

# DC VOLTAGE SENSOR

### **DESCRIPTION:**

The Hi-G 1310 Series DC Voltage Sensor is essentially a voltage monitoring device operating a snap-action transistor circuit with low drift and inherent temperature compensation. This device will either open or close a circuit when a predetermined voltage is present at the input. By using a Hi-G electro-mechanical relay as the output of the voltage sensor, a positive switching action can be achieved with very close difference between pull-in and drop-out voltages.

The unit is potted and hermetically sealed and are designed to meet the environmental requirements of airborne applications and MIL-R-83726.

### **ELECTRICAL SPECIFICATIONS**

Pull-in Voltage: Any voltage level between 10 to 150 VDC. Drop-Out Voltage: 0 to 0.5 volts below pull-in voltage.

Current Drain: 15 mAmax. @ 25°C.

Accuracy: ±21/2% of set point over temperature range. Maximum Allowable Applied Voltage: 150% of specified pull-in voltage.

Auxiliary Voltage: None required.

Operate and Release Times: 50 milliseconds maximum

over the temperature range. Contact Arrangements: 2PDT.

Contact Rating: 2 amperes resistive at 30 volts DC, 0.3

amperes resistive at 115 volts RMS, 400 Hz.

## **ENVIRONMENTAL SPECIFICATIONS:**

Temperature Range: -55°C to +125°C

Vibration: 20 G's, 10 to 2000 Hz.

Shock: 50 G's, 11 ±1 milliseconds duration.

Insulation Resistance: 1000 Megohms, minimum at 500

volts DC, all terminals to case.

Dielectric Strength: 1000 volts RMS, 60 Hz at sea level, all

terminals to case.

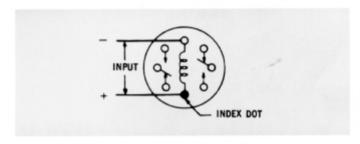
Sealing: Hermetic, 1.3 inches of mercury.

Life: 100,000 operations minimum

Weight: 3.5 oz. max.



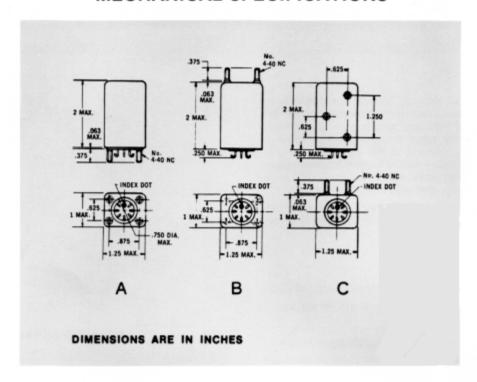
WIRING DIAGRAM



### **OPTIONS:**

- · Solid-State Output
- Two Stage Sensing (Voltage Band)
- Up to 10 A Relay Output
- · Controlled Drop-out Differential
- · Operate with Auxiliary Control Voltage
- · Time Delay on Trip Point
- Tighter Accuracy
- · Different Package, Header, Mounting

## **MECHANICAL SPECIFICATIONS**



## **HOW TO ORDER:**

