

Delta Limited® - Type WH

Water Heaters
Models 989B-2339B

Job: _____

Engineer: _____

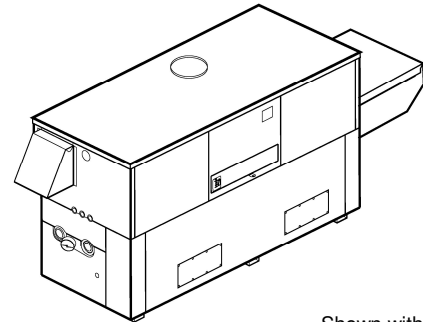
Contractor: _____

Prepared By: _____ Date: _____


Model: _____ Indoor/Outdoor: _____

MBTUH Input: _____

100% Factory Fire Tested
Efficiency: Up to 85%
Maximum Setpoint: 150°F
Maximum Outlet Temperature: 200°F
Minimum Non-Condensing Inlet Temperature: 105°F
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



Shown with outdoor
air inlet and pump covers

 Proudly Assembled in the U.S.A.

Heat Exchanger

- HLW Stamp
- Headers
 - Glass-Lined Cast Iron – Standard
 - A-1 Bronze
- ASME Inspected and Stamped
160 PSIG Working Pressure
- National Board Approved
- Fin Tubing
 - Copper (Std.) 85%
 - Cupro-Nickel 83.1%
- 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
 - A-6 Right

Controls

- 120V, 60Hz, 1Ø Power Supply
- 120/24V 60Hz Transformer
- 100% Shut-Off/Lockout
- Hot Surface Ignition
- Ignition Module
 - 3-Try Standard
 - C-6 Single-Try
- 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
- Status Display Lights

Gas Train

- Manual Gas Shut-Off Valve(s)
- Combination Valves
- Low Gas Pressure Switch, Manual
- Firing Mode
 - 2-Stage: Model 989B
 - 3-Stage: Model 1259B
 - 4-Stage: Models 1529B-2339B
- Fuel
 - Natural Gas
 - Propane Gas
- Design Certified -
ANSI Z21.10.3/CSA 4.3

Burner

- Ultra-Low NOx: Less than 20 PPM

Construction

- Indoor/Outdoor Construction
- Enclosed Front Controls
- AB-1953 Verified
- CSA Low Lead Certified $\leq .25\%$
Lead

Venting

Category I/III Cupro-Nickel

Category II/IV Copper

- Vent Location
 - Top, Outdoor – Standard
 - D-20 Top, Indoor
 - D-14 Rear
- Vent Termination Cap
 - D-11 Outdoor
 - D-15 Indoor, Horizontal
 - Indoor, Vertical (by others)
- Extractor – Optional
 - By others
 - Not required

Temperature Controls

- B-2 Tankstat, Single-Stage
(100-200°F)
- B-3 Tankstat, 2-Stage (100-200°F)
- B-26 TempTracker Digital Controller,
2-Stage
- B-21 TempTracker Digital Controller,
4-Stage
- B-__ TempTracker Mod+ (Loose) Up
to 16 Boilers

Options

- C-6 Ignition Module, Manual Reset
- F-10 Low Water Cut-Off, Remote
Probe
- I-1 High Limit Control, Auto Reset
- P-__ Pump: _____ HP, 120V,
1Ø, 60Hz
Water Hardness: _____ GPG
 - Cast Iron Bronze
 - Mounted Loose
 - Front Rear
- P-__ Cold Water Run (See 1000.19)
- S-2 High Gas Pressure Switch,
Manual
- X-1 SureRack® Kit
- X-2 SureRack Add-on
- _____

