

# PRODUCT POCKET CATALOG

*Includes our NAECA 2015  
Compliant Products!*



**Built to be the Best™**

  
**BRADFORD WHITE®**  
WATER HEATERS

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### Commercial Water Heaters

#### GAS

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# General Information

1. All Gas Water Heaters are design certified by CSA International (formerly AGA and CGA) in accordance with ANSI Z21.10.1 or 10.3 (latest addition). Closed Combustion Manufactured Home Water Heaters, are listed by Intertek (ETL).
2. All Electric Water Heaters are listed by Intertek (ETL).
3. All **Residential Storage Models** meet or exceed efficiency requirements of the Department of Energy. ASHRAE standard 90.1b (current standard) and the National Appliance Energy Conservation Act of 1987, recent amendment effective April 16, 2015 which supercedes all state and local efficiency requirements.
4. All Tank Type Water Heaters are certified at 300 PSI test pressure and 150 PSI working pressure (except where noted).
5. All Residential and Light Duty Water Connections are ¾" NPT on 8" centers (except where noted).
6. All Residential and Light Duty Gas Models have ½" NPT Gas Connections (except where noted).
7. All Residential Water Heaters come with a T&P Relief Valve included (except where noted).
8. MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 5,682,666; 7,634,976; 5,660,165; 5,954,492; 6,056,542; 6,935,280; 5,372,185; 5,485,879; 5,574,822; 7,971,560; 7,992,526; 6,684,821; 6,442,178; 7,334,419; 7,866,168; 7,270,087; 7,007,748; 5,596,952; 6,142,216; 7,699,026; 5,341,770; 7,337,517; 7,665,211; 7,665,210; 7,063,132; 7,063,133; 7,559,293; 7,900,589; 5,943,984; 8,082,888; 5,988,117; 7,621,238; 7,650,859; 5,761,379; 7,409,925; 5,277,171; 8,146,772; 7,458,341; 2,262,174. OTHER U.S. AND FOREIGN PATENT APPLICATIONS PENDING. CURRENT CANADIAN PATENTS: 2,314,845; 2,504,824; 2,108,186; 2,143,031; 2,409,271; 2,548,958; 2,112,515; 2,476,685; 2,239,007; 2,092,105; 2,107,012.
9. All dimensions are in inches (unless otherwise noted). Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement.
10. All products manufactured by Bradford White Water Heaters are designed, fabricated, and assembled in Middleville, MI. All raw materials and component parts are sourced from American companies for the highest level of American made content and manufacture, whenever possible.



**CSA  
International**



**National  
Sanitation  
Foundation**



**American Society  
of Mechanical Engineers  
Heating Boilers**



**American Society of  
Mechanical Engineers Lined  
Potable Water Heaters**



**National Board of  
Boiler and Pressure  
Vessel Inspectors**



**Compliance, Safety,  
Accountability**

LLC - Low  
Lead Content



Intertek



Intertek

Intertek



**Underwriters  
Laboratories**



**Air-Conditioning, Heating,  
and Refrigeration Institute**

# The Family of Hydrojet® Systems

## This Is *Technology That Works!*

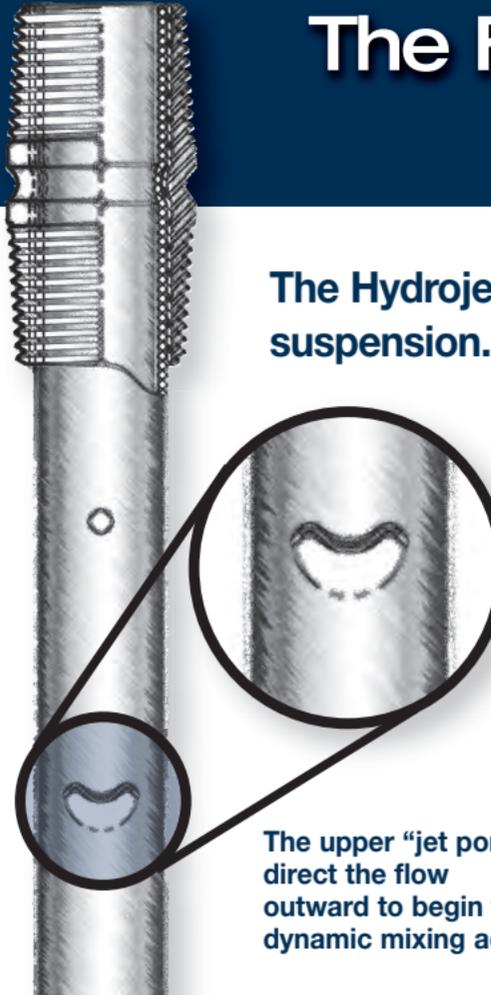
The Hydrojet® System's jet ports create a churning outflow that puts sediment into suspension. This turbulent action helps reduce sediment and prevent its accumulation.

### Hydrojet® Total Performance System

The Hydrojet® Total Performance System is a cold-water delivery tube that reduces sediment buildup and thoroughly mixes incoming water with stored water reducing thermal stratification. The secret is a series of flow altering "jet ports".

These ports create counter-rotation and dynamic turbulence that effectively blasts sediment into suspension and prevents its accumulation.

The Hydrojet® Total Performance System also causes more efficient temperature mixing inside the tank. Heating efficiency and usable hot water delivery are greatly increased, thereby saving energy and money.



The upper "jet ports" direct the flow outward to begin the dynamic mixing action.





# Hydrojet®

## Commercial Hydrojet® Sediment Reduction System

The commercial Hydrojet® was designed to block the build-up of harmful sediment in commercial units by increasing turbulence with accelerated water current inside the tank. It incorporates up to two inlet tubes. One is the traditional top connect version and the other is a front connection configuration.



## Hydrojet®2 Total Performance System

Much like the original Hydrojet® Total Performance System, this cold water inlet device minimizes sediment build up, increases delivery and reduces thermal stratification. The Hydrojet®2 is specifically designed for higher input applications. It utilizes additional jetports to initiate beneficial temperature mixing higher in the tank thereby increasing usable hot water.

The lower “jet ports” direct the flow inward to increase pressure and turbulence.

***“Make the Switch to Bradford White”***



# Residential Gas Atmospheric Vent High EF Models

6/7



- ENERGY STAR® Qualified
- High Efficiency Blower
  - 10 ft. power cord included (120 VAC)
- Bradford White ICON System™
  - Enhanced Performance
  - Advanced Temperature Control System
  - Intelligent Diagnostics
  - Separate Immersed Thermowell
- Advanced ScreenLok® Technology Flame Arrestor Design
- Flammable Vapor Sensor
- Maintenance-Free
- Sight Window
- Factory-Installed Hydrojet® Total Performance System
- Vitraglas® Lining
- 2" Non-CFC Foam Insulation

- Pedestal Base.
- Water Connections—3/4" NPT factory-Installed True Dielectric Fittings.
- Factory-Installed Heat Traps
- Protective Magnesium Anode Rod.
- 3x4 "Snap Lock" Draft Diverter
- T&P Relief Valve—Installed.
- Low Restriction Brass Drain Valve

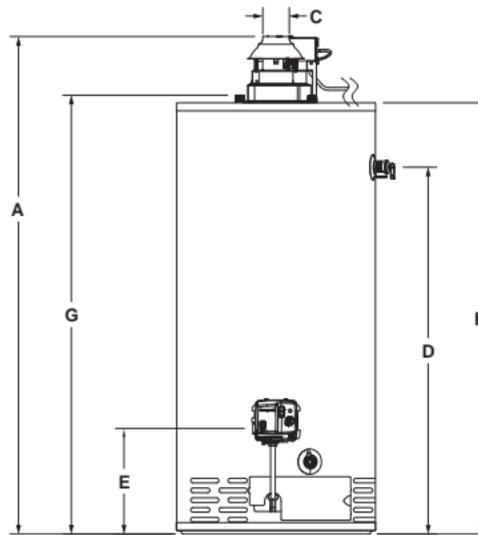
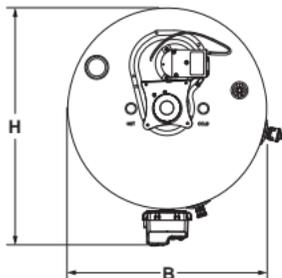


Photo of RG2F40S6N

# Atmospheric Vent High EF Models

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
78% Recovery Efficiency

DIMENSIONS IN INCHES

NATURAL GAS AND LIQUID PROPANE GAS MODELS					Recovery 90°F Rise*		A	B	C	D	E	F	G	H	
Model Number	Gal. Cap.	Input BTU/Hr.	1st Hour Rating (Gal.)	Energy Factor	Nat U.S. GPH	Nat Imp. GPH	Floor to Flue Conn.	Jacket Dia.	Vent Size	Floor to T&P Conn.	Floor to Gas Conn.	Floor to Top of Heater	Floor to Water Conn.	Depth	Approx. Shipping Weight (lbs)
★ RG2F40S6N	40	38,000	70	0.70	41	33	54 <sup>1</sup> / <sub>4</sub>	22	3 x 4	40	11 <sup>3</sup> / <sub>4</sub>	47	47 <sup>7</sup> / <sub>8</sub>	25 <sup>7</sup> / <sub>8</sub>	147
★ RG2F50S6N	50	38,000	84	0.70	41	33	55 <sup>1</sup> / <sub>4</sub>	24	3 x 4	40 <sup>5</sup> / <sub>8</sub>	11 <sup>3</sup> / <sub>4</sub>	48	48 <sup>7</sup> / <sub>8</sub>	27 <sup>7</sup> / <sub>8</sub>	178

Propane models feature a Titanium Stainless Steel propane burner. For Propane (LP) models change suffix "N" to "X".

For 10 year models, change suffix from "6" to "10".

\*Based on manufacturer's rated recovery efficiency.

120V, 60Hz. 1 Amp.

Energy Factor and First Hour Rating is based on the latest AHRI directory listings.

★ = ENERGY STAR® Qualified.





# Residential Gas Atmospheric Vent Damper Models

8/9



- ENERGY STAR® Qualified—Some models
- Bradford White ICON System™
  - Enhanced Performance
  - Advanced Temperature Control System
  - Intelligent Diagnostics
  - Separate Immersed Thermowell
- Automatic Flue Damper
  - 10 ft. power cord included (120 VAC)
- Advanced ScreenLok® Technology Flame Arrestor Design
- Flammable Vapor Sensor
- Maintenance-Free
- Sight Window
- Factory-Installed Hydrojet® Total Performance System
- Vitraglas® Lining
- Non-CFC Foam Insulation
- Pedestal Base.

- Water Connections—3/4" NPT factory-Installed True Dielectric Fittings.
- Factory-Installed Heat Traps
- Protective Magnesium Anode Rod.
- 3x4 "Snap Lock" Draft Diverter
- T&P Relief Valve—Installed.
- Low Restriction Brass Drain Valve

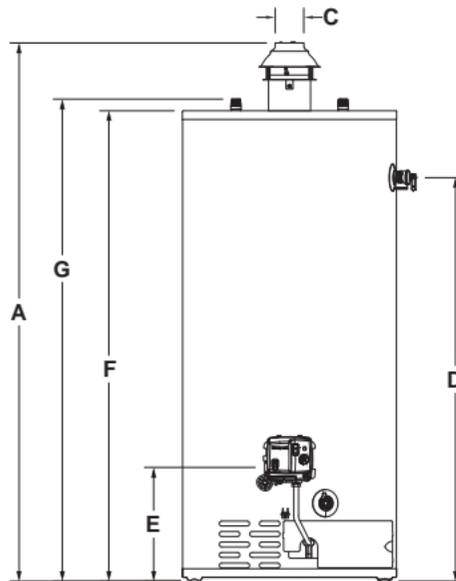
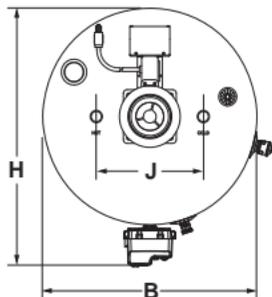


Photo of  
RG2D40S6N

# Atmospheric Vent Damper Models

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
80% Recovery Efficiency

DIMENSIONS IN INCHES

## NATURAL GAS MODELS

Model Number	Gal. Cap.	Input BTU/Hr.	1st Hour Rating (Gal.)	Energy Factor	Recovery 90°F Rise*		A Floor to Flue Conn.	B Jacket Dia.	C Vent Size	D Floor to T&P Conn.	E Floor to Gas Conn.	F Floor to Top of Heater	G Floor to Water Conn.	H Depth	J C/L of Water Conn.	Approx. Shipping Weight (lbs)
					Nat U.S. GPH	Nat Imp. GPH										
RG1D30T6N•	30	32,000	58	0.65	34	28	63	16	3 x 4	49 <sup>7</sup> / <sub>8</sub>	13	56 <sup>1</sup> / <sub>4</sub>	57	20 <sup>3</sup> / <sub>4</sub>	8	115
RG1D40S6N•	40	40,000	74	0.62	43	36	57 <sup>7</sup> / <sub>8</sub>	20	3 x 4	41	13	48	49 <sup>1</sup> / <sub>8</sub>	24 <sup>3</sup> / <sub>4</sub>	8	141
RG1D40T6N•	40	40,000	76	0.62	43	36	63 <sup>3</sup> / <sub>8</sub>	18	3 x 4	50 <sup>1</sup> / <sub>8</sub>	13	56 <sup>9</sup> / <sub>16</sub>	57 <sup>3</sup> / <sub>4</sub>	22 <sup>3</sup> / <sub>4</sub>	8	131
RG1D50T6N•	50	40,000	89	0.60	43	36	63 <sup>3</sup> / <sub>8</sub>	20	3 x 4	49 <sup>7</sup> / <sub>8</sub>	13	56 <sup>9</sup> / <sub>16</sub>	57 <sup>3</sup> / <sub>4</sub>	24 <sup>3</sup> / <sub>4</sub>	8	157
★ RG2D40S6N	40	38,000	72	0.67	41	34	54 <sup>1</sup> / <sub>2</sub>	22	3 x 4	40 <sup>7</sup> / <sub>8</sub>	11 <sup>3</sup> / <sub>4</sub>	47 <sup>11</sup> / <sub>16</sub>	48 <sup>7</sup> / <sub>8</sub>	26 <sup>1</sup> / <sub>8</sub>	11	159
★ RG2D50S6N	50	40,000	86	0.67	43	36	63 <sup>1</sup> / <sub>2</sub>	22	3 x 4	49 <sup>7</sup> / <sub>8</sub>	11 <sup>3</sup> / <sub>4</sub>	56 <sup>1</sup> / <sub>2</sub>	58	26 <sup>1</sup> / <sub>8</sub>	11	172

Propane models feature a Titanium Stainless Steel propane burner. For Propane (LP) models change suffix "N" to "X".

For 10 year models, change suffix from "6" to "10".

\*Based on manufacturer's rated recovery efficiency.

120V, 60Hz. 12 Amps.

Energy Factor and First Hour Rating is based on the latest AHRI directory listings.

★ = ENERGY STAR® Qualified.



• Models feature optional top T&P location and must be specified when ordering.

LP GAS MODELS Model Number	Input BTU/Hr.	Recovery 90°F Rise*	
		LP U.S. GPH	LP Imp. GPH
RG1D30T6X•	31,000	33	28
RG1D40S6X•	38,000	41	34
RG1D40T6X•	38,000	41	34
RG1D50T6X•	38,000	41	34
★ RG2D40S6X	38,000	41	34
★ RG2D50S6X	40,000	43	36



# Residential Gas Atmospheric Vent Models

10/11



- Bradford White ICON System™
  - Enhanced Performance
  - Advanced Temperature Control System
  - Intelligent Diagnostics
  - Separate Immersed Thermowell
- Advanced ScreenLok® Technology Flame Arrestor Design
- Resettable Thermal Switch
- Maintenance-Free
- Sight Window
- Factory-Installed Hydrojet® Total Performance System
- Vitraglas® Lining
- 2" Non-CFC Foam Insulation
- Pedestal Base.
- Water Connections—3/4" NPT Factory-Installed True Dielectric Fittings.

- Factory-Installed Heat Traps.
- Protective Magnesium Anode Rod.
- 3x4 "Snap Lock" Draft Diverter
- T&P Relief Valve—Installed.
- Low Restriction Brass Drain Valve

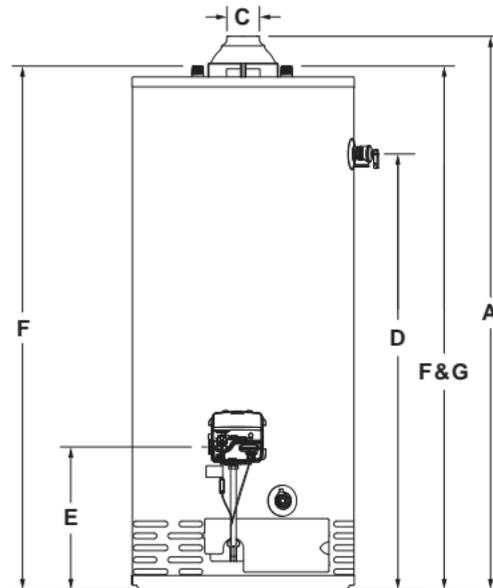
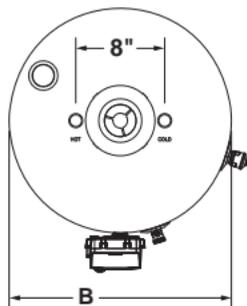


Photo of RG240T6N

# MAKE MORE MONEY ON WATER HEATER INSTALLATIONS



Now you have an incredible opportunity to increase your profits while providing an added value to the homeowner.

Instantly upgrade a water heater to 10 years during the installation – no need to change ANY components.

Available on selected Bradford White residential water heaters from your Bradford White distributor.



## Eligible Models LEVEL 1

<b>GAS*</b>	RG250L	URG250S	RE250S**	RE240S	RE115U
RG140S**	RG250T	<b>ELECTRIC*</b>	RE265T**	RE250S	RE120U
RG150L**	RG250S	RE120L	RE280T**	RE250S	RE16WW
RG150S**	URG230T	RE230L	RE330S	RE12U	RE112WV
RG230T	URG240T	RE240L	RE340S	RE16U	RE120WV
RG230S	URG240S	RE250L	RE340T	RE110U	
RG240T	URG250T	RE230S**	RE350S	RE112U	
RG240S	URG250L	RE240S**	RE350T	RE112T	

## Eligible Models LEVEL 2

<b>GAS*</b>	RG2DV40S	RG1PV50S	URG1D50T	URG2PDV50H
RG2F40S	RG2DV50S	RG2PV40T	URG2DV40S	<b>ELECTRIC*</b>
RG2F50S	RG2DV50H	RG2PV50T	URG2DV50S	MS65R
RG250H	RG2MH30T	RG2PV60T**	URG1PV40S	MS80R
RG275H	RG2MH40T	RG2PV50H	URG1PV50S	MS120R
RG2100H	RG2DVMH30T	RG2PV75H	URG2PV40T	
RG1D30T	RG2DVMH40T	URG250H	URG2PV50T	
RG1D40S	RG2PDV40S	URG275H	URG2PV50H	
RG1D40T	RG2PDV50S	URG2100H	URG2PV75H	
RG1D50T	RG2PDV50H	URG1D30T	URG2DV50H	
RG2D40S	RG2PDV75H	URG1D40S	URG2PDV40S	
RG2D50S	RG1PV40S	URG1D40T	URG2PDV50S	

\* This Warranty Upgrade includes all of the associated suffixes to the base model numbers above. The Upgrade Kit also applies to any corresponding new model numbers created.

\*\* Available in Canada ONLY.

# Discover Infiniti



A New Name  
in Tankless  
from  
Bradford White



## Introducing The New Heat Pump Water Heater from Bradford White



Featuring 3.39 EF  
(Energy Factor) uses 62%  
less energy than a standard  
50-gallon electric  
water heater

**Get AeroTherm.**  
**Get Satisfied Customers.**



# Atmospheric Vent Models

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
79% Recovery Efficiency

DIMENSIONS IN INCHES

NATURAL GAS MODELS					Recovery 90°F Rise*		A	B	C	D	E	F	G	
Model Number	Gal. Cap.	Input BTU/Hr.	1st Hour Rating (Gal.)	Energy Factor	Nat U.S. GPH	Nat Imp. GPH	Floor to Flue Conn.	Jacket Dia.	Vent Size	Floor to T&P Conn.	Floor to Gas Conn.	Floor to Water Conn.	Top T&P Conn.	Approx. Shipping Weight (lbs)
RG230T6N•	30	32,000	58	0.64	34	28	59 <sup>3</sup> / <sub>4</sub>	18	3 x 4	49 <sup>7</sup> / <sub>8</sub>	13	57 <sup>1</sup> / <sub>8</sub>	27 <sup>1</sup> / <sub>8</sub>	116
RG230S6N	30	30,000	56	0.63	32	37	49 <sup>1</sup> / <sub>4</sub>	20	3 x 4	38 <sup>5</sup> / <sub>8</sub>	13	46 <sup>1</sup> / <sub>2</sub>	N/A	113
RG240T6N•	40	40,000	76	0.62	43	36	60 <sup>1</sup> / <sub>8</sub>	20	3 x 4	50 <sup>1</sup> / <sub>8</sub>	13	57 <sup>9</sup> / <sub>16</sub>	57 <sup>9</sup> / <sub>16</sub>	134
RG240S6N•	40	40,000	74	0.62	43	36	51 <sup>1</sup> / <sub>2</sub>	22	3 x 4	41	13	49 <sup>3</sup> / <sub>16</sub>	49 <sup>3</sup> / <sub>16</sub>	139
RG250L6N	48	40,000	88	0.60	43	36	51 <sup>5</sup> / <sub>8</sub>	24	3 x 4	40 <sup>5</sup> / <sub>8</sub>	13	49 <sup>3</sup> / <sub>8</sub>	N/A	170
RG250T6N•	50	40,000	89	0.62	43	36	60 <sup>1</sup> / <sub>2</sub>	22	3 x 4	49 <sup>7</sup> / <sub>8</sub>	13	57 <sup>7</sup> / <sub>8</sub>	57 <sup>7</sup> / <sub>8</sub>	154
RG250S6N•	50	50,000	93	0.60	54	45	60 <sup>1</sup> / <sub>2</sub>	22	4	49 <sup>7</sup> / <sub>8</sub>	13	58 <sup>3</sup> / <sub>16</sub>	58 <sup>3</sup> / <sub>16</sub>	167

Propane models feature a Titanium Stainless Steel propane burner. For Propane (LP) models change suffix “N” to “X”.

For 10 year models, change suffix from “6” to “10”.

\*Based on manufacturer’s rated recovery efficiency.

•Models feature optional top T&P location and must be specified when ordering.

Note: RG230S6N and RG250L6N do not have top T&P option.

Energy Factor and First Hour Rating is based on the latest AHRI directory listings.

LP GAS MODELS	Input BTU/Hr.	Recovery 90°F Rise*	
Model Number		LP U.S. GPH	LP Imp. GPH
RG230T6X•	31,000	33	23
RG230S6X	32,000	32	27
RG240T6X•	36,000	34	33
RG240S6X•	35,000	41	34
RG250L6X	35,000	41	34
RG250T6X•	35,000	41	34
RG250S6X•	48,000	52	45



# Residential Gas Atmospheric Vent High Input Models

12/13



## All Model Features (except RG155H6N):

- Bradford White ICON System™
  - Enhanced Performance
  - Advanced Temperature Control System
  - Intelligent Diagnostics
  - Separate Immersed Thermowell

## All Model Features:

- Factory-Installed Hydrojet 2™ Total Performance System
- Vitraglas® Lining
- Side Connections—3/4" (19mm)
- Non-CFC Foam Insulation
- Pedestal Base (RG250H6N / RG275H6N only)

- Water Connections
- Hand Hole Cleanout (RG2100H6N only)
- Protective Magnesium Anode Rod.
- 4" (107mm) "Snap Lock" Draft Diverter
- T&P Relief Valve—Installed
- Low Restriction Brass Drain Valve
- Thermostatic Mixing Valve (ASSE Approved)—Included with RG155H6N only

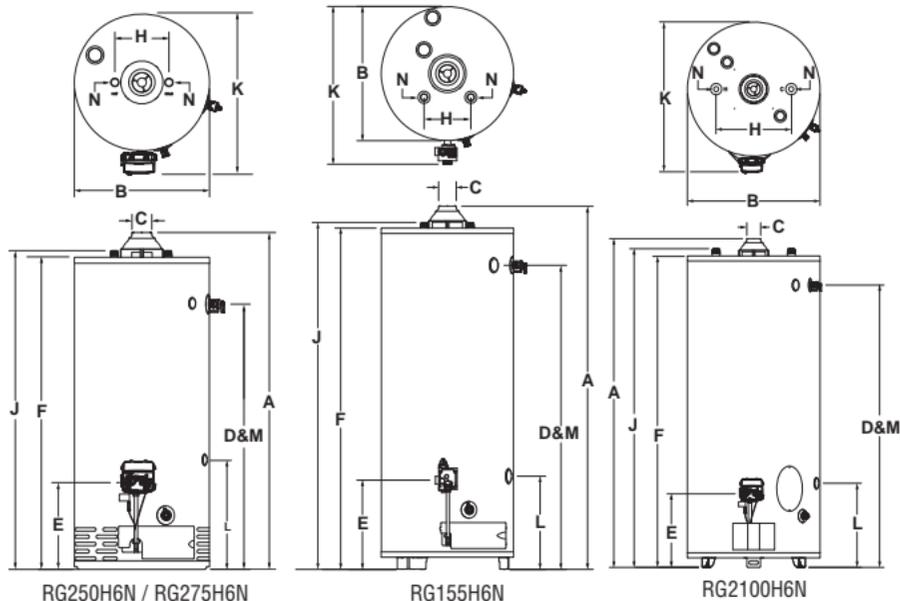


Photo of RG2100H6N

# Atmospheric Vent High Input Models

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed

DIMENSIONS IN INCHES

NATURAL GAS MODELS					Recovery 90°F Rise*		A	B	C	D	E	F	H	J	K	L	M	N	
Model Number	Gal. Cap.	Input BTU/Hr.	1st Hour Rating (Gal.)	Energy Factor	Nat U.S. GPH	Nat Imp. GPH	Floor to Flue Conn.	Jacket Dia.	Vent Size	Floor to T&P Conn.	Floor to Gas Conn.	Floor to Top of Heater	C/L of Water Conn.	Floor to Water Conn.	Depth	Floor to Space Heating Inlet	Floor to Space Heating Outlet	NPT	Approx. Shipping Weight (lbs)
RG250H6N	48	65,000	110	0.60	70	35	60	22	4	49 <sup>15/16</sup>	13	56 <sup>5/8</sup>	11	57 <sup>7/8</sup>	26	13 <sup>1/2</sup>	49 <sup>15/16</sup>	3/4	193
RG155H6N	55	80,000	N/A	N/A	86	72	59 <sup>1/2</sup>	22	4	49 <sup>7/8</sup>	14 <sup>13/16</sup>	55 <sup>15/16</sup>	8	57 <sup>7/8</sup>	25 <sup>7/8</sup>	15 <sup>7/16</sup>	49 <sup>7/8</sup>	3/4	207
RG275H6N	75	76,000	N/A	N/A	82	68	62 <sup>5/8</sup>	26	4	51 <sup>7/8</sup>	15	59	11	60 <sup>7/16</sup>	27 <sup>1/4</sup>	16 <sup>5/8</sup>	51 <sup>7/8</sup>	1	263
RG2100H6N	100	85,000	N/A	N/A	92	77	69	28 <sup>1/4</sup>	4	59 <sup>5/16</sup>	15 <sup>7/16</sup>	65 <sup>1/2</sup>	16	66 <sup>15/16</sup>	31 <sup>1/2</sup>	17 <sup>11/16</sup>	50 <sup>5/8</sup>	1 <sup>1/4</sup>	424

\*Based on manufacturer's rated recovery efficiency.

Propane models feature a Titanium Stainless Steel propane burner. For Propane (LP) models change suffix "N" to "X".

For 10 year models, change suffix from "6" to "10". RG155H6N not available as 10 year model.

RG2100H6N model features hand hole cleanout.

Energy Factor and First Hour Rating is based on the latest AHRI directory listings.

LP GAS MODELS	Input BTU/Hr.	Recovery 90°F Rise*	
		LP U.S. GPH	LP Imp. GPH
RG250H6X	61,000	66	55
RG155H6X	78,000	84	70
RG275H6X	76,000	82	68
RG2100H6X	85,000	95	79



# Residential Gas Direct Vent Models

14/15



- Bradford White ICON System™
  - Enhanced Performance
  - Advanced Temperature Control System
  - Intelligent Diagnostics
  - Separate Immersed Thermowell
- Closed Combustion
- Reinforced Seals
- Maintenance-Free
- Sight Window
- Factory-Installed Hydrojet® Total Performance System
- Vitraglas® Lining
- Cast Aluminum Air Intake Boot
- Telescoping Solid Vent Kits
- Flexible Vent Kit
- Side Connections—3/4" NPT tappings (RG2DV50H6N only)
- 2" Non-CFC Foam Insulation

- Pedestal Base
- Water Connections—3/4" NPT—  
Factory-Installed True Dielectric Fittings
- Factory-Installed Heat Traps

- Protective Magnesium Anode Rod
- T&P Relief Valve—Installed
- Low Restriction Brass Drain Valve

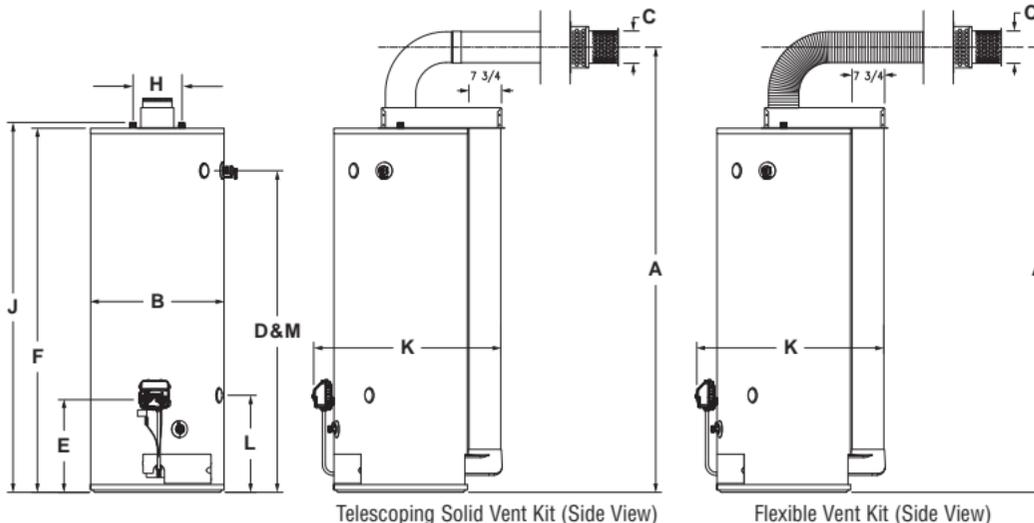


Photo of  
RG2DV50H6N

# Direct Vent Models

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
78% Recovery Efficiency

DIMENSIONS IN INCHES

NATURAL GAS MODELS					Recovery 90°F Rise*		A	B	C	D	E	F	H	J	K	L	M	
Model Number	Gal. Cap.	Input BTU/Hr.	1st Hour Rating (Gal.)	Energy Factor	Nat U.S. GPH	Nat Imp. GPH	Floor to C/L of Vent	Jacket Dia.	Vent Size I.D. O.D.	Floor to T&P Conn.	Floor to Gas Conn.	Floor to Top of Heater	C/L of Water Conn.	Floor to Water Conn.	Depth	Floor to Space Heating Inlet	Floor to Space Heating Outlet	Approx. Shipping Weight (lbs)
RG2DV40S6N	40	38,000	73	0.62	41	34	63 <sup>3</sup> / <sub>8</sub> min.	22	3 5	43 <sup>3</sup> / <sub>8</sub>	15	50 <sup>3</sup> / <sub>16</sub>	8	51 <sup>1</sup> / <sub>8</sub>	31	—	—	189
RG2DV50S6N	50	42,000	88	0.60	45	35	72 <sup>3</sup> / <sub>8</sub> min.	22	3 5	52 <sup>1</sup> / <sub>4</sub>	15	59 <sup>3</sup> / <sub>16</sub>	11	60 <sup>1</sup> / <sub>8</sub>	31	—	—	212
RG2DV50H6N	48	50,000	93	0.60	54	45	72 <sup>5</sup> / <sub>16</sub> min.	22	4 6	52 <sup>1</sup> / <sub>4</sub>	15	59 <sup>1</sup> / <sub>8</sub>	8	60 <sup>1</sup> / <sub>8</sub>	31	15 <sup>3</sup> / <sub>4</sub>	52 <sup>1</sup> / <sub>4</sub>	234

All Propane models feature a Titanium Stainless Steel propane burner. For Propane (LP) models change suffix "N" to "X".

For 10 year models, change suffix from "6" to "10". \*Based on manufacturer's rated recovery efficiency.

Energy Factor and First Hour Rating is based on the latest AHRI directory listings.

**RG2DV40S6N / RG2DV50S6N Solid Vent Kit:** Part No. 239-51283-00. **RG2DV40S6N / RG2DV50S6N Flexible Vent Kit:** Part No. 239-51284-00.

**RG2DV50H6N Solid Vent Kit:** Part No. 239-51286-00. **RG2DV50H6N Flexible Vent Kit:** Part No. 239-51287-00.

Kits can be ordered and shipped with water heater, or ordered and shipped separately. For vent kit components and venting instructions, refer to Installation and Operation Manual.

## RG2DV40S6N / RG2DV50S6N Optional Telescoping Solid Vent Kits:

**Kit "A"** Telescopes from 4<sup>3</sup>/<sub>4</sub>" to 5<sup>1</sup>/<sub>16</sub>" Part No. 239-41260-00

**Kit "B"** Telescopes from 6<sup>1</sup>/<sub>2</sub>" to 9<sup>3</sup>/<sub>16</sub>" Part No. 239-41331-00

**Kit "C"** Telescopes from 13<sup>3</sup>/<sub>4</sub>" to 23<sup>1</sup>/<sub>16</sub>" Part No. 239-41029-00

**Kit "D"** Telescopes from 49<sup>3</sup>/<sub>16</sub>" to 95<sup>13</sup>/<sub>16</sub>" Part No. 239-41424-00

## RG2DV50H6N Optional Telescoping Solid Vent Kits:

**Kit "F"** Telescopes from 4<sup>3</sup>/<sub>4</sub>" to 5<sup>1</sup>/<sub>16</sub>" Part No. 239-42516-00

**Kit "G"** Telescopes from 6<sup>1</sup>/<sub>2</sub>" to 9<sup>3</sup>/<sub>16</sub>" Part No. 239-42517-00

**Kit "H"** Telescopes from 13<sup>3</sup>/<sub>4</sub>" to 23<sup>11</sup>/<sub>16</sub>" Part No. 239-42514-00

**Kit "I"** Telescopes from 49<sup>3</sup>/<sub>16</sub>" to 95<sup>13</sup>/<sub>16</sub>" Part No. 239-42512-00

LP GAS MODELS	Input BTU/Hr.	Recovery 90°F Rise*	
Model Number		LP U.S. GPH	LP Imp. GPH
RG2DV40S6X	36,000	39	32
RG2DV50S6X	40,000	43	36
RG2DV50H6X	48,000	50	42



# Residential Gas TTW® Power Vent Models

16/17



- ENERGY STAR® Qualified—Some Models
- Bradford White ICON System™
  - Enhanced Performance
  - Advanced Temperature Control System
  - Intelligent Diagnostics
  - Separate Immersed Thermowell
- Power Vented Water Heater
- Powerful Blower Motor
  - 10 ft. power cord included (120 VAC)
- Horizontal and Vertical Venting
- Advanced ScreenLok® Technology  
Flame Arrestor Design
- Flammable Vapor Sensor
- Maintenance-Free
- Sight Window
- Factory-Installed Hydrojet®  
Total Performance System
- Vitraglas® Lining

- Non-CFC Foam Insulation
- Water Connections—3/4" NPT
- 3/4" NPT Side Connections  
(RG2PV50H6N, RG1PV55H6N, and  
RG2PV75H6N only)
- Factory-Installed Heat Traps
- Protective Magnesium Rod  
(RG1PV55H6N has two)
- T&P Relief Valve—Installed
- Low Restriction Brass Drain Valve

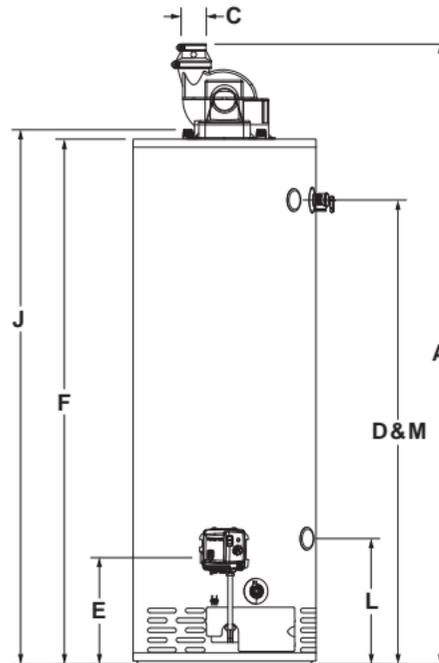
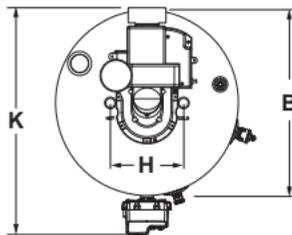


Photo of  
RG2PV50H6N

# TTW® Power Vent Models

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
80% Recovery Efficiency

DIMENSIONS IN INCHES

NATURAL GAS MODELS					Recovery 90°F Rise*		A	B	C	D	E	F	H	J	K	L	M	
Model Number	Gal. Cap.	Input BTU/Hr.	1st Hour Rating (Gal.)	Energy Factor	Nat U.S. GPH	Nat Imp. GPH	Floor to Vent Conn.	Jacket Dia.	Vent Size	Floor to T&P Conn.	Floor to Gas Conn.	Floor to Top of Heater	C/L of Water Conn.	Floor to Water Conn.	Depth	Floor to Space Heating Inlet	Floor to Space Heating Outlet	Approx. Shipping Weight (lbs)
RG1PV40S6N	40	40,000	72	0.66	43	36	57 <sup>5</sup> / <sub>16</sub>	20	2 or 3	40	11 <sup>3</sup> / <sub>4</sub>	47 <sup>1</sup> / <sub>2</sub>	8	49	27 <sup>7</sup> / <sub>8</sub>	N/A	N/A	140
RG1PV50S6N	50	40,000	86	0.65	43	36	58 <sup>1</sup> / <sub>4</sub>	22	2 or 3	40 <sup>5</sup> / <sub>8</sub>	11 <sup>3</sup> / <sub>4</sub>	48 <sup>1</sup> / <sub>4</sub>	8	59 <sup>1</sup> / <sub>2</sub>	26 <sup>3</sup> / <sub>4</sub>	N/A	N/A	166
★ RG2PV40T6N	40	40,000	72	0.70	43	36	66 <sup>7</sup> / <sub>8</sub>	20	2 or 3	50	11 <sup>3</sup> / <sub>4</sub>	56 <sup>3</sup> / <sub>4</sub>	8	58	24 <sup>1</sup> / <sub>2</sub>	N/A	N/A	146
★ RG2PV50T6N	50	40,000	86	0.70	43	36	66 <sup>7</sup> / <sub>8</sub>	22	2 or 3	50	11 <sup>3</sup> / <sub>4</sub>	56 <sup>3</sup> / <sub>4</sub>	8	58	26 <sup>1</sup> / <sub>2</sub>	N/A	N/A	173
★ RG2PV50H6N	48	65,000	112	0.70	70	58	66 <sup>1</sup> / <sub>8</sub>	22	3 or 4	50 <sup>1</sup> / <sub>8</sub>	11 <sup>3</sup> / <sub>4</sub>	56 <sup>3</sup> / <sub>8</sub>	11	57 <sup>3</sup> / <sub>4</sub>	26 <sup>3</sup> / <sub>4</sub>	13 <sup>1</sup> / <sub>2</sub>	50 <sup>1</sup> / <sub>8</sub>	187
RG1PV55H6N	55	78,000	N/A	N/A	84	70	64 <sup>3</sup> / <sub>16</sub>	22	3 or 4	47 <sup>15</sup> / <sub>16</sub>	11 <sup>1</sup> / <sub>2</sub>	54 <sup>5</sup> / <sub>8</sub>	8	56	26 <sup>1</sup> / <sub>2</sub>	13 <sup>3</sup> / <sub>8</sub>	47 <sup>15</sup> / <sub>16</sub>	219
RG2PV75H6N	75	76,000	N/A	N/A	82	68	69 <sup>7</sup> / <sub>16</sub>	26	3 or 4	51 <sup>1</sup> / <sub>2</sub>	13 <sup>1</sup> / <sub>2</sub>	59 <sup>1</sup> / <sub>2</sub>	11	60 <sup>3</sup> / <sub>4</sub>	30 <sup>1</sup> / <sub>4</sub>	13 <sup>3</sup> / <sub>8</sub>	51 <sup>1</sup> / <sub>2</sub>	260

Propane models feature a Titanium Stainless Steel propane burner. For Propane (LP) models change suffix "N" to "X". For 10 year models, change suffix from "6" to "10". RG1PV55H6N not available as 10 year model.\*Based on manufacturer's rated recovery efficiency. 120 VAC Required for Power Venting / 120 VAC 60HZ 3.1 Amperes.

Energy Factor and First Hour Rating is based on the latest AHRI directory listings.

★ = ENERGY STAR® Qualified.



	2" Vent Pipe	3" Vent Pipe	3" Vent Pipe	4" Vent Pipe
	RG1PV40S6N RG1PV50S6N RG2PV40T6N RG2PV50T6N		RG2PV50H6N RG1PV55H6N RG2PV75H6N	
Max. Equivalent Length	†50 ft.	†120 ft.	†50 ft.	†180 ft.
Min. Equivalent Length	7 ft.	15 ft.	7 ft.	15 ft.
Number of 90° Elbows	1 2 3	45 ft. 40 ft. 35 ft.	115 ft. 110 ft. 105 ft.	45 ft. 40 ft. 35 ft.

†For high altitude installations, consult the installation instructions.

LP GAS MODELS	Input BTU/Hr.	Recovery 90°F Rise*	
Model Number		LP U.S. GPH	LP Imp. GPH
RG1PV40S6X	38,000	41	34
RG1PV50S6X	38,000	41	34
★ RG2PV40T6X	40,000	43	36
★ RG2PV50T6X	40,000	43	36
★ RG2PV50H6X	58,000	62	52
RG1PV55H6X	78,000	84	70
RG2PV75H6X	75,500	81	67



# Residential Gas Power Direct Vent Models

18/19



- ENERGY STAR® Qualified—Some Models
- Bradford White ICON System™
  - Enhanced Performance
  - Advanced Temperature Control System
  - Intelligent Diagnostics
  - Separate Immersed Thermowell
- Closed Combustion Venting System
- Powerful Blower Model
  - 10 ft. power cord included (120 VAC)
- Cast Aluminum Air Intake Boot
- Horizontal and Vertical Venting
- Optional Concentric Vent Kit Termination
- Flammable Vapor Sensor (except RG2PDV75)
- Factory-Installed Hydrojet®
- Vitraglas® Lining
- 2" Non-CFC Foam Insulation
- Water Connections— 3/4" NPT
- Side Connections— 3/4" NPT (RG2PDV50H6N and RG2PDV75H6N only)
- Factory-Installed Heat Traps
- Protective Magnesium Anode Rod
- T&P Relief Valve—Installed
- Low Restriction Brass Drain Valve

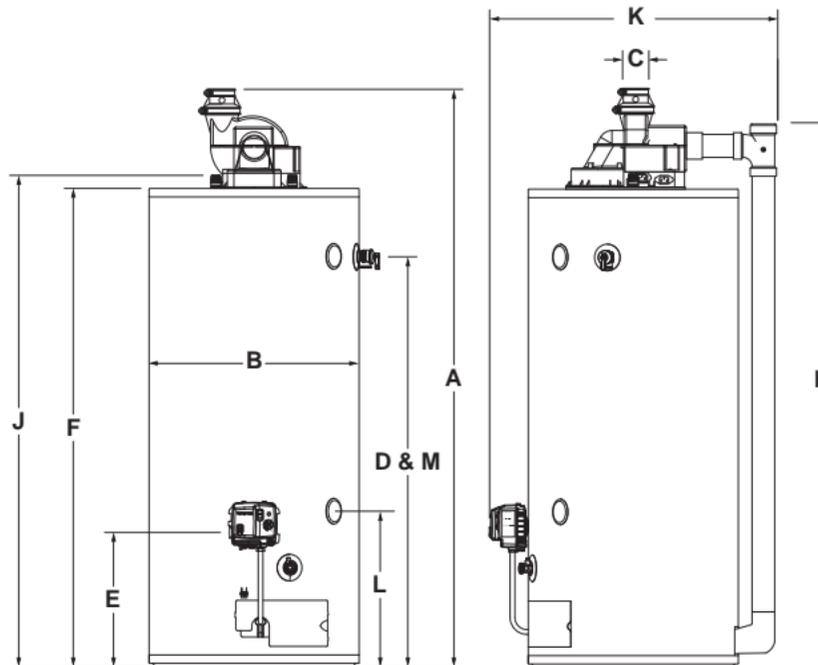


Photo of  
RG2PDV40S6N

# Power Direct Vent Models

DIMENSIONS IN INCHES

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
78% Recovery Efficiency

NATURAL GAS MODELS					Recovery 90°F Rise*		A	B	C	D	E	F	H	J	K	L	M	
Model Number	Gal. Cap.	Input BTU/Hr.	1st Hour Rating (Gal.)	Energy Factor	Nat U.S. GPH	Nat Imp. GPH	Floor to Exhaust Outlet	Jacket Dia.	Vent Size	Floor to T&P Conn.	Floor to Gas Conn.	Floor to Top of Heater	Floor to Air Intake	Floor to Water Conn.	Depth	Floor to Space Heating Inlet	Floor to Space Heating Outlet	Approx. Shipping Weight (lbs)
★ RG2PDV40S6N	40	40,000	72	0.70	43	36	59 <sup>11/16</sup>	22	2 or 3	42 <sup>1/2</sup>	14	49 <sup>1/2</sup>	59 <sup>3/8</sup>	50 <sup>13/16</sup>	30 <sup>1/2</sup>	—	—	161
★ RG2PDV50S6N	50	40,000	86	0.70	43	36	60 <sup>7/8</sup>	24	2 or 3	43 <sup>1/2</sup>	14	50 <sup>1/2</sup>	60 <sup>3/8</sup>	51 <sup>13/16</sup>	32 <sup>1/2</sup>	—	—	192
★ RG2PDV50H6N	48	60,000	100	0.68	65	54	69	22	3 or 4	52 <sup>1/4</sup>	13 <sup>5/8</sup>	58 <sup>3/4</sup>	67	60	30 <sup>5/8</sup>	15 <sup>3/4</sup>	52 <sup>1/4</sup>	204
RG2PDV75H6N	75	80,000	—	—	86	72	72	26	3 or 4	54 <sup>1/4</sup>	16 <sup>1/4</sup>	62 <sup>3/4</sup>	70 <sup>3/8</sup>	63 <sup>3/4</sup>	36	19	54 <sup>1/4</sup>	291

Propane models feature a Titanium Stabilized Stainless Steel propane burner. For Propane (LP) models change suffix "N" to "X".

For 10 year model, change suffix "6" to "10".

\*Based on manufacturer's rated recovery efficiency.

120 VAC Required for Power Venting / 120 VAC, 60HZ, 3.1 Amperes.

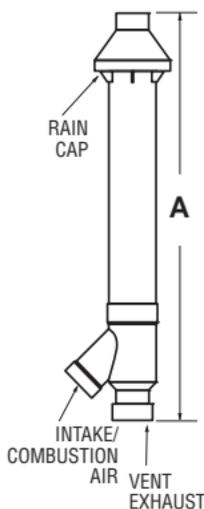
Energy Factor and First Hour Rating is based on the latest AHRI directory listings.

★ = ENERGY STAR® Qualified.



## Concentric Vent Kit Termination

2" Kit	A (in.)
P/N 239-44069-02	29 <sup>1/4</sup>
3" Kit	A (in.)
P/N 239-44069-01	36 <sup>1/4</sup>



	2" Vent Pipe	3" Vent Pipe		4" Vent Pipe
	RG2PDV40S6N RG2PDV50S6N	RG2PDV40S6N RG2PDV50S6N	RG2PDV50H6N RG2PDV75H6N	RG2PDV50H6N RG2PDV75H6N
Max. Intake Length	35 ft.	85 ft.	60 ft.	100 ft.
Max. Exhaust Length	35 ft.	85 ft.	60 ft.	100 ft.
Min. Vent Length	7 ft.	7 ft.	7 ft.	7 ft.
Number of 90° Elbows	1 2 3	30 ft. 25 ft. 20 ft.	80 ft. 75 ft. 70 ft.	55 ft. 50 ft. 45 ft.
			95 ft. 90 ft. 85 ft.	

## LP GAS MODELS

Model Number	Input BTU/Hr.	Recovery 90°F Rise*	
		LP U.S. GPH	LP Imp. GPH
★ RG2PDV40S6X	38,000	41	34
★ RG2PDV50S6X	38,000	41	34
★ RG2PDV50H6X	60,000	65	54
RG2PDV75H6X	78,000	84	70



# Residential Gas Manufactured Home Closed Combustion/Direct Vent Models

20/21



- Housing and Urban Development
- Sealed Combustion Roof Jack Kit—must order for new installations
- Flue Baffle
- Heat Traps
- Vitraglas® Lining
- Fully Automatic Controls
- 2" Non-CFC Foam Insulation
- Water Connections—3/4" NPT
- Protective Magnesium Anode Rod
- T&P Relief Valve—Installed
- Low Restriction Brass Drain Valve
- Convertible Gas Control

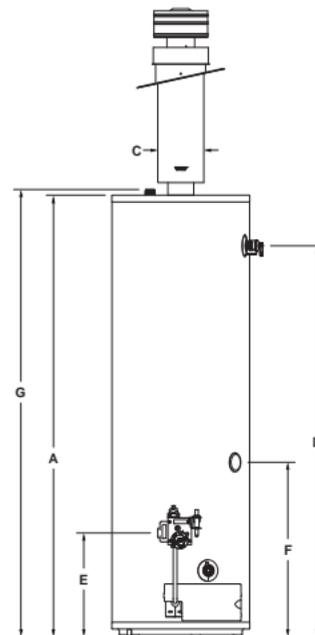
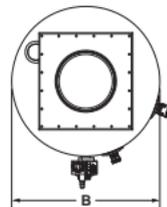


Photo of  
RG2DVMH30T6X

# Manufactured Home Closed Combustion/Direct Vent Models

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
76% Recovery Efficiency

DIMENSIONS IN INCHES

NATURAL GAS AND LIQUID PROPANE GAS MODELS					Recovery 90°F Rise*		A	B	C	D	E	F	G	Approx. Shipping Weight (lbs)
Model Number	Gal. Cap.	Input BTU/Hr.	1st Hour Rating (Gal.)	Energy Factor	Nat U.S. GPH	Nat Imp. GPH	Floor to Top of Heater	Jacket Dia.	Vent Size	Floor to T&P Conn.	Floor to Gas Conn.	Floor to Cold Water Conn.	Floor to Hot Water Conn.	
RG2DVMH30T6X	30	30,000	52	0.63	32	27	57 <sup>9</sup> / <sub>16</sub>	18	3	50 <sup>1</sup> / <sub>4</sub>	13 <sup>3</sup> / <sub>4</sub>	22 <sup>1</sup> / <sub>2</sub>	57 <sup>1</sup> / <sub>2</sub>	119
RG2DVMH40T6X	40	30,000	59	0.62	32	27	57 <sup>1</sup> / <sub>4</sub>	20	3	50 <sup>1</sup> / <sub>2</sub>	13 <sup>3</sup> / <sub>4</sub>	22 <sup>1</sup> / <sub>2</sub>	58	139

To order Natural Gas heaters change "X" to "N". For 10 year models, change suffix from "6" to "10".

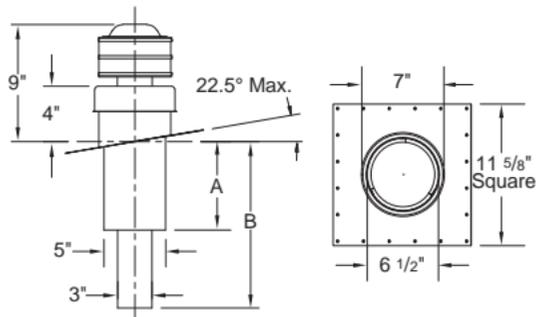
\*Based on manufacturer's rated recovery efficiency.

