

Residential Gas Condensing High Efficiency Tankless Water Heaters

15-Year Heat Exchanger Limited Warranty/5-Year Parts Warranty*

FEATURES

Ultra-Low NOx Condensing Technology provides 0.93 Energy Factor (EF)

Complies with California SCAQMD Rule 1146.2 and other Air Quality Management Districts with similar NOx emission requirements of 14 ng/J or 20 PPM

Operates on 1/2" Gas Line with Standard Gas Pressures

Durable Heat Exchanger

- Copper Primary Heat Exchanger
- Secondary Heat Exchanger is made of Marine Grade Type 316L Stainless Steel to protect against corrosion

Continuous Maximum Flow Rates up to 6.6 GPM

ENERGY STAR® Qualified

Available in Natural Gas or Propane (LP)

TS-140-GIH and TS-140-GEH can be used in Residential Hot Water and Heating Applications (Check local codes)

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

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).
- Category IV Stainless Steel venting can also be used

ACCESSORIES

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



**INDOOR MODEL
TS-140-GIH**



**OUTDOOR MODEL
TS-140-GEH**



Residential Gas Condensing High Efficiency Tankless Water Heaters

Tankless High Efficiency Condensing Models

MODEL NUMBER	FUEL TYPE	GAS CONSUMPTION INPUT		INLET GAS PRESSURE		ENERGY FACTOR	MAX GPM*	GAS CONN.	HOT/ COLD GAS CONN.	DIMENSIONS IN INCHES			UNIT WEIGHT (LBS)
		MIN. BTU/H	MAX. BTU/H	MIN. W.C.	MAX. W.C.					HEIGHT	WIDTH	DEPTH	
INDOOR													
TS-140-GIH	Natural	15,000	120,000	5.0	10.5	0.93	6.6	1/2" NPT	3/4" NPT	22-7/8	13-7/8	10-13/16	44
TS-140-LIH	Propane	15,000	120,000	8.0	14.0	0.93	6.6	1/2" NPT	3/4" NPT	22-7/8	13-7/8	10-13/16	44
OUTDOOR													
TS-140-GEH	Natural	15,000	120,000	5.0	10.5	0.93	6.6	1/2" NPT	3/4" NPT	22-7/8	13-7/8	10-13/16	44
TS-140-LEH	Propane	15,000	120,000	8.0	14.0	0.93	6.6	1/2" NPT	3/4" NPT	22-7/8	13-7/8	10-13/16	44

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; 0.5 gpm for activation; 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.



Non-Condensing Residential/Light Duty Commercial Gas, Low NOx

Altitude Range: 0-6,000 Feet Above Sea Level

Model Number	Type	BTU Input Natural/Propane		Uniform Energy Factor (U.E.F.)		Hot Water Output (GPM)		
		Minimum	Maximum	Natural	Propane	Maximum	45°F Rise	70°F Rise
TS-110-GI	Indoor	19,500	140,000	0.79	0.79	6.6	5.2	3.3
TS-310-GI	Indoor	11,000	190,000	0.80	0.80	8.0	7.0	4.5
TS-510-GI+	Indoor	11,000	199,000	0.80	0.80	10.0	7.3	4.7

For propane, change G to L in the model number when ordering. Example: TS-110-GI would become TS-110-LI.

+ Can be installed in light-duty commercial applications. Includes remote control and can connect up to 4 units.

Non-Condensing Residential/Light Duty Commercial Gas Ultra Low NOx

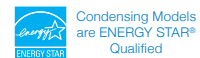
Altitude Range: Indoor Models: 0-10,100 Feet Above Sea Level, Outdoor Models: 0-6,000 Feet Above Sea Level

Model Number	Type	BTU Input Natural/Propane		Uniform Energy Factor (U.E.F.)		Hot Water Output (GPM)		
		Minimum	Maximum	Natural	Propane	Maximum	45°F Rise	70°F Rise
TS-110-UI*	Indoor	15,000	140,000	0.81	0.81	6.6	5.2	3.3
TS-310-UI*	Indoor	15,000	190,000	0.82	0.82	8.0	7.0	4.5
TS-510-UI*	Indoor	15,000	199,000	0.82	0.82	10.0	7.3	4.7
TS-110-UE*	Outdoor	15,000	140,000	0.81	0.81	6.6	5.2	3.3
TS-310-UE*	Outdoor	15,000	190,000	0.82	0.82	8.0	7.0	4.5
TS-510-UE*	Outdoor	15,000	199,000	0.81	0.81	10.0	7.3	4.7

* Field convertible natural gas to propane. Factory configured for natural gas, ships with propane conversion kit.

