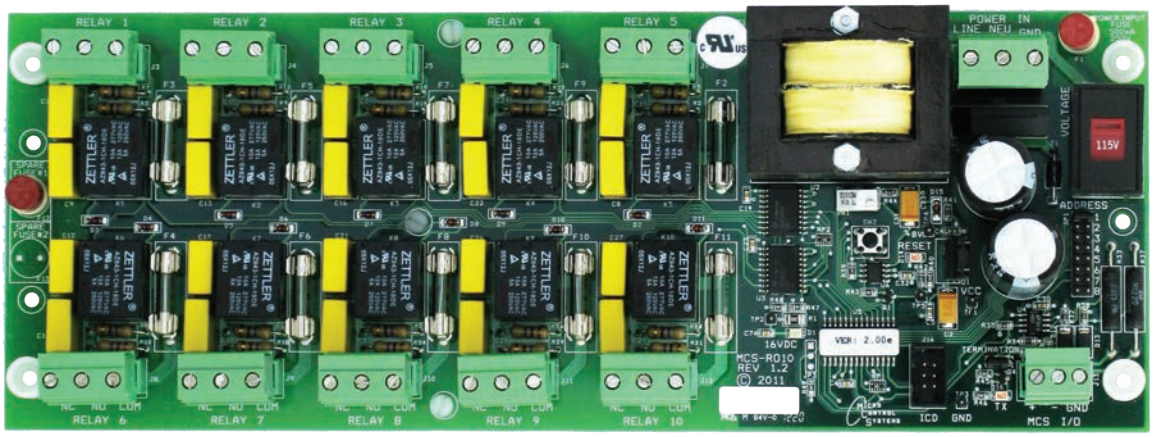
MCS-RO10
Description & Specifications



RoHS Compliant

Part # **MCS-RO10**

c UL us
File No: E169780

Description

The **MCS-RO10** provides a flexible and cost effective way to allow relay output expansion for **MCS-MAGNUM and [1]MicroMag** controllers. 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.

[1]MicroMag firmware and configuration software must be upgraded to Version 18.

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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5580 Enterprise Pkwy., Fort Myers, FL 33905
Office: 239-694-0089 • Fax: 239-694-0031 www.mcscontrols.com