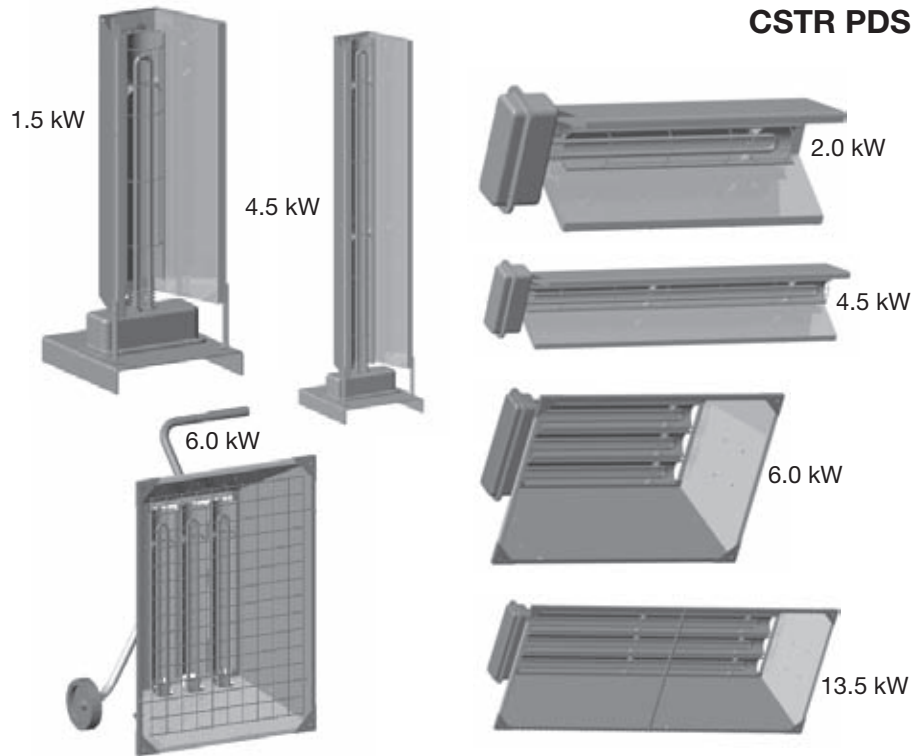


## Infra-Red Radiant Heaters

- 1.5 to 13.5 kW
- 5,118 to 46,062 BTU/Hr
- 120, 208, 240, 277, 480 and 600 V
- Single or 3 Phase - Most Models Field Convertible
- Fixed Overhead - Convertible to Portable
- Portable/Factory Assembled
- Optional Accessories
  - Ground Fault
  - Disconnect
  - Tip Over Shut Down
- UL Listed, CSA Registered Models



**Chromalox®**  
PRECISION HEAT AND CONTROL



Portable

Fixed

### Description

The Chromalox ChromaStar™ infra-red comfort heaters are designed to provide a rugged source of heat for use in areas where dependence on air movement is impractical. The heaters are versatile, designed to provide warmth directly where it is needed for primary or spot heating applications. Each unit is constructed for long life and requires minimal maintenance. There are no moving parts or motors to wear out, no air filters or lubrication required.

All Chromalox ChromaStar™ radiant heaters feature the exclusive "Arctic End" Patent Pending heating element terminal construction. This feature lowers the terminal box temperatures resulting in extended element and wiring life.

Extruded aluminum housings are rigid to provide added protection to the heating elements located at the focal point of a built-in mirrored aluminum reflector(s).

The heater(s) consist of hairpin bent .430" diameter alloy sheath tubular element(s) constructed of high quality resistance wire embedded in carefully selected MgO refractory insulation. The element feature "Arctic end" terminal construction for longer life and cooler terminal enclosure temperatures. The element(s) also feature terminal construction using a waged-in silicone bushings that produce unequalled resistance to moisture absorption. The heating element(s) connect to a gasketed, moisture resistance terminal enclosure with liquid-tight bulkhead threaded fittings.

An extension reflector constructed of 0.050" mirrored aluminum extends over the assembly to provide a more uniform heating pattern.

### Portable

All portable heaters are supplied fully assembled to a rugged, chrome-nickel plated tubular steel cart and handle (1.5 and 2.0 kW heater has a fixed pedestal). The cart features large wheels for easy portability. All portable heaters include safety grills to protect personnel from contacting hot elements.

Field wiring is accomplished through a 3/4" conduit opening in terminal enclosure. The 1.5 kW unit comes complete with a factory installed 6 foot cord and 2 prong grounding type plug. Other models can be field wired using accessory cable and plug kits shown.

