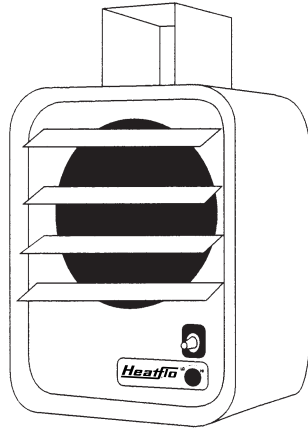




FILE #E7061



CERTIFIED  
FILE LR40859



# SUBMITTAL SHEET LUH — HORIZONTAL UNIT HEATERS

### Capacities

2.6, 4, 5, 7.5, 10 kW  
208, 240, 480, 600V  
1Ø and 3Ø  
12.5, 15, 20, 25, 35, 40, 45 kW  
208, 240, 480, 600V 3Ø only

**See Selection Chart  
Back Page**

JOB NAME: \_\_\_\_\_

LOCATION: \_\_\_\_\_

ARCHITECT: \_\_\_\_\_

ENGINEER: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_

SUBMITTED BY: \_\_\_\_\_

QUANTITY: \_\_\_\_\_

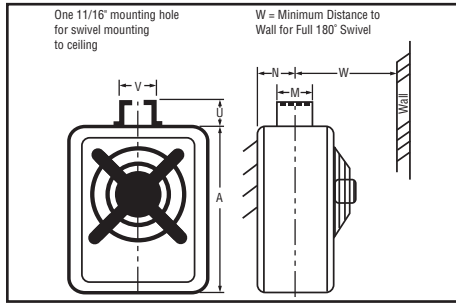
DATE: \_\_\_\_\_

QTY.	CATALOG NUMBER	TAG	HEATER			AMPS	MOTOR VOLTS	PHASE Ø	MOTOR RPM	AIR FLOW		NO. OF STAGES	BUILT-IN-CONTROLS
			KW	VOLTS	Ø					CFM	°F RISE		

ACCESSORIES  
AND  
CONTROLS

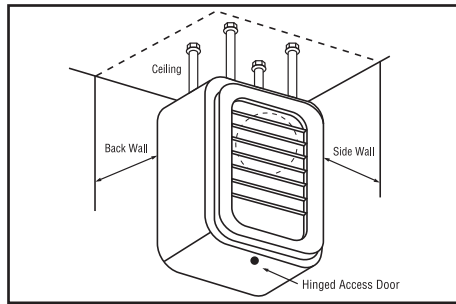
QTY.	CAT. NO.	TAG	DESCRIPTION

## Ceiling Mounted



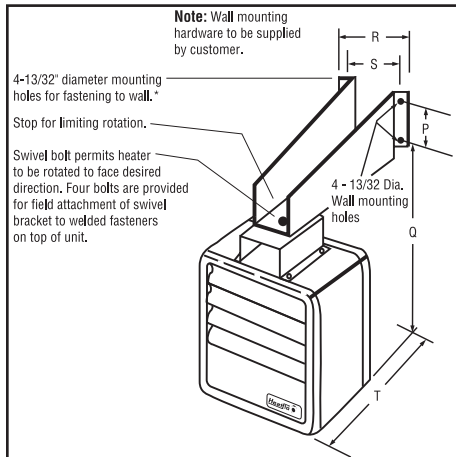
Bracket Catalog No.	Dimensions - inches						Wt. lbs.	Bracket Use With Heater
	A	M	N	U	V	W		
WUH-04A	16	6	4-7/16	4	4-3/4	10-1/2	1-3/4	LUH-02, 04, 05
WUH-05	20-1/2	8	4-3/4	6	7-1/4	16	5	LUH-07, 10, 12, 15
WUH-05	24	8	6-1/4	6	7-1/4	16	5	LUH-20, 25
WUH-06	24	13-3/4	9-5/16	6	7-1/4	21	11	LUH-30, 35, 40, 45

## Ceiling Mounted



Basic Catalog No.	Mounting Limitations		
	Back to Wall	Side to Wall	Top to Ceiling
LUH-02 Thru KUH-05	4"	6"	6"
LUH-07 Thru KUH-15	6"	6"	6"
LUH-20 and KUH-25	6"	6"	6"
LUH-30 Thru KUH-45	4"	6"	6"

