

460-15-100-SLD

Single-Channel Seal-Leak Detector



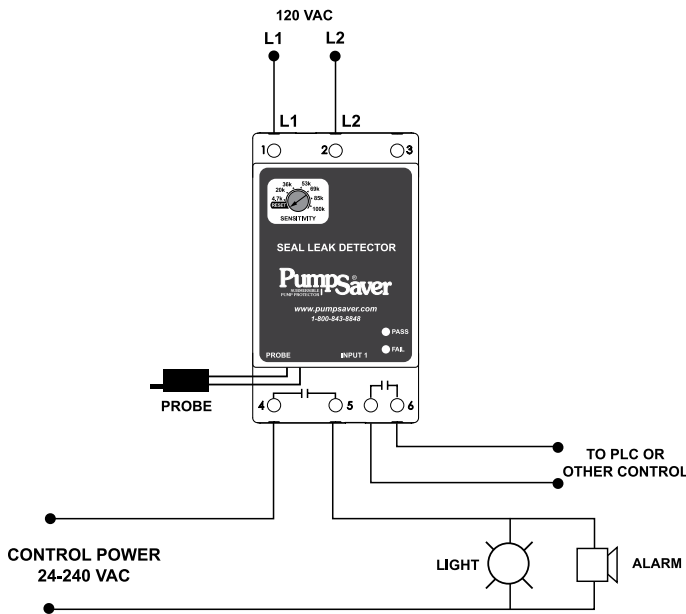
Description

The 460-15-100-SLD is a seal-leak detector to sense seal failures on submersible pumps. A microcontroller-based relay monitors the shaft seal of a submersible pump motor. A resistive probe is installed in the seal cavity. If water leaks into the pump, the resistance measured by the probe decreases. When the resistance drops below the sensitivity setpoint, the unit will trip and the relay contacts will change state. Output relay logic can be reversed by removing an external jumper. The unit will automatically reset when a fault is cleared.

Features & Benefits

| FEATURES | BENEFITS |
|--------------------------------------|--|
| Unique probe protection logic | Probes are protected from scale build up through pulsed DC signal between the probes |
| Invertible relay logic | Allows flexibility to be used in pump-up and pump-down applications |
| LED status indicators | Provides visual indication of the relay status |
| 2 relay contacts | Control independent loads on different circuits |

Wiring Diagram



Specifications

Input Characteristics

Control Voltage 110/120VAC nominal
Frequency 50/60Hz (Note: 50Hz will increase all delay timers by 20%)

Functional Characteristics

Sensitivity 4.7k-100kΩ
Probe Sense Voltage 5vdc pulsed

Output Characteristics

Output contact Rating – (Two Form A - SPST)
Pilot Duty 360VA @ 240VAC
General Purpose 8A @ 240VAC

General Characteristics

Ambient Temperature Range
Operating -40° to 70°C (-40° to 158°F)
Storage -40° to 80°C (-40° to 176°F)
Maximum Input Power 2 W
Class of Protection IP20, NEMA 1 (finger safe)
Relative Humidity 10-95%, non-condensing per IEC 68-2-3
Terminal Torque 4.5 in.-lbs.
Wire AWG 12-20 AWG

Standards Passed

Electrostatic Discharge (ESD) IEC 61000-4-2, Level 3, 6kV contact, 8kV air
Radio Frequency Immunity, Radiated 150MHz, 10 V/m
Fast Transient Burst IEC 61000-4-4, Level 3, 3.5kV input power and controls

460-15-100-SLD

Surge

IEC

IEC 61000-4-5, Level 3, 4kV line-to-line;
Level 4, 4kV line-to-ground

ANSI/IEEE

C62.41 Surge and Ring Wave Compliance
to a level of 6kV line-to-line

Hi-Potential Test

Meets UL508 (2 x rated V + 1000 V for 1 min.)

Safety Marks

UL

UL508 (File #E68520)

CE

IEC 60947

Enclosure

Polycarbonate

Dimensions

H 88.9 mm (3.5"); **W** 52.93 mm (2.08");

D 59.69 mm (2.35")

Weight

1 lb. (16 oz., 453.59 g)

Mounting Method

35mm DIN rail or Surface Mount
(#6 or #8 screws)