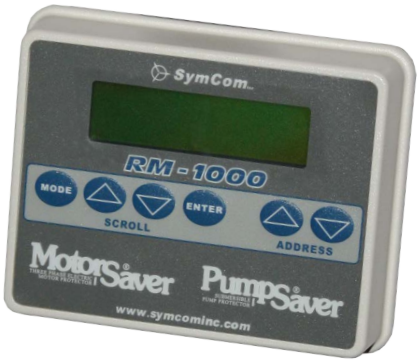
RM1000 SERIES

Remote Monitor

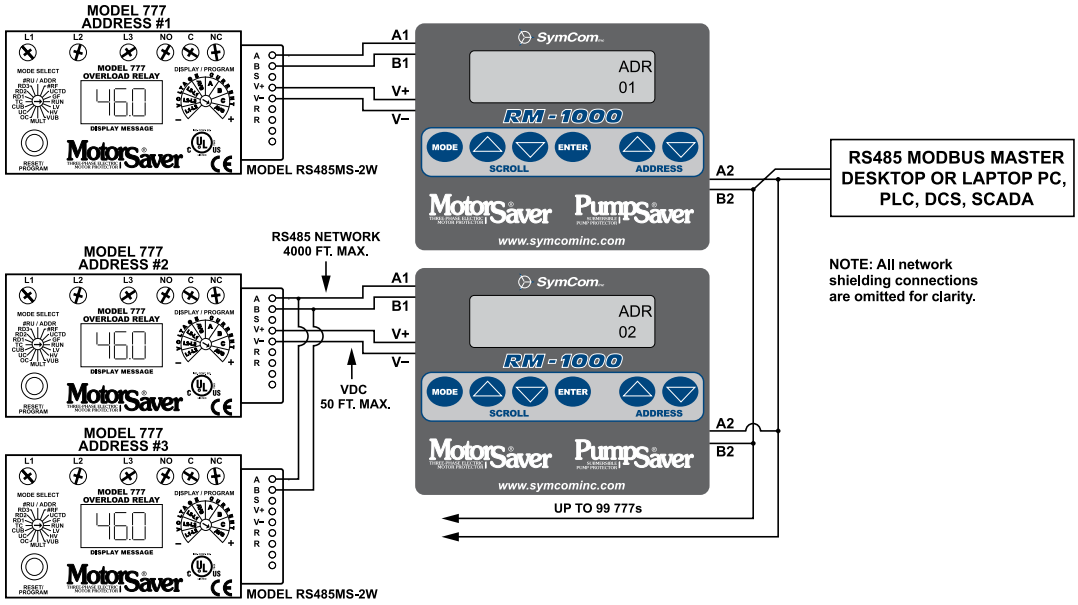


Description

The RM-1000 Series is a motor-monitoring device to be used in conjunction with the 777 family of products (excluding the P1 Series), 77C family of products and the 601 voltage monitors, via Modbus protocol with a communications module. The RM-1000/777 motor management system combines unsurpassed electronic motor protection and critical, user-friendly, motor monitoring.

The RM1000 Series can monitor up to 16 MotorSaver® and/or PumpSaver® units through an RS-485 network using Modbus RTU protocol. A second communication port allows monitoring and control of up to 99 MotorSaver® and/or PumpSaver® units from a computer, PLC, DCS or SCADA system and can be accessed from the host computer or PLC with the RM1000 acting as a repeater for any of its motor protectors. In addition to the monitoring functions, the RM-1000 can be used to reset a tripped MotorSaver® or PumpSaver®.

Wiring Diagram



Ordering Information

MODEL	DESCRIPTION
RM1000	NEMA 3R and/or UL Type 12
RM1000-3R	NEMA 3R
RM1000 NEMA 4	NEMA 4X

The RM1000 Series is easily mounted remotely and improves safety for service and operations personnel by allowing them to control and monitor the device without opening the electrical cabinet. Using the RM1000 is a simple, cost-effective method for aiding compliance with arc flash safety regulations. The enclosure and keypad assembly is water and ultraviolet light resistant. The enclosure is NEMA 3R or NEMA 4X (optional) rated. The RM1000 and RM1000 NEMA 4 also carry a UL Type 12 rating, whereas the RM-1000-3R does not carry the UL Type 12 rating due to added weep holes. The added weep holes in the RM1000-3R make it suitable for applications subjected to condensing moisture/humidity.

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RM1000 SERIES

Features

Displays:

- Individual line currents and average current
- Current and voltage unbalance
- Individual phase voltages and average voltage
- Displays last four faults, trip reason, and restart timer status
- MotorSaver® and/or PumpSaver® setpoints
- Run-hours on each motor
- Warning of pending (imminent) faults

Controls:

- Reset run-hour meter
- Reset MotorSaver® or PumpSaver®
- Change setpoints from the RM1000

Convenience:

- Power from RS485MS-2W communications module
- Monitor up to 16 777s with one display
- NEMA 3R outdoor rated
- Secondary steel enclosure available

Accessories



RS485-RS232 Converter with cable & plug
Allows RS485 devices to be connected to a PC via the RS232 (serial) port. Provides convenient terminal blocks for making signal and DC power supply connections. Pre-wired.



RS485-USB
Converter with cable & plug/RS232:USB
Allows RS485 devices to be connected to a PC via the USB port. Provides convenient terminal blocks for making signal and DC power supply connections. Pre-wired.



RM1000 ENCL
Steel enclosure for protecting the RM-1000 remote communications monitor from adverse affects of weather and vandalism, while allowing normal communications connections to the RM-1000 unit.



Solutions Software: Solutions-M
Software features include data logging, real-time data monitoring and fault and event monitoring.

Specifications

Input Characteristics

Control Power	12-24VDC (Supplied by RS485MS-2W)

Functional Characteristics

	Port #1 for 777(s)	**Port #2 for PC, PLC, etc.**
Communication		
Baud Rate	1200-28800	1200-28800
Setup	None, Odd, or Even Parity 1 or 2 Stop Bits	None, Odd, or Even Parity 1 or 2 Stop Bits
Protocol	Modbus RTU	Modbus RTU
Serial Interface	RS-485	RS-485
Available Addresses	1-99 addresses (max 16 per RM-1000)	Responds to all port #1
Mechanical Life	100,000 actuations	
Overlay Material	Polyester	
UV Exposure w/o degradation	2000 hrs	
Terminal Torque (depluggable terminal block)	3 in.-lbs.	
Panel Thickness	0.03" min, 0.12" max	

General Characteristics

Ambient Temperature Range	
Operating	-40° to 70°C (-40° to 158°F)
Storage	-40° to 80°C (-40° to 176°F)
Maximum Input Power	100mA
Class of Protection	
RM1000, RM1000 NEMA 4	NEMA 3R and/or UL Type12, NEMA 4X (optional)
RM1000-3R	NEMA 3R only
Relative Humidity	Up to 85%, non-condensing
Safety Marks	
UL	UL508 (File #E68520)
CSA	22.2 No. 14 (File #46510)
CE	IEC 60947-6-2
Enclosure Material	Black polycarbonate
Display	Liquid Crystal with extended temp. range
Size	2 rows x 16 characters
Keypad	Six 0.5" stainless steel dome buttons for tactile feedback
Dimensions	**H** 91.92 mm (3.62"); **W** 115.42 mm (4.54"); **D** 22.86 mm (0.9")
Weight	1.5 lbs. (24 oz., 680.39 g)
Mounting Method	Surface mountable on backplane using 4 screws

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