### Fixed Overhead

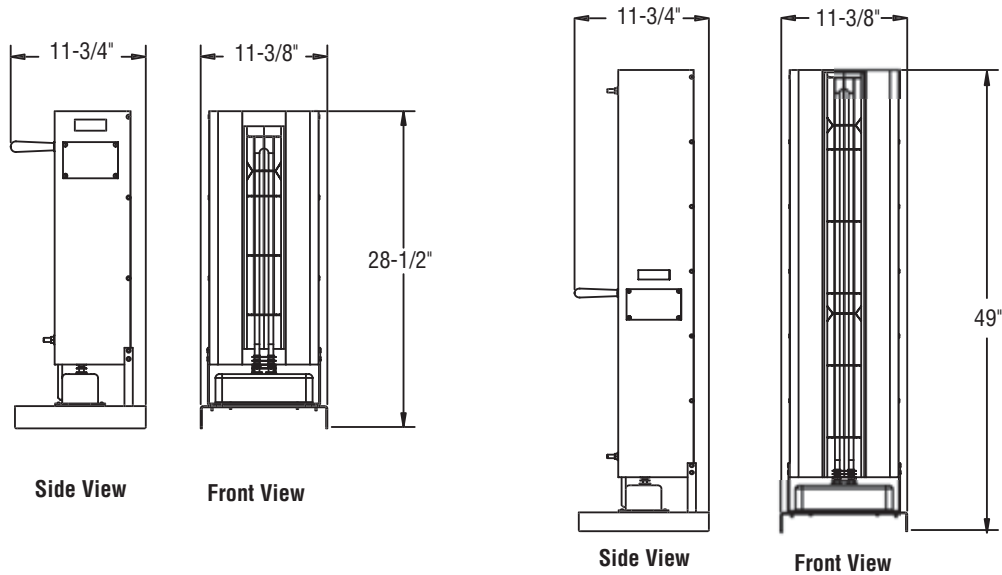
The Chromalox ChromaStar™ radiant heater is shipped fully assembled and can be hung from the ceiling with 2 chains or rigid angle brackets attached to the heater brackets located on the back of the heater.

Field wiring is accomplished through the liquid tight terminal enclosure. No secondary splice box required.

Protective screens, disconnect switches and portable carts are available for these heaters as shown.

# ChromaStar™ - Infra-Red Comfort Heaters

## Portable Radiant Heaters 1.5 to 4.5 kW Dimensions



### Construction

Extruded aluminum housing is rigid to provide added protection to the heating element, which is located at the focal point of a built-in mirrored aluminum reflector.

The heater consists of a hairpin bent .430" diameter alloy sheath tubular element constructed of high quality resistance wire embedded in carefully selected MgO refractory insulation. The element features "Arctic End" terminal construction for longer element life and cooler terminal enclosure temperatures. The element also features a terminal construction

using a swaged-in silicone bushing that produces unequalled resistance to moisture absorption. The heating element connects to a gasketed, moisture resistance terminal enclosure with liquid-tight bulkhead threaded fittings.

An extension reflector constructed of 0.050" mirrored aluminum extends over the assembly to provide a more uniform heating pattern.

All portable heaters are supplied fully assembled to a rugged, chrome-nickel plated tubular steel

cart and handle (1.5 and 2.0 kW heater has a fixed pedestal). The cart features large wheels for easy portability. All portable heaters include safety grills to prevent personnel from contacting hot elements.

Field wiring is accomplished through a 3/4" conduit opening in terminal enclosure. The 1.5 kW unit comes complete with a factory installed 6 foot cord and 2 prong grounding type plug. Other models can be field wired using accessory cable and plug kits shown on page 5.

### Specifications and Ordering Information

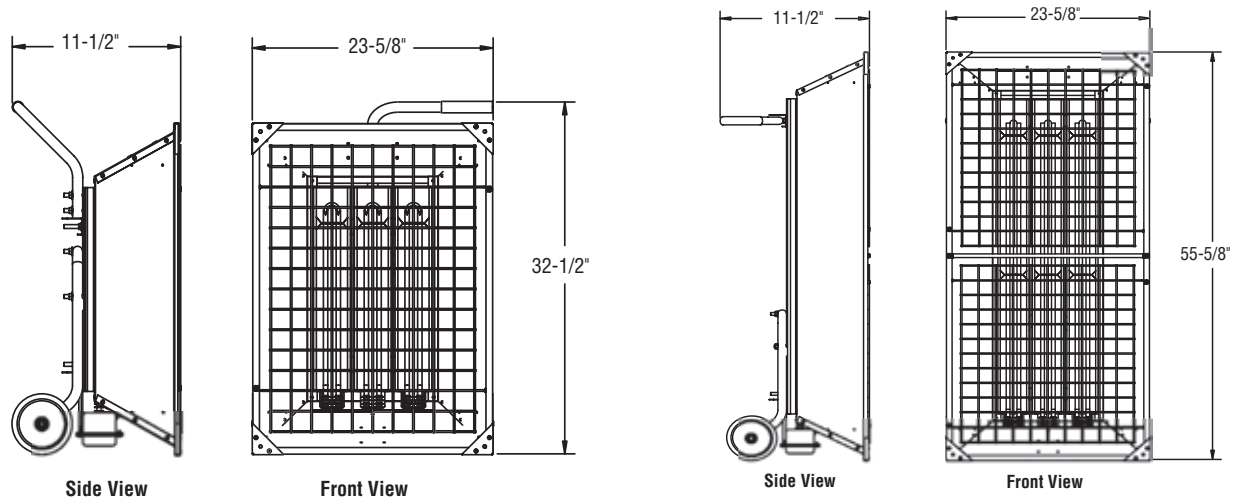
Electrical						Dimensions (in.)			Ordering			
kW	Volts	Phase	No. Elem.	Amps	Btuh	Height	Base Width	Base Depth	Model	Stock	PCN	Wt. (Lbs.)
1.5	120	1	1	12.5	5,118	28-1/2	11-3/8	11-3/4	<b>STAR-02A-11-PC*</b>	<b>S</b>	<b>340486</b>	15
2	208	1	1	9.6	6,824	28-1/2	11-3/8	11-3/4	STAR-02A-81-P	AS	340494	15
2	240	1	1	8.3	6,824	28-1/2	11-3/8	11-3/4	STAR-02A-21-P	AS	340507	15
2	277	1	1	7.2	6,824	28-1/2	11-3/8	11-3/4	STAR-02A-71-P	AS	340515	15
2	480	1	1	4.2	6,824	28-1/2	11-3/8	11-3/4	<b>STAR-02A-41-P</b>	<b>S</b>	<b>340523</b>	15
2	600	1	1	3.3	6,824	28-1/2	11-3/8	11-3/4	STAR-02A-61-P	AS	340531	15
4.5	208	1	1	21.6	15,354	49	11-3/8	11-3/4	STAR-05A-81-P	AS	340380	25
4.5	240	1	1	18.8	15,354	49	11-3/8	11-3/4	STAR-05A-21-P	AS	340398	25
4.5	277	1	1	16.2	15,354	49	11-3/8	11-3/4	STAR-05A-71-P	AS	340400	25
4.5	480	1	1	9.4	15,354	49	11-3/8	11-3/4	<b>STAR-05A-41-P</b>	<b>S</b>	<b>340419</b>	25
4.5	600	1	1	7.5	15,354	49	11-3/8	11-3/4	STAR-05A-61-P	AS	340427	25

