HUBBELL
a **nudyne** company

SEAFARE SERIES

MTXA

High Capacity ASME Commercial Marine Electric Tankless Water Heater

The Hubbell Tankless MTXA water heater can provide flow rates up to 40 GPM with a temperature range of 32–194°F

Available up to 162 kW in three phase voltage

Instantaneous design reduces stand-by heat loss and significantly lowers operating costs compared to traditional storage systems

Constructed with high-grade materials to ensure long operating life

Digital temperature controls

- Factory packaged heater provides trouble-free installation and operation
- Solid state switching that fully modulate between 0–100%
- Wide selection of sizes to meet the needs of even the most demanding application

Applications

On board barges, cruise ships, ferries, fishing vessels, houseboats, work boats, tankers, and much more.

Tankless water heater for commercial marine use

The Seafare MTXA is a highly reliable and easy to maintain electric tankless water heater, designed and built specifically for commercial marine applications. The MTXA has a high quality ASME stamped pressure vessel and is made to ABS standards with optional ABS Certification. The unit provides outstanding efficiency, and occupies minimum space.

Over 100 years of water heating expertise

Hubbell water heaters are the right choice for your commercial and industrial applications. We have water heating solutions for most energy sources with storage capacities from 1–10,000 gallons — all designed, engineered, and manufactured for reliability and longevity coupled with unparalleled support and service.

ABS certification option available. *ASME option available.* Intertek 9001:2015 MADE in the USA Buy American Act Compliant Contains Imported Components

hubbellheaters.com **sales@hubbellheaters.com** **203.378.2650**

Technical Features

Temperature Controller

A sophisticated electronic temperature controller with LED digital display provides the user interface. The temperature controller processes all flow and temperature data and calculates the precise amount of power needed to meet demand.

Temperature Controller Capabilities	
Power Limiting:	Allows the operator to reduce the power consumption by any percentage to provide installation and operational flexibility and savings.
Diagnostics:	Display inlet and outlet temperatures, flow rate and error codes to assist in troubleshooting.
Cost Calculator:	Determine the exact cost of operating the heater. Input your cost per kW·Hr and the controller displays total kW·HRs consumed, total cost of operation, and total hot water usage (shown in gallons or liters).
Temperature Control:	Set the digital display to the desired water temperature in °F or °C. Fully adjustable in 1° increments from 32–194°F (0–90°C). A user adjustable +/- 3° calibration feature provides additional control for superior accuracy.

Full Heater Modulation

Each heating element is switched on/off using a fast acting solid state TRIAC with zero cross over firing control. This switching scheme provides full modulation of each heating element, ensuring that the precise amount of heat is added to meet demand.

Proper Power Integrity

All Hubbell tankless water heaters, including all 3 phase models, are engineered to operate as a balanced load and operate at 0.999 Power Factor. All Hubbell 3 phase models are designed for 3 wire (3 live, 1 ground) and 4 wire power systems and draw equal current across all conductors to maintain the power integrity of the users electrical system. Hubbell does not recommend the use of heaters that operate as an unbalanced load. All load switching in Hubbell tankless models is performed as zero cross over, eliminating phase angle firing interference and associated EMI issues.

Full Resource Staging

The Hubbell tankless control scheme ensures that usage is equalized across all heating circuits. To achieve this, once the controller has calculated the precise amount of kW required, all circuits are energized in a staggered fashion such that each circuit is proportionally and independently energized and then time staggered between circuits. This Full Resource Staging Scheme reduces EMI output, increases component longevity, and provides highly accurate and consistent hot water temperatures. For three phase models, all circuits are fully modulated and synchronized to operate as a balanced load.

