

TRONIC 3000

US3-2R | US4-2R | US7-2R | US9-2R

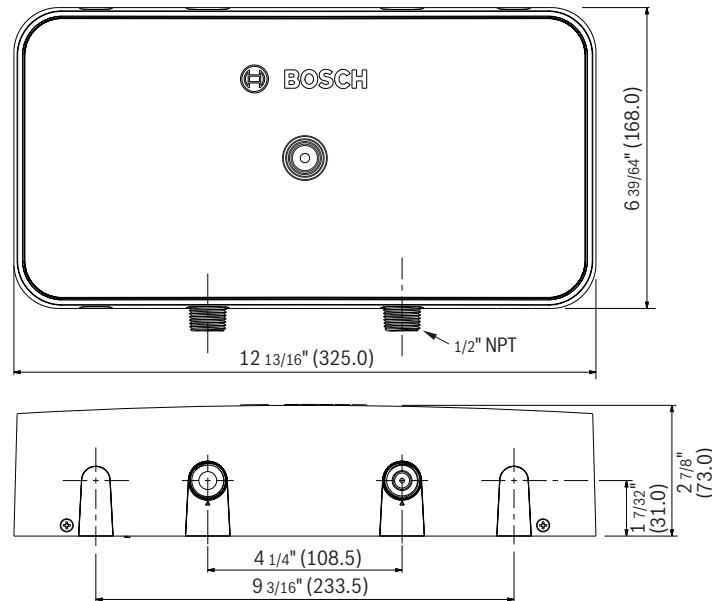
Electric Tankless Water Heaters

Engineering
Submittal
Sheet



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Dimensions



Engineering Specifications

Water heater shall be a Model TRONIC 3000 US3-2R, US4-2R, US7-2R or US9-2R.

Installation shall consist of ___ Model TRONIC 3000 US3-2R electric tankless water heaters as distributed by Bosch Thermotechnology Corp. with a thermal efficiency of 99%. Supply voltage shall be 110-120VAC with a maximum output of 3.6kW. Minimum flow rate shall be 0.3gpm.

Installation shall consist of ___ Model TRONIC 3000 US4-2R electric tankless water heaters as distributed by Bosch Thermotechnology Corp. with a thermal efficiency of 99%. Supply voltage shall be 208-240 VAC with a maximum output of 4.5kW. Minimum flow rate shall be 0.4gpm.

Installation shall consist of ___ Model TRONIC 3000 US7-2R electric tankless water heaters as distributed by Bosch Thermotechnology Corp. with a thermal efficiency of 99%. Supply voltage shall be 208-240 VAC with a maximum output of 7.2kW. Minimum flow rate shall be 0.7gpm.

Installation shall consist of ___ Model TRONIC 3000 US9-2R electric tankless water heaters as distributed by Bosch Thermotechnology Corp. with a thermal efficiency of 99%. Supply voltage shall be 208-240 VAC with a maximum output of 9.5kW. Minimum flow rate shall be 0.7gpm.

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 with two power levels and a high temperature safety cut-out with manual reset.

INSTALLATION

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

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Engineering Specifications

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.

WARRANTY*

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

* see www.bosch-thermotechnology.us for full warranty details.

