Dual Seal Leakage Relay DSLR

MOTOR PROTECTION ELECTRONICS LLC

MADE IN THE U.S.A.

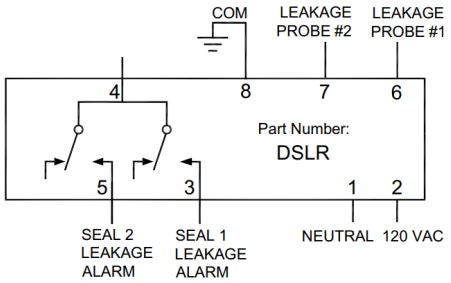
UL FILE #E101681

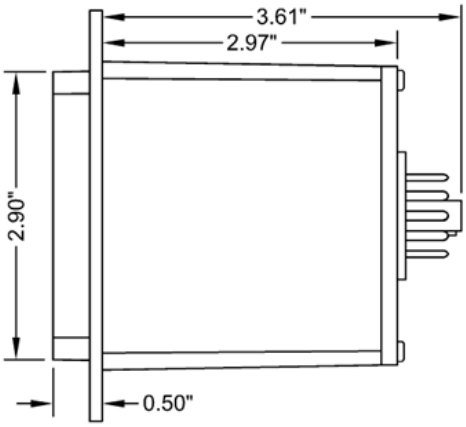
OPERATION

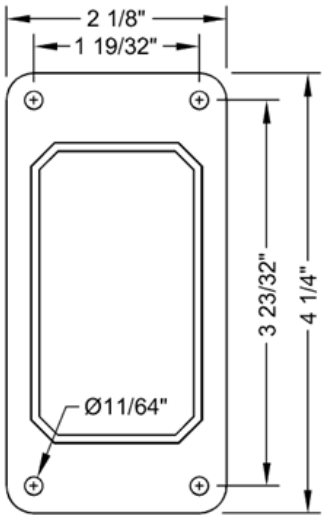
The Dual Seal Leakage Relay (DSLR) provides Seal Leakage alarms for Submersible Pumps. The DSLR is capable of monitoring two pumps simultaneously.

The DSLR detects moisture inside a pump motor by using a low voltage AC signal to measure the resistance between the two Leakage Probes and the grounded motor housing. The potentiometer on the DSLR is used to adjust the resistance necessary to produce a Seal Leakage Condition. A Seal Leakage condition is considered present when the amount of moisture in the motor causes the resistance between the Leakage Probes and ground to drop below the setting on the potentiometer. When this occurs and the Leakage Detection Delay expires, the DSLR turns on the Leakage Indication LED corresponding to the Leakage Probe that identified the leak. The DSLR then energizes the Leakage Alarm Relay(s) closing the contacts between terminals 3 and 4, or 5 and 4, depending upon which Leakage Probe identified the leakage condition.

The alarm trip point may be set by the following procedure: Isolate a Leakage Probe from either terminals 6 or 7. Connect a resistor, with the desired trip value, across terminal 6 and terminal 8 (Common) or terminal 7 and terminal 8 (Common). Slowly adjust the potentiometer to the point where the alarm turns on. Remove the resistor and reconnect to the Leakage Probe.







SPECIFICATIONS

Input Power:	120 VAC ±10%, 7.0 VA max
Output Rating:	8A Resistive @ 120VAC
Operating Temp:	-20°C to +65 °C
Storage Temp:	-45°C to +85 °C
Leakage Sensor Voltage:	3.6 VAC ±10%
Enclosure:	White Lexan
Base:	Phenolic

