

Combi[™]

Residential Atmospheric Vent Combi[™] Energy Saver Gas Water Heater System



Photo is of
C-SW2-75T10BN

The Combi[™] Models Feature:

- **Millivolt Powered Control**—The thermopile system converts heat energy from the pilot flame into electrical energy to operate the control system. No need for external electricity.
- **Piezo Igniter**—Easy push button allows pilot to be lit without opening inner chamber door. To help determine when pilot is lit, the LED display starts blinking green.
- **Self Diagnostic Gas Control Valve**—Integrated, immersion gas control valve offers precise temperature control for uniformity of tank set temperature. An LED display aids in trouble-shooting and start-up diagnostic codes.
- **Separate Water Temperature Well**—Integrated design incorporates a thermowell that provides isolation between a temperature sensor and the surrounding water. There is no need to drain the tank when removing gas valve.
- **Heat Exchanger**—Single Wall 1½" O.D. glass coated (Vitraglas[®]) carbon steel coil. The coil has a stored water volume of 2.5 gal.
- **Low Heat Exchanger Head Loss**—Up to 10 GPM flow, with less than 5 ft. of head loss. Greatly reduces the required pump size for heat exchange.
- **Factory Installed Hydrojet 2[™] 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.
- **Supply and Return Connections**—The 1" NPT female connections are located on the front for both the space heating supply and return.
- **Vitraglas[®] Lining**—Bradford White water heater tanks are protected from the corrosive effects of hot water by an exclusive ceramic porcelain-like coating. The Bradford White high silica Vitraglas[®] lining provides a tough interior surface for our hot water tanks.
- **Optimizer[™] Temperature Control System**—Integrated mixing device features a thermostatically controlled mixing device that is pre-piped with a flexible connector. This required system ensures a comfortable outlet temperature while providing a steady flow of hot water.
- **2" 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.
- **Water Connections**—¾" NPT factory installed true dielectric fittings extend water heater life and eases installation.
- **Two Protective Aluminum Anode Rods**—Provide added protection against corrosion for long trouble-free service.
- **Steel Tank**—Heavy gauge steel automatically formed, rolled and welded.
- **T&P Relief Valve**—Installed.
- **Brass Drain Valve.**
- **Design Certified by CSA International (formerly AGA/CGA).**



10-Year Limited Tank and Heat Exchanger 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. Some states do not allow limitations on warranties. See complete copy of the warranty included with the heater.

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 5,954,492; 5,761,379; 5,943,984; 5,081,696; 5,988,117; 6,142,216; 5,199,385; 5,574,822; 5,372,185; 5,485,879; 5,277,171; (B1)5,341,770; 5,660,165; 5,596,952; 5,682,666; 4,904,428; 5,023,031; 5,000,893; 4,669,448; 4,829,983; 4,808,356; 5,115,767; 5,092,519; 5,052,346; 4,416,222; 4,628,184; 4,861,968; 4,672,919; Re. 34,534; 7,270,087 B2. OTHER U.S. AND FOREIGN PATENT APPLICATIONS PENDING. CURRENT CANADIAN PATENTS: 1,272,914; 1,280,043; 1,289,832; 2,045,862; 2,112,515; 2,108,186; 2,107,012; 2,092,105; 2,409,271
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Residential Atmospheric Vent Gas Water Heater System

