

## 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).

### 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 5500 watt elements).
- Single element heaters are single-phase only.

### TERMINAL BLOCK

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

### CONTROLS

- Temperature control (adjustable through a range of 110° to 170°F on single element and 120° to 181°F on dual element) and manual reset high temperature cutoff per element.

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

### HEAT TRAP NIPPLES ARE FACTORY-INSTALLED ON ALL MODELS

### SIMPLIFIED CIRCUITRY, COLOUR CODED FOR EASE OF SERVICE

### ANODE ROD FOR MAXIMUM CORROSION PROTECTION

### CABINET HAS BONDERIZED UNDERCOAT WITH BAKED ENAMEL FINISH

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

### UL APPROVED FIELD CONVERSION PROGRAM

### COMPLIANCE

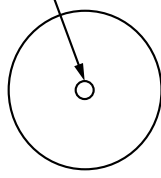
- Meets the standby loss requirements of NRCan and current edition of ASHRAE/IES 90.1.

### LIMITED WARRANTY OUTLINE

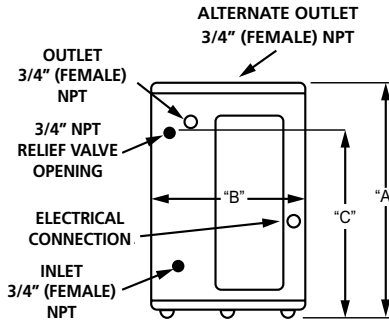
- If the tank should leak any time during the first three years, under the terms of the warranty, A. O. Smith will furnish a replacement heater; installation, labour, handling and local delivery extra. THIS OUTLINE IS NOT A WARRANTY. For complete information consult the written warranty or A. O. Smith.



HOT WATER OUTLET DEL-6



Top View  
DEL 6/10/15/20



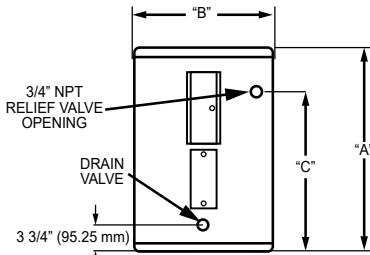
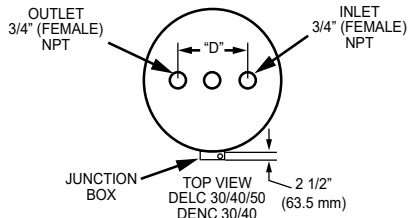
FRONT VIEW  
DEL 6/10/15/20

\*(NO SIDE OUTLET AVAILABLE FOR DEL-6 MODELS)

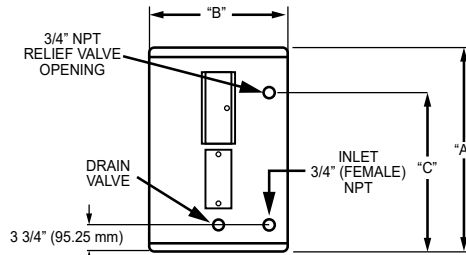
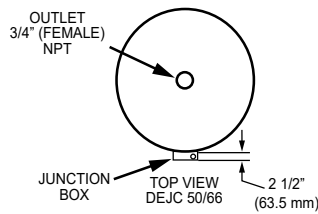
## ROUGH-IN DIMENSIONS

MODEL NUMBER	NO. OF ELEMENTS	TANK CAPACITY		STANDBY LOSS WATTS	A		B		C		D		SHIPPING WEIGHT	
		USG	L		IN	MM	IN	MM	IN	MM	IN	MM	LB	KG
DEL-6	1	6	23	N/A	15-1/2	394	14-1/4	362	11	279	N/A	N/A	35	16
DEL-10	1	10	37	N/A	18-1/4	464	18	457	12-1/2	318	N/A	N/A	54	25
DEL-15	1	13	49	49	26	660	18	457	20-1/2	521	N/A	N/A	58	26
DEL-20	1	19	74	54	22-1/4	565	21-3/4	552	15-3/8	391	N/A	N/A	73	33

