



The new degree of comfort.™



Water

Commercial Electric
Heavy Duty Water Heaters

Heavy Duty Electric commercial water heater available in 175 gallon capacity

Features & Benefits

- Ideal for general commercial use and point-of-use applications like eyewash stations, or used as a booster
- Inputs: 3 through 108 kW
- Voltages: 208, 240 or 480 VAC in either single phase or 3-phase; 600 VAC three phase
- Element wattages: 2000, 3000, 4000, 4500, 5000 and 6000; 9000 watt element at 480 VAC
- Available in 1, 3, 6, 9 or 12 element configurations for your specific kW application
- Elements are Lifeguard™ stainless steel, screw-in type that resist burn out and corrosion
- ASME construction is standard on E175 model
- Long life tank design: proprietary steel formulation with high temperature porcelain enamel to maximize corrosion resistance resulting in a superior tank design
- Two anode rods are installed to ensure long life and corrosion resistance
- Thermostat can be set up to 190° F

Efficiency

- 98% thermal efficiency
- Thick foam insulation for minimal standby heat loss

Performance

- Recovery rate: Up to 438 gallons GPH at a 100 degree rise
- Up to 190° F maximum delivered temperature

Capacity & Shipping Weight

- 175 Gal/700 lbs. ASME only

Easy Installation & Service

- Control box is located at the front of unit for easy wiring during installation – Multiple knockout holes accommodate a variety of conduit sizes
- **Exclusive!** System Sentinel™ provides a diagnostic panel with LEDs that correspond to the number, location and status of each element
- **Exclusive!** Full-port, full-flow, brass drain valve for faster draining
- Minimum distance to combustibles is zero inches from jacket and 18 inches from access door
- All models approved for installation on combustible flooring

Plus

- Temperature and pressure relief valve at top of 175 gallon model
- Water connections: hot and cold water inlets are 2-1/2" NPT dielectric nipples

Warranty

3-Year limited tank warranty, 1-year limited parts warranty

See Commercial Warranty Certificate for complete information.

Efficiency | These models have been tested according to DOE test procedures, and exceed the minimum energy factor requirements of current ASHRAE Standards (Part of the federally mandated Energy Policy Act (EPAct)). Also exceeds energy efficiency codes of all states including California Energy Commission (CEC).

Safety and Construction | Safety and Construction: These products are design certified by Underwriters Laboratories (UL) to meet UL standard 1453 and UL/NSF 005 as electric storage tank water heaters. All models are North Carolina and Massachusetts Code compliant. **Certified for a 150 PSI Maximum Working Pressure. (160 PSI maximum for ASME models)**



Rheem-Ruud Heavy Duty
175-Gallon Capacity
ASME Construction
3-Year Limited Warranty
Electric



(With
Optional
Seal Kit)



INTEGRATED AIR & WATER

ELECTRICAL CHARACTERISTICS												
INPUT KW	NUMBER OF ELEMENTS	ELEMENT WATTAGE	FULL LOAD CURRENT IN AMPERES							IMMERSION THERMOSTATS		
			208V		240V		480V		600V	NUMBER OF FUSES	STAGED THERMOSTATS	
			PHASE		PHASE		PHASE		PHASE		NUMBER OF THERMOSTATS	KW STEP SIZE
			1	3	1	3	1	3	3			
3	1	3000	15	-	13	-	6	-	-	2		3
6	3	2000	29	17	25	14	13	7	6	6	N/A	6
9	3	3000	43	25	38	22	19	11	9	6	ONE	9
12	3	4000	58	33	50	29	25	15	12	6	T'STAT	12
15	3	5000	72	42	63	36	31	18	15	6	STD.	15
18	3	6000	-	-	75	43	38	22	18	6		18
18	6	3000	87	50	-	-	-	-	-	12	2	9
24	6	4000	116	67	100	58	50	29	23	12	2	12
27	6	4500	130	75	113	65	56	33	26	12	2	13.5
30	6	5000	144	84	125	73	63	36	29	12	2	15
36	6	6000	-	-	150	87	75	43	35	12	2	18
36	9	4000	173	100	-	-	-	-	-	18	3	12
45	9	5000	217	125	188	109	94	54	43	18	3	15
54	9	6000	260	150	225	130	113	65	52	18	3	18
60	12	5000	288	166	250	144	125	72	58	24	4	15
72	12	6000	-	200	-	172	150	87	70	24	4	18
81	9	9000	-	-	-	-	169	98	-	18	3	27
108*	12	9000	-	-	-	-	-	130	-	24	4	27

Thermostat Staging – On all immersion thermostat models, 24 kW and above (18 kW for 208V), additional thermostats can be provided so that the maximum element input will not exceed 18 kW - 27 kW per step. Temperature differential between steps can be set as desired.

