http://waterheatertimer.org/power-vent-water-heater-troubleshoot.html



Residential Power Direct Vent Gas Water Heater

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 (excluding RG2PDV75H6N).
- 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) (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















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

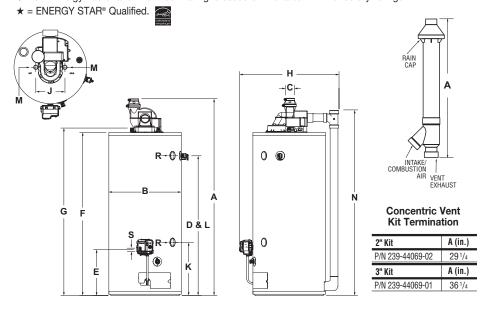
Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed 78% Recovery Efficiency

NATURAL GAS AND LIQUID PROPANE GAS							70 /0 Housesty Emolency													
Model Number	Nominal Gal. Capacity	DOE Rated			First		Recovery at 90°F Rise*				Model Number		Nominal Liter Capacity	DOE Rated			First		Rec 50°	overy at C Rise*
	U.S. Imp. Gal. Gal.	Storage Volume (Gal.)		LP BTU/Hr. Input	Hour Rating (Gal.)	Uniform Energy Factor	U.S. GPH	lmp. GPH	LP LF U.S. Imp GPH GP).				Storage Volume (Liters)	kW Input		Rating E	niform nergy actor	Liters, Hour	LP / Liters/ Hour
★ RG2PDV40S6N	40 33	38	40,000	38,000	73	0.64	43	36	41 34	*	RG2	PDV40S6N	151	144	11.7	11.1	277	0.64	163	155
★ RG2PDV50S6N	50 42	48	40,000	38,000	80	0.68	43	36	41 34	*	RG2	2PDV50S6N	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	*	r RG2	PDV50H6N	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		RG2	PDV75H6N	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 loor to Water Conn. in.	H Depth in.	C/L Wa Coi ir	iter nn.	K Floor to Space Heating Inlet in.	Floo Spa Heating	ace J Outlet	M Water Conn. NPT in.	N Floor to Air Intake in.	Heatin	g (S Gas Conn. Size in.	Approx. Shipping Weight Ibs.
★ RG2PDV40S6N	597/8	22	2 or 3	42 9/16	13 15/16	49 9/16	4	19 ¹⁵ / ₁₆	323/8	8	}	N/A	N,	/A	3/4	597/16	N/A		1/2	161
★ RG2PDV50S6N	607/8	24	2 or 3	431/16	13 15/16	50 9/16		52	343/8	8	3	N/A	N,	/A	3/4	60 7/16	N/A		1/2	192
★ RG2PDV50H6N	691/16	22	3 or 4	52 5/16	13 15/16	595/16	(3/ ₁₆	30 1/2	11	1	15 ¹³ / ₁₆	52	5/16	3/4	693/16	3/4		1/2	204
RG2PDV75H6N	69 1/2	26	3 or 4	51 15/16	13 15/16	59 11/16	(3/ ₁₆	353/8	1	1	16 11/16	511	5/16	3/4	69 9/16	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 loor to Water Conn. mm.	H Depth mm.	C/L Wa Coi mi	iter nn.	K Floor to Space Heating Inlet mm.	Floo Spa Heating mr	ace J Outlet	M Water Conn. NPT mm	N Floor to Air Intake mm.	Heatin	g (ize	S Gas Conn. Size mm.	Approx. Shipping Weight kg.
★ RG2PDV40S6N	1521	559	51 or 76	1081	354	1259		1268	822	20)3	N/A	N,	/A	19	1510	N/A		13	73
★ RG2PDV50S6N	1546	610	51 or 76	1094	354	1284		1321	873	20)3	N/A	N,	/A	19	1535	N/A		13	87
★ RG2PDV50H6N	1754	559	76 or 102	1329	354	1507		1529	775	27	79	402	13	29	19	1757	19		13	93
RG2PDV75H6N	1765	660	76 or 102	1319	354	1516	1 -	1529	899	27	7	424	1 10	19	19	1767	19	- 1	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".

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.



2" Vent Pipe		RG2PDV40S6N 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 Pipe		RG2PDV40S6N RG2PDV50S6N	RG2PDV50H6N RG2PDV75H6N				
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 Pipe			RG2PDV50H6N RG2PDV75H6N				
Max. Intake Length	1		100 ft.				
Max. Exhaust Leng	jth		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 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.







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

^{*} Based on manufacturer's rated recovery efficiency.