MICRO CONTROL SYSTEMS

5877 Enterprise Parkway, Fort Myers, FL 33905
Office: 239-694-0089 Fax: 239-694-0031
www.mcscontrols.com

The MCS-PHASE Specifications & Description

Specifications

Dimensions ..... 4.25"w, 6.5"h, 1.4"d
Mounting Holes ..... Mounts on a backplane using two #8 sheet metal screws

Operating Temperature
Control ..... -40°F to +167°F (-40°C to +75°C)
LCD ..... -4°F to +167°F (-20°C to +75°C)
Storage ..... -40°F to +185°F (-40°C to +85°C)

Input
Universal ..... 190-630vac @ 50/60Hz

Ouput
Type ..... SPDT Relay
Maximum Voltage ..... 240vac @ 50/60Hz
Maximum Current..... 10amps

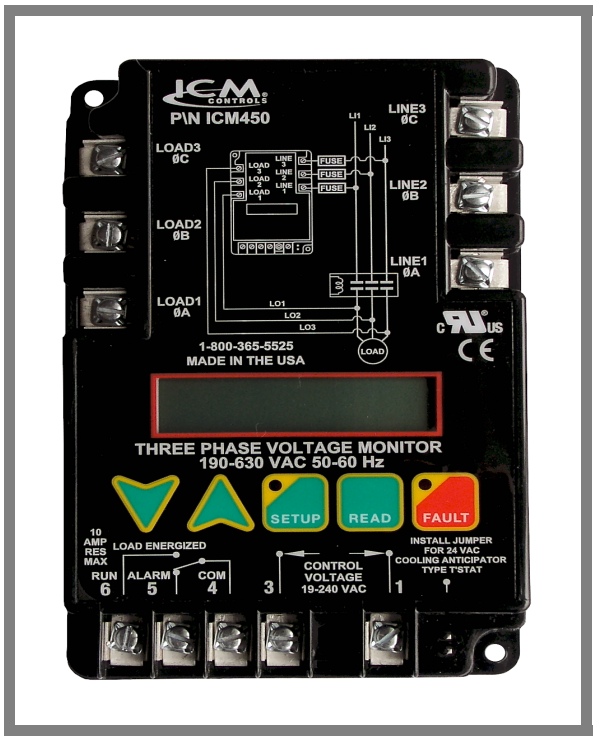
Phase Unbalance Protection
Voltage Unbalance..... 2-25% adjustable

Over/Under Protection
Under Voltage ..... 2-25% adjustable
Over Voltage ..... 2-25% adjustable

Phase Loss Protection
Phase Loss condition ..... <25% of nominal for any given phase

Delay on Break Timer
Control Voltage 18-240vac
Time Delay..... 0-10 minutes adjustable

Fault Interrogation Delay
Time Delay..... 0-15 seconds adjustable



Part # **MCS-PHASE**

Product Description

The MCS-PHASE is a programmable 3-phase line voltage monitor with 25-fault memory, high temperature LCD display, easy setup and clear diagnostic readout of system faults. The MCS-PHASE was specifically designed to protect motors and other 3-phase loads from premature failure and damage due to common voltage faults such as unbalance, over/under voltage, phase loss, reversal, incorrect sequencing and rapid short cycling.

At power up, the MCS-PHASE evaluates the incoming power for proper phase sequence, amplitude and voltage unbalance. If the three phase input at the line side connections is within user-set parameters, the load energize LED is turned on and the internal relay is energized. Continuity will be across terminals 4 and 6. If connections are made to the load side terminals, the MCS-PHASE will transfer monitoring over to the load side only. When a critical fault condition (phase loss or phase reversal) is present, the relay will immediately de-energize, the load-energized LED will turn off, the fault LED will flash, and the fault is written to memory. Continuity will be across terminals 4 and 5.

If a non-critical fault condition (unbalance, high or low voltage) is present, the MCS-PHASE will ignore it during the interrogation delay time. If it is still present following the interrogation delay time, the relay will de-energize, the load-energized LED turn off, the fault LED will flash, and the fault is written to memory. Continuity will be across terminals 4 and 5.

The MCS-PHASE will store the last 25 faults in memory. The relay will not energize if any fault conditions exist. The integral adjustment delay on break timer will prevent short cycling.

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