

EN: This Datasheet is presented by the manufacturer.

Please visit our website for pricing and availability at <u>www.hestore.hu</u>.

Thermostats - Commercial

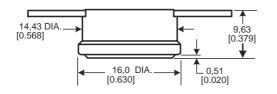


2450R/2450HR/2455R Series Phenolic Automatic Reset Thermostats

A temperature-sensitive bimetal disc, electrically isolated from the switch, actuates the normally closed contacts. The contacts open when the surface or ambient temperatures increase to the operating snap point of the calibrated disc. Response to temperature changes is extremely rapid due to the inherently low mass of the disc and the small size of the product. These products are factory calibrated to the customer's specification.

Reset type: Amperage capacity: Housing material: Operating temperature range: Environmental exposure range: Automatic 15 A resistive max. Phenolic 0 °C to 150 °C [32 °F to 302 °F] 0 °C to 177 °C [32 °F to 350 °F]

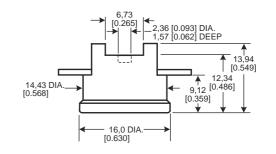
2450R



SERIES NAME 2450R Phenolic Automatic Reset Thermostat Commercial thermostats include products for use in a wide array of small and major appliances, automotive applications, office copy machines, heat and smoke detectors and HVAC equipment. These snap-action thermostats include automatic or manual reset options, phenolic or ceramic housings, and a variety of mounting brackets and terminal options.

NOTE: The products in this section do not follow the "how to use this catalogue" instructions provided in the catalogue introduction. Specific reference numbers are not given due to their custom nature. Please contact your local Honeywell sales office for ordering information.

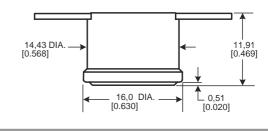
2450HR



SERIES NAME

2450HR Phenolic Automatic Reset Thermostat

2455R



SERIES NAME

2455R Phenolic Automatic Reset Thermostat

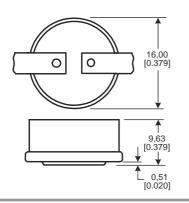
Honeywell www.honeywell.com/sensing

2450RC/2450RCH/2455RC Series **Ceramic Automatic Reset Thermostats**

A temperature-sensitive bimetal disc, electrically isolated from the switch, actuates the normally closed contacts. The contacts open when the surface or ambient temperatures increase to the operating snap point of the calibrated disc. Response to temperature changes is extremely rapid due to the inherently low mass of the disc and the small size of the product.

Reset type:	Automatic
Amperage capacity:	15 A resistive max.
Housing material:	Ceramic
Operating temperature range:	0 °C to 260 °C [32 °F to 500 °F]
Environmental exposure range:	–20 °C to 287 °C [0 °F to 550 °F]

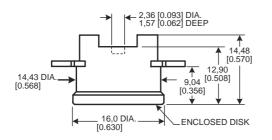
2450RC



SERIES NAME

2450RC Ceramic Automatic Reset Thermosta

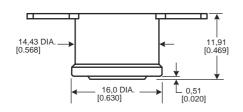
2450RCH



SERIES NAME

2450RCH Ceramic Automatic Reset Thermostat

2455RC



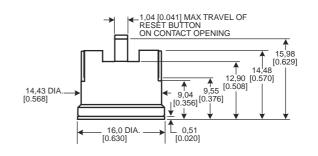
SERIES NAME

2450CM/2455RM Series Ceramic and Phenolic Manual Reset Thermostats

A temperature-sensitive bimetal disc, electrically isolated from the switch, actuates the normally closed contacts. The contacts open when the surface or ambient temperatures increase to the operating snap point of the calibrated disc. The circuit will stay open above room ambient temperature until the manual reset button is pressed. Response to temperature changes is extremely rapid due to the inherently low mass of the disc and the small size of the product.

Reset type:	Manual
Amperage capacity:	15 A resistive max.
Housing material:	Ceramic or phenolic
Operating temperature range:	52 °C to 232 °C [125 °F to 450 °F] (ceramic)
	52 °C to 150 °C [125 °F to 302 °F] (phenolic)
Environmental exposure range:	10 °C to 260 °C [50 °F to 500 °F] (ceramic)
	10 °C to 177 °C [50 °F to 350 °F] (phenolic)

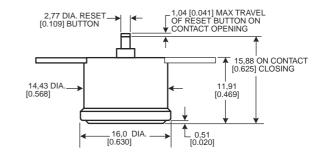
2450CM





2450CM Ceramic Manual Reset Thermostat

2455RM



SERIES NAME

2455RM Phenolic Manual Reset Thermostat

2455RC Ceramic Automatic Reset Thermostat

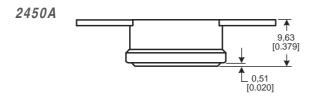
Honeywell www.honeywell.com/sensing

18 °C to 177 °C [0 °F to 350 °F] (phenolic)

