

Process Air and Radiant

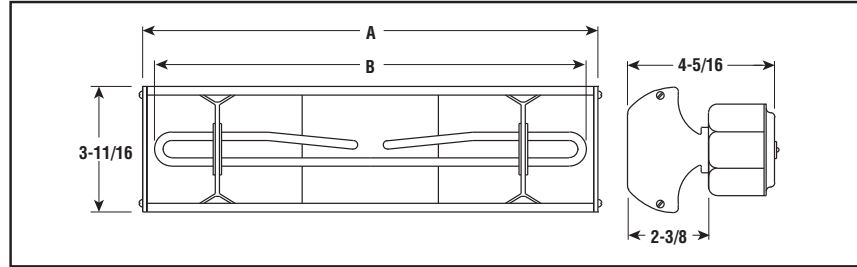
DU-RAD

Single Element, Double-Hairpin Radiant Heater



- 3.66 kW/Ft²
- 1.6 - 7.83 kW
- 120, 208, 240, 275 and 480 Volt
- 3/8" Dia. INCOLOY® Sheath Elements (type UTU)
- 1500°F Max. Sheath Temp.

Dimensions (Inches)



Applications

- Textile and Paper Drying
- Coatings Curing
- Vinyl Fusing
- Preheat Roll Fed Plastics for Laminating or Embossing

Features

More Heated Length for limited space.

Process Temperature Control — Radiant heater output may be controlled with Chromalox SCR Power Controllers, Percentage Timing Input Controls and Non-Contact Temperature Sensors. See the Controls section of this catalog.

For New or Existing Installations — Utilization of a double-hairpin element, with terminal connections in the center of the housing, gives a heated length covering almost the entire length of the housing.

Movable Mounting Clamps and Bolts are supplied to accommodate many mounting configurations such as banks, tunnels and oven sections.

Center Mounted Terminals are enclosed in terminal box on rear of heater housing.

Construction

Enclosed Chromalox Alloy-Sheath Tubular Heating Element is completely isolated and supported on secondary insulation for improved electrical safety. Designed for long life, the element is more resistant to hard blows than quartz lamp or tube and open coil types.

Rigid Extruded Aluminum Housing protects heating element from harsh industrial environments.

Highly Polished Aluminum Reflectors give good reflectivity and heat transfer, and are easily cleaned to maintain energy efficiency.

Accessories

Protective Grille — Optional snap-in sections help protect personnel and work from contact with hot elements.

Companion Reflector — Optional radiant companion reflectors improve oven efficiency. See Radiant Accessories in this section.

Note: Model DU-RAD heaters are not listed for use in fixed electric space heated applications under NEC 424. If they are to be used in such applications, installation must be approved by local code enforcement authorities.

Specifications and Ordering Information

kW	Length (In.)		Model	120V		240V		480V		Model	208V		275V		Optional Grille	Wt. (Lbs.)
	Overall A	Heated B		Stock	PCN	Stock	PCN	Stock	PCN		Stock	PCN	Stock	PCN		
1.6	20-3/8	18-15/16	DU-RAD-040	NS	117575	NS	117591	—	—	DU-RAD-040V	NS	117585	NS	117604	(1) GR-2	6
1.97	23-25/32	22-25/32	DU-RAD-048	NS	117612	NS	117639	—	—	DU-RAD-048V	NS	117620	NS	117647	(1) GR-3	7
2.44	28-7/8	27-25/32	DU-RAD-058	NS	117655	NS	117671	NS	117698	DU-RAD-058V	NS	117663	NS	117680	(1) GR-3	8
2.82	33-1/4	31-25/32	DU-RAD-066	NS	117700	NS	117727	NS	117743	DU-RAD-066V	NS	117719	NS	117735	(2) GR-2	9
3.19	37-1/4	35-25/32	DU-RAD-074	NS	117751	NS	117778	NS	117794	DU-RAD-074V	NS	117760	NS	117786	(2) GR-2	10
3.57	41-1/8	39-7/8	DU-RAD-082	NS	—	NS	117815	NS	117831	DU-RAD-082V	NS	117815	NS	117831	(1) GR-4	11
3.95	45-3/16	43-7/8	DU-RAD-090	NS	—	NS	117858	NS	117874	DU-RAD-090V	NS	117840	NS	117866	(2) GR-3	12
4.52	51-7/8	49-7/8	DU-RAD-0102	NS	—	NS	117890	NS	117911	DU-RAD-0102V	NS	117882	NS	117903	(3) GR-2	13
4.99	56-3/16	54-7/8	DU-RAD-0112	NS	—	NS	117938	NS	117954	DU-RAD-0112V	NS	117920	NS	117946	(1) GR-5	14
5.56	62-1/2	60-15/16	DU-RAD-0124	NS	—	NS	117970	NS	117997	DU-RAD-0124V	NS	117962	NS	117989	(1) GR-3	15
6.13	68-9/16	66-15/16	DU-RAD-0136	NS	—	NS	118017	NS	118033	DU-RAD-0136V	NS	118009	NS	118025	(1) GR-4 (1) GR-6	15
6.7	75-1/2	72-15/16	DU-RAD-0148	NS	—	NS	118050	NS	118076	DU-RAD-0148V	NS	118041	NS	118068	(1) GR-3 (1) GR-5	16
7.1	78-13/16	77	DU-RAD-0156	NS	—	NS	118092	NS	118113	DU-RAD-0156V	NS	118084	NS	118105	(2) GR-4	17
7.45	82-11/16	81	DU-RAD-0164	NS	—	NS	118130	NS	118156	DU-RAD-0164V	NS	118121	NS	118148	(1) GR-2 (1) GR-6	17
7.83	87	85-1/16	DU-RAD-0172	NS	—	NS	118172	NS	118199	DU-RAD-0172V	NS	118164	NS	118180	(1) GR-2 (1) GR-6	18

Stock Status: S = stock NS = non-stock
To Order—Specify model, PCN, kW, volts, quantity and optional grille (if needed).

Process Air and Radiant

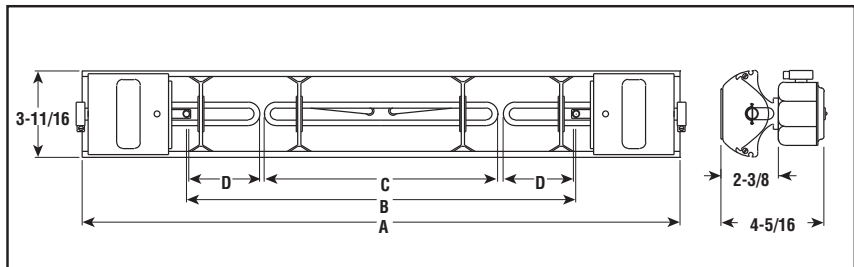
DU-RAD

Three Element Radiant Heater



- 3.66 kW/Ft²
- 3.2 - 15.03 kW
- 120, 240 and 480 Volt
- 3/8" Dia. INCOLOY® Sheath Elements (type UTU)
- 1500°F Max. Sheath Temp.

Dimensions (Inches)



Applications

- Textile and Paper Drying
- Coatings Curing
- Vinyl Fusing
- Preheat Roll Fed Plastics for Laminating or Embossing
- Web Heating where sizes vary in width
- Web Heating and Applications where compensation is needed for end losses

Features

Basic Unit is an extruded aluminum housing that contains one double hairpin-bent radiant heater in center, flanked by two U-shaped elements.

Movable Mounting Clamps and Bolts are supplied to accommodate many mounting configurations such as banks, tunnels and oven sections.

Terminals of end units are in end caps; center mounted terminals are enclosed in terminal box on rear of heater housing.

Process Temperature Control — Radiant heater output may be controlled with Chromalox SCR Power Controllers, Percentage Timing Input Controls and Non-Contact Temperature Sensors. See the Controls section of this catalog.

Construction

Enclosed Chromalox Alloy-Sheath Tubular Heating Element is completely isolated and supported on secondary insulation for improved electrical safety. Designed for long life, the element is more resistant to hard blows than quartz lamp or tube and open coil types.

Rigid Extruded Aluminum Housing protects heating element from harsh industrial environments.

Highly Polished Aluminum Reflectors give good reflectivity and heat transfer, and are easily cleaned to maintain energy efficiency.

Accessories

Protective Grille — Optional snap-in sections help protect personnel and work from contact with hot elements.

Companion Reflector — Optional radiant companion reflectors improve oven efficiency. See Radiant Accessories in this section.

Pipe Plug — Used to close tapped wiring entry holes. See Radiant Accessories in this section.

METAL SHEATH
RADIANT

Process Air and Radiant

DU-RAD

Three Element Radiant Heater *(cont'd.)*

Specifications and Ordering Information

kW			Volts	Dimensions (In.)				Model	Stock	PCN	Optional Grille ²	Replacement Elements ¹		Wt. (Lbs.)
Total	Ea. End	Center		A	B	C	D					Center	End	
3.2	0.8	1.6	120	44-3/4	35-7/8	19-1/4	8-5/16	DU-RAD-240	NS	112205	(2) GR-2	UTU-40	UTU-2	10
3.2	0.8	1.6	240	44-3/4	35-7/8	19-1/4	8-5/16	DU-RAD-240	NS	112213	(2) GR-2	UTU-40	UTU-2	10
3.57	0.8	1.97	120	48-3/4	39-7/8	23-1/4	8-5/16	DU-RAD-248	NS	112221	(1) GR-4	UTU-48	UTU-2	11
3.57	0.8	1.97	240	48-3/4	39-7/8	23-1/4	8-5/16	DU-RAD-248	NS	112230	(1) GR-4	UTU-48	UTU-2	11
4.04	0.8	2.44	120	53-7/8	45	28-3/8	8-5/16	DU-RAD-258	NS	112248	(2) GR-3	UTU-58	UTU-2	11
4.04	0.8	2.44	240	53-7/8	45	28-3/8	8-5/16	DU-RAD-258	NS	112256	(2) GR-3	UTU-58	UTU-2	11
4.42	0.8	2.82	120	57-7/8	49	32-3/8	8-5/16	DU-RAD-266	NS	112264	(3) GR-2	UTU-66	UTU-2	12
4.42	0.8	2.82	240	57-7/8	49	32-3/8	8-5/16	DU-RAD-266	NS	112272	(3) GR-2	UTU-66	UTU-2	12
4.79	0.8	3.19	240	62	53-1/8	36-1/2	8-5/16	DU-RAD-274	NS	112299	(1) GR-5	UTU-74	UTU-2	13
5.17	0.8	3.57	240	66-1/16	57-3/16	40-9/16	8-5/16	DU-RAD-282	NS	112301	(1) GR-5	UTU-82	UTU-2	14
5.55	0.8	3.95	240	70-3/16	61-5/16	44-11/16	8-5/16	DU-RAD-290	NS	112310	(1) GR-3, (1) GR-4	UTU-90	UTU-2	15
6.12	0.8	4.52	240	76-9/16	67-5/16	50-11/16	8-5/16	DU-RAD-2102	NS	112328	(1) GR-6	UTU-102	UTU-2	16
6.59	0.8	4.99	240	81-5/16	72-7/16	55-13/16	8-5/16	DU-RAD-2112	NS	112336	(1) GR-6	UTU-112	UTU-2	16
7.16	0.8	5.56	240	87-1/2	78-5/8	62	8-5/16	DU-RAD-2124	NS	112344	(2) GR-4	UTU-124	UTU-2	32
7.73	0.8	6.13	240	93-1/2	84-5/8	68	8-5/16	DU-RAD-2136	NS	112352	(1) GR-2, (1) GR-6	UTU-136	UTU-2	36
8.3	0.8	6.7	240	99-5/8	90-3/4	74-1/8	8-5/16	DU-RAD-2148	NS	112360	(1) GR-3, (1) GR-6	UTU-148	UTU-2	37
8.7	0.8	7.1	240	103-11/16	94-13/16	78-3/8	8-5/16	DU-RAD-2156	NS	112379	(1) GR-4, (1) GR-5	UTU-156	UTU-2	40
9.05	0.8	7.45	240	107-13/16	98-15/16	82-5/16	8-5/16	DU-RAD-2164	NS	112387	(1) GR-3, (2) GR-4	UTU-164	UTU-2	41
9.43	0.8	7.83	240	112	103-1/8	86-1/2	8-5/16	DU-RAD-2172	NS	112395	(1) GR-3, (2) GR-4	UTU-172	UTU-2	43
3.8	1.1	1.6	120	51	42-1/8	19-1/4	11-7/16	DU-RAD-340	NS	112408	(1) GR-4	UTU-40	UTU-3	12
3.8	1.1	1.6	240	51	42-1/8	19-1/4	11-7/16	DU-RAD-340	NS	112416	(1) GR-4	UTU-40	UTU-3	12
4.17	1.1	1.97	120	55	46-1/8	23-1/4	11-7/16	DU-RAD-348	NS	112424	(2) GR-3	UTU-48	UTU-3	13
4.17	1.1	1.97	240	55	46-1/8	23-1/4	11-7/16	DU-RAD-348	NS	112432	(2) GR-3	UTU-48	UTU-3	13
4.64	1.1	2.44	120	60-1/8	51-1/8	28-3/8	11-7/16	DU-RAD-358	NS	112440	(3) GR-2	UTU-58	UTU-3	13
4.64	1.1	2.44	240	60-1/8	51-1/8	28-3/8	11-7/16	DU-RAD-358	NS	112459	(3) GR-2	UTU-58	UTU-3	13
5.02	1.1	2.82	120	64-1/8	55-1/4	32-3/8	11-7/16	DU-RAD-366	NS	112467	(1) GR-5	UTU-66	UTU-3	14
5.02	1.1	2.82	240	64-1/8	55-1/4	32-3/8	11-7/16	DU-RAD-366	NS	112475	(1) GR-5	UTU-66	UTU-3	14
5.39	1.1	3.19	120	68-1/4	59-3/8	36-1/2	11-7/16	DU-RAD-374	NS	112483	(1) GR-2, (1) GR-4	UTU-74	UTU-3	15
5.39	1.1	3.19	240	68-1/4	59-3/8	36-1/2	11-7/16	DU-RAD-374	NS	112491	(1) GR-2, (1) GR-4	UTU-74	UTU-3	15
5.77	1.1	3.57	240	72-5/16	63-7/16	40-9/16	11-7/16	DU-RAD-382	NS	112504	(1) GR-3, (1) GR-4	UTU-82	UTU-3	16
6.15	1.1	3.95	240	76-7/16	67-9/16	44-11/16	11-7/16	DU-RAD-390	NS	112512	(1) GR-6	UTU-90	UTU-3	17
6.72	1.1	4.52	240	82-7/16	73-9/16	50-11/16	11-7/16	DU-RAD-3102	NS	112520	(1) GR-2, (1) GR-5	UTU-102	UTU-3	19
7.19	1.1	4.99	240	87-9/16	78-11/16	55-13/16	11-7/16	DU-RAD-3112	NS	112539	(2) GR-4	UTU-112	UTU-3	32
7.76	1.1	5.56	240	93-3/4	84-7/8	62	11-7/16	DU-RAD-3124	NS	112547	(1) GR-2, (1) GR-6	UTU-124	UTU-3	36
8.33	1.1	6.13	240	99-3/4	90-7/8	68	11-7/16	DU-RAD-3136	NS	112555	(1) GR-3, (1) GR-6	UTU-136	UTU-3	37
8.9	1.1	6.7	240	105-7/8	97	74-1/8	11-7/16	DU-RAD-3148	NS	112563	(2) GR-2, (2) GR-4	UTU-148	UTU-3	40
9.3	1.1	7.1	240	109-15/16	101-3/16	78-3/16	11-7/16	DU-RAD-3156	NS	112571	(1) GR-3, (2) GR-4	UTU-156	UTU-3	42
9.65	1.1	7.45	240	114-1/16	105-3/16	82-5/16	11-7/16	DU-RAD-3164	NS	112580	(1) GR-4, (1) GR-6	UTU-164	UTU-3	43
10.03	1.1	7.83	240	118-1/4	109-3/8	86-1/2	11-7/16	DU-RAD-3172	NS	112598	(2) GR-5	UTU-172	UTU-3	47
5.2	1.8	1.6	240	66-3/4	57-7/8	19-1/4	19-3/8	DU-RAD-440	NS	112600	(1) GR-2, (1) GR-4	UTU-40	UTU-4	14
5.57	1.8	1.97	240	70-3/4	61-7/8	23-1/4	19-3/8	DU-RAD-448	NS	112619	(1) GR-3, (1) GR-4	UTU-48	UTU-4	15
6.04	1.8	2.44	240	75-7/8	67	28-3/8	19-3/8	DU-RAD-458	NS	112627	(1) GR-6	UTU-58	UTU-4	17
6.04	1.8	2.44	480	75-7/8	67	28-3/8	19-3/8	DU-RAD-458	NS	116310	(1) GR-6	UTU-58	UTU-4	17
6.42	1.8	2.82	240	79-7/8	71	32-3/8	19-3/8	DU-RAD-466	NS	112635	(3) GR-3	UTU-66	UTU-4	18
6.42	1.8	2.82	480	79-7/8	71	32-3/8	19-3/8	DU-RAD-466	NS	116345	(3) GR-3	UTU-66	UTU-4	18
6.79	1.8	3.19	240	84	75-1/3	36-1/2	19-3/8	DU-RAD-474	NS	112643	(1) GR-3, (1) GR-5	UTU-74	UTU-4	19
6.79	1.8	3.19	480	84	75-1/3	36-1/2	19-3/8	DU-RAD-474	NS	116370	(1) GR-3, (1) GR-5	UTU-74	UTU-4	19
7.17	1.8	3.57	240	88-1/16	79-3/16	40-9/16	19-3/8	DU-RAD-482	NS	112651	(2) GR-4	UTU-482	UTU-4	33
7.17	1.8	3.57	480	88-1/16	79-3/16	40-9/16	19-3/8	DU-RAD-482	NS	116409	(2) GR-4	UTU-482	UTU-4	33
7.55	1.8	3.95	240	92-3/16	83-5/16	44-11/16	19-3/8	DU-RAD-490	NS	112660	(1) GR-2, (1) GR-6	UTU-490	UTU-4	36
7.55	1.8	3.95	480	92-3/16	83-5/16	44-11/16	19-3/8	DU-RAD-490	NS	116433	(1) GR-2, (1) GR-6	UTU-490	UTU-4	36