**Stock Status:** S = stock AS = assembly stock NS = non-stock  
**To Order** — Specify model, PCN, kW, volts, phase and quantity.

\*Includes 6 Foot cord and 2-prong grounding type plug

# Infra-Red Comfort Heaters - ChromaStar™

## Portable Radiant Heaters 6 to 13.5 kW Dimensions



### Construction

Three rigid extruded aluminum housings provide added protection to the three heating elements, each of which is located at the focal point of a built in polished aluminum reflector.

The heater consists of a hairpin bent .430" diameter alloy sheath tubular element constructed of high quality resistance wire embedded in carefully selected MgO refractory insulation. The element features "Arctic End" terminal construction for longer element life and cooler terminal enclosure temperatures. The element also features a terminal

construction using a swaged-in silicone bushing that produces unequalled resistance to moisture absorption. The heating element connects to a gasketed, moisture resistant terminal enclosure with liquid-tight bulkhead threaded fittings. Heater can be hosed down to remove dust and dirt.

An extension reflector constructed of 0.050" mirrored aluminum extends over the assembly to provide a more uniform heating pattern. An additional heat deflecting baffle is included to protect temperature sensitive flooring surfaces.

Portable radiant heaters are supplied with a heavy gauge protective wire screen as standard equipment.

All portable heaters are supplied fully assembled to a rugged, chrome-nickel plated tubular steel cart and handle. The cart features large wheels for easy portability and provides for operation in any position.

All models can be field wired using accessory cable and plug kits shown on page 5.

### Specifications and Ordering Information

Electrical					Dimensions (in.)			Ordering			
kW	Volts	Phase	Amps	Btuh	Height	Base Width	Base Depth	Model	Stock	PCN	Wt. (Lbs.)
6	208	3	16.7	20,472	32-1/2	23-5/8	11-1/2	STAR-06A-83-P	S	341163	26
6	240	3	14.4	20,472	32-1/2	23-5/8	11-1/2	STAR-06A-23-P	S	341171	26
6	277	1	21.7	20,472	32-1/2	23-5/8	11-1/2	STAR-06A-71-P	AS	341180	26
6	480	3	7.2	20,472	32-1/2	23-5/8	11-1/2	STAR-06A-43-P	S	341198	26
2	600	3	5.8	20,472	32-1/2	23-5/8	11-1/2	STAR-06A-63-P	AS	341120	26
13.5	208	3	37.5	46,062	55-5/8	23-5/8	11-1/2	STAR-14A-83-P	S	341219	44
13.5	240	3	32.5	46,062	55-5/8	23-5/8	11-1/2	STAR-14A-23-P	S	341227	44
13.5	277	1	47.7	46,062	55-5/8	23-5/8	11-1/2	STAR-14A-71-P	S	341235	44
13.5	480	3	16.3	46,062	55-5/8	23-5/8	11-1/2	STAR-14A-43-P	S	341243	44
13.5	600	3	3	46,062	55-5/8	23-5/8	11-1/2	STAR-14A-63-P	S	341251	44

**Stock Status:** S = stock AS = assembly stock NS = non-stock  
**To Order** — Specify model, PCN, kW, volts, phase and quantity. \*Includes 6 Foot cord and 2-prong grounding type plug

# ChromaStar™ - Infra-Red Comfort Heaters

## Tip-Over Switch Kits (For Portable STAR-06 and STAR-14 Heaters)

Chromalox STARTIP tip-over switch kits can be easily added to all Chromalox STAR 06 or 14 series factory assembled portable heaters or fixed overhead heaters which have been modified by use of a portable, STAR-CART kit. This kit is designed to de-energize the heating elements of unattended units in event the heater is accidentally knocked over. The kit includes a control circuit transformer, magnetic contactor, tip-over switch assembly and on-off toggle switch with rubber boot, completely prewired in a NEMA 4 enclosure. The kit also includes a 1" coupling, wiring between the contactor and heater, mounting bracket, hardware and instructions to complete the installation to the heater.

Model No.	Heater Volts	Status	PCN	Wt. Lbs
STARTP-8	208	AS	340670	14
<b>STARTP-2</b>	240	<b>S</b>	<b>340689</b>	14
STARTP-7	277	NS	340697	14
<b>STARTP-4</b>	480	<b>S</b>	<b>340700</b>	14
STARTP-6	600	NS	340718	14



## Tip-Over Switch and Ground Fault Detector Kits (For Portable STAR-06 and STAR-14 Heaters)

The Chromalox STAR-TG series kits include the components and features of the STARTIP tip-over kits with the additional protection provided by a ground fault detector. The ground fault detector will monitor for any gradual changes in the insulation level due to humidity or mechanical damage and will de-energize the contactor to prevent arcing type faults, preventing premature element failure and potential fire damage.

