

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

XTherm®

Type WH

Water Heaters

Models 2505-4005

- 97% Thermal Efficiency at Full Rate
- 100% Factory Fire-Tested
- VERSA IC® Modulating Controller with Color Touch Screen Display
- Full Electronic Modulation, 60% Min Fire Under Normal Conditions
- Full Safety Diagnostics with History
- Status Display Lights
- Cascade up to 4 Heaters – No External Sequencer Required
- Modbus RTU BMS Port
- CSA Low Lead Certified ≤ .25% Lead
- Maximum Outlet Water Temperature: 200°F
- Maximum Tank Setpoint Temperature: 150°F
- Minimum Inlet Water Temp: 50°F
- Limited Twenty-Five-Year Thermal Shock Warranty
- Limited Five-Year Copper/Ten-Year Cupro-Nickel Primary Heat Exchanger Warranty
- Limited Ten-Year Stainless Steel Condensing Heat Exchanger Warranty
- Low NOx - BAAQMD Certified Per Rule 9-7



Proudly Assembled in the USA

Heat Exchanger

- Headers - Bronze
- ASME HLW Stamped; 160 PSIG MAWP
- National Board Listed
- Fin Tubing
 - Copper – Standard
 - A-3 Cupro-Nickel
- ASME Powder-Coated Tube Sheet
- Silicone High-Temp O-Rings
- ASME Pressure Relief Valve
 - 125 PSIG – Standard
 - 150 PSIG – Optional
- Air Bleed Valve, Manual (2)
- T&P Gauge
- Four Pass Primary Heat Exchanger
- Stainless Steel Evaporator Plate
- 4 Inch Grooved Copper Water Connections

Control

- 240V, 60Hz, 1Ø, Power Supply
- 240/120V 60Hz Transformer
- 240/24V 60Hz Transformer
- VERSA IC® Integrated Control
- Cascade up to 4 Heaters
- Hot Surface Ignition (HSI)
- Ignition Module
 - 3-Try – Standard
 - C-6 Single-Try
- Remote Flame Sensor
- Fixed High Limit, Manual Reset, 200°F
- On/Off Power Switch
- Flow Switch
- Blocked Vent Pressure Switch
- Freeze Protection
- Alarm Dry Contact
- Pump Outputs – Pilot Duty
 - Injection Pump
 - Recirculation Pump

- High Gas Pressure Switch
- Programmable Pump Time Delays
- Color HD Touch Screen Display
- Modulating Temperature Control, 60% Min Fire Under Normal Conditions
- Water Temperature Sensors (2 MTD, 1 Loose)
- Cold Water Protection Function
- Modbus RTU BMS Port (Up to 115K Baud Rate, see Cat. No. 5000.73)
 - B-85 BMS Gateway, Modbus RTU to Modbus TCP, N2 Metasys, BACnet IP, or BACnet MS/TP
 - B-86 BMS Gateway, Modbus RTU to LonWorks

Burner

- Radially-Fired Knitted Burner

Gas Train

- Fuel
 - Natural Gas
 - Propane (Minimum Grade HD5)
- Dual-Seat Combination Valve
- Manual Shut-Off Firing Valve

Construction

- Indoor/Outdoor Construction
- Enclosed Front Controls
- PolyTuf Powder Coat Finish
- Rear Connections (Water, Gas, Vent, Electrical, Comb. Air)
- Combustion Air Filter
- Front Connection Low Voltage Wiring
- Design Certified ANSI Z21.10.3/CSA 4.3
- CSA Low Lead Certified ≤ .25% Lead

Venting

- Vent Termination

- D-11 Outdoor or Indoor, Vertical – (Cat IV)
- D-15 Indoor, Horizontal – (Cat IV)
- D-33 Polypropylene Vent Adaptor
- Extractor – Optional
 - By others
 - Not required

Options

- D-11 Outdoor Vent Cap with Outdoor Filter Cover
- D-22 Truseal Air Intake Box, Indoor
- F-10 Low Water Cut-Off, Remote Probe
- I-6 High Limit, Manual Reset, Adj., 100-200°F
- I-13 High Limit, Auto Reset, Adj., 100-200°F
- S-1 Low Gas Pressure Switch, Manual Reset
- Z-12 Condensate Treatment Kit

