

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

Engineering
Submittal
Sheet



BOSCH

Overview and Certifications



Engineering Specifications

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

Installation shall consist of ___ Model TRONIC ES2.5 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 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 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 the US and UPC certified. The electric mini-tank water heaters shall be Massachusetts Plumbing Board approved and Wisconsin Plumbing Board approved.

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 and ES4. Water connections for inlet and outlet shall be ¾” NPT male for ES8.

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

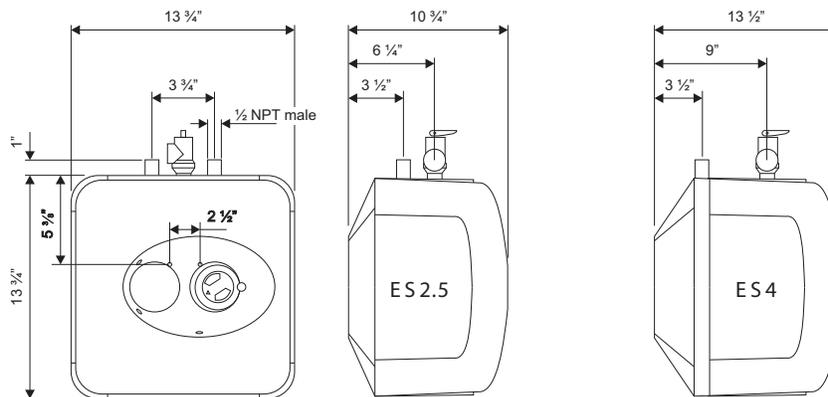
The inner tank shall carry a 6 year limited warranty. All other parts and components shall carry a 2 year limited warranty against defects in materials or workmanship.

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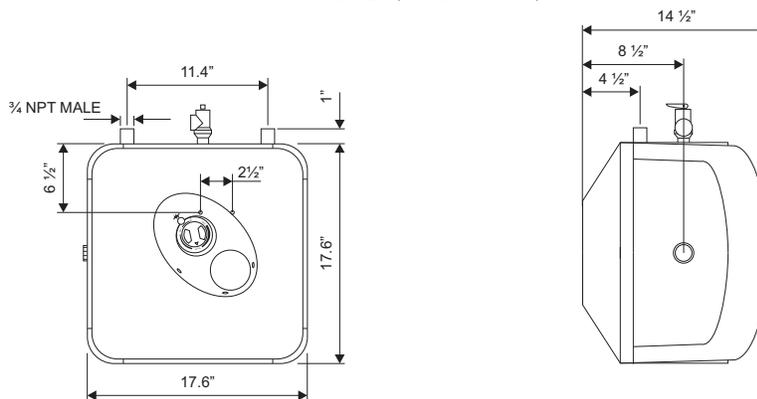
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ES2.5-ES4 Dimensions

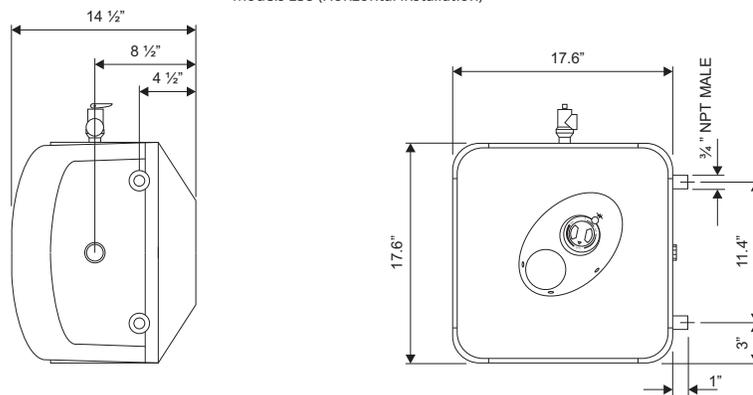


ES8 Dimensions

Models ES8 (Vertical installation)



Models ES8 (Horizontal installation)



