



MCS-MAGNUM-PANL-12

Description & Specifications



Part # MCS-MAGNUM-PANL-12



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-PANL-12** consists of a master micro controller 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 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.

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 using four #6 (6-32) 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	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 (4 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 +158°F (-30°C to +80°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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