



The MCR series Intelligent Motion Driver/Controllers are 4 and 8 axis integrated stepping motor controllers that drive and control 2-phase stepping motors with phase currents from 0.25 to 3.0Amps/phase, simultaneously. MCR controllers perform indexing functions without the need of a host computer, or can operate under the direction of a host. The MCR's internal non-volatile memory will store and execute a programmed instruction set. High efficiency, low noise motor drivers provide ideal remote control for multi-axis positioners, beamline shutters and other laboratory control instrumentation.

MCR Controller Features

- Powers, Drives and Controls up to 4 (MCR-4) or 8 (MCR-8) 2-Phase Stepping Motors with Stepping Rates up to 50,000 Steps/Sec.
- Adjustable Motor Winding Current 0.25 – 3.0 Amps/Phase
- High Efficiency, Low Noise Motor Drivers Designed for Laboratory Applications
- Nonvolatile Memory for Control Variables & Comprehensive Motion Instruction Set
- Quick Adjust Front Panel Controls for Setting & Changing Motor Current, Idle Current and Stepping Mode
- Front Panel LED Indicators for Home, Limits and Motor Busy Status
- Certified Scientific Software – spec Driver Support
- EPICS Driver Support
- Ethernet & RS-232 Serial Communications
- Circular Connectors
 - Motor 5-Pin Conxall/Switchcraft
 - Limits 7-Pin Conxall/Switchcraft
- Optional External Manual Jog Control



MCR Controller Specifications

- Electrical
 - Motor Drive Current 0.25 – 3.0 Amps/Phase
 - Motor Idle Current 0 to 3.0 Amps/Phase
 - System Power Supply – 120VAC Standard
220VAC Optional
- Motor Requirements
 - 2-Phase Bi-Polar Stepping Motors, or
 - 4-Phase Motors Connected as 2-Phase
 - 4, 6 or 8 Leads
 - 0.25 – 3.00Amp Winding Current
- Motor Operating Mode
 - Low Noise Bi-Polar Chopper Drive
 - Full Stepping
 - Half Step with Torque Compensation
 - Quarter Step with Torque Compensation
 - Eighth Step with Torque Compensation
- Environmental
 - Operating Temperature 0C – 50C (32F – 140F)
 - Storage Temperature -20C – 70C (-4F – 160F)
 - Humidity <95% Non-Condensing
- Physical
 - Width – 19.00" (482.60mm)
 - Depth – 15.25" (387.35mm)
 - Height – 3.469" (88.11mm) / 2U Rack Spacing
 - Circular Connectors for Motor and Limits Wiring