



The MCS-8 Panel Mount Specifications & Description

Physical Characteristics

Package Specifications

| | |
|-----------------------------|--|
| Dimensions | 13.75"w, 12.25"h, 2.50"d |
| Mounting Holes | 6 holes w/rubber grommets |
| Wire Duct | 1.75"w x 1.62"h top & bottom |
| Cover | 12.87"w x 8.25"h hinged & removable |
| Color | Textured 'Profile Gray' |
| Material | 0.062" aluminum |
| Display | 16 character x 2 lines, large character, LED backlight, extended temperature LCD |
| Keypad Size | 8.50"w x 6.00"h recessed |
| Keypad Layout | 8 status & 8 entry keys |
| Operating Temperature | -4°F to +158°F (-20°C to +70°C) |
| Storage Temperature | -22°F to +158°F (-30°C to +70°C) |

Control Specifications

| | |
|------------------------------|---|
| Microprocessor..... | Intel 80C196 @ 12mhz |
| Sensor Inputs (SI) | 8 inputs 0-5vdc (10-bit A/D) |
| Relay Outputs (RO)..... | 8 outputs 10amps @ 115vac |
| Analog Output (AO)..... | (1) 0-10vdc or 4-20mA |
| System Total | 48 inputs and 48 outputs |
| Printed Circuit Board | Four layer with separate power and ground planes |
| Input Power (Standard) | 115vac ±10% 50/60Hz @ 77°F (25°C) ambient, 20VA max |
| MCS-IO Comm Port | 1 @ 38,400 baud |
| RS-485 Comm Port | 1 @ 19,200 baud |
| RS-232 Comm Port..... | 1 @ 19,200 baud |
| Real Time Clock..... | Battery backup |
| Power Detection..... | Automatic power fail reset |
| Authorization | Multiple levels |
| Primary Control | Built in safeties |
| History Information | Automatic 144 samples all points |

Product Description

The MCS-8 is a rugged microprocessor based controller designed for the hostile environment of the HVAC/R industry. It is designed to be the primary manager of the package it is controlling.

The MCS-8 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.

Complementing the MCS-8 micro controller are MCS-I/O, MCS-RO8, MCS-SI8/16 and MCS-AO8 units. This allows for system expansion to a maximum of 48 inputs and 48 outputs.



Part # **MCS-8-P-BLCD**

Options

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|-------------------------------|--|
| MCS-8-P-BLCD-24 | 24vac input power ±10% 50/60Hz @ 77°F (25°C) ambient |
| MCS-8-P-BLCD-230 | 230vac input power ±10% 50/60Hz @ 77°F (25°C) ambient |



File No: E169780 (115vac & 24vac)

The MCS-8-P-BLCD contains a MCS-8-N micro controller along with a keypad and display. It is the managing controller coordinating the other input-output units. All communication to these units occur at 38,400 baud over the MCS-I/O port which is dedicated for this purpose.

A RS-485 port is also provided for communication with other manufacturers systems. A portal is available that allows communication via BACnet, Modbus, Johnson N2, Automated Logic, 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. An optional system development package is also available for the development of proprietary software.