BACnet Module

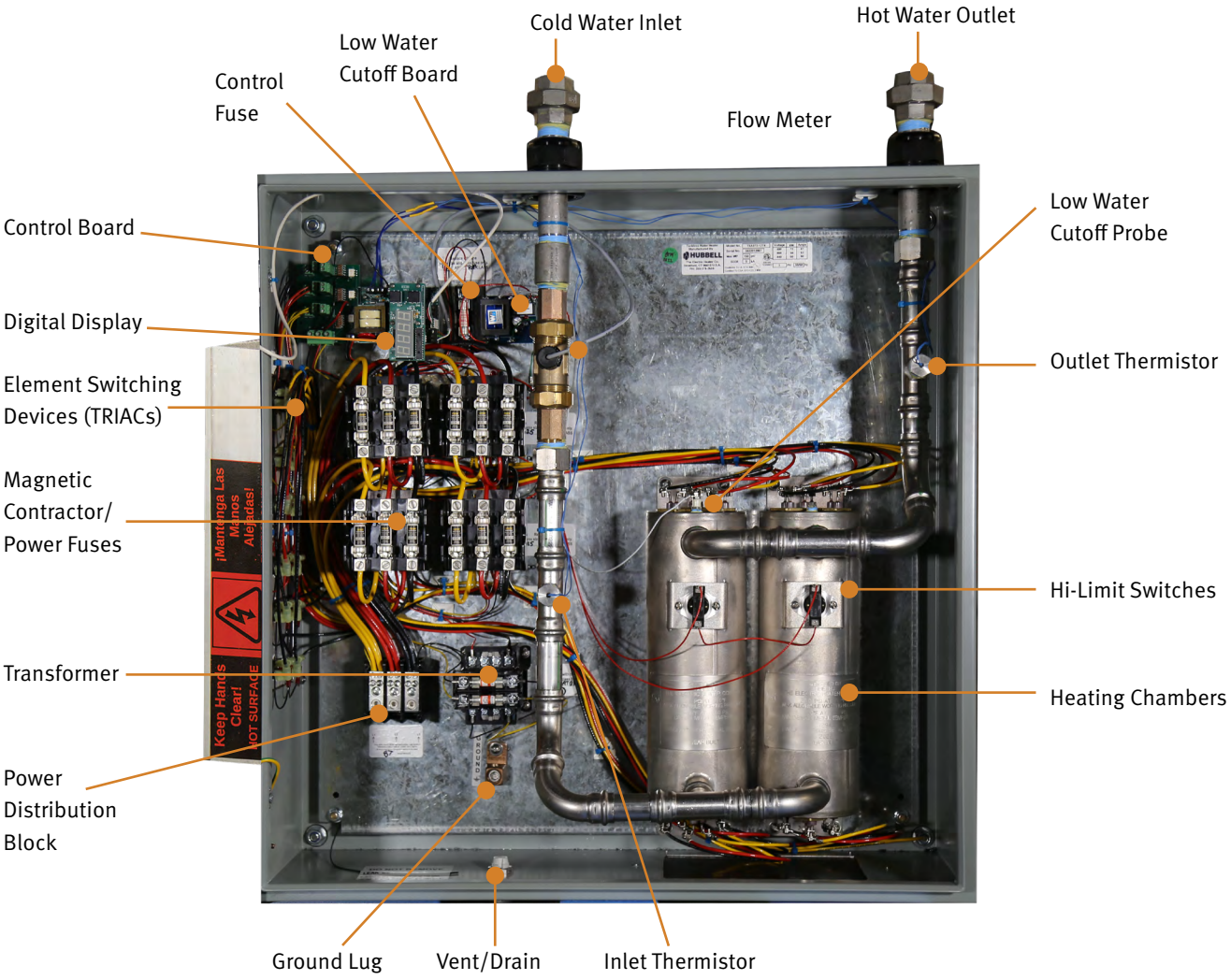
The Hubbell BACnet interface unit implements BACnet MS/TP protocol. The device comes from the factory ready to be operated. The unit can be reconfigured easily with a USB cable and the BACnet Network Utility program which you can download from hubbellheaters.com/bacnet. The BACnet includes features such as set temperature, power limiting, power setting, temperature in and out, flow rate, flowmeter error and leak detections. Note that internet protocol is not supported.

