

Differential Expansion Cartridge Type Thermostats

Widely Used in Industrial, Scientific and Commercial Temperature Control Applications

Typical Applications

- ✦ Packaging Machinery
- ✦ Laminating Equipment
- ✦ Photographic Processing
- ✦ Hot Stamping
- ✦ Plastic Processing Machines
- ✦ Vending Machines
- ✦ Food Service Equipment
- ✦ Medical & Dental Equipment
- ✦ Code Dating Equipment

Design Features

A

Flexible leads externally connected to terminal pins provide high pull strength, eliminating pulled out leads.

B

Setpoint adjustment allows the setting of the temperature required without transmitting force to the contact mechanism, which can interfere with the accuracy of the unit.

C

Terminals are embedded in fused glass, providing a seal and strain relief to eliminate lead tension that can interfere with the accuracy of the unit.

D

One-piece strut made from low expansion alloy is assembled under tension. The strut and contacts operate by slow make and break, responding to the smallest temperature changes, accounting for quick response and sensitivity to within $\pm 1.0^{\circ}\text{F}$.

E

Wire braid provides the flexibility required in order to withstand the expansion and contraction of the outer shell without interfering with the ability of the unit to handle the load capacity under maximum operating temperature.

F

The expanding shell is the heat sensing component and not just a housing, being responsive to the slightest temperature changes and leading the strut by an interval that varies with the range of temperature.

G

Silver alloy contacts mounted on a one-piece strut. They open and close by the expansion and contraction of the outer shell, instantaneously responding to temperature changes.

H

Heli-arc welded end disc provides a positive seal against moisture and other contaminants.