## Wall Mounted Universal Bracket



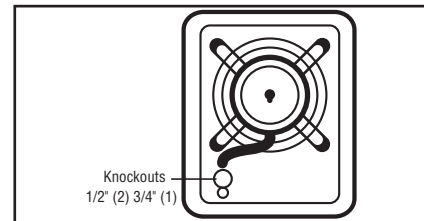
Heater	Dimensions - Inches					Wall Bracket	PCN	Stock	Wt. (lbs.)
	P	Q	R	S	T				
LUH-02 to -05	1-3/4	21-1/2	6-3/4	5-1/2	14-15/16	WUH-01A	303474	S	3
LUH-07, 10, 12, 15	2	28-7/16	9-1/2	8-3/8	22-1/4	WUH-02	300484	S	5
LUH-20, 25	2	32	9-1/2	8-3/8	22-1/4	WUH-02	300484	S	7
LUH-30, 35, 40, 45	5-1/2	28-11/16	5	3-1/2	33-1/4	WUH-03	300492	S	10

## Specifications Information

Specify kW, volts, phase, catalog number

Catalog Number	Electrical Data (60Hz)					Fan Motor				Air Fan Dia. (in.)	Temp. Veloc. CFM	Rise °F	Mounting Data		
	kW	Volts	Phase	Amps	BTU	Volts	Phase	RPM	HP				Max. Height	Hor. Throw	Wt. Lbs.
LUH-D-02-81-00	2.6	208	1	12.8	8,850	208	1	1650	1/40	9	410	21	8'	12'	35
LUH-D-02-21-00	2/2.6	208/240	1	11.1***	8,850	240	1	1650	1/40	9	410	21	8'	12'	35
LUH-D-02-71-00	2.6	277	1	9.6	8,850	277	1	1550	1/30	9	360	24	8'	12'	35
LUH-D-04-81-00	4	208	1	19.2	13,661	208	1	1650	1/40	9	410	31	8'	12'	35
LUH-D-04-83-34	4	208	3	11.2	13,661	208	1	1650	1/40	9	410	31	8'	12'	35
LUH-D-04-21-00	3/4	208/240	1	16.7***	13,661	240	1	1650	1/40	9	410	31	8'	12'	35
LUH-D-04-23-34	3/4	208/240	3	9.6***	13,661	240	1	1650	1/40	9	410	31	8'	12'	35
LUH-D-04-71-00	4	277	1	14.5	13,661	277	1	1550	1/30	9	360	35	8'	12'	35
LUH-D-04-43-00	4	480	3	4.8	13,661	480	1	1550	1/35	9	380	33	8'	12'	35
LUH-D-05-81-00	5	208	1	24.0	17,076	208	1	1650	1/40	9	410	39	8'	12'	35
LUH-D-05-83-34	5	208	3	13.8	17,076	208	1	1650	1/40	9	410	39	8'	12'	35
LUH-D-05-21-00	3.75/5	208/240	1	20.8***	17,076	240	1	1650	1/40	9	410	39	8'	12'	35
LUH-D-05-23-34	3.75/5	208/240	3	12.1***	17,076	240	1	1650	1/40	9	410	39	8'	12'	35
LUH-D-05-71-00	5	277	1	18.2	17,076	277	1	1650	1/30	9	360	44	8'	12'	35
LUH-D-05-43-00	5	480	3	6.0	17,076	480	1	1650	1/35	9	380	42	8'	12'	35
LUH-D-07-81-34	7.5	208	1	36.1	25,598	208	1	1725	1/15	12	850	28	8'	27'	55
LUH-D-07-83-34	7.5	208	3	20.9	25,598	208	1	1725	1/15	12	850	28	8'	27'	55
LUH-D-07-21-34	5.6/7.5	208/240	1	31.1***	25,598	240	1	1725	1/15	12	850	28	8'	27'	55
LUH-D-07-23-34	5.6/7.5	208/240	3	18.1***	25,598	240	1	1725	1/15	12	850	28	8'	27'	55
LUH-D-07-71-30	7.5	277	1	27.2	25,598	277	1	1550	1/15	12	750	32	8'	27'	55
LUH-D-07-43-30	7.5	480	3	9.0	25,598	480	3	1725	1/15	12	850	28	8'	27'	55
LUH-D-07-63-32	7.5	600	3	7.0	25,598	575	3	1725	1/3	12	850	28	8'	27'	55
LUH-D-10-81-34	9.7	208	1	48.0	34,130	208	1	1725	1/15	12	850	37	9'	27'	55
LUH-D-10-83-34	9.7	208	3	27.8	34,130	208	1	1725	1/15	12	850	37	9'	27'	55
LUH-D-10-21-34	7.5/10	208/240	1	41.7***	34,130	240	1	1725	1/15	12	850	37	9'	27'	55
LUH-D-10-23-34	7.5/10	208/240	3	24.0***	34,130	240	1	1725	1/15	12	850	37	9'	27'	55
LUH-D-10-43-30	10	480	3	12.0	34,130	480	3	1725	1/15	12	850	37	9'	27'	55
LUH-D-10-63-32	10	600	3	10.0	34,130	575	3	1725	1/3	12	850	37	9'	27'	55
