

234-P

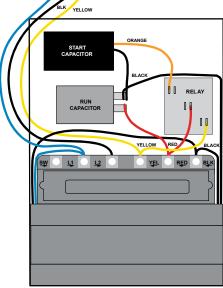
Single-Phase Pump Monitor



Wiring Diagram

234-P CONNECTIONS IN GRUNDFOS* CONTROL BOX





For installation instructions see the Fresh Water Pumping Catalog.

Description

The PumpSaver® Plus Model 234-P protects single-phase pumps from dry-well, dead-head, rapid-cycle, jammed-impeller, and over/undervoltage conditions. Typical applications include residential waterwells, commercial waterwells, irrigation wells, and golf course and other sprinkler systems.

The Model 234-P is designed to be mounted inside a Grundfos* control box to protect $\frac{1}{3}$ -3 hp, 2- or 3-wire, 230 V pumps.

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

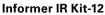
Features & Benefits

FEATURES	BENEFITS
Proprietary microcontroller based circuitry	Constant monitoring of voltage and current protects pumps from dry-well, dead-head, jammed impeller, rapid cycling, and voltage faults
Onboard sensitivity adjustment	Allows user to adjust the current sensitivity for the dry-well / dead-head trip point from 70 % - 90 % of the full load.
Adjustable restart delay	Allows user to select well recovery time delay after a dry-well condition occurs, or to select manual reset
Built in IR communications link	Used with the Informer, allows user to see stored faults, run time, and also troubleshoot the pump while it's running
LED indication	Provides status and diagnostics for troubleshooting

Accessories



A hand-held diagnostic tool that uses an infrared receiver to access information which can be helpful for troubleshooting the system. Includes the Informer IR Kit-12



12" infrared adapter cable attaches to the face of the unit to provide remote diagnostics without opening the panel. Included with the Informer

234-P



Specifications

Functional Specifications Adjustments/Settings . Overcurrent Underload (dry-well) **Overvoltage** Undervoltage Number of restarts allowed in a 60-second period (rapid-cycling) Trip Delay Times Overcurrent Dry-well **Restart Delay Times** Over/undervoltage All other faults (dry-well recovery timer)

125 % of calibration point Adjustable (70 - 90 % of calibrated run power) 265 V ac 190 V ac

5 seconds 4 seconds

4

2 seconds

Manual, 2-225 minutes

Input Characteristics Supply Voltage

Load Range Frequency **Output Characteristics**

Dimensions

Mounting Methods

Standards Passed

Weight

General Characteristics

230 V ac 1⁄3 – 3 hp 50/60 Hz (Note: 50 Hz will increase all delay timers by 20 %)

Output Contact Rating (SPST) 3 hp @ 240 V ac (17 A max.)

Operating Temperature -40 °C to 70 °C (-40 °F to 158 °F) Maximum Input Power 5 W (max.) Fitted to Grundfos* Control Box 14 oz. Grundfos* Control Box

Electrostatic Discharge (ESD) IEC 61000-4-2, Level 2, 4 kV contact, 6 kV air

*Grundfos is a trademark of its respective owner.