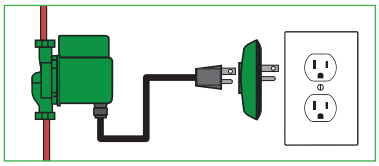
# SmartPlug Instant Hot Water Control® — SP115-1

The patented SmartPlug lets you upgrade any hot water recirculation pump with a power cord to "Smart" operation. Simply connect the SmartPlug to any 110V power outlet then plug the circulator power cord into the SmartPlug. Using a sensor that mounts to the hot water supply pipe, the SmartPlug will record the daily hot water usage pattern in a home and adjust the circulator run time automatically. Hot water will always be available when needed.

**No Programming, Timers or Aquastats Required • Sensor Included**

U.S. Pat# 8,594,853 and 9,207,682



For use with any Taco domestic water 00® circulator with a 110 Volt Line Cord. Circulator sold separately.

Taco Comfort Solutions®
A Taco Family Company

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# Application & Benefits

## Application:

The Taco SmartPlug is designed to upgrade any hot water recirculation system. SmartPlug replaces inefficient timers and aquastats typically used in recirculation systems. It adds intelligence to your system by learning when hot water is used in the home. The pipe-mounted temperature sensor records daily hot water usage patterns during the course of a week. Recorded data is used to automatically run the circulator at the same times the following week. So hot water is always available when it's needed. If usage pattern changes, the SmartPlug adjusts automatically.

**— No programming required.**

## Benefits:

- **Easy to install:** Upgrades any recirculation pump to "Smart" operation.
- **Water conservation:** The average residence can save up to 12,000 gallons* of water per year by eliminating the wait for hot water to arrive at fixtures and taps.
- **Comfort and convenience:** Hot water is available in seconds. No timers or programming required.
- **Efficiency:** "Smart" setting maximizes hot water comfort and energy savings.
- **Reliability:** The SmartPlug, when combined with a Taco domestic hot water circulator, provides whisper quiet operation and industry leading electronics for proven performance and dependability.

** Source: Department of Energy study*

## SmartPlug Control Options / Features:

**"Smart" Mode:** When set to "Smart" mode, the SmartPlug monitors and records the home's hot water usage pattern over a 7 day period. The SmartPlug will use the preceding week's usage pattern to automatically cycle the circulator ON, so hot water is always available when it's needed. The recording and repeating process is continuous, week after week.

**"Pulse" Mode:** When set to "Pulse" mode, the SmartPlug will continuously cycle the circulator ON for 5 minutes, then OFF for 10 minutes to maintain hot water at all fixtures.

**Vacation Mode:** After 36 hours of no hot water usage, the SmartPlug will automatically turn the circulator OFF and remain off until hot water usage is detected.

**Exercise Function:** While in vacation mode the SmartPlug will cycle the circulator for 10 seconds every 7 days to prevent any corrosion or scale build up.

**LED Indicator lights:**
Green: Power
Yellow: Mode Setting
Red: Error code diagnostics

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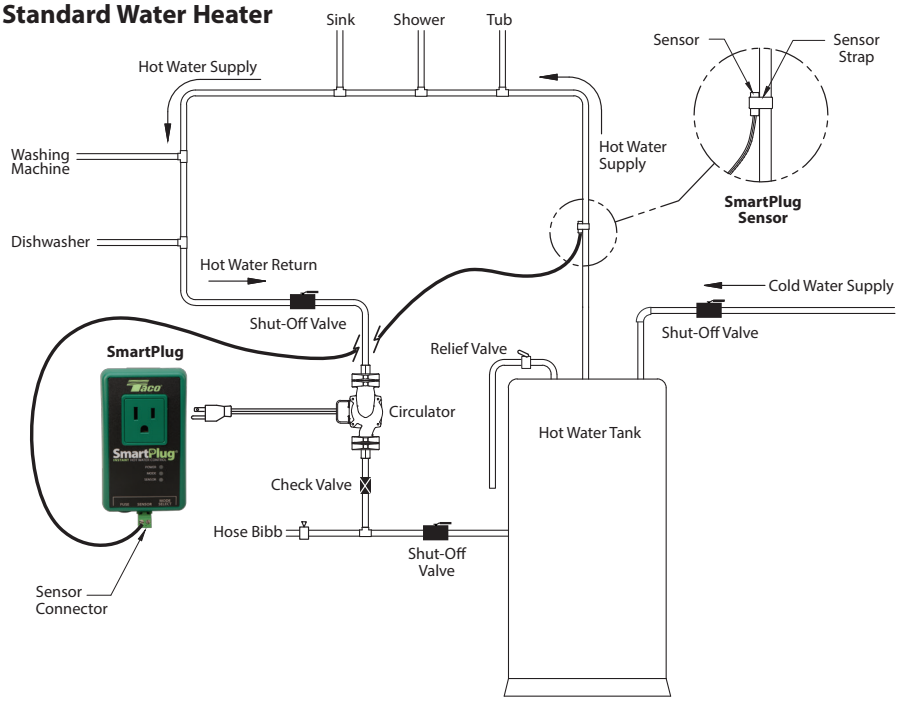
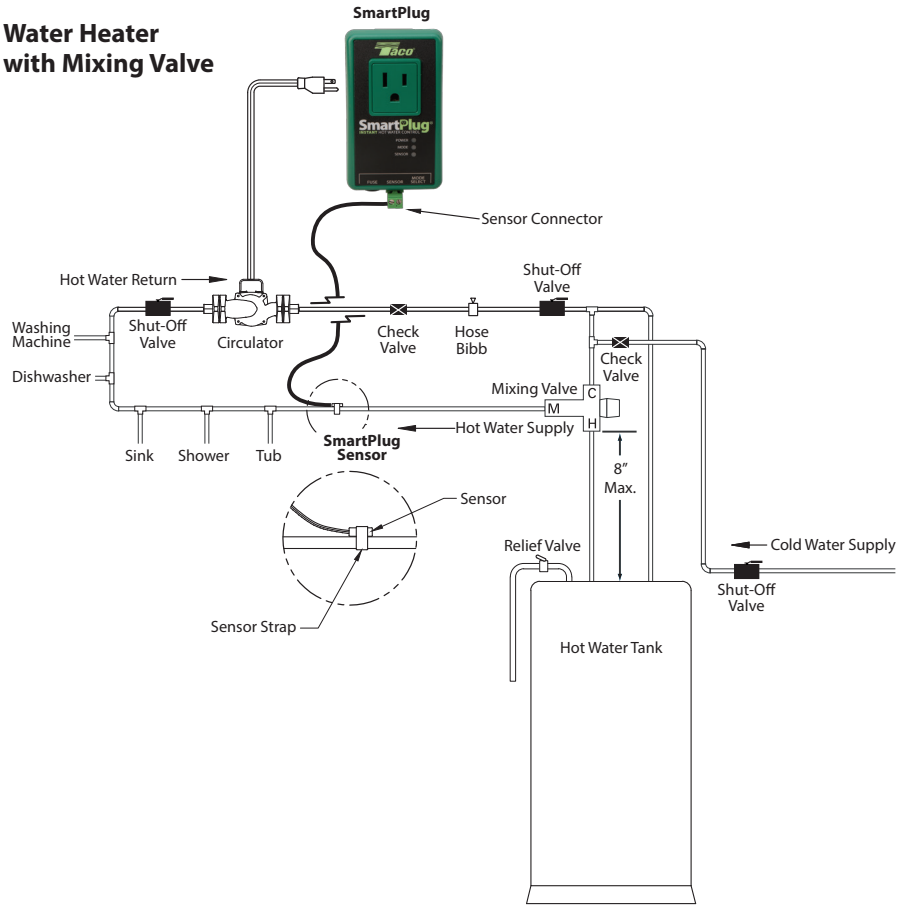
# Submittal Data Information
# SmartPlug Instant Hot Water Control®