LUH-D-12-83-34	12.5	208	3	34.8	42,663	208	1	1725	1/15	12	850	47	9'	27'	55
LUH-D-12-23-34	9.4/12.5	208/240	3	30.1***	42,663	240	1	1725	1/15	12	850	47	9'	27'	55
LUH-D-12-43-30	12.5	480	3	15.1	42,663	480	3	1725	1/15	12	850	47	9'	27'	55
LUH-D-12-63-32	12.5	600	3	12.0	42,663	575	3	1725	1/3	12	850	47	9'	27'	55
LUH-D-15-83-34	15	208	3	41.8	51,195	208	1	1725	1/15	12	850	56	10'	27'	55
LUH-D-15-23-34	11.2/15	208/240	3	36.2***	51,195	240	1	1725	1/15	12	850	56	10'	27'	55
LUH-D-15-43-30	15	480	3	18.1	51,195	480	3	1725	1/15	12	850	56	10'	27'	55
LUH-D-15-63-32	15	600	3	15.0	51,195	575	3	1725	1/3	12	850	56	10'	27'	55
LUH-D-20-23-34	15/20	208/240	3	48.0***	68,460	208	3	1725	1/3	14	1240	53	11'	31'	75
LUH-D-20-43-30	20	480	3	24.0	68,460	480	3	1725	1/3	14	1240	53	11'	31'	75
LUH-D-20-63-32	20	600	3	19.0	68,460	575	3	1725	1/3	14	1240	53	11'	31'	75
LUH-D-25-43-30	25	480	3	30.0	85,525	480	3	1725	1/3	14	1350	60	12'	31'	75
LUH-D-25-63-32	25	600	3	24.0	85,525	575	3	1725	1/3	14	1350	60	12'	31'	75
LUH-D-30-83-34	30	208	3	83.4	102,390	240	3	1725	1/3	14	1555	64	13'	46'	110
LUH-D-30-23-34	22.5/30	208/240	3	72.2***	102,390	240	3	1725	1/3	14	1555	64	13'	46'	110
LUH-D-30-43-30	30	480	3	36.1	102,390	480	3	1725	1/3	14	1555	64	13'	46'	110
LUH-D-30-63-32	30	600	3	29.0	102,390	575	3	1725	1/3	14	1555	64	13'	46'	110
LUH-D-35-23-34	26.2/35	208/240	3	84.3***	119,455	240	3	1725	1/3	14	1555	71	14'	45'	110
LUH-D-35-43-30	35	480	3	42.1	119,455	480	3	1725	1/3	14	1555	71	14'	45'	110
LUH-D-35-63-32	35	600	3	34.0	119,455	575	3	1725	1/3	14	1555	71	14'	45'	110
LUH-D-40-23-34	30/40	208/240	3	96.0***	136,520	240	3	1725	1/3	14	1555	84	15'	44'	110
LUH-D-40-43-30	40	480	3	48.0	136,520	480	3	1725	1/3	14	1555	84	15'	44'	110
LUH-D-40-63-32	40	600	3	49.0	136,520	575	3	1725	1/3	14	1555	84	15'	44'	110
LUH-D-45-43-30	45	480	3	54.1	153,585	480	3	1725	1/3	14	1555	94	17'	42'	110
LUH-D-45-63-32	45	600	3	43.0	153,585	575	3	1725	1/3	14	1555	94	17'	42'	110

\*\* Check factory for motor data  
\*\*\*208V amperage is 86% of 240V value



Knockout Sizes		
LUH-02-05	1/2" (2)	3/4" (1)
LUH-07-15	1/2" (2)	3/4" (1)
LUH-20-25	1/2" (2)	3/4" (1)
LUH-30-45	1/2" (2)	3/4", 1", 1-1/2" (1)

## ARCHITECT'S & ENGINEER'S SPECIFICATIONS

Furnish and install Chromalox type LUH Horizontal Unit Heaters with heating and air delivery capabilities as shown on the heating schedule. Mounting brackets designed for either ceiling or wall swivel mounting shall be furnished as shown on the heating schedule. The cabinet shall be 18 gauge die formed furniture grade steel. Individual adjustable louvers shall be furnished to provide desired control of discharge air. All metal surfaces of the casing shall be phosphate coated to resist corrosion, and finished in almond powder coated paint.

