

## Residential Atmospheric Vent Extra Recovery Energy Saver Gas Water Heater



Photo is of  
M-2-XR65T6FBN

### FEATURING:



### The Atmospheric Vent FVIR Defender Safety System® Models Feature:

- **Bradford White ICON System™**—Intelligent gas control with proven millivolt powered technology and built-in piezo igniter. A standard, off the shelf thermopile converts heat energy from the pilot flame into electrical energy to operate the gas valve and microprocessor. No need for external electricity.
  - **Enhanced Performance**—Proprietary algorithms provide enhanced First Hour Delivery ratings and tighter temperature differentials.
  - **Advanced Temperature Control System**—Microprocessor constantly monitors and controls burner operation to maintain consistent and accurate water temperature levels.
  - **Intelligent Diagnostics**—An exclusive green LED light prompts the installer during start-up and provides ten different diagnostic codes to assist in troubleshooting.
  - **Pilot On Indication**—Flashing green LED provides positive indication that pilot is on.
  - **Separate Immersed Thermowell**—High strength advanced polymer composite thermowell provides isolation between electric temperature sensor and surrounding water. No need to drain the tank when removing gas valve.
- **Advanced ScreenLok® Technology Flame Arrestor Design**—Flame arrestor is designed to prevent ignition of flammable vapor outside of the water heater.
- **Resettable Thermal Switch**—Proven and reliable bimetallic switch prevents burner and pilot operation in case of ongoing flammable vapor burn inside of the combustion chamber or restricted air flow.
- **Maintenance Free**—No regular cleaning of air inlet openings or flame arrestor is required under normal conditions.
- **Sight Window**—Offers a view into the combustion chamber to observe the operation of the pilot and burner.
- **Factory Installed Hydrojet® Total Performance System**—Cold water inlet sediment reducing device helps prevent sediment build up in tank. Increases first hour delivery of hot water while minimizing temperature build up in tank.
- **Vitraglas® Lining**—Bradford White tanks are lined with an exclusively engineered enamel formula that provides superior tank protection from the highly corrosive effects of hot water. This formula (Vitraglas®) is fused to the steel surface by firing at a temperature of over 1600°F (871°C).
- **Side Connections**—3/4" NPT tapings allow easy connections for space heating applications (Potable water only).
- **2" Non-CFC Foam Insulation**—Covers the sides and top of tank, reducing the amount of heat loss. This results in less energy consumption, improved operation efficiencies and jacket rigidity (M-1-XR403S has 1").
- **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**—Allows either 3" or 4" vent connections with inputs of 40,000 BTU/Hr or less. Over 40,000 BTU/Hr. has the 4" "Snap Lock" Draft Diverter.
- **T&P Relief Valve**—Included.
- **Low Restriction Brass Drain Valve**—Durable tamper proof design.

### 6 or 10-Year Limited Tank Warranties / 6 or 10-Year Limited Warranty on Component Parts.

For more information on warranty, please visit [www.bradfordwhite.com](http://www.bradfordwhite.com)

For products installed in USA, Canada and Puerto Rico. Some states do not allow limitations on warranties. See complete copy of the warranty included with the heater.

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 5,954,492; 5,761,379; 5,943,984; 5,081,696; 5,988,117; 6,142,216; 5,199,385; 5,574,822; 5,372,185; 5,485,879; 5,277,171; (B1)5,341,770; 5,660,165; 5,596,952; 5,682,666; 4,904,428; 5,023,031; 5,000,893; 4,669,448; 4,829,983; 4,808,356; 5,115,767; 5,092,519; 5,052,346; 4,416,222; 4,628,184; 4,861,968; 4,672,919; Re. 34,534; 7,270,087 B2. OTHER U.S. AND FOREIGN PATENT APPLICATIONS PENDING. CURRENT CANADIAN PATENTS: 1,272,914; 1,280,043; 1,289,832; 2,045,862; 2,112,515; 2,108,186; 2,107,012; 2,092,105; 2,409,271. Defender Safety System®, ScreenLok®, Vitraglas® and Hydrojet® are registered trademarks of Bradford White® Corporation.

# Residential Atmospheric Vent Gas Water Heater

## Extra Recovery Energy Saver Models

NATURAL GAS AND LIQUID PROPANE GAS

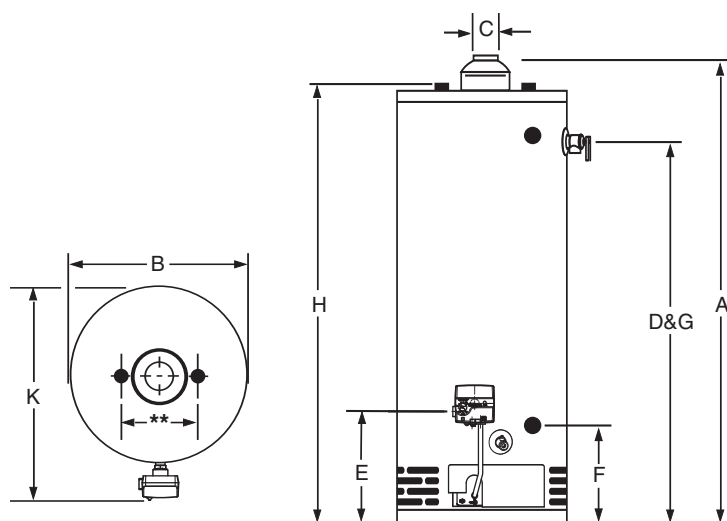
Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed  
79% Recovery Efficiency

