



**Product Submittal for Professional Indirect Pool Heater
Powered by XTherm®
1.0-1.5-2.0 MMBTUH Models**

Date: _____ Job: _____ Location: _____
Equipment Tags: _____ Engineer: _____ Contractor: _____
Model: _____ Notes: _____
Prepared by: _____ Indoor Outdoor Gas Type: Natural Gas Propane

The Professional Indirect combines the ultra-high-efficiency XTherm boiler with an efficient indirect heat exchanger to provide high-efficiency heating with minimal maintenance. All equipment is provided on a factory-built skid for easy installation and commissioning.

- 96% thermal efficiency at full rate
- 100% factory fire-tested
- VERSA IC® modulating controller with 7" color touchscreen display
- Raymote™ IoT connectivity provided standard
- Full electronic modulation, constant ratio 7:1 turndown
- Full safety diagnostics with history
- Status display lights
- Modbus RTU BMS port
- Cascade up to 8 heaters - no external sequencer required
- Cascade in parallel or sequential modulation modes
- PVC venting
- Maximum pool/spa water temperature: 104°F (40°C)
- Limited 10-year primary and secondary heat exchanger warranty
- Limited 25-year thermal shock warranty
- Limited 5-year titanium indirect heat exchanger warranty
- Limited 3-year cupronickel indirect heat exchanger warranty
- SCAQMD Rule 1146.2 certified, Ultra-Low NOx < 20 ppm
- Proudly assembled in the USA





Product Submittal for Professional Indirect Pool Heater

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Job: _____

Standard Features

Heat Exchanger

- Headers - cast iron
- ASME H stamped; 160 PSIG MAWP
- National board registered
- Copper finned tubing
- ASME powder-coated tube sheet
- Silicone high-temp O-rings
- ASME pressure relief valve, 30 PSIG
- Air vent, manual
- T&P gauge
- Secondary stainless steel condensing heat exchanger - U stamped
- Stainless steel evaporator plate
- Indirect pool heat exchanger
 - Cupronickel (standard)
 - Titanium (optional)

Power

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

Control

- Boiler pump: 120V, 1Ø, 60Hz
- Indirect pump: 115/230V, 1Ø, 60Hz
- VERSA IC® built-in controller
- 7" (178 mm) color HD touchscreen display
- Raymote™ IoT connectivity
- Cascade up to 8 heaters
- Parallel and sequential modulation cascade modes
- Cascade interstage delay settings
- Ignition module
 - 3-try (standard)
 - C-6 Single-try (optional)
- Remote flame sensor
- High limit, auto reset, 240°F max
- High limit, manual-reset, 180°F max
- Low water cut-off, remote probe
- Low gas pressure switch, manual reset
- High gas pressure switch, manual reset
- Low water pressure switch
- On/Off power switch

- Flow switch (2)
- Fixed auto limit - pool return
- Blocked vent pressure switch
- Freeze protection
- Alarm dry contact
- Programmable pump time delays
- Water temperature sensors 10KΩ (2 mtd, 2 loose, 1 well)
- Cold water protection
- Blocked condensate switch
- Modbus RTU BMS port (up to 115K baud rate, see Cat. No. 5000.73)
 - B-85 BMS Gateway, Modbus RTU to Modbus TCP, N2 Metasys, BACnet IP, or BACnet MS/TP (optional)
 - B-86 BMS Gateway, Modbus RTU to LonWorks (optional)

Burner

- Hot surface ignition (HSI)
- Radially-fired knitted burner

Gas Train

- Fuel
 - Natural gas
 - Propane (minimum grade HD-5)
- Dual-seat combination valve
- Manual shutoff firing valve
- Electronic modulation mode (H7)

Construction

- Indoor/outdoor construction
- Enclosed front controls
- PolyTuf powder coat finish
- PVC vent adapter (includes manual vent limit)
- Mounted condensate treatment kit
- Rear connections (water, gas, vent, electrical, combustion air, condensate drain)
- Internal combustion air filter
- Front connection low-voltage wiring
- Expansion tank
- Manual air bleed valve

