

Tankless Electric Booster Heater

Available up to 54 KW in Single or Three Phase Voltages

Features

■ Heavy Duty Construction

- ✓ Constructed with high grade materials to ensure long operating life
- ✓ Turn-Key package is simple to specify and easy to install and operate
- ✓ Factory wired electrical controls provide trouble-free installation and operation

■ Advanced Design

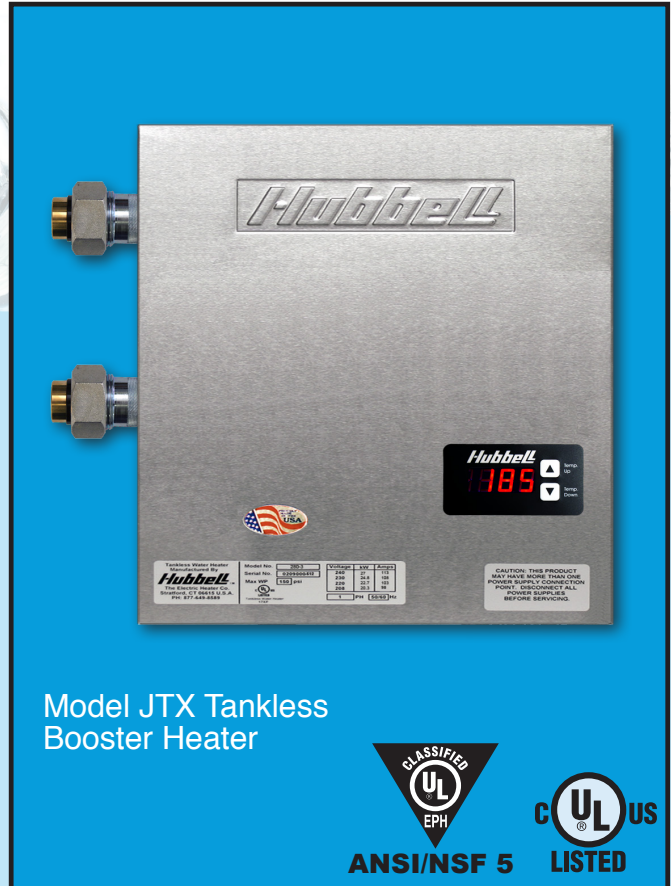
- ✓ Engineered specifically for use in commercial kitchens
- ✓ Wide selection of sizes to meet the needs of all dishmachine manufacturers
- ✓ Compact wall mount design saves precious floor space
- ✓ Digital display provides clear indication of set point temperature and fault conditions

■ High Efficiency

- ✓ On demand heating provides environmentally friendly low cost operation
- ✓ Instantaneous design essentially eliminates stand-by heat loss and significantly lowers operating costs compared to traditional tank type booster heaters
- ✓ Over 98% efficient and saves over 2300 kW hours per year compared to tank type booster heaters



- ✓ **SAVE ENERGY**
- ✓ **SAVE SPACE**
- ✓ **SAVE MONEY**



Model JTX Tankless Booster Heater

The Model JTX Tankless is a compact electric tankless booster heater easily installed and operated for sanitizing rinse use.

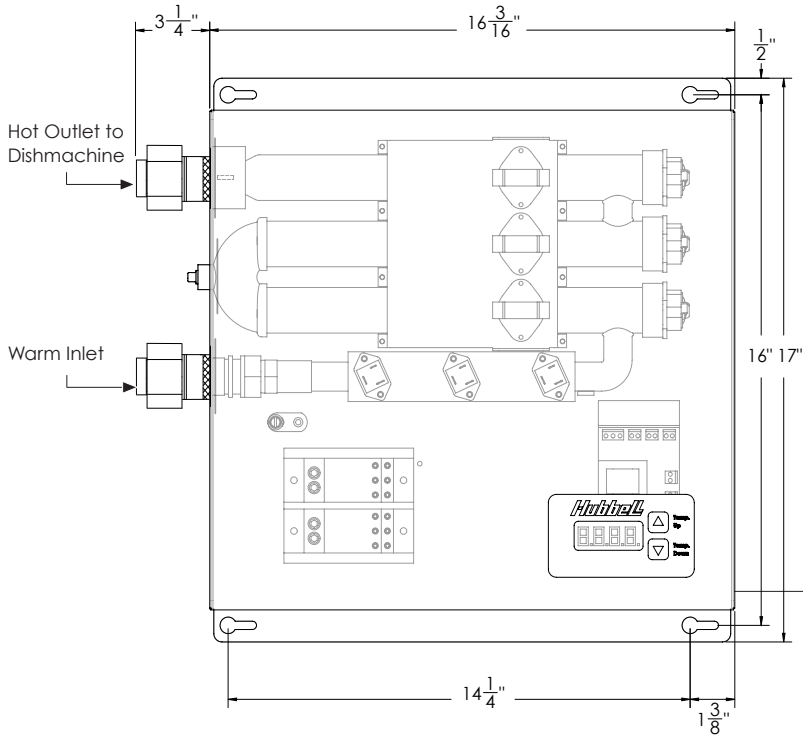
Tankless Booster Heater For Commercial Kitchen Use

