



MicroMag-12

Description & Specifications

Specifications - Rev. 7.0



Part# MicroMag-12



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) 12VDC ±10% =50/60Hz @ 77°F (25°C) ambient, 25VA min
 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
 Battery backup
 Automatic power fail reset

Real Time Clock Battery backed
 Power Detection Automatic power fail reset

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.

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.



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

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