MCS-MAGNUM-SB-12
INDUSTRIAL CONTROL PANEL

RoHS Compliant ✓

c(UL)us
UL 508A - E511647

Part # **MCS-MAGNUM-SB-12**

Description

The **MCS-MAGNUM-SB-12 Industrial Control Panel*** is made of powder coated aluminum for durability and longevity. A left hand swing door is mounted with three seven-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-SB-12 comes standard equipped with a Magnum micro controller board, Keypad/LCD, a 20 amp and a 5 amp circuit breakers. There is also a electrical outlet for laptop plug-in power at the panel.

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

SHIELDWIRE-GROUNDING multi-terminal connectors are included to eliminate stray electrical current, thereby helping to reduce line noise form the sensors to the controller.

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

Options

MCS-RS-485-EXTENDER
Cable for extending RS-485 port to front of control panel.

-232 .... This adds RS-232 port on Keypad
MCS-RS-232-EXTENDER .... Cable for extending RS-232 port to front of control panel (only available with -232 Keypad option)

Specifications
Industrial Control Panel*

Certification...........................UL508A
NEMA Rating – Type 2; IP 30

Enclosure Dimensions........	18.2"w x 24.75"h x 8"d
	462.28 W x 628.65 H x 203.2 D mm
Mounting Holes..................	Mounts, four pre drilled 15/32" holes
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

TEMPERATURE RANGE Control Panel/Keypad/LCD

Operating Temp. of 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
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 (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	40 lbs(approx)
Box	24" X 30" x 10"

* Photo shown is an example of an Industrial Control Panel; some optional equipment may be shown.   Revision - 2025-02-05