

## Radiant Process Heaters



### Series CRE and CRR E-Mitters


#### Type CRE & CRR Edison Screw-In Bulb E-Mitters



#### Design Features

- \* Provides safe, clean, radiant heat anywhere
- \* Easy installation
- \* Not affected by vibration—high mechanical strength
- \* Good resistance to atmospheric contamination
- \* Does not generate visible light—only heat
- \* Reversible color change feature
- \* 3.5 to 7 $\mu$ m infrared radiation peak wavelength

#### Typical Applications

- ➔ Plastic Thermoforming and vacuum forming
- ➔ Curing adhesives
- ➔ Curing dental composite material
- ➔ Heating laboratory samples and specimens
- ➔ Comfort heat for agricultural, zoological and reptilian pet applications
- ➔ Preventing moisture accumulation and freezing in electrical control boxes
- ➔ Preventing moisture accumulation, mildew and freezing in clothes lockers
- ➔ Resistor Banks
- ➔ Agricultural
- ➔ Agency Approval: 



#### Screw-In Base

Ceramic receptacle for use with screw-in bulb E-Mitters

Part Number: CRK00016

#### Type CRE & CRR E-Mitters

##### Edison Screw-In Bulb E-Mitters

The CRE and CRR Style E-Mitters are hollow ceramic heaters with a unique thin wall construction and geometrical shape to facilitate fast heating and cooling rates.

The resistance coil is embedded into the specially designed circular ceramic E-mitter surface, providing extremely uniform heat transmission with low element surface temperatures.

Because of the convenient Edison Screw-In style termination, CRE & CRR E-Mitters are recognized as a tremendously versatile source for localized spot heating. They can be used virtually anywhere quickly and easily by simply installing the CRE E-Mitter into common porcelain/ceramic insulated bulb sockets—like any ordinary light bulb.

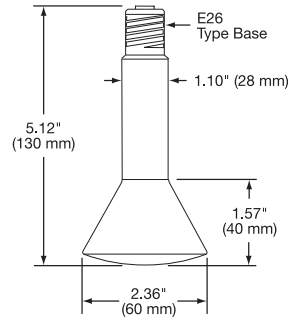




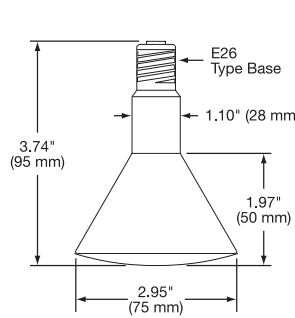
# Radiant Process Heaters

## Series CRE and CRR E-Mitters

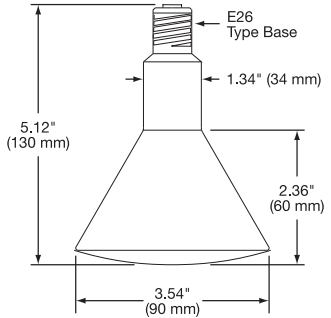
### Type CRE Edison Screw-In Bulb E-Mitters



