

# TANKLESS HIGH EFFICIENCY CONDENSING WATER HEATERS



**INDOOR MODELS**  
GTS-240, GTS-340, GTS-540



**OUTDOOR MODELS**  
GTS-240, GTS-340, GTS-540

Complies with  
SCAQMD  
Rule 1146.2  
California and Texas



ANSI Z21.10.3



GTS 540  
model only



CSA 4.3

## FEATURES

**Ultra-Low NOx Condensing Technology Provides Unprecedented 0.95 Energy Factor**

### Durable Heat Exchanger

- Primary Heat Exchanger is constructed of HRS35 Commercial-Grade Copper which is more resilient against erosion
- Secondary Heat Exchanger is made of Type 316L Stainless Steel to protect against corrosion

**Continuous Maximum Flow Rates up to 10.0 GPM**

### ENERGY STAR® Qualified

**Available in Natural Gas or Propane (LP)**

**GTS-540-NIH & GTS-540-NEH Can be used in both Residential and Commercial Applications**

**Electronic Ignition - No Pilot Light**

**Indoor Model - Includes a Built-In Temperature Controller and Advanced Diagnostics to Simplify Troubleshooting**

**Outdoor Model - Includes a Wall Mount Temperature Remote Controller and Advanced Diagnostics to Simplify Troubleshooting**

**Factory-Installed Power Cord Included for Indoor Models**

**Easy-Link up to 4 Units (GTS-540 Models Only)**

- With no additional parts or accessories needed

**Multi-Link up to 20 Units (GTS-540 Models Only)**

**Complies with Lead Free Standards**

### Safety Features:

- Air-Fuel Ratio (AFR) Sensor
- Exhaust & Water Temperature Safety Control
- Overheat Cut-Off Fuse

**Internal Freeze Protection System**

### Power Direct Vent Design

- Exhaust, 3" PVC Venting up to 70 Feet or 4" PVC Venting up to 100 Feet
- Provides flexible venting with PVC, CPVC, or ABS Pipe for Intake and Exhaust (solid core only). Canadian Installations Require ULCS636 Listed PVC or CPVC Pipe for Venting.
- Category IV Stainless Steel venting can also be used

### Accessories

- Pipe Cover
- Neutralizer Kit
- Isolation Valve Kits
- Concentric Termination

### Warranty

- 12-year limited warranty on heat exchanger in residential applications
- 5-year limited warranty on heat exchanger in commercial applications
- 5-year limited warranty on all parts

For more information on Tankless Condensing Water Heaters contact:

State Water Heaters  
500 Tennessee Waltz Parkway  
Ashland City, TN 37015  
800.365.0024 Toll-free USA  
www.statewaterheaters.com

