

# TITAN™

## Commercial Oil Water Heater



- **Meets or Exceeds the Thermal Efficiency and/or Standby Loss Requirements of the U.S. Department of Energy and Current Edition of ASHRAE/IESNA 90.1**
- **Titan™ Models Inhibit Lime and Sediment Buildup** – Titan™ models are warranted against tank failure due to sediment buildup for three years.
- **Glass-Lined Tank** – Assures years of rust-free clean hot water. 160 psi working pressure.
- **180° Adjustable Thermostat** – Has upper and lower sensing bulbs to average water temperatures at top and bottom of heater for maximum temperature control (120°-180°).
- **Safety Shutoff** – Limits temperature buildup.
- **UL Listed Oil Burner** – Precision engineered to match the units they are used with; designed to fire 1.75 to 5.0 gallons of oil per hour. All models equipped with single phase continuous duty motor 120 volt AC 60 Hz, 3450 rpm with overload switch and interrupted ignition. Standard burners equipped with single stage pump with 1 or 2 line capability. Flame retention principle assures high rate of combustion efficiency, yet maintains low operating noise levels. Fuel unit includes pump, strainer, pressure regulating valve and ignition transformer. Transformer rated at 120 volt AC, 60 Hz with high voltage secondary, UL listed for use with No. 1 and 2 commercial grade fuel oil. Burner mounted cadmium cell relay for flame detection - 15 second safety switch timing eliminates the need for RA890F Electronic Safeguard. Complies with UL 296-MP 1192.
- **Efficient Combustion Chamber** – Precast, high temperature combustion chamber made of alumina silica ceramic fiber. Engineered for maximum insulation and heat reflection. Unique design assures more complete combustion by stabilizing flame pattern.
- **Interrupted Ignition** – Reduces electrical consumption.
- **Oil Solenoid Safety Valve** – Standard on GPO75 385, GPO75 455 and GPO69 700.
- **3/4" Drain Valve** – Provided in lower tank for fast draining.
- **Two Hand-Hole Cleanouts** – Allows easy cleaning on standard models GPO75 385 and larger and ASME models.
- **Anodic Protection** – For longer tank life.
- **Flame Observation Port** – Permits convenient flame check.
- **Foam Insulation** – Saves fuel, helps assure constant temperature, vermin proof.
- **Jacket** – Heavy gauge steel with baked enamel finish over bonderized undercoat. Not approved for installation on combustible flooring.
- **Easy To Install Burner** – Three bolt mounting of burner assures easy installation.
- **Barometric Draft Regulator**
- **CSA Certified and ASME Rated T&P Relief Valve**

**CAUTION:** Units must be installed on non-combustible surface.

### Limited Warranty:

- **Limited Warranty Outline**
  - If the tank should leak any time during the first three years, under the terms of the warranty, State Water Heaters will furnish a replacement heater; installation, labor, handling and local delivery extra.
  - **NOTE: This Outline is NOT A Warranty.** For complete information, consult the written warranty or State Water Heaters.

### Other Features:

- Two layers of high temperature ceramic fiber insulation in combustion chamber
- Flame inspection port opening
- Mounted on rugged channel iron skids
- Multiple anodes for protection

### Optional Features:

- **Two Stage Pump** - For use with underground oil storage tanks.
- **ASME Construction** - Available on models GP084 315, GP075 385, GP075 455, GP069 700. ASME units have 160 psi working pressure.

