



## The MCS-8 Box Mount Specifications & Description

### Physical Characteristics

#### Package Specifications

Dimensions .....13.87"w, 12.75"h, 2.31"d  
 Mounting Holes .....4 holes 0.31" diameter  
 Wire Duct .....1.75"w x 1.62"h top & bottom  
 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% 50/60 Hz @ 77°F (25°C) ambient, 20VA max  
 MCS-I/O 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 and MCS-SI16 units. This allows for system expansion to a maximum of 48 inputs and 48 outputs.



Part # **MCS-8-B-BlCD**

#### Options

- 24.....24vac input power ±10%  
50/60Hz @ 77°F (25°C) ambient
- 230.....230vac input power ±10%  
50/60Hz @ 77°F (25°C) ambient



File No: E169780 (115vac & 24vac)

The MCS-8-B-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.