Venting, cat IV

- D-23 Flue support brackets
- D-37 Motorized combustion air damper

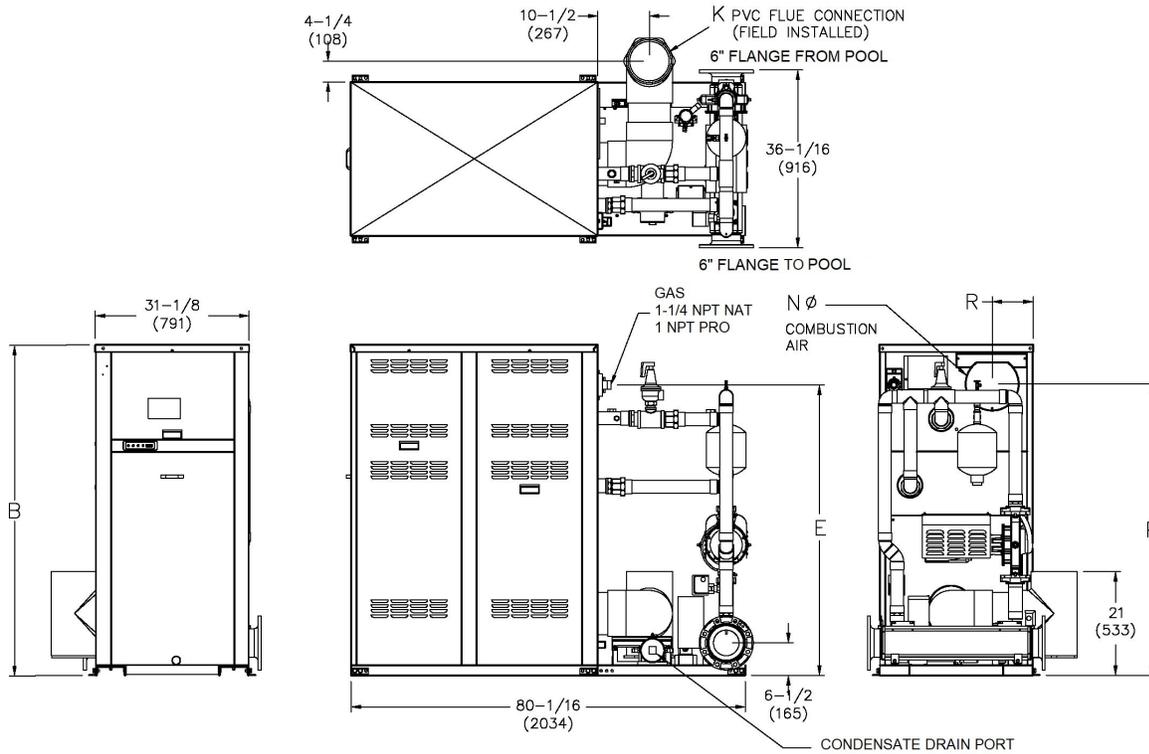
Options

- E-5 Boiler alarm with 4" Bell
- E-15 Boiler alarm with buzzer
- F-14 System flow switch
- M-1 Safety valve, motorized
- M-10 Safety valve, solenoid
- M-15 Safety valve, vent (requires M-1 or M-10)
- P-172 Flange kit CPVC
- Z-12 Condensate treatment kit

Additional options or accessories

- _____

Job: _____



Model (H7-)	MBTUH (kW)		Dimensions - inches (mm)						Shipping Weight - lbs. (kg)
	Input	Output	B Height	E	K Flue Ø	N C/A Ø	P	R	
<input type="checkbox"/> 1005A	999 (292.7)	969 (283.9)	55-1/4 (1403)	47 (1194)	6	6	47-1/8 (1197)	8-5/16 (211)	1343 (609)
<input type="checkbox"/> 1505A	1500 (439.6)	1455 (426.4)	67-1/8 (1705)	59 (1499)	8	8	59-1/8 (1502)	8-3/16 (208)	1448 (657)

