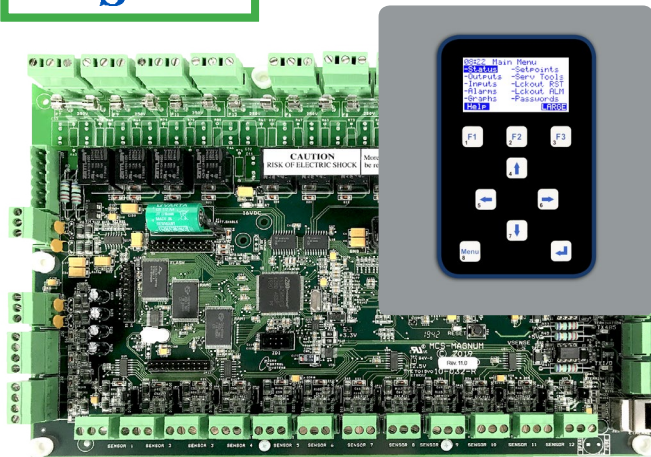




# MCS-MAGNUM-DOOR-12

## Description & Specifications



Part # MCS-MAGNUM-DOOR



### Description

The **MCS-MAGNUM-12** 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-12** consists of a master control board along with a keypad and display. Complementing the Magnum micro controller are the **MCS-RO-BASE**, **MCS-RO-EXT**, **MCS-SI-BASE**, **MCS-SI-EXT** 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 Building Management Systems (BMS). Other 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.

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

### Accessory Parts

#### MCS-RS485-EXTENDER

Cable for extending RS485 port to front of control cabinet



### 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 +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).....	12 vdc Regulated Power Supply
Minimum (Brown in).....	9.44 vdc
Amp Draw (Loaded).....	857.0 mA
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

#### Keypad/LCD

##### NEMA rated Type 1

Display.....	128 x 64 dot pixel STN monochrome graphics LCD with 2.8" diagonal viewing area
Color.....	White characters on a blue background (Reversible)
Keypad Size.....	7.25"w x 8.50"h (8 mounting studs)
Keypad Layout.....	9 keys (3 function keys)
Connection.....	6 conductor shielded cable (max length of cable is 10 feet)
RS-485 Comm Port.....	1 @ 19,200 baud
Operating Temperature.....	-4°F to +158°F (-20°C to +70°C)
Operating Humidity.....	0-95% Non-Condensing
Storage Temperature.....	-22°F to +185°F (-30°C to +85°C)

#### Packaging

MAG-KEYPAD to MAGNUM 6 Conductor Cable with connectors

#### MAGNUM MOUNTING HARDWARE KIT

(8) #6-20 x 1" phillips panhead zinc plated steel drilling screw  
Drilled Lexan 8" x 12" x 0.060 for Magnum board with  
1-5/8" nylon standoff with 5/32" Snap Both Ends

Ship Weight..... 3.84 lb (approx)

Box Dimensions..... 13.25" x 9" x 5" (approx)

#### **POWER SUPPLY NOT INCLUDED**

**Consult MCS-SALES for information on Power Supply sold for this controller.**

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