

Job: _____
Engineer: _____
Contractor: _____
Prepared By: _____ Date: _____
Model: _____ Indoor/Outdoor: _____

Raytherm® - Type WH

Water Heaters
Commercial
Models 514-824

EFFICIENT

- ▶ 82% thermal efficiency – highest of any atmospheric water heater available today

THERMAL SHOCK PROOF

- ▶ Twenty-year warranty against thermal shock damage up to 150°F differential
- ▶ Maximum operating temperature: 210°F

LIGHTWEIGHT

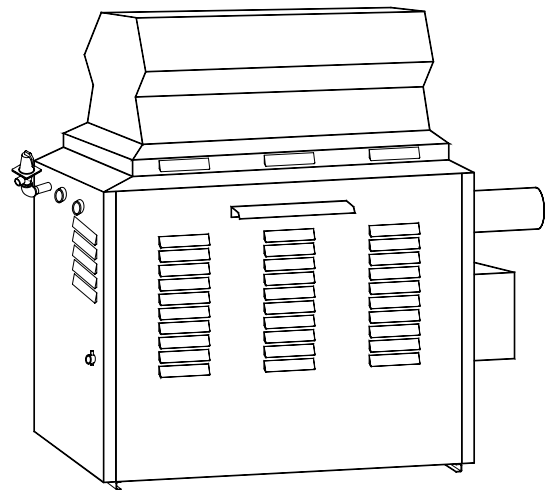
- ▶ A floor load of 70 lbs./sq. ft. or less

HIGH RECOVERY

- ▶ Cuts fuel costs substantially because the standby and radiation losses associated with tank-type water heaters are eliminated

LOW WATER OPERATING TEMPERATURE

- ▶ Operates with water temperature as low as 105°F without condensing



Heat Exchanger

- ASME Inspected and Stamped 160 PSIG
- National Board Approved
- Headers
 - ☐ Bronze – Standard
 - ☐ Glass-lined Cast Iron – Option A-2
- Fin Tubing
 - ☐ Copper – Standard
 - ☐ Cupro Nickel – Option A-3
- ASME Steel Tube Sheet
- Silicone O-Rings
- 125 PSIG ASME Pressure Relief Valve
- Temperature and Pressure Gauge
- Water Connections
 - ☐ Left Hand – Standard
 - ☐ Right Hand – Option A-6
- Two-pass Flow Configuration
- Pump – Optional
 - ☐ Mounted, 1/2 HP, 120 VAC, 1Ø, 60 Hz

Controls

- 120V, 60Hz, 1 Ph Power Supply
- 120/24V Transformer
- 100% Pilot Shut-off/Lockout
- Electronic, Intermittent Ignition (IID) Pilot
- High Limit Control, Manual Reset – 200°F
- On/Off Switch
- Flow Switch
- Economaster II Pump Time Delay

Gas Control Train

- Manual Main Gas Shut-off Cock
- Main Gas Pressure Regulator
- Redundant Safety Shut-off Valve
- Control Valve
- Firing Mode
 - ☐ On/Off (WH1)
 - ☐ 2-stage Firing (WH3)
 - ☐ Mechanical Modulation (WH2)
- Fuel
 - ☐ Natural Gas
 - ☐ Propane Gas
- Design Certified ANSI Z21.10.3/CSA 4.3

Construction

- Front Controls
- Stainless Steel Burners
- PolyTuf Powder Coat Finish
- Vent Selection
 - ☐ Drafthood (Indoor) – Option D-10
 - ☐ Motorized Draft Inducer (Indoor) – Option D-2
 - ☐ Stackless Top (Outdoor) – Option D-11
- Base – Optional
 - ☐ Combustible Floor Shield – Option J-1

Temperature Controls

- ☐ B-2 Single-Stage Tankstat (100-180°F)
- ☐ B-3 2-Stage Tankstat (100-180°F)
- ☐ Y-241 Electronic Sequencer, 1-4 Stages
- ☐ Y-281 Electronic Sequencer, 1-8 Stages

Additional Safety Controls

- ☐ F-9 Low Water Cut-off Probe
- ☐ I-3 High Limit Control, Auto Reset, 180°F
- ☐ S-1 Low Gas Pressure Switch, Manual
- ☐ S-2 High Gas Pressure Switch, Manual

