MCS-MAGNUM-LB-10.1-12
INDUSTRIAL CONTROL PANEL

Part #
MCS-MAGNUM LB-10.1-12

UL 508A

Description

The **MCS-MAGNUM-LB-10.1-12 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. This panel is intended for use in an environment protected from the weather.

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-10.1 consists of a **MCS-MAGNUM, MCS-S1-Base** expansion board, and a Touchscreen 15.4" display. The **MCS-TOUCH-10.1** is a new touchscreen interface designed to simplify user access with the MCS-MAGNUM utilizing **MCS-CONNECT** to provide both graphics and service mode access to technicians. Information and graphics on the MCS-TOUCH-10.1 are shown on a 10.1" high resolution (1280x800) LCD display with LED backlighting, which will guarantee long-life operation.

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

Panel includes the following; 20A, and a 5A Single-Pole Circuit Breaker. A 5 port 10/100 Ethernet Workgroup Switch Industrial rated, 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.

Complementing the MCS-MAGNUM micro controller are a variety of MCS expansion boards that allow for system expansion to a maximum of 112 inputs and 80 outputs. Communication to these units occur at 38,400 baud over the Mcs-I/O Port which Is dedicated for this purpose.

Specifications

Certification............................ UL508A

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, four pre-drilled 15/32" holes

Temp. Range for Control Panel & Touch Screen
Operating Temperature.......... -4°F to 158°F (-20°C to 70°C)
Operating Humidity................ 0-95% Non-Condensing
Storage Temperature............. -4°F to 158°F (-20°C to 70°C)

MCS-MAGNUM Controller
Microprocessor .... Zilog eZ80 Acclaim! @ 50 mhz
Sensor Inputs (SI)................ 12 inputs 0-5VDC (10-bit A/D)
Digital Inputs........................ 4 inputs 0 or 5VDC only
Relay Outputs (RO) .... 10 outputs 6.3 amps @ 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) 9.44VDC
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

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

MCS-Touch 10.1 Touchscreen
LCD Screen .... 10.1" Diagonal (Aspect Ratio 16:10)
1280 x 800 Resolution
5-Wire resistive touch w/Stylus pen
Gasket.................................. HT800 Cellular Silicone
NEMA 4 IP66 rated
Surface Treatment .... Glare/Anti-Reflection ≤1.5%
Operating Temperature............ -20°C to +65°C Operating Temperature
Operating Humidity............... 0-95% Non-Condensing
Storage Temperature............. -25°C to +70°C Storage Temperature
Motherboard-Rev 4.0 .... Freescale i.MX6 Dual Core 800mhz
2Gb of 512mhz DDR3 RAM memory
16Gb of eMMC Flash memory
10m/100m/1G Ethernet
1 Micro-SD Slots
2 USB Host 2.0
Real Time Clock (RTC) w/ Battery
3 RS485 communication ports

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