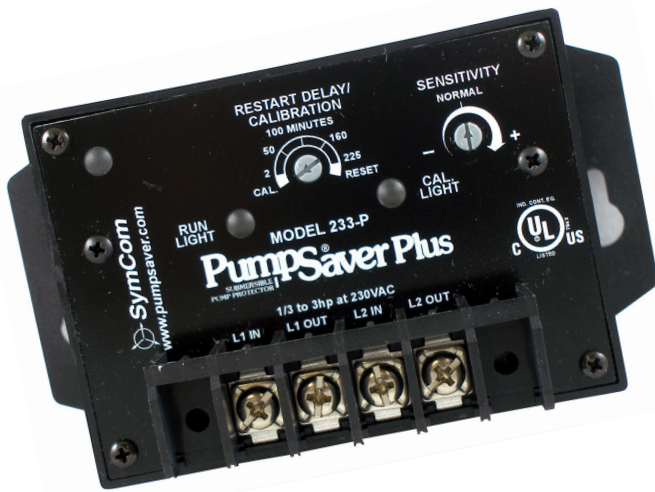


Single-Phase PumpSaver® Plus

Model 233-P

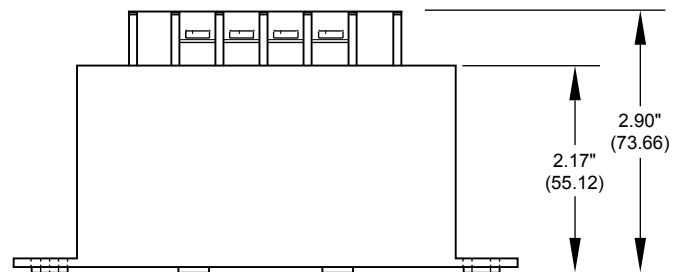
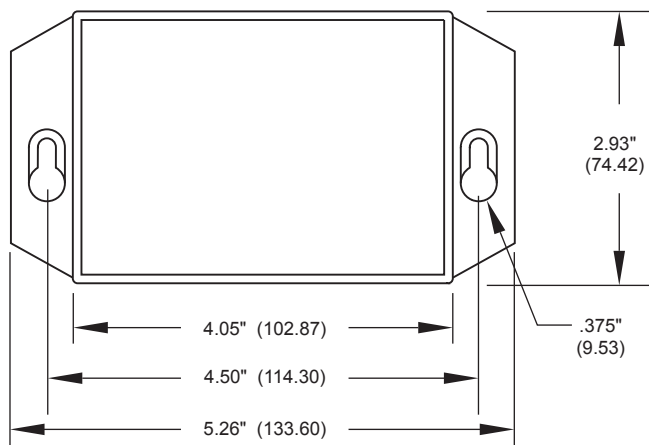
The Model 233-P single-phase PumpSaver®Plus is a pump monitor designed to protect single-phase pumps from dry-well, dead-head, jammed impeller, rapid cycle and overvoltage and undervoltage conditions. The PumpSaver®Plus Model 233-P protects 230 volt, 2 or 3 wire, 1/3 to 3 hp pumps.



A calibration adjustment allows the Model 233-P 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 turns the pump back on.

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

NOTE: The PumpSaverPlus 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.



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	
233-P	1/3 - 3 hp
233-1.5-P	1/3 - 1.5 hp
Frequency	50/60Hz (note: 50Hz will increase all delay timers by 20%)
Output Characteristics	
Output Contact Rating-SPST	
233-P	3hp@240VAC (17 amps max.)
233-1.5-P	1.5hp@240VAC (17 amps max.)
General Characteristics	
Operating Temperature	
Ambient	-40° to 40° C (-40° to 104° F)
Surrounding Air	-40° to 55° C (-40° to 131° F)
Power Consumption	5 Watts (max.)
Wire Gauge	Solid or Stranded 10 - 22AWG
Terminal Torque	13 in.-lbs.
Standards Passed	
Electrostatic Discharge (ESD)	IEC 1000-4-2, Level 2, 4kV contact, 6kV air
Safety Marks	
UL	UL508
CSA	C22.2 No. 14
Dimensions	5.26" W x 2.93" H x 2.90" D
Weight	14 oz.
Mounting Methods	#8 screws

How to order:

Part Number: 233-P
 233-1.5-P
 233-P-3R-L (mounted in NEMA 3R box)
 233-1.5-P-3R-L (mounted in NEMA 3R box)



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