

# Power Direct Vent Residential Gas Water Heater

## Features

- **Defender Safety System®**—Designed to be the safest & most reliable flammable vapor ignition resistant system in the industry with a proven track record since 2003. Featuring an advanced ScreenLok® technology flame arrestor design, flammable vapor sensor, sight window, and designed to be maintenance-free.
- **Bradford White ICON System®**—Intelligent gas control that eliminates constant burning pilot, saving gas during standby periods (120 VAC). Proprietary algorithms provide tighter temperature differential and consistent water temperature levels up to 160°F (70°C). LED light indicates pilot function or operation status/service required.
- **Vitraglas® Lining with Microban®**—An exclusively engineered enamel formula that provides superior tank protection from the corrosive effects of water; and with Microban® antimicrobial product protection to help prevent the growth of bacteria, mold and mildew on the surface of the tank lining.
- **Hydrojet® Total Performance System**—Sediment reducing device that also increases first hour rating of hot water while minimizing temperature build-up in tank.

## Additional Details

- **Closed Combustion Venting System**—Ideal for tightly insulated installations with insufficient air for combustion. Twin pipe system: one pipe draws in outside air, while the other expels combustion products.
- **Cast Aluminum Air Intake Boot**—Provides exceptional durability during installation and operation.
- **Flexible Venting**—Horizontal/vertical venting with PVC, ABS, or CPVC.\* Concentric Vent Kit termination provides single exit point (subtract 10ft (3m) for both intake and exhaust pipes when calculating length).
- **Insulation System**—Non-CFC foam covers the tank, reducing heat loss, energy consumption, and improves efficiency and jacket rigidity.
- **Factory Installed Heat Traps**—Incorporates a flexible disk that reduces heat loss in piping and prevents noise.
- **Water Connections**—Factory-installed true dielectric waterways extend water heater life and simplify water line connections.
- **Protective 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.

\*Intake venting length cannot exceed exhaust venting length.



Photo is of RG2PDV40S6N

Bradford White  
**DEFENDER**  
Safety System

BRADFORD WHITE  
**ICON**  
System

**VITRAGLAS**  
SUPERIOR PROTECTION SINCE 1987

+

**MICROBAN**

**Hydrojet**



**6 or 10-Year Limited Tank Warranties / 6-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. See complete copy of the warranty included with the heater for limitations.

Microban® antimicrobial product protection helps prevent the growth of bacteria, mold and mildew that may affect the product. The built-in antimicrobial properties do not protect users or others from disease-causing organisms. Microban® is a registered trademark of Microban Products Company.

# Power Direct Vent Residential Gas Water Heater

## SPECIFICATIONS

Natural Gas and Liquid Propane Gas

These water heaters meet or exceed all or portions of (where applicable) the minimum efficiency requirements of ASHRAE Standard 90.1 (latest edition), C.E.C. Listed, 78% Recovery Efficiency.

Model Number	Rated Nominal Volume		DOE Rated Storage Volume Gal.	First Hour Rating BTU/Hr. Input	LP BTU/Hr. Input	Uniform Energy Factor	Recovery at 90°F Rise*				Model Number	Rated Nominal Volume Liters	DOE Rated Storage Volume Liters	First Hour Rating kW Input	LP kW Input	First Hour Rating Liters	Uniform Energy Factor	Recovery at 50°C Rise*	
	U.S. Gal.	Imp. Gal.					U.S. GPH	Imp. GPH	U.S. GPH	Imp. GPH								U.S. GPH	Imp. GPH
RG2PDV40S6N	40	33	38	40,000	38,000	0.70	43	36	41	34	RG2PDV40S6N	151	144	11.7	11.1	284	0.70	163	155
RG2PDV50S6N	50	42	48	40,000	38,000	0.68	43	36	41	34	RG2PDV50S6N	189	182	11.7	11.1	303	0.68	163	155
RG2PDV50H6N	48	40	46	60,000	60,000	0.68	65	54	65	54	RG2PDV50H6N	182	174	17.6	17.6	390	0.68	246	246
RG2PDV75H6N	75	62	72	80,000	78,000	0.69	86	72	84	70	RG2PDV75H6N	284	273	23.4	22.9	508	0.69	326	318