Technical data

| Description | Unit | US3-2R | US4-2R | US7-2R | US9-2R |
|--|-------|--|------------------|------------------|------------------|
| Part number | – | 7736505867 | 7736505868 | 7736505870 | 7736505871 |
| Packaging dimensions (W x L x H) | Inch | 8.7 x 14.4 x 3.6 | 8.7 x 14.4 x 3.6 | 8.7 x 14.4 x 3.6 | 8.7 x 14.4 x 3.6 |
| Product dimensions (W x L x H) | Inch | 6.6 x 12.8 x 2.9 | 6.6 x 12.8 x 2.9 | 6.6 x 12.8 x 2.9 | 6.6 x 12.8 x 2.9 |
| Gross weight | lbs | 6.3 | 6.3 | 6.3 | 6.3 |
| Net weight | lbs | 5.6 | 5.6 | 5.6 | 5.6 |
| Rated power | kW/V | 3.6kW @120V | 4.5kW @240V | 7.2kW @240V | 9.5kW @240V |
| Temperature control | – | Hydronic | Hydronic | Hydronic | Hydronic |
| Maximum inlet water temperature | °F/°C | 77/25 | 77/25 | 77/25 | 77/25 |
| Minimum inlet water temperature ¹ | °F/°C | 36/2 | 36/2 | 36/2 | 36/2 |
| Activation flow rate | gpm | 0.3 | 0.4 | 0.7 | 0.7 |
| Water connections | Inch | ½" NPT | ½" NPT | ½" NPT | ½" NPT |
| Minimum water pressure | PSI | 25 | 10 | 10 | 10 |
| Minimum operating pressure | PSI | 150 | 150 | 150 | 150 |
| IPX | – | IPX4 | IPX4 | IPX4 | IPX4 |
| Voltage supply | V AC | 110-120 | 208-240 | 208-240 | 208-240 |
| Power line type | – | L1/L2 | L1/L2 | L1/L2 | L1/L2 |
| Frequency | Hz | 60 | 60 | 60 | 60 |
| Minimum circuit breaker size | – | 1 x 30 amp fuse | 1 x 25 amp fuse | 1 x 30 amp fuse | 1 x 40 amp fuse |
| Minimum recommended wire size | AWG | 10 | 10 | 10 | 8 |
| Thermal efficiency | % | 99 | 99 | 99 | 99 |
| Certifications | – |   | | | |

¹) Do not use heater for water temperature boosting applications

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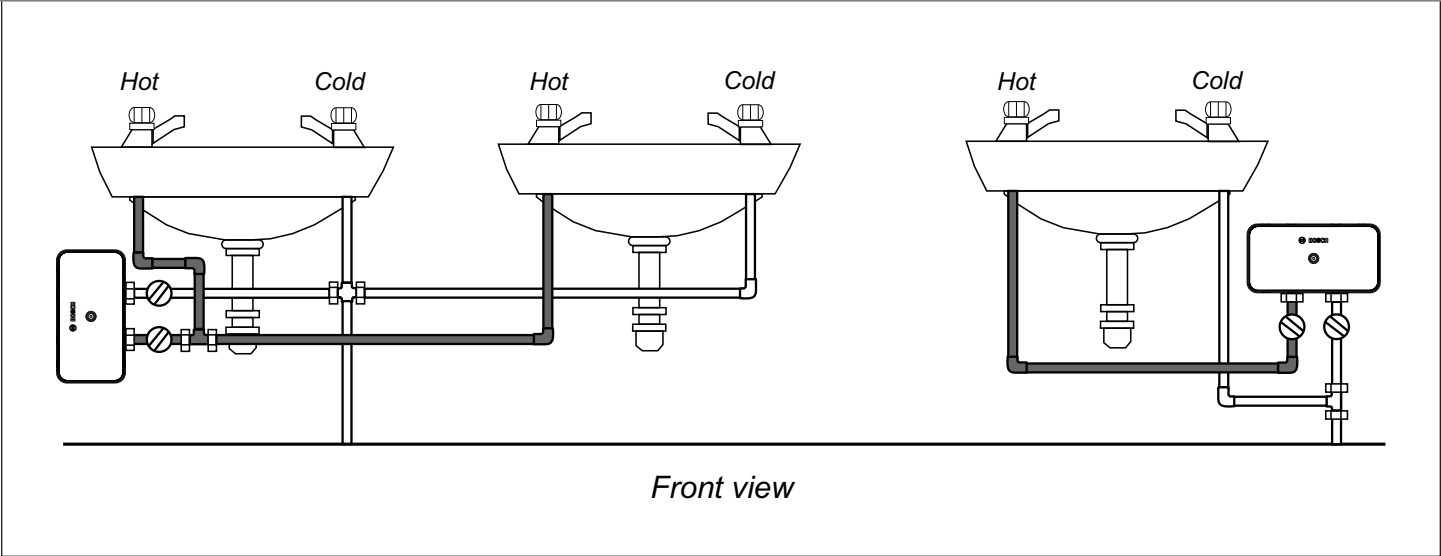


