



MCS-NITROMAG-CENTRIFUGAL-NEMA4 INDUSTRIAL CONTROL PANEL

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



Part # **MCS-NITROMAG- CENTRIFUGAL-NEMA4**

Description

The **MCS-NITROMAG-CENTRIFUGAL-NEMA4 Industrial Control Panel** is made of powder coated steel for durability and longevity. A 36"H x 30"W x 12"D NEMA 4 powered coated gray 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 dual 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-N, MCS-IO-BASE, MCS-IO-EXT, MCS-SI-BASE(2) with MCS-SI-EXT(1), MCS-RO-BASE(1) 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 controller 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 from 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

LCD Screen. 15.4" (16:10 Diagonal)

16.2 Million Colors

1280x800 Resolution

View Angle 70°U, 70°D, 70°L, 70°R

Capacitive Stylus pen

White LED Backlight (Min Life 50,000 Hrs)

Luminance Min. 350 Min. 450 Typical

Touchscreen Surface..... UV Degradation Protection

Operating Temperature..... -22°F to 176°F (-30°C to +80°C)

Operating Humidity..... 90 %RH (Non Condensing)

Storage Temperature..... -22°F to 176°F (-30°C to +80°C)

Controller

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

INPUT	MINIMUM	NOMINAL	MAXIMUM
VOLTAGE	10	12	12.5
AMPS			2

Flash Memory 16 GB EMMC

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

Power Supply - Specification

12vdc power supply.....85vac ~ 264vac

AC frequency range.....47 ~ 63Hz / 7.5A / 90W

24vdc power supply.....85vac ~ 264vac

AC frequency range.....47 ~ 63Hz / 4A / 96W

Packaging

Weight 90 lbs(approx)

Box 29" x 10" x 37"

5580 Enterprise Pkwy., Fort Myers, FL 33905

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* 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.