

# Bradford White Commercial Water Heaters



Committed to American Manufacturing, Wholesale  
Distribution, and Professional Installation.

  
**BRADFORD WHITE**<sup>®</sup>  
W A T E R   H E A T E R S

[www.bradfordwhite.com](http://www.bradfordwhite.com)

# THE SOLUTION

Bradford White's MAGNUM Series® is an extensive line of commercial water heaters that are used by specifiers, architects, engineers, mechanical contractors, and building owners for practically every type of commercial installation. This all-inclusive line provides solutions to the multitude of challenges faced when specifying, buying, and installing commercial water heating products.

Most importantly, the water heaters showcased in this catalog incorporate features and design characteristics that result in greater durability, more reliable and energy efficient performance, exceptional installation flexibility, and cost savings.

Hotels, motels, restaurants, medical centers, schools, universities, public buildings, apartments, health clubs, stadiums, prisons, office buildings, shopping centers, laundromats, and more - no matter what the call for hot water, there's a MAGNUM Series® solution.



Committed to American Manufacturing, Wholesale Distribution, and Professional Installation.

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**Built to be the Best™**

  
**BRADFORD WHITE®**  
WATER HEATERS  
[www.bradfordwhite.com](http://www.bradfordwhite.com)

# INNOVATION AND INNOVATION



## **Bradford White ICON System™ Intelligent Gas Control**

Bradford White's exclusive gas control technology offers numerous benefits including Advanced Temperature Control for consistent and accurate water temperature levels, Performance Software for enhanced First Hour Delivery ratings and tighter temperature differentials, Intelligent Diagnostics to assist in troubleshooting, and Pilot-On-Indication. The ICON System™ is another competitive advantage for specifiers, professional installers, and wholesalers. Best of all, it's provided at no extra cost.

## **Bradford White ICON HD™ Integrated Commercial Control System**

Bradford White's ICON HD™ is an intelligent integrated control that offers improved reliability and reduced downtime. It combines temperature control, diagnostic codes, and system functions and status into a single digital LCD interface. Available only from Bradford White, it comes standard on our entire line of heavy duty electronic ignition commercial water heaters.



## **Hydrojet® Total Performance System**

The Hydrojet® Total Performance System is a cold-water inlet tube engineered to reduce costly sediment buildup, create more thorough mixing of incoming water with stored water, and reduce extreme temperature differences throughout the tank. Water heaters with the Hydrojet® Total Performance System don't have to work as hard or as often to maintain a maximum supply of hot water at the desired temperature. They heat water faster and use less energy to do it.



## **The Defender Safety System® and Eco-Defender Safety System®**

The Defender Safety System® and Eco-Defender Safety System® are proven combustion technologies that resist the ignition of flammable vapors outside the water heater. They offer outstanding efficiency and a long service life while providing virtually maintenance-free operation. The Eco-Defender uses a radiant burner and an advanced control to cut normal NOx emission by 75% over standard models.





# ND RESOURCES



## RightSpec® Commercial Product Sizing Program

When the industry needed a tool to make sure it sized the right water heater for the job, Bradford White brought out the first user-friendly electronic sizing program. It is the most comprehensive and intuitive program of its kind. You get real time solutions to any commercial installation and more. You can feel confident that when you use RightSpec®, you are specifying it right the first time! Specifiers can also find Revit drawings of our commercial products on Autodesk® Seek and SmartBIM®.

## Phone Apps

Bradford White's RightSpec® Cross Reference, Warranty Check, and eF Series® Efficiency Calculator Apps are available for both Android™ and iOS platform devices. They are intuitive and easy-to-use and help save valuable time in the field. Visit [Bradfordwhite.com](http://Bradfordwhite.com) for full details and download links.



## 24/7 Technical Support Center

Expert support, 24 hours a day, 7 days a week. Our Technical Service and Warranty Support personnel are U.S.-based, right inside our Technical Support facilities in Middleville, Michigan. Each technician goes through a rigorous training program before they take your call. Call Technical Support at 800-334-3393 and Warranty Support at 800-531-2111.

## iTEC® – The International Technical Excellence Center

Bradford White's International Technical Excellence Center (iTEC) is an 18,500 sq. ft. state-of-the-art LEED certified training facility located adjacent to the company's manufacturing facilities in Middleville, MI. The iTEC facility hosts product and sales training events throughout the year for contractors, engineers, wholesale distributors, and sales representatives from across the United States and Canada.



## Certified Low Lead

Bradford White recognizes that our products are an integral part of a residential or commercial water system. We have, therefore, voluntarily had our products tested and certified by CSA International to the federal low lead requirements of the Safe Drinking Water Act.

**Built to be the Best™**

  
**BRADFORD WHITE®**  
WATER HEATERS  
[www.bradfordwhite.com](http://www.bradfordwhite.com)

# GAS MODELS



## STANDARD FEATURES\*

- ICON System™ Control
- Defender Safety System® (50-gallon model only)
- Hydrojet® Total Performance System
- Vitraglas® Lining
- Max-Temp - 180°F
- NSF Construction Available
- Side Connections
- Factory-Installed Heat Traps
- Snap Lock Draft Diverter
- Protective Magnesium Anode Rod
- Low Restriction Brass Drain Valve
- T&P Relief Valve Installed
- Non-CFC Foam Insulation
- 3-Year Limited Tank Warranty—can be upgraded to 5-Year at additional cost

## APPLICATIONS

Fast food restaurants and office buildings

*\*Full descriptions are available in glossary beginning on page 25.*

## Light Duty Atmospheric Vent

Light Duty Atmospheric Vent models are perfect for smaller commercial applications that require more recovery than a residential water heater, but not as much as a larger commercial unit. Each of these models combines energy-saving performance with the durability to withstand the day-to-day demands of commercial water heating. Light Duty Atmospheric Vent models are also available in Ultra Low NOx Eco-Defender Safety System® versions.

## Specifications



Model Number	Capacity U.S. Gal.	Input		Recovery at 100°F Rise* Nat. LP U.S. U.S. GPH GPH		Floor to Vent Conn. in.	Jacket Dia. in.	Vent Size in.	Approx. Shipping Weight lbs.
		Nat. BTU/Hr.	LP BTU/Hr.	Nat. U.S. GPH	LP U.S. GPH				
LG250H653N	48	65,000	61,000	63	59	60	22	4	193
LG155H803N	55	80,000	78,000	78	76	59½	22	4	207
LG275H763N	75	76,000	76,000	74	74	62⅝	24	4	263
LG2100H853N	100	85,000	88,000	82	85	69	28¼	4	424

For additional specifications and/or limitations, please see the installation manual for this product.

All specifications are subject to change without notice.

\*Based on manufacturers rated recovery efficiency.

## STANDARD FEATURES\*

- ICON System™ Control
- Defender Safety System® (50-gallon models only)
- Electronic Ignition
- Powerful and Quiet Blower Motor
- Horizontal and Vertical Venting with PVC, ABS, or CPVC
- Hydrojet®2 Total Performance System
- Vitraglas® Lining
- ¾" NPT Dielectric Waterway Fittings
- Factory-Installed Heat Traps
- Max Temp - 180°F
- NSF Construction Available
- Side Connections
- Protective Magnesium Anode Rod
- Low Restriction Brass Drain Valve
- T&P Relief Valve Installed
- Non-CFC Foam Insulation
- 3-Year Limited Tank Warranty– can be upgraded to 5-Year at additional cost

## APPLICATIONS

Fast food restaurants and office buildings

*\*Full descriptions are available in glossary beginning on page 25.*



# Light Duty TTW® Power Vent

Light Duty TTW® Power Vent units are perfect for applications where installation flexibility is as important as meeting hot water demands. Power vented for positive exhaust, these units can be vented horizontally and vertically up to 180 feet. These extremely long vent lengths solve difficult ventilation challenges. Light Duty Power Vent models are also available in Ultra Low NOx versions.

## Specifications

Model Number	Capacity U.S. Gal.	Input		Recovery at 100°F Rise*		Floor to Vent Conn. in.	Jacket Dia. in.	Vent Size Min. in.	Approx. Shipping Weight lbs.
		Nat. BTU/Hr.	LP BTU/Hr.	Nat. U.S. GPH	LP U.S. GPH				
LG2PV50H653N	48	65,000	58,000	63	56	66 <sup>1</sup> / <sub>8</sub>	22	3	186
LG1PV55H783N	55	78,000	78,000	76	76	64 <sup>9</sup> / <sub>16</sub>	22	3	253
LG2PV75H763N	75	76,000	75,500	74	73	69 <sup>7</sup> / <sub>16</sub>	26	3	252

For additional specifications and/or limitations, please see the installation manual for this product.

All specifications are subject to change without notice.

\*Based on manufacturers rated recovery efficiency.



# GAS MODELS



## Light Duty Direct Vent

Light Duty Direct Vent models are the solution for airtight installations. Utilizing a closed combustion and co-axial concentric (pipe inside a pipe) direct venting system, they are perfect for installations that lack sufficient air for combustion.

