



# MCS-PHASE-B

## Description & Specifications

**cULus**  
Listed E53944



Part # **MCS-PHASE-B**

### Specifications

#### MECHANICAL

Dimensions..... 6.5" x 4.75" x 1.09"  
Mounting..... Surface mount using (2) #8 screws  
Terminations ..... 1/4" quick connects  
Weight ..... 12 ounces (341 grams)

#### Operating Temperature

Control ..... -40°F to +149°F (-40°C to +65°C)  
Storage..... -40°F to +185°F (-40°C to +85°C)

#### Input

Line Voltage..... Universal, 190-600 VAC  
Frequency..... 50-60 Hz  
Control Voltage..... 18-240 VAC

#### Output

Type..... SPDT Relay  
Voltage Range..... 277 VAC @ 6A maximum

### Package contains:

2 #8 mounting screws,  
3-KTK, 1A, 600V Fuses, 3-pole Fuse Block.



### Description

The **MCS-PHASE-B** is a programmable 3-phase line voltage monitor, high temperature LCD display, easy setup and clear diagnostic readout of system faults. The MCS-PHASE-B 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-B 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 1 and 2. If connections are made to the load side terminals, the MCS-PHASE-B 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 1 and 3.

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 1 and 3.

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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