Heater Specifications

Heating Chamber	Stainless Steel
Wattage Range	5 –162 kW
Orientation	Wall Mounted
Voltages	208– 600 Volt, 50/60 HZ
Phases	3Φ (balanced)
Power Factor	0.999
Thermal Efficiency	98% +
Inlet / Outlet Size	1" FNPT
Min/Max Flow	0.5 GPM Min, 40 GPM Max
Max Inlet Temp.:	150°F
Thermostat Range	32 –194°F / 0 – 90°C
Hi-Limit	200°F (Fixed temperature)
Design WP	150 psi
Design TP	225 psi
Elements	Incoloy 800
Standby Power	‹ 3 Watts
Heating Chamber Warranty	5 Year
Electrical Warranty	1 Year
Enclosure	Painted Steel NEMA 4 IP65/IP66 Rating
Approvals	ETL and ASME

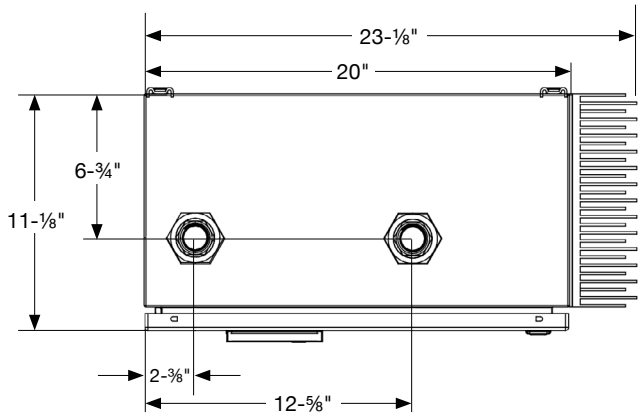
All information is subject to change without notice. Consult factory for submittal drawings.

Inside the Tankless MTXA (2 chamber model shown)

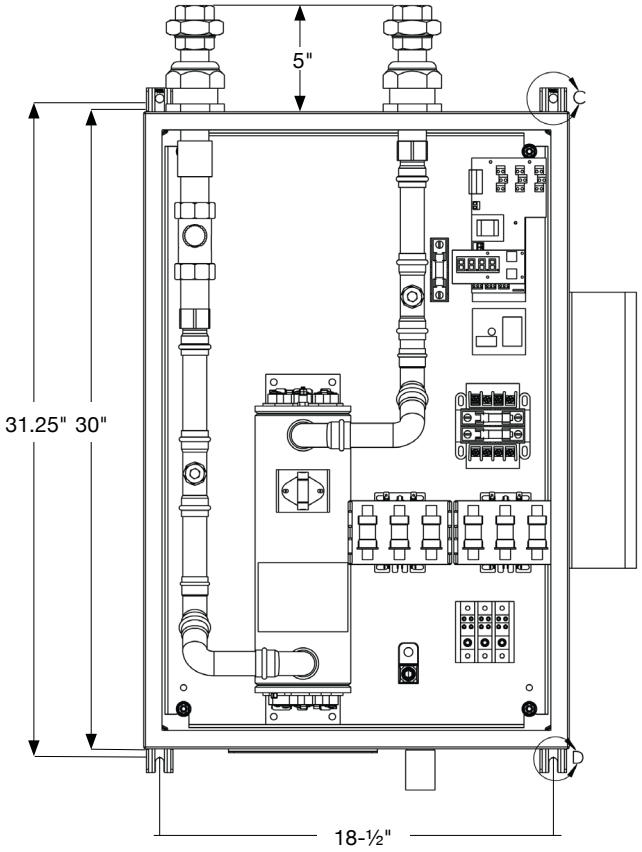


Dimensions

3 & 6 Element



TOP VIEW



FRONT VIEW

All information is subject to change without notice.
Consult factory for submittal drawings.

