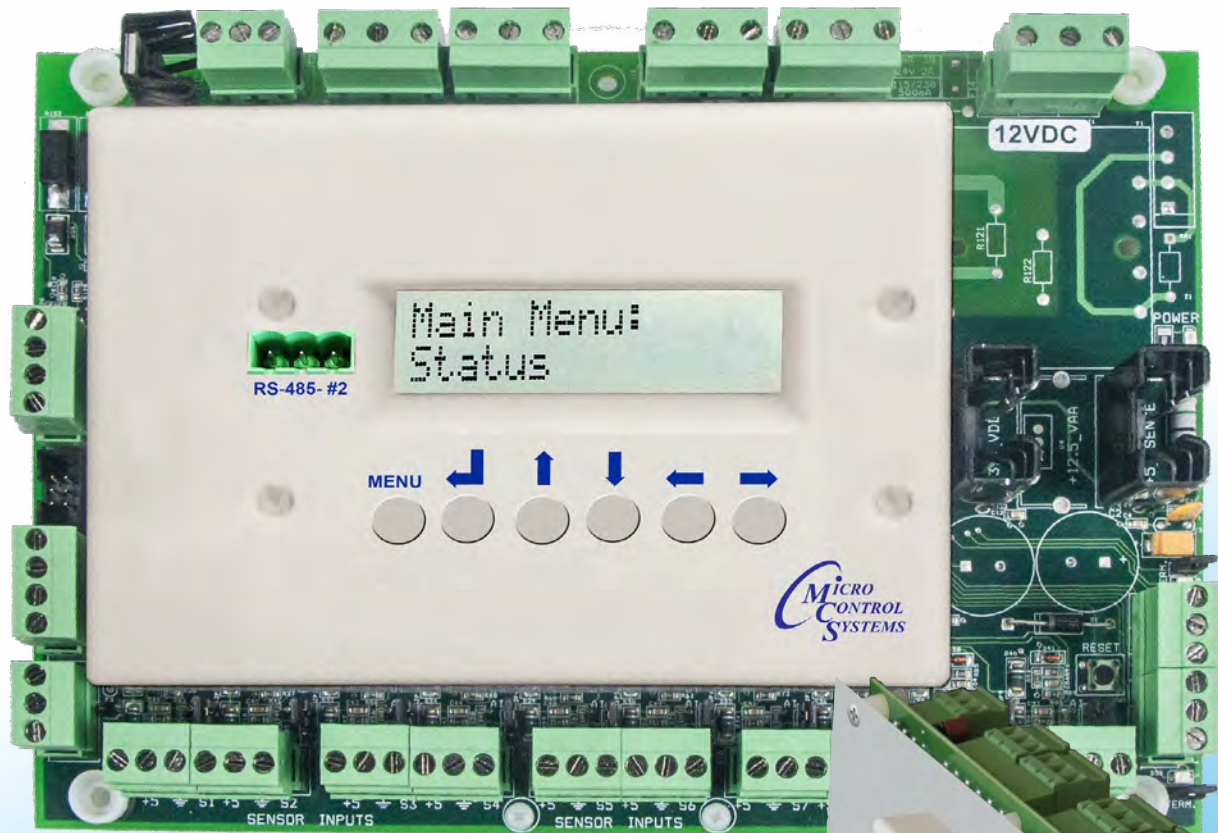


*MCS Introduces the new version 7.0 . . .*

# *MicroMag +12*



*MCS Total  
Solutions for all your  
Control Needs*



◀ Mounted inside your enclosure

▼ Mounted on front of your enclosure



MicroMag 7.0 - 12 volt system introduces improved quality and overall functionality. Input power to the board is 12VDC (NOT SUPPLIED). Current draw is 850A @12VDC.

## ***The LCD is now REVERSIBLE.***

The MicroMag can be installed, mounted inside your enclosure as shown or can be mounted to the front of an enclosure.

***Indoor installation only, see next page for MCS-NEMA-DOOR indoor or outdoor installation.***

The MicroMag is a rugged microprocessor based controller designed for the hostile environment of the HVAC/R industry. It is designed to be the primary manager of the package it is controlling. The MicroMag provides flexibility with set points and control options that can be selected prior to commissioning a system or when the unit is live and functioning.

