

B R A D F O R D W H I T E



Commander Series®
Ultra Low NOx
Commercial Gas Water Heaters



Built to be the Best® | www.bradfordwhite.com

Bradford White's Commander Series®

The Commander Series®, the superior line of ultra low NOx water heaters that redefines the standard in commercial gas water heating.

With advanced features and technologies, the Commander Series® provides higher performance levels, enhanced capabilities, cleaner emissions, and remarkable installation flexibility. Take charge of your commercial water heating demands and increase customer satisfaction with the new Commander Series® from Bradford White.



Highlights

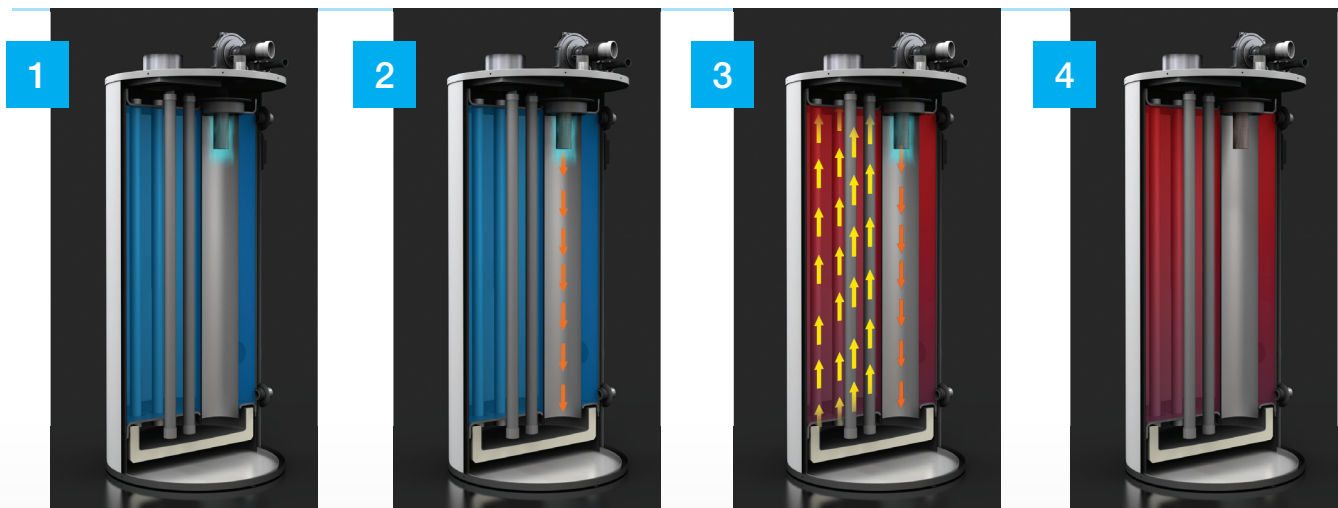
- *BMS Integration*
- *Up to 82% Thermal Efficiency*
- *Smallest footprint of all Ultra Low NOx commercial gas models in its class (28.25 inch (718 mm) width)*
- *ICON HD® Commercial Control System*
- *Direct Spark Ignition*
- *Two Pass Fire-Tube System*
- *Down-Fired Premix Power Burner Automatically adjusts up to 10,000 ft (3,048m) above sea level*
- *Ductable Air Intake - Optional (PVC, CPVC, ABS)*
- *Top and Side 1-1/2" NPT Water Connections*
- *Optional Side Space Heating Connections*
- *Moveable T&P and Drain Valve (left to right)*
- *No Dampers or Pressure Switches*
- *Meets California Ultra Low NOx Requirements*



Take Charge of Your Commercial Water Heating

The Commander Series® features a unique down-fired premix power burner that automatically regulates for optimum combustion and efficiency.

Sequence of Operation



1. Initial call for heat initiates blower for a 30 second, air intake pre-purge. Gas valve opens and fuel mixes with intake air as direct spark ignites main burner.
2. Flame signal confirmed. Combustion gases enter the 1st pass heat exchanger traveling down a single heat exchanger tube.
3. Combustion gases reach a pass collector and are redirected upwards into multiple, smaller heat exchanger tubes.
4. Thermostat satisfies, gas valve closes, main burner turns off, and blower post-purges for 30 seconds.

Great Installation Flexibility!

- *Smallest footprint of all Ultra Low NOx commercial gas models in its class*
- *Overall shorter height allows for installation where existing venting restricts water heater height*
- *Direct vent from an outside wall or through a roof up to 75 feet (23m) with optional air intake ducting*
- *Top and side 1-1/2" NPT water connections*
- *T&P and drain valves are moveable (left to right) in the field*

With the New Commander Series® from Bradford White

With a two pass, fire-tube system, the **Commander Series®** achieves excellent thermal efficiencies and meets the most stringent air quality standards for allowable NOx emissions.