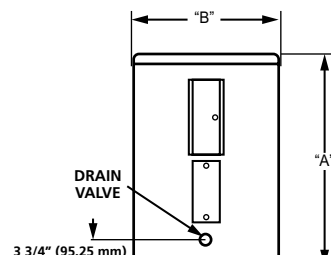
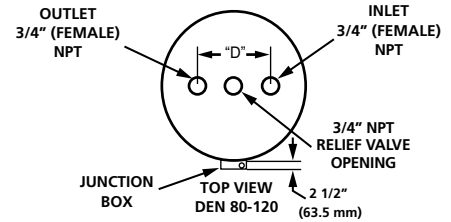
\* No side outlet available on DEL-6 Model



FRONT VIEW  
DELC 30/40/50  
DENC 30/40



FRONT VIEW  
DEJC 50/66



FRONT VIEW  
DEN 80-120

## ROUGH-IN DIMENSIONS

MODEL NUMBER	NO. OF ELEMENTS	TANK CAPACITY		STANDBY LOSS WATTS	A		B		C		D		SHIPPING WEIGHT	
		USG	L		IN	MM	IN	MM	IN	MM	IN	MM	LB	KG
DELC-30	2	27	103	46	31-5/8	803	24	610	21-15/16	557	8	203	120	54
DELC-40	2	36	138	53	33-7/8	860	26	660	23-7/8	606	8	203	115	52
DELC-50	2	50	190	63	36	914	26-1/2	673	26-1/8	664	8	203	175	79
DENC-30	2	29	109	47	39-7/8	1013	22	559	30-7/16	773	8	203	100	45
DENC-40	2	38	145	54	49-7/8	1267	20-1/2	521	40-3/4	1035	8	203	103	47
DEJC-50	2	49	184	77	48-1/4	1226	22	559	40-5/16	1024	Side Inlets	-	127	58
DEJC-66	2	63	237	87	60-1/2	1537	22	559	52-3/4	1340	Side Inlets	-	150	68
DEN-80	2	75	284	86	59-3/8	1508	24	610	N/A	N/A	8	203	211	96
DEN-120	2	113	428	146	62-7/16	1586	29-3/8	746	N/A	N/A	8	203	326	148



# Commercial Electric Water Heaters

## ELEMENT AVAILABILITY CHART (LIGHT-DUTY COMMERCIAL ELECTRIC)

MODELS & ELEMENTS	VOLTAGE	PHASE	WIRING	KW INPUT AVAILABLE										
				1.5	2	2.5	3							
6-GALLON MODELS SINGLE-ELEMENT	120V	1	-	1.5	2	2.5	3							
	208V	1	-	1.5	2	2.5	3							
	240V	1	-	1.5	2	2.5	3							
	277V	1	-	1.5	2	2.5	3							
	480V	1	-		2	2.5	3							
10-GALLON THROUGH 20-GALLON MODELS SINGLE-ELEMENT	120V	1	-	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	
	208V	1	-	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	
	240V	1	-	1.5	2	2.5	3		4	4.5	5		6	
	277V	1	-	1.5	2	2.5	3		4	4.5	5		6	
	480V	1	-		2	2.5	3		4	4.5	5	5.5	6	
30-GALLON THROUGH 120-GALLON MODELS DOUBLE-ELEMENT	120V	1	Interlock	1.5	2	2.5	3							
		1	Simultaneous	3	4	5	†							
	208V	1/3	Interlock	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	
		1/3	Simultaneous	3	4	5	6	7	8	9	10**	11**	†	
	240V	1/3	Interlock	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	
		1/3	Simultaneous	3	4	5	6	7	8	9	10	11	12**	
	277V	1/3	Interlock	1.5	2	2.5	3		4	4.5	5		6	
		1/3	Simultaneous	3	4	5	6		8	9	10		12	
	480V	1/3	Interlock		2	2.5	3		4	4.5	5	5.5	6	
		1/3	Simultaneous		4	5	6		8	9	10	11	12	

6 gallon model not available above 3kW  
 6/10/15/20 gallon models all A6 circuit (2 wire) only  
 † Exceeds maximum amp draw.  
 \*\* Simultaneous only in 3ph

