# FULL PRODUCT LINE
# POCKET GUIDE

RESIDENTIAL & COMMERCIAL



The story is all in the details. Every water heater that carries the A. O. Smith name has a reputation to live up to, one that we've earned through 140 years of innovation. As an industry leader, we constantly look for new materials and develop new technologies that can improve energy efficiency. So, when you choose an A. O. Smith water heater, whether it's gas, electric or hybrid you can be confident that you are getting the best water heating solution regardless of the application—for today and for years to come. Innovation has a name... A. O. Smith.



All A. O. Smith residential water heaters meet the Federal Energy Efficiency Standards effective June 4, 2018, according to the National Appliance Energy Conservation Act (NAECA) of 1992, and meet the thermal efficiency and standby loss requirements of the U. S. Department of Energy and current edition of ASHRAE/IES 90.1. They also comply with the current edition of ICC Codes and the HUD Standards. Gas models meet American National Standards Institute Standards (ANSI Z21.10.1 - CSA 4.1) governing storage-type water heaters. Electric models are UL listed according to safety specifications outlined in Underwriters Laboratories, Inc. Standards for Safety (UL 174).

# TABLE OF CONTENTS


Introduction ..... 1
Table of Contents ..... 2-4
Introducing the ProLine® Family ..... 5
Contractor Rewards ..... 6
ProLine® Gas Family Features ..... 7
ProLine® Electric Family Features ..... 8
ProLine® Tankless Family Features ..... 9

**RESIDENTIAL GAS**

Vertex™ High Efficiency Power Vent ..... 10-11
Vertex™ High Efficiency Power Direct Vent ..... 12-13
Polaris® High Efficiency ..... 14-15
ProLine® XE Non-Condensing Power Vent ..... 16-17
ProLine® XE Non-Condensing Power Direct Vent ..... 18-19
ProLine® XE High Efficiency Non-Condensing Flue Damper ..... 20-21
ProLine® XE High Efficiency Non-Condensing Ultra-Low NOx Flue Damper ..... 22-23
ProLine® XE High Efficiency Non-Condensing Ultra-Low NOx Power Vent ..... 24-25
ProLine® Master Atmospheric Vent ..... 26-29
ProLine® Master Ultra-Low NOx ..... 28-29
ProLine® High Capacity Atmospheric Vent ..... 30-31
ProLine® Direct Vent ..... 32-33
ProLine® Atmospheric Vent ..... 34-37
ProLine® Energy Saver Atmospheric Vent Mobile Home ..... 38-39
ProLine® Energy Saver Direct Vent Mobile Home ..... 40-41
ProLine® Ultra-Low NOx ..... 42-43
ProLine® Ultra-Low NOx Direct Vent ..... 44-46
ProLine® Ultra-Low NOx High Capacity ..... 46-47

**RESIDENTIAL HYBRID ELECTRIC**

Voltex® Hybrid Electric Heat Pump - 10-Year Warranty ..... 48-49
Voltex® Hybrid Electric Heat Pump - 6-Year Warranty ..... 50-51

**RESIDENTIAL ELECTRIC**

ProLine® XE Electronic Display ..... 52-53
ProLine® Electronic Thermostat ..... 54-55
ProLine® Master ..... 56-57
ProLine® Standard ..... 58-59

# TABLE OF CONTENTS


ProLine® 80 Gallon Electric ..... 60-61
Mobile Home ..... 62-63
ProLine® Specialty ..... 64-65

## RESIDENTIAL PUMP AND EXPANSION TANKS

Pump Tanks ..... 66-67
Expansion Tanks ..... 68-69

## TANKLESS (RESIDENTIAL AND COMMERCIAL)

ProLine® XE X3P Series ..... 70-71
ProLine® XE Combi Boiler ..... 72-73
ProLine® XE Condensing with Recirculation Pump ..... 74-75
ProLine® XE Condensing High Efficiency (140) ..... 76-77
ProLine® XE Condensing High Efficiency (240-540) ..... 78-79
ProLine® XE Non-Condensing Concentric Vent ..... 80-81
ProLine® XE Non-Condensing Ultra-Low NOx ..... 82-83
Non-Condensing Heavy-Duty ..... 84-85
Rack System ..... 86-89
BACnet and Modbus Interface ..... 90-91
Point-of-Use ..... 92-93
Electric Tankless ..... 94-95

## COMMERCIAL GAS AND OIL FIRED

Cyclone® HE BTX-80 ..... 96-97
Cyclone® Xi BTX-100 ..... 98-99
Cyclone® Xi BTXL-100 ..... 100-101
Cyclone® MXi ..... 102-105
Cyclone® XL ..... 106-107
Cyclone® LV ..... 108-111
Polaris® High Efficiency ..... 112-113
TX1 Integrated Tankless on Tank ..... 114-115
Master-Fit® BTR ..... 116-119
Master-Fit® Ultra-Low NOx ..... 120-123
Conservationist® BT ..... 124-125
Conservationist® Power Vent ..... 126-127
Conservationist® Power Direct Vent ..... 128-129
Conservationist® Ultra-Low NOx ..... 130-131
Power Burner Light-Duty ..... 132-133
Low NOx Power Burner ..... 134-135
Conservationist® Duraclad Oil-Fired Tank-Type ..... 136-137

# TABLE OF CONTENTS


## COMMERCIAL ELECTRIC

Light-Service ..... 138-139
DEN/DEL Electric Dura-Power™ ..... 140-141
Gold Xi Series - DVE Electric ..... 142-143
Gold Series - DRE Electric ..... 144-145
Heavy-Duty Custom Xi ..... 146-147
Heavy-Duty Premium Electric DVE/DHE Dura-Power™ ..... 148-153

## COMMERCIAL HEAT PUMP

CHP-120 Fully Integrated Heat Pump ..... 154-155

## CIRCULATING WATER HEATERS

XP High Efficiency Water Heater ..... 156-157
XP PLUS High Efficiency Water Heater ..... 158-159
Burkay® Genesis® Domestic Water Heater ..... 160-161
Variable Fire™ High Efficiency Water Heater ..... 162-163

## HOT WATER SUPPLY BOILERS

Burkay® Energy Saver Copper Heat Exchanger ..... 164-165
Burkay® HWH Gas Domestic Water Heaters & Boiler ..... 166-167

## HOT WATER GENERATOR

Steam or Boiler Hot Water HWG Generator Systems ..... 168-169

## COMMERCIAL STORAGE TANKS

Standard Jacketed Storage Tank ..... 170-171
Custom-Line Factory Jacketed
& Insulated Storage Tank ..... 172-175
Uninsulated Standard Stock Bare Storage Tank ..... 176-179
Heavy-Duty Large Volume Storage Tanks
Model HD Custom-Built ..... 180-183

## COMMERCIAL WATER HEATERS

AC-U-Temp Complete Hot Water Systems ..... 184
Xpert Water Heater Selection Tool ..... 185

# Introducing the ProLine® Family of Commercial-Grade Residential Water Heaters



ProLine® XE Vertex™ | ProLine® Master | ProLine®

When it comes to building a tough commercial-grade water heater, the keys to success are outstanding components and superior manufacturing capabilities. We've combined these two important elements to create the ProLine® Family of commercial-grade residential water heaters. This wholesale-channel exclusive will give A. O. Smith's contractors the ultimate advantage.

# WHY PROFESSIONALS CHOOSE A. O. SMITH




It's free and easy to participate. Enroll online at contractorrewards.com. Eligible products will have a yellow reward code label worth valuable points. Two ways to enter the codes:

1. **Download the smartphone app and scan the code.**
2. **Enter the code at contractorrewards.com.**
3. **Redeem your points on thousands of reward items.**

**CONTRACTOR REWARDS.COM**
Your Business. Your Choices. Your Rewards.

## WITH OVER 1,000,000 MERCHANDISE ITEMS, YOUR REWARD CHOICES ARE ENDLESS.

## A. O. SMITH PROVIDES 6 KEY THINGS

TO HELP GROW YOUR BUSINESS & BECOME MORE PROFITABLE

### 1. Contractor Locator

A new online locator that drives thousands of consumers from our website right to our loyal contractors. Your company listing is free and generated for you when you participate in our Contractor Rewards™ program.* Visit hotwater.com/contractorlocator for more information.

### 2. Contractor Rewards Program

Our program rewards our loyal contractors for buying our products. Buy more and get rewarded with prizes and higher status on our Contractor Locator.

### 3. Contractor Advertising Tools

Our Advertising Resource Center allows contractors to develop an easy, affordable and custom advertising campaign to promote their business. Go to www.hotwater.com/ads.

### 4. Breadth of Product Line

Residential or commercial, we have the most complete line from standard models to the most innovative high efficiency water heaters available.

### 5. Product Sales Tools

We provide contractors access to the sales tools needed to close more sales.

### 6. Brand Support

Marketing investment in our brand drives consumers to recognize our name, visit our website, locate local contractors and request products.

*To be listed on the Contractor Locator you must meet the minimum threshold of codes entered at contractorrewards.com

# GAS WATER HEATERS

## PREMIUM FEATURES. COMMERCIAL-GRADE COMPONENTS.

**PREMIUM FEATURES:**







| | PROLINE® GOOD | PROLINE® MASTER BETTER | PROLINE® XE BEST |
|---|---|---|---|
| OPERATING COST | $$$ | $$$ | $ |
| INSTALLATION SPACE REQUIRED | ■ to ■■ | ■■ | ■■■ |
| WARRANTY (YEARS) | 6 | 8 | 6-10 |
| Blue Diamond® Glass Coating | • | • | • |
| DynaClean™ Automatic Sediment-Cleaning System | • | • | • |
| Self-Powered Electronic Gas Valve | • | • | • |
| Heat Trap Nipples | • | • | • |
| Enhanced Flow Brass Drain Valve | • | • | • |
| CoreGard™ Advanced Anode Rod Protection | • | • | • |
| ENERGY STAR® Qualified* | | | • |
| Electronic User Interface* | | | • |
| Over 90% Condensing Efficiency* | | | • |
| Best In Class Material and Technology | | | • |
| Industry Leading Efficiency | | | • |
| Multiple Venting Options | | | • |

*Select Heat Pump Water Heater models only.

Hot Water Output, Cost of Operation, & Installation Space Required estimated based on typical applications/installations.
For a more custom analysis of unique installations, visit hotwater.com and use our product selector tool.

# ELECTRIC WATER HEATERS

## PREMIUM FEATURES. COMMERCIAL-GRADE COMPONENTS.

**PREMIUM FEATURES:**







PROLINE® GOOD

PROLINE® MASTER BETTER

PROLINE® XE BEST

| | PROLINE® GOOD | PROLINE® MASTER BETTER | PROLINE® XE BEST |
|---|---|---|---|
| OPERATING COST | $$$ | $$$ | $ |
| INSTALLATION SPACE REQUIRED | ■ to ■■ | ■■ | ■■■ |
| WARRANTY (YEARS) | 6 | 8 | 6-10 |
| Blue Diamond® Glass Coating | • | • | • |
| DynaClean™ Automatic Sediment-Cleaning System | • | • | • |
| Heat Trap Nipples | • | • | • |
| Enhanced Flow Brass Drain Valve | • | • | • |
| CoreGard™ Advanced Anode Rod Protection | • | • | • |
| ENERGY STAR® Qualified* | | | • |
| Electronic User Interface* | | | • |
| Industry Leading Efficiency* | | | • |

*Select Heat Pump Water Heater models only.

Hot Water Output, Cost of Operation, & Installation Space Required estimated based on typical applications/installations.

For a more custom analysis of unique installations, visit hotwater.com and use our product selector tool.

# TANKLESS WATER HEATERS

## PREMIUM FEATURES. COMMERCIAL-GRADE COMPONENTS.

### PREMIUM FEATURES:



PROLINE® XE BEST

| | |
|---|---|
| OPERATING COST | $ |
| INSTALLATION SPACE REQUIRED | ■ |
| WARRANTY (YEARS) | 6-10 |

| Model Family | Proline XE Non-Condensing ULN | Proline XE Non-Condensing Concentric Vent |
|---|---|---|
| Condensing | | |
| Non-Condensing | • | • |
| Indoor Models | • | • |
| Outdoor Models | • | |
| BTUs | 140k-199k | 140k-199k |
| Recirculation Pump - DHW | | |
| Recirculation Pump - HydronicHeating | | |
| Concentric Venting | | • |
| Ultra-Low Nox | • | |
| ENERGY STAR® Qualified | | |

| Model Family | Proline XE Condensing | Proline XE Condensing with Recirc Pump | Proline XE Combi Boiler |
|---|---|---|---|
| Condensing | • | • | • |
| Non-Condensing | | | |
| Indoor Models | • | • | • |
| Outdoor Models | • | • | |
| BTUs | 120k-199k | 199k | 110k-199k |
| Recirculation Pump - DHW | | • | |
| Recirculation Pump - HydronicHeating | | | • |
| Concentric Venting | | | |
| Ultra-Low Nox | • | • | • |
| ENERGY STAR® Qualified | • | • | • |

RESIDENTIAL GAS

# VERTEX™ HIGH EFFICIENCY POWER VENT

PROLINE® XE BEST



## ENERGY STAR® QUALIFIED Condensing Design

- Helical internal heat exchanger keeps hot combustion gases in the tank longer to extract more heat into the water
- High efficiency operation with 0.88 UEF (94% Thermal Efficiency) which saves money on operating costs compared to a standard efficiency gas water heater

## Power Vent Design for Installation Versatility

- Power vent using PVC, CPVC, ABS or Polypropylene either thru-the-wall or thru-the-roof

## Side-Mounted Taps for Recirculating Systems

- Hot and cold "side taps" allow Vertex Power Vent to be used for combination space/water heating applications

## Intelli-Vent™* Gas Control with Silicon Nitride Hot Surface Ignitor

- Premium-grade hot surface ignitor eliminates standing pilot
- Electronic circuitry provides superior system diagnostics capabilities plus extremely precise temperature control

## Blue Diamond® Glass Coating with Two Heavy Duty Anode Rods

- Provides superior corrosion resistance compared to the industry-standard glass lining

## Green Choice® Gas Burner

- Patented eco-friendly burner design reduces NOx emissions by up to 33% and complies with Low-NOx emission requirements of less than 40 ng/J

## Dynaclean™ Diffuser Dip Tube

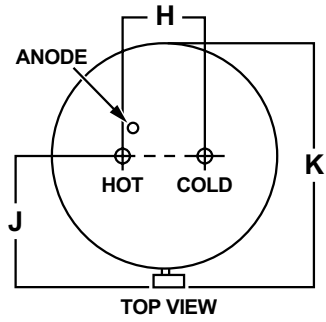
## Code Compliance

- Meets IBC and ICC National Codes
- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1

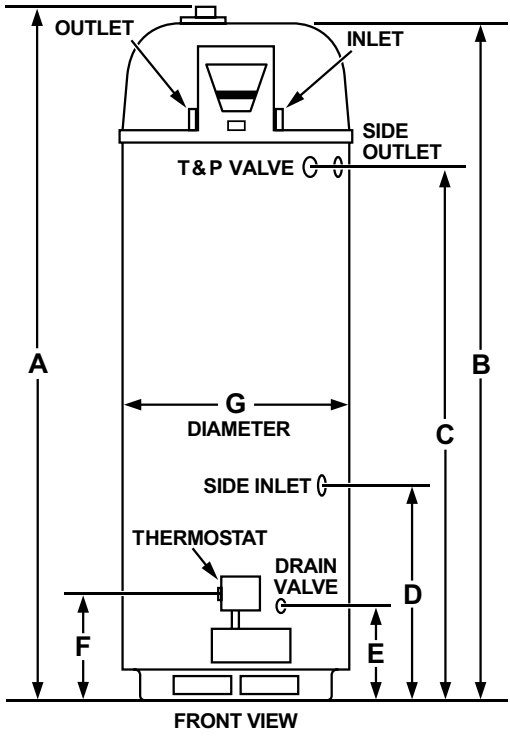
## 6-Year Limited Tank and Parts Warranty

- For complete information, consult written warranty or go to hotwater.com

*Intelli-Vent™ is a registered trademark of Emerson Electric Company




* INSTALL IN ACCORDANCE WITH LOCAL CODES




| Model Number | Nominal Capacity | Rated Storage Volume | First Hour Rating (Gallons) | UEF | Thermal Efficiency | Recovery @ 90°F Rise Gallon Per Hour | BTU Input Per Hour |
|---|---|---|---|---|---|---|---|
| GPHE-50 | 50 | 48 | 124 | 0.88 | 94% | 95 | 76,000 |

| Model Number | Dimensions in Inches | | | | | | | | | | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | J | K | |
| GPHE-50 | 71-1/8 | 68-5/8 | 52 | 21 | 9-1/8 | 12 | 22 | 8 | 15-3/4 | 27 | 225 |

Available in natural gas only.
Standard model certified for sea level to 5,300 ft. elevation. Order SMR K30 for elevations to 10,100 ft.
Optional Condensate Neutralizer Kit available (Part Number 100112380).

# VERTEX™ HIGH EFFICIENCY POWER DIRECT VENT

PROLINE® XE BEST



**GDHE-75**

## ENERGY STAR® QUALIFIED Condensing Design

- Helical internal heat exchanger keeps hot combustion gases in the tank longer to extract more heat into the water
- High efficiency operation with up to 0.88 UEF (96% Thermal Efficiency) which saves money on operating costs compared to a standard efficiency gas water heater

## Advanced Electronic Control

- Optional Powered Anode available
- Exclusive A. O. Smith designed touch display control system
- Precise temperature control
- Built-in diagnostics and operational information

## Power Direct Vent Design

- Power Direct vent using PVC, CPVC or Polypropylene either thru-the-wall or thru-the-roof
- Optional concentric vent and low profile termination kits are available

## Ultra-Low NOx

- Complies with SCAQMD Rule 1146.2 and other air quality management districts with similar requirements for Ultra-Low NOx emissions requirements of 14 ng/J or 20 PPM

## Side-Mounted Hot and Cold Recirculating Taps

- Hot and cold "side taps" allow Vertex Power Direct Vent to be used for combination space/water heating applications

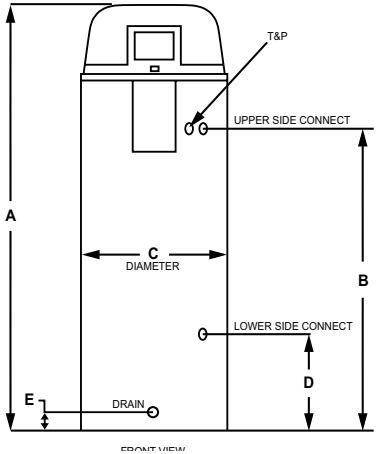
## Code Compliance

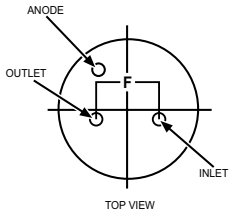
- Meets IBC and ICC National Codes
- Meets the thermal efficiency and standby loss requirements of the U. S. Department of Energy and current edition of ASHRAE/IES 90.1

## 6-Year Limited Tank and Parts Warranty

- For complete information, consult written warranty or go to hotwater.com

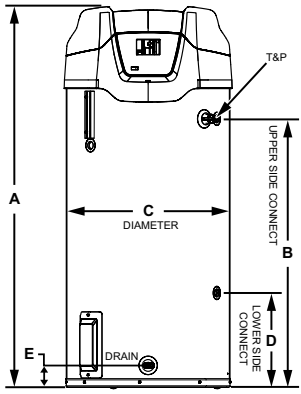
## ROUGH IN DIMENSIONS: 50 GALLON UNIT

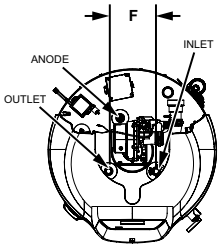



*INSTALL IN ACCORDANCE WITH LOCAL CODES.

## ROUGH IN DIMENSIONS: 75 GALLON UNIT




| Model Number | Nominal Capacity | Rated Storage Volume | First Hour Rating (Gallons) | UEF | Thermal Efficiency | Recovery @ 90°F Rise Gallon Per Hour | BTU Input Per Hour |
|---|---|---|---|---|---|---|---|
| **GDHE-50** | **50** | 49 | 100 | 0.88 | 96% | 129 | 100,000 |
| **GDHE-75** | **75** | 74 | 130 | 0.86 | 96% | 129 | 100,000 |

| Model Number | Vent Size | Dimensions in Inches | | | | | | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|---|---|---|
| | | A | B | C | D | E | F | |
| **GDHE-50** | 2 or 3 | 66-3/4 | 49-1/4 | 22 | 15-3/4 | 3 | 8 | 255 |
| **GDHE-75** | 2 or 3 | 65-1/4 | 45-5/8 | 27-3/4 | 16 | 3-3/4 | 8 | 382 |

Available in Propane (LP) gas. Specify when ordering propane (LP) gas.
Available with a Powered Anode. Specify when ordering.
Models certified for sea level to 10,100 ft. elevation.
Optional Condensate Neutralizer Kit available (part number 100112380).

# POLARIS® HIGH EFFICIENCY

PROLINE® XE BEST



## ENERGY STAR® QUALIFIED

### Stainless Steel Construction

- Tank and helical heat exchanger are constructed from 444 stainless steel for excellent corrosion resistance without the need for an anode

### Condensing Design

- Helical internal heat exchanger keeps hot combustion gases in the tank longer to extract more heat into the water
- High efficiency operation with up to 0.90 UEF (96% Thermal Efficiency) which saves money on operating costs compared to a standard efficiency gas water heater

### Power Direct Vent Design

- Direct vent using PVC, CPVC or ABS either thru-the-wall or thru-the-roof
- Optional concentric vent kit

### Whisper Quiet Operation

- Ultra quiet blower and burner minimize noise

### Advanced Electronic Control

- Exclusive A. O. Smith designed touch display control system
- Precise temperature control
- Built-in diagnostics and operational information

### Ultra-Low NOx

- Complies with SCAQMD Rule 1146.2 and other air quality management districts with similar requirements for Ultra-Low NOx emissions requirements of 14 ng/J or 20 PPM

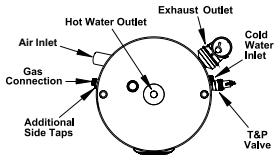
### Code Compliance

- Meets IBC and ICC National Codes
- Meets the thermal efficiency and standby loss requirements of the U. S. Department of Energy and current edition of ASHRAE/IES 90.1

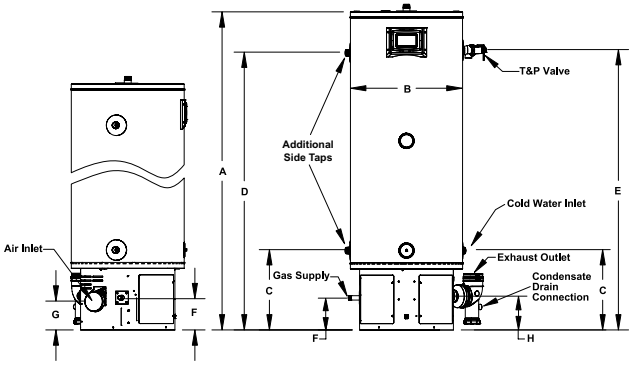
### 10-Year Limited Tank and 10-Year Parts Warranty

- For complete information, consult written warranty or go to hotwater.com

AHRI CERTIFIED® www.ahridirectory.org




TOP




LEFT SIDE FRONT

| Model Number | Vent Connection | Nominal Capacity | Rated Storage Volume | First Hour Rating (Gallons) | UEF | Thermal Efficiency | Recovery @ 90° Rise Gallon Per Hour |
|---|---|---|---|---|---|---|---|
| **GSP 100** | 2 or 3 | 34 | 33 | 179 | 0.90 | 96% | 129 |
| **GSP 130** | 2 or 3 | 34 | N/A | N/A | N/A | 96% | 165 |
| **GSP 150** | 2 or 3 | 34 | N/A | N/A | N/A | 94% | 190 |
| **GTP 130** | 2 or 3 | 50 | N/A | N/A | N/A | 95% | 165 |
| **GTP 150** | 2 or 3 | 50 | N/A | N/A | N/A | 95% | 190 |
| **GTP 175** | 3 | 50 | N/A | N/A | N/A | 96% | 222 |
| **GTP 199** | 3 | 50 | N/A | N/A | N/A | 96% | 253 |

| Model Number | BTU/h Input Gallon Per Hour | Dimensions in Inches | | 1" Water Connections | | T&P | Gas Supply* | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|---|---|---|
| | | A | B | C | D | E | F | |
| **GSP 100** | 100,000 | 48-1/2 | 22 | 15-3/4 | 40-1/2 | 41 | 6-3/8 | 150 |
| **GSP 130** | 130,000 | 48-1/2 | 22 | 15-3/4 | 40-1/2 | 41 | 6-3/8 | 150 |
| **GSP 150** | 150,000 | 48-1/2 | 22 | 15-3/4 | 40-1/2 | 41 | 6-3/8 | 150 |
| **GTP 130** | 130,000 | 62-3/8 | 22 | 15-3/4 | 54-1/2 | 55 | 6-3/8 | 176 |
| **GTP 150** | 150,000 | 63-3/4 | 22 | 15-3/4 | 55-3/4 | 56-1/4 | 6-3/8 | 180 |
| **GTP 175** | 175,000 | 63-3/4 | 22 | 15-3/4 | 55-3/4 | 56-1/4 | 6-3/8 | 180 |
| **GTP 199** | 199,000 | 63-3/4 | 22 | 15-3/4 | 55-3/4 | 56-1/4 | 6-3/8 | 180 |

Available in Propane (LP) gas. Specify when ordering Propane (LP) gas.
Models certified for sea level to 7,700 ft. elevation.

RESIDENTIAL GAS

# PROLINE® XE NON-CONDENSING POWER VENT



## Versatile Power Vent Design

- All models feature an exclusive 3-position rotatable blower outlet which adds flexibility
- Combined horizontal and vertical vent runs up to 180 equivalent feet with 4" diameter venting (ABS, PVC, CPVC and polypropylene)
- All models are equipped with a protected sensor that detects the presence of flammable vapors and automatically disables the burner to prevent ignition
- Air intake snorkel elevates the inlet location of combustion air to prevent flammable vapors from entering the sealed combustion chamber

## Hot Surface Ignitor

- More robust and reliable than standing pilot, and reduces energy consumption

## Built-in Heat Traps on the Water Inlet and Outlet Reduce the Amount of Heat Lost Through Piping

## User-Friendly

- State-of-the-art electronic gas control provides more precise temperature control
- LED control light displays operation status and diagnostics information

## Enhanced-Flow Brass Drain Valve Available in Natural Gas and Propane

## Code Compliance

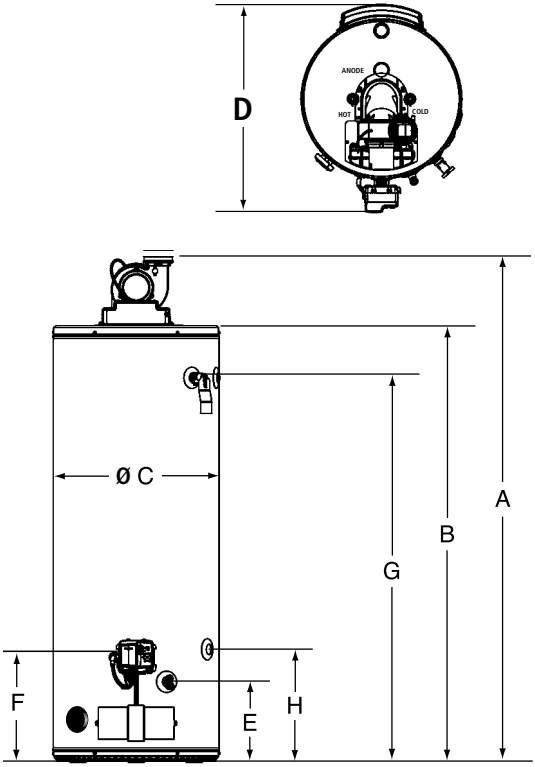
- Meets UBC, CEC and HUD National Codes
- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1
- Complies with the Federal Energy Conservation Standards effective April 16, 2015, in accordance with the Energy Policy and Conservation Act (EPCA) as amended

## Design-Listed by CSA International

- Certified at 300 psi test pressure and 150 psi working pressure
- Listed according to ANSI Z21.10.1-CSA 4.1 standards governing storage tank-type water heaters

## 6-Year Limited Tank and Parts Warranty

- For complete information, consult written warranty or go to hotwater.com




| Model Number | Series | Nominal Capacity | Rated Storage Volume | UEF | First Hour Rating (Gallons) | Recovery @ 90°F Rise Gallon Per Hour | Input BTU/h |
|---|---|---|---|---|---|---|---|
| **GPVL-40** | 200 | 40 | 38 | 0.67 | 72 | 45 | 40,000 |
| **GPVT-40** | 200 | 40 | 38 | 0.70 | 87 | 56 | 50,000 |
| **GPVL-50** | 200 | 50 | 49 | 0.72 | 79 | 45 | 40,000 |
| **GPVT-50** | 200 | 50 | 48 | 0.72 | 97 | 56 | 50,000 |
| **GPVX-50L** | 200 | 50 | 50 | 0.73 | 119 | 69 | 62,000 |
| **†GPVX-75L** | 310 | 75 | 72 | 0.69 | 116 | 80 | 76,000 |

| Model Number | Dimensions in Inches | | | | | | | | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | |
| **GPVL-40** | 59 | 49-5/8 | 22 | 29-1/8 | 11 | 13-1/4 | 42-1/2 | N/A | 174 |
| **GPVT-40** | 68-1/2 | 59-1/4 | 20 | 27-1/8 | 11 | 13-1/4 | 53-1/8 | 15-1/4 | 176 |
| **GPVL-50** | 60-1/8 | 50-3/4 | 24 | 31-1/8 | 11 | 13-1/4 | 43-3/4 | N/A | 198 |
| **GPVT-50** | 68-1/8 | 58-3/4 | 22 | 29-1/8 | 11 | 13-1/4 | 51-3/4 | 15-1/4 | 192 |
| **GPVX-50L** | 61-1/8 | 52 | 24 | 31-1/8 | 11 | 13-1/4 | 44-1/2 | 15-1/4 | 212 |
| **†GPVX-75L** | 70-5/8 | 61-1/4 | 26 | 33-1/8 | 11 | 13-1/4 | 53 | 15-1/4 | 277 |

Available in propane (LP) gas. Specify when ordering propane (LP) gas.
Side connections are standard on GPVX models.
Side connections available on GPVT models. Add "L" to the model number (example: GPVT-40L).
All models are certified from sea level to 10,100 ft. elevation.
† GPVX-75L is not ENERGY STAR® Qualified.

# PROLINE® XE NON-CONDENSING POWER DIRECT VENT



## Power Direct Vent Design

- Combined horizontal and vertical vent runs up to 180 equivalent feet with 4" diameter venting (ABS, PVC, CPVC and polypropylene)
- Two-pipe sealed combustion system uses outside air, eliminating problems caused by insufficient indoor ventilation

## Green Choice® Gas Burner

- Patented eco-friendly burner design reduces NOx emissions by up to 33% and complies with Low-NOx emission requirements of less than 40 ng/J

## Hot Surface Ignitor

- More robust and reliable than standing pilot, and reduces energy consumption

## DynaClean™ Diffuser Dip Tube

## User-Friendly

- State-of-the-art electronic gas control provides more precise temperature control
- LED control light displays operation status and diagnostics information

## Enhanced-Flow Brass Drain Valve

## CSA Certified and ASME Rated T&P Relief Valve

## Code Compliance

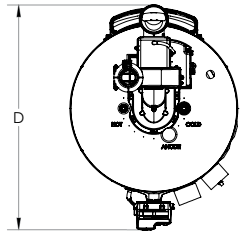
- Meets UBC, CEC and HUD National Codes
- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1
- Complies with the Federal Energy Conservation Standards effective April 16, 2015, in accordance with the Energy Policy and Conservation Act (EPCA) as amended

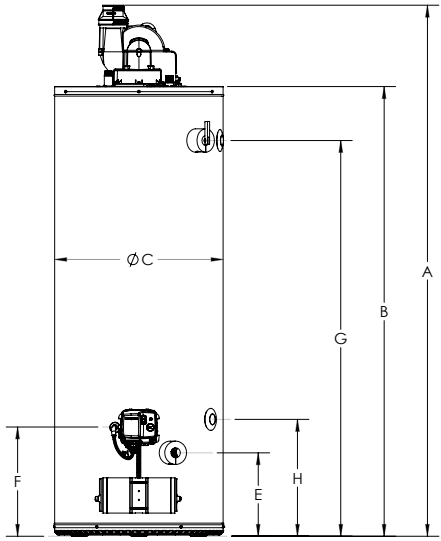
## Design-Listed by CSA International

- Certified at 300 psi test pressure and 150 psi working pressure
- Listed according to ANSI Z21.10.1-CSA 4.1 standards governing storage tank-type water heaters

## 6-Year Limited Tank and Parts Warranty

- For complete information, consult written warranty or go to hotwater.com




| Model Number | Series | Nominal Capacity | Rated Storage Volume | UEF | First Hour Rating (Gallons) | Recovery @ 90°F Rise Gallon Per Hour | Input BTU/h |
|---|---|---|---|---|---|---|---|
| **GPDL 40** | 200 | 40 | 38 | 0.68 | 74 | 45 | 40,000 |
| **GPDT 50** | 200 | 50 | 48 | 0.72 | 81 | 50 | 45,000 |
| **GPDX 50L** | 200 | 50 | 48 | 0.73 | 118 | 73 | 62,000** |
| **† GPDX 75L** | 210 | 75 | 72 | 0.68 | 129 | 82 | 76,000 |

| Model Number | Dimensions in Inches | | | | | | | | Approx. Shipping Weight (lb) |
|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | |
| **GPDL 40** | 58-1/4 | 49-5/8 | 22 | 29-7/8 | 11 | 13-1/4 | 42-1/2 | 15-1/4 | 174 |
| **GPDT 50** | 67-1/2 | 58-3/4 | 22 | 29-7/8 | 11 | 13-1/4 | 51-3/4 | 15-1/4 | 192 |
| **GPDX 50L** | 69 | 60-1/4 | 22 | 29-7/8 | 11 | 13-1/4 | 52-3/4 | 15-1/4 | 200 |
| **† GPDX 75L** | 70-5/8 | 61-1/2 | 26 | 33-7/8 | 11 | 13-1/4 | 53 | 15-1/4 | 277 |

**Propane model has input of 58,000 BTU/hr.
Available in propane (LP) gas. Specify when ordering propane (LP) gas.
Side connections are standard on GPDX-50L and GPDX-75L.
Side connections available on GPDL-40 and GPDT-50. Add "L" to the model number (example: GDPT-50L).
All models are certified from sea level to 10,100 ft. elevation.
† GPVX-75 is not ENERGY STAR® Qualified.

# PROLINE® XE HIGH EFFICIENCY NON-CONDENSING FLUE DAMPER



## Automatic Flue Damper

- Increases efficiency as it automatically opens and closes to reduce heat loss in the standby mode

## Electronic Gas Control

## Diagnostics

## Electronic Ignition

## Dynaclean™ Diffuser Dip Tube

## Green Choice® Gas Burner

- Patented eco-friendly burner design reduces NOx emissions by up to 33% and complies with Low-NOx emission requirements of less than 40 ng/J

## CoreGard™ Anode Rod

## Enhanced-Flow Brass Drain Valve

## Blue Diamond® Glass Coating

## CSA Certified And ASME RATED T&P Relief Valve

## Code Compliance

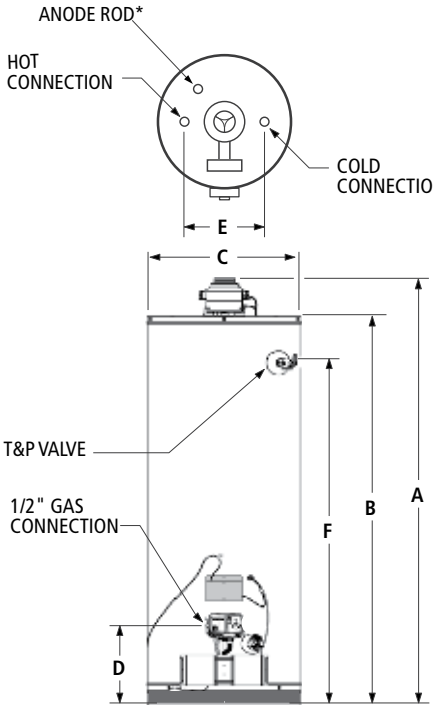
- Meets UBC, CEC and HUD National Codes.
- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1
- Complies with the Federal Energy Conservation Standards effective April 16, 2015, in accordance with the Energy Policy and Conservation Act, (EPCA), as amended

## Design-Certified by CSA International

- Certified at 300 psi test pressure and 150 psi working pressure
- Listed according to ANSI Z21.10.1 - CSA 4.1 standards governing storage tank-type water heaters

## 6-Year Limited Tank and Parts Warranty

- For complete information, consult written warranty or go to hotwater.com




* Location for optional top-mounted T&P Valve if ordered from factory.

**Maximum Hydrostatic Working Pressure: 150 PSI.**

| Model Number | Nominal Capacity | Rated Storage Volume | First Hour Rating (Gallons) | UEF | BTU Input Gallon Per Hour Natural* | Recovery @ 90°F Rise Gallon Per Hour | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|---|---|
| **Tall Models** | | | | | | | |
| **GCF-40** | 40 | 38 | 70 | 0.64 | 40,000 | 42 | 152 |
| **GCF-50** | 50 | 48 | 84 | 0.69 | 40,000 | 42 | 167 |
| **Short Models** | | | | | | | |
| **GCFL-40** | 40 | 38 | 65 | 0.66 | 40,000 | 42 | 149 |
| ***GCFL-50** | 50 | 49 | 78 | 0.69 | 40,000 | 42 | 175 |

| Model Number | Dimensions in Inches | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Foam Thickness | A | B | C | D | E | F | Draft Hood Outlet |
| **Tall Models** | | | | | | | | |
| **GCF-40** | 2 | 64-1/4 | 58-1/4 | 20 | 13 | 8 | 51-3/4 | 3 or 4 |
| **GCF-50** | 2 | 63-1/2 | 57-1/4 | 22 | 13 | 8 | 50-1/4 | 3 or 4 |
| **Short Models** | | | | | | | | |
| **GCFL-40** | 2 | 54 | 47-3/4 | 22 | 13 | 8 | 41 | 3 or 4 |
| ***GCFL-50** | 2 | 55-3/4 | 49-1/2 | 24 | 13-1/4 | 8 | 42-1/2 | 3 or 4 |

Requires 120 VAC power supply.
Water connection is ¾" on all models.
All models are certified from sea level to 10,100 ft. elevation.
*GCFL-50 available in natural gas only. All other models available in propane (LP) gas.

# PROLINE® XE HIGH EFFICIENCY NON-CONDENSING ULTRA-LOW NOx FLUE DAMPER



## ENERGY STAR® Efficiency

- Eco-friendly non-CFC foam insulation and an automatic flue damper increase efficiency to provide maximum household annual operating cost savings

## Green Choice® Gas Burner

- Enhanced Ultra-Low NOx burner complies with SCAQMD Rule 1121 and other air quality management districts with similar requirements for NOx emissions of less than 10ng/J

## Electronic Gas Control

## DynaClean™ Diffuser Dip Tube

## CoreGard™ Anode Rod

## Blue Diamond® Glass Coating

## Enhanced-Flow Brass Drain Valve

## Requires 120V Power; 19.5 Ft Cord Included

## Code Compliance

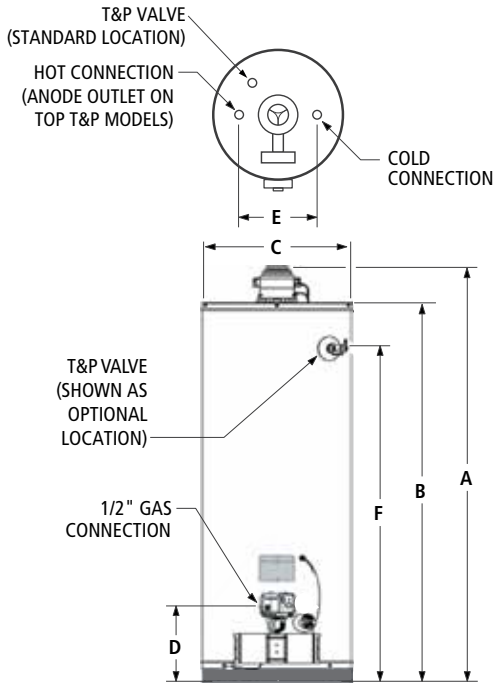
- Meets UBC, CEC, and HUD (excluding mobile homes) National Codes
- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1
- Complies with the Federal Energy Conservation Standards effective April 16, 2015, in accordance with the Energy Policy and Conservation Act (EPCA), as amended

## CSA and Design-Certified by CSA International

- Certified at 300 psi test pressure and 150 psi working pressure
- Listed according to ANSI Z21.10.1 – CSA 4.1 standards governing storage tank-type water heaters

## 6-Year Limited Tank and Parts Warranty

- For complete information, consult written warranty or go to hotwater.com




**Maximum Hydrostatic Working Pressure: 150 PSI.**

| Model Number | Nominal Capacity | Rated Storage Volume | UEF | First Hour Rating (Gallons) | Recovery @ 90F Rise (Gallon/ Hour) | BTU Input Natural Gas | Approx. Shipping Weight |
|---|---|---|---|---|---|---|---|
| **GUF-40** | 40 | 38 | 0.65 | 68 | 42 | 40,000 | 152 |
| **GUF-50** | 50 | 48 | 0.70 | 83 | 42 | 40,000 | 167 |

| Model Number | Dimensions in Inches | | | | | | |
|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | Draft Hood Outlet |
| **GUF-40** | 64-1/4 | 58-1/4 | 20 | 13 | 8 | 51-3/4 | 3 or 4 |
| **GUF-50** | 63-1/2 | 57-1/4 | 22 | 13 | 8 | 50-1/4 | 3 or 4 |

Requires 120VAC power supply located within 19ft of the heater.
Water connection is 3/4" on all models.
Standard top T&P, specify when ordering side T&P.
All models are certified from sea level to 7,800ft elevation.

RESIDENTIAL GAS

# PROLINE® XE HIGH EFFICIENCY NON-CONDENSING ULTRA-LOW NOx POWER VENT



## Power Venting Made Simple

- Thru-the-wall or thru-the-roof power venting using either 2" or 3" PVC. ABS or CPVC vent pipe

## Intelli-Vent™ Gas Control

- Advanced electronics for more precise control of water temperature and easy to understand system diagnostics

## Combination Thermostat/ECO

- Utilizes an intermittent ignition gas valve (no standing pilot) with thermistor temperature sensor and built-in high temperature cut off

## Quiet and Efficient Blower

- Factory-installed 6-foot power cord with standard 3-prong male connector provided
- Electrical requirements; 110/120 VAC power source less than 5 amp draw

## Dynaclean™ Diffuser Dip Tube

- Reduces lime and sediment buildup and maximizes hot water output
- Made from long-lasting PEX cross-linked polymer

## Coregard™ Anode Rod

## Green Choice® Gas Burner

- Complies with SCAQMD Rule 1121 and other air quality management districts with similar requirements for NOx emissions of less than 10 ng/J

## Enhanced-Flow Brass Drain Valve

## Code Compliance

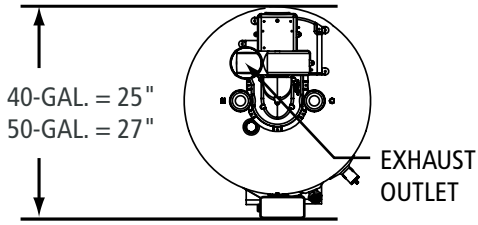
- Meets UBC, CEC and HUD National Codes
- Meets the thermal efficiency and standby loss requirements of the U. S. Department of Energy and current edition of ASHRAE/IES 90.1
- Complies with the Federal Energy Conservation Standards effective April 16, 2015, in accordance with the Energy Policy and Conservation Act, (EPCA), as amended

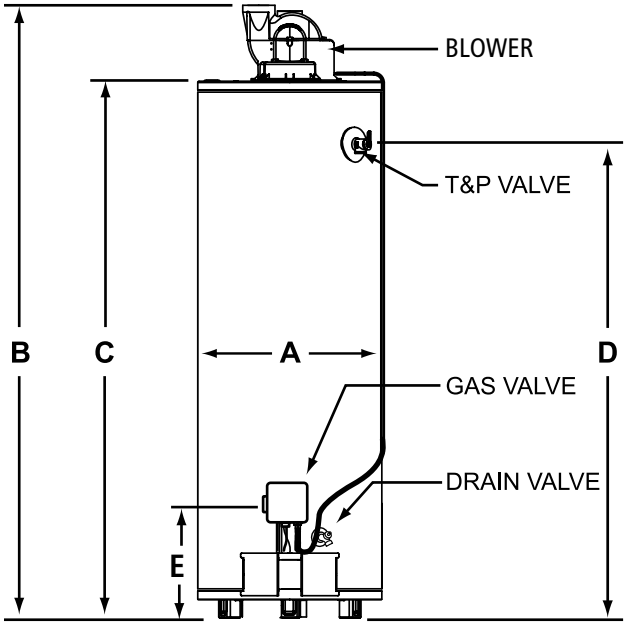
## Design-Certified by CSA-International

- Certified at 300 psi test pressure and 150 psi working pressure
- Listed according to ANSI Z21.10.1-CSA 4.1 standards governing storage tank-type gas water heaters

## 6-Year Limited Tank and Parts Warranty

- For complete information, consult written warranty or go to hotwater.com




| Model Number | Nominal Capacity | Rated Storage Volume | First Hour Rating (Gallons) | UEF | Recovery @ 90°F Rise Gallon Per Hour | BTU Input Gallon Per Hour |
|---|---|---|---|---|---|---|
| **GPNH-40** | 40 | 38 | 76 | 0.70 | 42.6 | 42,000 |
| **GPNH-50** | 50 | 48 | 71 | 0.65 | 42.6 | 42,000 |

| Model Number | Dimensions in Inches | | | | | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|---|
| | A | B | C | D | E | |
| **GPNH-40** | 20 | 66-7/8 | 58-5/8 | 51-1/2 | 12-1/4 | 170 |
| **GPNH-50** | 22 | 65-7/8 | 57-7/16 | 51 | 12-1/4 | 207 |

No option available for top T&P valve.

