ChromaStarTM

Infra-Red Radiant Heaters

- · 1.5 to 13.5 kW
- · 5,118 to 46,062 BTU/Hr
- 120, 208, 240, 277, 480, and 600 Volts
- 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 (Fixed Overhead Models Only)
- · INCOLOY Sheath

Applications

- · Localized heating in large plants
- Loading Docks
- Narrow warehouse aisle heating
- Garages
- · Dry paint
- Prevent freezing of pipes, valves
- · Heat hoppers







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 u nit 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 thee 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.

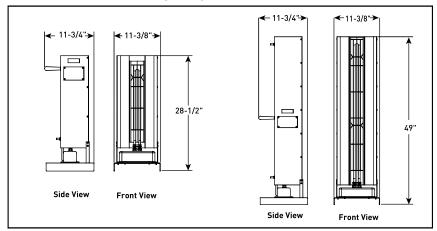
Protective screens, disconnect switches and portable carts are available for these heaters as shown.



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Infra-Red Radiant Heaters (cont'd.)

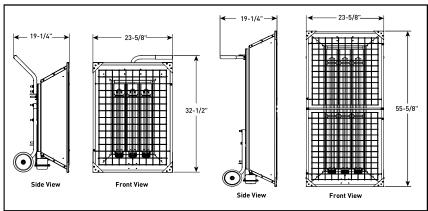
Portable Radiant Heaters 1.5 to 4.5 kW Dimensions



Specifications and Ordering Information

		Ele	ctrical			Dim	ensions	(in.)	Ord	ering		
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	STAR-02A-11-PC*	S	340486	15
2	208	1	1	9.6	6,824	28-1/2	11-3/8	11-3/4	STAR-02A-81-P	NS	340494	15
2	240	1	1	8.3	6,824	28-1/2	11-3/8	11-3/4	STAR-02A-21-P	NS	340507	15
2	277	1	1	7.2	6,824	28-1/2	11-3/8	11-3/4	STAR-02A-71-P	NS	340515	15
2	480	1	1	4.2	6,824	28-1/2	11-3/8	11-3/4	STAR-02A-41-P	NS	340523	15
2	600	1 1	1	3.2	6,824	28-1/2	11-3/8	11-3/4	STAR-02A-61-P	NS	340531	15
4.5	208	1	1	21.6	15,354	49	11-3/8	11-3/4	STAR-05A-81-P	NS	340380	25
4.5	240	1	1	18.8	15,354	49	11-3/8	11-3/4	STAR-05A-21-P	NS	340398	25
4.5	277	1	1	16.2	15,354	49	11-3/8	11-3/4	STAR-05A-71-P	NS	340400	25
4.5	480	1	1	9.4	15,354	49	11-3/8	11-3/4	STAR-05A-41-P	NS	340419	25
4.5 600 1 1 7.5 15,354 49 11-3/8 11-3/4 STAR-05A-61-P NS 340427 25												
Stock Status: S = stock NS = non-stock 'Incl 6 foot cord and 2-prong grounding type plug. To Order — Specify model, PCN, kW, volts, phase and quantity.												

Portable Radiant Heaters 6 to 13.5 kW Dimensions



Specifications and Ordering Information

1 0				0 0							
		Electric	cal		Dim	ensions (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	NS	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 1	21.7	20,472	32-1/2	23-5/8	11-1/2	STAR-06A-71-P	NS	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
6	600	3	5.8	20,472	32-1/2	23-5/8	11-1/2	STAR-06A-63-P	NS	341200	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	NS	341227	44
13.2	277	1 1	47.7	46,062	55-5/8	23-5/8	11-1/2	STAR-14A-71-P	NS	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	NS	341251	44

Stock Status: S = stock NS = non-stock *Includes 6 foot cord and 2-prong grounding type plug.

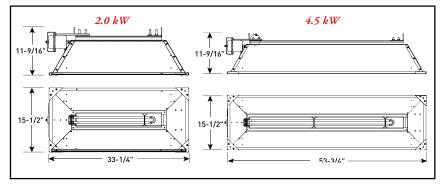
To Order — Specify model, PCN, kW, volts, phase and quantity. Assembly Stock shipped in one week.

For Stock shipment, order fixed overhead heaters on following page and appropriate cart kit.

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Infra-Red Radiant Heaters (cont'd.)