Regulatory Agency Requirements

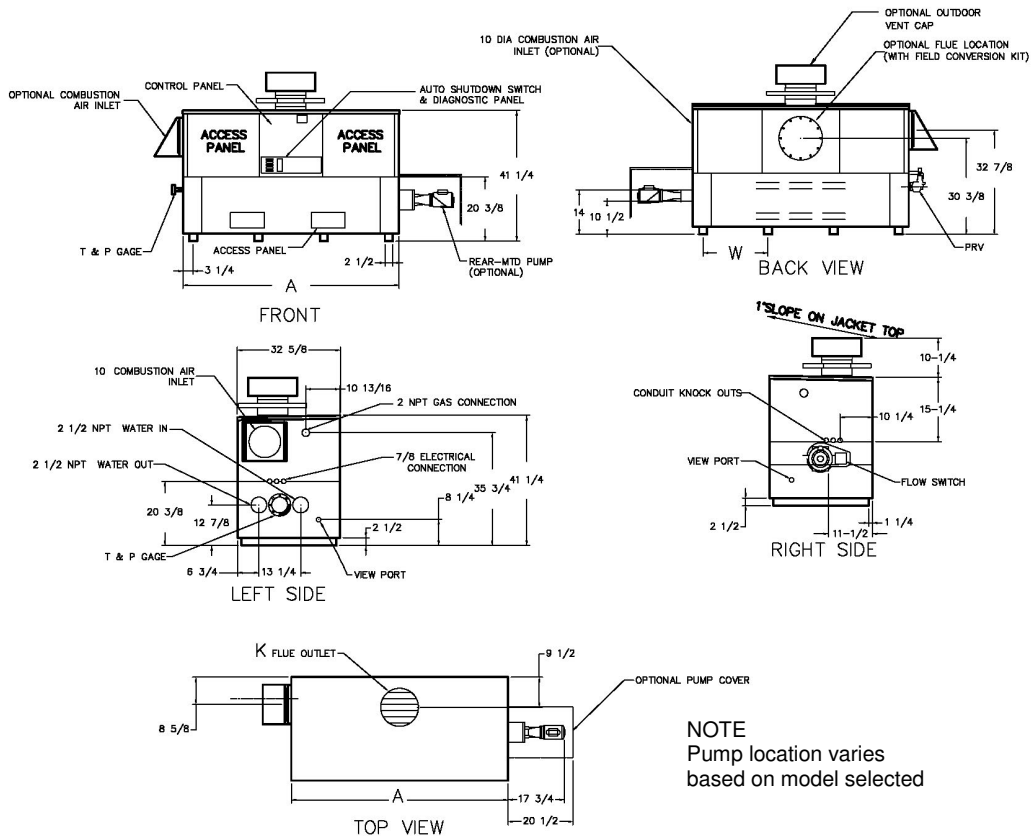


Delta Limited models not approved for use in California

Raypak®
A Rheem® Company

Delta Limited – Type WH Models 989B-2339B

Model _____



SPECIFICATIONS										
Model	MBTUH			Firing Stages	A Width	K	T	W	Amp. Draw*	Approx. Shipping Wt. (Lbs.)
	Input	Output 85%	Output 83.1%							
<input type="checkbox"/> 989B	990	842	823	3	57-1/8	10	10	16-13/16	<12	900
<input type="checkbox"/> 1259B	1260	1071	1047	4	68-1/2	12		20-9/16		1010
<input type="checkbox"/> 1529B	1530	1301	1271	4	79-7/8	12		24-3/8		1225
<input type="checkbox"/> 1799B	1800	1530	1496	4	91-1/8	14		28-1/8		1350
<input type="checkbox"/> 1999B	2070	1699	1661	4	102-1/2	14		31-15/16		1450
<input type="checkbox"/> 2069B	2070	1760	1720	4	102-1/2	14		31-15/16		1450
<input type="checkbox"/> 2339B	2340	1989	1945	4	113-7/8	16		35-11/16		1520

1. Rates shown are for natural or propane gas and elevations up to 4,500 feet. For installations above 4,500 feet, please contact manufacturer.
2. Recommended natural gas supply pressure is 7.0 – 10.5 in. WC. Recommended propane gas supply pressure is 11.0 – 13.0 in. WC.
3. Amp draw is heater only less pump