# RESIDENTIAL GAS
# PROLINE® MASTER ATMOSPHERIC VENT




## Intelligent Control Logic*

- The internal microprocessor provides enhanced operating parameters and tighter differentials for precise sensing and faster heating response to optimize performance
- Uses a thermopile to generate the power needed to operate the electronic gas control without requiring an external power source
- The electronic gas control incorporates an LED status indicator that monitors system operation and service diagnostics

## DynaClean™ Diffuser Dip Tube

## CoreGard™ Anode Rod

- ProLine® Master products have increased anode protection with either longer or multiple anodes, depending on model

## Push-Button Piezo Ignitor

## Enhanced-Flow Brass Drain Valve

## Heat Trap Nipple

## Blue Diamond® Glass Coating

- Blue Diamond® Glass Coating blend is formulated in the same lab that creates the protection for our industry-leading commercial product line

## Code Compliance

- Meets UBC, CEC and HUD National Codes.
- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1
- Complies with the Federal Energy Conservation Standards effective April 16, 2015, in accordance with the Energy Policy and Conservation Act (EPCA), as amended

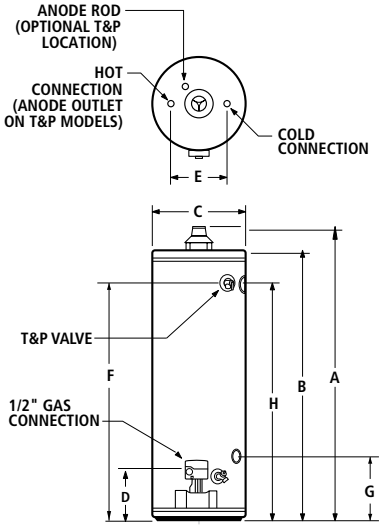
## Design-Certified By CSA International

- Certified at 300 psi test pressure and 150 psi working pressure
- Listed according to ANSI Z21.10.1-CSA 4.1 standards governing storage tank-type gas water heaters

## 8-Year Limited Tank and Parts Warranty

- For complete information, consult written warranty or go to hotwater.com

*Not available on 60,000 BTU input models (HWRT-50 and HWRX-55)




**Maximum Hydrostatic Working Pressure: 150 PSI**

| Model Number | Nominal Capacity | Rated Storage Volume | First Hour Rating Gallon | UEF | BTU Input Natural Gas | BTU Input Propane Gas | Recovery 90°F Rise Gallon Per Hour |
|---|---|---|---|---|---|---|---|
| **Tall Models** | | | | | | | |
| **HWR-40** | 40 | 38 | 80 | 0.66 | 40,000 | 36,000 | 42 |
| **HWG-50** | 50 | 48 | 81 | 0.62 | 40,000 | 37,000 | 41 |
| **HWR-50** | 50 | 48 | 84 | 0.62 | 40,000 | 37,000 | 43 |
| **HWRT-50** | 50 | 48 | 89 | 0.61 | 50,000 | 45,000 | 54 |
| **HWRX-55*** | 55 | 55 | 83 | 0.62 | 60,000 | 54,000 | 65 |
| **Short Models** | | | | | | | |
| **HWRL-40** | 40 | 38 | 67 | 0.59 | 40,000 | 36,000 | 41 |
| **HWRL-50** | 50 | 50 | 81 | 0.62 | 40,000 | 40,000 | 43 |

| Model Number | Dimensions in Inches | | | | |
|---|---|---|---|---|---|
| | A | B | C | D | E |
| **Tall Models** | | | | | |
| **HWR-40** | 61-3/4 | 58-1/4 | 20 | 12-1/4 | 8 |
| **HWG-50** | 60-3/4 | 57-1/4 | 21 | 12-1/4 | 8 |
| **HWR-50** | 60-3/4 | 57-1/4 | 22 | 12-1/4 | 8 |
| **HWRT-50** | 60-3/4 | 57-1/4 | 22 | 12-1/4 | 8 |
| **HWRX-55*** | 59-3/4 | 55-1/4 | 24 | 13-1/2 | 8 |
| **Short Models** | | | | | |
| **HWRL-40** | 51-1/2 | 48 | 22 | 12 | 8 |
| **HWRL-50** | 53-1/4 | 49-3/4 | 24 | 12 | 8 |

| Model Number | Dimensions in Inches | | | | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|
| | F | *G | *H | Draft Hood Outlet | |
| **Tall Models** | | | | | |
| **HWR-40** | 52 | N/A | N/A | 3 or 4 | 138 |
| **HWG-50** | 50 1/2 | N/A | N/A | 3 or 4 | 148 |
| **HWR-50** | 50-1/2 | N/A | N/A | 3 or 4 | 165 |
| **HWRT-50** | 50-1/2 | 14-1/4 | 50-1/2 | 4 | 165 |
| **HWRX-55*** | 48 | 14-1/4 | 48 | 4 | 185 |
| **Short Models** | | | | | |
| **HWRL-40** | 41-1/4 | N/A | N/A | 3 or 4 | 135 |
| **HWRL-50** | 41-3/8 | N/A | N/A | 3 or 4 | 177 |

*For optional side-mounted recirculating taps, add "L" to the suffix in the model number.
Water connection is ¾" on all models.
All models approved for installation from sea level to 10,100 ft. elevation.
Specify when ordering propane (LP) gas.

# PROLINE® MASTER ULTRA-LOW NOx




## The Electronic Gas Control Incorporates an LED Status Indicator that Monitors System Operation and Service Diagnostics

## High Uniform Energy Factors (UEFs)

- Eco-Friendly non-CFC foam insulation, external heat traps and specially designed combustion chamber combine to produce a high UEF for maximum savings on operating costs

## Green Choice® Gas Burner

- Enhanced Ultra-Low NOx burner complies with SCAQMD Rule 1121 and other air quality management districts with similar requirements for NOx emissions of less than 10 ng/J

## DynaClean™ Diffuser Dip Tube

## CoreGard™ Anode Rod

- ProLine® Master products have increased anode protection with either longer or multiple anodes, depending on model

## Push-Button Piezo Ignitor

## Heat Trap Nipples

## Blue Diamond® Glass Coating

- Blue Diamond® Glass Coating blend is formulated in the same lab that creates the protection for our industry-leading commercial product line

## Enhanced-Flow Brass Drain Valve

## Code Compliance

- Meets UBC, CEC and HUD National Codes
- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1
- Complies with the Federal Energy Conservation Standards effective April 16, 2015, in accordance with the Energy Policy and Conservation Act (EPCA), as amended

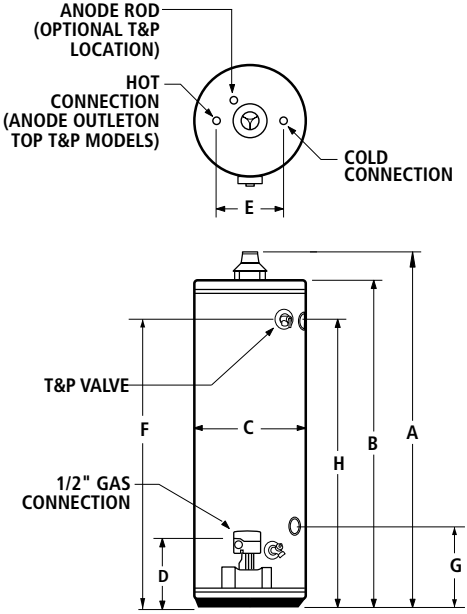
## CSA Certified by CSA International

## Design-Certified by CSA International

- Certified at 300 psi test pressure and 150 psi working pressure. Listed according to ANSI Z21.10.1-CSA 4.1 standards governing storage tank-type gas water heaters

## 8-Year Limited Tank and Parts Warranty

- For complete information, consult written warranty or go to hotwater.com




**Maximum Hydrostatic Working Pressure: 150 PSI**

| Model Number | Nominal Capacity | Rated Storage Volume | First Hour Rating Gallon | UEF | BTU Input Natural Gas | Recovery @ 90°F Rise Gallon Per Hour | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|---|---|
| **Tall Models** | | | | | | | |
| **HUC-40** | 40 | 38 | 72 | 0.55 | 40,000 | 41 | 125 |
| **HUR-40** | 40 | 38 | 81 | 0.64 | 40,000 | 41 | 125 |
| **HUC-50** | 50 | 48 | 84 | 0.61 | 40,000 | 42 | 148 |
| **HUR-50** | 50 | 48 | 84 | 0.64 | 40,000 | 42 | 148 |
| **HURT-50L*** | 50 | 48 | 91 | 0.60 | 50,000 | 51 | 177 |
| **Short Models** | | | | | | | |
| **HURL-40** | 40 | 38 | 72 | 0.57 | 40,000 | 41 | 138 |

| Model Number | Dimensions in Inches | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G* | H* | Draft Hood Outlet |
| **Tall Models** | | | | | | | | | |
| **HUC-40** | 62 | 58-1/4 | 18 | 12 | 8 | 52 | N/A | N/A | 3 or 4 |
| **HUR-40** | 62 | 58-1/4 | 20 | 12 | 8 | 52 | N/A | N/A | 3 or 4 |
| **HUC-50** | 60-3/4 | 57-1/4 | 20 | 12 | 8 | 50-1/2 | N/A | N/A | 3 or 4 |
| **HUR-50** | 60-3/4 | 57-1/4 | 22 | 12 | 8 | 50-1/2 | N/A | N/A | 3 or 4 |
| **HURT-50L*** | 61 | 57-1/2 | 22 | 11-1/4 | 8 | 50-1/2 | 12-1/4 | 50-1/2 | 4 |
| **Short Models** | | | | | | | | | |
| **HURL-40** | 51-1/2 | 47-3/4 | 22 | 12 | 8 | 41-1/4 | N/A | N/A | 3 or 4 |

All models may be ordered from the factory with top T&P.
*Side loop connections are standard on model (HURT-50L).
All models approved for 10,1000 ft. elevation.

# PROLINE® HIGH CAPACITY ATMOSPHERIC VENT



## Highest Recoveries

- Capacity/input combinations up to 98 gallons/75,100 BTU's to produce recoveries up to 81 gallons per hour

## The Electronic Gas Control Incorporates an LED Status Indicator that Monitors System Operation and Service Diagnostics

## Green Choice® Gas Burner

- Patented eco-friendly burner design reduces NOx emissions up to 33% and complies with Low-NOx emission requirements of 40 ng/J

## DynaClean™ Diffuser Dip Tube

## CoreGard™ Anode Rod

## Push-Button Piezo Ignitor

## Blue Diamond® Glass Coating

## Enhanced-Flow Brass Drain Valve

## Code Compliance

- Meets UBC, CEC and ICC National Codes
- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1

## CSA Certified and ASME Rated T&P Relief Valve

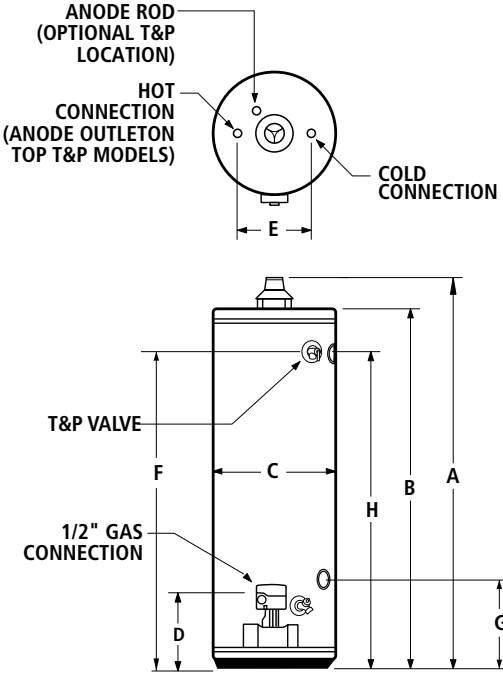
## Maximum Hydrostatic Working Pressure: 150 psi

## Design-Certified By CSA International

- Certified at 300 psi test pressure and 150 psi working pressure
- Listed according to ANSI Z21.10.1-CSA 4.1 standards governing storage tank-type gas water heaters

## 6-Year Limited Tank and Parts Warranty

- For complete information, consult written warranty or go to hotwater.com




**Maximum Hydrostatic Working Pressure: 150 PSI**

| Model Number | Nominal Capacity | Rated Storage Volume | UEF | First Hour Rating (Gallons) | Recovery @ 90°F Rise Gallon Per Hour | BTU Input Natural Gas |
|---|---|---|---|---|---|---|
| **FCG-75** | 74 | 71 | 0.60 | 125 | 81 | 75,100 |
| **FCG-100** | 98 | 95 | 0.58 | 170 | 81 | 75,100 |

| Model Number | Dimensions in Inches | | | | | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|---|
| | A | B | C | D | E | |
| **FCG-75** | 61 | 58-1/2 | 26-1/2 | 15-3/16 | 16 | 270 |
| **FCG-100** | 68-1/2 | 66-1/2 | 27-3/4 | 15-3/16 | 16 | 340 |

| Model Number | Dimensions in Inches | | | |
|---|---|---|---|---|
| | F | G | H | Draft Hood Outlet |
| **FCG-75** | 50-1/4 | 15-1/2 | 50-1/4 | 4 |
| **FCG-100** | 57-3/8 | N/A | N/A | 4 |

Water connections are 1" male NPT on FCG-75 and 1-1/4" on FCG-100.
For 10-year tank and 10-year parts limited warranty, change "F" to "P" in model number (example: PCG-75).
For optional side-mounted recirculating taps, add "L" to the suffix of the model number (example: FCG-75L).
Specify when ordering propane (LP) gas.
All models are certified from sea level to 7,700 ft. elevation.

# PROLINE® DIRECT VENT



## Direct Vent Design

- One-pipe, dual-channel closed system draws all make-up air from outside the home, eliminating problems caused by insufficient indoor ventilation and is FVIR compliant
- Horizontal air intake and venting on all models up to 80 inches from outside wall with no electrical power needed

## Intelligent Control Logic

## Green Choice® Gas Burner

- Patented eco-friendly burner design reduces NOx emissions by up to 33% and complies with Low-NOx emission requirements of less than 40 ng/J

## DynaClean™ Diffuser Dip Tube

## CoreGard™ Anode Rod

## Push Button Piezo Ignitor

## Heat Trap Nipples

## Code Compliance

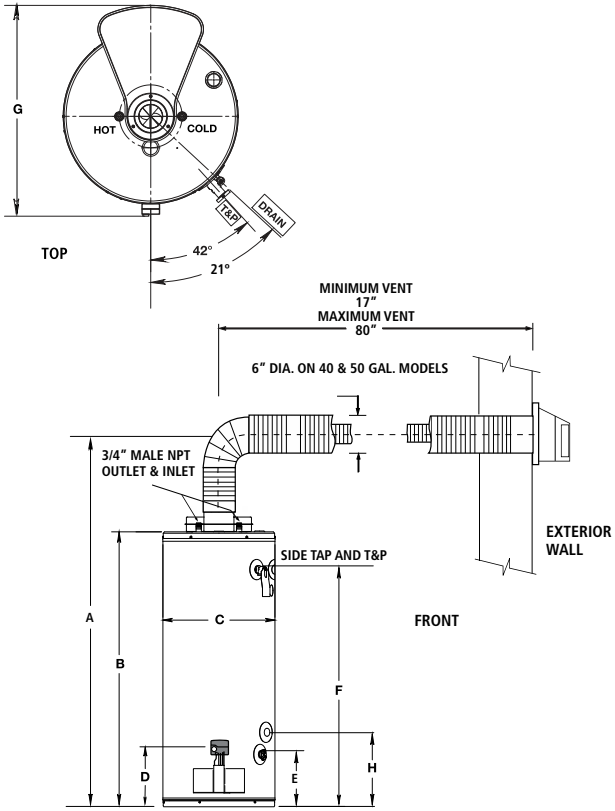
- Meets UBC, CEC and HUD National Codes
- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1
- Complies with the Federal Energy Conservation Standards effective April 16, 2015, in accordance with the Energy Policy and Conservation Act (EPCA), as amended

## Design-Certified by CSA International

- Certified at 300 psi test pressure and 150 psi working pressure. Listed according to ANSI Z21.10.1-CSA 4.1 standards governing storage tank-type gas water heaters

## 6-Year Limited Tank and Parts Warranty

- For complete information, consult written warranty or go to hotwater.com




| Model Number | Nominal Capacity | Rated Storage Volume | First Hour Rating (Gallons) | UEF | Input BTU Per Hour | Recovery 90°F Rise Gallon Per Hour | Vent Outlet |
|---|---|---|---|---|---|---|---|
| **GDV-40** | 40 | 39 | 64 | 0.60 | 38,000 | 41 | Co-Axial |
| **GDV-50** | 50 | 48 | 77 | 0.66 | 40,000 | 43 | Co-Axial |
| **GDVT-50** | 50 | 48 | 83 | 0.65 | 47,000 | 51 | Co-Axial |

| Model Number | Dimensions in Inches | | | | | | | | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | *G | H | |
| **GDV-40** | 64 | 49-3/4 | 22 | 13-1/4 | 15-1/4 | 42-1/2 | 29 | 15-1/4 | 178 |
| **GDV-50** | 73 | 59 | 22 | 13-1/4 | 15-1/4 | 51-3/4 | 29 | 15-1/4 | 200 |
| **GDVT-50** | 74 | 60 | 22 | 13-1/4 | 15-1/4 | 52-3/4 | 29 | 15-1/4 | 215 |

Dual-channel system has 3" vent pipe inside 6" air intake pipe, for the 40 and 50-gallon models.
All models have 2" foam cavity.
Water connection is 3/4" male on all models.
40 and 50 gallon models are 8" on center.
*Allow 29-1/2" for front to back dimension for gas control and air intake pipe at the rear of the heater.
All models are available in propane (LP) gas (series 301).
All models are certified from sea level to 7,700 ft. elevation.
All models available with side connections. Add "L" to the model number, example GDV-40L.

RESIDENTIAL GAS

# PROLINE®
# ATMOSPHERIC VENT



## Intelligent Control Logic*

- The internal microprocessor provides enhanced operating parameters and tighter differentials for precise sensing and faster heating response to optimize performance
- Uses a thermopile to generate the power needed to operate the electronic gas control without requiring an external power source
- The electronic gas control incorporates an LED status indicator that monitors system operation and service diagnostics

*Not available on 60,000 BTU input models (GCRX-50 and GCRX-55)

## DynaClean™ Diffuser Dip Tube

## CoreGard™ Anode Rod

## Push-Button Piezo Ignitor

## Enhanced-Flow Brass Drain Valve

## Heat Trap Nipple

## Blue Diamond® Glass Coating

## Code Compliance

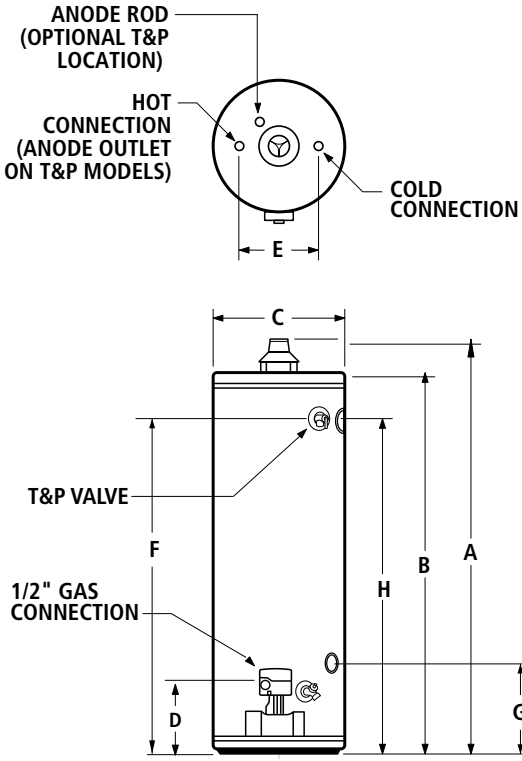
- Meets UBC, CEC and HUD National Codes
- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1
- Complies with the Federal Energy Conservation Standards effective April 16, 2015, in accordance with the Energy Policy and Conservation Act (EPCA), as amended

## Design-Certified By CSA International

- Certified at 300 psi test pressure and 150 psi working pressure
- Listed according to ANSI Z21.10.1-CSA 4.1 standards governing storage tank-type gas water heaters

## 6-Year Limited Tank and Parts Warranty

- For complete information, consult written warranty or go to hotwater.com




**Maximum Hydrostatic Working Pressure: 150 PSI**

Line drawings and dimensions on the following page.

# PROLINE®
# ATMOSPHERIC VENT *(CONTINUED)*

| Model Number | Nominal Gallon Capacity | Rated Storage Volume | First Hour Rating (Gallons) | UEF | BTU Input Natural Gas | BTU Input Propane Gas | Recovery 90°F Rise Gallon Per Hour |
|---|---|---|---|---|---|---|---|
| **Tall Models** | | | | | | | |
| **†GCB-30R** | 30 | 29 | 62 | 0.60 | 32,000 | 29,000 | 32 |
| **GCR-30R** | 30 | 29 | 62 | 0.60 | 32,000 | 29,000 | 31 |
| **‡GCRH-40** | 40 | 38 | 65 | 0.61 | 35,500 | N/A | 38 |
| **†GCB-40** | 40 | 38 | 78 | 0.65 | 40,000 | 36,000 | 42 |
| **GCR-40*** | 40 | 38 | 80 | 0.66 | 40,000 | 36,000 | 42 |
| **GCG-50*** | 50 | 48 | 81 | 0.62 | 40,000 | 37,000 | 41 |
| **GCR-50*** | 50 | 48 | 84 | 0.62 | 40,000 | 37,000 | 43 |
| **GCRT-50*** | 50 | 48 | 89 | 0.61 | 50,000 | 45,000 | 54 |
| **†GCRX-50*** | 50 | 49 | 99 | 0.61 | 60,000 | 54,000 | 65 |
| **GCRX-55*** | 55 | 55 | 83 | 0.62 | 60,000 | 54,000 | 65 |
| **Short Models** | | | | | | | |
| **†GCBL-30R** | 30 | 29 | 65 | 0.60 | 32,000 | 29,000 | 32 |
| **GCRL-30R** | 30 | 29 | 55 | 0.60 | 32,000 | 29,000 | 32 |
| **†GCBL-40** | 40 | 38 | 68 | 0.57 | 40,000 | 36,000 | 41 |
| **GCRL-40** | 40 | 38 | 67 | 0.59 | 40,000 | 36,000 | 41 |
| **GCRL-50** | 50 | 50 | 81 | 0.62 | 40,000 | 40,000 | 43 |

Water connection is ¾" on all models.
For 10-year tank and 10-year parts warranty, change "G" to "X" in model number (example: XCR-40).
All models approved for installation from sea level to 10,100 ft. elevation.
† Models ship with supplied insulation blanket
Specify when ordering propane (LP) gas.
‡ LP models not available on GCRH-40
*For optional side-mounted recirculating taps, add "L" to the suffix in the model number.

| Model Number | Dimensions in Inches | | | | |
|---|---|---|---|---|---|
| | A | B | C | D | E |
| **Tall Models** | | | | | |
| **†GCB-30R** | 60 1/2 | 57 | 16 | 12-1/4 | 8 |
| **GCR-30R** | 60 1/2 | 57 | 18 | 12-1/4 | 8 |
| **‡GCRH-40** | 61-3/4 | 58-1/4 | 20 | 12-1/4 | 8 |
| **†GCB-40** | 61-3/4 | 58-1/4 | 18 | 12-1/4 | 8 |
| **GCR-40*** | 61-3/4 | 58-1/4 | 20 | 12-1/4 | 8 |
| **GCG-50*** | 60-3/4 | 57-1/4 | 21 | 12-1/4 | 8 |
| **GCR-50*** | 60-3/4 | 57-1/4 | 22 | 12-1/4 | 8 |
| **GCRT-50*** | 60-3/4 | 57-1/4 | 22 | 12-1/4 | 8 |
| **†GCRX-50*** | 65-1/2 | 61 | 22 | 13-1/2 | 8 |
| **GCRX-55*** | 59-3/4 | 55-1/4 | 24 | 13-1/2 | 8 |
| **Short Models** | | | | | |
| **†GCBL-30R** | 50 1/4 | 46 3/4 | 18 | 12 | 8 |
| **GCRL-30R** | 50 1/4 | 46 3/4 | 20 | 12 | 8 |
| **†GCBL-40** | 51-1/2 | 48 | 20 | 12 | 8 |
| **GCRL-40** | 51-1/2 | 48 | 22 | 12 | 8 |
| **GCRL-50** | 53-1/4 | 49-3/4 | 24 | 13-1/4 | 8 |

| Model Number | Dimensions in Inches | | | | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|
| | F | *G | *H | Draft Hood Outlet | |
| **Tall Models** | | | | | |
| **†GCB-30R** | 51-3/4 | N/A | N/A | 3 or 4 | 123 |
| **GCR-30R** | 51-3/4 | N/A | N/A | 3 or 4 | 132 |
| **‡GCRH-40** | 52 | N/A | N/A | 3 or 4 | 138 |
| **†GCB-40** | 52 | N/A | N/A | 3 or 4 | 130 |
| **GCR-40*** | 52 | 14-1/4 | 51-3/4 | 3 or 4 | 138 |
| **GCG-50*** | 50 1/2 | 14-1/4 | 50-1/2 | 3 or 4 | 148 |
| **GCR-50*** | 50-1/2 | 14-1/4 | 50-1/2 | 3 or 4 | 165 |
| **GCRT-50*** | 50-1/2 | 14-1/4 | 50-1/2 | 4 | 165 |
| **†GCRX-50*** | 54-1/4 | 14-1/4 | 54-1/4 | 4 | 182 |
| **GCRX-55*** | 48 | 14-1/4 | 48 | 4 | 185 |
| **Short Models** | | | | | |
| **†GCBL-30R** | 40 | N/A | N/A | 3 or 4 | 114 |
| **GCRL-30R** | 40 | N/A | N/A | 3 or 4 | 108 |
| **†GCBL-40** | 41-1/4 | N/A | N/A | 3 or 4 | 134 |
| **GCRL-40** | 41-1/4 | N/A | N/A | 3 or 4 | 135 |
| **GCRL-50** | 41-3/8 | N/A | N/A | 3 or 4 | 177 |

Water connection is ¾" on all models.
For 10-year tank and 10-year parts warranty, change "G" to "X" in model number (example: XCR-40).
All models approved for installation from sea level to 10,100 ft. elevation.
† Models ship with supplied insulation blanket
Specify when ordering propane (LP) gas.
‡ LP models not available on GCRH-40
*For optional side-mounted recirculating taps, add "L" to the suffix in the model number.

RESIDENTIAL GAS

# PROLINE® ENERGY SAVER ATMOSPHERIC VENT MOBILE HOME



## Complies with HUD Standards for Manufactured Housing Installation

## Gas Control Convertible for Natural and Propane Gas

- For flexibility to meet the varying needs of manufactured housing installations

## Side-Mounted 3/4" Cold Water Inlet

- For flexibility to meet the varying needs of manufactured housing installations
- Top-mounted 3/4" hot water outlet

## Green Choice® Gas Burner

- Patented eco-friendly burner design reduces NOx emissions by up to 33% and complies with Low-NOx emission requirements of less than 40 ng/J

## CoreGard™ Anode Rod

## Blue Diamond® Glass Coating

## Enhanced-Flow Brass Drain Valve

## Code Compliance

- Meets UBC, CEC and HUD National Codes.
- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1
- Complies with the Federal Energy Conservation Standards effective April 16, 2015, in accordance with the Energy Policy and Conservation Act (EPCA), as amended

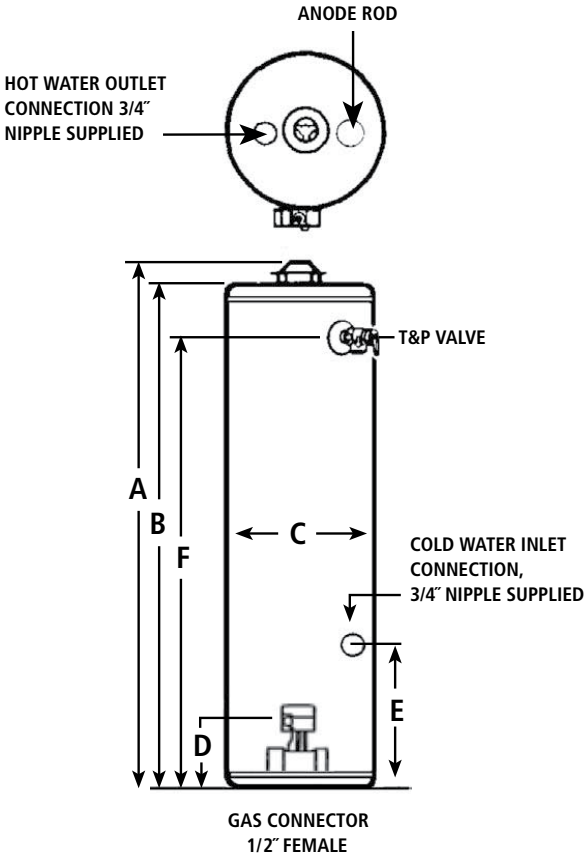
## Design-Certified by CSA International

- Certified at 300 psi test pressure and 150 psi working pressure
- Listed according to ANSI Z21.10.1-CSA 4.1 standards governing storage tank-type gas water heaters

## CSA Certified and ASME Rated T&P Relief Valve

## 6-Year Limited Tank and 6-Year Limited Tank Parts Warranty

- For complete information, consult written warranty or go to hotwater.com




| Model Number | Nominal Capacity | Rated Storage Volume | First Hour Rating (Gallons) | UEF | BTU Input Per Hour Natural Gas | BTU Input Per Hour Propane Gas | Recovery @ 90°F Rise Gallon Per Hour |
|---|---|---|---|---|---|---|---|
| **FMHR-30** | 30 | 29 | 63 | 0.61 | 35,500 | 32,000 | 36 |
| **FMHR-40** | 40 | 38 | 59 | 0.58 | 35,500 | 32,000 | 36 |

| Model Number | Dimensions in Inches | | | | | | | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | Draft Hood Outlet | |
| **FMHR-30** | 61-1/2 | 58 | 18 | 13 | 14-1/4 | 52 | 3 or 4 | 129 |
| **FMHR-40** | 61-3/4 | 58-1/4 | 20 | 13 | 14-1/4 | 51-3/4 | 3 or 4 | 153 |

All models ship from factory for use with natural gas. A complete propane (LP) burner is supplied for converting to propane gas.
No option available for top T&P.
Certified from sea level to 10,100 ft. elevation.

# PROLINE® ENERGY SAVER DIRECT VENT MOBILE HOME



## Complies With HUD Standards For Manufactured Housing Installation

## Gas Control Convertible for Natural and Propane Gas

- For flexibility to meet the varying needs of manufactured housing installations

## Direct Vent Models Package with Bottom Intake Air Vent

- To draw all combustion make-up air from outside the structure

## Optional Ducted Air Inlet Kit for Direct Vent Models

- For use when water heater is installed over a basement
- Provision for horizontal air inlet ducting

## Side-Mounted 3/4" Cold Water Inlet

## Green Choice® Gas Burner

- Patented eco-friendly burner design reduces NOx emissions by up to 33% and complies with Low-NOx emission requirements of less than 40 ng/J

## DynaClean™ Diffuser Dip Tube

## CoreGard™ Anode Rod

## Enhanced-Flow Brass Drain Valve

## Blue Diamond® Glass Coating

## Code Compliance

- Meets UBC, CEC and HUD National Codes
- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1
- Complies with the Federal Energy Conservation Standards effective April 16, 2015, in accordance with the Energy Policy and Conservation Act (EPCA), as amended

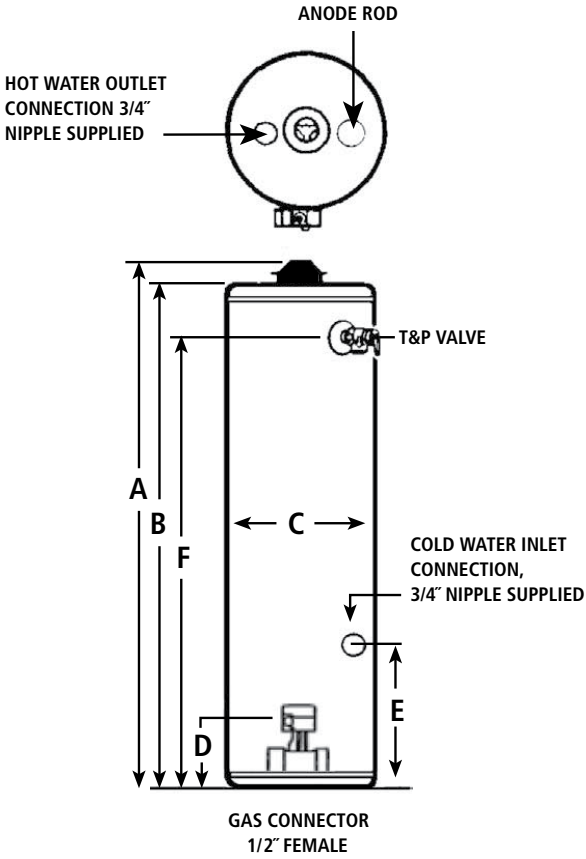
## Design-Certified by CSA International

- Certified at 300 psi test pressure and 150 psi working pressure
- Listed according to ANSI Z21.10.1-CSA 4.1 standards governing storage tank-type gas water heaters

## CSA Certified and ASME Rated T&P Relief Valve

## 6-Year Limited Tank and 6-Year Limited Parts Warranty

- For complete information, consult written warranty or go to hotwater.com




| Model Number | Nominal Capacity | Rated Storage Volume | First Hour Rating (Gallons) | UEF | Btu Input Per Hour Natural Gas | Btu Input Per Hour Propane | Recovery @ 90°F Rise Gallon Per Hour | Vent Outlet |
|---|---|---|---|---|---|---|---|---|
| **FMDV-30** | 30 | 29 | 60 | 0.61 | 30,000 | 29,000 | 31 | 3 |
| **FMDV-40** | 40 | 38 | 57 | 0.59 | 32,000 | 29,000 | 33 | 3 |
| **FMDV-50** | 50 | 47 | 67 | 0.56 | 40,000 | 37,000 | 39 | 3 |

| Model Number | Dimensions in Inches | | | | | | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | |
| **FMDV-30** | 61 | 58 | 18 | 13 | 14-1/4 | 52-1/2 | 129 |
| **FMDV-40** | 61-3/4 | 58-3/4 | 20 | 13 | 14-1/4 | 52-1/4 | 153 |
| **FMDV-50** | 60 | 57 | 22 | 13 | 14-1/4 | 50 | 168 |

All models ship from the factory for use with natural gas, a complete propane burner is supplied for converting to propane gas.
No option available for top T&P.
Water connections-3/4" on all models.
All models are certified for installation from sea level to 5,400 ft. elevation.

# PROLINE® ULTRA-LOW NOx



## The Electronic Gas Control Incorporates an LED Status Indicator that Monitors System Operation and Service Diagnostics

## High UEFs

- Eco-Friendly non-CFC foam insulation, external heat traps and specially designed combustion chamber combine to produce a high UEF for maximum savings on operating costs

## Green Choice® Gas Burner

- Enhanced Ultra-Low NOx burner complies with SCAQMD Rule 1121 and other air quality management districts with similar requirements for NOx emissions of less than 10 ng/J

## DynaClean™ Diffuser Dip Tube

## CoreGard™ Anode Rod

## Push-Button Piezo Ignitor

## Heat Trap Nipples

## Blue Diamond® Glass Coating

## Enhanced-Flow Brass Drain Valve

## Code Compliance

- Meets UBC, CEC and HUD National Codes
- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1
- Complies with the Federal Energy Conservation Standards effective April 16, 2015, in accordance with the Energy Policy and Conservation Act (EPCA), as amended

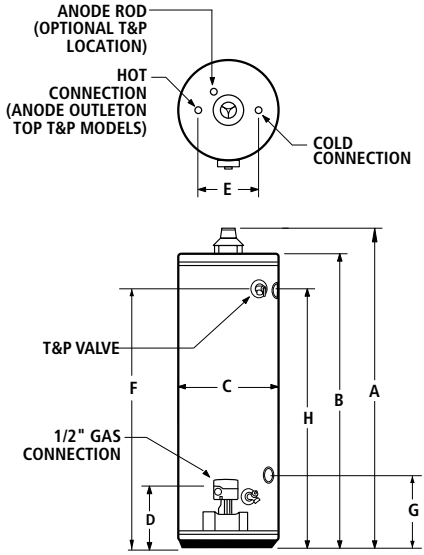
## CSA Certified And ASME Rated T&P Valve

## Design-Certified by CSA International

- Certified at 300 psi test pressure and 150 psi working pressure
- Listed according to ANSI Z21.10.1-CSA 4.1 standards governing storage tank-type gas water heaters

## 6-Year Limited Tank and Parts Warranty

- For complete information, consult written warranty or go to hotwater.com




**Maximum Hydrostatic Working Pressure: 150 PSI**

| Model Number | Nominal Capacity | Rated Storage Volume | First Hour Rating (Gallons) | UEF | BTU Input Natural Gas | Recovery @ 90°F Rise Gallon Per Hour | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|---|---|
| **Tall Models** | | | | | | | |
| **GUC-30** | 30 | 29 | 62 | 0.59 | 33,000 | 34 | 126 |
| **GUC-40** | 40 | 38 | 72 | 0.55 | 40,000 | 41 | 125 |
| **GUR-40** | 40 | 38 | 81 | 0.64 | 40,000 | 41 | 125 |
| **GUC-50** | 50 | 48 | 84 | 0.61 | 40,000 | 42 | 148 |
| **GUR-50** | 50 | 48 | 84 | 0.64 | 40,000 | 42 | 148 |
| **GURT-50L*** | 50 | 48 | 91 | 0.60 | 50,000 | 51 | 177 |
| **Short Models** | | | | | | | |
| **GURL-40** | 40 | 38 | 72 | 0.57 | 40,000 | 41 | 138 |

| Model Number | Dimensions in Inches | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G* | H* | Draft Hood Outlet |
| **Tall Models** | | | | | | | | | |
| **GUC-30** | 61-3/4 | 58 | 16 | 12 | 8 | 51-3/4 | N/A | N/A | 3 or 4 |
| **GUC-40** | 62 | 58-1/4 | 18 | 12 | 8 | 52 | N/A | N/A | 3 or 4 |
| **GUR-40** | 62 | 58-1/4 | 20 | 12 | 8 | 52 | N/A | N/A | 3 or 4 |
| **GUC-50** | 60-3/4 | 57-1/4 | 20 | 12 | 8 | 50-1/2 | N/A | N/A | 3 or 4 |
| **GUR-50** | 60-3/4 | 57-1/4 | 22 | 12 | 8 | 50-1/2 | N/A | N/A | 3 or 4 |
| **GURT-50L*** | 61 | 57-1/2 | 22 | 12-1/4 | 8 | 50-1/2 | 12-1/4 | 50-1/2 | 4 |
| **Short Models** | | | | | | | | | |
| **GURL-40** | 51-1/2 | 47-3/4 | 22 | 12 | 8 | 41-1/4 | N/A | N/A | 3 or 4 |

All models may be ordered from the factory with top T&P.
*Side loop connections are standard on model (GURT-50L).
*All models approved for installation from sea level to 10,100 ft. elevation.
For 10-year tank and 10-year parts limited warranty, change "G" to "X" in model number (example: XUR-40).

RESIDENTIAL GAS

# PROLINE® ULTRA-LOW NOx DIRECT VENT



## Flammable Vapor Resistant/Direct Vent Sealed Combustion System

## Durable, Ultra-Low NOx Burner Construction

## Non-CFC Foam Insulation

- The tank is surrounded by a thick coat of non-CFC polyurethane foam to trap heat inside the tank, saving energy

## ¾" Top Water Connections and Side Space Heating Connections

## ½" Gas Connection

## Coregard™ Anode Rod

## Blue Diamond® Glass Coating

## Enhanced-Flow Brass Drain Valve

## Green Choice® Gas Burner

- Complies with SCAQMD Rule 1121 and other air quality management districts with similar requirements for NOx emissions of less than 10 ng/J

## Code Compliance

- Meets UBC, CEC and HUD National Codes
- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1
- Complies with the Federal Energy Conservation Standards effective April 16, 2015, in accordance with the Energy Policy and Conservation Act (EPCA), as amended

## CSA Certified And ASME Rated T&P Valve.

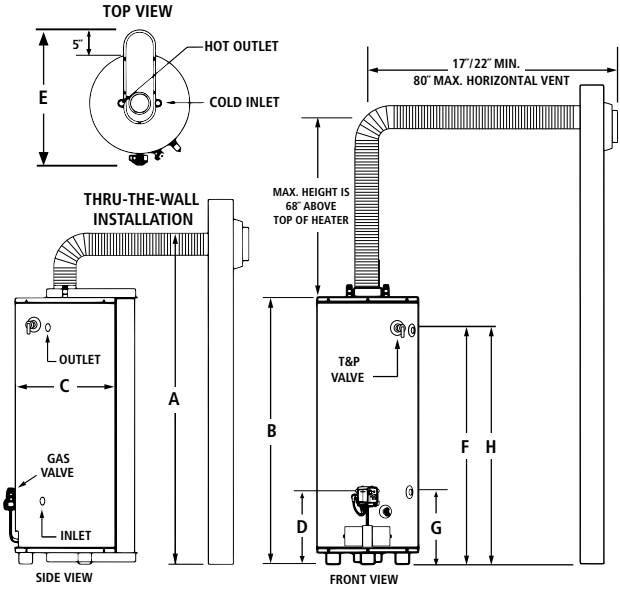
## Design-Listed by CSA International

- Certified at 300 psi test pressure and 150 psi working pressure
- Listed according to ANSI Z21.10-1- CSA 4.1 standards governing storage tank-type gas water heaters

## CSA Certified and ASME Rated T&P Relief Valve

## 6-Year Limited Tank and Parts Warranty

- For complete information, consult written warranty or go to hotwater.com




| Model Number | Nominal Capacity | Rated Storage Volume | First Hour Rating (Gallons) | UEF | Recovery 90°F Rise Gallon Per Hour | BTU Input Per Hour |
|---|---|---|---|---|---|---|
| **GDNL-40L** | 40 | 39 | 64 | 0.59 | 39 | 36,000 |
| **GDNT-50L** | 50 | 48 | 76 | 0.65 | 41 | 38,000 |

| Model Number | Concentric Vent Connection | Dimensions in Inches | | | | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|---|
| | | A | B | C | D | |
| **GDNL-40L** | 3 or 5 | 65-1/4 | 50-1/2 | 22 | 13-1/2 | 179 |
| **GDNT-50L** | 3 or 5 | 73-1/2 | 58-1/2 | 22 | 13-1/2 | 193 |

| Model Number | Dimensions in Inches | | | |
|---|---|---|---|---|
| | E | F | G | H |
| **GDNL-40L** | 30 | 43-7/8 | 15 | 45 |
| **GDNT-50L** | 30 | 52-1/4 | 15 | 53 |

No option available for top T&P valve.
All models have ¾" top water connections and comes standard with side loop fittings.
All models certified from sea level to 7,700 ft. elevation.

