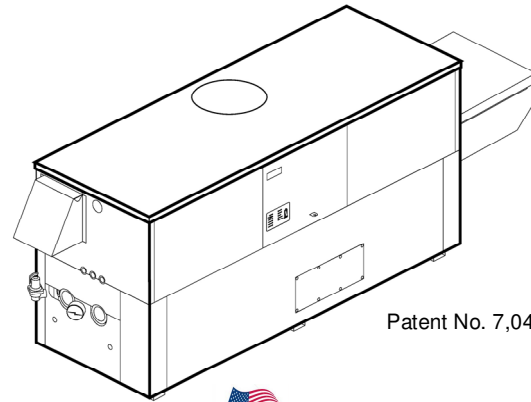


Job: \_\_\_\_\_  
 Engineer: \_\_\_\_\_  
 Contractor: \_\_\_\_\_  
 Prepared By: \_\_\_\_\_ Date: \_\_\_\_\_  
 Model: \_\_\_\_\_ Indoor/Outdoor: \_\_\_\_\_ MBTUH Input: \_\_\_\_\_

# Hi Delta<sup>®</sup> - Type WH

Water Heaters  
 Models 302B-902B

- 100% Factory Fire Tested**
- Efficiency: 85%**
- Maximum Outlet Temperature: 200°F**
- Minimum Non-Condensing Inlet Temperature: 105°F**
- Thermal Shock Proof Heat Exchanger**
- Limited Twenty-Five-Year Thermal Shock Warranty**
- Limited Five-Year Heat Exchanger Warranty**
- Full Safety Diagnostics with Fault History**
- PolyTuf Powder Coated Cabinet**
- No Combustible Floor Shield Required**
- Fan-Assisted**
- Patented Burner Security Blanket**



Patent No. 7,044,124



Proudly Assembled in the USA

### Heat Exchanger

- HLW Stamp
- Headers
  - Brass – Standard
  - Glass-Lined Cast Iron – Option A-2
- ASME Inspected and Stamped 160 PSIG Working Pressure
- National Board Approved
- Fin Tubing
  - Copper – Standard
  - Cupro Nickel – Option A-3
- ASME Steel Tube Sheet
- Silicone High Temp. O-Rings
- ASME Pressure Relief Valve
  - 125 PSIG – Standard
  - \_\_\_\_\_ PSIG – Optional
- Temperature and Pressure Gauge
- Water Connections
  - Left – Standard
  - Right – Option A-6

### Controls

- 120V, 60Hz, 1Ø Power Supply
- 120/24V 60Hz Transformer
- 100% Shut-Off/Lockout
- Hot Surface Ignition
- Remote Flame Sensor
- High Limit Control, Manual Reset
- On/Off Power Switch
- Manual Shut-Off, Front-Mounted
- Flow Switch
- Blocked Vent Pressure Switch
- Combustion Air Proving Switch
- Economaster Style Pump Time Delay
- Enable/Disable
- Diagnostic Panel with LCD Display 2 Lines, 20 Characters

### Gas Train

- Manual Gas Shut-Off Valve(s)
- Combo Valve(s)
- Firing Mode
  - On/Off: Models 302B-402B
  - 2-Stage: Models 302B-902B
- Fuel
  - Natural Gas
  - Propane Gas
  - 4" WC Gas Supply Pressure G-20
- Design Certified - ANSI Z21.10.3/ CSA 4.3

### Construction

- Indoor/Outdoor Construction
- Front Controls Enclosed
- PolyTuf Powder Coat Finish
- CSA Low Lead Certified ≤ .25% Lead

### Venting

- Vent Location
  - Top – Standard
  - Rear – Option D-14
- Vent Termination Cap
  - Outdoor D-11
  - Indoor, Horizontal D-15
  - Indoor, Vertical (by others)
- Combustion Air
  - In-Line Filter Kit (TruSeal only) D-17
  - Air Intake Elbow D-16
- Extractor – Optional
  - By others
  - Not required

