

# Light-Duty Ultra Low NOx Power Direct Vent Commercial Gas Water Heater

## Features

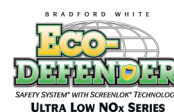
- **Eco-Defender Safety System®**—Designed to be the safest & most reliable flammable vapor ignition resistant system in the industry. Featuring an advanced ScreenLok® technology flame arrestor design, primary and secondary air distribution that reduces NOx generated by combustion, resettable thermal switch, 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 180°F (82°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**—Power Direct Vent closed combustion system utilizes external air for combustion and exhausts directly to the outside through a separate two-pipe system. The equivalent feet of intake venting cannot be greater than the equivalent feet of exhaust venting.
- **Cast Aluminum Air Intake Boot**—A cast molded air intake boot design provides exceptional durability during installation and operation.
- **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.
- **Optional Concentric Vent Kit Termination**—Concentric 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.)
- **Horizontal and Vertical Venting**—PVC, ABS, or CPVC (Maximum equivalent vent length for each pipe on reverse side).
- **Insulation System**—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.
- **3/4" (19mm) NPT Side Connections**—3/4" (19mm) NPT tapings that allow easy connections for space heating applications (potable water 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.
- **Complies with the latest Ultra Low NOx requirement (10 ng/J NOx limit).**



Photo is of ULG2PDV50H503N



### 3 or 5-Year Limited Tank Warranties / 1-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. 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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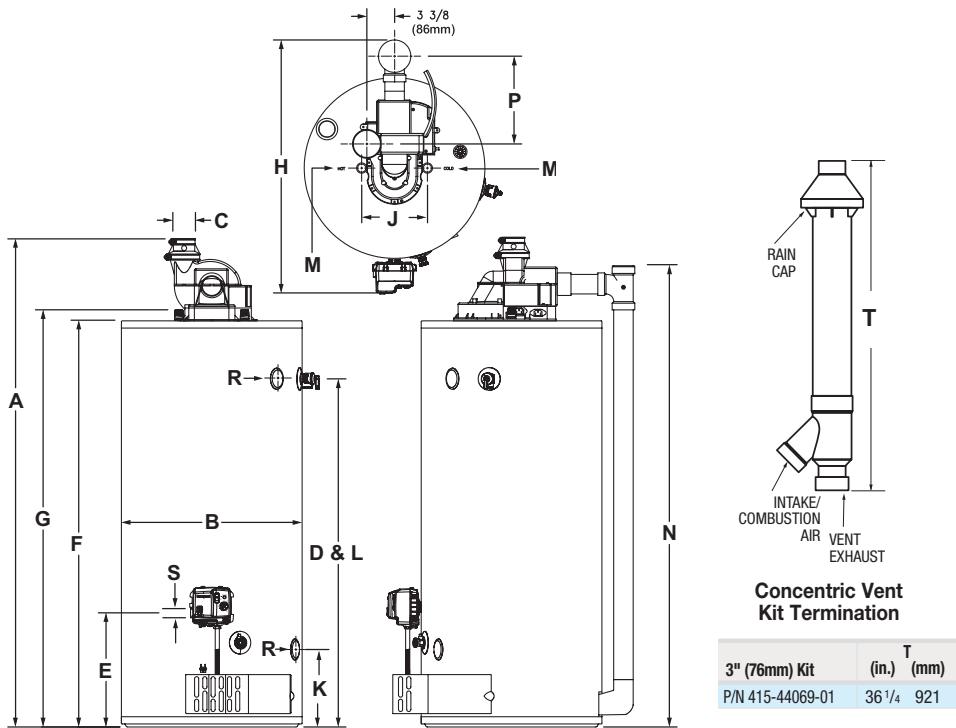
## SPECIFICATIONS

NATURAL GAS

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.)	BTU/Hr. Input	First Hour Rating (Gal.)	Uniform Energy Factor	Recovery at 100°F Rise*		Model Number	Rated Nominal Volume	DOE Rated Storage Volume (Liters)	kW Input	First Hour Rating (Liters)	Uniform Energy Factor	Recovery at 56°C Rise*		
	U.S. Gal.	Imp. Gal.					U.S. GPH	Imp. GPH								Liters	Liters/ Hour
ULG2PDV50H503N	48	40	46	50,000	82	0.68	48	40	ULG2PDV50H503N	182	172	14.7	311	0.68	182		
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.	P C/L Distance From Intake to Exhaust in.	R Space Heating Conn. Size in.	S Gas Conn. Size in.	Approx. Shipping Weight lbs.
ULG2PDV50H503N	67 <sup>5</sup> / <sub>16</sub>	22	3 or 4	52 <sup>1</sup> / <sub>4</sub>	13 <sup>7</sup> / <sub>8</sub>	59 <sup>11</sup> / <sub>16</sub>	61 <sup>15</sup> / <sub>16</sub>	31 <sup>11</sup> / <sub>16</sub>	11	15 <sup>3</sup> / <sub>4</sub>	52 <sup>1</sup> / <sub>4</sub>	3 <sup>4</sup> / <sub>4</sub>	63 <sup>7</sup> / <sub>8</sub>	9 <sup>1</sup> / <sub>4</sub>	3 <sup>4</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	201
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.	P C/L Distance From Intake to Exhaust mm.	R Space Heating Conn. Size mm.	S Gas Conn. Size mm.	Approx. Shipping Weight kg.
ULG2PDV50H503N	1708	559	76 or 102	1327	352	1516	1573	805	279	400	1327	19	1622	235	19	13	91

Available in Natural Gas only. For 5 year models change suffix from “3” to “5”.  
\* 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.



ULG2PDV50H503N	3" Vent Pipe	4" Vent Pipe
Max. Intake Length	60 ft.	100 ft.
Max. Exhaust Length	60 ft.	100 ft.
Min. Vent Length	7 ft.	7 ft.
Number of 90° Elbows	1	55 ft.
	2	50 ft.
	3	45 ft.
ULG2PDV50H503N	76mm Vent Pipe	102mm Vent Pipe
Max. Intake Length	18.3m	30.5m
Max. Exhaust Length	18.3m	30.5m
Min. Vent Length	2.1m	2.1m
Number of 90° Elbows	1	17.0m
	2	15.2m
	3	18.0m

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

## 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) on 11" (279mm) centers, all gas connections are 1/2" (13mm). All models design-certified by CSA International, ANSI standard Z21.10.1 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.