

## Dura-Power™

**Designed for use as a recovery heater having its own storage tank. Available in upright standard models (DEN) and lowboy models (DEL).**

**GLASSLINED TANK** - Thirteen sizes; 6 thru 119 gallon capacity. Tank interior is coated with glass specially designed by A. O. Smith for water heater use.

**ELEMENTS** - Zinc plated copper sheaths for longer life. Medium watt density means lower surface temperature to minimize scale build-up and more surface to heat water. Element sizes from 1.5 to 6 KW. Maximum input 12 KW (see chart on back).

**STANDARD VOLTAGES** - 120, 277 single phase and 208, 240 and 480V unbalanced three-phase delta; easily converted to single-phase at terminal block (except 208V with 6000 watt elements). Single element heater, single-phase only.

**TERMINAL BLOCK** - Factory-installed. Just bring the service to heater and connect to block. Terminal block not supplied on 120V & 277 volt models. (No junction box on DEL6-20)

**CONTROLS** - Temperature control (adjustable through arange of 110° to 170°F on single element and 120° to 180°F on dual element) and manual reset high temperature cutoff per element (dual element models). Factory-wired for non-simultaneous operation; easily converted to simultaneous element operation (three phase models only).

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

**SIMPLIFIED CIRCUITRY, COLOR CODED FOR EASE OF SERVICE**

**ANODE ROD FOR MAXIMUM CORROSION PROTECTION**

**CABINET HAS BONDERIZED UNDERCOAT WITH BAKED ENAMEL FINISH**

**TOP INLET AND OUTLET OPENINGS**

**DRAIN VALVE (EXCLUDES DEL 6-20)**

**UL APPROVED FIELD CONVERSION PROGRAM** - The 6 through 20 models are UL listed to UL 174 and the 30 through 120 models are listed to UL 1453.

**COMPLIANCE** - Meets the standby loss Requirements of the U.S. Department of Energy and current edition of ASHRAE/IESNA 90.1.

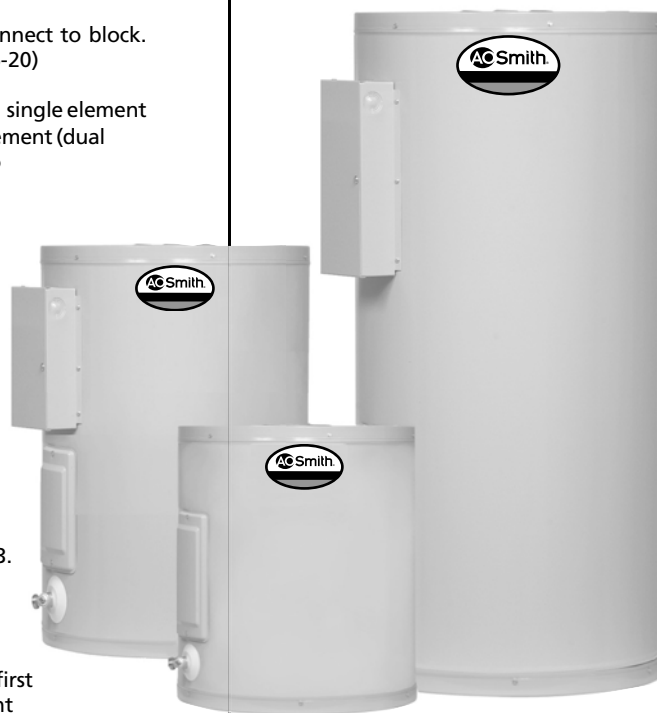
**LIMITED WARRANTY OUTLINE** - If the tank should leak any time during the first three years, under the terms of the warranty, A. O. Smith will furnish a replacement heater; installation, labor, handling and local delivery extra. THIS OUTLINE IS NOT A WARRANTY. For complete information consult the written warranty or A. O. Smith Water Products Company.