They require no electrical power yet still offer sidewall venting. For installation flexibility, venting options include a solid telescoping extension that can accommodate up to eight feet vertically and eight feet horizontally and a flexible vent kit that allows installations from 44" to 100" in total length. Light Duty High Input Direct Vent models are also available in Ultra Low NOx Eco-Defender Safety System® versions.

### STANDARD FEATURES\*

- ICON System™ Control
- Defender Safety System®
- No Electric Power Necessary
- Telescoping Solid Vent and Flexible Vent Kits Available
- Hydrojet® Total Performance System
- Vitraglas® Lining
- ¾" NPT Dielectric Waterway Fittings
- Factory-Installed Heat Traps
- Max Temp - 180°F
- Cast Aluminum Air Intake Boot
- Pedestal Base
- Side Connections
- Protective Magnesium Anode Rod
- Low Restriction Brass Drain Valve
- T&P Relief Valve Installed
- 2" Non-CFC Foam Insulation
- 3-Year Limited Tank Warranty– can be upgraded to 5-Year at additional cost

### APPLICATIONS

Beauty salons, small utility rooms, and closet installations

*\*Full descriptions are available in glossary beginning on page 25.*

### Specifications

Model Number	Capacity U.S. Gal.	Input		Recovery at 100°F Rise*		Floor to Center Line of Vent in.	Jacket Dia. in.	Vent Size in.	Approx. Shipping Weight lbs.
		Nat. BTU/Hr.	LP BTU/Hr.	Nat. U.S. GPH	LP U.S. GPH				
LG2DV50H503N	48	50,000	48,000	47	45	72 <sup>5</sup> /16 min.	22	4/6	217

For additional specifications and/or limitations, please see the installation manual for this product.

All specifications are subject to change without notice.

\*Based on manufacturers rated recovery efficiency.





## STANDARD FEATURES\*

- ICON System™ Control
- Defender Safety System® (50-gallon model only)
- Electronic Ignition
- Closed Combustion Venting System
- Powerful Blower Motor
- Horizontal and Vertical Venting with PVC, ABS, or CPVC
- Optional Concentric Vent Terminal Kit
- Hydrojet® Total Performance System
- Vitraglas® Lining
- Max Temp - 180°F
- NSF Construction Available
- ¾" NPT Dielectric Waterway Fittings
- Side Connections
- Protective Magnesium Anode Rod
- Low Restriction Brass Drain Valve
- T&P Relief Valve Installed
- Non-CFC Foam Insulation
- 3-Year Limited Tank Warranty– can be upgraded to 5-Year at additional cost

## APPLICATIONS

Office buildings, small apartments, and motels

*\*Full descriptions are available in glossary beginning on page 25.*



## Light Duty Power Direct Vent

Light Duty Power Direct Vent models are the solution for installations that lack sufficient combustion air or where an outside wall for ventilation is not readily accessible. All models can vent vertically or horizontally and are also approved for unbalanced, direct-vent closed combustion applications. Unbalanced venting means the air intake pipe doesn't have to be vented on the same external building surface as the exhaust vent. Light Duty Power Direct Vent models are also available in Ultra Low NOx Eco-Defender Safety System® versions.

## Specifications

Model Number	Capacity U.S. Gal.	Input		Recovery at 100°F Rise*		Floor to Vent Conn. in.	Jacket Dia. in.	Vent Size in.	Approx. Shipping Weight lbs.
		Nat. BTU/Hr.	LP BTU/Hr.	Nat. U.S. GPH	LP U.S. GPH				
LG2PDV50H603N	48	60,000	60,000	58	58	69	22	3 or 4	205
LG2PDV75H803N	75	80,000	78,000	77	76	72	26	3 or 4	392

For additional specifications and/or limitations, please see the installation manual for this product. All specifications are subject to change without notice.

\*Based on manufacturers rated recovery efficiency.



# GAS MODELS



## Ultra Low NOx Atmospheric Vent Commander Series™

The Commander Series™ of atmospherically vented, Ultra Low NOx water heaters offers class leading features from top to bottom. First is its overall compact design. The smaller footprint and shorter height allow installation in tighter spaces or where existing venting restricts vertical space. An advanced down-fired, premix power burner automatically regulates for optimum combustion and efficiency. With 82% thermal efficiency and the ICON HD™ Commercial Control System, The Commander Series™ is an excellent solution for an unlimited number of commercial gas installations.

### STANDARD FEATURES\*

- 82% Thermal Efficiency
- ICON HD™ Commercial Control System
- Direct Spark Ignition
- Two Pass Heat Exchanger System
- Pre-Mix Power Burner
- Submerged Combustion Chamber
- Hydrojet® Sediment Reduction System
- Vitraglas® Lining
- Zero Inch Clearance to Combustibles
- Integrated Exhaust System
- Optional Air Intake Ducting
- Hand Hole Cleanout
- Max Temp - 180°F
- NSF Construction Available
- 1 ½" NPT Dielectric Waterway Fittings
- Top and Side Water Connections
- Complies with Current Ultra Low NOx Requirements
- Low Restriction Brass Drain Valve
- T&P Relief Valve Installed – Built-in Alternate T&P Location
- Three Protective Magnesium Anode Rods
- Non-CFC Foam Insulation
- 3-Year Limited Tank Warranty– can be upgraded to 5-Year at additional cost

### APPLICATIONS

Apartments, hotels, schools, and restaurants

*\*Full descriptions are available in glossary beginning on page 25.*

### Specifications

Model Number	Capacity	Input	Recovery GPH at Degree Rise*			Thermal Efficiency	Floor to Vent Conn.	Jacket Dia.	Approx. Shipping Weight
	U.S. Gal.	Nat./LP BTU/Hr.	40°F	100°F	140°F				
UCG-100H-199-3N	100	199,999	493	197	141	82.0	73 1/4	28 1/4	632
UCG-100H-270-3N	100	270,000	665	266	190	82.0	73 1/4	28 1/4	632
UCG-100H-399-3N	98	399,999	994	398	284	82.0	77 1/4	28 1/4	657

For additional specifications and/or limitations, please see the installation manual for this product. All specifications are subject to change without notice.

\*Based on manufacturers rated recovery efficiency.



## STANDARD FEATURES\*

- ICON HD™ Commercial Control System
- Electronic Ignition
- Hydrojet® Sediment Reduction System
- Vitraglas® Lining
- Max Temp - 180°F
- Energy Cut-Off (E.C.O.)
- Hand Hole Cleanout
- NSF Construction Available
- ASME Construction Available on all Models over 199,999 BTU/Hr.
- 1 1/2" NPT Dielectric Waterway Fittings
- Low NOx Models Available
- Protective Magnesium Anode Rod
- T&P Relief Valve Installed
- Non-CFC Foam Insulation
- 3-Year Limited Tank Warranty– can be upgraded to 5-Year at additional cost

## APPLICATIONS

Apartments, cafeterias, and restaurants

\*Full descriptions are available in glossary beginning on page 25.



# ASME & Non-ASME Atmospheric Vent Electronic Ignition

ASME and Non-ASME Atmospheric Vent Electronic Ignition models, featuring the ICON HD™ Commercial Control System, provide solutions to applications with various demands for hot water. With capacities ranging from 38 – 100 gallons and with inputs from 125,000 - 505,000 BTU/Hr., there's a model that will meet most any requirement. Power Vent kits are available for all models.

## Specifications

Model Number	Capacity U.S. Gal.	Input		Recovery GPH at Degree Rise*			Floor to Vent Conn. in.	Jacket Dia. in.	Vent Size in.	Approx. Shipping Weight lbs.	
		Nat. BTU/Hr.	LP BTU/Hr.	40°F	100°F	140°F				STD.	ASME
D-38T-155-3N+	38	155,000	155,000	376	150	107	51	28 1/4	6	438	—
D-75T-125-3N	75	125,000	125,000	303	121	86	72 1/4	28 1/4	5	520	—
D-75T-160-3N	75	160,000	155,000	389	155	111	72 1/4	28 1/4	6	520	—
D-80T-180-3N	80	180,000	180,000	436	175	124	71 7/8	28 1/4	6	540	—
D-80T-199-3N	80	199,999	199,999	485	194	139	71 7/8	28 1/4	6	540	—
D-80T-250-3N(A)	80	250,000	235,000	606	242	173	71 3/8	28 1/4	6	540	590
D-100T-199-3N	98	199,999	199,999	485	194	139	83 3/8	28 1/4	6	610	—
D-100T-250-3N(A)	98	250,000	235,000	606	242	173	83 3/8	28 1/4	6	610	690
D-75T-300-3N(A)	75	300,000	300,000	727	291	208	74 3/8	28 1/4	7	590	645
D-65T-370-3N(A)	65	370,000	370,000	897	359	256	73 1/4	28 1/4	8	665	720
D-65T-399-3N(A)**	65	399,999	399,999	970	388	277	73 1/4	28 1/4	8	665	720
D-80T-425-3N(A)	80	425,000	425,000	1030	412	294	82 3/4	28 1/4	10	750	800
D-80T-505-3N(A)	80	505,000	505,000	1178	489	337	82 3/4	28 1/4	10	750	800
D-100S-199-3N	100	199,999	199,999	485	194	139	76 3/4	28 1/4	6	667	—
D-100S-250-3N(A)	100	250,000	250,000	606	242	173	76 3/4	28 1/4	6	667	702
D-100L-199-3N	100	199,999	199,999	485	194	139	75	30 1/4	6	725	—
D-100L-250-3N(A)	100	250,000	250,000	606	242	173	75	30 1/4	6	725	765
D-100L-270-3N(A)**	100	270,000	270,000	655	262	187	75	30 1/4	6	725	765
D-100L-300-3N(A)	100	300,000	300,000	727	291	208	75 3/8	30 1/4	7	725	765
D-80L-399-3N(A)	80	399,999	375,000	970	388	277	71 1/2	30 1/4	8	800	835
D-80L-450-3N(A)	80	450,000	425,000	1091	436	312	69	30 1/4	10	800	835
D-80L-505-3N(A)	80	505,000	475,000	1224	489	350	69	30 1/4	10	800	835

For additional specifications and/or limitations, please see the installation manual for this product. All specifications are subject to change without notice.