Additional Options or Accessories



Raypak®

A Rheem Company

XTherm® - Type WH

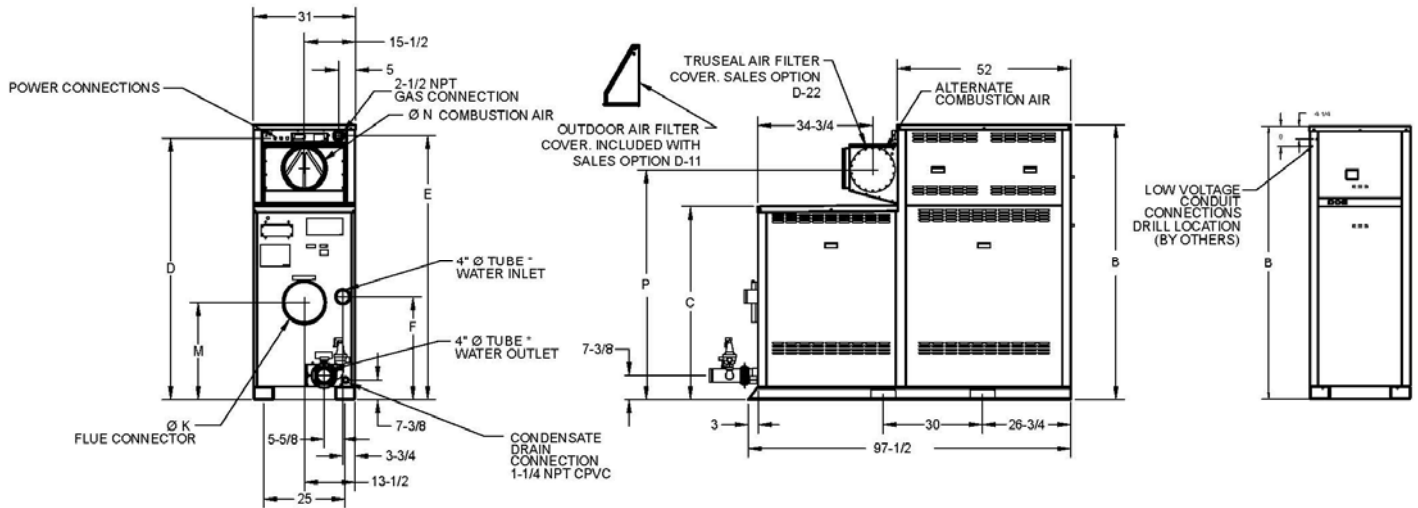
Models 2505-4005

Model _____

NOTE: Use in conjunction with a storage tank for proper operation.

Clearances – in

	Front	Rear	Right	Left	Top	Floor	Vent	Vent Cap (outdoor)
Combustible Minimum	24	12	1	1	0	0	1	12
Minimum Service	30	36	24	1	12	N/A	N/A	12



Model (WH7 -)	MBTUH		Dimensions - inches								Amp** Draw	Thermal Efficiency	Turn Down	Shipping Weight (Lbs.)
	Input	Output	B	C	D	E	F	K Flue	M	N C/A				
<input type="checkbox"/> 2505	2501	2426	68-1/4	43-1/2	64	79-1/4	30-7/8	10	29-1/4	10	70	97%	11:1	2656
<input type="checkbox"/> 3005	3000	2910	73-1/4	48-1/2	69	74-1/4	31-1/8	10	28-1/2	10	65			2775
<input type="checkbox"/> 3505	3500	3395	78-1/4	53-1/2	74	69-1/4	26-1/8	10	23-1/2	12	60			2925
<input type="checkbox"/> 4005	4000	3880	83-1/4	58-1/2	79	64-1/4	21-1/8	12	18-1/2	12	55			3058

* Water connections are grooved copper tube.

** Amp draw is for heater only and does not include pumps or accessories. Pump amp draw provided in separate table below.

Model (WH7-)	Internal Boiler Pump						External Injection Pump	
	<input type="checkbox"/> Soft (3-5 GPG)		<input type="checkbox"/> Medium (6-15 GPG)		<input type="checkbox"/> Hard (16-25 GPG)		HP	Amp Draw
	HP	Amp Draw	HP	Amp Draw	HP	Amp Draw		
<input type="checkbox"/> 2505	1.5	8.2	1.5	8.2	1.5	8.2	1.0	7.0
<input type="checkbox"/> 3005	1.5	8.2	3.0	16	3.0	16	1.5	8.2
<input type="checkbox"/> 3505	1.5	8.2	3.0	16	3.0	16	1.5	8.2
<input type="checkbox"/> 4005	3.0	16	3.0	16	3.0	16	1.5	8.2

Pumps are 240VAC/1PH.

*External injection pump ships loose for field installation.

Model (WH7-)	RECOVERY RATES									
	Temperature Rise (°F)									
	20	30	40	50	60	70	80	90	100	110
<input type="checkbox"/> 2505	14703	9802	7351	5881	4901	4201	3676	3267	2941	2673
<input type="checkbox"/> 3005	17636	11758	8818	7055	5879	5039	4409	3919	3527	3207
<input type="checkbox"/> 3505	20576	13717	10288	8230	6859	5879	5144	4572	4115	3741
<input type="checkbox"/> 4005	23515	15677	11758	9406	7838	6719	5879	5226	4703	4275

Table data applies at full rate.