Element availability Chart (light Duty Commercial Electric)

| Input | 120 V | 208V             | 240V  | 277V | 480V |
|-------|-------|------------------|-------|------|------|
| 1500  | Yes   | Yes              | Yes   | Yes  | --   |
| 2000  | Yes   | Yes              | Yes   | Yes  | Yes  |
| 2500  | Yes   | Yes              | Yes   | Yes  | Yes  |
| 3000  | Yes   | Yes              | Yes   | Yes  | Yes  |
| 3500  | -     | -                | Yes   | -    | -    |
| 4000  | -     | Yes              | Yes   | Yes  | Yes  |
| 4500  | -     | Yes              | Yes   | Yes  | Yes  |
| 5000  | -     | (Yes)            | Yes   | Yes  | Yes  |
| 5500  | -     | (Yes)            | Yes   | -    | Yes  |
| 6000  | -     | Yes <sup>†</sup> | (Yes) | Yes  | Yes  |

6 gallon model not available above 3.0 Kw  
 6/10/15/20 gallon model all A6 circuit (2 wire) only  
<sup>†</sup> Non simultaneous circuit only  
 (i) Simultaneous only in 3 Ph

## DEN/DEL MODELS

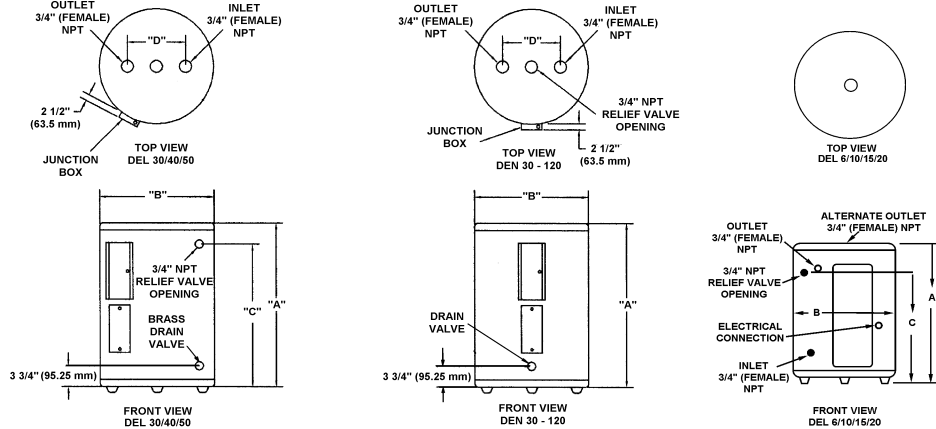




# Commercial Electric Water Heaters

## Dura-Power™

### PRODUCT SPECIFICATIONS



#### ROUGH-IN DIMENSIONS

| Models<br>Dimensions | No. of<br>Elements | Tank Capacity |        | A       |      | B      |     | C       |     | D      |     | Shipping Weight. |       |
|----------------------|--------------------|---------------|--------|---------|------|--------|-----|---------|-----|--------|-----|------------------|-------|
|                      |                    | US Gals.      | Litres | inches  | mm   | inches | mm  | inches  | mm  | inches | mm  | Lbs.             | Kg.   |
| DEL-6                | 1                  | 6             | 23     | 15 1/2  | 394  | 14 1/4 | 362 | 11      | 279 | -      | -   | 35               | 15.9  |
| DEL-10               | 1                  | 10            | 38     | 18 1/4  | 464  | 18     | 457 | 12 1/2  | 318 | -      | -   | 54               | 24.5  |
| DEL-15               | 1                  | 15            | 57     | 26      | 660  | 18     | 457 | 20 1/2  | 521 | -      | -   | 58               | 26.3  |
| DEL-20               | 1                  | 20            | 76     | 22 1/4  | 565  | 21 3/4 | 552 | 15 3/8  | 391 | -      | -   | 73               | 33.1  |
| DEL-30               | 2                  | 30            | 114    | 30 7/8  | 784  | 21 3/4 | 552 | 24 1/8  | 613 | 8      | 203 | 100              | 45.4  |
| DEL-40               | 2                  | 40            | 151    | 32 1/4  | 819  | 24     | 610 | 25 9/16 | 649 | 8      | 203 | 125              | 56.7  |
| DEL-50               | 2                  | 50            | 189    | 32 1/4  | 819  | 26 1/2 | 673 | 25 1/8  | 638 | 8      | 203 | 166              | 75.3  |
| DEN-30               | 2                  | 30            | 114    | 34 1/2  | 876  | 20 1/2 | 521 | -       | -   | 8      | 203 | 98               | 44.5  |
| DEN-40               | 2                  | 40            | 151    | 45 1/8  | 1146 | 20 1/2 | 521 | -       | -   | 8      | 203 | 113              | 51.3  |
| DEN-52               | 2                  | 50            | 189    | 54 7/8  | 1394 | 20 1/2 | 521 | -       | -   | 8      | 203 | 131              | 59.4  |
| DEN-66               | 2                  | 66            | 250    | 60 3/4  | 1543 | 21 3/4 | 552 | -       | -   | 8      | 203 | 176              | 79.8  |
| DEN-80               | 2                  | 80            | 303    | 59 3/8  | 1508 | 24     | 610 | -       | -   | 8      | 203 | 211              | 95.7  |
| DEN-120              | 2                  | 119           | 450    | 62 7/16 | 1586 | 29 3/8 | 746 | -       | -   | 8      | 203 | 326              | 147.9 |

