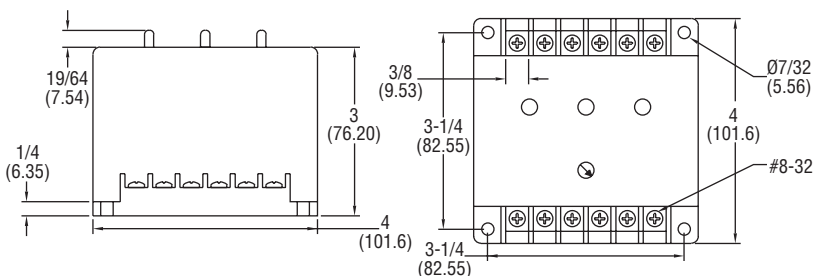




Series LDT Leak/Over-Temperature Detection Relay

Specifications - Installation and Operating Instructions



The **Series LDT0** is used to monitor the shaft seal and the stator temperature of a submersible pump to detect a leak or over-temperature before pump failure. A leak is detected by sensing the status of a float or conductivity switch installed in the seal cavity. When this resistance drops below the set sensitivity, the output relay energizes and the LED indicator illuminates. When the seal failure condition clears, the relay automatically resets. A normally closed temperature switch mounted on the stator detects over-temperature. The temperature safety feature incorporates a bistable relay that retains its position during power loss and latches on until the remote reset button is pressed. The LDT has adjustable leak sensitivity from 1 k to 35 k ohm. Installation is made simple with a surface mount configuration.

Important: Read the following carefully and completely before installing or connecting LDT units.

Note: DO NOT exceed specified electrical rating. Doing so may result in damage to control unit and load device.

INSTALLATION

1. Lock out all electrical current to relevant control panel during installation.
2. Fasten the surface mount LDT unit in a control panel.
3. Make the appropriate connections as shown in the wiring diagram (Figure A) to the corresponding numbered contacts on the LDT unit.
4. A 100 k ohm resistor must be connected as shown if conductive probes are used.
5. Set the potentiometer on face of unit to desired resistance (set to 1 k for float switch configuration).
6. Resume power to control panel and monitor system for proper functionality.

MAINTENANCE

Upon final installation of the Series LDT Leak/Over-Temperature Detection Relay, no routine maintenance is required. A periodic check of the system calibration is recommended. The Series LDT is not field serviceable and should be returned if repair is needed (field repair should not be attempted and may void warranty). Be sure to include a brief description of the problem plus any relevant application notes. Contact customer service to receive a return goods authorization number before shipping.

SPECIFICATIONS

Power Requirement: 120 VAC, 50/60 Hz.

Power Consumption: 4 VA (approximate).

Sensitivity: 1 k to 35 k ohm adjustable.

Temperature Limits:

Operating: -4 to 131°F (-20 to 55°C);

Storage: -40 to 185°F (-40 to 85°C).

Sensor Voltage: 12 VDC.

Switch Type: (2) SPDT.

Electrical Rating: 10 A @ 120 VAC resistive.

Response Times:

Leakage Trip: 1 s.

Leakage Reset: 1 s.

Temperature Trip: 0.1 s.

Indicators: Green LED illuminates under normal operation. Red LED's illuminate when leak or over-temperature is detected.

Enclosure: Polycarbonate dust cover.

Mounting: Surface mount.

Weight: 17 oz. (482 g).

Agency Approval: UL 508.

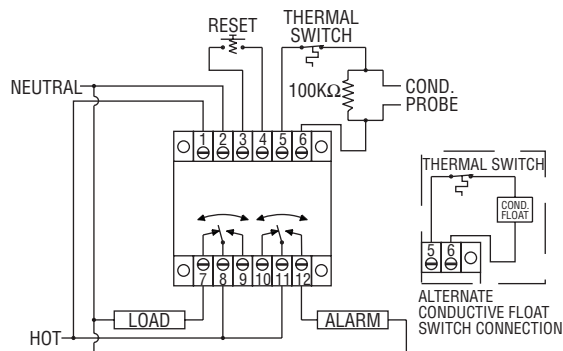


Figure A