For more information on Titan™ contact:  
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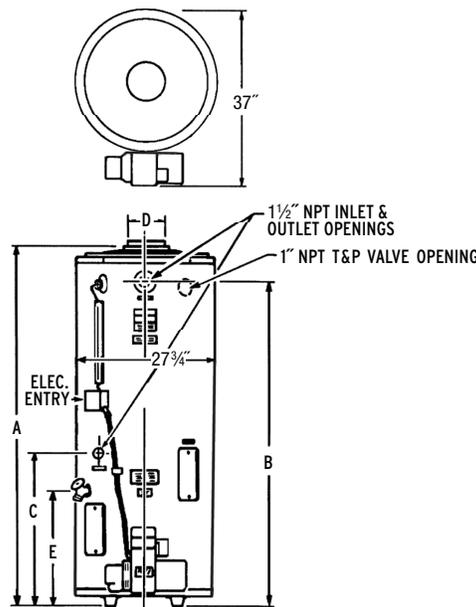
### SPECIFICATIONS

Model Number	Storage Capacity U.S. Gallons	Input* BTU/Hr.	Firing Rate GPH	Output (Gallons) Recovery			Dimensions In Inches					Motor HP	Approximate Shipping Wt. (lbs.)		Water Connections	
				80°F Rise	100°F Rise	140°F Rise	A	B	C	D	E		Standard	ASME	In	Out
GPO 86 1990E	86	199,000	1.42	241	193	138	74¾	67¾	27	6	23⅞	⅞	568	—	1½	1½
GPO 86 2450E	86	245,000	1.75	297	238	170	74¾	67¾	27	8	23⅞	⅞	557	—	1½	1½
GPO 84 3150E**	84	315,000	2.25	382	305	218	74¾	67¾	27	8	23⅞	⅞	557	668	1½	1½
GPO 75 3850E**	75	385,000	2.75	467	373	267	74¾	65	25¼	8	23¾	⅞	638	730	1½	1½
GPO 75 4550E**	75	455,000	3.25	552	441	315	74¾	66	25¼	8	23¾	⅞	647	748	1½	1½
GPO 69 7000E**	69	700,000	5.00	848	679	485	79¾	70¾	30⅞	10	29¾	⅞	739	853	1½	1½

\*Based on No.2 fuel oil. Capacity ratings are actual heater performance at 80% thermal efficiency.

\*\*These models are available with ASME construction. When ordering ASME construction, add "A" to end of model number. Example: GPO 69 7000E A

NOTE: Above 2000' altitude, input ratings should be reduced 4% for each 1000' above sea level.



#### GPO SUGGESTED SPECIFICATION

Water heater(s) shall be commercial oil model number \_\_\_\_\_ or equivalent. Heater(s) shall have a minimum oil firing rate of \_\_\_\_\_ gph at 100°F temperature rise and a storage capacity of \_\_\_\_\_ gallons. The 160 psi working pressure tank shall be glass-lined with the alkaline borosilicate composition being fused to the steel at 1600° and be equipped with 1-1/3" water inlet and outlet openings, and 2-3/4" x 3-3/4" boiler-type hand-hole cleanout (2) on GP084 315 and larger or ASME models. The tank shall be insulated with 2" of vermin proof fiber glass insulation. The outer jacket shall have baked enamel finish over a bonderized undercoating. The burner shall be Underwriters' Laboratories listed and have a \_\_\_\_\_ (one or two) stage oil pump. The burner shall have flame retention, interrupted ignition and be equipped with primary controls which will provide for 15 second safety shutdown in the event of flame failure. The heater(s) shall be factory equipped with primary controls which will provide for 15 second safety shutdown in the event of flame failure. The heater(s) shall be factory equipped with temperature limiting device, drain valve, flame observation port and 180° adjustable thermostat having upper and lower sensing bulbs which average the water temperatures at the top and bottom of the tank for maximum water temperature control. A pressure and temperature relief valve shall be furnished and installed by the factory. Heater tank shall have a 3 year limited warranty against corrosion and tank failure due to sediment buildup as outlined in the warranty.

CAUTION: Unit must be installed on non-combustible surface.

#### MULTIPLE INSTALLATIONS

Furnish and install \_\_\_\_\_ models as specified with a State (2, 3, or 4) heater manifold kit, package number \_\_\_\_\_.

For more information on Titan™ 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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