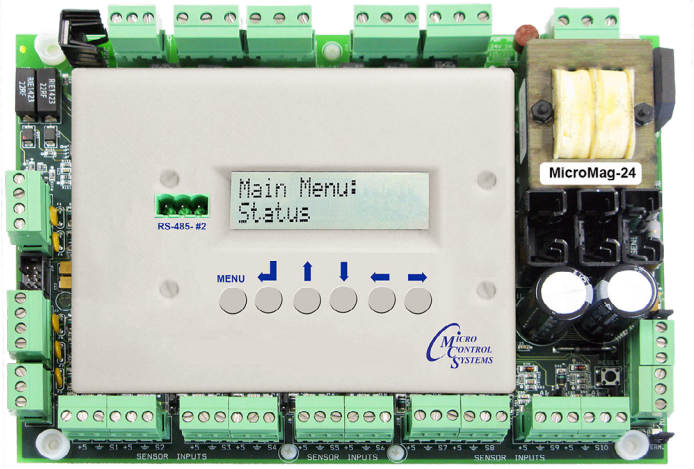
MicroMag-24
Description & Specifications



RoHS Compliant

Part# MicroMag-24

c UL us
File No: E169780

Description

The **MicroMag** is a rugged 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. Displays, alarms and other interfaces are accomplished in a clear and simple language that informs the user as to the status of the controller.

The MicroMag is designed to control up to 6 compressors with 6 circuits each. Complementing the MicroMag controller are 2 expansion boards that allow 26 Relay Outputs, 1 Triac Output, 42 Sensor Inputs and 12 Analog Outputs(using 2 expansion boards each). The expansion boards use the RS-485 protocol, allowing a 5000 ft distance between the MicroMag and its expansion boards.

The MicroMag has two RS-485 port. Both 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.

Because the terminal blocks are removable, board replacement requires no wires to be removed.

Packaging

Shipping Weight ..... 2.35 lb (approx)
Box Dimensions..... 12” x 9” x 4” (approx)

Specifications - Rev. 6.1

Controller

Dimensions	8.50”l, 6.00”w, 2.10”h
Mounting Holes	Mounts on a backplane using four #6 sheet metal screws
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. 0amps @ 24 vac
Analog Outputs (AO)	4 outputs 0-10vdc
Printed Circuit Board	Four layer with separate power and ground planes
Input Power (Standard)	24vac ±10% 50/60Hz @ 77°F (25°C) ambient, 25VA min
Current Draw	850mA @ 24VAC
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

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Keypad/LCD

Display	2 x 16 Backlit on I²C Bus
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 system configuration, dynamic on-line display screens, remote communication, graphing, and more.



Photo shows cover in place on a simulated door.

Field Reversible Cover

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.

Optional Kit available - call MCS-SALES

Revision 2026-10-16

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