kW and Amperage Selection Chart

3 Element

(Amperage shown in chart below indicates available models)

kW	3 Element 3 Phase Voltages						
	208	240	380	415	440	480	600
5	14				7		
6					8		
7					9	8	
11	31		17		14		
12	33						
13			20	18	17		
14		34				17	
15			23		20		
16	44	39		22	21		
18	50		27	25	24	22	
20	56		30	28	26		
21		51			28	25	20
24		58	37	33	32	29	23
27		65			35	33	26

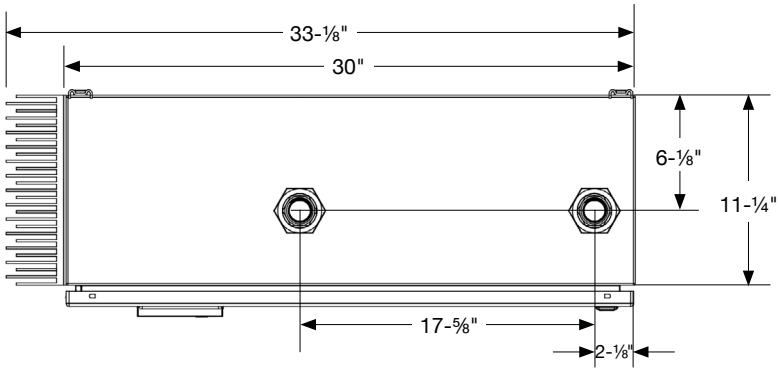
6 Element

(Amperage shown in chart below indicates available models)

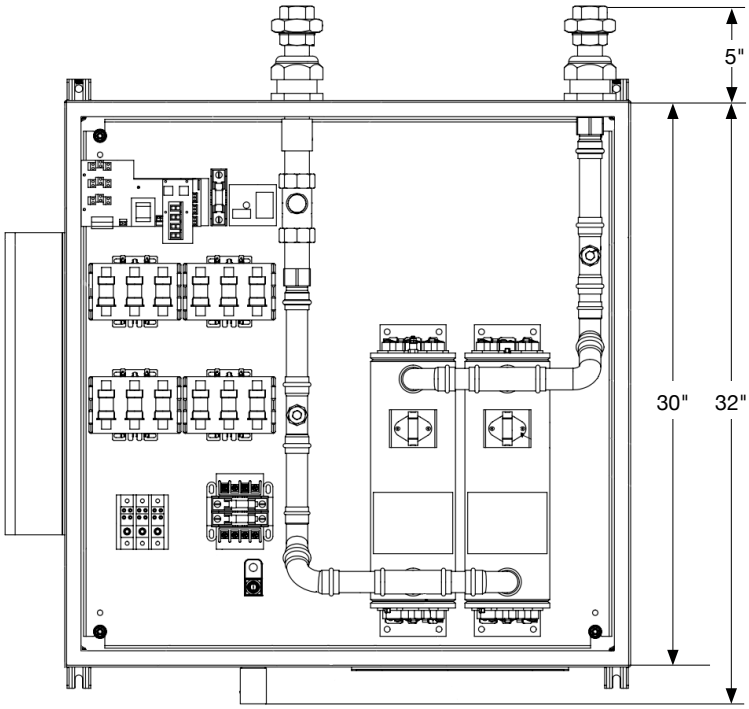
kW	6 Element 3 Phase Voltages						
	208	240	380	415	440	480	600
25	69						
27			41	38			
30			46				
31	86			43	41		
33		79					
36	100		55	50	47	43	
40			61	56	53		
42		101			55	51	40
48		116		67	63	58	46
54					71	65	52