The Hubbell model JTX Tankless electric booster heater is a highly reliable and easily maintained heater designed for operation in your commercial kitchen. The Hubbell JTX Tankless heater is compact, extremely efficient, takes up no floor space, and reduces operating costs. Hubbell's vast experience, meticulous engineering,

and advanced technology ensure that you can rely on the model JTX for your sanitizing rinse needs. The Hubbell JTX Tankless Booster Heater is the right choice for your booster heating requirements, as you will be providing your customer with a quality product that is long lasting, trouble-free, and energy efficient.

Outline Dimensions and Model Selection

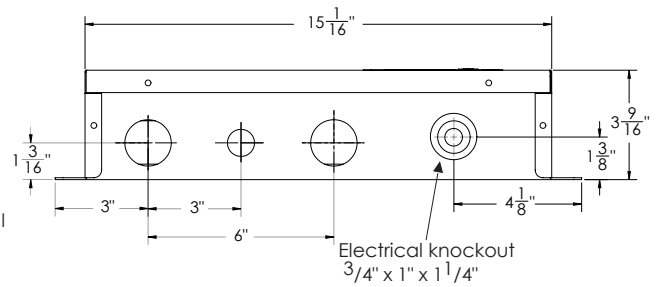
8-27 KW Models (2 and 3 Element)



Base Model No.	KW	BTU/Hr Rating	KW Selection					
			3 Phase Voltages			1 Phase Voltages		
			208V	240V	480V	600V	208V	240V
JTX008	8	27,296					✓ (2)	
JTX011	11	37,532	✓ (3)					✓ (2)
JTX012	12	40,944	✓ (3)				✓ (2)	
JTX014	14	47,768		✓ (3)			✓ (2)	✓ (2)
JTX016	16	54,592	✓ (3)	✓ (3)			✓ (3)	✓ (2)
JTX018	18	61,416	✓ (3)		✓ (3)		✓ (3)	✓ (2)
JTX020	20	68,240	✓ (3)				✓ (3)	
JTX021	21	71,652		✓ (3)	✓ (3)	✓ (3)		✓ (3)
JTX024	24	81,888		✓ (3)	✓ (3)	✓ (3)		✓ (3)
JTX027	27	91,124		✓ (3)	✓ (3)	✓ (3)		✓ (3)

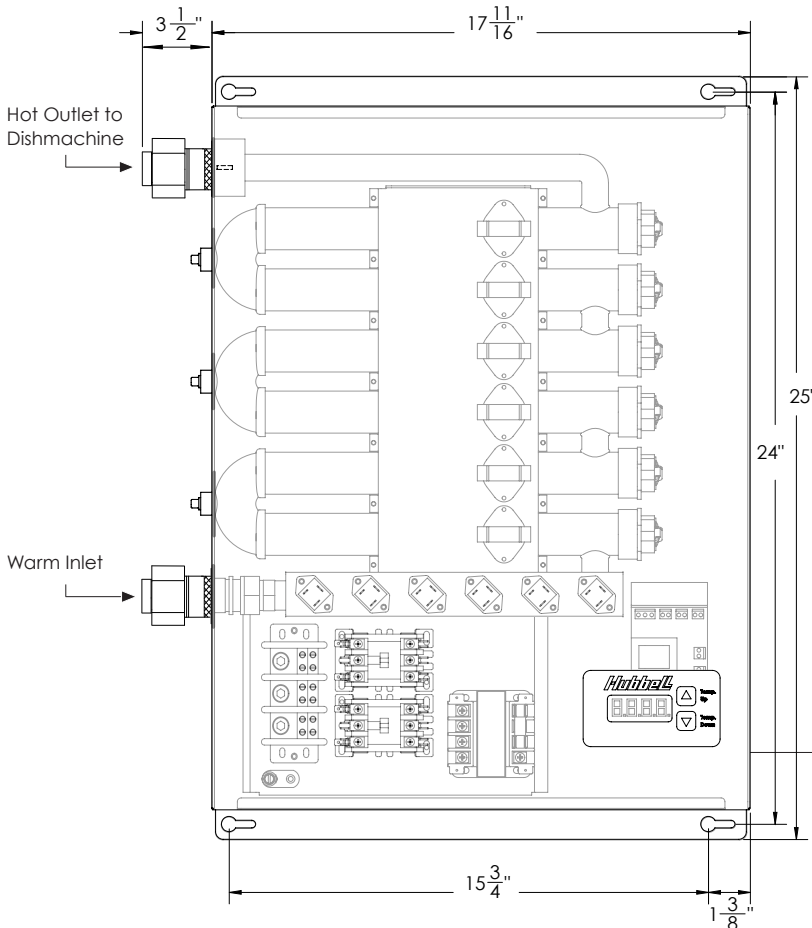
Note: Chart indicates three element (3) and two element (2) model types

