



**Delta Limited**  
**749B (750 MBH Input - 2 Stage Fire)**

Tag: RAYWH3749BNGBRZCNP8

Project: P8 Delta Stock

Quantity: 1

**Unit Information**

Model Series: **Delta Limited**  
 Size: **749B (750 MBH Input - 2 Stage Fire)**  
 Fuel:  
 Location: **Outdoor**  
 Altitude: **0** ft

**Heating Performance**

Input Temp: **55** F  
 Output Temp: **140** F  
 Design Capacity: **0** MBTUH  
 Input Capacity: **750** MBTUH  
 Output Capacity: **623** MBTUH  
 Thermal Efficiency: **83.1** %



**Water Flow**

Design Flow: gpm  
 Max Flow: **33** gpm  
 Min Flow: **90** gpm  
 Pressure Drop: ft. wg

**General Unit Data**

Unit Weight: **675** lbs.  
 Unit Length: **25** in.  
 Unit Width: **67** in.  
 Unit Height: **34** in.

Delta Limited



**Product Data: Type WH Water Heater**

Qty	Description
1	Type WH Water Heater

**Tag(s): RAYWH3749BNGBRZCNP8**

**Selected Options**

- Application : Domestic Water Heater
- Location : Outdoor
- Model Size / Input : 749B (750 MBH Input - 2 Stage Fire)
- Fuel Type : Natural Gas
- Efficiency : 83.1 %
- Water Quality / Pump Selection Criteria : Hard (16 to 25 GPG) / P8 (P11 non-ferrous)
- Pump Type : Mounted Pumps
- Pump Material : Bronze \ Stainless Steel
- Header Material : Bronze
- Heat Exchanger Material : A-3 Cupronickel Heat Exchanger
- Pressure Relief Valves : A-15 125 PSIG (Standard for Water Heater)
- Ignition Module : Standard 3-Try Ignition - Auto Reset
- Low Water Cut Off : None
- Codes : G-12 California
- 4 inch Supply Gas Pressure Configuration (G-20) : None
- High Limit - Manual Reset : None
- High Limit - Combination : I-12 Adjustable Auto Limit / Adjustable Manual Limit - 200/200 F
- Low Gas Pressure Switch : None
- High Gas Pressure Switch : None
- Low Water Pressure Switch : None
- Surerack - Unit Stacking Kit : None
- Mounting Location : Front-Mounted
- Mounted Pumps : P-8 Bronze Mounted Pump (Hard 16 to 25 GPG)
- Cold Water Start Systems : None
- Cold Water Run Pumps : None
- Injector Pump : None
- Flanges : None
- Control / Valve : None
- Controller (Not Included, See Accessories Section) : None
- Elevation : Below 2000 ft (0 – 1999 ft)

**Selected Accessories**

**Delta Limited WH Small Standard Features**

**Qty: 5    Tags: RAYWH1399BNGBRZCNP8, RAYWH3499BNGBRZCNP8, RAYWH3649BNGBRZCNP8, RAYWH3749BNGBRZCNP8, RAYWH3899BNGBRZCNP8**

---

**Standard Features**

**Heat Exchanger**

- ASME HLW Stamp
- ASME Inspected and Stamped  
160 PSIG Working Pressure
- National Board Approved
- ASME Steel Tube Sheet
- Silicone High Temp O-Rings
- Temperature and Pressure Gauge

**Control**

- 120V, 60Hz, 1Ø, Power Supply
- 120/24V 60 Hz 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 switch
- Flow Switch
- Blocked Vent Pressure Switch
- Combustion Air Proving Switch
- Pump Time Delay Relay, 5 Minute, Fixed
- Status Display Lights