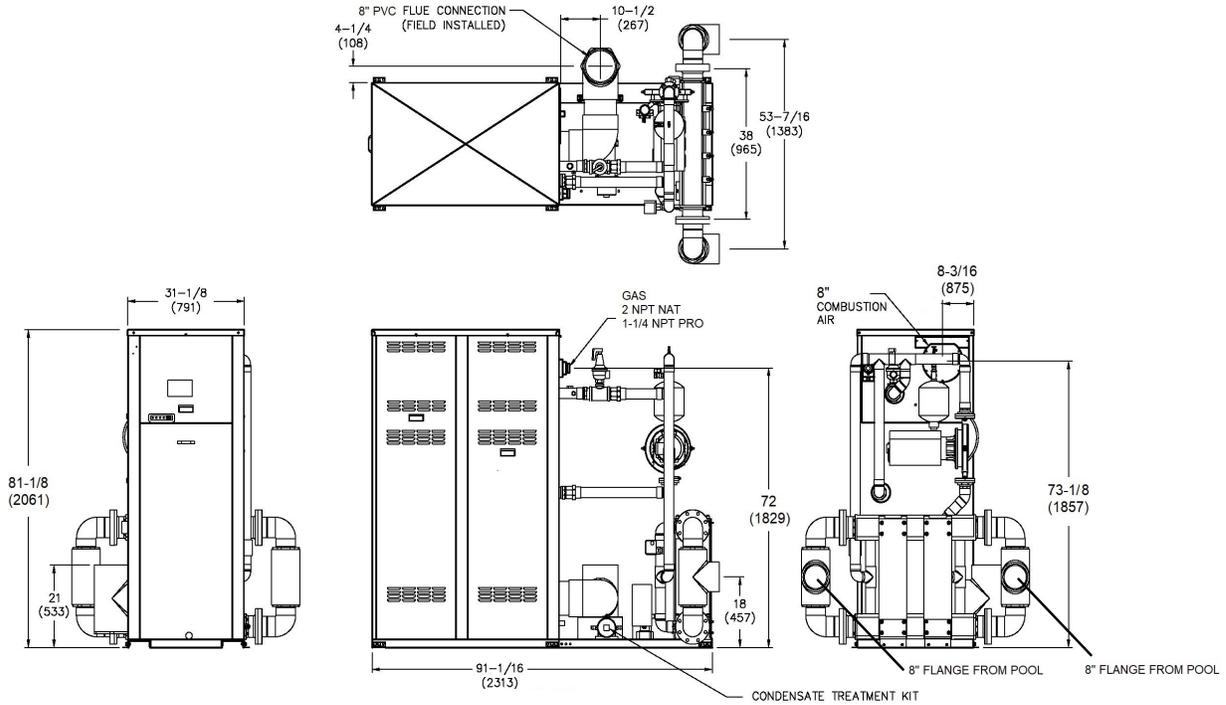
NOTE: Ratings are shown for elevations up to 4,500 ft. (1,371.6 m). De-rate above 4,500 ft; consult factory.
No hardware changes needed for elevations up to 10,000 ft. (3,050 m).

CLEARANCES		
Heater Side	Minimum Clearances from Combustible Surfaces in. (mm)	Minimum Service Clearance in. (mm)
Front	24 (609.6)	24 (609.6)
Rear	12 (305)	36 (914)
Right Side	1 (25)	24 (610)
Left Side	1 (25)	1 (25)
Top	0	10 (254.0)
Floor	0	N/A
Vent	1 (25)	N/A

Model	Amp Draw (120V)*		
	Boiler**	Boiler Pump**	Indirect Pump**
<input type="checkbox"/> 1005A	12**	10	> 7
<input type="checkbox"/> 1505A	12**	14	10.8

*Separate power connections are factory-supplied and separate supply breakers must be field-supplied.
**Current draw is for boiler only (supply breaker must have delayed trip).

