



Residential/Commercial Gas Tankless Water Heaters

TANKLESS HIGH EFFICIENCY CONDENSING MODELS

FEATURES

**ULTRA-LOW NO_x CONDENSING TECHNOLOGY PROVIDES UNPRECEDENTED
0.95 ENERGY FACTOR**

DURABLE HEAT EXCHANGER

- Primary Heat Exchanger is constructed of HRS35, a Commercial-Grade Copper that is more resilient to erosion. HRS35 is 25x better at heat transfer than stainless steel thus stabilizing outgoing water temperatures quicker
- 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)

**ATI 540H & ATO 540H 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 (540H MODELS ONLY)

- With no additional parts or accessories needed

MULTI-LINK UP TO 20 UNITS (540H 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

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



INDOOR MODELS

ATI-240H, ATI-340H, ATI-540H



OUTDOOR MODELS

ATO-240H, ATO-340H, ATO-540H



540 model only



ANSI Z21.10.3

CSA 4.3



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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	
INDOOR												
ATI-240H-N	Natural	15,000	160,000	5.0	10.5	0.95	6.6	3/4" NPT	23-5/8	17-3/4	11-1/4	58
ATI-240H-P	Propane	13,000	160,000	8.0	14.0	0.95	6.6	3/4" NPT	23-5/8	17-3/4	11-1/4	58
ATI-340H-N	Natural	15,000	180,000	5.0	10.5	0.95	8.0	3/4" NPT	23-5/8	17-3/4	11-1/4	58
ATI-340H-P	Propane	13,000	180,000	8.0	14.0	0.95	8.0	3/4" NPT	23-5/8	17-3/4	11-1/4	58
ATI-540H-N	Natural	15,000	199,000	5.0	10.5	0.95	10.0	3/4" NPT	23-5/8	17-3/4	11-1/4	59
ATI-540H-P	Propane	13,000	199,000	8.0	14.0	0.95	10.0	3/4" NPT	23-5/8	17-3/4	11-1/4	59
OUTDOOR												
ATO-240H-N	Natural	15,000	160,000	5.0	10.5	0.95	6.6	3/4" NPT	23-5/8	17-3/4	11-1/4	58
ATO-240H-P	Propane	13,000	160,000	8.0	14.0	0.95	6.6	3/4" NPT	23-5/8	17-3/4	11-1/4	58
ATO-340H-N	Natural	15,000	180,000	5.0	10.5	0.95	8.0	3/4" NPT	23-5/8	17-3/4	11-1/4	58
ATO-340H-P	Propane	13,000	180,000	8.0	14.0	0.95	8.0	3/4" NPT	23-5/8	17-3/4	11-1/4	58
ATO-540H-N	Natural	15,000	199,000	5.0	10.5	0.95	10.0	3/4" NPT	23-5/8	17-3/4	11-1/4	59
ATO-540H-P	Propane	13,000	199,000	8.0	14.0	0.95	10.0	3/4" NPT	23-5/8	17-3/4	11-1/4	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.