2450A/2455A Series Heat Detection Thermostats

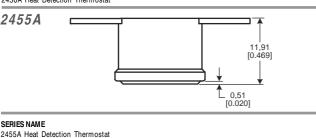
The gold contacts open or close on a temperature rise of 47 $^\circ C$ to 107 $^\circ C$ [117 $^\circ F$ to 225 $^\circ F].$

Reset type:	Automatic
Amperage capacity:	15 A resistive max.
Housing material:	Phenolic, epoxy-sealed cap and terminal
Operating temperature range:	47 °C to 107 °C [117 °F to 225 °F]
Environmental exposure range	e: 0 °C to 150 °C [32 °F to 302 °F]



SERIES NAME

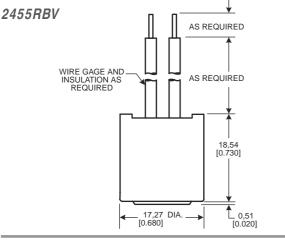




2455RBV Series Overmolded Automatic Reset Thermostats

A temperature-sensitive bimetal disc, electrically isolated from the switch, actuates the normally closed contacts. The contacts open when the surface or ambient temperatures increase to the operating snap point of the calibrated disc. Response to temperature changes is extremely rapid due to the inherently low mass of the disc and the small size of the product.

Reset type: Amperage capacity: Housing material: Operating temperature range: Environmental exposure range: Automatic 15 A resistive max. Ceramic or phenolic, epoxy overmold -12 °C to 105 °C [10 °F to 221 °F] -18 °C to 121 °C [0 °F to 250 °F]



SERIES NAME

2455RBV Overmolded Automatic Reset Thermostat

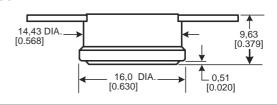
2450R/2450RCH/2455R/2455RC Series "One-shot" ½ in Thermostats

Products are designed for high limit applications where automatic reset is not desired.

Reset type:	None
Amperage capacity:	15 A resistive max.
Housing material:	ceramic or phenolic
Operating temperature range:	52 °C to 260 °C [125 °F to 500 °F] (ceramic)
	52 °C to 150 °C [125 °F to 302 °F] (phenolic)
Environmental exposure range:	18 °C to 316 °C [0 °E to 600 °E (ceramic)

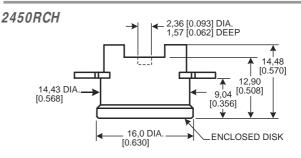
Environmental exposure range





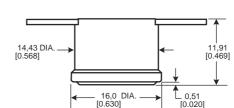
SERIES NAME

2450R Phenolic "One-shot" ½ in Thermostat



SERIES NAME 2450RCH Ceramic "One-shot" ½ in Thermostat

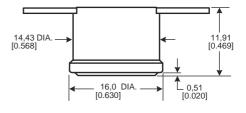
2455R



SERIES NAME

2455R Phenolic "One-shot" 1/2 in Thermostat

2455RC



SERIES NAME

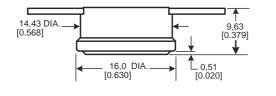
2455RC Ceramic "One-shot" 1/2 in Thermostat

2450R Series Annular Ring Cap Automatic Reset Thermostats

A temperature-sensitive bimetal disc, electrically isolated from the switch, actuates the normally closed contacts. The contacts open when the surface or ambient temperatures increase to the operating snap point of the calibrated disc. Response to temperature changes is extremely rapid due to the inherently low mass of the disc and the small size of the product.

Reset type: Amperage capacity: 15 A resistive, 12 Vdc Housing material: Phenolic, can be partially or totally sealed against water ingress Operating temperature range: Environmental exposure range: Life Cycle Capability:

-10 °C to 55 °C [14 °F to 131 °F] -40 °C to 130 °C [-40 °F to 266 °F] 300 K at 12 Vdc, 10 A Low Temperature Differential: Down to 8 °C [46 °F] Switch Temperature Tolerance:



SERIES NAME

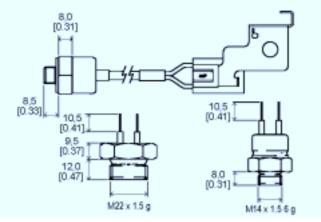
2450R Phenolic Annular Ring Cap Automatic Reset Thermostat

2450R/2455R Series Protected Thermostats

A temperature-sensitive bimetal disc, electrically isolated from the switch, actuates the normally closed contacts. The contacts open when the surface or ambient temperatures increase to the operating snap point of the calibrated disc. Basic thermostat is protected from the environment by sealing it in a metal housing or encapsulating it in epoxy.

