

### Water Heaters

### PATRIOT™

Designed for use as a recovery heater having its own storage tank. Available in upright, standard, and lowboy models.

#### **GLASSLINED TANK**

Thirteen sizes; 6 thru 119 gallon capacity.
 Tank interior is coated with glass specially designed by State Water Heaters 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 6.1 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 with limited exceptions. Single element heaters, 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 PCE 6-20)

#### **CONTROLS**

 Temperature control (adjustable through arange of 110° to 170°F on single element and 120° to 181°F on dual element) and manual reset high temperature cutoff per element (dual element models). Factorywired 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 PCE 6-20)

# UL APPROVED FIELD CONVERSION PROGRAM

#### 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, State Water Heaters 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 statewaterheaters.com



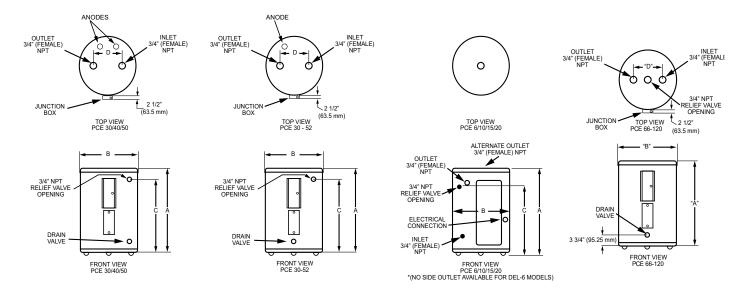




SOLID. STATE.



# Water Heaters



#### **ROUGH-IN DIMENSIONS**

Madala	urr	No. of	Nominal	Rated	ı	4	ı	3		;		D Shipping We		g Weight
Models	UEF	Elements	Capacity	Storage Volume	Inches	mm	Inches	mm	Inches	mm	Inches	mm	lbs.	Kg.
PCE-6	N/A	1	6	6	15-1/2	394	14-1/4	362	11	279	N/A	N/A	35	15.9
PCE-10	N/A	1	10	10	18-1/4	464	18	457	12-1/2	318	N/A	N/A	54	24.5
PCE-15	N/A	1	15	15	26	660	18	457	20-1/2	521	N/A	N/A	58	26.3
PCE-20	N/A	1	20	19	22-1/4	565	21-3/4	552	15-3/8	391	N/A	N/A	73	33.1
PCE-30-20LS	0.92	2	36	33	32	813	24	610	24	610	8	203	118	53.5
PCE-40-20LS**	0.92	2	38	35	32	813	23	584	24	610	8	203	118	53.5
PCE-50-20LS	0.92	2	51	48	36	914	26-1/2	673	25	635	8	203	172	78
PCE-30-20RT	0.92	2	40	37	49-3/4	1264	20-1/2	521	53-1/4	1353	8	203	118	53.5
PCE-40-20RT	0.92	2	50	46	59	1499	20-1/2	521	51-1/4	1302	8	203	125	56.7
PCE-52-20RT	0.92	2	55	55	56-1/2	1435	24	610	48-1/2	1232	8	203	145	65.8
PCE-66-20RTA	N/A	2	66	60	60-3/4	1543	21-3/4	552	N/A	N/A	8	203	176	79.8
PCE-82-20RTA	N/A	2	80	76	59-3/8	1508	24	610	N/A	N/A	8	203	211	95.7
PCE-120-20RTA	N/A	2	120	108	62-7/16	1586	29-3/8	746	N/A	N/A	8	203	326	147.9

	U.S Gallons/HR and Litres/HR at Temperature Rise Indicated													
Element Wattage (Upper/Lower)	Input KW	F°	36 F°	40 F°	54 F°	60 F°	72 F°	80 F°	90 F°	100 F°	108 F°	120 F°	126 F°	
		C°	20 C°	22.2 C°	30 C°	33.3 C°	40 C°	44.4 C°	50 C°	55.5 C°	60 C°	66.6 C°	70 C°	
6100/6100**	12.2	GPH	138	124	92	82	69	62	55	49	46	41	39	
6100/6100""	12.2	LPH	522	469	348	310	261	235	208	184	174	153	146	

<sup>\*</sup>No side outlet available on PCE-6 Model

Note: All 66, 80, 120 models can only be ordered 277V, 240V, or 480V

<sup>\*\*</sup>Blanket model



# Water Heaters

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

Models & Elements	Voltage	Wiring		kW Input Available										
	120V	-	1.5	2	2.5	3								
	208V	-	1.5	2	2.5	3								
6-Gallon Models Single-Element	240V	-	1.5	2	2.5	3								
<b>8</b>	277V	-	1.5	2	2.5	3								
	480V	-		2	2.5	3								
	120V	-	1.5	2	2.5	3								
10-Gallon through	208V	-	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6		
20-Gallon Models	240V	-	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6		
Single-Element	277V	-	1.5	2	2.5	3		4	4.5	5		6		
	480V	-		2	2.5	3		4	4.5	5	5.5	6		

6 gallon model not available above 3kW 6/10/15/20 gallon models all A6 circuit (2 wire) only