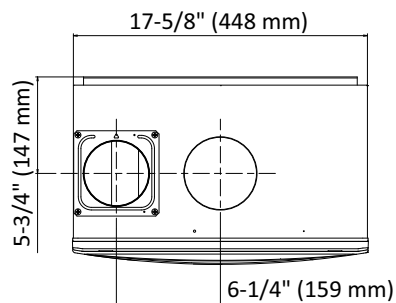
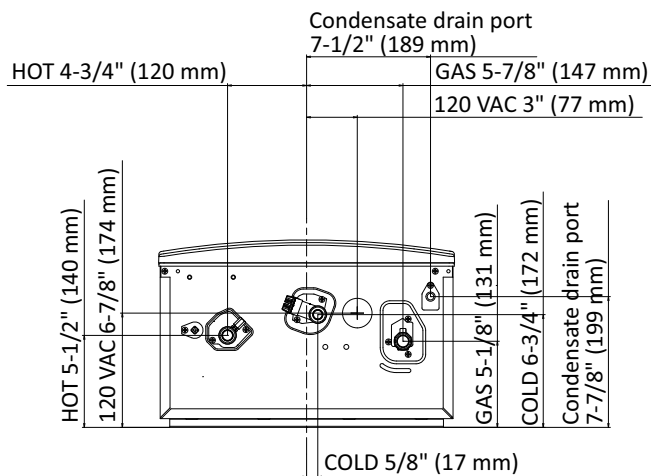
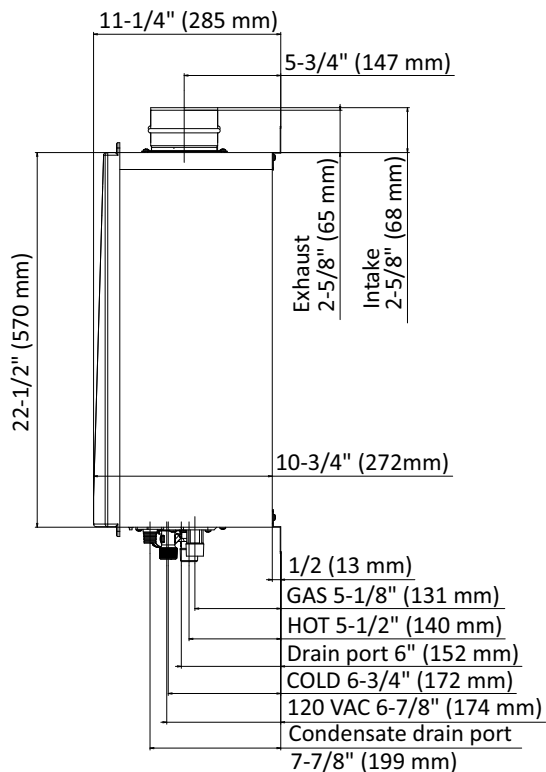
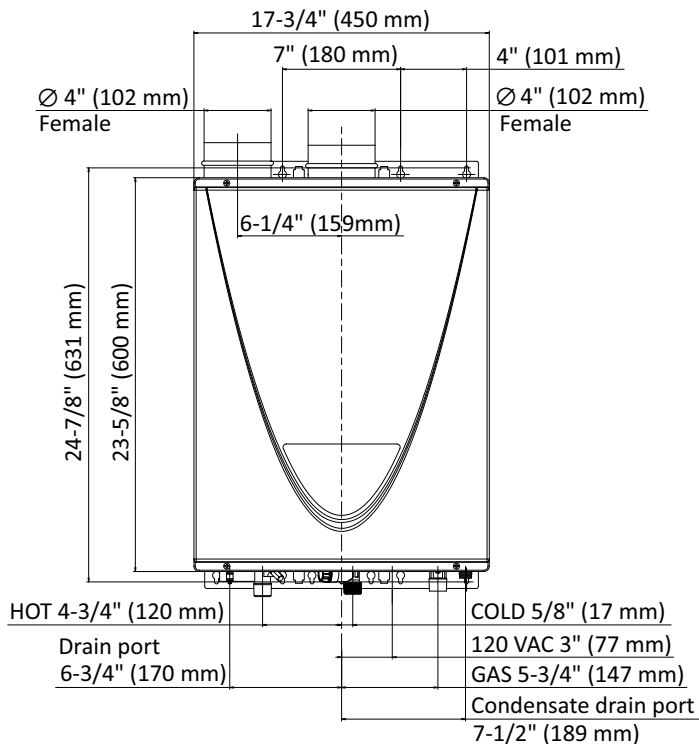
In accordance with ANSI Z21.10.3, CO emission does not exceed 400 PPM for normal input.