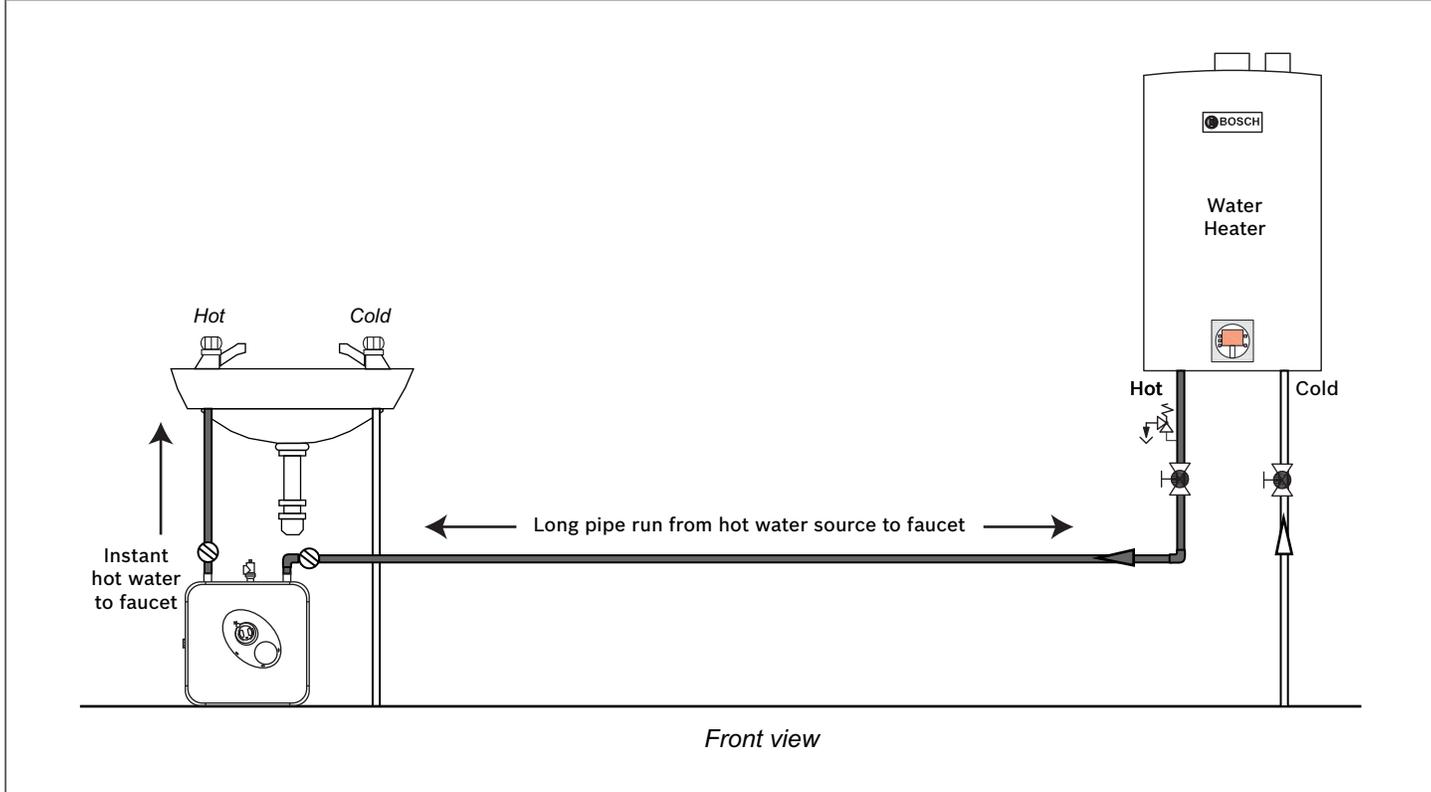
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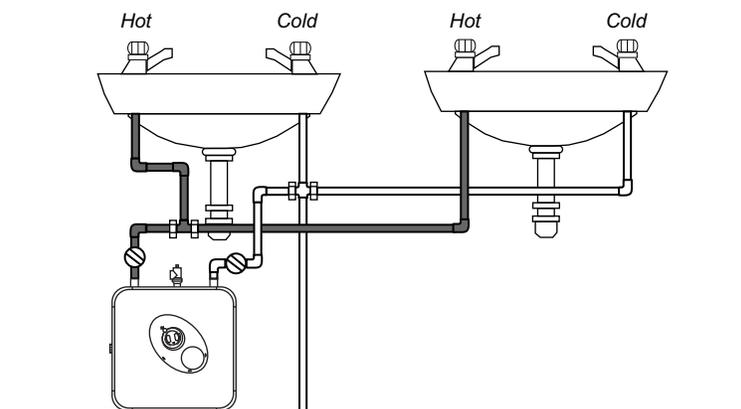
Technical Data				
Description	Unit	ES8	ES4	ES2.5
Part number	-	7738004998	7738004997	7738004996
Thermal Efficiency	%	98	98	98
Volts	VAC	110 - 120	110 - 120	110 - 120
Amps	A	12	12	12
Wire Type	-	Hard Wired	Plug-In	Plug-In
Tank Volume	GAL	7.1	4	2.7
Heating Capacity	Watts	1440	1440	1440
Recovery Rate @ 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