### Burner

- Ultra-Low NOx: Less than 20 PPM

### Temperature Controls

- B-2 Tankstat, Single-Stage (100-200°F)
- B-3 Tankstat, 2-Stage (100-200°F)
- B-21 TempTracker Digital Controller, 4-Stage
- B-25 Raytemp Digital Controller, 4-Stage
- B-\_\_ TempTracker MOD+ Hybrid (Up to 16 heaters)
- B-60 Stage Interface Card

### Options

- C-6 Ignition Module, Manual Reset
- D-21 TruSeal<sup>®</sup> Direct Vent
- F-10 Low Water Cut-Off, Remote Probe
- I-1 High Limit Control, Auto Reset
- P-\_\_ Pump: \_\_\_\_\_ HP, 120V, 1Ø, 60Hz  
 Water Hardness: \_\_\_\_\_ GPG
  - Bronze
  - Mounted  Loose
  - Front  Rear
- P-\_\_ Cold Water Run (See 1000.19)
- S-1 Low Gas Pressure Switch, Manual
- S-2 High Gas Pressure Switch, Manual
- X-1 SureRack<sup>™</sup> Kit
- X-2 SureRack Add-on

### Regulatory Agency Requirements

- \_\_\_\_\_

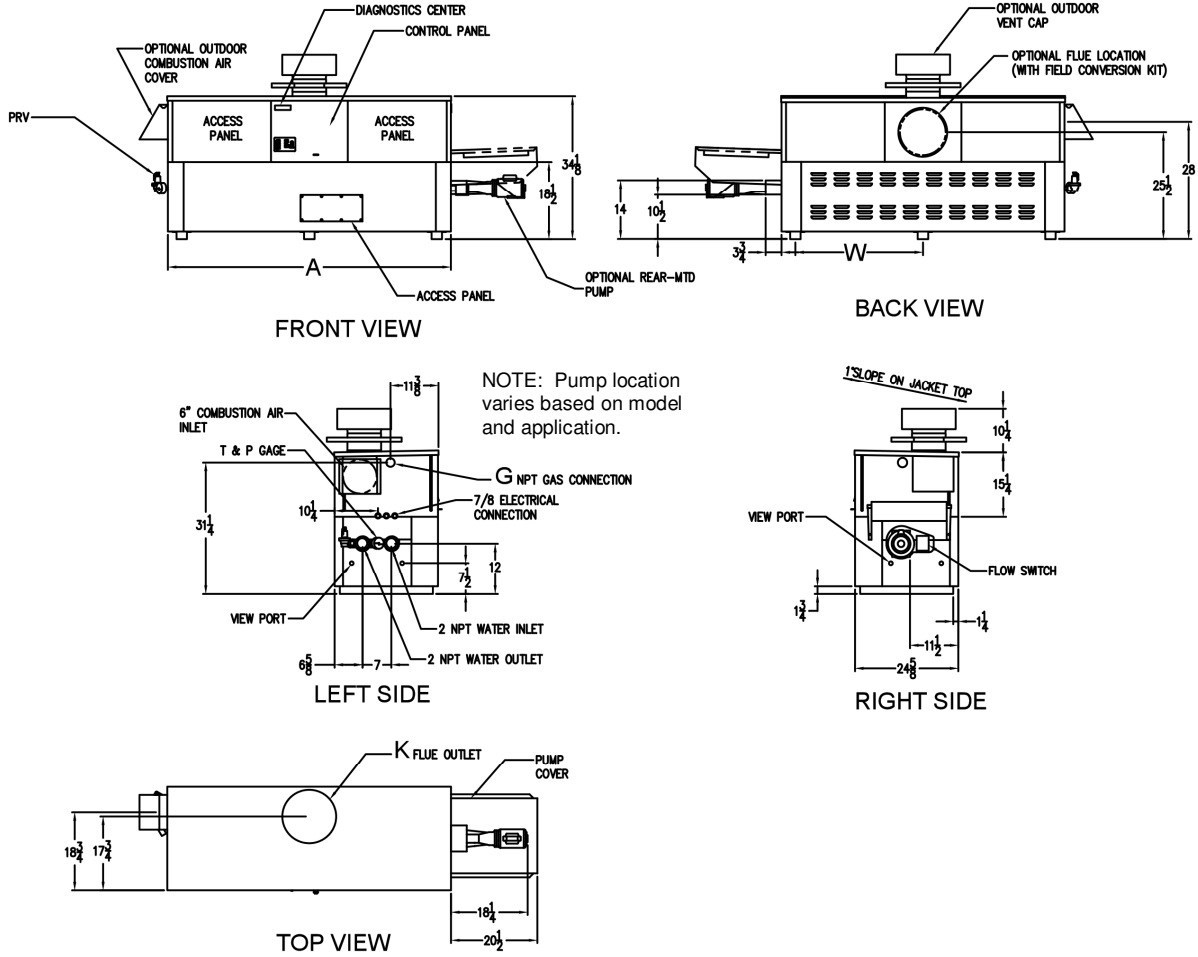


**Raypak<sup>®</sup>**

A Rheem<sup>®</sup> Company

# Hi Delta – Type WH Models 302B-902B

Model \_\_\_\_\_



Model	System Flow and Head Loss														
	0-4 Grains Per Gallon					5-15 Grains Per Gallon					16-25** Grains Per Gallon				
	$\Delta T$ (°F)	GPM	$\Delta P$ (ft wc)	MTS (in)	SHL (ft wc)	$\Delta T$ (°F)	GPM	$\Delta P$ (ft wc)	MTS (in)	SHL (ft wc)	$\Delta T$ (°F)	GPM	$\Delta P$ (ft wc)	MTS (in)	SHL (ft wc)
302B	13	40	2.0	2	5.1	10	52	3.3	2	8.3	7	74	6.6	2	16.3
