

# Light-Duty Power Direct Vent Commercial 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 (LG2PDV50H603N only).
- **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 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.
- **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 extend water heater life and simplify water line connections.
- **3/4" (19mm) NPT Side Connections**— 3/4" (19mm) NPT tappings 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.
- **NOx Emissions**—Less than 40 ng/J.

Photo is of LG2PDV50H603N



Bradford White  
**DEFENDER**  
Safety System®

BRADFORD WHITE  
**ICON**  
System

**VITRAGLAS**  
SUPERIOR PROTECTION SINCE 1981

+

PROTECTION THAT LIVES ON  
**MICROBAN**  
**Hydrojet**



**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.

C1755-0825 CANADA

# Light-Duty Power Direct Vent Commercial 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).

Model Number	Rated Nominal Volume		BTU/Hr. Input	LP BTU/Hr. Input	First Hour Rating (Gal.)	Uniform Energy Factor	Recovery at 100°F Rise*				Model Number	Rated Nominal Volume		kW Input	LP kW Input	First Hour Rating (Liters)	Uniform Energy Factor	Recovery at 56°C Rise*	
	U.S. Gal.	Imp. Gal.					U.S. GPH	Imp. GPH	U.S. GPH	LP Imp. GPH		Liters	Liters/ Hour					LP Liters/ Hour	
LG2PDV50H603N	48	40	60,000	60,000	103	0.68	58	48	58	48	LG2PDV50H603N	182	17.6	17.6	390	0.68	220	220	
LG2PDV75H803N	75	62	80,000	78,000	134	0.69	77	64	76	63	LG2PDV75H803N	284	23.4	22.9	508	0.69	292	288	
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.			
LG2PDV50H603N	69 <sup>3</sup> / <sub>16</sub>	22	3 or 4	52 <sup>1</sup> / <sub>4</sub>	13 <sup>11</sup> / <sub>16</sub>	59 <sup>3</sup> / <sub>16</sub>	59 <sup>13</sup> / <sub>16</sub>	30 <sup>7</sup> / <sub>8</sub>	11	15 <sup>9</sup> / <sub>4</sub>	52 <sup>1</sup> / <sub>4</sub>	¾	69 <sup>1</sup> / <sub>8</sub>	¾	½	205			
LG2PDV75H803N	69 <sup>1</sup> / <sub>4</sub>	26	3 or 4	51 <sup>7</sup> / <sub>8</sub>	13 <sup>11</sup> / <sub>16</sub>	59 <sup>1</sup> / <sub>4</sub>	60 <sup>13</sup> / <sub>16</sub>	35 <sup>1</sup> / <sub>8</sub>	11	10 <sup>1</sup> / <sub>4</sub>	51 <sup>7</sup> / <sub>8</sub>	¾	69 <sup>3</sup> / <sub>4</sub>	¾	½	392			
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.			
LG2PDV50H603N	1757	559	76 or 102	1327	348	1503	1519	784	279	400	1327	19	1756	19	13	93			
LG2PDV75H803N	1758	660	76 or 102	1318	348	1505	1544	892	279	260	1318	19	1772	19	13	178			

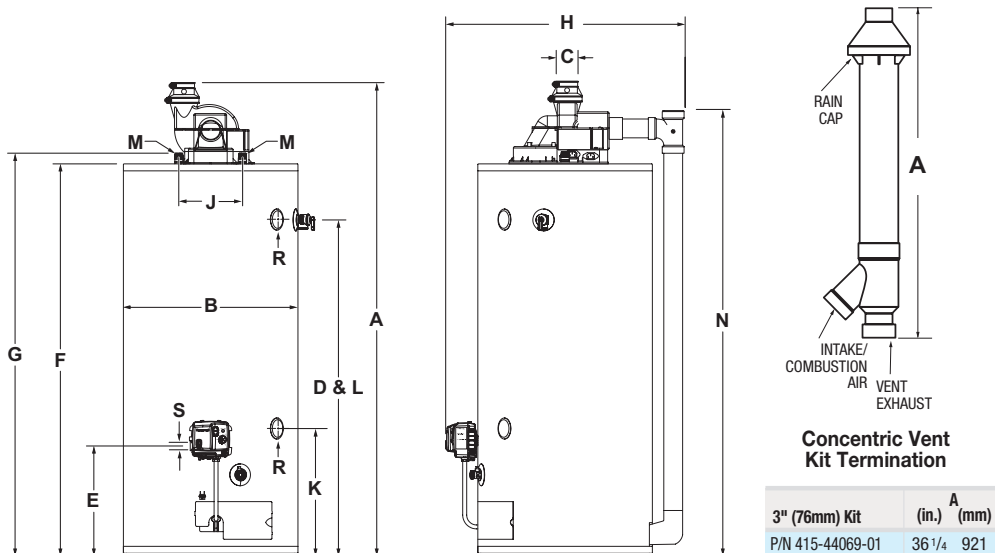
Propane models feature a Titanium Stabilized Stainless Steel propane burner. For Propane (LP) models change suffix "N" to "X".

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.



LG2PDV50H603N LG2PDV75H803N		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°	1	55 ft.	95 ft.
	2	50 ft.	90 ft.
	3	45 ft.	85 ft.
LG2PDV50H603N LG2PDV75H803N		72mm 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°	1	17.0m	29.0m
	2	15.2m	27.4m
	3	18.0m	26.0m

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

### Concentric Vent Kit Termination

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

## 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 Z21.10.3 and peak performance rated (LG2PDV50H653N = ANSI 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.**