



Product Submittal for Hi Delta SS® - Type WH
Water Heater
Models HD151-HD401

Date: _____ Job: _____ Location: _____
Equipment Tags: _____ Engineer: _____ Contractor: _____
Model: _____ Notes: _____
Prepared by: _____ Indoor ☐ Outdoor ☐

- TruSeal® direct vent
- Sealed combustion chamber
- 100% factory fire tested
- 85% thermal efficiency for copper finned units
- 83% thermal efficiency for cupronickel finned units
- Maximum outlet temperature: 200°F
- Minimum non-condensing inlet temperature: 105°F
- Thermal shock proof heat exchanger
- Limited 20-year thermal shock warranty
- Limited 5-year copper heat exchanger warranty
- Limited 10-year cupronickel 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



STANDARD PRODUCT

NOTE: Standard features listed below containing a [o] hollow bullet next to their description, can be modified for configured made-to-order product.

MODEL SIZE	ITEM# (Medium Water Pump Included)
HD151	☐ 100-10002725
HD201	☐ 100-10002726
HD251	☐ 100-10002728
HD301	☐ 100-10002729
HD401	☐ 100-10002731

MODEL SIZE	ITEM# (No Water Pump Included)
HD151	☐ 100-10002733
HD201	☐ 100-10002734
HD251	☐ 100-10002735
HD301	☐ 100-10002736
HD401	☐ 100-10002737

STANDARD FEATURES:

Heat Exchanger:

- Bronze header
- Copper finned tubing
- ASME HLW-stamped; 160 PSIG MAWP
- National Board registered
- ASME steel tube sheet
- Silicone high temp O-rings
- T&P gauge
- Flow switch – mounted
- PRV (125 psig)
- Left-hand water

Gas Type:

- Natural gas

Power:

- 120V, 60Hz, 1Ø, Power supply

Controls:

- 100% Shut-off/lockout
- Hot surface ignition (HSI)
- Remote flame sensor
- Ignition module (3-Try)
- High limit, manual-reset, fixed 200°F
- High limit, fixed, auto-reset 200°F max
- On/Off power switch
- Blocked vent pressure switch
- B-2 On/off tankstat 1-stage controller with well assembly, 100-200°F
- Combustion air proving switches (2)
- Economaster pump relay, 5 or 10 min.

Gas Train:

- 4" WC minimum pressure
- Combination valve
- Firing Mode On/Off (WH1)
- Ultra-Low NOx (<20 ppm Nat.)

Construction:

- Design certified ANSI Z21.10.3 / CSA 4.3
- Indoor/Outdoor construction
- Slide-out controls tray
- Front controls enclosed
- PolyTuf powder-coat finish
- TruSeal® direct vent
- Integral combustion air filter
- CSA low-lead certified ≤ .25% lead

Venting:

- Ready to vent with stainless steel

CONFIGURED PRODUCT (MADE-TO-ORDER)

NOTE: Features containing a [•] solid bullet in the “Standard Product” section, are also standard on the “Made-to-Order” configurations listed below.

Heat Exchanger:

- Fin tubing
 - ☐ Copper (standard)
 - ☐ Cupronickel
- ASME pressure relief valve
 - ☐ 125 PSIG (standard)
 - ☐ A-16 150 PSIG
- Left-hand water (standard)
 - ☐ A-6 Right-hand water

Gas Type:

- Fuel
 - ☐ Natural gas
 - ☐ Propane gas (minimum grade HD-5)

Power:

- ☐ 120V, 60Hz, 1Ø, power supply
- ☐ 120/24V, 60Hz, transformer

Control:

- Ignition module
 - ☐ 3-Try – (standard)
 - ☐ C-6 Single-try

Venting:

- ☐ D-11 Vent termination, outdoor
- ☐ D-12 Barometric damper
- ☐ D-15 Sidewall vent termination
- ☐ D-18 Boiler vent adapter (Cat III/IV)
- ☐ D-19 Vent termination adapter (Cat III/IV)
- ☐ D-20 Vertical vent termination (Cat I)
- Combustion air - ducted
 - ☐ D-16 Intake air elbow

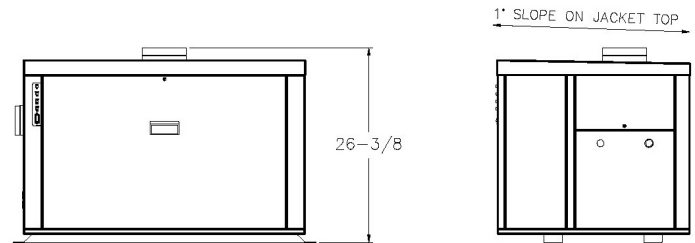
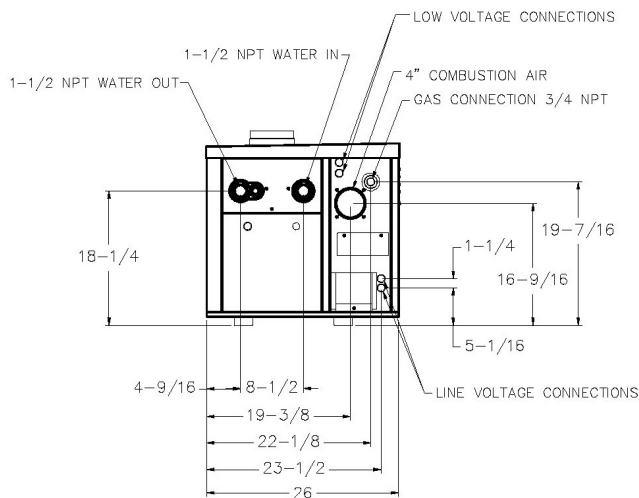
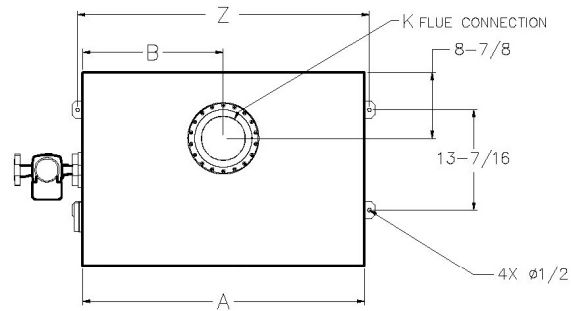
Temperature Controls:

- ☐ B-2 On/off tankstat 1-stage controller with well assembly, 100-200°F (Loose)
- ☐ B-3 On/off tankstat 2-stage controller with well assembly, 100-200°F (Loose)
- ☐ B-26 Two-stage digital controller
 - ☐ Loose ☐ Factory-mounted
- ☐ B-21 Four-stage digital controller
- ☐ B-28 On/off digital controller
 - ☐ Loose ☐ Factory-mounted

Other Options:

- ☐ E-5 Alarm with 4" bell
 - ☐ Loose ☐ Factory-mounted
- ☐ F-10 Low water cut-off, remote probe
- ☐ High limit, adj. manual-reset 200°F max.
- ☐ High limit, fixed, auto-reset 180°F max.
- ☐ High limit, fixed, auto-reset 200°F max.
- ☐ P__ Pump: ____ HP, 120V, 1Ø, 60Hz
 - ☐ Bronze ☐ Mounted
 - ☐ Cast Iron ☐ Loose
- ☐ P__ Cold water protection (see 1000.19)
- ☐ S-1 Low gas pressure switch, manual-reset
- ☐ S-2 High gas pressure switch, manual-reset
- ☐ Z-4 T&P relief valve
 - ☐ Loose ☐ Factory-mounted

