

MCS-MAGNUM-N-12 Description & Specifications







Part # MCS-MAGNUM-N-12

Description

The MCS-MAGNUM-N-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-N-12 consists of a master micro controller. Complementing the Magnum micro controller are the MCS-RO-BASE, MCS-SI-BASE and MCS-RO-EXT, MCS-SI-EXT expansion boards which allow 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.

The MCS-MAGNUM-12 includes the integration of Modbus RTU communication protocol, which is based on the master-slave architecture for data transfer over RS485 to a BMS system.

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.

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 using
	eight #6 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)
Flash Memory	.8 GB EMMC
Memory Chip	.128 MB DDR3
Digital Inputs	.4 inputs 0 or 5vdc only
Relay Outputs (RO)	.10 outputs 6.3amps @ 230vac
Analog Outputs (AO)	.4 outputs 0-10vdc
Input Power (Standard)	12 vdc Regulated Power Supply
Minimum (Brown out)	. 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
Protocols available	. Modbus RTU, Modbus IP,
Real Time Clock	. Battery backup
Power Detection	
Dookoging	

Packaging

Ship Weight	2.00 lb (approx)
Box Dimensions	14" x 9.5" x 2.5" (approx)

Revision - 2024-08-02