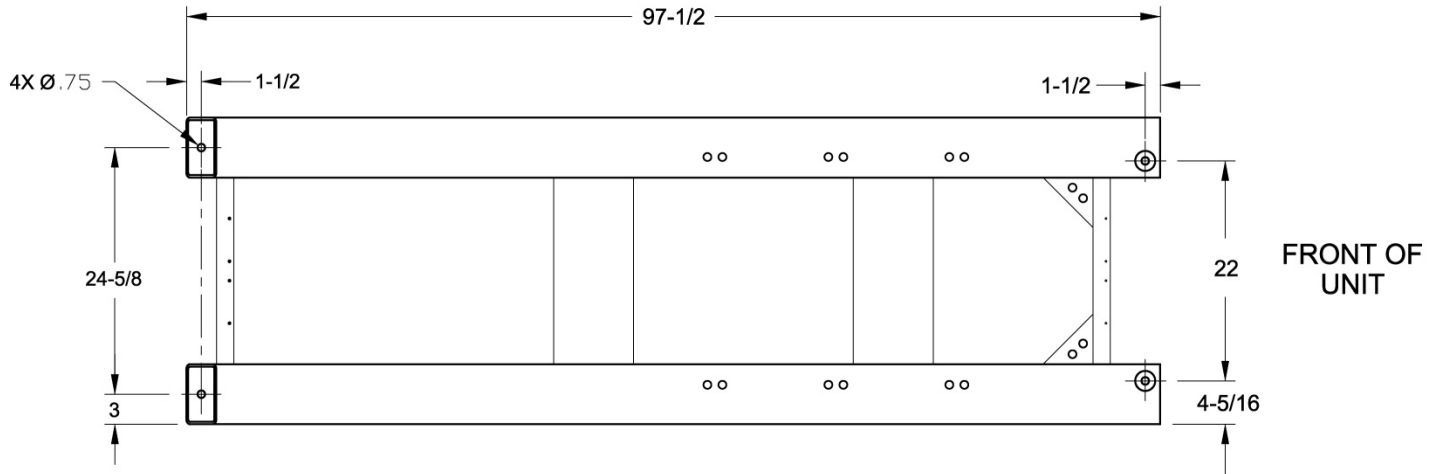
XTherm® - Type WH

Models 2505-4005

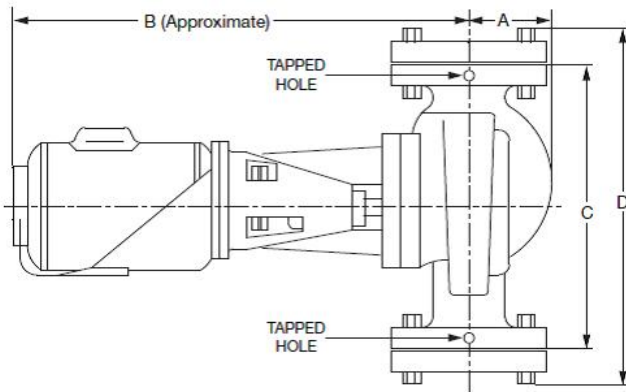
Model _____

NOTE: Use in conjunction with a storage tank for proper operation.

Base Anchor Bolt Pattern Models 2005 - 4005



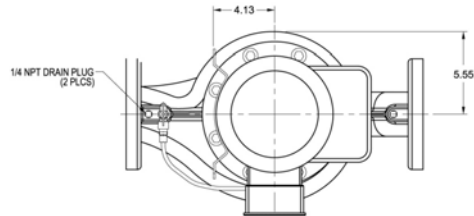
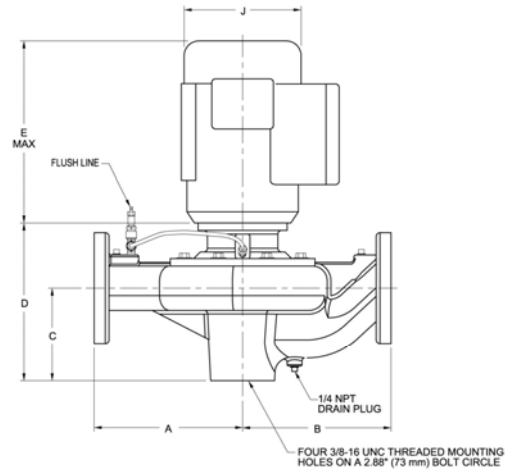
External Injection Pump – Field Installed



WH7 – 2505 TO WH7 - 3005

2-1/2 NPT Flanges Included

Model (WH7-)	Dimensions – inches			
	A	B	C	D
□ 2505	3-1/2	19	13-1/2	16-1/8
□ 3005	3-5/8	21	16-1/2	19-1/2



WH7 – 3505 TO WH7 - 4005

3" ANSI Flange – By Others

Model (WH7-)	Dimensions – inches								
	A	B	C	D	E	F	G	H	J
□ 3505	10	10	6-5/16	10-1/2	13-15/16	5-5/16	6-5/16	1/4	7-7/8
□ 4005									

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