# PROLINE® ULTRA-LOW NOx HIGH CAPACITY



## Fully Automatic Controls with Safety Shutoff

## Heavy Gauge Steel Jacket

## Blue Diamond® Glass Coating

## Foam Insulation

## Ultra-Low NOx Emissions

- Complies with SCAQMD Rule 1146.2 and other Air Quality Management Districts with similar requirements of 14 ng/J or 20 ppm

## Easy-To-Install

- Completely factory-assembled
- Only gas, water and vent connections need to be made
- All connections are located in front and top of heaters for ease-of-installation and service

## Coregard™ Anode Rod

- Our anode rods have a stainless steel core that extends the life of the anode rod allowing superior tank protection far longer than standard anode rods

## Maximum Working Pressure

- 150 psi

## Maximum Gas Inlet Pressure

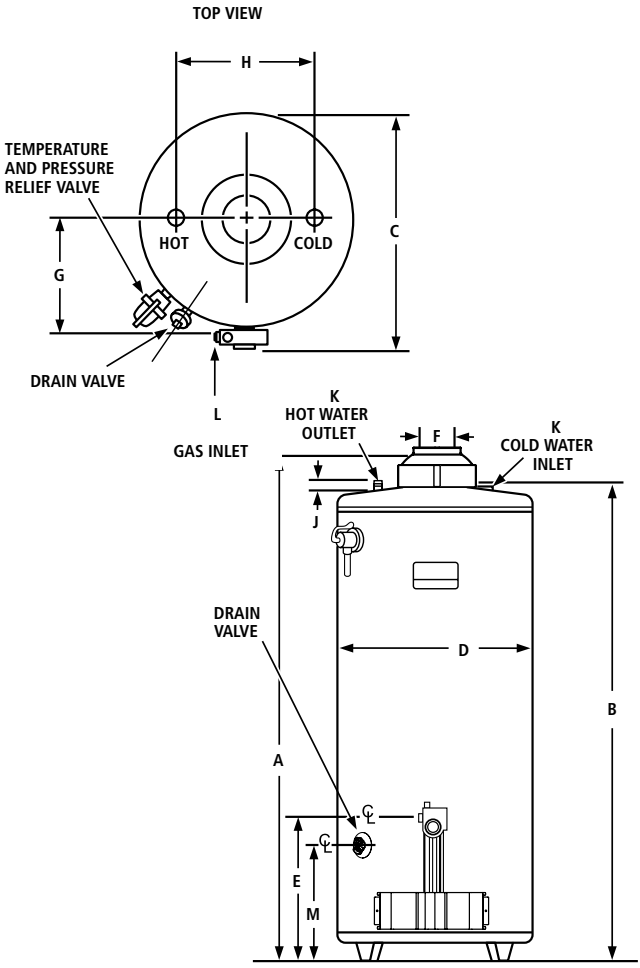
- 14" W.C.

## Code Compliance

- The Ultra-Low NOx atmospheric vent residential gas water heater meets the thermal efficiency and standby loss requirements of the U. S. Department of Energy and Current Edition ASHRAE/IES 90.1

## 6-Year Limited Tank and Parts Warranty

- For complete information, consult written warranty or go to hotwater.com




| Model Number | Nominal Capacity | Rated Storage Volume | First Hour Rating (Gallons) | UEF | Recovery @ 90°F Rise Gallon Per Hour | BTU Input Per Hour |
|---|---|---|---|---|---|---|
| † GCN-75 | 74 | 71 | 102 | 0.64 | 81 | 75,100 |
| GCN-100 | 98 | 95 | 120 | 0.58 | 82 | 75,100 |

| Model Number | Dimensions in Inches | | | | | Approx. Shipping Weight |
|---|---|---|---|---|---|---|
| | A | B | C | D | E | |
| †GCN-75 | 62-1/16 | 58 | 29-1/2 | 25-1/4 | 15-7/8 | 285 lbs |
| GCN-100 | 70-1/2 | 66-1/2 | 30-15/16 | 27-3/4 | 15-3/16 | 350 lbs |

*Recover rating based on 81% thermal efficiency.

**Recover rating based on 80% thermal efficiency.

†The GCN-75 comes standard with side loop fittings for use with hydronic heating applications.

RESIDENTIAL ELECTRIC

# VOLTEX® HYBRID ELECTRIC HEAT PUMP

PROLINE® XE BEST




## Increased Energy Efficiency

- Reduce water heating costs up to 73% compared to a standard electric water heater
- Up to a 3.45 Uniform Energy Factor (UEF) Rating conserves energy and meets ENERGY STAR® qualifications

## Dual Voltage Capable

- 208/240 VAC 60Hz capable for use in almost any residential installation

## Choice of Operating Modes

- Select from Efficiency, Hybrid or Electric modes to match heating requirements to environmental conditions and hot water demand. Hybrid mode automatically adjusts between compressor and element, depending upon heat requirements.
- Vacation mode reduces operating costs and provides freeze protection during extended absence.

## Backup Electric Elements

- Long-lasting 4500W backup heating elements help heat water according to environmental conditions, demand, and the chosen operating mode.

## Dry Fire Protection

- Control system checks to ensure the tank is full of water during start up to prevent dry firing the heating elements.

## Electronic User Interface

- User-friendly electronic interface allows easy control of temperature setting, operating mode, and communicates diagnostics.
- Advanced diagnostics convey error messages for service purposes. The last four error messages are saved in the control system memory.

## Other Features

- Ideal for basements or garage installations; the compressor transfers heat to the water while dehumidifying and cooling the ambient air
- Washable air filter is easily removed for routine cleaning
- Accessory Inlet/Outlet Duct Kit (Part number 100234320)

## Code Compliance

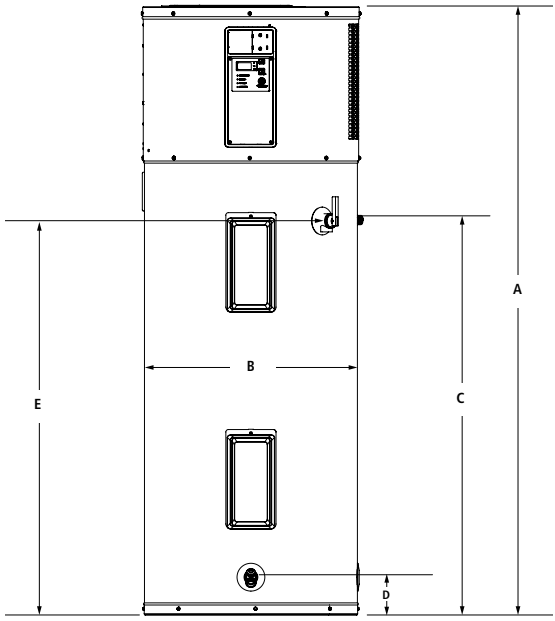
- Meets IBC and HUD National Codes.
- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1

## 10-Year Limited Warranty

- For complete information, consult written warranty or go to hotwater.com

ENERGY STAR

AHRI CERTIFIED® www.ahridirectory.org




| Model Number | Nominal Capacity | Rated Storage Volume | UEF | First Hour Rating (Gallons) | Approx. Shipping Weight (lbs) | Warranty Term |
|---|---|---|---|---|---|---|
| **HPTU-50N** | 50 | 46 | 3.45 | 66 | 196 | 10 |
| **HPTU-66N** | 66 | 67 | 3.45 | 79 | 289 | 10 |
| **HPTU-80N** | 80 | 82 | 3.45 | 86 | 307 | 10 |

| Model Number | Dimensions in Inches | | | | |
|---|---|---|---|---|---|
| | A | B | C | D | E |
| **HPTU-50N** | 63 | 22 | 40-5/8 | 3-3/4 | 40-1/2 |
| **HPTU-66N** | 61 | 27 | 38 | 4 | 38 |
| **HPTU-80N** | 69 | 27 | 46 | 4 | 46 |

Requires 30 amp breaker.
Top T&P option not available on this model.

# VOLTEX® HYBRID ELECTRIC HEAT PUMP

PROLINE® XE BEST




## Increased Energy Efficiency

- Reduce water heating costs up to 73% compared to a standard electric water heater
- Up to a 3.45 Uniform Energy Factor (UEF) Rating conserves energy and meets ENERGY STAR® qualifications

## Dual Voltage Capable

- 208/240 VAC 60Hz capable for use in almost any residential installation

## Choice of Operating Modes

- Select from Efficiency, Hybrid or Electric modes to match heating requirements to environmental conditions and hot water demand. Hybrid mode automatically adjusts between compressor and element, depending upon heat requirements.
- Vacation mode reduces operating costs and provides freeze protection during extended absence

## Backup Electric Elements

- Long-lasting 4500W backup heating elements help heat water according to environmental conditions, demand, and the chosen operating mode

## Dry Fire Protection

- Control system checks to ensure the tank is full of water during start up to prevent dry firing the heating elements

## Electronic User Interface

- User-friendly electronic interface allows easy control of temperature setting, operating mode, and communicates diagnostics
- Advanced diagnostics convey error messages for service purposes. The last four error messages are saved in the control system memory.

## Other Features

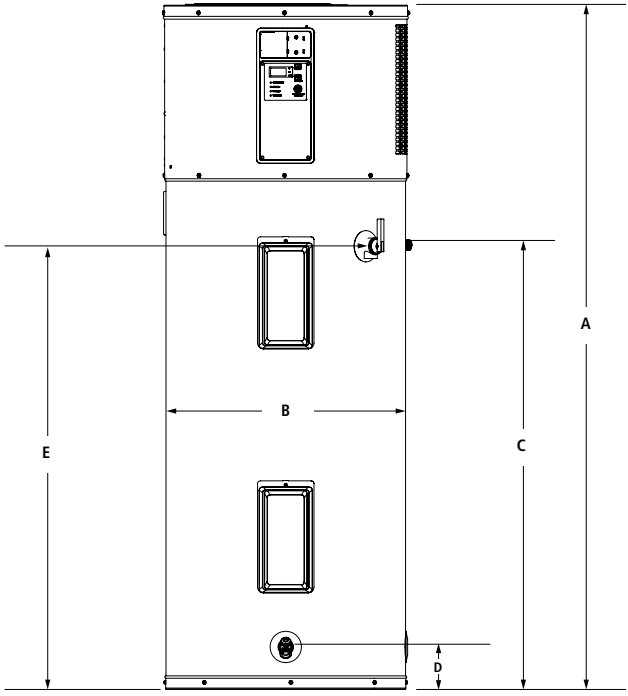
- Ideal for basements or garage installations; the compressor transfers heat to the water while dehumidifying and cooling the ambient air
- Washable air filter is easily removed for routine cleaning
- Accessory Inlet/Outlet Duct Kit (Part number 100234320)

## Code Compliance

- Meets IBC and HUD National Codes
- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1

## 6-Year Limited Warranty

- For complete information, consult written warranty or go to hotwater.com




| Model Number | Nominal Capacity | Rated Storage Volume | UEF | First Hour Rating (Gallons) | Approx. Shipping Weight (lbs) | Warranty Term |
|---|---|---|---|---|---|---|
| **FPTU-50** | 50 | 46 | 3.42 | 66 | 196 | 6 |
| **FPTU-66** | 66 | 67 | 3.35 | 79 | 289 | 6 |
| **FPTU-80** | 80 | 82 | 3.45 | 84 | 307 | 6 |

| Model Number | Dimensions in Inches | | | | |
|---|---|---|---|---|---|
| | A | B | C | D | E |
| **FPTU-50** | 63 | 22 | 40-5/8 | 3-3/4 | 40-1/2 |
| **FPTU-66** | 61 | 27 | 38 | 4 | 38 |
| **FPTU-80** | 69 | 27 | 46 | 4 | 46 |

Requires 30 amp breaker.
Top T&P option not available on this model.

# PROLINE® XE ELECTRONIC DISPLAY



## ELECTRONIC USER INTERFACE

- Touchscreen display
- Multiple operating modes help save money
  - Energy Saver and vacation modes available
- Diagnostic feedback
- Dry fire protection

## SMART PORT MODULE

- Allows for grid connectivity via optional CTA-2045 port adapter and 3rd party communication module
- Can provide Demand Response, Energy Storage and Time of Use saving benefits depending on local utility services offered.

## ENHANCED HEATING ELEMENTS

- Dual 5500 watt elements for the fastest recovery and reliable operation
- Incoloy stainless steel elements last longer than standard copper elements

## ENHANCED-FLOW BRASS DRAIN VALVE

## CODE COMPLIANCE

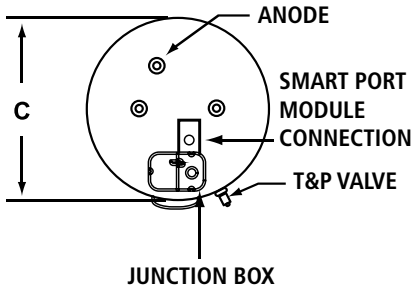
- Meets UBC, CEC and HUD National Codes
- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1
- Complies with the Federal Energy Conservation Standards effective April 16, 2015, in accordance with the Energy Policy and Conservation Act (EPCA), as amended

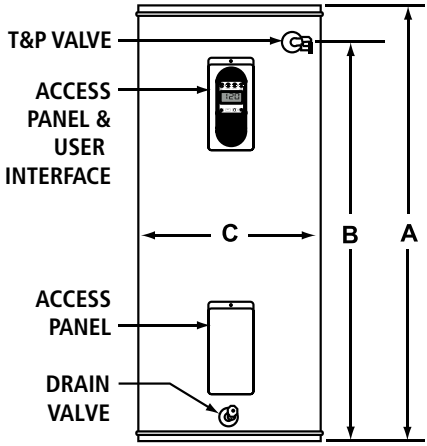
## DESIGN-LISTED BY UNDERWRITERS LABORATORIES

- Certified at 300 psi test pressure and 150 psi working pressure
- Listed according to UL174 standards governing storage tank-type water heaters

## 10-YEAR LIMITED TANK AND PARTS WARRANTY

- For complete information, consult written warranty or go to hotwater.com




| Model Number | Nominal Capacity | Rated Storage Volume | First Hour Rating (Gallons) | UEF | Recovery @ 90°F Rise Gallon Per Hour | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|---|
| **Tall Models** | | | | | | |
| **PXGT-40** | 40 | 36 | 59 | 0.93 | 25 | 118 |
| **PXGT-50** | 50 | 45 | 67 | 0.93 | 25 | 134 |
| **PXGT-55** | 55 | 55 | 72 | 0.92 | 25 | 145 |
| **Short Models** | | | | | | |
| **PXGS-40** | 40 | 37 | 54 | 0.92 | 25 | 109 |
| **PXGS-50** | 50 | 46 | 66 | 0.95 | 25 | 161 |

| Model Number | Element Wattage 240V | | Dimensions in Inches | | |
|---|---|---|---|---|---|
| | Standard | Maximum | A | B | C |
| **Tall Models** | | | | | |
| **PXGT-40** | 5500 | 6000 | 61-1/4 | 53-1/4 | 20 |
| **PXGT-50** | 5500 | 6000 | 60-1/2 | 51-1/4 | 22 |
| **PXGT-55** | 5500 | 6000 | 56-1/2 | 48-1/2 | 24 |
| **Short Models** | | | | | |
| **PXGS-40** | 5500 | 6000 | 49 3/4 | 40-3/4 | 20-1/2 |
| **PXGS-50** | 5500 | 6000 | 49-1/4 | 40-1/4 | 23 |

3/4" water connections on 8" center.
Only available for 240V or 208V applications. Equipped as dual element only, no single element configurations available. Minimum wattage available is 4,500 watt elements. Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement.

RESIDENTIAL ELECTRIC

# PROLINE® ELECTRONIC THERMOSTAT

PROLINE® XE BEST



## Smart Port Module

- Allows for grid connectivity via optional CTA-2045 port adapter and 3rd party communication module.
- Can provide Demand Response, Energy Storage and Time of Use saving benefits depending on local utility services offered.

## Energy Efficient

- Eco-friendly non-CFC foam insulation, heat traps and other features combine to yield a high Uniform Energy Factor to maximize savings

## Dynaclean™ Diffuser Dip Tube

- Helps reduce lime and sediment buildup and maximizes hot water output. Made from long-lasting PEX cross-linked polymer.

## Coregard™ Anode Rod

- Our anode rods have a stainless steel core that extends the life of the anode rod allowing superior tank protection far longer than standard anode rods

## Blue Diamond® Glass Coating

## Enhanced-Flow Brass Drain Valve

## Code Compliance

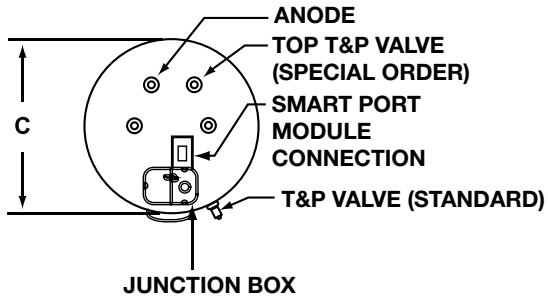
- Meets UBC, CEC and HUD National Codes.
- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1
- Complies with the Federal Energy Conservation Standards effective April 16, 2015, in accordance with the Energy Policy and Conservation Act (EPCA), as amended

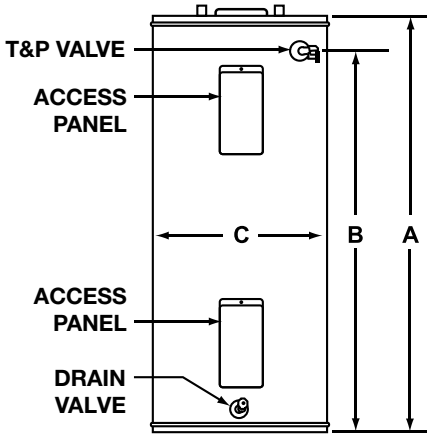
## CSA Certified And ASME Rated T&P Relief Valve

- Certified at 300 psi test pressure and 150 psi working pressure
- Listed according to UL 174 standards governing storage tank-type electric water heaters

## 6-Year Limited Tank and Parts Warranty

- For complete information, consult written warranty or go to hotwater.com




| Model Number | Nominal Capacity | Rated Storage Volume | First Hour Rating (Gallons) | UEF | Recovery @ 90°F Rise Gallon Per Hour | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|---|
| **Tall Models** | | | | | | |
| **EGT-40** | 40 | 36 | 51 | 0.92 | 25 | 118 |
| **EGT-50** | 50 | 45 | 56 | 0.93 | 25 | 134 |
| **Short Models** | | | | | | |
| **EGS-40** | 40 | 37 | 51 | 0.92 | 25 | 109 |
| **EGS-50** | 50 | 46 | 58 | 0.92 | 25 | 161 |

| Model Number | Element Wattage 240V | | Dimensions in Inches | | |
|---|---|---|---|---|---|
| | Standard | Maximum | Height to Top of Tank | Height to T&P | Diameter |
| **Tall Models** | | | | | |
| **EGT-40** | 4500 | 5500 | 61-1/4 | 53-1/4 | 20 |
| **EGT-50** | 4500 | 5500 | 61-1/2 | 51-1/4 | 22 |
| **Short Models** | | | | | |
| **EGS-40** | 4500 | 5500 | 49-3/4 | 40-3/4 | 20-1/2 |
| **EGS-50** | 4500 | 5500 | 49-1/4 | 40-1/4 | 23 |

3/4" water connections on 8" center.
All models are available with top-mounted T&P valve (Optional).
Only available for 240V or 208V applications.
208V is only available with 4,500 watt elements.
Equipped as dual element only, no single element configurations available.
Minimum wattage available is 4,500 watt elements.
Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement.

# PROLINE® MASTER STANDARD

PROLINE® MASTER BETTER




## Commercial-Grade Heating Elements

- Dual 4500 watt elements for the fastest recovery and reliable operation
- Long-lasting dual stainless steel elements last longer than standard copper elements

## High Uniform Energy Factors (UEFs)

## DynaClean™ Diffuser Dip Tube

## CoreGard™ Anode Rod

- ProLine® Master products have increased anode protection with either longer or multiple anodes, depending on model

## Code Compliance

- Meets UBC, CEC and HUD National Codes
- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1
- Complies with the Federal Energy Conservation Standards effective April 16, 2015, in accordance with the Energy Policy and Conservation Act (EPCA), as amended

## Approved for Manufactured Housing

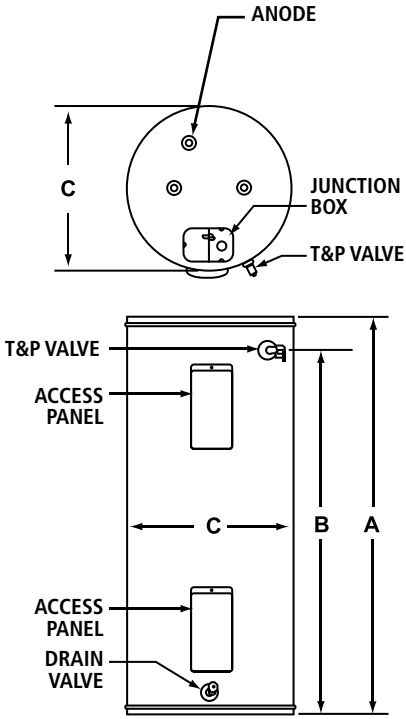
- All residential electric water heaters are compliant with HUD standards for mobile homes/ manufactured housing

## Design-Listed by Underwriters Laboratories

- Certified at 300 psi test pressure and 150 psi working pressure
- Listed according to UL 174 standards governing storage tank-type electric water heaters

## 8-Year Limited Tank and Parts Warranty

- For complete information, consult written warranty or go to hotwater.com




| Model Number | Nominal Capacity | Rated Storage Volume | First Hour Rating (Gallons) | UEF | Recovery @ 90°F Rise Gallon Per Hour |
|---|---|---|---|---|---|
| **Tall Models** | | | | | |
| **HNT-40** | 40 | 36 | 53 | 0.92 | 21 |
| **HNT-50** | 50 | 46 | 62 | 0.92 | 21 |
| **HNT-50W** | 50 | 46 | 45 | 0.88 | 11 |
| **HNT-55** | 55 | 55 | 72 | 0.93 | 21 |
| **Short Models** | | | | | |
| **HNS-40** | 40 | 37 | 55 | 0.92 | 21 |
| **HNS-40W** | 40 | 37 | 41 | 0.88 | 18 |
| **HNS-50** | 50 | 46 | 57 | 0.92 | 21 |

| Model Number | Element Wattage 240V | | | Dimensions in Inches | | | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|---|---|
| | Standard | Minimum | Maximum | A | B | C | |
| **Tall Models** | | | | | | | |
| **HNT-40** | 4500 | 3500 | 6000 | 61-1/4 | 53-1/4 | 18 | 118 |
| **HNT-50** | 4500 | @ 3000 | 6000 | 60-1/2 | 51-1/4 | 20-1/2 | 125 |
| **HNT-50W** | - | 1000 | 2500 | 60-1/2 | 51-1/4 | 20-1/2 | 125 |
| **HNT-55** | 4500 | 2500 | 6000 | 56-1/2 | 48-1/2 | 24 | 145 |
| **Short Models** | | | | | | | |
| **HNS-40** | 4500 | @ 4500 | 6000 | 50 | 40-3/4 | 20-1/2 | 109 |
| **HNS-40W** | - | 1000 | 4000 | 50 | 40-3/4 | 20-1/2 | 109 |
| **HNS-50** | 4500 | 2500 | 6000 | 49-3/4 | 40-3/8 | 23 | 161 |

Male 3/4" water connections on 8" center.
Models requiring a lower wattage than what is listed in the minimum wattage column and showing the @ symbol, will change to a "W" suffix model number.
"W" suffix models are available down to 1kW.
(example: HNS-40 using 4,000 watt elements or less will become "HNS-40W").
Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement.

# PROLINE® STANDARD

PROLINE® GOOD



## Enhanced Heating Elements

- Dual 4500 watt elements for the fastest recovery and reliable operation
- Incoloy stainless steel lower element lasts longer than standard copper elements

## High Uniform Energy Factors (UEFs)

## DynaClean™ Diffuser Dip Tube

## CoreGard™ Anode Rod

## Code Compliance

- Meets UBC, CEC and HUD National Codes
- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1
- Complies with the Federal Energy Conservation Standards effective April 16, 2015, in accordance with the Energy Policy and Conservation Act (EPCA), as amended

## Approved for Manufactured Housing

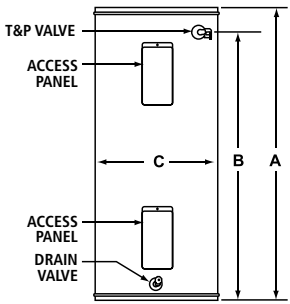
- All residential electric water heaters are compliant with HUD standards for mobile homes/ manufactured housing

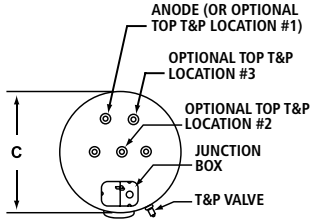
## Design-Listed by Underwriters Laboratories

- Certified at 300 psi test pressure and 150 psi working pressure
- Listed according to UL 174 standards governing storage tank-type electric water heaters

## 6-Year Limited Tank and Parts Warranty

- For complete information, consult written warranty or go to hotwater.com



| Model Number | Nominal Capacity | Rated Storage Volume | First Hour Rating (Gallons) | UEF | Element Wattage 240V | | |
|---|---|---|---|---|---|---|---|
| | | | | | Standard | Minimum | Maximum |
| **Tall Models** | | | | | | | |
| **ENT-30†** | 30 | 27 | 48 | 0.89 | 4500 | 1000 | 6000 |
| **ENT-40†** | 40 | 36 | 53 | 0.92 | 4500 | 3500 | 6000 |
| **ENT-50†** | 50 | 46 | 62 | 0.92 | 4500 | @ 3000 | 6000 |
| **ENT-50W†** | 50 | 46 | 45 | 0.88 | - | 1000 | 2500 |
| **ENT-55†** | 55 | 55 | 72 | 0.93 | 4500 | 2500 | 6000 |
| **Short Models** | | | | | | | |
| **ENSB-30*** | 30 | 27 | 50 | 0.90 | 4500 | 1000 | 6000 |
| **ENS-30†** | 30 | 27 | 47 | 0.89 | 4500 | 1000 | 6000 |
| **ENS-40†** | 40 | 37 | 55 | 0.92 | 4500 | @ 4500 | 6000 |
| **ENS-40W†** | 40 | 37 | 41 | 0.88 | - | 1000 | 4000 |
| **ENS-50†** | 50 | 46 | 57 | 0.92 | 4500 | 2500 | 6000 |
| **Lowboy Top Connect Models** | | | | | | | |
| **ENLB-30*†** | 28 | 26 | 43 | 0.89 | 4500 | 1000 | 6000 |
| **ENL-30†** | 28 | 26 | 44 | 0.90 | 4500 | 1000 | 6000 |
| **ENL-36†** | 36 | 33 | 51 | 0.92 | 4500 | @ 4500 | 6000 |
| **ENL-36W†** | 36 | 33 | 37 | 0.89 | - | 1000 | 4000 |
| **ENL-40†** | 38 | 35 | 50 | 0.89 | 4500 | 1000 | 6000 |
| **ENLB-40*†** | 38 | 35 | 51 | 0.92 | 4500 | @ 4500 | 6000 |
| **ENLB-40W*†** | 38 | 35 | 38 | 0.90 | - | 1000 | 4000 |
| **ENLB-50*†** | 48 | 44 | 60 | 0.93 | 4500 | @ 4000 | 6000 |
| **ENLB-50W*†** | 48 | 44 | 40 | 0.91 | - | 1000 | 3500 |
| **ENL-50†** | 51 | 48 | 51 | 0.92 | 4500 | 4000 | 6000 |

| Model Number | Recovery @ 90°F Rise Gallon Per Hour | Dimensions in Inches | | | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|
| | | A | B | C | |
| **Tall Models** | | | | | |
| **ENT-30†** | 21 | 46-1/2 | 39-1/2 | 19 | 95 |
| **ENT-40†** | 21 | 61-1/4 | 53-1/4 | 18 | 118 |
| **ENT-50†** | 21 | 60-1/2 | 51-1/4 | 20-1/2 | 125 |
| **ENT-50W†** | 11 | 60-1/2 | 51-1/4 | 20-1/2 | 125 |
| **ENT-55†** | 21 | 56-1/2 | 48-1/2 | 24 | 145 |
| **Short Models** | | | | | |
| **ENSB-30*** | 21 | 39 | 30-1/2 | 20 | 95 |
| **ENS-30†** | 21 | 39-3/4 | 30-1/2 | 22 | 94 |
| **ENS-40†** | 21 | 49-3/4 | 40-3/4 | 20-1/2 | 109 |
| **ENS-40W†** | 18 | 49-3/4 | 40-3/4 | 20-1/2 | 109 |
| **ENS-50†** | 21 | 49-1/4 | 40-3/8 | 23 | 161 |
| **Lowboy Top Connect Models** | | | | | |
| **ENLB-30*†** | 21 | 30 | 21-3/4 | 20 | 90 |
| **ENL-30†** | 21 | 31 1/4 | 21-3/4 | 24 | 115 |
| **ENL-36†** | 21 | 32 | 24 | 24 | 118 |
| **ENL-36W†** | 18 | 32 | 24 | 24 | 118 |
| **ENL-40†** | 21 | 33 1/2 | 24 | 26 | 118 |
| **ENLB-40*†** | 21 | 32 | 24 | 23 | 118 |
| **ENLB-40W*†** | 18 | 32 | 24 | 23 | 118 |
| **ENLB-50*†** | 21 | 34 | 25 | 26-1/2 | 172 |
| **ENLB-50W*†** | 16 | 34 | 25 | 26-1/2 | 172 |
| **ENL-50†** | 21 | 36 | 25 | 26-1/2 | 172 |

Male 3/4" water connections on 8" center. *Models ship with supplied insulation blanket. †For 10-year tank and 10-year parts warranty, change "E" to "P" in the model number (example: ENT-30 becomes PNT-30). Models requiring a lower wattage than what is listed in the minimum wattage column and showing the @ symbol, will change to a "W" suffix model number. "W" suffix models are available down to 1kW. (example: ENS-40 using 4,000 watt elements or less will become "ENS-40W"). Top T&P is not available on the 10 year lowboy models. Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement.

RESIDENTIAL ELECTRIC

# PROLINE® 80 GALLON ELECTRIC



## Smart Port Module

- Allows for grid connectivity via optional CTA-2045 port adapter and 3rd party communication module.
- Can provide Demand Response, Energy Storage and Time of Use saving benefits depending on local utility services offered.

## Energy Efficient

- Eco-friendly non-CFC foam insulation, heat traps and other features combine to yield a high Uniform Energy Factor to maximize savings

## Dynaclean™ Diffuser Dip Tube

- Helps reduce lime and sediment buildup and maximizes hot water output. Made from long-lasting PEX cross-linked polymer.

## Coregard™ Anode Rod

- Our anode rods have a stainless steel core that extends the life of the anode rod allowing superior tank protection far longer than standard anode rods

## Blue Diamond® Glass Coating

## Enhanced-Flow Brass Drain Valve

## Code Compliance

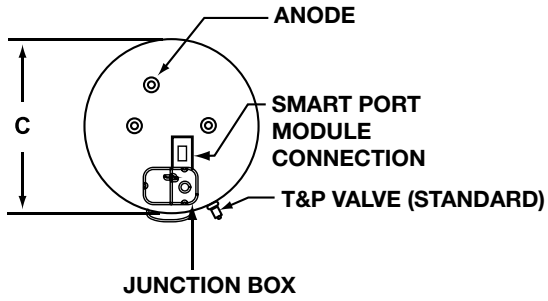
- Meets UBC, CEC and HUD National Codes.
- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1
- Complies with the Federal Energy Conservation Standards effective April 16, 2015, in accordance with the Energy Policy and Conservation Act (EPCA), as amended

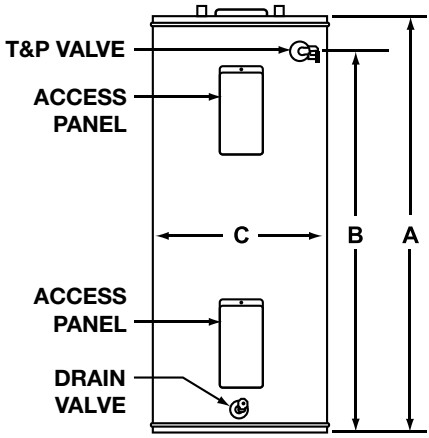
## CSA Certified And ASME Rated T&P Relief Valve

- Certified at 300 psi test pressure and 150 psi working pressure
- Listed according to UL 174 standards governing storage tank-type electric water heaters

## 6 & 10-Year Limited Tank and Parts Warranty

- For complete information, consult written warranty or go to hotwater.com




| Model Number | Nominal Capacity | Rated Storage Volume | First Hour Rating (Gallons) | UEF | Recovery @ 90°F Rise Gallon Per Hour | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|---|
| **High Capacity 6-Year Warranty Model** | | | | | | |
| **EGR-80** | 80 | 78 | 80 | 0.93 | 21 | 198 |
| **High Capacity 10-Year Warranty Model** | | | | | | |
| **PGR-80** | 80 | 78 | 80 | 0.93 | 21 | 198 |

| Model Number | Element Wattage 240V | | Dimensions in Inches | | |
|---|---|---|---|---|---|
| | Standard | Maximum | Height to Top of Tank | Height to T&P | Diameter |
| **High Capacity 6-Year Warranty Model** | | | | | |
| **EGR-80** | 4500 | 5500 | 64-1/2 | 56 | 26 |
| **High Capacity 10-Year Warranty Model** | | | | | |
| **PGR-80** | 4500 | 5500 | 64-1/2 | 56 | 26 |

3/4" water connections on 8" center.
Only available for 240V or 208V applications.
208V is only available with 4,500 watt elements.
Equipped as dual element only, no single element configurations available.
Minimum wattage available is 4,500 watt elements.
Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement.

# MOBILE HOME

PROLINE® GOOD



## Approved for Manufactured Housing

- All residential electric water heaters are compliant with HUD standards for mobile homes/ manufactured housing

## Side Water Connections

- For ease of installation in mobile home applications

## CoreGard™ Anode Rod

- Our anode rods have a stainless steel core that extends the life of the anode rod allowing superior tank protection far longer than standard anode rods

## Long-Lasting Heating Elements

- Screw-in, direct immersion, 3500W/240V or 3000W/120V heating elements for maximum efficiency

## Blue Diamond® Glass Coating

## Enhanced-Flow Brass Drain Valve

- Our residential water heaters have a solid brass, tamper resistant, enhanced-flow, ball type, drain valve
- Uses a standard female hose fitting that allows for fast and easy draining during maintenance

## CSA Certified and ASME Rated T&P Relief Valve

## Code Compliance

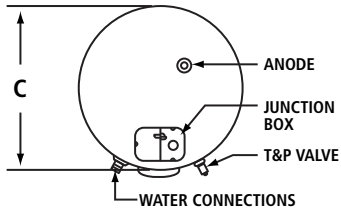
- Meets UBC, CEC and HUD National Codes
- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1
- Complies with the Federal Energy Conservation Standards effective April 16, 2015, in accordance with the Energy Policy and Conservation Act (EPCA), as amended

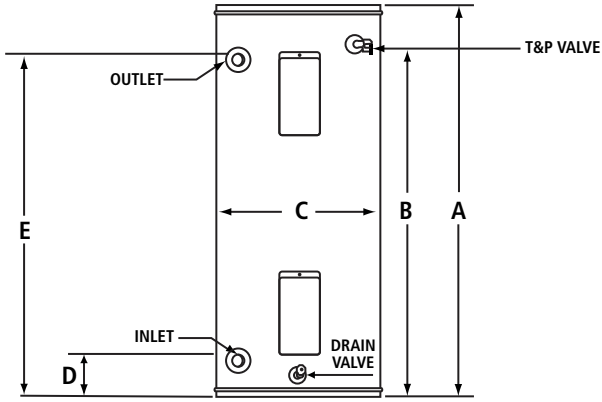
## Design-Listed by Underwriters Laboratories

- Certified at 300 psi test pressure and 150 psi working pressure
- Listed according to UL 174 standards governing storage tank-type electric water heaters

## 6-Year Limited Tank and Parts Warranty

- For complete information, consult written warranty or go to hotwater.com




| Model Number | Nominal Capacity | Rated Storage Volume | First Hour Rating (Gallons) | UEF | Recovery @ 90°F Rise Gallon Per Hour | Voltage |
|---|---|---|---|---|---|---|
| **EMHT-30** | 30 | 27 | 50 | 0.90 | 14 | 120 |
| **EMHT-30** | 30 | 27 | 50 | 0.90 | 16 | 240 |
| **EMHT-30** | 30 | 27 | 50 | 0.90 | 21 | 240 |
| **EMHS-40W** | 40 | 36 | 40 | 0.91 | 14 | 120 |
| **EMHS-40W** | 40 | 36 | 40 | 0.91 | 16 | 240 |
| **EMHS-40** | 40 | 36 | 54 | 0.95 | 21 | 240 |
| **EMHL-30*** | 28 | 26 | 47 | 0.90 | 14 | 120 |
| **EMHL-30*** | 28 | 26 | 47 | 0.90 | 16 | 240 |
| **EMHL-30*** | 28 | 26 | 47 | 0.90 | 21 | 240 |

| Model Number | Wattage | | Dimensions in Inches | | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|
| | Upper Element | Lower Element | Height to Top of Heater | Diameter | |
| **EMHT-30** | 3000 | 3000 | 46-3/4 | 19 | 98 |
| **EMHT-30** | 3500 | 3500 | 46-3/4 | 19 | 98 |
| **EMHT-30** | 4500 | 4500 | 46-3/4 | 19 | 98 |
| **EMHS-40W** | 3000 | 3000 | 50 | 22 | 109 |
| **EMHS-40W** | 3500 | 3500 | 50 | 22 | 109 |
| **EMHS-40** | 4500 | 4500 | 50 | 22 | 109 |
| **EMHL-30*** | 3000 | 3000 | 30 | 22 | 96 |
| **EMHL-30*** | 3500 | 3500 | 30 | 22 | 96 |
| **EMHL-30*** | 4500 | 4500 | 30 | 22 | 96 |

*Models ship with supplied insulation blanket.
Models may have limited element options due to element size or other restrictions.
¾" water connections. Available with side T&P only.
Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement.

# PROLINE® SPECIALTY ELECTRIC

PROLINE® GOOD



LOWBOY



TABLE TOP



COMPACT



POINT-OF-USE

## Approved For Manufactured Housing

- All residential electric water heaters are compliant with HUD standards for mobile homes/manufactured housing

## Table-Top

- Features a convenient flat porcelain surface at 36" height, providing extra "counter space" wherever installed.
- All plumbing and electrical connections are made through the back of the water heater. This heater is equipped with a PEX cross-linked polymer dip tube

## Point-of-Use

- Designed for low-demand, such as office lavatories or buildings with remote restrooms

## Compact

- Side-mounted plumbing and electrical connections (optional top-mounted water connections for field conversion)
- Designed for installation under a counter, in a crawl space or in other tight spaces

## Code Compliance

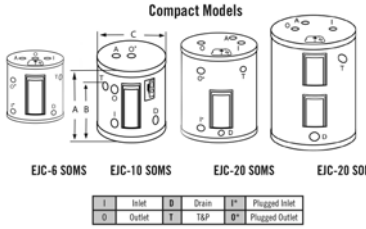
- Meets UBC, CEC and HUD National Codes
- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1
- Complies with the Federal Energy Conservation Standards effective April 16, 2015, in accordance with the Energy Policy and Conservation Act (EPCA), as amended

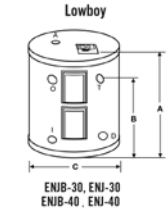
## Design-Listed By Underwriters Laboratories

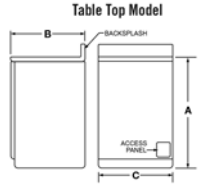
- Certified at 300 psi test pressure and 150 psi working pressure
- Listed according to UL 174 standards governing storage tank-type electric water heaters

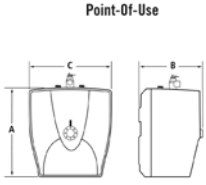
## 6-Year Limited Tank And Parts Warranty

- For complete information, consult written warranty or go to hotwater.com




| Model Number | Nominal Capacity | Rated Storage Volume | First Hour Rating (Gallons) | UEF | Element Wattage | |
|---|---|---|---|---|---|---|
| | | | | | Standard | Maximum |
| **Compact Models** | | | | | 120V | 240V |
| **EJC-6** | 6 | 6 | N/A | N/A | 1650 | 3000 |
| **EJC-10** | 10 | 9 | N/A | N/A | 1650 | 6000 |
| **EJCS-20** | 19 | 17 | N/A | N/A | 2500 | 6000 |
| **EJCT-20** | 19.9 | 18 | N/A | N/A | 2500 | 6000 |
| **Lowboy Side-Connect Model** | | | | | 240V | |
| **ENJB-30*** | 28 | 26 | 47 | 0.90 | 4500 | 6000 |
| **ENJ-30** | 28 | 26 | 43 | 0.91 | 4500 | 6000 |
| **ENJB-40*** | 38 | 35 | 57 | 0.94 | 4500 | 6000 |
| **ENJB-40W*** | 38 | 35 | 38 | 0.91 | - | 4000 |
| **ENJ-40** | 38 | 35 | 54 | 0.93 | 4500 | 6000 |
| **ENJ-40W** | 38 | 35 | 38 | 0.91 | - | 4000 |
| **Table Top Model** | | | | | 240V | |
| **ENTT-38** | 38 | 35 | 55 | 0.90 | 4500 | 5500 |
| **Point-Of-Use-Models** | | | | | 120V | |
| **EPU-2.5** | 2.5 | 2.6 | N/A | N/A | 1440 @ 120V | |
| **EPU-4** | 4 | 3.8 | N/A | N/A | 1440 @ 120V | |
| **EPU-6** | 6 | 5.9 | N/A | N/A | 1440 @ 120V | |

| Model Number | Recovery @ 90°F Rise Gallons Per Hour | Dimensions in Inches | | | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|
| | | A | B | C | |
| **Compact Models** | | | | | |
| **EJC-6** | 8 | 15-1/4 | 10-3/4 | 14-1/4 | 35 |
| **EJC-10** | 8 | 18-1/4 | 12-1/4 | 16 | 41 |
| **EJCS-20** | 11 | 24-3/4 | 18-5/8 | 18 | 68 |
| **EJCT-20** | 11 | 31-5/8 | 25-3/4 | 16 | 68 |
| **Lowboy Side-Connect Model** | | | | | |
| **ENJB-30*** | 21 | 30 | 21-3/4 | 22 | 101 |
| **ENJ-30** | 21 | 31-1/4 | 21-3/4 | 24 | 115 |
| **ENJB-40*** | 21 | 31-3/4 | 24 | 24 | 118 |
| **ENJB-40W*** | 18 | 31-3/4 | 24 | 24 | 118 |
| **ENJ-40** | 21 | 33-1/2 | 24 | 26 | 118 |
| **ENJ-40W** | 18 | 33-1/2 | 24 | 26 | 118 |
| **Table Top Model** | | | | | |
| **ENTT-38** | 21 | 36 | 24 | 25 | 150 |
| **Point-Of-Use-Models** | | | | | |
| **EPU-2.5** | 7 | 18-1/2 | 13-1/4 | 12 1/4 | 17 |
| **EPU-4** | 7 | 23 1/4 | 13-1/4 | 12 1/4 | 20 |
| **EPU-6** | 7 | 24 1/4 | 16 | 15 | 24 |

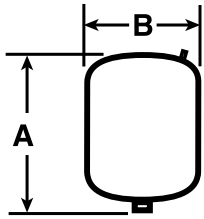
*Models ship with a supplied insulation blanket.
When ordering models ENJ-40 or ENJB-40 the model number will change for wattages of 4kW to 1kW. The new model number will include a "W" suffix (example: ENJB-40W)
Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement.

