

# MCS-NITROMAG-CENT-NEMA4-SS INDUSTRIAL CONTROL PANEL

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



#### Part # MCS-NITROMAG-CENT-NEMA4-SS\*

## **Description**

The **MCS-NITROMAG-CENT-NEMA4-SS Industrial Control Panel** is made of stainless steel for durability and longevity. A 36"H x 30"W x 12"D NEMA 4 window kit is mounted which provides a degree of protection against falling rain, splashing water and hose directed water, undamaged by formation of ice on the panel.

A left-hand swing door with 3 hinges ensures strength, while the Fast Opener Clamp Assembly provides quick, secure access no tools or keys required.

The industrial control panel consists of a MCS-NITROMAG-15.4, MCS-IO-BASE, MCS-IO-EXT, MCS-SI-BASE(2) with MCS-SI-EXT, MCS-RO-BASE with MCS-RO-EXT(1) expansion boards.

The Control Panel is supplied with a 12V and 24V power supplies.

The capacitive touchscreen interface designed to simplify user access with the MCS-NitroMag utilizing MCS-Connect to provide both graphics and service mode access to technicians. Input method: Finger, Stylus or \*\*Glove.

Highly accurate and does not require calibration - easy to clean glass surface. Works outdoors, bright screen, water resistant, exceptional Optics - 1280x800 resolution, sharp and vibrant images.

Control panel includes the following; 20A, 16A and a 5A Single-Pole Circuit Breaker. A 5 port 10/100/1000 Mbps Ethernet Workgroup Switch Industrial rated, 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.

#### **Specifications**

Certification...... UL508A - E511647

NEMA Rating - Type 4 Control Panel IP66

#### Industrial Control Panel

Dimensions of control panel . 36"H x 30"W x 12"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

#### Temp. Range for Control Panel & Touch Screen

5.4" (16:10 Diagonal)
L, 70°R
fe 50,000 Hrs)
i0 Typical
JV Degradation Protection
22°F to 176°F (-30°C to +80°C)
0 %RH (Non Condensing)
22°F to 176°F (-30°C to +80°C)

## **Controller**

Microprocessor Broadcom BCM2711 Quad core	
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Cortex (ARMv8) 64-bit SoC @ 1.5Ghz

INPUT	MINIMUM	NOMINAL	MAXIMUM
VOLTAGE	10	12	12.5
AMPS			2

Flash Memory16 GB EMMCRAM2 GB DDR3MCS-I/O Comm Port1 @ 38,400 baudRS-485 Ports2 @ go up to 115200 baud rateEthernet10 Mbps/100Mbps/1GbpsHDMI2 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
<b>Power Supply - Specification</b> <b>12vdc power supply</b>
24vdc power supply85vac ~ 264vac AC frequency range47 ~ 63Hz / 4A / 96W

#### **Packaging**

### 5580 Enterprise Pkwy., Fort Myers, FL 33905 Office: 239-694-0089 • Fax: 239-694-0031 www.mcscontrols.com

\* Photo shown is an example of an Industrial Control Panel; some optional equipment may be shown. \*\* The glove needs to have a conductive fabric or material to work with cap touchscreens.