Installation Instructions for PC-102CICI-LT

WARNING: TO PREVENT IGNITION OF FLAMMABLE OR COMBUSTABLE ATMOSPHERES, DISCONNECT POWER FROM THE SYSTEM PRIOR TO INSTALLATION OR SERVICE.

CAUTION: Installation must comply with all national, state, and local codes. Installation of this equipment should only be performed by qualified personnel. Read and understand these instructions completely before proceeding with installation.

WARNING: REMOVE POWER FROM THE SYSTEM PRIOR TO INSTALLING OR SERVICING THE PC-102.

Installation:

1. Mount the PC-102 on 35mm DIN rail, or by installing two #6 or #8 screws into the surface mounting holes provided.
2. Connect inputs and outputs according to the typical wiring diagram below. Switches or resistive probes can be used on the inputs. The PC-102 must be powered by 120VAC connected to terminals 2 and 3.

Operation:

The PC-102CICI-LT is a seal-leak detector to sense seal failures on submersible pumps with a temperature input to detect motor overheating. It has two form C isolated output relays and two LEDs, which illuminate when each associated output relay is energized.

TEMP Input/Output Function:

The resistance threshold for the TEMP input can be fixed at 4kΩ or adjustable from 4.7k to 100kΩ by setting the DIP switch S3 (see Table 1). When the input resistance is lower than the setpoint (temp switch closed), RELAY 1 is energized (green TEMP LED on). When the resistance measured at the input is greater than the setpoint (temp switch open), RELAY 1 is de-energized (in its normal state).

The PC-102CICI-LT can be configured for automatic or manual reset after a temperature trip. Set DIP switches S1 and S2 according to the reset option desired: 1) power cycle only; 2) pushbutton only; 3) power cycle or pushbutton; 4) automatic (see Table 1). *Note: to reset the TEMP output using a button, a normally-closed pushbutton (not included) must be wired in series with the temperature switch. After the motor has cooled down (temp. switch has closed), press the pushbutton for 1- 3 seconds to reset the output.*

SEAL Input/Output Function:

The resistance threshold for the SEAL input is adjustable from 4.7k to 100kΩ. When the resistance is greater than the sensitivity setting, RELAY 2 is de-energized (in its normal state). When the resistance drops below the sensitivity setting (water is detected), RELAY 2 is energized (red SEAL LED on). The SEAL input logic can be inverted using DIP switch S4 on the side of the unit (see Table 1).

	DIP SWITCHES			
TEMP RESET	S1	S2	S3	S4
Power Cycle Only	OFF	OFF		
Button Only	ON	OFF		
Power Cycle or Button	OFF	ON		
Automatic	ON	ON		
TEMP Input Sensitivity: 4kΩ			OFF	
TEMP Input Sensitivity: 4.7k–100kΩ			ON	
SEAL Logic: Direct				OFF
SEAL Logic: Inverted				ON

Table 1: DIP Switch Settings

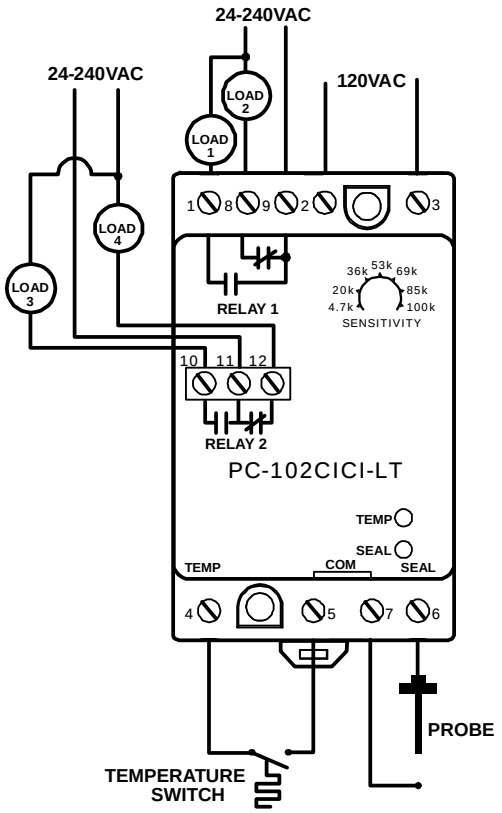

Figure 1: Typical Wiring Diagram
(Relays are shown in their normal/non-energized states.)

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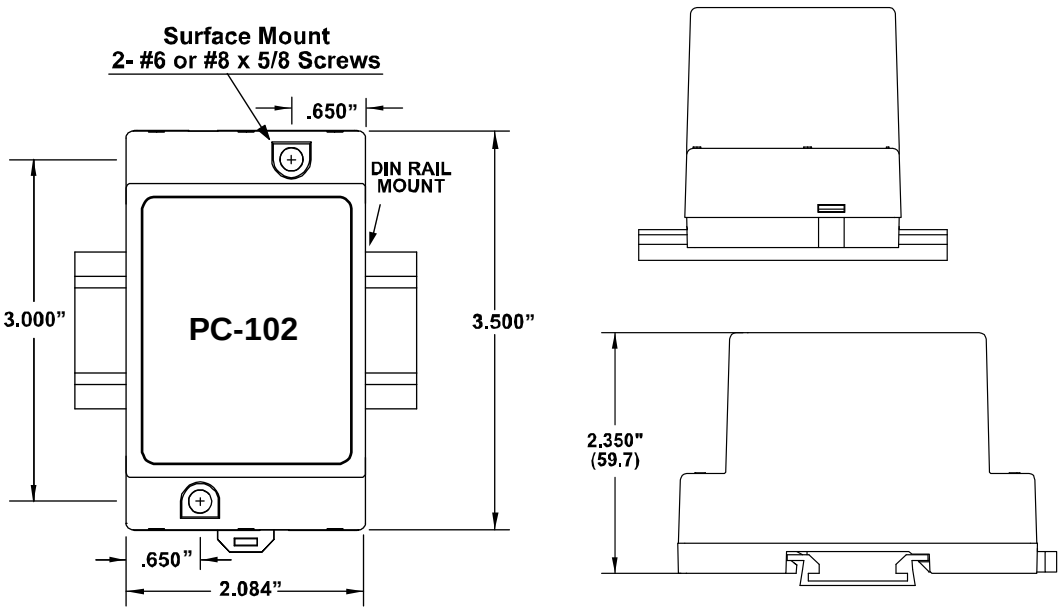
DIMENSIONS:



Model PC-102CICI-LT Specifications	
Control Voltage	120VAC
Frequency	50/60 Hz
Adjustments	
TEMP Input Sensitivity	4k (fixed) or 4.7k–100kΩ (adjustable)
SEAL Input Sensitivity	4.7k–100kΩ (adjustable)
Debounce Time Delay	
TEMP Input	1 second
SEAL Input	2 seconds
Operating Temperature	-20 to 55°C
Terminals	
Wire AWG	12–20 AWG
Torque	6 in.-lbs.
Relay Contacts	
	180VA @ 120VAC Pilot Duty, C150
	5A at 240VAC General Purpose
Safety Marks	
UL	UL508 (File #E68520)
cUL	C22.2 No. 14
Standards Passed	
Electrostatic Discharge (ESD)	IEC 61000-4-2, Level 3, 6 kV contact, 8 kV air
Radio Frequency Immunity (RFI)	IEC 61000-4-2, Level 3, 10V/m
Fast Transients	IEC 61000-4-4, Level 3, 4 kV input power 2 kV inputs/outputs