

MicroMag-24 Description & Specifications



RoHS Compliant Part# MicroMag-24



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.

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

Specifications - Rev. 6.1

Controller

Controller	
Dimensions	8.50"l, 6.00"w, 2.10"h
Mounting Holes	Mounts on a backplane using
0	four #6 sheet metal screws
Operating Temperature	-4°F to +158°F (-20°C to +70°C)
Operating Humidity	
	-4°F to +158°F (-20°C to +70°C)
	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)	
	77°F (25°C) ambient, 25VA min
Current Drow	
Current Draw	-
MCS-I/O Comm Port	\mathbf{O}
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
Fower Detection	Automatic power fail reset
Deal Time Cleak	Dattany booked
Real Time Clock	
Power Detection	Automatic power fail reset

Keypad/LCD

Display	2 x 16 Backlit on I ² C 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.



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