

Job: _____

Engineer: _____

Contractor: _____

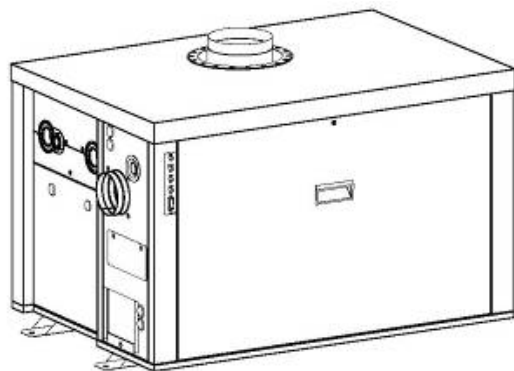
Prepared By: _____ Date: _____

Model: _____ Indoor/Outdoor: _____ MBTUH Input: _____

Hi Delta SS[®] - Type H

Space Heating/Hot Water Boiler Models HD101-HD401

**TruSeal[®] Direct Vent
Sealed Combustion Chamber
100% Factory Fire Tested
Efficiency: HD101 – HD 301 85% AFUE
HD401 - 84% Thermal
Maximum Outlet Temperature: 240 °F
Minimum Non-condensing Inlet Temperature: 105 °F
Thermal Shock Proof Heat Exchanger
Limited Twenty-year Thermal Shock Warranty
Limited Ten-year Closed-System Heat Exchanger Warranty
Status Display LED's
PolyTuf Powder-Coated Cabinet
No Combustible Floor Shield Required
Fan-assisted – Ultra Low NOx (<20 ppm Nat.)
Patented Burner Security Blanket**



Proudly Assembled in the USA

Heat Exchanger

- H Stamp
- Headers
 - Cast Iron, Glass-lined – Standard
 - A-1 Bronze
- ASME Inspected and Stamped
160 PSIG Working Pressure
- National Board Approved
- Finned Tubing
 - Copper – Standard
 - A-3 Cupro-Nickel
- ASME Steel Tube Sheet
- Silicone High-Temp O-Rings
- Pressure Relief Valve - ASME
 - 45 PSIG - Standard
 - _____ PSIG - Optional
- Temperature and Pressure Gauge (shipped loose)
- Flow Switch - Mounted
- Left-hand Water (Standard)
- A-6 Right-hand water

Controls

- 120V, 60Hz, 1 Power Supply
- 120/24V 60Hz Transformer
- 100% Shutoff/Lockout
- Hot Surface Ignition
- Remote Flame Sensor
- Fixed High Limit Control, Manual Reset
- On/Off Power Switch
- Blocked Vent Pressure Switch
- Combustion Air Proving Switches (2)
- Economaster Style Pump Relay
- Electronic Outdoor Reset Controller (HD101 – HD301 Only) 2-Stage Controller w/Outdoor Reset, Setpoint 120-200 °F

Gas Train

- 4" WC Minimum Pressure
- Combination Valve
- Firing Mode
 - Two-stage (H3) - Standard
 - On/Off (H4) - Optional
- Fuel
 - Natural Gas
 - Propane Gas
- Design Certified
ANSI Z21.13/CSA 4.9

Burner

- Two-stage
- Ultra-low NOx (<20 ppm Nat.)

Construction

- Indoor/Outdoor Construction
- Slide-out Controls Tray
- Front Controls Enclosed
- PolyTuf Powder Coat Finish
- TruSeal[®] Direct Vent
- Integral Combustion Air Filter

Venting

- Vent Termination Cap
 - D-11 Outdoor
 - D-15 Indoor, Horizontal
 - D-20 Indoor, Vertical
- Combustion Air - Ducted
 - D-16 Air Intake Elbow
- Extractor – Optional
 - By others
 - Not required

Temperature Controls (HD-401 Only)

- B-3 1-Stage Controller, 100-200 °F (Loose)
- B-6 2-Stage Controller, 130-230 °F (Loose)
- B-21 TempTracker Digital Controller 4-Stage (loose)
- B-26 TempTracker Digital Controller, 2-Stage (Mtd)
- B-27 TempTracker Digital Controller, 2-Stage, O/D (Mtd)
- B-28 On/Off Digital Controller, (Mtd)
- B-42 Electronic Controller, 2-stg, Outdoor Reset, 120° - 200 °F (Mtd)
- Remote Controller
 - By others:

Options

- F-10 Low Water Cut-off, Remote Probe
- I-1 Adjustable High Limit Control, Auto Reset
- P-__ Pump: _____ HP, 120V, 1 60 Hz
 - Bronze Mounted
 - Cast Iron Loose
- P-__ Cold Water Protection (See 1000.19)
- S-__ Low and High Gas Pressure Switches, Manual



