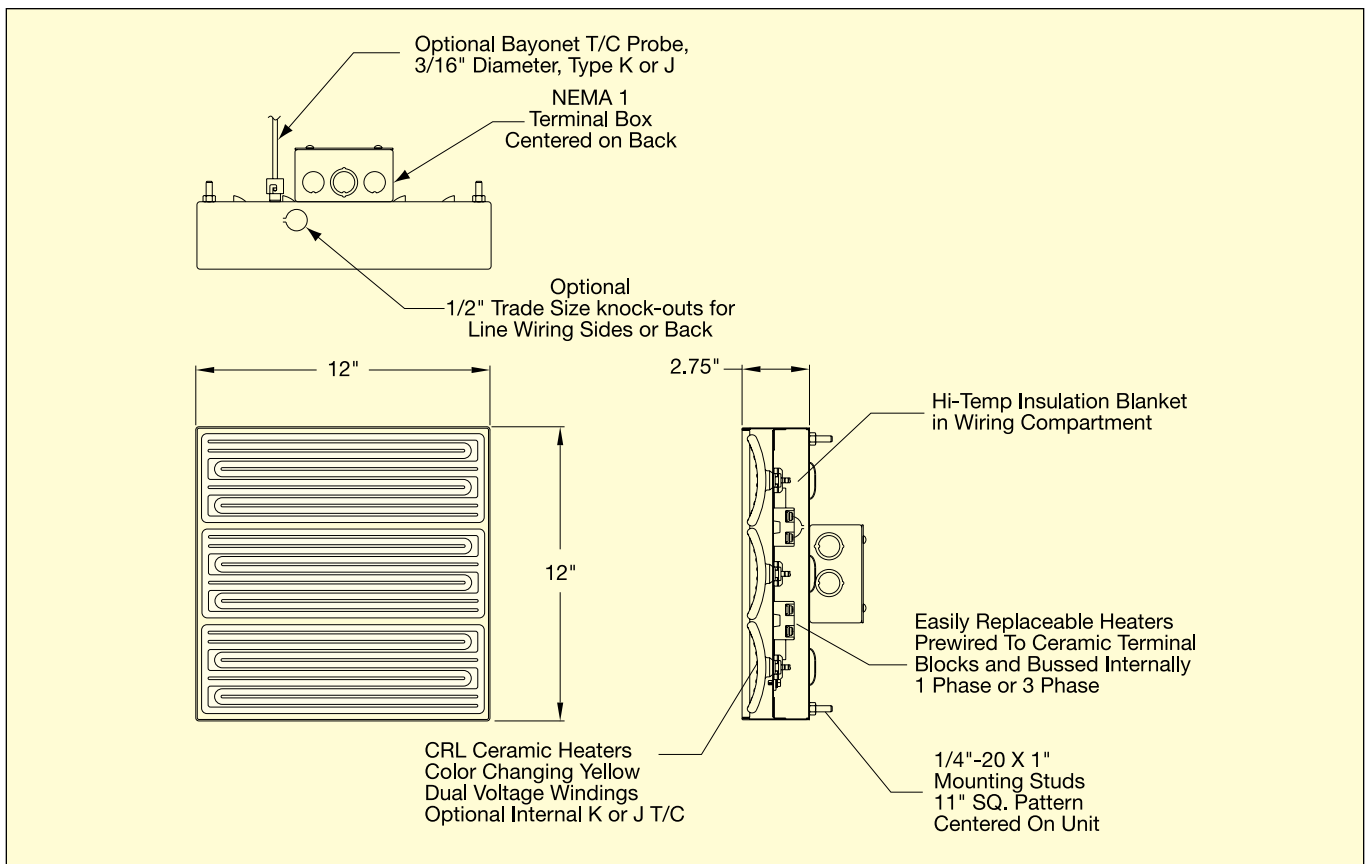## CRP Panel Heater
0.3 x 0.3 m (12 x 12") Modular Panels

CRP Series

- New Cost Effective and Self-Contained Ceramic Infrared Panel Heater
- Offers Ease of Installation and Trouble-Free Performance
- 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 gallon Aluminized Steel or Stainless Steel Housing
- Standard Stocked Voltage: 120, 220 to 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 11 watts/in^2 to 35 watts/in^2
- Standard Operating Temperature Range 399 to 704°C (750 to 1300°F)
- Best When used at Radiation Distances of 102 to 254 mm (4 to 10") From Application
- Performance is Unaffected By Vibration or Adverse Atmospheric Conditions.
- 3 to 6 µm Infrared Radiation Wavelength
- Made to Order/Custom Products Available

Three CRL E-Mitter heaters in one panel. Metamorphing yellow to orange.

