

Features

Three input voltage ranges provide the versatility to handle global applications.

Bicolor LED indicator light is green in normal conditions and red during trip conditions.

Optional 15A @ 240VAC high current relay can switch heavier current loads.

The microcontroller-based circuit provides better accuracy and higher reliability than analog designs.

Transient protection meets IEC 1000-4-5:1995 standards to handle tough conditions.

Single-phase conditions are detected regardless of regenerated voltages.



MotorSaver
THREE-PHASE ELECTRIC
MOTOR PROTECTOR

Model 350 Three-Phase Voltage Monitor

•
**Engineered
Protection**

•
**Microcontroller
Based**

Protects 3-Phase

Motors from:

- Loss of any phase (single-phasing)
- Low voltage
- Voltage unbalance
- Phase reversal
- Optional high voltage

Additional Features:

- Diagnostic LED indicates:
 - Run
 - Restart delay
 - Reverse phase
 - Unbalance/single-phase
 - High/low voltage
- Standard surface mount
- UL and cUL listed
- 5-year warranty
- Made in USA

Model 350 3-phase voltage monitor is perfect for heavy-duty applications such as rural pump panels, commercial and rural HVAC equipment, and oil rigs. The Model 350 is a versatile voltage monitor designed for 200, 400, or 600V applications. The Model 350-200 monitors 190 to 240V input voltages, the Model 350-400 monitors 380 to 480V input voltages, and the Model 350-600 monitors 475 to 600V input voltages.

A unique microcontroller-based voltage and phase-sensing circuit constantly monitors the 3-phase voltage to detect harmful power line conditions such as single-phasing, low voltage, phase reversal, voltage unbalance, and high voltage (optional). 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). The trip delay prevents nuisance tripping due to rapidly fluctuating power line conditions.

The Model 350-400 and 350-600 are equipped with one standard 470VA @ 600V contact. The Model 350-400 and 350-600 can be ordered with 15A general purpose contacts to switch heavier current loads.



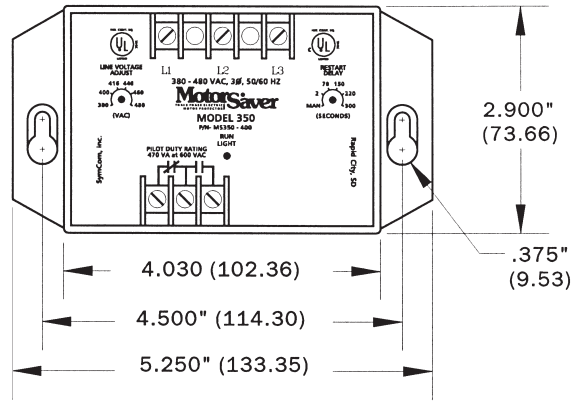
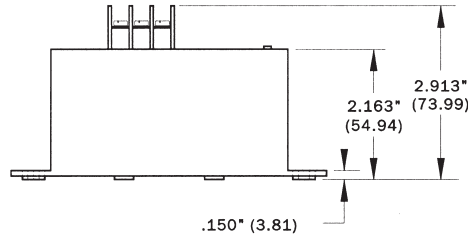
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MotorSaver®

THREE-PHASE ELECTRIC MOTOR PROTECTOR

Model 350 Three-Phase Voltage Monitor

- Specifications
- Operating Points
- Special Options



3-Phase Line Voltage

350-200	190-240VAC
350-400	380-480VAC
350-600	475-600VAC

(Specify voltage range)

Frequency..... 50*/60Hz

Order #:

350-200-2-6
350-200-2-8
350-200-2-9
350-200-2
350-200
350-400-2-5
350-400-2-8
350-400-2-9
350-400-2
350-400-5
350-400
350-600-2-6
350-600-2-8
350-600-2-9
350-600-2
350-600

Low Voltage (% of setpoint)

- Trip 90%
- Reset..... 93%

Voltage Unbalance (NEMA)

- Trip 6%
- Reset..... 4.5%

Trip Delay Time

- Low Voltage..... 4 seconds
- Unbalance & Phasing Faults... 2 seconds

Restart Delay Time

- After a Fault..... 2 seconds
- After a Complete Power Loss... 2 seconds

Output Contact Rating

SPDT (350-200)	480VA @ 240VAC Pilot Duty 15A General Purpose
SPDT (350-400, 350-600)	470VA @ 600VAC 10A General Purpose
DPDT (-5 Option)	2-10A General Purpose 480VA @ 240VAC Pilot Duty
DPDT (-6 Option)	1-10A General Purpose 480VA @ 240VAC Pilot Duty
	1-15A General Purpose 480VA @ 240VAC Pilot Duty
	1hp @ 240VAC
DPDT (-8 Option)	2-15A General Purpose 480VA @ 240VAC Pilot Duty
	1hp @ 240VAC

Transient Protection (Internal)

IEC 1000-4-5;1995 ± 6kV
5 Watts (max.)

Weight

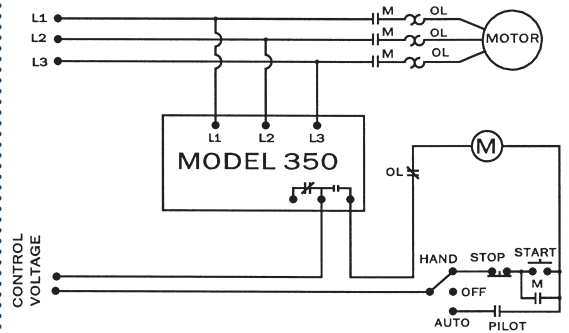
1.5 lbs.
Operating Temperature

Special Options on Model 350

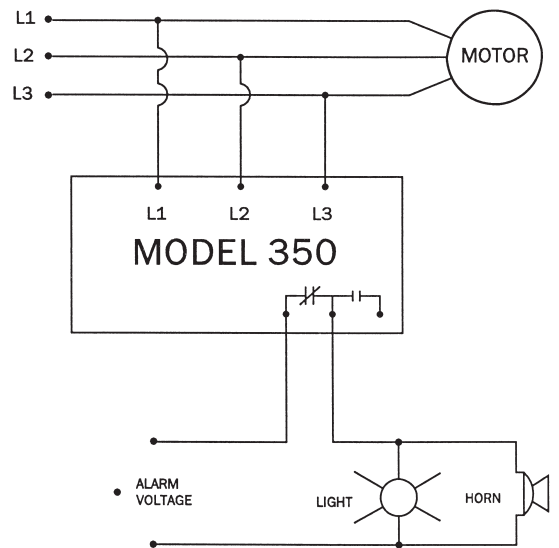
- High Voltage (% of setpoint)
 - Trip..... 110%
 - Reset..... 107%
- Adjustable Restart Delay..... 2-300 seconds
- Adjustable Trip Delay..... 2-30 seconds
- Manual Reset..... Standard with adj. restart delay
- Relay Options..... Consult Factory

*Note: 50 Hz will increase all delay timers by 20%.

TYPICAL WIRING DIAGRAM FOR MODEL 350 WITH MOTOR CONTROL



TYPICAL WIRING DIAGRAM FOR MODEL 350 WITH ALARM CONTROL



SymCom warrants its microcontroller-based products against defects in material or workmanship for a period of five (5) years from the date of manufacture. All other products manufactured by SymCom shall be warranted against defects in material and workmanship for a period of two (2) years from the date of manufacture. For complete information on warranty, liability, terms, returns, and cancellations, please refer to the SymCom Terms and Conditions of Sale document.