\*Based on manufacturers rated recovery efficiency.



# GAS MODELS



## ASME & Non-ASME Millivolt

ASME & Non-ASME models with Millivolt technology provide high-powered performance while making installations easier and less complicated. Using self-generated power from the pilot and thermopile assembly to operate the flue damper, there's no need to hard wire one for electricity or to locate it near an outlet. The continuous pilot ignition system eliminates "lockout" situations and utilizes a simplified control system for easier operation.

### Specifications

Model Number	Capacity U.S. Gal.	Input		Recovery GPH at Degree Rise*			Floor to Vent Conn. in.	Jacket Dia. in.	Vent Size in.	Approx. Shipping Weight lbs.	
		Nat. BTU/Hr.	LP BTU/Hr.	40°F	100°F	140°F				STD.	ASME
DM-38T-155-3N	38	155,000	155,000	368	147	107	51	28 <sup>1</sup> / <sub>4</sub>	6	438	-
DM-75T-125-3N	75	125,000	125,000	303	121	86	72 <sup>1</sup> / <sub>4</sub>	28 <sup>1</sup> / <sub>4</sub>	5	520	-
DM-75T-160-3N	75	160,000	155,000	378	151	108	72 <sup>1</sup> / <sub>4</sub>	28 <sup>1</sup> / <sub>4</sub>	6	520	-
DM-80T-180-3N	80	180,000	180,000	436	175	124	72 <sup>3</sup> / <sub>8</sub>	28 <sup>1</sup> / <sub>4</sub>	6	540	-
DM-80T-199-3N	80	199,999	190,000	485	194	139	72 <sup>3</sup> / <sub>8</sub>	28 <sup>1</sup> / <sub>4</sub>	6	540	-
DM-80T-250-3N(A)	80	250,000	235,000	606	242	173	72 <sup>3</sup> / <sub>8</sub>	28 <sup>1</sup> / <sub>4</sub>	6	540	590
DM-100T-199-3N	98	199,999	199,999	485	194	139	83 <sup>3</sup> / <sub>8</sub>	28 <sup>1</sup> / <sub>4</sub>	6	610	-
DM-100T-250-3N(A)	98	250,000	235,000	606	242	173	83 <sup>3</sup> / <sub>8</sub>	28 <sup>1</sup> / <sub>4</sub>	6	610	690
DM-100L-199-3N	100	199,999	199,999	485	194	139	75	30 <sup>1</sup> / <sub>4</sub>	6	725	-
DM-100L-250-3N(A)	100	250,000	250,000	606	242	173	75	30 <sup>1</sup> / <sub>4</sub>	6	725	765
DM-100L-270-3N(A)*	100	270,000	-	655	262	187	75	30 <sup>1</sup> / <sub>4</sub>	6	725	765
DM-100S-199-3N	100	199,999	199,999	485	194	139	76 <sup>3</sup> / <sub>4</sub>	30 <sup>1</sup> / <sub>4</sub>	6	667	-
DM-100S-250-3N(A)	100	250,000	250,000	606	242	173	76 <sup>3</sup> / <sub>4</sub>	30 <sup>1</sup> / <sub>4</sub>	6	667	702

For additional specifications and/or limitations, please see the installation manual for this product. All specifications are subject to change without notice.

\*Based on manufacturers rated recovery efficiency.

### STANDARD FEATURES\*

- Millivolt Powered Ignition – No external electric source is required for water heater operation
- Hydrojet® Sediment Reduction System
- Vitraglas® Lining
- Max Temp - 180°F
- Energy Cut-Off (E.C.O.)
- Hand Hole Cleanout
- NSF Construction Available
- ASME Construction Available on all Models over 199,999 BTU/Hr.
- 1 ½" NPT Dielectric Waterway Fittings
- Low NOx Models Available
- Low Restriction Brass Drain Valve
- T&P Relief Valve Installed
- Protective Magnesium Anode Rod
- Non-CFC Foam Insulation
- 3-Year Limited Tank Warranty– can be upgraded to 5-Year at additional cost

### APPLICATIONS

Hotels, dairy barns, and campgrounds

\*Full descriptions are available in glossary beginning on page 25.



## STANDARD FEATURES\*

- ICON HD™ Commercial Control System
- Direct Spark Ignition
- Three Pass Heat Exchanger System
- Pre-Mix Power Burner
- Submerged Combustion Chamber
- Hydrojet® Sediment Reduction System
- Vitraglas® Lining
- Zero Inch Clearance to Combustibles
- Unbalanced Venting
- Optional Concentric Vent Terminal Kit
- Hand Hole Cleanout
- Max Temp - 180°F
- NSF Construction Available
- ASME Construction Available
- 1 1/2" NPT Dielectric Waterway Fittings
- Complies with Current Ultra Low NOx Requirements
- All Models Listed with California Energy Commission
- Low Restriction Brass Drain Valve
- T&P Relief Valve Installed
- Four Protective Magnesium Anode Rods, (EF-100T-399, has Two Powered Anode Rods and One Magnesium Anode Rod)
- 3-Year Limited Tank Warranty– can be upgraded to 5-Year at additional cost

## APPLICATIONS

Apartments, hotels, and commercial kitchens

*\*Full descriptions are available in glossary beginning on page 25.*



(EF-60T-125E-3N,  
EF-100T-150E-3N,  
EF-100T-199E-3N,  
EF-100T-250E-3N,  
EF-100T-399E-3N)

# ASME & Non-ASME Ultra High Efficiency eF SERIES®

The eF Series® utilizes exclusive designs for unsurpassed reliability, efficiency, installation flexibility, and quiet operation. All models can vent vertically or horizontally and are approved for unbalanced, direct-vent closed combustion applications or those applications that require inside air for combustion. Unbalanced venting means the air intake pipe doesn't have to be vented on the same external building surface as the exhaust vent. Foam core pipe is also permitted on the entire venting system. Last but not least, the eF Series® is quiet, a feature building owners, managers, and occupants will appreciate.

## Specifications

Model Number	Capacity U.S. Gal.	Input Nat./LP BTU/Hr.	Recovery GPH at Degree Rise*			Floor to Top of Heater in.	Jacket Dia. in.	Approx. Shipping Weight lbs.
			40°F	100°F	140°F			
EF-60T-125E-3N(A)	60	125,000	364	145	104	57	28 1/4	570
EF-60T-150E-3N(A)	60	150,000	423	169	121	57	28 1/4	570
EF-60T-199E-3N(A)	60	199,999	558	223	159	57	28 1/4	570
EF-100T-150E-3N(A)	100	150,000	450	180	129	77 5/8	28 1/4	900
EF-100T-199E-3N(A)	100	199,999	597	239	171	77 5/8	28 1/4	900
EF-100T-250E-3N(A)	100	250,000	735	294	210	77 5/8	28 1/4	900
EF-100T-300E-3N(A)	100	300,000	836	335	239	77 5/8	28 1/4	900
EF-100T-399E-3N(A)	100	399,999	1127	451	322	77 5/8	28 1/4	950

For additional specifications and/or limitations, please see the installation manual for this product.

All specifications are subject to change without notice.

\*Based on manufacturers rated recovery efficiency.





# GAS MODELS



## STANDARD FEATURES\*

- ICON HD™ Commercial Control System
- Electronic Ignition
- Hydrojet® Sediment Reduction System
- Vitraglas® Lining
- Hand Hole Cleanout
- Max Temp - 180°F
- NSF Construction Available
- ASME Construction Available
- 1 ½" NPT Dielectric Waterway Fittings
- Low Restriction Brass Drain Valve
- T&P Relief Valve Installed
- Protective Magnesium Anode Rods
- Non-CFC Foam Insulation
- 3-Year Limited Tank Warranty– can be upgraded to 5-Year at additional cost

## APPLICATIONS

Schools, prisons, and gymnasiums

*\*Full descriptions are available in glossary beginning on page 25.*

## ASME & Non-ASME Electronic Ignition Induced Draft

Bradford White's commercial Electronic Ignition Induced Draft models were developed in order to provide incredible output and a great volume of hot water from a relatively small commercial water heater. They feature a smaller vent diameter for ease of installation and an automatic flue damper to reduce standby loss and improve overall efficiency.