#### RECOVERY CAPACITIES

| Element<br>Wattage<br>(Upper/Lower) | INPUT<br>KW | U.S. Gallons/Hr and Litres/Hr at TEMPERATURE RISE INDICATED |              |                |              |                |              |                |              |                 |               |                 |               |  |  |
|-------------------------------------|-------------|-------------------------------------------------------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|-----------------|---------------|-----------------|---------------|--|--|
|                                     |             | F°<br>C°                                                    | 36F°<br>20C° | 40F°<br>22.2C° | 54F°<br>30C° | 60F°<br>33.3C° | 72F°<br>40C° | 80F°<br>44.4C° | 90F°<br>50C° | 100F°<br>55.5C° | 108F°<br>60C° | 120F°<br>66.6C° | 126F°<br>70C° |  |  |
|                                     |             | NON-SIMULTANEOUS OPERATION                                  |              |                |              |                |              |                |              |                 |               |                 |               |  |  |
| /1500                               | 1.5         | GPH                                                         | 17           | 15             | 11           | 10             | 8            | 8              | 7            | 6               | 6             | 5               | 5             |  |  |
|                                     |             | LPH                                                         | 64           | 58             | 43           | 38             | 32           | 29             | 26           | 23              | 21            | 19              | 18            |  |  |
| /2000                               | 2.0         | GPH                                                         | 23           | 20             | 15           | 14             | 11           | 10             | 9            | 8               | 8             | 7               | 6             |  |  |
|                                     |             | LPH                                                         | 85           | 77             | 57           | 51             | 43           | 38             | 34           | 31              | 28            | 26              | 24            |  |  |
| /2500                               | 2.5         | GPH                                                         | 28           | 25             | 19           | 17             | 14           | 13             | 11           | 10              | 9             | 8               | 8             |  |  |
|                                     |             | LPH                                                         | 107          | 96             | 71           | 64             | 53           | 48             | 43           | 38              | 36            | 32              | 30            |  |  |
| 3000/3000                           | 3.0         | GPH                                                         | 34           | 30             | 23           | 20             | 17           | 15             | 14           | 12              | 11            | 10              | 10            |  |  |
|                                     |             | LPH                                                         | 128          | 115            | 85           | 77             | 64           | 58             | 51           | 46              | 43            | 38              | 37            |  |  |
| 4000/4000                           | 4.0         | GPH                                                         | 45           | 41             | 30           | 27             | 23           | 20             | 18           | 16              | 15            | 14              | 13            |  |  |
|                                     |             | LPH                                                         | 170          | 153            | 114          | 102            | 85           | 77             | 68           | 61              | 57            | 51              | 49            |  |  |
| 4500/4500                           | 4.5         | GPH                                                         | 51           | 46             | 34           | 30             | 25           | 23             | 20           | 18              | 17            | 15              | 14            |  |  |
|                                     |             | LPH                                                         | 192          | 173            | 128          | 115            | 96           | 86             | 77           | 69              | 64            | 58              | 55            |  |  |
| 5000/5000                           | 5.0         | GPH                                                         | 56           | 51             | 38           | 34             | 28           | 25             | 23           | 20              | 19            | 17              | 16            |  |  |
|                                     |             | LPH                                                         | 213          | 192            | 142          | 128            | 107          | 96             | 85           | 77              | 71            | 64              | 61            |  |  |
| 6000/6000                           | 6.0         | GPH                                                         | 68           | 61             | 45           | 41             | 34           | 30             | 27           | 24              | 23            | 20              | 19            |  |  |
|                                     |             | LPH                                                         | 256          | 230            | 170          | 153            | 128          | 115            | 102          | 92              | 85            | 77              | 73            |  |  |
| SIMULTANEOUS OPERATION              |             |                                                             |              |                |              |                |              |                |              |                 |               |                 |               |  |  |
| 3000/3000                           | 6           | GPH                                                         | 68           | 61             | 45           | 41             | 34           | 30             | 27           | 24              | 23            | 20              | 19            |  |  |
|                                     |             | LPH                                                         | 256          | 230            | 170          | 153            | 128          | 115            | 102          | 92              | 85            | 77              | 73            |  |  |
| 4000/4000                           | 8           | GPH                                                         | 90           | 81             | 60           | 54             | 45           | 41             | 36           | 32              | 30            | 27              | 26            |  |  |
|                                     |             | LPH                                                         | 341          | 307            | 227          | 205            | 170          | 153            | 136          | 123             | 114           | 102             | 97            |  |  |
| 4500/4500                           | 9           | GPH                                                         | 101          | 91             | 68           | 61             | 51           | 46             | 41           | 36              | 34            | 30              | 29            |  |  |
|                                     |             | LPH                                                         | 384          | 345            | 256          | 230            | 192          | 173            | 153          | 138             | 128           | 115             | 110           |  |  |
| 5000/5000                           | 10          | GPH                                                         | 113          | 101            | 75           | 68             | 56           | 51             | 45           | 41              | 38            | 34              | 32            |  |  |
|                                     |             | LPH                                                         | 426          | 384            | 284          | 256            | 213          | 192            | 170          | 153             | 142           | 128             | 122           |  |  |
| 6000/6000                           | 12          | GPH                                                         | 135          | 122            | 90           | 81             | 68           | 61             | 54           | 49              | 45            | 41              | 39            |  |  |
|                                     |             | LPH                                                         | 511          | 460            | 341          | 307            | 256          | 230            | 205          | 184             | 170           | 153             | 146           |  |  |