| Model Number   | Capacity  |           | 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 Space Heating Return in. | G Floor to Space Heating Outlet in. | H Floor to Water Conn. | K Depth | Approx. Shipping Weight |    |     |
|----------------|-----------|-----------|---------------------|------------------|---------------|-------------|-----------------------|---------------|-------------|----------------------|----------------------|-------------------------------------|-------------------------------------|------------------------|---------|-------------------------|----|-----|
|                | U.S. Gal. | Imp. Gal. | Nat. BTU/Hr. Input  | LP BTU/Hr. Input | Nat. U.S. GPH | LP U.S. GPH | in.                   | in.           | in.         | in.                  | in.                  | in.                                 | in.                                 | in.                    | in.     | lbs.                    |    |     |
| M-1-XR403S6FBN | 40        | 33        | 40,000              | 38,000           | 43            | 36          | 40                    | 33            | 50          | 20                   | 3x4                  | 41                                  | 13                                  | 13½                    | 41      | 48½                     | 24 | 126 |
| M-2-XR504T6FBN | 48        | 40        | 65,000              | 61,000           | 69            | 57          | 65                    | 54            | 59¼         | 22                   | 4                    | 50                                  | 13                                  | 13½                    | 50      | 57                      | 26 | 164 |
| M-2-XR65T6FBN  | 65        | 54        | 65,000              | 63,000           | 69            | 57          | 67                    | 56            | 63          | 24                   | 4                    | 53½                                 | 12¾/16                              | 13½                    | 53½     | 60¾                     | 28 | 205 |

| Model Number   | Capacity |  | Recovery* 50°C 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 Space Heating Return mm. | G Floor to Space Heating Outlet mm. | H Floor to Water Conn. | K Depth | Approx. Shipping Weight |
|----------------|----------|--|---------------------|-------------|-------------------|-----------------|-----------------------|---------------|-------------|----------------------|----------------------|-------------------------------------|-------------------------------------|------------------------|---------|-------------------------|
|                | Liters   |  | Nat. kW Input       | LP kW Input | Nat. Liters/ Hour | LP Liters/ Hour | mm.                   | mm.           | mm.         | mm.                  | mm.                  | mm.                                 | mm.                                 | mm.                    | mm.     | kg.                     |
| M-1-XR403S6FBN | 151      |  | 11.7                | 11.1        | 163               | 151             | 1270                  | 508           | 76 / 102    | 1041                 | 330                  | 343                                 | 1041                                | 1232                   | 609     | 57                      |
| M-2-XR504T6FBN | 182      |  | 19.1                | 19.1        | 261               | 246             | 1505                  | 559           | 102         | 1270                 | 330                  | 343                                 | 1270                                | 1448                   | 660     | 74                      |
| M-2-XR65T6FBN  | 246      |  | 19.1                | 18.5        | 261               | 253             | 1600                  | 609           | 102         | 1359                 | 309                  | 342                                 | 1359                                | 1543                   | 711     | 93                      |

Propane models feature a Titanium Stainless Steel propane burner. For Propane (LP) models change suffix "BN" to "SX".  
For 10 year models, change suffix from "6" to "10".

\*Based on manufacturers rated recovery efficiency.



\*\*M-1-XR403S water connections are on 8" centers, all other models are 11" centers.

### Meets NAECA Requirements

#### General

All gas water heaters are certified at 300 PSI (2068 kPa) test pressure and 150 PSI (1034 kPa) working pressure. All water connections are 3/4" (19mm) NPT. All gas connections are 1/2" (13mm).

All models design certified by CSA International (formerly AGA/CGA), ANSI Z-21.10.1 and/or peak performance rated.

**Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement.**

**Suitable for Water (Potable) Heating and Space Heating.**

Toxic chemicals, such as those used for boiler treatment, shall NEVER be introduced into this system. This unit may NEVER be connected to any existing heating system or component(s) previously used with a non-potable water heating appliance.



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 • Fax 269-795-1089

International: Telephone 215-641-9400 • Telefax 215-641-9750 / [www.bradfordwhite.com](http://www.bradfordwhite.com)

**BRADFORD WHITE-CANADA** INC. Sales / Technical Support 866-690-0961 / 905-238-0100 • Fax 905-238-0105 / [www.bradfordwhite.com](http://www.bradfordwhite.com)

## Built to be the Best™

©2013, Bradford White Corporation. All rights reserved.