

Features

Liquid crystal display.

LED's indicate mode of operation, fault status, communication status, and run status.

Easily mounted on the front of a panel and rated for environmental protection.

Can be mounted up to 4000 feet from the motor starter.

Second communication port is standard.



MotorSaver
THREE-PHASE ELECTRIC
MOTOR PROTECTOR

Model RM-2000

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**Engineered
Protection**
•
**Motor
Management**

The **RM-2000** is a motor monitoring device to be used in conjunction with SymCom's Model 777. The RM-2000/777 motor management system combines unsurpassed electronic motor protection and critical, user friendly motor monitoring.

The RM-2000 has membrane keypad controls which allow both monitoring and control of a 777 MotorSaver® through a RS485 network using Modbus RTU protocol. A second communication port is standard and allows monitoring and control of up to 99 RM-2000 devices from a computer with Solutions Software installed, a PLC, DCS, or SCADA system. The RM-2000 is environmentally protected and is easily mounted on the front of a panel or MCC.

A liquid crystal display informs users of the following motor information:

- Average current, individual line currents, and current unbalance
- Current to ground
- Average voltage, line-line voltages, and voltage unbalance
- Instantaneous power
- Power factor
- Last four faults
- All parameters programmed into 777 MotorSaver®
- Remaining restart delay times

The RM-2000 is also equipped with a real-time clock, which allows access to the following motor management information:

- Total motor run-time (re-settable)
- Time and date of last four faults, along with voltage and current at time of trip
- Time and date of last 10 motor starts
- Total number of motor restarts (re-settable)
- Minimum time between any two starts with time and date (re-settable)
- Run-time since last start (re-settable)
- KWH consumed (re-settable)
- KVAR's consumed (re-settable)

**The RM-2000 is available
with a variety of options
including:**

- Two form – C (SPDT) auxiliary relays – individually programmable for numerous functions (Option 1)
- Analog output available – 0-20mA, 4-20mA, 0-5VDC, or 0-10VDC (Option 2)
- Analog/digital input – several available configurations, consult factory (Option 3)
- Call the factory for additional options.



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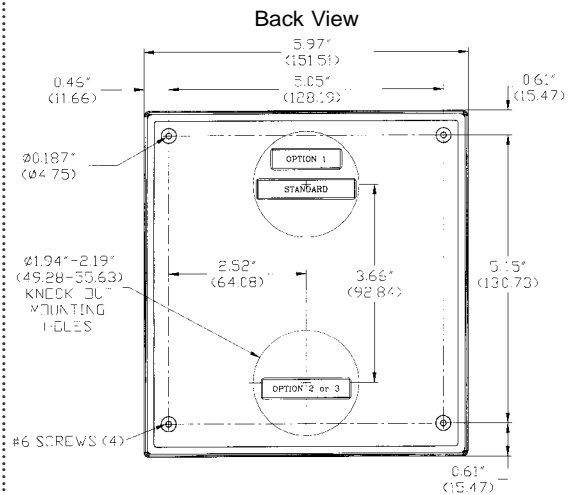
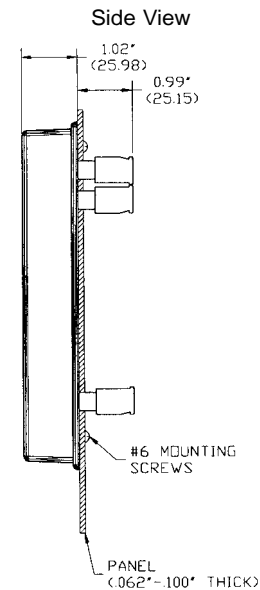
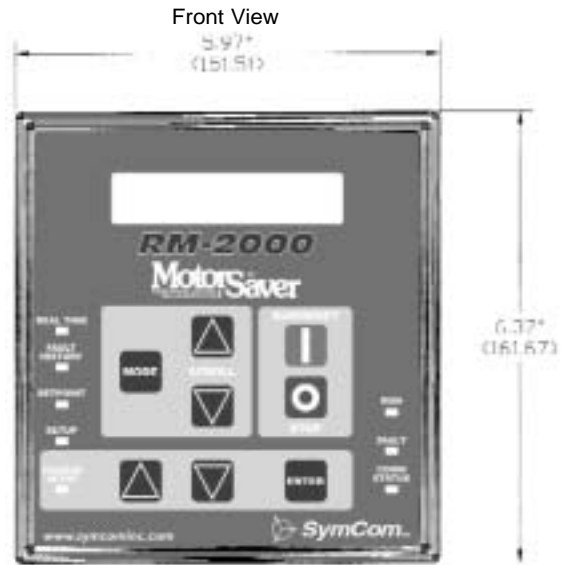
Motorsaver[®]

