# MICRO CONTROL CYSTEMS

# **MCS-CENTRIFUGAL-KEYPAD**

# **Description & Specifications**



Part # MCS-CENTRIFUGAL-KEYPAD

# **Description**

The MCS-CENTRIFUGAL enclosure is made of powdercoated aluminum for durability and longevity. A left hand swing door is mounted with three eight-inch hinges for strength. A key lock is provided for security on the door while still giving easy access.

The MCS-CENTRIFUGAL comes standard equipped with a **MCS-MAGNUM-N** controller board, LCD Keypad, two 15 amp, and one 20 amp circuit breaker. There is also a GFCI electrical outlet for laptop plug-in power at the box.

The MCS-CENTRIFUGAL has the following expansion boards installed:

Three (3) MCS-SI16-AO4, and two (2) MCS-RO10.

Standard configuration includes: isolation relays, BMS Network connectivity, (Field selectable hardware or network BMS), and BMS Terminal block for chiller relay.

The following warning lights and switches are included in the standard enclosure; MB-Alarm, MB-Warning, MB-Emer-SW, Hand/Off/Auto Switch and Ethernet Switch.

This box is intended for use in an environment protected from the weather.

### **Specifications**

### NEMA Rating - Type 1 Enclosure - IP20 Rating

Enclosure is intended for indoor use primarily to provide a degree of protection against contact with the enclosed equipment and is not protected from liquids.

#### **ENCLOSURE - LARGE BOX**

Dimensions of Large Box	27"w x 34.75"h x 8.0"d
Mounting Holes	Mounts with four pre-drilled
-	15/32" holes

### TEMPERATURE RANGE ENCLOSURE/Keypad/LCD

Operating Temp. of enclosure	4°F to +158°F (-20°C to + 70°C)
Operating Humidity	.0-95% Non-Condensing
Storage Temp	22°F to +185°F (-30°C to + 85°C)

#### **CONTROLLER SPECIFICATION**

Microprocessor	Zilog eZ80 Acclaim! @ 50mhz
Sensor Inputs (SI)	12 inputs 0-5vdc (10-bit A/D)
Digital Inputs	4 inputs 0 or 5vdc only
Relay Outputs (RO)	10 outputs 6.3amps @ 230vac
Analog Outputs (AO)	4 outputs 0-10vdc
Printed Circuit Board	Six layer with separate power
	and ground planes
Input Power (Standard)	115 or 230vac ±10% 50/60Hz
	@77°F (25°C) ambient, 20VA max
	(Voltage is field selectable)
MCS-I/O Comm Port	1 @ 38,400 baud
RS-485 Comm Port	1 @ 19,200 baud
Ethernet	10/100 Mbps Ethernet
Real Time Clock	Battery backup
Power Detection	Automatic power fail reset

#### KEYPAD / LCD

Display	128 x 64 dot pixel STN
	monochrome graphics LCD
	with 2.8" diagonal viewing area
Color	White characters on a blue
	background (Reversible)
Keypad Size	7.25"w x 8.50"h (6 mounting studs)
Keypad Layout	9 keys (3 function keys)
Connection	6 conductor shielded cable
RS-485 Comm Port	1 @ 19,200 baud

## **Option**

#### -MCS-MODBUS I/O

Other Options are available, call for more information.