Process Air and Radiant

DU-RAD

Three Element Radiant Heater (cont'd.)

Specifications and Ordering Information

kW			Volts	Dimensions (In.)				Model	Stock	PCN	Optional Grille ²	Replacement Elements ¹		Wt. (Lbs.)
Total	Ea. End	Center		A	B	C	D					Center	End	
8.12	1.8	4.52	240	98-3/16	89-5/16	50-11/16	19-3/8	DU-RAD-4102	NS	112678	(1) GR-3, (1) GR-6	UTU-102	UTU-4	37
8.12	1.8	4.52	480	98-3/16	89-5/16	50-11/16	19-3/8	DU-RAD-4102	NS	116468	(1) GR-3, (1) GR-6	UTU-102	UTU-4	37
8.59	1.8	4.99	240	103-5/16	94-7/16	55-13/16	19-3/8	DU-RAD-4112	NS	112686	(1) GR-4, (1) GR-5	UTU-112	UTU-4	40
8.59	1.8	4.99	480	103-5/16	94-7/16	55-13/16	19-3/8	DU-RAD-4112	NS	116492	(1) GR-4, (1) GR-5	UTU-112	UTU-4	40
9.16	1.8	5.56	240	109-1/2	100-5/8	62	19-3/8	DU-RAD-4124	NS	112694	(1) GR-3, (2) GR-4	UTU-124	UTU-4	42
9.16	1.8	5.56	480	109-1/2	100-5/8	62	19-3/8	DU-RAD-4124	NS	116521	(1) GR-3, (2) GR-4	UTU-124	UTU-4	42
9.73	1.8	6.13	240	115-1/2	106-5/8	68	19-3/8	DU-RAD-4136	NS	112707	(2) GR-5	UTU-136	UTU-4	45
9.73	1.8	6.13	480	115-1/2	106-5/8	68	19-3/8	DU-RAD-4136	NS	116556	(2) GR-5	UTU-136	UTU-4	45
10.3	1.8	6.7	240	121-5/8	112-3/4	74-1/8	19-3/8	DU-RAD-4148	NS	112715	(2) GR-5	UTU-148	UTU-4	47
10.3	1.8	6.7	480	121-5/8	112-3/4	74-1/8	19-3/8	DU-RAD-4148	NS	116580	(2) GR-5	UTU-148	UTU-4	47
10.7	1.8	7.1	240	125-11/16	116-13/16	78-3/16	19-3/8	DU-RAD-4156	NS	112723	(3) GR-4	UTU-156	UTU-4	49
10.7	1.8	7.1	480	125-11/16	116-13/16	78-3/16	19-3/8	DU-RAD-4156	NS	116610	(3) GR-4	UTU-156	UTU-4	49
11.05	1.8	7.45	240	129-13/16	120-15/16	82-5/16	19-3/8	DU-RAD-4164	NS	112731	(1) GR-5, (1) GR-6	UTU-164	UTU-4	50
11.05	1.8	7.45	480	129-13/16	120-15/16	82-5/16	19-3/8	DU-RAD-4164	NS	116644	(1) GR-5, (1) GR-6	UTU-164	UTU-4	50
11.43	1.8	7.83	240	134	125-1/8	86-1/2	19-3/8	DU-RAD-4172	NS	112740	(1) GR-2, (2) GR-5	UTU-172	UTU-4	52
11.43	1.8	7.83	480	134	125-1/8	86-1/2	19-3/8	DU-RAD-4172	NS	116679	(1) GR-2, (2) GR-5	UTU-172	UTU-4	52
6.6	2.5	1.6	240	81-5/8	72-3/4	19-1/4	26-13/16	DU-RAD-540	NS	112758	(1) GR-2, (1) GR-5	UTU-40	UTU-5	18
6.97	2.5	1.97	240	85-5/8	76-3/4	23-1/4	26-13/16	DU-RAD-548	NS	112766	(2) GR-4	UTU-48	UTU-5	19
7.44	2.5	2.44	240	90-3/4	81-7/8	28-3/8	26-13/16	DU-RAD-558	NS	112774	(1) GR-2, (1) GR-6	UTU-58	UTU-5	33
7.44	2.5	2.44	480	90-3/4	81-7/8	28-3/8	26-13/16	DU-RAD-558	NS	112782	(1) GR-2, (1) GR-6	UTU-58	UTU-5	33
7.82	2.5	2.82	240	94-3/4	85-7/8	32-3/8	26-13/16	DU-RAD-566	NS	112790	(1) GR-2, (1) GR-6	UTU-66	UTU-5	36
7.82	2.5	2.82	480	94-3/4	85-7/8	32-3/8	26-13/16	DU-RAD-566	NS	112803	(1) GR-2, (1) GR-6	UTU-66	UTU-5	36
8.19	2.5	3.19	240	98-7/8	90	36-1/2	26-13/16	DU-RAD-574	NS	112811	(1) GR-3, (1) GR-6	UTU-74	UTU-5	37
8.19	2.5	3.19	480	98-7/8	90	36-1/2	26-13/16	DU-RAD-574	NS	112820	(1) GR-3, (1) GR-6	UTU-74	UTU-5	37
8.57	2.5	3.57	240	102-15/16	94-1/16	40-9/16	26-13/16	DU-RAD-582	NS	112838	(1) GR-2, (2) GR-4	UTU-82	UTU-5	40
8.57	2.5	3.57	480	102-15/16	94-1/16	40-9/16	26-13/16	DU-RAD-582	NS	112846	(1) GR-2, (2) GR-4	UTU-82	UTU-5	40
8.95	2.5	3.95	240	107-1/16	98-3/16	44-11/16	26-13/16	DU-RAD-590	NS	112854	(1) GR-3, (2) GR-4	UTU-90	UTU-5	42
8.95	2.5	3.95	480	107-1/16	98-3/16	44-11/16	26-13/16	DU-RAD-590	NS	112862	(1) GR-3, (2) GR-4	UTU-90	UTU-5	42
9.52	2.5	4.52	240	113-1/16	104-3/16	50-11/16	26-13/16	DU-RAD-5102	NS	112870	(1) GR-4, (1) GR-6	UTU-102	UTU-5	45
9.52	2.5	4.52	480	113-1/16	104-3/16	50-11/16	26-13/16	DU-RAD-5102	NS	112889	(1) GR-4, (1) GR-6	UTU-102	UTU-5	45
9.99	2.5	4.99	240	118-3/16	109-5/16	55-13/16	26-13/16	DU-RAD-5112	NS	112897	(2) GR-5	UTU-112	UTU-5	47
9.99	2.5	4.99	480	118-3/16	109-5/16	55-13/16	26-13/16	DU-RAD-5112	NS	112900	(2) GR-5	UTU-112	UTU-5	47
10.56	2.5	5.56	240	124-3/8	115-1/2	62	26-13/16	DU-RAD-5124	NS	112918	(3) GR-4	UTU-124	UTU-5	49
10.56	2.5	5.56	480	124-3/8	115-1/2	62	26-13/16	DU-RAD-5124	NS	112926	(3) GR-4	UTU-124	UTU-5	49
11.13	2.5	6.13	240	130-3/8	121-1/2	68	26-13/16	DU-RAD-5136	NS	112934	(1) GR-5, (1) GR-6	UTU-136	UTU-5	50
11.13	2.5	6.13	480	130-3/8	121-1/2	68	26-13/16	DU-RAD-5136	NS	112942	(1) GR-5, (1) GR-6	UTU-136	UTU-5	50
11.7	2.5	6.7	240	136-1/2	127-5/8	74-1/8	26-13/16	DU-RAD-5148	NS	112950	(1) GR-2, (1) GR-5	UTU-148	UTU-5	52
11.7	2.5	6.7	480	136-1/2	127-5/8	74-1/8	26-13/16	DU-RAD-5148	NS	112969	(1) GR-2, (1) GR-5	UTU-148	UTU-5	52
12.1	2.5	7.1	240	140-9/16	131-11/16	78-3/16	26-13/16	DU-RAD-5156	NS	112977	(2) GR-6	UTU-156	UTU-5	53
12.1	2.5	7.1	480	140-9/16	131-11/16	78-3/16	26-13/16	DU-RAD-5156	NS	112985	(2) GR-6	UTU-156	UTU-5	53
12.45	2.5	7.45	240	144-11/16	135-13/16	82-5/16	26-13/16	DU-RAD-5164	NS	112993	(2) GR-6	UTU-164	UTU-5	54
12.45	2.5	7.45	480	144-11/16	135-13/16	82-5/16	26-13/16	DU-RAD-5164	NS	113005	(2) GR-6	UTU-164	UTU-5	54
12.83	2.5	7.83	240	148-7/8	140	86-1/2	26-13/16	DU-RAD-5172	NS	113013	(2) GR-6	UTU-172	UTU-5	55
12.83	2.5	7.83	480	148-7/8	140	86-1/2	26-13/16	DU-RAD-5172	NS	113021	(2) GR-6	UTU-172	UTU-5	55
7.6	3	1.6	240	93-3/4	84-7/8	19-1/4	32-13/16	DU-RAD-640	NS	113030	(1) GR-2, (1) GR-6	UTU-40	UTU-6	36
7.97	3	1.97	240	97-3/4	88-7/8	23-1/4	32-13/16	DU-RAD-648	NS	113048	(1) GR-3, (1) GR-6	UTU-48	UTU-6	37
8.44	3	2.44	240	102-7/8	94	28-3/8	32-13/16	DU-RAD-658	NS	113056	(1) GR-2, (1) GR-4	UTU-58	UTU-6	40
8.44	3	2.44	480	102-7/8	94	28-3/8	32-13/16	DU-RAD-658	NS	113064	(1) GR-2, (1) GR-4	UTU-58	UTU-6	40
8.82	3	2.82	240	106-7/8	98	32-3/8	32-13/16	DU-RAD-666	NS	113072	(1) GR-2, (1) GR-4	UTU-66	UTU-6	41
8.82	3	2.82	480	106-7/8	98	32-3/8	32-13/16	DU-RAD-666	NS	113080	(1) GR-2, (1) GR-4	UTU-66	UTU-6	41
9.19	3	3.19	240	111	102-1/8	36-1/2	32-13/16	DU-RAD-674	NS	113099	(1) GR-3, (1) GR-4	UTU-74	UTU-6	43
9.19	3	3.19	480	111	102-1/8	36-1/2	32-13/16	DU-RAD-674	NS	113101	(1) GR-3, (1) GR-4	UTU-74	UTU-6	43

