## Features

Infrared communication with INFORMER makes diagnostics simple.

Restart delay can be set up to 225 minutes or placed in manual reset mode.

PumpSaver can be calibrated to specific pump/motor combinations and various conditions.

"Run Light" conveniently shows that the pump can operate.

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


Model 233 & 111 Single Phase PumpSavers are pump monitors designed to protect single phase pumps from dry well, dead head, jammed impeller, and over & undervoltage conditions. The PumpSaver® Model 233 protects 230 volt, 2 or 3 wire, 1/3 to 3 hp pumps. The PumpSaver® Model 111 protects 115 volt pumps rated 1/3 to 1 hp. Typical applications include submersible pumps, centrifugal pumps, circulating pumps, cooling pumps, environmental pumps, residential waterwells, commercial waterwells, irrigation wells, and golf course systems.

A calibration adjustment allows the Model 233 and 111 to be calibrated to your specific pumping applications, thereby reducing the possibility of false or nuisance tripping. A unique microcontroller based voltage and current sensing circuit constantly monitors for power fluctuations, overcurrent, and undercurrent conditions. When an abnormality, such as loss of suction, is detected, the PumpSaver® deactivates its output relay and directly disconnects the pump motor. The PumpSaver® then begins its user-selectable "Restart Delay" (Dry Well recovery) timer. When the timer counts to zero or power is removed and reapplied, the PumpSaver® reactivates its output relay and turns the pump back on. An infrared LED communicates directly with a hand-held diagnostics tool called the INFORMER (sold separately). The INFORMER displays 16 parameters including calibration point, trip point, running points, and last fault.

Note: The use of flow restrictors or unusually high head pressures at the time of calibration may interfere with the detection of dead head conditions. Contact SymCom for information on a product to fit these applications.

PumpSaver® SUBMERSIBLE PUMP PROTECTOR

# Model 111 & Model 233

**Single Phase PumpSavers**

•

**Engineered Protection**

•

**Microcontroller Based**

***Protects Single-Phase pumps from:***

- Dry well
- Flow restrictions (dead head)
- Overcurrent (jammed impeller)
- Overvoltage
- Undervoltage
- Rapid cycling

***Additional Features:***

- State-of-the-art pump protection
- Infrared LED communication to SymCom's Informer
- 5 year warranty
- Made in USA

SymCom Inc
Motor Protection & Controls Since 1974

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(800) 843-8848 • (605) 348-5580 • FAX (605) 348-5685
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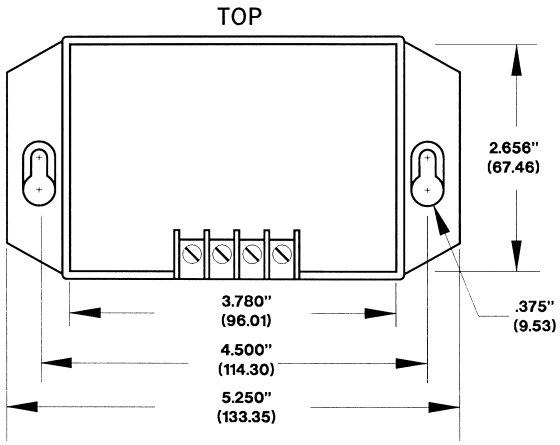
# Model 111 & Model 233
## Single Phase PumpSavers

PumpSaver® SUBMERSIBLE PUMP PROTECTOR

**Specifications**
•
**Operating Points**
•
**Special Options**

| Specifications | Model 111 | Model 233 |
|---|---|---|
| **1 Phase Line Voltage (±10%)** | 115 VAC | 230VAC |
| **Load Range** | 1/3 - 1 hp | 1/3 - 3 hp |
| **Frequency** | 50 - 60 Hz | 50 - 60 Hz |
| **Operating Points** | | |
| •Overload | 125% of Cal. Point | 125% of Cal. Point |
| •Underload (Dry Well) | Approx. 80% of Calibration | Amps (both models) |
| •Overvoltage Trip Point | 132.5 | 265 |
| •Undervoltage Trip Point | 95 | 190 |
| •# of Restarts allowed in a 60 sec. period before lockout (Rapid Cycle Timer) | 4 | 4 |
| •Trip Delay Time (Overload) | 5 sec | 5 sec. |
| •Trip Delay Time (Dry Well) | 2 sec | 2 sec. |
| | (4 sec. optional)* | (4 sec. optional)* |
| **Restart Delay Time** | | |
| •Overvoltage/Undervoltage Delay | 5 sec | 5 sec. |
| •All other faults (Dry Well Rec. Timer) | 2-225 min. | 2-225 min. |
| Output Contact Rating (SPST) | 1 hp @ 115 VAC | 3 hp @ 240 VAC |
| | (17 amps Max) | (17 amps Max) |
| **Weight** | 14 oz. | 14 oz. |
| •W/3R enclosure (-3R option) | 1.6 lbs. | 1.6 lbs. |
| **Power Consumption** | 5 Watts (Max) | 5 Watts (Max) |

*Note: Other trip delays and restart delays are available upon request.



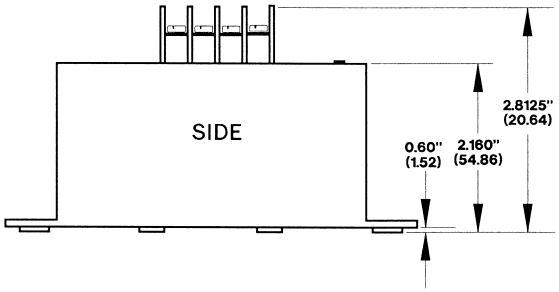
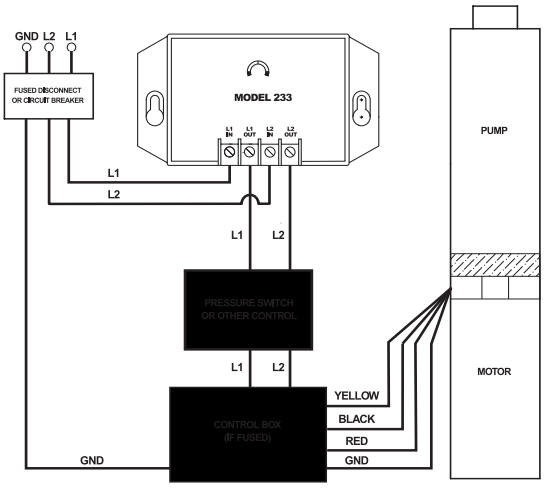




FIGURE NO. 2: Standard Control Box




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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