

### CRP 12" x 12" Modular Panels — METAMORPHING Yellow to Orange

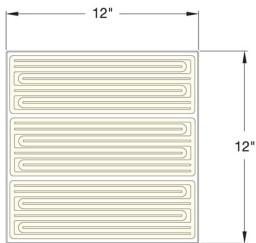
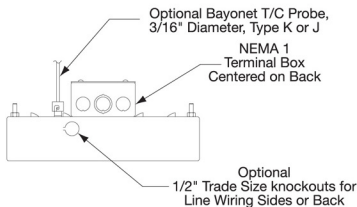
## New Cost Effective and Self-Contained Ceramic Infrared Panel Heater Offers Ease of Installation and Trouble-Free Performance



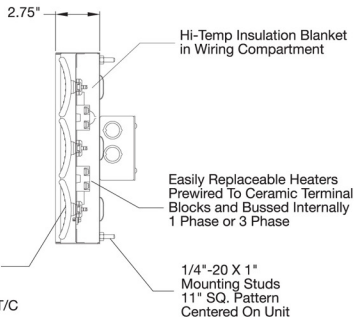
#### Design Features

- \* Standard colors are metamorphing yellow (cold) to orange (hot), and traditional white. Optional colors are metamorphing rose (cold) to grey (hot) and black.
- \* Low profile 20 ga. aluminized steel or stainless steel housing.
- \* Standard stocked voltage: 120, 220-240V or 480V as noted; other voltages are available.
- \* Low noise type K thermocouple mounted internally in center heater. Optional type J thermocouple is also available.
- \* Watt density range: from 11w/in<sup>2</sup> to 35w/in<sup>2</sup>
- \* Standard operating temp range: 750°F to 1300°F
- \* Best when used at radiation distances of 4-10" from application.
- \* Performance is unaffected by vibration or adverse atmospheric conditions.
- \* 3 to 6µm infrared radiation wavelength.
- \* Made to order.

*Three CRL E-Mitter heaters in one panel.  
See page 7-26 for CRP Modular Panel with  
an additional emitting glass face.*



CRL Ceramic Heaters  
Color Changing Yellow  
Dual Voltage Windings  
Optional Internal K or J T/C



### Tabletop Point-of-Use Temperature Control Console Systems

See Section 13, page 13-52



# Radiant Process Heaters



## CRP Panel Heater — Self-Contained

### Standard Ratings of Modular 12" × 12" CRP Radiant Panels – METAMORPHING Yellow to Orange

#### Aluminized Steel Housing with NEMA 1 Terminal Box (4" square by 2-1/8" deep)

KW	Watt Density (W/in <sup>2</sup> )	120V		240V-1Ph		Part Number 240V-3Ph		480V-1Ph		480V-3Ph	
		No T/C	K T/C	No T/C	K T/C	No T/C	K T/C	No T/C	K T/C	No T/C	K T/C
1.50	11.6	CRP20001	CRP20002	CRP20003	CRP20004	CRP20005	CRP20006	CRP20007	CRP20008	CRP20009	CRP20010
2.25	17.4	CRP20011	CRP20012	CRP20013	CRP20014	CRP20015	CRP20016	CRP20017	CRP20018	CRP20019	CRP20020
3.00	23.0	—	—	CRP20021	CRP20022	CRP20023	CRP20024	CRP20025	CRP20026	CRP20027	CRP20028
3.75	29.0	—	—	CRP20029	CRP20030	CRP20031	CRP20032	CRP20033	CRP20034	CRP20035	CRP20036
4.50	35.0	—	—	CRP20037	CRP20038	CRP20039	CRP20040	CRP20041	CRP20042	CRP20043	CRP20044

**NOTE:** K T/C panels have one low noise internal T/C in center heater with extension wires routed into rear terminal box.

