

Figure 6. 2455RM/2450CM Series Phenolic or Ceramic Manual Reset Thermostats



The 2455RM (phenolic)/2450CM (ceramic) Series is a single pole, single throw, snap-acting, non-adjustable thermostat. 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. The entire switch is enclosed in a housing; the bimetal disc is retained by a metal heat-conducting end cap. The circuit remains open above the room ambient temperature until the manual reset button is depressed. 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, European approved.

Potential applications include those where a manual reset is desired, including:

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

Table 10. 2455RM Series Standard Temperature Characteristics

Operating Temperature Range	Tolerance °C [°F]
52 °C to 93 °C [125 °F to 200 °F]	±5 [±8]
94 °C to 121 °C [201 °F to 250 °F]	±6 [±10]
122 °C to 150 °C [251 °F to 302 °F]	±7 [±12]

Table 11. 2450CM Series Standard Temperature Characteristics

Operating Temperature Range	Tolerance °C [°F]
52 °C to 93 °C [125 °F to 200 °F]	±5 [±8]
94 °C to 121 °C [201 °F to 250 °F]	±6 [±10]
122 °C to 149 °C [251 °F to 300 °F]	±7 [±12]
150 °C to 177 °C [301 °F to 350 °F]	±8 [±15]
177 °C to 204 °C [351 °F to 400 °F]	±10 [±18]
205 °C to 232 °C [401 °F to 450 °F]	±11 [±20]

Commercial Thermostats

Table 12. 2455RM/2450CM Series Specifications

Characteristic	Parameter
Switch type	SPST
Reset type	manual
Amperage	15 A resistive at 6,000 cycles (UL); 16 A resistive at 1000 cycles (EU)
Voltage	120 Vac to 250 Vac
Operating temperature range	2455RM: 52 °C to 150 °C [125 °F to 302 °F] 2450CM: 52 °C to 232 °C [125 °F to 450 °F]
Environmental exposure range	2455RM: -20 °C to 177 °C [0 °F to 350 °F] 2450CM: -20 °C to 260 °C [0 °F to 500 °F]
Materials:	
Base	2455RM: phenolic; 2450CM: ceramic
Contacts	silver alloy
Terminals	2455RM: unplated brass, plated brass or steel; 2450CM: plated steel
Closure	aluminum, brass, or stainless steel
Brackets	stainless steel
Approvals	UL File E36103, CSA File LR21048
Weight	6 g [0.21 oz] (does not include brackets or wire leads)

NOTICE

- 2455RM/2450CM thermostats are intended as a manual reset control. They are not to be used on applications where a limit thermostat is required unless back-up protection is provided. Units have been tested by UL for 1,000 cycles under load, 5,000 cycles no load, and are not considered as limit devices.
- This range of thermostats has an automatic reset function with manual override function.
- Reset pin operation should not be performed above 70% of set point temperature.

Table 13. 2450CM/2455RM Contact Ratings

Life Cycles	120 Vac	240 Vac
6,000	15 A resistive	10 A resistive
6,000	4.4 FLA 26.4 LRA 125 VA pilot duty	2.2 FLA 13.2 LRA 125 VA pilot duty

Note: Additional contact ratings are available, please consult Honeywell.