ORDERING INFORMATION

Part Number: DSLR

2464 Vulcan Road, Apopka, Florida 32703 (407) 299-3825 • www.mpelectronics.com

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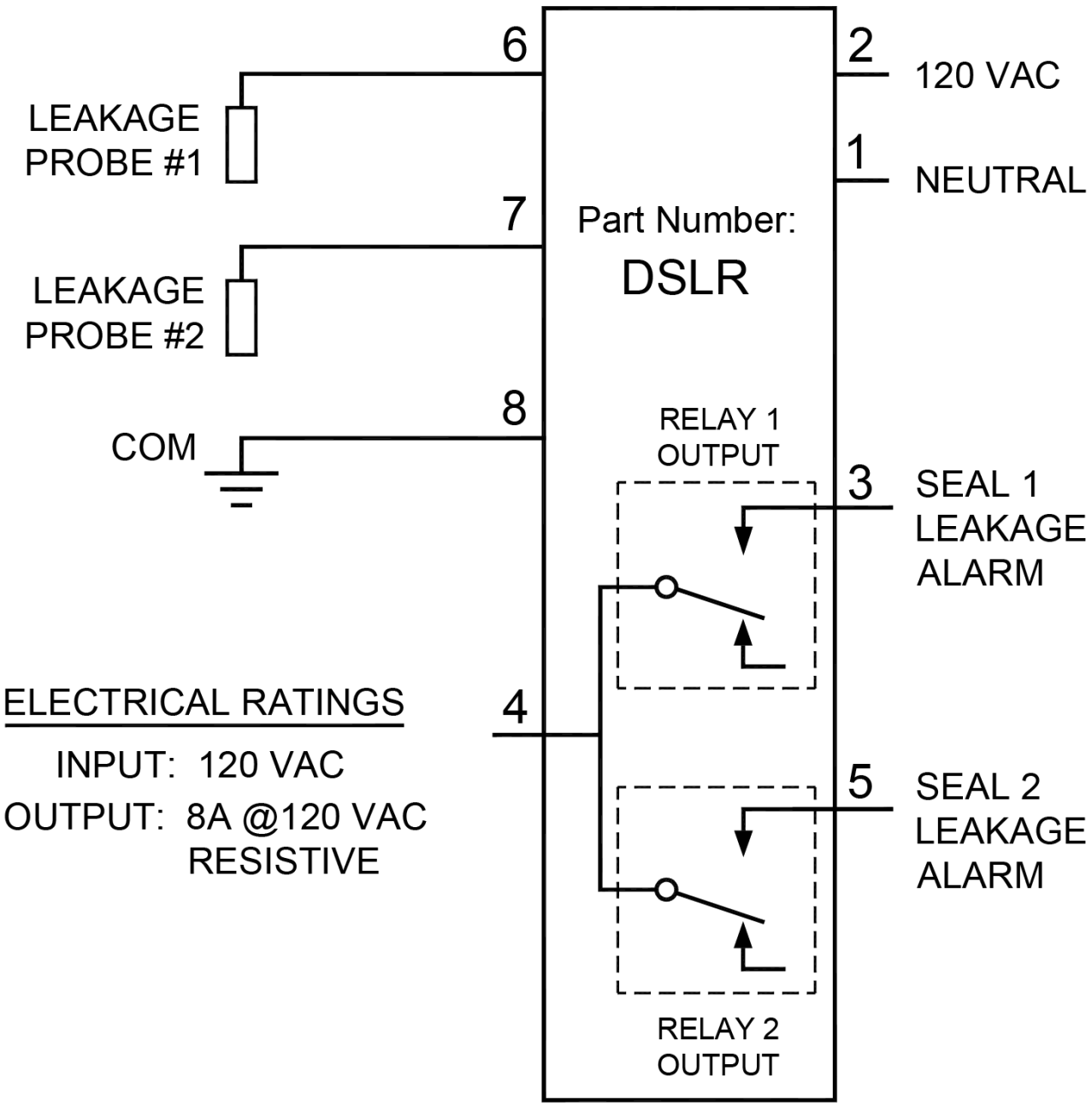
CONNECTION DIAGRAM



ELECTRICAL RATINGS

INPUT: 120 VAC

OUTPUT: 8A @120 VAC RESISTIVE

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How to Adjust the Leakage Alarm Trip Point

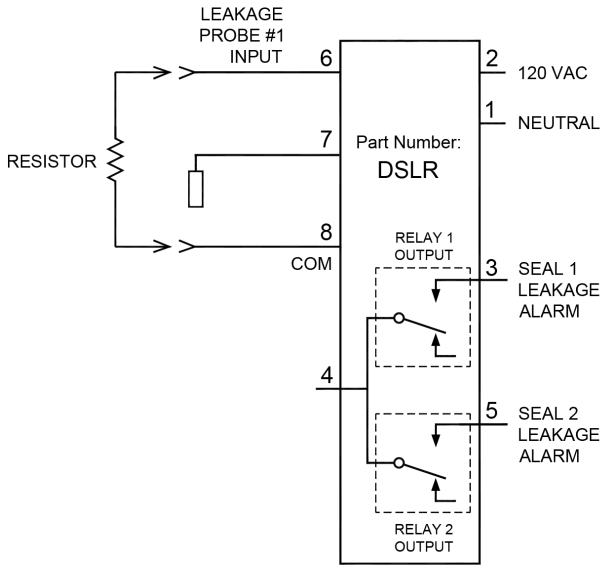
The Leakage Alarm trip point may be set by the following procedure:

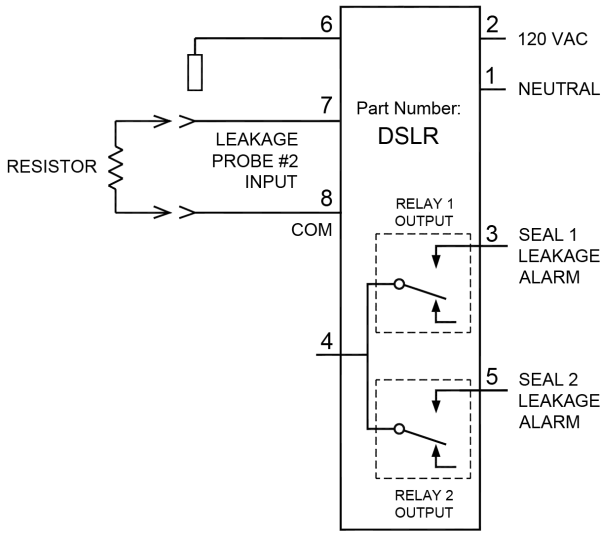
1) **Temporarily Isolate a Leakage Probe from either terminals 6 or 7.**

2) **Connect a resistor, with the desired trip value, across terminal 6 and terminal 8 (Common) or terminal 7 and terminal 8 (Common), as shown below.**

3) **Slowly adjust the potentiometer to the point where the alarm turns on.**

4) **Remove the resistor and reconnect to the Leakage Probe Sensor wires.**





Recommended Resistor Values:

For pump in <u>Typical Sewage</u> with <u>Conductance Type Leakage Probe Sensor</u>:	**20K Ohm**
For pump in <u>Storm Water</u> with <u>Conductance Type Leakage Probe Sensor</u>:	**50K Ohm**
For pump in <u>Typical Sewage</u> or <u>Storm Water</u> with a <u>Float Type Leakage Probe Sensor</u>:	**20K Ohm**