Job:		
Engineer:		
Contractor:		
Prepared By:	Date:	
Model:	Indoor/Outdoor:	

# XFyre<sup>®</sup> - Type WH

**Condensing Water Heaters** Models 300A-850A

Stainless Steel Water-tube Construction

95% Thermal Efficiency at Full Rate

**VERSA IC® Modulating Controller** 

LCD Status Display with Full Diagnostics and Fault Memory

Cascade up to Four Heaters - No External Sequencer Required

**Modbus RTU BMS Port** 

Soft Start, Electronic Modulation, 5:1 Turndown Maximum Outlet Water Temperature: 175°F

Maximum Setpoint: 150°F

100% Factory Fire Tested

Zero Clearance to Combustibles

Indoor/Outdoor Construction Standard

PVC, CPVC, Centrotherm™ Polypropylene or Stainless Venting Certified<sup>1</sup>

Meets 2012 NOx Requirements (< 20 ppm)

**Limited Twenty-Five-Year Thermal Shock Warranty** 

Limited Ten-Year Heat Exchanger Warranty

# **Heat Exchanger**

- All Stainless Steel Construction with Copper Connections
- Gasketless Heat Exchanger Design
- ASME H Stamped 160 PSIG Max Working Pressure
- National Board Approved
- ASME Pressure Relief Valve, Loose ☐ 125 PSIG – Standard
- \_ PSIG Optional
- Temperature and Pressure Gauge, Shipped Loose

- 120V, 60Hz, 1Ø, Power Supply
- VERSA IC Operating Control with LCD
- 0-10 VDC input for BMS
- Cascade up to 4 water heaters
- Remote Flame Sensor
- High Limit, Manual Reset, Fixed, 175°F
- Alarm Dry Contact Connection
- On/Off Power Switch
- Flow Switch
- Blocked Vent Pressure Switch
- Boiler, DHW & System Pump Contacts
- Water Temperature Sensors (3)10kΩ (Tank sensor shipped loose)

- Spark Ignition (DSI)
- Ultra-Low NOx: Less than 20 PPM

- Fuel
  - Natural Gas
  - ☐ Propane
- **Dual-Seat Combination Valve**
- Electronic Modulating Firing Mode (WH7)

## Construction

- Indoor/Outdoor Construction
- Front Controls Enclosed
- PolyTuf Powder Coat Finish
- Rear Connections (Electrical, Gas, Vent, Combustion Air)
- Top Connections (Water)
- Design Certified ANSI Z21.10.3/ CSA 4.3
- Combustion Air Filter
- Condensate Trap
- CSA Low Lead Certified ≤ .25% Lead

## Venting (PVC -CPVC- Centrotherm™ Polypropylene-Stainless) 1

- Vent Termination
  - □ D-15 Indoor, Horizontal - Option





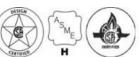
Proudly Assembled in the USA

- Outdoor Termination □ D-33 Polypropylene Adapter
- Extractor Optional
  - ☐ By others
- Not required

**Options** 

- ☐ D-21 TruSeal® Combustion Air Inlet
- ☐ D-22 TruSeal® Combustion Air Inlet (Loose)
- ☐ F-10 Low Water Cut-Off, Remote Probe
- □ P-\_\_ Pump: \_ HP, 120V, 1Ø, 60Hz ☐ Bronze/SS
- ☐ S-1/S-2 High/Low Gas Pressure
- Switches, Manual Reset
- ☐ Z-12 Condensate Neutralizer Kit

**Regulatory Agency Requirements** 



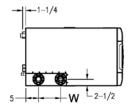




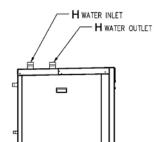
Note 1: Configured for PVC Vent Standard. Maximum Return Water Temperature of 130°F on models WH7-700A and WH7-850A for PVC Vent. See I & O Manual Cat. 1000.65

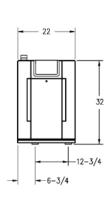


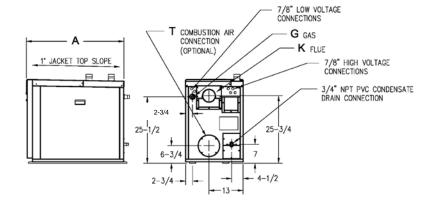
Effective: 11-19-18 Catalog No.: 3500.17F Replaces: 05-01-15



**TOP VIEW** 







LEFT VIEW

MOUNTING HOLES 4X

**FRONT** 

RIGHT VIEW

REAR

	Model	MBTUH		Dimensions (in.)						
	(H7-)	Input	Output	A Length	F Mounting	G NPT	H NPT	K Flue Ø	T C/A Ø	W (Water)
Γ	☐ 300A	300	282	28-1/4	27-9/16	3/4	1-1/2	4	4	8-1/2
Ī	☐ 400A	399	375	30-3/4	32-5/16	1	2	4	4	7
	☐ 500A	500	470	37-1/4	36-9/16	1	2	4	4	8-1/2
	☐ 700A	700	658	47-3/4	49-5/16	1-1/4	2	6	6	10-5/8
	☐ 850A	850	799	54-1/4	53-9/16	1-1/4	2	6	6	10-5/8

	CLEARANCES (in.)				
	Certified Service				
	Minimum Clearance				
Front	24	24			
Rear	24	24			
Right	0	0			
Left	0	0			
Тор	12	24			
Floor	0	-			
Vent	1	-			

Ratings shown are for elevations up to 2,000 feet. For installations at elevations above 2,000, please consult the factory for additional instructions.

Model (WH7-)	3-15 grains per gallon					Hard (16-25 grains per gallon)
(**********	$\Delta \mathbf{T}$	GPM	ΔΡ	MTS	SHL	
□ 300A	24	24	12	1.5	17	Do not use when
☐ 400A	20	38	18	2	20	hardness
□ 500A	20	48	16	2	19	exceeds 15 grains per
□ 700A	20	67	30	2	36	gallon
□ 850A	23	70	30	2	36	

Model (H7-)	Amps*	Foot- Print (ft²)	Ship Weight (lbs.)	
☐ 300A	3	4.3	410	
☐ 400A	4	4.7	465	
☐ 500A	4	5.7	505	
☐ 700A	5	7.3	580	
☐ 850A	5	8.3	580	

Current draw is for heater only.
 (Supply breaker must have delayed trip.)

MTS = Minimum Tube Size, inch

SHL = System head loss, ft (based on heater and tank placed no more than 5ft apart & 75ft equivalent length of tubing and fittings).

 $\Delta T$  = Temperature rise, °F

 $\Delta P$  = Pressure drop through heat exchanger, ft

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Model	Recovery Rates (gallons per hour)  Temperature Rise (°F)									
(WH7-)	20	30	40	50	60	70	80	90	100	
□ 300	1728	1151	863	691	576	494	432	384	345	
□ 400	2297	1532	1149	919	765	656	575	511	459	
□ 500	2879	1919	1440	1151	959	823	720	640	576	
□ 700	4031	2687	2015	1612	1344	1151	1008	986	806	
□ 850	4894	3262	2446	1958	1632	1398	1224	1087	978	

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