# Smith. Commercial Electric Water Heaters

## Dura-Power<sup>™</sup>

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, handeling 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 '	(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>1</sup> Non simultaneous circuit only () Simultaneous only in 3 Ph

**Smith** 



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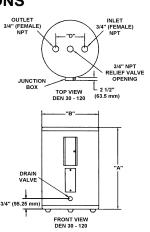
## DEN/DEL MODELS

A Smith

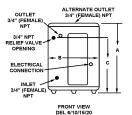


## ura-Powe PRODUCT SPECIFICATIONS

OUTLET 3/4" (FEMALE) 3/4" (FEMALE) 0 2 1/2" --/ (63.5 mm) TOP VIEW DEL 30/40/50 3/4" ELIEF VALV BRASS DRAIN VALVE FRONT VIEW DEL 30/40/50







ROUGH-IN DIMENSIONS

Models	No. of	Tank Cap	acity	А		В		с		D		Shipping Weight.	
Dimensions	Elements	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		U.S. Gallons/Hr and Litres/Hr at TEMPERATURE RISE INDICATED											
Wattage	INPUT	F°	36F°	40F°	54F°	60F°	72F°	80F°	90F°	100F°	108F°	120F°	126F°
(Upper/Lower)	KW	C°	20C°	22.2C°	30C°	33.3C°	40C°	44.4C°	50C°	55.5C°	60C°	66.6C°	70C°
NON-SIMULATANEOUS OPERATION													
/1500		GPH	17	15	11	10	8	8	7	6	6	5	5
	1.5	LPH	64	58	43	38	32	29	26	23	21	19	18
/2000		GPH	23	20	15	14	11	10	9	8	8	7	6
	2.0	LPH	85	77	57	51	43	38	34	31	28	26	24
/2500		GPH	28	25	19	17	14	13	11	10	9	8	8
	2.5	LPH	107	96	71	64	53	48	43	38	36	32	30
3000/3000		GPH	34	30	23	20	17	15	14	12	11	10	10
	3.0	LPH	128	115	85	77	64	58	51	46	43	38	37
4000/4000		GPH	45	41	30	27	23	20	18	16	15	14	13
	4.0	LPH	170	153	114	102	85	77	68	61	57	51	49
4500/4500		GPH	51	46	34	30	25	23	20	18	17	15	14
	4.5	LPH	192	173	128	115	96	86	77	69	64	58	55
5000/5000		GPH	56	51	38	34	28	25	23	20	19	17	16
	5.0	LPH	213	192	142	128	107	96	85	77	71	64	61
6000/6000		GPH	68	61	45	41	34	30	27	24	23	20	19
	6.0	LPH	256	230	170	153	128	115	102	92	85	77	73
SIMULATANEOU	S OPERA	TION											
3000/3000		GPH	68	61	45	41	34	30	27	24	23	20	19
	6	LPH	256	230	170	153	128	115	102	92	85	77	73
4000/4000		GPH	90	81	60	54	45	41	36	32	30	27	26
	8	LPH	341	307	227	205	170	153	136	123	114	102	97
4500/4500		GPH	101	91	68	61	51	46	41	36	34	30	29
	9	LPH	384	345	256	230	192	173	153	138	128	115	110
5000/5000		GPH	113	101	75	68	56	51	45	41	38	34	32
	10	LPH	426	384	284	256	213	192	170	153	142	128	122
6000/6000		GPH	135	122	90	81	68	61	54	49	45	41	39
	12	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 simultaneo us 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 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 value 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.