METAL SHEATH RADIANT

Process Air and Radiant

DU-RAD

Three Element Radiant Heater *(cont'd.)*

Specifications and Ordering Information

kW			Volts	Dimensions (In.)				Model	Stock	PCN	Optional Grille ²	Replacement Elements ¹		Wt. (Lbs.)
Total	Ea. End	Center		A	B	C	D					Center	End	
9.57	3	3.57	240	115-1/16	106-3/16	40-9/16	32-13/16	DU-RAD-682	NS	113110	(2) GR-5	UTU-82	UTU-6	45
9.57	3	3.57	480	115-1/16	106-3/16	40-9/16	32-13/16	DU-RAD-682	NS	113128	(2) GR-5	UTU-82	UTU-6	45
9.95	3	3.95	240	119-3/16	110-5/16	44-11/16	32-13/16	DU-RAD-690	NS	113136	(2) GR-5	UTU-90	UTU-6	46
9.95	3	3.95	480	119-3/16	110-5/16	44-11/16	32-13/16	DU-RAD-690	NS	113144	(2) GR-5	UTU-90	UTU-6	46
10.52	3	4.52	240	125-3/16	116-5/16	50-11/16	32-13/16	DU-RAD-6102	NS	113152	(3) GR-4	UTU-102	UTU-6	49
10.52	3	4.52	480	125-3/16	116-5/16	50-11/16	32-13/16	DU-RAD-6102	NS	113160	(3) GR-4	UTU-102	UTU-6	49
10.99	3	4.99	240	130-5/16	121-7/16	55-13/16	32-13/16	DU-RAD-6112	NS	113179	(1) GR-5, (1) GR-6	UTU-112	UTU-6	50
10.99	3	4.99	480	130-5/16	121-7/16	55-13/16	32-13/16	DU-RAD-6112	NS	113187	(1) GR-5, (1) GR-6	UTU-112	UTU-6	50
11.56	3	5.56	240	136-1/2	127-5/8	62	32-13/16	DU-RAD-6124	NS	113195	(1) GR-2, (1) GR-5	UTU-124	UTU-6	52
11.56	3	5.56	480	136-1/2	127-5/8	62	32-13/16	DU-RAD-6124	NS	113208	(1) GR-2, (1) GR-5	UTU-124	UTU-6	52
12.13	3	6.13	240	142-1/2	133-5/8	68	32-13/16	DU-RAD-6136	NS	113216	(2) GR-6	UTU-136	UTU-6	54
12.13	3	6.13	480	142-1/2	133-5/8	68	32-13/16	DU-RAD-6136	NS	113224	(2) GR-6	UTU-136	UTU-6	54
12.7	3	6.7	240	148-5/8	139-3/4	74-1/8	32-13/16	DU-RAD-6148	NS	113232	(2) GR-6	UTU-148	UTU-6	56
12.7	3	6.7	480	148-5/8	139-3/4	74-1/8	32-13/16	DU-RAD-6148	NS	113240	(2) GR-6	UTU-148	UTU-6	56
13.1	3	7.1	240	152-11/16	143-13/16	78-3/16	32-13/16	DU-RAD-6156	NS	113259	(2) GR-6	UTU-156	UTU-6	58
13.1	3	7.1	480	152-11/16	143-13/16	78-3/16	32-13/16	DU-RAD-6156	NS	113267	(2) GR-6	UTU-156	UTU-6	58
13.45	3	7.45	240	156-13/16	147-15/16	82-5/16	32-13/16	DU-RAD-6164	NS	113275	(1) GR-2, (2) GR-6	UTU-164	UTU-6	60
13.45	3	7.45	480	156-13/16	147-15/16	82-5/16	32-13/16	DU-RAD-6164	NS	113283	(1) GR-2, (2) GR-6	UTU-164	UTU-6	60
13.83	3	7.83	240	161	152-1/8	86-1/2	32-13/16	DU-RAD-6172	NS	113291	(1) GR-2, (2) GR-6	UTU-172	UTU-6	62
13.83	3	7.83	480	161	152-1/8	86-1/2	32-13/16	DU-RAD-6172	NS	113304	(1) GR-2, (2) GR-6	UTU-172	UTU-6	62
8.8	3.6	1.6	240	106	97-1/8	19-1/4	38-15/16	DU-RAD-740	NS	113312	(1) GR-2, (2) GR-4	UTU-40	UTU-7	42
9.17	3.6	1.97	240	110	101-1/8	23-1/4	38-15/16	DU-RAD-748	NS	113320	(1) GR-3, (2) GR-4	UTU-48	UTU-7	43
9.64	3.6	2.44	240	115-1/8	106-1/4	28-3/8	38-15/16	DU-RAD-758	NS	113339	(2) GR-5	UTU-58	UTU-7	45
9.64	3.6	2.44	480	115-1/8	106-1/4	28-3/8	38-15/16	DU-RAD-758	NS	113347	(2) GR-5	UTU-58	UTU-7	45
10.02	3.6	2.82	240	119-1/8	110-1/4	32-3/8	38-15/16	DU-RAD-766	NS	113355	(2) GR-5	UTU-66	UTU-7	47
10.02	3.6	2.82	480	119-1/8	110-1/4	32-3/8	38-15/16	DU-RAD-766	NS	113363	(2) GR-5	UTU-66	UTU-7	47
10.39	3.6	3.19	240	123-1/4	114-3/8	36-1/2	38-15/16	DU-RAD-774	NS	113371	(3) GR-4	UTU-74	UTU-7	49
10.39	3.6	3.19	480	123-1/4	114-3/8	36-1/2	38-15/16	DU-RAD-774	NS	113380	(3) GR-4	UTU-74	UTU-7	49
10.77	3.6	3.57	240	127-5/16	118-7/16	40-9/16	38-15/16	DU-RAD-782	NS	113398	(1) GR-5, (1) GR-6	UTU-82	UTU-7	50
10.77	3.6	3.57	480	127-5/16	118-7/16	40-9/16	38-15/16	DU-RAD-782	NS	113400	(1) GR-5, (1) GR-6	UTU-82	UTU-7	50
11.15	3.6	3.95	240	131-7/16	122-9/16	44-11/16	38-15/16	DU-RAD-790	NS	113419	(1) GR-2, (2) GR-5	UTU-90	UTU-7	51
11.15	3.6	3.95	480	131-7/16	122-9/16	44-11/16	38-15/16	DU-RAD-790	NS	113427	(1) GR-2, (2) GR-5	UTU-90	UTU-7	51
11.72	3.6	4.52	240	137-7/16	128-9/16	50-11/16	38-15/16	DU-RAD-7102	NS	113435	(1) GR-3, (2) GR-5	UTU-102	UTU-7	53
11.72	3.6	4.52	480	137-7/16	128-9/16	50-11/16	38-15/16	DU-RAD-7102	NS	113343	(1) GR-3, (2) GR-5	UTU-102	UTU-7	53
12.19	3.6	4.99	240	142-9/16	133-11/16	55-13/16	38-15/16	DU-RAD-7112	NS	113451	(2) GR-6	UTU-112	UTU-7	54
12.19	3.6	4.99	480	142-9/16	133-11/16	55-13/16	38-15/16	DU-RAD-7112	NS	113460	(2) GR-6	UTU-112	UTU-7	54
12.76	3.6	5.56	240	148-3/4	139-7/8	62	38-15/16	DU-RAD-7124	NS	113478	(2) GR-6	UTU-124	UTU-7	55
12.76	3.6	5.56	480	148-3/4	139-7/8	62	38-15/16	DU-RAD-7124	NS	113486	(2) GR-6	UTU-124	UTU-7	55
13.33	3.6	6.13	240	154-3/4	145-7/8	68	38-15/16	DU-RAD-7136	NS	113494	(1) GR-4, (2) GR-5	UTU-136	UTU-7	56
13.33	3.6	6.13	480	154-3/4	145-7/8	68	38-15/16	DU-RAD-7136	NS	113507	(1) GR-4, (2) GR-5	UTU-136	UTU-7	56
13.9	3.6	6.7	240	160-7/8	152	74-1/8	38-15/16	DU-RAD-7148	NS	113515	(1) GR-2, (2) GR-6	UTU-148	UTU-7	57
13.9	3.6	6.7	480	160-7/8	152	74-1/8	38-15/16	DU-RAD-7148	NS	113523	(1) GR-2, (2) GR-6	UTU-148	UTU-7	57
14.3	3.6	7.1	240	164-15/16	156-1/16	78-3/16	38-15/16	DU-RAD-7156	NS	113531	(1) GR-3, (1) GR-6	UTU-156	UTU-7	59
14.3	3.6	7.1	480	164-15/16	156-1/16	78-3/16	38-15/16	DU-RAD-7156	NS	113540	(1) GR-3, (1) GR-6	UTU-156	UTU-7	59
14.65	3.6	7.45	240	169-1/16	160-3/16	82-5/16	38-15/16	DU-RAD-7164	NS	113558	(3) GR-5	UTU-164	UTU-7	60
14.65	3.6	7.45	480	169-1/16	160-3/16	82-5/16	38-15/16	DU-RAD-7164	NS	113566	(3) GR-5	UTU-164	UTU-7	60
15.03	3.6	7.83	240	173-1/4	164-3/8	86-1/2	38-15/16	DU-RAD-7172	NS	113574	(3) GR-5	UTU-172	UTU-7	62
15.03	3.6	7.83	480	173-1/4	164-3/8	86-1/2	38-15/16	DU-RAD-7172	NS	113582	(3) GR-5	UTU-172	UTU-7	62

Stock Status: S = stock NS = non-stock
To Order—Specify model, PCN, kW, volts, quantity, optional grille and replacement elements (if needed).

1. Refer to Tubular Heaters section.
2. Refer to Accessories in this section for ordering information.

Process Air and Radiant

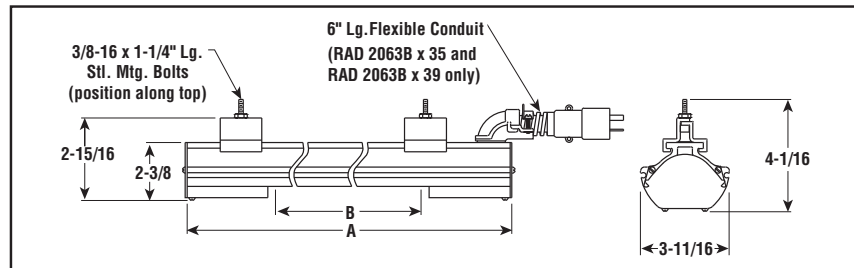
RAD

Single Element Radiant Heater

- 1.83 kW/Ft²
- 0.4 - 4.5 kW
- 120, 208, 240, 275 and 480 Volt
- 3/8" Dia. INCOLOY® Sheath Elements (Type RTU)
- 1500°F Max. Sheath Temp.



Dimensions (Inches)



Applications

- Finish Curing
- Latex and Resin Curing
- Plastics Processing
- Ink Drying
- Textile and Non-Woven Fabric Manufacturing
- Paper and Paperboard Manufacturing
- Food Processing
- Ceramic Drying

Features

Complete, Ready-to-Connect Assembly — available in various lengths to accommodate work of varying dimensions.

Movable Mounting Clamps and Bolts are supplied to accommodate many mounting configurations such as banks, tunnels and oven sections.

Process Temperature Control — Radiant heater output may be controlled with Chromalox SCR Power Controllers, Percentage Timing Input Controls and Non-Contact Temperature Sensors. See the Controls section of this catalog.

Additional Sizes and Ratings — Contact your Local Chromalox Sales office for price and availability.

Single Ended Wiring — Heaters may be furnished single-end wired with 18" leads as standard. Add the suffix SE to model number.

Construction

Enclosed Chromalox Alloy-Sheath Tubular Heating Element is completely isolated and supported on secondary insulation for improved electrical safety. Designed for long life, the element is more resistant to hard blows than quartz lamp or tube and open coil types.

Rigid Extruded Aluminum Housing helps protect heating element from harsh industrial environments.

Highly Polished Aluminum Reflectors give good reflectivity and heat transfer, and are easily cleaned to maintain energy efficiency.

Accessories

Protective Grille — Optional snap-in sections help protect personnel and work from contact with hot elements.

Companion Reflector — Optional radiant companion reflectors improve oven efficiency. See Radiant Accessories in this section.

Pipe Plug — Used to close tapped wiring entry holes. See Radiant Accessories in this section.

