

COMMERCIAL WATER HEATERS

SURFACE MOUNTED ELECTRIC TANK-TYPE WATER HEATERS 9 KW THRU 36 KW

RHEEM-RUUD line of commercial electric water heaters come in a broader range of models. Our completely redesigned single panel control center with hinged door features ready access to all controls and elements. With single or three phase operation, these units provide the most versatile and dependable operation we've ever offered in a commercial electric water heater.

Thick, R-Foam® insulation completely surrounds the tank, maximizing heat retention while improving energy costs.

Features the Lifeguard® high-efficiency stainless-steel clad elements for long element life and performance.

Seven different inputs from 9 KW to 36 KW to meet most commercial and industrial needs.

Model Applications

In addition to being suitable for general commercial hot water applications, these units are also ideal for point-of-use installations, eliminating costly temperature loss in long piping runs. A single unit can be used as a booster heater to satisfy the hot water requirements of commercial dishwashers. A single temperature storage unit, when installed with a mixing valve, will supply two temperatures in food service establishments. For larger volume hot water requirements, 2, 3 or 4 units can be parallel manifolded, using optional factory kits.



Energy Information

Rheemglas® commercial electric water heaters are quality engineered to provide the maximum amount of hot water available from storage capacity of the tank and energy input of heating elements. Surface mounted thermostat models provide water from 120°F to 160°F (50°C to 71°C). Detailed Engineering Information for 208, 240 and 600 volt models with single or three phase operation will be found in Table A, B or C.

These units have been tested according to procedures specified by CSA and meet or exceed the energy efficiency requirements of ASHRAE Standard 90.1b 1992 requirements for energy conservation.

Construction Features

GLASS LINED STORAGE TANK – Heavy duty steel tank protects with double coating of exclusive Rheemglas® to resist the corrosive action of hot water. Designed for 150 PSI working pressure. Each tank is supplied with factory installed anode rods or cathodic protection.

WATER CONNECTIONS – Hot outlet and cold inlet are 1-1/2" NPS brass nipples which prevent excessive turbulence of heated water and result in optimum tank draw.

R-FOAM® INSULATION – A rigid polyurethane foam insulation provides superior insulating qualities and improves efficiency. Exceeds R-16 insulation factor. Our patented process of injecting R-Foam directly into the insulating cavity adds additional durability and toughness to the heater jacket. Fiberglass insulation guards against heat loss in the heating element compartment, and provides easy service access.

SINGLE PANEL CONTROL BOX – With hinged door, provides immediate access to all electrical components and elements.

HEATING ELEMENTS – Separate screw-in type LIFE GUARD® elements on 50, 85 and 120 gallon models feature a stainless steel outer sheath of INCO-LOY® 800, surrounding a Nichrome wire filament, to resist water chemical corrosion and burn-out even in air or sediment...

for long element life and long life performance. Elements are directly immersed in the water for efficient transfer of heat, and are easily changed by simply screwing new ones into the tank.

TERMINAL BLOCK – All models are equipped with CSA listed terminal blocks for simplicity of installation. This new terminal block will accept either copper or aluminum field connect wire.

ELECTRICAL CONNECTIONS – Pre-wired, accessible control box with multiple knock-outs on top and side in size selections to match the Canadian Electrical Code. Sizes range from 1/2" to 2". A grounding screw is provided for attaching an equipment grounding conductor.

AUTOMATIC TEMPERATURE CONTROL – Temperature is maintained by a surface mounted thermostat adjustable to provide water 120°F to 160°F (50°C to 71°C) that insure instant shut off at the selected temperature for safety and economy of operation. Over temperature protection is provided by surface mounted high temperature limit controls, one per heating element, factory set at 190°F (88°C).

STANDARD EQUIPMENT ASME T&P RELIEF VALVE – This is a double safety valve that relieves when temperature or pressure becomes excessive.

MODEL NUMBERS			
INPUT KW	TANK CAPACITY		
	50 Gal. (190 L)	85 Gal. (321 L)	120 Gal. (454 L)
9	EGS50-C-9	EGS85-C-9	EGS120-C-9
12	EGS50-C-12	EGS85-C-12	EGS120-C-12
15	EGS50-C-15	EGS85-C-15	EGS120-C-15
18	EGS50-C-18	EGS85-C-18	EGS120-C-18
24	EGS50-C-24	EGS85-C-24	EGS120-C-24
30	EGS50-C-30	EGS85-C-30	EGS120-C-30
36	EGS50-C-36	EGS85-C-36	EGS120-C-36