Energy Factor and First Hour Rating is based on the latest AHRI directory listings.

## Optional Roof Jack Kits

Part Number	A	B	Through The Roof Clearance
239-37022-01	15"	16" - 33"	12"
239-37022-02	33 <sup>1</sup> / <sub>2</sub> "	33 <sup>1</sup> / <sub>2</sub> " - 66"	18" / 32"
239-37022-03	32 <sup>1</sup> / <sub>2</sub> " - 62 <sup>1</sup> / <sub>2</sub> "	37 <sup>1</sup> / <sub>2</sub> " - 74"	32" / 60"
239-37022-04	50" - 98 <sup>1</sup> / <sub>2</sub> "	54 <sup>1</sup> / <sub>2</sub> " - 109 <sup>1</sup> / <sub>2</sub> "	48" / 90"

(Includes: roof jack, hardware, air intake, instructions).



This water heater is of the closed combustion type (direct venting) for mobile home applications only, where all combustion air is supplied from the outdoors through the air intake and all combusted gas products are vented directly to the outside by means of the roof jack. No draft diverter (vent hood) is required for this water heater. The ETL listing of this water heater includes the field installation of the following components: roof jack, roof jack clamp, air intake, air intake seal, and heater tie down materials. These components for field installation are shipped with the heater in a separate box and must be installed according to instructions. No other components are approved for use with the water heater. The water heater must be installed in accordance with The Federal Mobile Home Construction and Safety Standard or in the absence of such standard, The Standard for Mobile Homes (ANSI/NFPA No. 601B-1977)



# Residential Gas Manufactured Home Atmospheric Combustion Models

22/23



- Advanced ScreenLok® Technology Flame Arrestor Design
- Resettable Thermal Switch
- Piezo Igniter
- Pedestal Base
- Maintenance-Free
- Sight Window
- Housing and Urban Development
- Roof Jack Kit—Must order for new installations
- Vitraglas® Lining
- Fully Automatic Controls
- Convertible Gas Control
- 2" Non-CFC Foam Insulation
- Water Connections—3/4" NPT
- Heat Trap

- Protective Magnesium Anode Rod
- 3"x4" "Snap Lock" Draft Diverter
- Flue Baffle
- Steel Tank
- T&P Relief Valve
- Low Restriction Brass Drain Valve
- Design Certified by CSA International (formerly AGA/CGA).

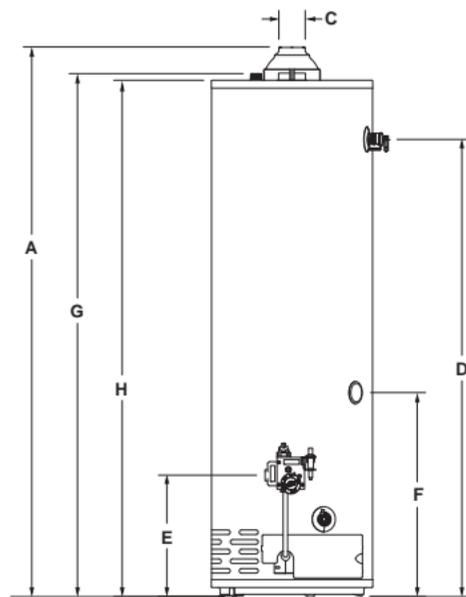
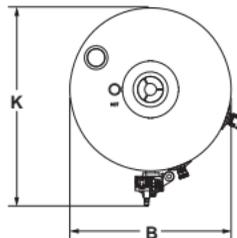


Photo of  
RG2MH30T6X

# Manufactured Home Atmospheric Combustion Models

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
77% Recovery Efficiency

## DIMENSIONS IN INCHES

NATURAL GAS AND LIQUID PROPANE GAS MODELS					Recovery 90°F Rise*		A	B	C	D	E	F	G	H	K	Approx. Shipping Weight (lbs)
Model Number	Gal. Cap.	Input BTU/Hr.	1st Hour Rating (Gal.)	Energy Factor	Nat U.S. GPH	Nat Imp. GPH	Floor to Flue Conn.	Jacket Dia.	Vent Size	Floor to T&P Conn.	Floor to Cold Water Conn.	Floor to Hot Water Conn.	Floor to Heater Top	Floor to Heater Top	Depth	
RG2MH30T6X	30	32,000	55	0.63	34	28	59 <sup>1</sup> / <sub>8</sub>	18	3 x 4	50 <sup>5</sup> / <sub>16</sub>	13	22 <sup>1</sup> / <sub>2</sub>	57 <sup>3</sup> / <sub>4</sub>	56 <sup>7</sup> / <sub>8</sub>	20	118
RG2MH40T6X	40	34,000	57	0.63	37	31	59 <sup>3</sup> / <sub>8</sub>	20	3 x 4	50 <sup>5</sup> / <sub>16</sub>	13	22 <sup>1</sup> / <sub>2</sub>	57 <sup>3</sup> / <sub>4</sub>	56 <sup>7</sup> / <sub>8</sub>	22	135

To order Natural Gas heaters change "X" to "N". For 10 year models, change suffix from "6" to "10".

\*Based on manufacturer's rated recovery efficiency.

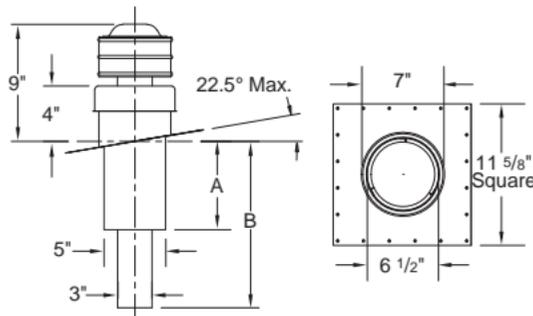
Energy Factor and First Hour Rating is based on the latest AHRI directory listings.

The water heater enclosure access door must be on the outside wall of the manufactured home (mobile home) only. Access to the water heater enclosure from the inside of the manufactured home (mobile home) is not permitted. The CSA International (formerly AGA/CGA) listing of this water heater includes the field installation of the following components: roof jack and heater tie down materials. These components for field installation are shipped in a separate box from the heater and must be installed according to instructions. No other components are approved for use with the water heater. The water heater must be installed in accordance with The Federal Manufactured Home Construction and Safety Standard Title 24 CRF, Part 3280.

### Optional Roof Jack Kits

Part Number	A	B	Through The Roof Clearance
239-37030-01	15"	16" - 33"	12"
239-37030-02	33 <sup>1</sup> / <sub>2</sub> "	33 <sup>1</sup> / <sub>2</sub> " - 66"	18" / 32"
239-37030-03	32 <sup>1</sup> / <sub>2</sub> " - 62 <sup>1</sup> / <sub>2</sub> "	37 <sup>1</sup> / <sub>2</sub> " - 74"	32" / 60"
239-37030-04	50" - 98 <sup>1</sup> / <sub>2</sub> "	54 <sup>1</sup> / <sub>2</sub> " - 109 <sup>1</sup> / <sub>2</sub> "	48" / 90"

(Includes: roof jack, hardware, air intake, instructions).





# Residential Gas

## Ultra Low NOx Atmospheric Vent Damper Models

24/25



- Bradford White ICON System™
  - Enhanced Performance
  - Advanced Temperature Control System
  - Intelligent Diagnostics
  - Separate Immersed Thermowell
- Automatic Flue Damper
  - 10 ft. power cord included (120 VAC)
- Defender Combustion Chamber
- Ultra Low NOx Burner with Primary and Secondary Air Distribution Devices
- Digital Thermal Sensor and Resettable Thermal Switch
- Maintenance-Free
- Sight Window
- Factory-Installed Hydrojet® Total Performance System
- Vitraglas® Lining
- 1" Non-CFC Foam Insulation

- Pedestal Base
- Water Connections—3/4" NPT
- Factory-Installed Heat Traps
- Protective Magnesium Anode Rod
- 3x4 "Snap Lock" Draft Diverter
- T&P Relief Valve—Installed.
- Low Restriction Brass Drain Valve
- Design Certified by CSA International (formerly AGA and CGA).
- Complies with the latest Ultra Low NOx requirement (10 ng/J NOx limit).

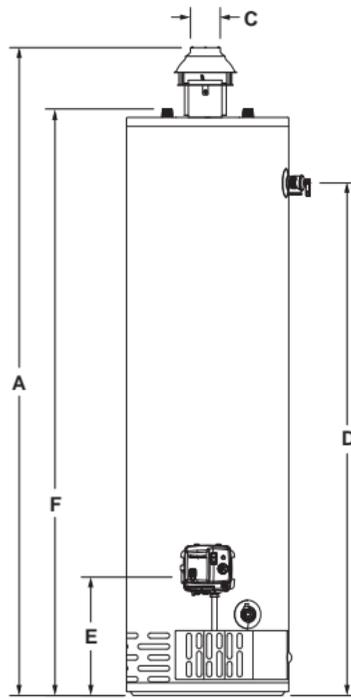
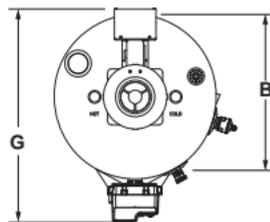


Photo of URG1D50T6N

# Ultra Low NOx Atmospheric Vent Damper Models

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
78% Recovery Efficiency

DIMENSIONS IN INCHES

NATURAL GAS MODELS					Recovery 90°F Rise*		A	B	C	D	E	F	G	
Model Number	Gal. Cap.	Input BTU/Hr.	1st Hour Rating (Gal.)	Energy Factor	Nat U.S. GPH	Nat Imp. GPH	Floor to Flue Conn.	Jacket Dia.	Vent Size	Floor to T&P Conn.	Floor to Gas Conn.	Floor to Water Conn.	Depth	Approx. Shipping Weight (lbs)
URG1D30T6N	30	32,000	58	0.65	34	25	63	16	3 x 4	49 <sup>7</sup> / <sub>8</sub>	11 <sup>3</sup> / <sub>4</sub>	57 <sup>1</sup> / <sub>8</sub>	20 <sup>3</sup> / <sub>4</sub>	118
URG1D40S6N	40	40,000	74	0.62	43	36	54 <sup>13</sup> / <sub>16</sub>	20	3 x 4	41	11 <sup>3</sup> / <sub>4</sub>	49 <sup>1</sup> / <sub>8</sub>	24 <sup>3</sup> / <sub>4</sub>	147
URG1D40T6N	40	40,000	76	0.62	43	36	63 <sup>9</sup> / <sub>16</sub>	18	3 x 4	50 <sup>1</sup> / <sub>8</sub>	11 <sup>3</sup> / <sub>4</sub>	57 <sup>1</sup> / <sub>2</sub>	22 <sup>3</sup> / <sub>4</sub>	135
URG1D50T6N	50	40,000	89	0.60	54	45	63 <sup>3</sup> / <sub>8</sub>	20	3 x 4	49 <sup>7</sup> / <sub>8</sub>	11 <sup>3</sup> / <sub>4</sub>	57 <sup>7</sup> / <sub>8</sub>	24 <sup>3</sup> / <sub>4</sub>	159

Available in Natural Gas only.

For 10 year models, change suffix from “6” to “10”.

\*Based on manufacturer’s rated recovery efficiency.

Energy Factor and First Hour Rating is based on the latest AHRI directory listings.



# Residential Gas

# Ultra Low NOx Atmospheric Vent Models

26/27



- Bradford White ICON System™
  - Enhanced Performance
  - Advanced Temperature Control System
  - Intelligent Diagnostics
  - Separate Immersed Thermowell
- Defender Combustion Chamber
- Ultra Low NOx Burner with Primary and Secondary Air Distribution Devices
- Digital Thermal Sensor and Resettable Thermal Switch
- Maintenance-Free
- Sight Window
- Factory-Installed Hydrojet® Total Performance System
- Vitraglas® Lining
- 2" Non-CFC Foam Insulation
- Pedestal Base
- Water Connections—3/4" NPT

- Factory-Installed Heat Traps
- Protective Magnesium Anode Rod
- 3x4 "Snap Lock" Draft Diverter
- Flue Baffle
- Steel Tank
- T&P Relief Valve—Installed
- Low Restriction Brass Drain Valve
- Design Certified by CSA International (formerly AGA and CGA).
- Complies with the latest Ultra Low NOx requirement (10 ng/J NOx limit).

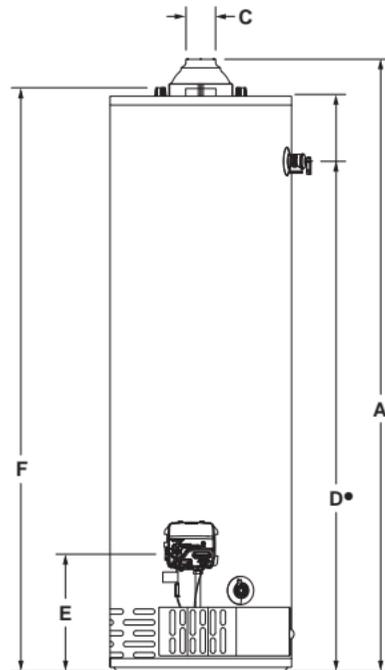
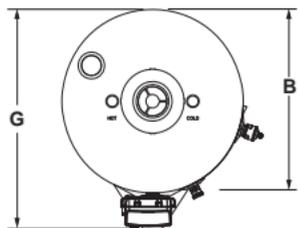


Photo of URG250T6N

# Ultra Low NOx Atmospheric Vent Models

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
80% Recovery Efficiency

DIMENSIONS IN INCHES

NATURAL GAS MODELS					Recovery 90°F Rise*		A	B	C	D	E	F	G	
Model Number	Gal. Cap.	Input BTU/Hr.	1st Hour Rating (Gal.)	Energy Factor	Nat U.S. GPH	Nat Imp. GPH	Floor to Flue Conn.	Jacket Dia.	Vent Size	Floor to T&P Conn.	Floor to Gas Conn.	Floor to Water Conn.	Depth	Approx. Shipping Weight (lbs)
URG230T6N•	30	32,000	58	0.64	34	25	59 <sup>7</sup> / <sub>8</sub>	18	3 x 4	49 <sup>7</sup> / <sub>8</sub>	11 <sup>3</sup> / <sub>4</sub>	57	21 <sup>1</sup> / <sub>2</sub>	121
URG240T6N•	40	40,000	76	0.62	43	36	60 <sup>1</sup> / <sub>4</sub>	20	3 x 4	50	11 <sup>3</sup> / <sub>4</sub>	57 <sup>1</sup> / <sub>2</sub>	23 <sup>1</sup> / <sub>2</sub>	139
URG240S6N•	40	40,000	74	0.62	43	36	51 <sup>5</sup> / <sub>8</sub>	22	3 x 4	41	11 <sup>3</sup> / <sub>4</sub>	49 <sup>1</sup> / <sub>8</sub>	25 <sup>1</sup> / <sub>2</sub>	146
URG250T6N•	50	40,000	90	0.62	43	36	60 <sup>3</sup> / <sub>16</sub>	22	3 x 4	49 <sup>7</sup> / <sub>8</sub>	11 <sup>3</sup> / <sub>4</sub>	58 <sup>5</sup> / <sub>16</sub>	25 <sup>1</sup> / <sub>2</sub>	161
URG250L6N	48	40,000	88	0.60	43	36	51 <sup>5</sup> / <sub>8</sub>	24	3 x 4	40 <sup>5</sup> / <sub>8</sub>	11 <sup>3</sup> / <sub>4</sub>	49 <sup>3</sup> / <sub>8</sub>	27 <sup>1</sup> / <sub>2</sub>	172
URG250S6N•	50	50,000	93	0.60	54	45	59 <sup>1</sup> / <sub>2</sub>	22	4	49 <sup>7</sup> / <sub>8</sub>	11 <sup>3</sup> / <sub>4</sub>	58 <sup>3</sup> / <sub>16</sub>	25 <sup>1</sup> / <sub>2</sub>	167

Available in Natural Gas only.

For 10 year models, change suffix from “6” to “10”.

\*Based on manufacturer’s rated recovery efficiency.

•Models feature optional top T&P location and must be specified when ordering.

Energy Factor and First Hour Rating is based on the latest AHRI directory listings.



# Residential Gas

## Ultra Low NOx Atmospheric Vent High Input Models

28/29



- Bradford White ICON System™
  - Enhanced Performance
  - Advanced Temperature Control System
  - Intelligent Diagnostics
  - Separate Immersed Thermowell
- Defender Combustion Chamber (URG250H6N only)
- Ultra Low NOx Burner with Primary and Secondary Air Distribution Devices
- Digital Thermal Sensor and Resettable Thermal Switch (URG250H6N only)
- Maintenance-Free
- Sight Window
- Factory-Installed Hydrojet® Total Performance System
- Vitraglas® Lining
- Side Connections—3/4" NPT

- Non-CFC Foam Insulation
- Pedestal Base
- Water Connections
- Factory-Installed Heat Traps
- Protective Magnesium Anode Rod
- 4" (107mm) "Snap Lock" Draft Diverter.
- T&P Relief Valve
- Low Restriction Brass Drain Valve
- Design Certified by CSA International (formerly AGA and CGA).
- URG250H6N complies with the latest Ultra Low NOx requirement (10 ng/J NOx limit) URG275H6N / URG2100H6N complies with (14 ng/J NOx limit).

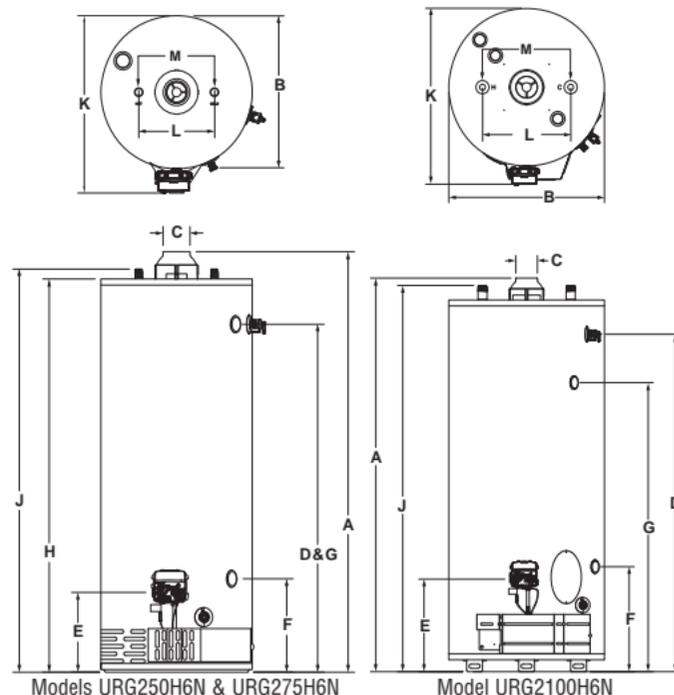


Photo of  
URG250H6N

# Ultra Low NOx Atmospheric Vent High Input Models

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
Recovery efficiency up to 80%

DIMENSIONS IN INCHES

NATURAL GAS MODELS					Recovery 90°F Rise*		A	B	C	D	E	F	G	H	J	K	L	M	
Model Number	Gal. Cap.	Input BTU/Hr.	1st Hour Rating (Gal.)	Energy Factor	Nat U.S. GPH	Nat Imp. GPH	Floor to Flue Conn.	Jacket Dia.	Vent Size	Floor to T&P Conn.	Floor to Gas Conn.	Floor to Space Heating Return	Floor to Space Heating Outlet	Floor to Top of Heater	Floor to Water Conn.	Depth	C/L of Water Conn.	NPT	Approx. Shipping Weight (lbs)
URG250H6N	48	55,000	100	0.60	59	49	60 <sup>5</sup> / <sub>16</sub>	22	4	49 <sup>7</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>2</sub>	13 <sup>3</sup> / <sub>8</sub>	49 <sup>7</sup> / <sub>8</sub>	56 <sup>3</sup> / <sub>8</sub>	57 <sup>13</sup> / <sub>16</sub>	25 <sup>7</sup> / <sub>16</sub>	11	<sup>3</sup> / <sub>4</sub>	194
URG275H6N	75	76,000	N/A	N/A	82	68	64 <sup>1</sup> / <sub>8</sub>	26	4	53 <sup>9</sup> / <sub>16</sub>	15 <sup>1</sup> / <sub>8</sub>	16 <sup>5</sup> / <sub>8</sub>	53 <sup>9</sup> / <sub>16</sub>	60 <sup>1</sup> / <sub>8</sub>	61 <sup>1</sup> / <sub>8</sub>	29 <sup>7</sup> / <sub>16</sub>	11	1	286
URG2100H6N	100	85,000	N/A	N/A	92	77	70 <sup>7</sup> / <sub>16</sub>	28 <sup>1</sup> / <sub>4</sub>	4	60 <sup>7</sup> / <sub>16</sub>	16 <sup>3</sup> / <sub>4</sub>	18 <sup>3</sup> / <sub>4</sub>	51 <sup>3</sup> / <sub>4</sub>	68	69 <sup>1</sup> / <sub>8</sub>	31 <sup>1</sup> / <sub>2</sub>	16	1 <sup>1</sup> / <sub>4</sub>	416

Available in Natural Gas only.

For 10 year models, change suffix from “6” to “10”.

\*Based on manufacturer’s rated recovery efficiency.

Energy Factor and First Hour Rating is based on the latest AHRI directory listings.



# Residential Gas Ultra Low NOx TTW<sup>®</sup> Power Vent Models

30/31



- ENERGY STAR<sup>®</sup> Qualified
- Ultra Low NOx Burner with Primary and Secondary Air Distribution Devices
- Defender Combustion Chamber
- Flammable Vapor Sensor and Resettable Thermal Switch (excluding URG2PV75H6N)
- Maintenance-Free
- Sight Window
- Bradford White ICON System™
- Enhanced Performance
- Advanced Temperature Control System
- Intelligent Diagnostics
- Separate Immersed Thermowell
- Powerful Blower Motor  
- 10 ft. power cord included (120 VAC)
- Horizontal and Vertical Venting
- Factory-Installed Hydrojet<sup>®</sup> Total Performance System

- Vitraglas<sup>®</sup> Lining
- Non-CFC Foam Insulation
- Water Connections
- Factory-Installed Heat Traps
- Protective Magnesium Anode Rod.
- Pedestal Base.
- T&P Relief Valve
- Low Restriction Brass Drain Valve
- All models comply with the latest Ultra Low NOx requirement (10 ng/J NOx limit) except URG2PV75H6N (14 ng/J NOx limit).

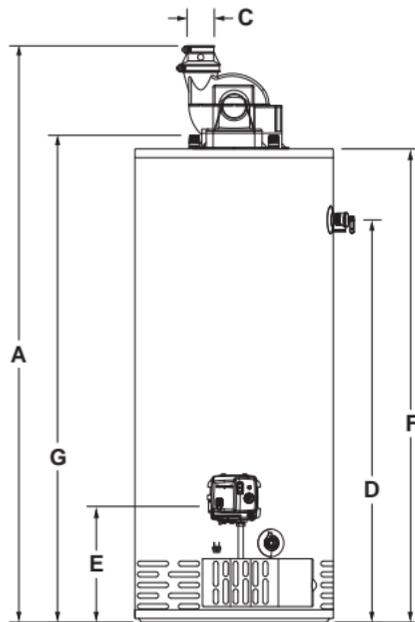
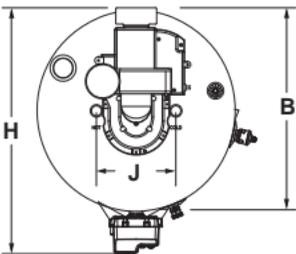


Photo of  
URG1PV40S6N

# Ultra Low NOx TTW<sup>®</sup> Power Vent Models

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
80% Recovery Efficiency

DIMENSIONS IN INCHES

## NATURAL GAS MODELS

Model Number	Gal. Cap.	Input BTU/Hr.	1st Hour Rating (Gal.)	Energy Factor	Recovery 90°F Rise*		A Floor to Vent Conn.	B Jacket Dia.	C Vent Size	D Floor to T&P Conn.	E Floor to Gas Conn.	F Floor to Top of Heater	G Floor to Water Conn.	H Depth	J C/L of Water Conn.	Approx. Shipping Weight (lbs)
					Nat U.S. GPH	Nat Imp. GPH										
URG1PV40S6N	40	40,000	72	0.66	43	36	57 <sup>1</sup> / <sub>4</sub>	20	2 or 3	40	11 <sup>3</sup> / <sub>4</sub>	47 <sup>1</sup> / <sub>8</sub>	48 <sup>1</sup> / <sub>2</sub>	24 <sup>7</sup> / <sub>8</sub>	8	144
URG1PV50S6N	50	40,000	86	0.65	43	36	58 <sup>1</sup> / <sub>4</sub>	22	2 or 3	40 <sup>5</sup> / <sub>8</sub>	11 <sup>3</sup> / <sub>4</sub>	48 <sup>1</sup> / <sub>8</sub>	49 <sup>1</sup> / <sub>2</sub>	26 <sup>7</sup> / <sub>8</sub>	8	169
★ URG2PV40T6N	40	40,000	72	0.70	43	36	66 <sup>7</sup> / <sub>8</sub>	20	2 or 3	49 <sup>7</sup> / <sub>8</sub>	11 <sup>3</sup> / <sub>4</sub>	56 <sup>5</sup> / <sub>8</sub>	58	24 <sup>7</sup> / <sub>16</sub>	8	151
★ URG2PV50T6N	50	40,000	86	0.70	43	36	66 <sup>7</sup> / <sub>8</sub>	22	2 or 3	49 <sup>7</sup> / <sub>8</sub>	11 <sup>3</sup> / <sub>4</sub>	56 <sup>5</sup> / <sub>8</sub>	58	26 <sup>7</sup> / <sub>16</sub>	8	176
★ URG2PV50H6N	48	56,000	99	0.70	60	50	66 <sup>3</sup> / <sub>8</sub>	22	3 or 4	49 <sup>7</sup> / <sub>8</sub>	11 <sup>3</sup> / <sub>4</sub>	56 <sup>5</sup> / <sub>8</sub>	58	26 <sup>1</sup> / <sub>2</sub>	11	192
URG2PV75H6N	75	76,000	N/A	N/A	82	68	69 <sup>1</sup> / <sub>4</sub>	26	3 or 4	51 <sup>7</sup> / <sub>8</sub>	11 <sup>3</sup> / <sub>4</sub>	59 <sup>1</sup> / <sub>2</sub>	61	30 <sup>1</sup> / <sub>4</sub>	11	270

Available in Natural Gas only. For 10 year models, change suffix from “6” to “10”.

\*Based on manufacturer’s rated recovery efficiency.

120 VAC Required for Power Venting / 120 VAC, 60HZ, 3.1 Amperes.

Energy Factor and First Hour Rating is based on the latest AHRI directory listings.

★ = ENERGY STAR<sup>®</sup> Qualified.



	2" Vent Pipe	3" Vent Pipe	3" Vent Pipe	4" Vent Pipe
	URG1PV40S6N URG1PV50S6N URG2PV40T6N URG2PV50T6N		URG2PV50H6N URG2PV75H6N	
Max. Equivalent Length	†50 ft.	†120 ft.	†50 ft.	†180 ft.
Min. Equivalent Length	7 ft.	15 ft.	7 ft.	15 ft.
Number of 90° Elbows	1 2 3	45 ft. 40 ft. 35 ft.	115 ft. 110 ft. 105 ft.	45 ft. 40 ft. 35 ft.
		175 ft.	170 ft.	165 ft.

†For high altitude installations, consult the installation instructions.



# Residential Gas Ultra Low NOx Power Direct Vent Models

32/33



- ENERGY STAR® Qualified
- Ultra Low NOx Burner with Primary and Secondary Air Distribution Devices
- Closed Combustion Venting System
- Bradford White ICON System™
  - Enhanced Performance
  - Advanced Temperature Control System
  - Intelligent Diagnostics
  - Separate Immersed Thermowell
- Cast Aluminum Air Intake Boot
- Flammable Vapor Sensor
- Factory-Installed Hydrojet® Total Performance System
- Vitraglas® Lining
- Powerful Blower Model
  - 10 ft. power cord included (120 VAC)
- Optional Concentric Vent Kit Termination

- Horizontal and Vertical Venting
- 2" Non-CFC Foam Insulation
- Water Connections— 3/4" NPT
- 3/4" NPT Side Connections— (URG2PDV50H6N only).
- Factory-Installed Heat Traps
- Protective Magnesium Anode Rod.
- T&P Relief Valve

- Low Restriction Brass Drain Valve
- Complies with the latest Ultra Low NOx requirement (10 ng/J NOx limit).

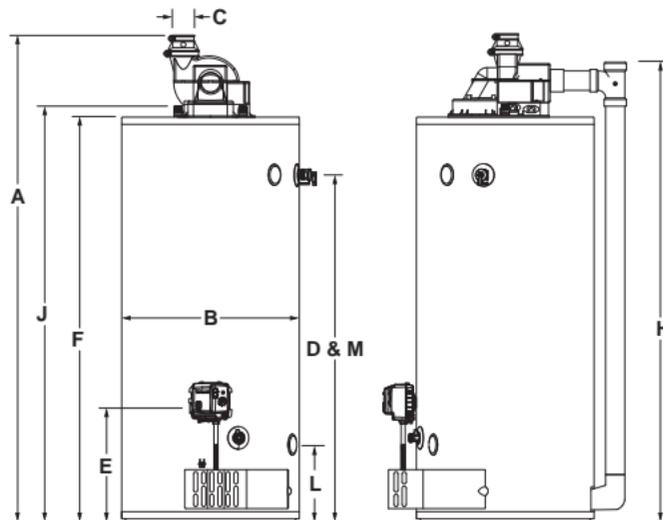
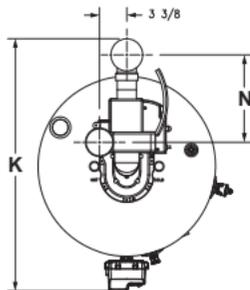


Photo of  
URG2PDV50H6N

# Ultra Low NOx Power Direct Vent Models

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
78% Recovery Efficiency

DIMENSIONS IN INCHES

NATURAL GAS MODELS					Recovery 90°F Rise*		A	B	C	D	E	F	H	J	K	L	M	N	
Model Number	Gal. Cap.	Input BTU/Hr.	1st Hour Rating (Gal.)	Energy Factor	Nat U.S. GPH	Nat Imp. GPH	Floor to Exhaust Outlet	Jacket Dia.	Vent Size	Floor to T&P Conn.	Floor to Gas Conn.	Floor to Top of Heater	Floor to Air Intake	Floor to Water Conn.	Depth	Floor to Space Heating Return	Floor to Space Heating Supply	C/L Distance From Intake to Exhaust	Approx. Shipping Weight (lbs)
★ URG2PDV40S6N	40	40,000	72	0.70	43	36	59½	22	2 or 3	42¾	13¾	49¾	59¾	51	30¾	—	—	10½	159
★ URG2PDV50S6N	50	40,000	86	0.70	43	36	60½	24	2 or 3	43	13¾	60¾	50¾	52	32¾	—	—	11½	189
★ URG2PDV50H6N	48	50,000	92	0.68	64	45	69¼	22	3 or 4	52¼	13¾	69¼	58¾	60	32	15¾	52¼	9¼	201

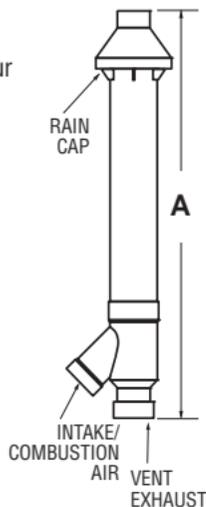
Available in Natural Gas only. For 10 year model, change suffix "6" to "10".  
\*Based on manufacturer's rated recovery efficiency. 120 VAC Required for Power Venting / 120 VAC, 60HZ, 3.1 Amperes. Energy Factor and First Hour Rating is based on the latest AHRI directory listings.

★ = ENERGY STAR® Qualified.



### Concentric Vent Kit Termination

<b>2" Kit</b>	<b>A (in.)</b>
P/N 239-44069-02	29 ¼
<b>3" Kit</b>	<b>A (in.)</b>
P/N 239-44069-01	36 ¼



	2" Vent Pipe	3" Vent Pipe		4" Vent Pipe
	URG2PDV40S6N URG2PDV50S6N	URG2PDV40S6N URG2PDV50S6N	URG2PDV50H6N	URG2PDV50H6N
Max. Intake Length	35 ft.	85 ft.	60 ft.	100 ft.
Max. Exhaust Length	35 ft.	85 ft.	60 ft.	100 ft.
Min. Vent Length	7 ft.	7 ft.	7 ft.	7 ft.
Number of 90° Elbows	1	30 ft.	80 ft.	55 ft.
	2	25 ft.	75 ft.	50 ft.
	3	20 ft.	70 ft.	45 ft.

Subtract 5ft. for each additional 90° elbow.



# Residential Gas Ultra Low NOx Direct Vent Models

34/35



## ■ Bradford White ICON System™

- Enhanced Performance
- Advanced Temperature Control System
- Intelligent Diagnostics
- Separate Immersed Thermowell
- Ultra Low NOx Burner with Primary and Secondary Air Distribution Devices
- Closed Combustion
- Reinforced Seals
- Maintenance-Free
- Sight Window
- Factory-Installed Hydrojet® Total Performance System
- Vitraglas® Lining
- Cast Aluminum Air Intake Boot
- Telescoping Solid Vent Kits
- Flexible Vent Kit

## ■ Side Connections—3/4" NPT

- 2" Non-CFC Foam Insulation
- Pedestal Base.
- Water Connections—3/4" NPT
- Factory-Installed Heat Traps.
- Protective Magnesium Anode Rod.

## ■ T&P Relief Valve

- Low Restriction Brass Drain Valve
- Design Certified by CSA International (formerly AGA and CGA).
- Complies with the latest Ultra Low NOx requirement (10 ng/J NOx limit).

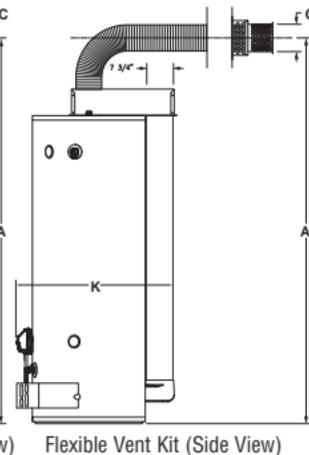
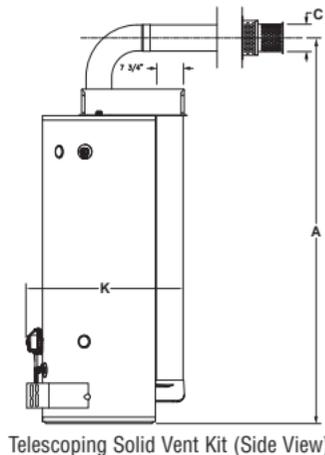
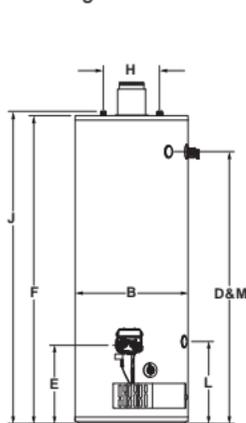


Photo of  
URG2DV50H6N

# Ultra Low NOx Direct Vent Models

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
78% Recovery Efficiency

DIMENSIONS IN INCHES

NATURAL GAS MODELS					Recovery 90°F Rise*		A	B	C	D	E	F	H	J	K	L	M	
Model Number	Gal. Cap.	Input BTU/Hr.	1st Hour Rating (Gal.)	Energy Factor	Nat U.S. GPH	Nat Imp. GPH	Floor to C/L of Vent	Jacket Dia.	Vent Size I.D. O.D.	Floor to T&P Conn.	Floor to Gas Conn.	Floor to Top of Heater	C/L of Water Conn.	Floor to Water Conn.	Depth	Floor to Space Heating Inlet	Floor to Space Heating Onlet	Approx. Shipping Weight (lbs)
URG2DV40S6N	40	38,000	73	0.62	41	34	63 <sup>3</sup> / <sub>8</sub>	22	3 5	43 <sup>3</sup> / <sub>8</sub>	15	50 <sup>1</sup> / <sub>4</sub>	8	51 <sup>1</sup> / <sub>2</sub>	31 <sup>1</sup> / <sub>8</sub>	—	—	198
URG2DV50S6N	50	38,000	84	0.60	41	34	65 <sup>1</sup> / <sub>2</sub>	22	3 5	52 <sup>1</sup> / <sub>4</sub>	15	59 <sup>1</sup> / <sub>4</sub>	8	60 <sup>1</sup> / <sub>2</sub>	31 <sup>1</sup> / <sub>8</sub>	—	—	221
URG2DV50H6N	48	45,000	88	0.60	46	38	74 <sup>1</sup> / <sub>4</sub>	22	4 6	52 <sup>1</sup> / <sub>4</sub>	15	59 <sup>1</sup> / <sub>4</sub>	11	60 <sup>1</sup> / <sub>8</sub>	30 <sup>5</sup> / <sub>8</sub>	15 <sup>3</sup> / <sub>4</sub>	52 <sup>1</sup> / <sub>4</sub>	240

Available in Natural Gas only. For 10 year models, change suffix from “6” to “10”.

\*Based on manufacturer’s rated recovery efficiency.

Energy Factor and First Hour Rating is based on the latest AHRI directory listings.

**URG2DV40S6N / URG2DV50S6N Solid Vent Kit:** Part No. 239-51283-00. **URG2DV40S6N / URG2DV50S6N Flexible Vent Kit:** Part No. 239-51284-00.

**URG2DV50H6N Solid Vent Kit:** Part No. 239-51286-00. **URG2DV50H6N Flexible Vent Kit:** Part No. 239-51287-00.

Kits can be ordered and shipped with water heater, or ordered and shipped separately. For vent kit components and venting instructions, refer to Installation and Operation Manual.

## URG2DV40S6N / URG2DV50S6N Optional Telescoping Solid Vent Kits:

**Kit “A”** Telescopes from 4<sup>3</sup>/<sub>4</sub>” to 5<sup>1</sup>/<sub>8</sub>” Part No. 239-41260-00

**Kit “B”** Telescopes from 6<sup>1</sup>/<sub>2</sub>” to 9<sup>1</sup>/<sub>8</sub>” Part No. 239-41331-00

**Kit “C”** Telescopes from 13<sup>3</sup>/<sub>4</sub>” to 23<sup>1</sup>/<sub>8</sub>” Part No. 239-41029-00

**Kit “D”** Telescopes from 49<sup>1</sup>/<sub>8</sub>” to 95<sup>1</sup>/<sub>8</sub>” Part No. 239-41424-00

## URG2DV50H6N Optional Telescoping Solid Vent Kits:

**Kit “F”** Telescopes from 4<sup>3</sup>/<sub>4</sub>” to 5<sup>1</sup>/<sub>8</sub>” Part No. 239-42516-00

**Kit “G”** Telescopes from 6<sup>1</sup>/<sub>2</sub>” to 9<sup>1</sup>/<sub>8</sub>” Part No. 239-42517-00

**Kit “H”** Telescopes from 13<sup>3</sup>/<sub>4</sub>” to 23<sup>1</sup>/<sub>8</sub>” Part No. 239-42514-00

**Kit “I”** Telescopes from 49<sup>1</sup>/<sub>8</sub>” to 95<sup>1</sup>/<sub>8</sub>” Part No. 239-42512-00



# Residential Gas Infiniti Tankless™ High Efficiency Models

36/37



- Featuring the SRT™ Scale Reduction Technology
  - Vertical Modulating Burner Design
  - Dual Fan Configuration
  - Internal Turbulators
  - Dual Heat Exchanger
- Built-In Digital Control
- Active Bypass
- Cascading Kit (Optional)
- Venting Flexibility
- Gas Connection Flexibility—1/2", 3/4", or 1"
- Inlet Water Filter
- Space Saving Installation
- Built-In Freeze Protection
- Interior and Exterior Installation Capability
- Complies with the latest Ultra-Low NOx requirement (10 ng/J NOx limit).

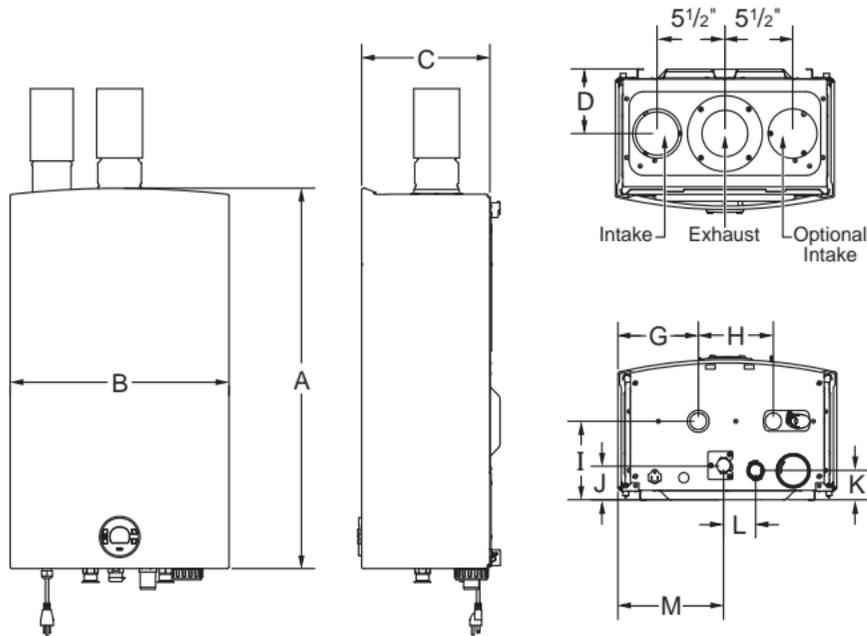


Photo of  
RTG-199HE-N

# Infiniti Tankless™ High Efficiency Models

DIMENSIONS IN INCHES

NATURAL GAS AND LIQUID PROPANE GAS MODELS

Model Number	Installation	Input BTU/Hr.	Vent Conn.	Recovery 90°F Rise* GPM	EF Rating Nat.	Minimum Water Flow GPM	Maximum Temperature Setting
RTG-199HE-N	Indoor / Outdoor*	19,900–199,900	3	4.2	0.95	0.5	140° F

	A	B	C	D	G	H	I	J	K	L	L	
Model Number	Height	Width	Depth	Intake/ Exhaust Center Line	Hot Water Outlet	Cold Water Inlet	Hot Water Outlet	Gas Conn.	Condensate Tee	Condensate Tee	Gas Conn	Approx. Shipping Weight (lbs)
RTG-199HE-N	30 <sup>9</sup> / <sub>16</sub>	17 <sup>13</sup> / <sub>16</sub>	10 <sup>7</sup> / <sub>16</sub>	5 <sup>3</sup> / <sub>16</sub>	6 <sup>9</sup> / <sub>16</sub>	6 <sup>1</sup> / <sub>8</sub>	6 <sup>5</sup> / <sub>16</sub>	2 <sup>11</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>8</sub>	2 <sup>5</sup> / <sub>8</sub>	2 <sup>3</sup> / <sub>8</sub>	74

For Propane (LP) Models change suffix "N" to "X".

Requires an electrical power supply from a 120VAC 60Hz properly rated receptacle and must be properly grounded. Power supply cord provided.

\*Outdoor installation requires optional outdoor kit

	2" Venting	3" Venting		4" Venting	
	Twin Pipe	Twin Pipe	Concentric	Twin Pipe	Concentric
Max. Allowable Exhaust Vent Length	9.5 ft.	31.0 ft.	23.0 ft.	63.0 ft.	43.0 ft.
Max. Allowable Intake Vent Length	9.5 ft.	31.0 ft.	23.0 ft.	63.0 ft.	43.0 ft.
Combined Max. Allowable Vent	19.0 ft.	62.0 ft.	46.0 ft.	126.0 ft.	83.0 ft.
Elbow Equivalency 90°	5.0 ft.				
Elbow Equivalency 45°	2.5 ft.				
Number of 90° Elbows	1	5	4	7	7



# Residential Gas Infiniti Tankless™ Mid Efficiency Models

38/39



- Featuring the SRT™ Scale Reduction Technology
  - Vertical Modulating Burner Design
  - Dual Fan Configuration
  - Internal Turbulators
  - Dual Heat Exchanger
- Built-In Digital Control
- Cascading Kit (Optional)
- Gas Connection Flexibility—1/2", 3/4", or 1"
- Inlet Water Filter
- Space Saving Installation
- Built-In Freeze Protection
- Interior and Exterior Installation Capability
- Complies with the latest Ultra-Low NOx requirement (10 ng/J NOx limit).

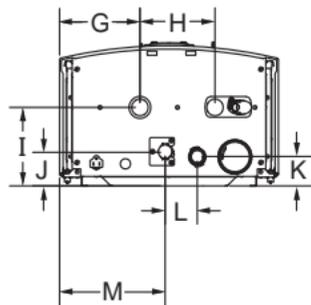
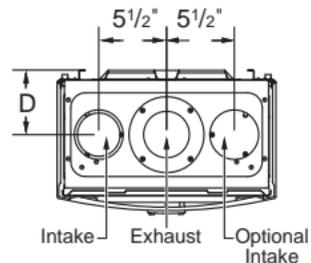
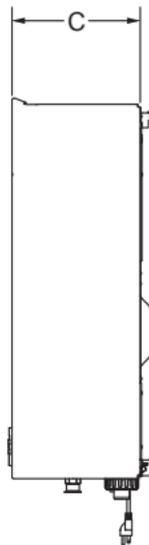
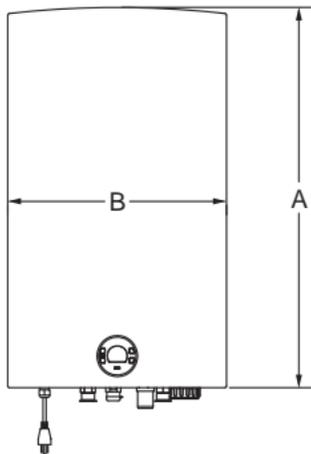


Photo of  
RTG-199ME-N

# Infiniti Tankless™ Mid Efficiency Models

DIMENSIONS IN INCHES

NATURAL GAS AND LIQUID PROPANE GAS MODELS

Model Number	Installation	Input BTU/Hr.	Vent Conn.	Recovery 90°F Rise* GPM	EF Rating Nat.	Minimum Water Flow GPM	Maximum Temperature Setting
RTG-199ME-N	Indoor / Outdoor*	19,900–199,900	3	3.7	0.83	0.5	140° F

	A	B	C	D	G	H	I	J	K	L	L	
Model Number	Height	Width	Depth	Intake/ Exhaust Center Line	Hot Water Outlet	Cold Water Inlet	Hot Water Outlet	Gas Conn.	Condensate Tee	Condensate Tee	Gas Conn	Approx. Shipping Weight (lbs)
RTG-199ME-N	30 <sup>9</sup> / <sub>16</sub>	17 <sup>13</sup> / <sub>16</sub>	10 <sup>7</sup> / <sub>16</sub>	5 <sup>3</sup> / <sub>16</sub>	6 <sup>9</sup> / <sub>16</sub>	6 <sup>1</sup> / <sub>8</sub>	6 <sup>5</sup> / <sub>16</sub>	2 <sup>11</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>8</sub>	2 <sup>5</sup> / <sub>8</sub>	2 <sup>3</sup> / <sub>8</sub>	67

For Propane (LP) Models change suffix "N" to "X".

Requires an electrical power supply from a 120VAC 60Hz properly rated receptacle and must be properly grounded. Power supply cord provided.

\*Outdoor installation requires optional outdoor kit

	3" Venting	4" Venting
Max. Allowable Exhaust Vent Length	28.5 ft.	61.25 ft.
Max. Allowable Intake Vent Length	28.5 ft.	61.25 ft.
Combined Max. Allowable Vent	57.0 ft.	122.5 ft.
Elbow Equivalency 90°	5.0 ft.	5.0 ft.
Elbow Equivalency 45°	2.5 ft.	2.5 ft.
Number of 90° Elbows	5	7



# Residential Electric Energy Saver Water Heaters

40/41



## General

All models are ETL listed. All water connections are 3/4" NPT factory-installed true dielectric fittings (RE120L). All electrical connections are 3/4". All models are certified at 300 psi test pressure and 150 psi working pressure. All models come equipped with two installed heat traps (except Utility, Wall Hung models, and RE120L).

**Note:** The **Upright** and **Lowboy** heaters will be wired single phase interlocking (non-simultaneous) 240 volt with 4500 watt elements, unless otherwise specified. Other wattages are available up to 6000 watts (208, 240, 277 and 480 volt). (Reference chart on following page for non-simultaneous and simultaneous limitations). 4500 watt/240 volt elements require a 25 amp or 30 amp circuit breaker. For 120 volt (non-simultaneous), all models have a maximum wattage of 3000. (120 and 277 volt can only be wired single phase.)

**Note:** The **Utility** and **Wall Hung** Heaters will be wired for 120 volt with a 1500 watt element. The 1500 watt/120 volt element requires a 20 amp breaker. Other wattages are available. Maximum wattage for 6 and 12 gallon tall utility models is 3000W. Maximum wattage for 10, 12 and 15 gallon utility models is 6000W. Maximum wattage for the 6 gallon wall hung model is 3000W. Maximum wattage for 12, 20 and 30 gallon wall hung models is 6000W.

Incoloy Element Availability Chart					
Watts	120V	208V	240V	277V	480V
1500	yes	yes	yes	no	no
2000	no	yes	yes	yes	yes
2500	no	yes	yes	no	no
3000	no	yes	yes	yes	yes
3500	no	yes	yes	no	no
4000	no	yes	yes	yes	yes
4500	no	yes	yes	yes	yes
5000	no	yes	yes	yes	yes
5500	no	yes	yes	yes	yes
6000	no	yes	yes	yes	yes

Phase	1	Single Phase
	3	Three Phase

EX: RE340T6-1NCWW

Operation	N	Non-simultaneous
	S	Simultaneous

EX: RE340T6-1NCWW

Designator	A	C	E	H	J	L*
Voltage	120	208/240	277	480	600	208

EX: RE340T6-1NCWW

\*Use "L" voltage designator if wiring 208V with 5000, 5500 or 6000 watt.

Wattage Limitations for Simultaneous Operation	Voltage				
	120V	208V	240V	277V	480V
1500W / 1500W	yes	yes	yes	yes	yes
2000W / 2000W	no	yes	yes	yes	yes
2500W / 2500W	no	yes	yes	yes	yes
3000W / 3000W	no	yes	yes	yes	yes
3500W / 3500W	no	yes	yes	no	no
4000W / 4000W	no	yes	yes	yes	yes
4500W / 4500W	no	yes	yes	yes	yes
5000W / 5000W	no	yes	yes	yes	yes
5500W / 5500W	no	no	yes	no	no
6000W / 6000W	no	no	no	yes	yes

Wattage Limitations for Non-Simultaneous Operation	Wattage Limitations for Single Element Operation	Voltage				
		120V	208V	240V	277V	480V
1500W / 1500W	1500W	yes	yes	yes	yes	yes
2000W / 2000W	2000W	yes	yes	yes	yes	yes
2500W / 2500W	2500W	yes	yes	yes	yes	yes
3000W / 3000W	3000W	yes	yes	yes	yes	yes
3500W / 3500W	3500W	no	yes	yes	no	no
4000W / 4000W	4000W	no	yes	yes	yes	yes
4500W / 4500W	4500W	no	yes	yes	yes	yes
5000W / 5000W	5000W	no	yes	yes	yes	yes
5500W / 5500W	5500W	no	yes	yes	yes**	yes**
6000W / 6000W	6000W	no	yes	yes	yes	yes

\*\*Incoloy element only.

#### For 120V, 277V, 480V, and 600V operation

Designator	J	K	L	M	N	P	R	S	T	W	X	Y	Z
Watt	1000	1250	1500	2000	2500	3000	3500	3800	4000	4500	5000	5500	6000

EX: RE340T6-1NCWW

#### For 240V and 208V operation (Dual rated elements show a value for both 240V and 208V)

Designator	J	K	L	M	N	P	R	S	T	W	X	Y	Z	X**	Y**	Z**
240V Wattage	1000	1250	1500	2000	2500	3000	3500	3800	4000	4500	5000	5500	6000	—	—	—
208V Wattage	—	—	1000	1500	2000	—	2500	—	3000	3500	—	4000	4500	5000	5500†	6000†

EX: RE340T6-1NCWW =, will give 240V with 4500W/4500W. This same heater can also be energized at 208V with reduced wattage of 3500W/3500W.

\*Use "L" voltage designator if wiring 208V with 5000, 5500 or 6000 watt.

†Available in non-simultaneous only.



