Custom CRA Linear Heater Assemblies Using Standard Components

Do It Yourself or let Tempco build an array to your exact specifications using standard components.

Consult Tempco for arrays using custom designed components.

Components Required To Build A Custom CRA Linear Heater using Standard Items

Example

Steps to Design a Custom CRA E-Mitter Linear Assembly from Standard Components

Designing a 40-inch-long CRA assembly using a stock housing length.

Step 1) Select the Housing. This application can use the standard CRK00004 housing from the Standard CRK Housing Lengths Table on page 7-19. Note the Maximum Power Rating of the housing when making your selection.

Step 2) Select the E-Mitters Series. The CRK Housing Lengths Table gives the various possible E-Mitter configurations that will fit the housing selected. A combination of CRBs and CRCs will be used for this application. CRB E-Mitters were selected for the inside three heaters to limit the number of unheated gaps that would be present if all CRC E-Mitters were used. The middle CRB E-Mitter has a thermocouple for temperature control. The outer two heaters in this example are CRC E-Mitters at a different w/in than the CRBs because the heat required at the edges is not the same as the center. The heater color selected is Metamorphing Rose.

- CRB E-Mitters can be found on page 7-4.
- CRC E-Mitters can be found on page 7-7.

Step 3) Select the Reflectors. Select E-Mitter Reflectors to match the Style and Quantity of E-Mitters you selected. Three Part Number CRK00007 Reflectors are required for the CRB E-Mitters and Two Part Number CRK00006 Reflectors are required for the CRC E-Mitters. Note: Reflectors are complete with mounting hardware to attach to housing (page 7-20).

Step 4) Select the Terminal Blocks. Select the number of terminal blocks required for wiring. This would typically be one for each heater for the power leads and one for each thermocouple (page 7-21 and 7-22). A total of six terminal Blocks, Part Number EHD-108-101, are required. One for the power leads of each E-Mitter and one for the thermocouple on CRB10033.