The electric heating bank shall be of Chromalox metal sheath *Fintube*<sup>®</sup> heating elements with furnace brazed fins for improved heat transfer. Automatic reset thermal overheat protection shall be wired for instantaneous de-energizing of built-in control of contactor holding coil in case of thermal overload. All units to include a heater contactor.

All heaters drawing more than 48 amperes shall have built-in branch circuit fusing for protection.

Motors shall be of the totally enclosed continuous fan-duty sleeve bearing type equipped with

built-in thermal overload protection. Each unit shall be equipped with a combination fan guard/motor support resiliently mounted at four points to absorb any motor vibration. Fans shall be aluminum, directly connected to fan motor, dynamically balanced and designed specifically for unit heater application.

Optional control transformers shall be available to internally develop safer low voltage for pilot-duty control circuits. Fan switching devices shall be available to independently operate the fan motor for summer circulation and winter heat recovery.

Individual optional built-in comfort control thermostat is integral or remote fan only switch and disconnect switch shall be available, for all models. All heaters shall be UL Listed, CSA Certified and meet requirements of the National Electrical Code.

### Recommended Control Options

PCN	Description	Kits			
		Thermo-stat	Fan Only	Remote Fan	Dis-connect
303001	LUH-D-02-81-34-00 208V 1P 2.6kW	LUH-TK1	ISFS-02	ESFS-42	EDS-1
303010	LUH-D-02-21-34-00 240V 1P 2.6kW	LUH-TK1	ISFS-02	ESFS-42	EDS-1
303028	LUH-D-02-71-35-00 277V 1P 2.6kW	LUH-TK1	ISFS-02	ESFS-47	EDS-1
303036	LUH-D-04-81-34-00 208V 1P 4kW	LUH-TK1	ISFS-02	ESFS-42	EDS-1
303044	LUH-D-04-83-34-00 208V 3P 4kW	LUH-TK1	ISFS-02	ESFS-42	EDS-1
303052	LUH-D-04-21-34-00 240V 1P 4kW	LUH-TK1	ISFS-02	ESFS-42	EDS-1
303060	LUH-D-04-23-34-00 240V 3P 4kW	LUH-TK1	ISFS-02	ESFS-42	EDS-1
303079	LUH-D-04-71-35-00 277V 1P 4kW	LUH-TK1	ISFS-02	ESFS-47	EDS-1
303087	LUH-D-04-43-32-00 480V 3P 4kW	LUH-TK1	ESFS-41	ESFS-41	EDS-1
303095	LUH-D-05-81-34-00 208V 1P 5kW	LUH-TK1	ISFS-02	ESFS-42	EDS-1
303108	LUH-D-05-83-34-00 208V 3P 5kW	LUH-TK1	ISFS-02	ESFS-42	EDS-1
303116	LUH-D-05-21-34-00 240V 1P 5kW	LUH-TK1	ISFS-02	ESFS-42	EDS-1
303124	LUH-D-05-23-34-00 240V 3P 5kW	LUH-TK1	ISFS-02	ESFS-42	EDS-1
303132	LUH-D-05-71-35-00 277V 1P 5kW	LUH-TK1	ISFS-02	ESFS-47	EDS-1
303140	LUH-D-05-43-32-00 480V 3P 5kW	LUH-TK1	ESFS-41	ESFS-41	EDS-1
303159	LUH-D-07-81-34-00 208V 1P 7.5kW	LUH-TK1	ISFS-02	ESFS-42	EDS-1
303167	LUH-D-07-83-34-00 208V 3P 7.5kW	LUH-TK1	ISFS-02	ESFS-42	EDS-1
303175	LUH-D-07-21-34-00 240V 1P 7.5kW	LUH-TK1	ISFS-02	ESFS-42	EDS-1
303183	LUH-D-07-23-34-00 240V 3P 7.5kW	LUH-TK1	ISFS-02	ESFS-42	EDS-1
303191	LUH-D-07-71-35-00 277V 1P 7.5kW	LUH-TK1	ISFS-02	ESFS-47	EDS-1
303204	LUH-D-07-43-32-00 480V 3P 7.5kW	LUH-TK1	ESFS-41	ESFS-41	EDS-1
303212	LUH-D-10-81-34-00 208V 1P 10kW	LUH-TK1	ISFS-02	ESFS-42	EDS-1

