

Gold Series

Comercial Electric Water Heaters

DRE-52, 80,120

Storage Capacity
190, 300 and 450 Litres

Range of KW Input
6 KW to 54 KW Input



Designed for use as a recovery heater having its own storage tank. Note: Not recommended for sanitizing water application.

FEATURES

Meets or exceeds the requirements of ASHRAE 90.1b-1992 and ASHRAE/IESNA 90.1-2004

| | |
|--------------------------------|---|
| GOLD ELEMENTS | DRE models ship with the Goldenrod 24K gold plated elements (see element availability chart on back). Patented Goldenrod elements provide long life and superior scaling resistance. Low watt density means lower surface temperature to minimize scale buildup and more surface to heat water. Goldenrod elements carry a one-year warranty against failure due to lime scale build-up. [Goldenrod Elements not available with 220V & 415V] |
| GLASS-LINED TANK | Three sizes: 190, 300 and 450 litres capacity. Tank interior is coated with glass specially developed by A. O. Smith for water heater use. Tanks rated at 10.34 Bar working pressure (ASME 10.34 Bar). 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. Available as an option on Canadian built heaters. |
| STANDARD VOLTAGES | 220, 240 V single-phase and 415 V in three-phase delta. Convertible from three-phase to single-phase (in field) and vice versa. Also available in international voltages. |
| TERMINAL BLOCK | Factory installed. Just bring the service to the heater and connect to block. |
| CONTROLS | One temperature control (adjustable through a range of 49°C to 82°C) and manual reset high temperature cut-off 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. |
| OTHER STANDARD FEATURES | <ul style="list-style-type: none"> • Surface mounted thermostats • 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 • THREE YEAR LIMITED TANK WARRANTY - For complete warranty information, consult written warranty or contact A. O. Smith. |
| OPTIONS | <ul style="list-style-type: none"> • UL and cUL listed conversion kits to adjust voltage and kW requirements in the field before and after installation • ASME 10.34 Bar tank construction • International voltages - 380, 400, 575, and 600 volts, three phase available with Y connected elements • MANIFOLD KITS - for multiple tank installations. Two heaters - part # 9003429205, three heaters - part # 9003430205 and four heaters - part # 9003431205 |



ASME/ CRN
(OPTIONAL)