Dimensions

12 Element Sample dimensions are for a MTXA



TOP VIEW



FRONT VIEW

kW and Amperage Selection Chart

12 Element

(Amperage shown in chart below indicates available models)

kW	12 Element 3 Phase Voltages						
	208	240	380	415	440	480	600
40	111						
50	139						
54		130					
60			91				
63	175			88			
66		159					
70					92		
72	200		110	100		87	
81			123	113			
84		202			110	101	81
96			146	134	126	116	92
108			164		142	130	104

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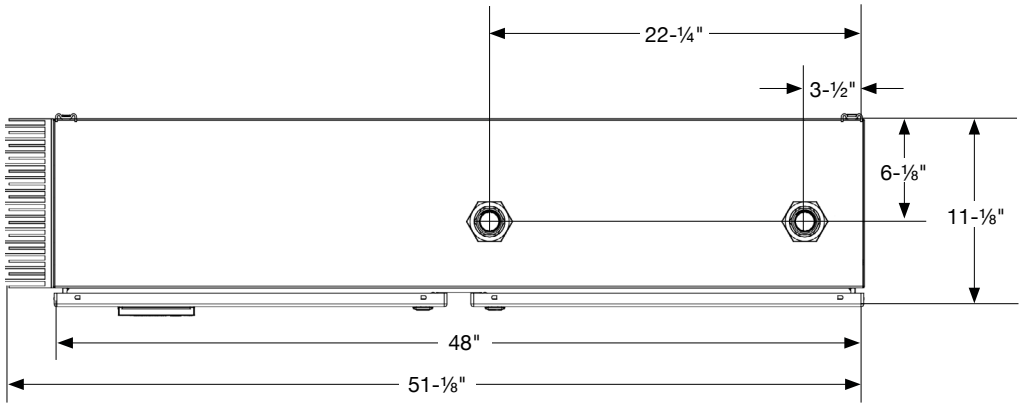
Consult factory for submittal drawings.

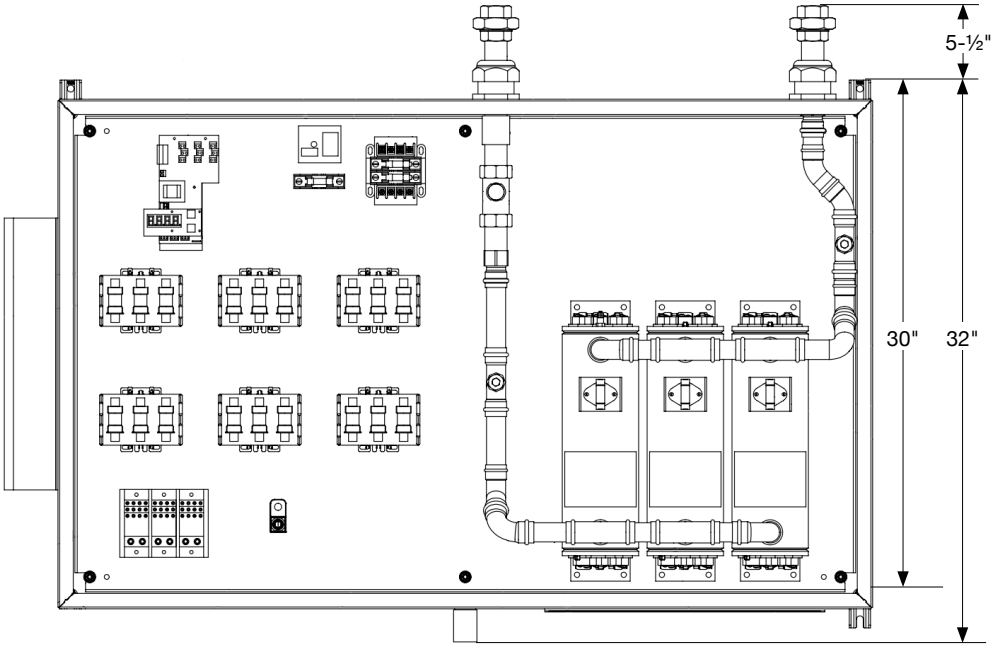
Dimensions

18 Element

Sample dimensions are for a MTXA



TOP VIEW



FRONT VIEW

kW and Amperage Selection Chart

18 Element

(Amperage shown in chart to right indicates available models)

kW	18 Element 3 Phase Voltages						
	208	240	380	415	440	480	600
75	208						
95	264						
99		238					
121			184	169			
126					166	152	121
144				201	189	173	139
162			246		213	195	156