# Residential Electric AeroTherm™ Series Heat Pump Models

42/43



- ENERGY STAR® Qualified
- The AeroTherm™ Series Control Panel
  - User-Friendly, Easy-to-Read Display.
  - LED's Clearly Indicate the Current Operating Mode.
  - Display Communicates Current Status, Mode and Set Point, and Displays Error Messages when Applicable.
- Operating Modes Offer Flexibility.
  - Heat Pump (Only) Mode
  - Hybrid Mode
  - Electric (Only) Mode
  - Vacation Mode
- Quiet Operation
- Can Be Laid Down for Easier Transportation

- Easily Accessible Top Mounted Washable Air Filter
- Operating Air Temperature Range of 35-120°F for the Heat Pump
- Backup Electric Heating Elements.
- Direct Heat Transfer with Immersed Elements
- 2" Non-CFC Foam Insulation
- Water Connections—3/4" NPT
- Protective Magnesium Alloy Anode Rod
- T&P Relief Valve—Installed.
- Low Restriction Brass Drain Valve
- Design Certified to NSF/ANSI 372 (Lead Content).
- Northern Climate Tier 3 Capable.
- Optional Ducting Kit

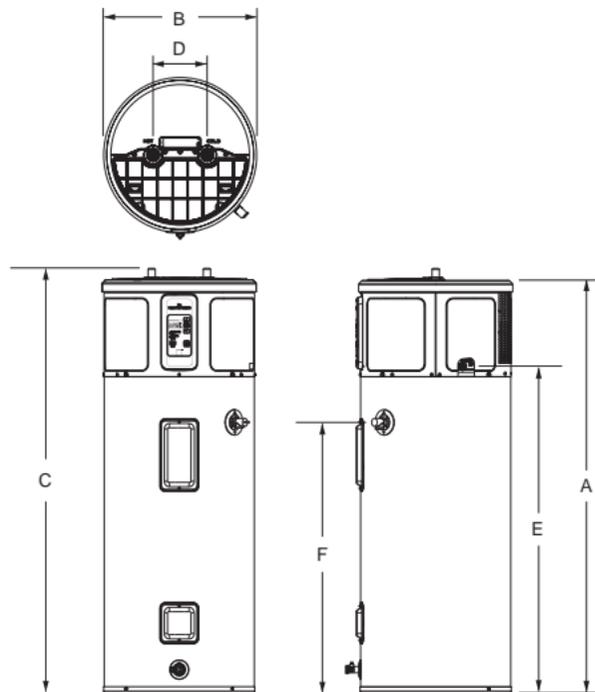


Photo of  
RE2H50R10B

# AeroTherm™ Series Heat Pump Models

DIMENSIONS IN INCHES

C.E.C. Listed

ELECTRIC MODELS				Recovery 90°F Rise*		A	B	C	D	E	F	Approx. Shipping Weight (lbs)
Model Number	Gal. Cap.	1st Hour** Delivery Rating	Energy Factor	Nat U.S. GPH	Nat Imp. GPH	Floor to Heater Top	Jacket Dia.	Floor to Water Conn.	Distance Between Water Conn.	Floor to Condensate Conn.	Floor to T&P Heater	
RE2H50R10B	50	69	3.39	21	18	59 <sup>1</sup> / <sub>8</sub>	21 <sup>3</sup> / <sub>4</sub>	60 <sup>3</sup> / <sub>4</sub>	8	46 <sup>3</sup> / <sub>4</sub>	38 <sup>3</sup> / <sub>4</sub>	195
RE2H80R10B	80	94	3.26	21	18	71 <sup>1</sup> / <sub>8</sub>	25	73 <sup>1</sup> / <sub>2</sub>	8	58 <sup>3</sup> / <sub>4</sub>	50 <sup>3</sup> / <sub>8</sub>	235

\*Based on 4500/4000W, Non-Simultaneous Operation.

## PARTS INCLUDED



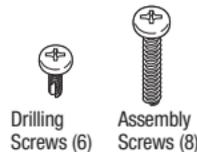
Upper Inlet  
Duct Adapter



Outlet Duct Adapter



Lower Inlet  
Duct Adapter



Drilling  
Screws (6)      Assembly  
Screws (8)



Inlet Duct Filter



8" Hose Clamps (2)

## Optional Ducting Kit: Part No. GVK8HS.

Kit installation also requires 8" insulated flexible ducting, ducting support hangers, and exterior wall vents for inlet & outlet. Additional clearances required for ducting, refer to ducting kit instructions.



# Residential Electric Upright Models

44/45



- DOE—Meet or Exceed Efficiency Requirements
- Fully Automatic Controls
- Direct Heat Transfer with Immersed Elements
- Factory-Installed Hydrojet® Total Performance System
- Vitraglas® Lining
- Non-CFC Foam Insulation
- Water Connections—3/4" NPT
- Factory-Installed Heat Traps
- Protective Magnesium Anode Rod
- Simultaneous and Non-Simultaneous Operation Available
- Voltages Available—120V, 208V, 240V, 277V, 480V.
- Single Phase or Three Phase Operation Available—120V & 277V

- T&P Relief Valve
- Design Evaluated by ETL in Accordance with Part 280.707(d) of HUD Mobile Home Construction and Safety Standards for Energy Efficiency.

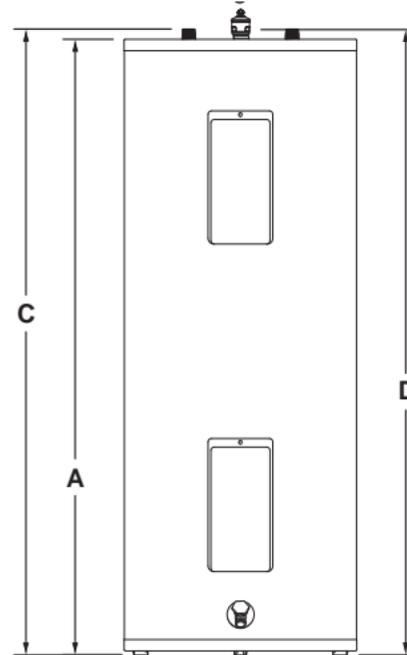
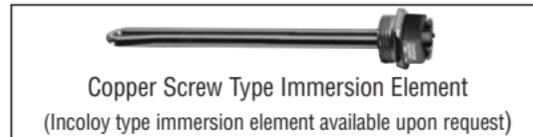
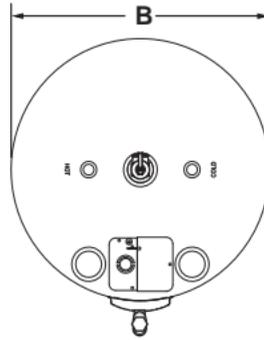


Photo of RE250S6

# Upright Models

DIMENSIONS IN INCHES

C.E.C. Listed

## ELECTRIC MODELS

Model Number	Gal. Cap.	1st Hour** Rating (Gal.)	Energy Factor	Recovery 90°F Rise*		A Floor to Heater Top	B Jacket Dia.	C Floor to Water Conn.	D Floor to T&P Heater	Approx. Shipping Weight (lbs)
				Nat U.S. GPH	Nat Imp. GPH					
RE330S6	30	47	0.95	21	18	47	20	47 <sup>3</sup> / <sub>4</sub>	47 <sup>3</sup> / <sub>4</sub>	100
RE340S6	40	55	0.95	21	18	47 <sup>7</sup> / <sub>8</sub>	22	48 <sup>5</sup> / <sub>8</sub>	48 <sup>5</sup> / <sub>8</sub>	114
RE340T6	40	56	0.95	21	18	60 <sup>5</sup> / <sub>8</sub>	20	61 <sup>3</sup> / <sub>8</sub>	61 <sup>3</sup> / <sub>8</sub>	125
RE350S6	50	67	0.95	21	18	47	24	47 <sup>3</sup> / <sub>4</sub>	47 <sup>3</sup> / <sub>4</sub>	144
RE350T6	50	67	0.95	21	18	58 <sup>5</sup> / <sub>8</sub>	22	59 <sup>3</sup> / <sub>8</sub>	59 <sup>3</sup> / <sub>8</sub>	138
RE240S6†	40	55	0.95	21	18	48	20	48 <sup>3</sup> / <sub>4</sub>	48 <sup>3</sup> / <sub>4</sub>	123
RE250S6†	50	67	0.95	21	18	47	22	47 <sup>3</sup> / <sub>4</sub>	47 <sup>3</sup> / <sub>4</sub>	143

†Models include supplied insulation blanket (2" thick). Dimensions in charts above do not include blanket thickness.

For 10 year models, change suffix "6" to "10".

\*Based on 4500W/4500W, Non-Simultaneous operation.

Energy Factor and First Hour Rating is based on the latest AHRI directory listings.

	Wattage Limitations for Simultaneous Operation					Wattage Limitations for Non-Simultaneous Operation				
	Voltage					Voltage				
	120V	208V	240V	277V	480V	120V	208V	240V	277V	480V
1500W / 1500W	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
2000W / 2000W	no	yes	yes	yes	yes	yes	yes	yes	yes	yes
2500W / 2500W	no	yes	yes	yes	yes	yes	yes	yes	yes	yes
3000W / 3000W	no	yes	yes	yes	yes	yes	yes	yes	yes	yes
3500W / 3500W	no	yes	yes	no	no	no	yes	yes	no	no
4000W / 4000W	no	yes	yes	yes	yes	no	yes	yes	yes	yes
4500W / 4500W	no	yes	yes	yes	yes	no	yes	yes	yes	yes
5000W / 5000W	no	yes	yes	yes	yes	no	yes	yes	yes	yes
5500W / 5500W	no	no	yes	no	no	no	yes	yes	no	no
6000W / 6000W	no	no	no	yes	yes	no	yes	yes	yes	yes

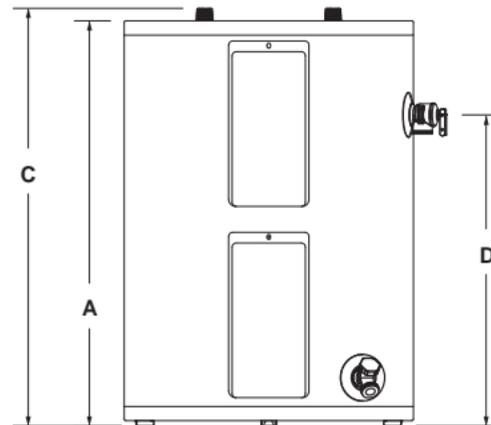
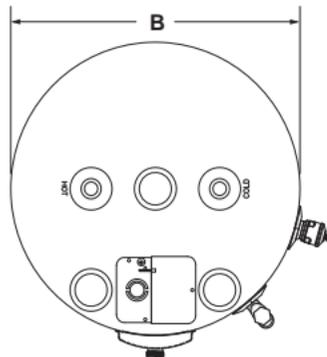
Wattage	Recovery▲ GPH Temperature Rise °F				
	60	80	90	100	120
1500W	10	8	7	6	5
2000W	14	10	9	8	7
2500W	17	13	11	10	9
3000W	21	15	14	12	10
3500W	24	18	16	14	12
4000W	28	21	18	16	14
4500W	31	23	21	19	15
5000W	34	26	23	21	17
5500W	38	29	25	23	19
6000W	41	31	28	25	21

▲ (GPH based on Non-Simultaneous operation, when Simultaneous operation the GPH will approximately double.)



- DOE—Models above 20-Gallon Meet or Exceed Efficiency Requirements
- Fully Automatic Controls
- Direct Heat Transfer with Immersed Elements
- Factory-Installed Hydrojet® Total Performance System
- Vitraglas® Lining
- Non-CFC Foam Insulation
- Water Connections—3/4" NPT
- Factory-Installed Heat Traps

- Protective Magnesium Anode Rod
- Simultaneous and Non-Simultaneous Operation Available
- Voltages Available—120V, 208V, 240V, 277V, 480V.
- Single Phase or Three Phase Operation Available—120V & 277V
- T&P Relief Valve
- Design Evaluated by ETL in Accordance with Part 280.707(d) of HUD Mobile Home Construction and Safety Standards for Energy Efficiency.



Copper Screw Type Immersion Element  
(Incoloy type immersion element available upon request)



Photo of RE240L6

# Lowboy Models

DIMENSIONS IN INCHES

C.E.C. Listed

ELECTRIC MODELS				Recovery 90°F Rise*		A	B	C	D	
Model Number	Gal. Cap.	1st Hour** Rating (Gal.)	Energy Factor	Nat U.S. GPH	Nat Imp. GPH	Floor to Heater Top	Jacket Dia.	Floor to Water Conn.	Floor to T&P Heater	Approx. Shipping Weight (lbs)
RE120L6†	19	—	—	21	18	24 <sup>7</sup> / <sub>8</sub>	18	25 <sup>5</sup> / <sub>8</sub>	19 <sup>1</sup> / <sub>8</sub>	65
RE230L6**‡	28	45	0.95	21	18	29 <sup>7</sup> / <sub>8</sub>	22	30 <sup>3</sup> / <sub>4</sub>	30 <sup>5</sup> / <sub>8</sub>	129
RE240L6**‡	38	55	0.95	21	18	32 <sup>5</sup> / <sub>8</sub>	24	33 <sup>1</sup> / <sub>2</sub>	33 <sup>5</sup> / <sub>8</sub>	153
RE250L6**‡	47	67	0.95	21	18	32 <sup>5</sup> / <sub>8</sub>	26	33 <sup>1</sup> / <sub>2</sub>	33 <sup>5</sup> / <sub>8</sub>	183

\*\*Models include supplied insulation blanket (2" thick). Dimensions in charts above do not include blanket thickness.

For 10 year models, change suffix "6" to "10".

\* Based on 4500W/4500W, Non-Simultaneous operation.

All models feature optional top T&P location and must be specified when ordering.

† Exempt from ASHRAE 90.1b (current standard).

Energy Factor and First Hour Rating is based on the latest AHRI directory listings.

‡ Low watt density element standard on 240v/4500w-208v/3500w only.

	Wattage Limitations for Simultaneous Operation					Wattage Limitations for Non-Simultaneous Operation				
	Voltage					Voltage				
	120V	208V	240V	277V	480V	120V	208V	240V	277V	480V
1500W / 1500W	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
2000W / 2000W	no	yes	yes	yes	yes	yes	yes	yes	yes	yes
2500W / 2500W	no	yes	yes	yes	yes	yes	yes	yes	yes	yes
3000W / 3000W	no	yes	yes	yes	yes	yes	yes	yes	yes	yes
3500W / 3500W	no	yes	yes	no	no	no	yes	yes	no	no
4000W / 4000W	no	yes	yes	yes	yes	no	yes	yes	yes	yes
4500W / 4500W	no	yes	yes	yes	yes	no	yes	yes	yes	yes
5000W / 5000W	no	yes	yes	yes	yes	no	yes	yes	yes	yes
5500W / 5500W	no	no	yes	no	no	no	yes	yes	no	no
6000W / 6000W	no	no	no	yes	yes	no	yes	yes	yes	yes

Wattage	Recovery▲ GPH Temperature Rise °F				
	60	80	90	100	120
1500W	10	8	7	6	5
2000W	14	10	9	8	7
2500W	17	13	11	10	9
3000W	21	15	14	12	10
3500W	24	18	16	14	12
4000W	28	21	18	16	14
4500W	31	23	21	19	15
5000W	34	26	23	21	17
5500W	38	29	25	23	19
6000W	41	31	28	25	21

▲ (GPH based on Non-Simultaneous operation, when Simultaneous operation the GPH will approximately double.)



# Residential Electric Wall Hung Models

48/49



- Fully Automatic Controls
- Direct Heat Transfer With a Single Immersed Element
- Vitraglas® Lining
- 1" Non-CFC Foam Insulation

- Factory-Installed Heavy Duty Wall Mounting Bracket
- Water Connections—3/4"
- Protective Magnesium Anode Rod
- Steel Tank

- Voltages Available—120V, 208V, 240V, 277V, 480V
- Single Phase Operation Only
- T&P Relief Valve

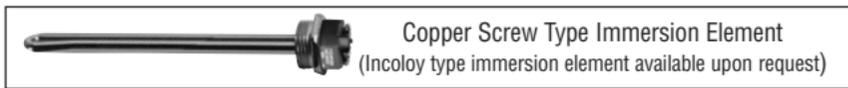
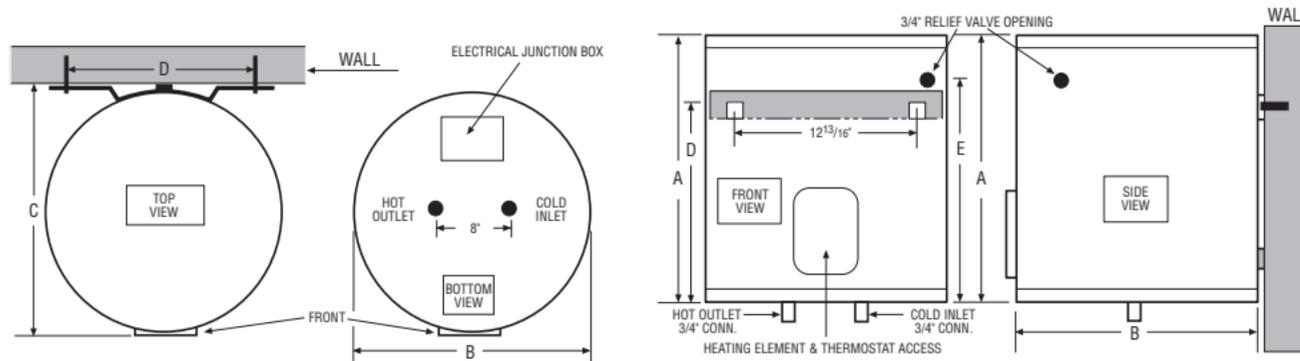


Photo of  
RE16UWV6

# Wall Hung Models

DIMENSIONS IN INCHES

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed

ELECTRIC MODELS		Recovery 90°F Rise*		A	B	C	D	E	
Model Number	Gal. Cap.	Nat U.S. GPH	Nat Imp. GPH	Height	Jacket Dia.	Wall to Front	Height to Bracket	Floor to T&P Heater	Approx. Shipping Weight (lbs)
RE16WW6†	6	7	6	15 <sup>3</sup> / <sub>4</sub>	14	14 <sup>5</sup> / <sub>8</sub>	11 <sup>3</sup> / <sub>4</sub>	11 <sup>7</sup> / <sub>8</sub>	37
RE112WW6	12	7	6	16 <sup>3</sup> / <sub>8</sub>	18	18 <sup>5</sup> / <sub>8</sub>	12 <sup>3</sup> / <sub>4</sub>	12 <sup>1</sup> / <sub>2</sub>	54
RE120WW6	19	7	6	24 <sup>3</sup> / <sub>8</sub>	18	18 <sup>5</sup> / <sub>8</sub>	18 <sup>1</sup> / <sub>4</sub>	21	67

†Maximum wattage at any voltage is 3000W.

For 10 year models, change suffix "6" to "10".

Single element only.

\*Based on 1500W operation.

Wattage Limitations	Voltage				
	120V	208V	240V	277V	480V
1500W	yes	yes	yes	yes	yes
2000W	yes	yes	yes	yes	yes
2500W	yes	yes	yes	yes	yes
3000W	yes	yes	yes	yes	yes
3500W	no	yes	yes	no	no
4000W	no	yes	yes	yes	yes
4500W	no	yes	yes	yes	yes
5000W	no	yes	yes	yes	yes
5500W	no	yes	yes	no	no
6000W	no	yes	yes	yes	yes

Wattage	Recovery GPH Temperature Rise °F				
	60	80	90	100	120
1500W	10	8	7	6	5
2000W	14	10	9	8	7
2500W	17	13	11	10	9
3000W	21	15	14	12	10
3500W	24	18	16	14	12
4000W	28	21	18	16	14
4500W	31	23	21	19	15
5000W	34	26	23	21	17
5500W	38	29	25	23	19
6000W	41	31	28	25	21



- Fully Automatic Controls
- Direct Heat Transfer with a Single Immersed Element
- Vitraglas® Lining
- 1" Non-CFC Foam Insulation
- Water Connections—3/4" NPT
- Alternate Top Water Connections
- Protective Magnesium Anode Rod
- Voltages Available—120V, 208V, 240V, 277V, 480V.
- Single Phase Operation Only
- T&P Relief Valve
- Design Evaluated by ETL in Accordance with Part 280.707(d) of HUD Mobile Home Construction and Safety Standards for Energy Efficiency

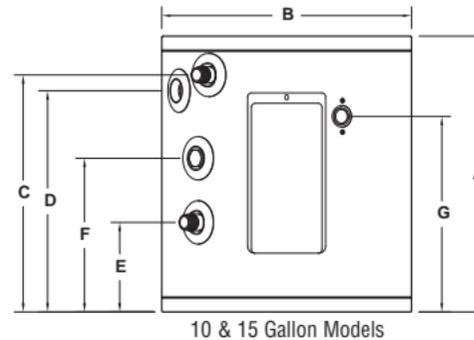
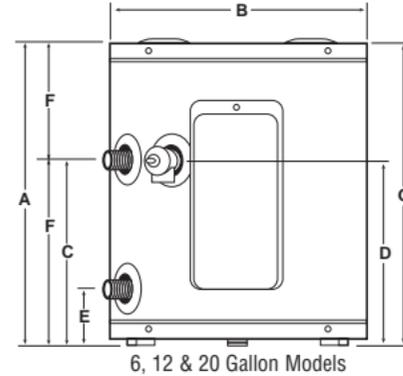
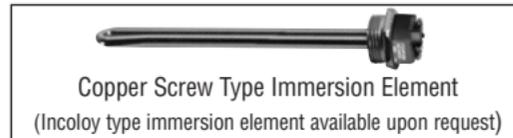
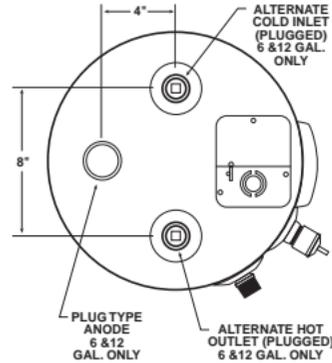


Photo of RE112U6

# Utility Models

DIMENSIONS IN INCHES

C.E.C. Listed

ELECTRIC MODELS		Recovery 90°F Rise*		A	B	C	D	E	E	E	
Model Number	Gal. Cap.	Nat U.S.* GPH	Nat Imp* GPH	Floor to Heater Top	Jacket Dia.	Floor to Hot Water Conn.	Floor to T&P Conn.	Floor to Cold Water Conn.	Floor to Anode Rod	Floor to Electrical Access	Approx. Shipping Weight (lbs)
RE16U6†	6	7	6	16½	14	10⅛	10⅛	3⅛	16½	16½	35
RE110U6	10	7	6	17½	16	15	14	5 <sup>11</sup> / <sub>16</sub>	9 <sup>11</sup> / <sub>16</sub>	12	44
RE112U6	12	7	6	16 <sup>7</sup> / <sub>8</sub>	18	10¼	10¼	3	16½	16 <sup>7</sup> / <sub>8</sub>	53
RE112T6†	12	7	6	27 <sup>3</sup> / <sub>4</sub>	14	21⅛	21⅛	3	27 <sup>3</sup> / <sub>4</sub>	27 <sup>3</sup> / <sub>4</sub>	48
RE115U6	15	7	6	20¼	18	17 <sup>3</sup> / <sub>4</sub>	16 <sup>3</sup> / <sub>4</sub>	6⅛	10⅛	12 <sup>11</sup> / <sub>16</sub>	58
RE120U6	19	7	6	24 <sup>3</sup> / <sub>4</sub>	18	18¼	18¼	3	10¼	24 <sup>3</sup> / <sub>4</sub>	65

†Maximum wattage at any voltage is 3000W.

For 10 year models, change suffix "6" to "10".

Single element only.

\*Based on 1500W operation.

Wattage Limitations	Voltage				
	120V	208V	240V	277V	480V
1500W	yes	yes	yes	yes	yes
2000W	yes	yes	yes	yes	yes
2500W	yes	yes	yes	yes	yes
3000W	yes	yes	yes	yes	yes
3500W	no	yes	yes	no	no
4000W	no	yes	yes	yes	yes
4500W	no	yes	yes	yes	yes
5000W	no	yes	yes	yes	yes
5500W	no	yes	yes	no	no
6000W	no	yes	yes	yes	yes

Wattage	Recovery GPH Temperature Rise °F				
	60	80	90	100	120
1500W	10	8	7	6	5
2000W	14	10	9	8	7
2500W	17	13	11	10	9
3000W	21	15	14	12	10
3500W	24	18	16	14	12
4000W	28	21	18	16	14
4500W	31	23	21	19	15
5000W	34	26	23	21	17
5500W	38	29	25	23	19
6000W	41	31	28	25	21



# Residential Electric Powerful Compact® Model

52/53



- Compact Design
  - Fully Automatic Control
  - Direct Heat Transfer with Immersed Element
  - Vitraglas® Lining
  - Non-CFC Insulation
  - Water Connections—3/4" NPT
  - Protective Magnesium Anode Rod
  - Steel Tank
  - Steel Jacket
  - T&P Relief Valve Opening
- Optional Features:**
- Wall Mounting Bracket.
  - Aluminum Anode Rod.

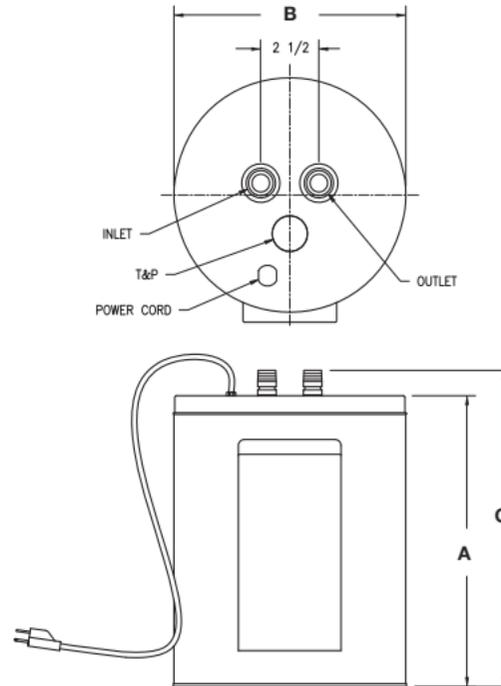


Photo of  
RE1-2U

# Powerful Compact® Model

DIMENSIONS IN INCHES

Meet or exceed ASHRAE 90.1b (current standard) CEC Listed

ELECTRIC MODELS		Recovery 90°F Rise*		A	B	C	
Model Number	Gal. Cap.	Nat U.S. GPH	Nat Imp. GPH	Floor to Heater Top	Jacket Dia.	Floor to Water Conn.	Approx. Shipping Weight (lbs)
RE1-2U6	2	7	6	12 <sup>1</sup> / <sub>4</sub>	9 <sup>7</sup> / <sub>8</sub>	13 <sup>5</sup> / <sub>16</sub>	13

Includes a 4ft. cord with 3 prong grounded plug (20 amp circuit required).

For 10 year models, change suffix "6" to "10".

Single element only.

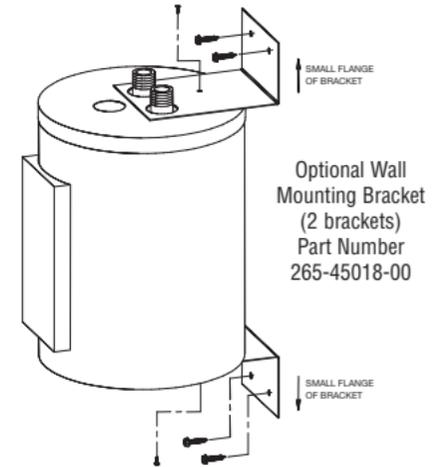
\*Based on 1500W operation.

Only available as 120V / 1500W.



Copper Screw Type Immersion Element

(Incoloy type immersion element available upon request)





## Instantaneous Water Heaters



**SINGLE  
POINT**



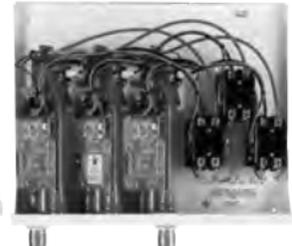
**THERMOSTATIC**



**FLOW  
CONTROLLED**



**TWIN HEATING  
MODULE**



**THERMOSTATIC  
THREE PHASE**

- On Demand Hot Water – No Delay
- Cut Energy Waste – Flow Switch Activates Heater Only on Demand (No Stand-by heat loss)
- Continuous Hot Water – No Storage Capacity to Run Out
- No T&P Relief Valve Needed – Check Local Codes
- Integral Flow Restrictor – Built-In to Ensure Proper Temperature Rise
- 10 Year Warranty on Heater Body/Element Assembly

- Easy Installation – Mounts on Wall – No Sweat Connections
- Ni Chrome Heating Element – a Unique, Patented Flow Path Ensures Optimum Heat Transfer and Extended Element Life
- Reduces Calcification
- Space Saving Installation – Compact Size
- Field Serviceable Element – 1 Year Warranty

# Single Point Single Phase Models

DIMENSIONS IN INCHES

ELECTRIC

Model Number*	kW Rating	Voltage	AMPS	Temp. Rise °F 0.5 GPM	Recommended Wire Size
ES-3000-1-S-10	3.0	120	25.0	41°	10 AWG
ES-3500-1-S-10	3.5	120	29.0	48°	10 AWG
ES-3500-4-S-10	3.5	240	14.6	48°	14 AWG
ES-4100-2-S-10	4.1	208	19.7	56°	12 AWG
ES-4100-5-S-10	4.1	277	14.8	56°	14 AWG
ES-5500-4-S-10	5.5	240	22.9	75°	10 AWG

## Specifications

Dimensions: 10.75" x 5.25" x 2.875"

Weight: 3 lbs.

Materials:

Cover: ABS UL rated 94Vo.

Glass Reinforced "Fortron"™ Heater

Body and Ni Chrome Element

Color: White • Element: Replaceable cartridge insert

• Pipe-Fittings: 3/8" compression at top of unit

# Thermostatic Single Phase Models

DIMENSIONS IN INCHES

ELECTRIC

Model Number*	kW Rating	Voltage	AMPS	Temp. Rise °F 0.5 GPM	Temp. Rise °F 0.75 GPM	Temp. Rise °F 1.0 GPM	Temp. Rise °F 1.5 GPM	Temp. Rise °F 2.0 GPM	Recommended Wire Size
EFT-7500-4-S-10	7.5	240	32.0	—	68°	51°	34°	25°	8 AWG
EFT-9500-4-S-10	9.5	240	40.0	—	86°	65°	43°	32°	8 AWG

\*Additional voltages and wattages are available. For more information, please consult factory.

## Specifications

Dimensions: 10.75" x 5.25" x 2.875"

Weight: 3 lbs.

Materials:

Cover: ABS UL rated 94Vo.

Glass Reinforced "Fortron"™ Heater

Body and Ni Chrome Element

Color: White • Standard temperature range 100°F-140°F.

• Element: Replaceable cartridge insert. • Pipe-Fittings:

1/2" compression at bottom of unit.

U.L. Listed: E86887(M)

# Electric Instantaneous Water Heaters (continued)

## Flow Controlled Single Phase Models

DIMENSIONS IN INCHES

ELECTRIC

Model Number*	kW Rating	Voltage	Current Per Phase	Temp. Rise °F 0.5 GPM	Temp. Rise °F 0.75 GPM	Temp. Rise °F 1.0 GPM	Temp. Rise °F 1.5 GPM	Temp. Rise °F 2.0 GPM	Recommended Wire Size
EFC-5500-4-S-10	5.5	240	23.0	75°	50°	38°	25°	18°	10 AWG
EFC-6500-4-S-10	6.5	240	27.0	88°	59°	44°	30°	22°	10 AWG
EFC-7500-4-S-10	7.5	240	32.0	—	68°	51°	34°	25°	8 AWG
EFC-8300-2-S-10	8.3	208	39.0	—	76°	57°	38°	29°	8 AWG
EFC-9500-4-S-10	9.5	240	40.0	—	86°	65°	43°	32°	8 AWG

## Series Two Single Phase Thermostatic Models

DIMENSIONS IN INCHES

ELECTRIC

Model Number*	kW Rating	Voltage	Current Per Phase	Temp. Rise °F 1.5 GPM	Temp. Rise °F 2.0 GPM	Temp. Rise °F 2.5 GPM	Temp. Rise °F 3.0 GPM	Recommended Wire Size
EFT-19000-4-D-10	19.0	240	2x40 Amps	87°	65°	52°	43°	10 AWG

\*Additional voltages and wattages are available. For more information, please consult factory.

### Specifications

Dimensions: 10.75" x 5.25" x 2.875"

Weight: 3 lbs.

Materials:

Cover: ABS UL rated 94Vo.

Glass Reinforced "Fortron®" Heater

Body and Ni Chrome Element

Color: White • Standard temperature range 100°F-140°F.

• Element: Replaceable cartridge insert. • Pipe-Fittings:

1/2" compression at bottom of unit.

Dimensions: 10" x 9" x 3"

Weight: 8 lbs.

Materials:

Cover: Enameled Steel.

Glass Reinforced "UDELL®" Heater

Body and Ni Chrome Element

Color: White • Element: Dual replaceable cartridge

inserts • Pipe-Fittings: 3/4" NPT at bottom of unit.

U.S. Patent No.'s: 4,762,980 and 4,960,976

# Series Three-Single Phase Thermostatic Models

## DIMENSIONS IN INCHES

### ELECTRIC

Model Number*	kW Rating	Voltage	Current Per Phase	Temp. Rise °F 1.5 GPM	Temp. Rise °F 2.0 GPM	Temp. Rise °F 2.5 GPM	Temp. Rise °F 3.0 GPM	Temp. Rise °F 4.0 GPM	Recommended Wire Size
EFT-28000-4-T-10	28.0	240	3x40 Amps	—	96°	76°	65°	47°	8 AWG Per Module
EFT-38000-4-F-10	38.0	240	4x40 Amps	—	130°	104°	86°	65°	8 AWG Per Module

This unit must have 3 independent electrical circuits using correctly valued wire and 3 circuit breakers.

### Specifications

Single Phase Model Dimensions:  
12.25" x 15.25" x 4.25"

Weight: 12 lbs.

Three Phase Model Dimensions:  
12.125" x 20.1875" x 4.125"

Weight: 15 lbs.

Materials:

Cover: Enameled Steel.

Glass Reinforced "UDELE"™ Heater

Body and Ni Chrome Element

Color: White • Element: Triple replaceable cartridge inserts • Pipe-Fittings: 3/4" NPT at bottom of unit.

U.S. Patent No.'s: 4,762,980 and 4,960,976

# Series Three-Three Phase Thermostatic Models

## DIMENSIONS IN INCHES

### ELECTRIC

Model Number*	kW Rating	Voltage	Current Per Phase	Temp. Rise °F 1.5 GPM	Temp. Rise °F 2.0 GPM	Temp. Rise °F 2.5 GPM	Temp. Rise °F 3.0 GPM	Temp. Rise °F 3.5 GPM	Temp. Rise °F 4.0 GPM	Temp. Rise °F 5.0 GPM	Recommended Wire Size
EFTR-18000-6-T-10	18.0	480 Y**	21.7 Amps	82°	61°	49°	41°	35°	32°	25°	6 AWG
EFTR-24000-6-T-10	24.0	480 Y**	28.9 Amps	—	82°	65°	54°	47°	41°	34°	6 AWG
EFTR-32000-6-T-10	32.0	480 Y**	38.5 Amps	—	—	87°	73°	62°	55°	45°	8 AWG

\*Additional voltages and wattages are available. For more information, please consult factory.

\*\*Neutral leg required.

### Voltage Identification Code For All Models

Voltage Code	Voltage
1	120
2	208
3	220
4	240
5	277
6	480

Example: EFT-28000-4-T-10

The 4 in the model number indicates 240 volt.



# EcoStor2™

## Double-Wall Gas Backup Models

# 58/59



### DEFENDER SAFETY SYSTEM®

- Heat Exchanger – Double Wall  
1½" O.D. Enamel Coated (Vitrage®)  
Steel Coil
- Self Diagnostic Honeywell Gas Control
- Backup Low NOx Burner
- Sensor Wires for Solar Thermistor  
Connections
- Factory-Installed Hydrojet® Total  
Performance System
- Vitrage® Lining
- 3/4" NPT Female Connections on  
Front for Supply and Return
- 2" Non-CFC Foam Insulation
- Potable Water Connections—  
3/4" NPT Factory Installed True  
Dielectric Fittings
- Two Protective Anode Rods

- T&P Relief Valve Included
- Low restriction Brass Drain Valve
- S-DW2-75 Is Not FVIR
- Thermostatic Mixing Valve  
(ASSE Approved) Included

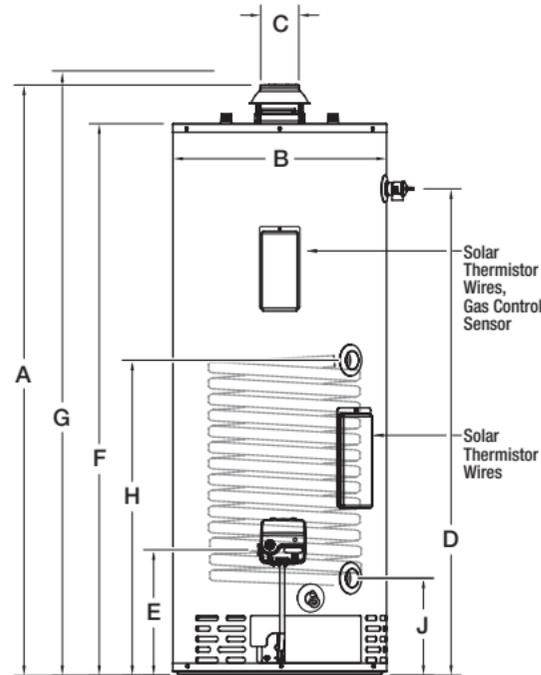
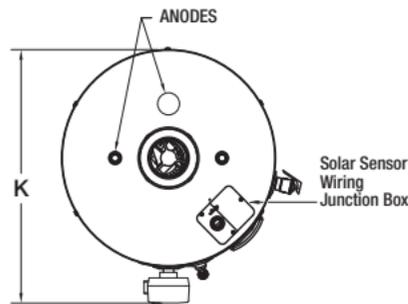


Photo of  
S-DW2-504T6FBN

# EcoStor™ Double-Wall Gas Backup Models

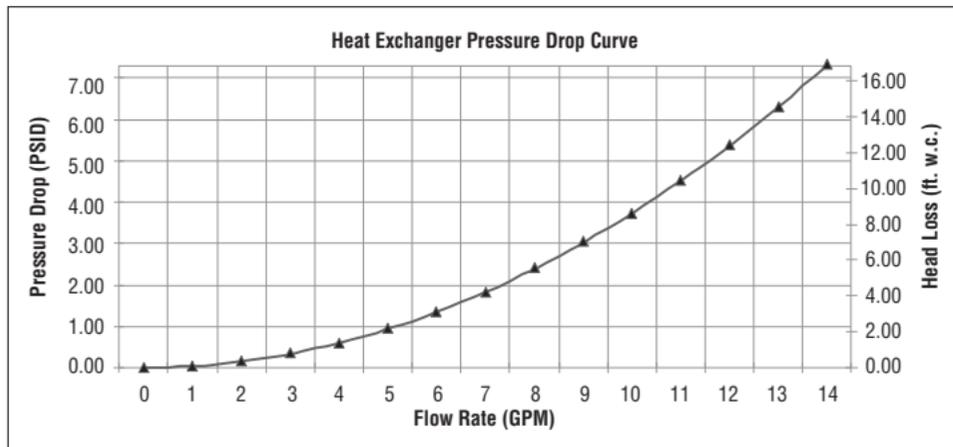
Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
80% Recovery Efficiency

DIMENSIONS IN INCHES

NATURAL GAS MODELS				A	B	C	D	E	F	G	H	J	K	
Model Number	Gal. Cap.	Input BTU/Hr.	GPH Recovery 90°F Rise*	Floor to Flue Conn.	Jacket Dia.	Vent Size	Floor to T&P Conn.	Floor to Gas Conn.	Floor to Heater Top	Floor to Water Conn.	Floor to Solar Collector Supply	Floor to Solar Collector Return	Depth	Approx. Shipping Weight (lbs)
S-DW2-504T6FBN	45	65,000	69	59 <sup>1</sup> / <sub>4</sub>	22	4	50	11 <sup>3</sup> / <sub>8</sub>	56	60	32 <sup>1</sup> / <sub>4</sub>	10 <sup>1</sup> / <sub>8</sub>	26	223
S-DW2-65T6FBN	60	65,000	69	63	24	4	53 <sup>1</sup> / <sub>2</sub>	11 <sup>3</sup> / <sub>8</sub>	59 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>4</sub>	32 <sup>1</sup> / <sub>4</sub>	10 <sup>1</sup> / <sub>8</sub>	28	264
S-DW2-75S6BN	75	76,000	82	62 <sup>3</sup> / <sub>8</sub>	26	4	52	14 <sup>3</sup> / <sub>8</sub>	59	62 <sup>3</sup> / <sub>4</sub>	34 <sup>5</sup> / <sub>8</sub>	12 <sup>1</sup> / <sub>2</sub>	30 <sup>3</sup> / <sub>8</sub>	306

\*Based on manufacturer's rated recovery efficiency.

Propane models feature a Titanium Stainless Steel propane burner. For propane (LP) models change suffix "BN" to "SX".



LP GAS MODELS	Input BTU/Hr.	GPH Rec. 90°F Rise
S-DW2-504T6FSX	61,000	65
S-DW2-65T6FSX	63,000	67
S-DW2-75S6SX	76,000	82



EcoStor<sup>2</sup>™ TTW<sup>®</sup>

# Power Vent Double-Wall Gas Backup Models

60/61



## DEFENDER SAFETY SYSTEM<sup>®</sup>

- Heat Exchanger – Double Wall 1½" O.D. Enamel Coated (Vitraglas<sup>®</sup>) Steel Coil
- Self Diagnostic Electronic Honeywell Gas Control
- Backup Low NOx Burner
- Sensor Wires for Solar Thermistor Connections
- Horizontal and Vertical Venting
- Powerful Blower Motor - 10 ft. Power Cord—Included (120 VAC)
- Factory-Installed Hydrojet<sup>®</sup> Total Performance System
- Vitraglas<sup>®</sup> Lining
- Supply and Return Connections—3/4" NPT
- 2" Non-CFC Foam Insulation
- Potable Water Connections—3/4" NPT Factory Installed True Dielectric Fittings
- Two Protective Anode Rods
- T&P Relief Valve Included
- Low restriction Brass Drain Valve
- S-DW2-TW-75 Is Not FVIR Compliant
- Thermostatic Mixing Valve (ASSE Approved) Included

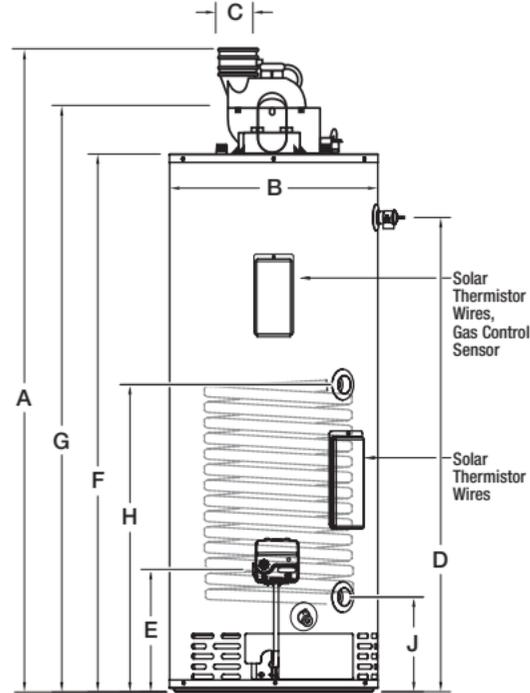
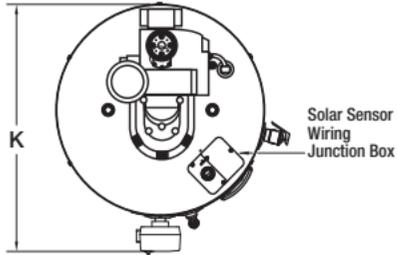


Photo of  
S-DW2-TW-65T6FBN

# EcoStor2™ TTW® Power Vent Double-Wall Gas Backup Models

DIMENSIONS IN INCHES

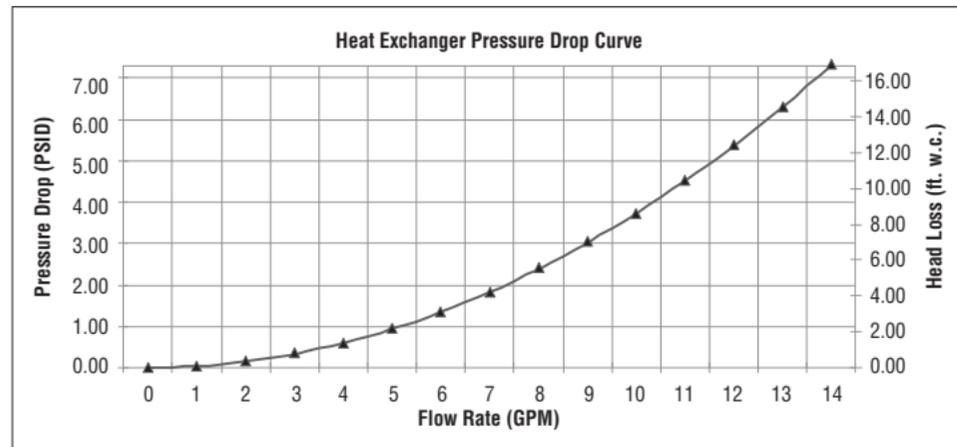
Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
80% Recovery Efficiency

NATURAL GAS MODELS				A	B	C	D	E	F	G	H	J	K	
Model Number	Gal. Cap.	Input BTU/Hr.	GPH Recovery 90°F Rise*	Floor to Flue Conn.	Jacket Dia.	Vent Size	Floor to T&P Conn.	Floor to Gas Conn.	Floor to Heater Top	Floor to Water Conn.	Floor to Solar Collector Supply	Floor to Solar Collector Return	Depth	Approx. Shipping Weight (lbs)
S-DW2-TW-50T6FBN	45	67,000	72	59 <sup>1</sup> / <sub>4</sub>	22	3 or 4	50	11 <sup>3</sup> / <sub>8</sub>	56	60	32 <sup>1</sup> / <sub>4</sub>	10 <sup>1</sup> / <sub>8</sub>	26	247
S-DW2-TW-65T6FBN	60	70,000	75	63	24	3 or 4	53 <sup>1</sup> / <sub>2</sub>	11 <sup>3</sup> / <sub>8</sub>	59 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>4</sub>	32 <sup>1</sup> / <sub>4</sub>	10 <sup>1</sup> / <sub>8</sub>	28	281
S-DW2-TW-75T6BN	70	76,000	82	62 <sup>3</sup> / <sub>8</sub>	26	4	52	14 <sup>3</sup> / <sub>8</sub>	59	62 <sup>3</sup> / <sub>4</sub>	34 <sup>5</sup> / <sub>8</sub>	12 <sup>1</sup> / <sub>2</sub>	30 <sup>3</sup> / <sub>8</sub>	336

\*Based on manufacturer's rated recovery efficiency.

Propane models feature a Titanium Stainless Steel propane burner. For propane (LP) models change suffix "BN" to "SX".

LP GAS MODELS	Input BTU/Hr.	GPH Rec. 90°F Rise
S-DW2-TW-50T6FSX	60,000	65
S-DW2-TW-65T6FSX	63,000	68
S-DW2-TW-75T6SX	75,500	81



S-DW2-TW-50T6FBN S-DW2-TW-65T6FBN S-DW2-TW-75T6FBN	3" Vent Pipe	4" Vent Pipe
Max. Equivalent Length	60 ft.**	180 ft.
Min. Equivalent Length	7 ft.	15 ft.
Number of 90° Elbows	1 2 3	175 ft. 170 ft. 165 ft.

Subtract 5ft. for each additional 90° elbow.  
\*\*S-DW2-TW-75 Max. 3" vent length is 50ft.



# EcoStor™ Open Loop Gas Backup Models

62/63



**DEFENDER**  
SAFETY SYSTEM™

- Heat exchanger – Double wall 1½" O.D. Enamel Coated (Vitraglas®) Steel Coil
- Self Diagnostic Electronic Honeywell Gas Control
- Backup Low NOx Burner
- Factory-Installed Hydrojet® Total Performance System
- Vitraglas® Lining
- Supply and return Connections—¾" NPT
- 2" Non-CFC Foam Insulation
- Potable Water Connections—¾" NPT (65 gallon), 1" NPT (75 gallon) and 1¼" NPT (100 gallon) Factory-Installed True Dielectric Fittings
- Protective anode Rods—65 and 75 gallon Models (1 Anode Rod), 100 gallon Model (2 Anode Rods)
- T&P Relief Valve Included
- Low Restriction Brass Drain Valve
- S-2-75S6BN and S-2-100T6BN are Not FVIR Compliant
- Thermostatic Mixing Valve (ASSE Approved) Included

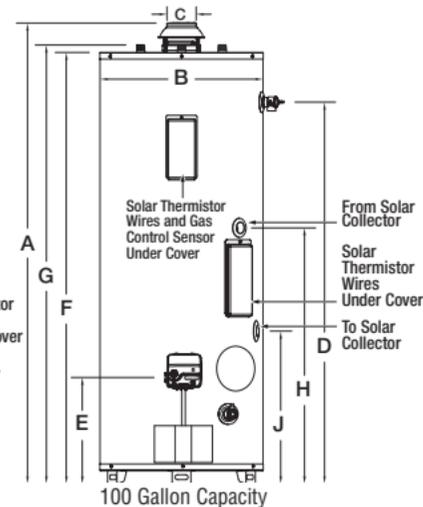
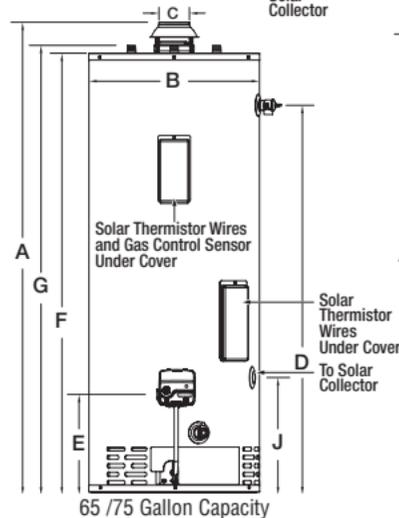
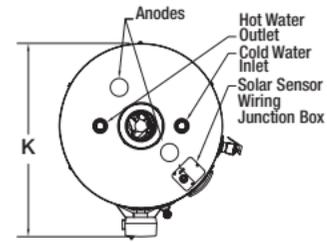
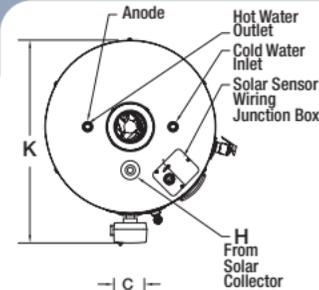


Photo of S-2-65T6BN

# EcoStar™ Open Loop Gas Backup Models

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
80% Recovery Efficiency

DIMENSIONS IN INCHES

NATURAL GAS MODELS				A	B	C	D	E	F	G	H	J	K	
Model Number	Gal. Cap.	Input BTU/Hr.	GPH Recovery 90°F Rise*	Floor to Flue Conn.	Jacket Dia.	Vent Size	Floor to T&P Conn.	Floor to Gas Conn.	Floor to Heater Top	Floor to Water Conn.	Floor to Solar Collector Supply	Floor to Solar Collector Return	Depth	Approx. Shipping Weight (lbs)
S-2-65T6FBN	65	65,000	69	63	24	4	53 <sup>1</sup> / <sub>2</sub>	11 <sup>3</sup> / <sub>8</sub>	59 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>4</sub>	60 <sup>1</sup> / <sub>4</sub>	10 <sup>1</sup> / <sub>8</sub>	28	215
S-2-75S6BN	75	76,000	82	62 <sup>3</sup> / <sub>8</sub>	26	4	52	14 <sup>1</sup> / <sub>8</sub>	59	59 <sup>3</sup> / <sub>4</sub>	59 <sup>3</sup> / <sub>4</sub>	12 <sup>1</sup> / <sub>2</sub>	30 <sup>3</sup> / <sub>8</sub>	250
S-2-100T6BN	100	85,000	92	63 <sup>11</sup> / <sub>16</sub>	28 <sup>1</sup> / <sub>4</sub>	4	39 <sup>1</sup> / <sub>4</sub>	14 <sup>1</sup> / <sub>4</sub>	65 <sup>1</sup> / <sub>2</sub>	67 <sup>1</sup> / <sub>2</sub>	38 <sup>3</sup> / <sub>4</sub>	17 <sup>1</sup> / <sub>2</sub>	32 <sup>1</sup> / <sub>4</sub>	400

\*Based on manufacturer's rated recovery efficiency.