Recovery capacities at 100° F rise equal: for non-simultaneous element operation = 4.1 gal. x kW of one element; for simultaneous element operation = 4.1 gal. x 2/3 kW of both elements. For other rises multiply element kW as previously explained by 410 and divide by temperature rise. Full load current for single phase = total watts ÷ voltage.

#### SUGGESTED SPECS

The water heaters(s) shall be Dura-Power™ Model(s) No. \_\_\_\_\_ as manufactured by A. O. SMITH or an approved equal. Heater(s) shall be rated at \_\_\_\_\_ kW, \_\_\_\_\_ volts, \_\_\_\_\_ phase, 60 cycle AC, and listed by Underwriters' Laboratories. Models shall meet the standby loss requirements of the U.S. Department of energy and current edition of ASHRAE/IESNA 90.1. Tank(s) shall be \_\_\_\_\_ gallon capacity. Heater(s) shall have 150 psi working pressure and be equipped with extruded high density anode rod. All steel by firing at a temperature range of 1600°F. Electric heating elements shall be medium watt density with zinc plated copper sheath. Each element shall be controlled by an individually mounted thermostat and high temperature cutoff switch. The outer jacket shall be of backed enamel finish and shall enclose the tank with foam insulation. Electrical junction box with heavy duty terminal block shall be provided (except on 120V & 277V (no junction box on DEL-6 thru 20)). 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. Fully illustrated instruction manual to be included.

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.