#### Stainless Steel Housing with NEMA 1 Terminal Box (Medical or Food Applications)

KW	Watt Density (W/in <sup>2</sup> )	120V		240V-1Ph		Part Number 240V-3Ph		480V-1Ph		480V-3Ph	
		No T/C	K T/C	No T/C	K T/C	No T/C	K T/C	No T/C	K T/C	No T/C	K T/C
1.50	11.6	CRP20045	CRP20046	CRP20047	CRP20048	CRP20049	CRP20050	CRP20051	CRP20052	CRP20053	CRP20054
2.25	17.4	CRP20055	CRP20056	CRP20057	CRP20058	CRP20059	CRP20060	CRP20061	CRP20062	CRP20063	CRP20064
3.00	23.0	—	—	CRP20065	CRP20066	CRP20067	CRP20068	CRP20069	CRP20070	CRP20071	CRP20072
3.75	29.0	—	—	CRP20073	CRP20074	CRP20075	CRP20076	CRP20077	CRP20078	CRP20079	CRP20080
4.50	35.0	—	—	CRP20081	CRP20082	CRP20083	CRP20084	CRP20085	CRP20086	CRP20087	CRP20088

**NOTE:** K T/C panels have one low noise internal T/C in center heater with extension wires routed into rear terminal box.

### Replacement Heaters for Standard Modular 12" × 12" CRP Radiant Panels

Panel KW	Heater Watts	Part Number			
		120V		240V-480V	
		No T/C	K T/C	No T/C	K T/C
1.50	500	CRL20021	CRL20022	CRL20023	CRL20024
2.25	750	CRL20025	CRL20026	CRL20027	CRL20028
3.00	1000	—	—	CRL20029	CRL20030
3.75	1250	—	—	CRL20031	CRL20032
4.50	1500	—	—	CRL20033	CRL20034

**NOTE:** All 240/480V heaters have two windings for dual voltage use (Parallel connected for 240V & series connected for 480V)  
120V heaters are single winding designs.  
K T/C units have an internal "low noise" style thermocouple with 12" leads.

### Standard Panel Specifications

KW	Panel Watt Density***	Typical Operating Temperature**		Primary Emitted Wavelength*
		°F	°C	
1.50	12.0	796	424	4.2
2.25	18.0	956	513	3.7
3.00	24.0	1076	580	3.4
3.75	30.0	1191	644	3.2
4.50	36.0	1308	709	3.0

\*Peak infrared radiation wavelength as calculated from Wien's Law, for operating temperature shown. Expressed in microns (μm). Operating temperature based on room ambient testing @ 72°F.

\*\*E-Mitter heater body temperature as measured with internal thermocouple when mounted facedown in stock CRK reflector and operating in 72°F/22°C room ambient.

\*\*\*Watt density calculated using total heater face surface area within panel.

# Radiant Process Heaters



## CRP Panel Heater with Glass Face

### CRP 12" x 12" Modular Glass Face Panels Standard Ratings



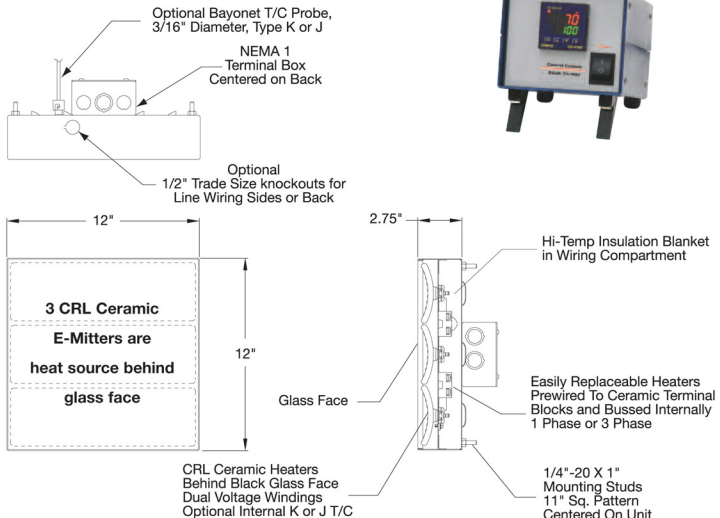
#### Design Features

- \* Dark red face glass is standard. Glass provides for ease of cleaning.
- \* Low profile 20 gauge aluminized steel or stainless steel housing
- \* Standard stocked voltage: 120, 220-240V or 480V as noted; other voltages are available.
- \* Low noise type K thermocouple mounted internally in center heater. Optional type J thermocouple is also available.
- \* Watt density range: from 11w/in<sup>2</sup> to 35w/in<sup>2</sup>
- \* Standard operating temp range: 750°F to 1300°F
- \* Best when used at radiation distances of 4-10" from application.
- \* Performance is unaffected by vibration or adverse atmospheric conditions.
- \* 3 to 6μm infrared radiation wavelength.
- \* Optional clear face glass is available.  
If required, please specify when ordering.
- \* Made to order.