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## TANKLESS HIGH EFFICIENCY CONDENSING MODELS

MODEL NUMBER	FUEL TYPE	GAS CONSUMPTION INPUT		INLET GAS PRESSURE		ENERGY FACTOR	MAX GPM*	HOT/COLD AND GAS CONN.	DIMENSIONS IN INCHES			UNIT WEIGHT (LBS)
		MINIMUM BTU/H	MAXIMUM BTU/H	MINIMUM W.C.	MAXIMUM W.C.				A HEIGHT	B WIDTH	C DEPTH	
<b>INDOOR</b>												
GTS-240-NIH	Natural	15,000	160,000	5.0	10.5	0.95	6.6	3/4" NPT	22-1/2	17-3/4	10-3/4	58
GTS-240-PIH	Propane	13,000	160,000	8.0	14.0	0.95	6.6	3/4" NPT	22-1/2	17-3/4	10-3/4	58
GTS-340-NIH	Natural	15,000	180,000	5.0	10.5	0.95	8.0	3/4" NPT	22-1/2	17-3/4	10-3/4	58
GTS-340-PIH	Propane	13,000	180,000	8.0	14.0	0.95	8.0	3/4" NPT	22-1/2	17-3/4	10-3/4	58
GTS-540-NIH	Natural	15,000	199,000	5.0	10.5	0.95	10.0	3/4" NPT	22-1/2	17-3/4	10-3/4	59
GTS-540-PIH	Propane	13,000	199,000	8.0	14.0	0.95	10.0	3/4" NPT	22-1/2	17-3/4	10-3/4	59
<b>OUTDOOR</b>												