Optional Bayonet T/C Probe, 3/16" Diameter, Type K or J

NEMA 1 Terminal Box Centered on Back

Optional 1/2" Trade Size knock-outs for Line Wiring Sides or Back

12"

12"

2.75"

Hi-Temp Insulation Blanket in Wiring Compartment

Easily Replaceable Heaters Prewired To Ceramic Terminal Blocks and Bussed Internally 1 Phase or 3 Phase

1/4"-20 X 1" Mounting Studs 11" SQ. Pattern Centered On Unit

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

CRP Panel Heater
Standard Ratings of Modular 0.3 x 0.3 m (12 x 12") Radiant Panels

Aluminized Steel Housing with NEMA 1 Terminal Box (4 in^2 x 2⅛" deep)

To Order *Visit omega.com/crp_series for Pricing and Details*

120V		240V-1Ph		240V-3Ph		480V-1Ph		480V-3Ph			Watt Density
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	KW	(W/in²)
Model No.											
CRP20001	CRP20002	CRP20003	CRP20004	CRP20005	CRP20006	CRP20007	CRP20008	CRP20009	CRP20010	1.50	11.6
CRP20011	CRP20012	CRP20013	CRP20014	CRP20015	CRP20016	CRP20017	CRP20018	CRP20019	CRP20020	2.25	17.4
—	—	CRP20021	CRP20022	CRP20023	CRP20024	CRP20025	CRP20026	CRP20027	CRP20028	3.00	23.0
—	—	CRP20029	CRP20030	CRP20031	CRP20032	CRP20033	CRP20034	CRP20035	CRP20036	3.75	29.0
—	—	CRP20037	CRP20038	CRP20039	CRP20040	CRP20041	CRP20042	CRP20043	CRP20044	4.50	35.0

Note: K thermocouple panels have one low noise internal thermocouple in center heater with extension wires routed into rear terminal box.
Ordering Example: CRP20002, 1.5 KW, 120 Vac radiant panel heater with K thermocouple.

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

120V		240V-1Ph		240V-3Ph		480V-1Ph		480V-3Ph			Watt Density
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	KW	(W/in²)
Model No.											
CRP20045	CRP20046	CRP20047	CRP20048	CRP20049	CRP20050	CRP20051	CRP20052	CRP20053	CRP20054	1.50	11.6
CRP20055	CRP20056	CRP20057	CRP20058	CRP20059	CRP20060	CRP20061	CRP20062	CRP20063	CRP20064	2.25	17.4
—	—	CRP20065	CRP20066	CRP20067	CRP20068	CRP20069	CRP20070	CRP20071	CRP20072	3.00	23.0
—	—	CRP20073	CRP20074	CRP20075	CRP20076	CRP20077	CRP20078	CRP20079	CRP20080	3.75	29.0
—	—	CRP20081	CRP20082	CRP20083	CRP20084	CRP20085	CRP20086	CRP20087	CRP20088	4.50	35.0

Note: K thermocouple panels have one low noise internal thermocouple in center heater with extension wires routed into rear terminal box.
Ordering Example: CRP20056, 2.25 KW, 120 Vac radiant panel heater with K thermocouple.

Replacement Heaters for Standard Modular 0.3 x 0.3 mm (12 × 12") CRP Radiant Panels

120V		240V-1Ph			
No T/C	K T/C	No T/C	K T/C	Panel KW	Heater Watts
Model No.					
CRL20021	CRL20022	CRL20023	CRL20024	1.50	500
CRL20025	CRL20026	CRL20027	CRL20028	2.25	750
—	—	CRL20029	CRL20030	3.00	1000
—	—	CRL20031	CRL20032	3.75	1250
—	—	CRL20033	CRL20034	4.50	1500

Note: All 240/480V heaters have two windings for dual voltage use. (Parallel connected for 240V and series connected for 480V). 120V heaters are single winding designs.
K thermocouple units have an internal "low noise" style thermocouple with 0.3 m (12") leads.
Ordering Example: CRL20022, 1.5 KW replacement heater.

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 @ 22°C (72°F).

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

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

DANGER: Hazard of Fire. These heaters are not for use in atmospheres where flammable vapors, gases or liquids are present as defined in the National Electrical Code. Where solvents, water, etc. are being evaporated from the process it is necessary to provide substantial quantities of ventilating air to carry away all resulting vapors.

CAUTION

WARNING: Hazard of Electric Shock. Installation must be grounded to earth to avoid shock hazard. Disconnect power to installation before servicing or installing heater.

WARNING: Do not use Copper Wire to make connections inside this heater. High temperatures will oxidize copper. Use of nickel plated or nickel clad insulated copper wire is recommended. Wire insulation rating must be suitable for the ambient temperature of the wiring installation.