Condensing Residential/Light Duty Commercial Gas, Ultra Low NOx

Altitude Range: Indoor Models: 0-10,100 Feet Above Sea Level, Outdoor Models: 0-6,000 Feet Above Sea Level



Model Number	Type	BTU Input Natural/Propane		Uniform Energy Factor (U.E.F.)		Hot Water Output (GPM)		
		Minimum	Maximum	Natural	Propane	Maximum	45°F Rise	70°F Rise
TS-140-GIH	Indoor	15,000/15,000	120,000	0.90	0.90	6.6	5.0	3.2
TS-240-GIH	Indoor	15,000/13,000	160,000	0.94	0.94	6.6	6.6	4.3
TS-340-GIH	Indoor	15,000/13,000	180,000	0.95	0.95	8.0	7.6	4.9
TS-540-GIH	Indoor	15,000/13,000	199,000	0.93	0.93	10.0	8.4	5.4
TS-540P-GIH [†]	Indoor	15,000/13,000	199,000	0.93	0.93	10.0	8.4	5.4
TS-140-GEH	Outdoor	15,000/15,000	120,000	0.91	0.91	6.6	5.0	3.2
TS-240-GEH	Outdoor	15,000/13,000	160,000	0.95	0.95	6.6	6.6	4.3
TS-340-GEH	Outdoor	15,000/13,000	180,000	0.94	0.94	8.0	7.6	4.9
TS-540-GEH	Outdoor	15,000/13,000	199,000	0.95	0.95	10.0	8.4	5.4
TS-540P-GEH [†]	Outdoor	15,000/13,000	199,000	0.95	0.95	10.0	8.4	5.4

For propane, change G to L in the model number when ordering. Example: TS-140-GIH would become TS-140-LIH.

[†] These models are equipped with a factory-installed hot water recirculation loop pump.

Concentric Vent, Non-Condensing Residential/Light Duty Commercial Gas,

Ultra Low NOx Suitable for High Altitude Areas. Altitude Range: 0-10,100 Feet Above Sea Level

Model Number	Type	BTU Input Natural/Propane		Uniform Energy Factor (U.E.F.)		Hot Water Output (GPM)		
		Minimum	Maximum	Natural	Propane	Maximum	45°F Rise	70°F Rise
TS-110C-GI*	Indoor	15,000	140,000	0.81	0.81	6.6	4.9	3.1
TS-310C-GI*	Indoor	15,000	190,000	0.82	0.82	8.0	6.9	4.4
TS-510C-GI*	Indoor	15,000	199,000	0.81	0.81	10.0	7.1	4.5

* Field convertible natural gas to propane. Factory configured for natural gas, ships with propane conversion kit.

Tankless Venting and Accessories







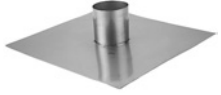


Water Heaters
Reliance.



TANKLESS VENTING

Simple Leak-Proof Gasketed Connections – No Sealant Required. **High Quality** – Category III Stainless Steel.
Versatile – Vertical and Horizontal Terminations. **Convenient** – Vent Kits Available.
UL Listed. All Connections have Heat Resistant Rubber Gaskets

PART #	DESCRIPTION	
WALL THIMBLE		
9007998005	Wall Thimble (4"-7")	
9007997005	Wall Thimble (5"-10")	
SUPPORT		
9007989005	Support Strap	
STRAIGHT		
9007987005	6" Straight Vent Pipe	
9007986005	12" Straight Vent Pipe	
9007984005	24" Straight Vent Pipe	
9007983005	36" Straight Vent Pipe	
9007982005	48" Straight Vent Pipe	
ADJUSTABLE		
9007985005	Adjustable Vent Pipe (10"-18")	
ELBOW		
9007981005	45 Degree Elbow	
9007980005	90 Degree Elbow	
ADAPTOR		
9007979005	Female-Female Adaptor	
9007667005	Direct Vent Conversion Kit	
BACKFLOW PREVENTION		
9008006005	4" Backflow Preventer & F-F Adaptor	
FIRESTOP		
9007988005	Vertical Firestop	

PART #	DESCRIPTION	
TERMINATION		
9008004005	Sidewall Vent Terminator (Hood and Wall Thimble (4"-7"))	
9008005005	Sidewall Vent Terminator (Hood and Wall Thimble (5"-10"))	
9007999005	Sidewall Vent Terminator (Hood)	
9007995005	Rain Cap	
9007611005	3" Concentric PVC Termination	
CONDENSATION DRAIN		
9007994005	Drain Tee (Horizontal)	
9007993005	Drain Tee (Vertical)	
ROOF FLASHING		
9007992005	Flat Roof Flashing	
9007991005	Angled Roof Flashing	
STORM COLLAR		
9007990005	Storm Collar	

