



MCS-CENTRIFUGAL-KEYPAD

Description & Specifications



Part # **MCS-CENTRIFUGAL-KEYPAD**

Description

The **MCS-CENTRIFUGAL** enclosure is made of powder-coated 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 Box27”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

MicroprocessorZilog 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 BoardSix 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 Port1 @ 38,400 baud
RS-485 Comm Port1 @ 19,200 baud
Ethernet10/100 Mbps Ethernet
Real Time ClockBattery backup
Power DetectionAutomatic power fail reset

KEYPAD / LCD

Display128 x 64 dot pixel STN
monochrome graphics LCD
with 2.8” diagonal viewing area
ColorWhite characters on a blue
background (Reversible)
Keypad Size7.25”w x 8.50”h (6 mounting studs)
Keypad Layout.....9 keys (3 function keys)
Connection6 conductor shielded cable
RS-485 Comm Port1 @ 19,200 baud

Option

-Centrifugal-VFD-MODBUS

Two (2) MCS-S116-A04, two MCS-RO10 expansion boards and a **MCS-MODBUS** (communicate to Modbus slave devices (such as Variable Frequency Drives, Compressors, etc.) to send and access parameters.

NOTE: One MCS-S116-A04 is removed from the standard MCS-Centrifugal and replaced with the MCS-MODBUS.

Other Options are available, call for more information.