Commercial Gas Water Heaters

CONSERVATIONIST®

BT-65, 80 & 100

TANK-TYPE WATER HEATERS

FEATURES

All models meet the thermal efficiency and standby loss requirements of the U. S. Department of Energy and Current Edition ASHRAE/IESNA 90.1.

GLASSLINED TANK — Maximizes tank life.

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.

FOAM INSULATION — Saves fuel, helps reduce standby heat loss.

CERTIFICATION — BT-65 units are design-certified by CSA. Certified for installation on combustible flooring.

LOW NOx — Complies with Texas and other districts requirements for NOx emissions less than 40 ng/j.

EASY-TO-INSTALL — Completely factory-assembled. Only gas, water and vent connections need be made. All connections are located in front and top of heaters for ease of installation and service.

DRAFT DIVERTER — Low profile diverter furnished as standard equipment.

MAXIMUM WORKING PRESSURE — 150 psi.

MAXIMUM GAS INLET PRESSURE — 14" W.C.

HANDHOLE CLEANOUT — On models BT-80 & BT-100. Allows easy tank cleaning.

THREE YEAR LIMITED WARRANTY — For complete warranty information, consult written warranty or contact A. O. Smith.

OTHER FEATURES

- Built-in gas filter and integral dirt leg (propane only)
- 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

Low Lead Content

BT-65 BT-80 AND 100

RECOVERY CAPACITIES

Models	Approx. Cap.		Input Rating		Type of Gas	TEMPERATURE RISE											
	Gal's.	Litres	Btu/Hr.	KW/Hr.		30°F/ 17°C	40°F/ 22°C	50°F/ 28°C	60°F/ 33°C	70°F/ 39°C	80°F/ 45°C	90°F/ 50°C	100°F/ 56°C	110°F/ 61 °C	120°F/ 67°C	130°F/ 72°C	140°F/ 78°C
BT-65	65	246	65,000 55,000	19.0 18	GPH LPH	200 758	150 569	120 455	100 379	86 326	75 284	67 254	60 227	54 205	50 190	46 174	43 163
BT-80	74	280	75,100	22	GPH LPH	243 916	182 686	146 550	121 456	104 392	91 343	81 305	73 275	66 249	61 230	56 211	52 196
BT-100	98	371	75,100	22	GPH LPH	243 916	182 686	146 550	121 456	104 392	91 343	81 305	73 275	66 249	61 230	56 211	52 196

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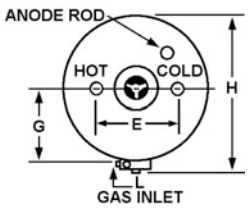
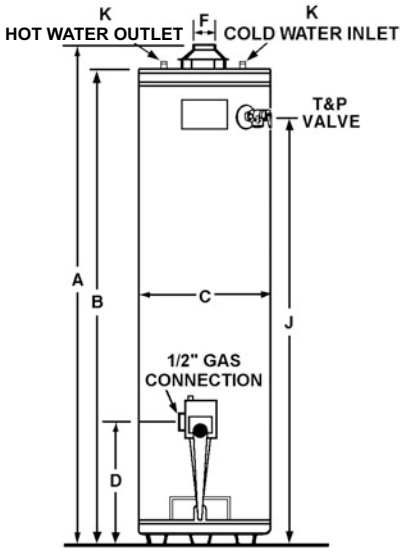
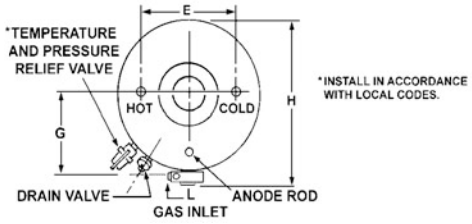


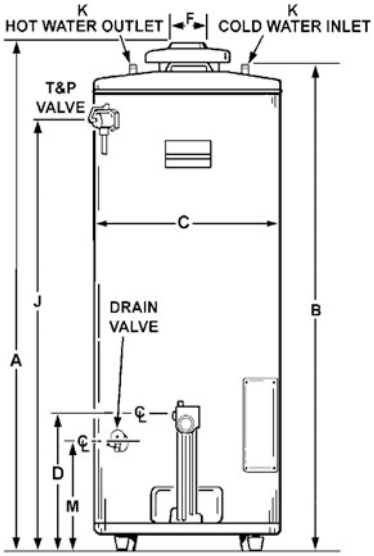
TOP VIEW



BT-65 FRONT VIEW



TOP VIEW



BT-80 & 100 FRONT VIEW

Dimensions in Inches/Centimeters

Model	Units	A	B	C	D	E	F	G	H	J	K	L	M	Approx. Ship Wt. Lbs./kg
BT-65 Natural and Propane	Inches	65	60 1/2	24	15-1/2	8	4	11-1/2	25-1/2	54-1/4	3/4	1/2	----	240/108.9
	CM	165.1	153.7	61	39.4	20.3	10.2	29.2	64.8	137.8	1.9	1/2	----	
BT-80 Natural and LP	Inches	61-1/8	58-1/2	26-1/2	15-3/16	16	4	14-1/2	29-11/16	54-1/4	1	1/2	11-15/16	350/158.8
	CM	155.25	148.6	75.4	67.3	38.6	10.2	39.4	40.6	3.2	NPT	NPT	30.3	
BT-100 Natural and LP	Inches	68-5/8	66-1/2	27-3/4	15-3/16	16	4	15-3/4	30-15/16	54-1/4	1-1/4	1/2	11-15/16	350/158.8
	CM	174.3	168.9	78.59	70.5	38.6	10.2	40.0	40.6	3.2	NPT	NPT	30.3	

SUGGESTED 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, and gas-fired, equipped to burn _____ gas and design certified by CSA and shall be approved by the National Sanitation Foundation (with optional leg kit). Heaters must meet all applicable energy codes. Heaters shall have an input rating of _____ BTU/H and a recovery capacity of _____ GPH at a temperature rise of 100°F with a storage capacity of _____ gallons. Heater shall be equipped with a 2-3/4" x 3-3/4" boiler-type handhole cleanout (except BT-65) 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 diverter, 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 tank shall have a three year limited warranty against corrosion and tank failure due to sediment build-up as outlined in the written warranty. Heater(s) shall be design certified by CSA. for 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.

For Technical Information and Automated Fax Service, call 800-527-1953. A. O. Smith Corporation reserves the right to make product changes or improvements without prior notice.