

eF Series® Power Direct Vent Residential Gas Water Heater

Features

- **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

- **Vertical, Dual-pass Heat Exchanger System**—Highly efficient helical-finned 5" (127mm) primary heat exchanger and three 2" (51mm) stainless steel baffled secondary tubes. Vertical design prevents corrosion issues common with less durable heat exchanger designs.
- **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.
- **Flexible Venting**—Can be installed as power vent or power direct vent (PDV can be balanced or unbalanced and terminate on different walls/pressure zones). Horizontal/vertical venting with PVC, ABS, or CPVC, or stainless steel.* 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.
- **Water Connections**—3/4" (19mm) NPT factory-installed true dielectric fittings extend water heater life and simplify water line connections.
- **Factory Installed Heat Traps**—Incorporates a flexible disk that reduces heat loss in piping and prevents noise.
- **Two Protective Anode Rods**—Provide 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 RC2PDV50H6N

PROPOSED WATER
ICON
System

VITRAGLAS
EXCLUSIVE PROTECTION FORMULA
+
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

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.

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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).

Model Number	Rated Nominal Volume		DOE Rated Storage Volume Gal.	First Hour Rating Gal.	Uniform Energy Factor	Recovery at 90°F Rise*				Model Number	Rated Nominal Volume		DOE Rated Storage Volume Liters	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				Liters	Liters	kW Input	LP kW Input	Liters/ Hour
RC2PDV50H6N	50	42	48	76,000	76,000	125	0.80	89	77	93	77	RC2PDV50H6N	190	185	22.0	22.0	473	0.80	337	352

Model Number	A Floor to Vent 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 Intake Conn. in.	R Space Heating Conn. Size in.	S Gas Conn. Size in.	Approx. Shipping Weight lbs.
RC2PDV50H6N	67 ⁷ / ₁₆	24	2, 3, and 4	46 ³ / ₈	14 ¹ / ₈	56 ¹ / ₄	57	33 ³ / ₄	8	15 ⁵ / ₈	46 ³ / ₈	3/4	65 ⁵ / ₈	3/4	1/2	290

Model Number	A Floor to Vent 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 Intake Conn. mm.	R Space Heating Conn. Size mm.	S Gas Conn. Size mm.	Approx. Shipping Weight kg.
RC2PDV50H6N	1713	610	51, 76, and 102	1178	359	1429	1448	857	203	397	1178	19	1667	19	13	131

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.

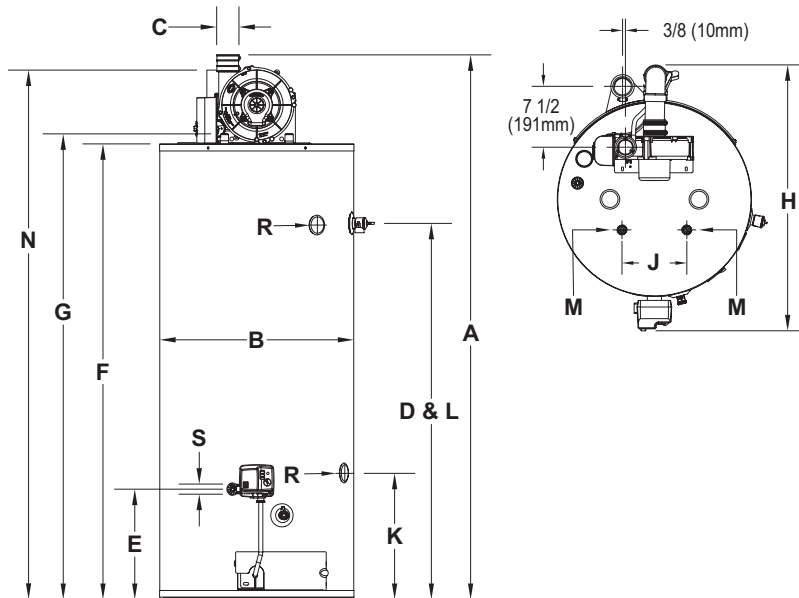
Uniform Energy Factor and First Hour Rating is based on the latest AHRI directory listings.

Optional Condensate Neutralizer Kit: p/n A2123601.



Concentric Vent Kit Termination

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



RC2PDV50H6N	2" Vent Pipe	3" Vent Pipe	4" Vent Pipe
Max. Intake Length	50 ft.	120 ft.	180 ft.
Min. Exhaust Length	†50 ft.	†120 ft.	†180 ft.
Min. Equivalent Length	7 ft.	15 ft.	15 ft.
Number of 90° Elbows	1 45 ft. 2 40 ft. 3 35 ft.	1 115 ft. 2 110 ft. 3 105 ft.	1 175 ft. 2 170 ft. 3 165 ft.

RC2PDV50H6N	51mm Vent Pipe	76mm Vent Pipe	102mm Vent Pipe
Max. Intake Length	15.2m	36.6m	54.9m
Min. Exhaust Length	†15.2m	†36.6m	†54.9m
Min. Equivalent Length	2.1m	4.6m	4.6m
Number of 90° Elbows	1 13.7m 2 12.2m 3 10.7m	1 35.1m 2 33.6m 3 32.0m	1 53.3m 2 51.9m 3 50.3m

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

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 3/4" NPT (19mm). All gas connections are 1/2" (13mm). All models design-certified by CSA International (formerly AGA/CGA) to ANSI standard Z21.10.1.

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.



Sales: 800-523-2931

24/7 Technical Support: 800-334-3393 • Email TechServ@bradfordwhite.com

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