Note: Thermostat staging recommended on 81 and 108 kW models.

RECOVERY CAPACITIES Recovery in U.S. Gallons/Hr. (GPH) and Liters/Hr. (LPH) at Various Temperature Rises														
INPUT KW	EQUIVALENT BTU/HR.	UNITS	40°F (22°C)	50°F (28°C)	60°F (33°C)	70°F (39°C)	80°F (45°C)	90°F (50°C)	100°F (56°C)	110°F (61°C)	120°F (67°C)	130°F (72°C)	140°F (78°C)	
3	10,236	GPH	31	25	20	17	15	14	12	11	10	9	9	
		LPH	117	95	76	64	57	53	45	42	38	34	34	
6	20,473	GPH	62	50	41	35	31	28	25	23	21	19	18	
		LPH	235	188	157	134	117	104	94	85	78	72	67	
9	30,709	GPH	93	74	62	53	47	41	37	34	31	29	27	
		LPH	352	282	235	201	176	157	141	128	117	108	101	
12	40,946	GPH	124	99	83	71	62	55	50	45	41	38	35	
		LPH	470	376	313	268	235	209	188	171	157	145	134	
15	51,183	GPH	155	124	103	89	78	69	62	56	52	48	44	
		LPH	587	470	391	335	294	261	235	213	196	181	168	
18	61,420	GPH	186	149	124	106	93	83	74	68	62	57	53	
		LPH	705	564	470	403	352	313	282	256	235	217	201	
24	81,893	GPH	248	199	165	142	124	110	99	90	83	76	71	
		LPH	939	751	626	537	470	417	376	342	313	289	268	
27	92,129	GPH	279	223	186	160	140	124	112	102	93	86	80	
		LPH	1057	845	705	604	528	470	423	384	352	325	302	
30	102,366	GPH	310	248	207	177	155	138	124	113	103	95	89	
		LPH	1174	939	783	671	587	522	470	427	391	361	335	
36	122,839	GPH	372	298	248	213	186	165	149	135	124	115	106	
		LPH	1409	1127	939	805	705	626	564	512	470	434	403	
45	153,549	GPH	465	372	310	266	233	207	186	169	155	143	133	
		LPH	1761	1409	1174	1006	881	783	705	640	587	542	503	
54	184,259	GPH	558	447	372	319	279	248	223	203	186	172	160	
		LPH	2114	1691	1409	1208	1057	939	845	769	705	650	604	
60	204,723	GPH	620	496	414	354	310	276	248	226	206	190	178	
		LPH	2347	1878	1567	1340	1173	1045	939	856	780	719	674	
72	245,678	GPH	744	596	296	426	372	330	298	270	248	230	212	
		LPH	2816	2256	1120	1615	1408	1249	1128	1022	939	871	803	
81	276,388	GPH	838	670	558	479	419	372	335	305	279	258	239	
		LPH	3174	2540	2116	1814	1587	1410	1270	1154	1058	977	907	
108*	368,518	GPH	1094	875	730	625	547	486	438	398	365	337	313	
		LPH	4141	3312	2763	2366	2071	1840	1658	1507	1382	1276	1185	

WATER TEMPERATURE RATINGS						
MODEL NUMBER	TANK CAPACITY		THERMOSTAT TYPE	MINIMUM DELIVERED TEMPERATURE	MAXIMUM DELIVERED TEMPERATURE	HIGH TEMPERATURE LIMIT
	GALLONS	LITERS				
E175A	175	662	Immersion	90°F	190°F	200°F
				32.2°C	87.8°C	93.3°C

MODEL NUMBERS	
INPUT KW	IMMERSION THERMOSTATS
	TANK CAPACITY
	175 GALLONS
3	E175A-3-G
6	E175A-6-G
9	E175A-9-G
12	E175A-12-G
15	E175A-15-G
18	E175A-18-G
24	E175A-24-G
27	E175A-27-G
30	E175A-30-G
36	E175A-36-G
45	E175A-45-G
54	E175A-54-G
60	E175A-60-G
72	E175A-72-G
81	E175A-81-G
108	E175A-108-G

Fuse type – “G” in the model number represents Class G fuses.

Thermostat staging – 175A model 24 kW and above (18 kW for 208V), may be ordered with additional thermostat(s) for staging. Add “S” after fuse type designation. Recommended on 81 and 108 kW models.

Example: E175A-81-G becomes E175A-81-GS.

ASME Construction – All E175A models are ASME certified.

Solid State Low Water Cut-off – E models (Immersion Thermostat) may be ordered with probe type cut-off for field installation (AP8408).

