

### Features:

- Protects motor from:
  - Low/High voltage
  - Voltage unbalance
  - Single phase
  - Reverse phase
- DPDT contacts
- Adjustable restart delay
- Diagnostic LED
- UL listed
- CSA approved
- 5-year warranty
- Made in USA

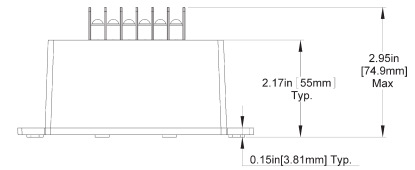
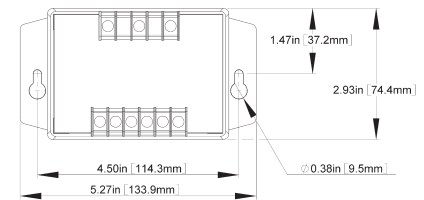
The Model 250-600 is a three-phase voltage monitor designed to protect 500-600VAC, 50/60Hz motors regardless of horsepower. It will protect motors from damage caused by single phasing, phase reversal, voltage unbalance, low voltage and high voltage. Added features include DPDT contacts and an adjustable restart delay. The DPDT relay allows control of two circuits with potentially different voltages.

The unique microcontroller-based voltage and phase-sensing circuit constantly monitors the voltages to detect harmful power line conditions. When a harmful condition is detected, the unit's output relay is deactivated after a specified fixed trip delay. The output relay reactivates after power line conditions return to an acceptable level and a specified amount of time has elapsed (adjustable restart delay). The trip delay prevents rapid or short cycling due to rapidly fluctuating power line conditions.

## Specifications

Functional Specifications	
Low Voltage (% of setpoint)	
Trip	90% +1%
Reset	93% +1%
High Voltage (% of setpoint)	
Trip	110% +1%
Reset	107% +1%
Voltage Unbalance (NEMA)	
Trip	6%
Reset	4.5%
Trip Delay Time	
Low and High 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	500-600VAC
Frequency	50/60Hz (Note: 50Hz will increase all delay timers by 20%)
Output Characteristics	
Output Contact Rating-DPDT	480VA @ 240VAC Pilot Duty 10A @ 240VAC General Purpose
General Characteristics	
Operating Temperature	
Ambient	-40° to 70° C (-40° to 158° F)
Storage	-40° to 80° C (-40° to 176° F)
Maximum Input Power	5 W
Wire Gauge	Solid or Stranded 12 - 22AWG
Terminal Torque	7 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, 3.5kV input power & controls
Surge	
IEC	IEC 61000-4-5, Level 3, 4kV line-to-line Level 4, 4kV line-to-ground
ANSI/IEEE	C62.41 Surge and Ring Wave Compliance to a level of 6kV line-to-line
Hi-potential Test	Meets UL508 (2 x rated V + 1000V for 1 minute)
Safety Marks	
UL/ULC Listed	UL 508, C22.2 No. 14
Dimensions	2.93" H x 5.27" W x 2.95" D
Weight	14 oz.
Mounting Methods	DIN Rail or Surface Mount (with #8 screws)

## Enclosure Dimensions



## How to order:

Part Number: 250-600



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