*Three CRL E-Mitter heaters behind an emitting dark red glass face*

### Tabletop Point-of-Use Temperature Control Console Systems

See Section 13, page 13-52



# Radiant Process Heaters



## CRP Panel Heater with Glass Face

### Standard Ratings of Modular 12" x 12" CRP Glass Faced Radiant Panels

#### Aluminized Steel Housing with NEMA 1 Terminal Box (4" square by 2.13" deep)

KW	Watt Density (W/in <sup>2</sup> )	120V		240V-1Ph		Part Number 240V-3Ph		480V-1Ph		480V-3Ph	
		No T/C	K T/C	No T/C	K T/C	No T/C	K T/C	No T/C	K T/C	No T/C	K T/C
1.50	11.6	CRP20089	CRP20090	CRP20091	CRP20092	CRP20093	CRP20094	CRP20095	CRP20096	CRP20097	CRP20098
2.25	17.4	CRP20099	CRP20100	CRP20101	CRP20102	CRP20103	CRP20104	CRP20105	CRP20106	CRP20107	CRP20108
3.00	23.0	—	—	CRP20109	CRP20110	CRP20111	CRP20112	CRP20113	CRP20114	CRP20115	CRP20116
3.75	29.0	—	—	CRP20117	CRP20118	CRP20119	CRP20120	CRP20121	CRP20122	CRP20123	CRP20124
4.50	35.0	—	—	CRP20125	CRP20126	CRP20127	CRP20128	CRP20129	CRP20130	CRP20131	CRP20132

**NOTE:** K T/C panels have one low noise internal T/C in center heater with extension wires routed into rear terminal box.

#### Stainless Steel Housing with NEMA 1 Terminal Box (4" square by 2.13" deep)

KW	Watt Density (W/in <sup>2</sup> )	120V		240V-1Ph		Part Number 240V-3Ph		480V-1Ph		480V-3Ph	
		No T/C	K T/C	No T/C	K T/C	No T/C	K T/C	No T/C	K T/C	No T/C	K T/C
1.50	11.6	CRP20133	CRP20134	CRP20135	CRP20136	CRP20137	CRP20138	CRP20139	CRP20140	CRP20141	CRP20142
2.25	17.4	CRP20143	CRP20144	CRP20145	CRP20146	CRP20147	CRP20148	CRP20149	CRP20150	CRP20151	CRP20152
3.00	23.0	—	—	CRP20153	CRP20154	CRP20155	CRP20156	CRP20157	CRP20158	CRP20159	CRP20160
3.75	29.0	—	—	CRP20161	CRP20162	CRP20163	CRP20164	CRP20165	CRP20166	CRP20167	CRP20168
4.50	35.0	—	—	CRP20169	CRP20170	CRP20171	CRP20172	CRP20173	CRP20174	CRP20175	CRP20176

**NOTE:** K T/C panels have one low noise internal T/C in center heater with extension wires routed into rear terminal box.

### Replacement Heaters for Standard Modular 12" x 12" CRP Radiant Panels

Panel KW	Heater Watts	Part Number			
		120V		240V-480V	
		No T/C	K T/C	No T/C	K T/C
1.50	500	CRL20021	CRL20022	CRL20023	CRL20024
2.25	750	CRL20025	CRL20026	CRL20027	CRL20028
3.00	1000	—	—	CRL20029	CRL20030
3.75	1250	—	—	CRL20031	CRL20032
4.50	1500	—	—	CRL20033	CRL20034

**NOTE:** All 240/480V heaters have two windings for dual voltage use (Parallel connected for 240V & series connected for 480V)

120V heaters are single winding designs.

K T/C units have an internal "low noise" style thermocouple with 12" leads.

### CRP Replacement Glass

Color	Part Number
Dark Red	GLS-101-101
Clear	GLS-101-102