

Commercial Electric Water Heater



3-Year Limited Tank/1-Year Limited Parts Warranty*

Heavy Duty Surface Thermostat Commercial Electric

- The STCE models are designed to provide years of reliable operation in commercial applications. Multiple anodes promote longer tank life through even distribution, for protection of the new tank interior.
- **Gold Plated Elements** The STCE models ship with gold plated elements. These gold elements provide long life and superior scale resistance.
- **Glass-Lined Tank** Three sizes; 50, 80 and 119 gallon capacity. Tank interior is coated with glass specially developed for water heater use. Tanks rated at 150 psi (1034 kPa) working pressure (ASME 150 psi). Foam insulation reduces costly heat loss, and is vermin proof.
- **Fusing** Protects all elements, thermostats, and internal wiring circuits against excess current flow. Meets National Electrical Code requirements that non-ASME tanks must have internal fusing when current draw exceeds 48 amps.
- **Standard Voltages** 208, 240 and 480V single-phase and three-phase delta. Convertible from three-phase to single-phase (in field) and vice versa. 277V single-phase also available.
- **Terminal Block** Factory installed. Just bring the service to the heater and connect to block
- **Controls** One temperature control (adjustable through a range of 120° to 180°F) and manual reset high temperature cutoff per element. Thermostat step control may be achieved by varying settings on individual temperature controls. Located behind hinged control compartment door for quick, easy access.
- Meets or exceeds the requirements of ASHRAE 90.1b-1992 and ASHRAE/IESNA 90.1-2004.
- Other Standard Features Simplified circuitry, color coded for ease of service Two anode rods for maximum corrosion protection Cabinet has bonderized undercoat with baked enamel finish Bottom inlet and top outlet openings Brass drain valve CSA/ASME temperature and pressure relief valve Single panel control box.
- **Options** UL listed conversion kits to correct some voltage and Kw requirements in the field before and after installation ASME 150 psi tank construction International voltages 220, 380, 400, 415, 575, and 600 volts, three phase available with Y connected elements MANIFOLD KITS for multiple tank installations. Two heaters -part # 9003429205, three heaterspart # 9003430205 and four heaters- part # 9003431205



STCE31-50, 80, 119





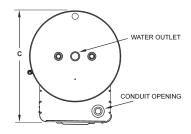


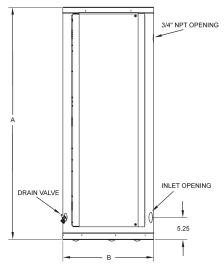


*For complete warranty information consult the written warranty of American Water Heaters found at www.americanwaterheater.com, or call (800) 456-9805.



Commercial Electric Water Heater





Dimensions on all charts shown in inches.

| GPH RECOVERY CAPACITIES | | | | | | | | | | | | |
|-------------------------|------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|
| | TEMPERATURE RISE | | | | | | | | | | | |
| KW INPUT | 30° F | 40° F | 50° F | 60° F | 70° F | 80° F | 90° F | 100° F | 110° F | 120° F | 130° F | 140° F |
| 6 | 82 | 62 | 49 | 41 | 35 | 31 | 27 | 25 | 22 | 21 | 19 | 18 |
| 9 | 123 | 92 | 74 | 62 | 53 | 46 | 41 | 37 | 34 | 31 | 28 | 26 |
| 12 | 164 | 123 | 98 | 82 | 70 | 61 | 55 | 49 | 45 | 41 | 38 | 35 |
| 13.5 | 184 | 138 | 111 | 92 | 79 | 69 | 62 | 55 | 50 | 46 | 43 | 40 |
| 15 | 205 | 154 | 123 | 102 | 88 | 77 | 68 | 61 | 56 | 51 | 47 | 44 |
| 18 | 246 | 184 | 148 | 123 | 105 | 92 | 82 | 74 | 67 | 62 | 57 | 53 |
| 24 | 328 | 246 | 197 | 164 | 140 | 123 | 109 | 98 | 90 | 82 | 76 | 70 |
| 27 | 369 | 276 | 221 | 185 | 158 | 138 | 123 | 111 | 101 | 92 | 85 | 79 |
| 30 | 410 | 307 | 246 | 205 | 176 | 154 | 137 | 123 | 112 | 102 | 95 | 88 |
| 36 | 492 | 369 | 295 | 246 | 211 | 184 | 164 | 148 | 134 | 123 | 113 | 105 |
| 40.5 | 554 | 418 | 332 | 277 | 237 | 208 | 185 | 166 | 151 | 138 | 128 | 119 |
| 45 | 615 | 461 | 369 | 307 | 263 | 230 | 205 | 184 | 168 | 154 | 142 | 132 |
| 54 | 738 | 554 | 443 | 359 | 316 | 277 | 246 | 221 | 201 | 185 | 170 | 158 |

Figured at 1 KW (3413 BTU) = 4.1 Gallons at 100°F temperature rise.