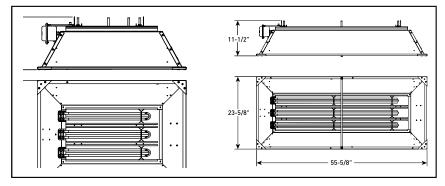
Fixed Overhead Radiant Heaters 2.0 to 4.5 kW Dimensions U.L Listed & CSA Certified for Fixed Installations



Specifications and Ordering Information

		Electri	cal		Dimo	ensions (in.)	0	rdering		
kW	Volts	Phase	Amps	Btuh	Height	Base Width	Base Depth	Model	Stock	PCN	Wt. (Lbs.)
2	208	1	9.6	6,824	27-11/16	9-7/8	6-13/16	STAR-02A-81-F	S	340558	14
2	240	1	8.3	6,824	27-11/16	9-7/8	6-13/16	STAR-02A-21-F	S	340566	14
2	277	1	7.2	6,824	27-11/16	9-7/8	6-13/16	STAR-02A-71-F	NS	340574	14
2	480	1	4.2	6,824	27-11/16	9-7/8	6-13/16	STAR-02A-41-F	S	340582	14
2	600	1	3.3	6,824	27-11/16	9-7/8	6-13/16	STAR-02A-61-F	NS	340590	14
4.5	208	1	21.6	15,354	48-3/16	9-7/8	6-13/16	STAR-05A-81-F	NS	340435	23
4.5	240	1	18.8	15,354	48-3/16	9-7/8	6-13/16	STAR-05A-21-F	NS	340443	23
4.5	277	1	16.2	15,354	48-3/16	9-7/8	6-13/16	STAR-05A-71-F	NS	340451	23
4.5	480	1	9.4	15,354	48-3/16	9-7/8	6-13/16	STAR-05A-41-F	S	340460	23
4.5	4.5 600 1 7.5 15,354 48-3/16 9-7/8 6-13/16 STAR-05A-61-F NS 340478 23										
	Stock Status: S = stock NS = non-stock To Order — Specify model, PCN, kW, volts, phase and quantity.										

Fixed Overhead Radiant Heaters 6.0 to 13.5 kW Dimensions



Specifications and Ordering Information

		Electric	al		Dim	ensions (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-F	NS	340339	26
6	240	3	14.4	20,472	32-1/2	23-5/8	11-1/2	STAR-06A-23-F	S	340347	26
6	277	1	21.7	20,472	32-1/2	23-5/8	11-1/2	STAR-06A-71-F	NS	340355	26
6	480	3	7.2	20,472	32-1/2	23-5/8	11-1/2	STAR-06A-43-F	s	340363	26
6	600	3	5.8	20,472	32-1/2	23-5/8	11-1/2	STAR-06A-63-F	NS	340371	26
13.5	208	3	37.5	46,062	55-5/8	23-5/8	11-1/2	STAR-14A-83-F	NS	340232	44
13.5	240	3	32.5	46,062	55-5/8	23-5/8	11-1/2	STAR-14A-23-F	S	340240	44
13.5	277	1	48.7	46,062	55-5/8	23-5/8	11-1/2	STAR-14A-71-F	NS	340259	44
13.5	480	3	16.3	46,062	55-5/8	23-5/8	11-1/2	STAR-14A-43-F	S	340267	44
13.5	600	3	13	46,062	55-5/8	23-5/8	11-1/2	STAR-14A-63-F	NS	340275	44
Stock Status: S = stock NS = non-stock To Order — Specify model, PCN, kW, volts, phase and quantity.											

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Infra-Red Radiant Heaters (cont'd.)

Accessories

For use with both Fixed Overhead and Portable Heaters

Disconnect Kits

The disconnect kit consists of a complete liquid tight assembly including a 3 pole 48 Amp switch, power terminal block and all hardware to mount either the fixed overhead or portable radiant heater. Disconnects are used for shutting off power to unit. Kits can be used on all STAR heaters.

Specifications and Ordering Information

Model No.	kW	Status	PCN	Wt. (Lbs.)
DS-50600	All	AS	340662	3



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 tipover kits with the additional protection provides 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 as they develop and will de-energize the contactor to prevent arcing type faults, preventing premature element failure and potential fire damage.

Specifications and Ordering Information

1 3		0	J	
Model No.	Volts	Status	PCN	Wt. (Lbs.)
STAR-TG-8	208	NS	340726	16
STAR-TG-2	240	NS	340734	16
STAR-TG-7	277	NS	340742	16
STAR-TG-4	480	NS	340750	16
STAR-TG-6	600	NS	340769	16

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Accessories (cont'd.)