METAL SHEATH
RADIANT

Process Air and Radiant

RAD

Single Element Radiant Heater *(cont'd.)*

Specifications and Ordering Information

kW	Volts	Length (In.)		Model	Stock	PCN	Optional Grille ³	Replacement Elements ¹	Wt. (Lbs.)
		Overall A	Heated B						
0.4	120	13-5/8	7-3/4	RAD-2063BX35²	S	110015	(1) GR-800	RTU-2063AX35	4
0.65	120	20	14-1/8	RAD-2063BX29²	S	110023	(1) GR-800	RTU-2063AX29	4
0.8	120	24-3/8	16-1/2	RAD-2083B	S	110031	(1) GR-2	RTU-2083A	4
0.8	208	24-3/8	16-1/2	RAD-2083BV	NS	110058	(1) GR-2	RTU-2083AV	4
0.8	240	24-3/8	16-1/2	RAD-2083B	S	110040	(1) GR-2	RTU-2083A	4
0.8	275	24-3/8	16-1/2	RAD-2083BV	NS	110066	(1) GR-2	RTU-2083AV	4
1.1	120	30-5/8	22-3/4	RAD-3113B	S	110074	(1) GR-3	RTU-3113A	5
1.1	208	30-5/8	22-3/4	RAD-3113BV	NS	110090	(1) GR-3	RTU-3113AV	5
1.1	240	30-5/8	22-3/4	RAD-3113B	S	110082	(1) GR-3	RTU-3113A	5
1.1	275	30-5/8	22-3/4	RAD-3113BV	NS	110103	(1) GR-3	RTU-3113AV	5
1.3	208	35-7/8	28-5/16	RAD-3133BV	NS	114841	(1) GR-3	RTU-3133AV	6
1.3	240	35-7/8	28-5/16	RAD-3133B	NS	114850	(1) GR-3	RTU-3133A	6
1.3	275	35-7/8	28-5/16	RAD-3133BV	NS	114868	(1) GR-3	RTU-3133AV	6
1.3	480	35-7/8	28-5/16	RAD-3133B	NS	114876	(1) GR-3	RTU-3133A	6
1.8	208	46-5/8	38-1/2	RAD-4183BV	S	110138	(1) GR-4	RTU-4183AV	8
1.8	240	46-5/8	38-1/2	RAD-4183B	S	110111	(1) GR-4	RTU-4183A	8
1.8	275	46-5/8	38-1/2	RAD-4183BV	NS	110146	(1) GR-4	RTU-4183AV	8
1.8	480	46-5/8	38-1/2	RAD-4183B	S	110120	(1) GR-4	RTU-4183A	8
2.15	208	53-7/8	45-7/16	RAD-5213BV	NS	114884	(1) GR-4	RTU-5213AV	9
2.15	240	53-7/8	45-7/16	RAD-5213B	NS	114892	(1) GR-4	RTU-5213A	9
2.15	275	53-7/8	45-7/16	RAD-5213BV	NS	114905	(1) GR-4	RTU-5213AV	9
2.15	480	53-7/8	45-7/16	RAD-5213B	NS	114913	(1) GR-4	RTU-5213A	9
2.5	208	61-3/8	53-3/8	RAD-5253BV	NS	110170	(1) GR-5	RTU-5253AV	10
2.5	240	61-3/8	53-3/8	RAD-5253B	S	110154	(1) GR-5	RTU-5253A	10
2.5	275	61-3/8	53-3/8	RAD-5253BV	NS	110189	(1) GR-5	RTU-5253AV	10
2.5	480	61-3/8	53-3/8	RAD-5253B	S	110162	(1) GR-5	RTU-5253A	10
2.7	208	65-7/8	58-1/4	RAD-6273BV	NS	114921	(1) GR-5	RTU-6273AV	11
2.7	240	65-7/8	58-1/4	RAD-6273B	NS	114930	(1) GR-5	RTU-6273A	11
2.7	275	65-7/8	58-1/4	RAD-6273BV	NS	114948	(1) GR-5	RTU-6273AV	11
2.7	480	65-7/8	58-1/4	RAD-6273B	NS	114956	(1) GR-5	RTU-6273A	11
3	208	73-3/4	65-3/4	RAD-6303BV	NS	110218	(1) GR-6	RTU-6303AV	12
3	240	73-3/4	65-3/4	RAD-6303B	S	110197	(1) GR-6	RTU-6303A	12
3	275	73-3/4	65-3/4	RAD-6303BV	NS	110226	(1) GR-6	RTU-6303AV	12
3	480	73-3/4	65-3/4	RAD-6303B	S	110200	(1) GR-6	RTU-6303A	12
3.35	208	79-7/8	72-1/4	RAD-7333BV	NS	114964	(1) GR-6	RTU-7333AV	13
3.35	240	79-7/8	72-1/4	RAD-7333B	NS	114972	(1) GR-6	RTU-7333A	13
3.35	275	79-7/8	72-1/4	RAD-7333BV	NS	114980	(1) GR-6	RTU-7333AV	13
3.35	480	79-7/8	72-1/4	RAD-7333B	NS	114999	(1) GR-6	RTU-7333A	13
3.6	208	85-3/4	78	RAD-7363BV	NS	110250	(2) GR-4	RTU-7363AV	14
3.6	240	85-3/4	78	RAD-7363B	S	110234	(2) GR-4	RTU-7363A	14
3.6	275	85-3/4	78	RAD-7363BV	NS	110269	(2) GR-4	RTU-7363AV	14
3.6	480	85-3/4	78	RAD-7363B	S	110242	(2) GR-4	RTU-7363A	14
4.5	208	106	97-1/2	RAD-8453BV	NS	115000	(2) GR-4, (1) GR-2	RTU-8453AV	17
4.5	240	106	97-1/2	RAD-8453B	NS	115019	(2) GR-4, (1) GR-2	RTU-8453A	17
4.5	275	106	97-1/2	RAD-8453BV	NS	115027	(2) GR-4, (1) GR-2	RTU-8453AV	17
4.5	480	106	97-1/2	RAD-8453B	NS	115035	(2) GR-4, (1) GR-2	RTU-8453A	17

Stock Status: S = stock NS = non-stock
To Order—Specify model, PCN, kW, volts, quantity, optional grille and replacement elements (if needed).

1. Refer to Tubular Heaters section.
2. Includes 6" BX and two-prong plug.
3. See Accessories in this section for ordering information.

Process Air and Radiant

RADD

Double Element Radiant Heater *(cont'd.)*

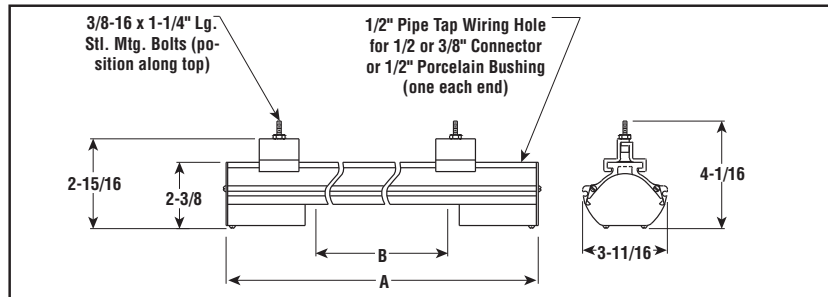


- 3.66 kW/Ft²
- 1.6 - 13 kW
- 120, 208, 240, 275 and 480 Volt
- 3/8" Dia. INCOLOY® Sheath Elements (Type RTU)
- 1500°F Max. Sheath Temp.

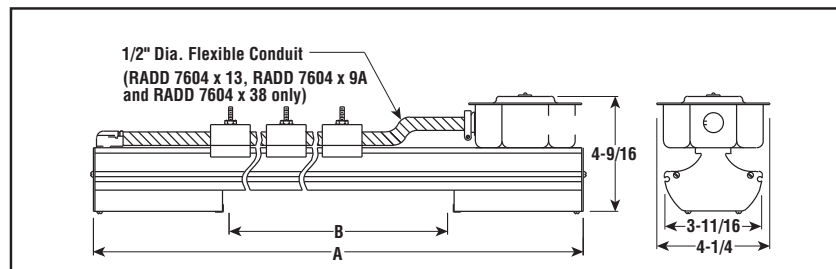
Applications

- Shrink Fitting
- Preheat Glass for Polishing, Drying, Sterilizing
- Fast-Moving Webs

Dimensions (Inches)



Dimensions (Inches)



METAL SHEATH RADIANT

Features

Complete, Ready-to-Connect Assembly available in various lengths to accommodate work of varying dimensions.

Movable Mounting Clamps and Bolts are supplied to accommodate many mounting configurations such as banks, tunnels and oven sections.

Process Temperature Control — Radiant heater output may be controlled with Chromalox SCR Controllers, Percentage Timing Input Controls and Non-Contact Temperature Sensors. See the Controls section of this catalog.

Additional Sizes and Ratings — Contact your Local Chromalox Sales office for price and availability.

Single Ended Wiring — Heaters may be furnished single-end wired with 18" leads as standard. Add the suffix SE to model number.

Construction

Enclosed Chromalox Alloy-Sheath Tubular Heating Element is completely isolated and supported on secondary insulation for improved electrical safety. Designed for long life, the element is more resistant to hard blows than quartz lamp or tube and open coil types.

Rigid Extruded Aluminum Housing protects heating element from harsh industrial environments.

Highly Polished Aluminum Reflectors give good reflectivity and heat transfer, and are easily cleaned to maintain energy efficiency.

Accessories

Protective Grille — Optional snap-in sections help protect personnel and work from contact with hot elements.

Companion Reflector — Optional radiant companion reflectors improve oven efficiency. See Radiant Accessories in this section.

Pipe Plug — Used to close tapped wiring entry holes. See Radiant Accessories in this section.

Note: Model RADD heaters are not listed for use in fixed electric space heated applications under NEC 424. If they are to be used in such applications, installation must be approved by local code enforcement authorities.

Process Air and Radiant

RADD

Two Element Radiant Heater *(cont'd.)*

Specifications and Ordering Information

kW	Volts	Length (In.)		Model	Stock	PCN	Optional Grille ³	Replacement Elements ¹	Wt. (Lbs.)
		Overall A	Heated B						
1.6	120	24-3/8	16-1/2	RADD-2164	NS	110277	(1) GR-2	RTU-2083A	7
1.6	208	24-3/8	16-1/2	RADD-2164V	NS	110285	(1) GR-2	RTU-2083AV	7
1.6	240	24-3/8	16-1/2	RADD-2164	S	110293	(1) GR-2	RTU-2083A	7
1.6	275	24-3/8	16-1/2	RADD-2164V	NS	110306	(1) GR-2	RTU-2083AV	7
2.2	120	30-5/8	22-3/4	RADD-3224	NS	110314	(1) GR-3	RTU-3113A	9
2.2	208	30-5/8	22-3/4	RADD-3224V	NS	110322	(1) GR-3	RTU-3113AV	9
2.2	240	30-5/8	22-3/4	RADD-3224	S	110330	(1) GR-3	RTU-3113A	9
2.2	275	30-5/8	22-3/4	RADD-3224V	NS	110349	(1) GR-3	RTU-3113AV	9
2.6	208	35-7/8	28-5/16	RADD-3264V	NS	115140	(1) GR-3	RTU-3133AV	10
2.6	240	35-7/8	28-5/16	RADD-3264	NS	115131	(1) GR-3	RTU-3133A	10
2.6	275	35-7/8	28-5/16	RADD-3264V	NS	115158	(1) GR-3	RTU-3133AV	10
2.6	480	35-7/8	28-5/16	RADD-3264	NS	115166	(1) GR-3	RTU-3133A	10
3.6	208	46-5/8	38-1/2	RADD-4364V	NS	110365	(1) GR-4	RTU-4183AV	11
3.6	240	46-5/8	38-1/2	RADD-4364	NS	110357	(1) GR-4	RTU-4183A	11
3.6	275	46-5/8	38-1/2	RADD-4364V	NS	110381	(1) GR-4	RTU-4183AV	11
3.6	480	46-5/8	38-1/2	RADD-4364	S	110373	(1) GR-4	RTU-4183A	11
4.3	208	53-7/8	45-7/16	RADD-5434V	NS	115174	(1) GR-4	RTU-5213AV	13
4.3	240	53-7/8	45-7/16	RADD-5434	NS	115182	(1) GR-4	RTU-5213A	13
4.3	275	53-7/8	45-7/16	RADD-5434V	NS	115190	(1) GR-4	RTU-5213AV	13
4.3	480	53-7/8	45-7/16	RADD-5434	NS	115203	(1) GR-4	RTU-5213A	13
5	208	61-3/8	53-3/8	RADD-5504V	NS	110402	(1) GR-5	RTU-5253AV	14
5	240	61-3/8	53-3/8	RADD-5504	NS	110390	(1) GR-5	RTU-5253A	14
5	275	61-3/8	53-3/8	RADD-5504V	NS	110429	(1) GR-5	RTU-5253AV	14
5	480	61-3/8	53-3/8	RADD-5504	S	110410	(1) GR-5	RTU-5253A	14
5.4	208	65-7/8	58-1/4	RADD-6544V	NS	115211	(1) GR-5	RTU-6273AV	17
5.4	240	65-7/8	58-1/4	RADD-6544	NS	115220	(1) GR-5	RTU-6273A	17
5.4	275	65-7/8	58-1/4	RADD-6544V	NS	115238	(1) GR-5	RTU-6273AV	17
5.4	480	65-7/8	58-1/4	RADD-6544	NS	115246	(1) GR-5	RTU-6273A	17
6	208	73-3/4	65-3/4	RADD-6604V	NS	110445	(1) GR-6	RTU-6303AV	16
6	240	73-3/4	65-3/4	RADD-6604	NS	110437	(1) GR-6	RTU-6303A	16
6	275	73-3/4	65-3/4	RADD-6604V	NS	110461	(1) GR-6	RTU-6303AV	16
6	480	73-3/4	65-3/4	RADD-6604	S	110453	(1) GR-6	RTU-6303A	16
6.7	208	79-7/8	72-1/4	RADD-7674V	NS	115254	(1) GR-6	RTU-7333AV	21
6.7	240	79-7/8	72-1/4	RADD-7674	NS	115262	(1) GR-6	RTU-7333A	21
6.7	275	79-7/8	72-1/4	RADD-7674V	NS	115270	(1) GR-6	RTU-7333AV	21
6.7	480	79-7/8	72-1/4	RADD-7674	NS	115289	(1) GR-6	RTU-7333A	21
7.2	208	85-3/4	78	RADD-7724V	NS	110488	(2) GR-4	RTU-7363AV	18
7.2	240	85-3/4	78	RADD-7724	NS	110470	(2) GR-4	RTU-7363A	18
7.2	275	85-3/4	78	RADD-7724V	NS	110509	(2) GR-4	RTU-7363AV	18
7.2	480	85-3/4	78	RADD-7724	S	110496	(2) GR-4	RTU-7363A	18
9	208	106	97-1/2	RADD-8904V	NS	115297	(2) GR-4, (1) GR-2	RTU-8453AV	26
9	240	106	97-1/2	RADD-8904	NS	115300	(2) GR-4, (1) GR-2	RTU-8453A	26
9	275	106	97-1/2	RADD-8904V	NS	115318	(2) GR-4, (1) GR-2	RTU-8453AV	26
9	480	106	97-1/2	RADD-8904	NS	115326	(2) GR-4, (1) GR-2	RTU-8453A	26
8	240/480 ²	114-1/8	106	RADD-7604X10	NS	110517	(2) GR-5	RTU-7303AX10	34
10	240/480 ²	141	132	RADD-7604X13	NS	110550	(2) GR-6	RTU-7303AX13	40
11	240/480 ²	160-5/8	150	RADD-7604X9A	NS	110592	(1) GR-4, (2) GR-5	RTU-7303AX9A	45
13	240/480 ²	185-5/8	174	RADD-7724X38	NS	110630	(1) GR-4, (2) GR-6	RTU-7363AX38	52

Stock Status: S = stock NS = non-stock
To Order—Specify model, PCN, kW, volts, quantity and interlocking connectors (if required).