# PUMP TANKS

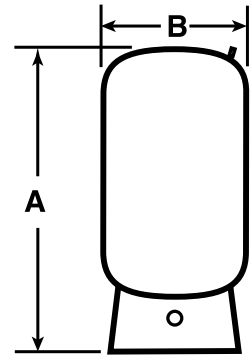


## Multiple Head Construction Adds Structural Strength and More Capacity within the Same Diameters

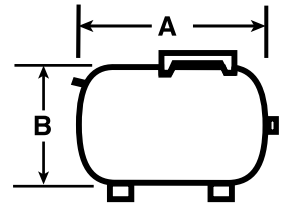
- Interior powder coating is permanently bonded to the tank shell for ultimate protection on the water side of the tank
- Butyl rubber parabolic diaphragm
- Positive lock retention system controls compression in the diaphragm connection, eliminating air loss or water leaks in tank
- Electrostatically applied powder-coated exterior for maximum sunlight (UV) resistance with zinc phosphate undercoat for highest corrosion resistance
- Corrosion-resistant metal air valve
- Rust Guard No-weld steel base
- 5-year limited warranty




IN-LINE




FREE-STANDING




HORIZONTAL

| Model Number | Volume (Gallons) | Connecting NPT Size | Dimensions in Inches | | | Weight (lbs.) |
|---|---|---|---|---|---|---|
| | | | Overall Height -A | To Center of Water Inlet | Diameter-B | |
| **PMI (Inline) and PM (Free-Standing) Series** | | | | | | |
| **PMI-2** | 2.0 | 3/4 (M) | 10-3/16 | - | 8-1/4 | 5 |
| **PMI-5** | 4.6 | 3/4 (M) | 14-3/4 | - | 11 | 9 |
| **PMI-7** | 7.3 | 3/4 (M) | 21-1/16 | - | 11 | 14 |
| **PMI-14** | 13.9 | 1 (M) | 21-1/16 | 2 | 15-3/8 | 24 |
| **PM-14** | 13.9 | 1 (F) | 24-15/16 | 2 | 15-3/8 | 24 |
| **PM-20** | 19.9 | 1 (F) | 32-3/8 | 2 | 15-3/8 | 34 |
| **PM-26** | 25.9 | 1 (F) | 39-9/16 | 2 | 15-3/8 | 43 |
| **PM-32** | 31.8 | 1 (F) | 47-1/4 | 2 | 15-3/8 | 52 |
| **PM-45** | 45.2 | 1-1/4 (F) | 36-9/16 | 2-1/2 | 22 | 65 |
| **PM-65** | 65.1 | 1-1/4 (F) | 48-5/8 | 2-1/2 | 22 | 90 |
| **PM-85** | 84.9 | 1-1/4 (F) | 60-11/16 | 2-1/2 | 22 | 114 |
| **PM-86** | 83.5 | 1-1/4 (F) | 46 | 2-1/2 | 26 | 116 |
| **PM-119** | 115.9 | 1-1/4 (F) | 61-5/16 | 2-1/2 | 26 | 161 |
| **Horizontal Series** | | | **Length-A** | | **Diameter-B** | |
| **PMH-7** | 7.3 | 3/4 (M) | 12-7/8 | - | 11 | 16 |
| **PMH-14** | 13.9 | 1 (M) | 18-1/4 | - | 15-3/8 | 25 |
| **PMH-20** | 19.9 | 1 (M) | 18-1/4 | - | 15-3/8 | 36 |

NOTE: M-Male connection
F-Female connection
All models 38 psi pre-charge

RESIDENTIAL

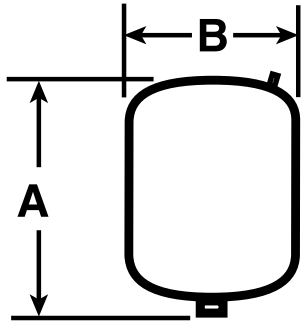
# EXPANSION TANKS




Certified to NSF/ANSI 61-G and 372

When used in potable applications

- Interior Powder Coating is Permanently Bonded to the Tank Shell for Ultimate Protection on the Inside of the Tank
- Butyl Rubber Parabolic Diaphragm
- Positive Lock Retention System Controls Compression in the Diaphragm Connection, Eliminating Air Loss or Water Leaks in Tank
- Projection Welded Air Valve
- 5-Year Limited Warranty on PMC Expansion Tanks
- 1-Year Limited Warranty on Hydronic Expansion Tanks




| Model Number | Maximum (psig) Working Pressure | Tank Volume (Gallons) | Maximum Accepted Volume (Gallons) | | |
|---|---|---|---|---|---|
| | | | 20 psi | 40 psi | 60 psi |
| **PMC-Series (Potable Expansion Tanks - 5-Year Limited Warranty)** | | | | | |
| **PMC-10** | 150 | 9.25 | 7.80 | 6.55 | 5.25 |
| **PMET-Series (Hydronic Expansion Tanks - 1-Year Limited Warranty)** | | | | | |
| **PMET-2** | 100 | 1.96 | 1.53 | N/A | N/A |
| **PMET-5** | 100 | 4.55 | 3.75 | N/A | N/A |
| **PMET-7** | 100 | 7.30 | 4.60 | N/A | N/A |
| **PMET-14** | 100 | 14.6 | 10.5 | N/A | N/A |

| Model Number | Connection NPT Size | Dimensions in Inches | | Weight (lbs) |
|---|---|---|---|---|
| | | Overall Height - A | Diameter - B | |
| **PMC-Series (Potable Expansion Tanks - 5-Year Limited Warranty)** | | | | |
| **PMC-10** | 3/4 | 15-1/2 | 15-3/8 | 18 |
| **PMET-Series (Hydronic Expansion Tanks - 1-Year Limited Warranty)** | | | | |
| **PMET-2** | 1/2 | 10-3/16 | 8-1/4 | 5 |
| **PMET-5** | 1/2 | 14-3/4 | 11 | 9 |
| **PMET-7** | 1/2 | 21-1/16 | 11 | 14 |
| **PMET-14** | 1/2 | 23-1/2 | 15-3/8 | 25 |

All PMC models 38 psi pre-charge.
All PMET models 12 psi pre-charge.

RESIDENTIAL TANKLESS

# PROLINE® XE WITH X3™ SCALE PREVENTION TECHNOLOGY

PROLINE® XE BEST



Meets SCAQMD Rule 1146.2

LOW-LEAD

DESIGN CERTIFIED

ENERGY STAR

AHRI CERTIFIED® www.ahridirectory.org

**ANSI Z21.10.3 • CSA 4.3**

## X3 Scale Prevention Technology (Patent Pending)

- Extends life of unit up to 3 times longer
- Eliminates need for isolation valves
- No annual descaling required
- No conditioning period required when using new copper pipe
- Maintains like-new performance longer

## Integrated Recirculation Pump

- Title 24 Compliant

## ENERGY STAR® Qualified

## Field Convertible From Natural Gas To Propane

## Dual Stainless Steel Heat Exchangers

## Ultra-Low NOx Emissions

- Complies with SCAQMD Rule 1146.2 NOx Emission Requirements Of 14 ng/J or 20 PPM

## EASY-LINK™ System

## Qualified As Lead Free Under The Safe Drinking Water Act

## Safety Features

- Exhaust & Water Temperature Safety Control
- Overheat Cut-Off Fuse

## Internal Freeze Protection System

## Operates With 1/2-Inch Gas Line

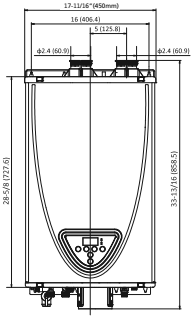
- Includes 1/2-inch gas connection

## Power Direct Vent Design

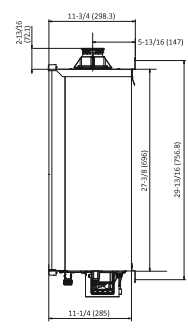
- Category IV venting can be used
- Exhaust, 2" PVC pipe up to 60 equivalent feet or 3" PVC pipe up to 150 equivalent feet
- Provides flexible venting with PVC, CPVC, polypropylene, or ABS Pipe for Intake and Exhaust (solid core only).

## Warranty

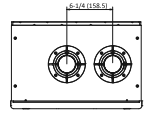
- No hard water exclusions
- 15-year limited warranty on heat exchanger in residential applications
- 1-year limited warranty on heat exchanger in commercial applications
- 5-year limited warranty on all parts



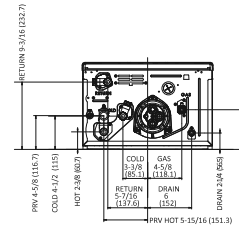

**FRONT**




**SIDE**




**TOP**




**BOTTOM**

| Model Number* | Type* | Gas Consumption Input | | Inlet Gas Pressure** | | UEF |
|---|---|---|---|---|---|---|
| | | Minimum BTU/H | Maximum BTU/H | Minimum in. W.C. | Maximum in. W.C. | |
| **AT-160X3P** | Natural | 9,000 | 160,000 | 3.5 | 10.5 | 0.93 |
| **AT-180X3P** | Natural | 9,000 | 180,000 | 3.5 | 10.5 | 0.93 |
| **AT-199X3P** | Natural | 9,000 | 199,000 | 3.5 | 10.5 | 0.93 |

| Maximum GPM*** | Hot/Cold Connections | Gas Connection | Dimensions in Inches | | | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|---|
| | | | Height | Width | Depth | |
| 6.5 | 3/4" NPT | 1/2" NPT | 28-5/8 | 17-11/16 | 11-3/4 | 80 |
| 8 | 3/4" NPT | 1/2" NPT | 28-5/8 | 17-11/16 | 11-3/4 | 80 |
| 10 | 3/4" NPT | 1/2" NPT | 28-5/8 | 17-11/16 | 11-3/4 | 80 |

15-150 PSI water pressure. 40 PSI or above recommended for maxium flow.
*Field gas convertible from natural gas to propane. Conversion kit is included with the heater.
** For propane, minimum inlet gas pressure is 8.0 in W.C. and maximum inlet gas pressure is 13.0 in W.C.
***Current numbers based on factory testing; 0.4 GPM required for activation; 0.26 GPM required for continuous fire after initial ignition.
Maximum certified or allowable installed altitude is 10,100 for indoor installations and 6,000 feet for outdoor installations.

RESIDENTIAL TANKLESS

# PROLINE® XE COMBI BOILER



Meets: SCAQMD Rule 1146.2

ANSI Z21.13 • CSA 4.9

## Indoor Installation Only

## Ultra-Low NOx Emissions

- Complies with SCAQMD Rule 1146.2 NOx Emission Requirements Of 14 ng/J or 20 PPM

## Modulating burner with 10:1 turndown ratio

- Continuously adjusts the firing rate to match demand for maximum comfort and system efficiency

## User Friendly Controls

- Programming the combi boiler takes less than two minutes and uses plain text rather than number codes

## Quicker Domestic Hot Water Response

- Advanced control technology prevents the cold water sandwich often found with other combi boilers

## Power Direct Vent Design

- Two-pipe sealed combustion system uses outside air, eliminating problems caused by insufficient indoor ventilation

## Domestic Hot Water flow rate up to 4.8 gpm at 77°F temperature rise

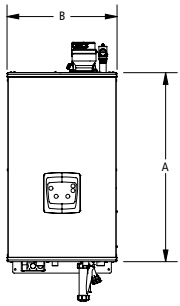
## Maximum Working Pressure

- 50 PSI max pressure (boiler); 150 PSI max pressure (DHW)

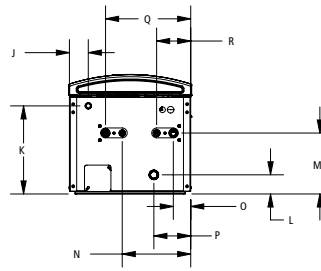
## Warranty

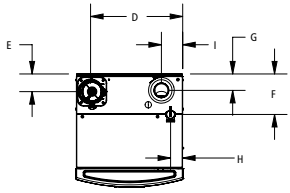
- 10-year limited warranty on heat exchanger in residential applications
- 5-year warranty on all parts
- Refer to hotwater.com for further warranty details

FRONT

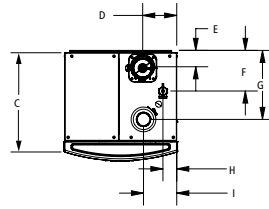



BOTTOM




TOP
110 Models




TOP
150-199 Models

| Model Number* | Gas Consumption Input | | AFUE% | Heating Capacity BTU/H | Net AHRI Rating BTU/H** |
|---|---|---|---|---|---|
| | Minimum BTU/H | Maximum BTU/H | | | |
| **ACB-110S-N** | 11,000 | 110,000 | 95.0 | 102,000 | 89,000 |
| **ACB-150S-N** | 15,000 | 150,000 | 95.0 | 139,000 | 121,000 |
| **ACB-199S-N** | 19,999 | 199,999 | 95.0 | 185,000 | 161,000 |

| Minimum in. W.C.† | Maximum in. W.C. | GPM at 77°F Rise | Water Connections | | Gas Connection | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|---|
| | | | Space Heating | DHW | | |
| 4.0 | 14.0 | 2.6 | 1″ NPT | 3/4″ NPT | 1/2″ NPT | 139 |
| 4.0 | 14.0 | 3.6 | 1″ NPT | 3/4″ NPT | 1/2″ NPT | 142 |
| 4.0 | 14.0 | 4.8 | 1″ NPT | 3/4″ NPT | 1/2″ NPT | 159 |

| Model Number* | Dimensions | | |
|---|---|---|---|
| | A | B | C |
| **ACB-110S-N** | 32-1/2″ | 17-1/4″ | 18″ |
| **ACB-150S-N** | 32-1/2″ | 18-3/4″ | 18″ |
| **ACB-199S-N** | 32-1/2″ | 18-3/4″ | 18″ |

*S Models can operate up to 4,500'. For high altitude (3,000' - 9,600'), change S to H. For liquid propane (LP), change N to P.

**The Net AHRI Water Ratings shown are based on a piping and pickup allowance of 1.15. The manufacturer should be consulted before selecting a boiler for installations having unusual piping and pickup requirements, such as intermittent system operation, extensive piping systems, etc.

†For LP, minimum supply pressure is 8.0 in. W.C.

The ratings have been determined under the provisions governing forced draft boilers.

RESIDENTIAL TANKLESS

# PROLINE® XE CONDENSING WITH RECIRCULATION PUMP

PROLINE® XE BEST



INDOOR MODEL



OUTDOOR MODEL

Meets SCAQMD Rule 1146.2

LOW-LEAD

ENERGY STAR

AHRI CERTIFIED® www.ahridirectory.org

**ANSI Z21.10.3 • CSA 4.3**

## Integrated Recirculation Pump

- Simplify installation by eliminating added time and money spent sourcing and installing pump and controls
- Integrated front panel controls are easy to view and set
- 1/2" pipe - 200'
- 3/4" pipe - 500'

## Pump Controls

- Included with heater
- Two timer settings
- Adjustable differential settings

## ENERGY STAR® Qualified

## Ultra-Low NOx Emissions

- Complies with SCAQMD Rule 1146.2 and other air quality management districts with similar requirements for Ultra-Low NOx emissions requirements of 14 ng/J or 20 PPM

## Indoor Models

- Include integrated temperature and pump controls with advanced diagnostics that simplify installation and troubleshooting
- Factory-installed power cord

## Outdoor Models

- Includes a wall mount temperature remote controller and advanced diagnostics to simplify troubleshooting

## Common Vent Indoor Models Up to 8 Heaters

- Easy-link with up to three 540H condensing tankless heaters to increase flow capacity

## Safety Features

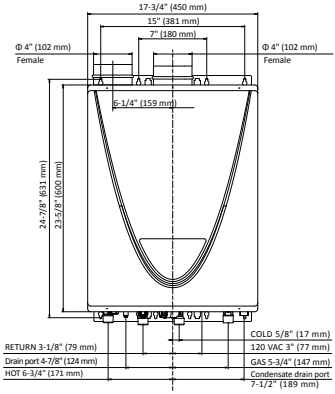
- Air-Fuel Ratio (AFR) Sensor
- Exhaust & Water Temperature Safety Control
- Overheat Cut-Off Fuse

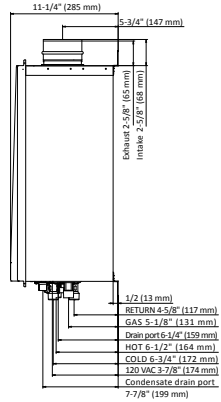
## Internal Freeze Protection

## Warranty

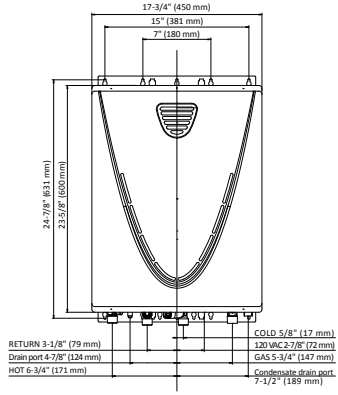
- 15-year limited warranty on heat exchanger in residential applications
- 5-year limited warranty on heat exchanger in commercial applications
- 5-year warranty on all parts

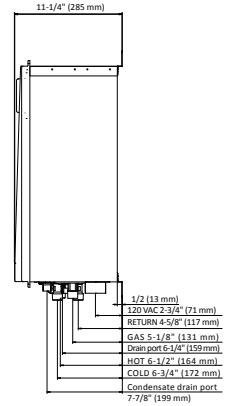
## INDOOR MODEL




## OUTDOOR MODEL




| Model Number* | Type | Gas Consumption Input | | Inlet Gas Pressure*** | |
|---|---|---|---|---|---|
| | | Minimum** (BTU/H) | Maximum (BTU/H) | Minimum (in. W.C.) | Maximum (in. W.C.) |
| **ATI-540P-N** | Natural | 15,000 | 199,000 | 4.0 | 10.5 |

| Model Number* | Indoor Model UEF | Outdoor Model UEF | Connections | | Sizing Chart (Number of Showers) | |
|---|---|---|---|---|---|---|
| | | | Water | Gas | Cold Climate† | Warm Climate‡ |
| **ATI-540P-N** | 0.93 | 0.95 | 3/4" NPT | 3/4" NPT | 3 | 4.5 |

| Model Number* | Clearances (in.) | | | | Approx Shipping Weight (lbs) |
|---|---|---|---|---|---|
| | Top | Bottom | Side | Front | |
| **ATI-540P-N** | 12 | 12 | 3 | 4 | 71 |

* For outdoor models, change "ATI" to "ATO". For propane models, change "N" to "P"
** For propane models, minimum is 13,000
*** For propane models, minimum inlet gas pressure is 8.0 in. W.C. and maximum inlet gas pressure is 14.0 in. W.C.
† Cold climate represents 70°F temperature rise
‡ Warm climate represents 50°F temperature rise

RESIDENTIAL TANKLESS

# PROLINE® XE CONDENSING HIGH EFFICIENCY

PROLINE® XE BEST



INDOOR MODEL



OUTDOOR MODEL

Meets SCAQMD Rule 1146.2

LOW-LEAD IAPMO R&T

AHRI CERTIFIED® www.ahridirectory.org

ANSI Z21.10.3 CSA 4.3

## ENERGY STAR® Qualified

## Condensing Technology Provides Up to 0.91 UEF

## Ultra-Low NOx Emissions

- Complies with SCAQMD Rule 1146.2 and other air quality management districts with similar requirements for Ultra-Low NOx emissions requirements of 14 ng/J or 20 PPM

## Copper Primary Heat Exchanger

- 25x better heat transfer than stainless steel thus stabilizing outgoing water temperature quicker and reducing pressure drop across the heat exchanger

## Secondary Heat Exchanger

- Marine-Grade 316L stainless steel to protect against corrosion

## Indoor Models

- Include a built-in temperature controller and advanced diagnostics to simplify troubleshooting
- Include factory-installed power cords

## Outdoor Models

- Include a wall mount temperature remote controller and advanced diagnostics to simplify troubleshooting

## Electronic Ignition - No Pilot Light

## Safety Features:

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

## Internal Freeze Protection System

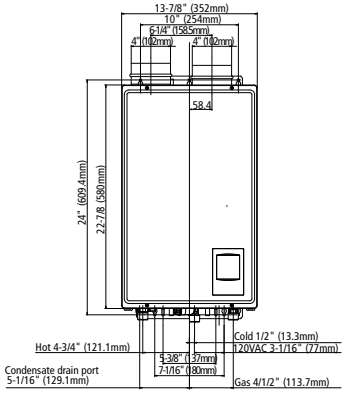
## Power Vent or Power Direct Vent Design

## Warranty

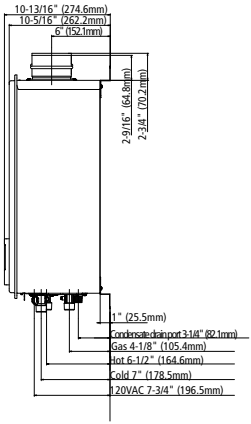
- 15-year limited warranty on heat exchanger in residential applications
- 5-year limited warranty on heat exchanger in commercial applications
- 5-year limited warranty on all parts

## INDOOR MODEL

Front view

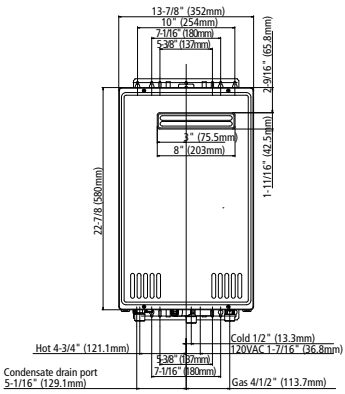



Side view

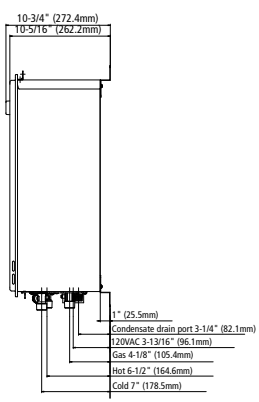



## OUTDOOR MODEL

Front view




Side view




| Model Number* | Type | Gas Consumption Input | | Inlet Gas Pressure*** | |
|---|---|---|---|---|---|
| | | Minimum** (BTU/H) | Maximum (BTU/H) | Minimum (in. W.C.) | Maximum (in. W.C.) |
| **ATI-140H-N** | Natural | 15,000 | 120,000 | 4.0 | 10.5 |

| Model Number* | Indoor Model UEF | Outdoor Model UEF | Connections | | Sizing Chart (Number of Showers) | |
|---|---|---|---|---|---|---|
| | | | Water | Gas | Cold Climate† | Warm Climate‡ |
| **ATI-140H-N** | 0.90 | 0.91 | 3/4" NPT | 1/2" NPT | 1.5 | 2.5 |

| Model Number* | Clearances (in.) | | | | Approx Shipping Weight (lbs) |
|---|---|---|---|---|---|
| | Top | Bottom | Side | Front | |
| **ATI-140H-N** | 12 | 12 | 3 | 4 | 54 |

*For outdoor models, change "ATI" to "ATO". For propane models, change "N" to "P"
**For propane models, minimum is 13,000
***For propane models, minimum inlet gas pressure is 8.0 in. W.C. and maximum inlet gas pressure is 14.0 in. W.C.
† Cold climate represents 70°F temperature rise
‡ Warm climate represents 50°F temperature rise

RESIDENTIAL TANKLESS & COMMERCIAL

# PROLINE® XE CONDENSING HIGH EFFICIENCY

PROLINE® XE BEST



INDOOR MODEL



OUTDOOR MODEL

Meets: SCAQMD Rule 1146.2

ENERGY STAR

LOW-LEAD

AHRI CERTIFIED® www.ahridirectory.org

ANSI Z21.10.3 CSA 4.3

## ENERGY STAR® Qualified

## Condensing Technology Provides Up to 0.95 UEF

## Ultra-Low NOx Emissions

- Complies with SCAQMD Rule 1146.2 and other air quality management districts with similar requirements for Ultra-Low NOx emissions requirements of 14 ng/J or 20 PPM

## Maximum Flow Rates up to 10.0 GPM

## Heat Exchanger

- Primary heat exchanger of the ATI/ATO-540 is constructed of a commercial-grade copper that is more resilient to erosion
- Copper is 25x better at heat transfer than stainless steel thus stabilizing outgoing water temperature quicker and reducing pressure drop across the heat exchanger
- Secondary heat exchanger is made of marine-grade 316L stainless steel to protect against corrosion

## Indoor Models

- Include integrated temperature controls and advanced diagnostics to simplify troubleshooting
- Include factory-installed power cords

## Outdoor Models

- Include a wall mount temperature remote controller and advanced diagnostics to simplify troubleshooting

## Common Vent Indoor Models up to 8 Units

## 540H Can Be Used In Both Residential and Commercial Applications

- Easy-link up to 4 heaters
- Multi-link up to 20 heaters

## Safety Features

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

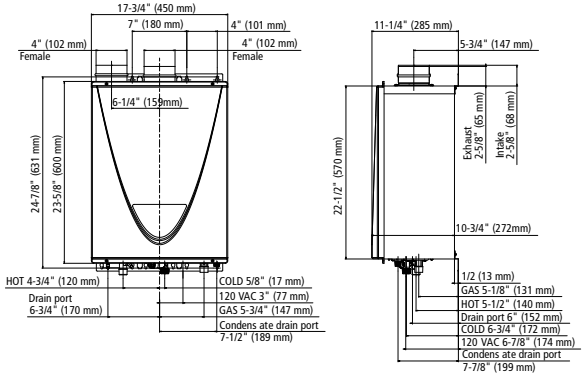
## Internal Freeze Protection System

## Power Vent or Power Direct Vent Design

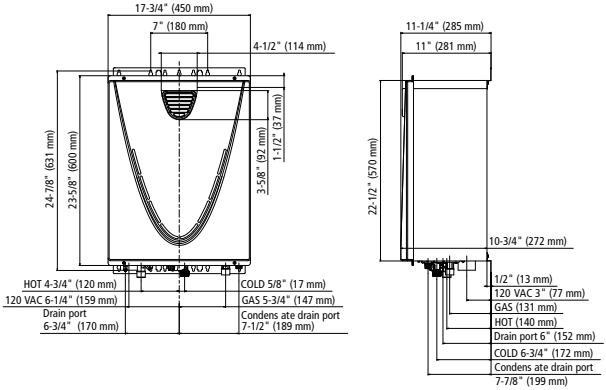
## Warranty

- 15-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

## INDOOR MODEL




## OUTDOOR MODEL




| Model Number* | Type | Gas Consumption Input | | Inlet Gas Pressure*** | |
|---|---|---|---|---|---|
| | | Minimum** (BTU/H) | Maximum (BTU/H) | Minimum (in. W.C.) | Maximum (in. W.C.) |
| **ATI-240H-N** | Natural | 15,000 | 160,000 | 4.0 | 10.5 |
| **ATI-340H-N** | Natural | 15,000 | 180,000 | 4.0 | 10.5 |
| **ATI-540H-N** | Natural | 15,000 | 199,000 | 4.0 | 10.5 |

| Model Number* | Indoor Model UEF | Outdoor Model UEF | Connections | | Sizing Chart (Number of Showers) | |
|---|---|---|---|---|---|---|
| | | | Water | Gas | Cold Climate† | Warm Climate‡ |
| **ATI-240H-N** | **0.94** | **0.95** | 3/4" NPT | 3/4" NPT | 2.5 | 3.5 |
| **ATI-340H-N** | **0.95** | **0.94** | 3/4" NPT | 3/4" NPT | 2.5 | 4.0 |
| **ATI-540H-N** | **0.93** | **0.95** | 3/4" NPT | 3/4" NPT | 3 | 4.5 |

| Model Number* | Clearances (in.) | | | | Approx Shipping Weight (lbs) |
|---|---|---|---|---|---|
| | Top | Bottom | Side | Front | |
| **ATI-240H-N** | 12 | 12 | 3 | 4 | 71 |
| **ATI-340H-N** | 12 | 12 | 3 | 4 | 71 |
| **ATI-540H-N** | 12 | 12 | 3 | 4 | 71 |

*For outdoor models, change "ATI" to "ATO". For propane models, change "N" to "P"
**For propane models, minimum is 13,000
***For propane models, minimum inlet gas pressure is 8.0 in. W.C. and maximum inlet gas pressure is 14.0 in. W.C.
† Cold climate represents 70°F temperature rise
‡ Warm climate represents 50°F temperature rise

RESIDENTIAL TANKLESS

# PROLINE® XE
# NON-CONDENSING CONCENTRIC VENT

PROLINE® XE BEST



Meets: SCAQMD Rule 1146.2

LOW-LEAD

AHRI CERTIFIED® www.ahridirectory.org

ANSI Z21.10.3

NSF

(510c models only)

## Concentric Vent Design

- Power direct vent
- Vertical or horizontal venting up to 43'

## Field Convertible from Natural Gas to Propane

## Ultra-Low NOx Emissions

- Complies with SCAQMD Rule 1146.2 and other air quality management districts with similar requirements for Ultra-Low NOx emissions requirements of 14 ng/J or 20 PPM

## Maximum Flow Rates up to 10.0 GPM

## Primary Heat Exchanger

- Primary heat exchanger of the ATI-510C is constructed of a commercial-grade copper that is more resilient to erosion
- Copper is 25x better at heat transfer than stainless steel thus stabilizing outgoing water temperatures quicker and reducing pressure drop across the heat exchanger

## Indoor Models Only

- Include integrated temperature controls and advanced diagnostics to simplify troubleshooting
- Include factory-installed power cords

## ATI-510C Can be Used in Both Residential and Commercial Applications

- Easy-Link up to 4 units
- Multi-Link up to 20 units

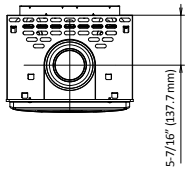
## Safety Features

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

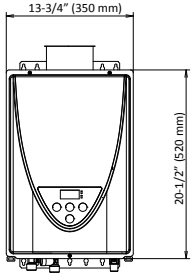
## Internal Freeze Protection

## Warranty

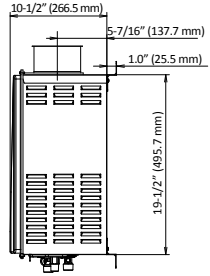
- 15-year limited warranty on heat exchanger in residential applications
- 5-year limited warranty on heat exchanger in commercial applications
- 5-year limited warranty on all parts



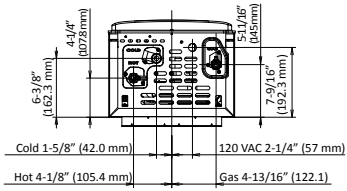

**Top view**




**Front view**




**Side view**




**Bottom view**

| Model Number* | Gas Consumption Input | | Inlet Gas Pressure** | |
|---|---|---|---|---|
| | Minimum (BTU/H) | Maximum (BTU/H) | Minimum (in. W.C.) | Maximum (in. W.C.) |
| ATI-110C-N | 15,000 | 140,000 | 4.0 | 10.5 |
| ATI-310C-N | 15,000 | 190,000 | 4.0 | 10.5 |
| ATI-510C-N | 15,000 | 199,000 | 4.0 | 10.5 |

| Model Number* | UEF | Connections | | Sizing Chart (Number of Showers) | |
|---|---|---|---|---|---|
| | | Water | Gas | Cold Climate† | Warm Climate‡ |
| ATI-110C-N | 0.81 | 3/4" NPT | 3/4" NPT | 1.5 | 2.5 |
| ATI-310C-N | 0.81 | 3/4" NPT | 3/4" NPT | 2.5 | 3.5 |
| ATI-510C-N | 0.81 | 3/4" NPT | 3/4" NPT | 2.5 | 3.5 |

| Model Number* | Clearances (in.) | | | | Approx Shipping Weight (lbs) |
|---|---|---|---|---|---|
| | Top | Bottom | Side | Front | |
| ATI-110C-N | 12 | 12 | 3 | 4 | 55 |
| ATI-310C-N | 12 | 12 | 3 | 4 | 55 |
| ATI-510C-N | 12 | 12 | 3 | 4 | 55 |

*Indoor models only. Units are field convertible from natural gas to propane with supplied conversion kit.

**When converted for propane, minimum inlet gas pressure is 8.0 in. W.C. and maximum inlet gas pressure is 14.0 in. W.C.

† Cold climate represents 70°F temperature rise

‡ Warm climate represents 50°F temperature rise

RESIDENTIAL TANKLESS & COMMERCIAL

# PROLINE® XE
# NON-CONDENSING ULTRA-LOW NOx

PROLINE® XE BEST



INDOOR MODEL



OUTDOOR MODEL

NSF 510U Models

Meets: SCAQMD Rule 1146.2

LOW-LEAD IAPMO R&T

AHRI CERTIFIED® www.ahridirectory.org

**ANSI Z21.10.3**

## Ultra-Low NOx Emissions

- Complies with SCAQMD Rule 1146.2 and other air quality management districts with similar requirements for Ultra-Low NOx emissions requirements of 14 ng/J or 20 PPM

## Field Convertible from Natural Gas to Propane

## Maximum Flow Rates Up To 10.0 GPM

## Copper Primary Heat Exchanger

- Primary heat exchange of the ATI/ATO-510U is constructed of a commercial-grade copper that is more resilient to erosion
- Copper is 25x better at heat transfer than stainless steel thus stabilizing outgoing water temperatures quicker and reducing pressure drop across the heat exchanger indoor and outdoor models available

## Indoor Models

- Include integrated temperature controls and advanced diagnostics to simplify troubleshooting
- Include factory-installed power cords

## Outdoor Models

- Include a wall mount temperature remote controller and advanced diagnostics to simplify troubleshooting

## ATI-510U / ATO-510U Can be Used in Both Residential and Commercial Applications

- Easy-Link Up To 4 Units
- Multi-Link Up to 20 Units

## Safety Features

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

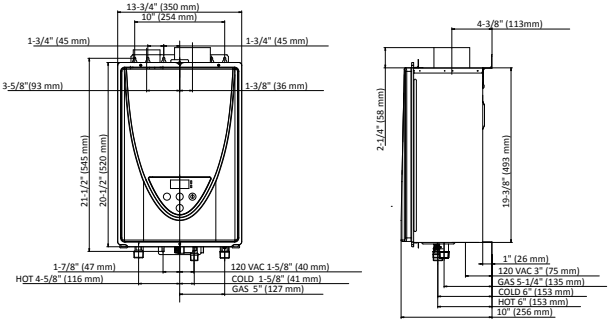
## Internal Freeze Protection

## Power Vent or Power Direct Vent Design

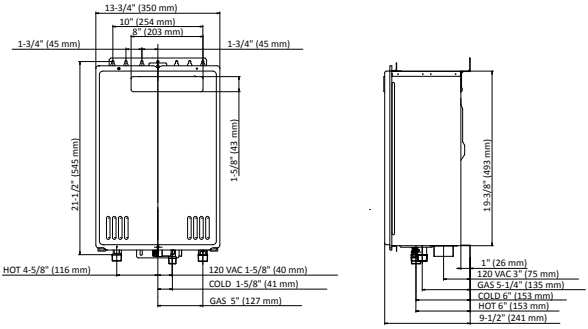
## Warranty

- 15-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

## INDOOR MODEL




## OUTDOOR MODEL




| Model Number* | Type | Gas Consumption Input | | Inlet Gas Pressure** | |
|---|---|---|---|---|---|
| | | Minimum (BTU/H) | Maximum (BTU/H) | Minimum (in. W.C.) | Maximum (in. W.C.) |
| **ATI-110U-200** | Natural | 15,000 | 140,000 | 4.0 | 10.5 |
| **ATI-310U-200** | Natural | 15,000 | 190,000 | 4.0 | 10.5 |
| **ATI-510U-200** | Natural | 15,000 | 199,000 | 4.0 | 10.5 |

| Model Number* | Indoor Model UEF | Outdoor Model UEF | Connections | | Sizing Chart (Number of Showers) | |
|---|---|---|---|---|---|---|
| | | | Water | Gas | Cold Climate† | Warm Climate‡ |
| **ATI-110U-200** | 0.81 | 0.81 | 3/4" NPT | 3/4" NPT | 1.5 | 2.5 |
| **ATI-310U-200** | 0.81 | 0.82 | 3/4" NPT | 3/4" NPT | 2.5 | 3.5 |
| **ATI-510U-200** | 0.81 | 0.81 | 3/4" NPT | 3/4" NPT | 2.5 | 3.5 |

| Model Number* | Clearances (in.) | | | | Approx Shipping Weight (lbs) |
|---|---|---|---|---|---|
| | Top | Bottom | Side | Front | |
| **ATI-110U-200** | 12 | 12 | 3 | 4 | 39 |
| **ATI-310U-200** | 12 | 12 | 3 | 4 | 39 |
| **ATI-510U-200** | 12 | 12 | 3 | 4 | 40 |

*For outdoor models, change "ATI" to "ATO". Units are field convertible from natural gas to propane with supplied conversion kit.

**When converted for propane, minimum inlet gas pressure is 8.0 in. W.C. and maximum inlet gas pressure is 14.0 in. W.C.

† Cold climate represents 70°F temperature rise

‡ Warm climate represents 50°F temperature rise

COMMERCIAL TANKLESS

# NON-CONDENSING HEAVY-DUTY



Commercial-Grade Copper Heat Exchanger (Non-ASME Models)

ASME Models Available

5" Category III Stainless Steel Venting

Vertical or Horizontal Venting Installation

Power Vent or Convertible to Power Direct Vent

Electronic Ignition

Low NOx Emissions

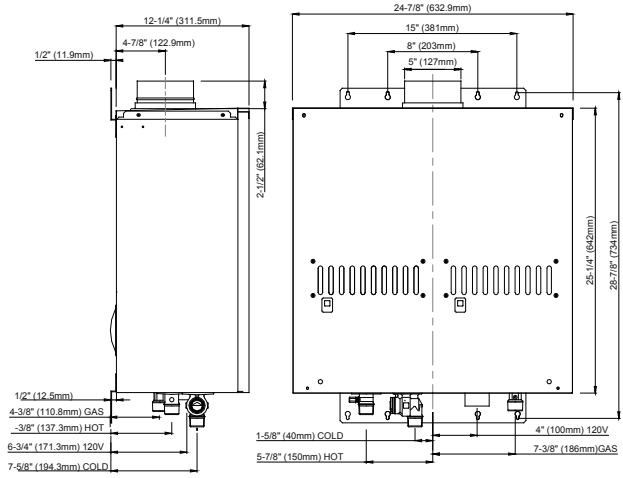
Combined Indoor/Outdoor Models

Easy-Link up to 4 Units

Multi-Link up to 10 Units

Warranty

- 6-year limited warranty on heat exchanger
- 5-year limited warranty on all parts




| Model Number* | Type | Gas Consumption Input | | Inlet Gas Pressure** | |
|---|---|---|---|---|---|
| | | Minimum (BTU/H) | Maximum (BTU/H) | Minimum (in. W.C.) | Maximum (in. W.C.) |
| **ATIO-910-N** | Natural | 15,000 | 380,000 | 5.0 | 10.5 |
| **ATIO-910-AN** | Natural | 15,000 | 380,000 | 5.0 | 10.5 |

| Model Number* | Thermal Efficiency | Connections | | Sizing Chart (Number of Showers) | |
|---|---|---|---|---|---|
| | | Water | Gas | Cold Climate† | Warm Climate‡ |
| **ATIO-910-N** | 80% | 1" NPT | 1" NPT | 5 | 7 |
| **ATIO-910-AN** | 80% | 1" NPT | 1" NPT | 5 | 7 |

| Model Number* | Clearances (in.) | | | | Approx Shipping Weight (lbs) |
|---|---|---|---|---|---|
| | Top | Bottom | Side | Front | |
| **ATIO-910-N** | 12 | 12 | 2 | 24 | 113 |
| **ATIO-910-AN** | 12 | 12 | 2 | 24 | 113 |

*"-AN" means ASME rated. For propane models, change "N" to "P".

**For propane models, minimum inlet gas pressure is 8.0 in. W.C. and maximum inlet gas pressure is 14.0 in. W.C.

† Cold climate represents 70°F temperature rise

‡ Warm climate represents 50°F temperature rise

# COMMERCIAL TANKLESS
# RACK SYSTEM



Wall Mount



Freestanding



Back-to-Back

## Multiple Design and Installation Configurations

- Wall mount, freestanding in-line, and freestanding back-to-back designs
- Indoor and outdoor rack designs
- Uses the CT-199 high efficiency condensing tankless heaters.

## Expandable

- Up to 1,194,000 BTU on a single rack system
- Able to link up to 20 heaters together with Multi-Link system

## Redundancy

- Multiple combustion systems provide piece of mind
- Easily isolate a unit for maintenance which extends the life of the heaters

## Lightweight

- Anodized aluminum frame
- Utilizes the industry's lightest 199,000 BTU high efficiency condensing tankless heater

## Easy Field Installation

- Reduce installation costs with three simple connections (cold water, hot water, and gas)

## Ultra-Low NOx Emissions

- Complies with SCAQMD Rule 1146.2 and other air quality management districts with similar requirements for Ultra-Low NOx emissions requirements of 14 ng/J or 20 PPM.

## Warranty

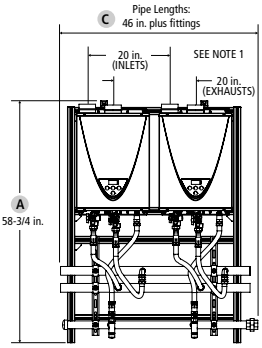
- 6-year limited warranty on heat exchanger
- 5-year limited warranty on tankless parts
- 1-year limited warranty on rack parts

| Model Number | Number of Heaters | Btuh Input | | Max Flow (GPM) | | |
|---|---|---|---|---|---|---|
| | | Min | Max | @ 50°F Rise | @ 70°F Rise | @ 100°F Rise |
| **Wall Mount** | | | | | | |
| **ACI-CRS-22WM-N** | 2 | 15,000 | 398,000 | 15.2 | 10.8 | 7.6 |
| **ACI-CRS-22WM-P** | 2 | 13,000 | 398,000 | 15.2 | 10.8 | 7.6 |
| **ACI-CRS-23WM-N** | 2 | 15,000 | 398,000 | 15.2 | 10.8 | 7.6 |
| **ACI-CRS-23WM-P** | 2 | 13,000 | 398,000 | 15.2 | 10.8 | 7.6 |
| **ACI-CRS-33WM-N** | 3 | 15,000 | 597,000 | 22.8 | 16.2 | 11.4 |
| **ACI-CRS-33WM-P** | 3 | 13,000 | 597,000 | 22.8 | 16.2 | 11.4 |
| **Freestanding** | | | | | | |
| **ACI-CRS-24IL-N** | 2 | 15,000 | 398,000 | 15.2 | 10.8 | 7.6 |
| **ACI-CRS-24IL-P** | 2 | 13,000 | 398,000 | 15.2 | 10.8 | 7.6 |
| **ACI-CRS-26IL-N** | 2 | 15,000 | 398,000 | 15.2 | 10.8 | 7.6 |
| **ACI-CRS-26IL-P** | 2 | 13,000 | 398,000 | 15.2 | 10.8 | 7.6 |
| **ACI-CRS-36IL-N** | 3 | 15,000 | 597,000 | 22.8 | 16.2 | 11.4 |
| **ACI-CRS-36IL-P** | 3 | 13,000 | 597,000 | 22.8 | 16.2 | 11.4 |
| **Back-to-Back** | | | | | | |
| **ACI-CRS-24B2B-N** | 2 | 15,000 | 398,000 | 15.2 | 10.8 | 7.6 |
| **ACI-CRS-24B2B-P** | 2 | 13,000 | 398,000 | 15.2 | 10.8 | 7.6 |
| **ACI-CRS-34B2B-N** | 3 | 15,000 | 597,000 | 22.8 | 16.2 | 11.4 |
| **ACI-CRS-34B2B-P** | 3 | 13,000 | 597,000 | 22.8 | 16.2 | 11.4 |
| **ACI-CRS-36B2B-N** | 3 | 15,000 | 597,000 | 22.8 | 16.2 | 11.4 |
| **ACI-CRS-36B2B-P** | 3 | 13,000 | 597,000 | 22.8 | 16.2 | 11.4 |
| **ACI-CRS-44B2B-N** | 4 | 15,000 | 796,000 | 30.4 | 21.6 | 15.2 |
| **ACI-CRS-44B2B-P** | 4 | 13,000 | 796,000 | 30.4 | 21.6 | 15.2 |
| **ACI-CRS-46B2B-N** | 4 | 15,000 | 796,000 | 30.4 | 21.6 | 15.2 |
| **ACI-CRS-46B2B-P** | 4 | 13,000 | 796,000 | 30.4 | 21.6 | 15.2 |
| **ACI-CRS-56B2B-N** | 5 | 15,000 | 995,000 | 38 | 27 | 19 |
| **ACI-CRS-56B2B-P** | 5 | 13,000 | 995,000 | 38 | 27 | 19 |
| **ACI-CRS-66B2B-N** | 6 | 15,000 | 1,194,000 | 45.6 | 32.4 | 22.8 |
| **ACI-CRS-66B2B-P** | 6 | 13,000 | 1,194,000 | 45.6 | 32.4 | 22.8 |

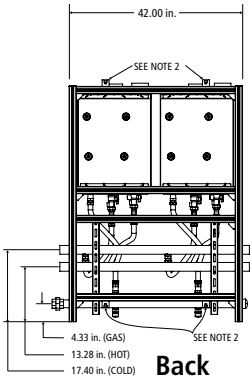
*For outdoor models, change ATI to ATO
**For Propane, change -N to -P

# RACK SYSTEM *(CONTINUED)*

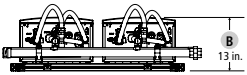
## Wall Mount




Front



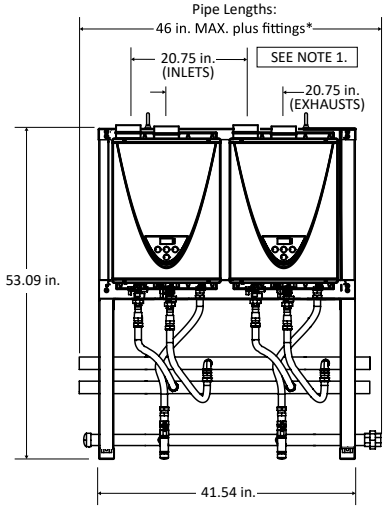

Back




Bottom

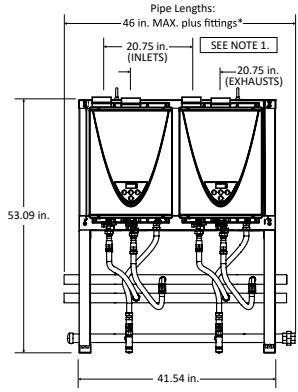
NOTES:
1. TOP-MOUNTED AIR SUPPLY INLET/EXHAUST VENTS ARE USED WITH INDOOR MODELS ONLY.
2. MOUNTING BRACKETS ADJUST HORIZONTALLY ALONG CHANNEL SLOTS.
3. INDOOR AND OUTDOOR RACK SYSTEMS HAVE IDENTICAL DIMENSIONS. EXCEPTION: INDOOR MODELS HAVE TOP-MOUNTED INTAKES AND EXHAUSTS. OUTDOOR MODELS DO NOT.

