

3-Phase Voltage Monitor

Model 250A-MET



Features:

- Protects 3-phase motors from:
 - Low voltage
 - Voltage unbalance
 - Single phase
 - Reverse phase
- Diagnostic LED
- UL listed
- 5-year warranty
- Made in USA

Model 250A-MET is an auto ranging voltage monitor designed to protect 3-phase motors regardless of size. It is used on 190-480VAC, 50/60Hz motors to protect the motors from damage caused by low voltage, voltage unbalance, single phasing and reverse phasing.

A unique microcontroller-based voltage and phase sensing circuit constantly monitors the three phase voltages to detect harmful power line conditions. When a harmful condition is detected, the MotorSaver's output relay is deactivated after a specified trip delay. The output relay reactivates after power line conditions return to an acceptable level for a specified amount of time (restart delay), unless the unit is in the manual reset mode. The trip delay prevents nuisance tripping due to rapidly fluctuating power line conditions.

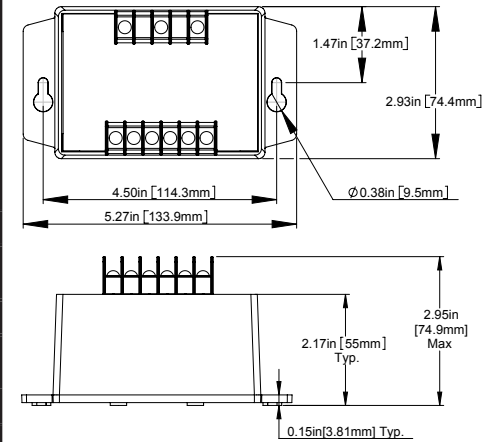
The 250A-MET has two Form C relays that operate independently of each other. The left-hand relay will energize when voltage conditions are good and de-energize when a fault condition is detected. The right-hand relay will only energize during a reverse-phase condition.

This unit was designed for use in applications with fire control panels, but may be used anywhere these features are required.

Specifications

Functional Specifications	
Low Voltage (% of setpoint)	
Trip	85% +1%
Reset	88% +1%
Voltage Unbalance (NEMA)	
Trip	6%
Reset	4.5%
Trip Delay Time	
Low Voltage	4 seconds
Voltage Unbalance and single-phasing faults (> 25% unbalance)	2 seconds
Restart Delay Time	
After a Fault or Complete Power Loss	Adjustable, 2-300 seconds or manual
Input Characteristics	
Supply Voltage	190-480VAC
Frequency	50/60Hz (Note: 50Hz will increase all delay timers by 20%)
Output Characteristics	
Output Contact Rating	480VA @ 240VAC Pilot Duty 10A @ 240VAC General Purpose
General Characteristics	
Operating Temperature	
Ambient	-40° to 70° C (-40° to 158° F)
Maximum Input Power	5 W
Wire Gauge	Solid or Stranded 12 - 22AWG
Terminal Torque	13 in.-lbs.
Relative Humidity	10-95%, non-condensing per IEC 68-2-3
Standards Passed	
Electrostatic Discharge (ESD)	IEC 61000-4-2, Level 3, 6kV contact, 8kV air
Radio Frequency Immunity, Radiated	150 MHz, 10V/m
Fast Transient Burst	IEC 61000-4-4, Level 3, 4kV input power, 2kV inputs/outputs
Surge	
IEC	IEC 61000-4-5, Level 3, 6kV line-to-line, 6kV line-to-ground
Hi-potential Test	Meets UL508 (2 x rated V + 1000V for 1 minute)
Safety Marks	
UL Listed	
Dimensions	UL 508 (File #E68520)
Weight	2.93" H x 5.27" W x 2.95" D
Mounting Method	14 oz. Surface Mount (with #8 screws)

Enclosure Dimensions



How to order:

Part Number: 250A-MET



(605) 348.5580 / (800) 843.8848 / Fax (605) 348.5685
customerservice@symcom.com / technicalsupport@symcom.com