## ELECTRIC CHARACTERISTICS

ELECTRIC CHARACTERISTICS													
NON SIMULTANEOUS AND SINGLE ELEMENT OPERATION 6 - 120 GALLON					SIMULTANEOUS DUAL ELEMENT OPERATION (SINGLE PHASE CONNECTION) 30 - 120 GALLON					SIMULTANEOUS DUAL ELEMENT OPERATION (UNBALANCED THREE PHASE CONNECTION) 30 - 120 GALLON			
ELEMENT WATTAGE	FULL LOAD CURRENT IN AMPERES (TERMINALS - L1, L2)				ELEMENT WATTAGE	FULL LOAD CURRENT IN AMPERES (TERMINALS - L1, L2)				ELEMENT WATTAGE	FULL LOAD CURRENT IN AMPERES (TERMINALS - L2 / TERMINAL L1 & L3)		
Upper/Lower	120V	208V	240V	480V	Upper/Lower	120V	208V	240V	480V	Upper/Lower	208V	240V	480V
1500	12.5	7.2	6.3	3.2	1500/1500	25.0	14.4	12.5	6.3	1500/1500	12.4/7.2	10.8/6.3	5.4/3.2
2000	16.7	9.6	8.3	4.2	2000/2000	33.4	19.2	16.6	8.3	2000/2000	16.6/9.6	14.4/8.3	7.2/4.2
2500	20.8	12.0	10.4	5.2	2500/2500	41.6	24	20.8	10.4	2500/2500	20.8/12.0	18.0/10.4	9.0/5.2
3000/3000	25.0	14.4	12.5	6.3	3000/3000	N/A	28.8	25	12.5	3000/3000	25.0/14.4	21.6/12.5	10.8/6.3
3500/3500	N/A	16.6	14.5	N/A	3500/3500	N/A	33.7	29.2	N/A	3500/3500	29.1/16.9	25.2/14.6	N/A
4000/4000	N/A	19.2	16.7	8.3	4000/4000	N/A	38.4	33.3	16.6	4000/4000	33.3/19.2	28.8/16.7	14.4/8.3
4500/4500	N/A	21.6	18.8	9.4	4500/4500	N/A	43.2	37.5	18.75	4500/4500	37.4/21.6	32.4/18.8	16.2/9.4
5000/5000	N/A	24.0	20.8	10.4	5000/5000	N/A	N/A	41.6	20.8	5000/5000	41.6/24.0	36.0/20.8	18.0/10.4
5500/5500	N/A	26.4	22.9	N/A	5500/5500	N/A	N/A	45.8	22.9	5500/5500	45.6/26.4	39.5/22.9	19.8/11.5
6000/6000	N/A	28.8	25.0	12.5	6000/6000	N/A	N/A	N/A	25	6000/6000	N/A	43.3/25.0	21.6/12.5



# Commercial Electric Water Heaters

## RECOVERY CAPACITIES

ELEMENT WATTAGE (UPPER/ LOWER)	INPUT	U. S. GALLONS/HR AND LITRES/HR AT TEMPERATURE RISE INDICATED											
		F°	36	40	54	60	72	80	90	100	108	120	126
		KW	C°	20	22.2	30	33.3	40	44.4	50	55.5	60	66.6
<b>NON-SIMULTANEOUS OPERATION</b>													
/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	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	GPH	34	30	23	20	17	15	14	12	11	10	10
		LPH	128	115	85	77	64	58	51	46	43	38	37
3500/3500	3.5	GPH	40	36	26	24	2	18	16	14	13	12	11
		LPH	151	136	98	90	75	68	60	52	49	45	41
4000/4000	4	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	GPH	56	51	38	34	28	25	23	20	19	17	16
		LPH	213	192	142	128	107	96	85	77	71	64	61
5500/5500	5.5	GPH	63	56	42	37	31	28	25	22	21	18	18
		LPH	238	211	158	140	117	105	94	83	79	68	68
6000/6000	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
<b>SIMULTANEOUS OPERATION</b>													
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
3500/3500	7	GPH	80	72	53	48	40	36	32	28	26	24	22
		LPH	302	272	200	181	151	136	121	105	98	90	83
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
5500/5500	11	GPH	126	113	84	75	63	56	50	45	42	37	36
		LPH	476	427	317	283	238	211	189	170	158	140	136
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.

### SPECIFICATION

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 NRCan and current edition of ASHRAE/IES 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 internal surfaces of the heater(s) exposed to water shall be glasslined 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 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 call 888-599-2837. A. O. Smith Enterprises Ltd. reserves the right to make product changes or improvements without prior notice.**