Residential eF Series® Power Direct Vent Gas Water Heater

The eF Series® Power Direct Vent Model Features:

- **ENERGY STAR® Qualified**—Meets or exceeds requirements for ENERGY STAR® per the latest ENERGY STAR® criteria revision, as well as most utility rebate programs.
- **Vertical, Dual-pass Heat Exchanger System**—Highly efficient, helical-finned 5" (127mm) primary heat exchanger tube and three, stainless steel baffled, 2" (51mm) secondary heat exchanger tubes.
  - Vertical design eliminates corrosion protection challenges of condensing water heaters that utilize less durable heat exchanger designs.
- **Bradford White ICON System**—Intelligent gas control with spark to pilot ignition system eliminates the constant burning pilot. This results in savings of pilot gas during standby periods (120 VAC).
  - **Enhanced Performance**—Proprietary algorithms provide enhanced First Hour Rating and tighter temperature differential.
  - **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.
- **Closed Combustion Venting System**—Power Direct Vent models are ideal for installations which lack sufficient air for combustion, such as new construction homes or additions which are tightly insulated. These models use a twin pipe system where combustion air is drawn from outside the building in one pipe, and combustion products are expelled to the outside in another pipe.
- **Cast Aluminum Air Intake Boot**—A cast molded air intake boot design provides exceptional durability during installation and operation.
- **Flexible Venting**—The eF Series® can be installed as a power direct vent or power vent. If power direct vent, they can be balanced or unbalanced and terminate on different walls or pressure zones.
  - **Horizontal and Vertical Venting**—PVC, ABS, or CPVC. The equivalent feet of intake venting cannot be greater than the equivalent feet of exhaust venting.
  - **Optional Concentric Vent Kit Termination**—Termination fitting provides for only one exit opening through a wall or roof. (Subtract 10ft. (3m) for intake pipe and 10ft. (3m) for exhaust pipe when calculating total vent length.)
- **Factory-Installed Hydrojet® Total Performance System**—Sediment reducing device that also increases first hour rating of hot water while minimizing temperature build-up in tank.
- **Vitraglas® Lining**—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).
- **Insulation System**—2" (51mm) Non-CFC foam insulation covers the sides and top of the tank, reducing heat loss. This results in less energy consumption, improved efficiencies, and jacket rigidity.
- **Water Connections**—3/4" (19mm) NPT factory-installed true dielectric fittings extend water heater life and simplify water line connections.
- **Side Connections**—3/4" (19mm) NPT tappings allow easy connections for space heating applications (Potable water only).
- **Factory Installed Heat Traps**—Design incorporates a flexible disk that reduces heat loss in piping and eliminates the potential for noise generation.
- **Two Protective Anode Rods.**
- **T&P Relief Valve**—Installed.
- **Low Restrictive Brass Drain Valve**—Durable tamper proof design.
- **NOx Emissions**—Less than 40 ng/J.

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

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 5,682,666; 7,634,976; 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; 7,334,419; 7,866,168; 7,270,087; 7,007,748; 5,956,952; 6,142,126; 6,793,026; 5,341,770; 7,337,517; 7,665,210; 7,063,133; 5,759,293; 7,900,589; 5,483,905; 6,828,888; 5,988,117; 7,621,238; 7,660,859; 5,761,379; 7,409,925; 5,277,171; 6,146,772; 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; 7,334,419; 7,866,168; 7,270,087; 7,007,748; 5,956,952; 6,142,126; 6,793,026; 5,341,770; 7,337,517; 7,665,210; 7,063,133; 5,759,293; 7,900,589; 5,483,905; 6,828,888; 5,988,117; 7,621,238; 7,660,859; 5,761,379; 7,409,925; 5,277,171; 6,146,772; 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; 2,476,686; 2,239,007; 2,092,105; 2,107,012. Defender Safety System®, Vitraglas® and Hydrojet® are registered trademarks of Bradford White® Corporation.
Residential eF Series® Power Direct Vent Gas Water Heater