PCN	Description	Kits			
		Thermo-stat	Fan Only	Remote Fan	Dis-connect
303220	LUH-D-10-83-34-00 208V 3P 10kW	LUH-TK1	ISFS-02	ESFS-42	EDS-1
303239	LUH-D-10-21-34-00 240V 1P 10kW	LUH-TK1	ISFS-02	ESFS-42	EDS-1
303247	LUH-D-10-43-32-00 240V 3P 10kW	LUH-TK1	ESFS-02	ESFS-42	EDS-1
303255	LUH-D-10-43-32-00 480V 3P 10kW	LUH-TK1	ESFS-41	ESFS-41	EDS-1
303263	LUH-D-12-83-34-00 208V 3P 12.5kW	LUH-TK1	ISFS-02	ESFS-42	EDS-1
303271	LUH-D-12-23-34-00 240V 3P 12.5kW	LUH-TK1	ISFS-02	ESFS-42	EDS-1
303280	LUH-D-12-43-32-00 480V 3P 12.5kW	LUH-TK1	ESFS-41	ESFS-41	EDS-1
303298	LUH-D-15-83-34-00 208V 3P 15kW	LUH-TK1	ISFS-02	ESFS-42	EDS-1
303300	LUH-D-15-23-34-00 240V 3P 15kW	LUH-TK1	ISFS-02	ESFS-42	EDS-1
303319	LUH-D-15-43-32-00 480V 3P 15kW	LUH-TK1	ESFS-41	ESFS-41	EDS-1
303327	LUH-D-20-23-34-00 240V 3P 20kW	LUH-TK1	ISFS-02	ESFS-42A	EDS-1
303335	LUH-D-20-43-32-00 480V 3P 20kW	LUH-TK1	ESFS-41A	ESFS-41A	EDS-1
303343	LUH-D-25-43-32-00 480V 3P 25kW	LUH-TK1	ESFS-41A	ESFS-41A	EDS-1
303351	LUH-D-30-83-34-00 208V 3P 30kW	LUH-TK1	ISFS-02	ESFS-42A	N/A
303360	LUH-D-30-23-34-00 240V 3P 30kW	LUH-TK1	ISFS-02	ESFS-4A2	EDS-1
303378	LUH-D-30-43-32-00 480V 3P 30kW	LUH-TK1	ESFS-41A	ESFS-41A	EDS-1
303386	LUH-D-35-23-34-00 240V 3P 35kW	LUH-TK1	ISFS-02	ESFS-42A	N/A
303394	LUH-D-35-43-32-00 480V 3P 35kW	LUH-TK1	ESFS-41A	ESFS-41A	EDS-1
303407	LUH-D-40-23-34-00 240V 3P 40kW	LUH-TK1	ISFS-02	ESFS-42A	N/A
303415	LUH-D-40-43-32-00 480V 3P 40kW	LUH-TK1	ESFS-41A	ESFS-41A	EDS-2
303423	LUH-D-45-43-32-00 480V 3P 45kW	LUH-TK1	ESFS-41A	ESFS-41A	EDS-2

**Model Numbers**

When ordering LUH heaters, specify the model number and corresponding PCN (Product Code Number). If controls or thermostat/fan options are required, designate these options in the model number

when orderin, as shown below. Always specify voltage, phase and kW by listing them on the purchase order product specifications.