Raypak

A Rheem Company

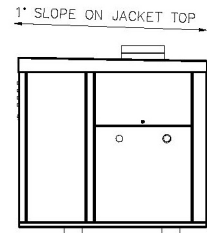
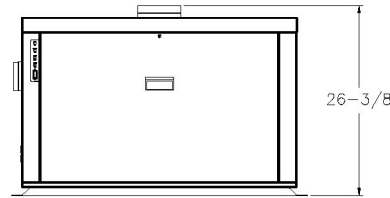
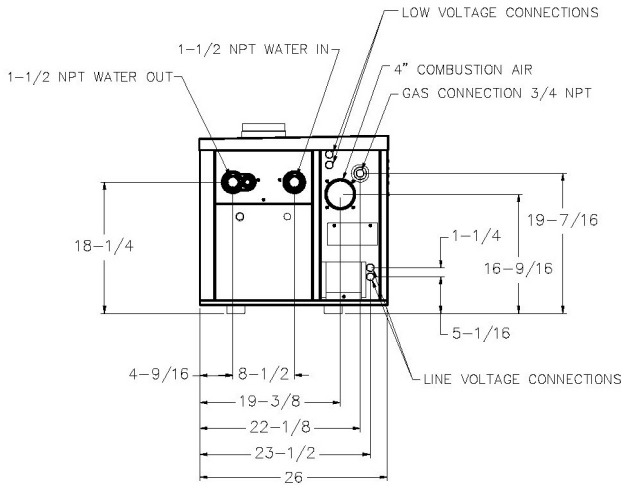
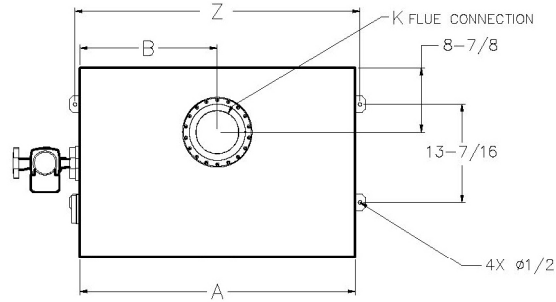
Hi Delta SS HD101-HD401

Type H - Hydronic Heating

Model _____

Primary Pump HP - Amps

Model	
H3-	
HD101	0010 1/8 - 1.3
HD151	
HD201	
HD251	
HD301	
HD401	



MODEL	MBTUH		AFUE (%)	A	B	K	Z	Boiler Amps‡	APPROX. SHIP WT. (LBS.)
	INPUT	OUTPUT							
HD101	100	84	85	18-9/16	9-1/4	4	19-15/16	<5	150
HD151	150	126		21-7/8	10-7/8	4	23-3/16	<5	175
HD201	199	167		25-1/16	12-1/2	5	26-7/16	<5	200
HD251	250	210		28-5/16	14-1/8	5	29-11/16	<5	225
HD301	299	251		31-9/16	15-3/4	5	32-15/16	<5	250
HD401	399	335	84*	38-1/16	19	6	39-7/16	<5	300

Dimensions are in inches.

‡ Amp draw does not include pump.

* Thermal Efficiency

RATES OF FLOW AND PRESSURE DROPS

MODEL	Input MBTUH	Output MBTUH	10°F ΔT		20°F ΔT		30°F ΔT		MIN. FLOW			MAX. FLOW		
			GPM	ΔP (ft)	GPM	ΔP (ft)	GPM	ΔP (ft)	GPM	ΔP (ft)	ΔT	GPM	ΔP (ft)	ΔT
HD101	100	84	17	1.2	N/A	N/A	N/A	N/A	13	0.8	13	44	8.8	4
HD151	150	126	25	2.9	13	0.8	N/A	N/A	13	0.8	20	44	8.8	6
HD201	199	167	33	5.2	17	1.3	N/A	N/A	13	3.3	27	44	8.9	8
HD251	250	210	44	9.2	21	2.1	14	0.9	13	0.7	34	44	9.2	10
HD301	299	251	N/A	N/A	25	3.1	17	1.3	13	0.7	40	44	9.4	11
HD401	399	335	N/A	N/A	34	5.6	22	2.5	22	2.5	30	44	9.8	15

NOTE: Basis for minimum flow is 13 GPM or 40°F ΔT.

- NOTES: 1. Rates shown are for natural or propane gas, and elevations up to 2,000 feet. For installations above 2,000 feet, please contact manufacturer.
2. Recommended natural gas pressure is 7 - 10.5" WC. Recommended propane gas pressure is 11 - 13" WC.