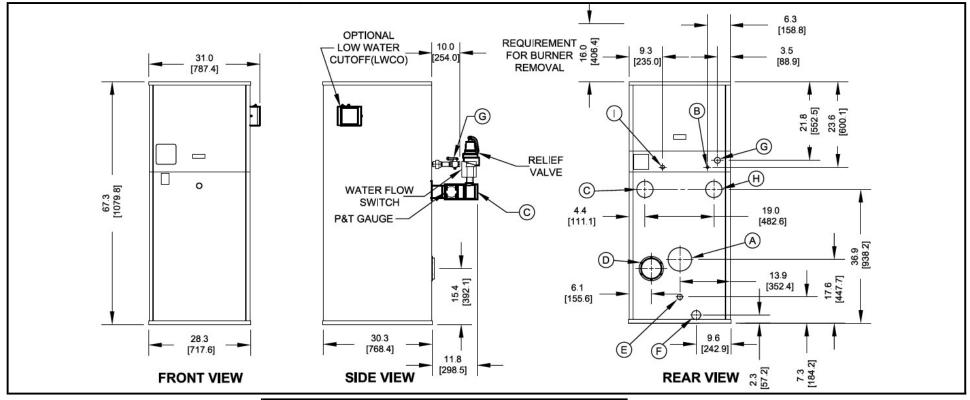


Submittal Data Sheet



KEY	<u>DESCRIPTION</u>				
Α	Flue Outlet	6" [152.4] Diameter (AL29-4C SS)			
В	Factory Installed Pilot Gas Lin	1/4" [6/4] O.D. Tube			
С	Water Supply to System	3" NPT			
D	Inlet Air	6" [152.4] Diameter			
E	Drain, Startup Condensate	5/8" [15.9] O.D. Tube SS			
F	Appliance Drain	1" NPT			
G	Gas Supply	1 1/2" NPT			
H	Water Return from System	3" NPT			
П	Optional Gas Train Vent	3/4" NPT (D.B.&B & D.B.&B w/ POC Only)			

NOTES:

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



EVO-1000

INNOVATIVE EQUIPMENT FOR HOT WATER SYSTEMS

WWW.THERMALSOLUTIONS.COM

Updated: 8/5/2025

EVSUBM250802



Submittal Data Sheet

RATINGS AND CAPACITIES					
Input (MBH):	1,000,000	BTU/HR			
Output (MBH):	850,000	BTU/HR			
Boiler Horsepower:	25.4	BTU/HR			
Thermal Efficiency:	85.0%	BHP			
Heating Surface:	175	Sq.Ft.			
Water Content:	16.4	Gallons			
Fuel:	Natural Gas or LP Gas				
Firing Rate:	Reliable Modulation				
Burner Turndown:	3:1				
Low NOx Emissions:	<10 ppm				
Inlet Gas Pressure (NG):	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 Manual, per PRODUCT UPDATE issued June 6, 2024.

Shipping Weight, Approximate: 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.)

1,185

UL Certified to ANSI Z21.13 / CSA 4.9

UL Certified to UL 795 / CSA 3.1



DIMENSIONS / CONNECTIONS					
Height:	67 3/8"	(Note 1)			
Width:	28 3/8"	(Note 2)			
Length:	30 3/8"	(Note 3)			
Supply Connection:	3"				
Return Connection:	3"				
Vent / Air Intake Connections:	6" Vent	6" Intake			
Condensate / Appliance Drain Connection:	5/8" Condensate Tube	1" NPT Drain			
Gas Connection:	1 1/2"				

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	82 (Max)	3.24				
40°F△T	41 (Min)	0.81				

Electrical Supply Options				
	120v/60hz/1ph (Standard)	7.5 amps		
	208v/60hz/1ph	6.6 amps		
	230v/60hz/1ph	6.4 amps		
	208v/60hz/3ph	6.0 amps		
	230v/60hz/3ph	6.0 amps		
	460v/60hz/3ph	3.0 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.*	0.0 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	DARD EQUIPMENT		OPTIONAL	EQUIPME	NT	
PRESSURE VESSEL DESIGN Copper Fin-tube construction Carbon steel or cast iron header design Gasketless heat exchanger ASME Section IV certified "H" stamp MAWP 160 PSI & max design temp 250°F 5-year heat exchanger warranty 20-year thermal shock warranty COMBUSTION DESIGN Maintenance-free ceramic burner Ultr-low NOx emissions (<10ppm) Whisper quet operation (<50 dBA)	Siemens RWF55 operating control High limit w/ manual reset safety temperature control Water flow switch Low water cut-off with manual reset safety controller Outlet temperature sensor Combustion air switch Pressure and temperature gauge Safety relief valve (Optional pressuress 30 - 150 PSI; See details above.) Single point electrical supply: (Available in: 1 and 3 phase options. See details above.) BURNER EQUIPMENT		Low gas pressure venturi, 4 750-2000) [FACTORY INSTAL Line Reactor Adds voltage VFD. (Highly recommended for a Line Reactor Adds voltage VFD. (Highly recommended for a Outdoor Air Sensor Condensate neutralizer: 850 MB 2,000 N Pump Kit (Boiler Circulation based on a 20°F Delta T	t" wc (AVAILABL LLED OPTION OI e / spike protect areas with dirty volt isplay with Mc e / spike protect areas with dirty volt BH MBH n Pump, Pump F	LE ONLY on NLY] tion for the tage .) DOBUS MO tion for the tage .) 1,	e blower's odule e blower's 200 MBH 000 MBH
Easy to service, 99% efficient industrial air filter Industrial cast aluminum blower assembly VFD Driven Blower Reliable electric spark-to-pilot ignition 10-year burner warranty Honeywell UV-Scanner VENTING Sealed or room air combustion	UL/FM/CSD-1 gas train Reliable Turndown Natural or LP gas Pilot gas valve / Pilot gas regulator Siemens SKP-75 gas valve Low and high gas pressure switches with manual reset SIEMENS RWF55 OPERATING CONTROL FEATURES Adjustable set point		Annual Maintenance Kit System Temperature Sen ModBus RS485 communi Honeywell Flame Safegu Universal comms. gtwy (ELocal / remote switch Alarm bell with silencing Relays: General Conductor Sequencing Panel without BMS. Contact your RS	nsor ication for Sie uard Control (BACnet MS/TP, BAC g switch I Alarm I: Reg. for multipl	Boiler to Cnet/IP, N2, I Bo Ie EVA app	BMS Modbus TCP)
Direct vent (sidewall or vertical) (Cat IV) Conventional venting (Cat II) Outdoor vent termination kit NOTE: This is NOT a Cat 1 Vent appliance.	Remote set point (0-10v or 4-20 mA) Outdoor air temperature reset	non-boile helps right	Conductor Sequencing Panacondensing, small & large ers (full modulation), and s improve system efficiency boiler to match operating e point boiler plant Energy N	nel manages m heat output, steam or hot v by selecting conditions. The	nultiple co new and water app and mode e Conduct	d/or existing plications. It dulating the ctor offers a
be less than 32 °F (0 °C). Appliance must be p	ion only in climates where the ambient temperature will not rotected from standing water. Install on a level platform. Do less than 3 feet from its top. The area under the overhang on carpeted flooring.	inclu MSTP gate	ding Modbus TCP/IP, Modbu standard. If Lonworks need	us RTU R\$485, BAded, add for the state of th	ACnet/IP one separa Availab ear	and BACnet ate Lonworks