1. Refer to Tubular Heaters section.
2. Shipped as 480V. Convert to 240V by changing jumpers. (See instructions included with heater.)
3. See Accessories in this section for ordering information.

Process Air and Radiant

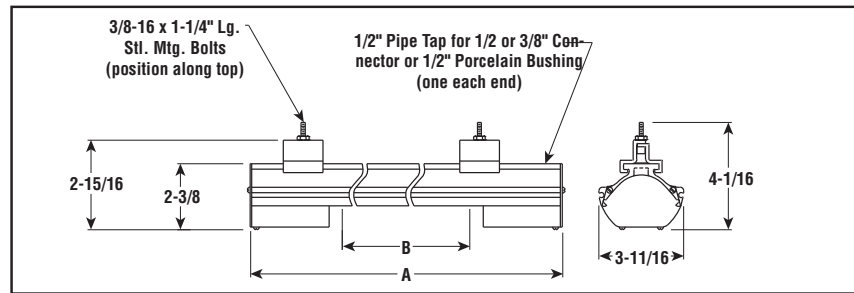
RAD-H

Hermetically Sealed Single Element Radiant Heater



- 1.83 kW/Ft²
- 0.7 - 3.6 kW
- 120 and 240 Volt
- 3/8" Dia. INCOLOY® Sheath Elements (type RTUH)
- 1000°F Max. Sheath Temp.

Dimensions (Inches)



Applications

- Humid Area Environments
- Rubber and Synthetic Fabric Processing
- Meat and Food Processing

Features

Complete, Ready-to-Connect Assembly available in various lengths to accommodate work of varying dimensions.

Movable Mounting Clamps and Bolts are supplied to accommodate many mounting configurations such as banks, tunnels and oven sections.

Process Temperature Control — Radiant heater output may be controlled with Chromalox SCR Power Controllers, Percentage Timing Input Controls and Non-Contact Temperature Sensors. See the Controls section of this catalog.

Additional Sizes and Ratings — Contact your Local Chromalox Sales office for price and availability.

Construction

Hermetically Sealed, Enclosed Chromalox Alloy-Sheath Tubular Heating Element is completely isolated and supported on secondary insulation for improved electrical safety. Designed for long life, the element is more resistant to hard blows than quartz lamp or tube and open coil types.

Rigid Extruded Aluminum Housing protects heating element from harsh industrial environments.

Highly Polished Aluminum Reflectors give good reflectivity and heat transfer, and are easily cleaned to maintain energy efficiency.

Accessories

Protective Grille — Optional snap-in sections help protect personnel and work from contact with hot elements.

Companion Reflector — Optional radiant companion reflectors improve oven efficiency.

METAL SHEATH RADIANT

Specifications and Ordering Information

kW	Volts	Length (In.)		Model	Stock	PCN	Optional Grille	Replacement Elements	Wt. (Lbs.)
		Overall A	Heated B						
0.7	120	24-3/8	14-1/2	RAD-H-207	NS	115570	(1) GR-800	RTUH-207	5
0.7	240	24-3/8	14-1/2	RAD-H-207	NS	115588	(1) GR-800	RTUH-207	5
1	120	30-5/8	20-3/4	RAD-H-310	NS	115596	(1) GR-2	RTUH-310	6
1	240	30-5/8	20-3/4	RAD-H-310	NS	115609	(1) GR-2	RTUH-310	6
1.8	240	46-5/8	36-1/2	RAD-H-418	NS	115617	(2) GR-2	RTUH-418	9
2.5	240	61-3/8	51-3/8	RAD-H-525	NS	115625	(3) GR-2	RTUH-525	11
3	240	73-3/4	63-3/4	RAD-H-630	NS	115633	(2) GR-3	RTUH-630	13
3.6	240	85-3/4	76	RAD-H-736	NS	115641	(2) GR-4	RTUH-736	15

Stock Status: S = stock NS = non-stock
To Order — Specify model, PCN, kW, volts, quantity, optional grille and replacement elements (if needed).

Process Air and Radiant

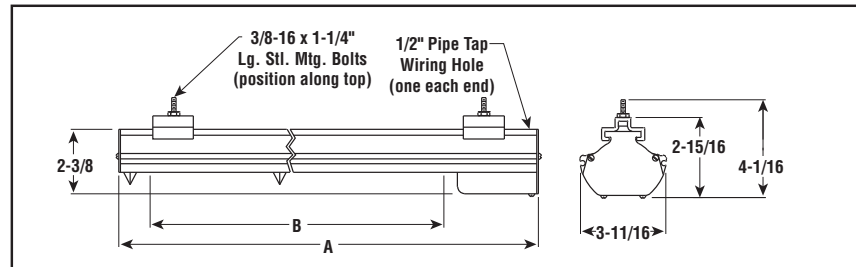
S-RAD

Single Element Radiant Heater

- 2.1 kW/Ft²
- 0.95 - 4.4 kW
- 120, 208, 240 and 275 Volt
- 3/8" Dia. INCOLOY® Sheath Elements (type SRTU)
- 1500°F Max. Sheath Temp.
- Single End Termination



Dimensions (Inches)



Applications

- Resin Curing
- Thermoforming
- Equipment Packaging
- Mirror Manufacturing
- Rubber Curing

Features

Complete, Ready-to-Connect Assembly available in various lengths to accommodate work of varying dimensions.

Movable Mounting Clamps and Bolts are supplied to accommodate many mounting configurations such as banks, tunnels and oven sections.

Process Temperature Control — Radiant heater output may be controlled with Chromalox SCR Power Controllers, Percentage Timing Input Controls and Non-Contact Temperature Sensors. See the Controls section of this catalog.

Additional Sizes and Ratings — Contact your Local Chromalox Sales office for price and availability.

Construction

Enclosed Chromalox Alloy-Sheath Tubular Heating Element is completely isolated and supported on secondary insulation for improved electrical safety. Designed for long life, the element is more resistant to hard blows than quartz lamp or tube and open coil types.

Rigid Extruded Aluminum Housing protects heating element from harsh industrial environments.

Highly Polished Aluminum Reflectors give good reflectivity and heat transfer, and are easily cleaned to maintain energy efficiency.

Accessories

Protective Grille — Optional snap-in sections help protect personnel and work from contact with hot elements.

Companion Reflector — Optional radiant companion reflectors improve oven efficiency. See Radiant Accessories in this section.

METAL SHEATH RADIANT

Note: Model S-RAD heaters are not listed for use in fixed electric space heated applications under NEC 424. If they are to be used in such applications, installation must be approved by local code enforcement authorities.

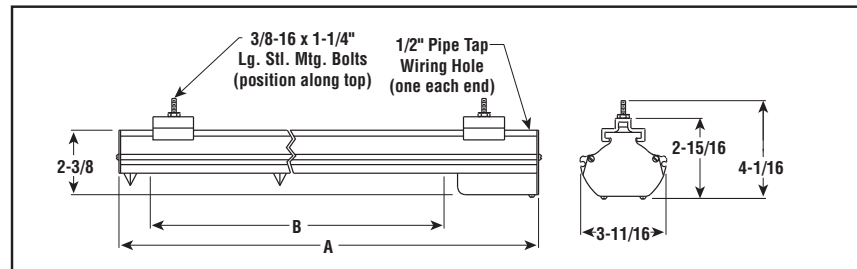
Process Air and Radiant

S-RAD

Single Element Radiant Heater *(cont'd.)*



Dimensions (Inches)



Specifications and Ordering Information

kW	Volts	Length (In.)		Model	Stock	PCN	Optional Grille ¹	Replacement Elements	Wt. (Lbs.)
		Overall A	Heated B						
0.95	120	24-3/8	16-1/2	S-RAD-2	NS	115334	(1) GR-2	SRTU-209	5
0.95	208	24-3/8	16-1/2	S-RAD-2V	NS	115342	(1) GR-2	SRTU-209V	5
0.95	240	24-3/8	16-1/2	S-RAD-2	NS	115350	(1) GR-2	SRTU-209	5
0.95	275	24-3/8	16-1/2	S-RAD-2V	NS	115369	(1) GR-2	SRTU-209V	5
1.3	120	30-5/8	22-3/4	S-RAD-3	NS	115377	(1) GR-3	SRTU-313	6
1.3	208	30-5/8	22-3/4	S-RAD-3V	NS	115385	(1) GR-3	SRTU-313V	6
1.3	240	30-5/8	22-3/4	S-RAD-3	NS	115393	(1) GR-3	SRTU-313	6
1.3	275	30-5/8	22-3/4	S-RAD-3V	NS	115406	(1) GR-3	SRTU-313V	6
2.2	208	46-5/8	38-5/8	S-RAD-4V	NS	115414	(1) GR-4	SRTU-422V	9
2.2	240	46-5/8	38-5/8	S-RAD-4	NS	115422	(1) GR-4	SRTU-422	9
2.2	275	46-5/8	38-5/8	S-RAD-4V	NS	115430	(1) GR-4	SRTU-422V	9
3	208	61-3/8	53-1/4	S-RAD-5V	NS	115457	(1) GR-5	SRTU-530V	11
3	240	61-3/8	53-1/4	S-RAD-5	NS	115465	(1) GR-5	SRTU-530	11
3	275	61-3/8	53-1/4	S-RAD-5V	NS	115473	(1) GR-5	SRTU-530V	11
3.75	208	73-3/4	65-1/2	S-RAD-6V	NS	115490	(1) GR-2, (1) GR-5	SRTU-638V	13
3.75	240	73-3/4	65-1/2	S-RAD-6	NS	115502	(1) GR-2, (1) GR-5	SRTU-638	13
3.75	275	73-3/4	65-1/2	S-RAD-6V	NS	115510	(1) GR-2, (1) GR-5	SRTU-638V	13
4.4	208	85-3/4	77-1/2	S-RAD-7V	NS	115537	(1) GR-2, (1) GR-6	SRTU-744V	15
4.4	240	85-3/4	77-1/2	S-RAD-7	NS	115545	(1) GR-2, (1) GR-6	SRTU-744	15
4.4	275	85-3/4	77-1/2	S-RAD-7V	NS	115553	(1) GR-2, (1) GR-6	SRTU-744V	15

Stock Status: S = stock NS = non-stock
To Order—Specify model, PCN, kW, volts, quantity, optional grille and replacement elements (if needed).

- Notes —**
 1. See Accessories in this section for ordering information.
 2. 480V ratings are available on some models. Contact your Local Chromalox Sales office for price and availability.

Process Air and Radiant

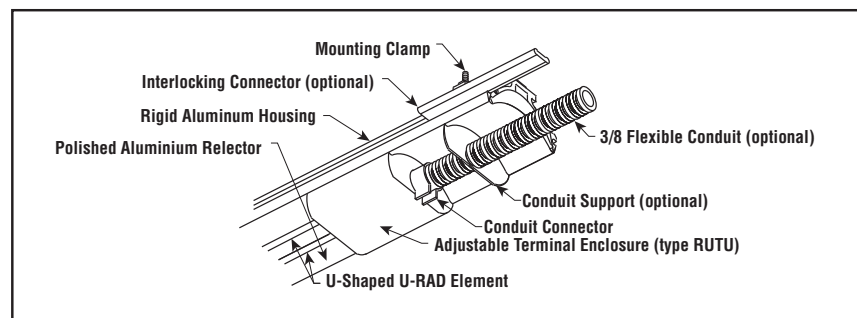
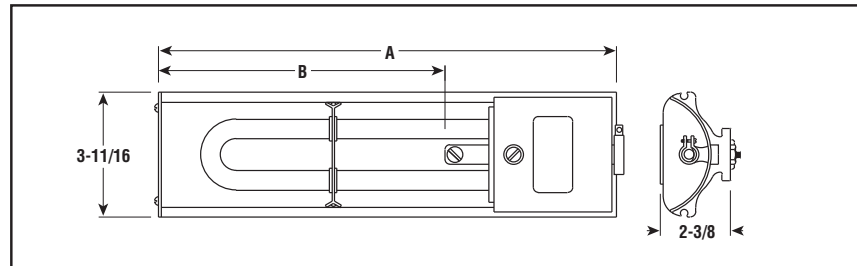
U-RAD®

Single Hairpin Element Radiant Heater

- 3.66 kW/Ft²
- 0.8 - 3.6 kW
- 120, 208, 240, 275 and 480 Volt
- 3/8" Dia. INCOLOY® Sheath Elements (type UTU)
- 1500°F Max. Sheath Temp.