<p><b>LUH</b></p>	<p><b>05</b></p>	<p><b>21</b></p>	<p><b>34</b></p>	<p><b>41</b></p>	<p><b>1</b></p>																						
					<p><b>Disconnect Switch</b></p> <table border="1" style="border-collapse: collapse;"> <tr><td style="padding: 2px;">1</td><td style="padding: 2px;">63 Amp</td></tr> <tr><td style="padding: 2px;">2</td><td style="padding: 2px;">80 Amp</td></tr> <tr><td style="padding: 2px;">3</td><td style="padding: 2px;">100 Amp</td></tr> </table>	1	63 Amp	2	80 Amp	3	100 Amp																
1	63 Amp																										
2	80 Amp																										
3	100 Amp																										
				<p><b>Control</b></p> <table border="1" style="border-collapse: collapse;"> <tr><td style="padding: 2px;">0</td><td style="padding: 2px;">0</td><td style="padding: 2px;">No Thermostat, No Summer Fan Switch</td></tr> <tr><td style="padding: 2px;">4</td><td style="padding: 2px;">0</td><td style="padding: 2px;">Internal Thermostat Only</td></tr> <tr><td style="padding: 2px;">4</td><td style="padding: 2px;">1</td><td style="padding: 2px;">Internal Therm. and Internal Sum. Fan Sw.</td></tr> <tr><td style="padding: 2px;">4</td><td style="padding: 2px;">2</td><td style="padding: 2px;">External Sum. Fan Sw. Only (Not 480V)</td></tr> <tr><td style="padding: 2px;">4</td><td style="padding: 2px;">3</td><td style="padding: 2px;">External Sum. Fan Sw. and Fan Relay (All Volts)</td></tr> <tr><td style="padding: 2px;">4</td><td style="padding: 2px;">4</td><td style="padding: 2px;">Rem. Fan Sw. and Internal Therm. (Not 480V)</td></tr> <tr><td style="padding: 2px;">4</td><td style="padding: 2px;">5</td><td style="padding: 2px;">Rem. Fan. Sw., Fan Relay and Int. Therm. (All Volts)</td></tr> </table>	0	0	No Thermostat, No Summer Fan Switch	4	0	Internal Thermostat Only	4	1	Internal Therm. and Internal Sum. Fan Sw.	4	2	External Sum. Fan Sw. Only (Not 480V)	4	3	External Sum. Fan Sw. and Fan Relay (All Volts)	4	4	Rem. Fan Sw. and Internal Therm. (Not 480V)	4	5	Rem. Fan. Sw., Fan Relay and Int. Therm. (All Volts)		
0	0	No Thermostat, No Summer Fan Switch																									
4	0	Internal Thermostat Only																									
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4	4	Rem. Fan Sw. and Internal Therm. (Not 480V)																									
4	5	Rem. Fan. Sw., Fan Relay and Int. Therm. (All Volts)																									
				<p><b>Control</b></p> <table border="1" style="border-collapse: collapse;"> <tr><td style="padding: 2px;">0</td><td style="padding: 2px;">0</td><td style="padding: 2px;">No Contactor(s)</td></tr> <tr><td style="padding: 2px;">3</td><td style="padding: 2px;">0</td><td style="padding: 2px;">24V Control Internal Transformer</td></tr> <tr><td style="padding: 2px;">3</td><td style="padding: 2px;">1</td><td style="padding: 2px;">24V Control Externally Supplied</td></tr> <tr><td style="padding: 2px;">3</td><td style="padding: 2px;">2</td><td style="padding: 2px;">120V Control Internal Transformer</td></tr> <tr><td style="padding: 2px;">3</td><td style="padding: 2px;">3</td><td style="padding: 2px;">120V Control Externally Supplied</td></tr> <tr><td style="padding: 2px;">3</td><td style="padding: 2px;">4</td><td style="padding: 2px;">208/240V Control Internally Supplied, No Transformer</td></tr> <tr><td style="padding: 2px;">3</td><td style="padding: 2px;">5</td><td style="padding: 2px;">277V Control Internally Supplied</td></tr> </table>	0	0	No Contactor(s)	3	0	24V Control Internal Transformer	3	1	24V Control Externally Supplied	3	2	120V Control Internal Transformer	3	3	120V Control Externally Supplied	3	4	208/240V Control Internally Supplied, No Transformer	3	5	277V Control Internally Supplied		
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3	5	277V Control Internally Supplied																									
		<p><b>Heater Voltage and Phase</b></p> <p><b>81</b> = 208V, 1 Phase      <b>71</b> = 277V, 1 Phase</p> <p><b>83</b> = 208V, 3 Phase      <b>43</b> = 480V, 3 Phase</p> <p><b>21</b> = 240V, 1 Phase      <b>63</b> = 600V, 3 Phase</p> <p><b>23</b> = 240V, 3 Phase</p>																									
	<p><b>Heating Elements</b></p> <p><b>02</b> = 2.6 kW      <b>20</b> = 20.0 kW</p> <p><b>04</b> = 4.0 kW      <b>25</b> = 25.0 kW</p> <p><b>05</b> = 5.0 kW      <b>30</b> = 30.0 kW</p> <p><b>07</b> = 7.5 kW      <b>35</b> = 35.0 kW</p> <p><b>10</b> = 10.0 kW      <b>40</b> = 40.0 kW</p> <p><b>12</b> = 12.5 kW      <b>45</b> = 45.0 kW</p> <p><b>15</b> = 15.0 kW</p>																										

**Chromalox Horizontal Unit Heater**