Installation: Do not mount CRP Panel Heaters closer than 6 inches to any structural material that does not have at least a 200°C (392°F) continuous temperature rating.
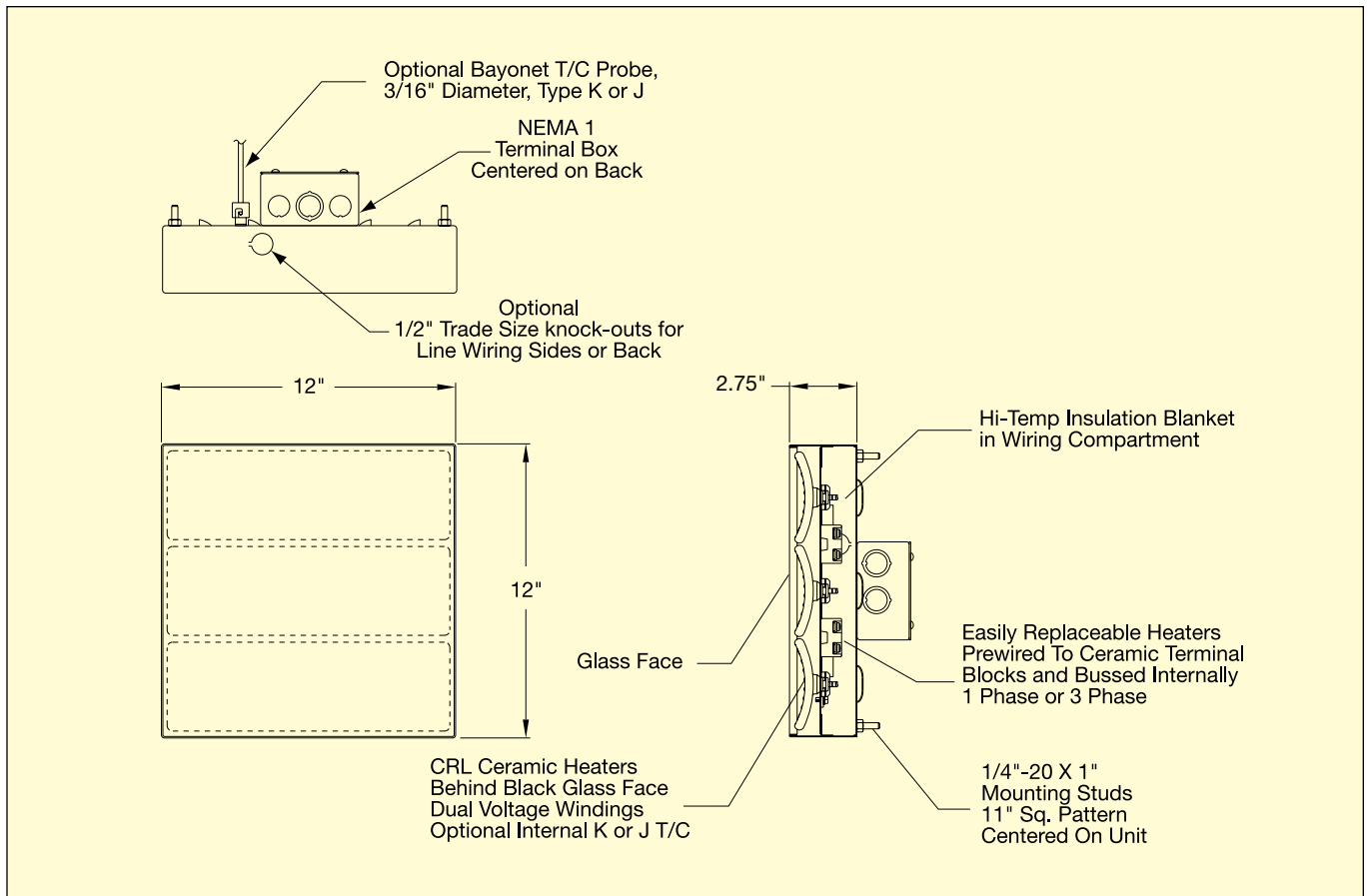
Panel Heater with Glass Face
0.3 x 0.3 m (12 x 12") Modular Glass Face Panels Standard Ratings

CRP Series

- 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 to 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 11 watts/in^2 to 35 watts/in^2
- Standard Operating Temperature Range 399 to 704°C (750 to 1300°F)
- Best When used at Radiation Distances of 102 to 254 mm (4 to 10") From Application
- Performance is Unaffected by Vibration or Adverse Atmospheric Conditions.
- 3 to 6 µm Infrared Radiation Wavelength
- Optional Clear Face Glass is Available If Required Please Specify When Ordering
- Made to Order/Custom Products Available