| | MODEL NUMBERS | | | NUMBER | | FULL LOAD CURRENT IN AMPERES | | | | | | |
|-------|---------------|---------------|----------------|----------|--------------|------------------------------|-------|---------|-------------|-------|-------|------|
| KW | TANK | CAPACITY IN G | 0F | ELEMENT | SINGLE PHASE | | | | THREE PHASE | | | |
| INPUT | 50 | 80 | 119 | ELEMENTS | WATTAGE | 208V | 240V | 277V | 480V | 208V | 240V | 480V |
| 6 | STCE31-50-060 | STCE31-80-060 | STCE31-119-060 | 3 | 2,000 | 28.8 | 25.0 | 21.7 | 12.5 | 16.7 | 14.4 | 7.2 |
| 9 | STCE31-50-090 | STCE31-80-090 | STCE31-119-090 | 3 | 3,000 | 43.3 | 37.5 | **32.5 | 18.8 | 25.0 | 21.7 | 10.8 |
| 12 | STCE31-50-120 | STCE31-80-120 | STCE31-119-120 | 3 | 4,000 | 57.7 | 50.0 | 43.3 | 25.0 | 33.3 | 28.9 | 14.4 |
| 13.5 | STCE31-50-135 | STCE31-80-135 | STCE31-119-135 | 3 | 4,500 | 64.9 | 56.3 | **48.7 | 28.1 | 37.5 | 32.5 | 16.2 |
| 15 | STCE31-50-150 | STCE31-80-150 | STCE31-119-150 | 3 | 5,000 | 72.1 | 62.5 | **54.2 | 31.3 | 41.6 | 36.1 | 18.0 |
| 18 | STCE31-50-180 | STCE31-80-180 | STCE31-119-180 | 3* | 6,000 | 86.5 | 75.0 | 65.0 | 37.5 | 50.0 | 43.3 | 21.7 |
| 24 | STCE31-50-240 | STCE31-80-240 | STCE31-119-240 | 6 | 4,000 | 115.4 | 100.0 | 86.6 | 50.0 | 66.6 | 57.7 | 28.9 |
| 27 | STCE31-50-270 | STCE31-80-270 | STCE31-119-270 | 6 | 4,500 | 129.8 | 112.5 | **97.5 | 56.3 | 74.9 | 65.0 | 32.5 |
| 30 | STCE31-50-300 | STCE31-80-300 | STCE31-119-300 | 6 | 5,000 | 144.2 | 125.0 | **108.3 | 62.5 | 83.3 | 72.2 | 36.1 |
| 36 | STCE31-50-360 | STCE31-80-360 | STCE31-119-360 | 6 | 6,000 | 173.1 | 150.0 | 130.0 | 75.0 | 99.9 | 86.6 | 43.3 |
| 40.5 | N/A | STCE31-80-405 | STCE31-119-405 | 9 | 4,500 | 194.7 | 168.8 | **146.2 | 84.4 | 112.4 | 97.4 | 48.7 |
| 45 | N/A | STCE31-80-450 | STCE31-119-450 | 9 | 5,000 | 216.3 | 187.5 | **162.5 | 93.8 | 124.9 | 108.3 | 54.1 |
| 54 | N/A | STCE31-80-540 | STCE31-119-540 | 9 | 6,000 | N/A | 225.0 | 194.9 | 112.5 | 149.9 | 129.9 | 65.0 |

^{*208} volt models may contain three (3) additional elements. ** Elements available in incoloy only.

| MODEL NUMBER | GALLON CAPACITY | HEIGHT TOP OF HEATER A | WIDTH B | DEPTH C | WATER CONN. | APPROX. SHIPPING WEIGHT |
|-----------------|--------------------|---------------------------------|------------|------------|----------------|-------------------------------|
| STCE31-50 | 50 | 55-3/4 | 21-3/4 | 27 | 1-1/4 | 265 |
| STCE31-80 | 80 | 60-1/4 | 25-1/2 | 31 | 1-1/4 | 280 |
| STCE31-119 | 119 | 62-1/4 | 29-1/2 | 35 | 1-1/4 | 390 |

^{*}Optional ASME models available. Add "A" before the model number to indicate ASME. Listed with the California Energy Commission. Specify wattage, voltage and phase when ordering.

Specification

Furnish and install, where indicated, in accordance with manufacturer's instructions and in compliance with all rules and regulations of authorities having jurisdiction.

The heater(s) shall be STCE Series Commercial Electric Model Number ______ as manufactured by American Water Heaters. Heater(s) shall be rated at ______ KW, _____ volts, _____ phase, 60 cycle AC, and listed by Underwriters' Laboratories and approved to the NSF Standard 5 by UL. Tank(s) shall be ______ gallon capacity. Tanks shall be 50, 80 and 119 gallon capacity and shall have 150 psi working pressure and be equipped with extruded high density anode. All internal surfaces of the heater(s) exposed to water shall be glass-lined with an alkaline borosilicate composition that has been fused-to-steel by firing at a temperature range of 1400°F to 1600°F. Electric heating elements shall be low watt density gold plated 1" screw-in type. Each element shall be controlled by an individually mounted thermostat and high temperature cut-off switch. All internal circuits shall be fused. The outer jacket shall be of baked enamel finish and shall be provided with full size control compartment for performance of service and maintenance through hinged front panel and shall enclose the tank with foam insulation. Electrical junction box with heavy duty terminal block shall be provided. The drain valve shall be located in the front for ease of servicing. Heater tank shall have a three-year limited warranty as outlined in the written warranty. Manufacturer shall supply ASME rated temperature and pressure relief valve. Fully illustrated instruction manual to be included. Meets ASHRAE 90.1b and ASHRAE/IESNA 90.1-2004.

Distributed By:

Order Entry and Sales

500 Princeton Road (FEDEX, UPS) Johnson City, TN 37601-2030 P.O. Box 4808 (Mailing) Johnson City, TN 37602-4808 (800) 937-1037 FAX (800) 581-7224

Warranty and Service

500 Princeton Road (FEDEX, UPS) Johnson City, TN 37601-2030 P.O. Box 1597 (Mailing) Johnson City, TN 37605-1597 (800) 456-9805 FAX (800) 999-5210