MCS-NITROMAG-MLB
INDUSTRIAL CONTROL PANEL

MCS-NITROMAG CONTROLLER

Part # **MCS-NITROMAG-MLB***

Description

The **MCS-NITROMAG-MLB 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-NITROMAG-MLB comes standard equipped with a MCS-NITROMAG micro controller board, a MCS-IO-BASE, MCS-IO-EXT, Keypad LCD, a 20A and 5A circuit breakers.

Power is supplied using a MCS-12V-90W 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.

This panel is intended for use in an environment protected from the weather.

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

Weight ....60 lbs(approx)
Box ....24" x 10" x 30"

Specifications

NEMA Rating – Type 1 Control Panel
Industrial Control Panel

Dimensions............................23.5"w x 32.65"h x 8"d
Mounting Holes......................Mounts with 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)

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.............................10Mbps/100Mbps/1Gbps
HDMI ....2 HDMI 2.0 ports-Standard and Micro
WiFi....................................2.4GHz, 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

* Photo shown is an example of an Industrial Control Panel; some optional equipment may be shown.

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