**NATURAL GAS AND LIQUID PROPANE MODELS**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Nominal Gal. Capacity</th>
<th>DOE Rated Storage Volume (Gal.)</th>
<th>BTU/Hr. Input</th>
<th>LP BTU/Hr. Input</th>
<th>First Hour Rating (Gal.)</th>
<th>Uniform Energy Factor</th>
<th>Recovery at 90°F Rise*</th>
<th>Model Number</th>
<th>Nominal Liter Capacity</th>
<th>DOE Rated Storage Volume (Liters)</th>
<th>LP Input kW</th>
<th>LP Input GPH</th>
<th>First Hour Rating (Liters)</th>
<th>Uniform Energy Factor</th>
<th>Recovery at 50°C Rise*</th>
</tr>
</thead>
<tbody>
<tr>
<td>RC2PDV50H6N</td>
<td>50</td>
<td>48</td>
<td>76,000</td>
<td>76,000</td>
<td>128</td>
<td>0.80</td>
<td>93</td>
<td>53</td>
<td>77</td>
<td>185</td>
<td>22.0</td>
<td>22.0</td>
<td>473</td>
<td>0.89</td>
<td>352</td>
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</tbody>
</table>

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

For 10 year model, change suffix “6” to “10”.

Based on manufacturer’s rated recovery efficiency.

110 VAC Required for Power Venting / 110 VAC, 60Hz., 3.1 Amperes.

General:

All gas water heaters are certified at 300 PSI test pressure (2068 kPa) and 150 PSI working pressure (1034 kPa). All water connections are ¾” NPT (19mm). All gas connections are ⅝” (13mm). Design-certified by CSA International (formerly AGA/CGA), to meet ANSI standard Z21.10.3 and 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.

Optional Condensate Neutralizer Kit: p/n A2123601.

Concentric Vent Kit Termination

- 2" Kit: A (in.)
  - P/N 239-44069-02 743
- 3" Kit: A (in.)
  - P/N 239-44069-01 361/4
- 51mm Kit: A (mm)
  - P/N 239-44069-02 743
- 76mm Kit: A (mm)
  - P/N 239-44069-01 921

<table>
<thead>
<tr>
<th>Model Number</th>
<th>2&quot; Vent Pipe</th>
<th>3&quot; Vent Pipe</th>
<th>4&quot; Vent Pipe</th>
</tr>
</thead>
<tbody>
<tr>
<td>RC2PDV50H6N</td>
<td>Max. Intake Length: 50 ft.</td>
<td>120 ft.</td>
<td>180 ft.</td>
</tr>
<tr>
<td></td>
<td>Min. Exhaust Length: 150 ft.</td>
<td>1100 ft.</td>
<td>1180 ft.</td>
</tr>
<tr>
<td></td>
<td>Min. Equivalent Length: 7 ft.</td>
<td>15 ft.</td>
<td>15 ft.</td>
</tr>
<tr>
<td></td>
<td>Number of Elbows: 45 ft.</td>
<td>115 ft.</td>
<td>175 ft.</td>
</tr>
<tr>
<td></td>
<td>40 ft.</td>
<td>110 ft.</td>
<td>170 ft.</td>
</tr>
<tr>
<td></td>
<td>35 ft.</td>
<td>105 ft.</td>
<td>165 ft.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model Number</th>
<th>51mm Vent Pipe</th>
<th>76mm Vent Pipe</th>
<th>102mm Vent Pipe</th>
</tr>
</thead>
<tbody>
<tr>
<td>RC2PDV50H6N</td>
<td>Max. Intake Length: 15.2m</td>
<td>36.8m</td>
<td>54.9m</td>
</tr>
<tr>
<td></td>
<td>Min. Exhaust Length: 15.2m</td>
<td>36.6m</td>
<td>54.9m</td>
</tr>
<tr>
<td></td>
<td>Min. Equivalent Length: 2.1m</td>
<td>4.6m</td>
<td>4.6m</td>
</tr>
<tr>
<td></td>
<td>Number of Elbows: 13.7m</td>
<td>35.1m</td>
<td>53.3m</td>
</tr>
<tr>
<td></td>
<td>12.2m</td>
<td>33.6m</td>
<td>51.9m</td>
</tr>
<tr>
<td></td>
<td>10.7m</td>
<td>32.0m</td>
<td>50.3m</td>
</tr>
</tbody>
</table>

Subtract 5ft. (1.5m) for each additional 90° elbow. For high altitude installations, consult the installation instructions.

For field service, contact your professional installer or local Bradford White sales representative.

Sales 800-523-2931 • Fax 215-641-1612
Technical Support 800-334-3393 • Email techserv@bradfordwhite.com
Warranty 800-531-2111 • Email warranty@bradfordwhite.com
International: Telephone 1-215-641-9400 • Email international@bradfordwhite.com / www.bradfordwhite.com

Built to be the Best®