Model Number	A Floor to Exhaust Conn. in.	B Jacket Dia. in.	C Vent Size in.	D Floor to T&P Conn. in.	E Floor to Gas Conn. in.	F Floor to Top of Heater in.	G Floor to Water Conn. in.	H Depth in.	J C/L of Water Conn. in.	K Floor to Space Heating Inlet in.	L Floor to Space Heating Outlet in.	M Water Conn. NPT in.	N Floor to Air Intake in.	R Space Heating Conn. Size in.	S Gas Conn. Size in.	Approx. Shipping Weight lbs.
RG2PDV40S6N	59 <sup>7</sup> / <sub>8</sub>	22	2 or 3	42 <sup>9</sup> / <sub>16</sub>	13 <sup>15</sup> / <sub>16</sub>	49 <sup>9</sup> / <sub>16</sub>	49 <sup>15</sup> / <sub>16</sub>	32 <sup>3</sup> / <sub>8</sub>	8	N/A	N/A	3/4	59 <sup>7</sup> / <sub>16</sub>	N/A	1/2	161
RG2PDV50S6N	60 <sup>7</sup> / <sub>8</sub>	24	2 or 3	43 <sup>1</sup> / <sub>16</sub>	13 <sup>15</sup> / <sub>16</sub>	50 <sup>9</sup> / <sub>16</sub>	52	34 <sup>3</sup> / <sub>8</sub>	8	N/A	N/A	3/4	60 <sup>7</sup> / <sub>16</sub>	N/A	1/2	192
RG2PDV50H6N	69 <sup>1</sup> / <sub>16</sub>	22	3 or 4	52 <sup>5</sup> / <sub>16</sub>	13 <sup>15</sup> / <sub>16</sub>	59 <sup>5</sup> / <sub>16</sub>	60 <sup>3</sup> / <sub>16</sub>	30 <sup>1</sup> / <sub>2</sub>	11	15 <sup>13</sup> / <sub>16</sub>	52 <sup>5</sup> / <sub>16</sub>	3/4	69 <sup>3</sup> / <sub>16</sub>	3/4	1/2	204
RG2PDV75H6N	69 <sup>1</sup> / <sub>2</sub>	26	3 or 4	51 <sup>15</sup> / <sub>16</sub>	13 <sup>15</sup> / <sub>16</sub>	59 <sup>1</sup> / <sub>16</sub>	60 <sup>3</sup> / <sub>16</sub>	35 <sup>3</sup> / <sub>8</sub>	11	16 <sup>11</sup> / <sub>16</sub>	51 <sup>15</sup> / <sub>16</sub>	3/4	69 <sup>3</sup> / <sub>16</sub>	3/4	1/2	291

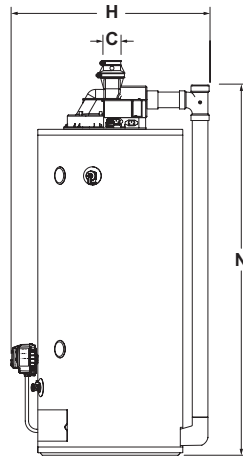
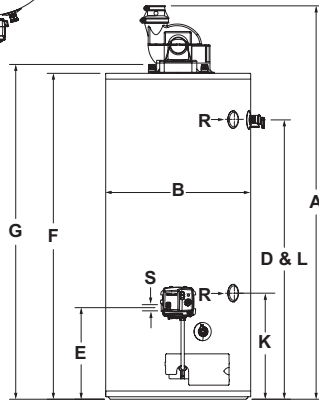
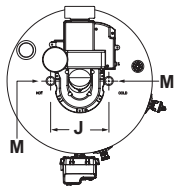
Model Number	A Floor to Exhaust Conn. mm.	B Jacket Dia. mm.	C Vent Size mm.	D Floor to T&P Conn. mm.	E Floor to Gas Conn. mm.	F Floor to Top of Heater mm.	G Floor to Water Conn. mm.	H Depth mm.	J C/L of Water Conn. mm.	K Floor to Space Heating Inlet mm.	L Floor to Space Heating Outlet mm.	M Water Conn. NPT mm.	N Floor to Air Intake mm.	R Space Heating Conn. Size mm.	S Gas Conn. Size mm.	Approx. Shipping Weight kg.
RG2PDV40S6N	1521	559	51 or 76	1081	354	1259	1268	822	203	N/A	N/A	19	1510	N/A	13	73
RG2PDV50S6N	1546	610	51 or 76	1094	354	1284	1321	873	203	N/A	N/A	19	1535	N/A	13	87
RG2PDV50H6N	1754	559	76 or 102	1329	354	1507	1529	775	279	402	1329	19	1757	19	13	93
RG2PDV75H6N	1765	660	76 or 102	1319	354	1516	1529	899	279	424	1319	19	1767	19	13	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.

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



### Concentric Vent Kit Termination

2" (51mm) Kit	A (in.)	(mm)
P/N 415-44069-02	29 <sup>1</sup> / <sub>4</sub>	743
3" (76mm) Kit	A (in.)	(mm)
P/N 415-44069-01	36 <sup>1</sup> / <sub>4</sub>	921

2" (51mm) Vent Pipe	RG2PDV40S6N RG2PDV50S6N	
Max. Intake Length	35 ft.	10.7m
Max. Exhaust Length	35 ft.	10.7m
Min. Vent Length	7 ft.	2.1m
Number of 90° Elbows	1	30 ft. 9.1m
	2	25 ft. 7.6m
	3	20 ft. 6.1m

3" (76mm) Vent Pipe	RG2PDV40S6N RG2PDV50S6N	RG2PDV50H6N RG2PDV75H6N
Max. Intake Length	85 ft. 26.0m	60 ft. 18.3m
Max. Exhaust Length	85 ft. 26.0m	60 ft. 18.3m
Min. Vent Length	7 ft. 2.1m	7 ft. 2.1m
Number of 90° Elbows	1	80 ft. 24.4m / 55 ft. 16.8m
	2	75 ft. 23.0m / 50 ft. 15.2m
	3	70 ft. 21.3m / 45 ft. 13.7m

4" (102mm) Vent Pipe	RG2PDV50H6N RG2PDV75H6N	
Max. Intake Length	100 ft.	30.5m
Max. Exhaust Length	100 ft.	30.5m
Min. Vent Length	7 ft.	2.1m
Number of 90° Elbows	1	95 ft. 29.0m
	2	90 ft. 27.4m
	3	85 ft. 26.0m

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

## GENERAL:

Meets NAECA Requirements, as applicable. 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 Z21.10.1 (except RG2PDV75H6N = Z21.10.3) and peak performance rated.

**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.

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



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