



# USE-RA/RB/RC (Creep Action type – Thermal Protector)

## Thermal Protector for Motors reacting to temperature

US Electronics USE-RA/RB/RC Series Thermal Protectors deliver the utmost protection in a miniature package at an excellent price

Our USE-RA/RB/RC Series Thermal Protectors prevent overheating in products that generate heat. They are in a miniature with a metal case and are creep action type, thermally operated devices that are proven performers in protection technology.

### It protects against overheating in:

- Small Motors in various appliances
- DC Electrical tools
- Low voltage house hold goods
- Rechargeable batteries
- Transformers
- Automotive Products, solenoids, PC boards and other applications



### Here's why you should be using US Electronics USE-RA/RB/RC Series Thermal Protectors in your product:

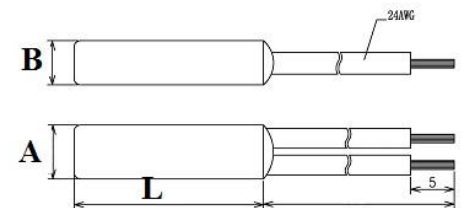
- Small size
- Individually temperature calibrated and inspected.
- High Repeatability in open temperature setting over life.
- Wide selection of leads.
- Cadmium free contacts

### Operation:

The USE-RA/RB/RC Series Thermal protector operates by sensing the temperature on its metal case. The high quality bi-metal sensor opens the contacts as soon as the pre-set open temperature is reached. When the equipment returns to a normal operating range, the device resets and closes the electrical circuit automatically within a few degrees of its open temperature.

### Dimensions:

SERIES	CURRENT RATING	CYCLES	A	B	L
USE-RA	2A @24VDC & 120VAC	10000	5.3 +/- 0.2	4.0 +/- 0.2	15 +/- 1.0
USE-RB	3A @24VDC & 120VAC	6000	5.3 +/- 0.2	4.0 +/- 0.2	16 +/- 1.0
USE-RC	2A @24VDC & 120VAC	10000	5.0 +/- 0.2	2.4 +/- 0.2	15 +/- 1.0



### Technical Specifications:

Temperature Range: 20°C to 120°C  
 Open Temp. Tolerance: +/- 5°C  
 Max. Storage temp.: 150°C  
 Switch Action: N/O SPST Creep action type  
 Hysteresis to reset: 1-2°C (depends on the open temperature setting)



# USE-RA/RB/RC (Creep Action Type)

## HOW TO ORDER (Part numbering system)

**USE-RA**

**045**

**XXXX**

Model USE-RA or RB or RC	Action Temp.(°C)	XX: Optional Customer code
	<b>Action Temp.(°C)</b>	<b>Reset Temp. (°C)</b>
	20±5	19±1
	25±5	24±1
	30±5	29±1
	35±5	34±1
	40±5	29±1
	45±5	44±1
	50±5	49±1
	55±5	54±1
	60±5	59±1
	65±5	64±1
	70±5	69±1
	75±5	74±1
	80±5	79±1
	85±5	84±1
	90±5	89±1
	95±5	94±1
	100±5	99±1
	105±5	104±1
	110±5	109±1
	115±5	114±1
	120±5	119±1
	125±5	124±1
	130±5	129±1
	135±5	134±1
	140±5	139±1
	145±5	144±1
	150±5	149±1

**Example: Part Number USE-RA45 -XXXX**  
 Model USE-RA series  
 45°C +/- 5°C Opening temp. with reset temp. of 44°C +/- 1°C with optional customer code