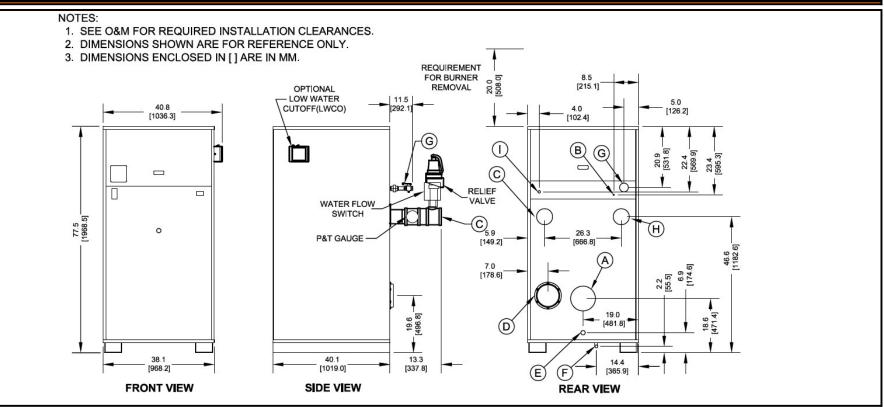


Submittal Data Sheet



KEY	<u>DESCRIPTION</u>		
Α	Flue Outlet	8" [203.2] Diameter (AL29-4C SS)	
В	Factory Installed Pilot Gas Li	1/4" [6/4] O.D. Tube	
С	Water Supply to System	4" NPT	
D	Inlet Air	8" [203.2] Diameter	
E	Drain, Startup Condensate	5/8" [15.9] O.D. Tube SS	
F	Appliance Drain	1" NPT	
G	Gas Supply	2" NPT	
H	Water Return from System	4" NPT	
	Optional Gas Train Vent	3/4" NPT (D.B.&B & D.B.&B w/ POC Only)	

NOTES:

- SEE O&M FOR REQUIRED INSTALLATION CLEARANCES.
- 2. DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.
- DIMENSIONS ENCLOSED IN [] ARE IN MM.

THERMAL® SOLUTIONS Innovative Equipment for Hot Water Systems	
PO BOX 3244 LANCASTER PA 17601	

EVA-2500

INNOVATIVE EQUIPMENT FOR HOT WATER SYSTEMS

Updated: 8/5/2025

WWW.THERMALSOLUTIONS.COM

EVSUBM250802



Submittal Data Sheet

RATINGS AND CAPACITIES					
Input (MBH):	2,500,000	BTU/HR			
Output (MBH):	2,170,000	BTU/HR			
Boiler Horsepower:	64.8	BTU/HR			
Thermal Efficiency:	86.8%	BHP			
Heating Surface:	518	Sq.Ft.			
Water Content:	41.6	Gallons			
Fuel:	Natural Gas or LP Gas				
Firing Rate:	Reliable Modulation				
Burner Turndown:	3:1				
Low NOx Emissions:	<10 ppm				
Inlet Gas Pressure (NG):	See Chart at right				
Inlet Gas Pressure (LP):	See Chart at right				
* This data supercedes data found on Table 3 of I&O Mo	anual per PRODUCT UPDATE issued June 6, 2024				

ASME Section IV (Max 160 PSIG / 250°F)

Setpoint range is 145-230°F

Adjustable, manual reset high limit setting of ≤ 240°F.

ASME H stamp MAWT is 250°F for the vessel. (For max setpoint, see Setpoint range.)

2.052

UL Certified to ANSI Z21.13 / CSA 4.9

Shipping Weight, Approximate:

UL Certified to UL 795 / CSA 3.1



DIMENSIONS / CONNECTIONS						
Height:	77 1/2"	(Note 1)				
Width:	38 1/8"	(Note 2)				
Length:	40 1/8"	(Note 3)				
Supply Connection:	4"	. ,				
Return Connection:	4"					
Vent / Air Intake Connections:	8" Vent	8" Intake				
Condensate / Appliance Drain Connection:	5/8" Condensate Tube	1" NPT Drain				
Gas Connection:	2"					

1. Height dimension is from floor to top of jacket.
2. Length is from jacket front to jacket rear.
3. Dimensions shown are for reference only

FLOWS AND PRESSURE DROPS						
Delta T	Flow (GPM)	△P (Ft. Hd)				
20°F△T	217 (Max)	4.34				
40°F△T	109 (Min)	1.43				

