

# COMMERCIAL ELECTRIC WATER HEATERS

## CUSTOM HI-POWER®



150 TO 2500 GALLONS STORAGE  
VERTICAL AND HORIZONTAL  
ENERGY SAVING PERFORMANCE

DESIGNED ★ ENGINEERED ★ ASSEMBLED

# USA

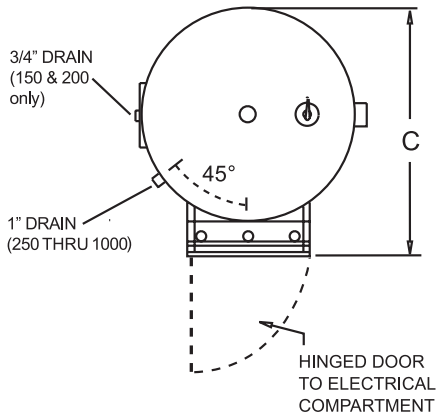
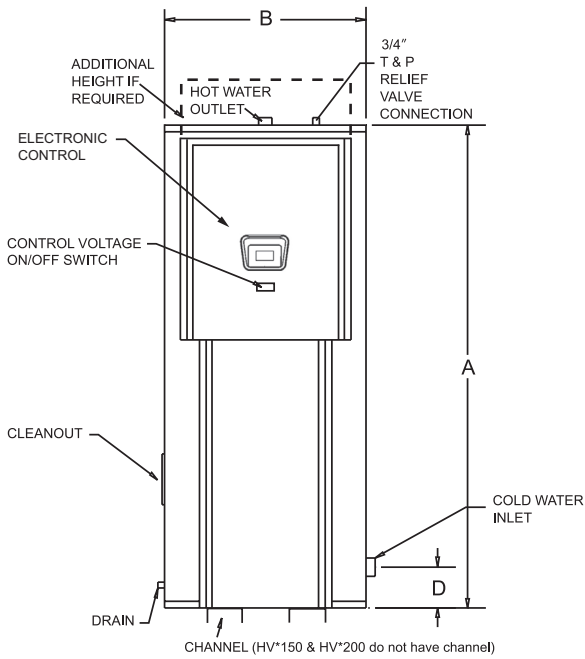


# Lochinvar®

HIGH EFFICIENCY BOILERS & WATER HEATERS

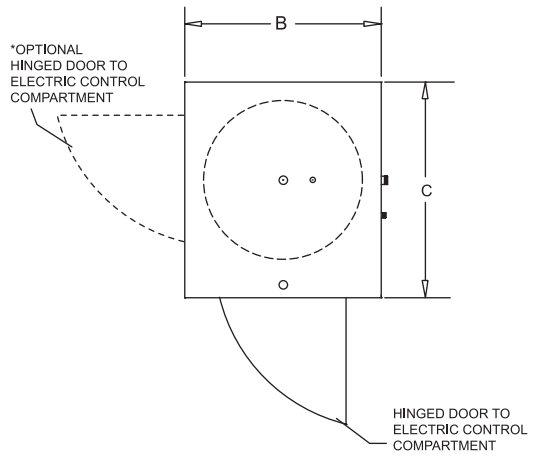
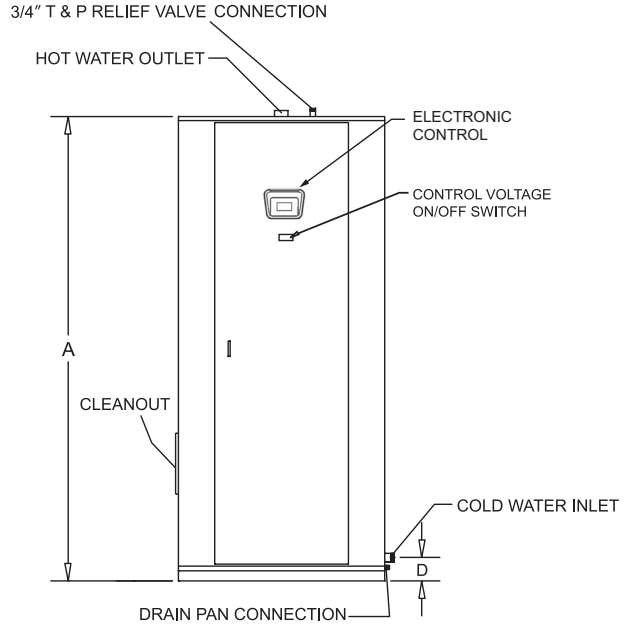
# DIMENSIONS

