BRADFORD WHITE®
WATER HEATERS

TTW®

Residential Ultra Low NOx Power Vent Gas Water Heater



Photo is of URG1PV40S6N

FEATURING:

ICON System

Eco Defender Safety System with Screenlok Technology — Ultra Low NOx Series

Hydrojet

Vitraglas — Superior Protection Since 1951

Microban

The TTW® FVIR Eco-Defender Safety System® Models Feature:

- **Powerful Blower Motor—**Exclusively featuring the AquaVENT MAX™ from Fasco™ is the quietest blower motor in the industry. This new blower is a lower profile than previous versions and features a more robust electrical connection.
  - 10 Foot (3m) Power Cord—Included (120 VAC).
- **Horizontal and Vertical Venting—**Designed for installations where atmospheric units cannot be used. Exhaust gases are vented under positive pressure directly out of the building through the roof or the wall with PVC, ABS or CPVC (Maximum equivalent vent length on reverse side).
- **High Altitude Ready—**Water Heaters designed and certified for installations up to 10,100 feet (3078m) out of the box. No conversion kit required.
- **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.
- **Defender Combustion Chamber—**Incorporates the Advanced ScreenLok® Technology Flame Arrestor and large split-door design to prevent ignition of flammable vapors outside the water heater.
- **Flammable Vapor Sensor and Resettable Thermal Switch—**Coordinates with control to prevent 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 URG2PV75H6N).
- **Maintenance-Free—**No regular cleaning of air inlet openings or flame arrestor is required under normal conditions.
- **Sight Window—**Offers a view into the combustion chamber to observe the operation of the pilot and burner.
- **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.
- **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.
- **Insulation System—**Non-CFC foam 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.
- **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**.
- **Pedestal Base**.
- **T&P Relief Valve—**Installed.
- **Low Restrictive Brass Drain Valve—**Durable tamper proof design.
- **All models comply with the latest Ultra Low NOx requirement (10 ng/J NOx limit) except URG2PV75H6N (14 ng/J NOx limit)**.

AHRI CERTIFIED www.ahridirectory.org

LLC – Low Lead Content

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.

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.

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 5,682,666; 7,634,976; 5,660,165; 5,954,492; 6,056,542; 6,935,280; 5,372,185; 5,485,879; 5,574,822; 7,971,560; 7,992,526; 6,684,821; 7,334,419; 7,866,168; 7,270,087; 7,007,748; 5,596,952; 6,142,216; 7,699,026; 5,341,770; 7,337,517; 7,665,211; 7,665,210; 7,063,132; 7,063,133; 7,559,293; 7,900,589; 5,943,984; 8,082,888; 5,988,117; 7,621,238; 7,650,859; 5,761,379; 7,409,925; 5,277,171; 8,146,772; 7,458,341; 2,262,174. OTHER U.S. AND FOREIGN PATENT APPLICATIONS PENDING. CURRENT CANADIAN PATENTS: 2,314,845; 2,504,824; 2,108,186; 2,143,031; 2,409,271; 2,548,958; 2,112,515; 2,476,685; 2,239,007; 2,092,105; 2,107,012. **Eco-Defender Safety System®, Defender Safety System®, ScreenLok®, TTW®, and Hydrojet® are registered trademarks of Bradford White® Corporation. Microban® is a registered trademark of Microban Products Company.**

Residential Power Vent Gas Water Heater

TTW® Ultra Low NOx Models "19 Series"

NATURAL GAS

Model Number	Rated Nominal Volume U.S. Gal.	Rated Nominal Volume Imp. Gal.	DOE Rated Storage Volume Gal.	BTU/Hr. Input	First Hour Rating Gal.	Uniform Energy Factor	Recovery at 90°F Rise* U.S. GPH	Recovery at 90°F Rise* Imp. GPH
URG1PV40S6N	40	33	38	40,000	75	0.68	43	36
URG1PV50S6N	50	42	48	40,000	78	0.69	44	37
URG2PV40T6N	40	33	38	40,000	78	0.72	43	35
URG2PV50T6N	50	42	48	40,000	75	0.72	44	36
URG2PV50H6N	48	40	46	56,000	107	0.68	60	50
URG2PV75H6N	75	62	72	76,000	121	0.69	82	68

Model Number	Rated Nominal Volume Liters	DOE Rated Storage Volume Liters	kW Input	First Hour Rating Liters	Uniform Energy Factor	Recovery at 50°C Rise* Liters/ Hour
URG1PV40S6N	151	144	11.7	284	0.68	163
URG1PV50S6N	189	182	11.7	295	0.69	167
URG2PV40T6N	151	144	11.7	295	0.72	161
URG2PV50T6N	189	182	11.7	284	0.72	165
URG2PV50H6N	182	174	16.4	406	0.68	227
URG2PV75H6N	284	273	22.3	459	0.69	310