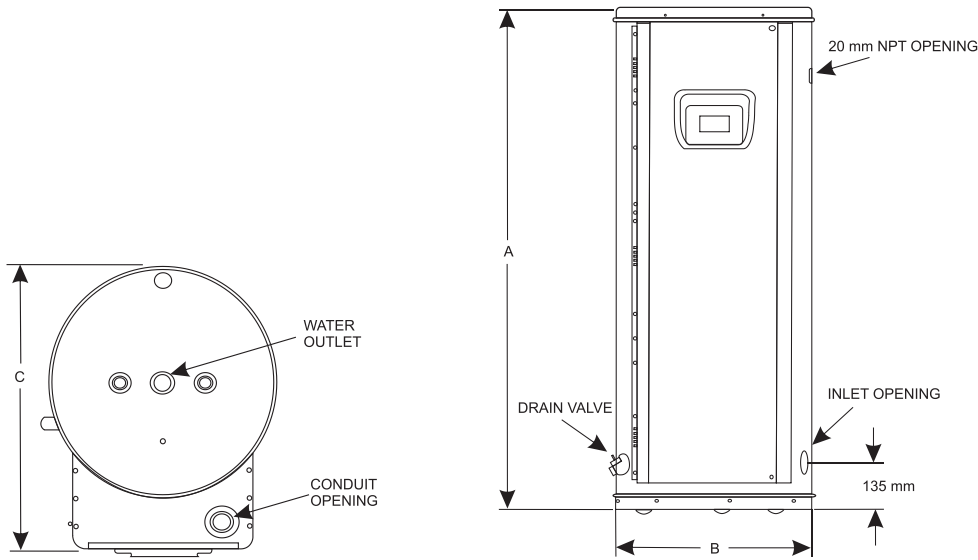
ANSI/ NSF-5

| Standard kW Input | Recovery capacity In litres for temperature rise of | | | | | | | | | | | | |
|-------------------|---|------|------|------|------|------|------|------|------|------|------|------|------|
| | Kcal/ Hour | 17°C | 22°C | 28°C | 33°C | 39°C | 45°C | 50°C | 56°C | 61°C | 67°C | 72°C | 78°C |
| 6 | 5,161 | 310 | 235 | 186 | 155 | 133 | 117 | 102 | 95 | 83 | 80 | 72 | 68 |
| 9 | 7,741 | 466 | 348 | 280 | 235 | 201 | 174 | 155 | 140 | 129 | 117 | 106 | 98 |
| 12 | 10,322 | 621 | 466 | 371 | 310 | 265 | 231 | 208 | 186 | 170 | 155 | 144 | 133 |
| 13.5 | 11,612 | 697 | 522 | 420 | 348 | 299 | 261 | 235 | 208 | 189 | 174 | 163 | 151 |
| 15 | 12,902 | 776 | 583 | 466 | 386 | 333 | 292 | 257 | 231 | 212 | 193 | 178 | 167 |
| 18 | 15,482 | 931 | 697 | 560 | 466 | 398 | 348 | 310 | 280 | 254 | 235 | 216 | 201 |
| 24 | 20,643 | 1242 | 931 | 746 | 621 | 530 | 466 | 413 | 371 | 341 | 310 | 288 | 265 |
| 27 | 23,224 | 1397 | 1045 | 837 | 700 | 598 | 522 | 466 | 420 | 382 | 348 | 322 | 299 |
| 30 | 25,804 | 1552 | 1162 | 931 | 776 | 666 | 583 | 519 | 466 | 424 | 386 | 360 | 333 |
| 36 | 30,965 | 1863 | 1397 | 1117 | 931 | 799 | 697 | 621 | 560 | 507 | 466 | 428 | 398 |
| 40.5 | 34,835 | 2097 | 1583 | 1257 | 1049 | 897 | 787 | 700 | 628 | 572 | 522 | 485 | 451 |
| 45 | 38,706 | 2328 | 1745 | 1397 | 1162 | 996 | 871 | 776 | 697 | 636 | 583 | 538 | 500 |
| 54 | 46,447 | 2794 | 2097 | 1677 | 1359 | 1196 | 1049 | 931 | 837 | 761 | 700 | 644 | 598 |

Figured at 1 KW=860 Kcal

| KW Input | Model Numbers Tank Capacity in Litres | | | Number of Elements | Elements Wattage | Full Load Current in Amperes | | |
|----------|--|-------------|--------------|-----------------------|---------------------|------------------------------|-------|-------------|
| | 190 | 300 | 450 | | | Single Phase | | Three Phase |
| | | | | | | 220V | 240V | 415V |
| 6 | DRE-52-6 | DRE-80-6 | DRE-120-6 | 3 | 2,000 | 27.2 | 25.0 | 8.3 |
| 9 | DRE-52-9 | DRE-80-9 | DRE-120-9 | 3 | 3,000 | 40.9 | 37.5 | 12.5 |
| 12 | DRE-52-12 | DRE-80-12 | DRE-120-12 | 3 | 4,000 | 54.5 | 50.0 | 16.6 |
| 13.5 | DRE-52-13.5 | DRE-80-13.5 | DRE-120-13.5 | 3 | 4,500 | 61.3 | 56.3 | 18.7 |
| 15 | DRE-52-15 | DRE-80-15 | DRE-120-15 | 3 | 5,000 | 68.1 | 62.5 | 20.8 |
| 18 | DRE-52-18 | DRE-80-18 | DRE-120-18 | 3* | 6,000 | 81.8 | 75.0 | 25.0 |
| 24 | DRE-52-24 | DRE-80-24 | DRE-120-24 | 6 | 4,000 | 109.0 | 100.0 | 33.3 |
| 27 | DRE-52-27 | DRE-80-27 | DRE-120-27 | 6 | 4,500 | 122.7 | 112.5 | 37.5 |
| 30 | DRE-52-30 | DRE-80-30 | DRE-120-30 | 6 | 5,000 | 136.3 | 125.0 | 41.7 |
| 36 | DRE-52-36 | DRE-80-36 | DRE-120-36 | 6 | 6,000 | 163.6 | 150.0 | 50.0 |
| 40.5 | N/A | DRE-80-40.5 | DRE-120-40.5 | 9 | 4,500 | 184.0 | 168.8 | 56.3 |
| 45 | N/A | DRE-80-45 | DRE-120-45 | 9 | 5,000 | 204.5 | 187.5 | 62.5 |
| 54 | N/A | DRE-80-54 | DRE-120-54 | 9 | 6,000 | N/A | 225.0 | 75.0 |

| Model Number | Tank Capacity | Dimensions | | | Inlet / Outlet [NPT] | Approx. Ship Wt. |
|--------------|---------------|------------|-----|-----|----------------------|------------------|
| | | A | B | C | | |
| | Litre | mm | mm | mm | mm | Kg. |
| DRE-52 | 190 | 1420 | 552 | 686 | 32 | 120 |
| DRE-80 | 300 | 1530 | 648 | 787 | 32 | 127 |
| DRE-120 | 450 | 1581 | 750 | 889 | 32 | 177 |



SUGGESTED SPECIFICATION

The heater(s) shall be Gold Series Commercial Electric Model Number _____ as manufactured by A. O. Smith. Heater(s) shall be rated at _____ kW, _____ volts, _____ phase, 50 cycle AC, and listed by Underwriters' Laboratories and approved to the NSF Standard 5 by UL. Tank(s) shall be _____ litres capacity. Tanks shall be 190, 300 and 450 litres capacity and shall have 10.34 bar 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 760°C to 870°C. Electric heating elements shall be low watt density Goldenrod 25 mm 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 -1992 and ASHRAE/IESNA 90.1-2004.

A. O. Smith India Water Heating Private Limited

No. 3, 6th Main Road, 4th Block, Jayanagar, Bengaluru - 560 011.
T: +91.80.4255.6000 ■ F: +91.80.4255.6025 ■ Toll Free: 1.800.103.2468
■ www.aosmithindia.com