Combi1™ Energy Saver Models

NATURAL GAS AND LIQUID PROPANE GAS

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed
80% Recovery Efficiency

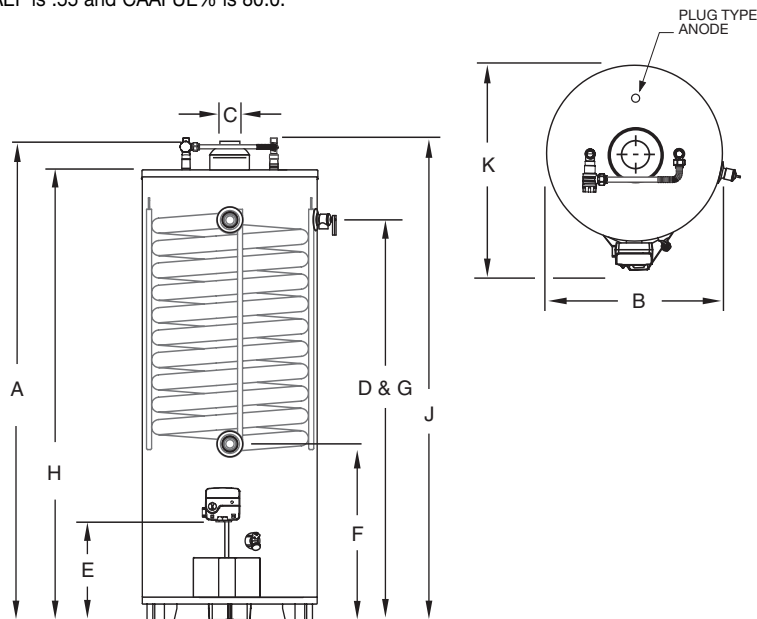
Model Number	Capacity		LP BTU/Hr Input	Recovery 90°F Rise*				A Floor to Flue Conn. in.	B Jacket Dia. in.	C Vent Size in.	D Floor to T&P Conn. in.	E Floor to Gas Conn. in.	F Floor to Exchanger Inlet in.	G Floor to Exchanger Outlet in.	H Floor to Top of Heater in.	J Floor to Water Conn. in.	K Depth in.	Approx. Shipping Weight lbs.	
	U.S. Gal.	Imp. Gal.		Nat. BTU/Hr Input	Nat. U.S. GPH	Nat. Imp. U.S. GPH	LP U.S. GPH												
C-SW2-75T10BN	72	61	76,000	76,000	81	70	81	70	63%	26	4	53	16	34½	53	60%	61½	28½	326

Model Number	Capacity		LP kW Input	Recovery 50°C Rise*				A Floor to Flue 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 Exchanger Inlet mm.	G Floor to Exchanger Outlet mm.	H Floor to Top of Heater mm.	J Floor to Water Conn. mm.	K Depth mm.	Approx. Shipping Weight kg.
	Liters	kW Input		Nat. kW Input	Nat. Liters/Hour	Nat. LP Liters/Hour	LP Liters/Hour											
C-SW2-75T10BN	272	22.3	22.3	317	317	1530	660	102	1346	406	863	1346	1550	1556	724	150		

Propane model features a Titanium Stainless Steel propane burner. For propane (LP) models change suffix "BN" to "SX".

*Based on manufacturers rated recovery efficiency.

CAEF is .55 and CAAFE% is 80.0.



Heat Exchanger Head Loss	
GPM	Ft. of Hd. Loss
2	trace
5	0.4
8	2.3
10	4.6
12	6.9

Heat Exchanger Values*

Supply Temperature	140°F	120°F	100°F
Return Temperature	120°F	100°F	80°F
Differential	20°F	20°F	20°F
Flow Rate	4.1 GPM	5.6 GPM	5.6 GPM
Net Output	35,500 BTU/Hr.	47,500 BTU/Hr.	47,500 BTU/Hr.

*These values were obtained using 180°F stored tank temperature.

Net Output is the space heating capacity based on normal piping and pickup allowance of 15%.

Actual values may vary based on circulator flow rate, number of zones, water and space heating demands. Numbers subject to change.

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 heat exchanger connections are 1" NPT (25mm). All gas connections 1/2" (13mm).

All models design certified by CSA International (formerly AGA/CGA), ANSI Z-21.10.3 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 the potable water side. The potable side of this unit may NEVER be connected to any existing heating system or component(s) previously used with a non-potable water heating appliance. The heat exchanger side of the unit may be used in space heating applications.



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

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Built to be the Best™

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