Dimensions (Inches)



Applications

- Roll Heating
- Shrink Fitting
- Preheat Glass for Polishing, Drying, Sterilizing
- Fast-Moving Webs and other applications where High Temperatures will not damage materials

Features

Complete, Ready-to-Connect Assembly with adjustable terminal housing, which permits easy interchange of elements to accommodate work of varying dimensions.

Movable Mounting Clamps and Bolts are supplied to accommodate many mounting configurations such as banks, tunnels and oven sections.

Process Temperature Control — Radiant heater output may be controlled with Chromalox SCR Power Controllers, Percentage Timing Input Controls and Non-Contact Temperature Sensors. See the Controls section of this catalog.

Additional Sizes and Ratings — Contact your Local Chromalox Sales office for price and availability.

Construction

Enclosed Chromalox Alloy-Sheath Tubular Heating Element is completely isolated and supported on secondary insulation for improved electrical safety. Designed for long life, the element is more resistant to hard blows than quartz lamp or tube and open coil types.

Rigid Extruded Aluminum Housing protects heating element from harsh industrial environments.

Highly Polished Aluminum Reflectors give good reflectivity and heat transfer, and are easily cleaned to maintain energy efficiency.

Accessories

Protective Grille — Optional snap-in sections help protect personnel and work from contact with hot elements.

Companion Reflector — Optional radiant companion reflectors improve oven efficiency. See Radiant Accessories in this section.

Note: Model U-RAD® heaters are not listed for use in fixed electric space heated applications under NEC 424. If they are to be used in such applications, installation must be approved by local code enforcement authorities.

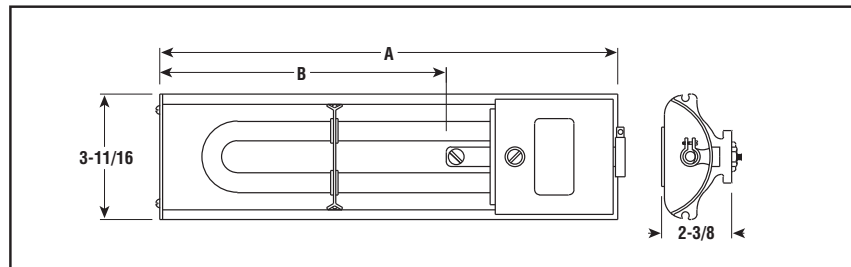
Process Air and Radiant

U-RAD[®]

Single Hairpin Element
Radiant Heater (*cont'd.*)



Dimensions (Inches)



Specifications and Ordering Information

kW	Volt	Length (In.)		Model	Stock	PCN	Optional Grille ²	Replacement Elements ¹	Wt. (Lbs.)
		Overall A	Heated B						
0.8	120	12-3/4	8-5/16	U-RAD-2	NS	110672	(1) GR-800	UTU-2	4
0.8	208	12-3/4	8-5/16	U-RAD-2V	NS	110680	(1) GR-800	UTU-2V	4
0.8	240	12-3/4	8-5/16	U-RAD-2	NS	110699	(1) GR-800	UTU-2	4
0.8	275	12-3/4	8-5/16	U-RAD-2V	NS	110701	(1) GR-800	UTU-2V	4
1.1	120	15-7/8	11-7/16	U-RAD-3	NS	110710	(1) GR-800	UTU-3	5
1.1	208	15-7/8	11-7/16	U-RAD-3V	NS	110728	(1) GR-800	UTU-3V	5
1.1	240	15-7/8	11-7/16	U-RAD-3	S	110736	(1) GR-800	UTU-3	5
1.1	275	15-7/8	11-7/16	U-RAD-3V	NS	110744	(1) GR-800	UTU-3V	5
1.8	208	23-13/16	19-3/8	U-RAD-4V	NS	110760	(1) GR-2	UTU-4V	7
1.8	240	23-13/16	19-3/8	U-RAD-4	NS	110752	(1) GR-2	UTU-4	7
1.8	275	23-13/16	19-3/8	U-RAD-4V	NS	110779	(1) GR-2	UTU-4V	7
1.8	480	23-13/16	19-3/8	U-RAD-4	S	114497	(1) GR-2	UTU-4	7
2.5	208	31-1/4	26-13/16	U-RAD-5V	S	110795	(1) GR-3	UTU-5V	8
2.5	240	31-1/4	26-13/16	U-RAD-5	NS	110787	(1) GR-3	UTU-5	8
2.5	275	31-1/4	26-13/16	U-RAD-5V	NS	113793	(1) GR-3	UTU-5V	8
2.5	480	31-1/4	26-13/16	U-RAD-5	S	110808	(1) GR-3	UTU-5	8
3	208	37-1/4	32-13/16	U-RAD-6V	NS	110824	(2) GR-2	UTU-6V	10
3	240	37-1/4	32-13/16	U-RAD-6	NS	110816	(2) GR-2	UTU-6	10
3	275	37-1/4	32-13/16	U-RAD-6V	NS	110840	(2) GR-2	UTU-6V	10
3	480	37-1/4	32-13/16	U-RAD-6	S	110832	(2) GR-2	UTU-6	10
3.6	208	43-3/8	38-15/16	U-RAD-7V	NS	110867	(1) GR-4	UTU-7V	12
3.6	240	43-3/8	38-15/16	U-RAD-7	S	110859	(1) GR-4	UTU-7	12
3.6	275	43-3/8	38-15/16	U-RAD-7V	NS	110883	(1) GR-4	UTU-7V	12
3.6	480	43-3/8	38-15/16	U-RAD-7	S	110875	(1) GR-4	UTU-7	12

METAL SHEATH
RADIANT

Stock Status: S = stock NS = non-stock
To Order — Specify model, PCN, kW, volts, quantity, optional grille and replacement elements (if needed).
 1. Refer to Tubular Heaters section.
 2. See Accessories in this section for ordering information.

Process Air and Radiant

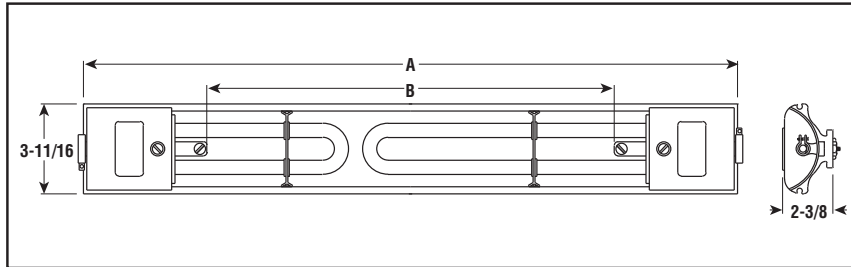
U-RAD[®]

Double Hairpin Element Radiant Heater



- 3.66 kW/Ft²
- 1.6 - 7.2 kW
- 120, 208, 240, 275 and 480 Volt
- 3/8" Dia. INCOLOY[®] Sheath Elements (type UTU)
- 1500°F Max. Sheath Temp.

Dimensions (Inches)



Applications

- Roll Heating
- Shrink Fitting
- Preheat Glass for Polishing, Drying, Sterilizing
- Fast-Moving Webs and other applications where high temperatures will not damage materials

Features

Complete, Ready-to-Connect Assembly with adjustable terminal housing, which permits easy interchange of elements to accommodate work of varying dimensions.

Movable Mounting Clamps and Bolts are supplied to accommodate many mounting configurations such as banks, tunnels and oven sections.

Process Temperature Control — Radiant heater output may be controlled with Chromalox SCR Power Controllers, Percentage Timing Input Controls and Non-Contact Temperature Sensors. See the Controls section of this catalog.

Additional Sizes and Ratings — Contact your Local Chromalox Sales office for price and availability.

Construction

Enclosed Chromalox Alloy-Sheath Tubular Heating Element is completely isolated and supported on secondary insulation for improved electrical safety. Designed for long life, the element is more resistant to hard blows than quartz lamp or tube and open coil types.

Rigid Extruded Aluminum Housing protects heating element from harsh industrial environments.

Highly Polished Aluminum Reflectors give good reflectivity and heat transfer, and are easily cleaned to maintain energy efficiency.

Accessories

Protective Grille — Optional snap-in sections help protect personnel and work from contact with hot elements.

Companion Reflector — Optional radiant companion reflectors improve oven efficiency. See Radiant Accessories in this section.

Specifications and Ordering Information

kW	Volts	Length (In.)		Model	Stock	PCN	Optional Grille ²	Replacement Elements ¹	Wt. (Lbs.)
		Overall A	Heated B						
1.6	120	25-1/2	16-5/8	U-RAD-22	NS	110891	(1) GR-2	(2) UTU-2	8
1.6	208	25-1/2	16-5/8	U-RAD-22V	NS	110904	(1) GR-2	(2) UTU-2V	8
1.6	240	25-1/2	16-5/8	U-RAD-22	NS	110912	(1) GR-2	(2) UTU-2	8
1.6	275	25-1/2	16-5/8	U-RAD-22V	NS	110920	(1) GR-2	(2) UTU-2V	8
1.9	120	28-5/8	19-3/4	U-RAD-32	NS	110939	(1) GR-2	(1) UTU-2, (1) UTU-3	9
1.9	208	28-5/8	19-3/4	U-RAD-32V	NS	110947	(1) GR-2	(1) UTU-2V, (1) UTU-3V	9
1.9	240	28-5/8	19-3/4	U-RAD-32	NS	110955	(1) GR-2	(1) UTU-2, (1) UTU-3	9
1.9	275	28-5/8	19-3/4	U-RAD-32V	NS	110963	(1) GR-2	(1) UTU-2V, (1) UTU-3V	9

Process Air and Radiant

U-RAD®

Double Hairpin Element Radiant Heater (cont'd.)

