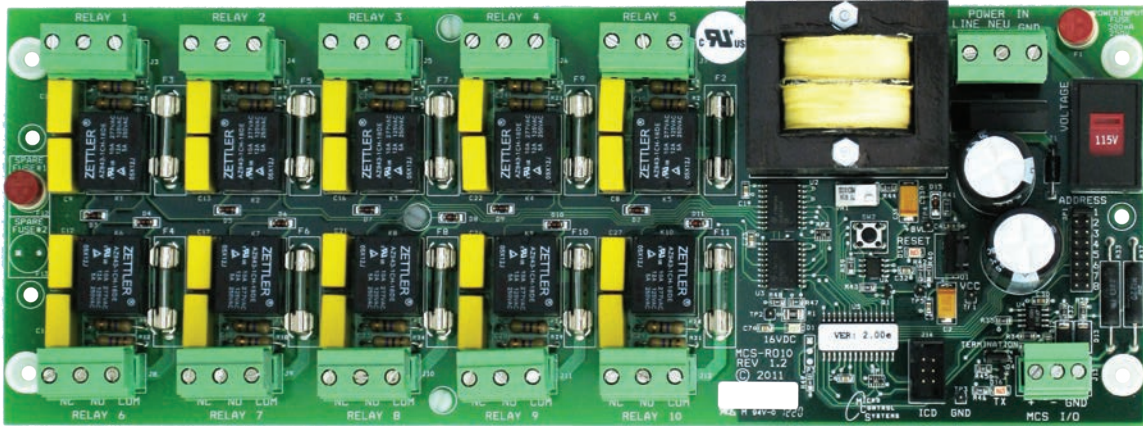




# MCS-RO10

## Description & Specifications



Part # MCS-RO10



### Description

The **MCS-RO10** provides a flexible and cost effective way to allow relay output expansion for **MCS-MAGNUM**. Each MCS-RO10 has a stand-alone microprocessor which communicates with a MCS MAGNUM over the MCS-I/O port at 38,400 baud. All data is check summed with auto error correction. Because the communication is over a RS-485 long distance two-wire differential network transmission system, the MCS-RO10 may be located up to 5,000 feet away. Each MCS-RO10 board is equipped with a dual voltage power transformer and an automatic power fail reset system.

The printed circuit board is a four layer board with a separate power and ground plane to provide the ultimate in electrical noise suppression. This coupled with noise suppression electronics makes the MCS-RO10 virtually impervious to electrical noise.

The MCS-RO10 provides ten relay outputs fused at 6.3 amps each using standard 5 x 20mm fuses. This allows for easy field replacement. Each relay output provides common, normally open and normally closed contacts on a removable terminal block. The terminal blocks provide screw connections which eliminate the need for sta-cons. Because the terminal blocks are removable, board replacement requires no wires to be removed.

The MCS-RO10 has the same footprint as the MCS-RO8 and can be used in place of a MCS-RO8. However, to make use of Relay Outputs 9 and 10 requires connection to a MCS-MAGNUM controller running version 8 or higher firmware.

### Specifications

#### Controller

- Dimensions..... 10.87"l, 4.00"w, 2.50"h
- Mounting Holes..... Mounts on a backplane using four #6 sheet metal screws
- Cover..... Lexan with standoffs
- Operating Temperature..... -40°F to +158°F (-40°C to +70°C)
- Operating Humidity..... 0-95% Non-Condensing
- Storage Temperature..... -40°F to +158°F (-40°C to +70°C)
- Microprocessor..... Microchip PIC16F883 @ 8mhz
- Relay Outputs (RO)..... 10 outputs 6.3amps @ 230vac
- Printed Circuit Board ..... Four layer with separate power and ground planes
- Input Power (Standard) ..... 115 or 230vac ±10% 50/60Hz @ 77°F (25°C) ambient, 12VA max (Voltage is field selectable)
- MCS-I/O Comm Port ..... 1 @ 38,400 baud
- Power Detection ..... Automatic power fail reset

#### Options

- 24 ..... 24vac input power ±10% 50/60Hz @ 77°F (25°C) ambient

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