



MCS-RO-BASE
REV 1.8
10-022-BASE-C
MICRO CONTROL SYSTEMS
MCS-RO-BASE

Part # MCS-RO-BASE



File No: E169780

Description

The **MCS-RO-BASE** provides a flexible and cost effective way to allow relay output expansion for the **MCS-MAGNUM**, and **Micromag**. Each MCS-RO-BASE has a stand-alone microprocessor which communicates with a Magnum/Micromag 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-RO-BASE may be located up to 5,000 feet away. The MCS-RO-BASE board is powered by a 12VDC regulated power supply.

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-RO-BASE virtually impervious to electrical noise.

The MCS-RO-BASE provides ten relay outputs fused at 5.0 amps. 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-RO-BASE allows one optional MCS-RO-EXT board to be stacked on top by using a board stacker header. Doing so will expand the number of Relays from 10 to 20, allowing twice the number of relays in the same footprint of one MCS-RO-BASE.

Specifications

Controller

Dimensions 9.5"l, 4.00"w, 2.50" h
 Mounting Holes Mounts on a backplane using four #6 sheet metal screws
 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 5amps @ 230VAC
 Printed Circuit Board Four layer with separate power and ground planes
 Input Power (Standard) 12 vdc Regulated Power Supply
 Minimum (Brown in) 10.50 vdc
 Amp Draw (Loaded) 311.0 mA
 MCS-I/O Comm Port 1 @ 38,400 Baud
 Power Detection Automatic power fail reset

Packaging

Kit of (4) #6 x 1" Phillips Panhead Zinc Plated Steel Screws
 Ship Weight 0.94 lb (approx)
 Box Dimensions 12" x 5" x 3" (approx)