### Specifications

Model Number	Capacity	Input	Recovery GPH at Degree Rise*			Floor to Top of Heater	Jacket Dia.	Vent Size	Approx. Shipping Weight
	U.S. Gal.	Nat. and LP BTU/Hr.	40°F	100°F	140°F	in.	in.	in.	lbs.
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	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	880

For additional specifications and/or limitations, please see the installation manual for this product. All specifications are subject to change without notice.

\*Based on manufacturers rated recovery efficiency.



## STANDARD FEATURES\*

- Fully Automatic Controls
- Hydrojet® Total Performance System (Upright and Lowboy models only)
- Direct Heat Transfer with Immersed Elements
- Optional Voltage, Phase and kW Conversion Kits Available
- Lowboy Models Provided with Insulation Wrap
- Incoloy Elements Optional
- Vitraglas® Lining
- ¾" NPT Dielectric Waterway Fittings
- Low Restriction Brass Drain Valve (Upright and Lowboy models only)
- T&P Relief Valve Installed
- Protective Magnesium Anode Rod
- Non-CFC Foam Insulation
- 3-Year Limited Tank Warranty– can be upgraded to 5-Year at additional cost

## APPLICATIONS

Strip malls, gas stations, and fast food restaurants

*\*Full descriptions are available in glossary beginning on page 25.*

# ELECTRIC MODELS



## ElectriFLEX™ LD Light Duty

ElectriFLEX™ LD (Light Duty) Commercial Electric models, with their Upright, Lowboy, Utility, and Wall Hung configurations, fit just about any location. These space-saving models are perfect for lower demand commercial applications. All model configurations are field convertible from three phase to single phase and from non-simultaneous to simultaneous operation.

### Upright Model Specifications

Model Number	Capacity U.S. Gal.	Recovery at 100°F Rise* U.S. GPH	Floor to Top of Heater in.	Jacket Dia. in.	Approx. Shipping Weight lbs.
LE230S3-3	30	18	46 <sup>7</sup> / <sub>8</sub>	18	85
LE240S3-3	40	18	46 <sup>7</sup> / <sub>8</sub>	20	103
LE250S3-3	50	18	46 <sup>1</sup> / <sub>2</sub>	22	130
LE265T3-3	65	18	59 <sup>1</sup> / <sub>4</sub>	22	156
LE280T3-3	80	18	59 <sup>1</sup> / <sub>4</sub>	24	183
LE2120T3-3	119	18	62 <sup>3</sup> / <sub>4</sub>	28	305

### Lowboy Model Specifications

Model Number	Capacity U.S. Gal.	Recovery at 100°F Rise* U.S. GPH	Floor to Top of Heater in.	Jacket Dia. in.	Approx. Shipping Weight lbs.
LE120L3-3	19	18	24 <sup>3</sup> / <sub>4</sub>	18	58
LE130L3-3	30	18	29 <sup>3</sup> / <sub>4</sub>	20	86
LE140L3-3	40	18	31 <sup>1</sup> / <sub>4</sub>	22	115
LE150L3-3	47	18	31 <sup>3</sup> / <sub>4</sub>	24	140

### Utility Model Specifications

Model Number	Capacity U.S. Gal.	Recovery at 100°F Rise* U.S. GPH	Floor to Top of Heater in.	Jacket Dia. in.	Approx. Shipping Weight lbs.
LE16U3-1	6	6	16 <sup>1</sup> / <sub>2</sub>	14	33
LE110U3-1	10	6	17 <sup>1</sup> / <sub>2</sub>	16	48
LE112T3-1	12	6	27 <sup>3</sup> / <sub>4</sub>	14	48
LE115U3-1	15	6	20 <sup>1</sup> / <sub>4</sub>	18	55
LE120U3-1	19	6	24 <sup>3</sup> / <sub>4</sub>	18	59

### Wall Hung Model Specifications

Model Number	Capacity U.S. Gal.	Recovery at 100°F Rise* U.S. GPH	Floor to Top of Heater in.	Jacket Dia. in.	Approx. Shipping Weight lbs.
LE16WV3-1	6	6	15 <sup>3</sup> / <sub>4</sub>	14	33
LE112WV3-1	12	6	16 <sup>3</sup> / <sub>8</sub>	18	48
LE120WV3-1	19	6	24 <sup>3</sup> / <sub>8</sub>	18	59

For additional specifications and/or limitations, please see the installation manual for this product. All specifications are subject to change without notice.

\*Based on manufacturers rated recovery efficiency.



# ELECTRIC MODELS



## STANDARD FEATURES\*

- Fully Automatic Controls
- Hydrojet® Total Performance System
- Vitraglas® Lining
- 6-18 kW Inputs
- Incoloy Elements Standard
- Max Temp - 180°F
- NSF Construction Available
- Direct Heat Transfer with Immersed Elements
- 1 ¼" NPT Dielectric Waterway Fittings
- Low Restriction Brass Drain Valve
- T&P Relief Valve Installed
- Protective Magnesium Anode Rod
- Non-CFC Foam Insulation
- 3-Year Limited Tank Warranty– can be upgraded to 5-Year at additional cost

## APPLICATIONS

Beauty salons, quick service restaurants, and office buildings

*\*Full descriptions are available in glossary beginning on page 25.*

## ElectriFLEX™ MD Medium Duty

ElectriFLEX™ MD (Medium Duty) models are design certified by ETL (to UL standards) for field conversions.

This added benefit allows for easy, on-the-job-site conversions of voltage, phase, and kW inputs. Eighteen conversion kits allow 54 model configurations. These units are available in gallon capacities of 50, 80, and 119 with factory inputs ranging from 6-18 kW and provide the added input required by medium duty commercial applications.

### Specifications

Model Number	Capacity U.S. Gal.	Recovery at 100°F Rise*	Floor to Top of Heater in.	Jacket Dia. in.	Approx. Shipping Weight lbs.
E32-50S-3	50	74	46½	22	137
E32-80R-3	80	74	59	24	190
E32-120R-3	119	74	63	28¼	312

For additional specifications and/or limitations, please see the installation manual for this product. All specifications are subject to change without notice.

\*Based on manufacturers rated recovery efficiency.

### Available Conversion Kits

Required Total Heater kW	Element Wattage	Kit Part Numbers		
		208 Volts	240 Volts	480 Volts
6	2000	265-43942-13	265-43942-07	265-43942-01
9	3000	265-43942-14	265-43942-08	265-43942-02
12	4000	265-43942-15	265-43942-09	265-43942-03
13.5	4500	265-43942-16	265-43942-10	265-43942-04
15	5000	265-43942-17	265-43942-11	265-43942-05
18	6000	265-43942-18	265-43942-12	265-43942-06



## STANDARD FEATURES\*

- Fully Automatic Controls
- Single or Three Phase
- 208V, 240V, 277V, 380V, 415V, 480V, or 600V
- Hydrojet® Sediment Reduction System
- Vitraglas® Lining
- ASME or Non-ASME with Surface (SF) or Immersion (CF) Thermostats
- 6-54 kW Inputs
- Incoloy Elements—Standard on Immersion Thermostat with Contactors (CF) Models; Optional on Surface Mount Thermostat (SF) Models
- Hand Hole Cleanout
- Max Temp - 180°F
- NSF Construction Available
- 1 ½" NPT Dielectric Waterway Fittings
- Low Restriction Brass Drain Valve
- T&P Relief Valve Installed
- Two Protective Magnesium Anode Rods
- Non-CFC Foam Insulation
- 3-Year Limited Tank Warranty— can be upgraded to 5-Year at additional cost

## APPLICATIONS

Stadiums, cafeterias, restaurants, and beauty salons

*\*Full descriptions are available in glossary beginning on page 25.*



# MII Surface Mounted Thermostats and Immersion Thermostats with Contactors

MII Energy Saver models set the standard in commercial electric water heaters. They're available in an assortment of capacities and inputs so professionals have the solutions to any challenge. Unprecedented standard features like the Hydrojet® Sediment Reduction System ensure long-lasting, top performance.

## Specifications

Model Number	Capacity U.S. Gal.	Floor to Top of Heater in.	Jacket Dia. in.	Approx. Shipping Weight lbs.	
				STD.	ASME
M-II-50(A)-kW-3SC	50	47 3/4	24	270	302
M-II-80(A)-kW-3SC	80	60 1/4	26	335	378
M-II-120(A)-kW-3SC	119	64 1/2	30 1/4	430	485

For additional specifications and/or limitations, please see the installation manual for this product. All specifications are subject to change without notice.