## VERTICAL ROUND MODELS 150-1000



TOP VIEW

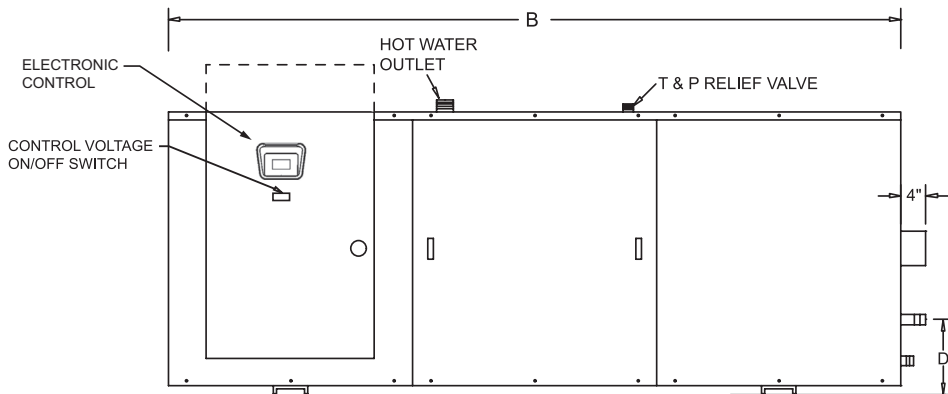
## VERTICAL SQUARE MODELS 1250-2500



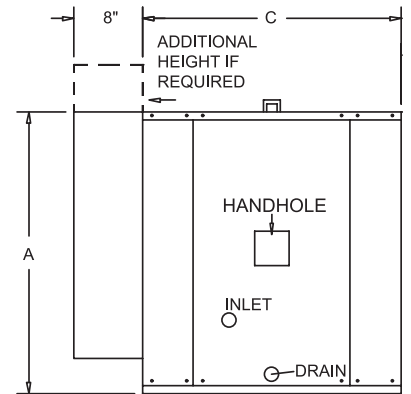
\*An oversized control panel may be required on models with inputs above 72 kW. An oversized control panel may increase the width and depth of the square jacket by up to 2".

TOP VIEW

## HORIZONTAL MODELS



A & D ELEVATION FROM FINISHED FLOOR



END VIEW

EXTRA PANEL BOX MAY BE NECESSARY FOR INPUTS HIGHER THAN 72KW. CONSULT FACTORY

## SPECIFICATIONS

Model	Max. KW	Gal. Cap.	A	B	C	D	Water Conn.		Shipping Weight
Vertical Round			Inlet		Outlet		(.lbs)		
CHV*kW-150	144	150	65-1/2"	32"	38-3/4"	7-3/4"	1-1/2"	1-1/2"	650
CHV*kW-200	180	200	78"	32"	38-3/4"	7-3/4"	1-1/2"	1-1/2"	750
CHV*kW-250	216	250	92"	34"	40-3/4"	19-1/2"	1-1/2"	1-1/2"	1,165
CHV*kW-300	270	300	80"	40"	46-3/4"	21"	2"	2"	1,350
CHV*kW-400	324	400	80"	46"	52-3/4"	22-1/2"	2"	2"	1,590
CHV*kW-500	396	500	92"	46"	52-3/4"	22-1/2"	2"	2"	1,700
CHV*kW-600	396	600	92"	52"	60-3/4"	24-1/2"	2-1/2"	2-1/2"	2,010
CHV*kW-800	396	750	104"	52"	60-3/4"	24-1/2"	2-1/2"	2-1/2"	2,450
CHV*kW-1000	396	950	128"	52"	60-3/4"	24-1/2"	2-1/2"	2-1/2"	3,160

On models 250 and up dimensions include channel iron base (not shown).