Model No.	Heater Volts	Status	PCN	Wt. Lbs
STAR-TG-8	208	AS	340726	16
<b>STAR-TG-2</b>	240	<b>S</b>	<b>340734</b>	16
STAR-TG-7	277	NS	340742	16
<b>STAR-TG-4</b>	480	<b>S</b>	<b>340750</b>	16
STAR-TG-6	600	NS	340769	16

## Power Disconnect Kit

The disconnect kit consists of a complete liquid tight assembly including a 3 pole 50 Amp switch, power terminal block and all hardware to mount to either the fixed overhead or portable radiant heater.

## Specifications and Ordering Information

Model No.	kW	Status	PCN	Wt. (Lbs)
<b>DS-50600</b>	All	<b>S</b>	<b>340662</b>	7



# Infra-Red Comfort Heaters - ChromaStar™

## Plug Kits For Portable Heaters

Plug Type	Catalog Number	Description	Volts	Amps	Configuration	NEMA#	ANSI#	Fits Cable Dia.	Stock	PCN	Wt. (Lbs.)
LOCKING	PGL-15-20	3 Pole, 4 Wire	250	20		L15-20	C73.85	.385"-.780	S	338845	0.5
LOCKING	PGL-15-30	3 Pole, 4 Wire	250	30		L15-30	C73.86	.385"-.780	S	338853	0.5
LOCKING	PGL-16-30	3 Pole, 4 Wire	480	30		L16-30	C73.88	.595"-1.150	S	338861	0.5
LOCKING	PGL-17-30	3 Pole, 4 Wire	600	30		L17-30	C73.89	.595"-1.150	S	338870	0.5
LOCKING	PGL-3763C	2 Pole, 3 Wire	600	50		—	—	.750"-1.125"	S	338917	0.5
LOCKING	PGL-3765C	3 Pole, 4 Wire	600	50		—	—	.750"-1.125"	S	338925	0.5
NON LOCKING	PGN-6-50	2 Pole, 3 Wire	250	50		6-50	C73.53	.625"-1.187"	S	338888	0.5
NON LOCKING	PGN-15-20	3 Pole, 4 Wire	250	20		15-20	C73.59	.390"-.775"	S	338896	0.5
NON LOCKING	PGN-15-50	3 Pole, 4 Wire	250	50		15-50	C73.61	.750"-1.250"	S	338909	0.5

## Cable Kits for ChromaStar™ Series Portable Radiant Heaters

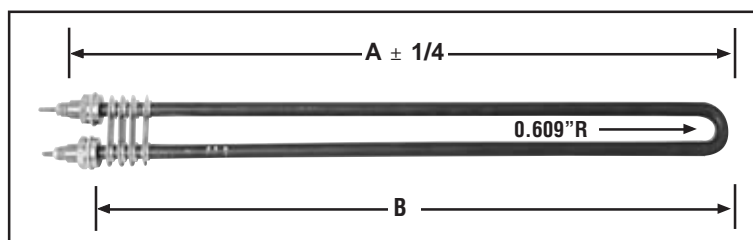
Cable packages include 25 feet Type SO cable, with either 3-conductors or 4-conductors, depending on the heater requirements. Each cable assembly includes the proper cord (connector). Plugs are not included. All models are factory wired for 3-phase, but can be field wired for single phase, select plug and cord accordingly.

Model No.	Cable Specifications			Cord Connector	Stock	PCN	Wt. (lbs.)
	Size/Type	Max. Amp	Temperature Ratings	NPT			
PLC-2514-4	14/4SO	15	90 Deg. C	3/4"	S	295427	7
PLC-2514-3	14/3SO	18	90 Deg. C	3/4"	S	295670	23
PLC-2512-4	12/4SO	20	90 Deg. C	1"	S	295435	9
PLC-2512-3	12/3SO	25	90 Deg. C	3/4"	S	295662	6
PLC-2510-3	10/3SO	30	90 Deg. C	1"	S	295443	9
PLC-2508-3	8/4SO	35	90 Deg. C	1"	S	295460	15
PLC-2506-4	6/4SO	45	90 Deg. C	1"	S	295494	17
PLC-2506-3	6/3SO	55	90 Deg. C	1"	S	295486	16

SO=hard Service Cord, 600V. Length=25 Feet

## Replacement Elements

Model No.	kW	Volts	Win2	Dimensions - inches		Status	PCN	Wt. (lbs.)
				A	B			
UTU-STAR 21	1.5	120	32	21-1/2	20-1/2	AS	106059	2
UTU-STAR 28	2	208	42	21-1/2	20-1/2	AS	106067	3
UTU-STAR 22	2	240	42	21-1/2	20-1/2	AS	106075	3
UTU-STAR 27	2	277	42	21-1/2	20-1/2	AS	106083	3
UTU-STAR 24	2	480	42	21-1/2	20-1/2	AS	106091	3
UTU-STAR 26	2	600	42	21-1/2	20-1/2	AS	106104	3
UTU-STAR 48	4.5	208	42	43-3/8	42-3/8	AS	106403	4
UTU-STAR 42	4.5	240	42	43-3/8	42-3/8	AS	106411	4
UTU-STAR 47	4.4	277	42	43-3/8	42-3/8	AS	106796	4
UTU-STAR 44	4.5	480	42	43-3/8	42-3/8	AS	106964	4
UTU-STAR 46	4.5	600	42	43-3/8	42-3/8	AS	106972	4