Job: _____



Model H7-	MBTUH (kW)		Shipping Weight - lbs. (kg)
	Input	Output	
<input type="checkbox"/> 2005A	1999 (585.5)	1939 (568.2)	1930 (875)

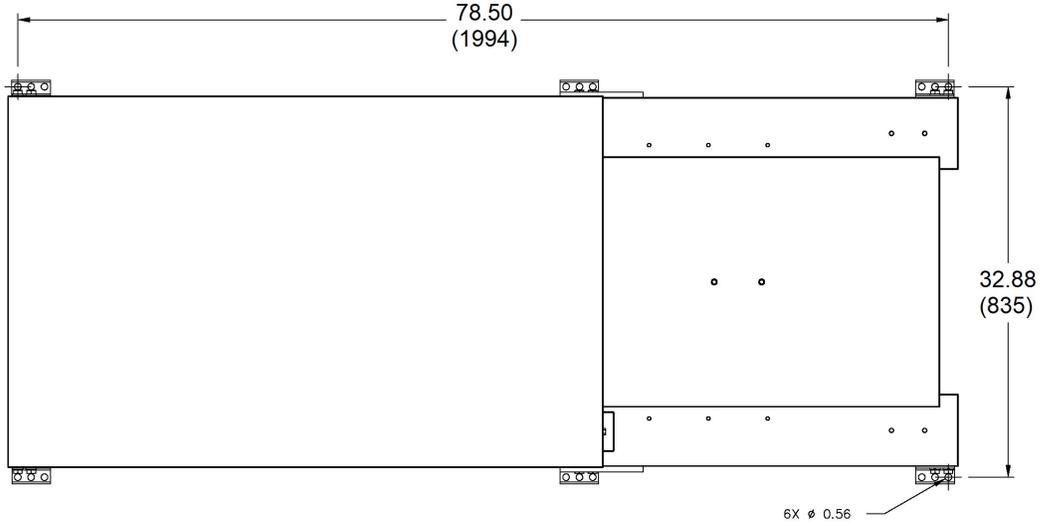
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	Boiler**	Boiler Pump**	Indirect Pump**
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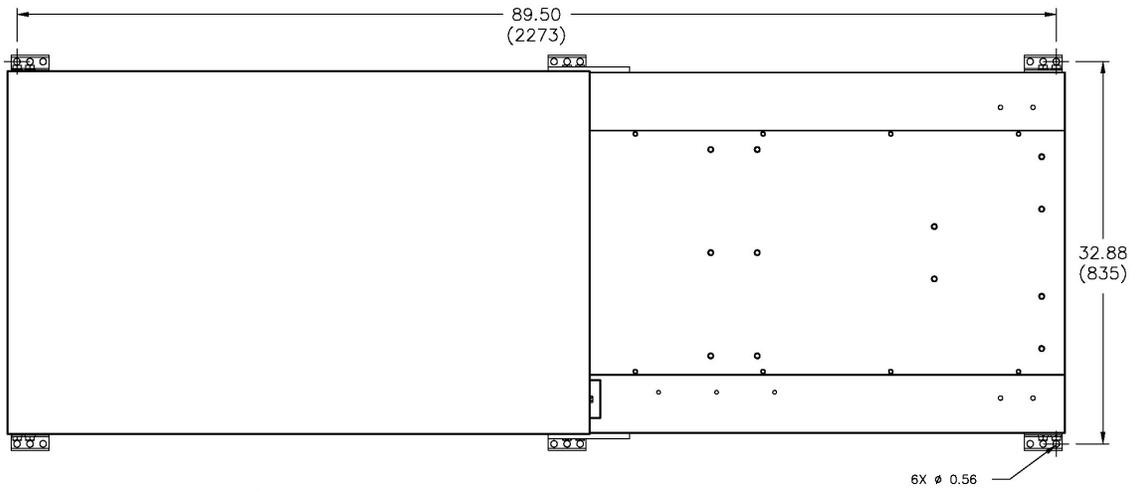
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**Anchoring Details
Models 1005A-1505A**



Dimensions are shown in inches (mm).

**Anchoring Details
Model 2005A**



Dimensions are shown in inches (mm).

Water Chemistry			
	TDS Limit (ppm)	Chlorine Limit (ppm)	pH
<input type="checkbox"/> Cupronickel	3,000**	2 - 3	7.6 - 7.8
<input type="checkbox"/> Titanium	10,000	2 - 3	7.6 - 7.8

** In Saltwater chlorinated pools, the total TDS can be as high as 6000 ppm