402B	17	40	2.0	2	5.1	13	52	3.4	2	8.4	9	74	6.8	2	16.4
502B	21	40	2.1	2	5.2	16	52	3.5	2	8.6	12	73	6.9	2	16.3
652B	28	40	2.2	2	5.3	20	55	4.1	2	9.7	15	72	7.0	2	16.2
752B	30	42	2.6	2	6.0	17	73	7.5	2	16.9	14	90	11.3	2	25.1
902B	30	51	3.9	2	8.7	21	73	7.8	2	17.2	17	90	11.7	2	25.5

SHL includes 50 ft of tubing each way (100 total)

\*\* Must use optional cupro-nickel tubes. For hardness exceeding 25 GPG, must use water softener

### SPECIFICATIONS

Model	MBTUH Input	MBTUH Output	A Width	G NPT	K	W	Amp. Draw	Approx. Shipping Wt. (Lbs)
302B	300	255	36	3/4	5	18	6	380
402B	399	339	43	3/4	6	18-1/2	6	445
502B	500	425	50	1-1/4	6	22	6	545
652B	650	553	60-1/2	1-1/4	8	27-1/4	6	590
752B	750	638	67-1/2	1-1/4	8	30-3/4	6	675
902B	900	765	78	1-1/4	8	36	7	740

### RECOVERY RATES (GPH)

Model	Temperature Rise in °F								
	20°	30°	40°	50°	60°	70°	80°	90°	100°
302B	1545	1030	773	618	515	442	386	343	309
402B	2055	1370	1028	822	685	587	514	457	411
502B	2576	1717	1288	1030	859	736	644	572	515
652B	3348	2232	1674	1339	1116	957	837	744	670
752B	3864	2576	1932	1545	1288	1104	966	859	773
902B	4636	3091	2318	1855	1545	1325	1159	1030	927

Dimensions are in inches.

- NOTES: 1. Rates shown are for natural or propane gas, and elevations up to 4,500 feet. For installation above 4,500 feet, please contact manufacturer.  
2. Required natural gas pressure is 7 – 10.5" WC. Required propane gas pressure is 11 - 13" WC.