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



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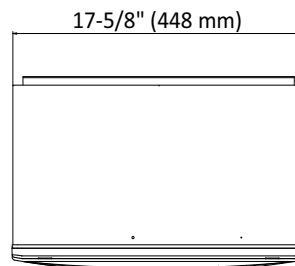
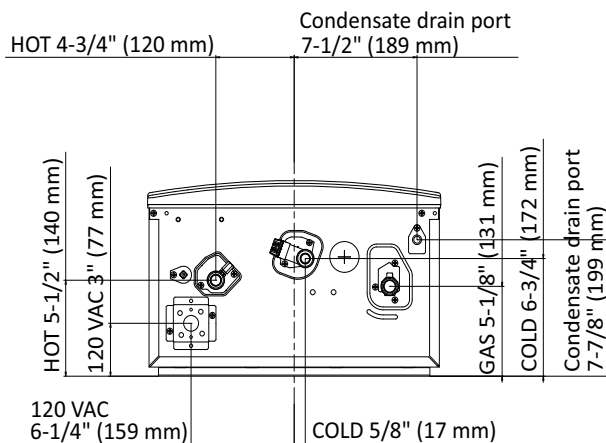
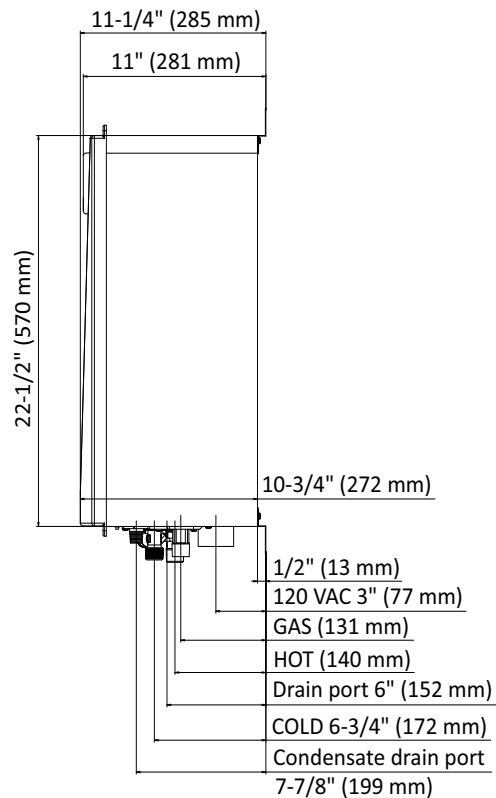
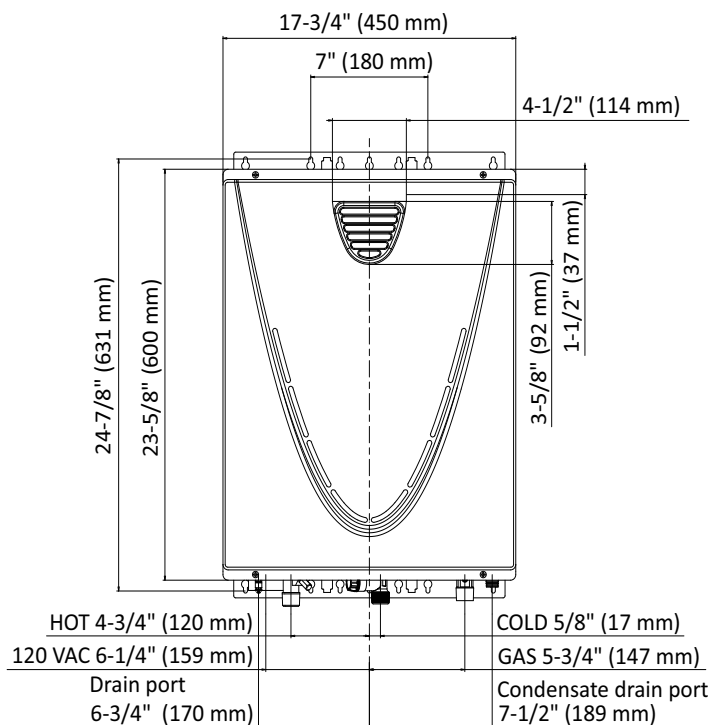
INDOOR MODEL





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OUTDOOR MODEL



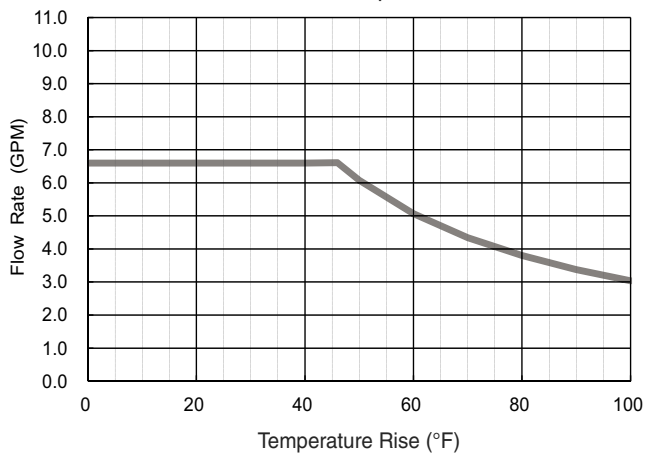


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FLOW RATE vs TEMPERATURE RISE