Propane models feature a Titanium Stainless Steel propane burner. For propane (LP) models change suffix "BN" to "SX".

LP GAS MODELS	Input BTU/Hr.	GPH Rec. 90°F Rise
S-2-65T6FSX	63,000	67
S-2-75S6SX	76,000	82
S-2-100T6SX	88,500	95



# EcoStor™ TTW® Power Vent Open Loop Gas Backup Models

64/65



## DEFENDER

SAFETY SYSTEM™

- 3/4" NPT Solar Collector Supply and Return Connections (No Internal Heat Exchanger)
- Self Diagnostic Electronic Honeywell Gas Control
- Backup Low NOx Burner
- Sensor Wires for Solar Thermistor Connections
- Horizontal and Vertical Venting
- Powerful Blower Motor  
- 10 ft. Power Cord—Included (120 VAC)
- Factory-Installed Hydrojet® Total Performance System
- Vitraglas® Lining
- Supply and Return Connections—3/4" NPT
- 2" Non-CFC Foam Insulation

- Potable Water Connections—3/4" NPT Factory-Installed True Dielectric Fittings
- Two Protective Anode Rods
- T&P Relief Valve Included
- Low Restriction Brass Drain Valve
- S-2-TW75T6BN Is Not FVIR Compliant
- Thermostatic Mixing Valve (ASSE Approved) Included

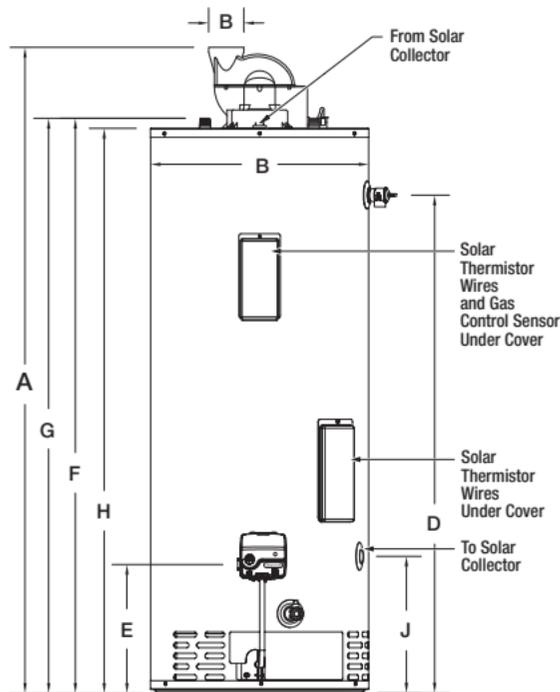
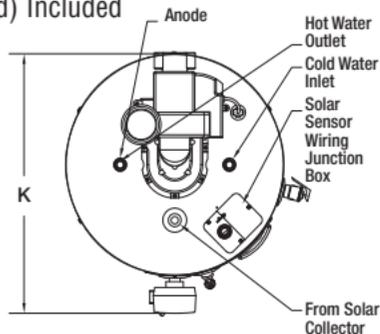


Photo of  
S-2-TW65T6FBN

# EcoStor™ TTW® Power Vent Open Vent Gas Backup Models

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
80% Recovery Efficiency

DIMENSIONS IN INCHES

NATURAL GAS MODELS				A	B	C	D	E	F	G	H	J	K	
Model Number	Gal. Cap.	Input BTU/Hr.	GPH Recovery 90°F Rise*	Floor to Flue Conn.	Jacket Dia.	Vent Size	Floor to T&P Conn.	Floor to Gas Conn.	Floor to Heater Top	Floor to Water Conn.	Floor to Solar Collector Supply	Floor to Solar Collector Return	Depth	Approx. Shipping Weight (lbs)
S-2-TW65T6FBN	65	70,000	75	63	24	3	53 <sup>1</sup> / <sub>2</sub>	11 <sup>3</sup> / <sub>8</sub>	59 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>4</sub>	32 <sup>1</sup> / <sub>4</sub>	10 <sup>1</sup> / <sub>8</sub>	28	225
S-2-TW75T6BN	75	76,000	82	62 <sup>3</sup> / <sub>8</sub>	26	3	52	14 <sup>1</sup> / <sub>8</sub>	59	59 <sup>3</sup> / <sub>4</sub>	34 <sup>5</sup> / <sub>8</sub>	12 <sup>1</sup> / <sub>2</sub>	30 <sup>3</sup> / <sub>8</sub>	260

\*Based on manufacturer's rated recovery efficiency.

Propane models feature a Titanium Stainless Steel propane burner. For propane (LP) models change suffix "BN" to "SX".

120 V.A.C. required for power venting.

120 V.A.C. 60HZ 3.1 Amperes.

LP GAS MODELS	Input BTU/Hr.	GPH Rec. 90°F Rise
S-2-TW65T6FSX	63,000	68
S-2-TW75T6SX	75,500	81

S-2-TW65T6FBN S-2-TW75T6BN	3" Vent Pipe	4" Vent Pipe
Max. Equivalent Length	60 ft.**	180 ft.
Min. Equivalent Length	7 ft.	15 ft.
Number	1	55 ft.
of	2	50 ft.
90° Elbows	3	45 ft.
		175 ft.
		170 ft.
		165 ft.

Subtract 5ft. for each additional 90° elbow.

\*\* S-2-TW-75 Max. 3" vent length is 50 ft. (15.24 m).

# EcoStor2™ SC Ultra Low NOx Double-Wall Gas Backup Models

66/67



- Heat Exchanger – Double Wall 1½" O.D. Enamel Coated (Vitraglas®) Steel Coil
- Self Diagnostic Honeywell Gas Control
- Eco-Defender Safety System®
- Backup Ultra Low NOx Burner
- Sensor Wires for Solar Thermistor Connections
- Factory-Installed Hydrojet® Total Performance System
- Vitraglas® Lining
- Supply and Return Connections—3/4" NPT
- 2" Non-CFC Foam Insulation
- Potable Water Connections—3/4" NPT  
Factory Installed True Dielectric Fittings
- Two Protective Anode Rods

- T&P Relief Valve Included
- Low Restriction Brass Drain Valve
- Complies with the Latest Ultra-Low NOx Requirements (10/ngts NOx limit)
- Thermostatic Mixing Valve (ASSE Approved) Included

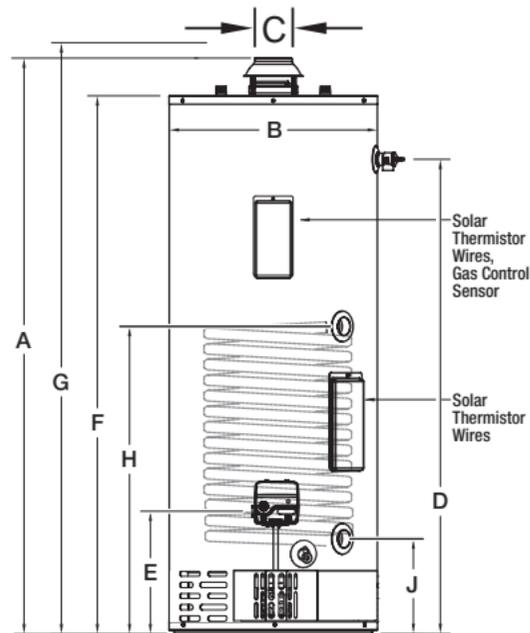
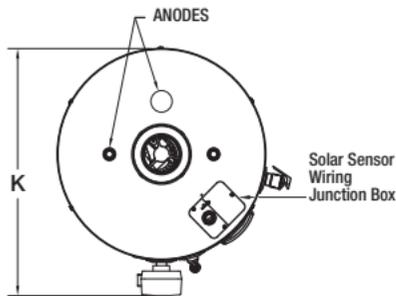


Photo of  
S-DW4-U5036FRN

# EcoStor2™ Ultra Low NOx Double-Wall Gas Backup Models

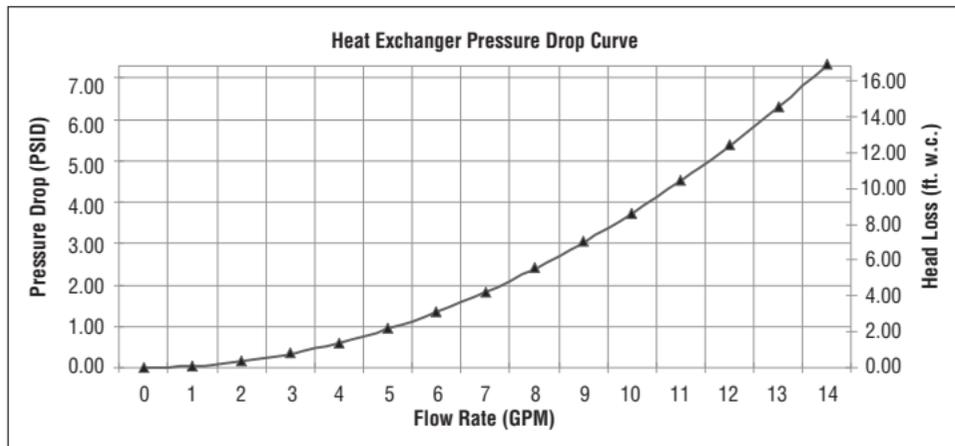
Meet or exceed ASHRAE 90.1b  
(current standard) C.E.C. Listed  
80% Recovery Efficiency

DIMENSIONS IN INCHES

NATURAL GAS MODELS				A	B	C	D	E	F	G	H	J	K	
Model Number	Gal. Cap.	Input BTU/Hr.	GPH Recovery 90°F Rise*	Floor to Flue Conn.	Jacket Dia.	Vent Size	Floor to T&P Conn.	Floor to Gas Conn.	Floor to Heater Top	Floor to Water Conn.	Floor to Solar Collector Supply	Floor to Solar Collector Return	Depth	Approx. Shipping Weight (lbs)
S-DW4-U5036FRN	45	40,000	43	59 <sup>1</sup> / <sub>4</sub>	22	3	50	11 <sup>5</sup> / <sub>8</sub>	56 <sup>1</sup> / <sub>4</sub>	60	32 <sup>1</sup> / <sub>4</sub>	10 <sup>1</sup> / <sub>8</sub>	26	233
S-DW2-U65T6FRN	60	55,000	57	63	24	4	53 <sup>1</sup> / <sub>2</sub>	11 <sup>5</sup> / <sub>8</sub>	59 <sup>1</sup> / <sub>2</sub>	63 <sup>1</sup> / <sub>4</sub>	32 <sup>1</sup> / <sub>4</sub>	10 <sup>1</sup> / <sub>8</sub>	28	272

\*Based on manufacturer's rated recovery efficiency.

Complies with the latest ultra-low NOx requirement (10 ng/J NOx limit).





# EcoStor™

## Dual Coil Heat Exchanger Backup Models

# 68/69



- Dual Coil Design—A single wall heat exchanger is located in the upper portion of the tank. A double wall heat exchanger is located in the lower portion of the tank
- Applications—Dual heat exchangers located inside the tank may be connected to a variety of different heating systems
- Sensor Wires for Solar Thermistor Connections
- Factory-Installed Hydrojet® Total Performance System
- Vitraglas® Lining
- Supply and Return Connections—1" NPT Upper Coil, 3/4" NPT Lower Coil
- 2" Non-CFC Foam Insulation

- Potable Water Connections—3/4" NPT Factory-Installed True Dielectric Fittings Extend Water Heater Life and Eases Installation
- Two Protective Anode Rods
- T&P Relief Valve Included
- Low Restriction Brass Drain Valve
- Thermostatic Mixing Valve (ASSE Approved) Included

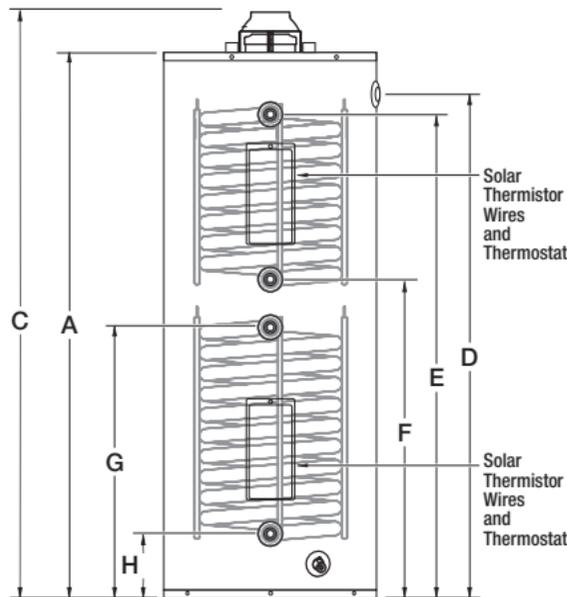
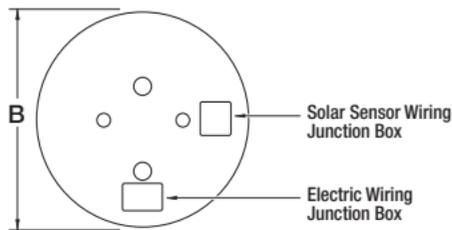
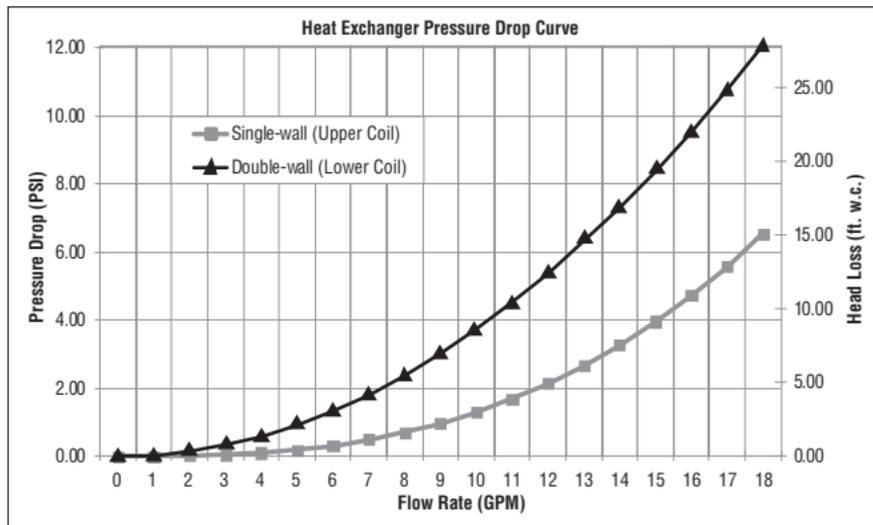


Photo of  
S-DC-DW2-55R6SW

# EcoStor™ Dual Coil Heat Exchanger Backup Models

DIMENSIONS IN INCHES

SOLAR MODELS		A	B	C	D	E	F	G	H	
Model Number	Gal. Cap.	Floor to Heater Top	Jacket Dia.	Floor to Water Conn.	Floor to T&P Conn.	Floor to Upper Coll. Supply	Floor to Upper Coll. Return	Floor to Lower Coll. Supply	Floor to Lower Coll. Return	Approx. Shipping Weight (lbs)
S-DC-DW2-55R6SW	55	59 <sup>1</sup> / <sub>4</sub>	22	62 <sup>3</sup> / <sub>4</sub>	53	56	37 <sup>1</sup> / <sub>2</sub>	27 <sup>1</sup> / <sub>2</sub>	5 <sup>3</sup> / <sub>8</sub>	282
S-DC-DW2-70R6SW	70	59 <sup>1</sup> / <sub>4</sub>	24	62 <sup>3</sup> / <sub>4</sub>	53	56	37 <sup>1</sup> / <sub>2</sub>	27 <sup>1</sup> / <sub>2</sub>	5 <sup>3</sup> / <sub>8</sub>	313
S-DC-DW2-110R6SW	110	62 <sup>1</sup> / <sub>2</sub>	28 <sup>1</sup> / <sub>4</sub>	66	55 <sup>3</sup> / <sub>4</sub>	57 <sup>3</sup> / <sub>4</sub>	39 <sup>1</sup> / <sub>4</sub>	27 <sup>1</sup> / <sub>2</sub>	5 <sup>3</sup> / <sub>8</sub>	442





## Single-Wall Electric Backup Models

# 70/71



- Heat Exchanger – Single Wall 1½" O.D. Enamel Coated (Vitraglas®) Steel Coil
- Supplied Sensor Wires for Solar Thermistor Connections
- Integrated Mixing Device
- Element Backup – Single or Dual 4500W Heating Elements
- Factory-Installed Hydrojet® Total Performance System
- Vitraglas® Lining
- 1" NPT Female Connections on Front for Supply and Return
- Potable Water Connections – 3/4" NPT Factory-Installed True Dielectric Fittings
- 2" Non-CFC Foam Insulation

- Two Protective Anode Rods
- T&P Relief Valve Included
- Low Restriction Brass Drain Valve
- Thermostatic Mixing Valve (ASSE Approved) Included

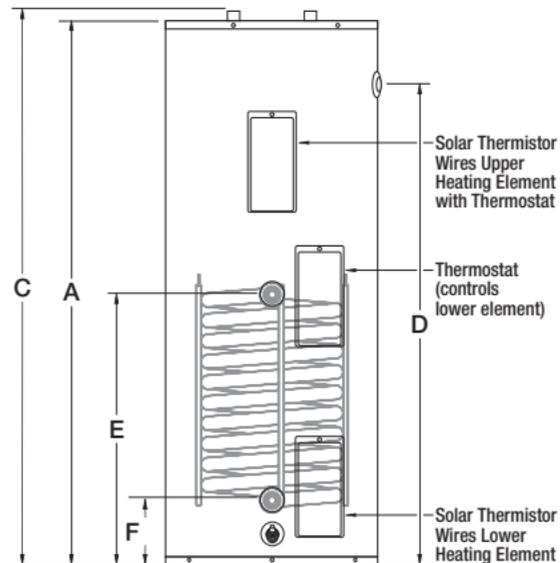
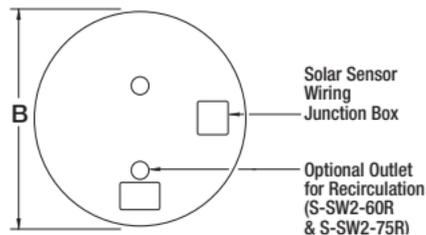


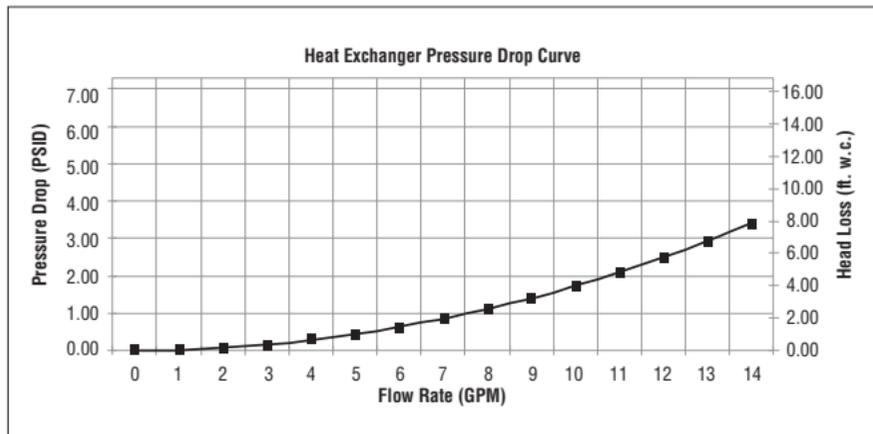
Photo of S-SW2-60R6DS

# EcoStor™ Single-Wall Electric Backup Models

DIMENSIONS IN INCHES

SOLAR MODELS		A	B	C	D	E	F	
Model Number	Gal. Cap.	Floor to Heater Top	Jacket Dia.	Floor to Water Conn.	Floor to T&P Conn.	Floor to Solar Coll. Supply	Floor to Solar Coll. Return	Approx. Shipping Weight (lbs)
S-SW2-60R6DS	60	59 <sup>1</sup> / <sub>4</sub>	22	63 <sup>1</sup> / <sub>4</sub>	53	29 <sup>1</sup> / <sub>2</sub>	7 <sup>3</sup> / <sub>8</sub>	210
S-SW2-75R6DS	75	59 <sup>1</sup> / <sub>4</sub>	24	63 <sup>1</sup> / <sub>4</sub>	53	29 <sup>1</sup> / <sub>2</sub>	7 <sup>3</sup> / <sub>8</sub>	236
S-SW2-115R6DS	115	62 <sup>3</sup> / <sub>4</sub>	28 <sup>1</sup> / <sub>4</sub>	66 <sup>3</sup> / <sub>4</sub>	55 <sup>3</sup> / <sub>4</sub>	29 <sup>1</sup> / <sub>2</sub>	7 <sup>3</sup> / <sub>8</sub>	340

For single element models change "D" to "S".  
(Ex. S-SW2-60R6SS)



## Electric Backup Water Heating Ratings

Model Number	First Hour Supply (Gal.)		Standby Heat Loss Rating (°F/Hr.)
	Single Element	Dual Element	
S-SW2-60R6DS	46	84	1.1
S-SW2-75R6DS	53	97	0.9
S-SW2-115R6DS	83	124	0.7



**EcoStor2™**

# Double-Wall Electric Backup Models

**72/73**



- Heat Exchanger—Double wall  
1½" O.D. Enamel Coated (Vitrage®)  
Steel Coil
- Supplied Sensor Wires for Solar  
Thermistor Connections
- Element Backup—Single or Dual  
4500W Heating Elements—Optional  
5500W
- Factory-Installed Hydrojet® Total  
Performance System
- Vitrage® Lining
- 3/4" NPT Female Connections on  
Front for Supply and Return
- Potable Water Connections—  
3/4" NPT Factory Installed True  
Dielectric Fittings
- 2" Non-CFC Foam Insulation

- Two Protective Anode Rods
- T&P Relief Valve Included
- Low Restriction Brass Drain Valve
- Thermostatic Mixing Valve (ASSE  
Approved) Included

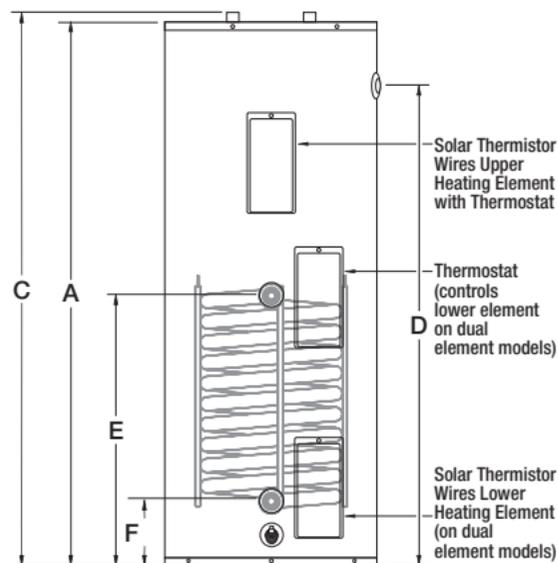
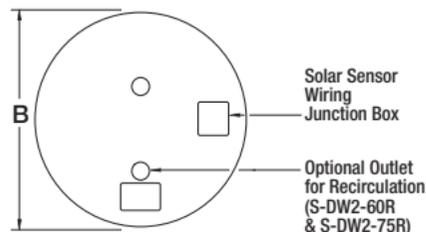


Photo of  
S-DW2-60R6DS

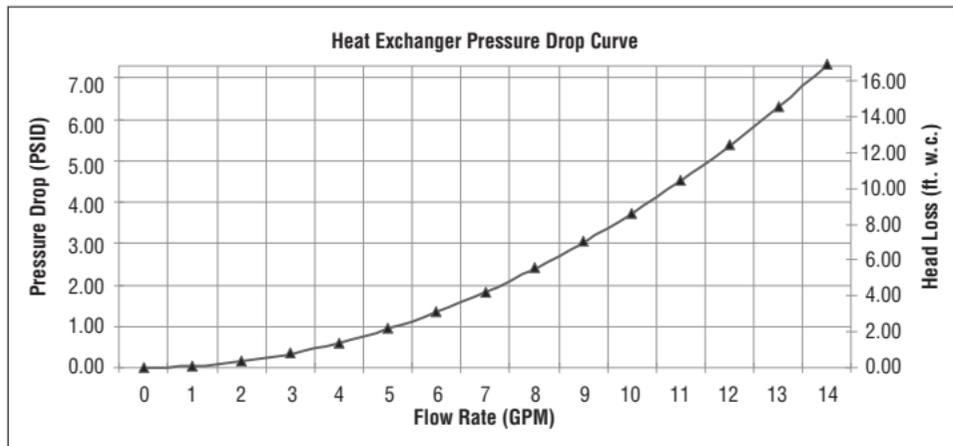
# EcoStor2™ Double-Wall Electric Backup Models

DIMENSIONS IN INCHES

SOLAR MODELS		A	B	C	D	E	F	
Model Number	Gal. Cap.	Floor to Heater Top	Jacket Dia.	Floor to Water Conn.	Floor to T&P Conn.	Floor to Solar Coll. Supply	Floor to Solar Coll. Return	Approx. Shipping Weight (lbs)
S-DW2-60R6DS	60	59 <sup>1</sup> / <sub>4</sub>	22	63 <sup>1</sup> / <sub>4</sub>	53	29 <sup>1</sup> / <sub>2</sub>	7 <sup>3</sup> / <sub>8</sub>	217
S-DW2-75R6DS	75	59 <sup>1</sup> / <sub>4</sub>	24	63 <sup>1</sup> / <sub>4</sub>	53	29 <sup>1</sup> / <sub>2</sub>	7 <sup>3</sup> / <sub>8</sub>	241
S-DW2-115R6DS	115	62 <sup>3</sup> / <sub>4</sub>	28 <sup>1</sup> / <sub>4</sub>	66 <sup>3</sup> / <sub>4</sub>	55 <sup>3</sup> / <sub>4</sub>	29 <sup>1</sup> / <sub>2</sub>	7 <sup>3</sup> / <sub>8</sub>	345

For single element models change "D" to "S".

(Ex. S-DW2-60R6SS)



## Electric Backup Water Heating Ratings

Model Number	First Hour Supply (Gal.)		Standby Heat Loss Rating (°F/Hr.)
	Single Element	Dual Element	
S-DW2-60R6DS	46	84	1.1
S-DW2-75R6DS	53	97	0.9
S-DW2-115R6DS	83	124	0.7



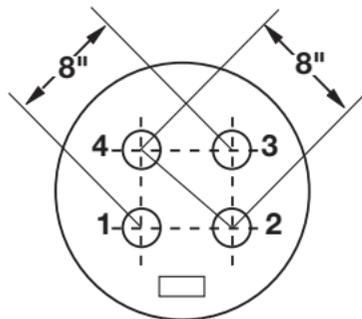
# Solar Saver® Electric Backup Models



# 74/75



- Vitraglas® Lining
- Factory-Installed Hydrojet® Total Performance System
- Equipped with a 4500 watt Element And Automatic Thermostat – Where a Backup System is Desired. If Storage Only Is Desired Do Not Connect the Unit to the Electrical Service.
- Top of Tank Access for Wiring and Water Connections
- Pre-Wired Sensor Lead
- Thermal Feet
- Water Connections—3/4" NPT Factory Installed True Dielectric Fittings
- 2" Non-CFC foam insulation
- Protective Magnesium Anode Rod
- Consult Factory for Other Wattages
- T&P Relief Valve Included
- Low Restriction Brass Drain Valve



- #1 - 3/4" Pump Suction
- #2 - 3/4" Cold Inlet
- #3 - 3/4" Collector Return
- #4 - 3/4" Hot Outlet

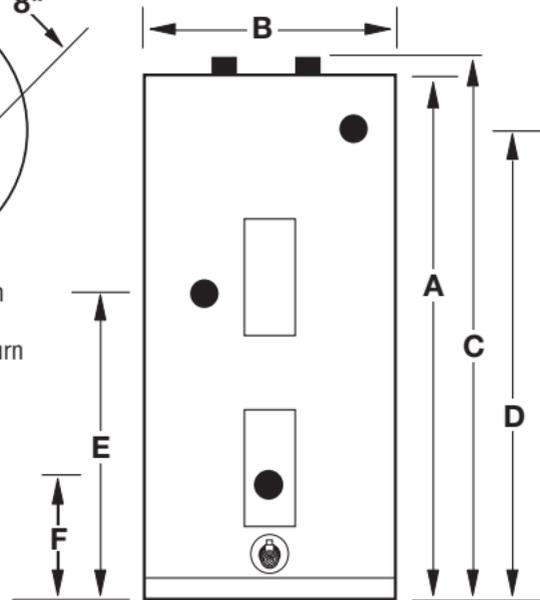


Photo of MS80R6SS

# Solar Saver® Electric Backup Models

DIMENSIONS IN INCHES

Meet or exceed ASHRAE 90.1b (current standard)

SOLAR MODELS		A	B	C	D	E	F	
Model Number	Gal. Cap.	Floor to Heater Top	Jacket Dia.	Floor to Water Conn.	Floor to T&P Conn.	Fl. to Alt. Coll. Return Conn.	Fl. to Alt. Coll. Supply Conn.	Approx. Shipping Weight (lbs)
MS65R6SS	65	59	22	60	52 <sup>1</sup> / <sub>2</sub>	—	—	168
MS80R6SS†	80	59	24	60	52 <sup>1</sup> / <sub>2</sub>	38	7 <sup>7</sup> / <sub>8</sub>	210
MS120R6SS†	119	62 <sup>1</sup> / <sub>2</sub>	28	63 <sup>1</sup> / <sub>2</sub>	56	38 <sup>1</sup> / <sub>4</sub>	7 <sup>7</sup> / <sub>8</sub>	310

NOTE: Suffix letter “S” denotes single element and surface mounted thermostat.

**If requirements are for storage only, do not use element connections.**

Second suffix letter “S” denotes Screw-Type Element. Meets California Energy Commission requirements.

†Models offer additional pump suction and collector return connections.



# Residential Gas Combi1™ Single-Wall Atmospheric Models

76/77



**DEFENDER SAFETY SYSTEM** BRADFORD WHITE **ICON System**

**The Combi1™ FVIR Defender Safety System® Models Feature (50 gallon model only):**

- Advanced ScreenLok® Technology Flame Arrestor Design
- Flammable Vapor Sensor

**All Combi1™ Models Feature:**

- Bradford White ICON System™
- Heat Exchanger—Single Wall 1½" O.D. Enamel Coated (Vitrilas®) Steel Coil
- Provides Domestic Hot Water and Space Heating in One System
- Low Heat Exchanger Head Loss—Up to 10 GPM Flow, with Less than 0.80 ft. of Head Loss

- Vitrilas® Lining
- Factory-Installed Hydrojet® Total Performance System
- Water Connections – 3/4" NPT Factory-Installed True Dielectric Fittings
- 1" Front NPT Supply and Return Connections
- 2" Non-CFC Foam Insulation
- Two Protective Anode Rods
- T&P Relief Valve Installed
- Low Restriction Brass Drain Valve
- Thermostatic Mixing Valve (ASSE Approved) Included

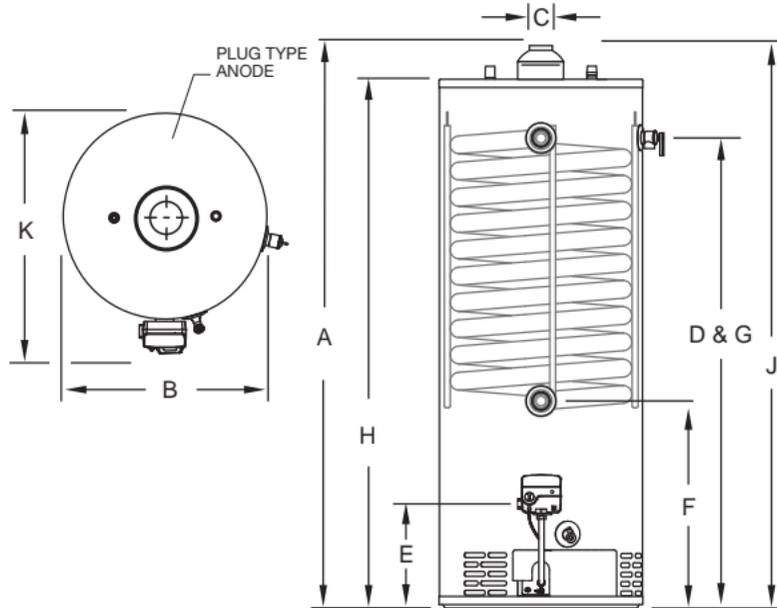


Photo of  
C-SW2-504T10FBN

# Combi1™ Atmospheric Vent Model

Meet or exceed ASHRAE 90.1b  
(current standard) C.E.C. Listed  
80% Thermal Efficiency

## DIMENSIONS IN INCHES

NATURAL GAS MODELS				A	B	C	D	E	F	G	H	J	K	
Model Number	Gal. Cap.	Input BTU/Hr.	GPH Recovery 90°F Rise*	Floor to Flue Conn.	Jacket Dia.	Vent Size	Floor to T&P Conn.	Floor to Gas Conn.	Floor to Exchanger Inlet	Floor to Exchanger Outlet	Floor to Top of Heater	Floor to Top Water Conn.	Depth	Approx. Shipping Weight (lbs)
C-SW2-504T10FBN	45	65,000	70	59 <sup>1</sup> / <sub>4</sub>	22	4	50	13	31 <sup>1</sup> / <sub>2</sub>	50	56 <sup>3</sup> / <sub>8</sub>	60 <sup>3</sup> / <sub>8</sub>	24 <sup>1</sup> / <sub>2</sub>	236
C-SW2-75T10BN	72	76,000	81	62 <sup>1</sup> / <sub>4</sub>	26	4	51 <sup>3</sup> / <sub>4</sub>	13 <sup>7</sup> / <sub>8</sub>	29 <sup>5</sup> / <sub>8</sub>	51 <sup>3</sup> / <sub>4</sub>	59	63	30 <sup>3</sup> / <sub>8</sub>	326

All propane models feature a Titanium Stainless Steel burner. For propane (LP) models change suffix "BN" to "SX".

\*Based on manufacturer's rated recovery efficiency.

CAEF is .55 and CAAFLUE % is 80.0.

## Heat Exchanger Values\*

	C-SW2-504T C-SW2-75T	C-SW2-504T		C-SW2-75T	
Supply Temperature	140°F	120°F	100°F	120°F	100°F
Return Temperature	120°F	100°F	80°F	100°F	80°F
Differential	20°F	20°F	20°F	20°F	20°F
Flow Rate	4.1 GPM	4.6 GPM	4.6 GPM	5.6 GPM	5.6 GPM
Net Output	35,500 BTU/Hr.	39,500 BTU/Hr.	39,500 BTU/Hr.	47,500 BTU/Hr.	47,500 BTU/Hr.

\*These values were obtained using 180°F stored tank temperature.

Net Output is the space heating capacity based on normal piping and pickup allowance of 15%.

Actual values may vary based on circulator flow rate, number of zones, water and space heating demands. Numbers subject to change.

LP GAS MODELS	Input BTU/Hr.	GPH Rec. 90°F Rise
C-SW2-504T10FSX	61,000	66
C-SW2-75T10SX	76,000	81

## Heat Exchanger Head Loss

GPM	2	5	8	10	12
Feet of Head Loss	0.03	0.20	0.51	0.80	1.15



# Residential Gas Combi1™ TTW® Single-Wall Power Vent Models

78/79



**DEFENDER** SAFETY SYSTEM™  
**ICON** System™

**The Combi1™ TTW® FVIR Defender Safety System® Models Feature (50 gallon model only):**

- Advanced ScreenLok® Technology Flame Arrestor Design

- Flammable Vapor Sensor

**All Combi1™ TTW® Models Feature:**

- Bradford White ICON System™

- Heat Exchanger—Single Wall 1½" O.D. Enamel Coated (Vitraglas®) Steel

- Provides Domestic Hot Water and Space Heating in One System

- Low Heat Exchanger Head Loss—Up to 10 GPM Flow, with Less than 0.80 ft. of Head Loss

- Vitraglas® Lining

- Power Vented

- 10 ft. Power Cord Included (120 VAC)

- Factory-Installed Hydrojet® Total Performance System

- Horizontal and Vertical Venting

- Water Connections – 3/4" NPT Factory-Installed True Dielectric Fittings

- 1" NPT Front Supply and Return Connections

- 2" Non-CFC Foam Insulation

- Two Protective Anode Rods

- T&P Relief Valve Installed

- Low Restriction Brass Drain Valve

- Pedestal Base

- Thermostatic Mixing Valve (ASSE Approved) Included

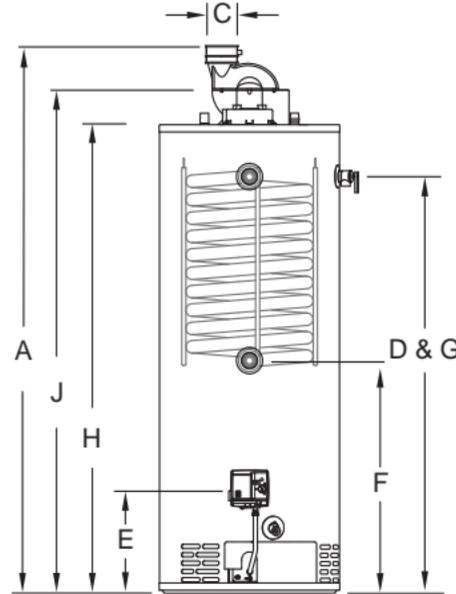
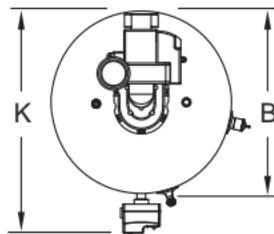


Photo of  
C-SW2-TW50T10FBN

# Combi1™ TTW® Single-Wall Power Vent Models

Meet or exceed ASHRAE 90.1b  
(current standard) C.E.C. Listed  
80% Recovery Efficiency

## DIMENSIONS IN INCHES

NATURAL GAS MODELS				A	B	C	D	E	F	G	H	J	K	
Model Number	Gal. Cap.	Input BTU/Hr.	GPH Recovery 90°F Rise*	Floor to Vent Conn.	Jacket Dia.	Vent Size	Floor to T&P Conn.	Floor to Gas Conn.	Floor to Exchanger Inlet	Floor to Exchanger Outlet	Floor to Top of Heater	Floor to Top Water Conn.	Depth	Approx. Shipping Weight (lbs)
C-SW2-TW50T10FBN	45	67,000	72	65 <sup>7</sup> / <sub>8</sub>	22	3 or 4	50 <sup>1</sup> / <sub>8</sub>	11 <sup>3</sup> / <sub>4</sub>	31 <sup>1</sup> / <sub>2</sub>	50	56 <sup>3</sup> / <sub>8</sub>	60 <sup>3</sup> / <sub>4</sub>	26 <sup>3</sup> / <sub>4</sub>	243
C-SW2-TW75T10BN	72	76,000	82	68 <sup>3</sup> / <sub>8</sub>	26	3 or 4	53	15	34 <sup>1</sup> / <sub>2</sub>	53	60 <sup>1</sup> / <sub>4</sub>	64 <sup>1</sup> / <sub>4</sub>	31	313

All propane models feature a Titanium Stainless Steel burner. For propane (LP) models change suffix "BN" to "SX".

\*Based on manufacturer's rated recovery efficiency.

120 V.A.C Required for Power Venting / 120 V.A.C., 60HZ, 3.1 Amperes.

## Heat Exchanger Values\*

Supply Temperature	140°F	120°F	100°F
Return Temperature	120°F	100°F	80°F
Differential	20°F	20°F	20°F
Flow Rate (TW50)	4.1 GPM	4.6 GPM	4.6 GPM
Net Output (TW50)	35,000 BTU/Hr.	39,500 BTU/Hr.	39,500 BTU/Hr.
Flow Rate (TW75)	4.1 GPM	5.6 GPM	5.6 GPM
Net Output (TW75)	35,000 BTU/Hr.	47,500 BTU/Hr.	47,500 BTU/Hr.

\*These values were obtained using 180°F stored tank temperature.

Net Output is the space heating capacity based on normal piping and pickup allowance of 15%.

Actual values may vary based on circulator flow rate, number of zones, water and space heating demands. Numbers subject to change.

Heat Exchanger Head Loss	
GPM	Ft. of Hd. Loss
2	0.03
5	0.20
8	0.51
10	0.80
12	1.15

LP GAS MODELS	Input BTU/Hr.	GPH Rec. 90°F Rise
C-SW2-TW50T10FSX	60,000	65
C-SW2-TW75T10SX	75,500	81

C-SW2-TW50 C-SW2-TW75	3" Vent Pipe		4" Vent Pipe	
	Max. Equivalent Length	60 ft.**	180 ft.	
Min. Equivalent Length	7 ft.	15 ft.		
Number of 90° Elbows	1	55 ft.	175 ft.	
	2	50 ft.	170 ft.	
	3	45 ft.	165 ft.	

Subtract 5ft. for each additional 90° elbow.

\*\*C-SW2-TW75 maximum 3" vent length is 50ft.



# Residential Gas Combi2™ Double-Wall Atmospheric Models

80/81



**DEFENDER** BRADFORD WHITE  
**ICON** System™  
SAFETY SYSTEM™

**The Combi2™ FVIR Defender Safety System® Models Feature (50 gallon model only):**

- Advanced ScreenLok® Technology Flame Arrestor Design
- Flammable Vapor Sensor

**All Combi2™ Models Feature:**

- Bradford White ICON System™
- Heat Exchanger—Double Wall 1½" O.D. Enamel Coated (Vitrage®) Steel Coil Ensures Separation of Potable Water and Heating Fluid
- Provides Domestic Hot Water and Space Heating in One System
- Low Heat Exchanger Head Loss—Up to 10 GPM Flow, with Less than 3.75 ft. of Head Loss
- Vitrage® Lining
- Factory-Installed Hydrojet® Total Performance System

- Water Connections – 3/4" NPT Factory-Installed True Dielectric Fittings
- 3/4" Front NPT Supply and Return Connections
- 2" Non-CFC Foam Insulation
- Two Protective Anode Rods
- T&P Relief Valve Installed
- Low Restriction Brass Drain Valve
- Thermostatic Mixing Valve (ASSE Approved) Included

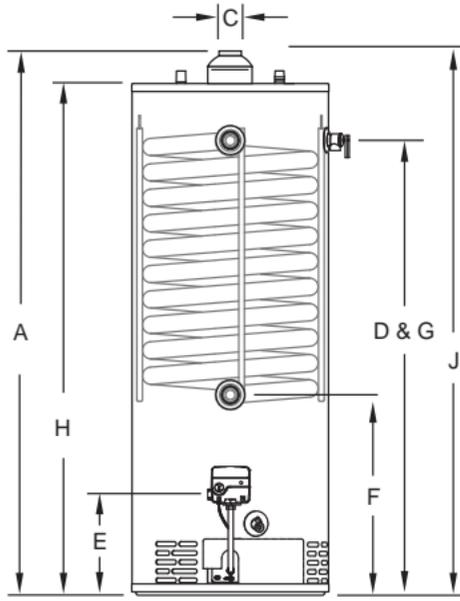
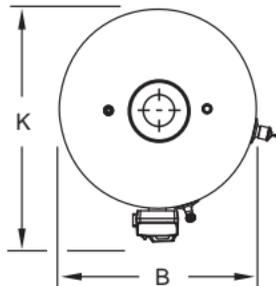


Photo of  
C-DW2-504T10FBN

# Combi2™ Double-Wall Atmospheric Models

Meet or exceed ASHRAE 90.1b  
(current standard) C.E.C. Listed  
80% Thermal Efficiency

DIMENSIONS IN INCHES

NATURAL GAS MODELS				A	B	C	D	E	F	G	H	J	K	
Model Number	Gal. Cap.	Input BTU/Hr.	GPH Recovery 90°F Rise*	Floor to Flue Conn.	Jacket Dia.	Vent Size	Floor to T&P Conn.	Floor to Gas Conn.	Floor to Exchanger Inlet	Floor to Exchanger Outlet	Floor to Top of Heater	Floor to Top Water Conn.	Depth	Approx. Shipping Weight (lbs)
C-DW2-504T10FBN	45	65,000	70	59 <sup>1</sup> / <sub>4</sub>	22	4	50	13	27 <sup>7</sup> / <sub>8</sub>	50	56 <sup>3</sup> / <sub>8</sub>	60 <sup>3</sup> / <sub>8</sub>	24 <sup>1</sup> / <sub>2</sub>	238
C-DW2-75T10BN	72	76,000	81	62 <sup>1</sup> / <sub>4</sub>	26	4	51 <sup>3</sup> / <sub>4</sub>	13 <sup>7</sup> / <sub>8</sub>	29 <sup>5</sup> / <sub>8</sub>	51 <sup>3</sup> / <sub>4</sub>	59	63	30 <sup>3</sup> / <sub>8</sub>	302

All propane models feature a Titanium Stainless Steel burner. For propane (LP) models change suffix "BN" to "SX".

\*Based on manufacturer's rated recovery efficiency.

CAEF is .55 and CAAFLUE % is 80.0.

LP GAS MODELS	Input BTU/Hr.	GPH Rec. 90°F Rise
C-DW2-504T10FSX	61,000	66
C-DW2-75T10SX	76,000	81

## Heat Exchanger Values\*

Supply Temperature	140°F	120°F	100°F
Return Temperature	120°F	100°F	80°F
Differential	20°F	20°F	20°F
Flow Rate	2.3 GPM	3.4 GPM	4.4 GPM
Net Output	20,000 BTU/Hr.	29,000 BTU/Hr.	38,000 BTU/Hr.

\*These values were obtained using 180°F stored tank temperature.

Net Output is the space heating capacity based on normal piping and pickup allowance of 15%.

Actual values may vary based on circulator flow rate, number of zones, water and space heating demands. Numbers subject to change.

## Heat Exchanger Head Loss

GPM	2	5	8	10	12
Feet of Head Loss	0.15	0.94	2.40	3.75	5.40



# Residential Gas Combi2™ TTW® Double-Wall Power Vent Models

82/83



**DEFENDER** SAFETY SYSTEM  
**BRADFORD WHITE** **ICON** System

**The Combi2™ TTW® FVIR Defender  
Safety System® Models Feature  
(50 gallon model only):**

- Advanced ScreenLok® Technology Flame Arrestor Design
- Flammable Vapor Sensor
- All Combi2™ TTW® Models Feature:**
- Bradford White ICON System™
- Heat Exchanger—Double Wall 1½" O.D. Enamel Coated (Vitraglas®) Steel Coil Ensures Separation of Potable Water and Heating Fluid
- Provides Domestic Hot Water and Hydronic Heating in One System
- Low Heat Exchanger Head Loss—Up to 10 GPM Flow, with Less than 3.75 ft. of Head Loss
- Vitraglas® Lining
- Factory-Installed Hydrojet® Total Performance System

- Power Vented  
- 10 ft. Power Cord Included (120 VAC)
- Horizontal and Vertical Venting
- Water Connections—3/4" NPT  
Factory-Installed True Dielectric Fittings
- 3/4" Front Supply and Return Connections
- 2" Non-CFC Foam Insulation
- Two protective Anode Rods
- T&P Relief Valve Installed
- Low Restriction Brass Drain Valve
- Pedestal Base
- Thermostatic Mixing Valve (ASSE Approved) Included

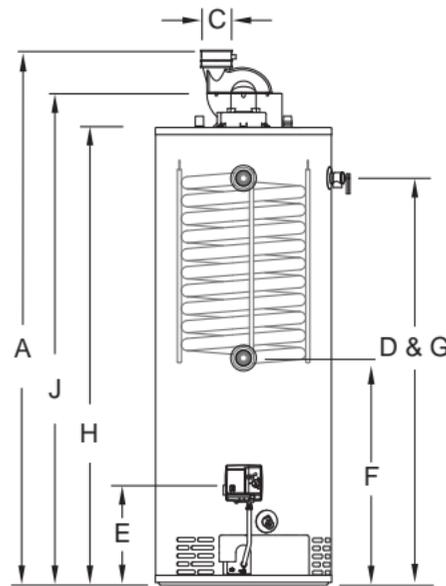
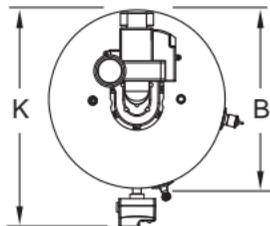


Photo of  
C-DW2-TW50T10FBN

# Combi2™ TTW® Double-Wall Power Vent Models

Meet or exceed ASHRAE 90.1b  
(current standard) C.E.C. Listed

Recovery Efficiency ranging up to 80% (Minimum)

## DIMENSIONS IN INCHES

NATURAL GAS MODELS				A	B	C	D	E	F	G	H	J	K	
Model Number	Gal. Cap.	Input BTU/Hr.	GPH Recovery 90°F Rise*	Floor to Vent Conn.	Jacket Dia.	Vent Size	Floor to T&P Conn.	Floor to Gas Conn.	Floor to Exchanger Inlet	Floor to Exchanger Outlet	Floor to Top of Heater	Floor to Top Water Conn.	Depth	Approx. Shipping Weight (lbs)
C-DW2-TW50T10FBN	45	67,000	72	65 <sup>7</sup> / <sub>8</sub>	22	3 or 4	50 <sup>1</sup> / <sub>8</sub>	11 <sup>3</sup> / <sub>4</sub>	28	50 <sup>1</sup> / <sub>8</sub>	56 <sup>3</sup> / <sub>8</sub>	60 <sup>3</sup> / <sub>4</sub>	26 <sup>3</sup> / <sub>4</sub>	245
C-DW2-TW75T10BN	72	76,000	82	68 <sup>3</sup> / <sub>8</sub>	26	3 or 4	53	15	30 <sup>7</sup> / <sub>8</sub>	53	60 <sup>1</sup> / <sub>4</sub>	64 <sup>1</sup> / <sub>4</sub>	31	315

All propane models feature a Titanium Stainless Steel burner. For propane (LP) models change suffix "BN" to "SX".

\*Based on manufacturer's rated recovery efficiency.

120 V.A.C Required for Power Venting / 120 V.A.C., 60HZ, 3.1 Amperes.

## Heat Exchanger Values\*

Supply Temperature	140°F	120°F	100°F
Return Temperature	120°F	100°F	80°F
Differential	20°F	20°F	20°F
Flow Rate	2.3 GPM	3.4 GPM	4.4 GPM
Net Output	20,000 BTU/Hr.	29,000 BTU/Hr.	38,000 BTU/Hr.

\*These values were obtained using 180°F stored tank temperature.

Net Output is the space heating capacity based on normal piping and pickup allowance of 15%.

Actual values may vary based on circulator flow rate, number of zones, water and space heating demands. Numbers subject to change.

## Heat Exchanger Head Loss

GPM	Ft. of Hd. Loss
2	0.15
5	0.94
8	2.40
10	3.75
12	5.40

LP GAS MODELS	Input BTU/Hr.	GPH Rec. 90°F Rise
C-DW2-TW50T10FSX	60,000	65
C-DW2-TW75T10SX	75,500	81

C-DW2-TW50 C-DW2-TW75	3" Vent Pipe	4" Vent Pipe
Max. Equivalent Length	60 ft.**	180 ft.
Min. Equivalent Length	7 ft.	15 ft.
Number of 90° Elbows	1	55 ft.
	2	50 ft.
	3	45 ft.

Subtract 5ft. for each additional 90° elbow.

\*\*C-DW2-TW75 maximum 3" vent length is 50ft.



