



# Energy Saver

## Commercial Electric Water Heaters

*Meet or exceed ASHRAE 90.1b (current edition) performance standards*



- ◆ **50, 80 & 119 gallon capacities with inputs from 6 to 54 kW**
- ◆ **3" Non-CFC foam insulation**
- ◆ **Surface Mounted Thermostat (SF Model):** offers sequenced element operation through variable thermostat settings for each element.
- ◆ **Immersion Thermostats with Contactors (CF Model):** offer accurate temperature control to 180° F.
- ◆ **Elements:** screw in style
- ◆ **Surface Mounted Thermostat** models have electroplated copper sheathed elements consisting of nickel chromium wire embedded in magnesium oxide. Incoloy sheathed elements are optional.
- ◆ **Immersion Thermostat** models have low watt density incoloy sheathed elements standard, which resists burnout caused by dry fire or lime buildup.
- ◆ **Porcelain glass lined with dual magnesium anode rods:** to prohibit corrosion for longer life.
- ◆ **ASME and NSF Construction available**

***3-Year limited warranty***



### Dimensions and Capacities

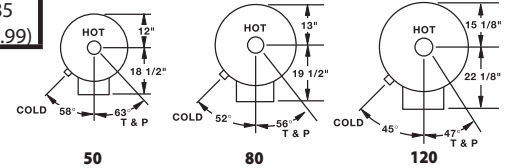
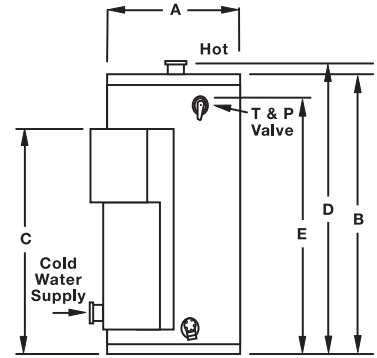
Model	Storage GAL (L)	kW Input	Inlet Pipe Dia. NPT	Dimensions in Inches (cm)					Shipping Weight	
				A	B	C	D	E	Standard LBS (kg)	ASME LBS (kg)
50F-*	50 (189.27)	**	1.50	24.00 (60.96)	47.75 (121.29)	46.50 (118.11)	49.25 (125.10)	41.00 (104.14)	270 (122.47)	302 (136.98)
80F-*	80 (302.83)	**	1.50	26.00 (66.04)	60.25 (153.04)	46.50 (118.11)	61.75 (156.85)	52.50 (133.35)	335 (151.95)	378 (171.46)
120F-*	119 (450.46)	**	1.50	30.25 (76.84)	64.50 (163.83)	50.25 (127.64)	66.00 (167.64)	55.00 (139.70)	430 (195.04)	485 (219.99)

\*When order surface mounted thermostat, add the letter "S" before the "F". Example 50SF

\*\*When ordering the Immersion thermostat add the letter "C" before the "F". Example 50CF

\*For ASME construction add an "A" to the model number. Example 50CF-A

\*\*Add a "6", "9", "12", "13.5", "15", "18", "24", "27", "30", "36", "45", or "54" to the model number to indicate kW input desired. Example 50S(C)F-6



### Operating Characteristics

kW Input	Recovery @ GPH		Full Load Current Amperes (Fused Models)***									
	90°F Rise	100°F Rise	208 Volts Phase		240 Volts Phase		277 Volts Phase	380 Volts Phase	415 Volts Phase	480 Volts Phase		600 Volts Phase
			1	3	1	3	1	3	3	1	3	3
6	28	25	28.8	16.6	25.0	14.4	21.6	10.0	9.0	12.5	7.2	5.8
9	42	37	43.2	25.0	37.2	21.6	32.4	14.0	13.0	18.7	10.8	8.7
12	55	50	57.6	33.3	50.0	28.9	43.3	19.0	17.0	25.0	14.4	11.5
13.5	62	56	64.9	37.5	56.2	32.5	48.7	21.0	19.0	28.1	16.2	13.0
15	69	62	72.1	41.6	62.5	36.1	54.1	23.0	21.0	31.2	18.0	14.4
18	83	74	86.5	50.0	72.0	43.4	64.0	28.0	25.0	37.5	21.6	17.3
24	110	99	115.4	66.7	100.0	57.8	86.6	37.0	34.0	50.0	28.9	23.1
27	124	112	129.8	75.0	112.5	65.0	97.4	41.0	38.0	56.2	32.5	26.0
30	138	124	144.2	83.3	125.0	72.2	108.3	46.0	42.0	62.5	36.1	28.9
36	165	149	173.0	100.0	150.0	86.7	129.9	55.0	50.0	75.0	43.3	34.6
45	207	186	216.3	125.0	187.5	108.3	162.4	69.0	63.0	93.7	54.1	43.3
54	248	223	259.6	150.0	225.0	130.0	194.9	83.0	75.0	112.5	65.0	52.0

kW Input	Number of Elements (Fused Models)***									
	208 Volts Phase		240 Volts Phase		277 Volts Phase	380 Volts Phase	415 Volts Phase	480 Volts Phase		600 Volts Phase
	1	3	1	3	1	3	3	1	3	3
6	3(2)	3	3(2)	3	3	3	3	3(2)	3	3
9	3	3	3	3	3	3	3	3	3	3
12	3	3	3(2)	3	3	3	3	3(2)	3	3
13.5	3	3	3	3	3	3	3	3	3	3
15	3	3	3	3	3	3	3	3	3	3
18	3	3	3	3	3	3	3	3	3	3
24	4	6	4	6	4	6	6	4	6	6
27	6	6	6	6	6	6	6	6	6	6
30	6	6	6	6	6	6	6	6	6	6
36	6	6	6	6	6	6	6	6	6	6
45	9	9	9	9	9	9	9	9	9	9
54	9	9	9	9	9	9	9	9	9	9

Units with amperage draw of 48 amps or more require factory installed internal fusing.

\*\*\*If the number of elements on non-fused models is different, it is indicated in parentheses (), following the AMP draw.



Where Applicable

- Dielectric Fittings:** Factory Installed
- T&P Valve:** Factory Installed
- Brass Drain Valve:** Factory Installed
- Relief Valve Opening:** 3/4"
- Hand-hole Cleanout Opening:** Standard
- Pressures (all):** Working Pressure, 150 psi; Testing Pressure, 300 psi

**Warning:** Do not install on combustible flooring. Installation should be in accordance with all national and/or local codes. In the absence of local codes, refer to NFPA 31, NFPA 54 or ANSI Z.21.10.1.

**Caution:** The recommended maximum hot water temperature setting for normal residential use is 120°F. Bock recommends a tempering valve or anti-scald valve be installed and used according to the manufacturer's directions to prevent scalding.



[www.bockwaterheaters.com](http://www.bockwaterheaters.com)  
 110 South Dickinson Street, Madison, Wisconsin 53703  
 Toll Free 800-794-2491 • Phone 608-257-2225 • Fax 608-257-5304

