MICRO CONTROL CYSTEMS

MCS-CENTRIFUGAL-KEYPAD-12

Description & Specifications



Part # MCS-CENTRIFUGAL-KEYPAD-12

Description

The MCS-CENTRIFUGAL-KEYPAD-12* 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-KEYPAD-12 comes standard equipped with a **MCS-MAGNUM-N** controller board, LCD Keypad, three 16 amp, one 20 amp and one 5 amp circuit breakers. There is also a 15A electrical outlet for laptop plug-in power at the panel and a Ground Bar for Sensor input shields.

The MCS-CENTRIFUGAL-KEYPAD-12 has the following expansion boards installed: One(1) MCS-SI-Base, and One(1) MCS-SI-BASE with MCS-SI-EXT, ONE(1) MCS-RO-Base with MCS-RO-EXT.

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

Control panel includes the following; 20A, 16A and a 5A Single-Pole Circuit Breaker. A 5-port 10/100/1000 Mbps Ethernet Workgroup Switch Industrial rated, Red Alarm Indicator, Yellow Warning Indicator, Emergency Stop Switch with guard and 3 Position Run/Stop Selector Switch.

SHIELDWIRE-GROUNDING multi-terminal connectors (11) are included to eliminate stray electrical current, thereby helping to reduce line noise form the sensors to the controller.

Packaging

| Weight | 88 lbs(approx.) |
|--------|--------------------------|
| Box | 29 x 10.5 x 42 (approx.) |

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 39.75" H x 8" 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

| | 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) | . 12 VDC - 90W |
| 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 |

MCS-SI-BASE/EXT Expansion Boards

| Sensor Inputs (SI) | . 48 inputs 0-5vdc (2 Base/1Ext) |
|---------------------|----------------------------------|
| Analog Outputs (AO) | 12 outputs 0-10vdc |
| MCS-I/O Comm Port | . 1 @ 38,400 baud |

MCS-RO-BASE/EXT Expansion Boards

| Relay Outputs (RO) | 20 outputs 6.3amps @ 230vad |) |
|---------------------|-----------------------------|---|
| MCS-I/O Comm Port 1 | 1 @ 38,400 baud | |

KEYPAD / LCD

| Display128 x 64 dot pixel STN | |
|---|-----|
| monochrome graphics LCD | |
| with 2.8" diagonal viewing are | эa |
| ColorWhite characters on a blue | |
| background (Reversible) | |
| Keypad Size7.25"w x 8.50"h (6 mounting stud | ls) |
| Keypad Layout9 keys (3 function keys) | |
| Connection6 conductor shielded cable | |
| RS-485 Comm Port1 @ 19,200 baud | |

Power Supply - Specification

| 12vdc power supply | 85vac ~ 264vac |
|----------------------|----------------|
| AC frequency range | 47 ~ 63Hz |
| Output rated current | 7.5A |
| Output rated power | 90W |
| 24vda nawar aunniy | 95vaa ~ 264vaa |

| 24vdc power supply | 85vac ~ 264vac |
|----------------------|----------------|
| AC frequency range | 47 ~ 63Hz |
| Output rated current | 4A |
| Output rated power | 96W |

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