Delta Limited – Type WH

Models 989B-2339B

Model _____

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)
<input type="checkbox"/> 989B	28	60	2.7	2 1/2	5.2	17	98	7.3	2 1/2	13.3	13	132	13.1	2 1/2	23.6
<input type="checkbox"/> 1259B	28	75	4.8	2 1/2	8.5	18	115	11.3	2 1/2	19.4	16	132	14.8	2 1/2	25.3
<input type="checkbox"/> 1529B	30	86	7.1	2 1/2	11.9	21	120	13.7	2 1/2	22.5	19	132	16.5	2 1/2	27.0
<input type="checkbox"/> 1799B	30	102	10.9	2 1/2	17.4	25	120	15.1	2 1/2	23.9	23	132	18.3	2 1/2	28.7
<input type="checkbox"/> 1999B	30	112	13.9	2 1/2	21.6	25	132	19.0	2 1/2	29.5	25	132	19.0	2 1/2	29.5
<input type="checkbox"/> 2069B	30	117	15.1	2 1/2	23.4	26	132	19.0	2 1/2	29.5	26	132	19.0	2 1/2	29.5
<input type="checkbox"/> 2339B	30	132	21.4	2 1/2	31.8	30	132	21.4	2 1/2	31.8	30	132	21.4	2 1/2	31.8

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)
<input type="checkbox"/> 989B	28	60	2.7	2 1/2	5.2	17	98	7.3	2 1/2	13.3	13	132	13.1	2 1/2	23.6
<input type="checkbox"/> 1259B	28	76	4.8	2 1/2	8.5	19	115	11.3	2 1/2	19.4	16	132	14.8	2 1/2	25.3
<input type="checkbox"/> 1529B	32	83	7.1	2 1/2	11.9	22	120	13.7	2 1/2	22.5	20	132	16.5	2 1/2	27.0
<input type="checkbox"/> 1799B	32	98	10.9	2 1/2	17.4	26	120	15.1	2 1/2	23.9	23	132	18.3	2 1/2	28.7
<input type="checkbox"/> 1999B	32	108	13.9	2 1/2	21.6	26	132	19.0	2 1/2	29.5	26	132	19.0	2 1/2	29.5
<input type="checkbox"/> 2069B	32	112	15.1	2 1/2	23.4	27	132	19.0	2 1/2	29.5	27	132	19.0	2 1/2	29.5
<input type="checkbox"/> 2339B	32	126	21.4	2 1/2	31.8	30	132	21.4	2 1/2	31.8	30	132	21.4	2 1/2	31.8

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 55 GPM or 30°F ΔT, 132 GPM for maximum flow

Model	83.1% RECOVERY RATES (GPH)									
	Temperature Rise (°F)									
	20°	30°	40°	50°	60°	70°	80°	90°	100°	
<input type="checkbox"/> 989B	4986	3324	2493	1994	1662	1425	1247	1108	997	
<input type="checkbox"/> 1259B	6346	4231	3173	2538	2115	1813	1586	1410	1269	
<input type="checkbox"/> 1529B	7706	5137	3853	3082	2569	2202	1926	1712	1541	
<input type="checkbox"/> 1799B	9065	6044	4533	3626	3022	2590	2266	2015	1813	
<input type="checkbox"/> 1999B	10068	6712	5034	4027	3356	2876	2517	2237	2014	
<input type="checkbox"/> 2069B	10425	6950	5213	4170	3475	2979	2606	2317	2085	
<input type="checkbox"/> 2339B	11785	7857	5893	4714	3928	3367	2946	2619	2357	

Model	85% RECOVERY RATES (GPH)									
	Temperature Rise (°F)									
	20°	30°	40°	50°	60°	70°	80°	90°	100°	
<input type="checkbox"/> 989B	5100	3400	2550	2040	1700	1457	1275	1133	1020	
<input type="checkbox"/> 1259B	6491	4327	3245	2596	2164	1855	1623	1442	1298	
<input type="checkbox"/> 1529B	7882	5255	3941	3153	2627	2252	1970	1752	1576	
<input type="checkbox"/> 1799B	9273	6182	4636	3709	3091	2649	2318	2061	1855	
<input type="checkbox"/> 1999B	10298	6865	5149	4119	3433	2942	2574	2288	2060	
<input type="checkbox"/> 2069B	10664	7109	5332	4265	3555	3047	2666	2370	2133	
<input type="checkbox"/> 2339B	12055	8036	6027	4822	4018	3444	3014	2679	2411	

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