Figure 7. 2455RM/2455CM Basic Dimensions

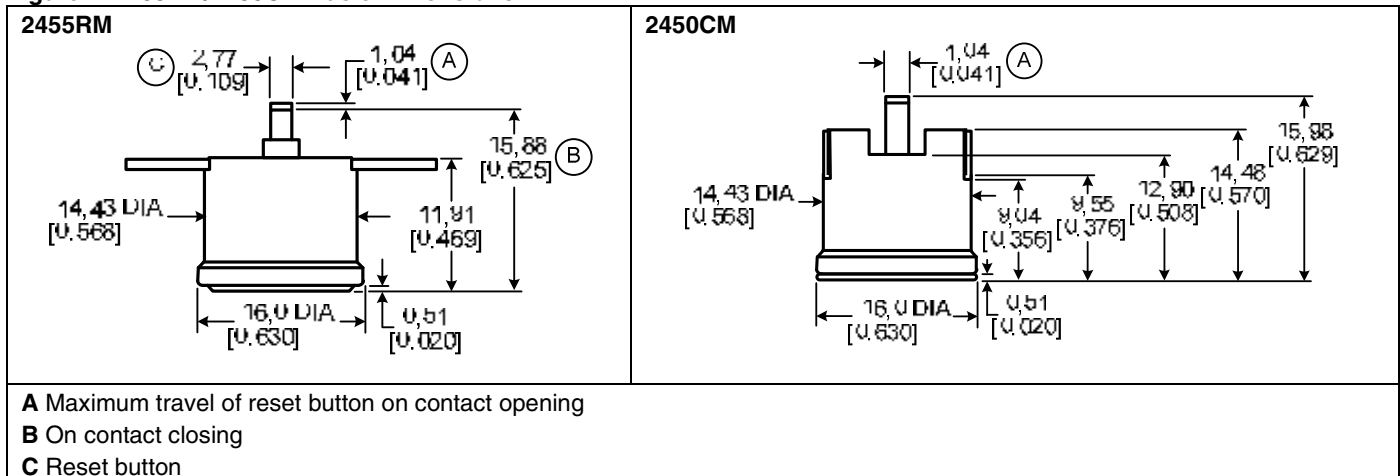


Figure 8. 2455RD Series Phenolic Manual Reset



The 2455RD Series is a single pole, single throw, snap-acting, non-adjustable thermostat. 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. The entire switch is enclosed in a housing; the bimetal disc is retained by a metal heat-conducting end cap. The circuit remains open above the room ambient temperature until the manual reset button is depressed. (These devices are constructed with an additional steel disc so that they are manual reset only. They do not have an automatic reset.) 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 those where a manual reset is desired, including:

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

Table 14. 2455RD Series Standard Temperature Characteristics

Operating Temperature Range	Tolerance °C [°F]
52 °C to 93 °C [125 °F to 200 °F]	±5 [±8]
94 °C to 121 °C [201 °F to 250 °F]	±6 [±10]
122 °C to 150 °C [251 °F to 302 °F]	±7 [±12]

Commercial Thermostats

Table 15. 2455RD Series Specifications

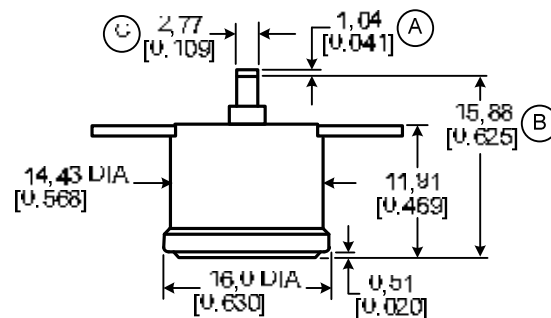
Characteristic	Parameter
Switch type	SPST
Reset type	manual
Amperage	15 A resistive at 6,000 cycles (UL); 16 A resistive at 1000 cycles (EU)
Voltage	120 Vac to 250 Vac
Operating temperature range	2455RD: 52 °C to 150 °C [125 °F to 302 °F]
Environmental exposure range	2455RD: -20 °C to 177 °C [0 °F to 350 °F]
Materials:	
Base	phenolic
Contacts	silver alloy
Terminals	unplated brass, plated brass or steel
Closure	aluminum, brass, or stainless steel
Brackets	stainless steel
Approvals	UL File E36103, CSA File LR21048

Table 16. 2455RD Contact Ratings

Life Cycles	120 Vac	240 Vac
6000	15 A resistive	10 A resistive

Note: Additional contact ratings are available, please consult Honeywell.

Figure 9. 2455RD Basic Dimensions



- A** Maximum travel of reset button on contact opening
- B** On contact closing
- C** Reset button