

Residential Power Direct Vent Gas Water Heater

The Power Direct Vent Models Feature:

- ENERGY STAR® Qualified—Some models qualify for the September 1, 2010 minimum ENERGY STAR® EF requirement, as well as most utility rebate programs.
- Bradford White ICON System<sup>™</sup>—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 V.A.C.).
  - 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.
  - 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 are 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.
- 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. for intake pipe and 10ft. for exhaust pipe when calculating total vent length.)
- Flammable Vapor Sensor—Electronic sensor prevents burner operation if flammable vapors are detected. The sensor will also prevent burner operation if there is an ongoing flammable vapor burn inside the combustion chamber (excluding RG2PDV75H6N).
- Factory-Installed Hydrojet® Total Performance System—Sediment reducing device that also increases first hour delivery 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) (RG2PDV50H6N & RG2PDV75H6N only).
- Factory Installed Heat Traps—Design incorporates a flexible disk that reduces heat loss in piping and eliminates the potential for noise generation.
- Protective Magnesium Anode Rod—Provides added protection against corrosion for long-term, trouble-free service.
- T&P Relief Valve—Installed.
- Low Restrictive Brass Drain Valve—Durable tamper proof design.
- NOx Emissions Less than 40 ng/J.



Photo is of RG2PDV40S6N

FEATURING: =













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

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.

## Power Direct Vent Gas Water Heater

## **Power Direct Vent Models**

NATURAL GAS AND LIQUID PROPANE GAS

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

| Model<br>Number | Capa         | acity        |                          |                        |                               |                  |    | Recov<br>90°F I     |    |                   | Model<br>Number | Capacity |                     |                   |                                 |      |                         | very at<br>Rise*      |
|-----------------|--------------|--------------|--------------------------|------------------------|-------------------------------|------------------|----|---------------------|----|-------------------|-----------------|----------|---------------------|-------------------|---------------------------------|------|-------------------------|-----------------------|
|                 | U.S.<br>Gal. | lmp.<br>Gal. | Nat.<br>BTU/Hr.<br>Input | LP<br>BTU/Hr.<br>Input | 1st Hour<br>Rating*<br>(Gal.) | Energy<br>Factor |    | Nat.<br>Imp.<br>GPH |    | LP<br>Imp.<br>GPH |                 | Liters   | Nat.<br>kW<br>Input | LP<br>kW<br>Input | 1st Hour<br>Rating*<br>(Liters) |      | Nat.<br>Liters/<br>Hour | LP<br>Liters/<br>Hour |
| ★ RG2PDV40S6N   | 40           | 33           | 40,000                   | 38,000                 | 72                            | 0.70             | 43 | 36                  | 41 | 34                | ★ RG2PDV40S6N   | 151      | 11.7                | 11.1              | 313                             | 0.70 | 163                     | 155                   |
| ★ RG2PDV50S6N   | 50           | 42           | 40,000                   | 38,000                 | 86                            | 0.70             | 43 | 36                  | 41 | 34                | ★ RG2PDV50S6N   | 189      | 11.7                | 11.1              | 326                             | 0.70 | 163                     | 155                   |
| ★ RG2PDV50H6N   | 48           | 40           | 60,000                   | 60,000                 | 100                           | 0.68             | 65 | 54                  | 65 | 54                | ★ RG2PDV50H6N   | 182      | 17.6                | 17.6              | 379                             | 0.68 | 246                     | 246                   |
| RG2PDV75H6N     | 75           | 62           | 80,000                   | 78,000                 | _                             | _                | 86 | 72                  | 84 | 70                | RG2PDV75H6N     | 284      | 23.4                | 22.9              | _                               | _    | 326                     | 318                   |

| Model<br>Number | A<br>Floor to<br>Exhaust<br>Outlet<br>in. | B<br>Jacket<br>Dia.<br>in. | C<br>Vent<br>Size<br>in. | D<br>Floor to<br>T&P<br>Conn.<br>in. | E<br>Floor to<br>Gas<br>Conn.<br>in. | F<br>Floor to<br>Top of<br>Heater<br>in. | H<br>Floor to<br>Air<br>Intake<br>in. | J<br>Floor to<br>Water<br>Conn.<br>in. | K<br>Depth<br>in. | L<br>Floor to<br>Space Heating<br>Return<br>in. | M<br>Floor to<br>Space Heating<br>Supply<br>in. | Approx.<br>Shipping<br>Weight<br>Ibs. |
|-----------------|---|----------------------------|--------------------------|--------------------------------------|--------------------------------------|--|---------------------------------------|--|-------------------|---|---|---------------------------------------|
| ★ RG2PDV40S6N   | 5911/16                                   | 22                         | 2 or 3                   | 421/2                                | 14                                   | 491/2                                    | 593/8                                 | 5013/16                                | 301/2             | _   | _   | 161                                   |
| ★ RG2PDV50S6N   | 607/8                                     | 24                         | 2 or 3                   | 431/2                                | 14                                   | 501/2                                    | 603/8                                 | 51 <sup>13</sup> / <sub>16</sub>       | 321/2             | _   | _   | 192                                   |
| ★ RG2PDV50H6N   | 69  | 22                         | 3 or 4                   | 52 <sup>1</sup> / <sub>4</sub>       | 13 5/8                               | 58 <sup>3</sup> / <sub>4</sub>           | 67                                    | 60                                     | 30 5/8            | 15 <sup>3</sup> / <sub>4</sub>                  | 52 <sup>1</sup> / <sub>4</sub>                  | 204                                   |
| RG2PDV75H6N     | 70  | 26                         | 3 or 4                   | 511/2                                | 14                                   | 597/8                                    | 681/4                                 | 611/4                                  | 35                | 16 7/8  | 511/2   | 291                                   |