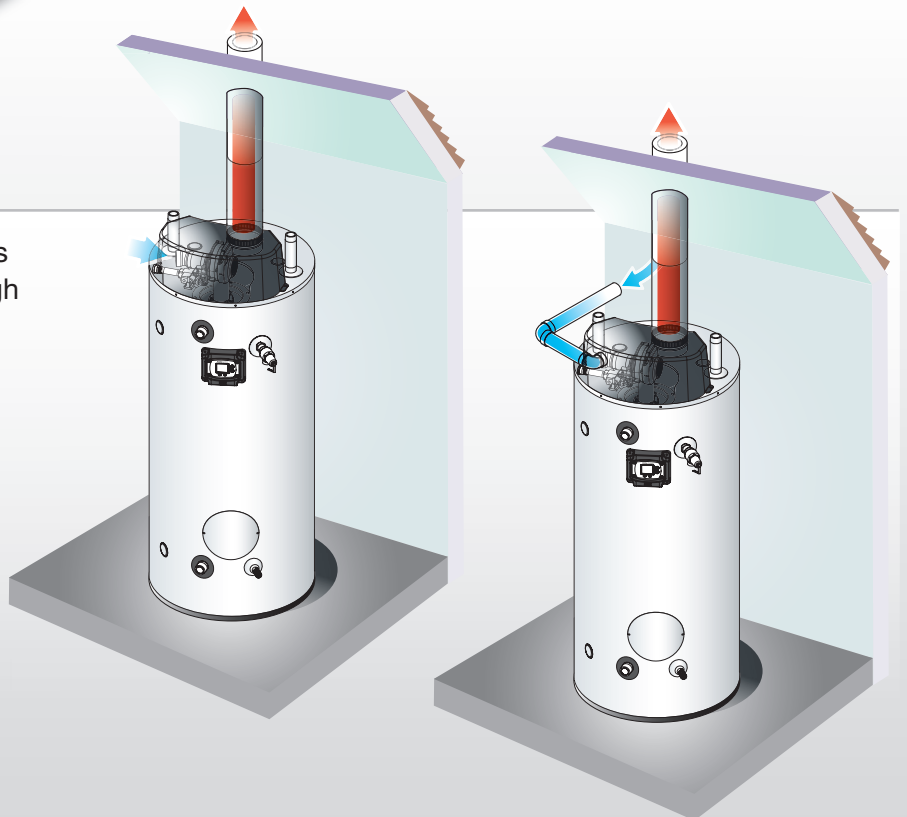


Commander Series® models are perfect for nearly all new or replacement commercial applications, including hotels, apartments, hospitals, and office buildings.

Venting Options

Atmospheric Vent – All models vent atmospherically through Category I venting (B-Vent)

Ductable Air Intake – Optional



The Commander Series® Exclusive Technologies and Features

THE BRADFORD WHITE
ICON^{HD}
COMMERCIAL CONTROL SYSTEM



ICON HD® Commercial Control System

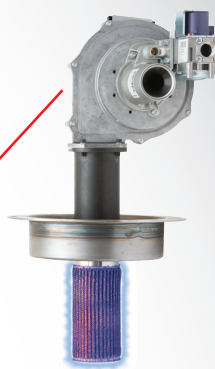
- Features an LCD digital display showing temperature set point and diagnostic codes to aid in servicing and troubleshooting
- User-friendly touchpad and easily viewable data display area

Hydrojet® Sediment Reduction System

- Helps prevent sediment buildup inside the tank



Scan the QR
code to see the
Commander Series®
video!



Down-Fired Premix Power Burner

- Proven design with over 10 years of use in the field
- Self-compensating negative pressure system
- Automatically regulates fuel flow when a change in combustion air is detected
- Optimum combustion and efficiency
- Automatically adjusts for altitudes up to 10,000 feet (3,048m)
- No Dampers or Pressure Switches

Two Pass, Fire-Tube System

- Two Pass, Multiple Tube Heat Exchanger System

Submerged Combustion Chamber

- The combination of high turbulence and velocity causes an enormous rate of heat transfer into the water


BRADFORD WHITE®
WATER HEATERS

Standard Features

- **BMS Integration**—Modbus standard, BACnet® via gateway kit.
- **Direct Spark Ignition**—For improved operational dependability and durability.
- **Sanitizing Capability**—Complies with sanitation capabilities up to 180°F (82°C).
- **Factory Installed Hydrojet® Sediment Reduction System**—Cold water inlet sediment reducing device helps prevent sediment build up in the tank.
- **Non-CFC Foam Insulation**—Covers the sides of tank, reducing the amount of heat loss. This results in less energy consumption, improved operation efficiencies and jacket rigidity.
- **Water Connections**—Factory installed true dielectric waterway fittings extend water heater life and eases installation. Multiple water connection locations allow for greater installation flexibility.
- **1" NPT Side Connections for Space Heating.**
- **Zero Inch Clearance to Combustibles.**
- **Hand Hole Cleanout.**
- **NSF Construction Available.**
- **T&P Relief Valve**—Installed.
- **Low Restriction Brass Drain Valve**—Durable tamper proof design.
- **Ultra Low NOx Construction (14 ng/J NOx emissions for natural gas and 77 ppm NOx limit for liquid propane).**
- **CSA Certified Low Lead Content.**
- **ASME Code Available on All Models.**

