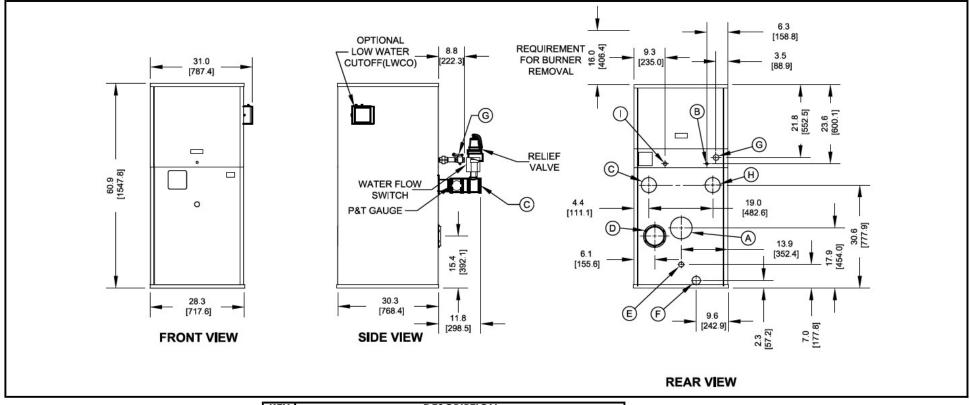


Submittal Data Sheet



KEY	<u>DESCRIPTION</u>					
Α	Flue Outlet	lue Outlet 4" [101.6] Diameter (AL29-4C SS)				
В	Factory Installed Pilot Gas Li	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 \$\$				
F	Appliance Drain	1" NPT				
G	Gas Supply	1" NPT				
H	Water Return from System	3" 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.
- 3. DIMENSIONS ENCLOSED IN [] ARE IN MM.

THERMAL® SOLUTIONS Innovelive Equipment for M Water Systems
PO BOX 3244 LANCASTER PA 17601

EVO-750

INNOVATIVE EQUIPMENT FOR
HOT WATER SYSTEMS
WWW.THERMALSOLUTIONS.COM

Updated: 8/5/2025

EVSUBM250802



Submittal Data Sheet

RATINGS AND CAPACITIES					
Input (MBH):	750,000	BTU/HR			
Output (MBH):	638,000	BTU/HR			
Boiler Horsepower:	19.1	BTU/HR			
Thermal Efficiency:	85.1%	BHP			
Heating Surface:	131	Sq.Ft.			
Water Content:	15.9	Gallons			
Fuel:	Natural Gas or LP Gas				
Firing Rate:	Reliable Modulation				
Burner Turndown:	3:1				
Low NOx Emissions:	<10 ppm				
1 1 1 0 5 () 10)					

Inlet Gas Pressure (NG):
See Chart at right
Inlet Gas Pressure (LP):
See Chart at right

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.)

1,097

UL Certified to ANSI Z21.13 / CSA 4.9

UL Certified to UL 795 / CSA 3.1



lbs

DIMENSIONS	/ CONNECTIONS	
Height:	60 15/16"	(Note 1)
Width:	28 3/8"	(Note 2)
Length:	30 3/8"	(Note 3)
Supply Connection:	3"	
Return Connection:	3"	
Vent / Air Intake Connections:	4" Vent	6" Intake
Condensate / Appliance Drain Connection:	5/8" Condensate Tube	1" NPT Drain
Gas Connection:	1"	

NOTES:
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	△P (Ft. Hd)				
20°F△T	62 (Max)	1.81			
40°F△T	31 (Min)	0.46			

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. 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.	14.0" w.c.		
1500	7.0" 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.

 $^{^{}st}$ This data supercedes data found on Table 3 of I&O Manual, per PRODUCT UPDATE issued June 6, 2024.



