

# Light Duty Commercial Ultra Low NOx High Input Direct Vent Energy Saver Gas Water Heater



Photo is of  
UDH-50T-45FR-3N

**The Direct Vent FVIR Eco-Defender Safety System® Models Feature:**

- **Ultra Low NOx Burner with Primary and Secondary Air Distribution Devices**—Ensures proper air to gas ratio for reduction of NOx generated by the combustion process.
- **Self Diagnostic Honeywell Gas Control**—Integrated, immersion gas control learns and monitors the combustion chamber's temperature profile and prevents water heater operation during upset conditions. Also equipped with an LED display to aid in start-up and diagnostics.
- **Closed Combustion**—All air for combustion is taken directly from the outside. The co-axial vent pipe (pipe inside a pipe) draws combustion air in through the outer pipe (6"), and exhausts the products of combustion through the inner pipe (4"). The co-axial vent pipe at the top of the unit can be rotated for venting flexibility.
- **Reinforced Seals**—Seals surround the closed combustion chamber and the FVIR inner door, preventing the ignition of Flammable Vapors outside of the water heater.
- **Maintenance Free**—The vent piping and the closed combustion chamber with reinforced seals does not require regular cleaning under normal operating conditions.
- **Sight Window**—Offers a view into the combustion chamber to observe the operation of the pilot and burner.
- **Factory Installed Hydrojet® Total Performance System**—Cold water inlet sediment reducing device helps prevent sediment build up in tank. Increases first hour delivery of hot water while minimizing temperature build up in tank.
- **Vitraglas® Lining**—Bradford White tanks are lined with 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).
- **Cast Aluminum Air Intake Boot**—A cast molded air intake boot provides exceptional installation durability.
- **Telescoping Solid Vent Kits**—Multiple kits (see reverse side) allow up to 8ft. vertical and 8ft. horizontal vent lengths (horizontal termination only).
- **Flexible Vent Kit**—The maximum vent length (horizontal and vertical) can be flexed to 100" (horizontal termination only).
- **Side Connections**—3/4" NPT tappings allow easy connections for space heating applications (Potable water only).
- **1" Non-CFC Foam Insulation**—Covers the sides and top of tank, reducing the amount of heat loss. This results in less energy consumption, improved operation efficiencies and jacket rigidity.
- **Pedestal Base.**
- **Water Connections**—3/4" NPT factory installed true dielectric fittings.
- **Factory Installed Heat Traps.**
- **Protective Magnesium Anode Rod.**
- **T&P Relief Valve**—Included.
- **Low Restriction Brass Drain Valve**—Durable tamper proof design.
- **Complies with the latest ultra-low NOx requirement (10 ng/J NOx limit).**

**FEATURING:**



**3 or 5 Year Limited Tank Warranty / 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. Some states do not allow limitations on warranties. See complete copy of the warranty included with the heater.

# Light Duty Commercial Direct Vent Water Heater

## High Input Energy Saver Models

NATURAL GAS

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

Model Number	Capacity		Nat. BTU/Hr. Input	First Hour Rating** Gal.	Recovery at 100°F Rise*		A Floor to Center Line of Vent 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 Space Heating Outlet in.	H Floor to Water Conn. in.	J Floor to Space Heating Inlet in.	K Depth in.	Approx. Shipping Weight lbs.
	U.S. Gal.	Imp. Gal.			Nat. U.S. GPH	Nat. Imp. GPH											
UDH-50T-45FR-3N	48	40	45,000	88	43	35	75 <sup>1</sup> / <sub>4</sub>	20	4-6	52 <sup>1</sup> / <sub>4</sub>	15	58 <sup>3</sup> / <sub>4</sub>	52 <sup>1</sup> / <sub>4</sub>	59 <sup>3</sup> / <sub>4</sub>	15 <sup>3</sup> / <sub>4</sub>	31 <sup>1</sup> / <sub>4</sub>	190
UDH-65T-45FR-3N	65	54	45,000	101	43	35	78 <sup>1</sup> / <sub>4</sub>	22	4-6	56	15	62	56	63	15 <sup>3</sup> / <sub>4</sub>	34 <sup>1</sup> / <sub>4</sub>	226
UDH-75T-50FR-3N	75	62	50,000	110	48	40	75 <sup>1</sup> / <sub>2</sub>	24	4-6	52	15	59	52	60	16 <sup>1</sup> / <sub>2</sub>	35 <sup>1</sup> / <sub>4</sub>	261

Model Number	Capacity		Nat. kW Input	First Hour Rating** Liters	Recovery at 56°C Rise*		A Floor to Center Line of Vent 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 Space Heating Outlet mm.	H Floor to Water Conn. mm.	J Floor to Space Heating Inlet mm.	K Depth mm.	Approx. Shipping Weight kg.
	Liters				Nat. Liters/Hour												
UDH-50T-45FR-3N	182	13.8	333	163	1411	508	102-152	1327	381	1492	1327	1518	400	768	86		
UDH-65T-45FR-3N	246	13.8	382	163	1988	559	102-152	1422	381	1575	1422	1600	400	864	102		
UDH-75T-50FR-3N	284	14.6	416	182	1918	610	102-152	1321	381	1499	1320	1524	419	889	118		

Available in Natural Gas only.