Model	Element Wattage											
Model		120V	208V	240V	277V	480V						
PCE-30-20LS	Min Watts	N/A	4500	4500	4500	4500						
FGE-30-20L3	Max Watts	N/A	6000 (*)	6000 (*)	6000	6000						
DOT 10 0010	Min Watts	N/A	4500	4500	4500	4500						
PCE-40-20LS	Max Watts	N/A	6000 (*)	6000 (*)	6000	6000						
DOE 50 0010	Min Watts	N/A	4000	4000	4000	4000						
PCE-50-20LS	Max Watts	N/A	6000 (*)	6000 (*)	6000	6000						
PCE-30-20RT	Min Watts	N/A	4500	4500	4500	4500						
PGE-3U-ZUKI	Max Watts	N/A	6000 (*)	6000 (*)	6000	6000						
PCE-40-20RT	Min Watts	3000 (*)	3000	3000	3000	3000						
rue-40-20KI	Max Watts	3000 (*)	6000 (*)	6000 (*)	6000	6000						
PCE-52-20RT	Min Watts	2500	2500	2500	2500	2500						
rue-32-20Kl	Max Watts	3000 (*)	6000 (*)	6000 (*)	6000	6000						

Additional limitations apply to 120V, 208V, and 240V - Simultaneous Operation are not available (\*) for these voltages.

<sup>3</sup> phase only on 240 6000 watt for simultaneous operation



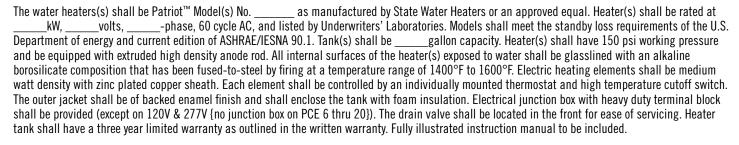
### Water Heaters

#### RECOVERY CAPACITIES

Element	land	U. S. Gallons/Hr and Litres/Hr at Temperature Rise Indicated											
Wattage	Input	F°	36	40	54	60	72	80	90	100	108	120	126
(Upper/Lower)	kW	C°	20	22.2	30	33.3	40	44.4	50	55.5	60	66.6	70
Non-Simulatane	ous Operatio	n											
/1500	1.5	GPH	17	15	11	10	8	8	7	6	6	5	5
/1300	1.5	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
72000	2	LPH	85	77	57	51	43	38	34	31	6 60 66.6  6 5  21 19  8 7  28 26  9 8  36 32  11 10  43 38  15 14  57 51  17 15  64 58  19 17  71 64  23 20  85 77  23 20  85 77  30 27  114 102  34 30  15 128 115  38 34  45 41  170 153	24	
/2500	2.5	GPH	28	25	19	17	14	13	11	10	9	8	8
72300	2.3	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
3000/3000	J	LPH	128	115	85	77	64	58	51	46	43	38	37
4000/4000	4	GPH	45	41	30	27	23	20	18	16		14	13
4000/4000		LPH	170	153	114	102	85	77	68	61			49
4500/4500	4.5	GPH	51	46	34	30	25	23	20	18	17	15	26 24  8 8  32 30  10 10  38 37  14 13  51 49  15 14  58 55  17 16  64 61  20 19  77 73
4300/4300	4.5	LPH	192	173	128	115	96	86	77	69		58	
5000/5000	5	GPH	56	51	38	34	28	25	23	20	19 17	16	
0000/0000	J	LPH	213	192	142	128	107	96	85	77			
6000/6000	6	GPH	68	61	45	41	34	30	27	24	23	20	19
0000/0000	Ů	LPH	256	230	170	153	128	115	102	92	85	77	73
Simulataneous 0	peration												
3000/3000	6	GPH	68	61	45	41	34	30	27	24			
0000/0000	Ů	LPH	256	230	170	153	128	115	102	92			
4000/4000	8	GPH	90	81	60	54	45	41	36	32			
1000, 1000	Ů	LPH	341	307	227	205	170	153	136	123	114		
4500/4500	9	GPH	101	91	68	61	51	46	41	36	34	30	5 18 6 24 8 30 10 37 13 49 14 55 16 61 19 73 73 26 97 29 110 32 122 39
.500, 1000		LPH	384	345	256	230	192	173	153	138			
5000/5000	10	GPH	113	101	75	68	56	51	45	41		5 5 5 19 18 7 6 26 24 8 8 8 32 30 10 10 10 338 37 14 13 51 49 15 14 58 55 17 16 64 61 20 19 77 73 27 26 102 97 30 29 115 110 34 32 128 122 41 39	
2200,0000	10	LPH	426	384	284	256	213	192	170	153	60 66.6 70  6 5 5  21 19 18  8 7 6  28 26 24  9 8 8  36 32 30  11 10 10  43 38 37  15 14 13  57 51 49  17 15 14  64 58 55  19 17 16  71 64 61  23 20 19  85 77 73  23 20 19  85 77 73  30 27 26  114 102 97  34 30 29  128 115 110  38 34 32  142 128 122  45 41 39		
6000/6000	12	GPH	135	122	90	81	68	61	54	49		41	
		LPH	511	460	341	307	256	230	205	184		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**



FOR MORE INFORMATION, CONTACT: STATE WATER HEATERS 500 TENNESSEE WALTZ PARKWAY, ASHLAND CITY, TN 37015 800-365-0024 TOLL-FREE USA STATEWATERHEATERS.COM