

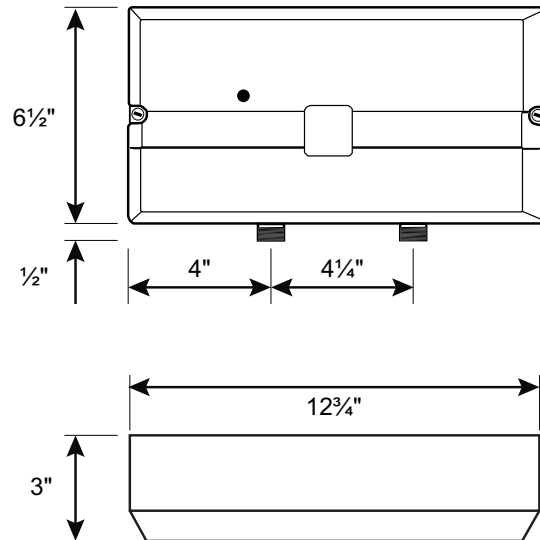
# TRONIC US12 Electric Tankless Water Heater

Engineering  
Submittal  
Sheet



# BOSCH

## Dimensions



## Engineering Specifications

Water heater shall be a Model TRONIC US12.

Installation shall consist of \_\_\_ Model TRONIC US12 electric tankless water heaters as distributed by Bosch Thermotechnology Corp. with a thermal efficiency of 99%. Supply voltage shall be 240VAC (220VAC, 208VAC) with a maximum output of 12.0kW.

The tankless water heaters shall be UL listed for the US and Canada and UPC certified.

### CONSTRUCTION

Water heater shall be electricity powered with compact tankless design. Primary heat exchanger shall be made from solid copper tubing, elements shall be copper-sheathed and unit shall be protected by a tough plastic housing. Heat exchanger shall be rated for maximum working pressure not less than 150 psig. Water heater shall be equipped with a flow switch. Water connections for inlet and outlet shall be 1/2" NPT male.

The internal controls shall contain a power selector and a high temperature safety cut-out with manual reset.

### INSTALLATION

All aspects of installation of Water Heater Plant shall be in strict accordance with manufacturer's instructions. Materials shall conform to all manufacturer's recommendations including electrical connections and wiring.

Water heater piping shall be field constructed of materials as specified. Water heater shall be installed with individually isolating shutoff valves for service and maintenance.

Unit shall be installed in close vicinity of point of use.

### OPERATION

Water heater shall use the signal from an internal flow switch to activate the correct number of elements to reach the target temperature set on the external dial.

### WARRANTY



The heating element shall carry a 5-year warranty against leakage. All other parts and components shall carry a 1 year warranty against defects in materials or workmanship.

# TRONIC US12

## Electric Tankless Water Heater

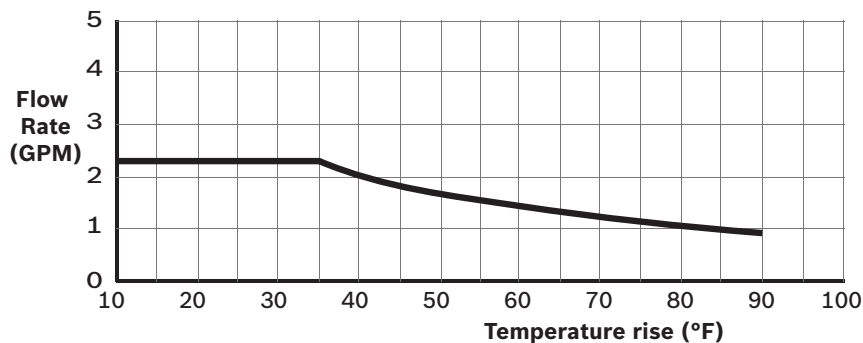


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| Technical data                   |      |   |
|----------------------------------|------|---|
| Description                      | Unit | US12  |
| Part number                      | -    | 7-736-500-683   |
| Voltage supply                   | VAC  | 240   |
| Minimum circuit breaker size     | A    | 50  |
| Maximum output                   | kW   | 12.00   |
| Maximum output at 220V           | kW   | 10.08   |
| Maximum output at 208V           | kW   | 9.00  |
| Minimum recommended wire size    | AWG  | 6   |
| Thermal efficiency               | %    | 99  |
| Maximum inlet water temperature* | ° F  | ≤ 86  |
| Water pressure range             | psi  | 10 - 150  |
| Activation flow rate             | GPM  | 0.6   |
| Inlet / Outlet connections       | Inch | ½" NPT  |
| Weight (without water)           | lbs  | 5   |
| Certifications                   | -    |   |