GTS-240-NEH	Natural	15,000	160,000	5.0	10.5	0.95	6.6	3/4" NPT	22-1/2	17-3/4	10-3/4	58
GTS-240-PEH	Propane	13,000	160,000	8.0	14.0	0.95	6.6	3/4" NPT	22-1/2	17-3/4	10-3/4	58
GTS-340-NEH	Natural	15,000	180,000	5.0	10.5	0.95	8.0	3/4" NPT	22-1/2	17-3/4	10-3/4	58
GTS-340-PEH	Propane	13,000	180,000	8.0	14.0	0.95	8.0	3/4" NPT	22-1/2	17-3/4	10-3/4	58
GTS-540-NEH	Natural	15,000	199,000	5.0	10.5	0.95	10.0	3/4" NPT	22-1/2	17-3/4	10-3/4	59
GTS-540-PEH	Propane	13,000	199,000	8.0	14.0	0.95	10.0	3/4" NPT	22-1/2	17-3/4	10-3/4	59

All dimensions are in inches.

15-150 psi Water Pressure. 40 psi or above is recommended for maximum flow.

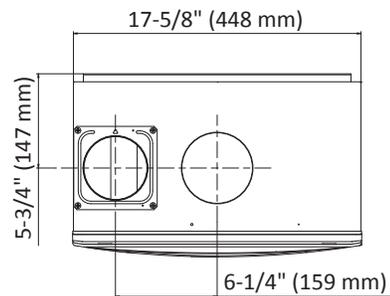
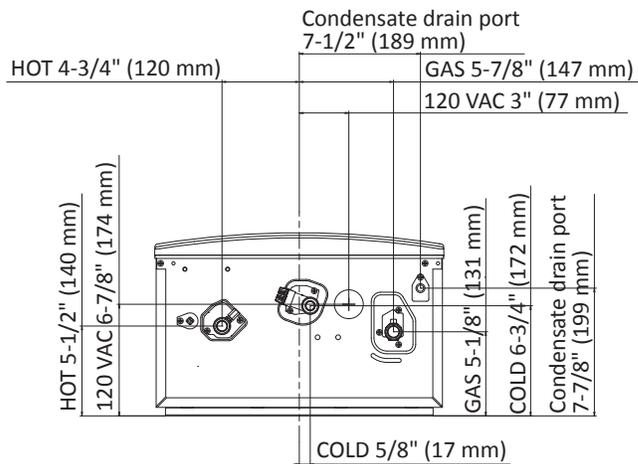
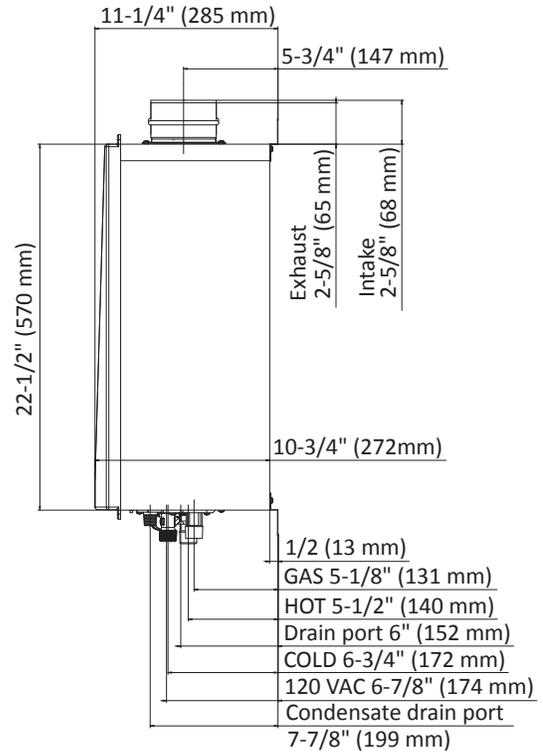
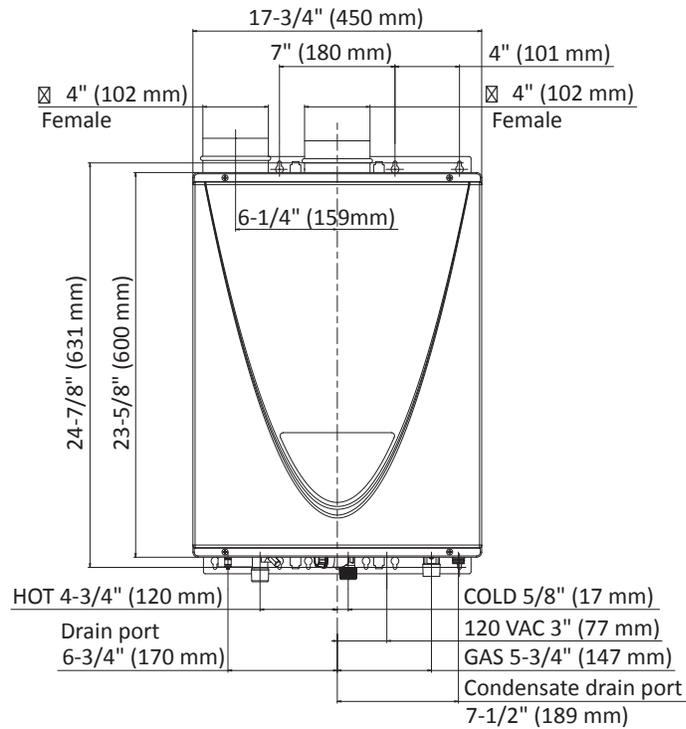
\*Current numbers based on factory testing; 0.4 GPM required for continuous fire after initial ignition.