For 5 year models, change suffix from "3" to "5".

\*Based on manufacturers rated recovery efficiency.

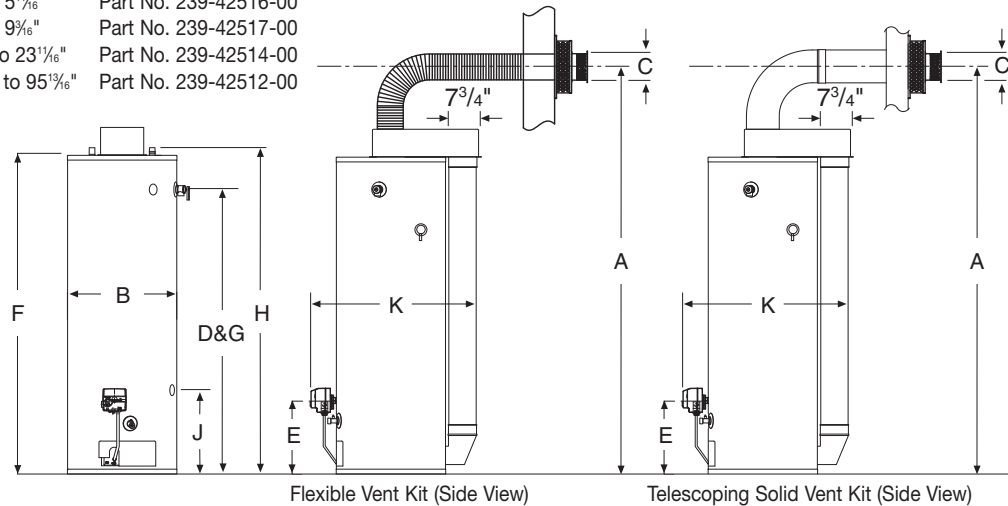
\*\*First Hour Rating is based on the latest AHRI Directory Listings.

Telescoping Solid Vent Kit (239-47811-00) or Flexible Vent Kit (239-47813-00) can be ordered and shipped with water heater, or ordered and shipped separately.

For vent kit components and venting instructions, refer to Installation and Operating Manual.

### Optional Telescoping Solid Vent Kits:

Kit "F"	Telescopes from 4 <sup>3</sup> / <sub>4</sub> " to 5 <sup>1</sup> / <sub>8</sub> "	Part No. 239-42516-00
Kit "G"	Telescopes from 6 <sup>1</sup> / <sub>2</sub> " to 9 <sup>5</sup> / <sub>8</sub> "	Part No. 239-42517-00
Kit "H"	Telescopes from 13 <sup>3</sup> / <sub>4</sub> " to 23 <sup>1</sup> / <sub>8</sub> "	Part No. 239-42514-00
Kit "I"	Telescopes from 49 <sup>1</sup> / <sub>8</sub> " to 95 <sup>1</sup> / <sub>8</sub> "	Part No. 239-42512-00



### Meets NAECA Requirements

#### General

All gas water heaters are certified at 300 PSI test pressure (2068 kPa) and 150 PSI working pressure (1034 kPa). All potable water connections are 3/4" NPT (19mm) on 11" (203mm) centers. All gas connections 1/2" (13mm).

All models design certified by CSA International (formerly AGA/CGA), ANSI Z-21.10.1 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.



Ambler, PA

For U.S. and Canada field service, contact your professional installer or local Bradford White sales representative.

Sales 800-523-2931 • Fax 215-641-1670 / Technical Support 800-334-3393 • Fax 269-795-1089 • Warranty 800-531-2111 • Fax 269-795-1089

International: Telephone 215-641-9400 • Telefax 215-641-9750 / www.bradfordwhite.com

**BRADFORD WHITE-CANADA** INC. Sales / Technical Support 866-690-0961 / 905-238-0100 • Fax 905-238-0105 / www.bradfordwhite.com

**Built to be the Best™**

©2014, Bradford White Corporation. All rights reserved.