## Standard Water Heater




Piping diagrams for reference only.

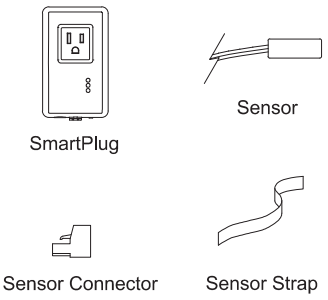
## Water Heater with Mixing Valve



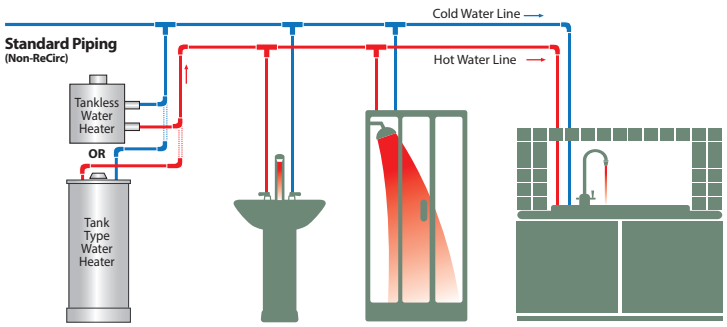

## Specifications

- Input: 120VAC, 50/60HZ, single phase, 6A
- Output: 120VAC, 50/60HZ, Single phase, 1/2 hp (limited to 6 FLA, 36LRA)
- Sensor: NTC Thermistor, 10K ohm @ 77°F, B= 3392
- Fuse: 125V, 6A, Medium Acting 5x20 mm glass, Littelfuse® p/n 0233006 mxp
- Ambient Operating Temp: 50-104°F, 10-40°C

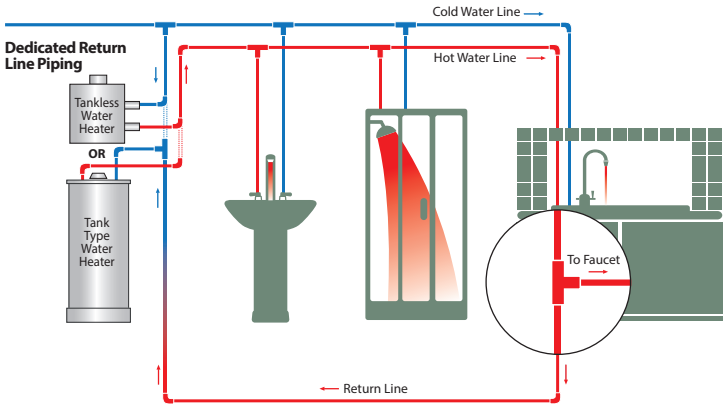
## SmartPlug Components




c UL us **FOR INDOOR USE ONLY**




- Hot-Link® System
- Hot-LinkPlus® System
- TacoGenie®
- SmartPlug Instant Hot Water Control®




- Plumb n'Plug®
- SmartPlus®
- TacoGenie®
- SmartPlug Instant Hot Water Control®

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