



## Compact ASME Hi-Power Commercial Electric Water Heaters

### Commercial Electric Water Heaters 5 to 120 Gallon - ASME Construction

#### Outstanding Features

- **Advanced Electronic Controls** – LCD readout displays operational and diagnostic information in words, not codes. Features Low Water Cutoff, Enable / Disable Contacts, Element Sensing and Night Setback
- **Glass-Lined Steel Tank**–The durable glass lining is fused to the tank at 1600°F to assure lasting protection against rust and corrosion while providing clean, clear hot water. ASME construction – 150 psi working pressure for 5 thru 50 gallon models and 125 psi working pressure for 65 thru 120 gallon models.
- **Powered Anode**–Combined magnesium anode and powered anode provide extra protection from corrosion for long trouble-free service.
- **Heating Element**–Incoloy sheathed immersion type heats water faster, more economically. Low watt density, (75 watts/in<sup>2</sup>)
- **Energy Cut-Off**–Shuts off electrical power to the elements should the water temperature in the tank reach 205° F.
- **ASME Temperature and Pressure Relief Valve**– Factory installed.
- **Non-CFC Foam Insulation**–Superior material formulation provides uniform tank coverage with a thick blanket of insulating foam. This non-CFC polyurethane closed cell foam minimizes standby losses and maximizes heat retention.
- **Hinged Access Door**–Provides easy access to electrical controls.
- **Immersion Thermostats with Contactors**–Thermostat settings range from 80°-180°F and can be adjusted to “off” position.
- **3 Year Limited Tank Warranty, 1-Year Limited Parts Warranty**  
– See warranty for details



#### Optional Equipment

- 150 PSI Working Pressure (65-120 Models)
- High and/or Low Water Pressure Limit Switches
- Alarm Horn
- Temperature & Pressure Gauge
- 4" x 6" Handhole Cleanout
- Pilot Lights & Switches
- Modulating Control

**Meets ASHRAE Energy Efficiency Standards**

## Dimensions & Specifications

Model Number	Gallon Capacity	Maximum kW	A	B	C	D	Water Conn.	Shipping Weight
CH(X)kW 005A	5	3	22"	16"	24"	4-1/4"	3/4"	82
CH(X)kW 010A	10	6	28-1/4"	18"	26"	5-1/4"	3/4"	116
CH(X)kW 020A	20	18	31-3/4"	22"	28"	5-3/4"	3/4"	145
CH(X)kW 030A	30	24	43-1/4"	22"	28"	5-3/4"	3/4"	218
CH(X)kW 040A	40	36	54-3/4"	22"	28"	5-3/4"	3/4"	245
CH(X)kW 050A	50	90	66-1/4"	22"	28"	5-3/4"	3/4"	291
CH(X)kW 065A	65	90	57-1/4"	26-1/2"	32-1/2"	11-1/2"	1-1/4"	344
CH(X)kW 080A	80	90	58-1/4"	28"	35"	12-1/2"	1-1/4"	406
CH(X)kW 100A	100	90	70-1/4"	28"	35"	12-1/2"	1-1/4"	419
CH(X)kW 120A	120	90	70-1/4"	30-1/4"	37"	12-1/2"	1-1/4"	453

NOTE: Allow 24" clearance from front access panel for service and maintenance.

### VOLTAGE SCHEDULE

T - 208V / 1 or 3 PH	3 to 24 kW	W - 277V / 1 PH	3 to 90 kW
J - 208V / 1 PH	30 to 45 kW	V - 480V / 1 PH	3 to 90 kW
K - 208V / 3 PH	30 to 90 kW	X - 480V / 3 PH	3 to 90 kW
P - 240V / 1 or 3 PH	3 to 54 kW	Y - 380V / 3 PH	3 to 90 kW
A - 240V / 1 PH	60 kW	Z - 415V / 3 PH	3 to 90 kW
B - 240V / 3 PH	60 to 90 kW	M - 575V / 3 PH	3 to 90 kW
		N - 600V / 3 PH	3 to 90 kW

### FOR EASE IN ORDERING BY MODEL NUMBER

C H X 36 040 A



This heater is a Compact Hi-Power, 480 vlt, 3 phase, 36 kW, 40 gallon water heater with ASME construction.

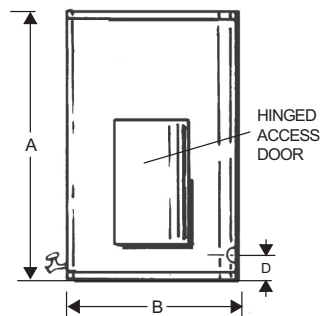
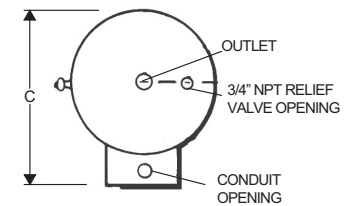
## Amperage Table

kW	SINGLE PHASE				THREE PHASE		
	208V	240V	277V	480V	208V	240V	480V
3	14.4	12.5	10.8	6.3	8.3	7.2	3.6
6	28.8	25.0	21.7	12.5	16.7	14.4	7.2
9	43.3	37.5	32.5	18.8	25.0	21.7	10.8
12	57.7	50.0	43.3	25.0	33.3	28.9	14.4
15	72.1	62.5	54.2	31.3	41.6	36.1	18.0
18	86.5	75.0	65.0	37.5	50.0	43.3	21.7
24	115.4	100.0	86.6	50.0	66.6	57.7	28.9
30	144.2	125.0	108.3	62.5	83.3	72.2	36.1
36	173.1	150.0	130.0	75.0	99.9	86.6	43.3
45	216.3	187.5	162.5	93.8	124.9	108.3	54.1
54	N/A	225.0	194.9	112.5	149.9	129.9	65.0
60	N/A	250.0	216.6	125.0	166.5	144.3	72.2
75	N/A	N/A	N/A	156.3	208.2	180.4	90.2
90	N/A	N/A	N/A	187.5	249.8	216.5	108.3

Note: All ASME models with an amp draw in excess of 120 amps receive factory installed internal fusing.

## GPH Recovery Rate

INPUT kW	Btu/hr	Recovery Rate ( GPH @ °F Rise)											
		30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F	110°F	120°F	130°F	140°F
3	10,239	41	31	34	20	17	15	13	12	11	10	10	9
6	20,478	82	62	49	41	35	31	27	25	22	21	19	18
9	30,717	123	92	74	62	53	46	41	37	34	31	28	26
12	40,956	164	123	98	82	70	61	55	49	45	41	38	35
15	51,195	205	154	123	102	88	77	68	61	56	51	47	44
18	61,434	246	184	148	123	105	92	82	74	67	62	57	53
24	81,912	328	246	197	164	140	123	109	98	90	82	76	70
30	102,390	410	308	246	205	176	154	137	123	112	103	95	88
36	122,868	492	369	295	246	211	184	164	148	134	123	113	105
45	153,585	615	461	369	307	263	230	205	184	168	154	142	132
54	184,302	738	554	443	359	316	277	246	221	201	185	170	158
60	204,780	819	615	492	410	351	307	273	246	223	205	189	176
75	255,975	1,025	768	615	512	439	384	341	307	279	256	236	219
90	307,710	1,229	922	738	615	527	461	410	369	335	307	284	263



Note: Outlet connection for 5 thru 50 models 3/4" NPT. Outlet connection for 65 thru 120 models 1-1/4" NPT.



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