UTU-STAR

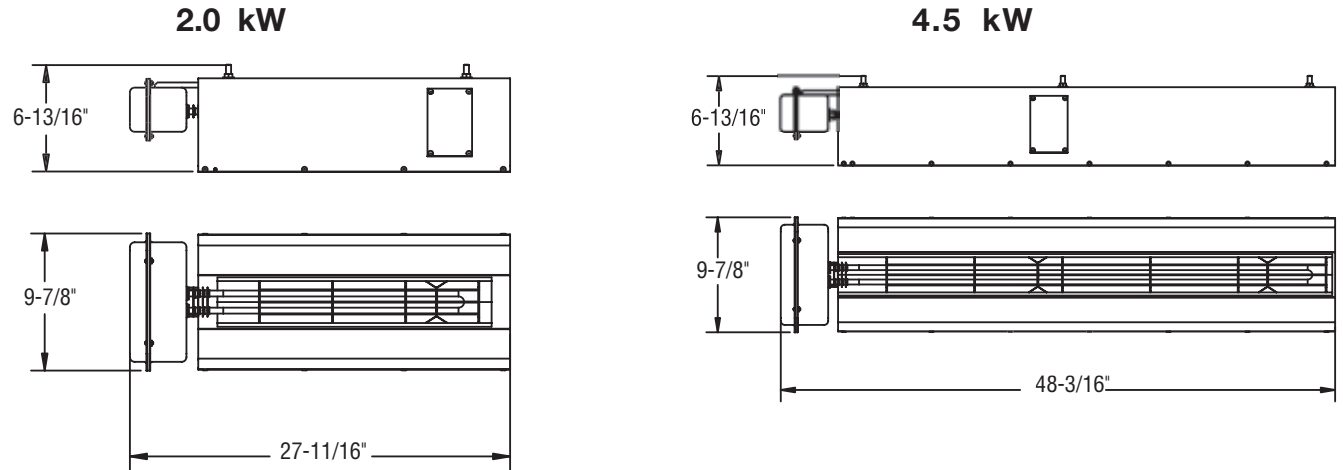
# ChromaStar™ - Infra-Red Comfort Heaters

## Kit Selection Guide For ChromaStar™ Portable Radiant Heaters

PCN	Cat. No.	kW	Volts	Phase	Amps	Disconnect Switch Kit		Tip Over Switch Kit (Portable Only)		Tip Over and Ground Fault Kit		Cord Kit		Locking Plug		Non Locking Plug	
						PCN	Model No.	PCN	Model No.	PCN	Model No.	PCN	MODEL NO.	PCN	MODEL NO.	PCN	MODEL NO.
340187	STAR-14-83-P	13.5	208	3	37.5			340670	STARTIP-8	340726	STAR-TG-8	295494	PLC-2506-4	338925	PGL-3765C	338909	PGN-15-50
340195	STAR-14-23-P	13.5	240	3	32.5			340689	STARTIP-2	340734	STAR-TG-2	295478	PLC-2508-4	338925	PGL-3765C	338909	PGN-15-50
340208	STAR-14-71-P	13.2	277	1	47.7			340697	STARTIP-7	340742	STAR-TG-7	295486	PLC-2506-3	338917	PGL-3763C		
340216	STAR-14-43-P	13.5	480	1	28.1	340662	DS-50600	340700	STARTIP-4	340750	STAR-TG-4	295443	PLC-2510-3	338917	PGL-3763C		
340224	STAR-14-63-P	13.5	600	3	16.2			340718	STARTIP-8	340769	STAR-TG-6	295435	PLC-2512-4	338861	PGL-1630		
340283	STAR-06-83-P	6	208	1	22.5			340670	STARTIP-8	340726	STAR-TG-8	295443	PLC-2510-3	338917	PGL-3763C		
340291	STAR-06-23-P	6	240	3	13.0			340689	STARTIP-2	340734	STAR-TG-2	295427	PLC-2514-4	338870	PGL-1730		
340304	STAR-06-71-P	6	277	1	28.9	340662	DS-50600	340697	STARTIP-7	340742	STAR-TG-7	295443	PLC-2510-3	338917	PGL-3763C	338888	PGN-6-50
340312	STAR-06-43-P	6	480	3	16.7			340700	STARTIP-7	340750	STAR-TG-4	295435	PLC-2512-4	338845	PGL-1520	338896	PGN-15-20
340320	STAR-06-63-P	6	600	1	25.0			340718	STARTIP-6	340769	STAR-TG-6	295443	PLC-2510-3	338917	PGL-3763C	338888	PGN-6-50
340380	STAR-05-81-P	4.5	208	1	14.4			340320	STAR-06-63-P	6	600	3	5.8	338861	PGL-1630		
340398	STAR-05-21-P	4.5	240	1	12.5			340380	STAR-05-81-P	4.5	208	1	21.6	338917	PGL-3763C	338888	PGN-6-50
340400	STAR-05-71-P	4.5	277	1	7.2			340398	STAR-05-21-P	4.5	240	1	18.8	338917	PGL-3763C	338888	PGN-6-50
340419	STAR-05-41-P	4.5	480	1	9.4			340400	STAR-05-71-P	4.5	277	1	16.2	338917	PGL-3763C		
340427	STAR-05-61-P	4.5	600	1	7.5			340419	STAR-05-41-P	4.5	480	1	9.4	338917	PGL-3763C		
340486	STAR-02-11-P	1.5	120	1	9.6			340427	STAR-05-61-P	4.5	600	1	7.5	338917	PGL-3763C		
340494	STAR-02-81-P	2	208	1	9.6			340486	STAR-02-11-P	1.5	120	1	9.6	338917	PGL-3763C		
340507	STAR-02-21-P	2	240	1	8.3			340494	STAR-02-81-P	2	208	1	9.6	338917	PGL-3763C	338888	PGN-6-50
340515	STAR-02-71-P	2	277	1	7.2			340507	STAR-02-21-P	2	240	1	8.3	338917	PGL-3763C	338888	PGN-6-50
340523	STAR-02-71-P	2	480	1	4.2			340515	STAR-02-71-P	2	277	1	7.2	338917	PGL-3763C		
340531	STAR-02-71-P	2	600	1	3.3			340523	STAR-02-71-P	2	480	1	4.2	338917	PGL-3763C		
								340531	STAR-02-71-P	2	600	1	3.3	338917	PGL-3763C		

