

Features

Insiders fit in existing control boxes, saving enclosure costs.

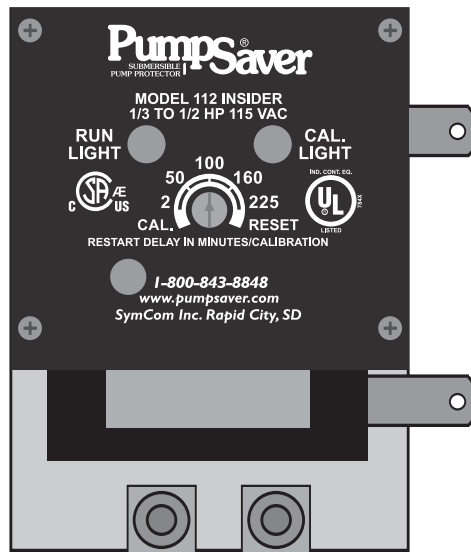
Installation is quick and easy—takes less than 30 seconds.

Infrared communication with Informer makes diagnostics simple.

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

Diagnostic LEDs indicate trip status and provide simple troubleshooting.

The restart delay can be set up to 225 minutes or to manual reset mode.



The Model 232-Insider single-phase PumpSaver® fits inside 1/3, 1/2, 3/4, and 1hp, 230V Grundfos control boxes. The **Model 112-Insider** single-phase PumpSaver® fits inside 1/3 and 1/2hp, 115V Grundfos control boxes. The PumpSaver® Model 112/232-Insider is a current monitor designed to protect single-phase pumps from dry-well, dead-head, jammed impeller, overvoltage and undervoltage conditions. Typical applications include residential water wells, commercial water wells, irrigation wells, and golf course systems.

A calibration adjustment allows the Insider 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 the incoming power for fluctuations, overcurrent, and undercurrent. 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. By leaving the restart delay knob in the reset position, the PumpSaver® will operate in manual reset mode.

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

Models 232-Insider & 112-Insider Single-Phase PumpSaver®

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Engineered
Protection for
Grundfos Pumps

Protects Single-Phase Pumps from:

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

Standard Features:

- Fits inside Grundfos control boxes
- State-of-the-art pump protection
- Fuzzy logic software
- Infrared LED communication to Symcom's Informer
- 5-year warranty
- Made in USA

Model 232-Insider & Model 112-Insider

Single-Phase PumpSaver®

PumpSaver®

SUBMERSIBLE
PUMP PROTECTOR

Specifications

Operating Points

Special Options

Specifications Model 112-Insider..... Model 232-Insider

1 Phase Line Voltage ($\pm 10\%$)..... 115VAC.....230VAC
 Load Range 1/3-1/2hp 1/3-1hp
 Frequency 50*/60Hz 50*/60Hz

Operating Points

- Overload 125% of Cal. Point 125% of Cal. Point
- High Voltage Reset Point 132.5 265
- Low Voltage Reset Point 95 190
- Trip Delay Time (Overload) 5 sec. 5 sec.
- Trip Delay Time (Dry well) 2 sec.** 2 sec.**

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)..... 1hp @ 115VAC 1hp @ 240VAC
 (17 amps max.) (17 amps max.)

Safety Marks

- UL UL508 UL508
- CSA C22.2 No.14 C22.2 No.14

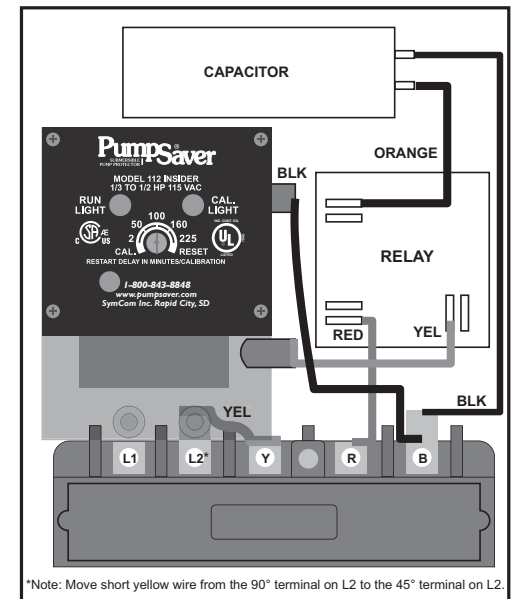
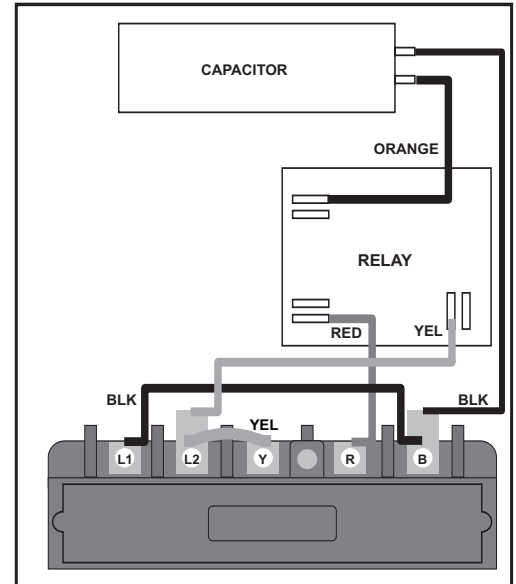
Weight..... 10 oz. 10 oz.

Power Consumption 5 Watts (max.) 5 Watts (max.)

*Note: 50 Hz will increase all delay timers by 20%

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

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.



*Note: Move short yellow wire from the 90° terminal on L2 to the 45° terminal on L2.