Side View



Pressure Drop: 3 psi @ 8 GPM Dry Weight: 21 Lbs Wet Weight: 21.5 Lbs Shipping Weight: 24 Lbs

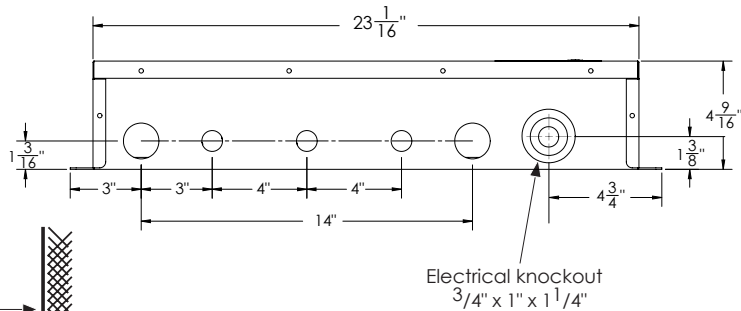
24-54 KW Models (6 Element)



Base Model No.	KW	BTU/Hr Rating	KW Selection					
			3 Phase Voltages			1 Phase Voltages		
			208V	240V	480V	600V	208V	240V
JTX024	24	68,240	✓ (6)				✓ (6)	
JTX031	31	81,888	✓ (6)				✓ (6)	
JTX033	33	105,772		✓ (6)				✓ (6)
JTX036	36	112,596	✓ (6)		✓ (6)		✓ (6)	
JTX040	40	122,832	✓ (6)				✓ (6)	
JTX042	42	136,480		✓ (6)	✓ (6)	✓ (6)		✓ (6)
JTX048	48	143,304	✓ (6)	✓ (6)	✓ (6)	✓ (6)	✓ (6)	✓ (6)
JTX054	54	163,776	✓ (6)	✓ (6)	✓ (6)	✓ (6)	✓ (6)	✓ (6)

Note: All models shown in this chart are six element (6) model types

Side View



Pressure Drop: 4 psi @ 8 GPM Dry Weight: 38 Lbs Wet Weight: 39 Lbs Shipping Weight: 42 Lbs

Heating Capacity and Amperage Chart

KW Rating	Heating Capability in GPH at °F Temperature Rise (°FΔT)										MAX Amps (at 100% heater output)					
	20° ΔT	30° ΔT	40° ΔT	60° ΔT	70° ΔT	80° ΔT	100° ΔT	110° ΔT	120° ΔT	140° ΔT	3 Phase Voltages				1 Phase Voltages	
											208V	240V	480V	600V	208V	240V
8	164	109	82	55	47	41	33	30	27	23	–	–	–	–	38	–
11	225	150	113	75	64	56	45	41	38	32	31	–	–	–	–	46
12	246	164	123	82	70	61	49	45	41	35	33	–	–	–	58	–
14	287	191	143	96	82	72	57	52	48	41	–	34	–	–	67	58
16	328	218	164	109	94	82	66	60	55	47	44	39	–	–	77	67
18	368	246	184	123	105	92	74	67	61	53	50	–	22	–	87	75
20	409	273	205	136	117	102	81	74	68	58	56	–	–	–	96	–
21	430	287	215	143	123	107	86	78	72	61	56	–	–	–	96	–
24	491	328	246	164	140	123	98	89	82	70	67	58	29	23	115	100
27	553	368	276	184	158	138	111	100	92	79	–	65	33	26	–	113
31	635	423	317	212	181	159	127	115	106	91	86	–	–	–	149	–
33	676	450	338	225	193	169	135	123	113	97	–	79	–	–	–	–
36	737	491	368	246	211	184	147	134	123	105	100	–	43	–	173	–
40	819	546	409	273	234	205	164	149	136	117	111	–	–	–	192	–
42	860	573	430	287	246	215	172	156	143	123	–	101	51	40	–	175
48	983	655	491	328	281	246	197	179	164	140	133	116	58	46	230	200
54	1105	737	553	368	316	276	221	201	184	158	–	130	65	52	–	225