# Infra-Red Comfort Heaters - ChromaStar™

## Fixed Overhead Radiant Heaters 2.0 to 4.5kW U.L. Listed & CSA Certified For Fixed Installations



### Construction

Extruded aluminum housing is rigid to provide added protection to the heating element, which is located at the focal point of a built-in mirrored aluminum reflector.

The heater consists of a hairpin bent .430" diameter alloy sheath tubular element constructed of high quality resistance wire embedded in carefully selected MgO refractory insulation. The element features "Arctic End" terminal construction for longer element life and cooler terminal enclosure temperatures. The element also features a terminal construction using a swaged-in silicone bushing that produces unequalled resistance to moisture absorption. The heating element connects to a gasketed, moisture resistant terminal enclosure with liquid-tight bulkhead threaded fittings.

The heating element connects to a gasketed, moisture resistant terminal enclosure with

liquid-tight bulkhead threaded fittings. The heater can be operated indoors or out or hose off to clean, when not energized. An extension reflector constructed of 0.050" mirrored aluminum extends over the assembly to provide a more uniform heating pattern.

The Chromalox ChromaStar™ radiant heater is shipped fully assembled and can be hung from the ceiling with 2 chains or rigid angle brackets attached to the heater brackets located on the back of the heater.

Field wiring is accomplished through the liquid-tight terminal enclosure. No secondary splice box required.

Protective screens, disconnect switches and portable carts are available for these heaters as shown on page 9.

### Specifications and Ordering Information

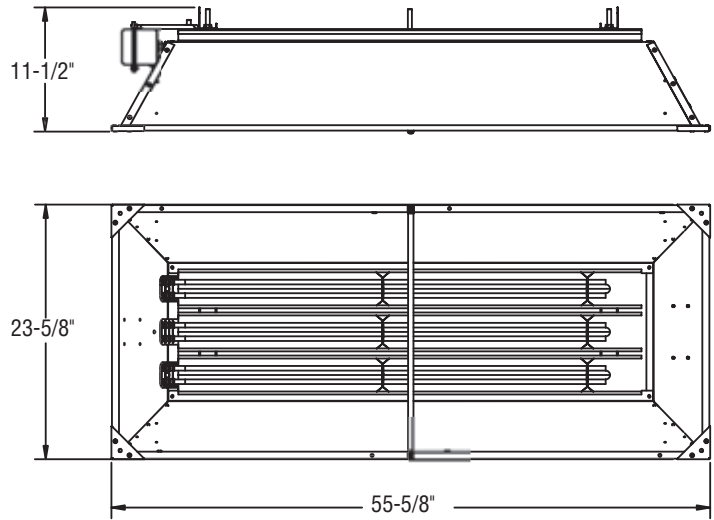
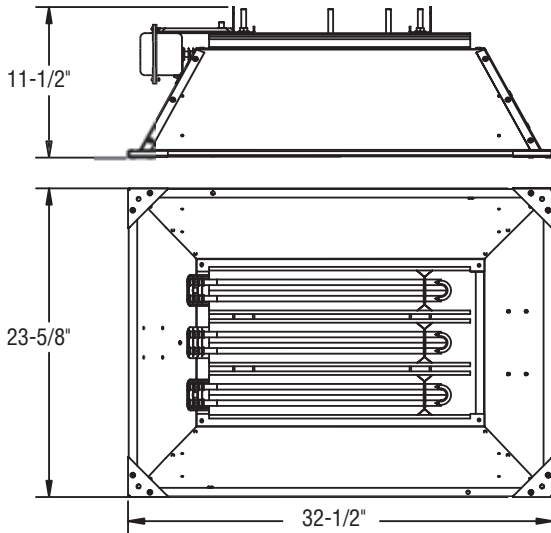
Electrical					Dimensions (in.)			Ordering			
kW	Volts	Phase	Amps	Btuh	Height	Base Width	Base Depth	Model	Stock	PCN	Wt. (Lbs.)
2	208	1	9.6	6,824	33-1/4	15-1/2	11-9/16	STAR-02-81-F	AS	340558	14
2	240	1	8.3	6,824	33-1/4	15-1/2	11-9/16	<b>STAR-02-21-F</b>	<b>S</b>	<b>340566</b>	14
2	277	1	7.2	6,824	33-1/4	15-1/2	11-9/16	STAR-02-71-F	AS	340574	14
2	480	1	4.2	6,824	33-1/4	15-1/2	11-9/16	<b>STAR-02-41-F</b>	<b>S</b>	<b>340582</b>	14
2	600	1	3.3	6,824	33-1/4	15-1/2	11-9/16	STAR-02-61-F	AS	340590	14
4.5	208	1	21.6	15,354	53-3/4	15-1/2	11-9/16	STAR-05-81-F	AS	340435	23
4.5	240	1	18.8	15,354	53-3/4	15-1/2	11-9/16	STAR-05-21-F	AS	340443	23
4.4	277	1	16.2	15,354	53-3/4	15-1/2	11-9/16	STAR-05-71-F	AS	340451	23
4.5	480	1	9.4	15,354	53-3/4	15-1/2	11-9/16	<b>STAR-05-41-F</b>	<b>S</b>	<b>340460</b>	23
4.5	600	1	7.5	15,354	53-3/4	15-1/2	11-9/16	STAR-05-61-F	AS	340478	23

