

# TRONIC ES2.5 CA, ES4 CA, ES8 CA Point-of-Use Electric Mini-Tank Water Heaters

Engineering  
Submittal  
Sheet



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## Overview and Certifications



## Engineering Specifications

Water heater shall be a Model TRONIC ES2.5 CA, ES4 CA, ES8 CA

Installation shall consist of \_\_\_Model TRONIC ES2.5 CA electric mini-tank water heaters as distributed by Bosch Thermotechnology Corp. and 98% thermal efficiency. Supply voltage shall be 110 - 120VAC with a heating capacity of 1440 Watts.

Installation shall consist of \_\_\_Model TRONIC ES4 CA electric mini-tank water heaters as distributed by Bosch Thermotechnology Corp. and 98% thermal efficiency. Supply voltage shall be 110 - 120VAC with a heating capacity of 1440 Watts.

Installation shall consist of \_\_\_Model TRONIC ES8 CA electric mini-tank water heaters as distributed by Bosch Thermotechnology Corp. and 98% thermal efficiency. Supply voltage shall be 110 - 120VAC with a heating capacity of 1440 Watts.

The electric mini-tank water heaters shall be UL listed for Canada and UPC certified. The water shall be pre-set from factory to 140 °F to comply with Canada regulations.

### CONSTRUCTION

Water heater shall be electrically powered with compact mini-tank design for point-of-use operation and an efficiency rating of 98%. Tank shall be glass-lined and insulated for thermal retention. Unit shall be protected by a tough plastic housing. Tank shall be rated for maximum working pressure not less than 150 psig. Water heater shall be equipped with a pressure relief

valve and a magnesium anode rod for protection against tank corrosion. Water connections for inlet and outlet shall be ½” NPT male for ES2.5 CA and ES4 CA. Water connections for inlet and outlet shall be ¾” NPT male for ES8 CA.

The controls shall be a wired thermostat with temperature selector and a high temperature safety cut-out. A red light shall indicate when the unit is powering the heating element.

### INSTALLATION

All aspects of installation of electric mini-tank water heater 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 water shutoff valves for service and maintenance.

### MODE OF OPERATION

The heater shall include integral factory wired thermostat to control all operation and energy input. Control of outlet water temperature shall be set through an internal set point with a field adjustment of 65 to 145 degrees F. Heater shall be capable of maintaining the temperature set point +/- 3 degrees F by supplying power to the 1440 Watt heating element.

### WARRANTY

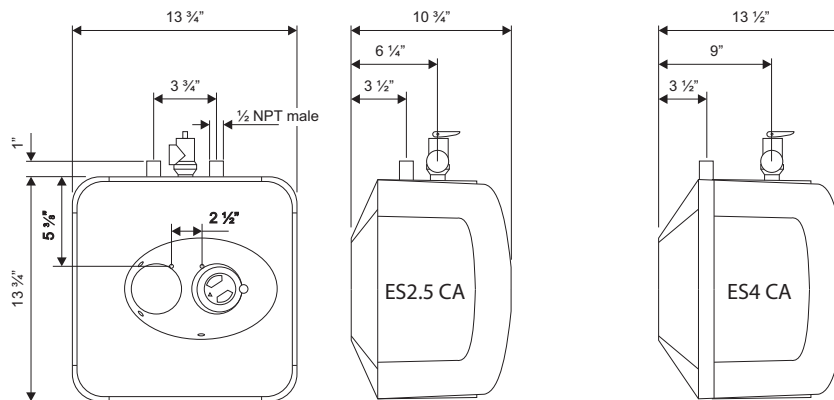
The inner tank shall carry a 6 year limited warranty. All other parts and components shall carry a 2 year limited warranty against defects in materials or workmanship.