| Model<br>Number | A<br>Floor to<br>Exhaust<br>Outlet<br>mm. | B<br>Jacket<br>Dia.<br>mm. | C<br>Vent<br>Size<br>mm. | D<br>Floor to<br>T&P<br>Conn.<br>mm. | E<br>Floor to<br>Gas<br>Conn.<br>mm. | F<br>Floor to<br>Top of<br>Heater<br>mm. | H<br>Floor to<br>Air<br>Intake<br>mm. | J<br>Floor to<br>Water<br>Conn.<br>mm. | K<br>Depth<br>mm. | L<br>Floor to<br>Space Heating<br>Return<br>mm. | M<br>Floor to<br>Space Heating<br>Supply<br>mm. | Approx.<br>Shipping<br>Weight<br>kg. |
|-----------------|---|----------------------------|--------------------------|--------------------------------------|--------------------------------------|--|---------------------------------------|--|-------------------|---|---|--------------------------------------|
| ★ RG2PDV40S6N   | 1516                                      | 559                        | 51 or 76                 | 1080                                 | 356                                  | 1257                                     | 1508                                  | 1291                                   | 775               | _   | _   | 73                                   |
| ★ RG2PDV50S6N   | 1546                                      | 610                        | 51 or 76                 | 1105                                 | 356                                  | 1283                                     | 1534                                  | 1316                                   | 826               | _   | _   | 87                                   |
| ★ RG2PDV50H6N   | 1753                                      | 559                        | 76 or 102                | 1327                                 | 346                                  | 1492                                     | 1702                                  | 1524                                   | 778               | 400   | 1327  | 93                                   |
| RG2PDV75H6N     | 1734                                      | 660                        | 76 or 102                | 1308                                 | 356                                  | 1521                                     | 1778                                  | 1556                                   | 889               | 429   | 1308  | 132                                  |

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

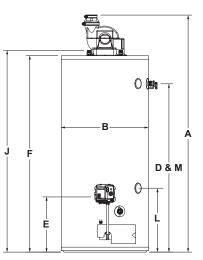
For 10 year model, change suffix "6" to "10".

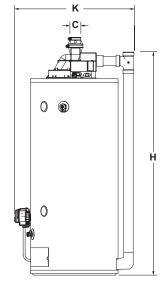
\*Based on manufacturer's rated recovery efficiency.

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

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







| RAIN<br>CAP               | <u></u>      | }        | _                 |
|---------------------------|--------------|----------|-------------------|
|                           |              | <b>A</b> |                   |
| INTAKE<br>COMBUSTIO<br>AI | N  <br>R VEI |          | _                 |
| Conce                     | EXI<br>ntri  |          | ST<br><b>/ent</b> |

Concentric Vent Kit Termination

| 2" Kit           | A (in.) |
|------------------|---------|
| P/N 239-44069-02 | 291/4   |
|                  |         |
| 3" Kit           | A (in.) |

| 2" Vent Pipe       |     | RG2PDV40S6N<br>RG2PDV50S6N |             |
|--------------------|-----|----------------------------|-------------|
| Max. Intake Length | 1   | 35 ft.                     |             |
| Max. Exhaust Leng  | jth | 35 ft.                     |             |
| Min. Vent Length   |     | 7 ft.                      |             |
| Number             | 1   | 30 ft.                     |             |
| of                 | 2   | 25 ft.                     |             |
| 90° Elbows         | 3   | 20 ft.                     |             |
| 3" Vent Pine       |     | RG2PDV40S6N                | RG2PDV50H6N |

| 3" Vent Pipe       |     | RG2PDV4056N |             |
|--------------------|-----|-------------|-------------|
| Max. Intake Length | 1   | 85 ft.      | 60 ft.      |
| Max. Exhaust Leng  | jth | 85 ft.      | 60 ft.      |
| Min. Vent Length   |     | 7 ft.       | 7 ft.       |
| Number             | 1   | 80 ft.      | 55 ft.      |
| of                 | 2   | 75 ft.      | 50 ft.      |
| 90° Elbows         | 3   | 70 ft.      | 45 ft.      |
| 4" Vent Pine       |     |             | RG2PDV50H6N |

| 4" Vent Pipe      |     | RG2PDV75H6N |
|-------------------|-----|-------------|
| Max. Intake Lengt | h   | 100 ft.     |
| Max. Exhaust Len  | gth | 100 ft.     |
| Min. Vent Length  |     | 7 ft.       |
| Number            | 1   | 95 ft.      |
| of                | 2   | 90 ft.      |
| 90° Elbows        | 3   | 85 ft.      |

Subtract 5ft. (1.5m) for each additional 90° elbow.

## General:

## Meets NAECA Requirements (Applicable Models).

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

All models design-certified by CSA International (formerly AGA/CGA), to meet ANSI standard Z-21.10.1 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.



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

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