# ChromaStar™ - Infra-Red Comfort Heaters

**Fixed Overhead Radiant Heaters 6 and 13.5 kW**  
**U.L. Listed & CSA Certified For Fixed Installations**

**6 kW**

**13.5 kW**



## Construction

Three rigid extruded aluminum housings provide added protection to the three heating elements, each of which is located at the focal point of a built-in mirrored aluminum reflector.

The heater consists of a hairpin bent .430" diameter alloy sheath tubular element constructed of high quality resistance wire embedded in carefully selected MgO refractory insulation. The element features "Arctic End" terminal construction for longer element life and cooler terminal enclosure temperatures. The element also features a terminal construction using a swaged-in silicone bushing that produces unequalled resistance to moisture absorption. The heating element connects to a gasketed, moisture resistant terminal enclosure with liquid-tight bulkhead threaded fittings.

An extension reflector constructed of 0.050" mirrored aluminum extends over the assembly to provide a more uniform heating pattern.

The Chromalox ChromaStar™ radiant heater is shipped fully assembled and can be hung from the ceiling with 2 chains or rigid angle brackets attached to the heater brackets located on the back of the heater.

Field wiring is accomplished through the liquid-tight terminal enclosure. No secondary splice box required.

Protective screens, disconnect switches and portable carts are available as shown on page 9.

## Specifications and Ordering Information

Electrical					Dimensions (in.)			Ordering			
kW	Volts	Phase	Amps	Btuh	Height	Base Width	Base Depth	Model	Stock	PCN	Wt. (Lbs.)
6	208	3	16.7	20,472	30-1/2	23-3/4	11-1/2	STAR-06-83-F	<b>S</b>	<b>340339</b>	26
6	240	3	14.4	20,472	30-1/2	23-3/4	11-1/2	STAR-06-23-F	<b>S</b>	<b>340347</b>	26
6	277	1	21.7	20,472	30-1/2	23-3/4	11-1/2	STAR-06-71-F	NS	340355	26
6	480	3	7.2	20,472	30-1/2	23-3/4	11-1/2	STAR-06-43-F	<b>S</b>	<b>340363</b>	26
6	600	3	5.8	20,472	30-1/2	23-3/4	11-1/2	STAR-06-63-F	NS	340371	26
13.5	208	3	37.5	46,062	59-1/2	27-7/8	15-1/8	STAR-14-83-F	<b>S</b>	<b>340232</b>	44
13.5	240	3	32.5	46,062	59-1/2	27-7/8	15-1/8	STAR-14-23-F	<b>S</b>	<b>340240</b>	44
13.2	277	1	48.7	46,062	59-1/2	27-7/8	15-1/8	STAR-14-71-F	NS	340259	44
13.5	480	3	16.3	46,062	59-1/2	27-7/8	15-1/8	STAR-14-43-F	<b>S</b>	<b>340267</b>	44
13.5	600	3	13	46,062	59-1/2	27-7/8	15-1/8	STAR-14-63-F	NS	340275	44

3 phase heaters can be rewired in the field for single phase operation

Amperage will increase to 174% of 3 phase draw.

# Infra-Red Comfort Heaters - ChromaStar™

## Hanger Kit

Hanger kits include 24 feet of chain, 4 "S" hooks to mount units in a fixed overhead position using the universal mounting brackets included on the back of fixed overhead radiant models. The chain is long enough to allow all heaters to be mounted up to 6 feet from the ceiling.

## Specifications and Ordering Information

Model No.	kW	Status	PCN	Wt. (Lbs.)
STAR-HK	All	S	340654	2

## Safety Grill Kits

The safety grill kits contain one (2kW, 4.5kW and 6kW) or two grills (13.5kW) to protect personnel from coming in contact with hot heating elements. The grills are constructed of heavy gauge plated steel and are simple to install.

## Specifications and Ordering Information

Model No.	kW	Status	PCN	Wt. (Lbs.)
GR-2	2	S	111878	5
GR-4	4.5	S	111894	5
GR-6KW	6	S	340830	6
GR-14KW	13.5	S	340849	12

## Portable Cart Kits

Chromalox series ChromaStar™ fixed overhead radiant heaters can be field converted to portable spot heaters with the use of the cart kits. Each kit includes wheels, legs, handle, grill(s), baffle (if required) and all of the necessary hardware to complete the modification. These kits are easy to install with standard tools.

## Specifications and Ordering Information

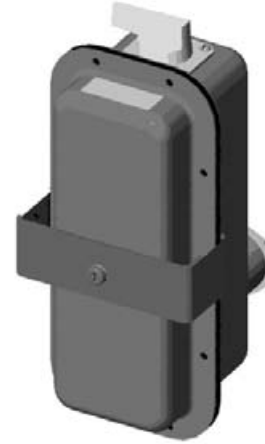
Model No.	kW	Status	PCN	Wt. (Lbs.)
STAR-06A CART	6	S	340830	8
STAR-14A CART	13.5	S	340849	8

# ChromaStar™ - Infra-Red Comfort Heaters

## Power Disconnect Kit

The disconnect kit consists of a complete liquid tight assembly including a 3 pole 50 Amp switch, power terminal block and all hardware to mount to either the fixed overhead or portable radiant heater.

