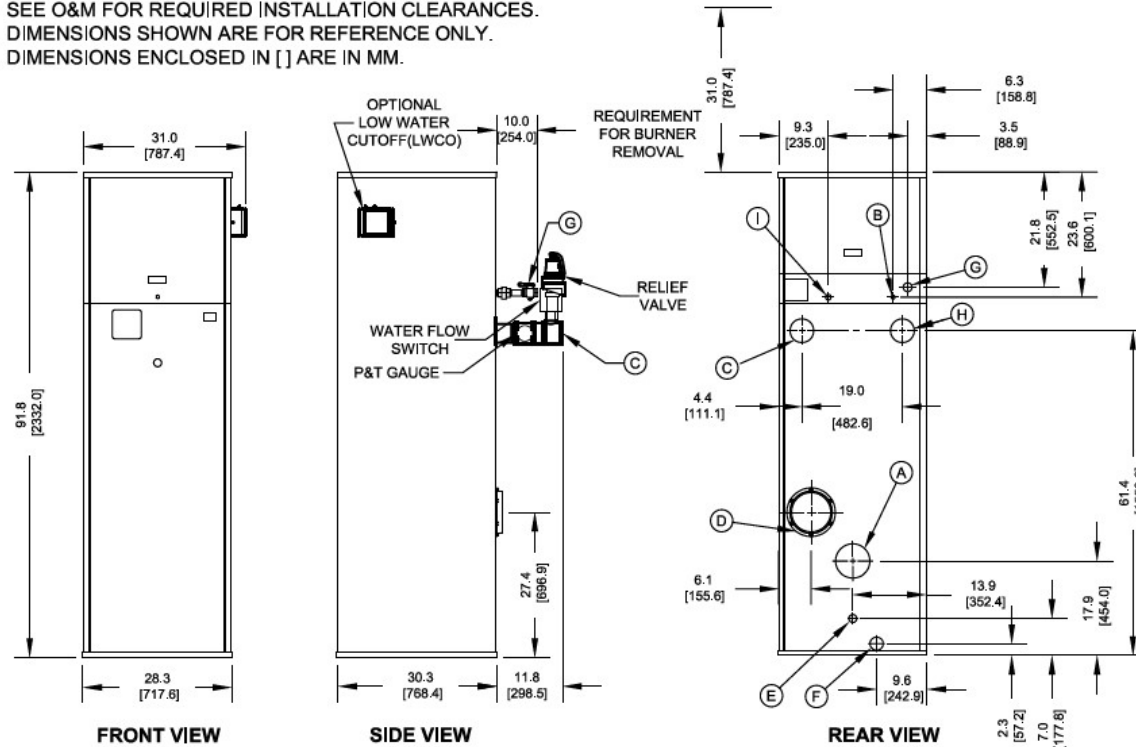NOTES:
1. SEE O&M FOR REQUIRED INSTALLATION CLEARANCES.
2. DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.
3. DIMENSIONS ENCLOSED IN [ ] ARE IN MM.

OPTIONAL LOW WATER CUTOFF(LWCO)

REQUIREMENT FOR BURNER REMOVAL

RELIEF VALVE

WATER FLOW SWITCH

P&T GAUGE

FRONT VIEW

31.0 [787.4]
91.8 [2332.0]
28.3 [717.6]

SIDE VIEW

10.0 [254.0]
27.4 [696.9]
30.3 [768.4]
11.8 [298.5]

REAR VIEW

31.0 [787.4]
6.3 [158.8]
9.3 [235.0]
3.5 [88.9]
21.8 [552.5]
23.6 [600.1]
4.4 [111.1]
19.0 [482.6]
61.4 [1558.9]
6.1 [155.6]
13.9 [352.4]
17.9 [454.0]
9.6 [242.9]
2.3 [57.2]
7.0 [177.8]

KEY	DESCRIPTION	
A	Flue Outlet	6" [152.4] Diameter (AL29-4C SS)
B	Factory Installed Pilot Gas Li	1/4" [6/4] O.D. Tube
C	Water Supply to System	3" 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	1 1/2" NPT
H	Water Return from System	3" NPT
I	Optional Gas Train Vent	3/4" NPT (D.B.&B & D.B.&B w/ POC Only)