Specifications and Ordering Information

kW	Volts	Length (In.)		Model	Stock	PCN	Optional Grille ²	Replacement Elements ¹	Wt. (Lbs.)
		Overall A	Heated B						
2.2	120	31-3/4	22-7/8	U-RAD-33	NS	110971	(1) GR-3	(2) UTU-3	10
2.2	208	31-3/4	22-7/8	U-RAD-33V	NS	110980	(1) GR-3	(2) UTU-3V	10
2.2	240	31-3/4	22-7/8	U-RAD-33	NS	110998	(1) GR-3	(2) UTU-3	10
2.2	275	31-3/4	22-7/8	U-RAD-33V	NS	111000	(1) GR-3	(2) UTU-3V	10
2.6	208	36-9/16	27-11/16	U-RAD-42V	NS	111026	(1) GR-3	(1) UTU-2V, (1) UTU-4V	11
2.6	240	36-9/16	27-11/16	U-RAD-42	NS	111018	(1) GR-3	(1) UTU-2, (1) UTU-4	11
2.6	275	36-9/16	27-11/16	U-RAD-42V	NS	111034	(1) GR-3	(1) UTU-2V, (1) UTU-4V	11
2.9	208	39-11/16	30-13/16	U-RAD-43V	NS	111050	(2) GR-2	(1) UTU-3V, (1) UTU-4V	12
2.9	240	39-11/16	30-13/16	U-RAD-43	NS	111042	(2) GR-2	(1) UTU-3, (1) UTU-4	12
2.9	275	39-11/16	30-13/16	U-RAD-43V	NS	111069	(2) GR-2	(1) UTU-3V, (1) UTU-4V	12
3.6	208	47-9/16	38-11/16	U-RAD-44V	NS	111085	(1) GR-4	(2) UTU-4V	13
3.6	240	47-9/16	38-11/16	U-RAD-44	NS	111077	(1) GR-4	(2) UTU-4	13
3.6	275	47-9/16	38-11/16	U-RAD-44V	NS	111093	(1) GR-4	(2) UTU-4V	13
3.3	208	44	35-1/8	U-RAD-52V	NS	111114	(2) GR-2	(1) UTU-2V, (1) UTU-5V	11
3.3	240	44	35-1/8	U-RAD-52	NS	111106	(2) GR-2	(1) UTU-2, (1) UTU-5	11
3.3	275	44	35-1/8	U-RAD-52V	NS	111122	(2) GR-2	(1) UTU-2V, (1) UTU-5V	11
3.6	208	47-1/8	38-1/4	U-RAD-53V	NS	111149	(1) GR-4	(1) UTU-3V, (1) UTU-5V	12
3.6	240	47-1/8	38-1/4	U-RAD-53	NS	111130	(1) GR-4	(1) UTU-3, (1) UTU-5	12
3.6	275	47-1/8	38-1/4	U-RAD-53V	NS	111157	(1) GR-4	(1) UTU-3V, (1) UTU-5V	12
4.3	208	55-1/16	46-3/16	U-RAD-54V	NS	111173	(3) GR-2	(1) UTU-4V, (1) UTU-5V	14
4.3	240	55-1/16	46-3/16	U-RAD-54	NS	111165	(3) GR-2	(1) UTU-4, (1) UTU-5	14
4.3	275	55-1/16	46-3/16	U-RAD-54V	NS	111181	(3) GR-2	(1) UTU-4V, (1) UTU-5V	14
5	208	62-7/16	53-9/16	U-RAD-55V	NS	111202	(1) GR-5	(2) UTU-5V	15
5	240	62-7/16	53-9/16	U-RAD-55	NS	111190	(1) GR-5	(2) UTU-5	15
5	275	62-7/16	53-9/16	U-RAD-55V	NS	111229	(1) GR-5	(2) UTU-5V	15
5	480	62-7/16	53-9/16	U-RAD-55	NS	111210	(1) GR-5	(2) UTU-5	15
3.8	208	50	41-1/8	U-RAD-62V	NS	111245	(1) GR-2, (1) GR-3	(1) UTU-2V, (1) UTU-6V	13
3.8	240	50	41-1/8	U-RAD-62	NS	111237	(1) GR-2, (1) GR-3	(1) UTU-2, (1) UTU-6	13
3.8	275	50	41-1/8	U-RAD-62V	NS	111253	(1) GR-2, (1) GR-3	(1) UTU-2V, (1) UTU-6V	13
4.1	208	53-1/8	44-1/4	U-RAD-63V	NS	111270	(2) GR-3	(1) UTU-3V, (1) UTU-6V	14
4.1	240	53-1/8	44-1/4	U-RAD-63	NS	111261	(2) GR-3	(1) UTU-3, (1) UTU-6	14
4.1	275	53-1/8	44-1/4	U-RAD-63V	NS	111288	(2) GR-3	(1) UTU-3V, (1) UTU-6V	14
4.8	208	61-1/16	52-3/16	U-RAD-64V	NS	111309	(1) GR-5	(1) UTU-4V, (1) UTU-6V	16
4.8	240	61-1/16	52-3/16	U-RAD-64	NS	111296	(1) GR-5	(1) UTU-4, (1) UTU-6	16
4.8	275	61-1/16	52-3/16	U-RAD-64V	NS	111317	(1) GR-5	(1) UTU-4V, (1) UTU-6V	16
5.5	208	68-1/2	59-5/8	U-RAD-65V	NS	111333	(1) GR-3, (1) GR-4	(1) UTU-5V, (1) UTU-6V	17
5.5	240	68-1/2	59-5/8	U-RAD-65	NS	111325	(1) GR-3, (1) GR-4	(1) UTU-5, (1) UTU-6	17
5.5	275	68-1/2	59-5/8	U-RAD-65V	NS	111350	(1) GR-3, (1) GR-4	(1) UTU-5V, (1) UTU-6V	17
5.5	480	68-1/2	59-5/8	U-RAD-65	NS	111341	(1) GR-3, (1) GR-4	(1) UTU-5, (1) UTU-6	17
6	208	74-1/2	65-5/8	U-RAD-66V	NS	111376	(1) GR-6	(2) UTU-6V	20
6	240	74-1/2	65-5/8	U-RAD-66	NS	111368	(1) GR-6	(2) UTU-6	20
6	275	74-1/2	65-5/8	U-RAD-66V	NS	111392	(1) GR-6	(2) UTU-6V	20
6	480	74-1/2	65-5/8	U-RAD-66	NS	111384	(1) GR-6	(2) UTU-6	20
4.4	208	56-1/8	47-1/4	U-RAD-72V	NS	111413	(1) GR-2, (1) GR-4	(1) UTU-2V, (1) UTU-7V	15
4.4	240	56-1/8	47-1/4	U-RAD-72	NS	111405	(1) GR-2, (1) GR-4	(1) UTU-2, (1) UTU-7	15
4.4	275	56-1/8	47-1/4	U-RAD-72V	NS	111421	(1) GR-2, (1) GR-4	(1) UTU-2V, (1) UTU-7V	15
4.7	208	59-1/4	50-3/8	U-RAD-73V	NS	111448	(3) GR-2	(1) UTU-3V, (1) UTU-7V	16
4.7	240	59-1/4	50-3/8	U-RAD-73	NS	111430	(3) GR-2	(1) UTU-3, (1) UTU-7	16
4.7	275	59-1/4	50-3/8	U-RAD-73V	NS	111456	(3) GR-2	(1) UTU-3V, (1) UTU-7V	16
5.4	208	67-1/8	58-1/4	U-RAD-74V	NS	111472	(1) GR-2, (1) GR-4	(1) UTU-4V, (1) UTU-7V	18
5.4	240	67-1/8	58-1/4	U-RAD-74	NS	111464	(1) GR-2, (1) GR-4	(1) UTU-4, (1) UTU-7	18
5.4	275	67-1/8	58-1/4	U-RAD-74V	NS	111480	(1) GR-2, (1) GR-4	(1) UTU-4V, (1) UTU-7V	18
6.1	208	74-1/2	65-5/8	U-RAD-75V	NS	111501	(1) GR-6	(1) UTU-5V, (1) UTU-7V	19
6.1	240	74-1/2	65-5/8	U-RAD-75	NS	111499	(1) GR-6	(1) UTU-5, (1) UTU-7	19
6.1	275	74-1/2	65-5/8	U-RAD-75V	NS	111528	(1) GR-6	(1) UTU-5V, (1) UTU-7V	19
6.1	480	74-1/2	65-5/8	U-RAD-75	NS	111510	(1) GR-6	(1) UTU-5, (1) UTU-7	19
6.6	208	80-5/8	71-3/4	U-RAD-76V	NS	111544	(1) GR-2, (1) GR-5	(1) UTU-6V, (1) UTU-7V	21
6.6	240	80-5/8	71-3/4	U-RAD-76	NS	111536	(1) GR-2, (1) GR-5	(1) UTU-6, (1) UTU-7	21
6.6	275	80-5/8	71-3/4	U-RAD-76V	NS	111560	(1) GR-2, (1) GR-5	(1) UTU-6V, (1) UTU-7V	21
6.6	480	80-5/8	71-3/4	U-RAD-76	NS	111552	(1) GR-2, (1) GR-5	(1) UTU-6, (1) UTU-7	21
7.2	208	86-3/4	77-7/8	U-RAD-77V	NS	111587	(2) GR-4	(2) UTU-7V	24
7.2	240	86-3/4	77-7/8	U-RAD-77	NS	111579	(2) GR-4	(2) UTU-7	24
7.2	275	86-3/4	77-7/8	U-RAD-77V	NS	111608	(2) GR-4	(2) UTU-7V	24
7.2	480	86-3/4	77-7/8	U-RAD-77	NS	111595	(2) GR-4	(2) UTU-7	24

METAL SHEATH RADIANT

Stock Status: S = stock NS = non-stock

To Order—Specify model, PCN, kW, volts, quantity, optional grille and replacement elements (if needed).

1. Refer to Tubular Heaters section.

2. See Accessories in this section for ordering information.

Process Air and Radiant

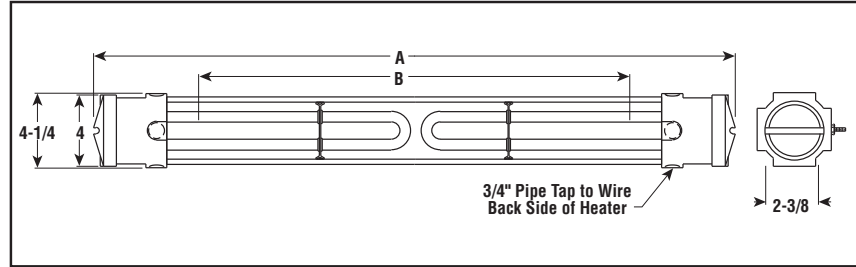
U-RAD-LT

Liquid-Tight, Double-Hairpin Element Radiant Heater



- 3.66 kW/Ft²
- 1.6 - 7.2 kW
- 120, 208, 240, 275 and 480 Volt
- 3/8" Dia. INCOLOY® Sheath Elements (type UTU-LT)
- 1500°F Max. Sheath Temp.

Dimensions (Inches)



Applications

- Food Processing
- Water Intake Screens (See Installation Manual for Limitations)
- Conveyor Belt Heating
- Outdoor Comfort Heating
- Facilities Washdown Operations (See Installation Manual for Limitations)
- Winter Applications where element needs to be shielded from strong drafts and wind

Features

Complete, Ready-to-Install and connect assembly.

Movable Mounting Clamps and Bolts are supplied to accommodate many mounting configurations such as banks, tunnels and oven sections.

Process Temperature Control — Radiant heater output may be controlled with Chromalox SCR Power Controllers, Percentage Timing Input Controls and Non-Contact Temperature Sensors. See the Controls section of this catalog.

Power Connections are made at both ends, using high-temperature wire.

Accessories

Protective Grille — Optional snap-in sections help protect personnel and work from contact with hot elements.

Special Protective Terminal Cover provides liquid-tight protection to terminals.

Construction

Liquid-Tight Terminal Enclosure for outdoor or hose-down locations.

Enclosed Chromalox Alloy-Sheath Tubular Heating Element is completely isolated and supported on secondary insulation for improved electrical safety. Designed for long life, the element is more resistant to hard blows than quartz lamp or tube and open coil types. Elements include bulkhead threaded fittings to ensure a water-tight seal.

Rigid Extruded Aluminum Housing protects heating element from harsh industrial environments.

Highly Polished Aluminum Reflectors give good reflectivity and heat transfer, and are easily cleaned to maintain energy efficiency.

Specifications and Ordering Information

kW	Volts	Length (In.)		Model	Stock	PCN	Optional Grille ²	Replacement Elements ¹	Wt. (Lbs.)
		Overall A	Heated B						
1.6	120	26-1/8	16-5/8	U-RAD-22LT	NS	119263	(1) GR-2	(2) UTU-2LT	14
1.6	208	26-1/8	16-5/8	U-RAD-22VLT	NS	119280	(1) GR-2	(2) UTU-2VLT	14
1.6	240	26-1/8	16-5/8	U-RAD-22LT	NS	119271	(1) GR-2	(2) UTU-2LT	14
1.6	275	26-1/8	16-5/8	U-RAD-22VLT	NS	119298	(1) GR-2	(2) UTU-2VLT	14
1.9	120	29-1/4	19-3/4	U-RAD-32LT	NS	119300	(1) GR-2	(1) UTU-3LT, (1) UTU-2LT	15
1.9	208	29-1/4	19-3/4	U-RAD-32VLT	NS	119327	(1) GR-2	(1) UTU-3VLT, (1) UTU-2VLT	15
1.9	240	29-1/4	19-3/4	U-RAD-32LT	NS	119319	(1) GR-2	(1) UTU-3LT, (1) UTU-2LT	15
1.9	275	29-1/4	19-3/4	U-RAD-32VLT	NS	119335	(1) GR-2	(1) UTU-3VLT, (1) UTU-2VLT	15
2.2	120	32-3/8	22-7/8	U-RAD-33LT	NS	119343	(1) GR-3	(2) UTU-3LT	16
2.2	208	32-3/8	22-7/8	U-RAD-33VLT	NS	119360	(1) GR-3	(2) UTU-3VLT	16
2.2	240	32-3/8	22-7/8	U-RAD-33LT	NS	119351	(1) GR-3	(2) UTU-3LT	16
2.2	275	32-3/8	22-7/8	U-RAD-33VLT	NS	119378	(1) GR-3	(2) UTU-3VLT	16
2.6	208	37-1/8	27-11/16	U-RAD-42LT	NS	119394	(1) GR-3	(1) UTU-2VLT, (1) UTU-4VLT	17
2.6	240	37-1/8	27-11/16	U-RAD-42LT	NS	119386	(1) GR-3	(1) UTU-2LT, (1) UTU-4LT	17
2.6	275	37-1/8	27-11/16	U-RAD-42VLT	NS	119407	(1) GR-3	(1) UTU-2VLT, (1) UTU-4VLT	17
2.9	208	40-1/4	30-13/16	U-RAD-43VLT	NS	119423	(2) GR-2	(1) UTU-3VLT, (1) UTU-4VLT	18
2.9	240	40-1/4	30-13/16	U-RAD-43LT	NS	119415	(2) GR-2	(1) UTU-3LT, (1) UTU-4LT	18
2.9	275	40-1/4	30-13/16	U-RAD-43VLT	NS	119431	(2) GR-2	(1) UTU-3VLT, (1) UTU-4VLT	18
3.6	208	48-1/8	38-11/16	U-RAD-44VLT	NS	119466	(1) GR-4	(2) UTU-4VLT	20
3.6	240	48-1/8	38-11/16	U-RAD-44LT	NS	119440	(1) GR-4	(2) UTU-4LT	20
3.6	275	48-1/8	38-11/16	U-RAD-44VLT	NS	119474	(1) GR-4	(2) UTU-4VLT	20
3.6	480	48-1/8	38-11/16	U-RAD-44LT	NS	119458	(1) GR-4	(2) UTU-4LT	20