Plug Kits for Portable Heaters

Plug Type	Model Number	Description	Volts	Amps	Config.	NEMA#	ANSI#	Fits Cable Dia.	Stock	PCN	Wt. (Lbs.)
Locking	PGL-15-20	3 Pole 4 Wire	250	20	(1 × 16)	L15-20	C73.85	.385"780	NS	338845	0.5
Locking	PGL-15-30	3 Pole 4 Wire	250	30	(1 <u>1</u>	L15-30	C73.86	.385"780	NS	338853	0.5
Locking	PGL-16-30	3 Pole 4 Wire	480	30	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	L16-30	C73.88	.595"- 1.150	NS	338861	0.5
Locking	PGL-17-30	3 Pole 4 Wire	600	30	(1 J)	L17-30	C73.89	.595"- 1.150	NS	338870	0.5
Locking	PGL-3763C	2 Pole 3 Wire	600	50	(1)	-	-	.750"-1.125	NS	338917	0.5
Locking	PGL-3765C	3 Pole 4 Wire	600	50	(x 1)	-	-	.750"-1.125	NS	338925	0.5
Non Locking	PGN-6-50	2 Pole 3 Wire	250	50		6-50	C73.53	.625"-1.187	NS	338888	0.5
Non Locking	PGN-15-20	3 Pole 4 Wire	250	20	T T	15-20	C73.59	.390"775	NS	338896	0.5
Non Locking	PGN-15-50	3 Pole 4 Wire	250	50	VS VS VS VS VS VS VS VS	15-50	C73.61	.750"-1.250	NS	338909	0.5

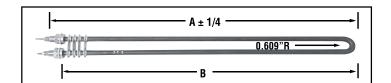
Cable Kits for ChromaStarTM Series Portable Radiant Heaters

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.

		Cable Speci	fications	Cord Connector			Wt.
Model No.	Size/Type	Max. Amp	Temperature Ratings	NPT	Stock	PCN	(Lbs.)
PLC-2514-4	14/4SO	15	90 Deg. C	3/4"	NS	295427	7
PLC-2514-3	14/3SO	18	90 Deg. C	3/4"	NS	295670	23
PLC-2512-4	12/4SO	20	90 Deg. C	1"	NS	295435	9
PLC-2512-3	12/3SO	25	90 Deg. C	3/4"	NS	295662	6
PLC-2510-3	10/3SO	30	90 Deg. C	1"	NS	295443	9
PLC-2508-3	8/4SO	35	90 Deg. C	1"	NS	295460	15
PLC-2506-4	6/4SO	45	90 Deg. C	1"	NS	295494	17
PLC-2506-3	6/3SO	55	90 Deg. C	1"	NS	295486	16
SO = hard Se	rvice Cord, 60						

Replacement Elements

				Dimensio	ıs - inches			
Model No.	kW	Volts	Win2	Α	В	Status	PCN	Wt. Lbs.
UTU-STAR 21	1.5	120	32	21-1/2	20-1/2	NS	106059	2
UTU-STAR 28	2	208	42	21-1/2	20-1/2	NS	106067	3
UTU-STAR 22	2	240	42	21-1/2	20-1/2	NS	106075	3
UTU-STAR 27	2	277	42	21-1/2	20-1/2	NS	106083	3
UTU-STAR 24	2	480	42	21-1/2	20-1/2	NS	106091	3
UTU-STAR 26	2	600	42	21-1/2	20-1/2	NS	106104	3
UTU-STAR 48	4.5	208	42	43-3/8	42-3/8	NS	106403	4
UTU-STAR 42	4.5	240	42	43-3/8	42-3/8	NS	106411	4
UTU-STAR 47	4.5	277	42	43-3/8	42-3/8	NS	106796	4
UTU-STAR 44	4.5	480	42	43-3/8	42-3/8	NS	106964	4
UTU-STAR 46	4.5	600	42	43-3/8	42-3/8	NS	106972	4



UTU-STAR



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Accessories (cont'd.)

Accessories for Fixed Overhead Heaters

Hanger Ki

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

Portable Cart Kits

Chromalox series ChromaStarTM 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). l	κW	Status	PCN	Wt. (Lbs.)
STAR-06A C	CART	6	NS	340830	8
STAR-14A C	ART 1	3.5	S	340849	8

Floor Protection Baffle Kit

The Chromalox safety baffle kit includes a refletor baffle which can be field installed on the lower reflective panel on portable STAR radiant heaters. The baffle will protect temperature sensitive flooring materials such as vinyl tile from being damaged due to radiant heat.

Specifications and Ordering Information

Model No.	kW	Status	PCN	Wt. (Lbs.)
FP-614	6 or 13.5	NS	340865	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	NS	340638	6
GR-14AKW		13.5	NS	340857	12

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 prewired ina NEMA 4 enclosure.

Specifications and Ordering Information

1 0					
Model No.	Heater Volts	Status	PCN	Wt. Lbs.	
STAR-GF-8	208	NS	340777	16	
STAR-GF-2	240	NS	340785	16	
STAR-GF-7	277	NS	340793	16	
STAR-GF-4	480	NS	340806	16	
STAR-GF-6	600	NS	340814	16	