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

Optional Bayonet T/C Probe, 3/16" Diameter, Type K or J

NEMA 1 Terminal Box Centered on Back

Optional 1/2" Trade Size knock-outs for Line Wiring Sides or Back

12"

12"

2.75"

Hi-Temp Insulation Blanket in Wiring Compartment

Glass Face

Easily Replaceable Heaters Prewired To Ceramic Terminal Blocks and Bussed Internally 1 Phase or 3 Phase

CRL Ceramic Heaters Behind Black Glass Face Dual Voltage Windings Optional Internal K or J T/C

1/4"-20 X 1" Mounting Studs 11" Sq. Pattern Centered On Unit

CRP Panels with Glass Face
Standard Ratings of Modular 0.3 x 0.3 m (12 × 12") CRP Glass Faced Radiant Panels

Aluminized Steel Housing with NEMA 1 Terminal Box (4 in² x 2.13" deep)

To Order	Visit omega.com/crp_series for Pricing and Details										
120V		**240V-1Ph**		**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	**KW**	**Watt Density (W/in²)**
Model No.											
CRP20089	CRP20090	CRP20091	CRP20092	CRP20093	CRP20094	CRP20095	CRP20096	CRP20097	CRP20098	1.50	11.6
CRP20099	CRP20100	CRP20101	CRP20102	CRP20103	CRP20104	CRP20105	CRP20106	CRP20107	CRP20108	2.25	17.4
—	—	CRP20109	CRP20110	CRP20111	CRP20112	CRP20113	CRP20114	CRP20115	CRP20116	3.00	23.0
—	—	CRP20117	CRP20118	CRP20119	CRP20120	CRP20121	CRP20122	CRP20123	CRP20124	3.75	29.0
—	—	CRP20125	CRP20126	CRP20127	CRP20128	CRP20129	CRP20130	CRP20131	CRP20132	4.50	35.0

Note: K thermocouple panels have one low noise internal thermocouple in center heater with extension wires routed into rear terminal box.
Ordering Example: CRP20090, 1.5 KW, glass face radiant heater, 120 Vac with K thermocouple.

Stainless Steel Housing with NEMA 1 Terminal Box (4 in² x 2.13" deep)

120V		**240V-1Ph**		**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	**KW**	**Watt Density (W/in²)**
Model No.											
CRP20133	CRP20134	CRP20135	CRP20136	CRP20137	CRP20138	CRP20139	CRP20140	CRP20141	CRP20142	1.50	11.6
CRP20143	CRP20144	CRP20145	CRP20146	CRP20147	CRP20148	CRP20149	CRP20150	CRP20151	CRP20152	2.25	17.4
—	—	CRP20153	CRP20154	CRP20155	CRP20156	CRP20157	CRP20158	CRP20159	CRP20160	3.00	23.0
—	—	CRP20161	CRP20162	CRP20163	CRP20164	CRP20165	CRP20166	CRP20167	CRP20168	3.75	29.0
—	—	CRP20169	CRP20170	CRP20171	CRP20172	CRP20173	CRP2074	CRP20175	CRP20176	4.50	35.0

Note: K thermocouple panels have one low noise internal thermocouple in center heater with extension wires routed into rear terminal box.
Ordering Example: CRP20144, 2.25 KW, glass face radiant heater, 120 Vac with K thermocouple.

Replacement Heaters for Standard Modular 0.3 x 0.3 mm (12 × 12") CRP Radiant Panels

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

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 thermocouple units have an internal "low noise" style thermocouple with 0.3 m (12") leads.
Ordering Example: CRL20022, 500 W replacement heater with K thermocouple.

CRP Replacement Glass

Model No	Color
GLS-101-101	Dark red clear
GLS-101-102	Clear

DANGER: Hazard of Fire. These heaters are not for use in atmospheres where flammable vapors, gases or liquids are present as defined in the National Electrical Code. Where solvents, water, etc. are being evaporated from the process it is necessary to provide substantial quantities of ventilating air to carry away all resulting vapors.

CAUTION

WARNING: Hazard of Electric Shock. Installation must be grounded to earth to avoid shock hazard. Disconnect power to installation before servicing or installing heater.

WARNING: Do not use Copper Wire to make connections inside this heater. High temperatures will oxidize copper. Use of nickel plated or nickel clad insulated copper wire is recommended. Wire insulation rating must be suitable for the ambient temperature of the wiring installation.

Installation: Do not mount CRP Panel Heaters closer than 6 inches to any structural material that does not have at least a 200°C (392°F) continuous temperature rating.