Model No.	kW	Status	PCN	Wt. (Lbs)
DS-50600	ALL	S	340662	7



## Ground Fault Detection

The Chromalox STAR-GF series wall mounted ground fault detectors are designed to monitor for any gradual changes in the insulation level due to humidity or mechanical damage as they develop and will de-energize the load to prevent arcing type faults, preventing premature element failure and potential fire damage. The detector consists of a ground fault sensor, control circuit transformer, magnetic contactor and an on off toggle switch with rubber boot, completely pre-wired in a NEMA 4 enclosure.

Model No.	Heater Volts	Status	PCN	Wt. (Lbs)
STAR-GF-8	208	AS	340777	16
<b>STAR-GF-2</b>	240	<b>S</b>	<b>340785</b>	16
STAR-GF-7	277	NS	340793	16
<b>STAR-GF-4</b>	480	<b>S</b>	<b>340806</b>	16
STAR-GF-6	600	NS	340814	16



## Kit Selection Guide For ChromaStar™ Fixed Overhead Radiant Heaters

PCN	Cat. No.	kW	Volts	Phase	Amps	Hanger		Grille Only Kit		Cart Kit (Includes Grille)		Disconnect Switch Kit		Ground Fault Detector (Wall Mounted)	
						PCN	Model No.	PCN	Model No.	PCN	Model No.	PCN	Model No.	PCN	Model No.
340232	STAR-14-83-F	13.5	208	3	37.5									340777	STAR-GF-8
340240	STAR-14-23-F	13.5	240	3	32.5									340785	STAR-GF-2
340259	STAR-14-71-F	13.2	277	1	47.7									340793	STAR-GF-7
340267	STAR-14-43-F	13.5	480	3	28.1	340654	STAR-HK	340646	GR-14KW	340603	STAR-14CART	340662	DS-50600	340806	STAR-GF-4
340275	STAR-14-63-F	13.5	600	3	22.5									340814	STAR-GF-6
340339	STAR-06-83-F	6	208	1	28.9									340777	STAR-GF-8
340347	STAR-06-23-F	6	240	3	16.7									340785	STAR-GF-2
340355	STAR-06-71-F	6	277	1	21.7	340654	STAR-HK	340368	GR-6KW	340611	STAR-06CART	340662	DS-50600	340793	STAR-GF-7
340363	STAR-06-43-F	6	480	3	7.2									340806	STAR-GF-4
340371	STAR-06-63-F	6	600	3	10.0									340814	STAR-GF-6
340435	STAR-05-81-F	4.5	208	1	21.6										
340443	STAR-05-21-F	4.5	240	1	18.8										
340451	STAR-05-71-F	4.5	277	1	16.2	340654	STAR-HK	111894	GR-4	340620	STAR-05CART				
340460	STAR-05-41-F	4.5	280	1	9.4										
340478	STAR-05-61-F	4.5	600	1	7.5										
340558	STAR-02-81-F	2	208	1	9.6										
340566	STAR-02-21-F	2	240	1	8.3	340654	STAR-HK	111878	GR-2						
340574	STAR-02-71-F	2	277	1	7.2										
340582	STAR-02-41-F	2	480	1	4.2										
340590	STAR-02-61-F	2	600	1	3.3										

# ChromaStar™ - Infra-Red Comfort Heaters

## Sizing Guidelines

### Portable Radiant Spot Heating

When performing radiant spot heating using portable heaters, the sizing is somewhat different. In the table below, the amount of square footage that can be heated to a specified comfort level is shown.

### Portable Spot Heating Coverage Areas

Portable Radiant Spot Heating	Non-Protected Areas Heated Area Size in Square Feet		Semi-Protected Areas Heated Area Size in Square Feet	
	Below 35°F	Above 35°F	Below 35°F	Above 35°F
2.0kW	25	36	40	50
4.5kW	64	75	90	125
6.0kW	85	100	120	150
13.5kW	192	225	270	375

### Required Watt Density by Application and Temperature Rise Requirement

WATT DENSITY FOR TYPICAL APPLICATIONS vs. TEMPERATURE RISE						
Application	Condition	Density Watts / Square Foot				
		Desired Comfort Temperature Rise				
		5°F	10°F	15°F	20°F	25°F
Indoor Supplementary		15 to 30 Watts / Square Foot				
Indoor Personnel Comfort	No Drafts No Cold Walls	5 to 6	11 to 13	17 to 20	22 to 26	28 to 33
Indoor Personnel Comfort	Average Conditions	7 to 9	15 to 18	23 to 28	30 to 36	50 to 60
Indoor Personnel Comfort	Drafty Area Cold Walls	10 to 12	20 to 24	30 to 36	40 to 48	50 to 60
Indoor Personnel Comfort	Large Mall Type Buildings	40 to 60 Watts / Square Foot				
Indoor Moisture	Removal and Control	15 to 30 Watts / Square Foot				
Outdoor Loading Dock	Protected Area With Wind Shield	50 to 120 Watts / Square Foot				
Outdoor Marquee Heating	Snow & Ice Melting 20 ft. Mounting Height	Check Factory				
Outdoor Personnel Comfort	Not Open To Sky Protected Area No Wind	10 to 12	20 to 24	30 to 36	40 to 48	50 to 60

Radiant Fixtures for spot heating of individuals should be mounted 10 to 12 feet from the floor with coverage from at least two (2) sides and directed at the individuals waist and never directly overhead. If fixture must be mounted over 12' from the floor, add 25% to the indicated watt density up to a maximum of 15'.