

Picture may not be representative of actual product.

The Model 233P single-phase PumpSaver®Plus is a pump monitor designed to protect single-phase pumps from dry-well, dead-head, jammed impeller, rapid cycle, overvoltage and undervoltage conditions. The PumpSaver®Plus Model 233P protects 230 volt, 2 or 3 wire, 1/3 to 3 hp pumps.

A calibration adjustment allows the Model 233P to be calibrated to your specific pumping applications, thereby reducing the possibility of false or nuisance tripping. A proprietary microcontroller based voltage, power factor and current-sensing circuit constantly monitors for power fluctuations, overcurrent and underload conditions. When an abnormality, such as loss of suction, is detected, the PumpSaver®Plus deactivates its output relay and directly disconnects the pump motor. The PumpSaver®Plus then begins its user-selectable "Restart Delay" (dry-well recovery) timer. When the timer expires or power is removed and reapplied, the PumpSaver®Plus reactivates its output relay and allows the pump to turn back on.

An infrared LED communicates directly with a hand-held diagnostic tool called the Informer (sold separately).

NOTE: The PumpSaver®Plus models have a sensitivity adjustment for the dry-well trip point. After calibration is done, you can adjust the sensitivity for the dry-well/dead-head trip point from 70-90% of the full load. This makes the unit even more adaptable to varying pumping applications. If you have a very low producing well, you increase the sensitivity closer to the 90% mark, or if you have a very heavy producing well, you would decrease the sensitivity around the 70% mark.

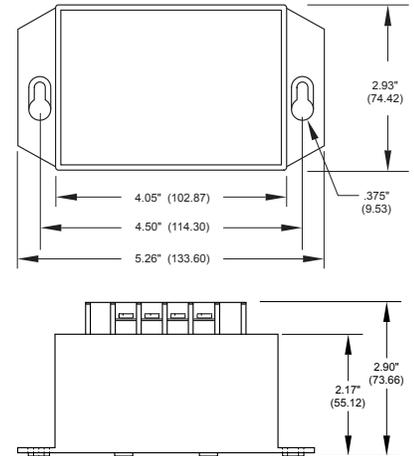
### Features:

- Protects single-phase pumps from:
  - Dry well
  - Flow restrictions (dead head)
  - Overcurrent (jammed impeller)
  - Overvoltage
  - Undervoltage
  - Rapid cycling
- Ideal for submersible pumps
- State-of-the-art pump protection
- Infrared LED communication to SymCom's Informer
- UL Listed
- 5-year warranty
- Made in USA

# Specifications

Functional Specifications	
Adjustments/Settings	
Overcurrent	125% of calibration point
Underload (dry-well)	Adjustable (70 to 90% of calibrated run power)
Overvoltage	265VAC
Undervoltage	190VAC
Number of restarts allowed in a 60-second period (rapid-cycling)	4
Trip Delay Times	
Overcurrent	5 seconds
Dry-well	4 seconds
Restart Delay Times	
Over/undervoltage	2 seconds
All other faults	Manual, 2-225 Minutes
Input Characteristics	
Supply Voltage	230VAC
Load Range	
233P-1.5	1/3 - 1.5 hp
233P	1/3 - 3 hp
Frequency	50/60Hz (note: 50Hz will increase all delay timers by 20%)
Output Characteristics	
Output Contact Rating-SPST	
233P-1.5	1.5hp@240VAC (10 amps max.)
233P	3hp@240VAC (17 amps max.)
General Characteristics	
Operating Temperature	-40° to 55° C (-40° to 131° F)
Maximum Input Power	5 W
Wire Gauge	Solid or Stranded 10 - 22AWG
Terminal Torque	13 in.-lbs.
Standards Passed	
Electrostatic Discharge (ESD)	IEC 61000-4-2, Level 2, 4kV contact, 6kV air
Surge Immunity	IEC 61000-4-5, Level 4, 4kV line-to-line and line-to-ground
Safety Marks	
cUL Listed	UL508, C22.2 No. 14
Dimensions	5.26" W x 2.93" H x 2.90" D
Weight	14 oz.
Mounting Methods	#8 screws

## Enclosure Dimensions



## How to order:

Part Number: 233P-1.5  
 233P-1.5-ENCL (for more information see spec sheet for ENCL enclosure)  
 233P  
 233P-ENCL (for more information see spec sheet for ENCL enclosure)



(605) 348.5580 / (800) 843.8848 / Fax (605) 348.5685  
 customerservice@symcom.com / technicalsupport@symcom.com