Model Number	A Floor to Top of Blower 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.	R Space Heating Conn. Size in.	S Gas Conn. Size in.	Approx. Shipping Weight lbs.
URG1PV40S6N	55 7/16	20	2 or 3	40 1/8	11 1/2	47 3/16	48 15/16	26 3/16	8	N/A	N/A	3/4	N/A	1/2	144
URG1PV50S6N	56 7/16	22	2 or 3	40 5/8	11 1/2	48 3/16	49 3/4	27 1/4	8	N/A	N/A	3/4	N/A	1/2	169
URG2PV40T6N	65	20	2 or 3	49 11/16	11 1/2	56 3/4	57 13/16	26	8	N/A	N/A	3/4	N/A	1/2	151
URG2PV50T6N	65	22	2 or 3	49 7/8	11 1/2	56 3/4	58 5/8	27 3/16	8	N/A	N/A	3/4	N/A	1/2	176
URG2PV50H6N	64 7/16	22	3 or 4	49 7/8	11 1/2	56 3/4	57 7/8	26 7/8	11	13 1/2	50 1/8	3/4	3/4	1/2	192
URG2PV75H6N	67 3/8	26	3 or 4	51 7/8	11 1/2	59 5/8	61 1/8	30 11/16	11	13 3/8	51 1/2	3/4	3/4	1/2	270

Model Number	A Floor to Top of Blower 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.	R Space Heating Conn. Size mm.	S Gas Conn. Size mm.	Approx. Shipping Weight kg.
URG1PV40S6N	1408	508	51 or 76	1019	292	1199	1243	665	203	N/A	N/A	19	N/A	13	65
URG1PV50S6N	1434	559	51 or 76	1032	292	1249	1264	692	203	N/A	N/A	19	N/A	13	77
URG2PV40T6N	1651	508	51 or 76	1262	292	1441	1468	660	203	N/A	N/A	19	N/A	13	68
URG2PV50T6N	1651	559	51 or 76	1267	292	1441	1489	691	203	N/A	N/A	19	N/A	13	80
URG2PV50H6N	1637	559	76 or 102	1267	292	1441	1490	683	279	343	1273	19	19	13	87
URG2PV75H6N	1711	660	76 or 102	1318	292	1514	1553	779	279	340	1308	19	19	13	122

Available in Natural Gas only. For 10 year models, change suffix from "6" to "10".

* Based on manufacturer's rated recovery efficiency.

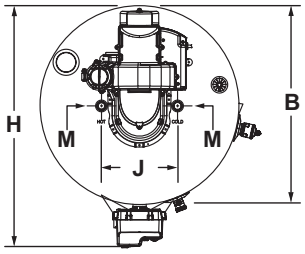
110 VAC Required for Power Venting / 110 VAC, 60Hz., 3.1 Amperes.

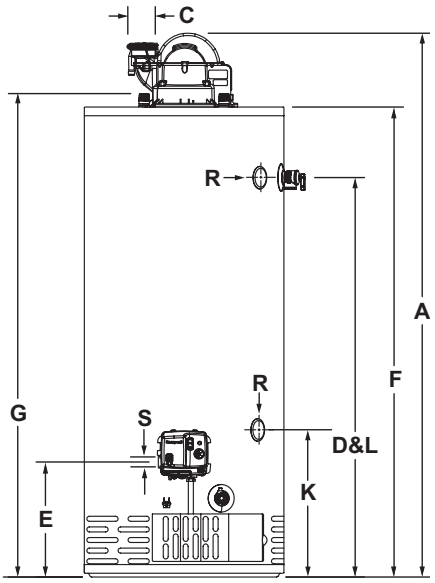
Uniform Energy Factor and First Hour Rating is based on the latest AHRI directory listings.

URG1PV40S6N URG1PV50S6N URG2PV40T6N URG2PV50T6N		2" (51mm) Vent Pipe		3" (76mm) Vent Pipe		4" (102mm) Vent Pipe	
Max. Equivalent Length		†50 ft.	†15.2m	†120 ft.	†36.6m	†200 ft.	†61.0m
Min. Equivalent Length		7 ft.	2.1m	15 ft.	4.6m	15 ft.	4.6m
Number	1	45 ft.	13.7m	115 ft.	35.0m	195 ft.	59.4m
of	2	40 ft.	12.2m	110 ft.	33.5m	190 ft.	58.0m
90° Elbows	3	35 ft.	10.7m	105 ft.	32.0m	185 ft.	56.4m

URG2PV50H6N URG2PV75H6N		3" (76mm) Vent Pipe		4" (102mm) Vent Pipe	
Max. Equivalent Length		†75 ft.	†23.0m	†180 ft.	†55.0m
Min. Equivalent Length		7 ft.	2.1m	15 ft.	4.6m
Number	1	70 ft.	21.3m	175 ft.	53.3m
of	2	65 ft.	20.0m	170 ft.	52.0m
90° Elbows	3	60 ft.	18.3	165 ft.	50.3m

† For high altitude installations, consult the installation instructions.





General:

Meets NAECA or EPACT Requirements, as applicable. All gas water heaters are certified at 300 PSI (2068 kPa) test pressure and 150 PSI (1034 kPa) working pressure. 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.

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.

— BRADFORD WHITE IS —

AMERICAN STRONG

Sales: **800-523-2931** ■ *Fax 215-641-1612*

24/7 Technical Support: **800-334-3393** ■ *Email techserv@bradfordwhite.com*

Products made by Bradford White are manufactured in the United States using the finest raw materials and components from around the world.

Built to be the Best®

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