THREE-PHASE ELECTRIC MOTOR PROTECTOR

Model RM-2000

Specifications

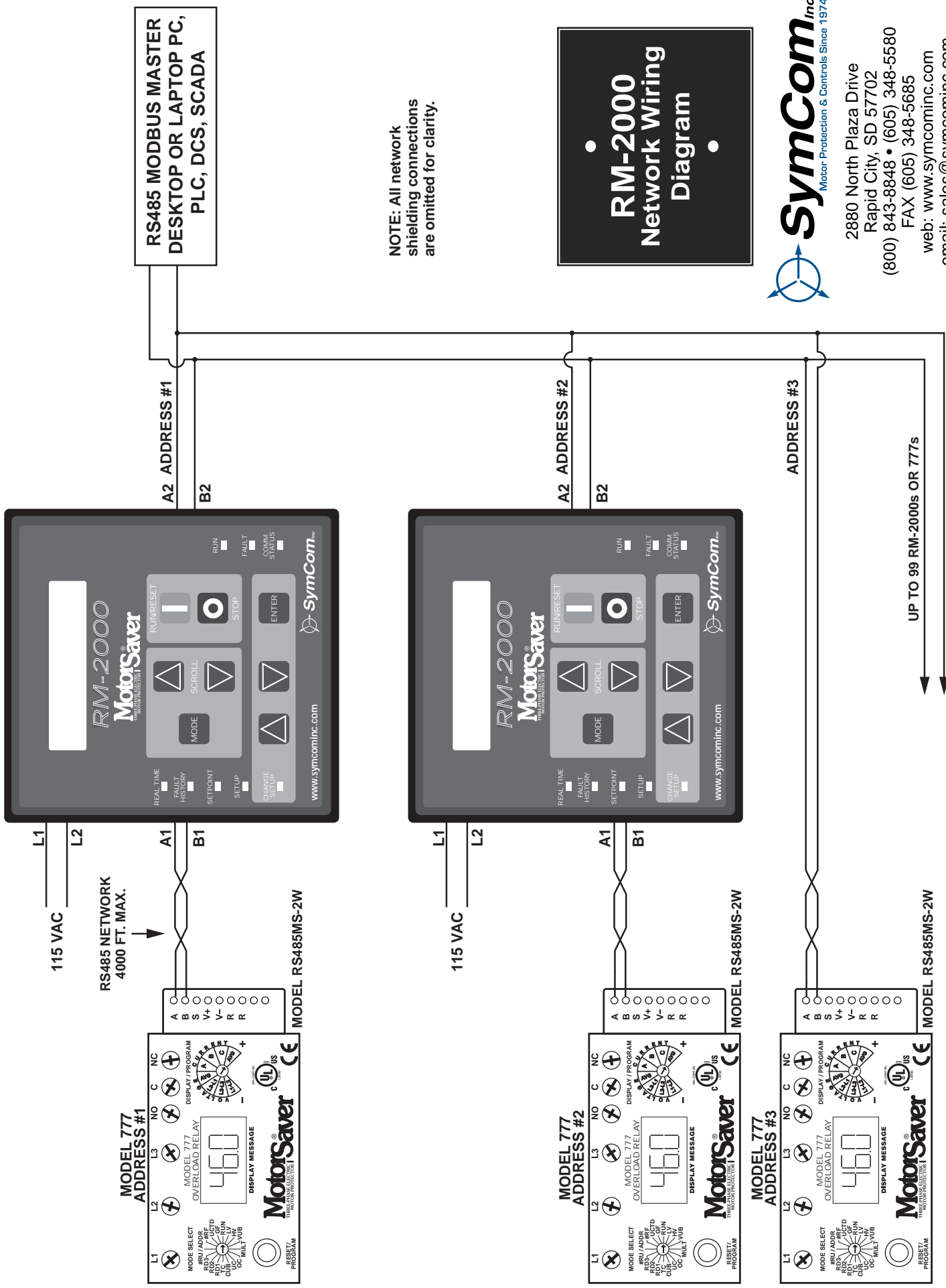
Control Voltage	115 VAC ±10%; 50-60 Hz	
Transient Protection (Internal)	2500 V for 10 ms	
Power Consumption	3 Watts (max.)	
Communication	1 Port for MS 777	1 Port for PC, PLC, etc.
Baud Rate	9600	300-28800
Setup	Even Parity	None, Odd, or Even
	1 Stop Bit	Parity 1 or 2 Stop Bits
Protocol	Modbus RTU	Modbus RTU
Serial Interface	RS485MS-2W	RS485MS-2W
Available Addresses	01	A01-A99
Real-time Clock		
Battery Back-up Life	10 years @ 25°C without external power	
Last fault memory	Stores up to 4 faults with time and date stamp, includes voltages and currents at time of trip	
Output Relays (Option 1)	Consult Factory for Function of Relays	
Configuration	Two Independent Electro-Mechanical Form C (SPDT)	
Contact Material	Silver/Tin Oxide	
Pilot Duty Rating	240 VA @ 120 VAC	
General Purpose Rating	5 A @ 120 VAC	
Analog Output (Option 2)		
Types	0-20 mA, 4-20 mA, 0-5 VDC, 0-10 VDC (specify with order, for others consult factory)	
Output Signal	KW, PF, Amps, or Volts (Software Selectable)	
Maximum Load		
0-20 mA	400 Ω max.	
4-20 mA	400 Ω max.	
0-10 VDC	2 kΩ min.	
0-5 VDC	2 kΩ min.	
Accuracy	± 3% @ 25°C	
Isolation	1 kVrms	
Analog/Digital Inputs (Option 3)	Consult Factory	
Environment		
Class of Protection	NEMA 3R	
Ambient Operating Temperature	-20° to 70°C	
Ambient Storage Temperature	-30° to 70°C	
Humidity	Up to 85%, non-condensing	
Enclosure		
Dimensions	6" W x 6 3/8" H x 1 1/16" D	
Weight	1.2 lbs.	
Material	Black polycarbonate	
Display	Liquid Crystal with extended temp. range	
Size	2 rows x 20 characters	
Lighting	LED Back-Light	
Keypad	Eight 0.5" stainless steel dome buttons for tactile feedback	
Mechanical Life	50,000 actuations	
Overlay Material	Polyester	
UV Exposure without degradation	2000 hrs	
Terminal	Depluggable terminal block	



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.



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RS485 MODBUS MASTER
DESKTOP OR LAPTOP PC,
PLC, DCS, SCADA

NOTE: All network
shielding connections
are omitted for clarity.

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RM-2000
Network Wiring
Diagram
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pumping applications. Call us.*

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THREE-PHASE ELECTRIC MOTOR PROTECTOR | SUBMERSIBLE PUMP PROTECTOR



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Motor Protection & Controls Since 1974

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