## Freestanding



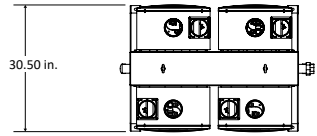

Front

*Fittings to be field supplied.




*Fittings to be field supplied.

Front




Top

**NOTES:**
1. TOP-MOUNTED AIR SUPPLY INLET/EXHAUST VENT ARE USED WITH INDOOR MODELS ONLY.
2. INDOOR AND OUTDOOR RACK SYSTEMS HAVE IDENTICAL DIMENSIONS. EXCEPTION: INDOOR MODELS HAVE TOP-MOUNTED INTAKES AND EXHAUSTS. OUTDOOR MODELS DO NOT.

| Model Number | Dimensions (in) | | | Approx Shipping Weight (lbs) |
|---|---|---|---|---|
| | A Length | B Width | C Height | |
| **Wall Mount** | | | | |
| **ACI-CRS-22WM-N** | 46 | 13.02 | 57 | 240 |
| **ACI-CRS-22WM-P** | 46 | 13.02 | 57 | 240 |
| **ACI-CRS-23WM-N** | 66 | 13.02 | 57 | 250 |
| **ACI-CRS-23WM-P** | 66 | 13.02 | 57 | 250 |
| **ACI-CRS-33WM-N** | 66 | 13.02 | 57 | 350 |
| **ACI-CRS-33WM-P** | 66 | 13.02 | 57 | 350 |
| **Freestanding** | | | | |
| **ACI-CRS-24IL-N** | 46 | 20 | 53.09 | 330 |
| **ACI-CRS-24IL-P** | 46 | 20 | 53.09 | 330 |
| **ACI-CRS-26IL-N** | 66 | 20 | 53.09 | 396 |
| **ACI-CRS-26IL-P** | 66 | 20 | 53.09 | 396 |
| **ACI-CRS-36IL-N** | 66 | 20 | 53.09 | 448 |
| **ACI-CRS-36IL-P** | 66 | 20 | 53.09 | 448 |
| **Back-to-Back** | | | | |
| **ACI-CRS-24B2B-N** | 46 | 30.5 | 53.09 | 330 |
| **ACI-CRS-24B2B-P** | 46 | 30.5 | 53.09 | 330 |
| **ACI-CRS-34B2B-N** | 46 | 30.5 | 53.09 | 404 |
| **ACI-CRS-34B2B-P** | 46 | 30.5 | 53.09 | 404 |
| **ACI-CRS-36B2B-N** | 66 | 30.5 | 53.09 | 447 |
| **ACI-CRS-36B2B-P** | 66 | 30.5 | 53.09 | 447 |
| **ACI-CRS-44B2B-N** | 46 | 30.5 | 53.09 | 481 |
| **ACI-CRS-44B2B-P** | 46 | 30.5 | 53.09 | 481 |
| **ACI-CRS-46B2B-N** | 66 | 30.5 | 53.09 | 519 |
| **ACI-CRS-46B2B-P** | 66 | 30.5 | 53.09 | 519 |
| **ACI-CRS-56B2B-N** | 66 | 30.5 | 53.09 | 597 |
| **ACI-CRS-56B2B-P** | 66 | 30.5 | 53.09 | 597 |
| **ACI-CRS-66B2B-N** | 66 | 30.5 | 53.09 | 674 |
| **ACI-CRS-66B2B-P** | 66 | 30.5 | 53.09 | 674 |

*For outdoor models, change ATI to ATO
**For Propane, change -N to -P

# BUILDING MANAGEMENT SYSTEM BACnet & MODBUS INTERFACE

## Connect Your A. O. Smith Water Heater to your Building Management System Using the New Millennium Control from ICC (Industrial Control Communications, Inc.)

- Works with Cyclone, DSE/DVE/DHE (Except BTX-80)
- Use the ICC Control to enable/disable the water heater
- Change Temperature Set points and differentials
- Two models with four different configurations to connect to BACnet and Modbus
- Ethernet and Serial RS-485 versions available
- 2 wire or 4 wire RS-485 Network
- Power can be supplied via the USB cable, as a 7-24 VDC input on the main terminal Block, or via IEEE 802.3af Power over Ethernet (PoE on ETH-1000 only)
- Configure protocols, network characteristics, and client/server object definitions
- Graphically interact with the internal database in real-time via USB connection
- Automatically discover and configure IP settings Ethernet gateways connected to the current subnet
- Update Firmware

# Building Management System BACnet and Modbus Interface

## BMS gateway for control of A. O. Smith Water Heaters

**Connect your A. O. Smith water heater to your building management system using the new Millennium control from ICC* (Industrial Control Communications, Inc.)**

- Works with Cyclone, BTH, BTHL, BTX-100 and BTXL-100, DHE/DVE, DSE and DVE



ETH-1000 Ethernet connection




Mirius Serial Gateway

| Kit Part # | Connection Type |
|---|---|
| **100316044** | Serial |
| **100316045** | Ethernet (IP) |

One unit needed per water heater.

# POINT-OF-USE

PROLINE® XE BEST




CLASSIFIED UL

## Dry-Fire Protection

- Prevents element failure due to dry fire
- Internal air bypass
- Temporary shutoff with excess air in chamber

## Wide Variety of KW and Voltage Options for Every Application

- 2.4kW – 12kW
- 120V, 208V, 240V, 277V options

## Easy Install

- Wall mount in vertical or horizontal position
- ¾" NPT water connections with two ¾" x 1/2" reducers included
- No venting required
- No T&P valve required (check local code)

## Scale-Reduction Technology

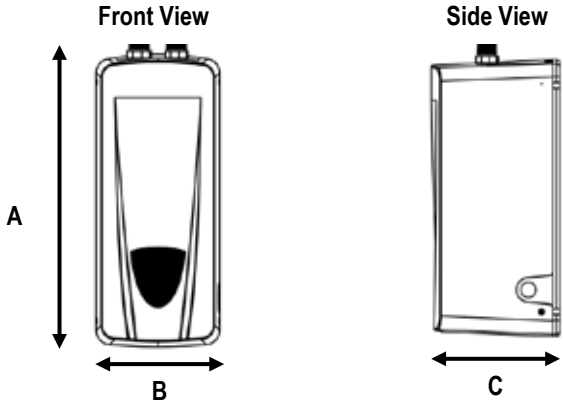
- Reduces failures and service requirements due to hard scale buildup
- Power-sharing technology reduces scale deposits on the element
- Dupont™ Zytel® chambers naturally resist scale buildup

## Code Compliance

- Meets current UBC and CEC National Codes
- Listed and tested to UL 499 Appliance and UL 834 Space Heating Standards
- Control tested to achieve temperature limit control requirements of UL 353 and CSA C22.2

## 5-Year Limited Warranty

- For complete information, consult the written warranty or go to hotwater.com




| Model Number | Wattage (kW) | Voltage (V) | Amperage (A) | UEF | Dimensions (in) | | | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|---|---|---|
| | | | | | A | B | C | |
| **RPVA-24K** | 2.4 | 120 | 20 | 0.6 | 16-5/8 | 6-1/2 | 7-3/16 | 8 |
| **RPVA-30K** | 3 | 120 | 25 | 0.6 | 16-5/8 | 6-1/2 | 7-3/16 | 8 |
| **RPVA-35K** | 3.5 | 120 | 29 | 0.6 | 16-5/8 | 6-1/2 | 7-3/16 | 8 |
| **RPVA-35E** | 3.5 | 240 | 15 | 0.6 | 16-5/8 | 6-1/2 | 7-3/16 | 8 |
| **RPVA-40X** | 4 | 208 | 19 | 0.6 | 16-5/8 | 6-1/2 | 7-3/16 | 8 |
| **RPVA-45E** | 4.5 | 240 | 19 | 0.6 | 16-5/8 | 6-1/2 | 7-3/16 | 8 |
| **RPVA-55E** | 5.5 | 240 | 23 | 0.6 | 16-5/8 | 6-1/2 | 7-3/16 | 8 |
| **RPVA-70E** | 7 | 240 | 29 | 0.6 | 16-5/8 | 6-1/2 | 7-3/16 | 8 |
| **RPVA-78X** | 7.8 | 208 | 38 | 0.6 | 16-5/8 | 6-1/2 | 7-3/16 | 8 |
| **RPVA-80E** | 8 | 240 | 33 | 0.6 | 16-5/8 | 6-1/2 | 7-3/16 | 8 |
| **RPVA-90E** | 9 | 240 | 38 | 0.6 | 16-5/8 | 6-1/2 | 7-3/16 | 8 |
| **RPVA-120E** | 12 | 240 | 50 | 0.6 | 16-5/8 | 6-1/2 | 7-3/16 | 8 |
| **CPVA-30Y** | 3 | 277 | 11 | 0.6 | 16-5/8 | 6-1/2 | 7-3/16 | 8 |
| **CPVA-40Y** | 4 | 277 | 14 | 0.6 | 16-5/8 | 6-1/2 | 7-3/16 | 8 |
| **CPVA-60Y** | 6 | 277 | 21 | 0.6 | 16-5/8 | 6-1/2 | 7-3/16 | 8 |
| **CPVA-73Y** | 7.3 | 277 | 26 | 0.6 | 16-5/8 | 6-1/2 | 7-3/16 | 8 |
| **CPVA-90Y** | 9 | 277 | 32 | 0.6 | 16-5/8 | 6-1/2 | 7-3/16 | 8 |

Dimensions and specifications are subject to change without notice in accordance with our policy of continuous product improvement.
Recommended that all wire be rated 90°C or greater.
Factory set point is 105°F. This can easily be changed in the field as needed or desired.
Temp range is 90°-140°F.
240V models can run on 208V with 25% reduced power output.
* Maximum recommended wire size is #6 cu AWG.

# ELECTRIC TANKLESS

PROLINE® XE BEST



RESIDENTIAL



COMMERCIAL

AHRI CERTIFIED® www.ahridirectory.org

CLASSIFIED UL

## Dry-Fire Protection

- Prevents element failure due to dry fire
- Internal air bypass
- Temporary shutoff with excess air in chamber

## Wide Variety of KW and Voltage Options for Every Application

- 12.2kW – 32kW
- 208V and 240V options

## Easy Install

- Mounts easily to the wall
- No venting required
- ¾" NPT water connections
- No T&P valve required (check local codes)

## Continuous Hot Water When Sized Appropriately

## Scale-Reduction Technology

- Reduces failures and service requirements due to hard scale buildup
- Power-sharing technology reduces scale deposits on the element
- Dupont™ Zytel® chambers naturally resist scaling buildup

## Soft Start

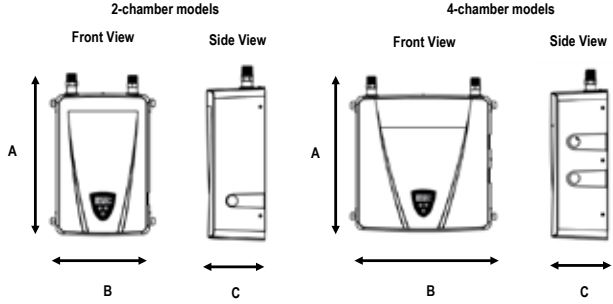
- Unit will not cause lights to dim with hard electricity draw

## Code Compliance

- Meets current UBC and CEC National Codes
- Meets or exceeds current federal minimum energy standards, according to the National Appliance Energy Conservation Act (NAECA)
- Listed and tested to UL 499 Appliance and UL 834 Space Heating standards
- Control tested to achieve temperature limit control requirements of UL 353 and CSA C22.2

## 5-Year Limited Warranty

- For complete information, consult the written warranty or go to hotwater.com




| Model Number | Wattage (kW) | Voltage (V) | Amperage (A) | UEF | Dimensions (in) | | | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|---|---|---|
| | | | | | A | B | C | |
| **Residential 2-Chamber Models** | | | | | | | | |
| **R2VA-140E** | 14 | 240 | 58 | 0.84 | 17-3/4 | 11-1/2 | 6-1/8 | 13 |
| **R2VA-140X** | 14 | 208 | 67 | 0.84 | 17-3/4 | 11-1/2 | 6-1/8 | 13 |
| **R2VA-160E** | 16 | 240 | 67 | 0.84 | 17-3/4 | 11-1/2 | 6-1/8 | 13 |
| **Residential 4-Chamber Models** | | | | | | | | |
| **R4LA-180E** | 18 | 240 | 75 | 0.92 | 18-1/8 | 17 | 6-1/8 | 20 |
| **R4LA-220E** | 22 | 240 | 92 | 0.92 | 18-1/8 | 17 | 6-1/8 | 20 |
| **R4LA-240E** | 24 | 240 | 100 | 0.92 | 18-1/8 | 17 | 6-1/8 | 20 |
| **R4LA-280E** | 28 | 240 | 117 | 0.92 | 18-1/8 | 17 | 6-1/8 | 20 |
| **R4LA-280X** | 28 | 208 | 135 | 0.92 | 18-1/8 | 17 | 6-1/8 | 20 |
| **R4MA-320E** | 32 | 240 | 133 | 0.93 | 18-1/8 | 17 | 6-1/8 | 20 |

| Model Number | Wattage (kW) | Voltage (V) | Amperage (A) | UEF | Dimensions (in) | | | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|---|---|---|
| | | | | | A | B | C | |
| **Commercial 2-Chamber** | | | | | | | | |
| **C2VA-120E** | 12.2 | 240 | 51 | 0.84 | 17-3/4 | 11-1/2 | 6-1/8 | 13 |
| **C2VA-140E** | 14 | 240 | 58 | 0.84 | 17-3/4 | 11-1/2 | 6-1/8 | 13 |
| **C2VA-140X** | 14 | 208 | 67 | 0.84 | 17-3/4 | 11-1/2 | 6-1/8 | 13 |
| **C2VA-160E** | 16 | 240 | 67 | 0.84 | 17-3/4 | 11-1/2 | 6-1/8 | 13 |
| **Commercial 4-Chamber** | | | | | | | | |
| **C4LA-180E** | 18 | 240 | 75 | 0.92 | 18-1/8 | 17 | 6-1/8 | 20 |
| **C4LA-220E** | 22 | 240 | 92 | 0.92 | 18-1/8 | 17 | 6-1/8 | 20 |
| **C4LA-280E** | 28 | 240 | 117 | 0.92 | 18-1/8 | 17 | 6-1/8 | 20 |
| **C4LA-280X** | 28 | 208 | 135 | 0.92 | 18-1/8 | 17 | 6-1/8 | 20 |
| **C4MA-320E** | 32 | 240 | 133 | 0.93 | 18-1/8 | 17 | 6-1/8 | 20 |

Dimensions and specifications are subject to change without notice in accordance with our policy of continuous product improvement.
Temperature Range: 90°- 140°F.
Recommended that all wire be rated 90°C or greater.
Factory set point is 120°F. This can easily be changed in the field as needed or desired.
Refer to National Electric Code Article 220 for calculating load contribution.
240V models can run on 208V with 25% reduced power output.
Refer to local code where applicable.
* Maximum recommended wire size is #6 cu AWG.

COMMERCIAL GAS

# CYCLONE® HE



## Power Vent Design for Installation Versatility

- Power vent using PVC, CPVC, ABS or Polypropylene either thru-the-wall or thru-the-roof

## Condensing Design

- Helical internal heat exchanger keeps hot combustion gases in the tank longer to extract more heat into the water
- High efficiency operation with 0.88 UEF (94% Thermal Efficiency) which saves money on operating costs compared to a standard efficiency gas water heater

## High Output with Small Footprint

- 22" diameter, combined with 90% efficiency, 50-gallon tank and 76,000 BTU input means Cyclone® HE can be installed in less space than a larger 75-gallon unit, with equal or better performance

## Side-Mounted Hot and Cold Recirculating Taps

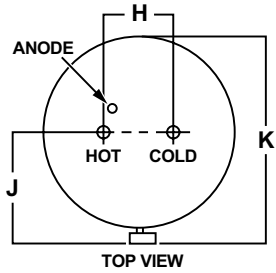
## Two Heavy-Duty Anode Rods

## 3-Year Limited Tank and 1-Year Limited Parts Warranty

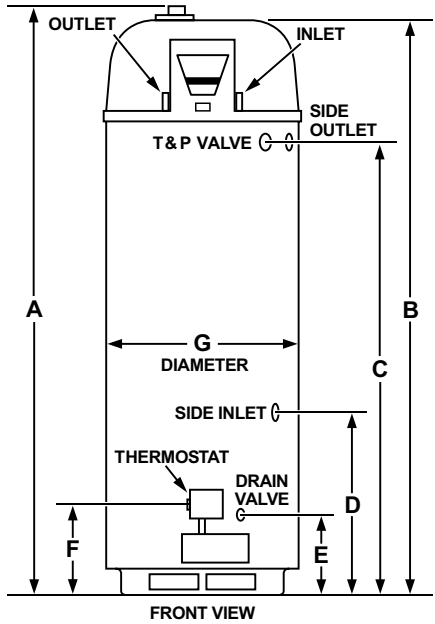
- For complete warranty information, consult written warranty or go to hotwater.com

GAS-FIRED
LISTED

AHRI CERTIFIED®
www.ahridirectory.org




* INSTALL IN ACCORDANCE WITH LOCAL CODES




| Model Number | Gallon Capacity | Recovery Capacity GPH @ 100°F Rise | BTU Input Per Hour | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|
| **BTX-80** | 50 | 83 | 76,000 | 225 |

| Model Number | Dimensions in Inches | | | | |
|---|---|---|---|---|---|
| | A | B | C | D | E |
| **BTX-80** | 71 | 68-5/8 | 52 | 21 | 9-1/8 |

| Model Number | Dimensions in Inches | | | | |
|---|---|---|---|---|---|
| | F | G | H | J | K |
| **BTX-80** | 12 | 22 | 8 | 15-3/4 | 27 |

Available in Natural Gas only.
Standard model certified from sea level to 5,300 ft. elevation. Order SMR S54 for elevations to 10,100 ft.
Optional Condensate Neutralization Kits available (Part Number 100112380).

# CYCLONE® Xi



## ENERGY STAR® QUALIFIED Condensing Design

- Helical internal heat exchanger keeps hot combustion gases in the tank longer to extract more heat into the water
- High efficiency operation with up to 0.88 UEF (96% Thermal Efficiency) which saves money on operating costs compared to a standard efficiency gas water heater

## Advanced Electronic Control

- Optional Powered Anode available
- Exclusive A. O. Smith designed touch display control system
- Precise temperature control
- Built-in diagnostics and operational information

## Power Direct Vent Design

- Power Direct vent using PVC, CPVC or Polypropylene either thru-the-wall or thru-the-roof
- Optional concentric vent and low profile termination kits are available

## Ultra-Low NOx

- Complies with SCAQMD Rule 1146.2 and other air quality management districts with similar requirements for Ultra-Low NOx emissions requirements of 14 ng/J or 20 PPM

## Side-Mounted Hot and Cold Recirculating Taps

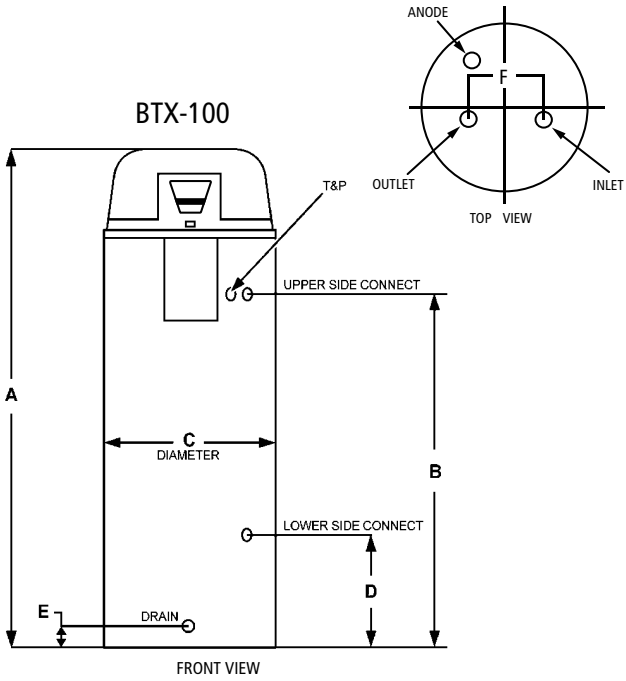
- Hot and cold "side taps" allow Vertex Power Direct Vent to be used for combination space/water heating applications

## Code Compliance

- Meets IBC and ICC National Codes
- Meets the thermal efficiency and standby loss requirements of the U. S. Department of Energy and current edition of ASHRAE/IES 90.1

## 3-Year Limited Tank and Parts Warranty

- For complete information, consult written warranty or go to hotwater.com




| Model Number | Gallon Capacity | Recovery Capacity GPH @ 100°F Rise | BTU Input Per Hour | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|
| **BTX-100** | 50 | 116 | 100,000 | 255 |

| Model Number | Dimensions in Inches | | | | | |
|---|---|---|---|---|---|---|
| | A | B | C | D | E | F |
| **BTX-100** | 66-3/4 | 49-1/4 | 22 | 15-3/4 | 3 | 8 |

Standard model certified from sea level to 10,100 ft. elevation.
Available with a Powered Anode. Specify when ordering.
Optional Concentric Vent Kits (100109357) and Condensate Neutralization Kits (100112380).
Specify when ordering propane (LP) gas.

# CYCLONE® Xi




## ENERGY STAR® QUALIFIED

### Condensing Design

- Helical internal heat exchanger keeps hot combustion gases in the tank longer to extract more heat into the water
- High efficiency operation with up to 0.88 UEF (96% Thermal Efficiency) which saves money on operating costs compared to a standard efficiency gas water heater

### Advanced Electronic Control

- Optional Powered Anode available
- Exclusive A. O. Smith designed touch display control system
- Precise temperature control
- Built-in diagnostics and operational information

### Power Direct Vent Design

- Power Direct vent using PVC, CPVC or Polypropylene either thru-the-wall or thru-the-roof
- Optional concentric vent and low profile termination kits are available

### Ultra-Low NOx

- Complies with SCAQMD Rule 1146.2 and other air quality management districts with similar requirements for Ultra-Low NOx emissions requirements of 14 ng/J or 20 PPM

### Side-Mounted Hot and Cold Recirculating Taps

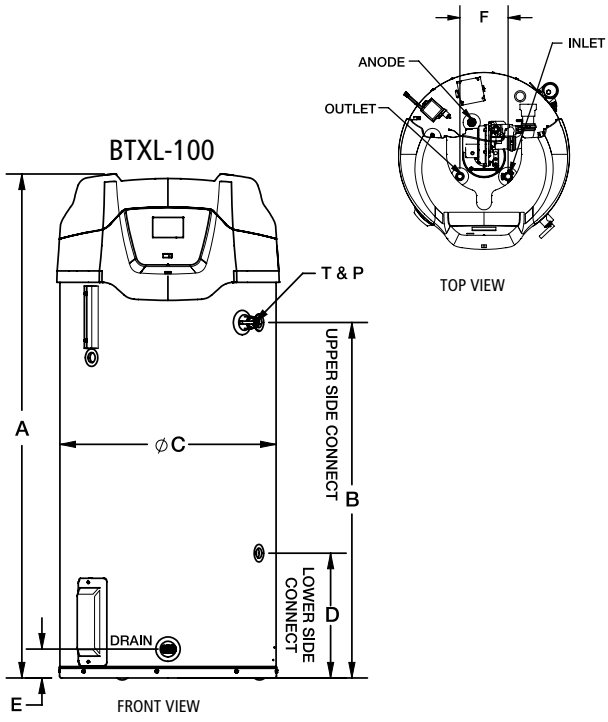
- Hot and cold "side taps" allow Vertex Power Direct Vent to be used for combination space/water heating applications

### Code Compliance

- Meets IBC and ICC National Codes
- Meets the thermal efficiency and standby loss requirements of the U. S. Department of Energy and current edition of ASHRAE/IES 90.1

### 3-Year Limited Tank and Parts Warranty

- For complete information, consult written warranty or go to hotwater.com




| Model Number | Gallon Capacity | Recovery Capacity GPH @ 100°F Rise | BTU Input Per Hour | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|
| **BTXL-100** | 75 | 116 | 100,000 | 382 |

| Model Number | Dimensions in Inches | | | | | |
|---|---|---|---|---|---|---|
| | A | B | C | D | E | F |
| **BTXL-100** | 65-1/4 | 45-5/8 | 27-3/4 | 16 | 3-3/4 | 8 |

Standard model certified from sea level to 10,100 ft. elevation.
Available with a Powered Anode. Specify when ordering.
Optional Concentric Vent Kits (100111100) and Condensate Neutralization Kits (100112380).
Specify when ordering propane (LP) gas.

COMMERCIAL GAS

# CYCLONE® MXi—MODULATING



## High Efficiency Modulating Pre-Mix Powered Burner

- Down-fired pre-mix burner provides optimum efficiency and quiet operation
- Top-mounted burner position prevents condensation from affecting burner operation

## Up to 98% Efficient

## Intelligent Control System with Touch Screen Display

- Exclusive A. O. Smith designed control system
- Provides detailed water heater status information
- Precise temperature control adjustable from 90 to 180 degrees
- Built-in diagnostics
- Run history information
- Cyclone water heaters include iCOMM remote connectivity; models 120-250 require optional Wi-Fi communications kit, models 300-500 come standard with Wi-Fi connectivity
- Convenient iOS and Android Phone App

## Submerged Combustion Chamber with Helical Heat Exchanger Coil

- Positioned in center of tank, surrounded by water to virtually eliminate radiant heat loss from chamber
- Direct spark ignition
- Spiral heat exchanger keeps hot burner gases swirling, uses centrifugal force to maximize efficiency of heat transfer to water in tank
- Spiral heat exchanger reduces lime scale from forming on water-side surfaces, which maintains energy efficiency over time

## Power Anodes Standard on All Models

- Provides long-lasting tank protection in varying water conditions
- Powered anodes are non-sacrificial
- Automatically adjusts output needed to properly protect the tank

## 3-Year Limited Tank and 1-Year Limited Parts Warranty

- For complete warranty information, consult written warranty or go to hotwater.com

Low Lead Content

CLASSIFIED WATER QUALITY

ENERGY STAR

GAS-FIRED LISTED (For 300, 400 & 500 Models)

ASME HLW

GAS-FIRED LISTED (For 120-150 Models)

AHRI CERTIFIED® www.ahridirectory.org

| Model Number | Gallon Capacity | Recovery Capacity | Input BTU/HR |
|---|---|---|---|
| **BTH-120(A)** | 60 | 138 | 120,000 |
| **BTH-150(A)** | 100 | 178 | 150,000 |
| **BTH-199(A)** | 100 | 235 | 199,900 |
| **BTH-250(A)** | 100 | 291 | 250,000 |
| **BTH-300(A)** | 119 | 349 | 300,000 |
| **BTH-400(A)** | 119 | 460 | 399,000 |
| **BTH-500(A)** | 119 | 576 | 499,000 |

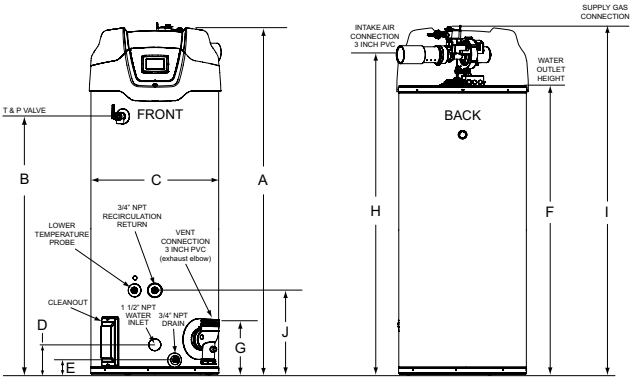
| Model Number | Approx. Shipping Weight (lbs) Std | Approx. Shipping Weight (lbs) ASME |
|---|---|---|
| **BTH-120(A)** | 460 | 490 |
| **BTH-150(A)** | 523 | 553 |
| **BTH-199(A)** | 523 | 553 |
| **BTH-250(A)** | 523 | 553 |
| **BTH-300(A)** | 855 | 855 |
| **BTH-400(A)** | 855 | 855 |
| **BTH-500(A)** | 855 | 855 |

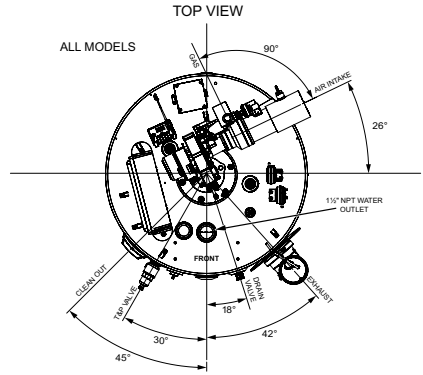
Optional Concentric Vent Kits 100111100 (BTH-120 through BTH-250 models).
100113124 (BTH-300 through BTH-500 models).
Electrical characteristics- 120V-60 Hz A.C., 5.0A.
"A" in the model number represents ASME construction.
Models are certified from sea level to 10,100 ft. elevation.

Line drawings and dimensions on the following page.

# CYCLONE® MXi—MODULATING

*(CONTINUED)*



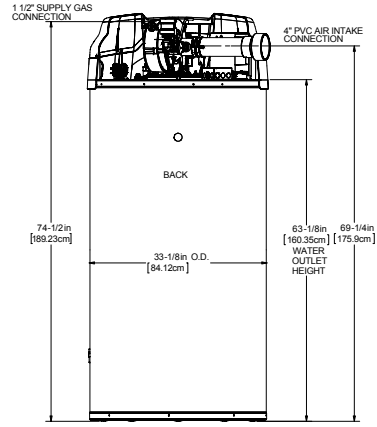



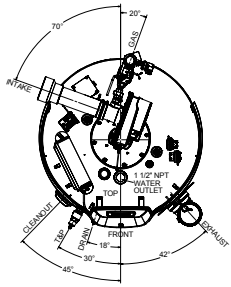

* Center line of water outlet on top of the water heaters is approximately 7 inches from the front edge of the water heater

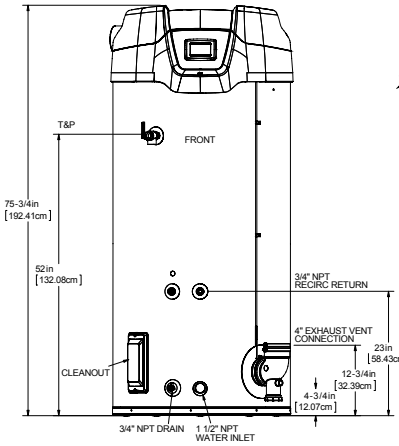
| Model Number | Dimensions in Inches | | | | |
|---|---|---|---|---|---|
| | A | B | C | D | E |
| BTH-120(A) | 3 | 27.75 | 6.3 | 35 | 53.5 |
| BTH-150(A) | 3 | 27.75 | 6.3 | 56.38 | 75.75 |
| BTH-199(A) | 3 | 27.75 | 6.3 | 56.38 | 75.75 |
| BTH-250(A) | 3 | 27.75 | 6.3 | 56.38 | 75.75 |

| Model Number | Dimensions in Inches | | | | |
|---|---|---|---|---|---|
| | F | G | H | I | J |
| BTH-120(A) | 55.5 | 11.25 | 42.25 | 48.5 | 18.25 |
| BTH-150(A) | 76 | 11.25 | 64 | 70 | 18.25 |
| BTH-199(A) | 76 | 11.25 | 64 | 70 | 18.25 |
| BTH-250(A) | 76 | 11.25 | 64 | 70 | 18.25 |

Optional Concentric Vent kit 100113124 (BTH-300 through BTH-500 models).
Electrical characteristics- 120V-60 Hz A.C., 5.0A.
"A" in the model number represents ASME construction.
Models are certified from sea level to 10,100 ft. elevation.




| Model Number | Dimensions in Inches | | | | |
|---|---|---|---|---|---|
| | A | B | C | D | E |
| BTH-300(A) | 4.75 | 33.12 | 4.75 | 52 | 75.75 |
| BTH-400(A) | 4.75 | 33.12 | 4.75 | 52 | 75.75 |
| BTH-500(A) | 4.75 | 33.12 | 4.75 | 52 | 75.75 |

| Model Number | Dimensions in Inches | | | | |
|---|---|---|---|---|---|
| | F | G | H | I | J |
| BTH-300(A) | 73.75 | 12.75 | 63.13 | 69.25 | 23 |
| BTH-400(A) | 73.75 | 12.75 | 63.13 | 69.25 | 23 |
| BTH-500(A) | 73.75 | 12.75 | 63.13 | 69.25 | 23 |

Optional Concentric Vent kit 100113124 (BTH-300 through BTH-500 models).
Electrical characteristics- 120V-60 Hz A.C., 5.0A.
"A" in the model number represents ASME construction.
Models are certified from sea level to 10,100 ft. elevation.

# CYCLONE® XL



## Extends Cyclone Condensing Products to 1,000,000 Btu/h

- High efficiency, condensing water heaters with modulating burner to 1,000,000 Btu/h
- Primary and secondary heat exchangers keep hot combustion gases in the tank longer to extract more heat into the water
- Models from 750,000 to 1,000,000 Btu/h deliver thermal efficiencies of 97%, saving money on operating costs
- PermaGlas® glass-lining provides superior protection against corrosion for the ASME-certified tank and primary heat exchanger

## Electronic Control & Display

- iCOMM™ connectivity platform provides diagnostic and operational information
- Integrated color touch display/control system.is standard on all models
- Precise temperature control, adjustable from 90° F. to 180° F.
- Remote monitoring, diagnostic fault notifications, and control of the set point and differential via the free A.O. Smith mobile app

## Primary and Seconday Heat Exchangers

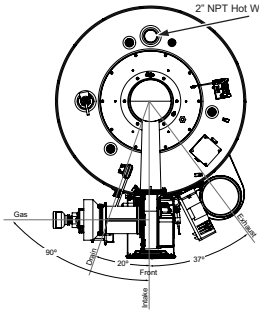
- Glass-lined 304L stainless steel primary HX positioned in center of tank, surrounded by water, to virtually eliminate radiant heat loss from chamber
- Secondary HX (where condensing process occurs) constructed of type 316L stainless steel for additional corrosion resistence
- 2-step heat transfer process between primary and secondary HX maximizes heat transfer, creating thermal efficiency of 97%

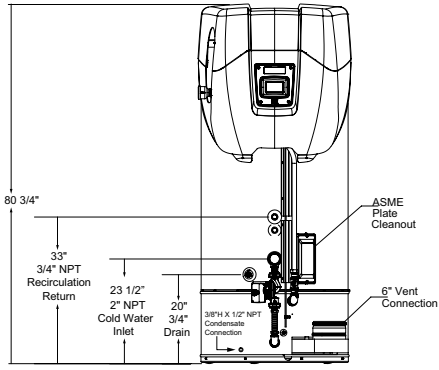
## Power Anodes Standard on All Models

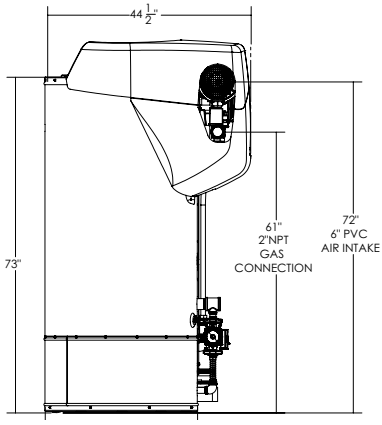
- Provides long-lasting tank protection in varying water conditions
- Non-sacrificial powered anodes prevent lime scale from forming on water-side surfaces, which maintains energy efficiency over time
- Automatically adjusts output needed to properly protect the tank

## 5-Year Limited Tank and 1-year Limited Parts Warranty

- For complete warranty information, consult written warranty or go to hotwater.com




| Model Number | Gallon Capacity | Recovery Capacity | Input BTU/HR | Approx. Shipping Weight (lbs) ASME |
|---|---|---|---|---|
| **BTHS-750A** | 120 | 882 | 750,000 | 1,300 |
| **BTHS-1000A** | 120 | 1,176 | 1,000,000 | 1,300 |

Electrical characteristics - 120V-60 Hz A.C., 5.0A
"A" in model number represents ASME construction.
Models are certified from sea level to 10,100 ft. elevation.

COMMERCIAL GAS

# CYCLONE® LV (LARGE VOLUME)



(All models except BTHL-500)

## Large Volume Tank + Condensing Design

- Large volume, integrated storage capacity to 250-gallons eliminates need for multiple water heaters or separate storage tank, saving space and install cost
- Helical internal heat exchanger keeps hot combustion gases in the tank longer to extract more heat into the water
- Models from 150,000 to 500,000 Btu/h deliver thermal efficiencies to 96%, saving money on operating costs
- PermaGlas® glass-lining process provides superior protection against corrosion for the large volume, ASME-certified storage tank

## Electronic Control & Display

- iCOMM™ connectivity platform provides diagnostic and operational information
- Integrated color touch display/control system is standard on all models
- Precise temperature control, adjustable from 90° F. to 180° F
- Remote monitoring, diagnostic fault notifications, and control of the set point and differential via the free A. O. Smith mobile app

## Submerged Combustion Chamber with Helical Heat Exchanger Coil

- Positioned in center of tank, surrounded by water to virtually eliminate radiant heat loss from chamber
- Direct spark ignition
- Spiral heat exchanger keeps hot burner gases swirling, uses centrifugal force to maximize efficiency of heat transfer to water in tank
- Spiral heat exchanger reduces lime scale from forming on water-side surfaces, which maintains energy efficiency over time

## Power Anodes Standard on All Models

- Provides long-lasting tank protection in varying water conditions
- Powered anodes are non-sacrificial
- Automatically adjusts output needed to properly protect the tank

## 5-Year Limited Tank and 1-year Limited Parts Warranty

- For complete warranty information, consult written warranty or go to hotwater.com

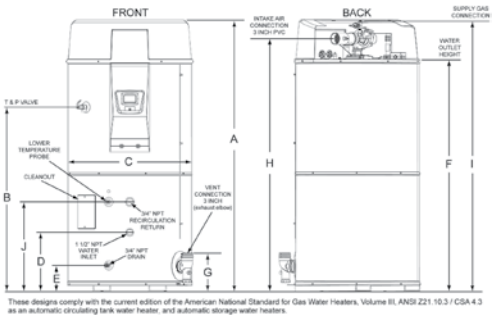
| Model Number | Gallon Capacity | Recovery Capacity | Input BTU/HR | Approx. Shipping Weight (lbs) ASME |
|---|---|---|---|---|
| **BTHL-150A** | 250 | 175 | 150,000 | 1125 |
| **BTHL-199A** | 250 | 230 | 199,900 | 1125 |
| **BTHL-250A** | 250 | 285 | 250,000 | 1125 |
| **BTHL-300A** | 220 | 342 | 300,000 | 1420 |
| **BTHL-400A** | 220 | 451 | 399,900 | 1420 |
| **BTHL-500A** | 220 | 557 | 499,900 | 1420 |

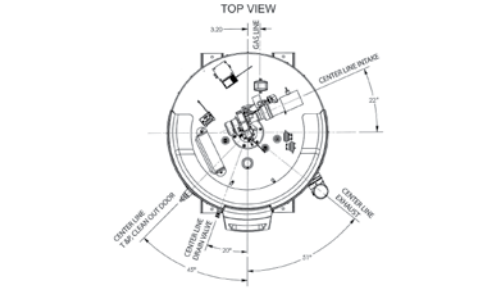
"A" in model number represents ASME construction.
Models are certified from sea level to 10,100 ft. elevation.

Line drawings and dimensions on the following page.

# CYCLONE® LV (LARGE VOLUME)

## BTHL 150A-250A




* Center line of water outlet on top of the water heaters is approximately 13 inches from the front edge of the water heater.

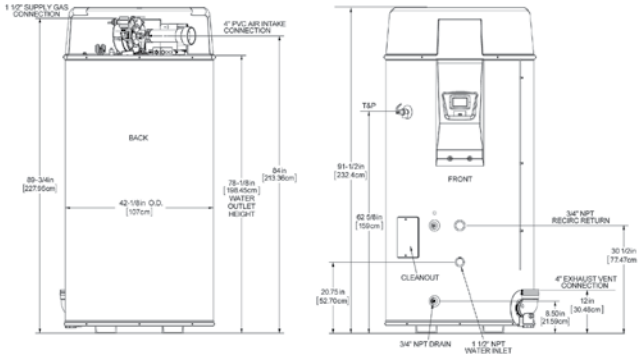
**Figure 5. Rough-In Dimensions**

| Model Number | Dimensions | | | | |
|---|---|---|---|---|---|
| | A | B | C | D | E |
| **BTHL-150A** | 91-1/2 | 62-5/8 | 42-1/8 | 20-1/2 | 8-1/2 |
| **BTHL-199A** | 91-1/2 | 62-5/8 | 42-1/8 | 20-1/2 | 8-1/2 |
| **BTHL-250A** | 91-1/2 | 62-5/8 | 42-1/8 | 20-1/2 | 8-1/2 |

| Model Number | Dimensions | | | | |
|---|---|---|---|---|---|
| | F | G | H | I | J |
| **BTHL-150A** | 78-1/8 | 12 | 85 | 90-1/8 | 30-1/2 |
| **BTHL-199A** | 78-1/8 | 12 | 85 | 90-1/8 | 30-1/2 |
| **BTHL-250A** | 78-1/8 | 12 | 85 | 90-1/8 | 30-1/2 |

Optional Concentric Vent Kits available. 100111100 (BTHL-150A through BTHL-250A models).
Optional Condensate Neutralization Kits available. 100112380 (BTHL-150A through BTHL-199A models), 100112381 (BTHL-250A through BTHL-500A models).
Electrical characteristics - 120V-60 Hz A.C., 5.0A
"A" in model number represents ASME construction.
Models are certified from sea level to 10,100 ft. elevation.

## BTHL 300A-500A




TOP VIEW



| Model Number | Dimensions | | | | |
|---|---|---|---|---|---|
| | A | B | C | D | E |
| **BTHL-300A** | 91-1/2 | 62-5/8 | 42-1/8 | 20-3/4 | 8-1/2 |
| **BTHL-400A** | 91-1/2 | 62-5/8 | 42-1/8 | 20-3/4 | 8-1/2 |
| **BTHL-500A** | 91-1/2 | 62-5/8 | 42-1/8 | 20-3/4 | 8-1/2 |

| Model Number | Dimensions | | | | |
|---|---|---|---|---|---|
| | F | G | H | I | J |
| **BTHL-300A** | 78-1/8 | 12 | 84 | 89-3/4 | 30-1/2 |
| **BTHL-400A** | 78-1/8 | 12 | 84 | 89-3/4 | 30-1/2 |
| **BTHL-500A** | 78-1/8 | 12 | 84 | 89-3/4 | 30-1/2 |

Optional Concentric Vent Kits available. 100113124 (BTHL-300A through BTHL-500A models).
Optional Condensate Neutralization Kits available. 100112381 (BTHL-250A through BTHL-500A models).
Electrical characteristics - 120V-60 Hz A.C., 5.0A
"A" in model number represents ASME construction.
Models are certified from sea level to 10,100 ft. elevation.