## GPH Recovery Capacities

kW Input	Temperature Rise*									
	40°F	50°F	60°F	70°F	80°F	90°F	100°F	120°F	140°F	
6	62	50	41	35	31	28	25	21	18	
9	93	74	62	53	47	42	37	31	27	
12	124	99	83	71	62	55	50	41	35	
13.5	140	112	93	80	70	62	56	47	40	
15	155	124	103	89	78	69	62	52	44	
18	186	149	124	106	93	83	74	62	53	
24	248	199	164	142	124	110	99	83	71	
27	279	223	186	160	140	124	112	93	80	
30	310	248	207	177	155	138	124	103	89	
36	372	298	248	213	186	165	149	124	106	
45	465	372	310	266	233	207	186	155	133	
54	558	447	372	319	279	248	223	186	160	

\*Based on manufacturers rated recovery efficiency.

# ELECTRIC MODELS



## ASME Immersion Thermostats with Contactors

These commercial electric models are specifically constructed to the ASME standard and offer inputs of up to 81 kW. They are intended for supplying potable hot water to commercial and industrial type applications and offer optional features to meet any specification requirement.

### Specifications

Model Number	Capacity U.S. Gal.	Input Maximum kW	Floor to Top of Heater in.	Jacket Dia. in.	Approx. Shipping Weight lbs.
6A-kW-3	6	3	17 <sup>1</sup> / <sub>4</sub>	16	83
12A-kW-3	12	9	28	16	118
20A-kW-3	20	18	27 <sup>1</sup> / <sub>2</sub>	20	145
30A-kW-3	30	36	38	20	180
40A-kW-3	40	36	48 <sup>1</sup> / <sub>4</sub>	20	220
50A-kW-3	50	81	47 <sup>3</sup> / <sub>4</sub>	24	270
80A-kW-3	80	81	60 <sup>1</sup> / <sub>4</sub>	26	335
120A-kW-3	119	81	64 <sup>1</sup> / <sub>2</sub>	30 <sup>1</sup> / <sub>4</sub>	430

For additional specifications and/or limitations, please see the installation manual for this product. All specifications are subject to change without notice.



### STANDARD FEATURES\*

- Immersion Type Thermostats for Accurate Temperature Control from Positive Off to 180°F
- Hydrojet® Sediment Reduction System
- Vitraglas® Lining
- 3 kW to 81 kW
- Incoloy Elements Standard
- 6 Gallon to 119 Gallon
- Hand Hole Cleanout (Except 6 & 12 Gallon Models)
- Max Temp - 180°F
- NSF Construction Available
- ASME Construction
- 1 1/2" NPT Dielectric Waterway Fittings
- Low Restriction Brass Drain Valve
- T&P Relief Valve Installed
- Protective Magnesium Anode Rod(s)
- Non-CFC Foam Insulation
- 3-Year Limited Tank Warranty— can be upgraded to 5-Year at additional cost

### OPTIONAL FEATURES:

- Low Water Cut-off
- Safety Door Interlock
- High and Low Pressure Limit Switches
- Alarm Horn
- Temperature and Pressure Gauge
- Time Delay Set-up Sequences (24 kW and Above)

### APPLICATIONS

Schools and government installations

*\*Full descriptions are available in glossary beginning on page 25.*

### GPH Recovery Capacities

kW Input	Temperature Rise*								
	40°F	50°F	60°F	70°F	80°F	90°F	100°F	120°F	140°F
3	31	25	21	18	16	14	12	10	9
6	62	50	41	35	31	28	25	21	18
9	93	74	62	53	47	42	37	31	27
12	124	99	83	71	62	55	50	41	35
13.5	140	112	93	80	70	62	56	47	40
15	155	124	103	89	78	69	62	52	44
18	186	149	124	106	93	83	74	62	53
24	248	199	164	142	124	110	99	83	71
27	279	223	186	160	140	124	112	93	80
30	310	248	207	177	155	138	124	103	89
36	372	298	248	213	186	165	149	124	106
45	465	372	310	266	233	207	186	155	133
54	558	447	372	319	279	248	223	186	160
81	852	671	558	477	418	371	334	278	238

\*Based on manufacturers rated recovery efficiency.



### STANDARD FEATURES\*

- Reduced Energy Waste – Flow Switch Activates Heater Only on Demand (No Stand-by Heat Loss); 99% Efficient
- Continuous Hot Water
- No T&P Relief Valve Needed
- Integral Flow Restrictor
- Easy Installation – Mounts on Wall – No Sweat Connections
- Ni Chrome Heating Element - Reduces Calcification
- Space Saving Installation – Compact Size
- Field Serviceable Element – Replaceable Cartridge Element (1-year Warranty)
- Warranty – Heaters Are Designed for Durability and Guaranteed against Failure Due to Leaks of Heater Body/Element Assembly for a Period of 10 Years

### APPLICATIONS

Office buildings, apartments, motels, and strip malls

\*Full descriptions are available in glossary beginning on page 25.



Single Point

### Single Point (Single Phase)

Model Number	kW Rating	Voltage	AMPS	Temperature 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

### Thermostatic (Single Phase)

Model Number	kW Rating	Voltage	AMPS	Temperature Rise °F					Recommended Wire Size
				0.5 GPM	0.75 GPM	1.0 GPM	1.5 GPM	2.0 GPM	
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

### Flow Controlled (Single Phase)

Model Number	kW Rating	Voltage	AMPS	Temperature Rise °F					Recommended Wire Size
				0.5 GPM	0.75 GPM	1.0 GPM	1.5 GPM	2.0 GPM	
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-9500-4-S-10	9.5	240	40.0	—	86	65	43	32	8 AWG
EFC-8300-2-S-10	8.3	208	39.0	—	76	57	38	29	8 AWG

### Series Two - Thermostatic (Single Phase)

Model Number	kW Rating	Voltage	AMPS	Temperature Rise °F				Recommended Wire Size
				1.5 GPM	2.0 GPM	2.5 GPM	3.0 GPM	
EFT-19000-4-D-10	19.0	240	80 (2x40)	87	65	52	43	8 AWG per module

### Series Three (Single Phase)

Model Number	kW Rating	Voltage	AMPS	Temperature Rise °F					Recommended Wire Size
				1.5 GPM	2.0 GPM	2.5 GPM	3.0 GPM	4.0 GPM	
EFT-28000-4-T-10	28.0	240	120 (3x40)	—	—	—	65	50	8 AWG per module

### Series Four (Single Phase)

Model Number	kW Rating	Voltage	AMPS	Temperature Rise °F								Recommended Wire Size
				1.0 GPM	2.0 GPM	2.5 GPM	3.0 GPM	4.0 GPM	5.0 GPM	6.0 GPM	8.0 GPM	
EFT-38000-4-F-10	38.0	240	160 (4x40)	129.8	129.8	103.8	86.5	64.9	51.9	43.3	35.4	8 AWG

### Thermostatic Triple Module Models (Three Phase)

Model Number	kW Rating	Voltage	AMPS	Temperature Rise °F						Recommended Wire Size
				1.5 GPM	2.0 GPM	2.5 GPM	3.0 GPM	3.5 GPM	4.0 GPM	
EFT-18000-2-T-10	18.0	208v/120v	50.0	82	61	49	41	35	32	10 AWG
EFT-24000-2-T-10	24.0	208v/120v	67.0	—	82	65	54	47	41	10 AWG
EFTR-18000-6-T-10	18.0	480v	21.7	82	61	49	41	35	32	10 AWG
EFTR-24000-6-T-10	24.0	480v	28.9	—	82	65	54	47	41	10 AWG
EFTR-32000-6-T-10	32.0	480v	38.5	—	—	87	73	62	55	8 AWG

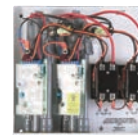
For additional specifications and/or limitations, please see the installation manual for this product. All specifications are subject to change without notice.



Flow Control



Thermostatic



Series Two



Series Three



Thermostatic Triple Module

# KwickShot® Tankless

KwickShot® Tankless models are compact and powerful enough to be located at the point-of-use in a wide variety of commercial applications.

# INDIRECT MODELS



## STANDARD FEATURES\*

- 1½" O.D. Single Wall, Glass Coated, Carbon Steel Heat Exchanger
- Honeywell Aquastat with an Adjustable Degree Differential
- Hydrojet® Total Performance System
- Vitraglas® Lining
- 1" NPT Dielectric Waterway Fittings
- T&P Relief Valve Installed
- Low Restriction Brass Drain Valve
- Three Protective Aluminum Anode Rods
- Non-CFC Foam Insulation
- 5-Year Limited Warranty on Steel Tank and Heat Exchanger

## APPLICATIONS

Combined with boilers in apartments and motels

*\*Full descriptions are available in glossary beginning on page 25.*

## PowerStor Series® Single Wall

PowerStor Series® Indirect Fired units provide class leading performance and large amounts of hot water. These units incorporate a newly designed, super-efficient heat exchanger coil. Made of 1½" O.D. diameter carbon steel tubing and coated with Vitraglas®, they have a total heat surface area of 27.2 feet resulting in exceptional first hour delivery and vast hot water reserves. PowerStor Series® models are the perfect addition to a boiler system.

