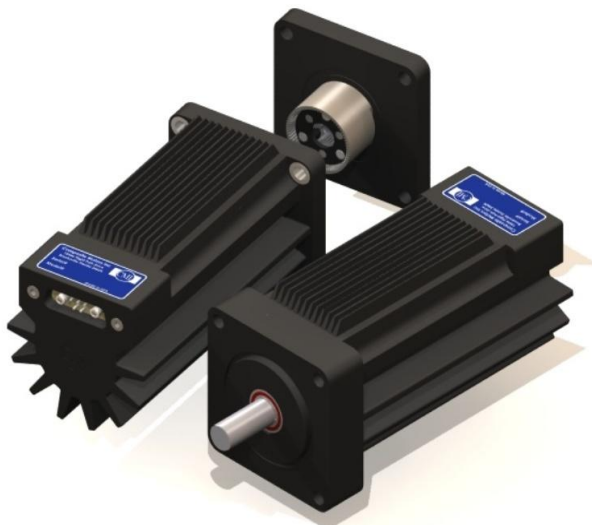
GRMA-010 GEAR MOTOR

POWER PERFORMANCE AND TOUGHNESS NOT SEEN BEFORE IN A MOTOR THIS SIZE

Introducing CMI's GRMA-010 series gear motor units, made possible by CMI proprietary materials and designs*. CMI clad metals, made in house, and used for electronic substrates and the hermetic electronic enclosure achieve maximum thermal transfer.

Custom stator design and special winding equipment also made in house, results in high density slot fill. Each motor is an integral over molded package consisting of a BLDC motor, heat sink and electronic driver mated to an interchangeable planetary gear reducer. They produce extremely high power for their size and are available in a variety of ratios, speeds, torque, and Watt ratings.

These gear motors have been tested and proven to withstand very harsh environments, salt water, many chemicals and high temperatures. The drivers are hermetically sealed and the entire unit is autoclavable.



TESTING:

- Mil-Spec 810 compliant.
- IP67-1m enclosure tested at one meter depth while operating under load for eight hours at 212° F (100° C) boiling salt water at maximum concentration.
- Survived 1000 cycles of thermally induced self shutdown at 150° C.
- Continuous power and current ratings established at 25° C and stabilized at a motor operating temperature of 125° C.

FEATURES:

- Compact size includes motor, driver and planetary gear reducer.
- SmCo Rare earth rotor magnets are encapsulated and sleeved with stainless steel.
- Integral D-sub power and signal connector adapts to standard D-sub connector or submersible CMI connector.
- Carbon fiber or fiberglass reinforced plastic housing is submersible, high temperature, UV, chemical, steam, and flame resistant.
- AGMA 10 planetary gear assembly is Integral, but easily removed for access.
- Reliable operation from -20°C to 125°C, device temperature.
- Operating voltages range from 10vdc to 24vdc.
- Peak power ratings up to 850W (in 25°C ambient).
- Peak current limiting, up to 75 amps.

APPLICATIONS:

- Industrial/Automation
- Personal Transportation
- Marine
- Military/Aerospace

* Patent Pending