MCS-MAGNUM-OEM-12

Description & Specifications

RoHS Compliant

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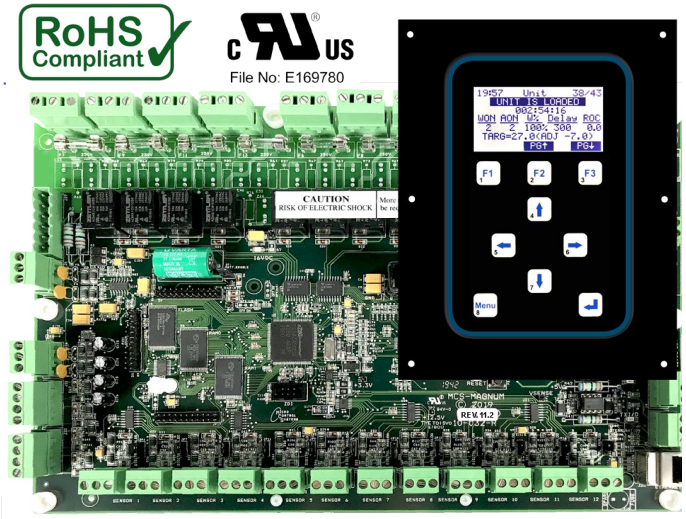

Part # **MCS-MAGNUM-OEM-12**

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-OEM-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).

A **MCS-BMS-GATEWAY** is available to provide protocols for: Bacnet IP, Bacnet MSTP, Modbus IP, Lontalk, or Johnson N2 communication interface. Information that can be transmitted includes the status of the unit, status of the inputs and outputs, alarm information, and setpoints.

MCS-MAGNUM-OEM-12 ships with MAGNUM Hardware Mounting Kit which includes eight #6 sheet metal screws, five Standoffs, one Lexan Cover and MAG-KEYPAD cable for connecting to the MAGNUM.

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

POWER SUPPLY NOT INCLUDED

Specifications

Controller

Dimensions	12.0”w, 8.0”h, 2.0”d
Mounting Holes	Mounts on a backplane using six #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

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

MCS-SHIELDWIRE-GROUNDING multi-terminal splicing connector with 9”- 16 awg wire with ring terminal (package of 2).

MAGNUM Board Only - 12vdc
Magnum LCD / Keypad Interface - OEM Mount
MAG-KEYPAD to MAGNUM 6 Conductor Cable with connectors
Kit of (8) #6 x 1” Phillips Panhead Zinc Plated Steel Screws

Ship Weight	3.45 lb (approx)
Box Dimensions	13.25” x 9” x 5” (approx)

Options

-MCS-RS-485-EXTENDER

Cable for extending RS-485 port to front of control cabinet

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