



MCS-NITROMAG-LB INDUSTRIAL CONTROL PANEL

(MCS-NITROMAG is pending acceptance
by UL as a Recognized Component)



Part # MCS-NITROMAG-LB*

Description

The **MCS-NITROMAG-LB 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-NITROMAG-LB comes standard equipped with a MCS-NITROMAG micro controller board, a MCS-IO-Base, and a MCS-IO-EXT boards. Additional MCS RO and SI boards can be added if required.

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

Panel includes the following; 20A, and a 5A Single-Pole Circuit Breaker, Red Alarm Indicator, Yellow Warning Indicator, Emergency Stop Switch with guard and 3 Position Run/Stop Selector Switch.

There is also an electrical outlet for laptop plug-in power at the panel.

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

Packaging

Weight90 lbs (approx)
Box29" x 10" x 37"

Specifications

NEMA Rating – Type 2 Control Panel

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 39.75"h x 8.0"d
Mounting Holes Mounts, 4 pre-drilled 15/32" holes

Temperature Range for 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)

Keypad

Dimensions 5.26"w x 8.50"h x 1.32"d
(133.6mm x 215.9mm x 33.62mm)
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 5.26"w x 8.50"h (8 mounting studs)
Keypad Layout..... 9 keys (3 function keys)
Operating Temperature..... -4°F to +185°F (-20°C to +85°C)
Operating Humidity..... 0-95% Non-Condensing

Controller

Microprocessor Broadcom BCM2711 quad core
Cortex (ARMv8) 64-bit SoC @ 1.5GHz
Flash Memory 16 GB EMMC

INPUT	MINIMUM	NOMINAL	MAXIMUM
VOLTAGE	10	12	12.5
AMPS			0.5

RAM 2 GB DDR3
MCS-I/O Comm Port. 1 @ 38,400 baud
RS-485 Ports..... 2 @ go up to 115200 baud rate
Ethernet..... 10 Mbps/100Mbps/1Gbps
HDMI 2 HDMI 2.0 ports-Standard and Micro
WiFi 2.4 GHz, 5.0GHz 8.02 b/g/n/ac wireless
USB 2 USB type B 2.0 ports 480Mbps signalling
Protocols..... BACnet IP, BACnet MSTP, Modbus IP,
Modbus RTU Slave, Modbus RTU Master
(BTL certification pending)
Real Time Clock Battery backup(Type BR2032)
Power Detection Automatic power fail reset

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