

Residential Combi2™ Energy Saver Oil-Powered Water Heater



Photo is of
C-DW1-70L6OF

Combi2™ Oil-Powered Model Features:

- **Dual Purpose Heating**—Provides domestic potable hot water and hydronic heating in one energy saving system.
- **Heat Exchanger**—Double wall 1½" O.D. glass coated (Vitraglas®) steel coil. Two pipes guarantee that the potable water will stay separate from the hydronic fluid. A positive leak path between the inner and outer pipes is used to indicate leaks of either the domestic side of the coil or the hydronic side of the coil.
- **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.
- **High Recovery Rates**—Oil heats water 3 to 4 times faster than other methods. This model is designed to assure a constant supply of hot water provided the draw-off rate is within the recovery capacity of the unit.
- **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 formula that provides superior 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.
- **Oil-Powered Burner**—Beckett Burner with dual aquastat wired 120 Volt 1-stage with a firing rate of 0.85 GPH (Shipped with heater in a separate box).
- **New Beckett Burners are Compatible with Biofuel**—Up to B5 (5% Biofuel) can be used with water heater, provided the Biofuel meets ASTM D6751.
- **Thermostatic Mixing Valve**—Supplied with unit to help prevent injury due to scalding.
- **Space Heating Connections**—3/4" NPT female tapings on the front of the water heater for easy pipe connections.
- **1" Non-CFC Foam Insulation**—Covers the sides and top of the tank, reducing the amount of heat loss. This results in less energy consumption, improved operation efficiencies and jacket rigidity.
- **Water Connections**—3/4" 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.
- **Flue Baffle**—Designed to maximize the amount of heat absorbed in the lower portion of tank. Reduces air movement in the heater during standby periods to retard heat loss up the flue.
- **Steel Tank**—Heavy gauge steel automatically formed, rolled and welded.
- **T&P Relief Valve**—Installed.
- **Low Restriction Brass Drain Valve**—Durable tamper proof design.
- **Design Certified by CSA International (formerly AGA/CGA).**



6-Year Limited Tank and Heat Exchanger Warranties / 2-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. Vitraglas® and Hydrojet® are registered trademarks of Bradford White® Corporation.

Residential Oil-Powered Water Heater System

Combi2™ Energy Saver Model

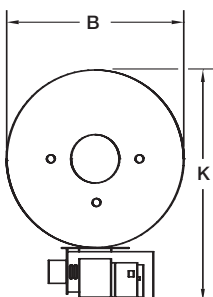
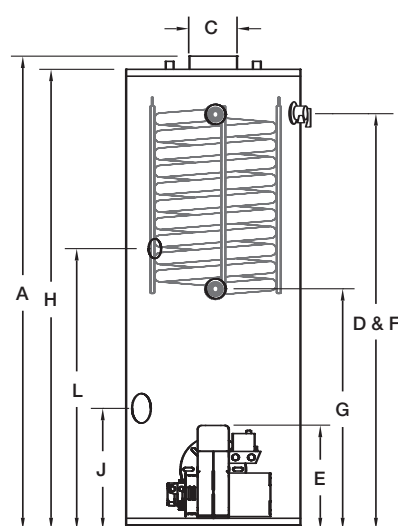
Meet or exceed ASHRAE 90.1b (current standard)
78% Recovery Efficiency

Model Number	Capacity		BTU/Hr. Input	GPH Firing Rate	Recovery 90°F Rise*	A Floor to Flue Conn.	B Jacket Dia.	C Vent Size	D Floor to T&P	E Floor to Top of Burner	F Floor to Exchanger Outlet	G Floor to Exchanger Inlet	H Floor to Top of Unit	J Floor to C/L Combustion Chamber Sight Hole	K Depth	L Floor to Control Thermostat	Approx. Shipping Weight	
	U.S. Gal.	Imp. Gal.			U.S. GPH	Imp. GPH	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	lbs.†
C-DW1-70L60F	68	57	119,000	0.85	127	119	66¾	24	6	57⅞	10½	57⅞	35¼	64	13¼	32½	33⅞	299

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	Liters	kW Input		Liters/ Hour	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.
C-DW1-70L60F	259	34.8	0.85	537	1695	610	152	194	267	1407	845	1626	337	829	860	137

*Based on manufacturers rated recovery efficiency.

†Shipping weights do not include burner and controls.



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

Part Number	Description
228-44392-05	Beckett Burner with dual Aquastat @ 0.85 GPH, 120 V, 1-stage

C-DW1-70L60F	
Input	119,000 BTU/Hr. 34.8 kW
Water Heating⊗	
First Hour Rating	174 Gal. 145 Imp. Gal. 659 Liters/Hr.
Space Heating	
CAAFUE%	78
Max. Heating Capacity♦	48,000 BTU/Hr. 16.1 kW

⊗ Based on ANSI Z21.10.1 and 10.3 and DOE Test Methods.

♦ Based on ANSI/ASHRAE 124 Standard. 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

This oil powered water heater is certified at 300 PSI test pressure (2068 kPa) and 150 PSI working pressure (1034 kPa). All potable water and heat exchanger connections are 3/4" NPT (19mm). The potable water connections are on 11" (203mm) centers.

All models design certified by CSA International (formerly AGA/CGA).

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.



Amblar, 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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