**CRE 60 mm**



**CRE 75 mm**

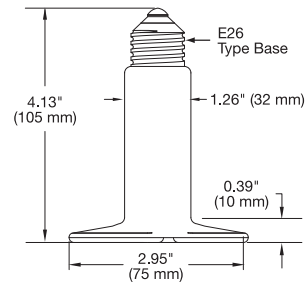


**CRE 90 mm**

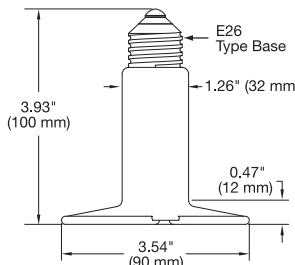
### Stock CRE E-Mitters

| Diameter | Wattage | Voltage | Color        | Watt Density         |                      | *Surface Temperature (Typical) |     | Part Number |
|----------|---------|---------|--------------|----------------------|----------------------|--------------------------------|-----|-------------|
|          |         |         |              | (W/in <sup>2</sup> ) | (W/cm <sup>2</sup> ) | °F                             | °C  |             |
| 60mm     | 60      | 120     | Rose to Grey | 13.26                | 6.45                 | 842                            | 450 | CRE10014    |
|          | 60      | 120     | White        | 13.26                | 6.45                 | 842                            | 450 | CRE00014    |
|          | 100     | 120     | Rose to Grey | 22.60                | 10.76                | 887                            | 477 | CRE10015    |
|          | 100     | 120     | White        | 22.60                | 10.76                | 887                            | 477 | CRE00015    |
| 75mm     | 60      | 120     | Rose to Grey | 8.49                 | 1.32                 | 662                            | 350 | CRE10012    |
|          | 60      | 120     | White        | 8.49                 | 1.32                 | 662                            | 350 | CRE00012    |
|          | 100     | 120     | Rose to Grey | 14.15                | 2.19                 | 788                            | 420 | CRE10013    |
|          | 100     | 120     | White        | 14.15                | 2.19                 | 788                            | 420 | CRE00013    |
| 90mm     | 150     | 120     | Rose to Grey | 15.59                | 2.41                 | 842                            | 450 | CRE10008    |
|          | 150     | 120     | White        | 15.59                | 2.41                 | 842                            | 450 | CRE00008    |
|          | 250     | 120     | Rose to Grey | 22.98                | 4.02                 | 986                            | 530 | CRE10002    |
|          | 250     | 120     | White        | 22.98                | 4.02                 | 986                            | 530 | CRE00002    |

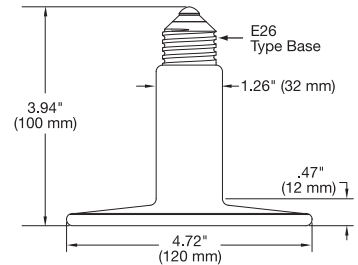
### Type CRR Edison Screw-In Bulb E-Mitters



**CRR 75 mm**



**CRR 90 mm**



**CRR 120 mm**

### Standard (Non-Stock) CRR E-Mitters (Color – White)

| Diameter | Wattage | Watt Density         |                      | *Surface Temperature (Typical) |     | Part Number<br>120V |
|----------|---------|----------------------|----------------------|--------------------------------|-----|---------------------|
|          |         | (W/in <sup>2</sup> ) | (W/cm <sup>2</sup> ) | °F                             | °C  |                     |
| 75mm     | 60      | 8.77                 | 1.36                 | 640                            | 338 | CRR00005            |
|          | 100     | 14.62                | 2.26                 | 710                            | 377 | CRR00006            |
| 90mm     | 100     | 10.16                | 1.57                 | 655                            | 346 | CRR00003            |
|          | 150     | 15.24                | 2.36                 | 760                            | 404 | CRR00004            |
|          | 200     | 20.32                | 3.14                 | 950                            | 510 | CRR00007            |
| 120mm    | 100     | 5.71                 | 0.88                 | 400                            | 204 | CRR00008            |
|          | 150     | 8.57                 | 1.33                 | 485                            | 252 | CRR00009            |
|          | 200     | 14.29                | 2.21                 | 670                            | 354 | CRR00010            |

\*E-Mitter (operating in 72°F/22°C ambient) face temperature measured with internal thermocouple.

# Radiant Process Heaters



## Series CRT E-Mitters

### Stock CRT E-Mitters



#### Series CRT – Tube Shaped E-Mitter

Tempco's Edison Screw-In Bulb Series CRT E-Mitter is a hollow, tube-shaped ceramic heater ideally suited for wide area heating. Standard colors are metamorphing rose and straight white; optional are metamorphing yellow and straight black.

#### Typical Applications

- Preventing moisture accumulation and freezing in electrical control boxes
- Preventing moisture accumulation, mildew and freezing in clothes lockers
- Resistor Banks
- Incubators

### Standard (Non-Stock) and Stock CRT E-Mitters (Color – METAMORPHING Rose to Grey)

**Stock Items Are Shown In RED**

| Wattage | *Surface Temperature (Typical) |     | Part Number     |          |
|---------|--------------------------------|-----|-----------------|----------|
|         | °F                             | °C  | 120V            | 240V     |
| 50      | 464                            | 240 | <b>CRT10100</b> | —        |
| 75      | 567                            | 297 | <b>CRT10101</b> | CRT10106 |
| 100     | 671                            | 355 | <b>CRT10102</b> | CRT10107 |
| 150     | 824                            | 440 | <b>CRT10103</b> | CRT10108 |
| 200     | 937                            | 503 | <b>CRT10104</b> | CRT10109 |
| 250     | 1049                           | 565 | <b>CRT10105</b> | CRT10110 |