Reset type: Amperage capacity: Housing material: Operating temperature range: Environmental exposure range:

Automatic 15 A resistive, 12 Vdc Brass, aluminium, stainless steel and epoxy 15 °C to 130 °C [59 °F to 266 °F] -40 °C to 155 °C [-40 °F to 311 °F]



SERIES NAME 2450R Protected Thermosta

2455R Protected Thermostat

2450R Series Fully Sealed Thermostats

A temperature-sensitive bimetal disc, electrically isolated from the switch, actuates the normally closed contacts. The contacts open when the surface or ambient temperatures increase to the operating snap point of the calibrated disc. Response to temperature changes is extremely rapid due to the inherently low mass of the disc and the small size of the product.

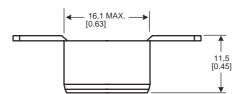
Reset type: Amperage capacity: Housing material:

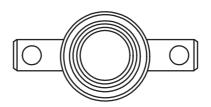
Automatic

±3 °C

Operating temperature range: Environmental exposure range: Life cycle capability: Low temperature differential: Switch temperature tolerance:

Automatic 15 A resistive, 12 Vdc Phenolic housing, aluminium cap totally encapsulated in water resistant epoxy -10 °C to 55 °C [14 °F to 131 °F] -40 °C to 130 °C [-40 °F to 266 °F] 300 K at 12 Vdc, 10 A Down to 8 °C [46 °F] ±3 °C





SERIES NAME 2450R Fully Sealed Thermostat

Honeywell www.honeywell.com/sensing

Temperature Sensors

Thermal Cutoffs

Thermistors & Probes

- Thermostats
 - >Redi-Temp Subminiature 3600 Series
 - >Redi-Temp Series 3100 SPST Hermetic Series
 - >Redi-Temp 3455 RC 15 AMP High Temp. Series
 - >Bimetal Precision & Commercial Thermostats
- Quick Links
- Products & Applications
- Thermal Products Glossary
- Contact Us
- Request Free Literature

Bimetal Thermostats



The Honeywell bimetal thermostat product line consists of Single-Pole, Single-Throw (SPST) hermetic and non-hermetic thermostats, including low-silhouette, logic level, auto reset, manual reset, one-shot, and subminiature thermostats and thermal switches. These products are also defined by their ability to reliably maintain precision temperature tolerances or high

amperage electrical loads. They provide temperature control and overtemperature protection for the appliance, office automation, industrial, commercial aircraft and medical equipment industries.

Bimetal thermostats are snap-action devices designed to operate in extreme conditions, such as exposure to hazardous substances, dust particles and liquid immersion. Contacts are thermally and electrically isolated. Dust-proof performance is achieved by using a ceramic or phenolic base protected by a metal enclosure. A variety of custom configurations are available which provide environmental protection.

Select a product from one of the following bimetal categories:

- Precision Thermostats
- Commercial Thermostats

Precision Thermostats

	Series	Features	Applications	
;	3100	Tight temperature tolerances and differentials available 6 A 120 Vac rating	 Industrial glue guns Blood analyzers 	
		Environmental exposure -62 ° C to 288 °C [-80 °F to 550 °F]	Battery pack heater	
;	3106	Gold alloy cross-point contacts for use in logic level circuits Tight temperature tolerances and differentials available	Solid state control backup	
;	3150	Low profile 7,7 mm [0.305 in] maximum design height 6 A 120Vac rating	Commercial aircraft avionics Power supplies	
		Tight temperature tolerances and differentials available	Copy machine overheat protection	
circuits Low profile 7,7 mm [0.305 maximum design height UL recognized and CSA certified		contacts for use in logic level circuits Low profile 7,7 mm [0.305 in] maximum design height UL recognized and CSA certified Tight temperature tolerances	Dry circuit applications where space is limited	
>	Custom Pack	aged Thermostats		
Series Features Applications				

Part Number Search	
Search the Sensing and Control Interactive Catalog.	
€	>
Keyword Search	ī
Search for product and support information.	
All Sensing & Control	
	Ð
→ Advanced Search	