Specs at a Glance

Model Number	Nominal Gal. Capacity		Input BTU/Hr.	GPH Recovery at Degree Rise*			A Floor to Vent 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 Cold Water Conn./Hot Water Conn. in.	H Depth in.	K Floor to Cold Water Conn. in.	L Floor to Hot Water Conn. in.	M Water Conn. NPT in.	S Gas Conn. Size in.	Relief Valve Open in.	Approx. Shipping Weight lbs.
	U.S. Gal.	Imp. Gal.		40°F	100°F	140°F														
UCG-80H-125-3N(A)	80	67	125,000	308	123	88	57	28	5	44 1/4	54 1/2	61 3/8	55 3/4	30	9 3/4	46 15/16	1 1/2	3/4	3/4	535
UCG-80H-199-3N(A)	81	67	199,999	493	197	141	57	28	6	44 1/4	54 1/2	61 3/8	55 3/4	30	9 3/4	46 15/16	1 1/2	3/4	3/4	535
UCG-80H-270-3N(A)	82	67	270,000	665	266	190	57	28	6	44 1/4	54 1/2	61 3/8	55 3/4	30	9 3/4	46 15/16	1 1/2	3/4	1	545
UCG-80H-399-3N(A)	83	67	399,999	960	384	274	57	28	8	44 1/4	54 1/2	61 3/8	55 3/4	30	9 3/4	46 15/16	1 1/2	3/4	1	545
UCG-100H-199-3N(A)	100	83	199,999	493	197	141	64 7/8	28	6	52 3/4	62 3/4	70	63 1/4	30	9 3/4	55 3/8	1 1/2	3/4	3/4	632
UCG-100H-270-3N(A)	100	83	270,000	665	266	190	64 7/8	28	6	52 3/4	62 3/4	70	63 1/4	30	9 3/4	55 3/8	1 1/2	3/4	1	632
UCG-100H-399-3N(A)	98	82	399,999	994	398	284	64 7/8	28	8	52 3/4	62 3/4	70	63 1/4	30	9 3/4	55 3/8	1 1/2	3/4	1	657

Model Number	Nominal Liter Capacity		Input kW	LPH Recovery at Degree Rise*			A Floor to Vent 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 Cold Water Conn./Hot Water Conn. mm.	H Depth mm.	K Floor to Cold Water Conn. mm.	L Floor to Hot Water Conn. mm.	M Water Conn. NPT mm.	S Gas Conn. Size mm.	Relief Valve Open mm.	Approx. Shipping Weight kgs.
				22°C	56°C	78°C														
UCG-80H-125-3N(A)	303		36.6	1164	466	333	1448	711	127	1124	1384	1569	1416	752	247	1192	38	19	19	243
UCG-80H-199-3N(A)	303		58.6	1864	746	533	1448	711	152	1124	1384	1569	1416	752	247	1192	38	19	19	243
UCG-80H-270-3N(A)	303		79.1	2517	1007	719	1448	711	152	1124	1384	1569	1416	752	247	1192	38	19	25	247
UCG-80H-399-3N(A)	303		117.2	3634	1454	1038	1448	711	203	1124	1384	1569	1416	752	247	1192	38	19	25	247
UCG-100H-199-3N(A)	379		58.6	1866	745	533	1648	711	152	1340	1594	1778	1606	752	247	1406	38	19	19	286
UCG-100H-270-3N(A)	379		79.1	2517	1006	719	1648	711	152	1340	1594	1778	1606	752	247	1406	38	19	25	286
UCG-100H-399-3N(A)	371		117.2	3757	1476	1060	1648	711	203	1340	1594	1778	1606	752	247	1406	38	19	25	298

For Propane Gas models change suffix "N" to "X"

Example: UCG-100H-199-3X (UCG-100H-399 available in Natural Gas only).

All models comply with the latest Ultra Low NOx requirements (14 ng/J or less for natural gas and 77 ppm NOx limit for liquid propane).

Amp Draw range = 1.0 to 1.8 amps.

(A) ASME - All models are available with ASME construction.

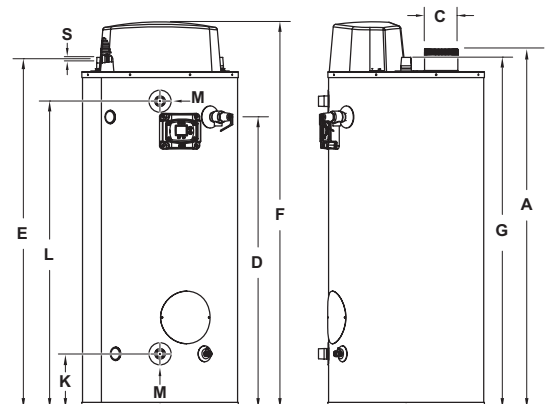
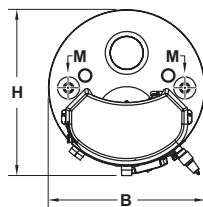
To order ASME construction add the (A) to the end of the model number.



Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement.

FOR THE PRO

See more at our exclusive professional website bwforthe.pro.com



Committed to the Professional.

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