Indoor models are certified from sea level to 10,100 ft. elevations.

In accordance with ANSI Z21.10.3, CO emission does not exceed 400 PPM for normal input.

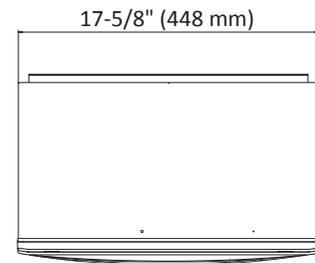
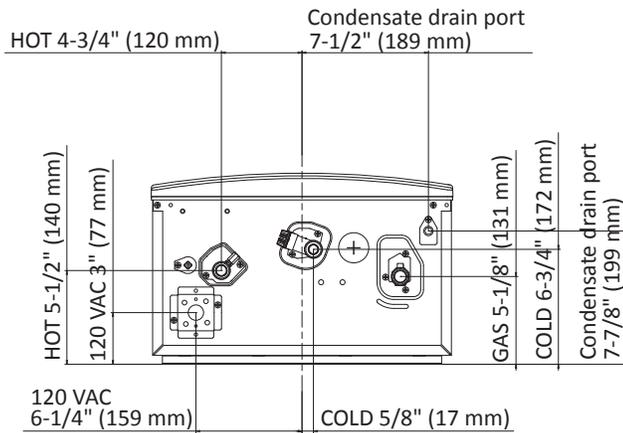
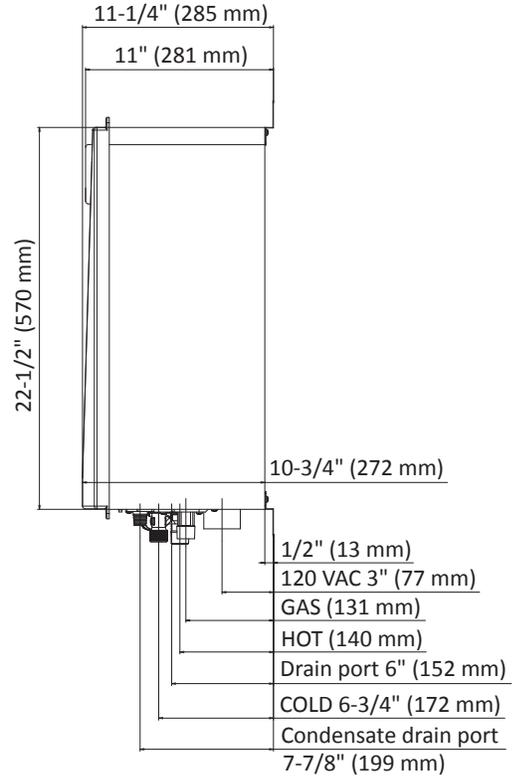
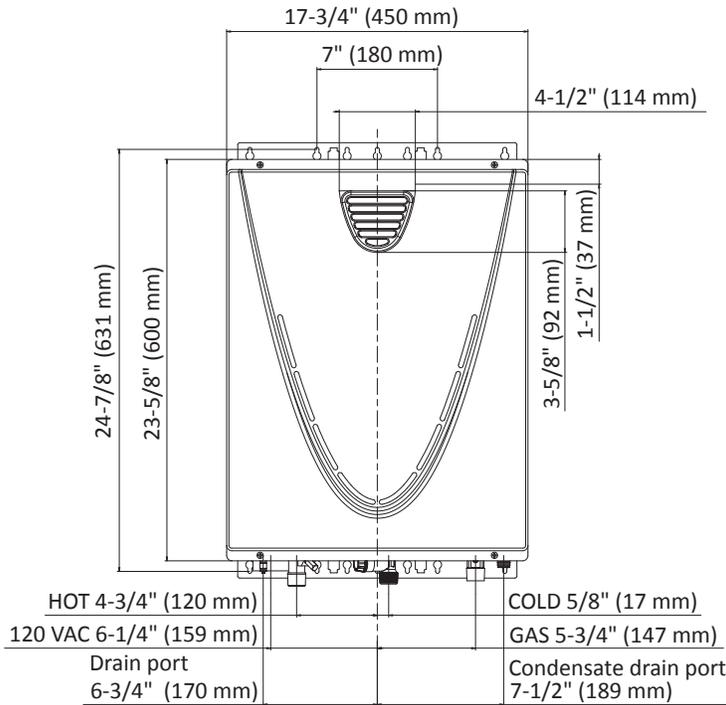
The manufacturer reserves the right to discontinue, or change at any time, specifications or designs without notice and without incurring obligation.