# Residential PowerStor Series®

## Single-Wall Indirect Models

84/85



- Heat Exchanger - Single Wall 1½" O.D. Enamel Coated (Vitrage®) Steel Coil
- Vitrage® Lining
- Factory-Installed Hydrojet® Total Performance System
- Water Connections – ¾" NPT Factory-Installed True Dielectric Fittings (SW-2-120L has 1" NPT Water Connection)
- 1" NPT Connection for Boiler Supply And Return
- 2" Non-CFC Foam Insulation

- Immersion Type Aquastat – Accurate Temperature Control
- Three Protective Aluminum Anode Rods
- T&P Relief Valve Included
- Low Restriction Brass Drain Valve
- Limited Lifetime Tank and Heat Exchanger Warranty
- AHRI Certified
- Standby Heat Loss Is Less than 1/2°F per Hour (ASHRAE 90.1b Current Standard)

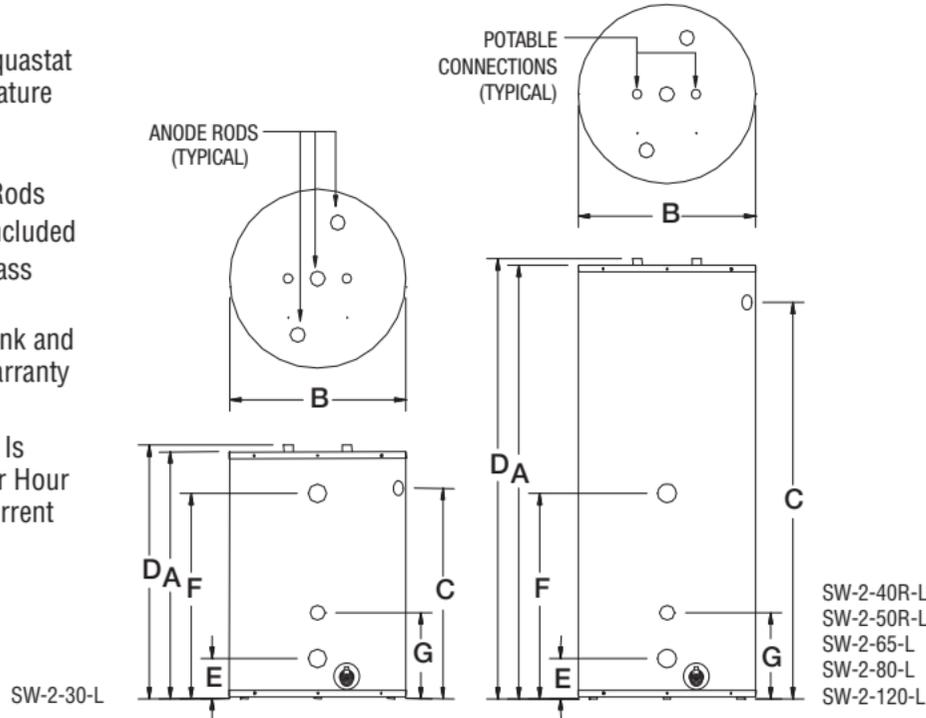


Photo of SW-2-65-L

# PowerStor Series® Single-Wall Indirect Models

DIMENSIONS IN INCHES

		A	B	C	D	E	F	G	
Model Number	Gallon Capacity	Floor to Heater Top	Jacket Dia.	Floor to T&P Conn.	Floor to Water Conn.	Floor to Exchanger Outlet	Floor to Exchanger Inlet	Floor to Aquastat	Approx. Shipping Weight (lbs)
SW-2-30-L	30	33 <sup>5</sup> / <sub>8</sub>	22	28 <sup>1</sup> / <sub>4</sub>	34 <sup>3</sup> / <sub>8</sub>	5 <sup>3</sup> / <sub>8</sub>	27 <sup>1</sup> / <sub>2</sub>	11 <sup>1</sup> / <sub>2</sub>	164
SW-2-40R-L	38	41 <sup>1</sup> / <sub>8</sub>	22	34 <sup>3</sup> / <sub>8</sub>	41 <sup>7</sup> / <sub>8</sub>	5 <sup>3</sup> / <sub>8</sub>	27 <sup>1</sup> / <sub>2</sub>	11 <sup>1</sup> / <sub>2</sub>	185
SW-2-50R-L	48	46 <sup>1</sup> / <sub>4</sub>	22	40 <sup>1</sup> / <sub>8</sub>	47	5 <sup>3</sup> / <sub>8</sub>	27 <sup>1</sup> / <sub>2</sub>	11 <sup>1</sup> / <sub>2</sub>	195
SW-2-65-L	60	59 <sup>1</sup> / <sub>4</sub>	22	53 <sup>1</sup> / <sub>8</sub>	60	5 <sup>3</sup> / <sub>8</sub>	27 <sup>1</sup> / <sub>2</sub>	11 <sup>1</sup> / <sub>2</sub>	225
SW-2-80-L	75	59	24	52 <sup>7</sup> / <sub>8</sub>	59 <sup>3</sup> / <sub>4</sub>	5 <sup>3</sup> / <sub>8</sub>	27 <sup>1</sup> / <sub>2</sub>	11 <sup>1</sup> / <sub>2</sub>	250
SW-2-120-L	116	62 <sup>1</sup> / <sub>2</sub>	28 <sup>1</sup> / <sub>4</sub>	55 <sup>3</sup> / <sub>4</sub>	63 <sup>1</sup> / <sub>4</sub>	6 <sup>3</sup> / <sub>8</sub>	28 <sup>1</sup> / <sub>2</sub>	11 <sup>1</sup> / <sub>2</sub>	370

## DOE Water Heater Performance

Model Number	Maximum First Hour Rating (Gal.) @		Continuous Draw Rating (Gal./Min.) @		Approximate Boiler Output Needed for Ratings (BTU/Hr.)
	140°F	115°F	140°F	115°F	
SW-2-30-L	279	429	4.2	6.7	220,000
SW-2-40R-L	288	438	4.2	6.7	220,000
SW-2-50R-L	297	447	4.2	6.7	220,000
SW-2-65-L	306	456	4.2	6.7	220,000
SW-2-80-L	321	470	4.2	6.7	220,000
SW-2-120-L	357	507	4.2	6.7	220,000

Note: Based on 200° F boiler water temperature and 50° F potable water inlet temperature.

## AHRI Water Heater Ratings

Model Number	First Hour Delivery	Continuous Draw Rating @ 135°F (Gal./Hr.)	Standby Heat Loss Rating (°F/Hr.)	Heat Req. Rate (BTU/Hr.)	Heat Source Flow Rate (Gal./Min.)
SW-2-30-L	255	235	1.2	157,000	13.7
SW-2-40R-L	260	235	1.1	157,000	13.7
SW-2-50R-L	265	235	0.9	157,000	13.7
SW-2-65-L	275	235	0.7	157,000	13.7
SW-2-80-L	295	235	0.6	157,000	13.7
SW-2-120-L	325	235	0.4	157,000	13.7

Note: These certified ratings were obtained with a heat source output rate and flow rate as specified and a 180° F boiler water supply temperature. Other results will be obtained under different conditions.



# Residential PowerStor2™ Series®

## Double-Wall Indirect Models

86/87



- Heat Exchanger—Double Wall 1½" O.D. Enamel Coated (Vitraglas®) Steel Coil
- Head Loss—Less than 5 ft. of Head Loss with Flows up to 10 GPM
- Vitraglas® Lining
- Factory-Installed Hydrojet® Total Performance System
- Water Connections—¾" NPT Factory-Installed True Dielectric Fittings
- 2" Non-CFC Foam Insulation
- Surface-Mount Thermostat
- Two Protective Magnesium Anode Rods
- T&P Relief Valve Installed
- Low Restriction Brass Drain Valve
- Limited Lifetime Warranty on Tank and Heat Exchanger
- AHRI Certified
- Standard Heat Loss—Less than 1/2°F per Hour (ASHRAE 90.1b Current Standard)

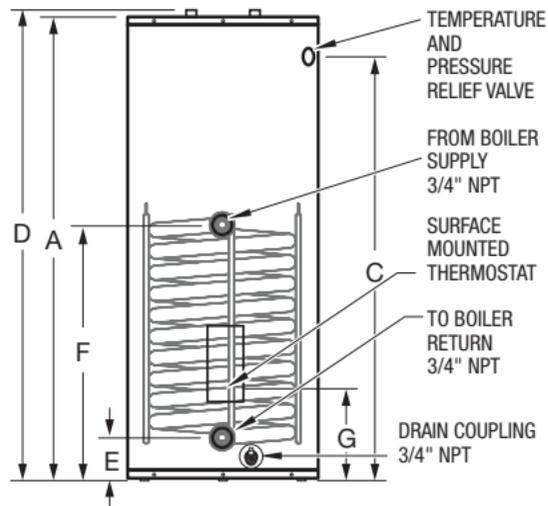
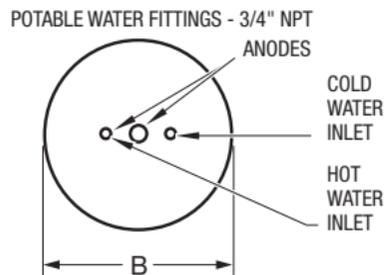


Photo of DW-2-50-L

# PowerStor2™ Series® Double-Wall Indirect Models

DIMENSIONS IN INCHES

		A	B	C	D	E	F	G	
Model Number	Gallon Capacity	Floor to Heater Top	Jacket Dia.	Floor to T&P Conn.	Floor to Water Conn.	Floor to Boiler Return	Floor to Boiler Supply	Floor to Thermostat	Approx. Shipping Weight (lbs)
DW-2-40-L	38	41	22	34 <sup>3</sup> / <sub>8</sub>	41 <sup>7</sup> / <sub>8</sub>	5 <sup>3</sup> / <sub>8</sub>	27 <sup>1</sup> / <sub>2</sub>	11 <sup>1</sup> / <sub>2</sub>	195
DW-2-50-L	48	46 <sup>1</sup> / <sub>4</sub>	22	40 <sup>1</sup> / <sub>8</sub>	47 <sup>1</sup> / <sub>4</sub>	5 <sup>3</sup> / <sub>8</sub>	27 <sup>1</sup> / <sub>2</sub>	11 <sup>1</sup> / <sub>2</sub>	205
DW-2-65-L	64	59	22	53 <sup>1</sup> / <sub>8</sub>	60	5 <sup>3</sup> / <sub>8</sub>	27 <sup>1</sup> / <sub>2</sub>	11 <sup>1</sup> / <sub>2</sub>	235
DW-2-80-L	75	59	24	52 <sup>7</sup> / <sub>8</sub>	59 <sup>3</sup> / <sub>4</sub>	5 <sup>3</sup> / <sub>8</sub>	27 <sup>1</sup> / <sub>2</sub>	11 <sup>1</sup> / <sub>2</sub>	255

## AHRI Water Heater Ratings

Model Number	First Hour Delivery	Continuous Draw Rating @ 135°F (Gal./Hr.)	Standby Heat Loss Rating (°F/Hr.)	Minimum Heat Req. Rate (BTU/Hr.)	Minimum Heat Source Flow Rate (Gal./Min.)
DW-2-40-L	123	98	1.1	65,000	8.0
DW-2-50-L	133	98	0.9	65,000	8.0
DW-2-65-L	148	98	0.7	65,000	8.0
DW-2-80-L	158	98	0.6	65,000	8.0

Note: These certified ratings were obtained with a heat source output rate and flow rate as specified and a 180° F boiler water supply temperature. Other results will be obtained under different conditions.

## DOE Water Heater Performance

Model Number	Maximum First Hour Rating (Gal.) @		Continuous Draw Rating (Gal./Min.) @		Approximate Boiler Output Needed For Ratings (BTU/Hr.)
	140°F	115°F	140°F	115°F	
DW-2-40-L	80	122	0.9	1.6	55,000
DW-2-50-L	87	129	0.9	1.6	55,000
DW-2-65-L	96	138	0.9	1.6	55,000
DW-2-80-L	106	148	0.9	1.6	55,000

Note: Based on 200° F boiler water temperature and 50°F potable water inlet temperature.



# Residential PowerStor Series<sup>®</sup> SS Stainless Steel Single-Wall Indirect Models

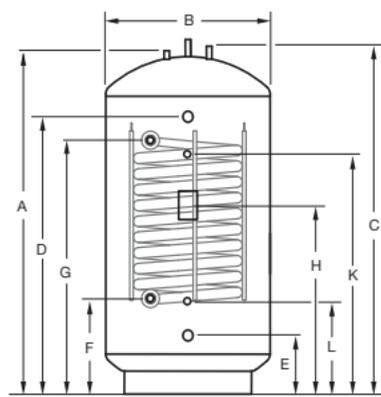
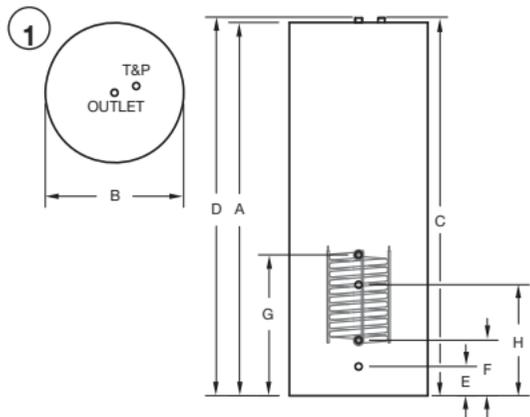
88/89



- Stainless Steel Heat Exchanger—Single-Wall 1" O.D. Stainless Steel Coil.
- Stainless Steel Tank and Heat Exchanger—Made from Chromium Molybdenum - Titanium Ferritic 444 Stainless Steel Alloy.
- Immersed Adjustable Honeywell Aquastat—Fast Acting Immersion Aquastat for Automatic Temperature Control

- Supply and Return Connections—3/4" NPT Female Connections Are Located on the Front for Both the Boiler Supply and Boiler Return (1" NPT on RTV-119)
- 2" Non-CFC Foam Insulation
- Potable Water Connections—3/4" NPT Factory-Installed Dielectric Fittings Extend Water Heater Life and Eases Installation (1/4" NPT on RTV-119)

- T&P Relief Valve Included
- Steel Jacket
- Low Restriction Brass Drain Valve
- AHRI Certified



- ① RTV-40-L  
RTV-52-L  
RTV-75-L
- ② RTV-120-L  
\*Floor to Top Spare 3/4" NPT Tank Connection is 41 1/2"  
Floor to Bottom Spare 3/4" NPT Tank Connection is 17"



Photo of RTV-40-L

# PowerStor Series® SS Stainless Steel Single-Wall Indirect Models

DIMENSIONS IN INCHES

		A	B	C	D	E	F	G	H	I	J	K	K	
Model Number	Gal. Cap.	Floor to Heater Top	Jacket Dia.	Floor to T&P Conn.	Floor to Hot Water Conn.	Floor to Cold Water Conn.	Floor to Exchanger Outlet	Floor to Exchanger Inlet	Floor to Aquastat	Floor to Exchanger Outlet (Upper)	Floor to Exchanger Inlet (Upper)	Floor to Spare 3/4" Hot Water Conn.	Floor to Spare 3/4" Cold Water Conn.	Approx. Shipping Weight
RTV-40-L	40	35 <sup>1</sup> / <sub>4</sub>	24	35 <sup>1</sup> / <sub>2</sub>	35 <sup>1</sup> / <sub>2</sub>	5	9 <sup>1</sup> / <sub>2</sub>	24 <sup>5</sup> / <sub>8</sub>	19	—	—	—	—	83
RTV-52-L	52	45 <sup>5</sup> / <sub>8</sub>	24	45 <sup>7</sup> / <sub>8</sub>	45 <sup>7</sup> / <sub>8</sub>	5	9 <sup>1</sup> / <sub>2</sub>	28 <sup>3</sup> / <sub>8</sub>	19	—	—	—	—	93
RTV-75-L	75	63 <sup>7</sup> / <sub>8</sub>	24	64 <sup>1</sup> / <sub>8</sub>	64 <sup>1</sup> / <sub>8</sub>	5	9 <sup>1</sup> / <sub>2</sub>	28 <sup>1</sup> / <sub>4</sub>	19	—	—	—	—	117
RTV-120-L	119	60 <sup>5</sup> / <sub>8</sub>	30 <sup>1</sup> / <sub>4</sub>	61	49 <sup>1</sup> / <sub>2</sub>	11 <sup>1</sup> / <sub>4</sub>	17 <sup>7</sup> / <sub>8</sub>	45 <sup>1</sup> / <sub>2</sub>	36	—	—	42 <sup>3</sup> / <sub>4</sub>	17 <sup>7</sup> / <sub>8</sub>	315

## AHRI Water Heater Ratings

Model Number	First Hour Delivery	Continuous Draw @ 135°F (Gal./Hr.)	Standby Heat Loss Rating (°F/Hr.)	Min. Heat Required Rate (BTU/Hr.)	Min. Heat Source Flow Rate (Gal./Min.)
RTV-40-L	158	133	0.9	88,000	8.0
RTV-52-L	200	165	0.7	113,000	8.0
RTV-75-L	225	165	0.5	113,000	8.0
RTV-120-L	360	280	0.6	195,000	11.0

Notes:

- 1) Inlet water temperature based on 50°F.
- 2) RTV-119 supplied with 2 extra plugged tappings (see manual).  
Height to top spare plug is 41<sup>3</sup>/<sub>4</sub>".  
Height to bottom spare plug is 17".
- 3) RTV-119 equipped with steel casing.  
All potable water connections are 3/4" NPT (1<sup>1</sup>/<sub>4</sub>" on RTV-119).  
3/4" Aquastat tapping.  
3/4" T&P valve tapping.

Note: These certified ratings were obtained with a heat output rate and flow rate as specified and a 180°F boiler water supply temperature. Other results will be obtained under different conditions.



# Residential



# Storage Tank Models

# 90/91



- Vitraglas® Lining
- Factory-Installed Hydrojet® Total Performance System
- Water Connections – 3/4" NPT  
Factory-Installed True Dielectric Fittings (AST-120 has 1" NPT Connections)
- 2" Non-CFC Foam Insulation
- Fully Automatic Controls
- Protective Magnesium Anode Rod
- Boiler Return Is 3/4"
- Thermal Feet
- T&P Relief Valve Opening
- Brass Drain/Return Valve (3/4")

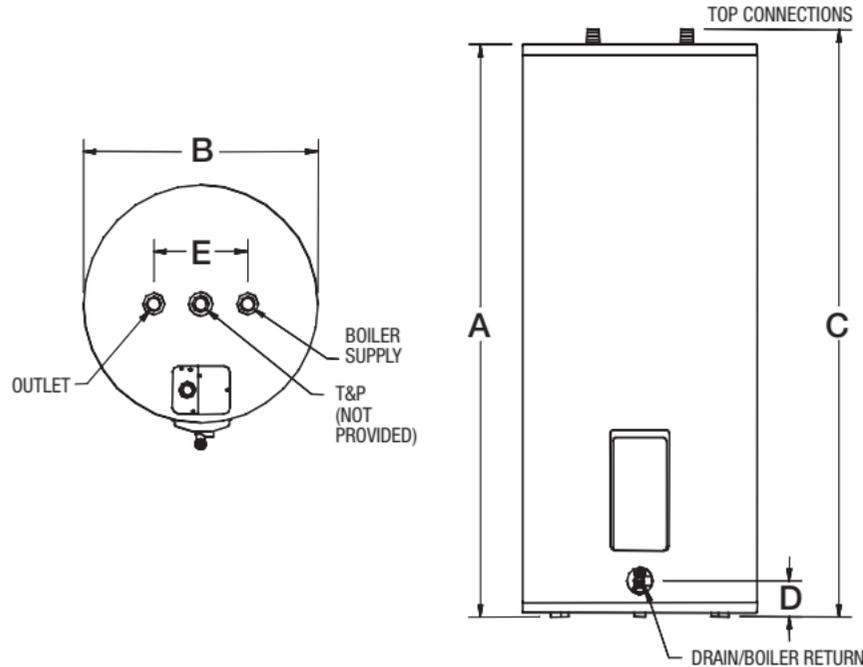


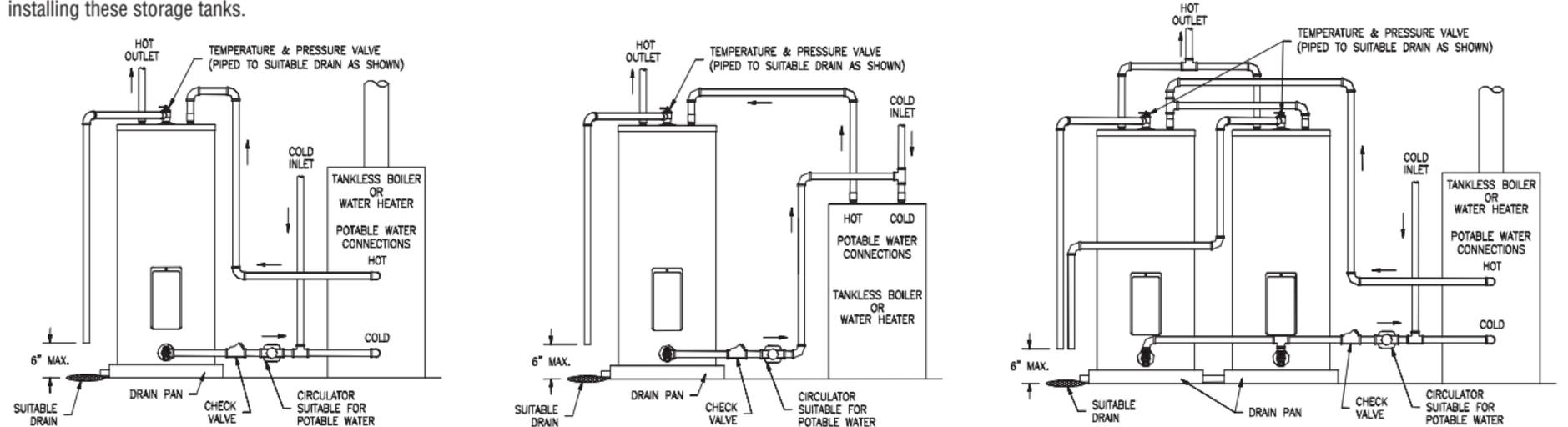
Photo of  
AST-50-6

# Storage Tank Models

DIMENSIONS IN INCHES

Model Number	Gallon Capacity	Floor to Heater Top	Jacket Dia.	Floor to Top Water Conn.	Floor to Drain/Boiler Return	Outlet	Heat Source Supply	Heat Source Return	Approx. Shipping Weight (lbs)
AST-40-6	40	46 <sup>7</sup> / <sub>8</sub>	20	47 <sup>7</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>16</sub>	3/4	3/4	3/4	103
AST-50-6	50	46 <sup>5</sup> / <sub>16</sub>	22	47 <sup>5</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>16</sub>	3/4	3/4	3/4	130
AST-80-6	80	58 <sup>7</sup> / <sub>8</sub>	24	59 <sup>7</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>16</sub>	3/4	3/4	3/4	183
AST-120-6	119	62 <sup>7</sup> / <sub>8</sub>	28 <sup>1</sup> / <sub>4</sub>	63 <sup>7</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>16</sub>	1	1	3/4	305

Note: Circulator pump and temperature pressure relief valve are NOT included. We recommend you use a stainless steel or low lead circulator pump and relief valve of your choice when installing these storage tanks.





*Everything you need  
to build magnum  
profits for your  
business.*

If you're selecting the water heating equipment for an apartment complex, restaurant, laundromat, hotel, school, manufacturing plant or any other business with a constant high demand for hot water, the Bradford White Magnum Series of commercial water heaters can fill all your requirements. Bradford White offers an extensive and comprehensive selection of water heating products for commercial applications. Our commercial and industrial models, known as the MAGNUM Series, include gas and electric light-duty versions, a full complement of high input Energy Saver units, Ultra High Efficiency unit (eF Series®), instantaneous models, booster units and storage tanks. Each and every one is designed and built to the most exacting quality specifications for durability, energy-efficiency and top performance.

## RightSpec® - Interactive Sizing and Cross Reference



RightSpec® commercial sizing and specifying guide offers many unique features and upgrades. You'll find it easy to use with complete specifications on the entire Residential and Magnum series line of commercial water heaters. The program enables you to determine the correct commercial model for any application including restaurants, apartment complexes and laundromats.

This interactive program includes a comprehensive cross reference guide that makes replacing any commercial or residential water heater with a Bradford White model quick and easy. You simply enter the model you wish to replace and the software will provide a Bradford White solution.

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***Visit Bradford White's Interactive sizing and cross reference program at:  
[www.bradfordwhite.com](http://www.bradfordwhite.com)***



# Commercial Gas

## Light Duty Atmospheric Vent High Input Models

94/95



- Bradford White ICON System™
  - Enhanced Performance
  - Advanced Temperature Control System
  - Intelligent Diagnostics
  - Separate Immersed Thermowell
- Advanced ScreenLok® Technology Flame Arrestor Design (LG250H653N)
- Resettable Thermal Switch (LG250H653NT)
- Factory-Installed Hydrojet 2™ Total Performance System
- Vitraglas® Lining
- Side Connections—3/4" (19mm) NPT

- Non-CFC Foam Insulation
- Water Connections
- Hand Hole Cleanout
- Protective Magnesium Anode Rod
- 4" (107mm) "Snap Lock" Draft Diverter
- T&P Relief Valve—Installed
- Low Restriction Brass Drain Valve
- Thermostatic Mixing Valve (ASSE Approved) included (LG155H803N only)

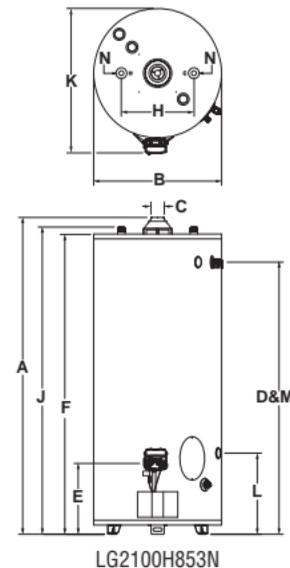
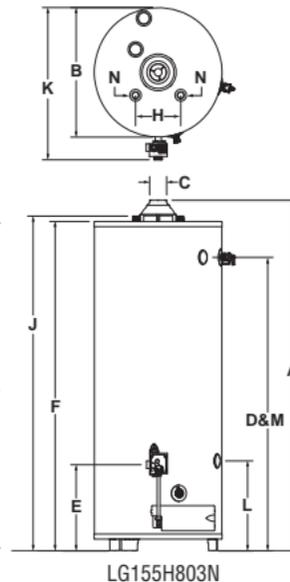
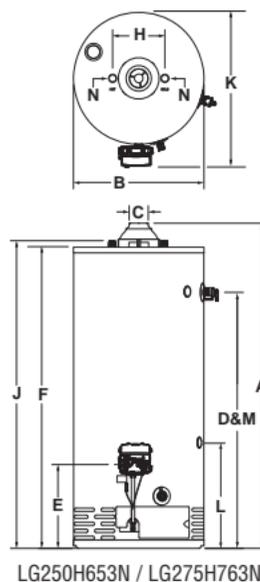


Photo of  
LG2100H853N



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- Quickly find a Bradford White water heater to replace any competitor's model

## eF Series® Efficiency Calculator

- Easily calculates the cost and energy savings you'll see by installing Bradford White's eF Series® Ultra High Efficiency water heaters



Made for

iPhone iPad

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\*Program valid only in the USA and Canada

# Ultra High Efficiency Water Heaters

Available in 60-Gallon and 100-Gallon models with BTU/Hr. inputs ranging from 125,000 to 399,999.

The eF Series® is one of the most exciting products in the Bradford White Residential and Commercial line-up. Utilizing exclusive designs and technologies, the eF Series out performs the competition when it comes to installation flexibility, quiet operation and, most importantly, efficiency.



**Thermal Efficiency  
Ratings Up To 99.1%**



***The eF Series® gives home and building owners, engineers and plumbing and heating professionals reliable, trouble-free performance.***

*Scan to learn more about Bradford White's eF Series® water heaters.*



# Light Duty Atmospheric Vent High Input Models

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed

DIMENSIONS IN INCHES

NATURAL GAS MODELS					Recovery 100°F Rise*		A	B	C	D	E	F	H	J	K	L	M	N	
Model Number	Gal. Cap.	Input BTU/Hr.	1st Hour Rating (Gal.)	Energy Factor	Nat U.S. GPH	Nat Imp. GPH	Floor to Flue Conn.	Jacket Dia.	Vent Size	Floor to T&P Conn.	Floor to Gas Conn.	Floor to Top of Heater	C/L of Water Conn.	Floor to Water Conn.	Depth	Floor to Space Heating Inlet	Floor to Space Heating Outlet	NPT	Approx. Shipping Weight (lbs)
LG250H653N	48	65,000	110	0.60	63	53	60	22	4	49 <sup>15</sup> / <sub>16</sub>	13	56 <sup>5</sup> / <sub>8</sub>	11	57 <sup>7</sup> / <sub>8</sub>	26	13 <sup>1</sup> / <sub>2</sub>	49 <sup>15</sup> / <sub>16</sub>	3/4	193
LG155H803N	55	80,000	N/A	N/A	78	65	59 <sup>1</sup> / <sub>2</sub>	22	4	49 <sup>7</sup> / <sub>8</sub>	14 <sup>13</sup> / <sub>16</sub>	55 <sup>15</sup> / <sub>16</sub>	8	57 <sup>7</sup> / <sub>8</sub>	25 <sup>7</sup> / <sub>8</sub>	15 <sup>7</sup> / <sub>16</sub>	49 <sup>7</sup> / <sub>8</sub>	3/4	207
LG275H763N	75	76,000	N/A	N/A	74	62	62 <sup>5</sup> / <sub>8</sub>	24	4	51 <sup>7</sup> / <sub>8</sub>	15	59	11	60 <sup>7</sup> / <sub>16</sub>	27 <sup>1</sup> / <sub>4</sub>	16 <sup>5</sup> / <sub>8</sub>	51 <sup>7</sup> / <sub>8</sub>	1	263
LG2100H853N	100	85,000	N/A	N/A	82	69	69	28 <sup>1</sup> / <sub>4</sub>	4	59 <sup>5</sup> / <sub>16</sub>	15 <sup>7</sup> / <sub>16</sub>	65 <sup>1</sup> / <sub>2</sub>	16	66 <sup>15</sup> / <sub>16</sub>	31 <sup>1</sup> / <sub>2</sub>	17 <sup>11</sup> / <sub>16</sub>	50 <sup>5</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>4</sub>	424

Propane models feature a Titanium Stainless Steel propane burner. For Propane (LP) models change suffix "N" to "X".

For 5 year models, change suffix "3" to "5". \*Based on manufacturer's rated recovery efficiency.

LG2100H853N model features hand hole cleanout.

Energy Factor and First Hour Rating is based on the latest AHRI directory listings.

NSF kits available.

LP GAS MODELS	Input BTU/Hr.	Recovery 100°F Rise*	
Model Number		LP U.S. GPH	LP Imp. GPH
LG250H653X	61,000	59	49
LG155H803X	78,000	76	63
LG275H763X	76,000	74	62
LG2100H853X	88,000	85	71



# Commercial Gas Light Duty TTW<sup>®</sup> Power Vent Models

96/97



- Bradford White ICON System™
  - Enhanced Performance
  - Advanced Temperature Control System
  - Intelligent Diagnostics
  - Separate Immersed Thermowell
- Powerful Blower Motor
  - 10 ft. Power Cord—Included (120 VAC)
- Horizontal and Vertical Venting
- Advanced ScreenLok<sup>®</sup> Technology  
Flame Arrestor Design
- Flammable Vapor Sensor
- Maintenance-Free
- Sight Window
- Factory-Installed Hydrojet<sup>®</sup> Total  
Performance System
- Vitraglas<sup>®</sup> Lining
- Non-CFC Foam Insulation

- Water Connections—3/4" NPT
- 3/4" NPT Side Connections.
- Factory-Installed Heat Traps
- Protective Magnesium Rod.
- T&P Relief Valve
- Low Restriction Brass Drain Valve
- Thermostatic Mixing Valve (ASSE  
Approved) included (LG1PV55)

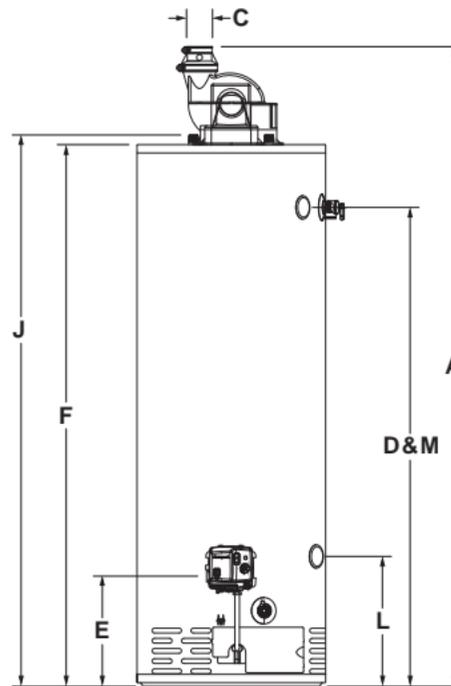
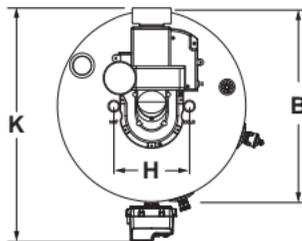


Photo of  
LG2PV50H653N

# Light Duty TTW<sup>®</sup> Power Vent Models

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
80% Recovery Efficiency

DIMENSIONS IN INCHES

NATURAL GAS MODELS					Recovery 100°F Rise*		A	B	C	D	E	F	H	J	K	L	M	
Model Number	Gal. Cap.	Input BTU/Hr.	1st Hour Rating (Gal.)	Energy Factor	Nat U.S. GPH	Nat Imp. GPH	Floor to Flue Conn.	Jacket Dia.	Vent Size	Floor to T&P Conn.	Floor to Gas Conn.	Floor to Top of Heater	C/L of Water Conn.	Floor to Water Conn.	Depth	Floor to Space Heating Inlet	Floor to Space Heating Onlet	Approx. Shipping Weight (lbs)
LG2PV50H653N	48	65,000	112	0.70	63	52	66 <sup>1</sup> / <sub>8</sub>	22	3 or 4	50 <sup>1</sup> / <sub>8</sub>	11 <sup>3</sup> / <sub>4</sub>	56 <sup>3</sup> / <sub>8</sub>	11	57 <sup>3</sup> / <sub>4</sub>	26 <sup>3</sup> / <sub>4</sub>	13 <sup>1</sup> / <sub>2</sub>	50 <sup>1</sup> / <sub>8</sub>	186
LG1PV55H783N	55	78,000	N/A	N/A	76	63	64 <sup>3</sup> / <sub>16</sub>	22	3 or 4	47 <sup>15</sup> / <sub>16</sub>	11 <sup>1</sup> / <sub>2</sub>	54 <sup>5</sup> / <sub>8</sub>	8	56	26 <sup>1</sup> / <sub>2</sub>	13 <sup>3</sup> / <sub>8</sub>	47 <sup>15</sup> / <sub>16</sub>	253
LG2PV75H763N	75	76,000	N/A	N/A	74	62	69 <sup>7</sup> / <sub>16</sub>	26	3 or 4	51 <sup>1</sup> / <sub>2</sub>	13 <sup>1</sup> / <sub>2</sub>	59 <sup>1</sup> / <sub>2</sub>	11	60 <sup>3</sup> / <sub>4</sub>	30 <sup>1</sup> / <sub>4</sub>	13 <sup>3</sup> / <sub>8</sub>	51 <sup>1</sup> / <sub>2</sub>	252

Propane models feature a Titanium Stainless Steel propane burner. For Propane (LP) models change suffix "N" to "X". For 5 year models, change suffix from "3" to "5".

\*Based on manufacturer's rated recovery efficiency.

120 VAC Required for Power Venting / 120 VAC 60HZ 3.1 Amperes.

Energy Factor and First Hour Rating is based on the latest AHRI directory listings.

	3" Vent Pipe	4" Vent Pipe
	<b>LG2PV50H653N</b> <b>LG1PV55H753N</b> <b>LG2PV75H753N</b>	
Max. Equivalent Length	†50 ft.	†180 ft.
Min. Equivalent Length	7 ft.	15 ft.
Number	1	175 ft.
of	2	170 ft.
90° Elbows	3	165 ft.

Subtract 5ft. for each additional 90° elbow

†For high altitude installations, consult the installation instructions.

LP GAS MODELS	Input BTU/Hr.	Recovery 100°F Rise*	
Model Number		LP U.S. GPH	LP Imp. GPH
LG2PV50H653X	58,000	56	47
LG1PV55H783X	78,000	76	63
LG2PV75H763X	75,500	73	61



# Commercial Gas Light Duty Power Direct Vent Models

98/99



- Bradford White ICON System™
  - Enhanced Performance
  - Advanced Temperature Control System
  - Intelligent Diagnostics
  - Separate Immersed Thermowell
- Powerful Blower Model
  - 10 ft. power cord included (120 VAC)
- Closed Combustion Venting System
- Cast Aluminum Air Intake Boot
- Horizontal and Vertical Venting
- Optional Concentric Vent Kit Termination

- Flammable Vapor Sensor
- Factory-Installed Hydrojet® Total Performance System
- Vitraglas® Lining
- 2" Non-CFC Foam Insulation
- Water Connections—  
3/4" NPT
- Side Connections—  
3/4" NPT
- Factory-Installed Heat Traps
- Protective Magnesium Anode Rod
- T&P Relief Valve—  
Installed
- Low Restriction Brass Drain Valve

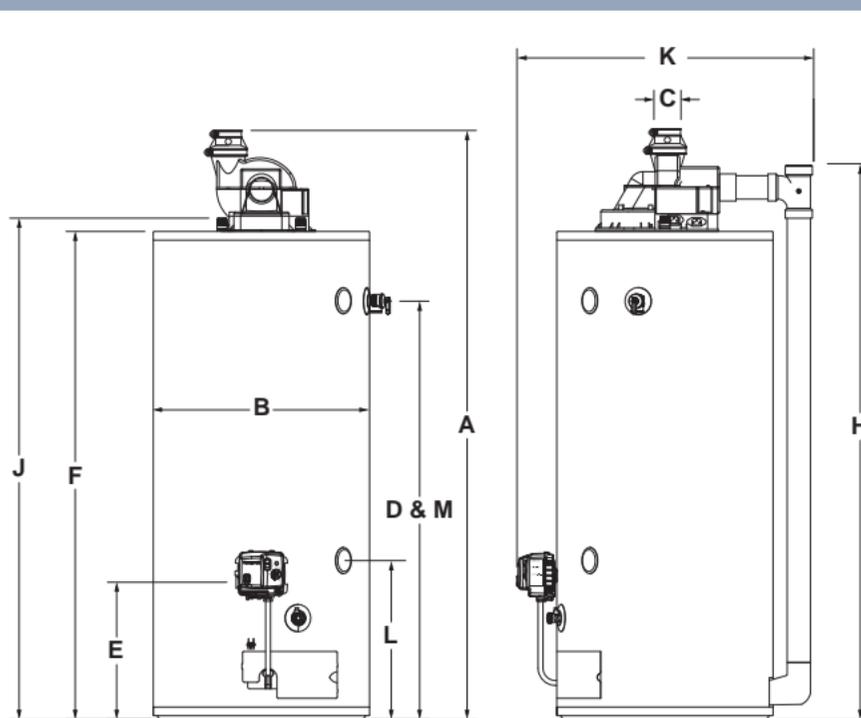


Photo of  
LG2PDV50H603N

# Light Duty Power Direct Vent Models

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
78% Recovery Efficiency

DIMENSIONS IN INCHES

## NATURAL GAS MODELS

Model Number	Gal. Cap.	Input BTU/Hr.	1st Hour Rating (Gal.)	Energy Factor	Recovery 100°F Rise*		A	B	C	D	E	F	H	J	K	L	M	Approx. Shipping Weight (lbs)
					Nat U.S. GPH	Nat Imp. GPH												
LG2PDV50H603N	48	60,000	105	0.68	58	48	69	22	3 or 4	52 <sup>1</sup> / <sub>4</sub>	13 <sup>5</sup> / <sub>8</sub>	58 <sup>3</sup> / <sub>4</sub>	67	60	30 <sup>5</sup> / <sub>8</sub>	15 <sup>3</sup> / <sub>4</sub>	52 <sup>1</sup> / <sub>4</sub>	205
LG2PDV75H803N	75	80,000	—	—	77	64	72	26	3 or 4	54 <sup>1</sup> / <sub>4</sub>	16 <sup>1</sup> / <sub>4</sub>	62 <sup>3</sup> / <sub>4</sub>	70 <sup>3</sup> / <sub>8</sub>	63 <sup>3</sup> / <sub>4</sub>	36	19	54 <sup>1</sup> / <sub>4</sub>	392

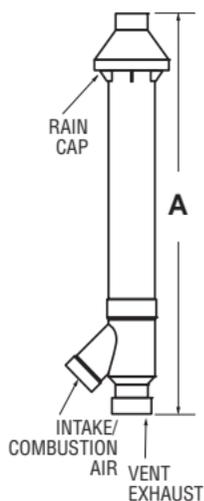
Propane models feature a Titanium Stabilized Stainless Steel propane burner. For Propane (LP) models change suffix "N" to "X".

For 5 year models change suffix from "3" to "5".

\*Based on manufacturer's rated recovery efficiency.

120 VAC Required for Power Venting / 120 VAC, 60HZ, 3.1 Amperes.

Energy Factor and First Hour Rating is based on the latest AHRI directory listings.



### Concentric Vent Kit Termination

3" Kit	A (in.)
P/N 239-44069-01	29 <sup>1</sup> / <sub>4</sub>

## LP GAS MODELS

Model Number	Input BTU/Hr.	Recovery 100°F Rise*	
		LP U.S. GPH	LP Imp. GPH
LG2PDV50H603X	60,000	58	48
LG2PDV75H803X	78,000	76	63

	3" Vent Pipe		4" Vent Pipe	
	LG2PDV50H603N LG2PDV75H803N			
Max. Intake Length	60 ft.		100 ft.	
Max. Exhaust Length	60 ft.		100 ft.	
Min. Vent Length	7 ft.		7 ft.	
Number of 90° Elbows	1	55 ft.	95 ft.	
	2	50 ft.	90 ft.	
	3	45 ft.	85 ft.	

Subtract 5ft. for each additional 90° elbow.



# Commercial Gas Light Duty Direct Vent Models

100/101



## ■ Bradford White ICON System™

- Enhanced Performance
- Advanced Temperature Control System
- Intelligent Diagnostics
- Separate Immersed Thermowell
- Closed Combustion
- Reinforced Seals
- Maintenance-Free
- Sight Window
- Factory-Installed Hydrojet® Total Performance System
- Vitraglas® Lining
- Cast Aluminum Air Intake Boot
- Telescoping Solid Vent Kits
- Flexible Vent Kit
- Side Connections—3/4" NPT

- 2" Non-CFC Foam Insulation
- Pedestal Base.
- Water Connections—3/4" NPT
- Factory-Installed Heat Traps

- Protective Magnesium Anode Rod
- T&P Relief Valve—Installed
- Low Restriction Brass Drain Valve

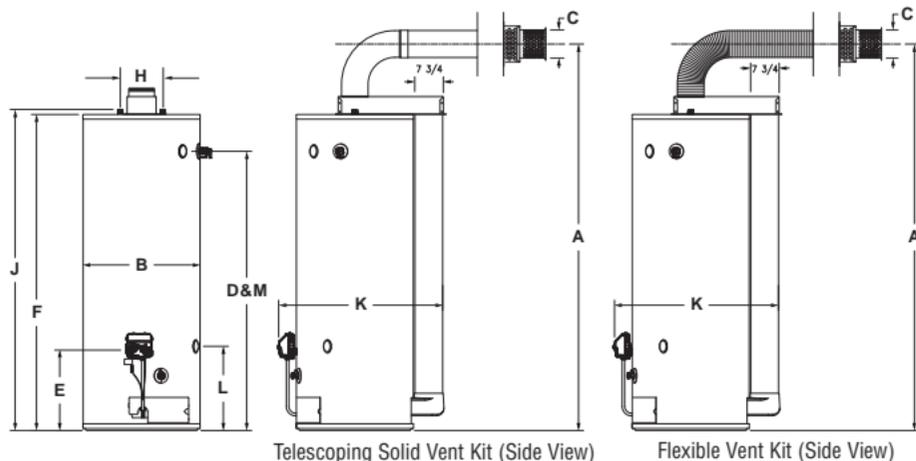


Photo of  
LG2DV50H503N

# Light Duty Direct Vent Models

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
78% Recovery Efficiency

## DIMENSIONS IN INCHES

### NATURAL GAS MODELS

Model Number	Gal. Cap.	Input BTU/Hr.	1st Hour Rating (Gal.)	Energy Factor	Recovery 100°F Rise*		A Floor to C/L of Vent	B Jacket Dia.	C Vent Size I.D. O.D.	D Floor to T&P Conn.	E Floor to Gas Conn.	F Floor to Top of Heater	H C/L of Water Conn.	J Floor to Water Conn.	K Depth	L Floor to Space Heating Inlet	M Floor to Space Heating Outlet	Approx. Shipping Weight (lbs)
					Nat U.S. GPH	Nat Imp. GPH												
LG2DV50H503N	48	50,000	93	0.60	47	39	72 <sup>5</sup> / <sub>16</sub> min.	22	4 6	52 <sup>1</sup> / <sub>4</sub>	15	59 <sup>1</sup> / <sub>8</sub>	8	60 <sup>1</sup> / <sub>8</sub>	31	15 <sup>3</sup> / <sub>4</sub>	52 <sup>1</sup> / <sub>4</sub>	217

All Propane models feature a Titanium Stainless Steel propane burner. For Propane (LP) models change suffix "N" to "X".

For 5 year models change suffix from "3" to "5".

\*Based on manufacturer's rated recovery efficiency.

Energy Factor and First Hour Rating is based on the latest AHRI directory listings.

**Solid Vent Kit:** Part No. 239-51286-00. **Flexible Vent Kit:** Part No. 239-51287-00.

Kits can be ordered and shipped with water heater, or ordered and shipped separately. For vent kit components and venting instructions, refer to Installation and Operation Manual.

### LG2DV50H503N Optional Telescoping Solid Vent Kits:

<b>Kit "F"</b>	Telescopes from 4 <sup>3</sup> / <sub>4</sub> " to 5 <sup>1</sup> / <sub>16</sub> "	Part No. 239-42516-00
<b>Kit "G"</b>	Telescopes from 6 <sup>1</sup> / <sub>2</sub> " to 9 <sup>3</sup> / <sub>16</sub> "	Part No. 239-42517-00
<b>Kit "H"</b>	Telescopes from 13 <sup>3</sup> / <sub>4</sub> " to 23 <sup>1</sup> / <sub>16</sub> "	Part No. 239-42514-00
<b>Kit "I"</b>	Telescopes from 49 <sup>1</sup> / <sub>16</sub> " to 95 <sup>1</sup> / <sub>16</sub> "	Part No. 239-42512-00

LP GAS MODELS	Input BTU/Hr.	Recovery 100°F Rise*	
Model Number		LP U.S. GPH	LP Imp. GPH
LG2DV50H503X	48,000	45	38



# Commercial Gas Light Duty Ultra Low NOx Atmospheric Vent High Input Models

102/103



- Bradford White ICON System™
  - Enhanced Performance
  - Advanced Temperature Control System
  - Intelligent Diagnostics
  - Separate Immersed Thermowell
- Ultra Low NOx Burner with Primary and Secondary Air Distribution Devices
- Maintenance-Free
- Sight Window
- Factory-Installed Hydrojet 2™ Total Performance System
- Vitraglas® Lining
- More Precise Temperature Control
- Side Connections—3/4" NPT

- Non-CFC Foam Insulation
- Pedestal Base—ULG250&75
- Water Connections
- Protective Magnesium Anode Rod
- Hand Hole Cleanout
- 4" (107 mm) "Snap Lock" Draft Diverter
- T&P Relief Valve—Installed
- Low Restriction Brass Drain Valve
- Design Certified by CSA International (formerly AGA and CGA).
- ULG250H553N Complies with the latest Ultra Low NOx requirement (10 ng/J NOx limit), ULG275H763N / ULG2100H853N (14 ng/J NOx limit).

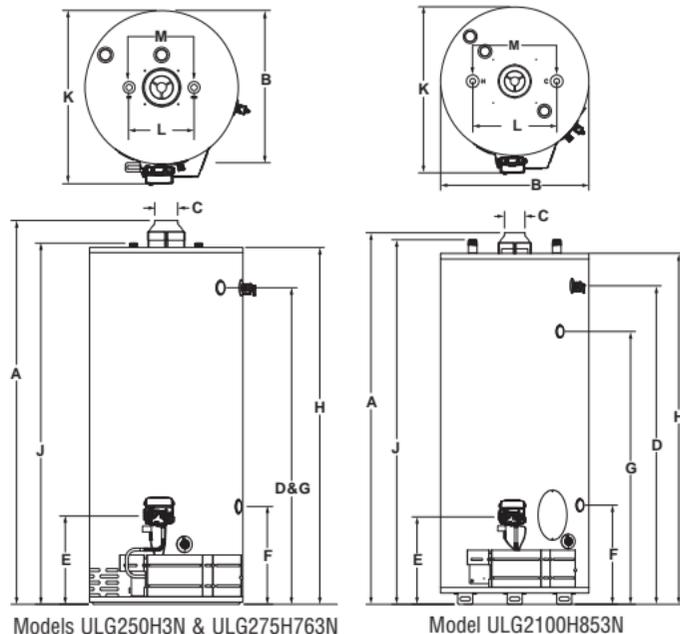


Photo of  
ULG275H763N

# Light Duty Ultra Low NOx Atmospheric Vent High Input Models

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
79% Recovery Efficiency

DIMENSIONS IN INCHES

NATURAL GAS MODELS					Recovery 90°F Rise*		A	B	C	D	E	F	G	H	J	K	L	M	
Model Number	Gal. Cap.	Input BTU/Hr.	1st Hour Rating (Gal.)	Energy Factor	Nat U.S. GPH	Nat Imp. GPH	Floor to Flue Conn.	Jacket Dia.	Vent Size	Floor to T&P Conn.	Floor to Gas Conn.	Floor to Space Heating Return	Floor to Space Heating Outlet	Floor to Top of Heater	Floor to Water Conn.	Depth	C/L of Water Conn	NPT	Approx. Shipping Weight (lbs)
ULG250H553N	48	55,000	100	0.60	59	49	60 <sup>5</sup> / <sub>16</sub>	22	4	49 <sup>7</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>2</sub>	13 <sup>3</sup> / <sub>8</sub>	49 <sup>7</sup> / <sub>8</sub>	56 <sup>3</sup> / <sub>8</sub>	57 <sup>13</sup> / <sub>16</sub>	25 <sup>7</sup> / <sub>16</sub>	11	<sup>3</sup> / <sub>4</sub>	193
ULG275H763N	75	76,000	N/A	N/A	74	62	64 <sup>1</sup> / <sub>8</sub>	26	4	53 <sup>9</sup> / <sub>16</sub>	15 <sup>1</sup> / <sub>8</sub>	16 <sup>5</sup> / <sub>8</sub>	53 <sup>9</sup> / <sub>16</sub>	60 <sup>1</sup> / <sub>8</sub>	61 <sup>1</sup> / <sub>8</sub>	29 <sup>7</sup> / <sub>16</sub>	11	1	263
ULG2100H853N	100	85,000	N/A	N/A	82	69	70 <sup>7</sup> / <sub>16</sub>	28 <sup>1</sup> / <sub>4</sub>	4	60 <sup>7</sup> / <sub>16</sub>	16 <sup>3</sup> / <sub>4</sub>	18 <sup>3</sup> / <sub>4</sub>	51 <sup>3</sup> / <sub>4</sub>	68 <sup>1</sup> / <sub>8</sub>	66 <sup>5</sup> / <sub>8</sub>	31 <sup>1</sup> / <sub>2</sub>	16	1 <sup>1</sup> / <sub>4</sub>	424

Available in Natural Gas only.

For 5 year models, change suffix from “3” to “5”.

\*Based on manufacturer’s rated thermal efficiency.

Energy Factor and First Hour Rating is based on the latest AHRI directory listings.