All information is subject to change without notice.
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Heating Capacity

kW Rating	Maximum Flow Rate GPM at Temperature Rise (°FΔT)											
	5°F ΔT	10°F ΔT	20°F ΔT	30°F ΔT	40°F ΔT	50°F ΔT	60°F ΔT	70°F ΔT	80°F ΔT	100°F ΔT	120°F ΔT	140°F ΔT
5	6.8	3.4	1.7	1.1	0.9	0.7	0.6	0.5	0.4	0.3	0.3	0.2
6	8.2	4.1	2.0	1.4	1.0	0.8	0.7	0.6	0.5	0.4	0.3	0.3
7	9.6	4.8	2.4	1.6	1.2	1.0	0.8	0.7	0.6	0.5	0.4	0.3
8	10.9	5.5	2.7	1.8	1.4	1.1	0.9	0.8	0.7	0.5	0.5	0.4
9	12.3	6.1	3.1	2.0	1.5	1.2	1.0	0.9	0.8	0.6	0.5	0.4
10	13.6	6.8	3.4	2.3	1.7	1.4	1.1	1.0	0.9	0.7	0.6	0.5
12	16.4	8.2	4.1	2.7	2.0	1.6	1.4	1.2	1.0	0.8	0.7	0.6
14	19.1	9.6	4.8	3.2	2.4	1.9	1.6	1.4	1.2	1.0	0.8	0.7
16	21.8	10.9	5.5	3.6	2.7	2.2	1.8	1.6	1.4	1.1	0.9	0.8
18	24.6	12.3	6.1	4.1	3.1	2.5	2.0	1.8	1.5	1.2	1.0	0.9
20	27.3	13.6	6.8	4.5	3.4	2.7	2.3	1.9	1.7	1.4	1.1	1.0
24	32.8	16.4	8.2	5.5	4.1	3.3	2.7	2.3	2.0	1.6	1.4	1.2
25	34.1	17.1	8.5	5.7	4.3	3.4	2.8	2.4	2.1	1.7	1.4	1.2
27	36.8	18.4	9.2	6.1	4.6	3.7	3.1	2.6	2.3	1.8	1.5	1.3
30		20.5	10.2	6.8	5.1	4.1	3.4	2.9	2.6	2.0	1.7	1.5
31		21.2	10.6	7.1	5.3	4.2	3.5	3.0	2.6	2.1	1.8	1.5
33		22.5	11.3	7.5	5.6	4.5	3.8	3.2	2.8	2.3	1.9	1.6
36		24.6	12.3	8.2	6.1	4.9	4.1	3.5	3.1	2.5	2.0	1.8
40		27.3	13.6	9.1	6.8	5.5	4.5	3.9	3.4	2.7	2.3	1.9
42		28.7	14.3	9.6	7.2	5.7	4.8	4.1	3.6	2.9	2.4	2.0
48		32.8	16.4	10.9	8.2	6.6	5.5	4.7	4.1	3.3	2.7	2.3
50		34.1	17.1	11.4	8.5	6.8	5.7	4.9	4.3	3.4	2.8	2.4
54		36.8	18.4	12.3	9.2	7.4	6.1	5.3	4.6	3.7	3.1	2.6
60			20.5	13.6	10.2	8.2	6.8	5.8	5.1	4.1	3.4	2.9
63			21.5	14.3	10.7	8.6	7.2	6.1	5.4	4.3	3.6	3.1
66			22.5	15.0	11.3	9.0	7.5	6.4	5.6	4.5	3.8	3.2
70			23.9	15.9	11.9	9.6	8.0	6.8	6.0	4.8	4.0	3.4
72			24.6	16.4	12.3	9.8	8.2	7.0	6.1	4.9	4.1	3.5
75			25.6	17.1	12.8	10.2	8.5	7.3	6.4	5.1	4.3	3.7
81			27.6	18.4	13.8	11.1	9.2	7.9	6.9	5.5	4.6	3.9
84			28.7	19.1	14.3	11.5	9.6	8.2	7.2	5.7	4.8	4.1
95			32.4	21.6	16.2	13.0	10.8	9.3	8.1	6.5	5.4	4.6
96			32.8	21.8	16.4	13.1	10.9	9.4	8.2	6.6	5.5	4.7
99			33.8	22.5	16.9	13.5	11.3	9.7	8.4	6.8	5.6	4.8
108			36.8	24.6	18.4	14.7	12.3	10.5	9.2	7.4	6.1	5.3
116			39.6	26.4	19.8	15.8	13.2	11.3	9.9	7.9	6.6	5.7
126				28.7	21.5	17.2	14.3	12.3	10.7	8.6	7.2	6.1
144				32.8	24.6	19.7	16.4	14.0	12.3	9.8	8.2	7.0
162				36.8	27.6	22.1	18.4	15.8	13.8	11.1	9.2	7.9

