

Features

Digital programmability permits precise customizing.

16 setpoints can be programmed for maximum protection.

Last fault memory provides instant troubleshooting diagnostics.

Voltage, current, last 4 faults, kWh usage, and power factor are recordable when using communications package.

RS-485 communication port comes standard for use with computerized systems using Modbus protocol.

UL and cUL listed as an overload relay—CE compliant.



MotorSaver
SINGLE-PHASE ELECTRIC
MOTOR PROTECTOR

Model 777-HVR
Model 777-HVR-LR
Model 777-575-HVR
Model 777-575-HVR-LR

Overload Relays
•
Engineered Protection

Applications

The Model 777-HVR can be used on any 3-phase motor operating on 380-480VAC systems drawing 2-800 amps (external CTs required for >90FLA systems). The Model 777-575-HVR can be used on 475-600VAC systems drawing 2-800 amps. The HVR designator indicates the unit is equipped with a high voltage relay for handling control voltages up to 600VAC. The LR designator indicates low range—LR models should be used on motors drawing 1-9 full load amps. Applications include **CONVEYOR SYSTEMS, HVAC EQUIPMENT, PUMPS, SAWS, GRINDERS AND OTHER 3-PHASE ELECTRIC MOTORS.**

Description

The Models 777-HVR and 777-HVR-LR are fully-programmable electronic overload relays. An alphanumeric LED display provides programming and diagnostic information. 16 parameters can be programmed into these models:

- | | |
|-----------------------------------|---|
| 1) Low Voltage Setpoint | 9) Rapid-Cycle Timer (RD1) |
| 2) High Voltage Setpoint | 10) Overload Restart Delay (RD2) |
| 3) Voltage Unbalance Setpoint | 11) Underload Restart Delay (RD3 - Dry-Well Recovery Timer) |
| 4) CT Size/Loop Setting | 12) No. of Restarts After an Overload (Manual or Automatic) |
| 5) Overcurrent Trip Point | 13) RS-485 Address |
| 6) Undercurrent Trip Point | 14) Number of Restarts After an Underload Fault |
| 7) Current Unbalance Trip Point | 15) Underload Trip Delay |
| 8) Trip Class (5, 10, 15, 20, 30) | 16) Ground Fault Trip Point |

An RS-485 port allows communication between the Model 777-HVR and an RM-1000 or RM-2000 remote monitor or directly to a computer or PLC via an RS485MS-2W communication module using Modbus. The RM-2000/777 motor management system combines unsurpassed electronic motor protection and critical, user-friendly motor monitoring. SymCom's Solutions software (sold separately) can be used to monitor and control up to 99 Model 777-HVRs from a central computer. Using this software, an operator can control the motor, view the operating parameters, and record the following operating parameters to disk in as quick as one-second increments.

- | | | |
|------------------------|-----------------|-------------|
| • Line - Line Voltages | • Line Currents | • KWh Usage |
| • Last 4 Faults | • Power Factor | |

Protects 3-Phase Motors from:

- Overload
- Underload
- Jams
- High voltage
- Low voltage
- Single-phasing
- Unbalance (voltage & current)
- Ground fault (Class II)
- Rapid cycling
- Phase reversal

Additional Features

- Fully programmable
- Alphanumeric LED diagnostic display
- Automatic or manual reset
- Tamper guard
- Last fault memory
- Surface or DIN rail mountable
- UL and cUL listed
- CE compliant
- CSA approved
- 5-year warranty
- Made in USA

Communication Options

- Modbus w/RS485MS-2W communications module
- DeviceNet w/COM-DN communications module