TABLE A – ELECTRICAL CHARACTERISTICS								
INPUT KW	NO. OF ELEMENTS	ELEMENT WATTAGE	FULL LOAD CURRENT IN AMPERES					
			208 VOLTS		240 VOLTS		600 VOLTS	
			PHASE		PHASE		PHASE	
			1	3	1	3	1	3
9	3	3000	43	25	38	22	–	9
12	3	4000	58	33	50	29	–	12
15	3	5000	72	42	63	36	–	15
18	3	6000	87	50	75	43	–	18
24	6	4000	116	67	100	58	–	23
30	6	5000	144	84	125	73	–	29
36	6	6000	173	100	150	87	–	35

TABLE B – 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)
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
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

SAMPLE SPECIFICATIONS (For Trade Reference Only)

Water Heater shall be Rheemglas Commercial Electric Model _____ having an input of _____ KW and a recovery rate of _____ GPH at a _____ ° temperature rise, and equipped for _____ volt, _____ phase operation. Tank shall be lined with a double coating of exclusive Rheemglas high temperature glass formula and furnished with rigidly supported anode rods. Tank shall be designed for 150 PSI working pressure and be approved-listed and constructed in accordance with Canadian Electrical Codes. Tank shall be completely insulated with R-Foam® Insulation having a minimum insulation factor of R-16. Water heater shall be equipped with "screw-in" immersion elements, surface thermostat, and manual reset high temperature limit control. Large terminal block that accepts either CU or AL field connect wire, plus grounding screw for attaching an equipment grounding conductor.

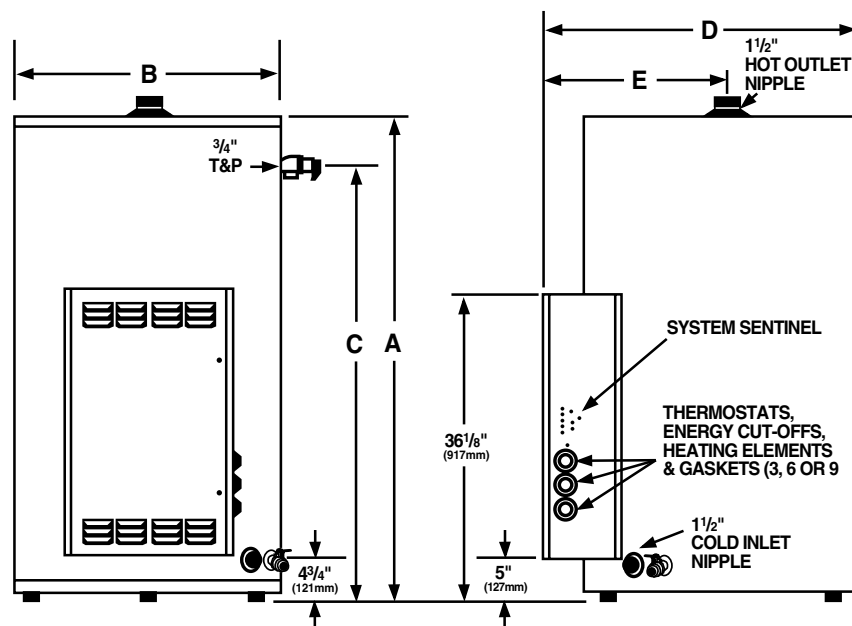
LIMITED WARRANTY

This product features a three year limited warranty against tank leaks. Please refer to Commercial Warranty Information brochure for complete warranty information.

TABLE C – DIMENSIONAL INFORMATION

All dimensions shown in English and Metric

MODEL NUMBER	A	B	C	D	E		APPROX. SHIPPING WEIGHT
50 GALS.	inches	43-5/8	26-1/4	36-1/4	32	17-1/4	270 lbs.
	mm	1108	667	920	813	438	122 kgs.
85 GALS.	inches	57-11/16	28-1/4	49-1/2	34	18-1/4	350 lbs.
	mm	1465	718	1258	864	464	159 kgs.
120 GALS.	inches	67-5/8	30-1/4	58-3/4	36	19-1/4	430 lbs.
	mm	1718	768	1493	914	489	185 kgs.



SYSTEM SENTINEL - All models employ a diagnostic panel utilizing light emitting diodes (L.E.D.), corresponding to the number and location of each heating element. L.E.D.'s are energized when the electric elements are operating. An unlit L.E.D. pinpoints the exact location of a non-functioning element, making element operation diagnosis simple and positive.

The minimum distance to provide adequate clearance for protection of combustible material is 0 inches from jacket and 18 inches from access door. However, additional clearance for accessibility to permit inspection and servicing such as removing heating elements or checking controls must be provided. All models are approved for installation on combustible flooring.



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

Rheem Manufacturing Company • Water Heater Division

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Warranty 1-800-263-8342

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