Process Air and Radiant

U-RAD-LT

Liquid-Tight, Double-Hairpin Element Radiant Heater *(cont'd.)*

Specifications and Ordering Information

kW	Volts	Length (In.)		Model	Stock	PCN	Optional Grille ²	Replacement Elements ¹	Wt. (Lbs.)
		Overall A	Heated B						
3.3	208	44-5/8	35-1/8	U-RAD-52VLT	NS	119490	(2) GR-2	(1) UTU-2VLT, (1) UTU-5VLT	18
3.3	240	44-5/8	35-1/8	U-RAD-52LT	NS	119482	(2) GR-2	(1) UTU-2LT, (1) UTU-5LT	18
3.3	275	44-5/8	35-1/8	U-RAD-52VLT	NS	119503	(2) GR-2	(1) UTU-2VLT, (1) UTU-5VLT	18
3.6	208	47-3/4	38-1/4	U-RAD-53VLT	NS	119520	(1) GR-4	(1) UTU-3VLT, (1) UTU-5VLT	19
3.6	240	47-3/4	38-1/4	U-RAD-53LT	NS	119511	(1) GR-4	(1) UTU-3LT, (1) UTU-5LT	19
3.6	275	47-3/4	38-1/4	U-RAD-53VLT	NS	119538	(1) GR-4	(1) UTU-3VLT, (1) UTU-5VLT	19
4.3	208	55-5/8	46-3/16	U-RAD-54VLT	NS	119562	(3) GR-2	(1) UTU-4VLT, (1) UTU-5VLT	21
4.3	240	55-5/8	46-3/16	U-RAD-54LT	NS	119546	(3) GR-2	(1) UTU-4LT, (1) UTU-5LT	21
4.3	275	55-5/8	46-3/16	U-RAD-54VLT	NS	119570	(3) GR-2	(1) UTU-4VLT, (1) UTU-5VLT	21
4.3	480	55-5/8	46-3/16	U-RAD-54LT	NS	119554	(3) GR-2	(1) UTU-4LT, (1) UTU-5LT	21
5	208	63-1/8	53-9/16	U-RAD-55VLT	NS	119600	(1) GR-5	(2) UTU-5VLT	22
5	240	63-1/8	53-9/16	U-RAD-55LT	NS	119589	(1) GR-5	(2) UTU-5LT	22
5	275	63-1/8	53-9/16	U-RAD-55VLT	NS	119597	(1) GR-5	(2) UTU-5VLT	22
5	480	63-1/8	53-9/16	U-RAD-55LT	NS	119618	(1) GR-5	(2) UTU-5LT	22
3.8	208	50-9/16	41-1/8	U-RAD-62VLT	NS	119634	(1) GR-2, (1) GR-3	(1) UTU-2VLT, (1) UTU-6VLT	20
3.8	240	50-9/16	41-1/8	U-RAD-62LT	NS	119626	(1) GR-2, (1) GR-3	(1) UTU-2LT, (1) UTU-6LT	20
3.8	275	50-9/16	41-1/8	U-RAD-62VLT	NS	119642	(1) GR-2, (1) GR-3	(1) UTU-2VLT, (1) UTU-6VLT	20
4.1	208	53-11/16	44-1/4	U-RAD-63VLT	NS	119669	(2) GR-3	(1) UTU-3VLT, (1) UTU-6VLT	21
4.1	240	53-11/16	44-1/4	U-RAD-63LT	NS	119650	(2) GR-3	(1) UTU-3LT, (1) UTU-6LT	21
4.1	275	53-11/16	44-1/4	U-RAD-63VLT	NS	119677	(2) GR-3	(1) UTU-3VLT, (1) UTU-6VLT	21
4.8	208	61-9/16	52-3/16	U-RAD-64VLT	NS	119706	(1) GR-5	(1) UTU-4VLT, (1) UTU-6VLT	23
4.8	240	61-9/16	52-3/16	U-RAD-64LT	NS	119685	(1) GR-5	(1) UTU-4LT, (1) UTU-6LT	23
4.8	275	61-9/16	52-3/16	U-RAD-64VLT	NS	119714	(1) GR-5	(1) UTU-4VLT, (1) UTU-6VLT	23
4.8	480	61-9/16	52-3/16	U-RAD-64LT	NS	119693	(1) GR-5	(1) UTU-4LT, (1) UTU-6LT	23
5.5	208	69-1/16	59-5/8	U-RAD-65VLT	NS	119749	(1) GR-3, (1) GR-4	(1) UTU-5VLT, (1) UTU-6VLT	24
5.5	240	69-1/16	59-5/8	U-RAD-65LT	NS	119722	(1) GR-3, (1) GR-4	(1) UTU-5LT, (1) UTU-6LT	24
5.5	275	69-1/16	59-5/8	U-RAD-65VLT	NS	119757	(1) GR-3, (1) GR-4	(1) UTU-5VLT, (1) UTU-6VLT	24
5.5	480	69-1/16	59-5/8	U-RAD-65LT	NS	119730	(1) GR-3, (1) GR-4	(1) UTU-5LT, (1) UTU-6LT	24
6	208	75	65-5/8	U-RAD-66VLT	NS	119781	(1) GR-6	(2) UTU-6VLT	26
6	240	75	65-5/8	U-RAD-66LT	NS	119765	(1) GR-6	(2) UTU-6LT	26
6	275	75	65-5/8	U-RAD-66VLT	NS	119790	(1) GR-6	(2) UTU-6VLT	26
6	480	75	65-5/8	U-RAD-66LT	NS	119773	(1) GR-6	(2) UTU-6LT	26
4.4	208	56-11/16	47-1/4	U-RAD-72VLT	NS	119810	(1) GR-2, (1) GR-4	(1) UTU-2VLT, (1) UTU-7VLT	22
4.4	240	56-11/16	47-1/4	U-RAD-72LT	NS	119802	(1) GR-2, (1) GR-4	(1) UTU-2LT, (1) UTU-7LT	22
4.4	275	56-11/16	47-1/4	U-RAD-72VLT	NS	119829	(1) GR-2, (1) GR-4	(1) UTU-2VLT, (1) UTU-7VLT	22
4.7	208	59-13/16	50-3/8	U-RAD-73VLT	NS	119845	(3) GR-2	(1) UTU-3VLT, (1) UTU-7VLT	23
4.7	240	59-13/16	50-3/8	U-RAD-73LT	NS	119837	(3) GR-2	(1) UTU-3LT, (1) UTU-7LT	23
4.7	275	59-13/16	50-3/8	U-RAD-73VLT	NS	119853	(3) GR-2	(1) UTU-3VLT, (1) UTU-7VLT	23
5.4	208	67-11/16	58-1/4	U-RAD-74VLT	NS	119888	(1) GR-2, (1) GR-4	(1) UTU-4VLT, (1) UTU-7VLT	25
5.4	240	67-11/16	58-1/4	U-RAD-74LT	NS	119861	(1) GR-2, (1) GR-4	(1) UTU-4LT, (1) UTU-7LT	25
5.4	275	67-11/16	58-1/4	U-RAD-74VLT	NS	119896	(1) GR-2, (1) GR-4	(1) UTU-4VLT, (1) UTU-7VLT	25
5.4	480	67-11/16	58-1/4	U-RAD-74LT	NS	119870	(1) GR-2, (1) GR-4	(1) UTU-4LT, (1) UTU-7LT	25
6.1	208	75-3/16	65-5/8	U-RAD-75VLT	NS	119925	(1) GR-6	(1) UTU-5VLT, (1) UTU-7VLT	26
6.1	240	75-3/16	65-5/8	U-RAD-75LT	NS	119909	(1) GR-6	(1) UTU-5LT, (1) UTU-7LT	26
6.1	275	75-3/16	65-5/8	U-RAD-75VLT	NS	119933	(1) GR-6	(1) UTU-5VLT, (1) UTU-7VLT	26
6.1	480	75-3/16	65-5/8	U-RAD-75LT	NS	119917	(1) GR-6	(1) UTU-5LT, (1) UTU-7LT	26
6.6	208	81-1/8	71-3/4	U-RAD-76VLT	NS	119968	(1) GR-2, (1) GR-5	(1) UTU-6VLT, (1) UTU-7VLT	28
6.6	240	81-1/8	71-3/4	U-RAD-76LT	NS	119941	(1) GR-2, (1) GR-5	(1) UTU-6LT, (1) UTU-7LT	28
6.6	275	81-1/8	71-3/4	U-RAD-76VLT	NS	119976	(1) GR-2, (1) GR-5	(1) UTU-6VLT, (1) UTU-7VLT	28
6.6	480	81-1/8	71-3/4	U-RAD-76LT	NS	119950	(1) GR-2, (1) GR-5	(1) UTU-6LT, (1) UTU-7LT	28
7.2	208	87-1/4	77-7/8	U-RAD-77VLT	NS	120002	(2) GR-4	(2) UTU-7VLT	30
7.2	240	87-1/4	77-7/8	U-RAD-77LT	NS	119984	(2) GR-4	(2) UTU-7LT	30
7.2	275	87-1/4	77-7/8	U-RAD-77VLT	NS	120010	(2) GR-4	(2) UTU-7VLT	30
7.2	480	87-1/4	77-7/8	U-RAD-77LT	NS	119992	(2) GR-4	(2) UTU-7LT	30

METAL SHEATH
RADIANT

Stock Status: S = stock NS = non-stock
To Order—Specify model, PCN, kW, volts, quantity, optional grille and replacement elements (if needed).

1. Refer to Tubular Heaters section.
2. See Accessories in this section for ordering information.

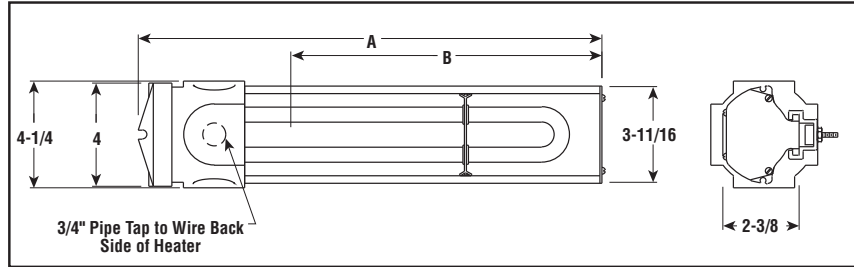
Process Air and Radiant

U-RAD-LT

Liquid-Tight, Single-Hairpin Element Radiant Heater



Dimensions (Inches)



- 3.66 kW/Ft²
- 0.8 - 3.6 kW
- 120, 208, 240, 275 and 480 Volt
- 3/8" Dia. INCOLOY® Sheath Elements (type UTU-LT)
- 1500°F Max. Sheath Temp.

Applications

- Food Processing
- Water Intake Screens
- Conveyor Belt Heating
- Outdoor Comfort Heating
- Facilities Washdown Operations
- Winter Applications where element needs to be shielded from strong drafts and wind

Features

Complete, Ready-to-Connect Assembly available in various lengths to accommodate work of varying dimensions.

Movable Mounting Clamps and Bolts are supplied to accommodate many mounting configurations such as banks, tunnels and oven sections.

Special Protective Terminal Cover provides liquid-tight protection to terminals.

Power Connections are made at one end, using high-temperature wire.

Construction

Liquid-Tight Terminal Enclosure for outdoor or hose-down locations.

Enclosed Chromalox Alloy-Sheath Tubular Heating Element is completely isolated and supported on secondary insulation for improved electrical safety. Designed for long life, the element is more resistant to hard blows than quartz lamp or tube and open coil types. Element includes bulkhead threaded fittings to ensure a water-tight seal.

Rigid Extruded Aluminum Housing protects heating element from harsh industrial environments.

Highly Polished Aluminum Reflectors give good reflectivity and heat transfer, and are easily cleaned to maintain energy efficiency.

Accessories

Protective Grille — Optional snap-in sections help protect personnel and work from contact with hot elements.

Companion Reflector — Optional radiant companion reflectors improve oven efficiency. See Radiant Accessories in this section.

METAL SHEATH
RADIANT

Specifications and Ordering Information

kW	Volts	Length (In.)		Model	Stock	PCN	Optional Grille ²	Replacement Elements ¹	Wt. (Lbs.)
		Overall A	Heated B						
0.8	120	13-5/16	8-5/16	U-RAD-2LT	NS	106833	(1) GR-800	UTU-2LT	7
0.8	208	13-5/16	8-5/16	U-RAD-2VLT	NS	119140	(1) GR-800	UTU-2VLT	7
0.8	240	13-5/16	8-5/16	U-RAD-2LT	NS	106841	(1) GR-800	UTU-2LT	7
0.8	275	13-5/16	8-5/16	U-RAD-2VLT	NS	119159	(1) GR-800	UTU-2VLT	7
1.1	120	16-7/16	11-7/16	U-RAD-3LT	NS	106930	(1) GR-800	UTU-3LT	8
1.1	208	16-7/16	11-7/16	U-RAD-3VLT	NS	119167	(1) GR-800	UTU-3VLT	8
1.1	240	16-7/16	11-7/16	U-RAD-3LT	NS	106850	(1) GR-800	UTU-3LT	8
1.1	275	16-7/16	11-7/16	U-RAD-3VLT	NS	119175	(1) GR-800	UTU-3VLT	8
1.8	208	24-3/8	19-3/8	U-RAD-4VLT	NS	119183	(1) GR-2	UTU-4VLT	10
1.8	240	24-3/8	19-3/8	U-RAD-4LT	NS	106868	(1) GR-2	UTU-4LT	10
1.8	275	24-3/8	19-3/8	U-RAD-4VLT	NS	119191	(1) GR-2	UTU-4VLT	10
1.8	480	24-3/8	19-3/8	U-RAD-4LT	NS	106948	(1) GR-2	UTU-4LT	10
2.5	208	31-13/16	26-13/16	U-RAD-5VLT	NS	119204	(1) GR-3	UTU-5VLT	11
2.5	240	31-13/16	26-13/16	U-RAD-5LT	NS	106876	(1) GR-3	UTU-5LT	11
2.5	275	31-13/16	26-13/16	U-RAD-5VLT	NS	119212	(1) GR-3	UTU-5VLT	11
2.5	480	31-13/16	26-13/16	U-RAD-5LT	NS	106884	(1) GR-3	UTU-5LT	11
3	208	37-13/16	32-13/16	U-RAD-6VLT	NS	119220	(2) GR-2	UTU-6VLT	13
3	240	37-13/16	32-13/16	U-RAD-6LT	NS	106892	(2) GR-2	UTU-6LT	13
3	275	37-13/16	32-13/16	U-RAD-6VLT	NS	119239	(2) GR-2	UTU-6VLT	13
3	480	37-13/16	32-13/16	U-RAD-6LT	NS	106905	(2) GR-2	UTU-6LT	13
3.6	208	43-15/16	38-15/16	U-RAD-7VLT	NS	119247	(1) GR-4	UTU-7VLT	15
3.6	240	43-15/16	38-15/16	U-RAD-7LT	NS	106913	(1) GR-4	UTU-7LT	15
3.6	275	43-15/16	38-15/16	U-RAD-7VLT	NS	119255	(1) GR-4	UTU-7VLT	15
3.6	480	43-15/16	38-15/16	U-RAD-7LT	NS	106921	(1) GR-4	UTU-7LT	15

Stock Status: S = stock NS = non-stock
To Order— Specify model, PCN, kW, volts, quantity, optional grille and replacement elements (if needed).

1. Refer to Tubular Heaters section.
2. Refer to Accessories in this section for ordering information.