**NOTES:** Vertical Round models above 90 kW at 208V or 240V and 162 kW at 380V, 415V, 480V, or 600V exceed the capacity of a single control box and may require multiple control panels and/or square jacket construction. Consult the factory for specific details and optional construction. Vertical Square construction is available as an option for models that exceed the listed kW limits.

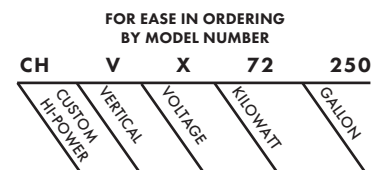
Control panel height on Vertical Round models may exceed tank height – consult factory for specific heights on models with inputs above 72 kW.

Vertical Square									
CHV*kW-1250	900	1,250	132-1/2"	64-1/2"	64-1/2"	23-1/4"	3"	3"	3,560
CHV*kW-1500	900	1,500	128-1/2"	70-1/2"	70-1/2"	25-1/4"	3"	3"	4,120
CHV*kW-2000	900	2,000	124-1/2"	78-1/2"	78-1/2"	27"	3"	3"	4,350
CHV*kW-2500	900	2,500	146-1/2"	82-1/2"	82-1/2"	29"	3"	3"	5,750

Horizontal Square									
CHH*kW-150	144	150	37"	68-1/2"	34-1/4"	12"	2"	2"	1,180
CHH*kW-200	180	200	37"	78"	34-1/4"	12"	2"	2"	1,370
CHH*kW-250	225	250	39"	90-1/4"	36-1/4"	13"	2"	2"	1,450
CHH*kW-300	270	300	45"	78-1/4"	42-1/4"	14-3/4"	2"	2"	1,530
CHH*kW-400	324	400	52"	78-1/4"	48-1/4"	16"	2"	2"	1,750
CHH*kW-500	450	500	52"	90-3/4"	48-1/4"	16"	2"	2"	1,860
CHH*kW-600	540	600	58"	90-3/4"	54-1/4"	13-1/2"	2-1/2"	2"	2,340
CHH*kW-800	720	750	58"	102-1/4"	54-1/4"	13-1/2"	2-1/2"	2"	2,850
CHH*kW-1000	900	950	58"	126-1/4"	54-1/4"	13-1/2"	2-1/2"	2"	3,040
CHH*kW-1250	900	1,250	64"	130-1/4"	60-1/4"	15"	3"	3"	3,750
CHH*kW-1500	900	1,500	70"	126-1/4"	66-1/4"	16"	3"	3"	4,340
CHH*kW-2000	900	2,000	82"	123-1/4"	78-1/4"	14"	3"	3"	4,580
CHH*kW-2500	900	2,500	82"	144-1/4"	78-1/4"	16-1/2"	3"	3"	6,060

\* = Voltage  
kW = Kilowatt

VOLTAGE SCHEDULE	
J — 208V 1ø	Y — 380V 3ø
K — 208V 3ø	Q — 400V 3ø
A — 240V 1ø	Z — 415V 3ø
B — 240V 3ø	X — 480V 3ø
W — 277V 1ø	N — 600V 3ø



This unit is a Custom Hi-Power, Vertical, 480 Volt, Three Phase, 72 Kilowatt, 250 gallon water heater.

## STANDARD FEATURES

Glass Lined Steel Tank  
 ASME Construction and National Board Listed  
 125 psi Working Pressure  
 Approved for 180°F Temperature Operation  
 Incoloy Heating Elements  
 Internal Fusing (above 120 amps)  
 Enamel Finished Galvanized Steel Jacket  
 Magnesium Tank Saver Anodes  
 Immersion Thermostat  
 Advanced Electronic Control  
 Control Voltage On/Off Switch w/ Pilot Light  
 Low Water Cut-Off  
 BMS Enable/Disable Contacts  
 High Limit w/Manual Reset  
 Full Length Hinged Doors with Key Lock  
 Terminal Block Connections  
 ASME Temperature and Pressure Relief Valve (Supplied but not installed)  
 Channel Iron Skid Base (Except 150 & 200 gallon round)  
 All models meet or exceed ASHRAE energy efficiency standards  
 Handhole/Cleanout  
 UL Listed (U.S. and Canada)