### Specifications

Model Number	Capacity U.S. Gal.	Floor to Top of Heater in.	Jacket Dia. in.	Approx. Shipping Weight lbs.
SW-65C-5	58	59¼	22	273
SW-80C-5	73	59	24	300
SW-120C-5	114	62½	28¼	422

For additional specifications and/or limitations, please see the installation manual for this product. All specifications are subject to change without notice.

### AHRI Certified Water Heater Ratings

Model Number	First Hour Delivery Rating (Gal./Hr.)	Continuous Draw Rating @ 135°F (Gal./Hr.)	Standby Heat Loss Rating (°F/Hr.)	Min. Heat Required Rate (BTU/Hr.)	Min. 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



### STANDARD FEATURES\*

- 1" O.D. Single Wall, Stainless Steel Heat Exchanger
- Honeywell Aquastat with an Adjustable Degree Differential
- NPT Waterway Fittings
- Low Restriction Brass Drain Valve
- T&P Relief Valve Included
- Protective Aluminum Anode Rod
- Non-CFC Foam Insulation
- 5-Year Limited Warranty on Steel Tank and Heat Exchanger

### APPLICATIONS

Combined with boilers in apartments and motels.

*\*Full descriptions are available in glossary beginning on page 25.*



## PowerStor Series® SS (Stainless Steel) Single Wall

PowerStor Series® SS (Stainless Steel) models utilize a superior grade of stainless steel for the tank and the heat transfer coil. PowerStor Series® SS models also provide superior thermal conductivity for higher efficiency. These models are the solution when stainless steel is specified or preferred for the application.

### Specifications

Model Number	Capacity U.S. Gal.	Floor to Top of Heater in.	Jacket Dia. in.	Approx. Shipping Weight lbs.
RTV-40-L	40	35 <sup>1</sup> / <sub>4</sub>	24	83
RTV-52-L	52	45 <sup>5</sup> / <sub>8</sub>	24	93
RTV-75-L	75	63 <sup>7</sup> / <sub>8</sub>	24	117
RTV-120-L	119	60 <sup>5</sup> / <sub>8</sub>	30 <sup>1</sup> / <sub>4</sub>	315

For additional specifications and/or limitations, please see the installation manual for this product. All specifications are subject to change without notice.

### AHRI Certified Water Heater Ratings

Model Number	First Hour Delivery Rating (Gal./Hr.)	Continuous Draw Rating @ 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	0.7	113,000	8.0
RTV-120-L	360	280	0.6	195,000	11.0

# STORAGE TANKS



## STANDARD FEATURES\*

- ASME Construction Available
- Designed for Storage of Potable Water to 180°F
- 80, 120, and 200 Gallon Capacities
- Vitraglas® Lining
- Hand Hole Cleanout
- 2" NPT Dielectric Waterway Fittings (2½" on M-3-ST120R5A and M-3-ST200R5A)
- Optional 2" Rear Water Connections (only on M-3-ST120R5 and M-3-ST120R5A)
- Low Restriction Brass Drain Valve
- Side T&P Valve Opening
- Two Protective Magnesium Anode Rods
- Non-CFC Foam Insulation
- 5-Year Limited Tank Warranty

## APPLICATIONS

Dormitories and laundry facilities

*\*Full descriptions are available in glossary beginning on page 25.*

## Small Volume Jacketed and Insulated

Designed for moderate and commercial peak demands, jacketed storage tanks are available in 80, 120, and 200 gallon capacities. They meet a variety of hot water requirements in smaller commercial applications where a large dump volume is required in a short period of time.

## Specifications

Model Number	Capacity U.S. Gal.	Floor to Top of Heater in.	Jacket Dia. in.	Approx. Shipping Weight lbs.
M-3-ST80R5	80	58¾	24	192
M-3-ST80R5A*	80	58¾	24	278
M-3-ST120R5	119	62½	28	312
M-3-ST120R5A*	119	62½	28	366
M-3-ST200R5A*	200	77	32	541

\* Meets ASME code

For additional specifications and/or limitations, please see the installation manual for this product. All specifications are subject to change without notice.



## STANDARD FEATURES\*

- Horizontal or Vertical Configurations Available
- Available with Vitraglas® Lining, Double Vitraglas® Lining, Epoxy Lining, or Stainless Steel Tank
- Hydrojet® HC – Optional
- Sturdy Steel Jacket
- Hand Hole Cleanout and Manway – Optional
- Designed for Storage of Potable Water up to 180°F
- All Tanks are Constructed and Certified in Accordance with ASME Section IV, Part HLW for 125 psi (862 kPa)
- Two Female 3" NPT Water Connections
- Two 3/4" NPT Aquastat Fittings
- Magnesium Anode Rods
- 2" High Density Foam Insulation
- 5-Year Limited Warranty on Steel Tank
- 10-Year Limited Warranty on Double Vitraglas® lined Steel Tank

## APPLICATIONS

Large fitness centers, industrial plants, hotels, stadiums, and resorts

*\*Full descriptions are available in glossary beginning on page 25.*



# Large Volume Jacketed and Insulated

Available in 34", 40", 46", 52", and 64" standard diameters, these large volume, insulated, and jacketed tanks offer capacities ranging from 175 – 1,530 gallons. Two-inch, high-density foam insulation minimizes heat loss.

## Specifications

Model Number	Capacity U.S. Gal.	Vertical Height in.	Horiz. Length in.	Jacket Dia. in.	Glass Lined Weight 125 psi ASME lbs.
N†175J*5A	175	71	67	34	438
N†210J*5A	210	83	79	34	493
N†240J*5A	240	93	89	34	539
N†280J*5A	280	107	103	34	603
N†285J*5A	285	80	76	40	667
N†310J*5A	310	86	82	40	710
N†320J*5A	320	119	115	34	658
N†340J*5A	340	93	89	40	760
N†360J*5A	360	98	94	40	796
N†415J*5A	415	110	106	40	881
N†435J*5A	435	89	85	46	917
N†453J*5A	453	89	88	46	942
N†465J*5A	465	122	118	40	967
N†500J*5A	500	81	77	52	1176
N†505J*5A	505	101	97	46	1017
N†515J*5A	515	134	130	40	1053
N†575J*5A	575	113	109	46	1117
N†580J*5A	580	92	88	52	1310
N†645J*5A	645	125	121	46	1217
N†675J*5A	675	104	100	52	1456
N†720J*5A	720	137	133	46	1317
N†765J*5A	765	116	112	52	1602
N†790J*5A	790	147	143	46	1400
N†840J*5A	840	128	124	52	1748
N†875J*5A	875	107	103	58	1776
N†1040J*5A	1040	149	145	52	2003
N†1245J*5A	1245	124	120	64	3326
N†1530J*5A	1530	148	144	64	3541

†V = Vertical, H=Horizontal.

\*G = Glass Lined (Vitraglas®),

\*D = Double Glass Lined (Vitraglas®)

\*E = Epoxy Lined

\*S = Stainless Steel Tank.

Example: NV210JG5A.

### Tank Options:

- Hand hole (4"x6")
- Manway (12"x16")
- Extra Tappings (1" - 4")
- Flanged Connections (3" - 10")
- 150 psi working pressure (add suffix -5)
- Hydrojet® HC (add suffix -1)



All dimensions and specifications within are subject to change without notice in accordance with our policy of continuous product improvement.



# STORAGE TANKS

Large Volume Unjacketed  
and Uninsulated



Sprayed-On Rigid  
Polyurethane Foam (SPF)  
with Acrylic TopCoat  
(Outdoor Installations)



## STANDARD FEATURES\*

- Horizontal or Vertical Configurations Available
- Available with Vitraglas® Lining, Double Vitraglas® Lining, Epoxy Lining, or Stainless Steel Tank
- Hydrojet® HC - Optional
- 6" Skirt Height (Vertical Tank)
- Lifting Lugs - Standard
- Designed for Storage of Potable Water up to 180°F
- All Tanks are Constructed and Certified in Accordance with ASME Section IV, Part HLW for 125 PSI (862 kPa)
- Magnesium Anode Rods
- 5-Year Limited Warranty

## APPLICATIONS

Dormitories and laundry facilities

*\*Full descriptions are available in glossary beginning on page 25.*

## STANDARD FEATURES

- The 100% Acrylic Topcoat has 2 1/4" (R-value of 16) of High Density Polyurethane Foam that Is Formulated to Withstand Extreme Weather and a Full Range of Environmental Conditions
- Alternative for Insulated and Steel Jacketed Tank
- Any Tank Size or Shape can be Insulated with SPF
- SPF Insulation Is Field Repairable