# Commercial Gas

## Light Duty Ultra Low NOx Direct Vent Model

104/105



- Bradford White ICON System™
  - Enhanced Performance
  - Advanced Temperature Control System
  - Intelligent Diagnostics
  - Separate Immersed Thermowell
- Ultra Low NOx Burner with Primary and Secondary Air Distribution Devices
- Closed Combustion
- Reinforced Seals
- Maintenance-Free
- Sight Window
- Factory-Installed Hydrojet® Total Performance System
- Vitraglas® Lining
- Cast Aluminum Air Intake Boot
- Telescoping Solid Vent Kits
- Flexible Vent Kit
- Side Connections—3/4" NPT
- 2" Non-CFC Foam Insulation

- Pedestal Base.
- Water Connections—3/4" NPT
- Factory-Installed Heat Traps
- Protective Magnesium Anode Rod
- T&P Relief Valve—Installed
- Low Restriction Brass Drain Valve—Durable tamperproof design.
- Design Certified by CSA International (formerly AGA and CGA)
- Complies with the latest Ultra Low NOx requirement (10 ng/J NOx limit)

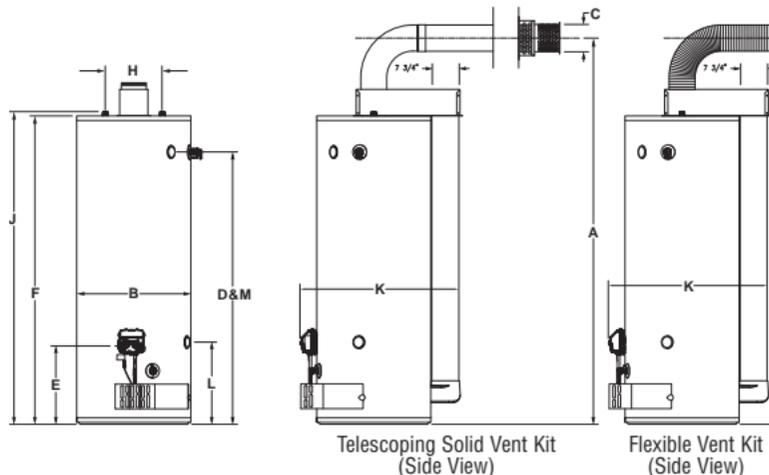


Photo of  
ULG2DV50H453N

# Light Duty Ultra Low NOx Direct Vent Model

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
78% Recovery Efficiency

## DIMENSIONS IN INCHES

NATURAL GAS MODELS					Recovery 100°F Rise*		A	B	C	D	E	F	H	J	K	L	M	
Model Number	Gal. Cap.	Input BTU/Hr.	1st Hour Rating (Gal.)	Energy Factor	Nat U.S. GPH	Nat Imp. GPH	Floor to C/L of Vent	Jacket Dia.	Vent Size I.D.O.D.	Floor to T&P Conn.	Floor to Gas Conn.	Floor to Top of Heater	C/L of Water Conn.	Floor to Water Conn.	Depth	Floor to Space Heating Inlet	Floor to Space Heating Outlet	Approx. Shipping Weight (lbs)
ULG2DV50H453N	48	45,000	88	0.60	43	35	74 <sup>1</sup> / <sub>4</sub> min.	22	4 6	52 <sup>1</sup> / <sub>4</sub>	15	59 <sup>1</sup> / <sub>4</sub>	11	60 <sup>1</sup> / <sub>8</sub>	30 <sup>5</sup> / <sub>8</sub>	15 <sup>3</sup> / <sub>4</sub>	52 <sup>1</sup> / <sub>4</sub>	201

Available in Natural Gas only. For 5 year models change suffix from "3" to "5".

\*Based on manufacturer's rated recovery efficiency.

Energy Factor and First Hour Rating is based on the latest AHRI directory listings.

**Solid Vent Kit:** Part No. 239-51286-00. **Flexible Vent Kit:** Part No. 239-51287-00.

Kits can be ordered and shipped with water heater, or ordered and shipped separately. For vent kit components and venting instructions, refer to Installation and Operation Manual.

### Optional Telescoping Solid Vent Kits:

**Kit "F"** Telescopes from 4<sup>3</sup>/<sub>16</sub>" to 51<sup>1</sup>/<sub>16</sub>" Part No. 239-42516-00

**Kit "G"** Telescopes from 6<sup>1</sup>/<sub>2</sub>" to 9<sup>3</sup>/<sub>16</sub>" Part No. 239-42517-00

**Kit "H"** Telescopes from 13<sup>3</sup>/<sub>4</sub>" to 23<sup>1</sup>/<sub>16</sub>" Part No. 239-42514-00

**Kit "I"** Telescopes from 49<sup>1</sup>/<sub>16</sub>" to 95<sup>1</sup>/<sub>16</sub>" Part No. 239-42512-00



# Commercial Gas Light Duty Ultra Low NOx TTW® Power Vent Model

106/107



- Ultra Low NOx Burner with Primary and Secondary Air Distribution Devices
- Defender Combustion Chamber
- Flammable Vapor Sensor and Resettable Thermal Switch
- Maintenance-Free
- Sight Window
- Bradford White ICON System™
  - Enhanced Performance
  - Advanced Temperature Control System
  - Intelligent Diagnostics
  - Separate Immersed Thermowell
- Powerful Blower Motor
  - 10 ft. Power Cord—Included (120 VAC)
- Horizontal and Vertical Venting
- Factory-Installed Hydrojet® Total Performance System
- Vitraglas® Lining
- Non-CFC Foam Insulation
- Water Connections—3/4"NPT
- Factory-Installed Heat Traps
- Protective Magnesium Anode Rod
- Pedestal Base
- T&P Relief Valve—Installed
- Low Restriction Brass Drain Valve
- All Models Comply with the Latest Ultra Low NOx Requirement (10 ng/J NOx limit) Except ULG2PV75H763N (14 ng/J NOx limit)

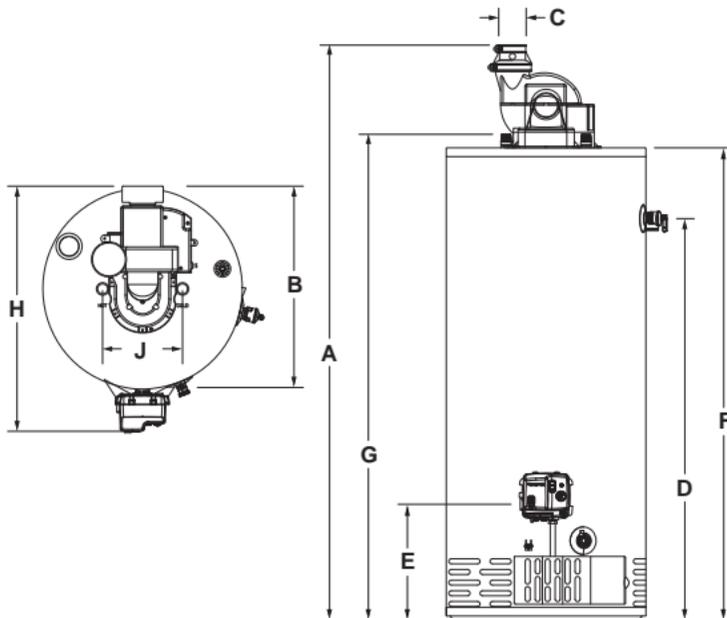


Photo of  
ULG2PV50H603N

# Ultra Low NOx TTW<sup>®</sup> Power Vent Model

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
80% Recovery Efficiency

## DIMENSIONS IN INCHES

NATURAL GAS MODELS					Recovery 100°F Rise*		A	B	C	D	E	F	G	H	J	
Model Number	Gal. Cap.	Input BTU/Hr.	1st Hour Rating (Gal.)	Energy Factor	Nat U.S. GPH	Nat Imp. GPH	Floor to Vent Conn.	Jacket Dia.	Vent Size	Floor to T&P Conn.	Floor to Gas Conn.	Floor to Top of Heater	Floor to Water Conn.	Depth	C/L of Water Conn.	Approx. Shipping Weight (lbs)
ULG2PV50H563N	48	56,000	99	0.70	54	54	66 <sup>3</sup> / <sub>8</sub>	22	3 or 4	49 <sup>7</sup> / <sub>8</sub>	11 <sup>3</sup> / <sub>4</sub>	56 <sup>5</sup> / <sub>8</sub>	58	26 <sup>1</sup> / <sub>2</sub>	11	190
ULG2PV75H763N	75	76,000	N/A	N/A	74	62	69 <sup>1</sup> / <sub>4</sub>	26	3 or 4	51 <sup>7</sup> / <sub>8</sub>	11 <sup>3</sup> / <sub>4</sub>	59 <sup>1</sup> / <sub>2</sub>	61	30 <sup>1</sup> / <sub>4</sub>	11	270

Available in Natural Gas only. For 5 year models, change suffix from “3” to “5”.

\*Based on manufacturer’s rated recovery efficiency.

120 VAC Required for Power Venting / 120 VAC, 60HZ, 3.1 Amperes.

Energy Factor and First Hour Rating is based on the latest AHRI directory listings.

	3" Vent Pipe	4" Vent Pipe
	<b>ULG2PV50H563N ULG2PV75H763N</b>	
Max. Equivalent Length	†50 ft.	†180 ft.
Min. Equivalent Length	7 ft.	15 ft.
Number of 90° Elbows	1	45 ft.
	2	40 ft.
	3	35 ft.
	175 ft.	170 ft.
	165 ft.	

†For high altitude installations, consult the installation instructions.



# Commercial Gas Light Duty Ultra Low NOx Power Direct Vent Models

108/109



- Ultra Low NOx Burner with Primary and Secondary Air Distribution Devices
- Closed Combustion Venting System
- Bradford White ICON System™
  - Enhanced Performance
  - Advanced Temperature Control System
  - Intelligent Diagnostics
  - Separate Immersed Thermowell
- Cast Aluminum Air Intake Boot
- Flammable Vapor Sensor
- Factory-Installed Hydrojet® Total Performance System
- Vitraglas® Lining
- Optional Concentric Vent Kit Termination
- Horizontal and Vertical Venting
- 2" Non-CFC Foam Insulation
- Water Connections—3/4" NPT
- Side Connections—3/4" NPT
- Factory-Installed Heat Traps
- Protective Magnesium Anode Rod
- T&P Relief Valve
- Low Restriction Brass Drain Valve
- Complies with the latest Ultra Low NOx Requirement (10 ng/J NOx Limit)

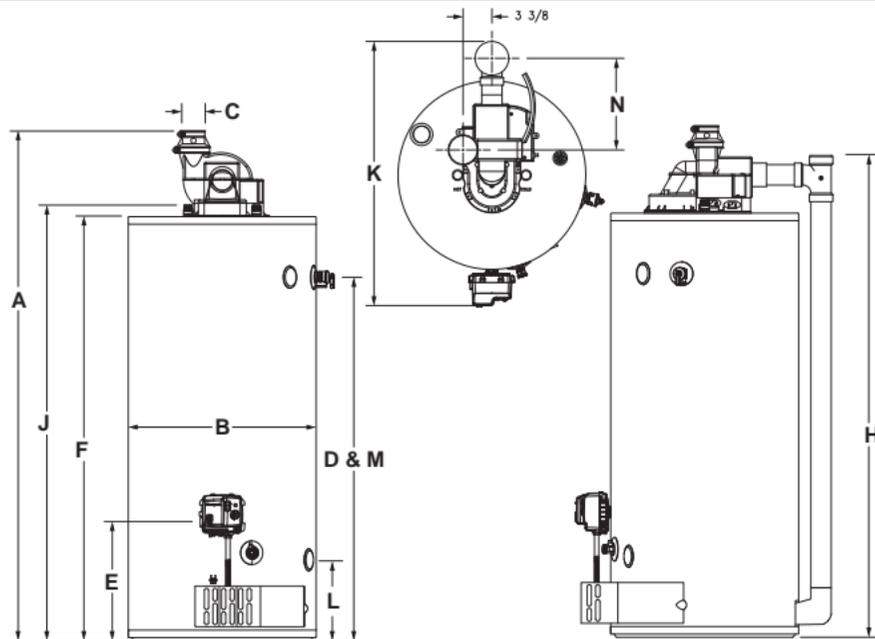


Photo of  
ULG2PDV50H503N

# Light Duty Ultra Low NOx Power Direct Vent Model

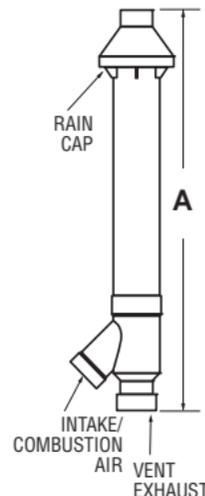
Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
78% Recovery Efficiency

DIMENSIONS IN INCHES

NATURAL GAS MODEL					Recovery 100°F Rise*		A	B	C	D	E	F	H	J	K	L	M	N	Approx. Shipping Weight (lbs)
Model Number	Gal. Cap.	Input BTU/Hr.	1st Hour Rating (Gal.)	Energy Factor	Nat U.S. GPH	Nat Imp. GPH	Floor to Exhaust Outlet	Jacket Dia.	Vent Size	Floor to T&P Conn.	Floor to Gas Conn.	Floor to Top of Heater	Floor to Air Intake	Floor to Water Conn.	Depth	Floor to Space Heating Return	Floor to Space Heating Supply	C/L Distance From Intaketo Exhaust	
ULG2PDV50H503N	48	50,000	92	0.68	48	40	69 <sup>1</sup> / <sub>4</sub>	22	3 or 4	52 <sup>1</sup> / <sub>4</sub>	13 <sup>7</sup> / <sub>8</sub>	69 <sup>1</sup> / <sub>4</sub>	58 <sup>3</sup> / <sub>4</sub>	60	32	15 <sup>3</sup> / <sub>4</sub>	52 <sup>1</sup> / <sub>4</sub>	9 <sup>1</sup> / <sub>4</sub>	201

Available in Natural Gas only. For 5 year models change suffix from "3" to "5".

\*Based on manufacturer's rated recovery efficiency. 120 VAC Required for Power Venting / 120 VAC, 60HZ, 3.1 Amperes. Energy Factor and First Hour Rating is based on the latest AHRI directory listings.



3" Kit	A (in.)
P/N 239-44069-01	36 <sup>1</sup> / <sub>4</sub>

	3" Vent Pipe		4" Vent Pipe	
	ULG2PDV50H503N			
Max. Intake Length	60 ft.	100 ft.		
Max. Exhaust Length	60 ft.	100 ft.		
Min. Vent Length	7 ft.	7 ft.		
Number of 90° Elbows	1	55 ft.	95 ft.	
	2	50 ft.	90 ft.	
	3	45 ft.	85 ft.	

Subtract 5ft. for each additional 90° elbow.



# Commercial Gas

## Commander Series™ Atmospheric Vent Models

# 110/111



- **ICON HD™**
  - Operation Mode
  - Service Mode
- Optional Air Intake Ducting
- Premix Power Burner
- Direct Spark Ignition
- Integrated Exhaust System
- Sanitizing Capability
- Factory-Installed Hydrojet® Sediment Reduction System
- Vitraglas® Lining
- Non-CFC Foam Insulation
- Water Connections
- 1" NPT Side Connections for Space Heating
- 82% Thermal Efficiency
- Zero Inch Clearance to Combustibles (Excluding UCG-100H-399)
- Hand Hole Cleanout

- NSF Construction Available
- T&P Relief Valve
- Low Restriction Brass Drain Valve
- Ultra Low NOx Construction (14 ng/J NOx Emissions)
- CSA Certified Low Lead Content

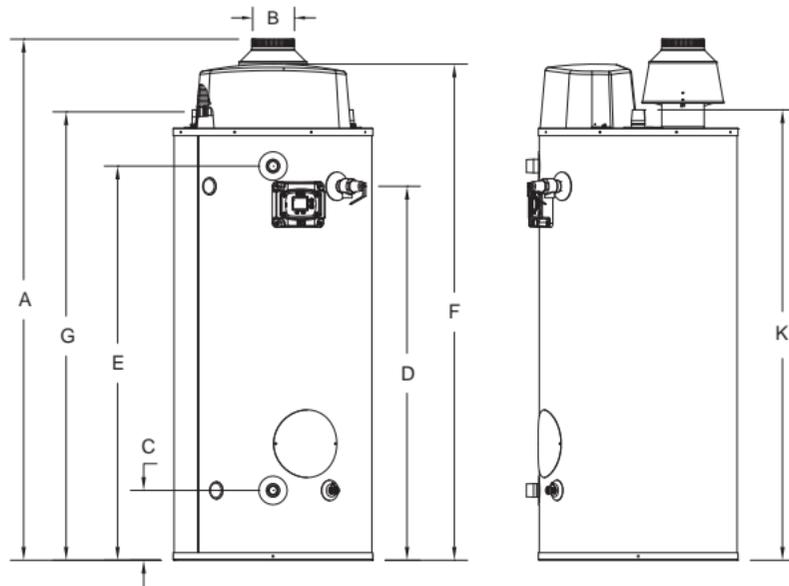
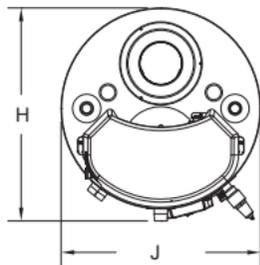


Photo of  
UCG-100H-199-3N

# Commander Series™ Atmospheric Vent Models

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
82% Thermal Efficiency

## DIMENSIONS IN INCHES

NATURAL GAS MODELS			GPH Recovery at Degree Rise*			A	B	C	D	E	F	G	H	J	K				
Model Number	Gal. Cap.	Input BTU/Hr.				Floor to Top of Vent	Vent Dia.	Floor to Cold Water Inlet	Floor to T&P Conn.	Floor to Hot Water Outlet	Floor to Top of Heater	Floor to Gas Conn.	Depth	Width	Floor to Cold Water Inlet/Hot Water Outlet	Water Conn. Dia.	Gas Conn. Dia.	Relief Valve Open	Approx. Shipping Weight (lbs)
			40°F	100°F	140°F														
UCG-100H-199-3N	100	199,999	493	197	141	73 <sup>1</sup> / <sub>4</sub>	6	10	52 <sup>1</sup> / <sub>2</sub>	55 <sup>1</sup> / <sub>2</sub>	69 <sup>3</sup> / <sub>4</sub>	63 <sup>1</sup> / <sub>4</sub>	30	28 <sup>1</sup> / <sub>4</sub>	63 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	<sup>3</sup> / <sub>4</sub>	<sup>3</sup> / <sub>4</sub>	632
UCG-100H-270-3N	100	270,000	665	266	190	73 <sup>1</sup> / <sub>4</sub>	6	10	52 <sup>1</sup> / <sub>2</sub>	55 <sup>1</sup> / <sub>2</sub>	69 <sup>3</sup> / <sub>4</sub>	63 <sup>1</sup> / <sub>4</sub>	30	28 <sup>1</sup> / <sub>4</sub>	63 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	<sup>3</sup> / <sub>4</sub>	1	632
UCG-100H-399-3N	98	399,999	994	398	284	77 <sup>1</sup> / <sub>4</sub>	6	8	52 <sup>1</sup> / <sub>2</sub>	55 <sup>1</sup> / <sub>2</sub>	69 <sup>3</sup> / <sub>4</sub>	63 <sup>1</sup> / <sub>4</sub>	30	28 <sup>1</sup> / <sub>4</sub>	63 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	<sup>3</sup> / <sub>4</sub>	1	657

For Propane Gas models change suffix "N" to "X". Example: UCG-100H-199-3X (Propane Gas not available on UCG-100H-399-3N). Natural gas models comply with the latest Ultra Low NOx requirements (14 ng/J or less). Amp Draw range = 1.0 to 1.8 amps.

## Optional Air Intake Ducting Maximum Lengths

Model	2" PVC, ABS, or CPVC	3" PVC, ABS, or CPVC	4" PVC, ABS, or CPVC
UCG-100H-199-3(N,X)	20 ft.	50 ft.	75 ft.
UCG-100H-270-3(N,X)	20 ft.	50 ft.	75 ft.
UCG-100H-399-3 (N)	N/A	25 ft.	50 ft.



# Commercial Gas Electronic Ignition Water Heaters

112/113



THE BRADFORD WHITE  
**ICON HD**  
COMMERCIAL CONTROL SYSTEM

**ON GUARD** RMT

- **ICON HD™**—Intelligent proven design combines temperature control, diagnostic codes and system ignition functions into a single control board with a digital LCD display
  - Operation Mode
  - Service Mode
- Electronic Ignition
- Automatic Flue Damper

- Factory-Installed Hydrojet® Sediment Reduction System
- Vitraglas® Lining
- Non-CFC Foam Insulation
- Water connections—Factory-Installed True Dielectric Waterway Fittings
- Hand Hole Cleanout
- Automatic Re-Set E.C.O.
- Magnesium Anode Rods

- Sanitizing Capability
- ASME Code Available on All Models above 200,000 BTU/Hr.
- NSF Construction Available
- Low NOx Construction Available
- North Carolina Code Compliant
- T&P Relief Valve Installed
- Low Restriction Brass Drain Valve



## Commercial Gas Burner

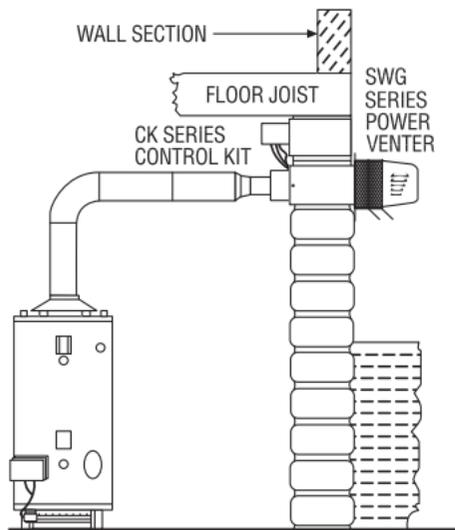
- Orifice Alignment Bracket for True Injection
- Stainless Steel Pilot Shield
- Stainless Steel Burner Rack and Mounting Bracket
- Aluminized Steel Burner Tubes with Adjustable Air Shutter (Stainless Steel Burner Tubes Available)

- Opposing Lance Formed Burner Ports Yield Consistent Performance to Stabilize Burner Flame and Promote Better Air Gas Mixture
- Standard on Both “T” and “L” Commercial Energy Saver Models



Photo of  
D-80T-180-3N

## Typical Applications



**Optional Power Vent Kits** – available for inputs from 125,000 to 505,000.

### BTU Input Range

125,000 to 290,000 BTU's:

300,000 to 399,999 BTU's:

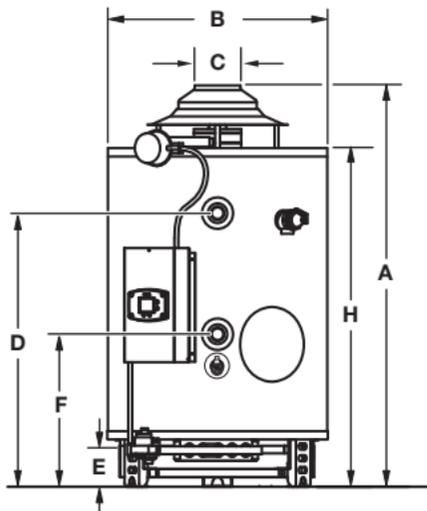
425,000 to 505,000 BTU's:

### Kit Number

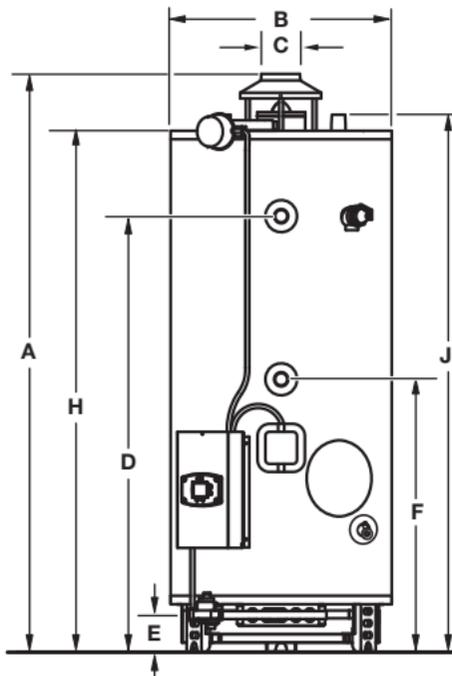
239-81764-00

239-81766-00

239-82148-00



D-38T-155



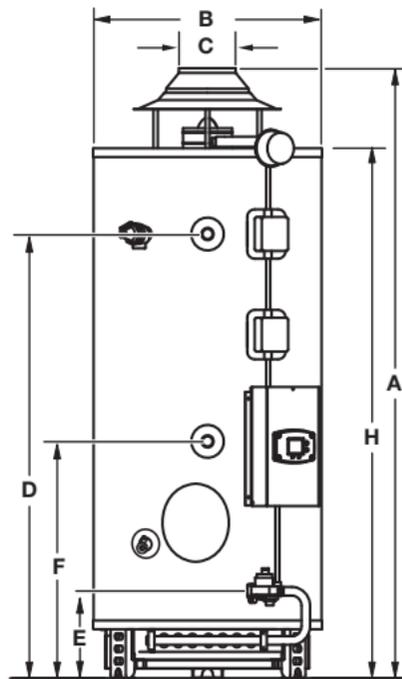
D-75T-(125, 160)

D-80T-(180, 199,250)

D-100T-(199, 250)

D-100S-(199, 250)

D-100L-(199, 250, 270, 300)



D-75T-300

D-65T-(370, 399)

D-80T-(425, 505)

D-80L-(399, 450, 505)



# Commercial Gas Electronic Ignition Models

# 114/115



## Electronic Ignition Models

DIMENSIONS IN INCHES

These models meet or exceed both Thermal Efficiency and Standby Loss Requirements of ASHRAE 90.1b (Current Edition). C.E.C. Listed

NATURAL GAS MODELS						A	B	C	D	E	F	H	J				Approx. Shipping Weight (lbs)	
Model Number	Gal. Cap.	Input BTU/Hr.	GPH Recovery at °F Rise*			Top Vent Height	Jacket Dia.	Vent Dia.	Front Hot Water Conn.	Floor to Gas Conn.	Front Cold Water Conn.	Floor to Top of Heater	Floor to Top Water Conn.	Water Conn.	Gas Conn. Dia.	Relief Valve Open.	Std.	ASME
			40°	100°	140°													
D-38T-155-3N+	38	155,000	376	150	107	51	28 <sup>1</sup> / <sub>4</sub>	6	35	4 <sup>5</sup> / <sub>8</sub>	19 <sup>3</sup> / <sub>8</sub>	43 <sup>1</sup> / <sub>2</sub>	—	1 <sup>1</sup> / <sub>2</sub> (F)	3/4	3/4	438	—
D-75T-125-3N	75	125,000	303	121	86	72 <sup>1</sup> / <sub>4</sub>	28 <sup>1</sup> / <sub>4</sub>	5	54 <sup>1</sup> / <sub>2</sub>	4 <sup>3</sup> / <sub>4</sub>	34	65	67 <sup>1</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>2</sub> (T&F)	3/4	3/4	520	—
D-75T-160-3N	75	160,000	389	155	111	72 <sup>1</sup> / <sub>4</sub>	28 <sup>1</sup> / <sub>4</sub>	6	54 <sup>1</sup> / <sub>2</sub>	4 <sup>3</sup> / <sub>4</sub>	34	65	67 <sup>1</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>2</sub> (T&F)	3/4	3/4	520	—
D-80T-180-3N	80	180,000	436	175	124	71 <sup>7</sup> / <sub>8</sub>	28 <sup>1</sup> / <sub>4</sub>	6	56	4 <sup>3</sup> / <sub>4</sub>	19 <sup>1</sup> / <sub>2</sub>	64 <sup>1</sup> / <sub>2</sub>	66 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub> (T&F)	3/4	3/4	540	—
D-80T-199-3N	80	199,999	485	194	139	71 <sup>7</sup> / <sub>8</sub>	28 <sup>1</sup> / <sub>4</sub>	6	56	4 <sup>3</sup> / <sub>4</sub>	19 <sup>1</sup> / <sub>2</sub>	64 <sup>1</sup> / <sub>2</sub>	66 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub> (T&F)	3/4	3/4	540	—
D-80T-250-3N(A)	80	250,000	606	242	173	71 <sup>7</sup> / <sub>8</sub>	28 <sup>1</sup> / <sub>4</sub>	6	56	4 <sup>3</sup> / <sub>4</sub>	19 <sup>1</sup> / <sub>2</sub>	64 <sup>1</sup> / <sub>2</sub>	66 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub> (T&F)	3/4	1	540	590
D-100T-199-3N	98	199,999	485	194	139	83 <sup>3</sup> / <sub>8</sub>	28 <sup>1</sup> / <sub>4</sub>	6	67	4 <sup>3</sup> / <sub>4</sub>	19 <sup>1</sup> / <sub>2</sub>	75 <sup>1</sup> / <sub>2</sub>	77 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub> (T&F)	3/4	3/4	610	—
D-100T-250-3N(A)	98	250,000	606	242	173	83 <sup>3</sup> / <sub>8</sub>	28 <sup>1</sup> / <sub>4</sub>	6	67	4 <sup>3</sup> / <sub>4</sub>	19 <sup>1</sup> / <sub>2</sub>	75 <sup>1</sup> / <sub>2</sub>	77 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub> (T&F)	3/4	1	610	690
D-75T-300-3N(A)	75	300,000	727	291	208	74 <sup>3</sup> / <sub>8</sub>	28 <sup>1</sup> / <sub>4</sub>	7	54 <sup>1</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>2</sub>	29	65 <sup>3</sup> / <sub>4</sub>	—	1 <sup>1</sup> / <sub>2</sub> (F)	3/4	1	590	645
D-65T-370-3N(A)	65	370,000	897	359	256	73 <sup>1</sup> / <sub>4</sub>	28 <sup>1</sup> / <sub>4</sub>	8	54 <sup>1</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>2</sub>	29	64 <sup>3</sup> / <sub>4</sub>	—	1 <sup>1</sup> / <sub>2</sub> (F)	<sup>10</sup> / <sub>32</sub> (P)	1	665	720
D-65T-399-3N(A)†	65	399,999	970	388	277	73 <sup>1</sup> / <sub>4</sub>	28 <sup>1</sup> / <sub>4</sub>	8	54 <sup>1</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>2</sub>	29	64 <sup>3</sup> / <sub>4</sub>	—	1 <sup>1</sup> / <sub>2</sub> (F)	1(N)	1	665	720
D-80T-425-3N(A)	80	425,000	1030	412	294	82 <sup>3</sup> / <sub>4</sub>	28 <sup>1</sup> / <sub>4</sub>	10	64 <sup>1</sup> / <sub>2</sub>	10 <sup>1</sup> / <sub>2</sub>	29	75 <sup>1</sup> / <sub>2</sub>	—	1 <sup>1</sup> / <sub>2</sub> (F)	<sup>10</sup> / <sub>32</sub> (P)	1	750	800
D-80T-505-3N(A)	80	505,000	1178	471	337	82 <sup>3</sup> / <sub>4</sub>	28 <sup>1</sup> / <sub>4</sub>	10	64 <sup>1</sup> / <sub>2</sub>	10 <sup>1</sup> / <sub>2</sub>	29	75 <sup>1</sup> / <sub>2</sub>	—	1 <sup>1</sup> / <sub>2</sub> (F)	<sup>10</sup> / <sub>32</sub> (P)	1	750	800

# Electronic Ignition Models

These models meet or exceed both Thermal Efficiency and Standby Loss Requirements of ASHRAE 90.1b (Current Edition).

DIMENSIONS IN INCHES

## NATURAL GAS MODELS

Model Number	Gal. Cap.	Input BTU/Hr.	GPH Recovery at °F Rise*			A Top Vent Height	B Jacket Dia.	C Vent Dia.	D Front Hot Water Conn.	E Floor to Gas Conn.	F Front Cold Water Conn.	H Floor to Top of Heater	J Floor to Top Water Conn.	Water Conn.	Gas Conn. Dia.	Relief Valve Open.	Approx. Shipping Weight (lbs)	
			40°	100°	140°												Std.	ASME
			D-100S-199-3N	100	199,999												485	194
D-100S-250-3N(A)	100	250,000	606	242	173	76 <sup>3</sup> / <sub>4</sub>	28 <sup>1</sup> / <sub>4</sub>	6	60 <sup>3</sup> / <sub>8</sub>	4 <sup>5</sup> / <sub>8</sub>	20 <sup>3</sup> / <sub>4</sub>	67 <sup>7</sup> / <sub>8</sub>	70	1 <sup>1</sup> / <sub>2</sub> (T&F)	3/4	1	667	702
D-100L-199-3N	100	199,999	485	194	139	75	30 <sup>1</sup> / <sub>4</sub>	6	56 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>2</sub>	23 <sup>1</sup> / <sub>2</sub>	64 <sup>3</sup> / <sub>4</sub>	67	1 <sup>1</sup> / <sub>2</sub> (T&F)	3/4	3/4	725	–
D-100L-250-3N(A)	100	250,000	606	242	173	75	30 <sup>1</sup> / <sub>4</sub>	6	56 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>2</sub>	23 <sup>1</sup> / <sub>2</sub>	64 <sup>3</sup> / <sub>4</sub>	67	1 <sup>1</sup> / <sub>2</sub> (T&F)	3/4	1	725	765
D-100L-270-3N(A)†	100	270,000	655	262	187	75	30 <sup>1</sup> / <sub>4</sub>	6	56 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>2</sub>	23 <sup>1</sup> / <sub>2</sub>	64 <sup>3</sup> / <sub>4</sub>	67	1 <sup>1</sup> / <sub>2</sub> (T&F)	3/4	1	725	765
D-100L-300-3N(A)	100	300,000	727	291	208	75 <sup>3</sup> / <sub>8</sub>	30 <sup>1</sup> / <sub>4</sub>	7	56 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>2</sub>	23 <sup>1</sup> / <sub>2</sub>	64 <sup>3</sup> / <sub>4</sub>	67	1 <sup>1</sup> / <sub>2</sub> (T&F)	3/4	1	725	765
D-80L-399-3N(A)	80	399,999	970	388	277	71 <sup>1</sup> / <sub>2</sub>	30 <sup>1</sup> / <sub>4</sub>	8	51 <sup>1</sup> / <sub>2</sub>	10 <sup>1</sup> / <sub>2</sub>	23 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>4</sub>	–	1 <sup>1</sup> / <sub>2</sub> (F)	1 <sup>1</sup> / <sub>2</sub> (LP)	1	800	835
D-80L-450-3N(A)	80	450,000	1091	436	312	69	30 <sup>1</sup> / <sub>4</sub>	10	51 <sup>1</sup> / <sub>2</sub>	10 <sup>1</sup> / <sub>2</sub>	23 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>4</sub>	–	1 <sup>1</sup> / <sub>2</sub> (F)	1 <sup>1</sup> / <sub>2</sub> (LP)	1	800	835
D-80L-505-3N(A)	80	505,000	1224	489	350	69	30 <sup>1</sup> / <sub>4</sub>	10	51 <sup>1</sup> / <sub>2</sub>	10 <sup>1</sup> / <sub>2</sub>	23 <sup>1</sup> / <sub>2</sub>	60 <sup>1</sup> / <sub>4</sub>	–	1 <sup>1</sup> / <sub>2</sub> (F)	1 <sup>1</sup> / <sub>2</sub> (LP)	1	800	835

(A) = ASME Code Available

(F) = Front Water Connection

(T) = Top Water Connection

† = Available in Natural Gas Only

+ = Fiberglass Insulation

For (LP) Propane Gas models change suffix "N" to "X".

\*Based on manufacturer's rated recovery efficiency.

\*\*Recoveries are based on 80% Thermal Efficiency.

Low NOx models are not available for inputs over 399,999

**For Low NOx compliance place an "E" following the BTU input identifier of the model number.**

**Example: D-75T-125E-3N**

Amperage Draw = .5 for damper models/less than 4 for induced draft models.

**Power Vent Kits** – available for inputs from 125,000 to 505,000.

LP GAS MODELS	Input BTU/Hr.	GPH Rec.		
		40°	100°	140°
D-75T-160-3X	155,000	376	150	107
D-80T-250-3X	235,000	570	228	163
D-100T-250-3X	235,000	570	228	163
D-80L-399-3X	375,000	909	364	260
D-80L-450-3X	425,000	1030	412	294
D-80L-505-3X	475,000	1152	461	329



# Commercial Gas Induced Draft Models

116/117



THE BRADFORD WHITE  
**ICON HD™**  
COMMERCIAL CONTROL SYSTEM

**ON GUARD RMT**

- **ICON HD™**—Intelligent proven design combines temperature control, diagnostic codes and system ignition functions into a single control board with a digital LCD display
  - Operation Mode
  - Service Mode
- Electronic Ignition
- Factory-Installed Hydrojet® Total Performance System
- Vitraglas® Lining
- Automatic Re-Set E.C.O.
- Non-CFC Foam Insulation
- Water Connections—1½" NPT Front Factory-Installed True Dielectric Fittings
- Protective Magnesium Anode Rods
- Hand Hole Cleanout
- Sanitizing Capability
- NSF Construction Available
- ASME Construction Available
- T&P Relief Valve Installed
- Low Restriction Brass Drain Valve

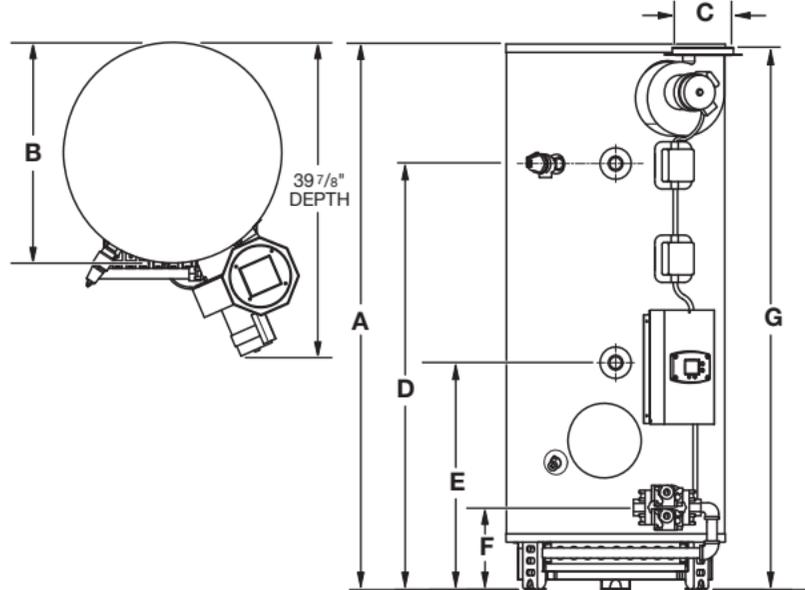


Photo of  
D-65T-625-3NA

# Induced Draft Models

DIMENSIONS IN INCHES

These models meet or exceed both Thermal Efficiency and Standby Loss Requirements of ASHRAE 90.1b (Current Edition). C.E.C. Listed 80% Thermal Efficiency

NATURAL GAS MODELS						A	B	C	D	E	F	G				
Model Number	Gal. Cap.	Nat. & LP Input BTU/Hr.	GPH Recovery at °F Rise*			Floor to Heater Top	Jacket Dia.	Vent Dia.	Floor to Hot Water Conn.	Floor to Cold Water Conn.	Floor to Gas Conn.	Floor to Vent Height	Gas Conn. Dia.	Relief Valve Open	Approx. Shipping Weight (lbs)	
			40°	100°	140°										Std.	ASME
D-65T-625-3N(A)	65	625,000	1515	606	433	69 <sup>3</sup> / <sub>8</sub>	28 <sup>1</sup> / <sub>4</sub>	8	54 <sup>1</sup> / <sub>8</sub>	28 <sup>7</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>2</sub>	68 <sup>7</sup> / <sub>8</sub>	1†	1	720	775
D-80T-725-3N(A)	80	725,000	1757	703	502	79 <sup>5</sup> / <sub>8</sub>	28 <sup>1</sup> / <sub>4</sub>	8	64 <sup>1</sup> / <sub>4</sub>	28 <sup>7</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>2</sub>	79 <sup>1</sup> / <sub>8</sub>	1†	1	800	880

(A) = ASME Code Available

For Propane Gas models change suffix "N" to "X".

†LP Gas connection 3/4".

\*Based on manufacturer's rated recovery efficiency.

\*\*Recoveries are based on Thermal Efficiencies of 80%.



# Commercial Gas Millivolt Models

118/119



- No Electricity Required
- ASME Code Available on All Models above 200,000 BTU/Hr.
- Continuous pilot-ignition
- Piezo Igniter - Easy and Quick Lighting by the Pilot Burner by Push Button
- Millivolt Controls
- Automatic Flue Damper
- Vitraglas® Lining
- Factory-Installed Hydrojet® Sediment Reduction System
- Factory-Installed Dielectric Fittings
- Non-CFC Foam Insulation
- Hand Hole Cleanout (Standard)
- NSF Construction Available
- T&P Relief Valve Installed
- Low Restriction Brass Drain Valve
- 3 Year Limited Tank Warranty



Photo of  
DM-75T-125-3N

**Water Connections**

**Top and Front**

DM80T180, 199, 250

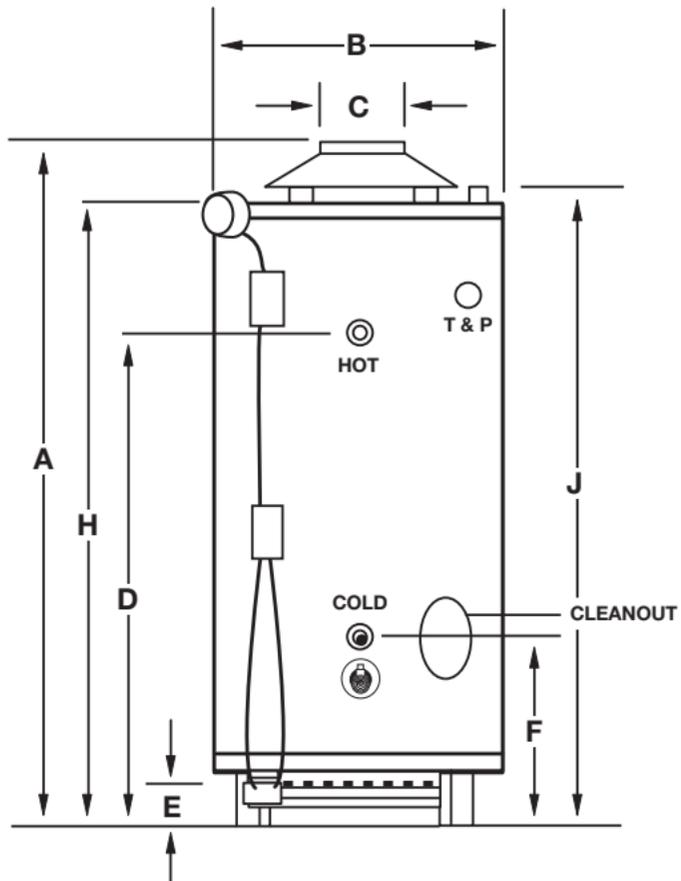
DM100T199, 250

DM75T125, 160

**Top Front**

DM100L199, 250, 270

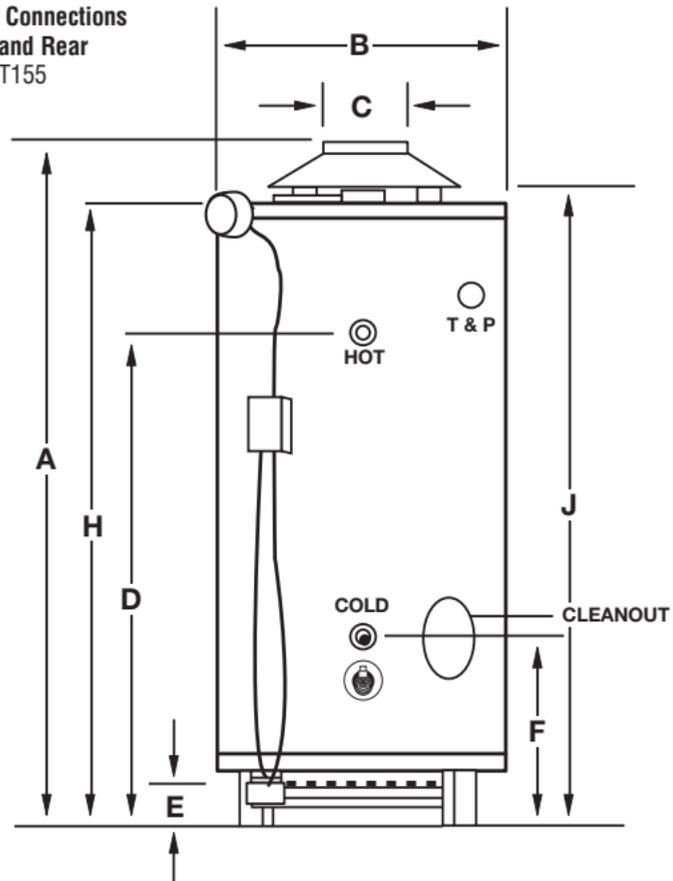
DM100S199, 250



**Water Connections**

**Front and Rear**

DM38T155





# Commercial Gas Millivolt Models

# 120/121



## Millivolt Models

DIMENSIONS IN INCHES

These models meet or exceed both Thermal Efficiency  
and Standby Loss Requirements of ASHRAE 90.1b (Current Edition). C.E.C. Listed

NATURAL GAS MODELS						A	B	C	D	E	F	H	J				Approx. Shipping Weight (lbs)	
Model Number	Gal. Cap.	Input BTU/Hr.	GPH Recovery at °F Rise*			Top Vent Height	Jacket Dia.	Vent Dia.	R/F Hot Water Conn.	Floor to Gas Conn.	R/F Cold Water Conn.	Floor to Top of Heater	Floor to Top Water Conn.	Water Conn.	Gas Conn. Dia.	Relief Valve Open.	Std.	ASME
			40°	100°	140°													
DM-38T-155-3N	38	155,000	368	147	107	51	28 <sup>1</sup> / <sub>4</sub>	6	34 <sup>1</sup> / <sub>2</sub>	4 <sup>5</sup> / <sub>8</sub>	19 <sup>3</sup> / <sub>8</sub>	43	—	1 <sup>1</sup> / <sub>2</sub>	3/4	3/4	438	—
DM-75T-125-3N	75	125,000	303	121	86	72 <sup>1</sup> / <sub>4</sub>	28 <sup>1</sup> / <sub>4</sub>	5	54 <sup>1</sup> / <sub>2</sub>	4 <sup>3</sup> / <sub>4</sub>	34	65	67 <sup>1</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>2</sub>	3/4	3/4	520	—
DM-75T-160-3N	75	160,000	378	151	108	72 <sup>1</sup> / <sub>4</sub>	28 <sup>1</sup> / <sub>4</sub>	6	54 <sup>1</sup> / <sub>2</sub>	4 <sup>3</sup> / <sub>4</sub>	34	65	67 <sup>1</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>2</sub>	3/4	3/4	520	—
DM-80T-180-3N	80	180,000	436	175	124	72 <sup>3</sup> / <sub>8</sub>	28 <sup>1</sup> / <sub>4</sub>	6	56	4 <sup>3</sup> / <sub>4</sub>	19 <sup>1</sup> / <sub>2</sub>	64 <sup>1</sup> / <sub>2</sub>	66 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	3/4	3/4	540	—
DM-80T-199-3N	80	199,999	485	194	139	72 <sup>3</sup> / <sub>8</sub>	28 <sup>1</sup> / <sub>4</sub>	6	56	4 <sup>3</sup> / <sub>4</sub>	19 <sup>1</sup> / <sub>2</sub>	64 <sup>1</sup> / <sub>2</sub>	66 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	3/4	3/4	540	—
DM-80T-250-3N(A)	80	250,000	606	242	173	72 <sup>3</sup> / <sub>8</sub>	28 <sup>1</sup> / <sub>4</sub>	6	56	4 <sup>3</sup> / <sub>4</sub>	19 <sup>1</sup> / <sub>2</sub>	64 <sup>1</sup> / <sub>2</sub>	66 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	3/4	1	540	590
DM-100T-199-3N	98	199,999	485	194	139	83 <sup>3</sup> / <sub>8</sub>	28 <sup>1</sup> / <sub>4</sub>	6	67	4 <sup>3</sup> / <sub>4</sub>	19 <sup>1</sup> / <sub>2</sub>	75 <sup>1</sup> / <sub>2</sub>	77 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	3/4	3/4	610	—
DM-100T-250-3N(A)	98	250,000	606	242	173	83 <sup>3</sup> / <sub>8</sub>	28 <sup>1</sup> / <sub>4</sub>	6	67	4 <sup>3</sup> / <sub>4</sub>	19 <sup>1</sup> / <sub>2</sub>	75 <sup>1</sup> / <sub>2</sub>	77 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	3/4	1	610	690
DM-100L-199-3N	100	199,999	485	194	139	75	30 <sup>1</sup> / <sub>4</sub>	6	56 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>2</sub>	23 <sup>1</sup> / <sub>2</sub>	65	67	1 <sup>1</sup> / <sub>2</sub> (T&F)	3/4	3/4	725	—
DM-100L-250-3N(A)	100	250,000	606	242	173	75	30 <sup>1</sup> / <sub>4</sub>	6	56 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>2</sub>	23 <sup>1</sup> / <sub>2</sub>	65	67	1 <sup>1</sup> / <sub>2</sub> (T&F)	3/4	1	725	765
DM-100L-270-3N(A)†	100	270,000	655	262	187	75	30 <sup>1</sup> / <sub>4</sub>	6	56 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>2</sub>	23 <sup>1</sup> / <sub>2</sub>	65	67	1 <sup>1</sup> / <sub>2</sub> (T&F)	3/4	1	725	765
DM-100S-199-3N	100	199,999	485	194	139	76 <sup>3</sup> / <sub>4</sub>	30 <sup>1</sup> / <sub>4</sub>	6	60 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>2</sub>	20 <sup>3</sup> / <sub>4</sub>	72 <sup>7</sup> / <sub>8</sub>	75	1 <sup>1</sup> / <sub>2</sub> (T&F)	3/4	3/4	667	—
DM-100S-250-3N(A)	100	250,000	606	242	173	76 <sup>3</sup> / <sub>4</sub>	30 <sup>1</sup> / <sub>4</sub>	6	60 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>2</sub>	20 <sup>3</sup> / <sub>4</sub>	72 <sup>7</sup> / <sub>8</sub>	75	1 <sup>1</sup> / <sub>2</sub> (T&F)	3/4	1	667	702

(A) = ASME Code Available

(F) = Front Water Connection

(T) = Top Water Connection

† = Available in Natural Gas Only

For Propane Gas models change suffix "N" to "X".

**For LowNOx compliance, place an "E" following the BTU Input identifier of the model number. Example: DM-75T-125E-3N**

\*Based on manufacturer's rated recovery efficiency.

\*\*Recoveries are based on Thermal Efficiencies of 80%.

