



(May not be exact product. For reference only.)

SymCom's Model 777-HVR-SP is a fully programmable electronic overload relay. It is designed to monitor and protect any single-phase, 340-480VAC motor drawing 2-800 full load amps (an external CT is required above 90 amps). This unit's Form C contacts are pilot duty rated at 470VA @ 600VAC for applications where a control power transformer (CPT) is not used on a 480V system. It provides unsurpassed protection from faulty voltage.

The 777-HVR-SP incorporates a 3-digit LED display that is used for programming, providing real-time operational information and displaying diagnostic codes to aid in troubleshooting a fault condition.

The 777-HVR-SP can be used as a stand-alone product, or it can be used in a network to communicate with a PC, PLC, SCADA system, or SymCom's Solutions Software with the use of its built-in RS-485 communications port. Up to 99 model 777-HVR-SP units can be networked together. The unit can also be connected to SymCom's remote monitors for a simple, cost-effective way to meet new requirements for arc-flash safety.

The unit's many features include a settable trip class range (5, 10, 15, 20, 30), with or without jam protection, or an alternate linear trip delay can be set with a range of 2-60 seconds.

Common applications include saws and grinders, fan motors and almost any pumping application, to save the cost and extra wiring associated with a CPT.

Features:

- Protects 3-phase motors from:
 - High voltage
 - Low voltage
 - Overcurrent
 - Undercurrent
- Network programmable
- Automatic reset with three separate restart delay timers, or manual reset
- Tamper guard
- RS-485 communications port (communications module sold separately)
- 3-digit LED diagnostic display
- Last fault memory
- UL and ULC listed
- CE compliant
- CSA approved
- Surface or DIN rail mount
- 5-year warranty
- Made in USA

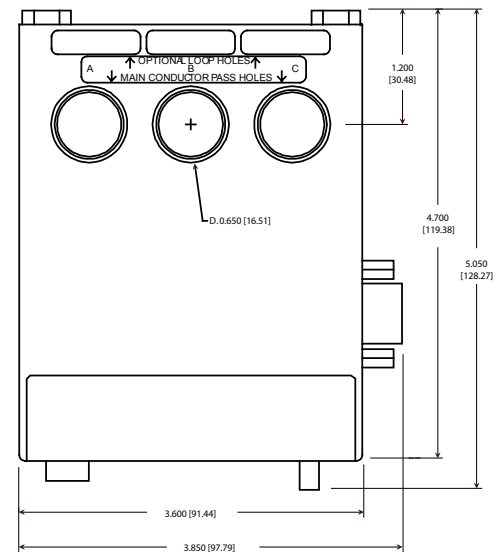
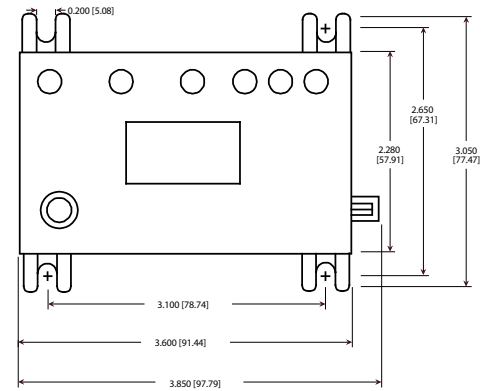
Auxiliary Products:

- Remote Displays (RM-1000/RM-2000)
- Communication Modules
- Remote Manual Reset Kit
- Solutions-M Software

Specifications

Functional Specifications	
Programmable Operating Points LV-Low Voltage Threshold HV-High Voltage Threshold MULT-# of Conductors or CT Ratio (xxx:5) OC-Overcurrent Threshold UC-Undercurrent Threshold TC-Overcurrent Trip Class or Linear Overcurrent Trip Delay RD1-Rapid-cycle Timer RD2-Restart Delay after all faults except undercurrent (motor cool-down timer) RD3-Restart Delay after undercurrent (dry-well recovery timer) #RU-Number of restarts after all undercurrent faults ADDR-RS485 Address #RO-Number of restarts after overcurrent faults UCTD-Undercurrent Trip Delay	340-HV Setting LV Setting-528V 1-10 Loops or 100, 150, 200, 300, 400, 500, 600, 700, 800 (20-100A) + MULT of 80-120% of CT Primary (0, 10-98A) + MULT or 40-100% of CT Primary 5, J5, 10, J10, 15, J15, 20, J20, 30, J30 or lin (linear) 0, 2-500 seconds 2-500 minutes/seconds 2-500 minutes/seconds 0, 1, 2, 3, 4, A (automatic) A01-A99 0, 1, 2, 3, 4, A (automatic) 2-60 seconds
Input Characteristics	
Supply Voltage Frequency Motor Full Load Amp Range	340-480VAC 50/60Hz 2-25A (looped conductors required), 26-90A (direct), 80-800A (external CTs required)
Output Characteristics	
Output Contact Rating-SPDT (Form C) Pilot Duty Expected Life Mechanical Electrical	470VA@600VAC 1 x 10 ⁶ operations 1 x 10 ⁵ operations at rated load
General Characteristics	
Operating Temperature Ambient Operating Ambient Storage Accuracy at 25° C (77° F) Voltage Current Timing Repeatability Voltage Current Maximum Input Power Pollution Degree Class of Protection Relative Humidity Terminal Torque Standards Passed Electrostatic Discharge (ESD) Radio Frequency Immunity (RFI), Conducted Radio Frequency Immunity (RFI), Radiated Fast Transient Burst Short Circuit Surge IEC ANSI/IEEE Hi-potential Test Vibration Shock Safety Marks UL CE Max Conductor Size through 777 Dimensions Weight Mounting Method	-20° to 70° C (-4° to 158° F) -40° to 80° C (-40° to 176° F) ± 1% ± 3% (<100A direct) 5% ±1 second ± 0.5% of nominal voltage ± 1% (<100A direct) 10 W 3 IP20 10-95%, non-condensing per IEC 68-2-3 7 in.-lbs. IEC 61000-4-2, Level 3, 6kV contact, 8kV air IEC 61000-4-6, Level 3 10V IEC 61000-4-3, Level 3 10 V/m IEC 61000-4-4, Level 3, 3.5 kV input power 100kA 61000-4-5 Level 3, 2kV line-to-line; Level 4, 4kV line-to-ground C62.41 Surge and Ring Wave Compliance to a level of 6kV line-to-line Meets UL508 (2 x rated V + 1000V for 1 minute) IEC 68-2-6, 10-55Hz, 1mm peak-to-peak, 2 hours, 3 axis IEC 68-2-27, 30g, 3 axis, 11ms duration, half-sine pulse UL508 IEC 60947-1, IEC 60947-5-1 0.65" with insulation 3.05 H x 3.85 W x 5.05 D in. (77.47 x 97.79 x 128.27 mm) 1.2 lbs. (544.31 g) Surface mount (4 - #8 screws) or DIN Rail Mount

Enclosure Dimensions



inches (millimeters)

How to order:

Part Number: 777-HVR-SP

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