# **INDUSTRIAL SOLID STATE RESISTANCE DETECTOR**





The 1234 is a 'window' type detector and can be used where fail-safe operation is required. Output is operated when sensing probes come in contact with a material which provides a resistance value between the upper and lower set resistances. Output is released when the resistance between the sensing probes is less than the lower set resistance or greater than the upper set resistance. LED indicators show low/good/high conditions. In a typical application the unit could detect a probe shorted to ground(low) or a broken wire to the probe(high).

### **OPERATION** UPPER SET RESISTANCE INPUT LOWER SET-ON OUTPUT OFF **ORDERING DATA ORDERING CODE** 1234 -1 -Α -BASIC MODEL NUMBER **INPUT VOLTAGE -**1 120VAC 2 24VAC/DC SENSING RANGE A 0Ω - 50k OUTPUT **B** Relay SPDT **OPTIONS** (If desired) OP1 Factory installed 47kΩ upper trip resistor

#### **SPECIFICATIONS**

VOLTAGE: 120VAC, 24VAC/DC

FREQUENCY: 50/60 Hz

**TOLERANCE (VOLTAGE):** ± 10% of nominal **POWER CONSUMPTION:** 10 VA maximum

TRANSIENT PROTECTION: MOV

OUTPUT **TYPE:** Electromechanical relay RATING: 10A @ 240VAC maximum

**SENSE RANGE:**  $0\Omega$  to >50k RESISTANCE **UPPER SET POINT:**  $100\Omega$  to 50k**LOWER SET POINT:**  $85\Omega$  to 42k

must be <85% of upper point

**OPEN CIRCUIT VOLTAGE:** 13 VDC maximum **SHORT CIRCUIT CURRENT:** 2.0 mA maximum

**HYSTERESIS:** Approximately 5%

**OPERATING TEMP:** 0° to 70° C (32° to 120°F)

**MOUNTING:** Base mount

**TERMINATION:** Terminal blocks on face of timer

**HOUSING:** Metal

#### **WIRING**

A-B Voltage input (constant)

C-D Sensing Input (energizes output)

E-F Lower trip set resistance

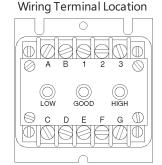
G-F Upper trip set resistance

1-2 N.O.

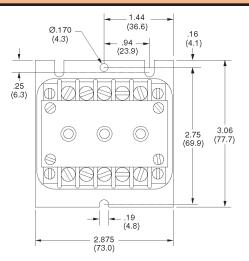
**PHYSICAL** 

2-3 N.C.

> Caution: Never apply voltage to terminals C-D-E-F-G



## **DIMENSIONS** Inches (millimeters)



and  $3.0k\Omega$  lower trip resistor.