#### Screw-In Base

Ceramic receptacle for use with screw-in bulb E-Mitters

**Part Number: CRK00016**

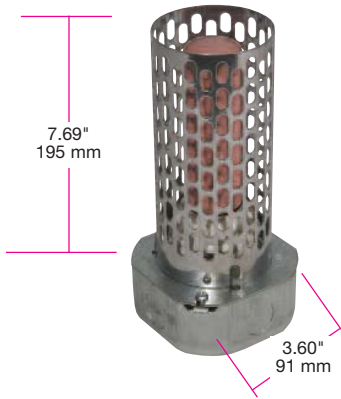
\*E-Mitter (operating in 72°F/22°C ambient) surface temperature measured with a thermocouple.



# Radiant Process Heaters

## Series EHC Enclosure Heaters

### EHC Ceramic E-Mitter Enclosure Heaters



#### Typical Applications

- Traffic Signal Control Boxes
- Automatic Teller Machines (ATMs)
- Outdoor Electrical Power Enclosures
- Control Panels
- Control Valve Housings
- Switch Gear
- Clothing Lockers

Tempco enclosure heaters are the answer to all your enclosure heater needs. Our heaters are designed to help electric, electronic, pneumatic, hydraulic and mechanical equipment perform at top capacity by protecting them against low temperatures, condensation and corrosion. Tempco offers many different styles of heaters that can be used in enclosure heating applications. Our most popular styles are displayed below.

#### EHC Enclosure Heaters with NEMA 1 Housing

| Watts | Volts | Color        | Part Number | Replacement Heater Bulb |
|-------|-------|--------------|-------------|-------------------------|
| 50    | 120   | Rose to Grey | EHC10100    | CRT10100                |
| 75    | 120   | Rose to Grey | EHC10101    | CRT10101                |
| 75    | 240   | Rose to Grey | EHC10106    | CRT10106                |
| 100   | 120   | Rose to Grey | EHC10102    | CRT10102                |
| 100   | 240   | Rose to Grey | EHC10107    | CRT10107                |
| 150   | 120   | Rose to Grey | EHC10103    | CRT10103                |
| 150   | 240   | Rose to Grey | EHC10108    | CRT10108                |
| 200   | 120   | Rose to Grey | EHC10104    | CRT10104                |
| 200   | 240   | Rose to Grey | EHC10109    | CRT10109                |
| 250   | 120   | Rose to Grey | EHC10105    | CRT10105                |
| 250   | 240   | Rose to Grey | EHC10110    | CRT10110                |

*See page 11-114 for help in sizing and determining the best enclosure heater for your application.*

### EHA — Remote Thermostats for Enclosure Heaters



See Page 9-18 for details

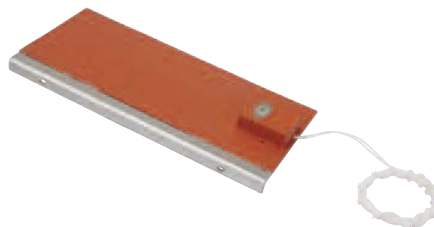
#### Stock EHA Remote Thermostats

| Opens °F | Closes °F | Part Number |
|----------|-----------|-------------|
| 60±5     | 40±7      | EHA00001    |
| 140±5    | 110±10    | EHA00002    |
| 180±5    | 150±10    | EHA00003    |

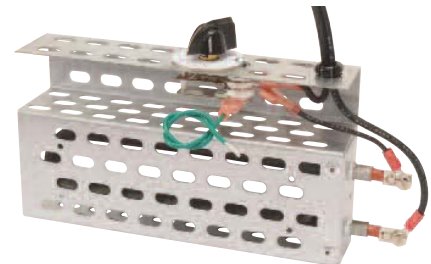
### Other Types of Enclosure Heaters



Finned Strip Heater  
See Page 8-14



Silicone Rubber Heater  
See Page 9-18



Tubular Heater  
See Page 11-115