



# MCS-MAGNUM-LB-12

## INDUSTRIAL CONTROL PANEL



Part # MCS-MAGNUM-LB-12\*

### Description

The **MCS-MAGNUM-LB-12 Industrial Control Panel** is made of powder-coated aluminum for durability and longevity. A left hand swing door is mounted with three eight-inch hinges for strength. A key lock is provided for security on the door while still giving easy access of the display and keypad.

Critical safety components manufactured by MCS and installed in this panel are UL Recognized Components under UL File #169780 and are also ROHS compliant.

The MCS-MAGNUM-LB-12 comes standard equipped with a Magnum micro controller board, a MCS-SI-Base, Keypad/ LCD, 20A and 5 A Single-Pole Circuit Breaker.

Power is supplied using a MCS-12V power supply.

Panel includes the following; Red Alarm Indicator, Yellow Warning Indicator, Emergency Stop Switch and 3 Position Run/Stop Selector Switch. There is also an electrical outlet for laptop plug-in power at the panel, and a Ground Bar for Sensor input shields.

Options are available for all MCS-MAGNUM Industrial Control Panels with Keypads or Touch Screens. These options are factory installed by MCS at time of purchase. Visit our website for options available.

### OPTIONAL RS-485 EXTENDER

MCS-RS-485-EXTENDER  
Cable for extending RS-485 port to front of control panel.  
Factory installed at time of purchase.



### Specifications

Certification.....UL508A - E511647

#### **NEMA Rating – Type 1 Control Panel - IP20 Rating**

Enclosure is intended for indoor use primarily to provide a degree of protection against contact with the enclosed equipment and is not protected from liquids.

#### **Industrial Control Panel**

Rated Voltage (Standard).....120VAC or 230VAC  
Phase / Frequency .....1 Phase / 60Hz  
Full Load Current(approx) .....40A at 120VAC or 20A at 240VAC  
Short Circuit Current Rating.....10kA  
Dimensions of control panel .....27" w x 34.75" h x 8.0" d  
Mounting Holes .....Mounts, 4 pre-drilled 15/32" holes

#### **Temperature Range for Panel/Keypad/Lcd**

Operating Temp. of control panel.....-4°F to +158°F (-20°C to + 70°C)  
Operating Humidity.....0-95% Non-Condensing  
Storage Temp. ....-22°F to +185°F (-30°C to + 85°C)

#### **MCS-MAGNUM Controller**

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  
Ethernet.....10/100 Mbps Ethernet  
MCS-I/O Comm Port .....1 @ 38,400 baud  
RS-485 Comm Port .....1 @ 19,200 baud  
Real Time Clock .....Battery backup  
Power Detection .....Automatic power fail reset

#### **MCS-SI-BASE Expansion Board**

Sensor Inputs (SI).....16 inputs 0-5VDC (10-bit A/D)  
Analog Outputs (AO) .....4 outputs 0-10VDC  
MCS-I/O Comm Port .....1 @ 38,400 baud

#### **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 (6 mounting studs)  
Keypad Layout .....9 keys (3 function keys)  
Connection .....6 conductor shielded cable  
RS-485 Comm Port .....1 @ 19,200 baud

#### **Packaging**

Weight .....90 lbs (approx)  
Box .....29" x 10" x 37"

5580 Enterprise Pkwy., Fort Myers, FL 33905

Office: 239-694-0089 • Fax: 239-694-0031 [www.mcscontrols.com](http://www.mcscontrols.com)