TANKLESS ACCESSORIES

CONCENTRIC DIRECT VENT KITS

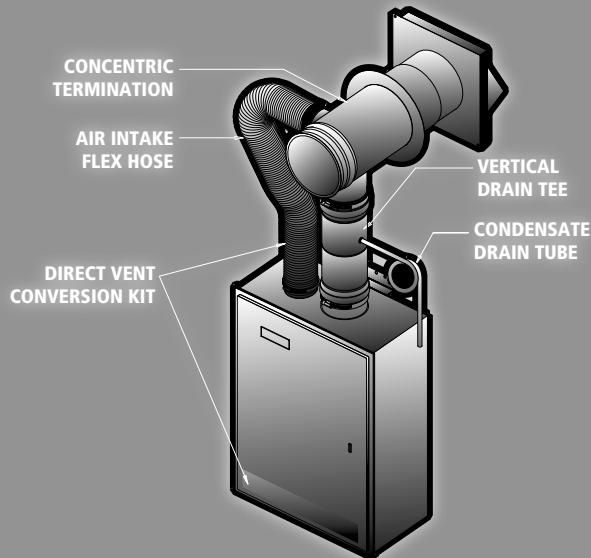
PART #	DESCRIPTION											
		110 INDOOR Non-Condensing	110 OUTDOOR Non-Condensing	310 INDOOR Non-Condensing	310 OUTDOOR Non-Condensing	510 INDOOR Non-Condensing	510 OUTDOOR Non-Condensing	520 INDOOR Condensing	520 OUTDOOR Condensing	520 INDOOR Condensing	520 OUTDOOR Condensing	
9008002005	Direct Vent Conversion Kit with Remote, Condensate Drain, Backflow Preventer, Air Intake Flex Hose, Condensate Drain Tube, and Concentric Termination (5'-10")	X		X								
9008003005	Direct Vent Conversion Kit with Remote, Condensate Drain, Backflow Preventer, Air Intake Flex Hose, Condensate Drain Tube, and Concentric Termination (12"-18")	X		X								
9008001005	Direct Vent Conversion Kit with Condensate Drain, Backflow Preventer, Air Intake Flex Hose, Condensate Drain Tube, and Concentric Termination (5'-10")	X		X		X						
9008000005	Direct Vent Conversion Kit with Condensate Drain, Backflow Preventer, Air Intake Flex Hose, Condensate Drain Tube, and Concentric Termination (12"-18")	X		X		X						

ACCESSORIES

PART #	DESCRIPTION											
		110 INDOOR Non-Condensing	110 OUTDOOR Non-Condensing	310 INDOOR Non-Condensing	310 OUTDOOR Non-Condensing	510 INDOOR Non-Condensing	510 OUTDOOR Non-Condensing	520 INDOOR Condensing	520 OUTDOOR Condensing	520 INDOOR Condensing	520 OUTDOOR Condensing	
9007666005	Remote Temperature Controller	X	X	X	X							
9007603005						X	X	X	X	X	X	
9007667005	Direct Vent Conversion Kit	X		X		X						
9007670005	Pipe Cover			X	X	X	X					
9007671005		X	X									
9007606005								X	X	X	X	
9007674005	Recess Box		X		X		X					
9007998005	Wall Thimble (4"-7")	X		X		X						
9007997005	Wall Thimble (5"-10")	X		X		X						
9008004005	Sidewall Vent Terminator (Hood) and Wall Thimble (4"-7")	X		X		X		X		X		
9008005005	Sidewall Vent Terminator (Hood) and Wall Thimble (5"-10")	X		X		X						
9007989005	Support Strap	X		X		X						

Concentric DV Conversion Kit

9008001005 (5'-10")
9008000005 (12"-18")



Concentric DV Conversion Kit w/Remote

9008002005 (5'-10")
9008003005 (12"-18")



TANKLESS ACCESSORIES

ACCESSORIES

		110 INDOOR Non-Condensing	110 OUT DOOR Non-Condensing	310 INDOOR Non-Condensing	310 OUT DOOR Non-Condensing	510 INDOOR Non-Condensing	510 OUT DOOR Non-Condensing	320 INDOOR Condensing	320 OUT DOOR Condensing	520 INDOOR Condensing	520 OUT DOOR Condensing
9007987005	6" Straight Vent Pipe	X		X		X					
9007986005	12" Straight Vent Pipe	X		X		X					
9007984005	24" Straight Vent Pipe	X		X		X					
9007983005	36" Straight Vent Pipe	X		X		X					
9007982005	48" Straight Vent Pipe	X		X		X					
9007985005	Adjustable Vent Pipe (10"-18")	X		X		X					
9007981005	45 Degree Elbow	X		X		X					
9007980005	90 Degree Elbow	X		X		X					
9007979005	Female-Female Adaptor	X		X		X					
9008006005	4" Backflow Preventer and F-F Adaptor	X		X		X					
9007988005	Vertical Firestop	X		X		X					
9007999005	Sidewall Terminator (Hood)	X		X		X					
9007995005	Rain Cap	X		X		X					
9007994005	Drain Tee (Horizontal)	X		X		X					
9007993005	Drain Tee (Vertical)	X		X		X					
9007992005	Flat Roof Flashing	X		X		X					
9007991005	Angled Roof Flashing	X		X		X					
9007990005	Storm Collar	X		X		X					
9007604005	Isolation Valve Kit (lead free)	X	X	X	X	X	X	X	X	X	X
9007605005	Isolation Valve Kit	X	X	X	X	X	X	X	X	X	X
9007610005	PVC Intake Adaptor							X		X	
9007611005	PVC Concentric Termination							X		X	
9007607005	Neutralizer Kit							X	X	X	X

