



Comforming
to UL Standard 1693

HEATIZON
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SYSTEM OPERATING TABLES AND USEFUL INFORMATION

The following tables list Transformer sizes and the amperage/wattage values that they will operate at using varying lengths of Tuff Cable or Z Mesh element. These tables may be used as a general guide in selecting the proper voltage tap for use with the specific length of heating element that your particular installation requires. It is important to note that the System Operating Tables DO NOT include any resistance for Cold leads. As a result, it is recommended by Heatizon Systems that the helpful formulas (on the "Useful Information" page) be used to more accurately estimate the total resistance you have, the Transformer tap you should use, and the amperage and watts you will experience.

NOTES:

YOUR HEATIZON SYSTEM MAY BE PRE-DESIGNED BY HEATIZON OR ONE OF ITS DEALERS TO MATCH YOUR HEATING REQUIREMENTS WITH THE PROPER LENGTH OF ELEMENT & TRANSFORMER SIZE / VOLTAGE. PROPER DESIGN OF THE SYSTEM BEFORE INSTALLATION WILL GREATLY REDUCE THE NEED FOR MODIFICATIONS OF SYSTEM COMPONENTS. CONTACT HEATIZON SYSTEMS OR ONE OF ITS DEALERS FOR ADDITIONAL INFORMATION.

THE LENGTH OF THE COLD LEAD MAY DECREASE THE LENGTH OF THE Z MESH OR TUFF CABLE THAT IS ACCEPTABLE TO USE.

THE LENGTH OF THE COLD LEAD HAS A MORE SIGNIFICANT IMPACT ON SMALLER SIZED TRANSFORMERS.

System Operating Tables 12" Z Mesh

Length of Element: 50 Feet or Less (SCRKIT50)

Transformer Size	Tap Number	Tap Voltage	15 feet		20 feet		25 feet		30 feet		33 feet		36 feet		39 feet		42 feet		45 feet		48 feet	
			Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
.25kVA	1	1.68	89	10	67	6																
.25kVA	2	2.51					80	8	66	6												
.50kVA	1	3.40							90	10	82	8	75	7	69	6	64	5	60	5		
.50kVA	2	4.10											90	10	83	9	77	7	72	7	68	6
.50kVA	3	5.00															94	11	88	10	83	9

Length of Element: 55 to 100 Feet (SCRKIT75 or SCRKIT100)

Transformer Size	Tap Number	Tap Voltage	55 feet		60 feet		65 feet		70 feet		75 feet		80 feet		85 feet		90 feet		95 feet		100 feet	
			Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
.50kVA	3	5.00	72	7	66	6	61	5														
1kVA	1	6.60	95	11	87	10	80	8	75	7	70	6	65	5	62	5						
1kVA	2	7.70					94	11	87	10	81	8	76	7	72	7	68	6	64	5	61	5
1kVA	3	8.80									93	11	87	10	82	8	77	8	73	7	70	6
1kVA	4	10.00													93	11	88	10	83	9	79	8

Length of Element: 110 to 200 Feet (SCRKIT150 or SCRKIT200)

Transformer Size	Tap Number	Tap Voltage	110 feet		120 feet		130 feet		140 feet		150 feet		160 feet		170 feet		180 feet		190 feet		200 feet	
			Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
1kVA	4	10.00	75	7	71	6	66	5														

Note: Wattage values are given in watts per linear foot of element.
To calculate watts per square foot, multiply watts per linear foot by the following factors:
2" spacing x .857; 4" spacing x .750; 6" spacing x .666

Wattage on these System Operating Tables are calculated using 0 feet of Cold Lead.
Please use formulas in "useful Information" section to determine exact wattage.

System Operating Tables 9" Z Mesh

Length of Element: 15 to 60 feet
(SCRKIT50-9, SCRKIT100-9)

Transformer Size	Tap Number	Tap Voltage	15 feet		20 feet		25 feet		30 feet		35 feet		40 feet		45 feet		50 feet		55 feet		60 feet	
			Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
.25kVA	1	1.68	82	9	61	5																
.25kVA	2	2.51			92	12	73	7	61	5												
.50kVA	1	3.40							83	9	71	7	62	5								
.50kVA	2	4.10									86	10	75	8	67	6	60	5				
.50kVA	3	5.00											91	11	81	9	73	7	66	6	61	5
1kVA	1	6.60																	88	11	80	9
1kVA	2	7.70																			94	12

Length of Element 65 to 100 feet
(SCRKIT100-9, SCRKIT250-9)

Transformer Size	Tap Number	Tap Voltage	65 feet		70 feet		75 feet		80 feet		85 feet		90 feet		95 feet		100 feet		105 feet		110 feet	
			Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
1kVA	1	6.60	74	8	69	7	64	6	60	5												
1kVA	2	7.70	87	10	80	9	75	8	70	7	66	6	63	5	59	5						
1kVA	3	8.80			92	12	86	10	80	9	76	8	72	7	68	6	64	6	61	6	58	5
1kVA	4	10.00							91	11	86	10	81	9	77	8	73	7	70	7	66	6

Length of Element 120 to 210 feet
(SCRKIT250-9)

Transformer Size	Tap Number	Tap Voltage	120 feet		130 feet		140 feet		150 feet		160 feet		170 feet		180 feet		190 feet		200 feet		210 feet	
			Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
1kVA	4	10.00	60	5																		

Note: Wattage Values are given in watts per linear foot of element.

To calculate watts per square foot, multiply watts per linear foot by the following factors:

2" spacing x 1.09; 4" spacing x .923; 6" spacing x .800

Wattage on these System Operating Tables are calculated using 0 feet of Cold Lead
Please use formulas in "Useful Information" section to determine exact wattage.

System Operating Tables Tuff Cable

Length of Element: 15 to 60 feet (CABKIT100)

Transformer Size	Tap Number	Tap Voltage	15 feet		20 feet		25 feet		30 feet		35 feet		40 feet		45 feet		50 feet		55 feet		60 feet	
			Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
.25kVA	1	1.68	95	11	71	6	57	4	47	3												
.25kVA	2	2.51					85	9	71	6	61	4	53	3	47	3	43	2				
.50kVA	1	3.40							96	11	82	8	72	6	64	5	58	4	52	3	48	3
.50kVA	2	4.10											87	9	77	7	69	6	63	5	58	4
.50kVA	3	5.00													94	10	85	8	77	7	71	6

Length of Element: 65 to 110 feet (CABKIT100, CABKIT200)

Transformer Size	Tap Number	Tap Voltage	65 feet		70 feet		75 feet		80 feet		85 feet		90 feet		95 feet		100 feet		105 feet		110 feet	
			Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
.50kVA	3	5.00	65	5																		
1kVA	1	6.60	86	9	80	8	75	7	70	6	66	5	62	5	59	4	56	4	53	3		
1kVA	2	7.70			93	10	87	9	82	8	77	7	73	6	69	6	65	5	62	5	59	5
1kVA	3	8.80							93	10	88	9	83	8	79	7	75	7	71	6	68	5
1kVA	4	10.00											94	10	89	9	85	8	81	8	77	7

Note: Wattage values are given in watts per linear foot of element.
To calculate watts per square foot, multiply watts per linear foot by the following factors:
2" spacing x 6; 4" spacing x 3; 6" spacing x 2;

Wattage on these System Operating Tables are calculated using 0 feet of Cold Lead and 120 VAC
Please use formulas in "Useful Information" section to determine exact wattage.