COMMERCIAL GAS

# POLARIS® HIGH EFFICIENCY



## ENERGY STAR® QUALIFIED

### Stainless Steel Construction

- Tank and helical heat exchanger are constructed from 444 stainless steel for excellent corrosion resistance without the need for an anode

### Condensing Design

- Helical internal heat exchanger keeps hot combustion gases in the tank longer to extract more heat into the water
- High efficiency operation with up to 0.90 UEF (96% Thermal Efficiency) which saves money on operating costs compared to a standard efficiency gas water heater

### Power Direct Vent Design

- Direct vent using PVC, CPVC or ABS either thru-the-wall or thru-the-roof
- Optional concentric vent kit

### Whisper Quiet Operation

- Ultra quiet blower and burner minimize noise

### Advanced Electronic Control

- Exclusive A. O. Smith designed touch display control system
- Precise temperature control
- Built-in diagnostics and operational information

### Ultra-Low NOx

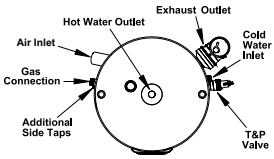
- Complies with SCAQMD Rule 1146.2 and other air quality management districts with similar requirements for Ultra-Low NOx emissions requirements of 14 ng/J or 20 PPM

### Code Compliance

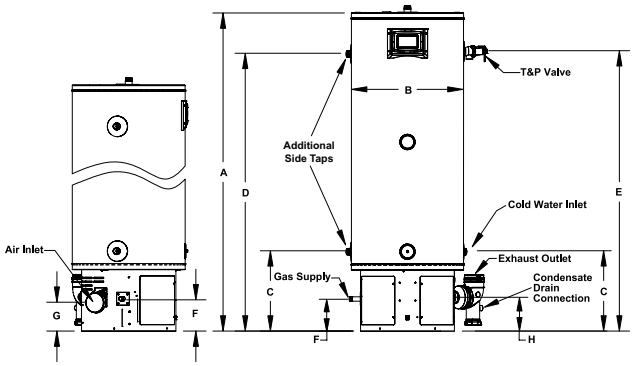
- Meets IBC and ICC National Codes
- Meets the thermal efficiency and standby loss requirements of the U. S. Department of Energy and current edition of ASHRAE/IES 90.1

### 10-Year Limited Tank and 1-Year Parts Warranty

- For complete information, consult written warranty or go to hotwater.com




TOP




LEFT SIDE FRONT

| Model Number | Gallon Capacity | BTU/h Input Gallon Per Hour | Thermal Efficiency | Recovery @ 100° Rise Gallon Per Hour | Dimensions in Inches | |
|---|---|---|---|---|---|---|
| | | | | | A | B |
| **BSS 130** | 34 | 130,000 | 96% | 149 | 48-1/2 | 22 |
| **BSS 150** | 34 | 150,000 | 94% | 171 | 48-1/2 | 22 |
| **BTS 130** | 50 | 130,000 | 95% | 149 | 62-3/8 | 22 |
| **BTS 150** | 50 | 150,000 | 95% | 171 | 63-3/4 | 22 |
| **BTS 175** | 50 | 175,000 | 96% | 200 | 63-3/4 | 22 |
| **BTS 199** | 50 | 199,000 | 96% | 227 | 63-3/4 | 22 |

| Model Number | Vent Connection | 1" Water Connections | | T&P | Gas Supply* | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|---|
| | | C | D | E | F | |
| **BSS 130** | 2 or 3 | 15-3/4 | 40-1/2 | 41 | 6-3/8 | 150 |
| **BSS 150** | 2 or 3 | 15-3/4 | 40-1/2 | 41 | 6-3/8 | 150 |
| **BTS 130** | 2 or 3 | 15-3/4 | 54-1/2 | 55 | 6-3/8 | 176 |
| **BTS 150** | 2 or 3 | 15-3/4 | 55-3/4 | 56-1/4 | 6-3/8 | 180 |
| **BTS 175** | 3 | 15-3/4 | 55-3/4 | 56-1/4 | 6-3/8 | 180 |
| **BTS 199** | 3 | 15-3/4 | 55-3/4 | 56-1/4 | 6-3/8 | 180 |

Available in Propane (LP) gas. Specify when ordering Propane (LP) gas.
Models certified for sea level to 7,700 ft. elevation.

# TX1 INTEGRATED TANKLESS ON TANK



## Delivers 96% Thermal Efficiency

## Ultra-Low NOx Operation

- Complies with SCAQMD Rule 1146.2 and other Air Quality Management Districts with similar requirements for ultra low-NOx emissions

## Uses CT-199 Commercial Tankless

- Modulating burner
- Primary heat exchanger constructed of commercial grade copper
- Secondary heat exchanger constructed of 316 grade stainless steel
- Advanced electronic control with integrated diagnostics
- 185°F maximum temperature

## 119 Gallon Storage Tank

- 4.1 GPM pump
- Glass lined tank
- Multiple anodes to protect the tank
- Front water inlet and top water outlet

## 6 Year Limited Heat Exchanger and Tank, 5 Year Limited Parts Warranty

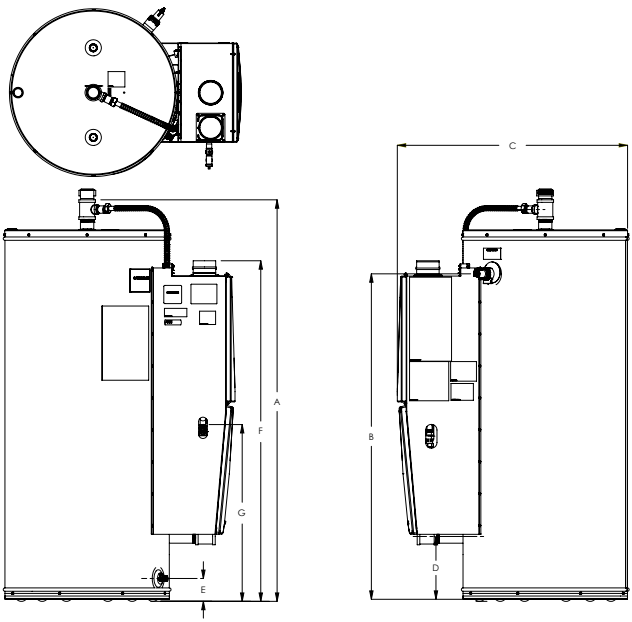
- For complete information, consult written warranty or go to hotwater.com

ENERGY STAR

LEAD FREE

NSF ANSI/NSF 5

AHRI CERTIFIED® www.ahridirectory.org




| Model Number | Gallon Capacity | Input BTU/ HR | Thermal Efficiency % | Recovery @ 100° Rise GPH | Approx. Shipping Weight (lbs.) |
|---|---|---|---|---|---|
| **ATX-199** | 119 | 199,000 | 96 | 232 | 520 |

| Model Number | Dimensions | | | | | | |
|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G |
| **ATX-199** | 72 | 58-11/16 | 41 | 11-13/16 | 4-5/16 | 61-3/8 | 30 |

Electrical characteristics-120V-60Hz A.C., 5.0 A
Propane gas models available
Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement

COMMERCIAL GAS

# MASTER-FIT® BTR



## The Eliminator™ Self-Cleaning System

- Designed to significantly reduce or eliminate sediment build-up inside the tank
- Reduced sediment build-up maintains rated thermal efficiency and reduces water heating costs
- Self-cleaning system maximizes tank life

## Factory-Installed Draft Diverter and Automatic Flue Damper (BTR-120-400 Models)

- BTR-500 Model features induced draft design and no damper
- Low-profile draft diverter helps for installation in tight spaces
- Automatic motorized flue damper helps minimize standby heat loss

## Three Water Connection Options for Added Flexibility

- Hot and cold water connections can be made through front, top or rear of unit
- Eliminator™ system operates when cold water is connected through front

## 3-Year Limited Tank and 1-Year Warranty

- For complete warranty information, consult written warranty or go to hotwater.com

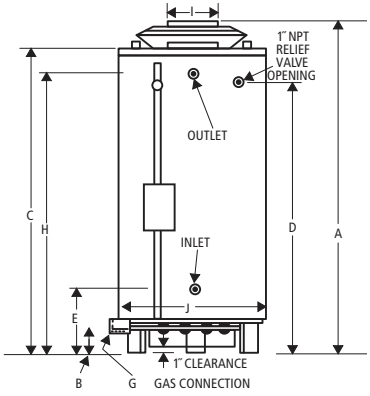
| Model Number | Gallon Capacity | Input BTU/HR Natural Gas | Recovery Capacity GPH @ 100°F Rise |
|---|---|---|---|
| **BTR-120*** | 71 | 120,000 | 116 |
| **BTR-154** | 81 | 154,000 | 149 |
| **BTR-180** | 81 | 180,000 | 175 |
| **BTR-197** | 100 | 199,000 | 193 |
| **BTR-199** | 81 | 199,000 | 193 |
| **BTR-200 (A)** | 100 | 199,000 | 193 |
| **BTR-250* (A)** | 100 | 250,000 | 242 |
| **BTR-251* (A)** | 65 | 251,000 | 243 |
| **BTR-275* (A)** | 100 | 275,000 | 267 |
| **BTR-305 (A)** | 65 | 305,000 | 296 |
| **BTR-365 (A)** | 85 | 365,000 | 354 |
| **BTR-400 (A)** | 100 | 390,000 | 378 |
| **BTR-500 (A)** | 85 | 500,000 | 485 |

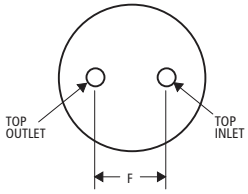
Specify when ordering propane (LP) gas.
*Model BTR 120 is shipped with 6" x 5" flue outlet adapter. Models BTR 250, 251 and 275 are shipped with a 8" x 6" flue outlet adapter.
Standard models certified from sea level to 2,000 ft. elevation. Order SMR S54 for elevations up to 8,000 ft.
BTR-500 model features induced draft design and no damper.

Line drawings and dimensions on the following page.

# MASTER-FIT® BTR *(CONTINUED)*

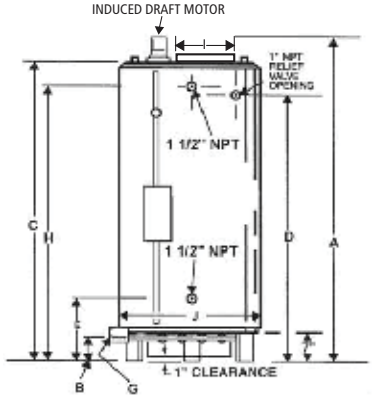
## Master-Fit BTR 120-400

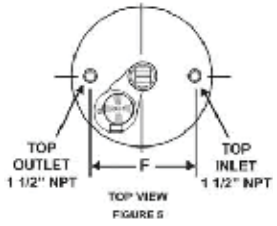



MODEL
BTR-120-400

## Master-Fit BTR 500




MODEL
BTR-500

| Model Number | Dimensions in Inches | | | | | |
|---|---|---|---|---|---|---|
| | A | B | C | D | E | F |
| **BTR-120*** | 69-3/4 | 4-1/4 | 59-1/2 | 50-7/8 | 19-11/16 | 19 |
| **BTR-154** | 67-1/2 | 4-1/2 | 62 | 53-5/8 | 20-1/2 | 21 |
| **BTR-180** | 67-1/2 | 4-1/2 | 62 | 53-5/8 | 20-1/2 | 21 |
| **BTR-197** | 75 | 4-1/2 | 70 | 61-5/8 | 20-1/2 | 21 |
| **BTR-199** | 67-1/2 | 4-1/2 | 62 | 53-5/8 | 20-1/2 | 21 |
| **BTR-200(A)** | 72 | 4-1/2 | 65-1/8 | 55-7/8 | 19-3/4 | 23 |
| **BTR-250*(A)** | 72 | 4-1/2 | 65-1/8 | 55-7/8 | 19-3/4 | 23 |
| **BTR-251*(A)** | 75 | 4-1/2 | 65-3/4 | 57-1/4 | 20 | N/A |
| **BTR-275*(A)** | 72 | 4-1/2 | 65-1/8 | 55-7/8 | 19-3/4 | 23 |
| **BTR-305 (A)** | 75 | 4-1/2 | 65-3/4 | 57-1/4 | 20 | N/A |
| **BTR-365 (A)** | 79-1/2 | 4-1/2 | 70-1/4 | 62-1/2 | 22-1/2 | 23 |
| **BTR-400 (A)** | 75-1/2 | 4-1/2 | 67-1/2 | 58-1/4 | 26-3/4 | 23 |
| **BTR-500 (A)** | 81-1/2 | 17-1/2 | 77-1/4 | 67-1/2 | 27 | 21 |

| Model Number | Dimensions in Inches | | | | Approx. Shipping Weight (lbs) | |
|---|---|---|---|---|---|---|
| | G | H | I | J | Standard | ASME |
| **BTR-120*** | 1/2 | 51-7/8 | 6 | 27-3/4 | 400 | - |
| **BTR-154** | 1/2 | 54-5/8 | 6 | 27-3/4 | 470 | - |
| **BTR-180** | 1/2 | 54-5/8 | 6 | 27-3/4 | 470 | - |
| **BTR-197** | 1/2 | 62-5/8 | 6 | 27-3/4 | 603 | - |
| **BTR-200(A)** | 1/2 | 56-3/8 | 6 | 30-1/4 | 630 | 725 |
| **BTR-250*(A)** | 1/2 | 56-3/8 | 8 | 30-1/4 | 630 | 725 |
| **BTR-251*(A)** | 1/2 | 58-3/4 | 8 | 27-3/4 | 750 | 862 |
| **BTR-275*(A)** | 1/2 | 56-3/8 | 8 | 30-1/4 | 630 | 725 |
| **BTR-305 (A)** | 1/2 | 58-3/4 | 8 | 27-3/4 | 750 | 862 |
| **BTR-365 (A)** | 3/4 | 63 | 8 | 27-3/4 | 725 | 833 |
| **BTR-400 (A)** | 3/4 | 59 | 8 | 30-1/4 | 760 | 874 |
| **BTR-500 (A)** | 1 | 67-1/2 | 8 | 27-3/4 | 812 | 857 |

Specify when ordering propane (LP) gas.
*Model BTR 120 is shipped with 6" x 5" flue outlet adapter. Models BTR 250, 251 and 275 are shipped with a 8" x 6" flue outlet adapter.
Standard models certified from sea level to 2,000 ft. elevation. Order SMR S54 for elevations up to 8,000 ft.
BTR-500 model features induced draft design and no damper.

# MASTER-FIT® ULTRA-LOW NOx



## 80% Thermal Efficiency means Lower Operating Costs

### Fan Assisted Combustion

- The blower is built into the low NOx burner assembly
- 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

### Air-Flapper

- A stainless steel air flapper is used inside the premix system to replace externally mounted flue damper to minimize the standby heat loss and to minimize the overall heater height

### Metal Venting

- Rated Category I Appliance. Uses standard double wall type "B" vent.
- Can be commonly vented with other Category I appliances
- Vent connects directly to the vent connector outlet
- An excellent choice for retrofit and upgrade installations

### 3-Year Limited Tank/1-Year Limited Parts Warranty

- For complete warranty information, consult written warranty or go to hotwater.com

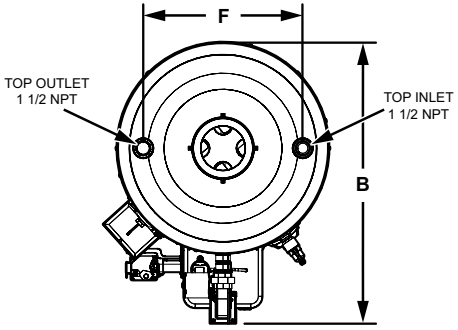
| Model Number | Gallon Capacity | Input BTU/ HR | Recovery Capacity GPH @ 100°F Rise |
|---|---|---|---|
| **BTL-120** | 81 | 120,000 | 115 |
| **BTL-154** | 81 | 154,000 | 148 |
| **BTL-180** | 81 | 180,000 | 173 |
| **BTL-198** | 81 | 199,000 | 191 |
| **BTL-199** | 100 | 199,000 | 191 |
| **BTL-250** | 100 | 250,000 | 240 |
| **BTL-275** | 100 | 275,000 | 264 |
| **BTL-310** | 86 | 310,000 | 298 |
| **BTL-366** | 86 | 366,000 | 352 |
| **BTL-400** | 86 | 390,000 | 375 |
| **BTL-250A** | 100 | 250,000 | 240 |
| **BTL-275A** | 100 | 275,000 | 264 |
| **BTL-310A** | 86 | 310,000 | 298 |
| **BTL-366A** | 86 | 366,000 | 352 |
| **BTL-400A** | 86 | 390,000 | 375 |

Electrical characteristics—120V-60 Hz A. C., 5.0A.
(A) after model number designates ASME construction.
LEG KITS FOR UL SANITATION TO MEET NSF-5 (increases overall height by 4").
BTL models not available in LP gas.

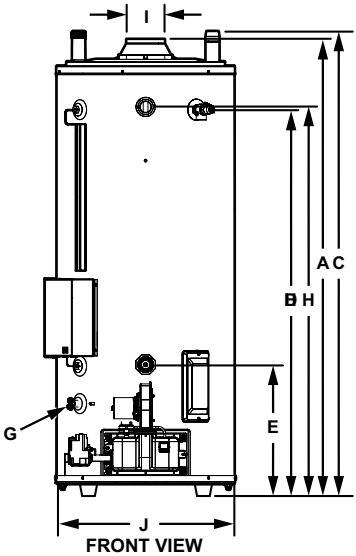
Line drawings and dimensions on the following page.

# MASTER-FIT® ULTRA-LOW NOx

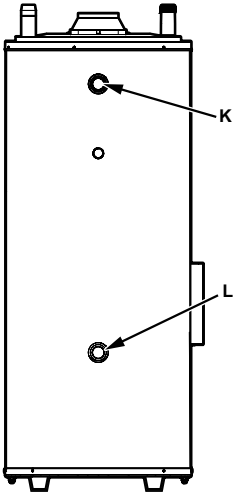
*(CONTINUED)*




**TOP VIEW**




**FRONT VIEW**




**BACK VIEW**

| Letter | BTL-120, 154, 180, 198 | BTL-199, 250(A), 275(A) | BTL-310(A), 366(A), 400(A) |
|---|---|---|---|
| | Dimensions in Inches | | |
| **A** | 63-3/4 | 71-3/4 | 71-3/4 |
| **B** | 37 | 37 | 37 |
| **C** | 65 | 73 | 73 |
| **D** | 52-3/4 | 60-3/4 | 60-3/4 |
| **E** | 20-3/4 | 20-1/2 | 20-1/2 |
| **F** | 21 | 21 | 21 |
| **G** | 3/4 NPT | | |
| **H** | 53 | 61 | 61 |
| **I** | 6 | 6 | 6 |
| **J** | 27-3/4 | 27-3/4 | 27-3/4 |
| **K** | 1-1/2 NPT | | |
| **L** | 1-1/2 NPT | | |

| Approx. Shipping Weight (lbs) | BTL-120, 154, 180, 198 | BTL-199, 250(A), 275(A) | BTL-310(A), 366(A), 400(A) |
|---|---|---|---|
| **Standard** | 650 | 750 | 810 |
| **ASME** | N/A | 800 | 860 |

Electrical characteristics—120V-60 Hz A. C., 5.0A.
(A) after model number designates ASME construction.
LEG KITS FOR UL SANITATION TO MEET NSF-5 (increases overall height by 4").
BTL models not available in LP gas.

COMMERCIAL GAS

# CONSERVATIONIST® BT



## Glasslined Tank

- Maximizes tank life.
- Fully Automatic Controls with Safety Shutoff
- Accurate, dependable control system requires no electric connections
- Fixed automatic gas shutoff device for added safety
- Not recommended for 180°F sanitizing

## Heavy Gauge Steel Jacket

- Finished with baked enamel over bonderized undercoat

## Foam Insulation

- Saves fuel, helps reduce standby heat loss
- Low NOx

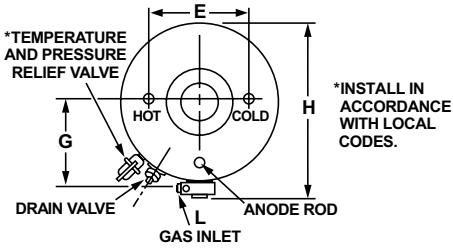
## Complies with Texas and other Districts Requirements for NOx Emissions Less than 40 ng/j

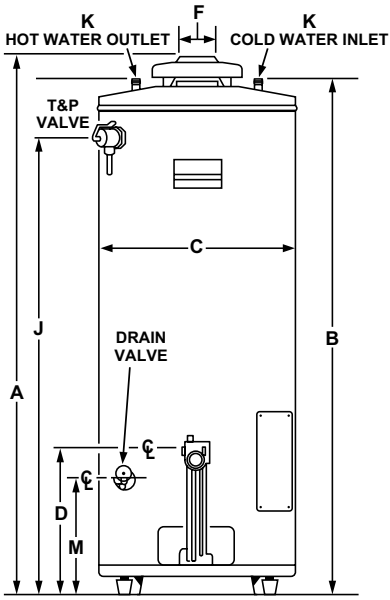
## Easy-to-Install

- Completely factory-assembled
- Only gas, water and vent connections need be made
- All connections are located in front and top of heaters for ease of installation and service

## 3-Year Limited Tank / 1-Year Limited Parts Warranty

- For complete warranty information, consult written warranty or go to hotwater.com




| Model Number | Gallon Capacity | Input Rating BTU/HR | Recovery Capacity GPH @ 100°F Rise | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|
| **BT-80** | 74 | 75,100 | 73 | 275 |
| **BT-100** | 98 | 75,100 | 73 | 350 |

| Model Number | Dimensions in Inches | | | | | |
|---|---|---|---|---|---|---|
| | A | B | C | D | E | F |
| **BT-80** | 61-1/8 | 58-1/2 | 26-1/2 | 15-3/16 | 16 | 4 |
| **BT-100** | 68-5/8 | 66-1/2 | 27-3/4 | 15-3/16 | 16 | 4 |

| Model Number | Dimensions in Inches | | | | | |
|---|---|---|---|---|---|---|
| | G | H | J | K | L | M |
| **BT-80** | 14-1/2 | 29-11/16 | 54-1/4 | 1 | 1/2 | 11-15/16 |
| **BT-100** | 15-3/4 | 30-15/16 | 54-1/4 | 1 | 1/2 | 11-15/16 |

NSF leg kit 100111360.
Specify when ordering (LP) gas.

COMMERCIAL GAS

# CONSERVATIONIST® POWER VENT



## Approval Rating and Certification

- All models comply with ANSI Z21.10.3/CSA 4.3 and ASHRAE/IES 90.1-2004
- Meets Texas and other low NOx areas requiring 40 ng/J
- All models are approved for use in combined appliance applications

## CFC Free Foam Insulation

- Minimize radiant heat loss

## Dip Tube

- Carries inlet water deep into the tank

## Hot Surface Ignition

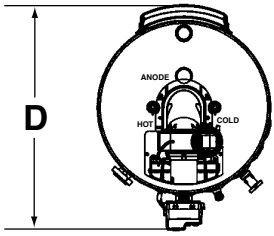
- Has a solid state ignition surface that does not flutter or blow out
- Provides increased reliability and efficiency over spark ignition systems
- Eliminates the pilot and saves energy

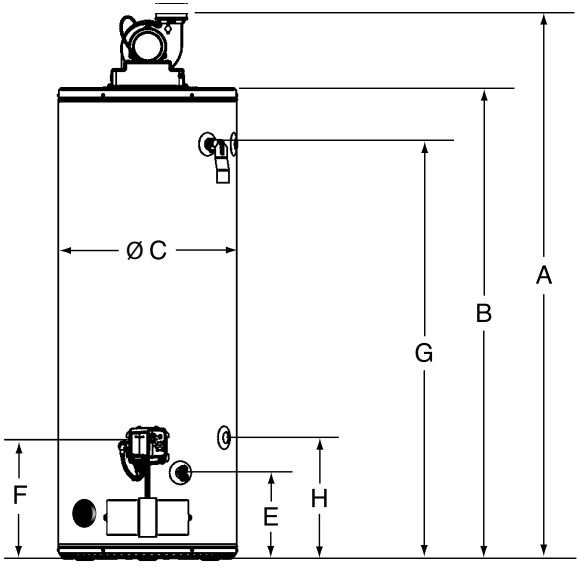
## User-Friendly

- State-of-art electronic gas control provides more precise temperature control
- LED control light displays operation status and diagnostics

## 3-Year Limited Tank/1-Year Limited Parts Warranty

- For complete warranty information, consult written warranty or go to hotwater.com




| Model Number | Gallon Capacity | Btuh Input | Approx. Shipping Weight |
|---|---|---|---|
| **BTF-80** | 75 | 76,000 | 277 lbs |

| Model Number | Dimensions in inches | | | |
|---|---|---|---|---|
| | A | B | C | D |
| **BTF-80** | 70-5/8 | 61-1/4 | 26 | 33-1/8 |

| Model Number | Dimensions in inches | | | |
|---|---|---|---|---|
| | E | F | G | H |
| **BTF-80** | 11 | 13-1/4 | 53 | 15-1/4 |

Recovery capacity based on 81% thermal efficiency.
Available in LP (Propane) gas.
Can be installed up to 10,100 feet without alteration.

COMMERCIAL GAS

# CONSERVATIONIST® POWER DIRECT VENT



## DynaClean™ Diffuser Dip Tube

- Helps reduce lime and sediment buildup and maximizes hot water output
- Made from long-lasting PEX cross-linked polymer

## Blue Diamond® Glass Coating

- Provides superior corrosion resistance compared to the industry-standard glasslining

## Hot Surface Ignition

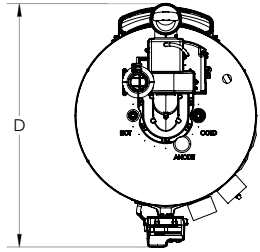
- Has a solid state ignition surface that does not flutter or blow out
- Provides increased reliability and efficiency over spark ignition systems. Eliminates the pilot and saves energy

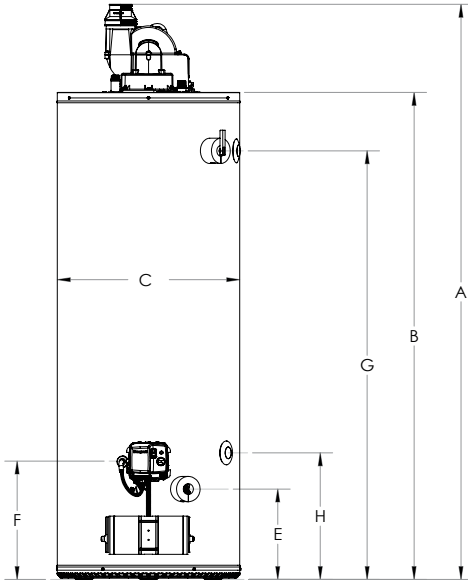
## Standards

- Design-certified by CSA International, according to ANSI Z21.10.3-CSA 4.3 standards governing storage-type water heaters
- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1

## 3-Year Limited Tank/1-Year Limited Parts Warranty

- For complete warranty information, consult written warranty or go to hotwater.com




| Model Number | Gallon Capacity | Btuh Input | Approx. Shipping Weight (lbs) |
|---|---|---|---|
| **BPD-80** | 75 | 72,000 | 277 |

| Model Number | Dimensions in Inches | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **A** | **B** | **C** | **D** | **E** | **F** | **G** | **H** |
| **BPD-80** | 70-5/8 | 61-1/4 | 26 | 33-1/8 | 11 | 13-1/4 | 53 | 15-1/4 |

Specify when ordering propane (LP) gas.
Can be installed up to 10,100 feet without alteration.
Recovery capacity based on 81% thermal efficiency.

# CONSERVATIONIST® ULTRA-LOW NOx



## Code Compliance

- The Ultra-Low NOx atmospheric vent commercial gas water heater which meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and Current Edition ASHRAE/IES 90.1

## Fully Automatic Controls with Safety Shutoff

- Accurate, dependable control system requires no electric connections
- Fixed automatic gas shutoff device for added safety
- Not recommended for 180˚ F sanitizing

## Heavy Gauge Steel Jacket

- Finished with baked enamel over bonderized undercoat

## Foam Insulation

- Saves fuel, helps reduce standby heat loss

## Ultra-Low NOx Emissions

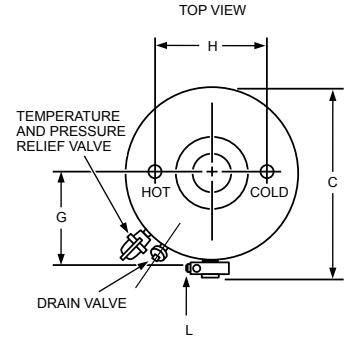
- Complies with SCAQMD Rule 1146.2 and other Air Quality Management Districts with similar requirements of 14 ng/J or 20 ppm

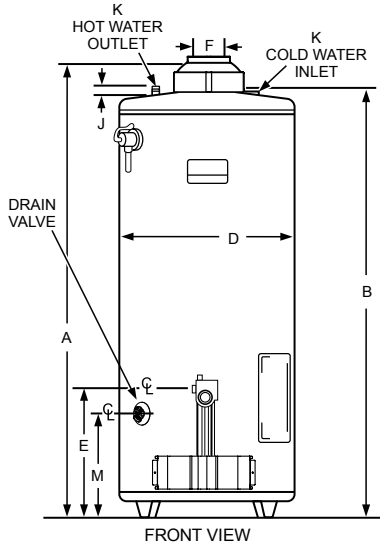
## Easy-to-Install

- Completely factory-assembled
- Only gas, water and vent connections need to be made
- All connections are located in front and top of heaters for ease-of-installation and service

## 3-Year Limited Tank and 1-Year Limited Parts Warranty

- For complete warranty information, consult written warranty or go to hotwater.com




| Model Number | Gallon Capacity | Input BTU/hr | Recovery Capacity GPH @ 100°F Rise | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|
| **BL-80 **** | 74 | 75,100 | 73 | 285 |
| **BL-100*** | 98 | 75,100 | 74 | 350 |

| Dimensions in Inches | | | | | |
|---|---|---|---|---|---|
| **Model Number** | **A** | **B** | **C** | **D** | **E** |
| **BL-80 **** | 62-1/16 | 58 | 29-1/2 | 25-1/4 | 15-7/8 |
| **BL-100*** | 70-1/2 | 66-1/2 | 30-15/16 | 27-3/4 | 15-3/16 |

| Dimensions in Inches | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Model Number** | **F** | **G** | **H** | **J** | **K** | **L** | **M** |
| **BL-80 **** | 4 | 15-1/4 | 16 | 2 | 1 | 1/2 | 12-1/2 |
| **BL-100*** | 4 | 15-3/4 | 16 | 1-1/4 | 1-1/4 | 1/2 | 11-15/16 |

Natural gas only.
*Recovery rating based on 81% thermal efficiency
**Recovery rating based on 80% thermal efficiency

COMMERCIAL GAS

# POWER BURNER LIGHT DUTY



## Power Gas Burner

- Electronic flame safeguard control with direct spark ignition
- Redundant gas valves for added safety
- Power gas burner requires 120V, 60Hz service
- Non-forced-draft burner; negative draft required in vent piping

## Fully Automatic Controls with Safety Shutoff

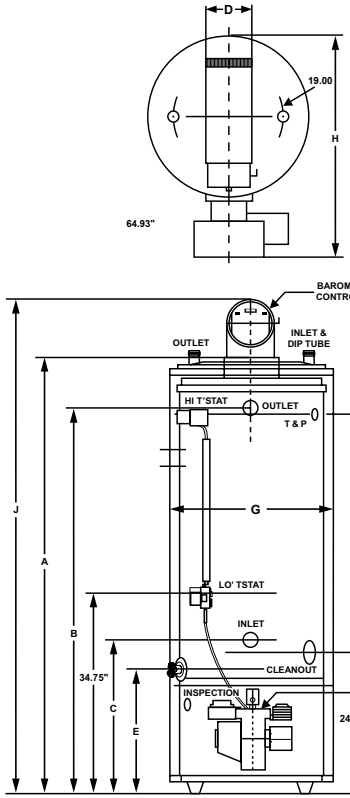
- High temperature limit control (manual reset)
- Dual thermostats for accurate temperature control

## Glass Coating

- Exclusive process provides superior protection against corrosion

## 3-Year Limited Tank and 1-Year Limited Parts Warranty

- For complete warranty information, consult written warranty or go to hotwater.com




| Model Number | BTU Input Per Hour | Tank Size |
|---|---|---|
| **BTP-270(A)** | 270,000 | 81 |
| **BTP-370(A)**** | 370,000 | 81 |

| Model Number | GPH or LPH | Recovery Gallons Per Hour Temperature Rise | Maximum Amperes 120V, 60 Hz, 1 |
|---|---|---|---|
| | | 100° | |
| **BTP-270(A)** | GPH | 262 | 5 |
| **BTP-370(A)**** | GPH | 359 | 5 |

| Model Number | Dimensions in Inches | | | | |
|---|---|---|---|---|---|
| | A | B | C | D | E |
| **BTP-270(A)** | 74-3/4 | 65 | 26-3/4 | 6 | 21-3/8 |
| **BTP-370(A)**** | 74-3/4 | 65 | 26-3/4 | 6 | 21-3/8 |

| Model Number | Dimensions in Inches | | | Approx. Shipping Weight | |
|---|---|---|---|---|---|
| | G | H | J | Standard | ASME |
| **BTP-270(A)** | 27-3/4 | 38 | 85-1/4 | 547 lbs | 632 lbs |
| **BTP-370(A)**** | 27-3/4 | 38 | 85-1/4 | 547 lbs | 632 lbs |

** BTP 370 available in Natural Gas only.

# LOW NOx POWER BURNER



## Venting Options

- BTP models designed for conventional atmospheric vertical venting
- Barometric draft regulating damper provided. Order Vent Kit Part #100125540
- BTPV models designed for horizontal atmospheric sidewall venting or direct venting
- For sidewall venting order Vent Kit Part #100125500
- For direct venting order Vent Kit Part #100131270

## Low NOx Power Gas Burner (Natural Gas Only)

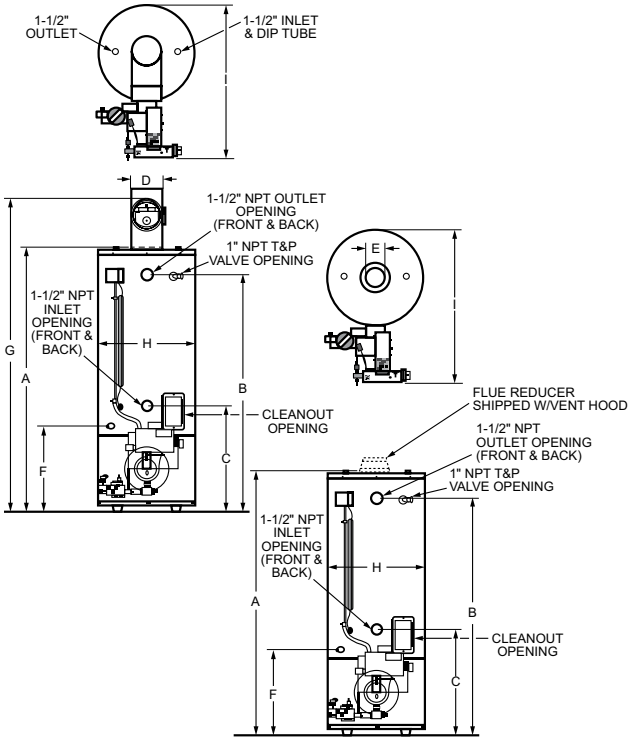
- Pre-mix design with internal Flue Gas Recirculation (FGR)
- Safety features include internal blocked flue sensor, separate pilot system, internal thermal cutoff and anti-flashback barrier

## Fully Automatic Controls

- Including safety shut-off, high-temperature limit control
- Dual thermostat, adjust from 120°F to 180°F
- Factory start-up included; required for activating and assuring maximum performance.

## 3-Year Limited Tank and 1-Year Limited Parts Warranty

- For complete warranty information, consult written warranty or go to hotwater.com




| Model Number | Gallon Capacity | Input/BTU/HR Natural Gas | Recovery Capacity GPH @ 100°F Rise | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|
| **BTP(V)-540A** | 85 | 540,000 | 523 | 950 |
| **BTP(V)-650A** | 85 | 650,000 | 630 | 950 |
| **BTP(V)-740A** | 85 | 740,000 | 718 | 950 |

| Model Number | Dimensions in Inches | | | | |
|---|---|---|---|---|---|
| | A | B | C | D | E |
| **BTP(V)-540A** | 80-3/4 | 73 | 32-1/4 | 9 | 26-1/2 |
| **BTP(V)-650A** | 80-3/4 | 73 | 32-1/4 | 9 | 26-1/2 |
| **BTP(V)-740A** | 80-3/4 | 73 | 32-1/4 | 9 | 26-1/2 |

| Model Number | Dimensions in Inches | | | |
|---|---|---|---|---|
| | F | G | H | I |
| **BTP(V)-540A** | 26-1/2 | 93 | 29-1/2 | 48-1/2 |
| **BTP(V)-650A** | 26-1/2 | 93 | 29-1/2 | 48-1/2 |
| **BTP(V)-740A** | 26-1/2 | 93 | 29-1/2 | 48-1/2 |

Not available in propane (LP).
Vent Kit included in unit price if ordered with heater.
Authorizes start-up service included; required to activate warranty. Consult local factory representative (Continental U.S. only)

COMMERCIAL GAS

# CONSERVATIONIST® DURACLAD OIL-FIRED TANK-TYPE



## 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

## Two Hand-hole Cleanouts

- Allows easy cleaning on standard models COF-385 and larger and ASME models

## Easy-to-Install Burner

- Three-bolt mounting of burner assures easy installations.

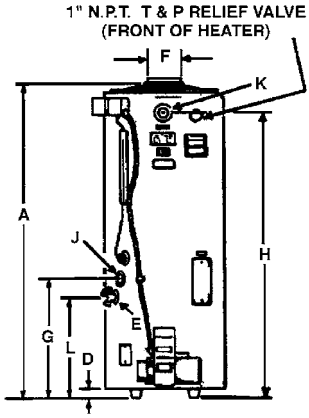
## 3-Year Limited Tank and 1-Year Limited Parts Warranty

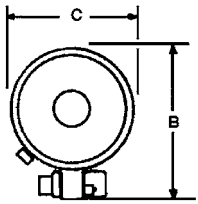
- Factory Start-Up included: required for activating warranty and assuring maximum operating performance (Continental U.S. only)
- For complete warranty information, consult written warranty or go to hotwater.com

Low Lead Content

HLW

**ASME**
Available on
COF-315 and higher




| Model Number | Gallon Capacity | Input BTU/HR | Recovery Capacity GPH @ 100˚ F Rise* | Firing Rate in GPM | Approx. Shipping Weight (lbs) | |
|---|---|---|---|---|---|---|
| | | | | | Standard | ASME |
| **COF-199†** | 86 | 199,000 | 191 | 1.42 | 553 | N/A |
| **COF-245** | 86 | 245,000 | 235 | 1.75 | 554 | N/A |
| **COF-315** | 84 | 315,000 | 302 | 2.25 | 554 | 657 |
| **COF-385** | 75 | 385,000 | 369 | 2.75 | 624 | 742 |
| **COF-455** | 75 | 455,000 | 436 | 3.25 | 700 | 747 |
| **COF-700** | 69 | 700,000 | 671 | 5 | 739 | 822 |

| Model Number | Dimensions in Inches | | | | |
|---|---|---|---|---|---|
| | A | B | C | D | E |
| **COF-199†** | 74-1/2 | 36-3/4 | 27-3/4 | 2 | 3/4 NPT |
| **COF-245** | 74-1/2 | 36-3/4 | 27-3/4 | 2 | 3/4 NPT |
| **COF-315A** | 74-1/2 | 36-3/4 | 27-3/4 | 2 | 3/4 NPT |
| **COF-385A** | 73-3/4 | 36-3/4 | 27-3/4 | 2 | 3/4 NPT |
| **COF-455A** | 73-3/4 | 36-3/4 | 27-3/4 | 2 | 3/4 NPT |
| **COF-700A** | 73-3/4 | 36-3/4 | 27-3/4 | 2 | 3/4 NPT |

| Model Number | Dimensions in Inches | | | | | |
|---|---|---|---|---|---|---|
| | F | G | H | J | K | L |
| **COF-199†** | 8 | 26-5/8 | 74-1/2 | 1-1/2 NPT | 1-1/2 NPT | 22-3/4 |
| **COF-245** | 8 | 26-5/8 | 74-1/2 | 1-1/2 NPT | 1-1/2 NPT | 22-3/4 |
| **COF-315A** | 8 | 26-5/8 | 74-1/2 | 1-1/2 NPT | 1-1/2 NPT | 22-3/4 |
| **COF-385A** | 8 | 24-3/4 | 73-3/4 | 1-1/2 NPT | 1-1/2 NPT | 23-7/16 |
| **COF-455A** | 8 | 24-3/4 | 73-3/4 | 1-1/2 NPT | 1-1/2 NPT | 23-7/16 |
| **COF-700A** | 8 | 30-3/16 | 79-3/16 | 1-1/2 NPT | 1-1/2 NPT | 28-7/8 |

*Based on No. 2 fuel oil. All models have 1/8 HP motor.
Add "A" to the end of the model number for ASME tanks. (COF 315A - COF-700A only)
†Model supplied with Flue reducer which should be installed on top cover.

# COMMERCIAL ELECTRIC
# LIGHT-SERVICE



Designed for light duty commercial applications with intermittent hot water loads.