TRONIC ES2.5 CA, ES4 CA, ES8 CA  
Point-of-Use Electric Mini-Tank Water Heaters



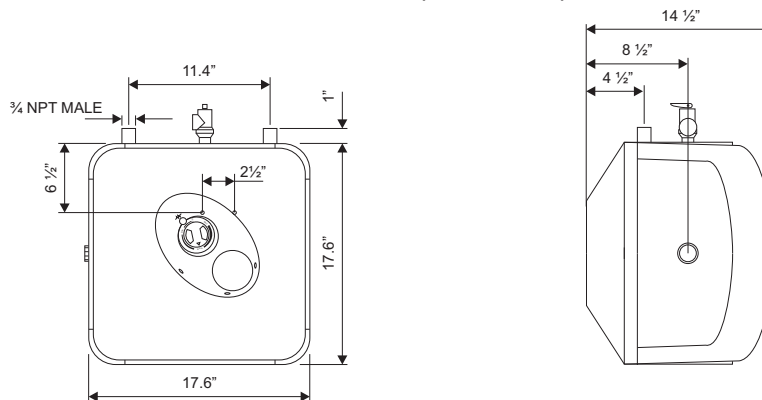
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**ES2.5 CA, ES4 CA Dimensions**

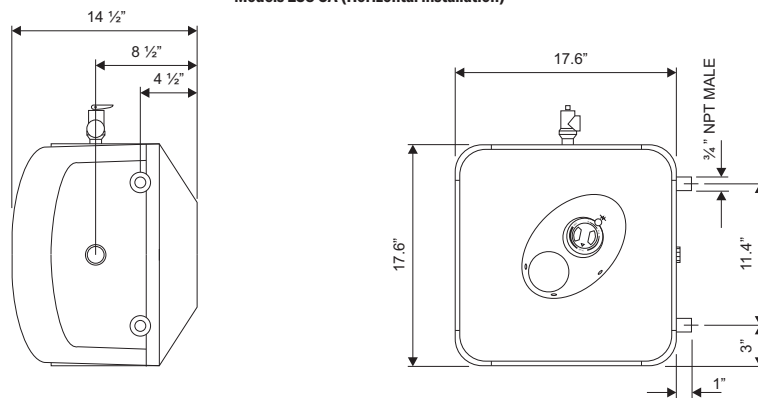


**ES8 CA Dimensions**

**Models ES8 CA (Vertical installation)**



**Models ES8 CA (Horizontal installation)**



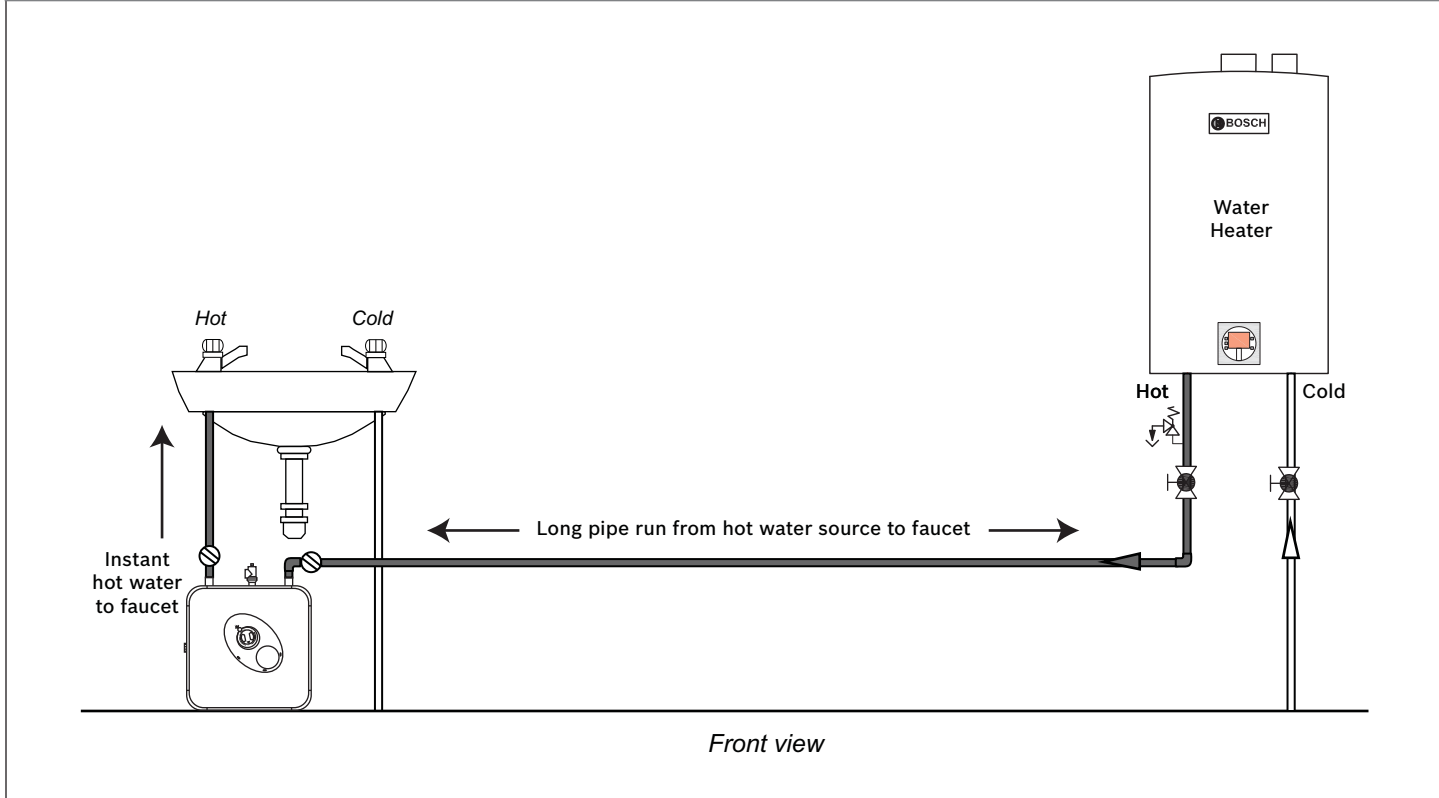
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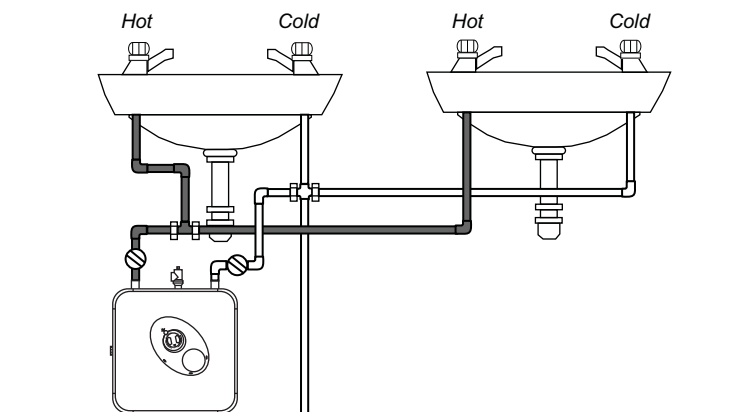
Technical Data				
Description	Unit	ES8 CA	ES4 CA	ES2.5 CA
Part number	-	7738004998	7738004997	7738004996
Thermal Efficiency	%	98	98	98
Volts	VAC	110 - 120	110 - 120	110 - 120
Amps	A	12	12	12
Wire Type	-	Hard Wired	Plug-In	Plug-In
Tank Volume	GAL	7.1	4	2.7
Heating Capacity	Watts	1440	1440	1440
Recovery Rate @ 90°F Rise	GPH	6.8	6.8	6.8
Temperature Range	° F	65 - 145	65 - 145	65 - 145
Max Operating Pressure	psi	150	150	150
Weight	lbs	29.5	17.3	15.5
Water Fittings	inch NPT	¾" Male NPT	½" Male NPT	½" Male NPT
Pressure Relief Valve	-	Included	Installed	Installed