**Burner**

- Ultra-Low NOx: Less than 20 PPM

**Gas Train**

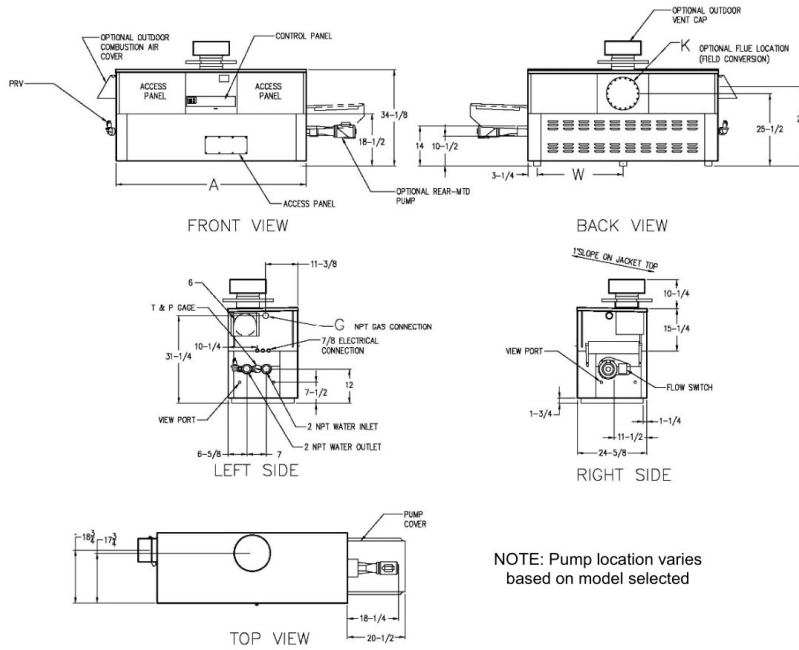
- Manual Gas Shut-off Valve(s)
- Combination Valves
- Design Certified – ANSI Z21.10.3/CSA 4.3

**Construction**

- Indoor/outdoor construction
- Enclosed front controls
- CSA Low Lead Certified (≤.25% Lead)
- 100% Factory Fire Tested
- Thermal Shock Proof Heat Exchanger
- Limited Twenty-Year Thermal Shock Warranty
- Limited Ten-Year Cupro-Nickel Heat Exchanger Warranty
- Limited Five-Year Copper Heat Exchanger Warranty
- PolyTuf Powder Coated Cabinet
- Combustible Floor Shield Required
- Fan-Assisted
- Patented Burner Security Blanket
- Proudly Assembled in the USA

Delta Limited WH Dimensions 749B

Qty: 1 Tags: RAYWH3749BNGBRZCNP8



NOTE: Pump location varies based on model selected

Model	SPECIFICATIONS								Approx. Shipping Wt. (lbs.)
	MBTUH			A Width	G NPT	K	W	Amp. Draw	
	Input	Output 85%	Output 83.1%						
749B	750	638	623	67-1/2	1-1/4	8	30-3/4	6	675

- 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. Recommended natural gas supply pressure is 7 – 10.5" WC. Recommended propane gas supply pressure is 11 - 13" WC.
  3. Amp draw is heater less pump

Model	83.1% System Flow and Head Loss														
	3-4 Grains Per Gallon				5-15 Grains Per Gallon				16-25** Grains Per Gallon						
	ΔT (°F)	GPM	ΔP (FT WC)	MTS (IN)	SHL (FT WC)	ΔT (°F)	GPM	ΔP (FT WC)	MTS (IN)	SHL (FT WC)	ΔT (°F)	GPM	ΔP (FT WC)	MTS (IN)	SHL (FT WC)
749B	28	45	3.0	2	6.8	23	55	4.4	2	9.9	14	90	11.3	2	25.1

Model	85% System Flow and Head Loss														
	3-4 Grains Per Gallon				5-15 Grains Per Gallon				16-25** Grains Per Gallon						
	ΔT (°F)	GPM	ΔP (FT WC)	MTS (IN)	SHL (FT WC)	ΔT (°F)	GPM	ΔP (FT WC)	MTS (IN)	SHL (FT WC)	ΔT (°F)	GPM	ΔP (FT WC)	MTS (IN)	SHL (FT WC)
749B	29	45	3.0	2	6.8	23	55	4.4	2	9.9	14	90	11.3	2	25.1

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

Basis for minimum flow is 40 GPM or 30°F ΔT, 90 GPM for maximum flow

Model	83.1 % Recovery Rates								
	20°	30°	40°	50°	60°	70°	80°	90°	100°
749B	3777	2518	1889	1511	1259	1079	944	839	755

Model	85 % Recovery Rates								
	20°	30°	40°	50°	60°	70°	80°	90°	100°
749B	3864	2576	1932	1545	1288	1104	966	859	773