## Glasslined Tank

- Tank interior is coated with glass specially designed by A. O. Smith for water heater use

## Heating Elements

- Two 4.5 KW zinc plated copper sheathed elements are standard

## Standard Voltages

- The standard voltage is 240V single phase

## Top Mounted Recessed Junction Box

## Controls

- Thermostat is adjustable through a range of 120° to 181°F with a manual reset high temperature cutoff
- The heater is wired for non-simultaneous single phase operation

## Coregard™ Anode Rod

- Our anode rods have a stainless steel core that extends the life of the anode rod allowing superior tank protection for longer than standard anode rods

## Enhanced-Flow Brass Drain Valve

- Solid brass, tamper resistant, enhanced-flow, ball type, drain valve

## Maximum Working Pressure 150 psi

## Factory Installed CSA Certified and ASME Rated Temperature and Pressure Relief Valve

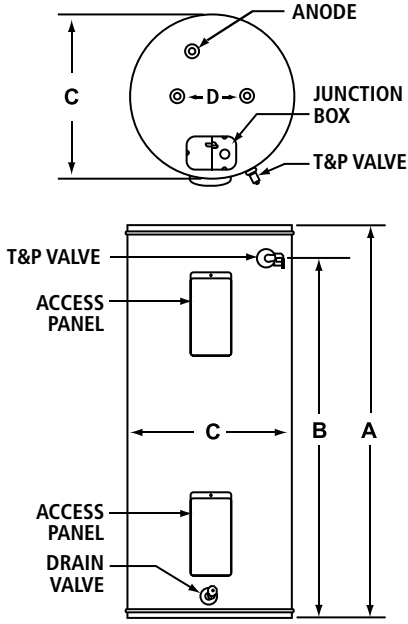
## Certified to UL 1453 for Commercial Electric Water Heaters

## Compliance

- Meets the standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1

## Warranty

- 6-Year limited tank/1-Year limited parts.
- For complete information consult the written warranty or hotwater.com




| Model Number | Gallon Capacity | Standard Element Wattage 240 VAC | Dimensions in Inches | | | | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|---|---|
| | | | A | B | C Diameter | D | |
| **LTE 66D** | 66 | 4500 | 60-1/4 | 53 | 22 | 8 | 146 |
| **LTE 80D** | 80 | 4500 | 60-1/2 | 52-1/4 | 24 | 8 | 175 |
| **LTE 120D** | 119 | 4500 | 61-1/2 | 54-1/2 | 28 | 8 | 268 |

Not available with top mounted T&P valve option

| Element Wattage (Upper/Lower) | U. S. Gallons/Hr at Temperature Rise Indicated | |
|---|---|---|
| | F° | 100 |
| **Non-Simultaneous Operation** | | |
| **/1500** | GPH | 6 |
| **/2000** | GPH | 8 |
| **/2500** | GPH | 10 |
| **3000/3000** | GPH | 12 |
| **4000/4000** | GPH | 16 |
| **4500/4500** | GPH | 18 |
| **5000/5000** | GPH | 20 |
| **6000/6000** | GPH | 24 |
| **Simultaneous Operation** | | |
| **3000/3000** | GPH | 24 |
| **4000/4000** | GPH | 32 |
| **4500/4500** | GPH | 36 |
| **5000/5000** | GPH | 41 |
| **6000/6000** | GPH | 49 |

# DEN/DEL ELECTRIC DURA-POWER™



DEN-40

DEL-30

## Glasslined Tank

- Thirteen sizes, 6 thru 119 gallon capacity
- Tank interior is coated with glass specially designed by A. O. Smith for water heater use

## Elements

- Zinc plated copper sheaths for longer life
- Medium watt density means lower surface temperature to minimize scale build-up and more surface to heat water
- Element sizes from 1.5 to 6 KW. Maximum input 12 KW

## Standard Voltages

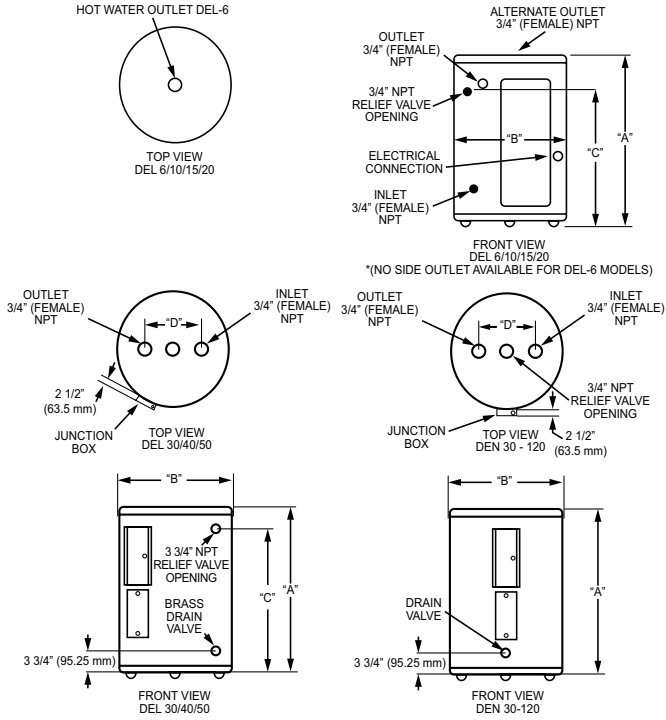
- 120, 277 single phase and 208, 240 and 480V unbalanced three-phase delta; easily converted to single-phase at terminal block (except 208V with 6000 watt elements).
- Single element heater, single-phase only

## Terminal Block

- Factory-installed. Just bring the service to heater and connect to block
- Terminal block not supplied on 120V & 277 volt models (No junction box on DEL6-20)

| Element Wattage (Upper/Lower) | U. S. Gallons/Hr at Temperature Rise Indicated | |
|---|---|---|
| | F° | 100 |
| **Non-Simultaneous Operation** | | |
| **/1500** | GPH | 6 |
| **/2000** | GPH | 8 |
| **/2500** | GPH | 10 |
| **3000/3000** | GPH | 12 |
| **4000/4000** | GPH | 16 |
| **4500/4500** | GPH | 18 |
| **5000/5000** | GPH | 20 |
| **6000/6000** | GPH | 24 |
| **Simultaneous Operation** | | |
| **3000/3000** | GPH | 24 |
| **4000/4000** | GPH | 32 |
| **4500/4500** | GPH | 36 |
| **5000/5000** | GPH | 41 |
| **6000/6000** | GPH | 49 |

6 gallon model not available above 3.0 kW.
Single element heaters available in single phase only.




| Model Number | Gallon Capacity | Dimensions in Inches | | | | Approx. Shipping Weight (lbs.) |
|---|---|---|---|---|---|---|
| | | A | B | C | D | |
| **Compact Models** | | | | | | |
| **DEL-6S** | 6 | 15-1/2 | 14-1/4 | 11 | N/A | 35 |
| **DEL-10S** | 10 | 18-1/4 | 18 | 12-1/2 | N/A | 54 |
| **DEL-15S** | 15 | 26 | 18 | 20-1/2 | N/A | 58 |
| **DEL-20S** | 20 | 22-1/4 | 21-3/4 | 15-3/8 | N/A | 73 |
| **Lowboy Models** | | | | | | |
| **DEL-30D** | 30 | 30-7/8 | 21-3/4 | 24-1/8 | 8 | 100 |
| **DEL-40D** | 40 | 32-1/4 | 24 | 25-9/16 | 8 | 125 |
| **DEL-50D** | 50 | 32-1/4 | 26-1/2 | 25-1/8 | 8 | 166 |
| **Tall Models** | | | | | | |
| **DEN-30D** | 30 | 34-1/2 | 20-1/2 | N/A | 8 | 98 |
| **DEN-40D** | 40 | 45-1/8 | 20-1/2 | N/A | 8 | 113 |
| **DEN-52D** | 50 | 54-7/8 | 20-1/2 | N/A | 8 | 131 |
| **DEN-66D** | 66 | 60-3/4 | 21-3/4 | N/A | 8 | 176 |
| **DEN-80D** | 80 | 59-3/8 | 24 | N/A | 8 | 211 |
| **DEN-120D** | 119 | 62-7/16 | 29-3/8 | N/A | 8 | 326 |

S= Single Element D= Dual Elements.
Dual element models wired for 3-phase 208/240/480 volt.
Field convertible to 1-phase as long as amp does not exceed 48 Amps.

# COMMERCIAL ELECTRIC
# GOLD Xi SERIES



## Advanced Electronic Control

- Plain English text and animated icons display diagnostics

## Economy Mode Operation Lowers the Operating Set Point and Reduces Operating Costs

## Thermostatic Linear Sequencing Control Helps Reduce Current Surges and Provides Accurate Control of Water Temperature

## Incoloy Elements

- All DVE models ship standard with incoloy elements
- Incoloy elements provide long life with superior scaling resistance

## Standard Voltages

- 208, 240, 277, 480V single-phase and three-phase delta
- Convertible from three-phase to singles-phase (in field) and vice versa (except 208/54kW) 277 single-phase only

## Element availability

- DRE/DVE heaters available from 3kw to 54 KW with recoveries of 25 to 837 GPH at a 100°F rise

## 3-Year Limited Tank and 1-Year Limited Parts Warranty

- For complete warranty information, consult written warranty or go to hotwater.com

Low Lead Content

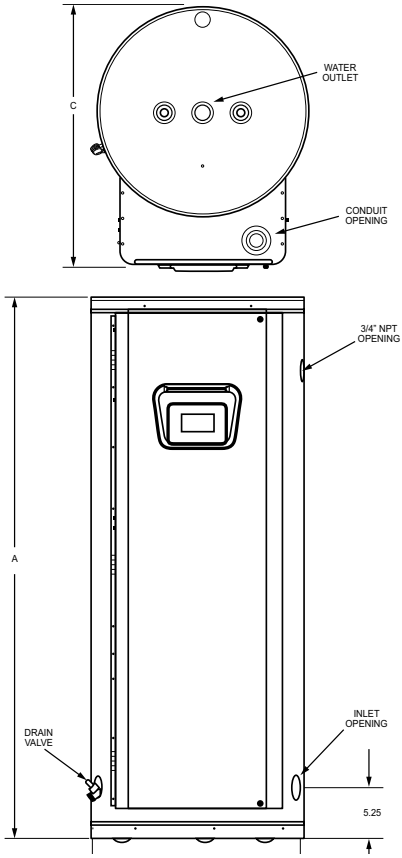
HLW

WATER QUALITY

Listed

ASME/CRN (optional)

AHRI CERTIFIED® www.ahridirectory.org




| Model Number | Gallon Capacity | Dimensions in Inches | | | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|
| | | A | B | C | |
| **DVE-52** | 50 | 55-3/4 | 21-3/4 | 27 | 265 |
| **DVE-80** | 80 | 60-1/4 | 25-1/2 | 31 | 280 |
| **DVE-120** | 119 | 62-1/4 | 29-1/2 | 35 | 390 |

See specification sheets or contact your local rep for optional kW's available.

# GOLD SERIES



## Incoloy Elements

- DRE models ship with incoloy elements (see spec sheet for kW options)
- Incoloy elements provide long life and superior scaling resistance

## Fusing

- Protects all elements, thermostats, and internal wiring circuits against excess current flow
- Meets National Electrical Code requirements that non-ASME tanks must have internal fusing when current draw exceeds 48 amps
- Available as an option on Canadian-built heaters

## Meets the Standby Loss Requirements of the U. S. Department of Energy and Current Edition of AHRAE/IES 90.1

## Standard Voltages

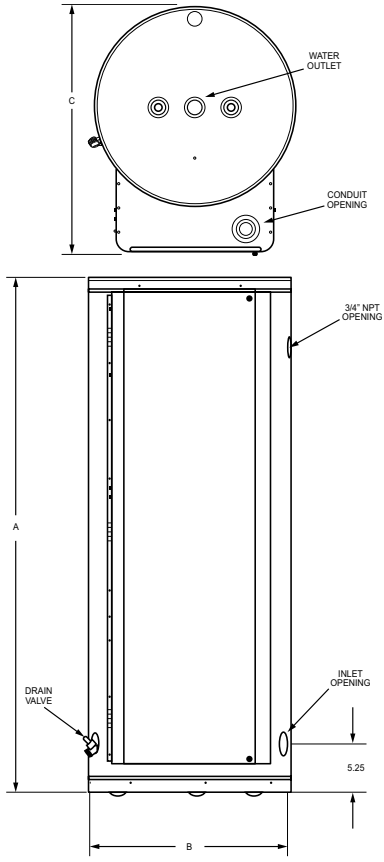
- 208, 240, 277, 480V single-phase and three-phase delta
- Convertible from three-phase to singles-phase (in field) and vice versa (except 208/54kW) 277 single-phase only

## Element availability

- DRE/DVE heaters available from 3kw to 54 KW with recoveries of 25 to 837 GPH at a 100°F rise

## 3-Year Limited Tank and 1-Year Limited Parts Warranty

- For complete warranty information, consult written warranty or go to hotwater.com




| Model Number | Gallon Capacity | Dimensions in Inches | | | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|---|
| | | A | B | C | |
| **DRE-52*** | 50 | 55-3/4 | 21-3/4 | 27 | 265 |
| **DRE-80** | 80 | 60-1/4 | 25-1/2 | 31 | 280 |
| **DRE-120** | 119 | 62-1/4 | 29-1/2 | 35 | 390 |

* DRE-52 is maximum 36kW.
See specification sheets or contact your local rep for optional kW's available.

COMMERCIAL ELECTRIC

# HEAVY-DUTY CUSTOM Xi



## Advanced Electronic Control

- Provides Precise Temperature Control and Plain English Text with Animated Icons Display

## Low-Water Cutoff—Remote Electronic Immersion-Type Probe to Prevent Energizing of the Elements, Eliminating Accidental Dry Firing

## Incoloy-Sheath Heating Elements Standard

## Factory-Wired, 120V Circuit Controls

## Power-Circuit Fusing for System Protection

## Glass-Lined Tank, with ASME Construction

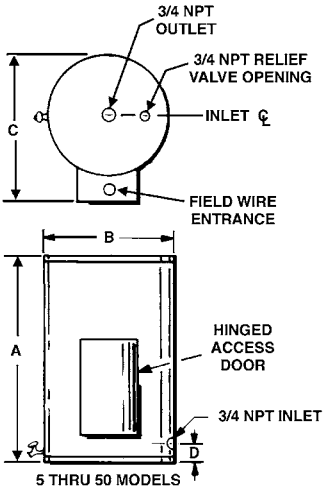
## CSA Certified and ASME Rated T&P Relief Valve

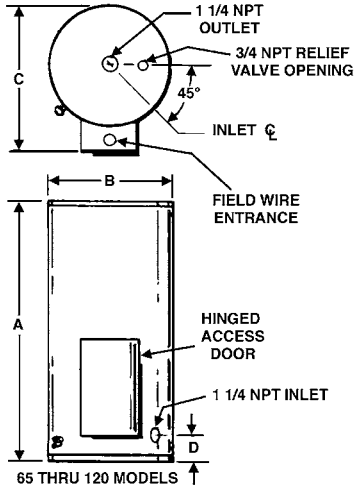
## BACnet and Modbus Compatible with ICC Interface

## 3-Year Limited Tank and 1-Year Limited Parts Warranty

- For complete warranty information, consult written warranty or go to hotwater.com

| Model Number | Tank Capacity | | Maximum kW Input | Approx. Shipping Weight | |
|---|---|---|---|---|---|
| | Gallons | Litres | | lbs. | Kg. |
| **DSE-5A** | 5 | 19 | 3 | 82 | 37.2 |
| **DSE-10A** | 10 | 38 | 6 | 116 | 48.1 |
| **DSE-20A** | 20 | 76 | 18 | 145 | 65.7 |
| **DSE-30A** | 30 | 114 | 24 | 218 | 98.9 |
| **DSE-40A** | 40 | 151 | 36 | 245 | 111.1 |
| **DSE-50A** | 50 | 189 | 90 | 291 | 132.0 |
| **DSE-65A** | 65 | 246 | 90 | 344 | 156.0 |
| **DSE-80A** | 80 | 303 | 90 | 406 | 184.2 |
| **DSE-100A** | 100 | 379 | 90 | 419 | 190.1 |
| **DSE-120A** | 120 | 450 | 90 | 453 | 205.5 |




| Model Number | Maximum kW Input | Dimensions in Inches | | | |
|---|---|---|---|---|---|
| | | A | B | C | D |
| **DSE-5A** | 3 | 22" | 16" | 24" | 4.25" |
| **DSE-10A** | 6 | 28.13" | 18" | 26" | 5.25" |
| **DSE-20A** | 18 | 31.75" | 22" | 28" | 5.75" |
| **DSE-30A** | 24 | 43.25" | 22" | 28" | 5.75" |
| **DSE-40A** | 36 | 54.75" | 22" | 28" | 5.75" |
| **DSE-50A** | 90 | 66.19" | 22" | 28" | 5.75" |
| **DSE-65A** | 90 | 57.25" | 26.5" | 32.5" | 11.38" |
| **DSE-80A** | 90 | 58.13" | 28" | 35" | 12.5" |
| **DSE-100A** | 90 | 70.25" | 28" | 35" | 12.5" |
| **DSE-120A** | 90 | 70.25" | 30.13" | 37" | 12.5" |

# HEAVY-DUTY PREMIUM ELECTRIC DVE/DHE DURA-POWER™



Advanced Electronic Control: A. O. Smith's New Propriety Electronic Water Heater Control Provides Precise + or - 1°F Temperature Control that is Ideal for Industrial and Food Service Applications where Exact Temperatures of Hot Water are Needed

Modbus/BACnet compatible with optional Gateway interface

Call 888 WATER02 for more information

Progressive Modulating: Sizes the Input of Available Elements to Match Current Load Conditions; Rotates and Lead Lags Element Loads to Provide Long Life and Equal Wear.

Heavy-Duty Incoloy-Sheath Heating Elements

208V, 240V, 380V, 400V, 415V, 480V and 600V

Check with Factory for Voltages and kWs Not Listed

Factory-Installed Terminal Block

Heavy-Duty Magnetic Contactors

Factory-Wired, 120V Circuit Controls

Power-Circuit Fusing

Low-Water Cutoff

Glass-Lined Tank (Standard)

Handhole Clean-Out(s)

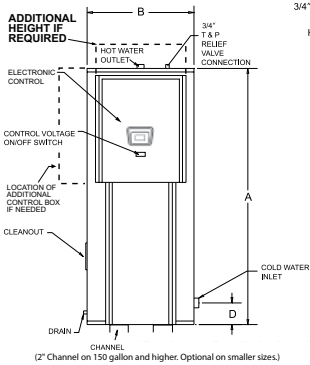
Color-Coded Circuitry

CSA Certified and ASME Rated T&P Relief Valve

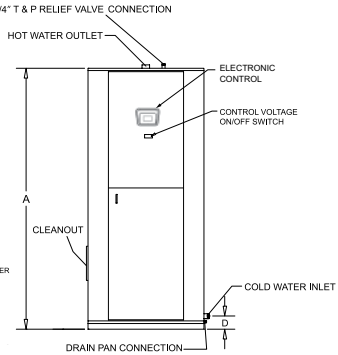
MEETS ASHRAE/IESNA 90.1 CURRENT EDITION

ASME

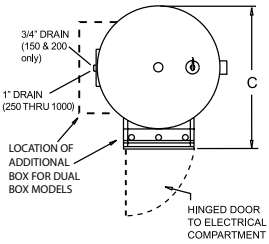
## Vertical Round Models 150-1000



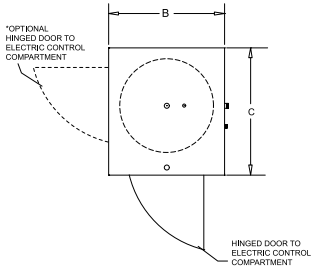

## Vertical Square Models 1250-2500



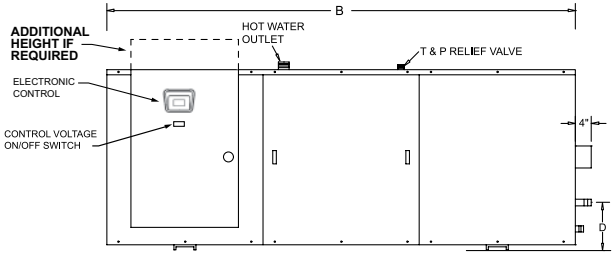

### Top View



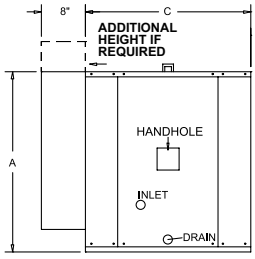

### Top View




## Horizontal Models




A & D ELEVATION FROM FINISHED FLOOR




END VIEW

EXTRA PANEL BOX MAY BE NECESSARY FOR INPUTS HIGHER THAN 72KW. CONSULT FACTORY

*An oversized control panel may be required on models with inputs above 72 kW. An oversized control panel may increase the width and depth of the square jacket by up to 2".

# HEAVY-DUTY PREMIUM ELECTRIC DVE/DHE DURA-POWER™ *(CONTINUED)*

| Model Number* | Max. KW | Gallon Capacity | Dimensions in Inches | | | |
|---|---|---|---|---|---|---|
| | | | A | B | C | D |
| **Vertical Round Electric Storage Heater** | | | | | | |
| **DVE-150A** | 144 | 150 | 65-1/2″ | 32″ | 38-3/4″ | 11-3/4″ |
| **DVE-200A** | 180 | 200 | 78″ | 32″ | 38-3/4″ | 11-3/4″ |
| **DVE-250A** | 216 | 250 | 92″ | 34″ | 40-3/4″ | 19-1/4″ |
| **DVE-300A** | 270 | 300 | 80″ | 40″ | 46-3/4″ | 20-3/4″ |
| **DVE-400A** | 360 | 400 | 80″ | 46″ | 52-3/4″ | 22-1/4″ |
| **DVE-500A** | 396 | 500 | 92″ | 46″ | 52-3/4″ | 22-1/4″ |
| **DVE-600A** | 396 | 600 | 92″ | 52″ | 60-3/4″ | 24-1/4″ |
| **DVE-800A** | 396 | 750 | 104″ | 52″ | 60-3/4″ | 24-1/4″ |
| **DVE-1000A** | 396 | 950 | 128″ | 52″ | 60-3/4″ | 24-1/4″ |
| **Vertical Square Electric Storage Heater** | | | | | | |
| **DVE-1250A** | 900 | 1,250 | 132-1/2″ | 64-1/2″ | 64-1/2″ | 23-1/4″ |
| **DVE-1500A** | 900 | 1,500 | 128-1/2″ | 70-1/2″ | 70-1/2″ | 25-1/4″ |
| **DVE-2000A** | 900 | 2,000 | 124-1/2″ | 78-1/2″ | 78-1/2″ | 27″ |
| **DVE-2500A** | 900 | 2,500 | 146-1/2″ | 82-1/2″ | 82-1/2″ | 29″ |
| **Horizontal Square Electric Storage Heater** | | | | | | |
| **DHE-150A** | 144 | 150 | 37″ | 68-1/2″ | 34-1/4″ | 12″ |
| **DHE-200A** | 180 | 200 | 37″ | 78″ | 34-1/4″ | 12″ |
| **DHE-250A** | 225 | 250 | 39″ | 90-1/4″ | 36-1/4″ | 13″ |
| **DHE-300A** | 270 | 300 | 45″ | 78-1/4″ | 42-1/4″ | 14-3/4″ |
| **DHE-400A** | 360 | 400 | 52″ | 78-1/4″ | 48-1/4″ | 16″ |
| **DHE-500A** | 450 | 500 | 52″ | 90-3/4″ | 48-1/4″ | 16″ |
| **DHE-600A** | 540 | 600 | 58″ | 90-3/4″ | 54-1/4″ | 13-1/2″ |
| **DHE-800A** | 720 | 750 | 58″ | 102-1/4″ | 54-1/4″ | 13-1/2″ |
| **DHE-1000A** | 900 | 950 | 58″ | 126-1/4″ | 54-1/4″ | 13-1/2″ |
| **DHE-1250A** | 900 | 1,250 | 64″ | 130-1/4″ | 60-1/4″ | 15″ |
| **DHE-1500A** | 900 | 1,500 | 70″ | 126-1/4″ | 66-1/4″ | 16″ |
| **DHE-2000A** | 900 | 2,000 | 82″ | 123-1/4″ | 78-1/4″ | 14″ |
| **DHE-2500A** | 900 | 2,500 | 82″ | 144-1/4″ | 78-1/4″ | 16-1/2″ |

| Model Number* | Water Connection | | Shipping Weight (lbs) |
|---|---|---|---|
| | Inlet Openings | Outlet Openings | |
| **Vertical Round Electric Storage Heater** | | | |
| **DVE-150A** | 1-1/2″ | 1-1/2″ | 650 |
| **DVE-200A** | 1-1/2″ | 1-1/2″ | 750 |
| **DVE-250A** | 1-1/2″ | 1-1/2″ | 1,165 |
| **DVE-300A** | 2″ | 2″ | 1,350 |
| **DVE-400A** | 2″ | 2″ | 1,590 |
| **DVE-500A** | 2″ | 2″ | 1,700 |
| **DVE-600A** | 2-1/2″ | 2-1/2″ | 2,010 |
| **DVE-800A** | 2-1/2″ | 2-1/2″ | 2,450 |
| **DVE-1000A** | 2-1/2″ | 2-1/2″ | 3,160 |
| **Vertical Square Electric Storage Heater** | | | |
| **DVE-1250A** | 3″ | 3″ | 3,560 |
| **DVE-1500A** | 3″ | 3″ | 4,120 |
| **DVE-2000A** | 3″ | 3″ | 4,350 |
| **DVE-2500A** | 3″ | 3″ | 5,750 |
| **Horizontal Square Electric Storage Heater** | | | |
| **DHE-150A** | 2″ | 2″ | 1,180 |
| **DHE-200A** | 2″ | 2″ | 1,370 |
| **DHE-250A** | 2″ | 2″ | 1,450 |
| **DHE-300A** | 2″ | 2″ | 1,530 |
| **DHE-400A** | 2″ | 2″ | 1,750 |
| **DHE-500A** | 2″ | 2″ | 1,860 |
| **DHE-600A** | 2-1/2″ | 2″ | 2,340 |
| **DHE-800A** | 2-1/2″ | 2″ | 2,850 |
| **DHE-1000A** | 2-1/2″ | 2″ | 3,040 |
| **DHE-1250A** | 3″ | 3″ | 3,750 |
| **DHE-1500A** | 3″ | 3″ | 4,340 |
| **DHE-2000A** | 3″ | 3″ | 4,580 |
| **DHE-2500A** | 3″ | 3″ | 6,060 |

# HEAVY-DUTY PREMIUM ELECTRIC DVE/DHE DURA-POWER™ *(CONTINUED)*

| kW Input | GPH 100°F Rise | Btu/hr Equivalent | Max. No. of Elements | No. of Control Steps | kW Per Element | No. of Contractors 240/480V |
|---|---|---|---|---|---|---|
| 15 | 62 | 51,180 | 1 | 1 | 15 | 2/1 |
| 18 | 74 | 61,416 | 1 | 1 | 18 | 2/1 |
| 30 | 123 | 102,360 | 2 | 1 | 15 | 2/1 |
| 36 | 148 | 122,832 | 2 | 1 | 18 | 4/2 |
| 45 | 185 | 153,540 | 3 | 1 | 15 | 3/2 |
| 54 | 221 | 184,248 | 3 | 1 | 18 | 6/2 |
| 60 | 246 | 204,720 | 4 | 2 | 15 | 12/6 |
| 72 | 295 | 245,664 | 4 | 2 | 18 | 8/4 |
| 90 | 369 | 307,080 | 5 | 2 | 18 | 6/3 |
| 108 | 443 | 368,496 | 6 | 2 | 18 | 12/4 |
| 120 | 492 | 409,440 | 8 | 3 | 15 | 8/4 |
| 135 | 554 | 460,620 | 9 | 3 | 15 | 9/6 |
| 144 | 590 | 491,328 | 8 | 3 | 18 | 16/8 |
| 162 | 664 | 552,744 | 9 | 3 | 18 | 18/6 |
| 180 | 738 | 614,160 | 10 | 4 | 18 | 20/10 |
| 216 | 886 | 736,992 | 12 | 4 | 18 | 24/8 |
| 234 | 959 | 798,408 | 13 | 5 | 18 | 26/13 |
| 252 | 1,033 | 859,824 | 14 | 5 | 18 | 28/14 |
| 270 | 1,107 | 921,240 | 15 | 5 | 18 | 30/10 |
| 288 | 1,181 | 982,656 | 16 | 6 | 18 | 32/16 |
| 306 | 1,255 | 1,044,072 | 17 | 6 | 18 | 34/17 |
| 324 | 1,328 | 1,105,488 | 18 | 6 | 18 | 36/12 |
| 342 | 1,402 | 1,166,904 | 19 | 7 | 18 | 38/19 |
| 360 | 1,476 | 1,228,320 | 20 | 7 | 18 | 40/20 |
| 378 | 1,550 | 1,289,736 | 21 | 7 | 18 | 42/14 |
| 396 | 1,624 | 1,351,152 | 22 | 8 | 18 | 44/22 |
| 414 | 1,697 | 1,412,568 | 23 | 8 | 18 | 46/23 |
| 432 | 1,771 | 1,473,984 | 24 | 8 | 18 | 48/16 |

Models with over 72kW will require an extended control box, which increases the height.
Please consult factory for orders over 72kW
Complete model number includes the desired kw at the end, minimum installation
Clearances required: 30″ from front, 12″ from top and 24″ from right side.
BACnet and Modbus connectivity available with the ICC Gateway device.

| kW Input | Suggested Modulating Control Steps 240/480V | Amperage Draw | | | | |
|---|---|---|---|---|---|---|
| | | Single Phase | | Three Phase | | |
| | | 208V | 240V | 208V | 240V | 480V |
| 15 | | 72 | 63 | 42 | 36 | 18 |
| 18 | | 87 | 75 | 50 | 44 | 22 |
| 30 | | 144 | 125 | 83 | 72 | 36 |
| 36 | 4/2 | 174 | 150 | 100 | 87 | 44 |
| 45 | 3/2 | 216 | 188 | 125 | 108 | 54 |
| 54 | 3/2 | 260 | 225 | 150 | 130 | 65 |
| 60 | 4/3 | 289 | 250 | 167 | 144 | 72 |
| 72 | 4/4 | Not Recommended | Not Recommended | 200 | 174 | 87 |
| 90 | 3/3 | | | 250 | 217 | 109 |
| 108 | 4/4 | | | 300 | 260 | 130 |
| 120 | 4/4 | | | 333 | 289 | 144 |
| 135 | 4/4 | | | 375 | 325 | 162 |
| 144 | 4/4 | | | 400 | 347 | 174 |
| 162 | 8/6 | | | 450 | 389 | 195 |
| 180 | 8/8 | | | 500 | 434 | 217 |
| 216 | 8/8 | | | 600 | 519 | 260 |
| 234 | 8/8 | | | 650 | 563 | 282 |
| 252 | 8/8 | | | 700 | 607 | 304 |
| 270 | 12/10 | | | 750 | 649 | 325 |
| 288 | 12/12 | | | 800 | 692 | 347 |
| 306 | 12/12 | | | 850 | 736 | 368 |
| 324 | 12/12 | | | 900 | 780 | 390 |
| 342 | 12/12 | | | 950 | 822 | 412 |
| 360 | 12/12 | | | 1,000 | 865 | 435 |
| 378 | 14/14 | | | 1,050 | 909 | 455 |
| 396 | 15/16 | | | 1,100 | 952 | 477 |
| 414 | 16/16 | | | 1,150 | 995 | 498 |
| 432 | 16/16 | | | 1,200 | 1,040 | 520 |

Complete model number includes the desired kW at the end (example: DVE-140-120)
Minimum installation clearances required: 30˝ from front, 12˝ from top and 24˝ from right side
150 gallon available in both tall (T) and short (S) models
BACnet and Modbus connectivity available with the ICC Gateway device

COMMERCIAL HEAT PUMP

# FULLY INTEGRATED HEAT PUMP



## Energy Saving & Environmentally Friendly

- Heat pump transfers heat from surrounding area into the tank
- Industry leading 4.2 COP
- Multiple operating modes maximize efficiency while meeting specific hot water needs
- Integrated, large capacity tank enables heat pump to operate more frequently than electric elements, saving money
- Meets standby loss requirements of U.S. Department of Energy and current edition of ASHRAE 118.1

## Commercial Performance

- First hour delivery of 150 GPH
- Electric heating element capacity of 12 kW (240Vac)
- Max. water temperature of 150° F. in Efficiency/ Hybrid modes and 180° F. in Electric mode
- Ambient room temperature operating range of 20° to 110° F.
- Dual evaporator fans maximize performance and provide room cooling
- Low operating sound measured at 59 dB (A)

## Ease of Operation

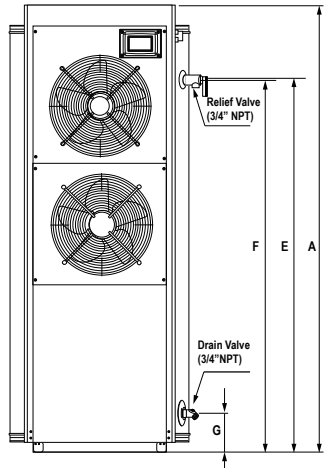
- Integrated design and pre-charged refrigeration system facilitates fast, easy installation
- Large touch screen LCD display allows for mode selection, provides run information and includes troubleshooting alerts and detail
- Three operating modes: Efficiency, Hybrid or Electric

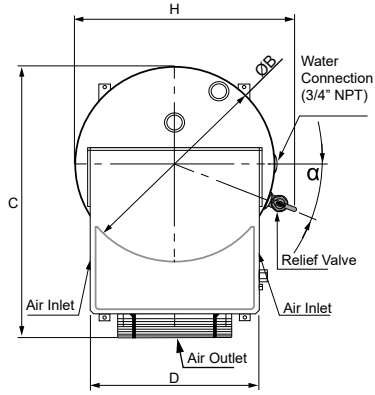
## Dependable & Long Lasting Design

- A. O. Smith-developed glass coated tank
- Tank rated at 160 PSI working pressure
- Commercial grade anode protects the tank and extends service life
- Electric elements have incoloy sheathing and provide excellent protection from oxidation and scaling

## 3-Year Limited Tank and 1-year Limited Parts/Compressor Warranty

- For complete warranty information, consult written warranty or go to hotwater.com




| Model Number | Gallon Capacity | COP | Number of Elements |
|---|---|---|---|
| CAHP-120 | 119 | 4.2 | 2 |

| Total Element Wattage (both elements @ 240V) | First Hour Delivery in Hybrid Mode (GPH) | Recovery in GPH at 100° Temperature Rise | Approx. Shipping Weight (lbs) |
|---|---|---|---|
| 12,000 | 150 | Efficency = 41<br>Hybrid = 90<br>Electric = 50 | 620 |

| Model Number | Dimensions | | | |
|---|---|---|---|---|
| | A | B | C | D |
| CAHP-120 | 69-11/16 | 28-1/32 | 39-11/64 | 23-5/8 |

| Dimensions | | | |
|---|---|---|---|
| E | F | G | H |
| 58-7/64 | 57-51/64 | 6-1/32 | 30-29/32 |

CIRCULATING WATER HEATER

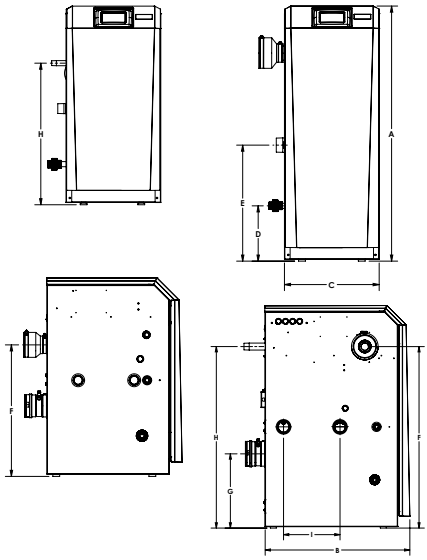
# XP HIGH EFFICIENCY WATER HEATERS



- Up to 96% Thermal Efficiency
- Fully Modulating with 5:1 Turndown
- Advanced Electronics with Large Touchscreen Display and Built-In Lead/Lag Sequencing
- Direct Vent Flexibility Up to 100 Feet
- Matches with Storage Tank for Storage Flexibility
- ASME Rated Relief Valve
- 160 lb. ASME Working Pressure
- Factory-Supplied Bronze Circulating Pump
- Adjustable Pump Delay
- 316L Stainless steel Heat Exchanger
- Meets the Requirements of South Coast Air Quality Management District in Southern California and the Requirements of Texas Commission on Environmental Qualities.
- 5-Year Heat Exchanger and 1-Year Parts Limited Warranty
  - For complete warranty information, consult written warranty or go to hotwater.com

| Recovery Capacities | | | | | |
|---|---|---|---|---|---|
| Model Number | BTU/HR Natural Gas Input | Water Flow | Temperature Rise | | |
| | | | 70 | 100 | 140 |
| **XWH-150** | 150,000 | GPH | 248 | 173 | 124 |
| **XWH-200** | 200,000 | GPH | 336 | 235 | 168 |
| **XWH-285** | 285,000 | GPH | 474 | 332 | 237 |
| **XWH-400** | 400,000 | GPH | 665 | 465 | 332 |
| **XWH-500** | 500,000 | GPH | 831 | 582 | 416 |
| **XWH-600** | 600,000 | GPH | 997 | 698 | 499 |
| **XWH-700** | 700,000 | GPH | 1,164 | 815 | 582 |
| **XWH-800** | 800,000 | GPH | 1,330 | 931 | 665 |

150 - 200 285 - 800




| Model Number | Dimensions in Inches | | | | |
|---|---|---|---|---|---|
| | A | B | C | D | E |
| XWH-285 | 42 | 20 | 15-1/2 | 9-1/4 | 19-1/4 |
| XWH-400 | 42 | 27-1/4 | 15-1/2 | 9 | 19 |
| XWH-500 | 42 | 31-3/4 | 15-1/2 | 9-1/4 | 19 |
| XWH-600 | 42 | 46-1/2 | 15-1/2 | 9-1/4 | 19-1/4 |
| XWH-700 | 42 | 40-1/2 | 15-1/2 | 9-1/4 | 19-1/4 |
| XWH-800 | 42 | 45-1/2 | 15-1/2 | 9-1/4 | 19-1/4 |

| Model Number | Dimensions in Inches | | | |
|---|---|---|---|---|
| | F | G | H | I |
| XWH-285 | 34-1/4 | 14 | 31-1/2 | 3-3/4 |
| XWH-400 | 34-1/4 | 14 | 34-1/4 | 10-3/4 |
| XWH-500 | 32-3/4 | 14 | 36-1/4 | 10-3/4 |
| XWH-600 | 36-1/2 | 14 | 33-1/4 | 10-3/4 |
| XWH-700 | 36-1/2 | 14 | 33-1/4 | 13-3/4 |
| XWH-800 | 36-1/2 | 14 | 33-1/4 | 13-3/4 |

| Model Number | Dimensions in Inches | | | |
|---|---|---|---|---|
| | A | B | C | D |
| XWH-150 | 32-3/4 | 18-1/4 | 15-1/2 | 6-3/4 |
| XWH-200 | 32-3/4 | 22-1/4 | 15-1/2 | 6-3/4 |

| Model Number | Dimensions in Inches | | | | |
|---|---|---|---|---|---|
| | E | F | G | H | I |
| XWH-150 | 15-3/4 | 21-1/2 | 11-1/2 | 23-1/4 | 3-3/4 |
| XWH-200 | 15-3/4 | 21-1/2 | 11-1/2 | 23-1/4 | 9-1/4 |

CIRCULATING WATER HEATER

# XP PLUS HIGH EFFICIENCY WATER HEATERS



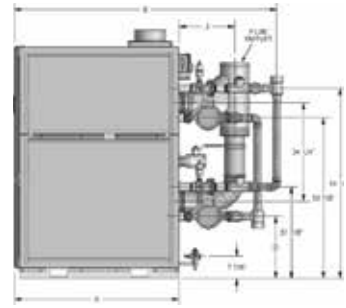

XP PLUS

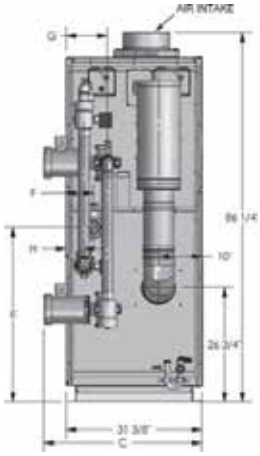
ASME

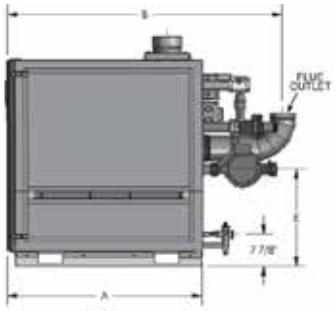
CRN

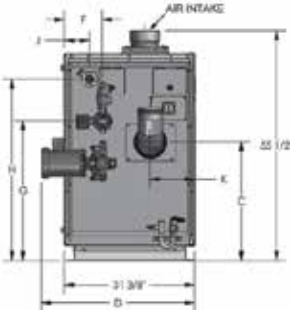
- Advanced Color Touchscreen Display
- Operating Control Featuring Lead/Lag Sequencing
- 98% Thermal Efficiency
- 1.25 to 4.0 Million BTU/Hr
- Firing Rate Modulation to 5:1
- Less Than 20 PPM NOx
- Direct Vent Flexibility Up to 150 Ft.
- 5-Year Heat Exchanger and 1-Year Parts Limited Warranty
  - For complete warranty information, consult written warranty or go to hotwater.com

| Recovery Capacities | | | |
|---|---|---|---|
| Model Number | BTU/HR Natural Gas Input | Water Flow | Temperature Rise °F |
| | | | 100 |
| PWH 1250NP | 1,250,000 | GPH | 1,065 |
| PWH 1500NP | 1,500,000 | GPH | 1,497 |
| PWH 2000NP | 2,000,000 | GPH | 2,317 |
| PWH 3000NP | 3,000,000 | GPH | 3,000 |
| PWH 4000NP | 4,000,000 | GPH | 3,956 |






| Models | PWH-1000 | | PWH-1300 | | PWH-1700 | |
|---|---|---|---|---|---|---|
| **Dimensions** | **Inches** | **mm** | **Inches** | **mm** | **Inches** | **mm** |
| **Flue Outlet Diameter** | 6 | 152 | 8 | 152 | 8 | 203 |
| **Air Intake Diameter** | 6 | 152 | 6 | 152 | 8 | 203 |
| **Wat Inlet** | 2 inch NPT | | | | 2-1/2 inch NPT | |
| **Water Outlet** | 2 inch NPT | | | | 2-1/2 inch NPT | |
| **Gas Inlet** | 2 inch NPT | | | | 2 inch NPT | |
| **A** | 47 | 1199 | 49 | 1245 | 57 | 1448 |
| **B** | 67 | 1702 | 68 | 1727 | 76 | 1930 |
| **C** | 29 | 737 | 29 | 737 | 29 | 737 |
| **D** | 37 | 940 | 38 | 965 | 37 | 940 |
| **E** | 23 | 584 | 23 | 584 | 24 | 610 |
| **F** | 9 | 29 | 9 | 229 | 9 | 229 |
| **G** | 34 | 864 | 34 | 864 | 34 | 864 |
| **H** | 44 | 1118 | 45 | 1143 | 45 | 1143 |
| **J** | 6 | 152 | 6 | 152 | 6 | 152 |
| **K** | 11 | 279 | 11 | 279 | 11 | 279 |
| **L** | 12 | 305 | 11 | 279 | 12 | 305 |

COMMERCIAL WATER HEATER

# BURKAY® GENESIS® DOMESTIC WATER HEATER

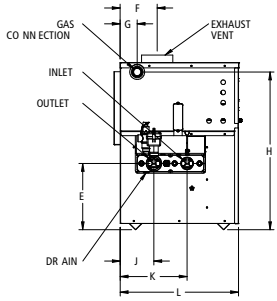


Burkay GENESIS®

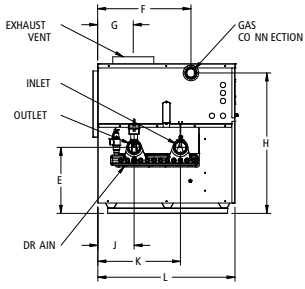
- 85% Thermal Efficiency
- Electronic Control with Precise Temperature Management
- Stage Gas Firing System - Prevents Short Cycling and Ensures Smooth Operation, Saves Fuel and Extends Product Life
- Low NOx Operation
- Copper Finned-Tube Heat Exchanger
- Space-Saving Design: Optional Stack Rack Allows One Unit to be Stacked on Top of Another, Doubling Output within the Footprint of a Single Unit
- Meets ASHRAE/IES 90.1-2004
- Multiple Venting Options
- Factory Start-Up Included
- 5-Year Heat Exchanger and 1-Year Parts Limited Warranty
  - For complete warranty information, consult written warranty or go to hotwater.com

| Model Number | Input MBH | Recovery Capacity GPH @ 100°F Rise | Approx. Shipping Weight (lbs) |
|---|---|---|---|
| **GWH-400N** | 399 | 412 | 454 |
| **GWH-500N** | 500 | 515 | 467 |
| **GWH-650N** | 650 | 670 | 551 |
| **GWH-750N** | 750 | 773 | 611 |
| **GWH-1000N** | 990 | 1,020 | 843 |
| **GWH-1250N** | 1,260 | 1,298 | 939 |
| **GWH-1450N** | 1,440 | 1,484 | 1,035 |
| **GWH-1800N** | 1,800 | 1,855 | 1,168 |
| **GWH-2100N** | 2,070 | 2,133 | 1,285 |

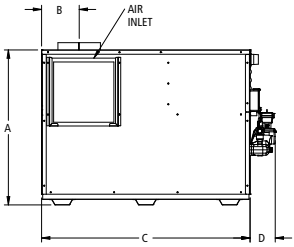
When ordering propane change "N" to "P" in the model number (example GWH-750P).