Motorsaver®

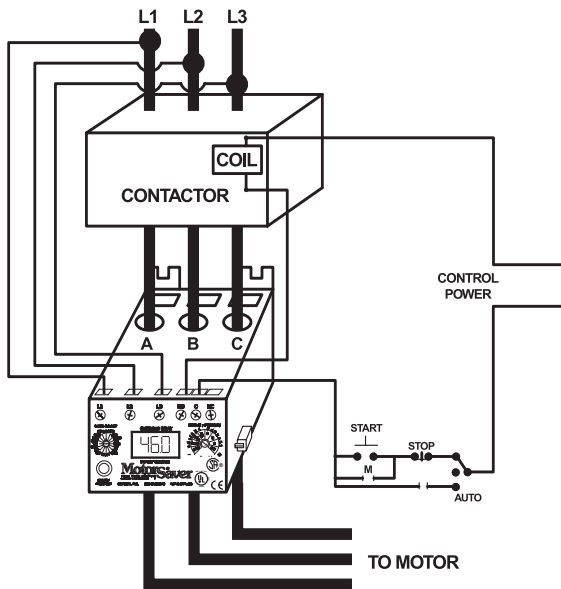
SINGLE-PHASE ELECTRIC MOTOR PROTECTOR



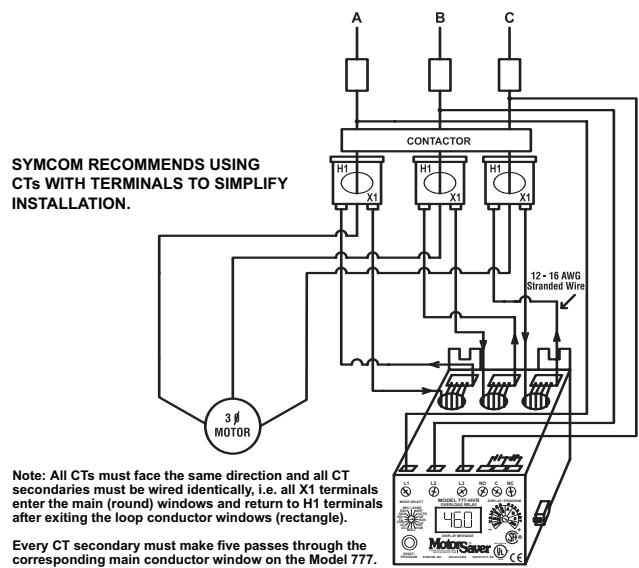
Specifications
 •
 Operating Points
 •
 Special Options

777-HVR • 777-HVR-LR
 777-575-HVR • 777-575-HVR-LR
 Overload Relays

TYPICAL WIRING DIAGRAM FOR MODEL 777-HVR (25 TO 90 AMPS) AND 777-HVR-LR



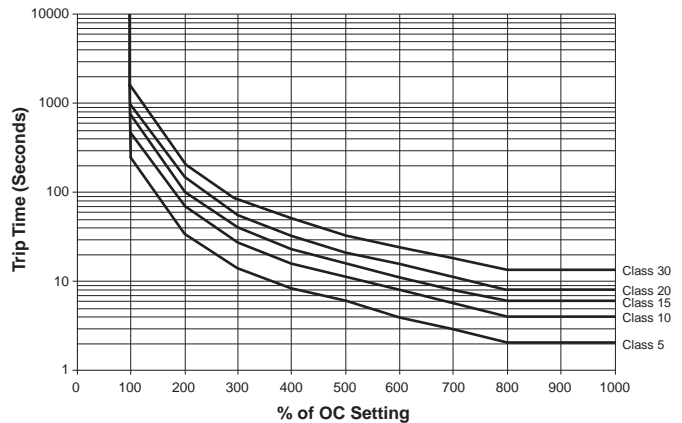
CURRENT TRANSFORMER WIRING DIAGRAM FOR MODEL 777-HVR (90 TO 800 AMPS)



Wiring configuration based on motor amps.

Model	Full Load Amps	# of Loops	# of Conductors through A, B and C	MULT to Program (CT Ratio)
777-HVR-LR	1 - 2	1	2	2
	2 - 9	0	1	1
777-HVR	8 - 12	2	3	3
	12 - 25	1	2	2
	25 - 90	0	1	1
External CTs required. See wiring diagram for external CTs	80 - 110	4	5	100 (100:5)
	110 - 160	4	5	150 (150:5)
	160 - 220	4	5	200 (200:5)
	220 - 320	4	5	300 (300:5)
	320 - 420	4	5	400 (400:5)
	400 - 520	4	5	500 (500:5)
	480 - 600	4	5	600 (600:5)
	560 - 800	4	5	800 (800:5)

Overload Trip Classes



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