Water Heating Capacity Data

| Model | Volts | Amps | Loading (watts) | | Temperature Rise (°F) at Flow Rate GPM | | | | | | | |
|--------|---------|------|-----------------|-----------|--|-----|-----|----------|---------|---------|---------|---------|
| | | | Low | High | 0.3 | 0.4 | 0.5 | 0.75 GPM | 1.0 GPM | 1.5 GPM | 2.0 GPM | 2.5 GPM |
| US3-2R | 110-120 | 15 | 1513-1800 | | 39 | 35 | 24 | 16 | 12 | 8 | 6 | 5 |
| US3-2R | 110-120 | 30 | | 3025-3600 | 79 | 61 | 49 | 33 | 24 | 16 | 12 | 10 |
| US4-2R | 208-240 | 9 | 1891-2250 | | N/A | 38 | 31 | 20 | 15 | 10 | 8 | 6 |
| US4-2R | 208-240 | 19 | | 3781-4500 | N/A | 76 | 61 | 41 | 31 | 20 | 15 | 12 |
| US7-2R | 208-240 | 15 | 3025-3600 | | N/A | N/A | N/A | 33 | 24 | 16 | 12 | 10 |
| US7-2R | 208-240 | 30 | | 6050-7200 | N/A | N/A | N/A | 65 | 49 | 33 | 24 | 20 |
| US9-2R | 208-240 | 20 | 3576-4760 | | N/A | N/A | N/A | 43 | 32 | 22 | 16 | 13 |
| US9-2R | 208-240 | 40 | | 7151-9521 | N/A | N/A | N/A | 86 | 65 | 43 | 32 | 26 |

N/A - Value is below the activation flow.

Installation examples



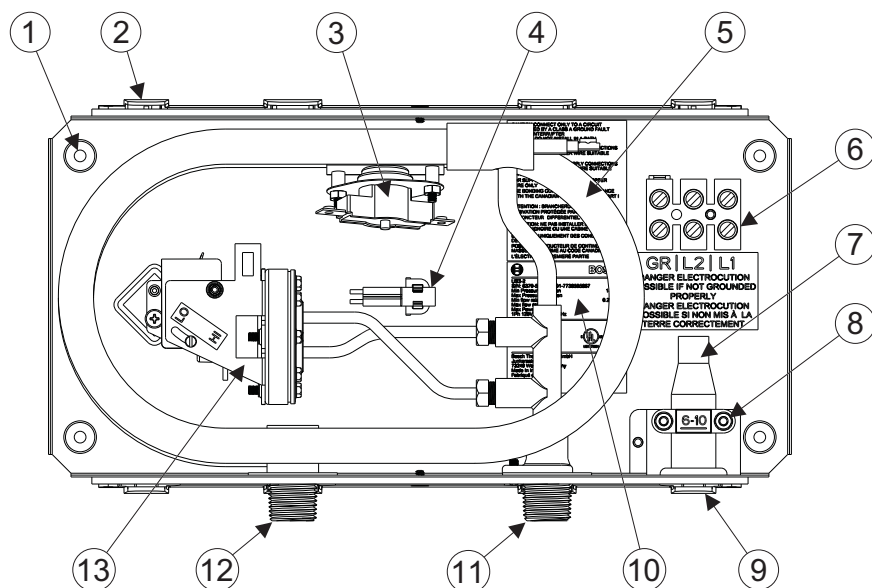
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Tankless Components



Interior Components

- [1] Mounting hole (backplate)
- [2] Upper trim
- [3] Thermal cut-out (manual re-set)
- [4] Neon light
- [5] Heating elements
- [6] Terminal block
- [7] Cable grommet
- [8] Cable clamp
- [9] Cable entry
- [10] Serial and model sticker
- [11] Cold water inlet
- [12] Hot water Outlet
- [13] Flow switch