## Unjacketed and Uninsulated Specifications

Model Number	Capacity U.S. Gal.	Vertical Height in.	Horiz. Length in.	Jacket Dia. in.	Approx. Shipping Weight @125 psi lbs.
N†175N*5A	175	67	63	30	303
N†210N*5A	210	79	75	30	347
N†240N*5A	240	89	85	30	383
N†280N*5A	280	103	99	30	433
N†285N*5A	285	76	45	36	550
N†310N*5A	310	82	78	36	527
N†320N*5A	320	115	111	30	476
N†340N*5A	340	89	85	36	569
N†360N*5A	360	94	90	36	559
N†415N*5A	415	106	102	36	671
N†435N*5A	435	85	81	42	695
N†453N*5A	453	88	51	42	805
N†465N*5A	465	118	114	36	743
N†500N*5A	500	77	73	48	928
N†505N*5A	505	97	51	42	874
N†515N*5A	515	130	126	36	815
N†575N*5A	575	109	105	42	863
N†580N*5A	580	88	84	48	1045
N†645N*5A	645	121	117	42	947
N†675N*5A	675	100	96	48	1173
N†720N*5A	720	133	129	42	1031
N†765N*5A	765	112	108	48	1301
N†790N*5A	790	143	139	42	1101
N†840N*5A	840	124	120	48	1428
N†1040N*5A	1040	145	141	48	1652
N†1340N*5A	1340	153	147	54	2182
N†1820N*5A	1820	168	168	60	3110
N†2105N*5A	2105	192	186	60	3516
N†2395N*5A	2395	216	210	60	3922
N†2700N*5A	2700	174	168	72	3851
N†3115N*5A	3115	198	192	72	4338
N†3530N*5A	3530	222	216	72	4825
N†4050N*5A	4045	192	93	84	6009
N†4120N*5A	4120	256	250	72	5516
N†5695N*5A	5695	262	256	84	7994

## SPF Topcoat Specifications

Model Number	Capacity U.S. Gal.	Vertical Height in.	Horiz. Length in.	Jacket Dia. in.	Approx. Shipping Weight @125 psi lbs.
N†175T*5A	175	69	65	35	303
N†210T*5A	210	81	77	35	347
N†240T*5A	240	91	87	35	383
N†280T*5A	280	105	101	35	433
N†285T*5A	285	76	45	41	550
N†310T*5A	310	84	80	41	527
N†320T*5A	320	117	113	35	476
N†340T*5A	340	91	87	41	569
N†360T*5A	360	96	92	35	559
N†415T*5A	415	108	104	41	671
N†435T*5A	435	87	83	47	695
N†453T*5A	453	88	51	47	805
N†465T*5A	465	120	116	41	743
N†500T*5A	500	79	75	53	928
N†505T*5A	505	97	51	47	874
N†515T*5A	515	132	128	41	815
N†575T*5A	575	111	107	47	863
N†580T*5A	580	90	86	53	1045
N†645T*5A	645	123	119	47	947
N†675T*5A	675	102	98	53	1173
N†720T*5A	720	135	131	47	1031
N†765T*5A	765	114	110	53	1301
N†790T*5A	790	145	141	47	1101
N†840T*5A	840	126	122	53	1428
N†1040T*5A	1040	147	143	53	1652
N†1340T*5A	1340	153	147	59	2182
N†1690T*5A	1690	189	183	54	2622
N†1820T*5A	1820	168	168	65	3110
N†2395T*5A	2395	216	210	65	3922
N†3115T*5A	3115	198	192	77	4338
N†3530T*5A	3530	222	216	77	4825
N†4120T*5A	4120	256	250	77	5516
N†5695T*5A	5695	262	256	89	7994

†V = Vertical, H=Horizontal.

\*G = Glass Lined  
(Vitraglas®).

\*D = Double Glass Lined  
(Vitraglas®).

\*E = Epoxy Lined

\*S = Stainless Steel Tank.  
Example: NV210TG5A.

### Tank Options

- Hand hole (4"x6")
- Manway (12"x16")
- Extra Tappings (1" - 4")
- Flanged Connections (3" - 10")
- 150 psi working pressure (add suffix -5)
- Hydrojet® HC (add suffix -1)



# GLOSSARY OF ITEMS/FEATURES

**Alarm Horn** – An option specified when the installation requires an audible alarm to signal when the water heater operation is interrupted for faults including tripped high limit control, excessive pressure, insufficient pressure, or low water level.

**All Models Listed with California Energy Commission** – California's primary energy policy and planning agency. The Commission forecasts future energy needs, promotes energy efficiency through appliance and building standards, and supports renewable energy technologies.

**ASME Construction Available** – American Society of Mechanical Engineers (ASME) standard for the design, fabrication, and inspection of boilers and pressure vessels. This option allows certain Bradford White commercial water heaters to be built to meet the ASME Construction requirements.

**ASME T&P Relief Valve** – Factory-provided ASME rated relief valve protects against excessive temperature and pressure buildup in the water heater.

**Cast Aluminum Air Intake Boot** – The cast molded air intake boot provides exceptional durability.

**Closed Combustion** – A combustion system that draws air for combustion from outside through an intake pipe or duct. Exhaust is vented through a similar pipe or duct to the outside. Ideal for installations with a negative air pressure.

**Co-axial (Pipe inside Pipe) Venting System with a Heavy-Duty Aluminum Inner Wall and Galvanized Outer Wall** – Venting that utilizes a pipe inside a pipe configuration. This allows combustible air to enter from the outside through an outer pipe and exhausts the products of combustion through an inner pipe. Ideal for installations with a negative air pressure.

**CSA** – CSA International (Canadian Standards Association) is a standards organization that provides product testing and certification services for electrical, mechanical, plumbing, and gas products.

**Defender Safety System®** – Bradford White's proven FVIR (Flammable Vapor Ignition Resistant) combustion technology. It resists the ignition of flammable vapors outside the water heater, maintains outstanding efficiency, long service life, and low NOx emissions while providing maintenance-free operation. FVIR compliance is required on all natural gas and propane water heaters 75,000 BTU/Hr. and under.

**Dielectric Waterway Fittings** – Plastic-lined, galvanized steel fittings slow down the process of electrolysis to minimize corrosion. The dielectric waterway fittings increase the life expectancy of the tank by decreasing possible leaks.

**Direct Spark Ignition** – A type of electronic pilot ignition that uses a spark to ignite the gas directly at the burner.

**Electronic Ignition** – A type of ignition system that eliminates the need for a standing pilot thus reducing gas consumption and saving energy. Electronic ignition system also promotes reliable and consistent pilot and main burner ignitions.

**Energy Cut-Off (E.C.O.)** – A Energy Cut-Off (E.C.O) shuts off all gas in event of an overheat condition. The E.C.O. is manually resettable for convenience.

**Epoxy Lining** – Bradford White storage tanks can be lined with a specially formulated epoxy that is a strong, heat resistant, and durable coating proven effective against corrosion.

**ETL** – The ETL Listed mark is proof of product compliance (electrical, gas, and other safety standards) to North American safety standards. ETL specializes in electrical product safety testing and benchmark performance testing.

**Factory-Installed Heat Traps** – Devices that reduce standby heat loss through the inlet and outlet fittings.

**Flammable Vapor Sensor** – Electronic sensor that prevents water heater operation if flammable vapors are detected.

**Fully Automatic Controls** – Fast acting surface mount thermostat for automatic temperature control with manual reset energy cut-off for safety.

**Hand Hole Cleanout** – Allows inspection of tank interior and facilitates removal of accumulated lime and sediment.

**High and Low Pressure Limit Switches** – Devices that shut down the water heater in the event of either excessive or inadequate water pressure.

**High Density Foam Insulation** – Covers the side and top of tank, reducing the amount of heat loss. This results in less energy consumption, improved operation efficiencies, and jacket rigidity.

**Hydrojet® Total Performance System** – The Hydrojet® Total Performance System is a cold-water inlet tube engineered to reduce costly sediment buildup and create more thorough mixing of incoming water with stored water. Because of more efficient mixing, extreme temperature differences throughout the tank are greatly reduced. Water heaters with the Hydrojet® Total Performance System don't have to work as hard or as often to maintain a maximum supply of hot water at the desired temperature. They heat water faster and use less energy to do it.

**Hydrojet®2 Total Performance System** – This cold water inlet device minimizes sediment buildup, increases delivery, and reduces thermal stratification. The Hydrojet®2 is specifically designed for higher input applications.

**Hydrojet® Sediment Reduction System** – The Hydrojet® Sediment Reduction System is a variation of the original residential Hydrojet system that reduces the accumulation of harmful sediment in commercial water heaters.

**Hydrojet® HC** – The Hydrojet® HC is an optional front connect configuration specifically designed to maximize hot water delivery from Bradford White's large volume storage tanks.

# GLOSSARY OF ITEMS/FEATURES

## **ICON HD™ Commercial Control System –**

A major innovation in water heating control technology that combines intelligence with ease of installation and service. It features an LCD digital display showing temperature setpoint and diagnostic error codes to aid in servicing and troubleshooting.