Electrical Supply Options				
	120v/60hz/1ph (Standard)	N/A		
	208v/60hz/1ph	8 amps		
	230v/60hz/1ph	7.8 amps		
	208v/60hz/3ph	7.4 amps		
	230v/60hz/3ph	7.3 amps		
	460v/60hz/3ph	3.7 amps		

Blower Motor (hp)
1-1/2

Relief Valve Options					
	30 psi		50 psi		60 psi
	75 psk		100 psi		125 psi
	150 psi		-	-	-

Inlet Gas Pressure					
SIZE	Nat. Gas Min. ("w.c.)	LP Min. ("w.c.)	Max		
500	5.0" w.c.				
750	7.0" w.c.*	8.0" w.c.			
1000	7.0" w.c.*	8.0 w.c.			
1500	7.0" w.c.*		14.0" w.c.		
2000	9.0" w.c.*	9.0" w.c.	14.0 W.C.		
2000s	7.0" w.c.				
2500	6.0" w.c.	8.0			
3000	6.0" w.c				

^{*} NOTE: Optional natural gas train with 4" w.c. minumum inlet gas pressure ONLY AVAILABLE on sizes 750, 1000, 1500 & 2000.



Submittal Data Sheet

STAN	STANDARD EQUIPMENT			OPTIONAL EQUIPMENT			
PRESSURE VESSEL DESIGN	BOILER EQUIPMENT		Low gas pressure ve	nturi, 4" wc (A	VAILABLE ON	ILY on Models	
Copper Fin-tube construction	Siemens RWF55 operating control		750-2000) [FACTORY		•		
Carbon steel or cast iron header design Gasketless heat exchanger	High limit w/ manual reset safety temperature control Water flow switch		Line Reactor Adds v VFD. (<u>Highly recommen</u>				
ASME Section IV certified "H" stamp	Low water cut-off with manual reset safety controller		Honeywell 7800 Se	ries display	with ModBu	s Module	
MAWP 160 PSI & max design temp 250°F 5-year heat exchanger warranty	Outlet temperature sensor Combustion air switch		Line Reactor Adds v VFD. (Highly recommend		•		
20-year thermal shock warranty	Pressure and temperature gauge		Outdoor Air Sensor			,	
	Safety relief valve (Optional pressuress 30 - 150 PSI; See details		Condensate neutral	lizer:			
COMBUSTION DESIGN	above.)		_	350 MBH	•	1,200 MBH	
Maintenance-free ceramic burner	Single point electrical supply: (Available in: 1 and 3 phase		_	2,000 MBH	-	5,000 MBH	
Ultr-low NOx emissions (<10ppm) Whisper quet operation (<50 dBA)	options. See details above.) BURNER EQUIPMENT		Pump Kit (Boiler Circ based on a 20°F Del		o, rump Flanç	ge kir sizea	
Easy to service, 99% efficient industrial air filter	UL/FM/CSD-1 gas train		Annual Maintenar				
Industrial cast aluminum blower assembly VFD Driven Blower	Reliable Turndown Natural or LP gas	▮⊔	System Temperatu ModBus RS485 cor		n for Siomon	or DWESS and	
Reliable electric spark-to-pilot ignition	Pilot gas valve / Pilot gas regulator		Honeywell Flame S				
10-year burner warranty	Siemens SKP-75 gas valve		Ûniversal comms.	gtwy (BACnet A	MS/TP, BACnet/II	P, N2, Modbus TCP)	
Honeywell UV-Scanner	Low and high gas pressure switches with manual reset		Local / remote swi	itch	* NOTE: Op	tional natural gas t	
VENTING	CITATENE DIVISES OPERATING CONTROL FRATURES		Alarm bell with sile	- 1			
<u>VENTING</u> Sealed or room air combustion	SIEMENS RWF55 OPERATING CONTROL FEATURES Adjustable set point	┫╹	Relays: Conductor Sequencing	General Alarm		Boiler Status	
Direct vent (sidewall or vertical) (Cat IV)	Remote set point (0-10v or 4-20 mA)		without BMS. Contact			таррисаногіз	
Conventional venting (Cat II) NOTE: This is NOT a Cat 1 Vent appliance.	Outdoor air temperature reset	non-c boiled helps right singled include		large heat of and steam of iciency by se rating conditi ergy Manage Modbus RTU R ss needed, ac	output, new or hot wate electing and ions. The Co ement Systen RS485, BACne dd for the se	and/or existing r applications. It modulating the anductor offers a n (EMS) interface et/IP and BACnet parate Lonworks	
			Extended Wa				
			<u>Parts Only</u> Parts and Labor	<u>3-Year</u> □ N/A	<u>5-Year</u> □ □	<u>10 Year</u> □ □	