Both RS-485 ports allow the user to interactively communicate with the MicroMag via **MCS-CONNECT**. A BMS (Building Management System) running Modbus RTU or BACnet MSTP can also communicate with the MicroMag via the RS-485 port for monitoring purposes.

***The Cover/LCD/Keypad can be removed from the MicroMag board and plugged into the backside of the MicroMag board for door mount option.***

***Photo shows MicroMag in this configuration.***



Field Reversible Cover

# MicroMag-Nema Door



The **MicroMag-Nema Door** is a new design allowing the MicroMag to be mounted to the front of your customer's NEMA 4 enclosure. A HT800 Cellular Silicone Gasket seals the LCD Keypad between the enclosure and the MicroMag providing a NEMA 4 IP66 rating\*.

The MicroMag-Nema Door can be installed Indoor or outdoor (when mounted correctly).\*

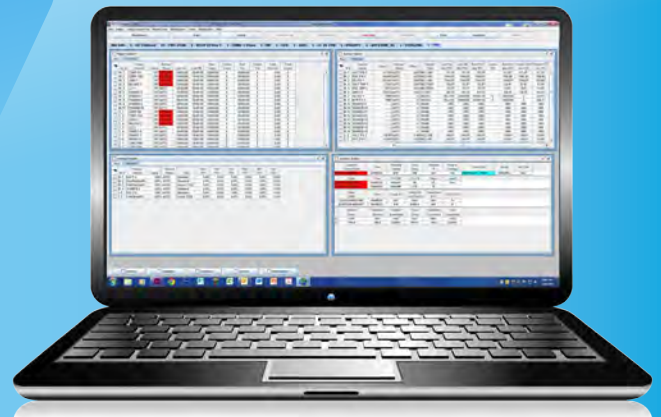
## Controller

Dimensions.....	10.842"l, 7.867"w, 3.141"h
Mounting Holes.....	Mounts on a door using Eight #6 metal studs and nuts HT800 Cellular Silicone Gasket NEMA 4 IP66 rated
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)
Sensor Inputs (SI).....	10 inputs 0-5vdc (10-bit A/D)
Relay Outputs (RO).....	6 outputs 5.0 amps @ 24V/120V/230V
Analog Outputs (AO).....	4 outputs 0-10vdc
Printed Circuit Board .....	Four layer with separate power and ground planes
Input Power .....	12VDC ±10% 50/60Hz (NOT SUPPLIED)
Current Draw .....	850mA @ 12VDC
MCS-I/O Comm Port .....	1 @ 38,400 baud
RS-485 Comm Port .....	2 @ 19,200 to 115,200 baud, select from MCS Protocol, Bacnet MSTP, Modbus RTU
Real Time Clock .....	Battery backup
Power Detection .....	Automatic power fail reset
Real Time Clock .....	Battery backed
Power Detection .....	Automatic power fail reset

## Keypad/LCD

Display.....	2 x 16 Backlit
Keypad Layout.....	6 keys (Menu, Enter, 4 direction)
Connection .....	12 pin header plus 4 nylon bolts

***A complete software support package MCS-CONNECT is available for your PC allowing for dynamic on-line display screens, remote communication, graphing, and more.***



\*NEMA 4 Ip66 Rating

An IP66 rated fixture is protected against multi-directional, high-pressure water jets. To pass IP66 testing, the fixture must be able to withstand water projected from 0.50-inch nozzle, multi-directional, high-pressure jets. This test must be run for a minimum of three minutes, at a distance of three yards, with a water volume of 26.4 gallons per minute and a pressure of 100 kPa.



**Providing HVAC/R  
Solutions Worldwide**

## ***The MCS Commitment***

*The founders of Micro Control Systems Inc. have been in the manufacture of Microprocessor Controls their entire careers and have over eight decades of combined HVAC/R Microprocessor Controls experience. MCS was founded to meet the needs of the Utility and HVAC/R Industries with products based on the following design criteria:*

- ▶ **Quality & Service**
  - ▶ **Cost Effectiveness**
  - ▶ **Ease of Use**

*Our commitment is to provide practical solutions for the industries needs and to be both a leader and partner in the effective use of Microprocessor Controls.*

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