Regulatory Agency Requirements

- ☐ CSD-1 Safety Controls

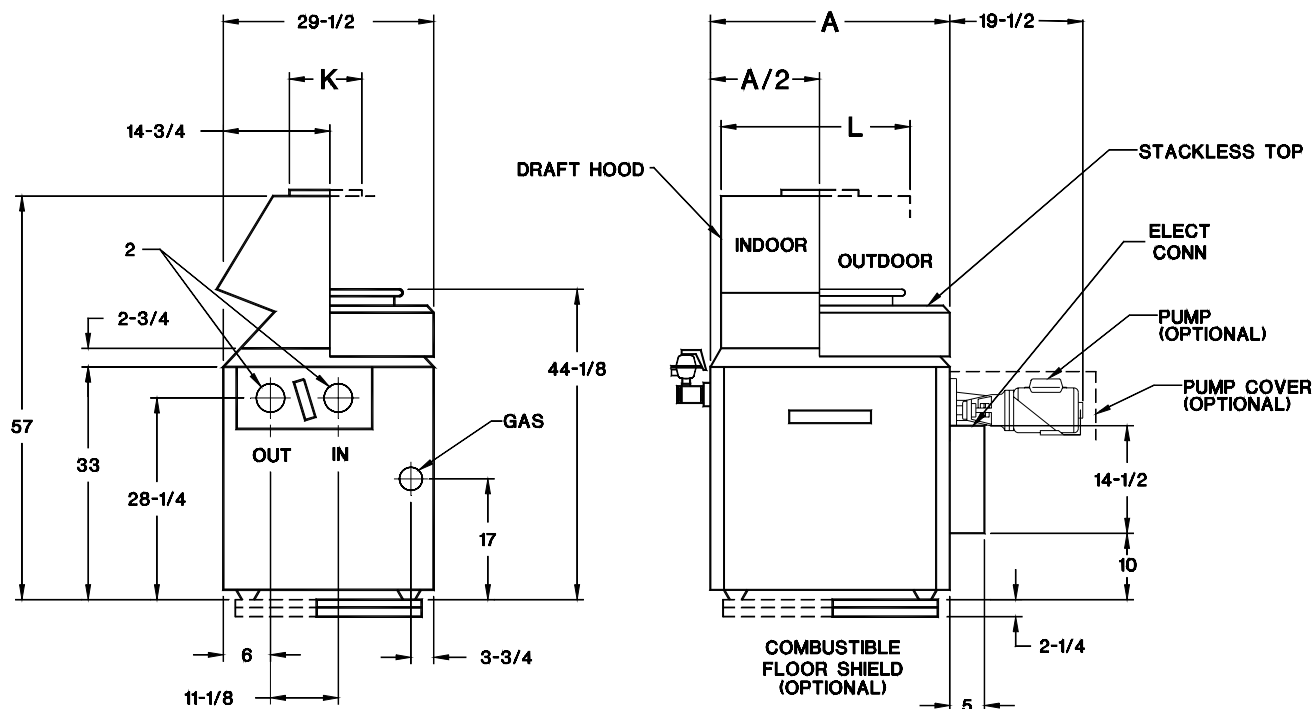


Raypak®
A Rheem® Company

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Model _____



MODELS WH 514-824

Model No.	Indoor		Outdoor		Dimensions (Inches)				Shipping Weight (Lbs.) - Approx.	
	MBTUH Input	MBTUH Output	MBTUH Input	MBTUH Output	Width A	Gas Conn. G	Flue Dia. K	L	Less Pump	W/ Pump
WH-514	511.5	419.4	511.5	419.4	32-3/4	1	10	25-3/8	475	530
WH-624	627.0	514.0	627.0	514.0	37-1/2	1	12	29-1/2	485	540
WH-724	726.0	595.0	726.0	595.0	41-5/8	1	12	34-1/4	635	690
WH-824	825.0	676.5	825.0	676.5	45-3/4	1	14	38-1/2	645	700

NOTE: Ratings shown are for elevations up to 2,000 feet. For elevations over 2,000 feet, reduce ratings at the rate of 4% for each 1,000 feet above sea level.

HEATER RATES OF FLOW AND PRESSURE DROPS

Model No.	20° ΔT		30° ΔT		40° ΔT	
	GPM	ΔP (ft)	GPM	ΔP (ft)	GPM	ΔP (ft)
WH-514	42	1.9	N/A	N/A	N/A	N/A
WH-624	51	3.0	N/A	N/A	N/A	N/A
WH-724	60	4.4	40	2.0	N/A	N/A
WH-824	68	6.0	45	2.6	N/A	N/A

N/A – Not Applicable

HEATER RECOVERY RATES

Model No.	Temperature Rise						
	20°F	30°F	40°F	50°F	60°F	80°F	100°F
WH-514	2518	1678	1259	1007	839	629	504
WH-624	3086	2057	1543	1234	1029	772	617
WH-724	3573	2382	1787	1429	1191	893	715
WH-824	4061	2707	2030	1624	1354	1015	812