Safety Drain Pan (Square Models)  
 3 Year Limited Tank Warranty  
 1 Year Limited Parts Warranty

## OPTIONAL EQUIPMENT

Pilot Lights and Switches  
 High and Low Water Pressure Switches  
 Alarm Bell  
 Lifting Lugs  
 Safety Door Interlock  
 Temperature and Pressure Gauges  
 Manway (250 Gallon and Larger Only)  
 150 psi or 160 psi Working Pressure  
 Seismic Attachment Points (250 Gallon and Larger Only)(customer must provide seismic zone or city and state of install)  
 ICC Control, BACnet or Modbus communication, available in Serial RS-485 connection or Ethernet connection

## FIELD INSTALLED OPTIONS

Shunt Trip Disconnect

## STANDARD kW INPUT & AMPERAGE

kW Input	GPH@ 100°F Rise	Btu/hr Equivalent	Max. No. of Elements	No. of Control Steps	kW Per Element	No. of Contactors 240/480V	Suggested Modulating Control Steps 240/480V	Amperage Draw				
								Single Phase 208V	240V	Three Phase 208V	240V	480V
15	62	51,180	1	1	15	1/1	-	72	63	42	36	18
18	74	61,416	1	1	18	2/1	-	87	75	50	44	22
24	100	81,888	2	1	12	4/1	-	115	100	67	58	29
30	123	102,360	2	1	15	2/2	-	144	125	83	72	36
36	148	122,832	2	1	18	4/2	4/2	174	150	100	87	44
45	185	153,540	3	1	15	3/2	3/3	216	188	125	108	54
54	221	184,248	3	1	18	6/2	3/3	260	225	150	130	65
60	246	204,720	4	2	15	4/4	4/3	289	250	167	144	72
72	295	245,664	4	2	18	8/4	4/4	-	-	200	174	87
90	369	307,080	5	2	18	6/3	3/3	-	-	250	217	109
108	443	368,496	6	2	18	12/4	4/4	-	-	300	260	130
120	492	409,440	8	3	15	8/4	4/4	-	-	333	289	144
135	554	460,620	9	3	15	9/6	4/4	-	-	375	325	162
144	590	491,328	8	3	18	16/8	4/4	-	-	400	347	174
162	664	552,744	9	3	18	18/6	8/6	-	-	450	389	195
180	738	614,160	10	4	18	20/10	8/8	-	-	500	434	217
216	886	736,992	12	4	18	24/8	8/8	-	-	600	519	260
234	959	798,408	13	5	18	26/13	8/8	-	-	650	563	282
252	1,033	859,824	14	5	18	28/14	8/8	-	-	700	607	304
270	1,107	921,240	15	5	18	30/10	12/10	-	-	750	649	325
288	1,181	982,656	16	6	18	32/16	12/12	-	-	800	692	347
306	1,255	1,044,072	17	6	18	34/17	12/12	-	-	850	736	368
324	1,328	1,105,488	18	6	18	36/12	12/12	-	-	900	780	390
342	1,402	1,166,904	19	7	18	38/19	12/12	-	-	950	822	412
360	1,476	1,228,320	20	7	18	40/20	12/12	-	-	1,000	865	435
378	1,550	1,289,736	21	7	18	42/14	14/14	-	-	1,050	909	455
396	1,624	1,351,152	22	8	18	44/22	15/16	-	-	1,100	952	477
414	1,697	1,412,568	23	8	18	46/23	16/16	-	-	1,150	995	498
432	1,771	1,473,984	24	8	18	48/16	16/16	-	-	1,200	1,040	520

For technical information call 800-722-2101. Lochinvar, LLC reserves the right to make product changes or improvements without prior notice.

For KW above 432 or other voltages please consult factory



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DESIGNED ★ ENGINEERED ★ ASSEMBLED

