Description

The MCS-MAGNUM is a durable microprocessor based controller designed for the hostile environments in the HVAC/R industry. It is designed to be the primary manager of the package it is controlling.

The Magnum provides flexibility with setpoints and control options that can be selected prior to commissioning a system or when the unit is live and functioning. Displays, alarms and other interfaces are accomplished in a clear and simple language that informs the user as to the status of the controller.

The MCS-MAGNUM-OEM consists of a master micro controller along with a keypad and display. Complementing the Magnum micro controller are the MCS-RO10 and MCS-SI16-AO4 expansion boards. This allows for system expansion to a maximum of 112 inputs and 108 outputs. Communication with these units occurs at 38,400 baud over the MCS-I/O port, which is dedicated to this purpose.

A RS-485 port is also provided for communication with other manufacturers systems. Other new features include the integration of BACnet IP, Modbus IP and Modbus RTU into the Magnum. A MCS-BMS-GATEWAY is also available that allows communication via BACnet MSTP and LonWorks, or the data format is available to allow the user to communicate directly.

A complete software support package is available for your PC, allowing for system configuration, dynamic on-line display screens, remote communication, graphing and more.

Optional mounting kit available, see under options.

Specifications

Controller

Dimensions...12.0"w, 8.0"h, 2.0"d
Mounting Holes Mounts on a backplane or in your enclosure
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...............Zilog eZ80 Acclaim! @ 50mhz
Sensor Inputs (SI).............12 inputs 0-5vdc (10-bit A/D)
Digital Inputs................4 inputs 0 or 5vdc only
Relay Outputs (RO)............10 outputs 6.3amps @ 230vac
Analog Outputs (AO).........4 outputs 0-10vdc
Printed Circuit Board........Six layer with separate power and ground planes
Input Power (Standard)......115 or 230vac ±10% 50/60Hz @ 77°F (25°C) ambient, 20VA max (Voltage is field selectable)
MCS-I/O Comm Port..........1 @ 38,400 baud
RS-485 Comm Port............1 @ 19,200 baud
Ethernet.....................10/100 Mbps Ethernet
Real Time Clock..............Battery backup
Power Detection...............Automatic power fail reset

Options

-MCS-MAG MOUNT KIT - consists of 8 - #6 Sheet Metal Screws, 5 - Standoffs for Lexan Cover and 1 Lexan cover
-24 24vac input power ±10%
50/60Hz @ 77°F (25°C) ambient