LP GAS MODELS	Input BTU/Hr.	GPH Rec.		
		40°	100°	140°
DM-75T-160-3X	155,000	376	150	107
DM-80T-199-3X	190,000	461	184	132
DM-80T-250-3X	235,000	570	228	163
DM-100T-250-3X	235,000	570	228	163



# Commercial Gas Ultra High Efficiency Models

122/123



- **ICON HD™**—Intelligent proven design combines temperature control, diagnostic codes and system ignition functions into a single control board with a digital LCD display
- Up to 99.1% Thermal Efficiency
- ASME Construction Available
- Electronic Controls
- Low-NOx Premix Power Burner
- Three Pass Flue System
- Flexible Venting Options
- Vitraglas® Lining
- Factory-Installed Hydrojet® Sediment Reduction System
- Factory-Installed Dielectric Fittings
- Non-CFC Foam Insulation
- Four Protective Magnesium Anode Rods (Except EF-100T-399)
- Two Powered Anode Rods and One Non-Powered Anode Rod in the EF-100T-399
- Hand Hole Cleanout
- Zero Inch Clearance to Combustibles
- NSF Construction Available
- T&P Relief Valve Installed
- Low Restriction Brass Drain Valve
- Complies with the Latest Ultra-Low NOx Requirement (14 ng/J NOx Limit)

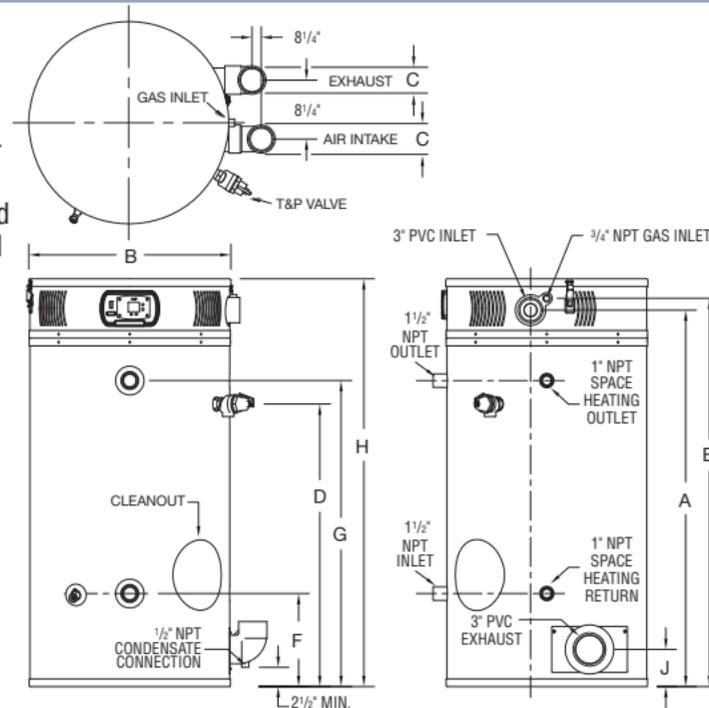


Photo of  
EF-60T-199E-3N

# Ultra High Efficiency Models

These models meet or exceed both Thermal Efficiency and Standby Loss Requirements of ASHRAE 90.1b (Current Edition). C.E.C. Listed

DIMENSIONS IN INCHES

## NATURAL GAS AND LIQUID PROPANE GAS MODELS

Model Number	Gal. Cap.	Therm. Eff. %	Input BTU/Hr.	GPH Recovery at °F Rise			A	B	C	D	E	F	G	H	J	Water Conn.	Gas Conn. Dia.	Relief Valve Open	Approx. Shipping Weight (lbs)
				40°	100°	140°													
				Floor to Air Intake	Jacket Dia.	Vent & Air Intake Size													
EF-60T-125E-3N(A)	60	96.0	125,000	364	145	104	52 <sup>1</sup> / <sub>2</sub>	28 <sup>1</sup> / <sub>4</sub>	3	40	53 <sup>1</sup> / <sub>2</sub>	12 <sup>7</sup> / <sub>8</sub>	42 <sup>1</sup> / <sub>2</sub>	57	5	1 <sup>1</sup> / <sub>2</sub>	<sup>3</sup> / <sub>4</sub>	<sup>3</sup> / <sub>4</sub>	570
EF-60T-150E-3N(A)	60	93.0	150,000	423	169	121	52 <sup>1</sup> / <sub>2</sub>	28 <sup>1</sup> / <sub>4</sub>	3	40	53 <sup>1</sup> / <sub>2</sub>	12 <sup>7</sup> / <sub>8</sub>	42 <sup>1</sup> / <sub>2</sub>	57	5	1 <sup>1</sup> / <sub>2</sub>	<sup>3</sup> / <sub>4</sub>	<sup>3</sup> / <sub>4</sub>	570
EF-60T-199E-3N(A)	60	92.0	199,999	558	223	159	52 <sup>1</sup> / <sub>2</sub>	28 <sup>1</sup> / <sub>4</sub>	3	40	53 <sup>1</sup> / <sub>2</sub>	12 <sup>7</sup> / <sub>8</sub>	42 <sup>1</sup> / <sub>2</sub>	57	5	1 <sup>1</sup> / <sub>2</sub>	<sup>3</sup> / <sub>4</sub>	<sup>3</sup> / <sub>4</sub>	570
EF-100T-150E-3N(A)	100	99.1	150,000	450	180	129	73 <sup>1</sup> / <sub>8</sub>	28 <sup>1</sup> / <sub>4</sub>	3	60	74 <sup>3</sup> / <sub>4</sub>	12 <sup>7</sup> / <sub>8</sub>	62 <sup>1</sup> / <sub>2</sub>	77 <sup>5</sup> / <sub>8</sub>	5	1 <sup>1</sup> / <sub>2</sub>	<sup>3</sup> / <sub>4</sub>	<sup>3</sup> / <sub>4</sub>	900
EF-100T-199E-3N(A)	100	98.5	199,999	597	239	171	73 <sup>1</sup> / <sub>8</sub>	28 <sup>1</sup> / <sub>4</sub>	3	60	74 <sup>3</sup> / <sub>4</sub>	12 <sup>7</sup> / <sub>8</sub>	62 <sup>1</sup> / <sub>2</sub>	77 <sup>5</sup> / <sub>8</sub>	5	1 <sup>1</sup> / <sub>2</sub>	<sup>3</sup> / <sub>4</sub>	<sup>3</sup> / <sub>4</sub>	900
EF-100T-250E-3N(A)	100	97.0	250,000	735	294	210	73 <sup>1</sup> / <sub>8</sub>	28 <sup>1</sup> / <sub>4</sub>	3	60	74 <sup>3</sup> / <sub>4</sub>	12 <sup>7</sup> / <sub>8</sub>	62 <sup>1</sup> / <sub>2</sub>	77 <sup>5</sup> / <sub>8</sub>	5	1 <sup>1</sup> / <sub>2</sub>	<sup>3</sup> / <sub>4</sub>	1	900
EF-100T-300E-3N(A)	100	92.0	300,000	836	335	239	73 <sup>1</sup> / <sub>8</sub>	28 <sup>1</sup> / <sub>4</sub>	3	60	74 <sup>3</sup> / <sub>4</sub>	12 <sup>7</sup> / <sub>8</sub>	62 <sup>1</sup> / <sub>2</sub>	77 <sup>5</sup> / <sub>8</sub>	5	1 <sup>1</sup> / <sub>2</sub>	<sup>3</sup> / <sub>4</sub>	1	900
EF-100T-399E-3N(A)	100	94.0	399,999	1127	451	322	73 <sup>1</sup> / <sub>8</sub>	28 <sup>1</sup> / <sub>4</sub>	3	60	73 <sup>1</sup> / <sub>4</sub>	13	63	77 <sup>5</sup> / <sub>8</sub>	5	1 <sup>1</sup> / <sub>2</sub>	1	1	950

(A) = ASME Code Available

For Propane Gas models change suffix "N" to "X" and remove "E" from model number Example: EF-100T-150-3X.

Note: The weight is the same for both ASME and Non-ASME models.

NSF Compliance Kit—p/n 265-44542-04.

\*\*Recoveries are based on the listed Thermal Efficiencies.



# Commercial Gas Ultra High Efficiency Models

124/125



	EF-60T-125		EF-60T-150 EF-100T-150		EF-60T-199 EF-100T-199	
2" Vent Pipe	Power Direct Vent	Power Vent	Power Direct Vent	Power Vent	Power Direct Vent	Power Vent
Max. Intake Length	15 ft.	N/A	15 ft.	N/A	15 ft.	N/A
Max. Exhaust Length	15 ft.	30 ft.	15 ft.	30 ft.	15 ft.	30 ft.

	EF-60T-125 EF-100T-150		EF-60T-150 EF-100T-199		EF-60T-199 EF-100T-250		EF-100T-300		EF-100T-399	
3" Vent Pipe	Power Direct Vent	Power Vent	Power Direct Vent	Power Vent	Power Direct Vent	Power Vent	Power Direct Vent	Power Vent	Power Direct Vent	Power Vent
Max. Intake Length	60 ft.	N/A	50 ft.	N/A	40 ft.	N/A	30 ft.	N/A	25 ft.	N/A
Max. Exhaust Length	60 ft.	120 ft.	50 ft.	100 ft.	40 ft.	80 ft.	30 ft.	60 ft.	25 ft.	50 ft.

	EF-60T-125 EF-100T-150		EF-60T-150 EF-100T-199		EF-60T-199 EF-100T-250		EF-100T-300		EF-100T-399	
4" Vent Pipe	Power Direct Vent	Power Vent	Power Direct Vent	Power Vent	Power Direct Vent	Power Vent	Power Direct Vent	Power Vent	Power Direct Vent	Power Vent
Max. Intake Length	85 ft.	N/A	75 ft.	N/A	65 ft.	N/A	55 ft.	N/A	50 ft.	N/A
Max. Exhaust Length	85 ft.	170 ft.	75 ft.	150 ft.	65 ft.	130 ft.	55 ft.	110 ft.	50 ft.	100 ft.

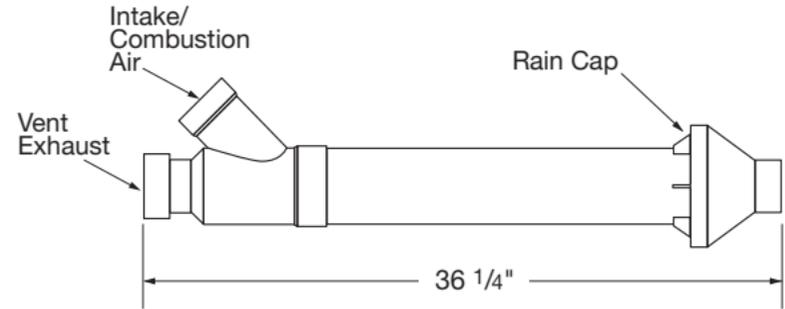
**eF Series® Optional Equipment Features:**

**Maxitrol Gas Pressure Regulating Valve**—Ensures proper supply pressure to eF unit of 7" to 11" W.C.(provided incoming pressure is between 1/2 and 2 psi). This can be ordered as a separate part, or as part of the heater. For the separate part, please use p/n 243-45517-00 (not available for use with the EF-100T-399).

**NSF Compliance Option**—p/n 265-44542-04

**Low Gas Inlet Pressure Option**—Pre-assembled to allow operation at lower inlet natural gas pressure.

**Concentric Vent Terminal Kit**—3" termination fitting provides for only one exit opening through wall or roof (p/n 239-44069-01).



p/n 239-44069-01  
p/n 239-44069-02 (for 2" vent pipe only)



# Commercial Electric Water Heaters

126/127



## Specify voltage and wattage when ordering.

All models are ETL listed. All water connections are 3/4" NPT (LE2120T has 1" NPT). All electrical connections are 3/4". All models are certified at 300 psi test pressure and 150 psi working pressure. All models come equipped with two installed heat traps (except LE2120T, LE120L, Utility and Wall Hung models). All models include an installed T&P Relief Valve.

**Note:** All **Upright** and **Lowboys** will be wired 240 Volt with two 4500 watt elements, 3 phase non-simultaneous operation (except 277 volt; 277 volt is only available in single phase operation). Other wattages and voltages are available. These models are field convertible to single phase and simultaneous operation. All models have a maximum total wattage of 3000 watts at 120 Volt. Incoloy elements available for most inputs.

**Note:** All **Wall Hung** and **Utility Models** will be wired 120 Volt with a 1500 watt element as single phase operation. 3 phase wiring not available on Wall Hung or Utility models (Single Element Units). Other wattages and voltages are available. Maximum wattage for 6 and 12 gallon tall utility models is 3000W. Maximum wattage for 10, 12 and 15 gallon utility models is 6000W. Maximum wattage for the 6 gallon wall hung model is 3000W. Maximum wattage for 12, 20 and 30 gallon wall hung models is 6000W. All models have a maximum wattage of 3000 watts at 120 Volt. Incoloy elements available for most inputs.

Incoloy Element Availability Chart					
Watts	120V	208V	240V	277V	480V
1500	yes	yes	yes	no	no
2000	no	yes	yes	yes	yes
2500	no	yes	yes	no	no
3000	no	yes	yes	yes	yes
3500	no	yes	yes	no	no
4000	no	yes	yes	yes	yes
4500	no	yes	yes	yes	yes
5000	no	yes	yes	yes	yes
5500	no	yes	yes	yes	yes
6000	no	yes	yes	yes	yes

NOTE: WHEN ORDERING WATER HEATERS SPECIFY VOLTAGE AND KW INPUT ONLY.  
THE FOLLOWING TABLES ARE FOR INFORMATIONAL PURPOSES ONLY.

**Phase and Operation are determined by the voltage.**

**All 208V, 240V and 480V models are shipped standard three phase, non-simultaneous.**

Can be converted to single phase and/or simultaneous operation in the field.

**All 120V and 277V models are shipped standard single phase, non-simultaneous.**

Can be converted to simultaneous operation in the field. Three phase not available.

<b>Phase</b>	1	Single Phase	<b>Operation</b>	N	Non-Simultaneous
	3	Three Phase		S	Simultaneous

EX: LE250S3-3NCWW

EX: LE250S3-3NCWW

<b>Designator</b>	<b>A</b>	<b>C</b>	<b>E</b>	<b>H</b>	<b>J</b>	<b>L*</b>
<b>Voltage</b>	120	208/240	277	480	600	208

EX: LE250S3-3NCWW

\*Use "L" voltage designator if wiring 208V with 5000 watt.

**For 120V, 277V, 480V, and 600V operation**

<b>Designator</b>	<b>J</b>	<b>K</b>	<b>L</b>	<b>M</b>	<b>N</b>	<b>P</b>	<b>R</b>	<b>S</b>	<b>T</b>	<b>W</b>	<b>X</b>	<b>Y</b>	<b>Z</b>
<b>Wattage</b>	1000	1250	1500	2000	2500	3000	3500	3800	4000	4500	5000	5500	6000

EX: LE250S3-3NCWW

**For 240V and 208V operation (Dual rated elements show a value for both 240V and 208V)**

<b>Designator</b>	<b>J</b>	<b>K</b>	<b>L</b>	<b>M</b>	<b>N</b>	<b>P</b>	<b>R</b>	<b>S</b>	<b>T</b>	<b>W</b>	<b>X</b>	<b>Y</b>	<b>Z</b>	<b>X**</b>	<b>Y**</b>	<b>Z**</b>
<b>240V Wattage</b>	1000	1250	1500	2000	2500	3000	3500	3800	4000	4500	5000	5500	—	—	—	—
<b>208V Wattage</b>	—	—	1000	1500	2000	—	2500	—	3000	3500	—	4000	4500	5000	—	—

EX: LE250S3-3NCWW, will give 240V with 4500W/4500W. This same heater can also be energized at 208V with reduced wattage of 3500W/3500W.

\*\*Use "L" voltage designator if wiring 208V with 5000, 5500 or 6000 watt.

†Available in non-simultaneous only.

	<b>Wattage Limitations for Non-Simultaneous and Simultaneous Operation</b>				
	<b>Voltage</b>				
	<b>120V</b>	<b>208V</b>	<b>240V</b>	<b>277V</b>	<b>480V</b>
1500W / 1500W	yes	yes	yes	yes	yes
2000W / 2000W	no	yes	yes	yes	yes
2500W / 2500W	no	yes	yes	yes	yes
3000W / 3000W	no	yes	yes	yes	yes
3500W / 3500W	no	yes	yes	no	no
4000W / 4000W	no	yes	yes	yes	yes
4500W / 4500W	no	yes	yes	yes	yes
5000W / 5000W	no	yes	yes	yes	yes
5500W / 5500W	no	no	yes	no	no
6000W / 6000W	no	no	no	yes	yes



# Commercial Electric

## Electri-Flex™ LD (Light Duty) Upright Models

# 128/129



- Fully Automatic Controls
- Direct Heat Transfer with Immersed Elements
- Factory-Installed Hydrojet® Total Performance System
- Vitraglas® Lining
- 2" Non-CFC Foam Insulation
- Water Connections—3/4" NPT
- Factory-Installed Heat Traps
- Protective Magnesium Anode Rod
- Steel Tank
- Field Convertible
- Voltages Available—120V, 208V, 240V, 277V, 480V.
- T&P Relief Valve Installed

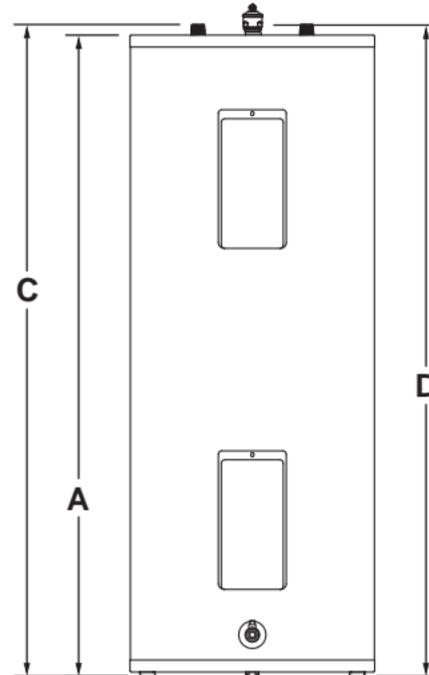
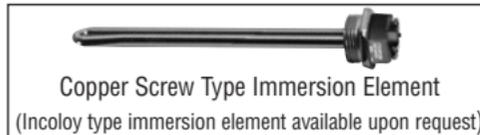
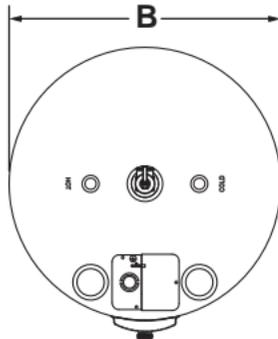


Photo of  
LE250S3-3

# Electri-Flex™ LD (Light Duty) Upright Models

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed

## DIMENSIONS IN INCHES

ELECTRIC MODELS		Recovery 100°F Rise*		A	B	C	D	
Model Number	Gal. Cap.	Nat U.S. GPH	Nat Imp. GPH	Floor to Heater Top	Jacket Dia.	Floor to Water Conn.	Floor to T&P Conn.	Approx. Shipping Weight (lbs)
LE230S3-3	30	18	15	46 <sup>7</sup> / <sub>8</sub>	18	48 <sup>1</sup> / <sub>8</sub>	47 <sup>3</sup> / <sub>16</sub>	85
LE240S3-3	40	18	15	46 <sup>7</sup> / <sub>8</sub>	20	47 <sup>7</sup> / <sub>8</sub>	46 <sup>7</sup> / <sub>8</sub>	103
LE250S3-3	50	18	15	46 <sup>1</sup> / <sub>2</sub>	22	47 <sup>1</sup> / <sub>2</sub>	46 <sup>1</sup> / <sub>2</sub>	130
LE265T3-3	65	18	15	59 <sup>1</sup> / <sub>4</sub>	22	60 <sup>1</sup> / <sub>4</sub>	59 <sup>1</sup> / <sub>4</sub>	156
LE280T3-3	80	18	15	59 <sup>1</sup> / <sub>4</sub>	24	60 <sup>1</sup> / <sub>4</sub>	59 <sup>1</sup> / <sub>4</sub>	183
LE2120T3-3	119	18	15	62 <sup>3</sup> / <sub>4</sub>	28	64 <sup>1</sup> / <sub>4</sub>	62 <sup>1</sup> / <sub>4</sub>	305

Specify wattage and voltage when ordering.

Use chart below for maximum wattages at certain voltages

For 5 year models, change suffix "3" to "5".

\*Based on 4500W/4500W, Non-Simultaneous operation.

NSF Kits available when ordering.

Wattage	Recovery▲ GPH Temperature Rise °F				
	60	80	90	100	120
1500W	10	8	7	6	5
2000W	14	10	9	8	7
2500W	17	13	11	10	9
3000W	21	15	14	12	10
3500W	24	18	16	14	12
4000W	28	21	18	16	14
4500W	31	23	21	19	15
5000W	34	26	23	21	17
5500W	38	29	25	23	19
6000W	41	31	28	25	21

▲ (GPH based on Non-Simultaneous operation, when Simultaneous operation the GPH will approximately double.)

	Wattage Limitations for Non-Simultaneous and Simultaneous Operation				
	Voltage				
	120V	208V	240V	277V	480V
1500W / 1500W	yes	yes	yes	yes	yes
2000W / 2000W	no	yes	yes	yes	yes
2500W / 2500W	no	yes	yes	yes	yes
3000W / 3000W	no	yes	yes	yes	yes
3500W / 3500W	no	yes	yes	no	no
4000W / 4000W	no	yes	yes	yes	yes
4500W / 4500W	no	yes	yes	yes	yes
5000W / 5000W	no	yes	yes	yes	yes
5500W / 5500W	no	no	yes	no	no
6000W / 6000W	no	no	no	yes	yes



# Commercial Electric Electri-Flex™ LD (Light Duty) Lowboy Models

130/131



- Fully Automatic Controls
- Direct Heat Transfer with Immersed Elements
- Factory-Installed Hydrojet® Total Performance System
- Vitraglas® Lining
- 1" Non-CFC Foam Insulation
- Water Connections—3/4" NPT
- Factory-Installed Heat Traps
- Protective Magnesium Anode Rod
- Steel Tank
- Field Convertible
- Voltages Available—120V, 208V, 240V, 277V, 480V.
- T&P Relief Valve Installed

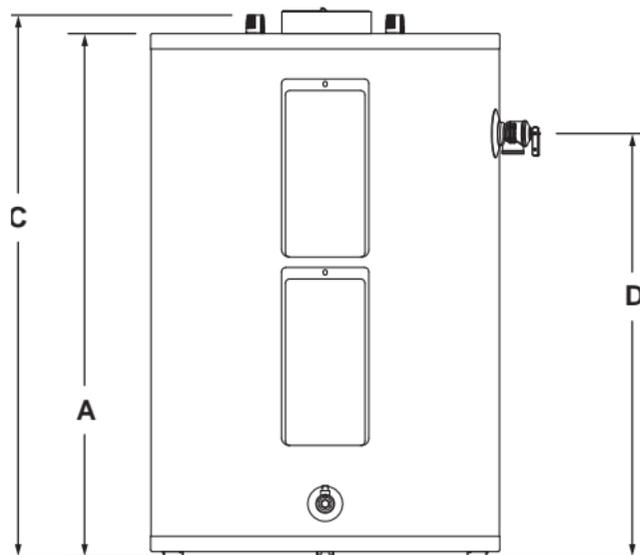
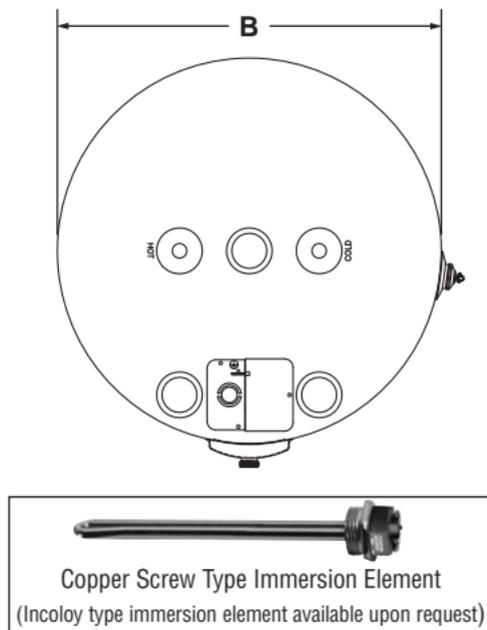


Photo of  
LE120S3-3

# Electri-Flex™ LD (Light Duty) Lowboy Models

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed

## DIMENSIONS IN INCHES

### ELECTRIC MODELS

Model Number	Gal. Cap.	Recovery 100°F Rise*		A	B	C	D	Approx. Shipping Weight (lbs)
		Nat U.S. GPH	Nat Imp. GPH	Floor to Heater Top	Jacket Dia.	Floor to Water Conn.	Floor to T&P Conn.	
LE120L3-3†	19	18	15	24 <sup>3</sup> / <sub>4</sub>	18	26	19 <sup>1</sup> / <sub>4</sub> / 24 <sup>7</sup> / <sub>8</sub>	58
LE130L3-3	30	18	15	29 <sup>3</sup> / <sub>4</sub>	20	31	24 / 29 <sup>3</sup> / <sub>8</sub>	86
LE140L3-3	40	18	15	31 <sup>1</sup> / <sub>4</sub>	22	32 <sup>7</sup> / <sub>8</sub>	24 <sup>1</sup> / <sub>8</sub> / 31 <sup>3</sup> / <sub>4</sub>	115
LE150L3-3	47	18	15	31 <sup>3</sup> / <sub>4</sub>	24	33 <sup>1</sup> / <sub>8</sub>	24 <sup>1</sup> / <sub>8</sub> / 31 <sup>3</sup> / <sub>4</sub>	140

Specify wattage and voltage when ordering.

Use the charts to the right for maximum wattages at certain voltages.

All Models include supplied insulation blanket.

For 5 year models, change suffix "3" to "5".

\*Based on 4500W/4500W, Non-Simultaneous operation.

NSF Kits available when ordering.

†Exempt from ASHRAE 90.1b.

Wattage	Recovery▲ GPH Temperature Rise °F				
	60	80	90	100	120
1500W	10	8	7	6	5
2000W	14	10	9	8	7
2500W	17	13	11	10	9
3000W	21	15	14	12	10
3500W	24	18	16	14	12
4000W	28	21	18	16	14
4500W	31	23	21	19	15
5000W	34	26	23	21	17
5500W	38	29	25	23	19
6000W	41	31	28	25	21

▲ (GPH based on Non-Simultaneous operation, when Simultaneous operation the GPH will approximately double.)

	Wattage Limitations for Non-Simultaneous and Simultaneous Operation				
	Voltage				
	120V	208V	240V	277V	480V
1500W / 1500W	yes	yes	yes	yes	yes
2000W / 2000W	no	yes	yes	yes	yes
2500W / 2500W	no	yes	yes	yes	yes
3000W / 3000W	no	yes	yes	yes	yes
3500W / 3500W	no	yes	yes	no	no
4000W / 4000W	no	yes	yes	yes	yes
4500W / 4500W	no	yes	yes	yes	yes
5000W / 5000W	no	yes	yes	yes	yes
5500W / 5500W	no	no	yes	no	no
6000W / 6000W	no	no	no	yes	yes

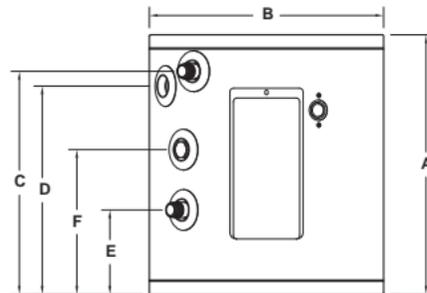
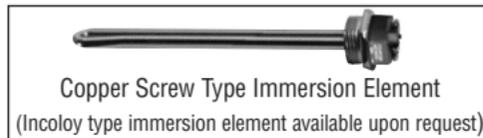
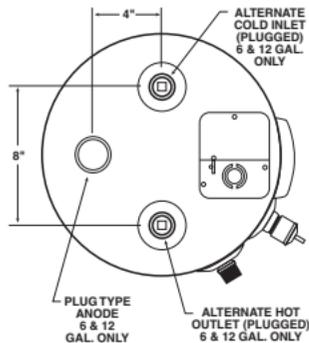


# Commercial Electric Electri-Flex™ LD (Light Duty) Utility Models

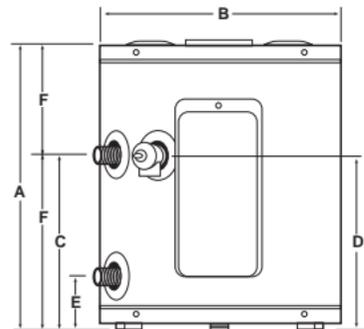
132/133



- Fully Automatic Controls
- Direct Heat Transfer with a Single Immersed Element
- Vitraglas® Lining
- 1" Non-CFC Foam Insulation
- Water Connections—3/4" NPT
- Alternate Top Water Connections
- Protective Magnesium Anode Rod
- Steel Tank
- Voltages Available—120V, 208V, 240V, 277V, 480V
- Single Phase Operation Only
- T&P Relief Valve



10 & 15 Gallon Models



6, 12, & 20 Gallon Models



Photo of  
LE112T3-1

# Electri-Flex™ LD (Light Duty) Utility Models

C.E.C. Listed

## DIMENSIONS IN INCHES

ELECTRIC MODELS		Recovery 100°F Rise*		A	B	C	D	E	F	Approx. Shipping Weight (lbs)
Model Number	Gal. Cap.	Nat U.S. GPH	Nat Imp. GPH	Floor to Heater Top	Jacket Dia.	Floor to Hot Water Conn.	Floor to T&P Conn.	Floor to Cold Water Conn.	Floor to Anode Rod	
LE16U3-1†	6	6	5	16 <sup>1</sup> / <sub>2</sub>	14	10 <sup>1</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>8</sub>	16 <sup>1</sup> / <sub>2</sub>	33
LE110U3-1	10	6	5	17 <sup>1</sup> / <sub>2</sub>	16	15	14	5 <sup>11</sup> / <sub>16</sub>	9 <sup>11</sup> / <sub>16</sub>	48
LE112T3-1†	12	6	5	27 <sup>3</sup> / <sub>4</sub>	14	21 <sup>1</sup> / <sub>8</sub>	21 <sup>1</sup> / <sub>8</sub>	3	27 <sup>3</sup> / <sub>4</sub>	48
LE115U3-1	15	6	5	20 <sup>1</sup> / <sub>4</sub>	18	17 <sup>3</sup> / <sub>4</sub>	16 <sup>3</sup> / <sub>4</sub>	6 <sup>1</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>8</sub>	55
LE120U3-1	19	6	5	24 <sup>3</sup> / <sub>4</sub>	18	18 <sup>1</sup> / <sub>4</sub>	18 <sup>1</sup> / <sub>4</sub>	3	10 <sup>1</sup> / <sub>4</sub>	59

Specify wattage and voltage when ordering.

Use chart to right for maximum wattages at certain voltages.

†Maximum wattage at any voltage is 3000W.

For 5 year models, change suffix "3" to "5".

Single element only.

\*Based on 1500W operation.

NSF Kits available when ordering.

Wattage	Recovery GPH Temperature Rise °F				
	60	80	90	100	120
1500W	10	8	7	6	5
2000W	14	10	9	8	7
2500W	17	13	11	10	9
3000W	21	15	14	12	10
3500W	24	18	16	14	12
4000W	28	21	18	16	14
4500W	31	23	21	19	15
5000W	34	26	23	21	17
5500W	38	29	25	23	19
6000W	41	31	28	25	21

Wattage Limitations	Voltage				
	120V	208V	240V	277V	480V
1500W / 1500W	yes	yes	yes	yes	yes
2000W / 2000W	yes	yes	yes	yes	yes
2500W / 2500W	yes	yes	yes	yes	yes
3000W / 3000W	yes	yes	yes	yes	yes
3500W / 3500W	no	yes	yes	no	no
4000W / 4000W	no	yes	yes	yes	yes
4500W / 4500W	no	yes	yes	yes	yes
5000W / 5000W	no	yes	yes	yes	yes
5500W / 5500W	no	yes	yes	no	no
6000W / 6000W	no	yes	yes	yes	yes



# Commercial Electric

## Electri-Flex™ LD (Light Duty) Wall Hung Models

134/135



- Fully Automatic Controls
- Direct Heat Transfer with a Single Immersed Element
- Vitraglas® Lining
- 1" Non-CFC Foam Insulation
- Factory-Installed Heavy-Duty Wall Mounting Bracket

- Water Connections—3/4" NPT
- Protective Magnesium Anode Rod
- Steel Tank
- Voltages Available—120V, 208V, 240V, 277V, 480V
- Single Phase Operation Only
- T&P Relief Valve

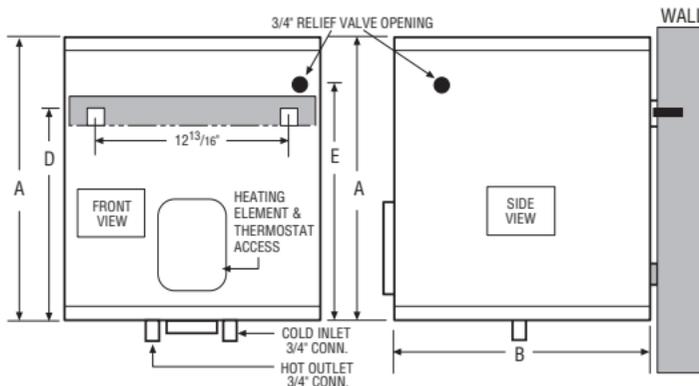
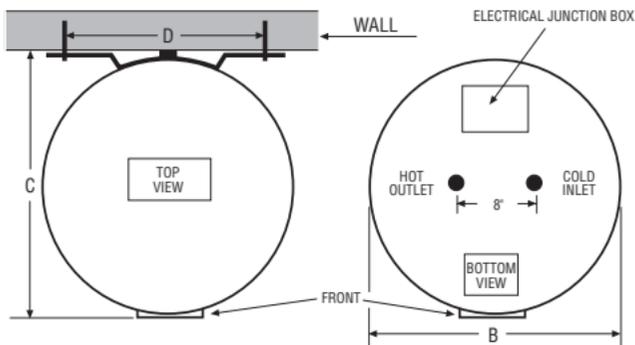
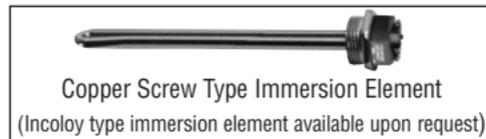


Photo of  
LE16WV3-1

# Electri-Flex™ LD (Light Duty) Wall Hung Models

C.E.C. Listed

## DIMENSIONS IN INCHES

ELECTRIC MODELS		Recovery 100°F Rise*		A	B	C	D	E	
Model Number	Gal. Cap.	Nat U.S. GPH	Nat Imp. GPH	Height	Jacket Dia.	Wall to Front	Height to Bracket	Height to T&P Conn.	Approx. Shipping Weight (lbs)
LE16WW3-1†	6	6	5	15 <sup>3</sup> / <sub>4</sub>	14	14 <sup>5</sup> / <sub>8</sub>	11 <sup>3</sup> / <sub>4</sub>	11 <sup>7</sup> / <sub>8</sub>	33
LE112WW3-1	12	6	5	16 <sup>3</sup> / <sub>8</sub>	18	18 <sup>5</sup> / <sub>8</sub>	12 <sup>3</sup> / <sub>4</sub>	12 <sup>1</sup> / <sub>2</sub>	48
LE120WW3-1	19	6	5	24 <sup>3</sup> / <sub>8</sub>	18	18 <sup>5</sup> / <sub>8</sub>	18 <sup>1</sup> / <sub>4</sub>	21	59

Specify wattage and voltage when ordering. Use chart to right for maximum wattages at certain voltages.

†Maximum wattage at any voltage is 3000W.

For 5 year models, change suffix "3" to "5".

Single element only.

\*Based on 1500W operation.

NSF Kits available when ordering.

Wattage	Recovery GPH Temperature Rise °F				
	60	80	90	100	120
1500W	10	8	7	6	5
2000W	14	10	9	8	7
2500W	17	13	11	10	9
3000W	21	15	14	12	10
3500W	24	18	16	14	12
4000W	28	21	18	16	14
4500W	31	23	21	19	15
5000W	34	26	23	21	17
5500W	38	29	25	23	19
6000W	41	31	28	25	21

Wattage Limitations	Voltage				
	120V	208V	240V	277V	480V
1500W / 1500W	yes	yes	yes	yes	yes
2000W / 2000W	yes	yes	yes	yes	yes
2500W / 2500W	yes	yes	yes	yes	yes
3000W / 3000W	yes	yes	yes	yes	yes
3500W / 3500W	no	yes	yes	no	no
4000W / 4000W	no	yes	yes	yes	yes
4500W / 4500W	no	yes	yes	yes	yes
5000W / 5000W	no	yes	yes	yes	yes
5500W / 5500W	no	yes	yes	no	no
6000W / 6000W	no	yes	yes	yes	yes



# Commercial Electric



## Electri-Flex™ MD (Medium Duty) Models

# 136/137



- Vitraglas® Lining
- Factory-Installed Hydrojet® Total Performance System
- Water Connections – 1½" NPT Factory-Installed Dielectric Waterway Fittings
- 2" Non-CFC Foam Insulation
- Fully Automatic Controls (180°F maximum)
- Direct Heat Transfer with Immersed Elements
- Protective Magnesium Anode Rod
- T&P Relief Valve Factory Installed
- Low Restriction Brass Drain Valve

### Optional

Field Conversion Kits; see next page for part numbers.

NSF Construction Kits; see next page for part numbers.

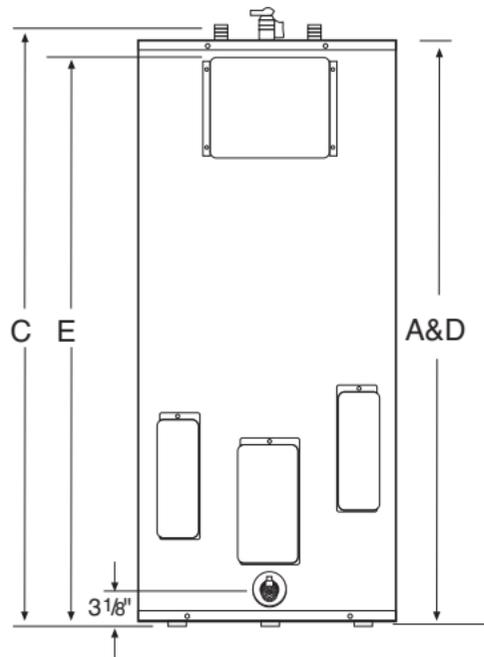
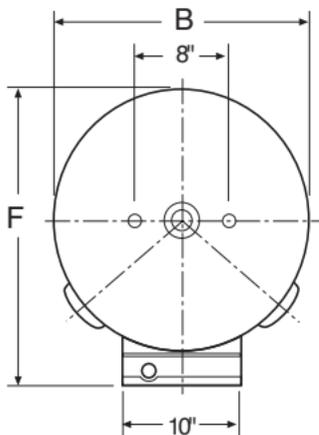


Photo of  
E32-80R-3

# Electri-Flex™ MD (Medium Duty) Models

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed

## DIMENSIONS IN INCHES

ELECTRIC MODELS		A	B	C	D	E	F	
Model Number	Gallon Capacity	Floor to Heater Top	Jacket Dia.	Floor to Water Conn.	Floor to T&P Conn.	Floor to Control Box	Control Box to Back of Heater	Approx. Shipping Weight (lbs)
E32-50S-3	50	46 <sup>1</sup> / <sub>2</sub>	22	47 <sup>1</sup> / <sub>2</sub>	47 <sup>5</sup> / <sub>8</sub>	44 <sup>7</sup> / <sub>8</sub>	24 <sup>5</sup> / <sub>8</sub>	137
E32-80R-3	80	59	24	60	60 <sup>1</sup> / <sub>8</sub>	57 <sup>3</sup> / <sub>8</sub>	26 <sup>3</sup> / <sub>4</sub>	190
E32-120R-3	119	63	28 <sup>1</sup> / <sub>4</sub>	64	64 <sup>1</sup> / <sub>8</sub>	61 <sup>3</sup> / <sub>8</sub>	30 <sup>7</sup> / <sub>8</sub>	312

All Medium Duty heaters are wired 240V/3 phase 18 kW.

Other voltages, wiring phase and kW are available and must be specified when ordering.

NOTE: Refer to pages 128/129 for technical information and pages 148/149 for GPH recovery information.

## Conversion Kit Table

Required Total Heater Wattage	Element Wattage	Kit Part Numbers		
		208V	240V	480V
6000	2000	265-43942-13	265-43942-07	265-43942-01
9000	3000	265-43942-14	265-43942-08	265-43942-02
12000	4000	265-43942-15	265-43942-09	265-43942-03
13500	4500	265-43942-16	265-43942-10	265-43942-04
15000	5000	265-43942-17	265-43942-11	265-43942-05
18000	6000	265-43942-18	265-43942-12	265-43942-06

1,000 watts = 1kW

## Full Load Amperes - (Single Phase / Three Phase) and Recovery at a 100°F Rise

Input kW	208V	240V	277V	380V	415V	480V	Recovery
18	86.5/50	75/43.4	64	28	25	37.5/21.6	74 GPH
6	28.8/16.6	25/14.4	21.6	10	8.3	12.5/7.2	25 GPH

## NSF Construction Kit

Model Number	Kit Part Numbers
E32-50S	265-45446-01
E32-80R	265-45446-02
E32-120R	265-45446-03



### Immersion Thermostat with Contactors

- Immersion Type Thermostat for Accurate Temperature Control from Positive off up to 180°F

### Surface Mounted Thermostats

- Thermostat Step Control Can Be Accomplished by Variable Settings

### All Models Feature

- Vitraglas® Lined Tank
- Factory-Installed Hydrojet® Sediment Reduction System
- Completely Pre-wired with Pressure Lug Terminal or Fuse Block Eliminating the Need for Splicing or Taping Wires

- Water Connections – 1½" NPT Factory-Installed True Dielectric Fittings
  - 3" Non-CFC Foam Insulation
  - Two Protective Magnesium Anode Rods
  - Hand-hole Cleanout Opening
  - Low Restriction Brass Drain Valve
  - T&P Relief Valve Installed
- Options**
- ASME & NSF Construction Available on Immersion and Surface Thermostats

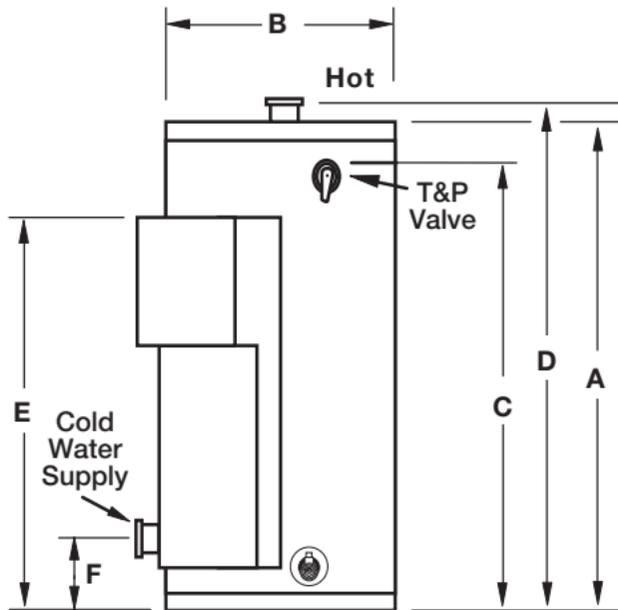


Photo of  
M-II-50-36-3SF

# Surface and Immersion Thermostat Models

DIMENSIONS IN INCHES

Meet or exceed ASHRAE 90.1b (current standard). C.E.C. Listed

ELECTRIC MODELS		A	B	C	D	E	F	Approx. Shipping Weight (lbs)	
Model Number	Gal. Cap.	Floor to Heater Top	Jacket Dia.	Floor to T&P Conn.	Floor to Hot Water Outlet	Floor to Top of Control Box	Floor to Cold Water Inlet	Std.	ASME
								M-II-50-kW-3SF	50
M-II-80-kW-3SF	80	60 <sup>1</sup> / <sub>4</sub>	26	52 <sup>1</sup> / <sub>2</sub>	61 <sup>3</sup> / <sub>4</sub>	46 <sup>1</sup> / <sub>2</sub>	6 <sup>3</sup> / <sub>4</sub>	335	378
M-II-120-kW-3SF	119	64 <sup>1</sup> / <sub>2</sub>	30 <sup>1</sup> / <sub>4</sub>	55	66	50 <sup>1</sup> / <sub>4</sub>	6 <sup>3</sup> / <sub>4</sub>	430	485

Model numbers shown are for Surface Mount thermostats. For Immersion thermostat change suffix "SF" to "CF".

Voltage and phase must be specified when ordering. Example: M-II-50-12-3SF, 240 Volt, 3 phase.

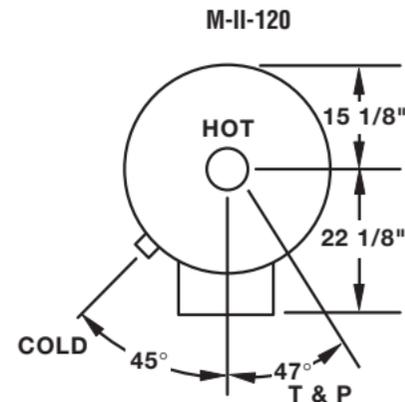
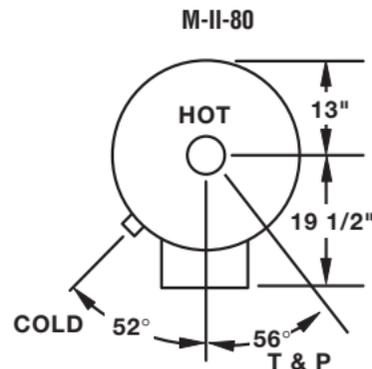
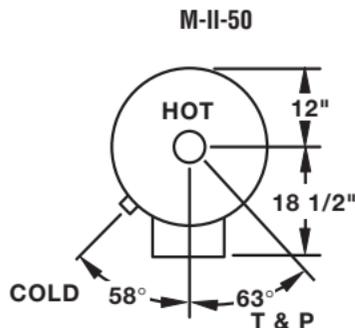
All models available in 208/240/277 and 480 volt.

(A) ASME Construction available.

For ASME construction add "A" to the model number.

Example: M-II-50A-12-3SF, 240 Volt, single phase.

NOTE: Refer to pages 128/129 for technical information and pages 148/149 for GPH recovery information.





# Commercial Electric

## ASME Models



# 140/141



### Standard Features:

- Immersion Thermostat with Contactors - Immersion Type Thermostat for Accurate Temperature Control from Positive Off up to 180°F
- ASME Code Construction
- Vitraglas® Lining
- Factory-Installed Commercial Hydrojet® Sediment Reduction System
- Completely Pre-Wired With Pressure Lug Terminal or Fuse Block Eliminating the need for Splicing or Taping Wires
- Factory Installed Dielectric Fittings
- Non-CFC Foam Insulation  
2" For 6-40 Gallon  
3" For 50-119 Gallon

- Protective Magnesium Anode Rod
  - Handhole Cleanout Opening (20 thru 120 Gallon Models Only)
  - T&P Relief Valve Installed
  - Low Restriction Brass Drain Valve
- Options:**
- Low Water Cut-Off Switch
  - Safety Door Interlock
  - High and Low Pressure Limit Switches
  - Alarm Horn
  - Temperature and Pressure Gauge
  - Time Delay Step Sequences (24kW and Above)
  - NSF Construction

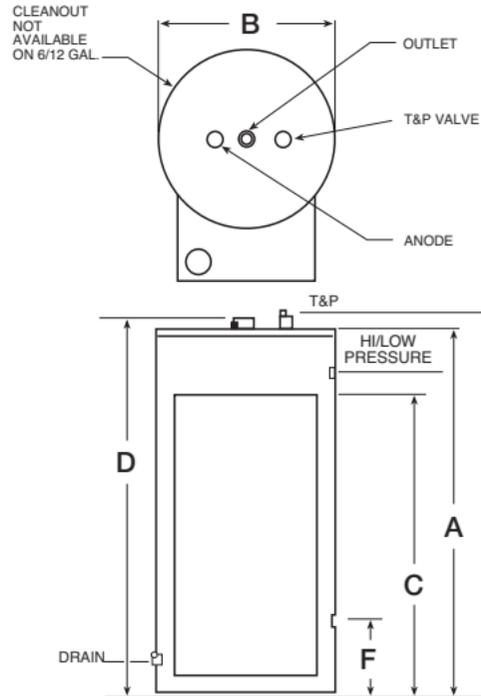


Photo of 30A-36-3

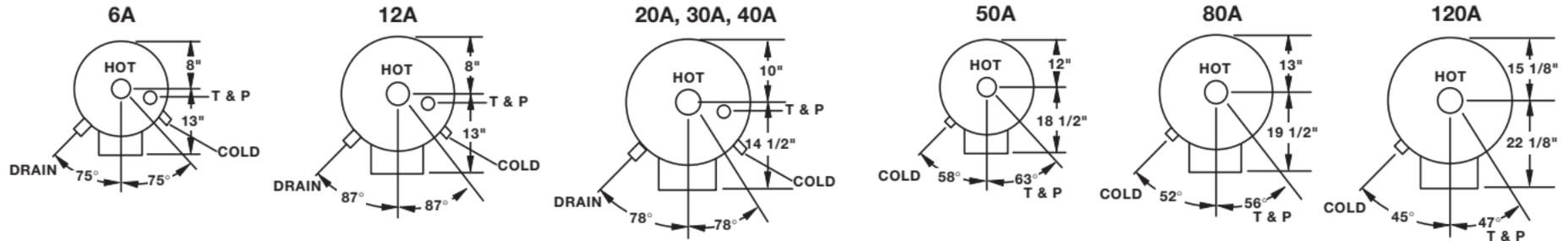
# ASME Models

DIMENSIONS IN INCHES

## ELECTRIC MODELS

Model Number	Gal. Cap.	Max. kW Input	A Floor to Heater Top	B Jacket Dia.	C Floor to Top of Control Box	D Floor to HW Outlet	E Floor to T&P Valve	F Floor to CW Inlet	Water Conn.	Approx. Shipping Weight (lbs)
6A-kW-3	6	3	17 <sup>1</sup> / <sub>4</sub>	16	17	18 <sup>1</sup> / <sub>4</sub>	18 <sup>1</sup> / <sub>16</sub>	6 <sup>1</sup> / <sub>4</sub>	3/4	83
12A-kW-3	12	9	28	16	28	29	28 <sup>15</sup> / <sub>16</sub>	6 <sup>1</sup> / <sub>4</sub>	3/4	118
20A-kW-3	20	18	27 <sup>1</sup> / <sub>2</sub>	20	27	28 <sup>1</sup> / <sub>2</sub>	28	6 <sup>1</sup> / <sub>4</sub>	3/4	145
30A-kW-3	30	36	38	20	38	39	40 <sup>1</sup> / <sub>4</sub>	6 <sup>1</sup> / <sub>4</sub>	3/4	180
40A-kW-3	40	36	48 <sup>1</sup> / <sub>4</sub>	20	38	49 <sup>1</sup> / <sub>4</sub>	50 <sup>1</sup> / <sub>2</sub>	6 <sup>1</sup> / <sub>4</sub>	3/4	220
50A-kW-3	50	81	47 <sup>3</sup> / <sub>4</sub>	24	46 <sup>1</sup> / <sub>2</sub>	49 <sup>1</sup> / <sub>4</sub>	50 <sup>3</sup> / <sub>8</sub>	6	1 <sup>1</sup> / <sub>2</sub>	270
80A-kW-3	80	81	60 <sup>1</sup> / <sub>4</sub>	26	46 <sup>1</sup> / <sub>2</sub>	61 <sup>3</sup> / <sub>4</sub>	61 <sup>7</sup> / <sub>8</sub>	6	1 <sup>1</sup> / <sub>2</sub>	335
120A-kW-3	119	81	64 <sup>1</sup> / <sub>2</sub>	30 <sup>1</sup> / <sub>4</sub>	50 <sup>1</sup> / <sub>4</sub>	66	66 <sup>5</sup> / <sub>16</sub>	6	1 <sup>1</sup> / <sub>2</sub>	430

NOTE: Refer to pages 148/149 for GPH recovery information.



# Commercial Electric Brute Vertical Round Models

142/143



## Standard Features:

- 125 psi ASME Code Enamel Lined Tank
- Incoloy Heating Elements
- Internal Fusing
- Galvanized Steel Jacket
- Magnesium Anode Rods
- Immersion Thermostat
- Manual Reset High Limit
- Hinged Door with Keyed Lock
- Temperature and Pressure Relief Valve
- Channel Iron Skid Base
- Hand Hole Cleanout
- 180°F Operation
- Three Year Limited Warranty
- Meets or Exceeds ASHRAE 90.1b (Current Edition)

## Optional Equipment Features:

- Low Water Cut-Off
  - Pilot Lights
  - Manual Limiting Switches
  - Alarm Bell
  - Low or High Pressure Switch
  - Time Clock (7 Day or 24 Hour)<sup>†</sup>
  - Safety Door Interlock
  - Temperature and Pressure Gauge
  - Manhole Cleanout (250 Gallons and Larger)
  - 150 psi Working Pressure
  - Electronic Sequencer (36kW & Higher)
  - Shunt trip disconnect<sup>†</sup>
  - BMS Relay
- <sup>†</sup>Separate mounting

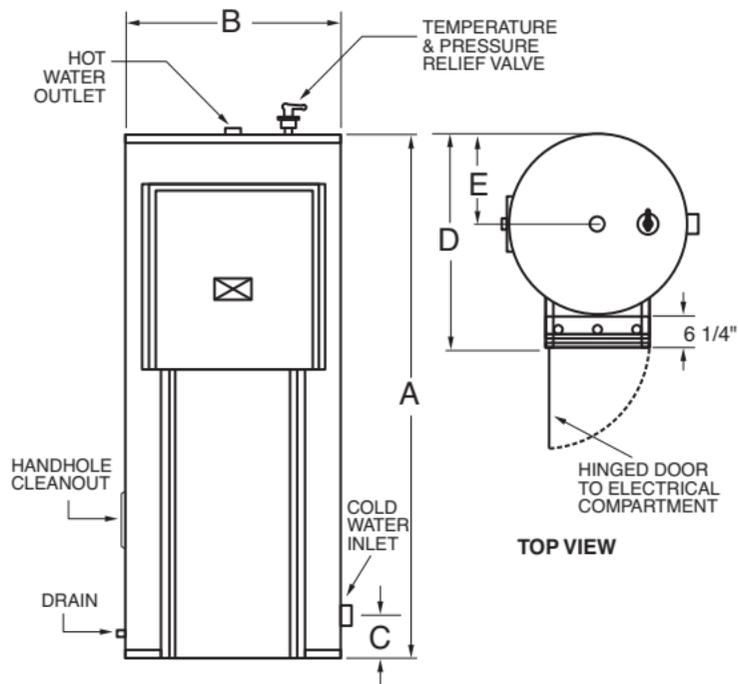


Photo of  
VR-200-36

# Vertical Round Models

## DIMENSIONS IN INCHES

ELECTRIC MODELS			A	B	C	D	E		
Model Number	Gal. Cap.	Max. kW Load**	Floor to Top of Heater	Jacket Diameter	Floor to Cold Water Inlet	Depth	Back of Heater to Cold Water Inlet	Water Conn.	Approx. Shipping Weight (lbs)
VR-150-kW	150	135	65 <sup>1</sup> / <sub>2</sub>	32	7 <sup>3</sup> / <sub>4</sub>	38 <sup>3</sup> / <sub>4</sub>	16	1 <sup>1</sup> / <sub>2</sub>	650
VR-200-kW	200	180	78	32	7 <sup>3</sup> / <sub>4</sub>	38 <sup>3</sup> / <sub>4</sub>	17	1 <sup>1</sup> / <sub>2</sub>	750
VR-250-kW	250	216	92	34	19 <sup>1</sup> / <sub>2</sub>	40 <sup>3</sup> / <sub>4</sub>	17	1 <sup>1</sup> / <sub>2</sub>	1165
VR-300-kW	300	270	80	40	21	46 <sup>3</sup> / <sub>4</sub>	20	2	1350
VR-400-kW	400	360	80	46	22 <sup>1</sup> / <sub>2</sub>	52 <sup>3</sup> / <sub>4</sub>	23	2	1590
VR-500-kW	500	396	92	46	22 <sup>1</sup> / <sub>2</sub>	52 <sup>3</sup> / <sub>4</sub>	23	2	1700
VR-600-kW	600	396	92	54	24 <sup>1</sup> / <sub>2</sub>	60 <sup>3</sup> / <sub>4</sub>	27	2 <sup>1</sup> / <sub>2</sub>	2010
VR-800-kW	800	396	104	54	24 <sup>1</sup> / <sub>2</sub>	60 <sup>3</sup> / <sub>4</sub>	27	2 <sup>1</sup> / <sub>2</sub>	2450
VR-1000-kW	1000	396	128	54	24 <sup>1</sup> / <sub>2</sub>	60 <sup>3</sup> / <sub>4</sub>	27	2 <sup>1</sup> / <sub>2</sub>	3160

On 250 gallon model and larger dimensions: include channel iron legs (not shown).

