

# Commercial Gas Water Heaters

### **CONSERVATIONIST® ULTRA-LOW NOX**

#### **CODE COMPLIANCE**

 The Ultra-Low Nox atmospheric vent commercial gas water heater which meets the thermal efficiency and standby loss requirements of the U. S. Department of Energy and Current Edition ASHRAE/IESNA 90.1.

## FULLY AUTOMATIC CONTROLS WITH SAFETY SHUTOFF

 Accurate, dependable control system requires no electric connections. Fixed automatic gas shutoff device for added safety. Not recommended for 180°F sanitizing.

#### **HEAVY GAUGE STEEL JACKET**

Finished with baked enamel over bonderized undercoat.

#### **GLASSLINED TANK**

· Maximizes tank life.

#### FOAM INSULATION

• Saves fuel, helps reduce standby heat loss.

#### **ULTRA-LOW NOX EMISSIONS**

 Complies with SCAQMD Rule 1146.2 and other Air Quality Management Districts with similar requirements of 14 ng/J or 20 ppm.

#### **EASY-TO-INSTALL**

 Completely factory-assembled. Only gas, water and vent connections need to be made. All connections are located in front and top of heaters for ease-ofinstallation and service.

#### **DRAFT HOOD**

• Low profile draft hood furnished as standard equipment.

#### **COREGARD™ ANODE ROD**

 Our anode rods have a stainless steel core that extends the life of the anode rod allowing superior tank protection far longer than standard anode rods.

#### **MAXIMUM WORKING PRESSURE**

• 150 psi.

#### **MAXIMUM GAS INLET PRESSURE**

• 14" W.C.

#### HANDHOLE CLEANOUT

Allows easy tank cleaning.

#### **FEATURES**

- Anodic protection
- · Equipped with gas pressure regulator
- Integral automatic gas shutoff system prevents excessive water temperature
- CSA Certified and ASME Rated T&P Relief Valve

### 3-YEAR LIMITED TANK / 1-YEAR LIMITED PARTS WARRANTY

• For complete warranty information, consult written warranty or contact A. O. Smith.











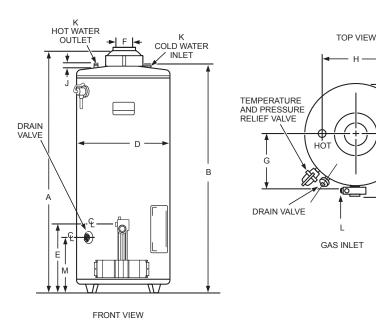
## **Commercial Gas**

Recovery Ratings														
Model	Input Rate	Recovery in US Gallons/hr or Liters/he at Indicated Temperature Rise in Fahrenheit or Celsius												
BL-80**	75,100 BTU/h	°F	30	40	50	60	70	80	90	100	110	120	130	140
		GPH	243	182	146	121	104	91	81	73	66	61	56	52
	22 kW	°C	17	22	28	33	39	44	50	56	61	67	72	78
		LPH	919	689	551	459	394	345	316	276	251	230	212	197
BL-100*	75,100 BTU/h	°F	30	40	50	60	70	80	90	100	110	120	130	140
		GPH	246	184	147	123	105	92	82	74	67	61	57	53
	22 kW	°C	17	22	28	33	39	44	50	56	61	67	72	78
		LPH	930	698	558	465	399	349	310	279	254	233	215	199

<sup>\*</sup> Recovery rating based on 81% thermal efficiency

<sup>\*\*</sup> Recovery rating based on 80% thermal efficiency

Dimensions														
Model	Units	А	В	С	D	E	F	G	Н	J	K	L	М	Approx. Shipping Weight
BL-80	Inches	62-1/16	58	29-1/2	25-1/4	15-7/8	4	15-1/4	16	2	1	1/2	12-1/2	285 lbs
	CM	157.6	147.3	74.9	64.1	40.3	10.2	38.7	40.6	5.1	NPT	NPT	31.8	129.2 kg
BL-100	Inches	70-1/2	66-1/2	30-15/16	27-3/4	15-3/16	4	15-3/4	16	1-1/4	1-1/4	1/2	11-15/16	350 lbs
	CM	179.1	168.9	78.6	70.5	38.6	10.2	40	40.6	3.2	NPT	NPT	30.3	158.8 kg



#### **SPECIFICATION**

Water heater(s) shall be Model as manufactured by A. O. Smith or an approved equal. Water heater(s) shall be of glasslined design, equipped to burn \_ gas and design certified by UL. Heaters must meet all applicable energy codes and comply with ultra-low NOx emissions of 14 BTU/H and a recovery capacity of \_\_\_\_\_ ng/J or 20 ppm. Heaters shall have an input rating of \_\_\_ \_ GPH at a temperature rise of 100°F with a storage gallons. Heater shall be equipped with a 2-3/4" x 3-3/4" boiler-type handhole cleanout and shall have a working pressure of 150 psi. Heater(s) shall be provided with an automatic gas shutoff device and safety shutoff in event pilot flame is extinguished; a gas pressure regulator set for the type of gas supplied; an approved draft hood, and extruded anode rod rigidly supported for cathodic protection. A CSA Certified and ASME Rated T&P Relief Valve shall be furnished and installed by the manufacturer. The tank shall be foam insulated. The outer jacket shall have a baked enamel finish over a bonderized undercoating. Fully illustrated instruction manual and parts list to be included. All internal surfaces of the heater(s) exposed to water shall be glasslined with an alkaline borosilicate composition that has been fused-to-steel by firing at a temperature range of 1400° to 1600°F. Heater shall have a three year limited tank and one year limited parts warranty against corrosion and tank failure due to sediment build-up as outlined in the written warranty. Heater(s) shall be design certified by UL. Operation of the heater in a closed system where thermal expansion has not been compensated for with a properly sized expansion tank will void the warranty.