Note:

- Alternate voltages including 277, 380, 415, 440 and 575 volt available. Please consult factory for exact KW availability in these voltages.
- Unshaded flows specify Base Model JTX, shaded flows must specify Base Model JHX due to flows exceeding 8 GPM.

Sizing Formulas

Step 1 Solve for the unknown using formulas below.

Variables To Solve For:

KW Requirement:

$$\text{_____ GPH} \times \text{_____ } ^\circ\text{F}\Delta\text{T} \times 0.00244 = \text{_____ KW}$$

Temperature Rise:

$$\text{_____ KW} \times 410 \div \text{_____ GPH} = \text{_____ } ^\circ\text{F}\Delta\text{T}$$

Flow Rate:

$$\text{_____ KW} \times 410 \div \text{_____ } ^\circ\text{F}\Delta\text{T} = \text{_____ GPH}$$

Step 2

Choose the Tankless model with the KW rating which meets the peak demand (GPH) and required temperature rise (°FΔT) for your dishmachine.

Step 3

Choose the voltage and phase power supply available. Note the maximum amperage draw of the unit and verify availability.

Voltage De-Rating Factors

Rated Voltage	Applied Voltage	De-Rating Factor
600 V	575 V	92%
600 V	550 V	84%
480 V	460 V	92%
480 V	440 V	84%
240 V	230 V	92%
240 V	220 V	84%
240 V	208 V	75%

When the actual supply voltage (applied voltage) is different than the design voltage (rated voltage) the resulting KW output will be affected. Please see the chart for typical voltage de-rating factors, or use the following formula.

$$\frac{\text{Applied Voltage}^2}{\text{Rated Voltage}^2} \times \text{Rated KW} = \text{KW output at applied voltage}$$

Metric Conversions

- Liters x 0.2641 = Gallons
- Gallons x 3.79 = Liters
- Gallons x 0.003785 = m³
- m³ x 264.2 = Gallons
- 1°C ΔT = 1.8°F ΔT

- °F = (°C x 1.8) + 32
- °C = (°F - 32) x 0.556
- psi x 0.06896 = Bar
- Bar x 14.5 = psi
- psi x 6.86 = kPa