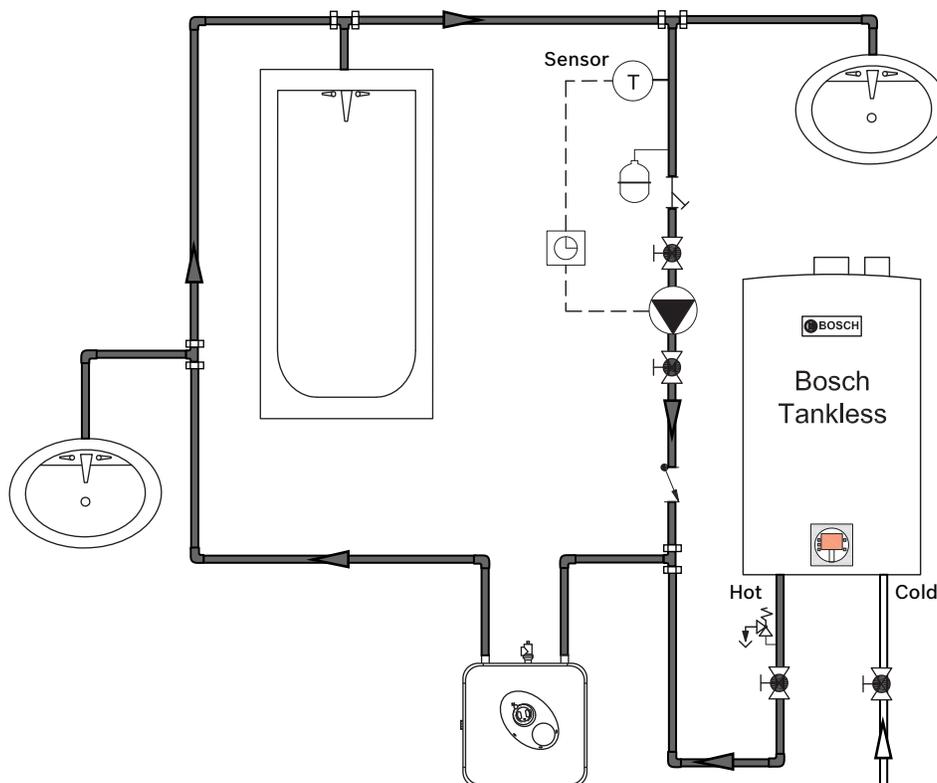


Installation Example 2 - Point-Of-Use Application

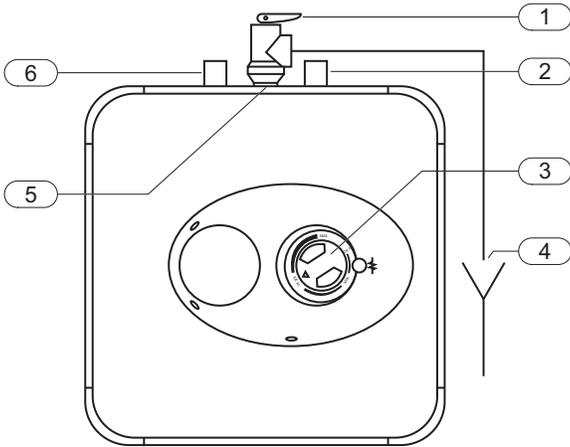


Front view

Installation Example 3 Domestic Hot Water Recirculation Application



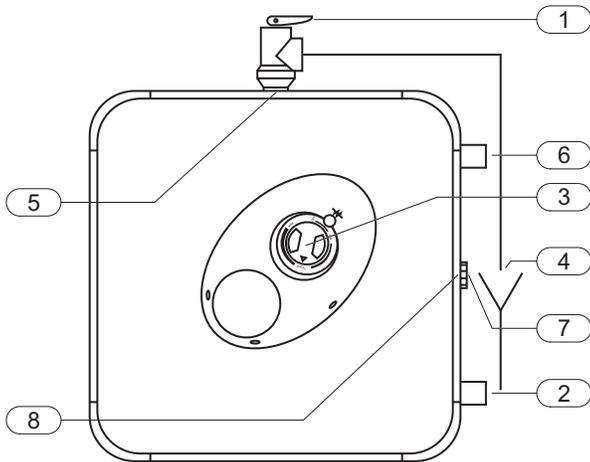
ES2.5 & ES4 Components



Components Legend

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

ES8 Components



Components Legend

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