NOTES:
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THERMAL SOLUTIONS®
Innovative Equipment for Hot Water Systems
PO BOX 3244 | LANCASTER, PA 17601

EVA-2000

INNOVATIVE EQUIPMENT FOR HOT WATER SYSTEMS
WWW.THERMALSOLUTIONS.COM

Updated: 8/25/2025

EVSUBM250803

1

Submittal **D**ata **S**heet

THERMAL SOLUTIONS®
Innovative Equipment for Hot Water Systems

RATINGS AND CAPACITIES

Input (MBH):	**2,000,000**	BTU/HR
Output (MBH):	**1,696,000**	BTU/HR
Boiler Horsepower:	**50.7**	BTU/HR
Thermal Efficiency:	**84.8%**	BHP
Heating Surface:	**352**	Sq.Ft.
Water Content:	**18.5**	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 Manual, per PRODUCT UPDATE issued June 6, 2024.

Shipping Weight, Approximate:	**1,461**	lbs

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.)

UL Certified to ANSI Z21.13 / CSA 4.9

UL Certified to UL 795 / CSA 3.1

DIMENSIONS / CONNECTIONS

Height:	**91 7/8"**	(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**	**8" Intake**
Condensate / Appliance Drain Connection:	**5/8" Condensate Tube**	**1" NPT Drain**
Gas Connection:	**1 1/2"**	

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	Flow (GPM)	△P (Ft. Hd)
20°F△T	**170** *(Max)*	**13.27**
40°F△T	**85** *(Min)*	**3.32**

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.*		
1500	7.0" w.c.*		14.0" w.c.
2000	9.0" w.c.*	9.0" 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

STANDARD EQUIPMENT

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)
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
Direct vent (sidewall or vertical) (Cat IV)
Conventional venting (Cat II)
NOTE: This is NOT a Cat 1 Vent appliance.

BOILER EQUIPMENT

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

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
Remote set point (0-10v or 4-20 mA)
Outdoor air temperature reset

OPTIONAL EQUIPMENT

☐ Low gas pressure venturi, 4" wc (AVAILABLE ONLY on Models 750-2000) [FACTORY INSTALLED OPTION ONLY]
☐ Line Reactor Adds voltage / spike protection for the blower's VFD. (*Highly recommended for areas with dirty voltage*.)
☐ Honeywell 7800 Series display with ModBus Module
Line Reactor Adds voltage / spike protection for the blower's VFD. (*Highly recommended for areas with dirty voltage*.)
☐ Outdoor Air Sensor
☐ Condensate neutralizer:
    ☐ 850 MBH   ☐ 1,200 MBH
    ☐ 2,000 MBH   ☐ 5,000 MBH
☐ Pump Kit (Boiler Circulation Pump, Pump Flange Kit Sized based on a 20°F Delta T
☐ Annual Maintenance Kit
☐ System Temperature Sensor
☐ ModBus RS485 communication for Siemens RWF55 and Honeywell Flame Safeguard Control (Boiler to BMS System)
☐ Universal comms. gtwy (BACnet MS/TP, BACnet/IP, N2, Modbus TCP)
☐ Local / remote switch
☐ Alarm bell with silencing switch
☐ Relays: ☐ General Alarm   ☐ Boiler Status
☐ Conductor Sequencing Panel: Req. for multiple EVA applications without BMS. Contact your RSM with Questions.)

The Conductor Sequencing Panel manages multiple condensing & non-condensing, small & large heat output, new and/or existing boilers (full modulation), and steam or hot water applications. It helps improve system efficiency by selecting and modulating the right boiler to match operating conditions. The Conductor offers a single point boiler plant Energy Management System (EMS) interface including Modbus TCP/IP, Modbus RTU RS485, BACnet/IP and BACnet MSTP standard. If Lonworks needed, add for the separate Lonworks gateway.

Extended Warranty Options Available:

	3-Year	*5-Year*	*10 Year*
Parts Only	☐	☐	☐
Parts and Labor	N/A	☐	☐