

## DURA-POWER 180°F BOOSTER MODELS

Dura-Power® commercial electric water heaters are designed to boost the water temperatures for applications such as commercial dishwashers, which require very high temperature sanitizing rinse—typically 180°F. Both 5-gallon countermount “CMC” models and 20-gallon “SU” models are available with inputs up to 54 kW. Models are also available with an optional stainless steel tank for use with deionized water.

### FEATURES

#### INCOLOY-SHEATH HEATING ELEMENTS STANDARD

- Industrial-grade Incoloy sheathed heating elements are designed for rugged long-lasting commercial service and can withstand sheath temperatures up to 1500°F
- Each heating element has three separate heating loops, which provides more heating surface, lower watt density and maximum recovery efficiency
- Pre-wired leads provide excellent protection against oxidation and scaling
- Input options from 6 kW to 54 kW, recoveries from 25 to 221 gallons per hour (gph) at 100°F rise
- Deionized models equipped with stainless steel standard elements

#### A. O. SMITH GOLDENROD® ELEMENTS OPTIONAL

- Patent-pending 24k gold-plated sheath plus medium watt-density ensures even longer element life
- Higher resistance to scale build-up, compared to Incoloy elements
- Three-year warranty against failure due to lime scale build-up
- Not available on deionized models

#### STANDARD VOLTAGES FOR EASY INSTALLATION

- Single-phase and three-phase
- Single-phase 208V and 240V are field-convertible to three-phase
- CMC models only, 208V and 240V at 24 kW and below are supplied as phase-convertible units (single- to three-phase and vice versa)
- 277V single-phase also available – Contact A. O. Smith for 120V circuit availability

#### IMMERSION THERMOSTAT FOR EFFICIENT CONTROL

- Close-differential, immersion-type thermostat for superbly accurate temperature control
- Adjustable from 140°F to 185°F
- Manual reset, high-temperature cutoff

#### HEAVY-DUTY MAGNETIC CONTACTORS

- UL-rated 100,000 cycles

#### FACTORY-WIRED, 120V CIRCUIT CONTROLS

- 120V control circuit powered by fused transformer
- Eliminates need for 120V service connection

## MODELS CMC/SU-6 through CMC/SU-54





# Commercial Electric Water Heaters

## **POWER-CIRCUIT FUSING FOR SYSTEM PROTECTION**

- Safeguards elements and contactors from short circuits, overloading and line surges
- Required by National Electric Code and UL when current draw exceeds 120 A

## **ALL STAINLESS STEEL JACKET**

- Cleans easily, corrosion resistant, hinged for easy serviceability
- Standard on CMC models, optional on SU models

## **GLASSLINED TANK, ASME TANK CONSTRUCTION**

- Specifically developed for high-temperature water heater use
- Provides long-lasting protection against corrosion
- Equipped with anode rod for additional corrosion protection
- Stainless steel tank on deionized models

## **MAXIMUM HYDROSTATIC WORKING PRESSURE: 150 PSI**

## **CSA CERTIFIED AND ASME RATED T&P RELIEF VALVE**

## **MEETS THE THERMAL EFFICIENCY AND/OR STANDBY LOSS REQUIREMENTS OF THE U.S. DEPARTMENT OF ENERGY AND CURRENT EDITION ASHRAE/IESNA 90.1**

## **THREE-YEAR LIMITED TANK WARRANTY**

- For complete information, consult written warranty

## **OTHER DURA-POWER CMC AND SU SERIES STANDARD FEATURES:**

- SIMPLIFIED, COLOR-CODED CIRCUITRY FOR EASE OF SERVICE
- CSA CERTIFIED AND ASME RATED T&P RELIEF VALVE
- PRESSURE REDUCING VALVE WITH BYPASS CHECK AND STRAINER
- TEMPERATURE/PRESSURE GAUGES

## **OTHER DURA-POWER CMC AND SU SERIES OPTIONS:**

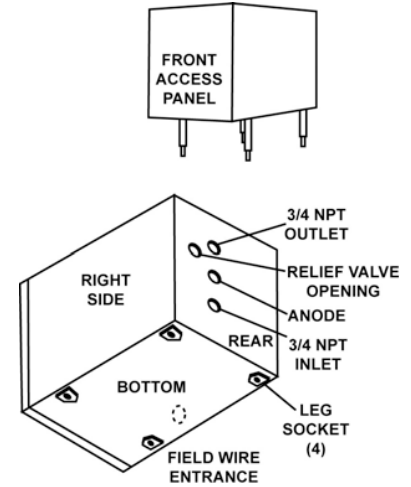
- STAINLESS STEEL TANK
  - For deionized water
- LOW-WATER CUTOFF
  - Probe-type electric low-water cutoff
  - Prevents energizing of elements when low-water condition exists (automatic reset)
- UNDERCOUNTER MOUNTING PAN FOR CMC MODELS
- DUAL INDICATING/PILOT LIGHTS AND SWITCH
  - Lights indicate when elements are on, switch gives positive on-off control of control circuit
- SHOCK ABSORBER REDUCES WATER HAMMER