**ICON System™ Control –** An exclusive gas control technology that offers Advanced Temperature Control for consistent and accurate water temperature levels, Performance Software for enhanced First Hour Delivery ratings and tighter temperature differentials, Intelligent Diagnostics with ten different codes to assist in troubleshooting, Pilot-On-Indication provided by a flashing green LED, Millivolt Powered operation to eliminate the need for external electricity, separate immersed thermowell to eliminate the need to drain the tank when removing or replacing the gas valve, and an integrated Piezo Igniter to eliminate the need to open the combustion chamber to light the pilot.

## **Immersed Adjustable Honeywell Aquastat**

– Fast acting immersion aquastat for automatic temperature control (adjustable from 80°F to 160°F).

## **Immersion Thermostat and High Limit –**

Certain Bradford White electric water heaters feature a thermostat immersed (submerged) inside the tank for greater accuracy and control and also a high temperature limit for sanitation applications.

**Incoloy Elements –** Incoloy elements are used by Bradford White because of their durability. This tough alloy resists the effects of prolonged high operating temperatures, hard water, acids, corrosion, and thermal shock. They offer longer life and reduced service and replacement costs. Incoloy elements are designed to better resist overheating conditions.

## **Integrated Primary Control (Indoor) –**

Indoor EverHot® tankless models have a primary control integrated into the face of the water heater that provides 96°-140°F temperature settings. Optional commercial control provides up to 180°F - 185°F temperature settings depending on model.

**Lifting Lugs –** Our large volume, unjacketed storage tanks include lifting lugs to assist in transportation, installation, and positioning.

**Low NOx Power Burner –** Bradford White's eF Series® Ultra High Efficiency water heaters utilize a gas burner that produces low levels of nitrogen oxides during combustion to meet stringent air quality requirements in regions throughout the country.

**Low Restriction Brass Drain Valve –** This durable and tamperproof valve allows the installer or service technician to drain the tank faster, resulting in a reduction of service time. Features a ball valve and straight design for easy hose connection.

**Low Water Cut-Off (also listed as Internal Low Water Cut-Off) –** A feature that shuts down the water heater in the event there is inadequate water volume.

**Manway –** A convenient passageway that allows a person easy access to the tank for inspection and cleaning.

**Max Temp–180°F –** Water heaters with a maximum temperature setting of 180°F may have the ability to be used in applications requiring hot water for sanitary purposes such as commercial kitchens, laundromats, hospitals, and other healthcare facilities (unless otherwise noted).

**Millivolt Powered Ignition –** Water heaters equipped with Millivolt Powered Ignition produce their own energy from the pilot and thermopile assembly to operate the flue damper, eliminating the need for an external source of electricity. These water heaters also incorporate a continuous pilot, which eliminates "lockout" situations.

**Non-CFC Foam Insulation –** A highly efficient and environmentally friendly polyurethane material injected between the tank and jacket that reduces heat loss, resulting in less energy consumption, improved operation efficiencies, and jacket rigidity.

**NPT (Aquastat Fittings, Dielectric Water Fittings, Water Connections, T&P Relief Valve Opening) –** National Pipe Thread Taper (NPT) is a U.S. standard for tapered threads used on pipes and fittings. A tapered thread will pull tight, making a fluid-tight seal.

**NSF Approved –** NSF (National Sanitation Foundation) International is an accredited, third-party certification body that tests and certifies products to verify they meet certain public health and safety standards. Water heaters approved by NSF meet minimum public health and sanitation standards in materials, design, construction, and performance of commercial water heaters, hot water supply boilers, and heat recovery equipment.

**NSF Construction Available –** This option allows certain Bradford White commercial water heaters to meet the requirements of NSF construction.

**Optional Concentric Vent Kit Termination –** 2" or 3" termination fitting provides for a single opening through a wall or roof.

**Pedestal Base –** Round, legless support base allows for easy transport and positioning of the water heater.

**Piezo Igniter** – An ignition system that consists of a small, spring-loaded hammer that hits a crystalline material producing a spark to ignite a gas fuel source. It eliminates the need to open the combustion chamber to light the burner. No external electricity is required.

**Powered Anode Rod** – A type of anode rod for large commercial water heaters where the risk of corrosion is high. Powered anode rods release a small electrical current to protect the tank from corrosion. Powered anode rods don't need to be removed and replaced, as they don't corrode.

**Powerful Blower Motor** – Bradford White's Power Vent and Power Direct Vent models feature a powerful blower motor with higher torque for greater resistance to outside winds and the power to eliminate many problems with difficult venting situations. It is quiet and runs cooler for a longer operational life.

**Protective Magnesium (also Aluminum) Anode Rod** – A sacrificial rod composed of one or more metals that protects the tank from corrosion by drawing the harmful electrolytic process away from the tank to the rod itself. Magnesium and Aluminum are the most widely used anode materials and will satisfy the majority of water chemistry situations.

**Red Oxide Primer** – A lead-free, oil-based, high-quality, rust-resistant primer ideal for use on metal surfaces. The corrosion-resistant pigment makes it an ideal choice to protect steel tanks from chemical fumes, excessive heat, humidity, rain, and wind.

**Safety Door Interlock** – Safety switch secures access to the control box door when 120 volt is applied to the system. Unable to open the door when power is on.

**Sanitizing Capability** – Allows for a temperature setting up to 180°F (82°C) for sanitizing applications.

**Side Connections** – Side connections allow for greater installation flexibility and can be used to connect additional equipment such as a dishwasher or washing machine. When the water heater is equipped with a mixing valve, the side connections allow the water heater to supply higher and lower temperature general purpose hot water simultaneously.

**Single or Three Phase** – Single-phase electric power refers to the distribution of alternating current electric power using a system in which all the voltages of the supply vary in unison. In a three-phase system, the currents in each conductor reach their peak instantaneous values sequentially, not simultaneously.

**Snap-Lock Draft Diverter** – Bradford White is the originator of the Snap-Lock Draft Diverter. Unlike other manufacturers that offer a screw-in style, Bradford White water heaters provide a snap-on style so no drilling or sheet metal screws are needed. The Snap-Lock Draft Diverter makes installation faster and easier.

**Stainless Steel Tank** – Bradford White can manufacture storage tanks from 304, 304L, 316, or 316L stainless steel for a variety of applications.

**Stainless Steel Tank and Heat Exchanger** – Made from chromium molybdenum - titanium ferritic 444 stainless steel alloy.

**Submerged Combustion Chamber (see also Three Pass Flue System)** – eF Series® Ultra High Efficiency water heaters utilize a combustion chamber that is submerged in the center of the tank to minimize radiant heat loss and maximize efficiency.

**Surface (SF) or Immersion (CF) Thermostats** – Surface thermostats are mounted on the outside of the tank, sensing water temperature through the steel tank. Immersion thermostats are submerged directly into the water.

**T&P Relief Valve Installed** – Relief valve installed at the factory protects against excessive temperature and pressure (T&P) buildup in the tank.

**Temperature and Pressure Gauge** – A combination gauge that provides both temperature and pressure readings in the tank.

**Thermal Efficiency** – Thermal efficiency is a measure of the output energy divided by the input energy in a system. It must be between 0% and 100%. A thermal efficiency of 100% would mean that all energy put into a system comes out in a usable form.

**Three Pass Heat Exchanger System** – Bradford White's eF Series® Ultra High Efficiency water heaters employ a three-phase or pass flue-type heat exchanger. As the products of combustion pass through each phase of the flue tube, heat is efficiently transferred to the surrounding water.

**UL Listed** – Underwriters Laboratories (UL) is an independent product safety testing and certification organization. Products and components listed with this organization have been tested and certified to meet performance and public safety standards.

**Unbalanced Venting** – Venting configuration in which the air intake pipe doesn't have to be the same length as the exhaust pipe, and both terminations may be on different walls.

**Virtually Maintenance-Free Combustion System** – Under normal conditions, water heaters equipped with the Defender Safety System® combustion chamber do not require regular cleaning of air inlet openings or flame arrestor.

**Vitraglas® Lining** – Bradford White tanks are lined with an exclusively engineered enamel formula that provides superior protection from the highly corrosive effects of hot water. Vitraglas® is spray applied to the tank resulting in a uniform thickness and better bonding to the tank. Test results prove that Vitraglas provides unsurpassed protection against failure when compared to other water heater linings.

**1" O.D. Single Wall, Stainless Steel Heat Exchanger** – Single wall 1" O.D. stainless steel coil.

**6" Skirt Height (Vertical Tank)** – Bradford White unjacketed storage tanks feature a 4" skirt height on 30" to 48" diameter tanks and a 6" skirt height on 54" to 84" diameter tanks for easier access under the tank.



Ambler, PA

For U.S. and Canada field service,  
contact your professional installer or  
local Bradford White sales representative.

**Sales/800-523-2931**  
**Fax/215-641-1670**

**Technical Support/800-334-3393**  
**Fax/269-795-1089**

**Warranty/800-531-2111**  
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Mississauga, ON

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**[www.bradfordwhite.com](http://www.bradfordwhite.com)**



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