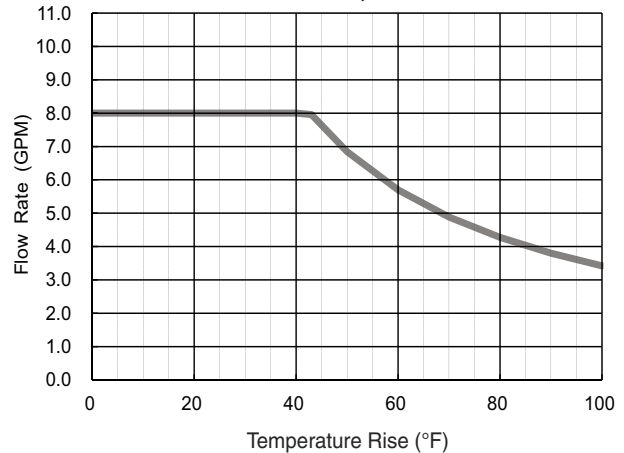
240H

Flow Rate vs. Temperature Rise



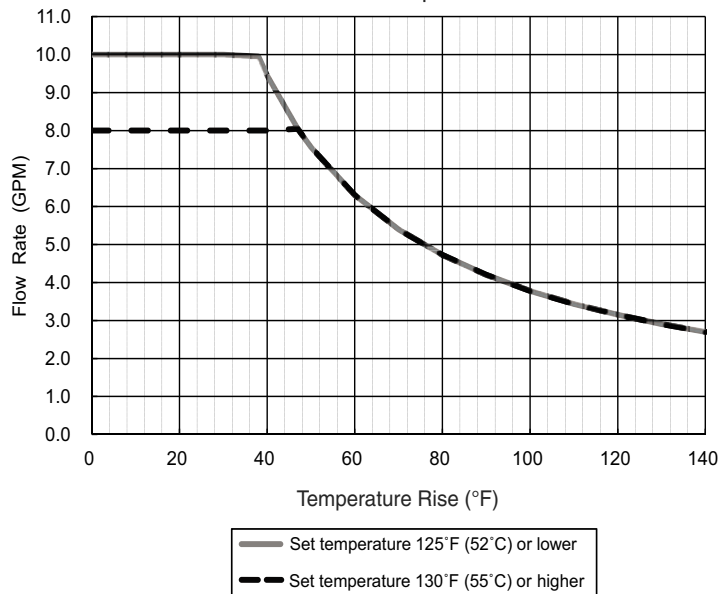
340H

Flow Rate vs. Temperature Rise



540H

Flow Rate vs. Temperature Rise

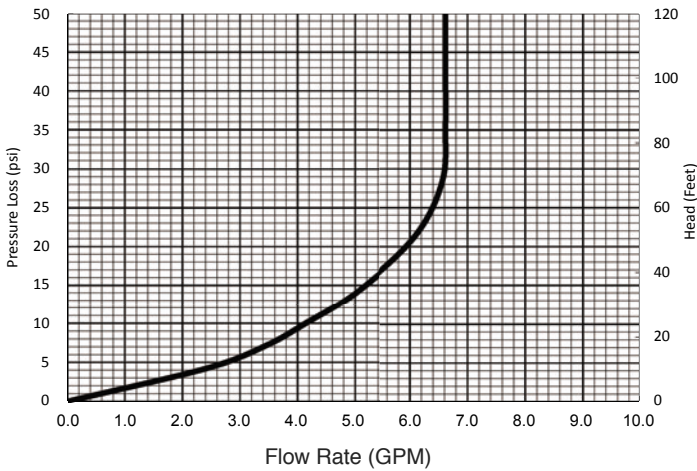




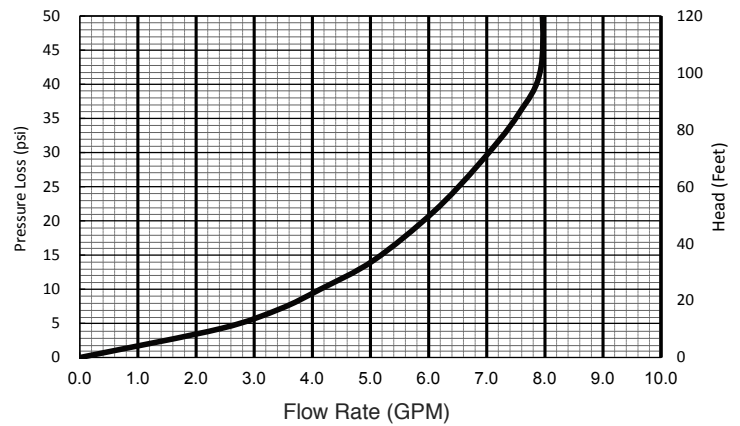
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PRESSURE LOSS

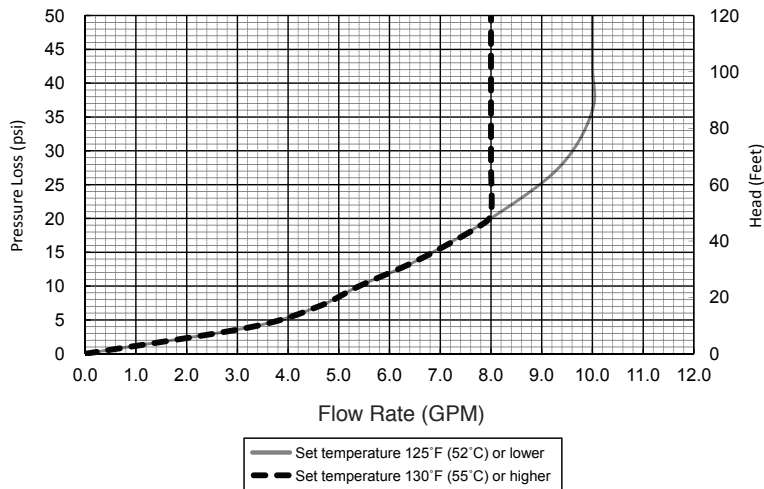
240H
Pressure Loss



340H
Pressure Loss



540H
Pressure Loss



Specification

Water heater(s) shall be Model _____ as manufactured by A. O. Smith 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 III 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.