## INPUT CAPACITY AND RECOVERY

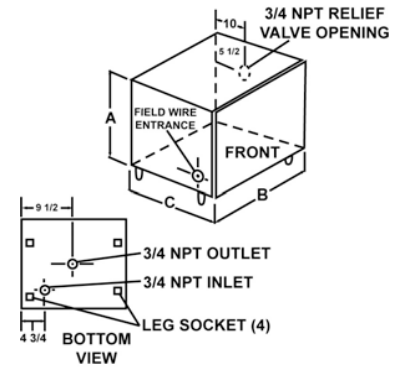
| MODEL NUMBER | STANDARD kW INPUT | GPH OR LPH | RECOVERY—GALLONS OR LITRES PER HOUR AT DEGREE RISE* |               |               |
|--------------|-------------------|------------|-----------------------------------------------------|---------------|---------------|
|              |                   |            | 40°F<br>22°C                                        | 100°F<br>56°C | 140°F<br>78°C |
| CMC-6        | 6                 | GPH        | 62                                                  | 25            | 18            |
| SU-6         |                   | LPH        | 234.7                                               | 94.6          | 68.1          |
| CMC-9        | 9                 | GPH        | 92                                                  | 37            | 26            |
| SU-9         |                   | LPH        | 348.2                                               | 140           | 98.4          |
| CMC-12       | 12                | GPH        | 123                                                 | 49            | 35            |
| SU-12        |                   | LPH        | 465.6                                               | 185.5         | 132.5         |
| CMC-15       | 15                | GPH        | 154                                                 | 61            | 44            |
| SU-15        |                   | LPH        | 582.9                                               | 230.9         | 166.5         |
| CMC-18       | 18                | GPH        | 184                                                 | 74            | 53            |
| SU-18        |                   | LPH        | 696.4                                               | 280.1         | 200.6         |
| CMC-20       | 20                | GPH        | 205                                                 | 82            | 58            |
| SU-20        |                   | LPH        | 775.9                                               | 310.4         | 219.5         |
| CMC-24       | 24                | GPH        | 246                                                 | 98            | 70            |
| SU-24        |                   | LPH        | 931.1                                               | 370.9         | 265           |
| CMC-30       | 30                | GPH        | 307                                                 | 123           | 88            |
| SU-30        |                   | LPH        | 1162                                                | 465.6         | 333.1         |
| CMC-36       | 36                | GPH        | 369                                                 | 148           | 105           |
| SU-36        |                   | LPH        | 1396.7                                              | 560.2         | 397.4         |
| CMC-45       | 45                | GPH        | 461                                                 | 184           | 132           |
| SU-45        |                   | LPH        | 1744.9                                              | 696.4         | 499.6         |
| CMC-54       | 54                | GPH        | 554                                                 | 221           | 158           |
| SU-54        |                   | LPH        | 2096.9                                              | 836.5         | 598           |

For deionized water models with stainless steel tanks, add "D" to model number.  
Examples CMCD-6, SUD-6. NSF recovery ratings = above ratings x .98.

## CMC MODELS



## SU MODELS



## DIMENSIONS AND WEIGHT

| MODEL NUMBER          | GALLONS OR LITRES | CAPACITY | DIMENSIONS IN INCHES |         |         |              | SHIPPING WEIGHT |
|-----------------------|-------------------|----------|----------------------|---------|---------|--------------|-----------------|
|                       |                   |          | HEIGHT A             | WIDTH B | DEPTH C | INLET/OUTLET | STANDARD        |
| CMC-6 through CMC-18  | U.S. Gallons      | 5        | 13.75                | 13      | 23.5    | 3/4          | 80 lbs.         |
|                       | Litres            |          | 34.9                 | 33      | 55.2    | 1.91         | 36.4 kg         |
| CMC-20 through CMC-54 | U.S. Gallons      | 5        | 12                   | 18      | 23.5    | 3/4          | 96 lbs.         |
|                       | Litres            |          | 30.5                 | 45.7    | 57.2    | 1.91         | 43.6 kg         |
| SU-6 through SU-54    | U.S. Gallons      | 20       | 25                   | 22.25   | 23      | 3/4          | 200 lbs.        |
|                       | Litres            |          | 63.5                 | 56.5    | 58.4    | 1.91         | 90.9 kg         |

