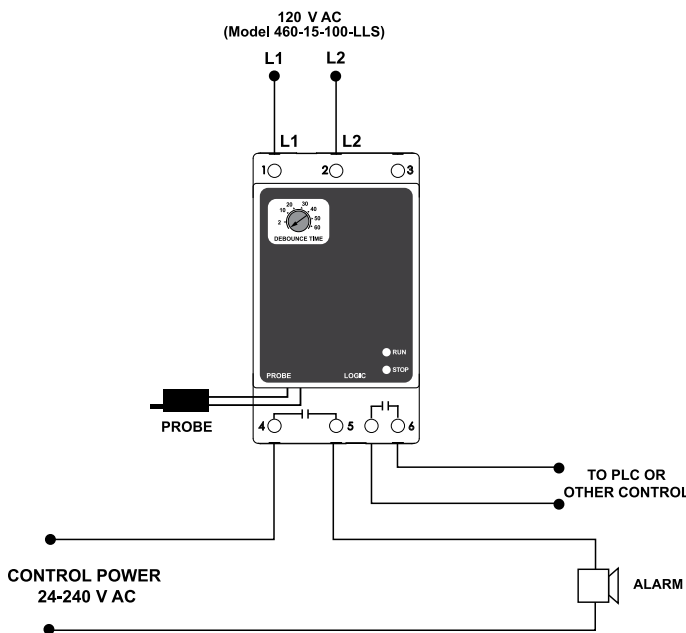


460-15-100-LLS

Single-Channel Liquid Level Sensor



Wiring Diagram



Description

The 460-15-100-LLS is a liquid level sensor to detect the presence of conductive liquids. A probe is mounted at the desired tank level and connected to the PumpSaver®. When the probe is submersed, the relay's output contacts will change state as soon as the debounce time expires. The adjustable debounce timer is intended to prevent nuisance actuating due to waves or splashing in the tank.

Relay logic can be inverted so the relay's output contacts change state when the probe is no longer submersed. This makes the unit versatile for use in pump-up and pump-down applications.

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
Adjustable debounce timer	Prevents nuisance actuating caused by waves or splashing in the tank
LED status indicators	Provides visual indication of the relay status

Specifications

Input Characteristics

Control Voltage

110/120 V ac nominal

Frequency

50/60 Hz (*Note: 50 Hz will increase all delay timers by 20%*)

Sensitivity

100 kΩ

Functional Characteristics

Probe Sense Voltage

5 V dc pulsed

Debounce Time Delay

2-60 seconds

Output Characteristics

Output contact Rating

– (Two Form A - SPST)

Pilot Duty

360 VA @ 240 V ac

General Purpose

8 A @ 240 V ac

General Characteristics

Ambient Temperature Range

Operating -40 °C to 70 °C (-40 °F to 158 °F)

Storage

-40 °C to 80 °C (-40 °F 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

12-20 AWG

Standards Passed

Electrostatic Discharge (ESD)

IEC 61000-4-2, Level 3, 6 kV contact, 8 kV air

Radio Frequency

Immunity, Radiated

150 MHz, 10 V/m

Fast Transient Burst

IEC 61000-4-4, Level 3, 3.5 kV input power and controls

Protection Relays

Pump Controls and Liquid Level Controls

460-15-100-LLS

Surge

IEC

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

ANSI/IEEE

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

Hi-Potential Test

Meets UL 508 (2 x rated V + 1000 V for 1 min.)

Safety Marks

UL

UL 508 (File #E68520)

CE

IEC 60947

Enclosure

Polycarbonate

Dimensions

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

D 59.69mm (2.35")

Weight

1 lb. (16 oz., 453.59 g)

Mounting Method

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