Notes:
Alternate voltages including 277, 380, 415, 440, 575 and 600 volts available. Please consult factory for exact kW availability in these voltages.

Tankless MTXA Model Number Designation

MODEL	KW RATING	NUMBER OF HEATING ELEMENTS	VOLTAGE / PHASE	OPTIONAL EQUIPMENT
	See pages 4–6 for available kW and heating element combinations.			
MTXA	5 – 162	3 6 12 18	**Balanced 3Φ** **R** = 208/3 **T** = 240/3 **T3** = 380/3 **T7** = 415/3 **T5** = 440/3 **T4** = 480/3 **T6** = 600/3	Write/type optional equipment code in the gray box below in alphabetical order. For multiple options separate codes with a dash (–).

MTXA		–		–	

Example: MTXA024-3T4-C35-V36

A Hubbell Seafare MTXA ASME stamped tankless electric water heater rated for 24kW, with 3 heating elements to be powered at 480 volts, three phase, 60 Hz power with optional BACnet communication module with T1000 digital controller and optional ABS Tier 5 Certification.

Optional Equipment

Note: *Optional equipment must be called out in the written specifications, use the codes below.*

Controller

- **C15** Non-Fused Disconnect Switch
- **C16** Fused Disconnect Switch
- **C35** BACnet Communication Module with T1000 Digital Controller
- **C51** Remote Control Display, Allows the Heater to be Installed in a a Remote Location. The 3" X 5" NEMA 4 Display Enclosure can be Located up to 25' from the Heater
- **C59** Integrated PLC Control Package
- **C63** Vortex Flow Meter

Please note: Optional equipment may impact overall dimensions and weight. Please request submittal drawing from factory.

Electrical

- **E8** Built-In Circuit Breaker with Safety Handle

General

- **G3** Enclosure Heater (Specify Minimum Temperature Expected)
- **G9** Explosion Resistant Construction (Specify Class, Divison, Group, and Temperature Class)
- **G16** NEMA 4X Rating

Vessel

- **V36** ABS Tier 5 Certification
- **V41** Alternate Threaded Inlet/Outlet Connections Size

Available Accessories

Tankless Valve Kit: Inlet and outlet valve assembly simplifies installation. Includes unions, shut offs, check valve, drain ports and pressure relief valve. For 1", specify part number "TANKLESS VALVE KIT 1""

10-year Warranty: 10-year non pro-rated tank warranty, specify part number "VESSEL WARRANTY"

Accessories Name _____ **Part #** _____

Accessories Name _____ **Part #** _____