GWH-400 THRU GWH-750




GWH-1000 THRU GWH-2100




SIDE VIEW

| Model Number | Dimensions in Inches | | | | | |
|---|---|---|---|---|---|---|
| | A | B | C | D | E | F |
| **GWH-400N** | 31-1/2 | 7 | 37-5/8 | 8-7/8 | 12-1/2 | 7 |
| **GWH-500N** | 31-1/2 | 7 | 45-3/8 | 8-7/8 | 12-1/2 | 7 |
| **GWH-650N** | 31-1/2 | 8-1/2 | 56-3/4 | 8-7/8 | 12-1/2 | 8-1/2 |
| **GWH-750N** | 31-1/2 | 8-1/2 | 64 | 8-7/8 | 12-1/2 | 8-1/2 |
| **GWH-1000N** | 36 | 8-3/4 | 48-1/2 | 5-7/8 | 15-7/8 | 22-1/2 |
| **GWH-1250N** | 36 | 9-3/4 | 58-3/4 | 5-7/8 | 15-7/8 | 22-1/2 |
| **GWH-1450N** | 36 | 10-1/2 | 68-7/8 | 5-7/8 | 15-7/8 | 22-1/2 |
| **GWH-1800N** | 36 | 11 | 82-3/8 | 5-7/8 | 15-7/8 | 22-1/2 |
| **GWH-2100N** | 36 | 11 | 92-5/8 | 5-7/8 | 15-7/8 | 22-1/2 |

| Model Number | Dimensions in Inches | | | | |
|---|---|---|---|---|---|
| | G | H | J | K | L |
| **GWH-400N** | 3-1/4 | 29-3/4 | 6-3/8 | 12-5/8 | 22-1/4 |
| **GWH-500N** | 3-1/4 | 29-3/4 | 6-3/8 | 12-5/8 | 22-1/4 |
| **GWH-650N** | 3-1/4 | 29-3/4 | 6-3/8 | 12-5/8 | 22-1/4 |
| **GWH-750N** | 3-1/4 | 29-3/4 | 6-3/8 | 12-5/8 | 22-1/4 |
| **GWH-1000N** | 8-1/2 | 33-3/4 | 8-3/4 | 19-7/8 | 33 |
| **GWH-1250N** | 9-3/4 | 33-3/4 | 8-3/4 | 19-7/8 | 33 |
| **GWH-1450N** | 10-1/4 | 33-3/4 | 8-3/4 | 19-7/8 | 33 |
| **GWH-1800N** | 10-7/8 | 33-3/4 | 8-3/4 | 19-7/8 | 33 |
| **GWH-2100N** | 10-7/8 | 33-3/4 | 8-3/4 | 19-7/8 | 33 |

When ordering propane change "N" to "P" in the model number (example GWH-750P).

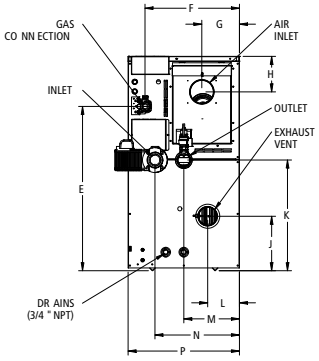
# COMMERCIAL WATER HEATER
# VARIABLE FIRE™ HIGH-EFFICIENCY WATER HEATERS



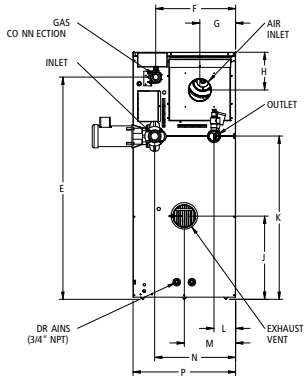
- Up to 85% Thermal Efficiency
- Advanced Modulating Control with Venturi-Mixing Gas/Air Ratio System
- Small Footprints, Zero Clearance to Combustibles on Sides of Unit
- Category II and IV Listed: Requires the use of AL29-4C, a Vent Material That Resists the Effects of Corrosive Condensates
- Complies with SCAQMD Rule 1146.2 and Other Air Quality Management Districts with Similar Requirements for Low NOx emissions
- Capable of Firing from 100% to 25% (or a 4:1 Turndown Ratio) of the Rated Input, Based on the Current System Demand
- Meets Thermal Efficiency and Standby Loss Requirements of the U.S. Department of Energy and Current Edition of ASHRAE/IES 90.1
- Professional Start-Up Included - Required for Activating Warranty and Assuring Maximum Operating Performance
- 5-Year Heat Exchanger and 1-Year Parts Limited Warranty
  - For complete warranty information, consult written warranty or go to hotwater.com

| Model Number | BTU/Hr Input | Recovery Capacity GPH @ 100°F Rise | Approx. Shipping Weight (lbs) |
|---|---|---|---|
| **VWH0500N** | 500,001 | 515 | 573 |
| **VWH0750N** | 750,000 | 773 | 622 |
| **VWH1000N** | 999,999 | 1030 | 662 |
| **VWH1500N** | 1,500,000 | 1545 | 1,118 |
| **VWH2000N** | 2,000,000 | 2061 | 1,187 |

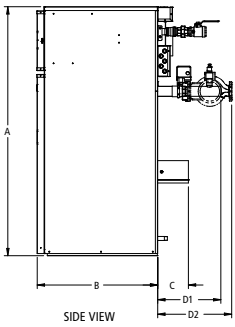
Change "N" to "P" when ordering propane (LP) gas (Example: VWH-750-P).




REAR VIEW
(VWH0500N-VWH1000N)




REAR VIEW
(VWH1500N-VWH2000N)




SIDE VIEW

*Pump shipped loose

| Model Number | Dimensions in Inches | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | A | B | C | D1 | D2 | E | F | G |
| VWH-500N | 44-1/2 | 30-3/8 | 6 | 12-1/2 | 15-1/8 | 34-1/8 | 19-5/8 | 7-3/4 |
| VWH-750N | 52-1/8 | 30-3/8 | 6 | 12-1/2 | 15-1/8 | 41-3/4 | 19-5/8 | 7-3/4 |
| VWH-1000N | 59-1/4 | 30-3/8 | 6 | 12-1/2 | 15-1/8 | 48-7/8 | 19-5/8 | 7-3/4 |
| VWH-1500N | 65-3/8 | 31-5/8 | 8 | 16-1/2 | 19-3/8 | 58-3/4 | 21-1/8 | 9-1/2 |
| VWH-2000N | 76-5/8 | 31-5/8 | 8 | 16-1/2 | 19-3/8 | 70 | 21-1/8 | 9-1/2 |

| Model Number | Dimensions in Inches | | | | | | |
|---|---|---|---|---|---|---|---|
| | H | J | K | L | M | N | P |
| VWH-500N | 7-3/8 | 11-3/8 | 23 | 6-1/2 | 11-1/2 | 17-1/2 | 23-1/8 |
| VWH-750N | 7-3/8 | 11-3/8 | 30-1/2 | 6-1/2 | 11-1/2 | 17-1/2 | 23-1/8 |
| VWH-1000N | 7-3/8 | 11-3/8 | 37-5/8 | 6-1/2 | 11-1/2 | 17-1/2 | 23-1/8 |
| VWH-1500N | 9-1/2 | 22 | 43-1/4 | 5-3/4 | 13-1/2 | 21-3/8 | 27-1/8 |
| VWH-2000N | 9-1/2 | 27-3/8 | 54-3/8 | 5-3/4 | 13-1/2 | 21-3/8 | 27-1/8 |

Authorized start-up service included; required to activate warranty.(Continental U.S. Only).
Change "N" to "P" when ordering propane (LP) gas (Example: VWH-750-P).

COMMERCIAL WATER HEATER

# BURKAY® ENERGY SAVER COPPER HEAT EXCHANGER



## All Non-Ferrous Waterways

- Rustproof because water comes in contact with nothing but copper, brass or bronze
- Copper transfers heat eight times faster than ferrous metals yet offer remarkable structural strength without excessive weight
- Free from the effects of thermal shock

## Efficiency Copper Coil Combustion Chamber

- Continuous coils of tightly wound copper tubing form a unique combustion chamber
- Water circulating thru the coils, around the flame, captures radiant heat which may otherwise be lost

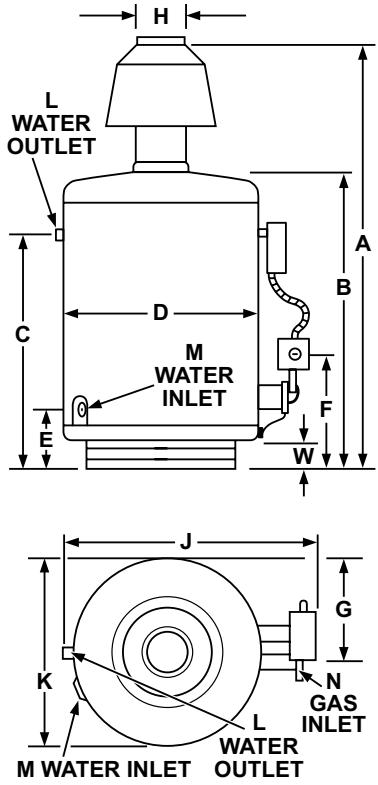
## High Efficiency Stainless Steel Burner

- Developed especially for A. O. Smith water heaters using the very latest burner principles

## Forced Water Circulation Improves System Efficiency

- Water moving at 2 to 4 feet per second helps to prevent lime buildup and also scrubs extra heat from the copper coil combustion chamber

| Model | Input Rating BTU/Hr. Natural & Propane Gas | Temperature Rise-100°F Gallons Per Hour |
|---|---|---|
| **HW-120M** | 120,000 | 120 |
| **HW-160M** | 160,000 | 154 |
| **HW-200M** | 199,000 | 195 |
| **HW-225M** | 225,00 Nat. Gas Only | 217 |




| Models | HWH-120 | HWH-160 | HWH-200 | HWH-225 |
|---|---|---|---|---|
| Dimensions in Inches | | | | |
| A | 49-3/8 | 50-1/8 | 53-1/4 | 60 |
| B | 30-3/8 | 30-3/8 | 33-1/8 | 33-1/8 |
| C | 23-5/8 | 23-5/8 | 27-1/8 | 27-1/8 |
| D | 20-3/4 | 20-3/4 | 20-3/4 | 20-3/4 |
| E | 5-1/2 | 5-1/2 | 5-1/2 | 5-1/2 |
| F | 10 | 10 | 10 | 10 |
| G | 11-13/16 | 11-13/16 | 11-13/16 | 11-13/16 |
| H | 6 | 7 | 7 | 7 |
| J | 26-11/16 | 26-11/16 | 26-11/16 | 26-11/16 |
| K | 20-3/4 | 20-3/4 | 20-3/4 | 20-3/4 |
| L | 1-1/4 NPT | 1-1/4 NPT | 1-1/4 NPT | 1-1/4 NPT |
| M | 1 NPT | 1 NPT | 1 NPT | 1 NPT |
| N | 1/2 NPT | 1/2 NPT | 1/2 NPT | 1/2 NPT |
| W | 1-3/4 | 1-3/4 | 1-3/4 | 1-3/4 |
| Approx. Shipping Weight | 120 lbs. | 155 lbs. | 165 lbs. | 175 lbs. |

# BURKAY® HWH GAS DOMESTIC WATER HEATERS & BOILERS



## All Non-Ferrous Waterways

- All castings are made of bronze or brass
- All water tubes are made from copper
- Brazed joints or flare union construction make the boiler immune to the effects of thermal shock and thermal cycling
- A great boiler for domestic hot water supply

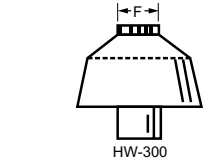
## Efficiency Copper Coil Combustion Chamber

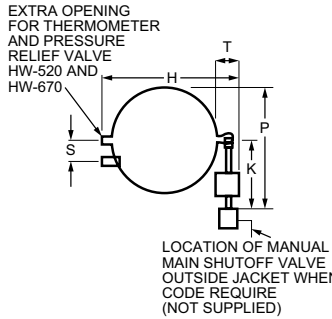
- The combustion chamber is a heat exchanger formed from a two passage coil of tightly wound continuous copper tube
- Water circulating through this coil surrounds the main burner and captures the radiant heat
- A wrap of insulation on the outside of the coil retains the heat captured by the circulating water

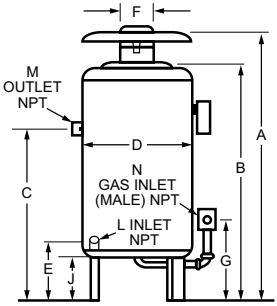
MEETS ASHRAE/IESNA 90.1 CURRENT EDITION

AHRI CERTIFIED® www.ahridirectory.org

| Model Number | Input Rating BTU/HR Natural & Propane (LP) Gas | Recovery Capacity GPH @ 100°F Rise | Approx. Shipping Weight (lbs) |
|---|---|---|---|
| **HW-300** | 300,000 | 298 | 255 |
| **HW-399** | 399,000 | 392 | 301 |
| **HW-420** | 420,000 | 417 | 301 |
| **HW-520** | 520,000 | 516 | 381 |
| **HW-670 Nat.** | 660,000 | 646 | 381 |
| **HW-670 Prop** | 670,000 | 656 | 381 |




| Dimensions in Inches | | Models | | | | |
|---|---|---|---|---|---|---|
| | | HW-300 | HW-399 | HW-420 | HW-520 | HW-670 |
| A | Overall height | 65 | 57-1/8 | 57-1/8 | 68-5/16 | 68-5/16 |
| B | Height to Top of Jacket | 43-1/4 | 45-1/8 | 45-1/8 | 56-1/4 | 56-1/4 |
| C | Floor to Center Line Water Outlet | 36 | 38-3/4 | 38-3/4 | 46 | 46 |
| D | Diameter of Jacket | 25-1/4 | 27 | 27 | 27 | 27 |
| E | Floor to Center Line Water Inlet | 12 | 12 | 12 | 12 | 12 |
| F | Draft Diverter Outlet Diameter | 8 | 10 | 10 | 10 | 12 |
| G | Floor to Center Line Gas Inlet | 16-1/2 | 16-3/4 | 16-3/4 | 8 | 8 |
| H | Overall Depth | 29-5/8 | 31-1/2 | 31-1/2 | 36-1/2 | 36-1/2 |
| J | Support Height | 9 | 9 | 9 | 9 | 9 |
| K | Width of Control String (approx.) | 14 | 14 | 14 | 11 | 11 |
| L | Pipe Size of Water Inlet (NPT) | 1-1/4 | 1-1/2 | 1-1/2 | 2 | 2 |
| M | Pipe Size of Water Outlet (NPT) | 1-1/4 | 1-1/2 | 1-1/2 | 2 | 2 |
| N | Pipe Size of Gas Inlet (NPT) | 3/4 | 3/4 | 1 | 1 | 1 |
| P | Control String Plus 1/2 Jacket Diameter (approx.) | 26-5/8 | 27-1/2 | 27-1/2 | 24-1/2 | 24-1/2 |
| S | Horizontal Length between Water Inlet & Outlet | 5-3/8 | 5-1/2 | 5-1/2 | 5-3/4 | 5-3/4 |
| T | Control String from Jacket | 5 | 5 | 5 | 7 | 7 |

HOT WATER GENERATOR

# STEAM OR BOILER HOT WATER HWG GENERATOR SYSTEMS



U
OPTIONAL

HLW

## All HWG Systems are Insulated and Jacketed

## Integral Circulator Pump

## Both Steam and Boiler Water Units are Custom Built to Meet Your Specifications

## Optional Steam Trim

- Includes electric operated valve
- Pressure gauge with siphon, vacuum breaker and air vent

## Optional Boiler Trim

- Electric high limit safety system
- Pressure gauge with siphon, vacuum breaker and air vent
- Boiler water temperature gauge

## ASME Rated

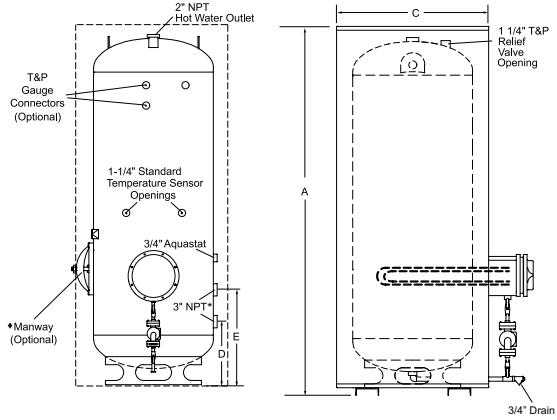
## Cathodic Protection

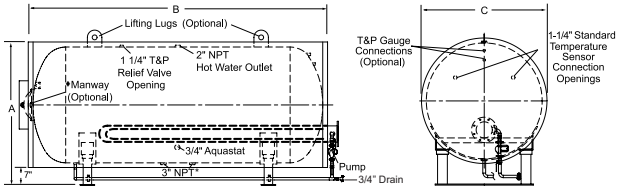
## Custom Sizes Available up to 5,000 Gallons

## 5-Year Limited Tank Warranty and 1-Year Limited Coil Warranty

- For complete warranty information, consult written warranty or go to hotwater.com

Reference specification sheet and submittal, for additional information on coil sizes and recovery rates.




***2" on 120; 2-1/2" on 200 Gal.**

| Model Number | Height | Length | Width | Gallon |
|---|---|---|---|---|
| **HWGV-120A** | 63 | 28 | 10 | 120 |
| **HWGV-200A** | 77.25 | 32 | 11.25 | 200 |
| **HWGV-250A** | 91 | 34 | 18 | 257 |
| **HWGV-318A** | 80 | 40 | 19.5 | 318 |
| **HWGV-400A** | 80 | 46 | 21 | 432 |
| **HWGV-500A** | 92 | 46 | 21 | 504 |
| **HWGV-650A** | 92 | 52 | 23.5 | 650 |
| **HWGV-750A** | 104 | 52 | 23.5 | 752 |
| **HWGV-1000A** | 128 | 52 | 23.5 | 940 |

| Model Number | Height | Length | Width | Gallon |
|---|---|---|---|---|
| **HWGH-250A** | 41 | 87 | 34 | 250 |
| **HWGH-300A** | 47 | 76 | 40 | 300 |
| **HWGH-400A** | 53 | 76 | 46 | 400 |
| **HWGH-500A** | 53 | 88 | 46 | 500 |
| **HWGH-600A** | 59 | 88 | 52 | 600 |
| **HWGH-700A** | 59 | 100 | 52 | 700 |
| **HWGH-1000A** | 59 | 124 | 52 | 1000 |

# STANDARD JACKETED STORAGE TANKS



HLW ON SELECT MODELS

## Glasslined Tank

- Alkaline borosilicate composition permanently fused to steel by firing at a temperature of 1600°F, providing years of corrosion protection and dependable use

## Ideal for Use with Gas Fired Copper Heat Exchanger Equipment for Potable Water at Temperatures Up to 180°F

## Threaded Openings

- All tanks furnished with threaded openings for thermometer, relief valve, 2" recirculation lines, tank stat, and drain valve

## ASME Construction on Select Models.

- 160 psi standard working pressure on all models

## Anodic Protection

## TJ-80S, TJ-80A, TJV-120M and TJV-120A

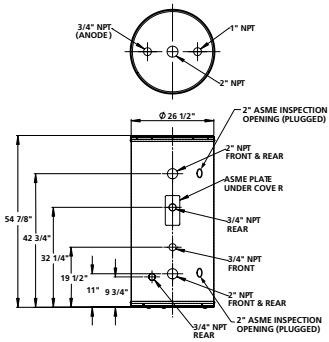
- Fits through 30" door
- Magnesium anode for anti-corrosion protection

## Meets R12.5 Minimum Thermal Insulation Requirements of the U.S. Department of Energy and Current Edition of ASHRAE/IES 90.1

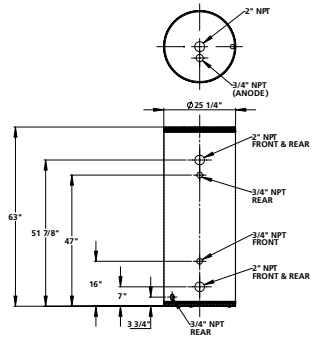
## 5-Year Heat Exchanger and 1-Year Parts Limited Warranty

- For complete warranty information, consult written warranty or go to hotwater.com

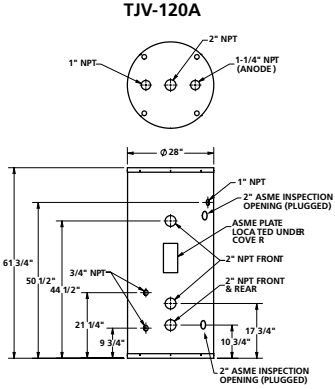
## TJ-80A



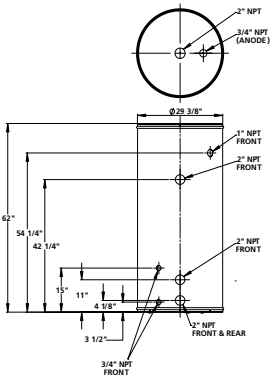

## TJ-80S



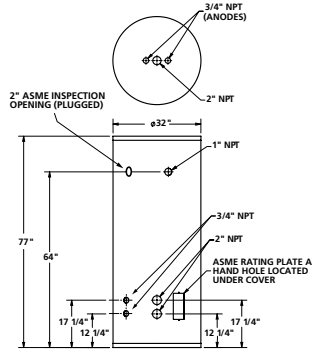

## TJV-120A




## TJV-120M




## TJV-200M




| Model Number | Gallon Capacity | Overall Length (Inches) | Diameter (Inches) | Approx. Shipping Weight (lbs) |
|---|---|---|---|---|
| TJ80S Jacketed-Vertical Only | 80 | 63 | 25-1/4 | 236 |
| TJV120M Jacketed-Vertical Only | 119 | 62 | 29-3/8 | 320 |
| TJ80A Jacketed-Vertical Only | 80 | 54-7/8 | 26-1/2 | 369 |
| TJV-120A | 119 | 61-3/4 | 28 | 411 |
| TJV-200M (ASME) | 175 | 77 | 32 | 560 |

# STANDARD-LINE FACTORY JACKETED & INSULATED STORAGE TANKS



## Standard Sizes

- From 140 to 2,500 gallons
- All stock tanks glasslined

## Horizontal or Vertical Mounting

## High-Density, Fiberglass Insulated Jackets

## Meet R12.5 Minimum Thermal Insulation Requirements of the U.S. Department of Energy and Current Edition of ASHRAE/IES 90.1

## ASME Construction

- Available in 125 and 150 working pressures; 125 standard.

## Anodic Protection

## Accessories

- Tanks will be supplied with the fittings located as indicated on the drawings

## Cabinet

- Heavy gauge steel with high quality powder coat paint provides additional insulating qualities for greater energy savings

## 5-Year Limited Tank Warranty

- For complete warranty information, consult written warranty or go to hotwater.com

| Model Number | A | B | C | D | E | F | G | H | "I" ASME Inspection Openings |
|---|---|---|---|---|---|---|---|---|---|
| TJV-140A | 87 | 30 | 21 1/2 | 51 | 8 | 1-1/2 | 2-1/2 | 6-3/8 | 2" |
| TJV-200A | 83 | 36 | 22 | 45 | 10 | 1-1/2 | 2-1/2 | 7-3/4 | 2" |
| TJV-250A | 96 | 36 | 22 | 58 | 10 | 1-1/2 | 2-1/2 | 7-3/4 | 2" |
| TJV-350A | 97 | 42 | 24 1/2 | 54 | 14 | 1-1/2 | 2-1/2 | 9-1/2 | 2" |
| TJV-400A | 105 | 42 | 24 1/2 | 61 | 14 | 1-1/2 | 2-1/2 | 9-1/2 | 2" |

**VERTICAL ROUND JACKETED ASME**

| Model Number | A | B | C | D | Gallons |
|---|---|---|---|---|---|
| TJVT-500A | 91 | 46 | 20.875 | 2" | 500 |
| TJV-500A | 77 | 52 | 22.875 | 2" | 500 |
| TJV-600A | 88 | 52 | 22.875 | 2" | 600 |
| TJV-700A | 97 | 52 | 22.875 | 2" | 700 |
| TJV-750A | 100 | 52 | 22.875 | 2" | 750 |
| TJV-1000A | 124 | 52 | 22.875 | 2" | 1000 |

**VERTICAL SQUARE JACKETED ASME**

| Model Number | A | B | C | D | Gallons |
|---|---|---|---|---|---|
| TJV-1250A | 133 | 60 | 24.375 | 3" | 1,250 |
| TJV-1500A | 129 | 66 | 25.875 | 3" | 1,500 |
| TJV-2000A | 126 | 78 | 28.375 | 3" | 2,000 |
| TJV-2500A | 146.5 | 78 | 28.375 | 3" | 2,500 |

The manhole is standard on all cement and epoxy lined tanks.

**HORIZONTAL ROUND JACKETED ASME TANKS**

| Model Number | A | B | Diameter | Gallons |
|---|---|---|---|---|
| TJH-250A | 41 | 87 | 34 | 250 |
| TJH-300A | 47 | 76 | 40 | 300 |
| TJH-400A | 53 | 76 | 46 | 400 |
| TJHT-500A | 53 | 87 | 46 | 500 |
| | | | | |
| TJH-500A | 59 | 77 | 52 | 500 |
| TJH-600A | 59 | 88 | 52 | 600 |
| TJH-700A | 59 | 97 | 52 | 700 |
| TJH-750A | 59 | 100 | 52 | 750 |
| TJH-1000A | 59 | 124 | 52 | 1000 |

**HORIZONTAL SQUARE JACKETED ASME TANKS**

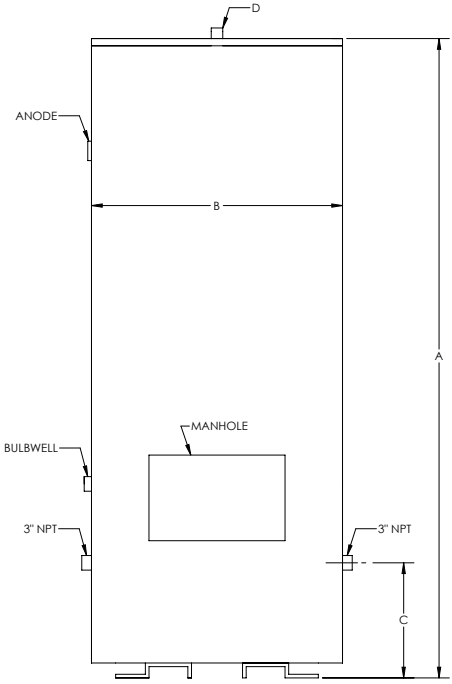
| Model Number | A | B | Depth | Gallons |
|---|---|---|---|---|
| TJH-1250A | 68.5 | 134 | 60.25 | 1,250 |
| TJH-1500A | 74.5 | 127 | 66.25 | 1,500 |
| TJH-2000A | 86.5 | 127 | 78.25 | 2,000 |
| TJH-2500A | 86.5 | 144 | 78.25 | 2,500 |

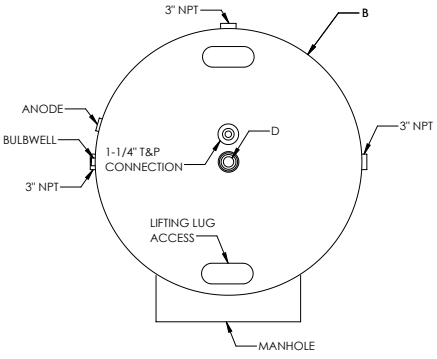
For Cement or Epoxy linings Order "HD" tanks with jackets and insulation.

# STANDARD-LINE FACTORY JACKETED & INSULATED STORAGE TANKS

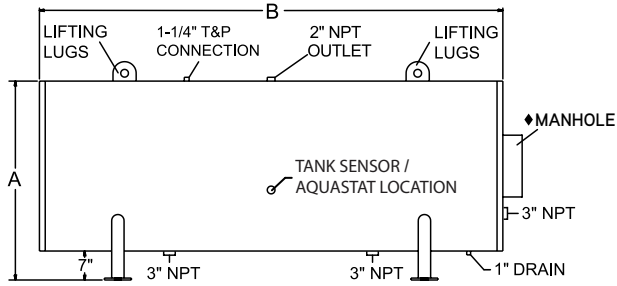
*(CONTINUED)*

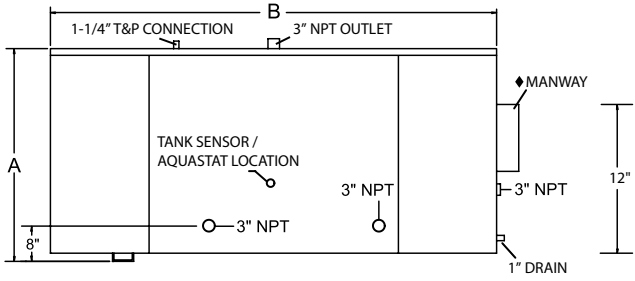
**VERTICAL ROUND JACKETED ASME**



## HORIZONTAL ROUND JACKETED ASME



COMMERCIAL STORAGE TANKS

# UNINSULATED STANDARD STOCK BARE STORAGE TANKS



Glasslined per ASME, HLW Procedures

Horizontal or Vertical Mounting

High-Density, Bare Steel Tanks

ASME Construction

Magnesium Anodes Protect Against Corrosion.

5-Year Limited Tank Warranty

- For complete warranty information, consult written warranty or go to hotwater.com

HLW

| Model Number | Gallon Capacity | Overall Dimensions Inches | A | B | C | D | E |
|---|---|---|---|---|---|---|---|
| **T-80 STD** | 80 | 20 x 62-1/8 | 20 | 61-1/2 | 2 | – | 7 |
| **T-120 STD** | 119 | 24-1/4 x 65 | 24-1/4 | 64-3/8 | 2-1/2 | – | 7 |
| **T-200 STD** | 200 | 30 x 72 | 30 | 70-3/4 | 2-1/2 | 10 | 13 |
| **T-350 STD** | 350 | 36 x 88 | 36 | 86 | 2-1/2 | 14 | 16 |
| **T-140 ASME** | 140 | 24 x 76-1/4 | 24 | 75 | 2-1/2 | 8 | 12 |
| **T-200 ASME** | 200 | 30 x 72 | 30 | 70-3/4 | 2-1/2 | 10 | 13 |
| **T-250 ASME** | 250 | 30 x 84 | 30 | 84 | 2-1/2 | 10 | 13-1/4 |
| **T-350 ASME** | 350 | 36 x 88 | 36 | 86 | 2-1/2 | 14 | 16 |
| **T-400 ASME** | 400 | 36 x 97 | 36 | 96 | 2-1/2 | 14 | 16 |

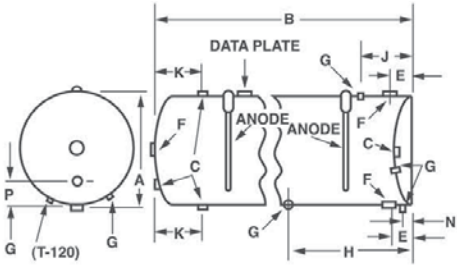



FIGURE 1 -T-80, T-120
NOTE:T-120 SHOWN.

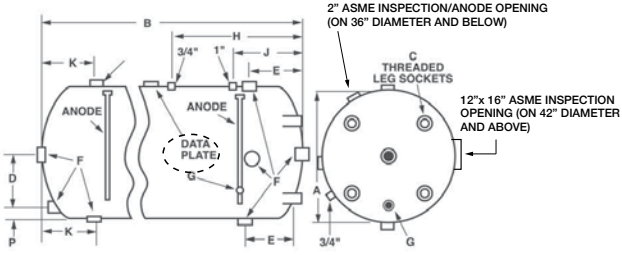



FIGURE 2 - T-140 THRU T-1000A

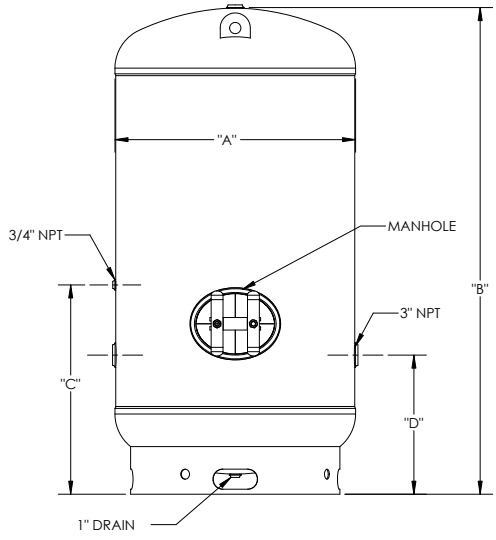
| Model Number | F | G | H | J | K | N | P | Approx. Shipping Weight |
|---|---|---|---|---|---|---|---|---|
| **T-80 STD** | 2 | 3/4 | 46-1/4 | 16 | 3-1/2 | 3-1/4 | 4 | 170 |
| **T-120 STD** | 2-1/2 | 3/4 | 34-1/2 | 15-1/2 | 10-1/2 | 3-1/2 | 4-1/8 | 287 |
| **T-200 STD** | 2-1/2 | 3/4 | 28-1/2 | 19-1/2 | 13 | – | 4 | 460 |
| **T-350 STD** | 2-1/2 | 3/4 | 31-1/2 | 20-1/4 | 16 | – | 4 | 670 |
| **T-140 ASME** | 2-1/2 | 3/4 | 27-1/2 | 18-1/2 | 12 | – | 4 | 400 |
| **T-200 ASME** | 2-1/2 | 3/4 | 28-1/2 | 19-1/2 | 13 | – | 4 | 460 |
| **T-250 ASME** | 2-1/2 | 3/4 | 28-1/2 | 19-1/2 | 13 | – | 4 | 505 |
| **T-350 ASME** | 2-1/2 | 3/4 | 31-1/2 | 20-1/4 | 16 | – | 4 | 670 |
| **T-400 ASME** | 2-1/2 | 3/4 | 31-1/2 | 20-1/4 | 16 | – | 4 | 775 |

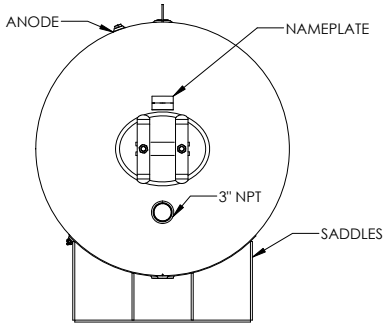
Working pressure for T models 80 - 400 is 160 PSI

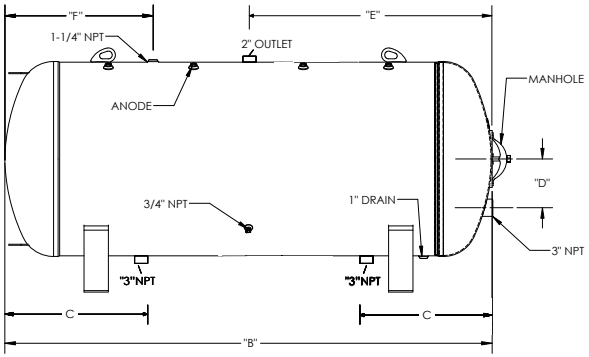
# UNINSULATED STANDARD STOCK BARE STORAGE TANKS *(CONTINUED)*

| Model Number | Gallons | A | B | C | D | Weight (LBS) - Glass 125 psi |
|---|---|---|---|---|---|---|
| **TVN-500A** | 500 | 42 | 87 | 36.875 | 20.875 | 763 |
| **TV-500A** | 500 | 48 | 77 | 34.875 | 18.875 | 1062 |
| **TV-600A** | 600 | 48 | 88 | 36.875 | 20.875 | 1193 |
| **TV-700A** | 700 | 48 | 97 | 36.875 | 20.875 | 1301 |
| **TV-750A** | 750 | 48 | 100 | 36.875 | 20.875 | 1337 |
| **TV-1000A** | 1000 | 48 | 124 | 36.875 | 20.875 | 1623 |
| **TV-1250A** | 1250 | 54 | 128 | 38.375 | 22.375 | 2100 |
| **TV-1500A** | 1500 | 60 | 124 | 39.875 | 23.875 | 2709 |
| **TV-1750A** | 1750 | 60 | 148 | 39.875 | 23.875 | 3156 |
| **TV-2000A** | 2000 | 72 | 121 | 42.375 | 26.375 | 3397 |

| Model Number | Gallons | A | B | C | D | E | F | Weight (LBS) - Glass 125 psi |
|---|---|---|---|---|---|---|---|---|
| **THN-500A** | 500 | 42 | 83 | 47.5 | 12 | 39.5 | 27.25 | 763 |
| **TH-500A** | 500 | 48 | 73 | 40.5 | 12 | 36.5 | 28.75 | 1062 |
| **TH-600A** | 600 | 48 | 84 | 48 | 12 | 42 | 28.5 | 1193 |
| **TH-700A** | 700 | 48 | 93 | 52.5 | 12 | 43.5 | 30.75 | 1301 |
| **TH-750A** | 750 | 48 | 96 | 54 | 12 | 46 | 30.75 | 1337 |
| **TH-1000A** | 1000 | 48 | 120 | 66 | 12 | 60 | 36.5 | 1623 |


"A"
3/4" NPT
MANHOLE
"B"
3" NPT
"C"
"D"
1" DRAIN


ANODE
NAMEPLATE
3" NPT
SADDLES


"F"
"E"
1-1/4" NPT
2" OUTLET
ANODE
MANHOLE
"D"
3/4" NPT
1" DRAIN
3" NPT
"3"NPT
"3"NPT
C
C
"B"

COMMERCIAL STORAGE TANKS

# HEAVY-DUTY LARGE VOLUME STORAGE TANKS MODEL HD CUSTOM-BUILT



U
OPTIONAL

HLW

## Custom-Built Tanks From 80 to 4,000 Gallons

## Horizontal or Vertical Mounting Options Available

## High-Density, Insulated Jackets or Bare Steel Tanks

## Glasslined, Cement or Epoxy Linings Available

## ASME Construction

- Available in 125, 150 and 160 psi working pressure.

## Anodic Protection

## Manholes, Handholes, Additional Tank Opening, M Lifting Lugs, Angle Legs, Ring Bases and Horizontal Tanks Saddles All Available as Options

## Insulated Tanks Meet R12.5 Minimum Thermal Insulation Requirements of the U.S. Department of Energy and Current Edition of ASHRAE/IES 90.1

## 5-Year Limited Tank Warranty

- For complete warranty information, consult written warranty or go to hotwater.com

| Model Number | Gallons | Dimensions | | |
|---|---|---|---|---|
| | | Diameter | Vertical Height | Horizontal Length |
| **HD*24-120A** | 118 | 24″ | 64″ | 60″ |
| **HD*24-140A** | 141 | 24″ | 76″ | 72″ |
| **HD*24-200A** | 188 | 24″ | 100″ | 96″ |
| **HD*24-250A** | 235 | 24″ | 124″ | 120″ |
| **HD*28-175A** | 175 | 28″ | 65″ | - |
| **HD*28-200A** | 200 | 28″ | 76″ | - |
| **HD*30-150A** | 147 | 30″ | 52″ | 48″ |
| **HD*30-185A** | 184 | 30″ | 64″ | 60″ |
| **HD*30-220A** | 220 | 30″ | 76″ | 72″ |
| **HD*30-250A** | 257 | 30″ | 87″ | 83″ |
| **HD*30-300A** | 294 | 30″ | 100″ | 96″ |
| **HD*30-375A** | 367 | 30″ | 124″ | 120″ |
| **HD*36-275A** | 265 | 36″ | 64″ | 60″ |
| **HD*36-325A** | 318 | 36″ | 76″ | 72″ |
| **HD*36-400A** | 370 | 36″ | 87″ | 83″ |
| **HD*36-425A** | 423 | 36″ | 100″ | 96″ |
| **HD*36-500A** | 528 | 36″ | 124″ | 120″ |
| **HD*42-450A** | 432 | 42″ | 76″ | 72″ |
| **HD*42-500A** | 504 | 42″ | 88″ | 84″ |
| **HD*42-600A** | 576 | 42″ | 100″ | 96″ |
| **HD*42-750A** | 720 | 42″ | 124″ | 120″ |
| **HD*42-900A** | 864 | 42″ | 148″ | 144″ |
| **HD*42-1000A** | 1,008 | 42″ | 172″ | 168″ |
| **HD*48-700A** | 658 | 48″ | 88″ | 84″ |
| **HD*48-750A** | 752 | 48″ | 100″ | 96″ |
| **HD*48-950A** | 940 | 48″ | 124″ | 120″ |
| **HD*48-1150A** | 1,128 | 48″ | 148″ | 144″ |
| **HD*48-1300A** | 1,315 | 48″ | 172″ | 168″ |
| **HD*48-1500A** | 1,503 | 48″ | 196″ | 192″ |
| **HD*54-1000A** | 951 | 54″ | 100″ | 96″ |
| **HD*54-1200A** | 1,189 | 54″ | 124″ | 120″ |
| **HD*54-1450A** | 1,427 | 54″ | 148″ | 144″ |
| **HD*54-1700A** | 1,665 | 54″ | 172″ | 168″ |
| **HD*54-1900A** | 1,903 | 54″ | 196″ | 192″ |
| **HD*54-2150A** | 2,141 | 54″ | 220″ | 216″ |
| **HD*60-1500A** | 1,469 | 60″ | 124″ | 120″ |
| **HD*60-1750A** | 1,763 | 60″ | 148″ | 144″ |
| **HD*60-2000A** | 2,056 | 60″ | 172″ | 168″ |
| **HD*60-2400A** | 2,350 | 60″ | 196″ | 192″ |
| **HD*60-2650A** | 2,644 | 60″ | 220″ | 216″ |
| **HD*72-2100A** | 2,115 | 72″ | 124″ | 120″ |
| **HD*72-2500A** | 2,538 | 72″ | 148″ | 144″ |
| **HD*72-3000A** | 2,961 | 72″ | 172″ | 168″ |
| **HD*72-3400A** | 3,384 | 72″ | 196″ | 192″ |
| **HD*72-4000A** | 3,807 | 72″ | 220″ | 216″ |

Specify Horizontal or Vertical installation H or V (after the HD)
For Jacketed models , the J will follow the orientation: HDVJ48-1500A.
For foam insulation, O represents Outdoor: HDVO48-1500A
For linings other than glass, use the suffix after the number and the A - HDHJ42-1000AE for and Epoxy lined or HDHJ42-100AC for Cement lined. U = Unlined.
For 150 PSI ASME working pressure, insert M at the end - HDV42-1000AM

# HEAVY-DUTY LARGE VOLUME STORAGE TANKS MODEL HD CUSTOM-BUILT *(CONTINUED)*

## FACTORY INSULATION OPTIONS

Factory Jacketed and Insulation

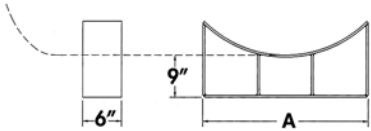
- INSULATION — Entire tank is surrounded with insulation
- CABINET — Heavy gauge painted steel
- Adds 4" to the round jacketed and 6″ to the square jacketed diameter of the tank

## OUTDOOR FOAM INSULATION

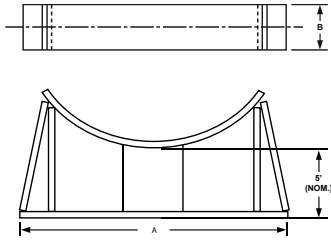
- INSULATION — Entire tank is sprayed with minimum of 2″ high-density polyurethane foam insulation that forms a watertight jacket that is approved for outdoor use
- Adds 6″ to the diameter of the tank, and 2" to the height

Note: Minimum foam insulation thickness is 2″; however, since tank is hand sprayed, insulation thicknesses may be greater in some areas giving the finished tank an uneven but watertight surface.

| Tank Diameter<br>30 36 42 48 54 60 72 |
|---|
| A 21" 25" 29" 34" 48" 52" 62" |




**NOTE:** Alternate saddle heights are available. (Consult factory)




**TANK SADDLES**

| A.O. SMITH PART NO. | SADDLE DESCRIPTIONS |
|---|---|
| **100170345** | SADDLE,TANK,24",9"CLR,P-1 |
| **100170349** | SADDLE,TANK,30",9"CLR,P-1 |
| **100170338** | SADDLE,TANK,28",9"CLR,P-1 |
| **100170352** | SADDLE,TANK,36",9"CLR,P-1 |
| **100170355** | SADDLE,TANK,42",9"CLR,P-1 |
| **100170358** | SADDLE,TANK,48",9"CLR,P-1 |
| **100170361** | SADDLE,TANK,54",9"CLR,P-1 |
| **100170365** | SADDLE,TANK,60",9"CLR,P-1 |
| **100170371** | SADDLE,TANK,72",9"CLR,P-1 |

COMMERCIAL WATER HEATER

# AC-U-TEMP COMPLETE HOT WATER SYSTEMS







Standard Tank Sizes from 80 to 1000 Gallons

Ac-U-Temp System Eliminates Costly Field Errors

Simplifies Installation

Standard Ac-U-Tanks are Factory Jacketed and Insulated

All Systems are Built to Order

Multi-Heater Systems for 50%-100% Back-Up

Superior Channel Iron

Factory Hydrostatic and Fire-Tested Before Shipping

ASME Relief Valve 125#

Tank Temperature Sensor

Tank Thermometer

Isolation Valves

Custom Tank Sizes to 5,000 Gallons

5-Year Limited Heat Exchanger Warranty and 5-Year Limited Tank Warranty

- For complete warranty information, consult written warranty or go to hotwater.com

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WATER HEATER SELECTION TOOL

Confidently select the right water heater for your floor plans with the help of an Xpert. With just a few quick questions, the Xpert Product Selection Tool evaluates A. O. Smith's full range of product options against your installation, energy efficiency and usage requirements. The result is a custom selection of water heaters recommended just for you.

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