MCS-MAGNUM-DOOR-NEMA4

Description & Specifications

Waterproof Keypad

Part # **MCS-MAGNUM-DOOR-NEMA4**

RoHS Compliant

c UL us File No: E169780

Description

The **MCS-MAGNUM-DOOR-NEMA4** has been sealed in its own frame using a new Gasket (BISCO HT-800 Medium Cellular Silicone). The RS485 port has been added to the back of the Keypad. Moving the communicating port to the back, adding the new gasket, provides the unit with a NEMA4 rating. Operating Temperature -4°F to +158°F (-20°C to +70°C)

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-DOOR-NEMA4 consists of a control board 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.

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.

Specifications

Controller

Dimensions	12.0”w, 8.0”h, 2.0”d
Mounting Holes	Mounts on a backplane utilizing eight through-hole studs
Operating Temperature	-40°F to +176°F (-40°C to +80°C)
Storage Temperature	-40°F to +176°F (-40°C to +80°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 Com Port	1 @ 38,400 baud
RS-485 Com Port	1 @ 19,200 baud
Ethernet	10/100 Mbps Ethernet
Real Time Clock	Battery backup
Power Detection	Automatic power fail reset

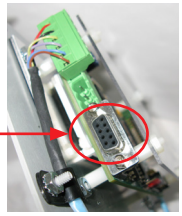
Keypad/LCD

Display	128 x 64 dot pixel STN monochrome graphics LCD with 2.8” diagonal viewing area
Gasket Material	HT-800 Medium Cellular Silicone NEMA 4
Color	White characters on a blue background (Reversible)
Keypad Size	7.25”w x 8.50”h x 1.77”d (8 mounting studs)
Keypad Layout	9 keys (3 function keys)
Connection	6 conductor shielded cable (max length of cable is 50 feet)
RS485 Com Port	1@19200 Baud
Operating Temperature	-4°F to +158°F (-20°C to +70°C)
Storage Temperature	-22°F to +185°F (-30°C to +85°C)

Options

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

-232 .....RS-232 port on back of Keypad



Revision 2015-12-17

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