\* Do not use heater for water temperature boosting applications

### Water Heating Capacity Curve



\* On maximum temperature setting

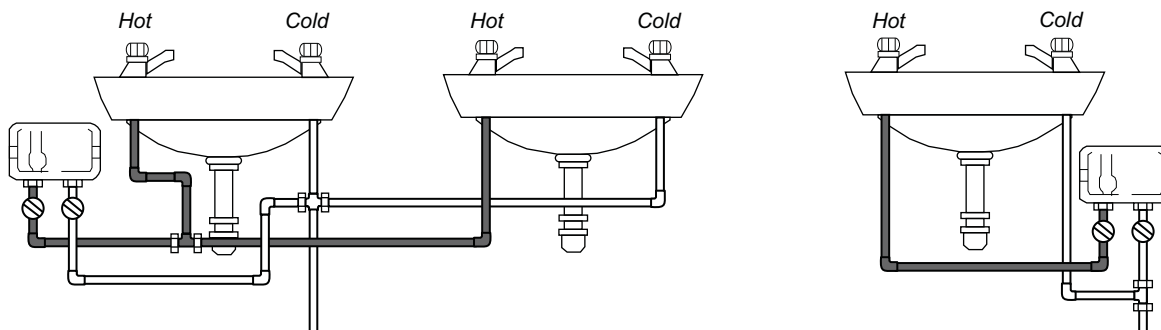
# TRONIC US12

## Electric Tankless Water Heater



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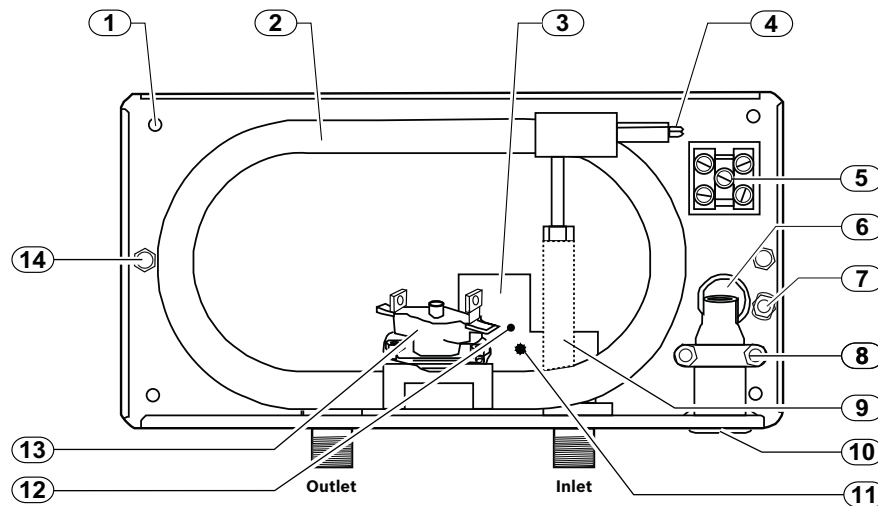
### US12 installation examples



Front view

NOTE; Appliance must be installed only as shown (inlet/outlet connection on bottom) in order to ensure flow switch activation

### Tankless Components



#### Components Legend

- 1 Mounting hole
- 2 Heat exchanger tube
- 3 Control P.C.B
- 4 Heating elements
- 5 Terminal block
- 6 Cable rear entry
- 7 Ground stud
- 8 Cable clamp
- 9 Flow switch
- 10 Cable bottom entry
- 11 Temperature adjustment knob
- 12 Neon light
- 13 High temp thermal cut-out (manual re-set)
- 14 Cover fixing screw