## INDOOR MODEL





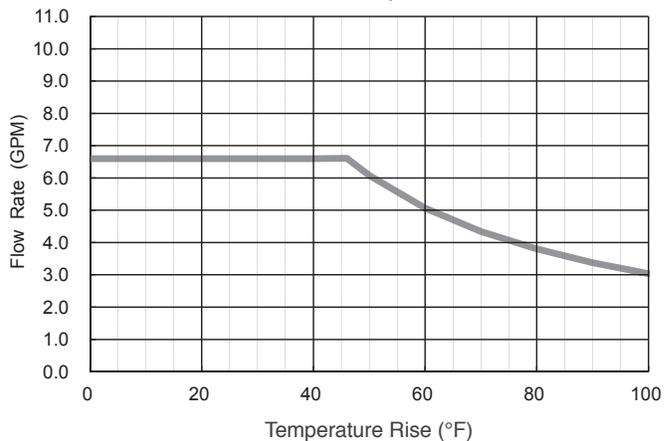
**OUTDOOR MODEL**



# FLOW RATE vs TEMPERATURE RISE

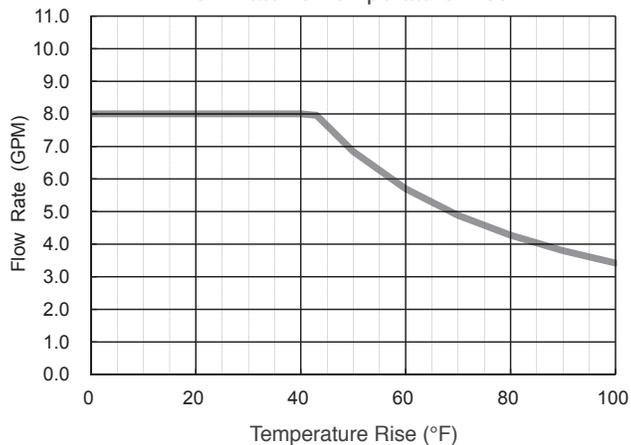
## GTS-240

Flow Rate vs. Temperature Rise



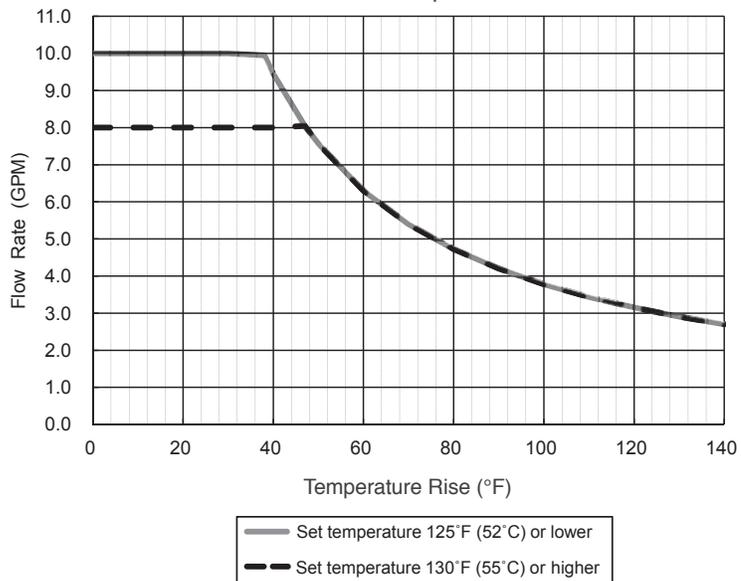
## GTS-340

Flow Rate vs. Temperature Rise



## GTS-540

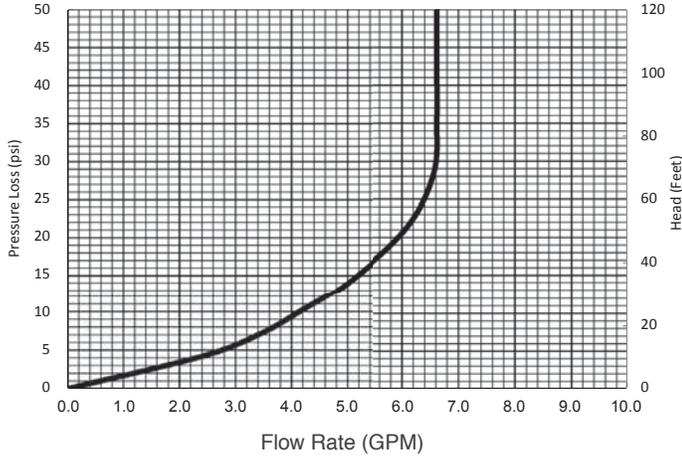
Flow Rate vs. Temperature Rise



**PRESSURE LOSS**

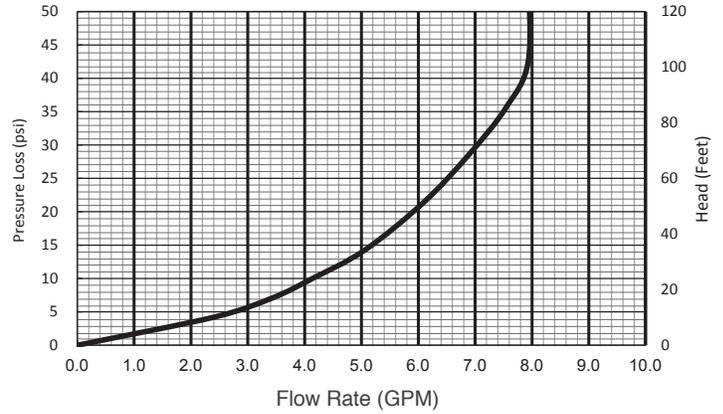
**GTS-240**

Pressure Loss



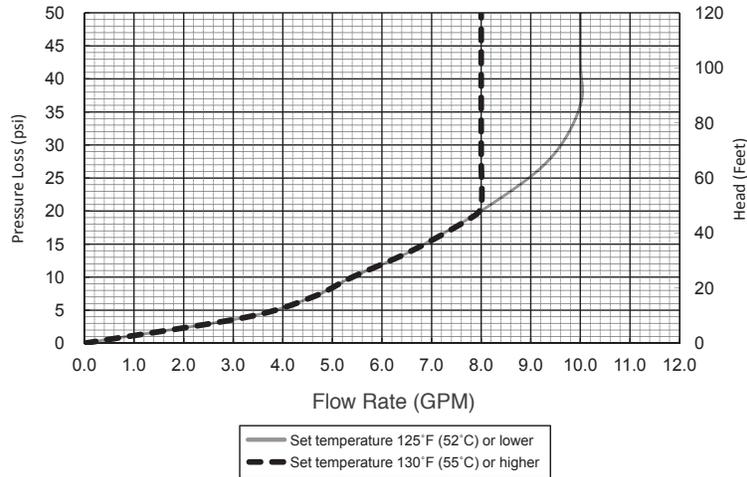
**GTS-340**

Pressure Loss



**GTS-540**

Pressure Loss



— Set temperature 125°F (52°C) or lower  
 - - - Set temperature 130°F (55°C) or higher

**Specification**

Water heater(s) shall be Model \_\_\_\_\_ as manufactured by State Water Heaters, shall be a copper coil integral fin and tube construction with quick release brass or bronze waterways. Heater(s) will be factory assembled and tested.

The heater shall be vented with 3" or 4" Schedule 40 PVC, CPVC, or ABS vent pipe, or stainless steel Category IV vent pipe at a distance not to exceed 70' (equivalent) for 3" vent or 100' (equivalent) for 4" vent, terminating vertically or horizontally as prescribed. Intake air pipe may be of such material as ABS, PVC, galvanized B-Vent, corrugated aluminum or stainless steel, or Category IV stainless steel not to exceed 70' (equivalent) for 3" vent or 100' (equivalent) for 4" vent.

The heater(s) shall be controlled by an onboard solid-state printed circuit board monitoring incoming and outgoing temperatures with factory installed thermistors, sensing and controlling flow rate to set point temperature, controlling both air and gas mixture inputs to maintain thermal combustion efficiency. The heater(s) shall also consist of inline fusing, a spark ignition and sensor system, aluminized stainless steel burners, an air-fuel ratio sensor, a hi-limit temperature switch, modulating and proportional gas valves, a freeze protection sensor with ceramic heating blocks, and an overheat cutoff fuse.

The water heater(s) shall be CSA listed, exceed the energy efficiency requirements of ASHRAE 90.1b-1992, and shall comply with SCAQMD Rule 1146.2 Ultra-Low NOx Standards.

**For complete information on limited warranties, consult written warranty or contact technical support at 1-800-365-0024. State Industries, Inc., reserves the right to make product changes or improvements without prior notice.**

For more information on Tankless Condensing Water Heaters contact:

State Water Heaters  
 500 Tennessee Waltz Parkway  
 Ashland City, TN 37015  
 800.365.0024 Toll-free USA  
 www.statewaterheaters.com

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