Part #
MCS-MAGNUM LB-10.1

Photo shown with optional lights/ switches & Expansion boards

RoHS Compliant ✓

c UL us
File No: E169780

Description

The **MCS-MAGNUM-LB-10.1** enclosure 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 box is intended for use in an environment protected from the weather.

The MCS-MAGNUM-LB-10.1 consists of a **MCS-MAGNUM, MCS-S116-A04** 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.

The following warning lights and switches are included in the standard enclosure; MB-Alarm, MB-Warning, Run-SW, and MB-Emer-SW.

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.

Options

-MB-KEYPAD-PANL	Magnum 9 button Keypad & 2.8" LCD
-MB-WIRELESS-MODEM	Cellular Modem with 2 yr subscription
-MB-RO10-(24/115/230)	10 relay output expansion board
-MB-24VOLT-(115/230)	115(230) to 24vac transformer
-MB-RUN-LT#(1/2/3/4)	Green run indicator
-MB-COMP#(1/2/3/4)	Single compressor on/off switch
-MB-BYPASS	Momentary bypass push button
-MB-ETHERNET	Industrial rated RS-232/Ethernet device
-MB-ETHERNET-SW	Ethernet switch and power supply
-MB-BMS-GATEWAY	BacNet IP to MSTP/Lontalk
-MB-EXV-DRIVER-xx	Control board for EXVs

Specifications

NEMA Rating – Type 1 Enclosure - 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.

Enclosure – Large Box

Dimensions of Large Box	27"w x 34.75"h x 8.0"d
Mounting Holes	Mounts with four pre-drilled 15/32" holes

Temp. Range for Enclosure & 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)

Controller Specification

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)	115 or 230vac ±10% 50/60Hz @77°F (25°C) ambient, 20VA max (Voltage is field selectable)
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

Touch Screen 10.1

Dimensions	12.204"L x 9.055"W x 3.215"H
Door Mount	10.875"L x 7.875" with cutout 10 mount studs thru customers encl. HT800 Cellular Silicone Gasket NEMA 4 IP66 rated
LCD Screen	10.1" Diagonal (Aspect Ratio 16:10) 16.2 Million Colors 1280 x 800 Resolution View Angle 85°U, 85°D, 85°L, 85°R 5-Wire resistive touch w/Stylus pen White LED Backlight (Min Life 50,000 Hrs) Luminance Min. 400 cd/m²
Surface Treatment	Glare/Anti-Reflection ≤1.5% Hard-Coating (3H)
Operating Temperature	-20°C to +65°C Operating Temperature
Operating Humidity	0-95% Non-Condensing
Storage Temperature	-25°C to +70°C Storage Temperature Power Input 12VDC regulated
Power Output	12VDC output regulated
Motherboard	Freescale i.MX6 Dual Core 800mhz 1Gb of 512mhz DDR3 RAM memory 4Gb of eMMC Flash memory 10m/100m/1G Ethernet 1 Micro-SD Slots 1 USB On-The-Go (OTG) 2 USB Host 2.0 Real Time Clock (RTC) w/ Battery LVDS for 15.4" LCD 5-wire touch 3 RS485 communication ports (max. baud rate 115k) Mini PCIe Interface

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