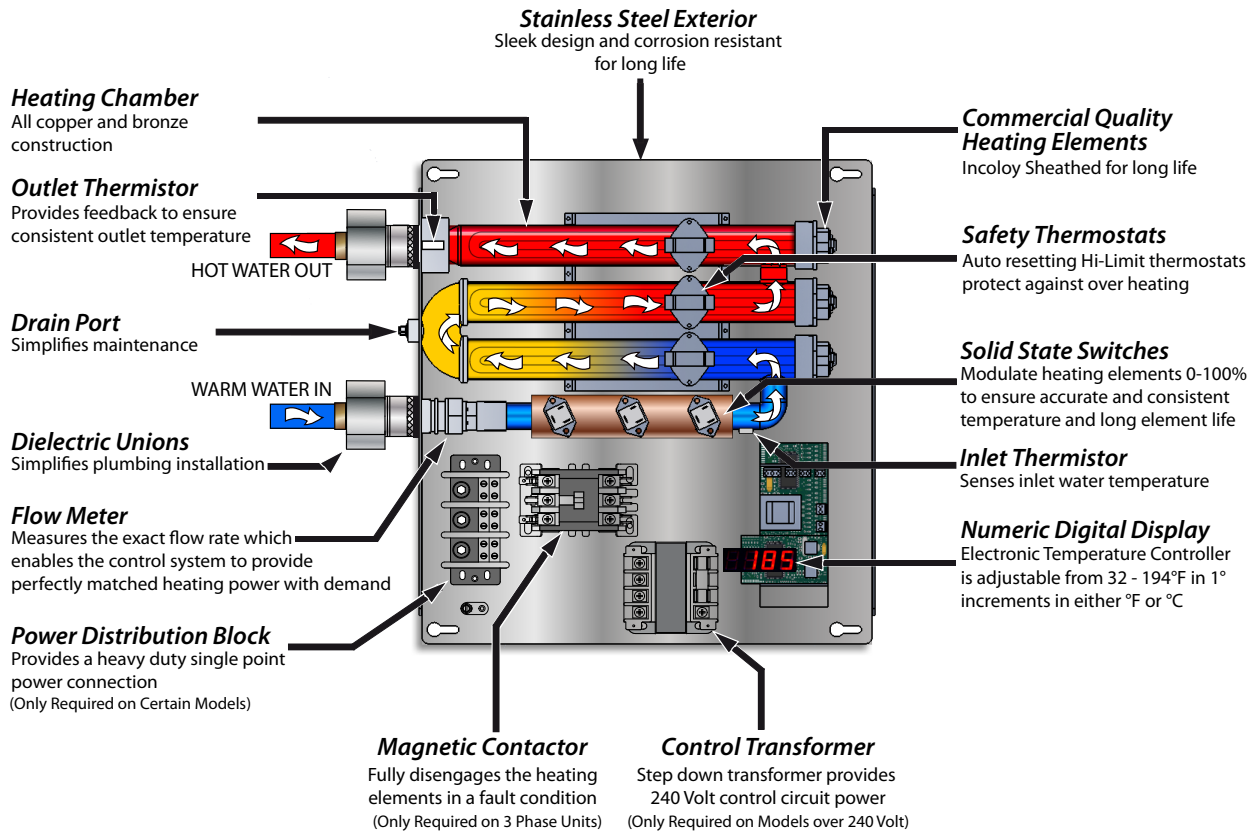
- kPa x 0.1456 = psi
- Kg/cm² x 14.28 = psi
- psi x 0.07 = Kg/cm²
- Lbs x 0.4536 = Kg
- Kg x 2.2 = Lbs

Hubbell Tankless Booster Features

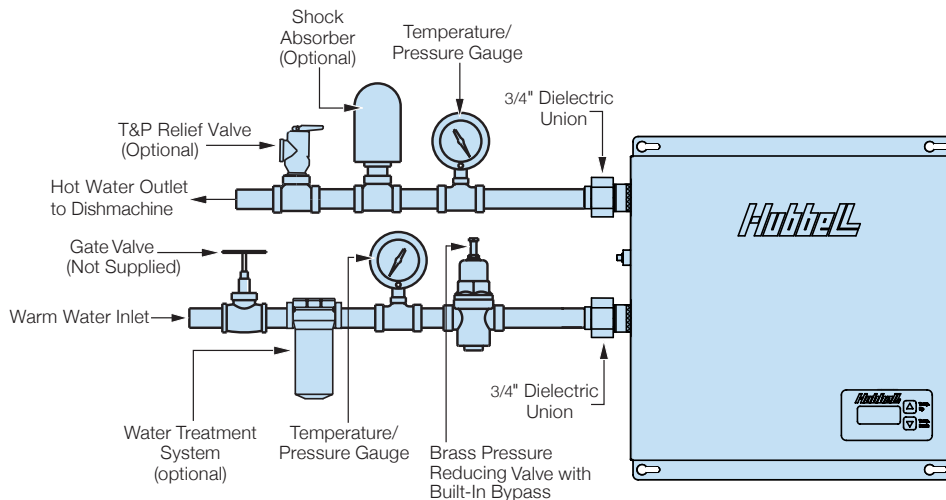
How It Works

The Hubbell Model JTX electric tankless booster heater contains high powered heating elements that heat water only when there is demand from the dishwasher. When hot water is needed, a built in flow sensor measures the exact flow rate, and that data combined with temperature readings at the heater's inlet and outlet are processed by the electronic temperature controller. This data is continuously transmitted to the temperature controller, which constantly calculates the precise amount of power (kW) needed to achieve the desired temperature. A zero cross over firing signal is sent to the heater's fast acting triacs in order to modulate the heating elements to the precise level needed to meet demand. The Hubbell tankless booster heater uses only as much power as is needed, while delivering accurate and consistent hot water temperature.

Heater Overview - 3 Element Model Shown



Installation Diagram Typical JTX Plumbing Installation



The Electric Heater Company



Committed to continuous improvement...

Continuing research results in product improvement; therefore specifications are subject to change without notice. For the most updated information, consult the factory directly.