Commercial Thermostats

Figure 4. 2450RC/2450RCH/2455RC Series Automatic Reset Thermostat

The 2450RC/2450RCH/2455RC Series is a single pole, single throw, snap-acting, non-adjustable thermostat which may be used in applications such as industrial and electrical equipment. A temperature-sensitive bimetal disc, electrically and thermally isolated from the switch, is used to actuate the normally-closed contacts. Contacts open when surface or ambient temperatures increase to the operating set point of the calibrated metal disc. The entire switch is enclosed in a ceramic housing; the bimetal disc is retained by a metal heat-conducting end cap. Due to the small size of this unit and the inherently low mass of the bimetal snap-action disc, response of this thermostat to temperature changes is extremely rapid, compared to other commercially available thermostatic devices. For increased sensitivity, an exposed bimetal disc may be specified. A variety of mounting brackets and terminals is available.

All versions are UL/CSA and European approved.

Potential applications include high temperature control for:

- Power supplies
- Appliances
- Medical equipment
- Water heaters
- Office automation
- Industrial equipment
- HVAC equipment

Table 5. 2450RC/2450RCH/2455RC Series Standard Temperature Characteristics

Operating Temperature Range	Tolerance		Standard Mean Differential °C [°F]
	Open °C [°F]	Close °C [°F]	
0 °C to 26 °C [32 °F to 79 °F]	±4 [±7]	±6 [±10]	28 to 34 [50 to 60]
	±4 [±6]	±6 [±10]	22 to 27 [40 to 49]
	±4 [±6]	±5 [±9]	17 to 22 [30 to 39]
	±4 [±6]	±5 [±8]	14 to 16 [25 to 29]
	±3 [±5]	±5 [±8]	8 to 14 [15 to 24]
27 °C to 82 °C [80 °F to 180 °F]	±5 [±9]	±8 [±15]	45 to 56 [81 to 100]
	±4 [±7]	±6 [±11]	34 to 45 [61 to 80]
	±4 [±6]	±6 [±10]	28 to 34 [50 to 60]
	±3 [±5]	±6 [±10]	22 to 27 [40 to 49]
	±3 [±5]	±5 [±9]	17 to 22 [30 to 39]
	±3 [±5]	±5 [±8]	8 to 16 [15 to 29]
83 °C to 110 °C [181 °F to 230 °F]	±6 [±10]	±8 [±15]	45 to 56 [81 to 100]
	±5 [±8]	±8 [±15]	35 to 45 [61 to 80]
	±4 [±7]	±7 [±12]	28 to 34 [50 to 60]
	±4 [±6]	±6 [±10]	22 to 27 [40 to 49]
	±4 [±6]	±5 [±9]	17 to 22 [30 to 39]
	±4 [±6]	±5 [±8]	8 to 16 [15 to 29]