

## Residential Power Direct Vent Gas Water Heater



Photo is of  
RG2PDV40S6N

**FEATURING:**



**The Power Direct Vent Models Feature:**

- **ENERGY STAR® Qualified**—Some models meet or exceed requirements for ENERGY STAR® per the latest ENERGY STAR® criteria revision, as well as most utility rebate programs.
- **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.
- **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.)
- **Flammable Vapor Sensor**—Electronic sensor prevents burner operation if flammable vapors are detected. The sensor will also prevent operation if there is ongoing flammable vapors burning inside the combustion chamber.
- **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 tapings 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 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.

**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.

# Power Direct Vent Gas Water Heater

## Power Direct Vent Models

NATURAL GAS AND LIQUID PROPANE GAS

Meet or exceed ASHRAE 90.1 (latest edition). C.E.C. Listed  
78% Recovery Efficiency

Model Number	Rated Nominal Volume		DOE Rated Storage Volume (Gal.)	BTU/Hr. Input	LP BTU/Hr. Input	First Hour Rating (Gal.)	Uniform Energy Factor	Recovery at 90°F Rise*				Model Number	Rated Nominal Volume		DOE Rated Storage Volume (Liters)	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	LP U.S. GPH	LP Imp. GPH		U.S. Gal.	Imp. Gal.						Liters	Liters/ Hour
★ RG2PDV40S6N	40	33	38	40,000	38,000	75	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	80	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	103	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	134	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>9</sup> / <sub>16</sub>	60 <sup>3</sup> / <sub>16</sub>	30 <sup>1</sup> / <sub>2</sub>	11	15 <sup>19</sup> / <sub>16</sub>	52 <sup>9</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>11</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>9</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

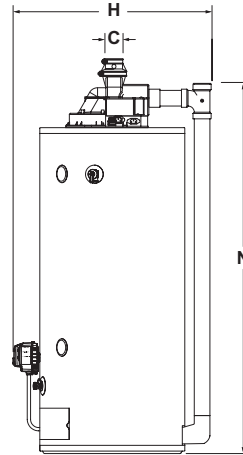
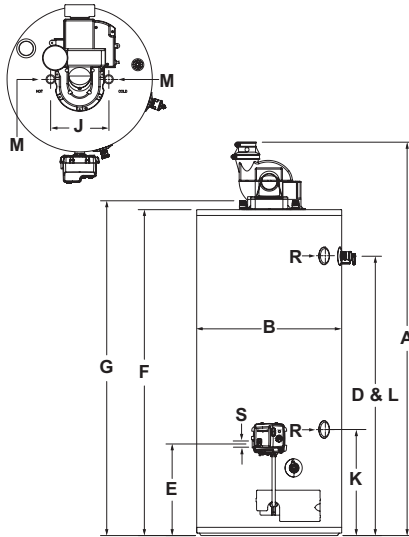
Propane models feature a Titanium Stabilized Stainless Steel propane burner. For Propane (LP) models change suffix "N" to "X".  
For 10 year model, change suffix "6" to "10".

\* 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.

★ = ENERGY STAR® Qualified.



### Concentric Vent Kit Termination

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

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 or EPACT 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.

**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.

— BRADFORD WHITE IS —



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24/7 Technical Support: 800-334-3393 ■ Email techserv@bradfordwhite.com

Products made by Bradford White are manufactured in the United States using the finest raw materials and components from around the world.

**Built to be the Best**