NOTE: Refer to pages 148/149 for GPH recovery information.

All horizontal models must be with square jackets.

\*\*Vertical Round models above 90kW at 208V, 240V and 162kW at 480V exceed the capacity of a single control box and may require multiple control panels. Consult factory for specific details and optional construction.



# Commercial Electric Brute Horizontal & Vertical Models

144/145



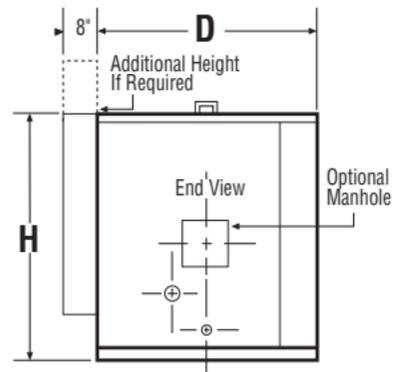
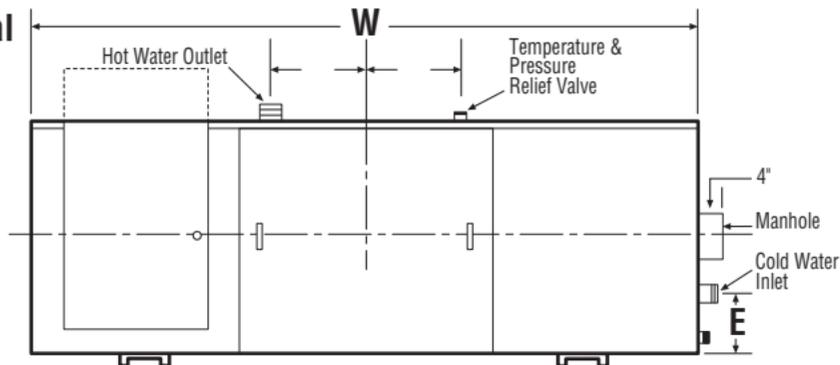
- Meets ASHRAE 90.1b (Current Edition) Energy Efficiency Standards
- Immersion Thermostats
- Incoloy Elements
- Internal Fusing
- Enamel Lined Tank
- Built-in Safety Drain Pan
- Magnesium Anode Rods
- Galvanized Jacket
- Key Hinged Door with Lock
- Temperature and Pressure Relief Valve
- 180°F Temperature Operation
- Hand Hole Cleanout
- Channel Iron Skid Base
- 125 psi ASME Construction
- UL Listed
- Three Year Limited Warranty

## Optional Features

- Alarm Bell
- Time Clock (Separate Mounting)
- Electronic Sequencer
- Combination Temperature and Pressure Gauge
- Low or High Pressure Switch
- Pilot Lights
- Manual Limiting Switches
- Safety Door Interlock
- Low Water Cut-Off
- Shunt Trip Disconnect
- Man Hole Cleanout (250 Gallons and Larger)
- 150 psi ASME Construction



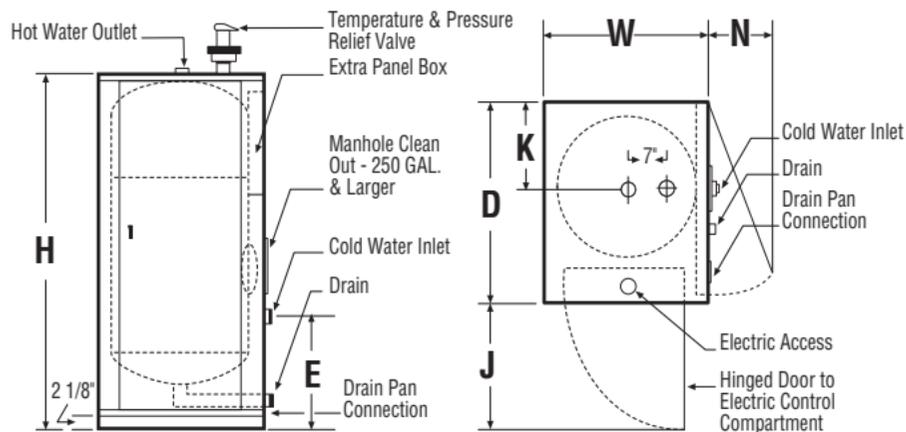
## Horizontal Models



**1,000-2,500 GALLONS**

Extra panel box may be necessary for higher than 72 kW. Consult factory.

## Vertical Models



**1,000-2,500 GALLONS**

Extra panel box may be necessary for 72kW and above on 208V and 144kW and above on 480V



# Commercial Electric Brute Horizontal & Vertical Models

146/147



## Horizontal Square Electric Models

DIMENSIONS IN INCHES

ELECTRIC MODELS

Model Number	Gal. Cap.	Max. kW Load	W	D	H	E	Water Conn. Inlet	Water Conn. Outlet	Approx. Shipping Weight (lbs)
H-200-(kW)	200	180	78	34 <sup>1</sup> / <sub>4</sub>	37	12	2	2	1370
H-250-(kW)	250	225	90 <sup>1</sup> / <sub>4</sub>	36 <sup>1</sup> / <sub>4</sub>	39	13	2	2	1450
H-300-(kW)	300	270	78 <sup>1</sup> / <sub>4</sub>	42 <sup>1</sup> / <sub>4</sub>	45	14 <sup>3</sup> / <sub>4</sub>	2	2	1530
H-400-(kW)	400	360	78 <sup>1</sup> / <sub>4</sub>	48 <sup>1</sup> / <sub>4</sub>	52	16	2	2	1750
H-500-(kW)	500	450	90 <sup>3</sup> / <sub>4</sub>	48 <sup>1</sup> / <sub>4</sub>	52	16	2	2	1860
H-600-(kW)	600	540	90 <sup>3</sup> / <sub>4</sub>	54 <sup>1</sup> / <sub>4</sub>	58	13 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	2	2340
H-800-(kW)	750	720	102 <sup>1</sup> / <sub>4</sub>	54 <sup>1</sup> / <sub>4</sub>	58	13 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	2	2850
H-1000-(kW)	1000	900	138 <sup>1</sup> / <sub>4</sub>	54 <sup>1</sup> / <sub>4</sub>	57 <sup>1</sup> / <sub>2</sub>	12 <sup>3</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>2</sub>	2	3040
H-1250-(kW)	1250	900	130 <sup>1</sup> / <sub>4</sub>	60 <sup>1</sup> / <sub>4</sub>	63 <sup>1</sup> / <sub>2</sub>	13	3	3	3750
H-1500-(kW)	1500	900	126 <sup>1</sup> / <sub>4</sub>	66 <sup>1</sup> / <sub>4</sub>	72 <sup>1</sup> / <sub>2</sub>	12 <sup>1</sup> / <sub>2</sub>	3	3	4340
H-2000-(kW)	2000	900	138 <sup>1</sup> / <sub>4</sub>	72 <sup>1</sup> / <sub>4</sub>	75 <sup>1</sup> / <sub>2</sub>	13 <sup>1</sup> / <sub>2</sub>	3	3	4580
H-2500-(kW)	2500	900	144 <sup>1</sup> / <sub>4</sub>	78 <sup>1</sup> / <sub>4</sub>	81 <sup>1</sup> / <sub>2</sub>	13 <sup>3</sup> / <sub>4</sub>	3	3	6060

# Vertical Square Electric Models

DIMENSIONS IN INCHES

## ELECTRIC MODELS

Model Number	Gal. Cap.	Max. kW Load	W	D	H	E	J	K	N	Water Connections	Approx. Shipping Weight (lbs)
V-1250-(kW)	1250	900	64 <sup>1</sup> / <sub>2</sub>	64 <sup>1</sup> / <sub>2</sub>	132 <sup>1</sup> / <sub>2</sub>	23 <sup>1</sup> / <sub>4</sub>	48	32 <sup>3</sup> / <sub>16</sub>	48	3	3560
V-1500-(kW)	1500	900	70 <sup>1</sup> / <sub>2</sub>	70 <sup>1</sup> / <sub>2</sub>	128 <sup>1</sup> / <sub>2</sub>	25 <sup>1</sup> / <sub>4</sub>	46	35 <sup>3</sup> / <sub>16</sub>	46	3	4120
V-2000-(kW)	2000	900	76 <sup>1</sup> / <sub>2</sub>	76 <sup>1</sup> / <sub>2</sub>	140 <sup>1</sup> / <sub>2</sub>	27 <sup>1</sup> / <sub>4</sub>	60	38 <sup>3</sup> / <sub>16</sub>	60	3	4350
V-2500-(kW)	2500	900	82 <sup>1</sup> / <sub>2</sub>	82 <sup>1</sup> / <sub>2</sub>	146 <sup>1</sup> / <sub>2</sub>	29	66	41 <sup>3</sup> / <sub>16</sub>	66	3	5750

NOTE: Refer to pages 148/149 for GPH recovery information.



# GPH Recovery Table for kW Input

148/149



kW Input	Gallon Per Hour Recovery Capacities				
	40°F	60°F	90°F	100°F	140°F
1	10.3	6.9	4.6	4.1	2.9
1.5	15.5	10.3	6.9	6.2	4.4
2	20.7	13.8	9.2	8.3	5.9
2.5	25.8	17.2	11.5	10.3	7.4
3	31.1	20.7	13.8	12.4	8.9
3.5	36.2	24.1	16.1	14.5	10.3
4	41.4	27.6	18.4	16.5	11.8
4.5	46.5	31.1	20.7	18.6	13.3
5	51.7	34.5	23.1	20.7	14.7
5.5	56.9	37.9	25.3	22.7	16.2
6	62.1	41.4	27.6	24.8	17.7
9	93.1	62.1	41.4	37.2	26.5
12	124	83	55	50	35
13.5	140	93	62	56	40
15	155	103	69	62	44
18	186	124	83	74	53
24	248	165	110	99	71
27	279	186	124	112	80

# GPH Recovery Table

kW Input	Gallon Per Hour Recovery Capacities				
	40°F	60°F	90°F	100°F	140°F
30	310	207	138	124	89
36	372	248	165	149	106
45	465	310	207	186	133
54	558	372	248	223	160
81	838	558	372	335	239
144	1489	993	662	596	425
162	1675	1117	744	670	479
180	1861	1241	827	744	532
225	2326	1550	1033	931	665
270	2792	1861	1241	1117	798
360	3722	2482	1654	1489	1063
396	4094	2730	1820	1638	1170
450	4653	3102	2068	1861	1329
540	5583	3722	2482	2233	1595
630	6514	4343	2895	2606	1861
720	7444	4963	3309	2978	2127
900	9306	6204	4136	3722	2659



# Commercial PowerStor Series<sup>®</sup> Single-Wall Indirect Models

150/151



- Heat Exchanger - Single Wall 1½" O.D. Enamel Coated (Vitraglas<sup>®</sup>) Steel Coil
- Vitraglas<sup>®</sup> Lining
- Factory-Installed Hydrojet<sup>®</sup> Total Performance System
- Water Connections – 1" NPT Factory Installed True Dielectric Fittings
- 1" NPT Connection for Boiler Supply and Return
- 2" Non-CFC Foam Insulation
- Immersion Type Aquastat – Accurate Temperature Control
- Three Protective Aluminum Anode Rods
- T&P Relief Valve Included
- Low Restriction Brass Drain Valve
- 5 Year Tank and Heat Exchanger Warranty

- AHRI Certified Water Heater Ratings
- Stand-by Heat Loss Is Less than 1/2°F per Hour (ASHRAE 90.1b Current Standard)

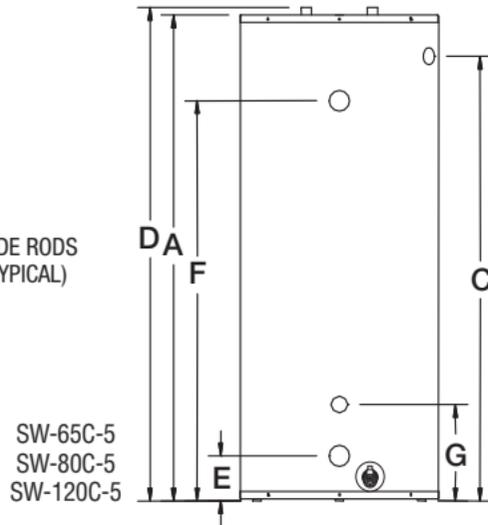
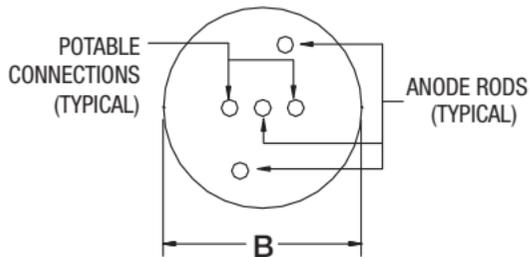


Photo of SW-65C-5

# PowerStor Series® Single-Wall Indirect Models

DIMENSIONS IN INCHES

		A	B	C	D	E	F	G	
Model Number	Gallon Capacity	Floor to Heater Top	Jacket Dia.	Floor to T&P Conn.	Floor to Water Conn.	Floor to Exchanger Outlet	Floor to Exchanger Inlet	Floor to Aquastat	Approx. Shipping Weight (lbs)
SW-65C-5	58	59 <sup>1</sup> / <sub>4</sub>	22	53 <sup>1</sup> / <sub>8</sub>	60	5 <sup>3</sup> / <sub>8</sub>	47 <sup>3</sup> / <sub>4</sub>	11 <sup>1</sup> / <sub>2</sub>	273
SW-80C-5	73	59	24	52 <sup>7</sup> / <sub>8</sub>	59 <sup>3</sup> / <sub>4</sub>	5 <sup>3</sup> / <sub>8</sub>	47 <sup>3</sup> / <sub>4</sub>	11 <sup>1</sup> / <sub>2</sub>	300
SW-120C-5	114	62 <sup>1</sup> / <sub>2</sub>	28 <sup>1</sup> / <sub>4</sub>	55 <sup>3</sup> / <sub>4</sub>	63 <sup>1</sup> / <sub>4</sub>	6 <sup>3</sup> / <sub>8</sub>	48 <sup>3</sup> / <sub>4</sub>	11 <sup>1</sup> / <sub>2</sub>	422

## DOE Water Heater Performance

Model Number	Maximum First Hour Rating (Gal.) @ 140°F 115°F		Approximate Boiler Output Needed for Rating (BTU/Hr.)
	140°F	115°F	
SW-65C-5	534	820	420,000
SW-80C-5	546	834	420,000
SW-120C-5	583	871	420,000

Note: Pressure Drop across commercial models is 2.3 ft w.c. at 12 gpm for 200°F Boiler Supply.

## AHRI Water Heater Ratings

Model Number	First Hour Delivery	Continuous Draw Rating @ 135°F (Gal./Hr.)	Standby Heat Loss (°F/Hr.)	Heat Req. Rate (BTU/Hr.)	Heat Source Flow Rate (Gal./Min.)
SW-65C-5	405	370	0.7	245,000	14.0
SW-80C-5	415	370	0.6	245,000	14.0
SW-120C-5	445	370	0.4	245,000	14.0

Note: These certified ratings were obtained with a heat source output rate and flow rate as specified and a 180°F boiler water supply temperature. Other results will be obtained under different conditions.



# Commercial Jacketed Storage Tank Models

152/153



- Vitraglas® Lining
- Optional ASME Construction Available
- 2" Non-CFC Foam Insulation
- Water Connections – 2" NPT Factory-Installed True Dielectric Fittings (M-3-ST120R5A and M-3-ST200R5A Have 2½" Connections)
- Rear Connection – 2" NPT Spud Allows for Rear Water Connection (M-3-ST120R5 and M-3-ST120R5A only)
- Hand Hole Cleanout (M-3-ST120R5 Has Optional Hand Hole Cleanout)
- Two Magnesium Anode Rods
- Steel Tank
- 1" Side T&P Valve Opening
- 3/4" NPT Aquastat Connection
- Low Restriction Brass Drain Valve

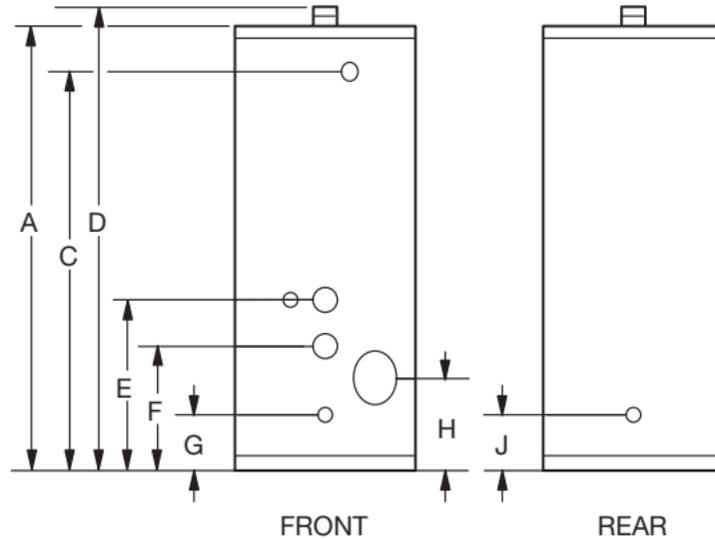
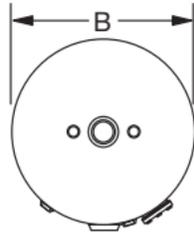


Photo of  
M-3-ST80R5

# Jacketed Storage Tank Models

DIMENSIONS IN INCHES

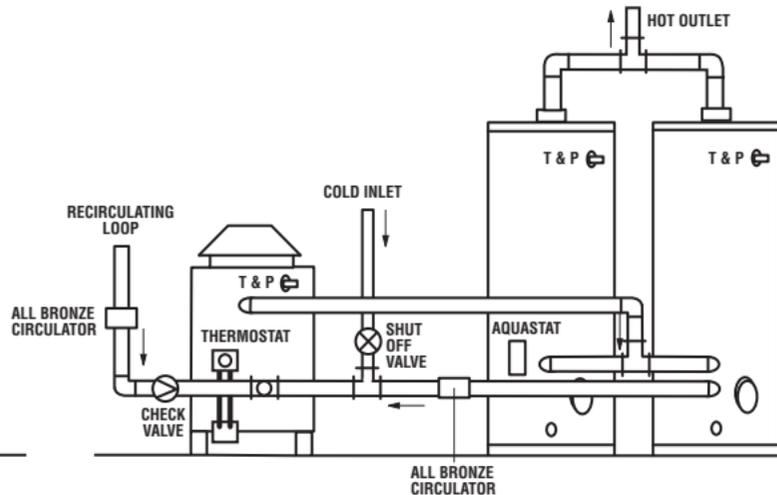
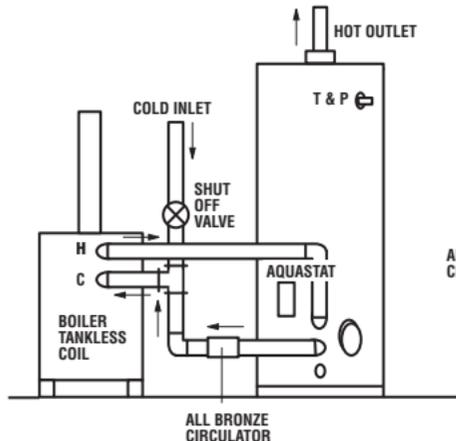
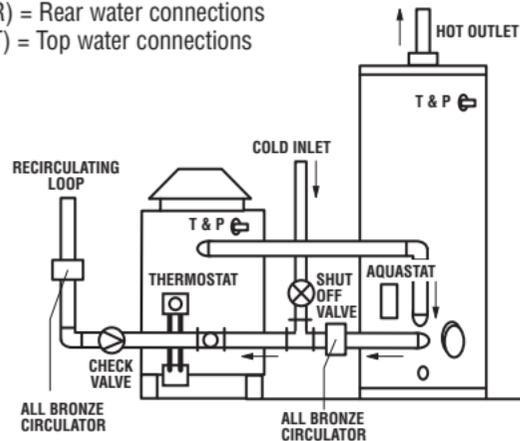
Model Number	Gallon Capacity	A Floor to Heater Top	B Jacket Dia.	C Floor to T&P Valve	D Floor to Hot Water Conn.	E Floor to Aquastat Top Circ. Conn.	F Floor to Bottom Circ. Conn.	G Floor to Drain Valve	H Floor to Hand Hole Cleanout	J Floor to Rear Water Conn.	Water Conn. Size†	Approx. Shipping Weight (lbs)
M-3-ST80R5	80	58 <sup>3</sup> / <sub>4</sub>	24	52 <sup>1</sup> / <sub>2</sub>	59 <sup>3</sup> / <sub>4</sub>	14 <sup>1</sup> / <sub>4</sub>	9 <sup>1</sup> / <sub>4</sub>	4 <sup>3</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>4</sub>	—	2(F&T)	192
M-3-ST80R5A*	80	58 <sup>3</sup> / <sub>4</sub>	24	52 <sup>1</sup> / <sub>2</sub>	59 <sup>3</sup> / <sub>4</sub>	14 <sup>1</sup> / <sub>4</sub>	9 <sup>1</sup> / <sub>4</sub>	4 <sup>3</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>4</sub>	—	2(F&T)	278
M-3-ST120R5	119	62 <sup>1</sup> / <sub>2</sub>	28	55 <sup>3</sup> / <sub>4</sub>	63 <sup>1</sup> / <sub>2</sub>	14 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>2</sub>	5	—	9 <sup>1</sup> / <sub>2</sub>	2(F&T), 2(R)	312
M-3-ST120R5A*	119	62 <sup>1</sup> / <sub>2</sub>	28	55 <sup>3</sup> / <sub>4</sub>	63 <sup>1</sup> / <sub>2</sub>	14 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>2</sub>	5	7 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub> (F&T), 2(R)	366
M-3-ST200R5A*	200	77	32	66	78	16 <sup>1</sup> / <sub>4</sub>	11 <sup>1</sup> / <sub>4</sub>	6 <sup>3</sup> / <sub>4</sub>	9 <sup>1</sup> / <sub>4</sub>	—	2 <sup>1</sup> / <sub>2</sub> (F&T)	541

\*Meets ASME Code

† (F) = Front water connections

(R) = Rear water connections

(T) = Top water connections





# Commercial Large Volume Jacketed Storage Tank Models

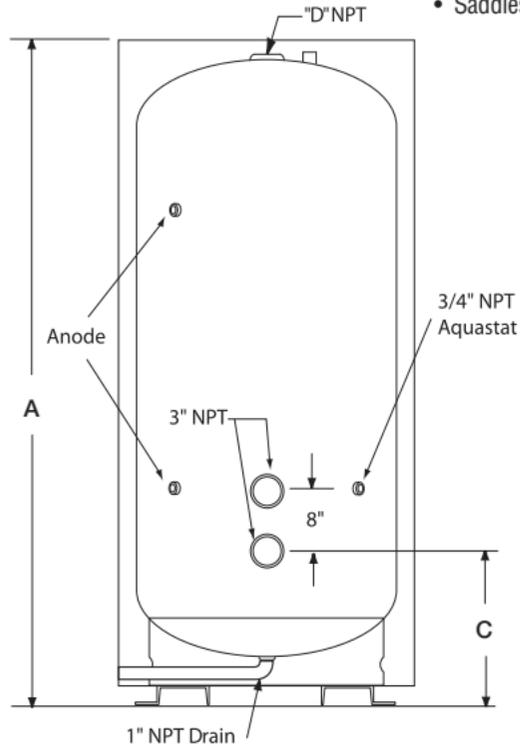
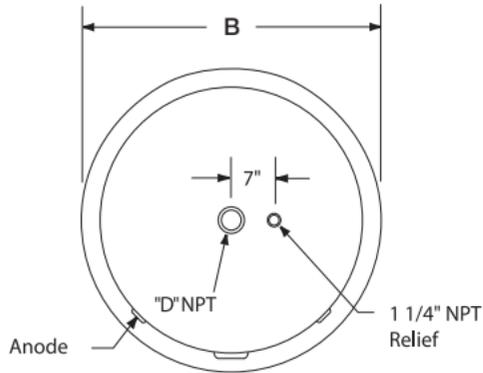
154/155



- Vertical or Horizontal Construction
- Water Connections — Two Female 3" NPT Fittings Are Located on the Front for Ease of Service and Installation
- ASME Construction
- Available with Vitraglas® Lining, Double Vitraglas® Lining, Epoxy Lining, or Stainless Steel Tank
- Hydrojet® HC — Optional
- 2" High Density Insulation
- Protective Magnesium Anode Rod(s)
- ASME Tested and Certified to 125 psi
- Steel Jacket
- Designed for Storage of Potable Water up to 180°F
- 5 Year Tank Warranty



Photo of  
NV310JG5A



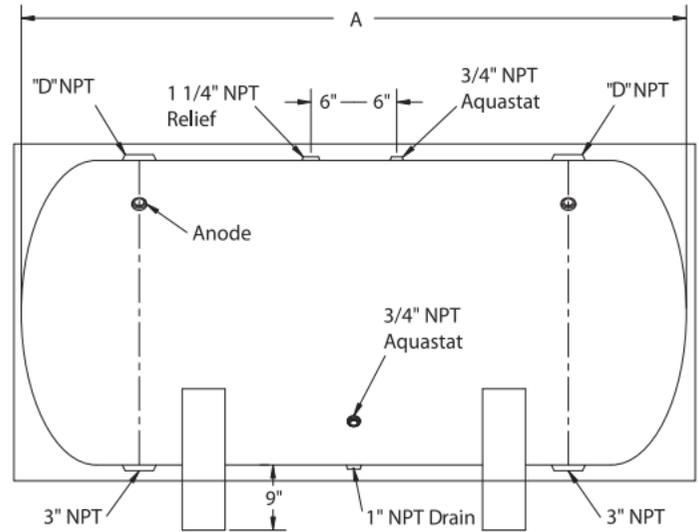
**Factory Options Include:**

- Manway (12" by 16")
- Hand Hole (4" by 6")
- Saddles

- Extra Tappings (1"-4")  
**Sizes must be specified when ordering**

- Flanged Connections (3"-10")
- Stainless Steel Construction
- 150 psi (add suffix -5)
- Hydrojet<sup>®</sup> HC (add suffix -1)

Manway inspection port is provided as standard equipment on epoxy lining.  
**Options must be specified when ordering**





# Commercial Large Volume Jacketed Storage Tank Models

156/157



## Vertical and Horizontal Models

DIMENSIONS IN INCHES

Model Number	Actual U.S. Capacity Gal.	Nominal U.S. Capacity Gal.	A		B	C	Hot Water Outlet Conn.	Approx. Shipping Weight (lbs) @125 PSI
			Vert. Height	Horiz. Length	Jacket Dia.	Floor to Inlet		
N†175J*5A	175	193	71	67	34	19½	2½	438
N†210J*5A	210	229	83	79	34	19½	2½	493
N†240J*5A	240	260	93	89	34	19½	2½	539
N†280J*5A	280	303	107	103	34	19½	2½	603
N†285J*5A	285	318	80	76	40	21	2½	667
N†310J*5A	310	344	86	82	40	21	2½	710
N†320J*5A	320	340	119	115	34	19½	2½	658
N†340J*5A	340	375	93	89	40	21	2½	760
N†360J*5A	360	397	98	94	40	21	2½	796
N†415J*5A	415	449	110	106	40	21	2½	881
N†435J*5A	435	486	89	85	46	22½	3	917
N†453J*5A	453	504	89	88	46	22½	3	942
N†465J*5A	465	502	122	118	40	21	2½	967

# Vertical and Horizontal Models

DIMENSIONS IN INCHES

Model Number	Actual U.S. Capacity Gal.	Nominal U.S. Capacity Gal.	A		B	C	Hot Water Outlet Conn.	Approx. Shipping Weight (lbs) @125 PSI
			Vert. Height	Horiz. Length	Jacket Dia.	Floor to Inlet		
N†500J*5A	500	572	81	77	52	24	3	1176
N†505J*5A	505	558	101	97	46	22 <sup>1</sup> / <sub>2</sub>	3	1017
N†515J*5A	515	555	134	130	40	21	2 <sup>1</sup> / <sub>2</sub>	1053
N†575J*5A	575	630	113	109	46	22 <sup>1</sup> / <sub>2</sub>	3	1117
N†580J*5A	580	658	92	88	52	24	3	1310
N†645J*5A	645	702	125	121	46	22 <sup>1</sup> / <sub>2</sub>	3	1217
N†675J*5A	675	752	104	100	52	24	3	1456
N†720J*5A	720	774	137	133	46	22 <sup>1</sup> / <sub>2</sub>	3	1317
N†765J*5A	765	846	116	112	52	24	3	1602
N†790J*5A	790	846	147	143	46	22 <sup>1</sup> / <sub>2</sub>	3	1400
N†840J*5A	840	940	128	124	52	24	3	1748
N†875J*5A	875	981	107	103	58	27 <sup>1</sup> / <sub>2</sub>	3	1776
N†1040J*5A	1040	1128	149	145	52	24	3	2003
N†1245J*5A	1245	1395	124	120	64	29	3	3326
N†1530J*5A	1530	1689	148	144	64	27	3	3541

† = Tank Orientation

V = Vertical

H = Horizontal

Saddles required for horizontal models.

Use Bare Tank Diameter for saddle sizes.

\* = Tank Lining/Construction

G = Vitraglas®

D = Double Vitraglas®

E = Epoxy

S = Stainless Steel

Ten Year Warranty with Double Vitraglas® Lining

One Year Warranty with Epoxy Lining

Example of full model number when ordering (NV240JG5A)



# Commercial Large Volume Unjacketed Storage Tank Models

158/159



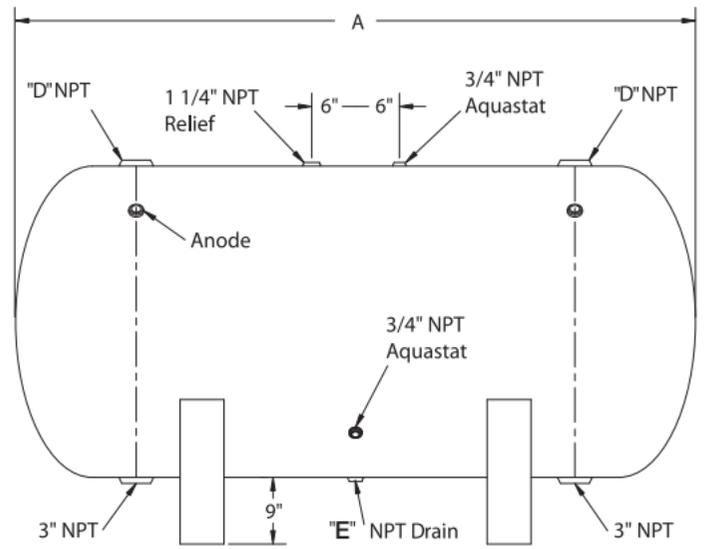
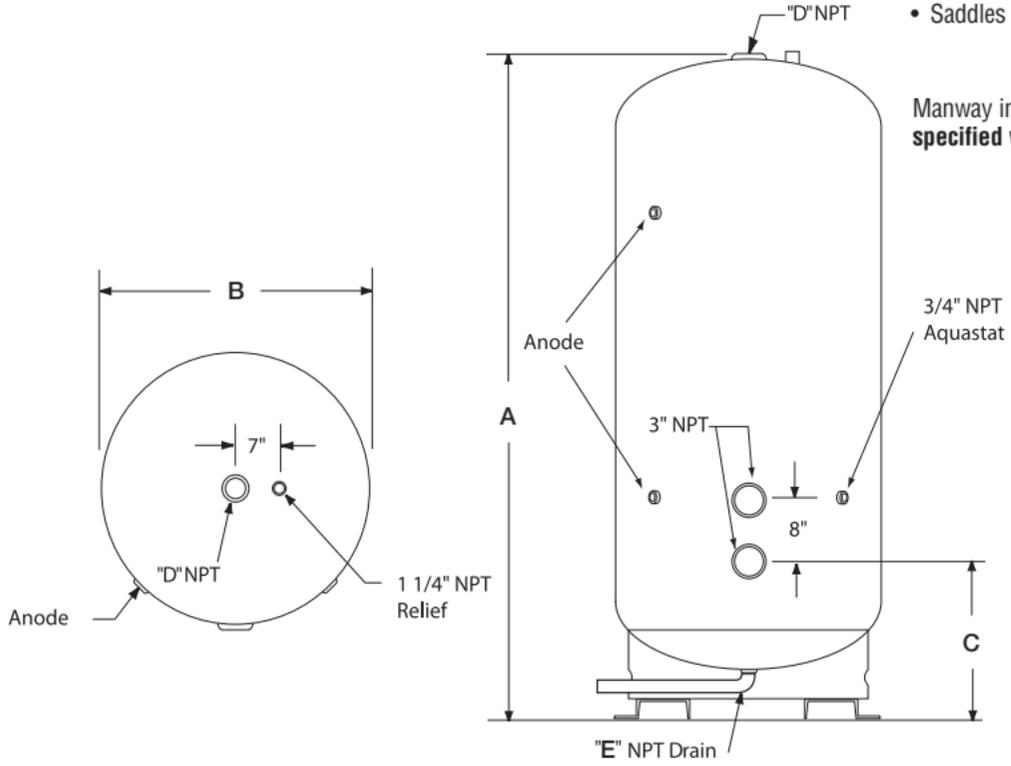
- ASME Construction
- Available with Vitraglas® Lining, Double Vitraglas® Lining, Epoxy Lining, or Stainless Steel Tank
- Hydrojet® HC — optional
- Magnesium Anode Rod(s) — for Protection and Longer Service Life
- ASME Tested and Certified to 125 psi
- Red Oxide Primer — Completely Covers Exterior of Tank
- 6" Skirt Height (Vertical Tank) Allows for Easier Access to Areas Under the Tank
- Lifting Lugs
- Designed for Storage of Potable Water up to 180°F
- 5 Year Tank Warranty



**Factory Options Include:**

- Manway (12" by 16")
- Hand Hole (4" by 6")
- Saddles
- Extra Tappings (1"-4")
- Flanged Connections (3"-10")
- Stainless Steel construction
- 150 psi (add suffix -5)
- Hydrojet® HC (add suffix -1)

Manway inspection port is provided as standard equipment on epoxy lining. **Options must be specified when ordering**





# Commercial Large Volume Unjacketed Storage Tank Models

# 160/161



## Vertical and Horizontal Models

DIMENSIONS IN INCHES

Meet or exceed ASHRAE 90.1b (current standard)

Model Number	Actual U.S. Capacity Gal.	Nominal U.S. Capacity Gal.	A		B	C	D	E	Approx. Shipping Weight (lbs) @125 PSI
			Vert. Height	Horiz. Length	Jacket Dia.	Floor to Return Conn.	Hot Water Outlet Conn.	Drain Valve	
N†175N*5A	175	193	67	63	30	17½	2½	1	303
N†210N*5A	210	229	79	75	30	17½	2½	1	347
N†240N*5A	240	260	89	85	30	17½	2½	1	383
N†280N*5A	280	303	103	99	30	17½	2½	1	433
N†285N*5A	285	318	76	45	36	19	2½	1	550
N†310N*5A	310	344	82	78	36	19	2½	1	527
N†320N*5A	320	340	115	111	30	17½	2½	1	476
N†340N*5A	340	375	89	85	36	19	2½	1	569
N†360N*5A	360	397	94	90	36	19	2½	1	559
N†415N*5A	415	449	106	102	36	19	2½	1	671
N†435N*5A	435	486	85	81	42	20½	3	1	695
N†453N*5A	453	504	88	51	42	20½	3	1	805
N†465N*5A	465	502	118	114	36	19	3	1	743
N†500N*5A	500	572	77	73	48	22	3	1	928
N†505N*5A	505	558	97	51	42	20½	3	1	874
N†515N*5A	515	555	130	126	36	19	2½	1	815
N†575N*5A	575	630	109	105	42	20½	3	1	863
N†580N*5A	580	658	88	84	48	22	3	1	1045

## Vertical and Horizontal Models

DIMENSIONS IN INCHES

Model Number	Actual U.S. Capacity Gal.	Nominal U.S. Capacity Gal.	A		B	C	D	E	Approx. Shipping Weight (lbs) @125 PSI
			Vert. Height	Horiz. Length	Jacket Dia.	Floor to Return Conn.	Hot Water Outlet Conn.	Drain Valve	
N†645N*5A	645	702	121	117	42	20½	3	1	947
N†675N*5A	675	752	100	96	48	22	3	1	1173
N†720N*5A	720	774	133	129	42	20½	3	1	1031
N†765N*5A	765	846	112	108	48	22	3	1	1301
N†790N*5A	790	846	143	139	42	20½	3	1	1101
N†840N*5A	840	940	124	120	48	22	3	1	1428
N†1040N*5A	1040	1128	145	141	48	22	3	1	1652
N†1340N*5A	1340	1457	153	147	54	25½	3	1½	2182
N†1820N*5A	1820	1983	168	168	60	27	3	1½	3110
N†2105N*5A	2105	2276	192	186	60	27	3	1½	3516
N†2395N*5A	2395	2570	216	210	60	27	3	1½	3922
N†2700N*5A	2700	2961	174	168	72	30	3	1½	3851
N†3115N*5A	3115	3384	198	192	72	30	3	1½	4338
N†3530N*5A	3530	3807	222	216	72	30	3	1½	4825
N†4050N*5A	4045	4462	192	93	84	33	3	1½	6009
N†4120N*5A	4120	4406	256	250	72	30	3	1½	5516
N†5695N*5A	5695	6141	262	256	84	33	3	1½	7994

† = Tank Orientation

V = Vertical

H = Horizontal

Saddles required for horizontal models.

Use Bare Tank Diameter for saddle sizes.

\* = Tank Lining/Construction

G = Vitraglas®

D = Double Vitraglas®

E = Epoxy

S = Stainless Steel

Ten Year Warranty with Double Vitraglas® Lining

One Year Warranty with Epoxy Lining

Example of full model number when ordering (NV175NG5A)



# Commercial Large Volume Vertical Topcoat Storage Tank Models

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- ASME construction
- Bradford White tanks with sprayed-on rigid insulation with acrylic topcoat exceeds ASHRAE 90.1 requirements with 2.25" of high-density polyurethane foam with an "R" value of R-16. SPF meets requirements for California Title 24. Bradford White spray foam insulation has the best fire spread rating with a class I foam with less than a 25-flame spread rating suitable for boiler room applications.
- The 100% acrylic topcoat is formulated for applications over spray polyurethane foam and is designed to withstand extreme weather and a full range of environmental conditions.
- The two component polyurethane foam is applied at ambient temperatures, directly to the vessel in the desired thickness. The 2-coat topcoat is then applied from a high-pressure spray gun and allowed to dry between applications.
- Alternative for insulated and steel jacket
- Any tank size or shape can be insulated
- Field repairable



### Spray Polyurethane Foam:

Specific Gravity: 1.17 – 1.19  
Viscosity: 800 – 1300  
Density: @ 2" 2.10 – 2.35  
@ 4" 1.88 – 1.99

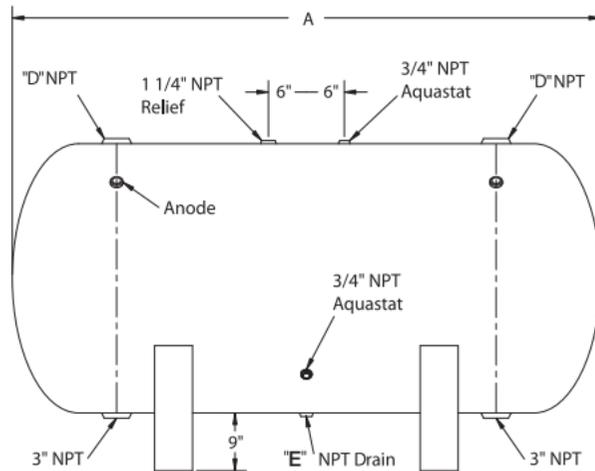
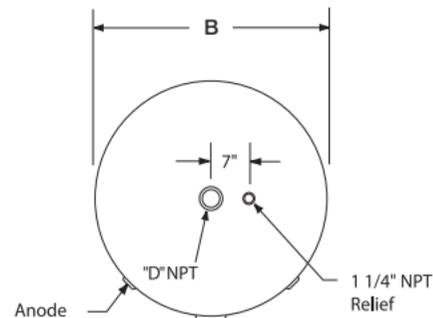
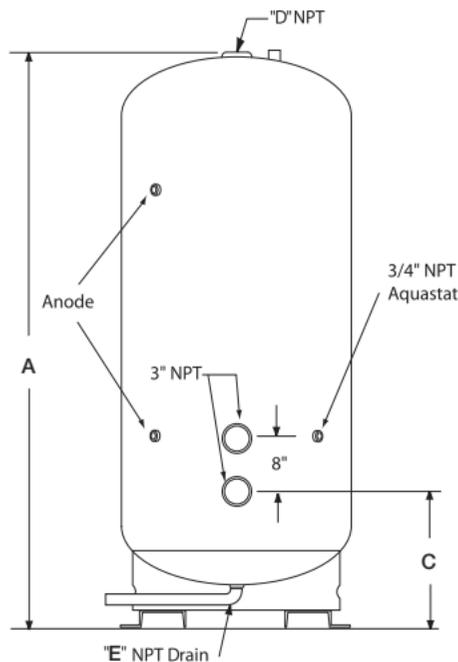
Closed Cell Content: >90%  
K-Factor, initial: 0.155 – 0.170  
Permeance: 2.91 (perms)  
2.99 (perm inch)

Dimensional Stability: +3.3 to +8.2 - Dry Age 28 days (158°F, Dry)  
-0.37 to -0.96 - Freeze 14 day (-20°F)

Flame Spread: 25 - ASTM E-84  
Smoke Development: 450  
R Value: 7.2/ inch  
Max. Thickness: 4"

### Acrylic Coating:

Topcoat: 2 coats white, 25 mils  
Texture: Smooth  
Grade: Spray or Roll  
Base: 100% Acrylic  
Solids by weight: 66% (+/-3)  
Solids by volume: 55% (+/-3)  
Weight per gallon: 11.65 (+/-2)  
Tensile Strength: 300 psi (+/-25)  
Elongation: 260% (+/-25)  
Durometer hardness: 62 Shore A (+/-2)  
Tear Resistance: 85 lbs/ in.  
Permeance: 11 U.S. Perms @ 20 mils  
Viscosity: 110 K.U. (+/-8)  
Codes/ Approvals: Energy Star, ICC, UL, ASTM D6083  
Reflectivity: New 85%, Aged 78%  
Emmissivity: .89





# Commercial Large Volume Vertical Topcoat Storage Tank Models

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## Vertical and Horizontal Energy Saver Models

DIMENSIONS IN INCHES

Model Number	Actual U.S. Capacity Gal.	Nominal U.S. Capacity Gal.	A		B	C	D	E	Approx. Shipping Weight (lbs) @125 PSI
			Vert. Height	Horiz. Length	Jacket Dia.	Floor to Return Conn.	Hot Water Outlet Conn.	Drain Valve	
N†175T*5A	175	193	69	65	35	17½	2½	1	303
N†210T*5A	210	229	81	77	35	17½	2½	1	347
N†240T*5A	240	260	91	87	35	17½	2½	1	383
N†280T*5A	280	303	105	101	35	17½	2½	1	433
N†285T*5A	285	318	76	45	41	19	2½	1	550
N†310T*5A	310	344	84	80	41	19	2½	1	527
N†320T*5A	320	340	117	113	35	17½	2½	1	476
N†340T*5A	340	375	91	87	41	19	2½	1	569
N†360T*5A	360	397	96	92	35	19	2½	1	559
N†415T*5A	415	449	108	104	41	19	2½	1	671
N†435T*5A	435	486	87	83	47	20½	3	1	695
N†465T*5A	465	502	120	116	41	19	3	1	743
N†500T*5A	500	572	79	75	53	22	3	1	928
N†515T*5A	515	555	132	128	41	19	2½	1	815
N†575T*5A	575	630	111	107	47	20½	3	1	863
N†580T*5A	580	658	90	86	53	22	3	1	1045
N†645T*5A	645	702	123	119	47	20½	3	1	947

## Vertical and Horizontal Models

DIMENSIONS IN INCHES

Model Number	Actual U.S. Capacity Gal.	Nominal U.S. Capacity Gal.	A		B	C	D	E	Approx. Shipping Weight (lbs) @125 PSI
			Vert. Height	Horiz. Length	Jacket Dia.	Floor to Return Conn.	Hot Water Outlet Conn.	Drain Valve	
N†675T*5A	675	752	102	98	53	22	3	1	1173
N†720T*5A	720	774	135	131	47	20½	3	1	1031
N†765T*5A	765	846	114	110	53	22	3	1	1301
N†790T*5A	790	846	145	141	47	20½	3	1	1101
N†840T*5A	840	940	126	122	53	22	3	1	1428
N†1040T*5A	1040	1128	147	143	53	22	3	1	1652
N†1340T*5A	1340	1457	153	147	59	25½	3	1½	2182
N†1820T*5A	1820	1983	168	168	65	27	3	1½	3110
N†2395T*5A	2395	2570	216	210	65	27	3	1½	3922
N†3115T*5A	3115	3384	198	192	77	30	3	1½	4338
N†3530T*5A	3530	3807	222	216	77	30	3	1½	4825
N†4120T*5A	4120	4406	256	250	77	30	3	1½	5516
N†5695T*5A	5695	6141	262	256	89	33	3	1½	7994

† = Tank Orientation

V = Vertical

H = Horizontal

Saddles required for horizontal models.

Use Bare Tank Diameter for saddle sizes.

**Ten Year Warranty with Double Vitraglas® Lining**

**One Year Warranty with Epoxy Lining**

Example of full model number when ordering (NV240TG5A)

Note: Please be advised that all tank sizes are available for this topcoat process.

\* = Tank Lining/Construction

G = Vitraglas®

D = Double Vitraglas®

E = Epoxy

S = Stainless Steel

**Factory Options Include:**

- Manway (12" by 16")

- Hand Hole (4" by 6")

- Saddles

- Extra Tappings (1"-4")  
**Sizes must be specified when ordering**

- Flanged Connections (3"-10")

- Stainless Steel construction

- 150 psi (add suffix -5)

- Hydrojet® HC (add suffix -1)

Manway inspection port is provided as standard equipment on epoxy lining. **Options must be specified when ordering**

# Warranty Information

Some states do not allow limitations on warranties. See copy of the Warranty included with the heater.

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	Limited Tank Warranty	Limited Parts Warranty
<b>Residential Gas Models</b>		
Atmospheric Vent High EF Models .....	6 or 10 Year	6 or 10 Year*
Atmospheric Vent Damper Models .....	6 or 10 Year	6 or 10 Year*
Atmospheric Vent Models .....	6 or 10 Year	6 or 10 Year*
Atmospheric Vent High Input Models .....	6 or 10 Year	6 or 10 Year*
Direct Vent Models .....	6 or 10 Year	6 or 10 Year*
Power Vent (TTW®) Models .....	6 or 10 Year	6 or 10 Year*
Power Direct Vent Models .....	6 or 10 Year	6 or 10 Year*
Manufactured Home Models .....	6 or 10 Year	6 Year
Ultra Low NOx Atmospheric Vent Damper Models .....	6 or 10 Year	6 or 10 Year*
Ultra Low NOx Atmospheric Vent Models .....	6 or 10 Year	6 or 10 Year*
Ultra Low NOx Atmospheric High Input Models .....	6 or 10 Year	6 or 10 Year*
Ultra Low NOx Power Vent (TTW®) Models .....	6 or 10 Year	6 or 10 Year*
Ultra Low NOx Power Direct Vent Models .....	6 or 10 Year	6 or 10 Year*
Ultra Low NOx Direct Vent Models .....	6 or 10 Year	6 or 10 Year*
Infiniti Tankless™ Models .....	12 Year†	5 Year
<b>Residential Electric Models</b>		
AeroTherm™ Series Heat Pump Models .....	10 Year	10 Year
Upright and Lowboy Models .....	6 or 10 Year	6 or 10 Year
Wall Hung and Utility Models .....	6 or 10 Year	6 or 10 Year
Powerful Compact® Models .....	6 or 10 Year	6 or 10 Year
Kwickshot® Tankless Models .....	10 Year††	1 Year

	Limited Tank Warranty	Limited Parts Warranty
<b>Commercial Gas Models</b>		
Light Duty Atmospheric Vent High Input Models .....	3 year	1 Year
Light Duty Power Vent (TTW®) Models .....	3 year	1 Year
Light Duty Power Direct Vent Models .....	3 year	1 Year
Light Duty Direct Vent Models .....	3 year	1 Year
Light Duty Ultra Low NOx Atmospheric Vent High Input Models .....	3 year	1 Year
Light Duty Ultra Low NOx Direct Vent Models .....	3 year	1 Year
Light Duty Ultra Low NOx Power Vent (TTW®) Models .....	3 year	1 Year
Light Duty Ultra Low NOx Power Direct Vent Models .....	3 year	1 Year
Commander Series™ Atmospheric Vent Models .....	3 year	1 Year
Electronic Ignition Flue Damper Models .....	3 year	1 Year
Induced Draft Models .....	3 year	1 Year
Millivolt Models .....	3 year	1 Year
eF Series® Ultra High Efficiency Models .....	3 year	1 Year
<b>Commercial Electric Models</b>		
Light Duty Upright and Lowboy Models .....	3 year	1 Year
Light Duty Wall Hung and Utility Models .....	3 year	1 Year
Medium Duty Models .....	3 year	1 Year
Heavy Duty Models .....	3 year	1 Year
ASME Models .....	3 year	1 Year
Brute Models .....	3 year	1 Year
<b>Commercial Storage Tank</b>		
Jacketed Storage Tank Models .....	3 year	1 Year
Large Volume Jacketed Storage Tank Models .....	3 year	1 Year
Large Volume Unjacketed Storage Tank Models .....	3 year	1 Year
Large Volume Vertical Topcoat Storage Tank Models .....	3 year	1 Year

\*10 year parts warranty on warranty upgrade kit models only. †Limited Residential Heat Exchanger Warranty. ††Heater Body Element Assembly.

# Tank Type Serial Number Identification

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## FIRST LETTER - YEAR OF MANUFACTURE

K = 1993	S = 1998	Z = 2003	E = 2008	K = 2013
L = 1994	T = 1999	A = 2004	F = 2009	L = 2014
M = 1995	W = 2000	B = 2005	G = 2010	M = 2015
N = 1996	X = 2001	C = 2006	H = 2011	N = 2016
P = 1997	Y = 2002	D = 2007	J = 2012	

Bradford White uses a 20-year letter designation rotation in serial numbers. Therefore, please be aware that water heaters manufactured 20 years apart will have the same serial number "letter year" designation. (i.e. A = 2004 and 1984).

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## SECOND LETTER - MONTH OF MANUFACTURE

A = JANUARY	E = MAY	J = SEPTEMBER
B = FEBRUARY	F = JUNE	K = OCTOBER
C = MARCH	G = JULY	L = NOVEMBER
D = APRIL	H = AUGUST	M = DECEMBER

Example:

FC12345678 = MARCH, 2009 Production

NA12345678 = JANUARY, 1996 Production

**Visit us on the web at: [www.bradfordwhite.com](http://www.bradfordwhite.com)**

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