## Installation Example 1 - Booster Application



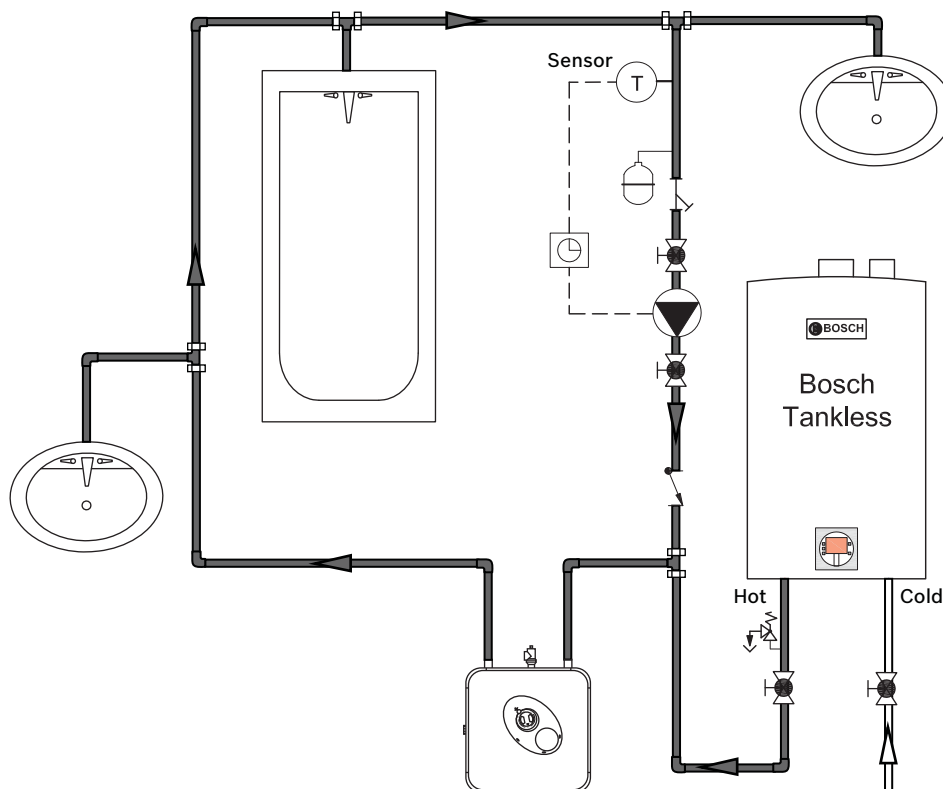


Installation Example 2 - Point-Of-Use Application

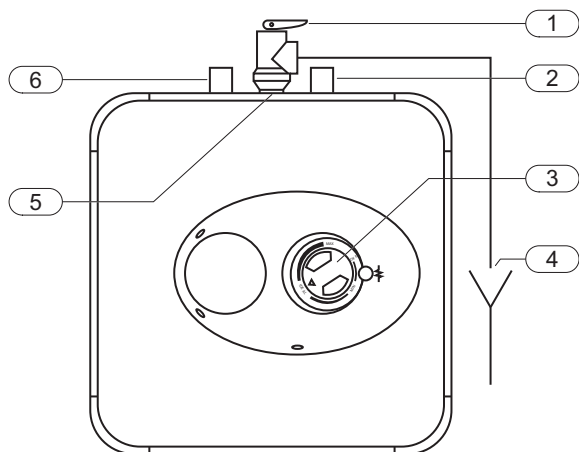


Front view

Installation Example 3 Domestic Hot Water Recirculation Application



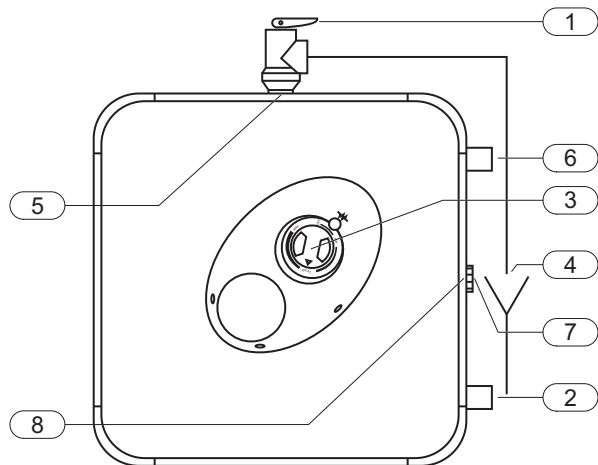
**ES2.5 CA & ES4 CA Components**



**Components Legend**

- 1** Temperature & pressure relief valve, ¾ NPT male
- 2** Cold water inlet ½ NPT male
- 3** Thermostat
- 4** Temperature & pressure relief valve discharge line to drain
- 5** ¾ NPT female tapping for relief valve
- 6** Hot water outlet ½ NPT male

**ES8 CA Components**



**Components Legend**

- 1** Temperature & pressure relief valve, ¾ NPT male
- 2** Cold water inlet ¾ NPT male
- 3** Thermostat
- 4** Temperature & pressure relief valve discharge line to drain
- 5** ¾ NPT female tapping for relief valve
- 6** Hot water outlet ¾ NPT male
- 7** ¾ NPT male plug
- 8** ¾ NPT female tapping for tap

**NOTICE:**

It is critical that the anode rod be inspected once a year to determine whether it requires replacement. See installation manual for details. Damage resulting from poor water quality or failure to replace the anode rod is not covered under the manufacturer's warranty.