	3000	Customized probe length	Heater control
		Custom probe materials Many termination/connector options	Aircraft bleed air Duct sensing Liquid bath control
			Hydraulic oil temperature control
→	Non-Hermet	ic Thermostats	
	Series	Features	Applications
	3001, 3004	Low profile and lightweight (Model 3001)	Computers
		European approved (3004	Office equipment
		only) Tight temperature tolerances and differentials available	Blood analyzers
→	High Ampera	age Thermostats 15 A	
,	Series	Features	Applications
	3450, 3455R, 3455RBV 3450RC, 3455RC	 Electrical rating to 15 A 120 Vac resistive UL recognized, CSA certified and European approved Single-pole, single-throw Environmental exposure for the 3450 & 3455R -18 °C to 177 °C [0 °F to 350 °F] Environmental exposure for the 3455RBV -18 °C to 121 ° C [0 °F to 250 °F] High temperature environmental exposure -18 ° C to 288 °C [0 °F to 550 °F] Electrical rating to 15 A 120 Vac resistive UL recognized, CSA certified and European approved Single-pole, single-throw 	 Power supplies Communications equipment Medical equipment Computers (where high amperage loads are present) Communications equipment Computers (where high amperage loads are present) Medical equipment Appliances
>		t Thermostats	Associations
	Series	Features	Applications
	3455RM, 3450CM	 Manually resettable operation (reset button) Electrical rating to 15 A 120 Vac resistive UL recognized and CSA certified Environmental exposure 10 ° C to 177 °C [50 °F to 350 F] 	Where automatic reset is not preferred

Commercial Thermostats

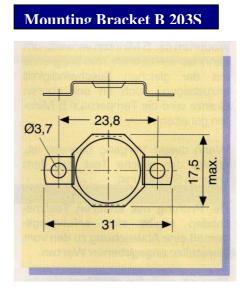
→ Phenolic Thermostats					
Series	Features	Applications			
2450R, 2450HR, 2455R	 15 A, 120 Vac; 10 A, 240 Vac UL recognized, CSA certified and European approved Contacts are available for mV and mA applications Environmental exposure 0 °C to 177 °C [32 °F to 350 °F] 	Copy machines Medical equipment Power supplies			

→	Ceramic Thermostats				
	Series	Features	Applications		
	2450RC, 2450RCH, 2455RC	 15 A 120 Vac; 10 A 240 Vac UL recognized, CSA certified and European approved Contacts are available for mV and mA applications Environmental Exposure 0 °C to 177 °C [32 °F to 350 °F] 	ac Office automation products Table-top applications mV Industrial equipment		
→	Manual Rese	t Thermostats			
´	Series	Features	Applications		
	2455RM, 2450CM	 15 A, 120 Vac; 10 A, 240 Vac UL recognized, CSA certified and European approved Environmental Exposure for 2455RM -18 °C to 121 °C [0 ° F to 250 °F] Environmental exposure for 3450CM 10 °C to 260 °C [50 ° F to 500 °F] 	Office automation products Medical equipment		
→	Overmolded	Automatic Reset Thermost	ats		
	Series	Features	Applications		
	2455RBV	 15 A ,120 Vac; 8.3 A, 240 Vac UL recognized, CSA certified and European approved Environmental exposure -18 ° C to 121 °C [0 °F to 250 °F] 	Industrial equipment		
→	Heat Detecti	on Thermostats			
	Series	Features	Applications		
			Heat detection		
→	One-shot Th	ermostats			
	Series Features		Applications		
	2450R, 2455R, 2450RC, 2455RC	 15 A, 120 Vac; 10 A, 240 Vac UL recognized, CSA certified and European approved Environmental exposure for 2450R & 2455R 0 °C to 177 ° C [32 °F to 350 °F] Environmental exposure for 2450RC & 2455RC 0 °C to 288 °C [32 °F to 550 °F] 	Automation equipment Tabletop appliances		

'Permanent Stock' of Thermostats Type 2455R

- Functions: Open on Rising Temperature, and Close on Rising Temperature
- Standard Mounting Bracket: B 203 S
- Terminals: horizontal T 146
- Operating Temperatures in 10° C Steps.
- Up to 15A and up to 250V AC
- Silver contact system

Part Number	Functio	n _			
	Open		Close		
	Ŷ	+/-	K ℃	+/-	κ
2455R- 100-84	3	0	3	15	4
2455R- 100-72	4	0	3	25	6
2455R- 100-73	5	0	3	35	6
2455R- 100-85	6	0	3	45	6
2455R- 100-74	7	0	3	55	6
2455R- 100-75	8	0	3	65	6
2455R- 100-76	9	0	3	75	6
2455R- 100-77	10	0	4	80	7
2455R- 100-86	11	0	4	90	7
2455R- 100-98	12	0	4	98	6
2455R- 100-88	13	0	4	110	8
2455R- 100-89	14	0	4	115	8
2455RC- 9100-373	15	0	7	120	8
	Close		Open		
	°C	+/-K	°C	+/-K	
2455R- 100-78	50	3	3	5	6
2455R- 100-79	60	3	4	5	6
2455R- 100-92	80	3	6		6
2455R- 100-93	90	3	7	5	6
2455R- 100-94	100	4	8	0	7
2455R- 100-95	120	4	10	0	7
2455R- 100-96	140	4	11	5	8



Terminals T 146

