Figure 12. 2450A/2455RA Heat Detection Thermostats



The 2450A/2455RA Series is a single pole, single throw, snap-acting, non-adjustable thermostat designed for easy mounting in devices such as fire alarms, security devices and smoke detectors. 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 bimetal disc. Devices are UL recognized and designed for use in both photoelectric and ionization type smoke detectors. Thermostats are available with and without collectors and meet UL spacing requirements for 15 ft, 30 ft and 50 ft. They are available to open or close on a temperature rise of 47 °C [117 °F] to 107 °C [225 °F]. Devices feature gold contacts for low voltage requirements and are epoxy sealed at the cap and terminal for long storage life of the application. Collectors are available in silver, black, beige, gold or bronze finishes.

All versions are UL approved.

Potential applications:

Smoke alarm/heat detectors in industrial, residential and commercial

NOTICE

Final approval of a fire detection system is determined by UL as outlined in UL #521 and UL #217 for the suitability of the combination of the thermostat (2450A/2455RA) and the user's mounting base, together with its intended application of the total fire detection system. To assist the use with design and testing , a minimum of 0.25 in extension beyond the housing is recommended.

Table 20. 2450A/2455RA Series Standard Temperature Characteristics

Detection (Close on Rise)		Release (Open on Rise)	
Close °C [°F]	Open °C [°F]	Open °C [°F]	Close °C [°F]
47 ±3 [117±5]	30 min [85 min]	57 ±3 [117 ±5]	30 min [85 min]
57 ±3 [135 ±5]	32 min [90 min]	57 ±3 [135 ±5]	32 min [90 min]
69 ±3 [156 ±5]	32 min [90 min]	69 ±3 [156 ±5]	32 min [90 min]
85 ±4 [185 ±7]	32 min [90 min]	85 ±4 [185 ±7]	32 min [90 min]
107 ±4 [225 ±7]	32 min [90 min]	107 ±4 [225 ±7}	32 min [90 min]

Notes:

- Additional switches can be provided as long as they fall between 47,2 °C to 107,2 °C [117 °F to 225 °F] close on rise or open or rise.
- Please consult Honeywell for tolerances and temperatures not listed.

Table 21. 2450A/2455RA Series Specifications

Characteristic	Parameter	
Switch type	SPST	
Reset type	automatic	
Amperage	3 A	
Voltage	120 Vac	
Operating temperature range	47,2 °C to 107,2 °C [117 °F to 225 °F]	
Environmental exposure range	-0 °C to 150 °C [32 °F to 302 °F]	
Materials:		
Base	phenolic	
Contacts	gold flash	
Terminals	unplated brass, plated brass	
Closure	aluminum	
Brackets	aluminum	
Approvals	UL File S1015 and S1389; Guide USCV2 and TAOZ2, UL Standard #521, #217	
Weight	6 g [0.21 oz] (does not include brackets)	

Figure 13. 2450A/2455RA Basic Dimensions

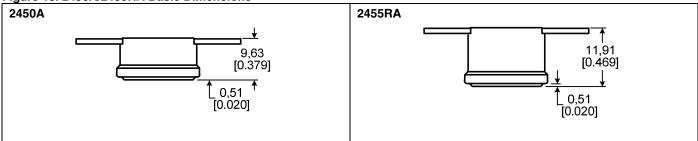


Figure 14. 2450A/2455RA Collector Figure 15. 2450A and 2455RA Spacing