Integral Fusing – all models have integral fusing for each element.

Anode Rods – two (2) magnesium anodes are installed in each tank to ensure long life and corrosion resistance.

Temperature and Pressure Relief Valve – CSA/ASME rated and factory installed.

Electrical Connections – pre-wired, accessible control box with multiple knock-outs on side in size selections to match the National Electric Code. Sizes range from 1/2" to 2-1/2". A grounding screw is provided for attaching an equipment grounding conductor.

Terminal Block – all models are equipped with U.L. listed terminal blocks for simplicity of installation. The terminal block will accept either copper or aluminum field connect wire.

120 Volt Control Circuit – all units are furnished with a fused 120 volt control circuit. All controls (thermostats, high temperature limit, etc.) are operated off of this basic 120 volt control circuit. This circuit is created by an internal multi-tap transformer of unique design that has four (4) taps for the primary voltages, 208, 240, 277 and 480.

Water Connections – hot outlet and cold inlet are 2-1/2" NPT dielectric nipples which prevent excessive turbulence of heated water and results in optimum tank draw.



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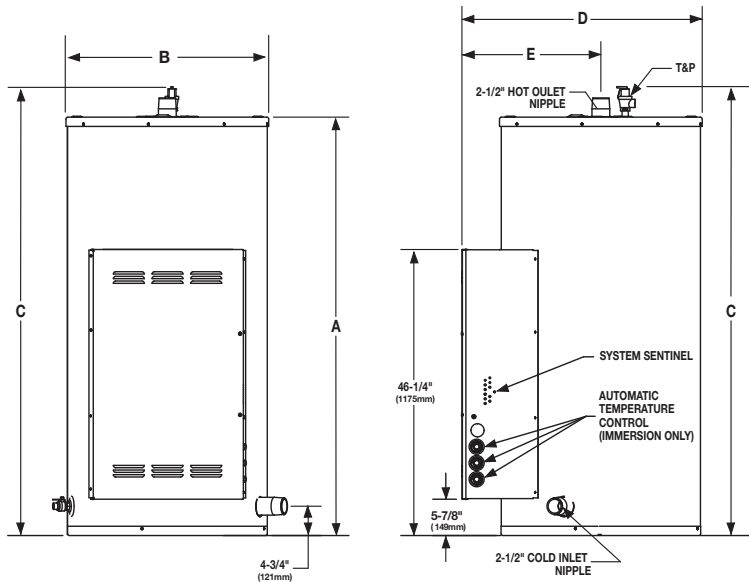


Water

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DIMENSIONAL INFORMATION All dimensions shown in English and Metric

MODEL NUMBER	UNITS	A	B	C	D	E	APPROX. SHIPPING WEIGHT (LBS.)	
							STD.	ASME
E175A	inches	69-1/2	32-1/4	72-1/2	38-1/2	22-1/4	-	700 lbs.
	mm	1765	832	1842	826	565	-	318 kgs.



175 Gallon Model

Recommended Specifications (for trade reference only)

Water heater(s) shall be model _____, manufactured by Rheem, having electrical input of _____ kW and a recovery rate of _____ GPH at a 100°F temperature rise. Water heater(s) shall have a storage capacity of _____ gallons. Water heater(s) shall have the UL seal of certification and be factory equipped with an CSA/ASME rated temperature and pressure relief valve. Tank(s) shall have a double coating of high temperature porcelain enamel and furnished with magnesium anode rods rigidly supported. Water heater(s) shall meet or exceed the standby loss requirements of ASHRAE. Tank(s) shall have a working pressure of 150 psi, and shall be completely assembled. Water heater(s) shall be approved-listed and constructed in accordance with UL Sanitation (NSF5). Water heater(s) shall be equipped with stainless steel “screw-in” type elements. Tank shall be insulated with thick polyurethane

foam insulation. Water heater(s) shall be constructed with a System Sentinel element diagnostic panel utilizing light emitting diodes. Each LED will correspond to the number and location of the heating elements and monitor their on-off function. Water heater(s) shall be provided with internal power circuit fusing, control circuit fusing, magnetic contactors, 120 volt control circuit transformer and immersion thermostat(s) with manual reset high limit control. 2-1/2" inlet & outlet water connections shall be provided. shall be provided. Water heater(s) shall be covered by a three year limited warranty against tank leaks.

When ordering ASME construction, place (A) after the model number (for trade reference only)

Water heater(s) shall be constructed in accordance with the requirements of the ASME Boiler and Pressure Vessel Code, Section IV Part HLW.

In keeping with its policy of continuous progress and product improvement, Rheem reserves the right to make changes without notice.

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INTEGRATED AIR & WATER