Submittal Data Sheet

STAN		OPTIONAL EQUIPMENT				
PRESSURE VESSEL DESIGN	<u>BOILER EQUIPMENT</u>		Low gas pressure	======================================	AVAILABLE OI	VLY on Models
Copper Fin-tube construction	Siemens RWF55 operating control	1 '	750-2000) [FACTORY INSTALLED OPTION ONLY] Line Reactor Adds voltage / spike protection for the blower			
Carbon steel or cast iron header design	High limit w/ manual reset safety temperature control	\mathbb{I}_{\neg}				
Gasketless heat exchanger	Water flow switch	\mathbb{I}^{-}	VFD. (<u>Highly recomn</u>			•
ASME Section IV certified "H" stamp	Low water cut-off with manual reset safety controller		Honeywell 7800) Series display [,]	with ModBı	ıs Module
MAWP 160 PSI & max design temp 250°F	Outlet temperature sensor		Line Reactor Add	ds voltage / spike	protection	for the blower's
5-year heat exchanger warranty	Combustion air switch		VFD. (<u>Highly recomn</u>	nended for areas wit	th dirty voltage	.)
20-year thermal shock warranty	Pressure and temperature gauge		Outdoor Air Ser	nsor		
	Safety relief valve (Optional pressuress 30 - 150 PSI; See details		Condensate neu	utralizer:		
COMBUSTION DESIGN	above.)			→ 850 MBH	!	☐ 1,200 MBH
Maintenance-free ceramic burner	Single point electrical supply: (Available in: 1 and 3 phase			☐ 2,000 MBH	ľ	☐ 5,000 MBH
Ultr-low NOx emissions (<10ppm)	options. See details above.)	\mathbb{L}_{-}	Pump Kit (Boiler C), Pump Flan	ge Kit Sized
Whisper quet operation (<50 dBA)	BURNER EQUIPMENT	▮▫	based on a 20°F	Delta T		
Easy to service, 99% efficient industrial air filter	UL/FM/CSD-1 gas train		Annual Mainter	nance Kit		
Industrial cast aluminum blower assembly	Reliable Turndown		System Tempero	ature Sensor		
VFD Driven Blower	ven Blower Natural or LP gas ModBus RS485 communication for Siem					ns RWF55 and
Reliable electric spark-to-pilot ignition	Pilot gas valve / Pilot gas regulator		Honeywell Flam	ne Safeguard C	Control (Boile	er to BMS
10-year burner warranty	Siemens SKP-75 gas valve		Universal comm	ns. gtwy (BACnet i	MS/TP, BACnet/	IP, N2, Modbus TCP)
Honeywell UV-Scanner	Low and high gas pressure switches with manual reset		Local / remote switch			
			Alarm bell with	silencing switch	h	
<u>VENTING</u>	SIEMENS RWF55 OPERATING CONTROL FEATURES		Relays:	General Alarm	Í	■ Boiler Status
Sealed or room air combustion	Adjustable set point	1 _	Conductor Sequen			A applications
Direct vent (sidewall or vertical) (Cat IV)	Remote set point (0-10v or 4-20 mA)		without BMS. Cont	act your RSM with	Questions.)	
Conventional venting (Cat II)	Outdoor air temperature reset		Conductor Sequen			
Outdoor vent termination kit			condensing, small ers (full modulation			
NOTE: This is NOT a Cat 1 Vent appliance.			s improve system			
			boiler to match o			
IMPORTANT NOTE: For installation and oper	ation only in climates where the ambient temperature will not		e point boiler plant			
•	e protected from standing water. Install on a level platform.		ding Modbus TCP/ standard. If Lonw			
, , , ,	verhang less than 3 feet from its top. The area under the		way.	roiks ficeaca, at	JG 101 111C 3C	parate conworks
overhang must be open on 3 sides. Never in	·		•			
eventaring most be open on a sides. The verification	israil all certy erreal perca hearing.					
			Extended V	Warranty Op		
				<u>3-Year</u>	<u>5-Year</u>	<u>10 Year</u>
			<u>Parts Only</u>			
			<u>Parts and Labor</u>	N/A		