COMPOSITE MODULES, INC.

3 PHASE BRUSHLESS DC MOTOR CONTROL DRIVER

CMI 5015-12 Features:

- Single Supply Operation
- Low Loss Current Sensing
- Under Voltage Lockout
- Automatic Brake Actuation
- 100 mA + 12 Volt Reference
- Forward / Reverse Control
- Thermal Shutdown
- Internal Bus Capacitor
- \sim -55°C to +125°C Operation

Description:

The CMI 5015-12 motor control module is specifically designed for operating fractional horsepower motors. This unique module operates from a single input supply ranging from +4 to +12 Volts with output capabilities of 5 to 30 Amps continuous current and peak currents of 45 Amps. Housed in a metal hermetic package this module is suited for applications in harsh environments.

Designed with the user in mind this plug and play module is easy to use. The circuit uses the latest in ASIC technology for commutation, cross conduction protection, automatic braking, under voltage lockout and cycle-bycycle current limiting. It also contains a temperature compensated voltage reference.



The high efficiency "N" Channel MOSFET output stage, driven with a custom high side driver, allows true low to zero speed operation without the loss of the high side voltages. A unique low loss current sensing circuit and an internal bus capacitor eliminate the need for large external components.

The CMI 5015-12 incorporates a DC/DC converter that allows the module to operate off a single supply as low as 4 Volts while supplying the maximum current to the output stage. Standard electrical sensor phasing is 60° with a factory wiring option of 120° .

CMI