Heater Pump HP - Amps			
Model	Water Hardness		
	Soft	Medium	Hard
HD151	1/8 - 1.1	1/8 - 1.3	1/4 - 1.6
HD201	1/8 - 1.1	1/8 - 1.3	1/4 - 1.6
HD251	1/8 - 1.1	1/8 - 1.3	1/4 - 1.6
HD301	1/8 - 1.1	1/8 - 1.3	1/4 - 1.6
HD401	1/8 - 1.1	1/8 - 1.3	1/4 - 1.6



SPECIFICATIONS								Approx. Shipping Wt. Lbs. (Kgs.)
Model	MBTUH (kW/h)		Dimensions					
	Input	Output	A Inches (mm)	B Inches (mm)	K Inches (mm)	Z Inches (mm)	Heater Amps	
 HD151	150 (44)	125 (36)	21-7/8 (555)	10-7/8 (276)	4 (102)	23-3/16 (589)	<5	175 (79)
 HD201	199 (58)	165 (48)	25-1/16 (636)	12-1/2 (317)	5 (127)	26-7/16 (672)	<5	200 (91)
 HD251	250 (73)	208 (61)	28-5/16 (719)	14-1/8 (359)	5 (127)	29-11/16 (754)	<5	225 (102)
 HD301	299 (88)	248 (73)	31-9/16 (802)	15-3/4 (400)	5 (127)	32-15/16 (837)	<5	250 (113)
 HD401	399 (117)	331 (97)	38-1/16 (967)	19 (483)	6 (152)	39-7/16 (1002)	<5	300 (136)

RATES OF FLOW AND PRESSURE DROPS															
Model	Soft (0-4 GPG)					Medium (5-15 GPG)					Hard (16-25 GPG)				
	ΔT °F (°C)	GPM (L/min)	ΔP (FT)	MTS	SHL	ΔT °F (°C)	GPM (L/min)	ΔP (FT)	MTS	SHL	ΔT °F (°C)	GPM (L/min)	ΔP (FT)	MTS	SHL
☐ HD151	13 (7)	20 (76)	1.8	1-1/2	3.8	10 (5)	26 (98)	3.1	1-1/2	6.3	6 (3)	45 (170)	9.2	1-1/2	18.1
☐ HD201	17 (9)	20 (76)	1.9	1-1/2	3.9	13 (7)	26 (98)	3.2	1-1/2	6.4	8 (4)	45 (170)	9.4	1-1/2	18.2
☐ HD251	21 (12)	20 (76)	1.9	1-1/2	3.9	16 (9)	26 (98)	3.2	1-1/2	6.5	9 (5)	45 (170)	9.6	1-1/2	18.5
☐ HD301	25 (14)	20 (76)	1.9	1-1/2	3.9	20 (11)	26 (98)	3.2	1-1/2	6.5	11 (6)	45 (170)	9.8	1-1/2	18.7
☐ HD401	34 (19)	20 (76)	2.0	1-1/2	4.0	26 (14)	26 (98)	3.3	1-1/2	6.6	15 (8)	45 (170)	10.3	1-1/2	19.1

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 4.0 – 10.5" WC. Recommended propane gas pressure is 11 - 13" WC.
3. Basis for minimum flow is 13 GPM 40°F ΔT.
4. GPG = Grains Per Gallon
5. With Hard Water (16-25 grains per gallon), the operating control must be set no higher than 130°F (54°C) for scale-free operation. For operating temperatures above 130°F (54°C), a water softener must be utilized.
6. SHL includes 50 ft of tubing each way (total 100 ft)

WATER HEATER RECOVERY RATES (GPH)

Model	Temperature Rise in °F								
	20°	30°	40°	50°	60°	70°	80°	90°	100°
HD151	747	498	374	299	249	213	187	166	149
HD201	991	660	496	396	330	283	248	220	198
HD251	1245	830	623	498	415	356	311	278	249
HD301	1489	993	745	596	496	426	372	331	298
HD401	1987	1325	994	795	663	568	497	442	398