## WATTAGE AND VOLTAGE

| KW INPUT | AVAILABLE MODEL |           | NUMBER OF IMMERSION HEATERS | IMMERSION HEATER WATTAGE | FULL LOAD CURRENT IN AMPERES |       |       |       |             |       |      |
|----------|-----------------|-----------|-----------------------------|--------------------------|------------------------------|-------|-------|-------|-------------|-------|------|
|          | CMC SERIES      | SU SERIES |                             |                          | SINGLE PHASE                 |       |       |       | THREE PHASE |       |      |
|          |                 |           |                             |                          | 208V                         | 240V  | 277V  | 480V  | 208V        | 240V  | 480V |
| 6        | CMC-6           | SU-6      | 1                           | 6,000                    | 28.8                         | 25    | 21.7  | 12.5  | 16.7        | 14.4  | 7.2  |
| 9        | CMC-9           | SU-9      | 1                           | 9,000                    | 43.3                         | 37.5  | 32.5  | 18.8  | 25          | 21.7  | 10.8 |
| 12       | CMC-12          | SU-12     | 1                           | 12,000                   | 57.7                         | 50    | 43.3  | 25    | 33.3        | 28.9  | 14.4 |
| 15       | CMC-15          | SU-15     | 1                           | 15,000                   | 72.1                         | 62.5  | 54.2  | 31.3  | 41.6        | 36.1  | 18   |
| 18       | CMC-18          | SU-18     | 1*                          | 18,000                   | 86.5                         | 75    | 65    | 37.5  | 50          | 43.3  | 21.7 |
| 20       | CMC-20          | SU-20     | 2                           | 10,000                   | 96.2                         | 83.3  | 72.2  | 41.7  | 55.5        | 48.1  | 24.1 |
| 24       | CMC-24          | SU-24     | 2                           | 12,000                   | 115.4                        | 100   | 86.6  | 50    | 66.6        | 57.7  | 28.9 |
| 30       | CMC-30          | SU-30     | 2                           | 15,000                   | 144.2                        | 125   | 108.3 | 62.5  | 83.3        | 72.2  | 36.1 |
| 36       | CMC-36          | SU-36     | 2                           | 18,000                   | 173.1                        | 150   | 130   | 75    | 99.9        | 86.6  | 43.3 |
| 45       | CMC-54          | SU-45     | 3                           | 15,000                   | 216.3                        | 187.5 | 162.5 | 93.8  | 124.9       | 108.3 | 54.1 |
| 54       | CMC-54          | SU-54     | 3                           | 18,000                   | N/A                          | 225   | 194.9 | 112.5 | 149.9       | 129.9 | 65   |

\*208V models use additional immersion heater



# Commercial Electric Water Heaters

## SUGGESTED SPECIFICATION

The water heater(s) shall be A. O. Smith Dura-Power Model(s) CMC/SU \_\_\_\_ rated at \_\_\_\_ kW, \_\_\_\_ volts, \_\_\_\_ -phase, 50/60 cycle AC, and constructed in accordance with ASME Code and shall bear appropriate symbol and be listed with the National Board as required. Heater shall be listed with Underwriters Laboratories and approved by National Sanitation Foundation.

Glasslined tank(s) shall be \_\_\_\_ gallon capacity with 150 psi maximum working pressure/ASME Code. Tank shall be cathodically protected with adequate extruded magnesium rod. All internal surfaces of the heater(s) exposed to water shall be glasslined with an alkaline borosilicate composition fused to steel. For deionized, substitute: Stainless tank(s) shall be \_\_\_\_ gallon capacity with 150 psi working pressure/ASME Code.

Elements shall be commercial-grade, medium watt density, triple-loop construction Incoloy sheathed or Goldenrod elements \_\_\_\_\_. For deionized, substitute: Elements shall be commercial-grade, type 316 L stainless steel sheathed. Elements shall be switched through magnetic contactor(s). Fused 120V control circuit shall include manual reset, high-temperature cut-off switch and immersion-style operating thermostat(s). Low-water cut-off (optional) to prevent element burnout due to possible low-water conditions. Straight-line rectangular cabinet shall be baked enamel with stainless steel front panel (SU models only). All stainless steel jacket (CMC models only) shall provide full-size access to control and elements for ease in servicing and shall enclose tank with fiber-class insulation.

Heater tank shall have a three (3) year limited warranty as outlined in the written warranty.