

Features

Universal range from 190-480 VAC, 50/60 Hz, provides the versatility needed to handle global applications.

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

Compact design saves precious panel space.

Microcontroller-based design provides better accuracy and higher reliability than analog designs.

Transient protected to meet IEEE 587 standards and stand up under tougher conditions.

10A @ 240 VAC general purpose relay can switch most loads.

Detects single-phase condition regardless of regenerated voltages.



MotorSaver
THREE-PHASE ELECTRIC
MOTOR PROTECTOR

Model 102A 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

Additional Features:

- UL and cUL listed
- 5-Year Warranty
- Made in USA
- Optional Manual/2-300 sec. Variable Restart Delay
- Surface Mount with Optional DIN Rail Mount
- Optional High Voltage Trip
- LED Diagnostics:
 - High or Low Voltage, Unbalance, Single-phase or Reverse-phase Trips
- Finger-safe Barrier Strip Cover

The Model 102A is an auto-ranging voltage monitor designed to protect 3-phase motors regardless of size. It is used on 190-480 VAC, 50 to 60 Hz motors to prevent damage caused by single phasing, low voltage, phase reversal, or voltage unbalance.

This 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). The trip delay prevents nuisance tripping due to rapidly fluctuating power line conditions.



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Motorsaver[®]

THREE-PHASE ELECTRIC MOTOR PROTECTOR

Model 102A Three-Phase Voltage Monitor

- Specifications
- Operating Points
- Special Options

Specifications

3-Phase Line Voltage	190 to 480 VAC
Frequency	50 or 60 Hz
Low Voltage (% of set point)	
• 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	480 VA @ 240 VAC Pilot Duty or 10A @240 VAC General Purpose
Transient Protection (Internal)	IEC 1000-4-5; 1995 ±6 kv
Power Consumption	5 Watts (Max.)
Weight	14 oz.

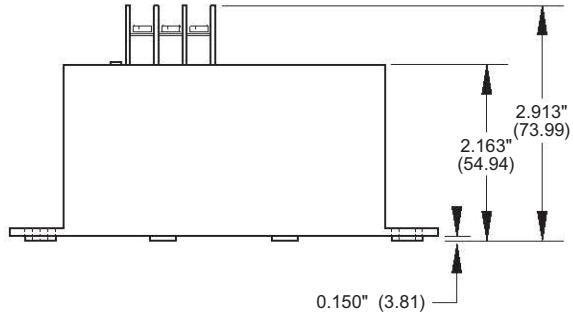
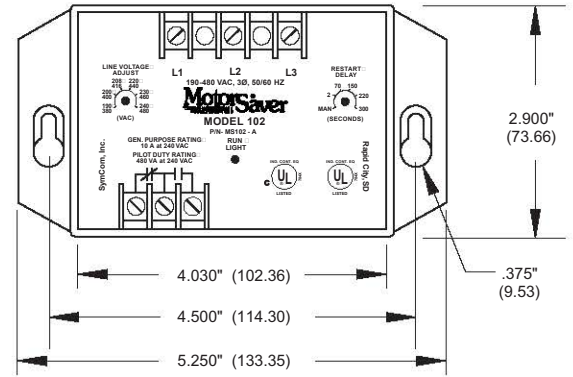
Available Options

- Adjustable Restart Delay (Option 2) . . . 2 - 300 seconds . . . Order # 102A-2
- Adjustable Trip Delay (Option 3) 2 - 30 seconds . . . Order # 102A-3
(Phasing and unbalance trip delay remains at 2 seconds)
- Manual Reset Standard with Adj. Restart Delay
- High Voltage Operating Points
 - Trip (% of Set point) (Option 9) 110% Order # 102A-9
 - Reset (% of Set point) 107%

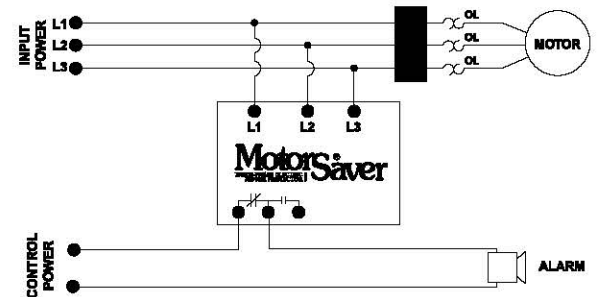
*Note: 50 Hz will increase all delay timers by 20%.

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.

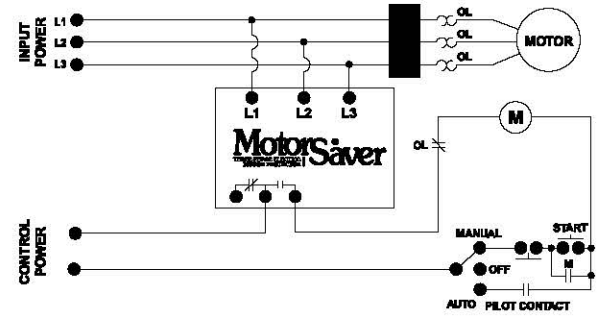
102A DIMENSIONS



TYPICAL WIRING DIAGRAM FOR MOTORSAYER WITH ALARM CIRCUIT



TYPICAL WIRING DIAGRAM FOR MOTORSAYER WITH MOTOR CONTROL



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