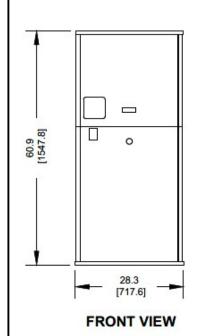
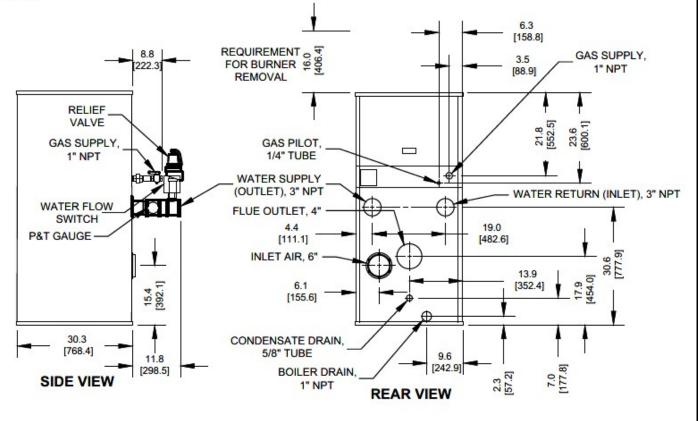


Submittal Data Sheet

NOTES:

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







EVO-750

INNOVATIVE EQUIPMENT FOR HOT WATER SYSTEMS

WWW.THERMALSOLUTIONS.COM

Updated: 10/10/25



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

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. ("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.

 $^{^{}st}$ 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 | BOILER EQUIPMENT | | Low gas pressure | venturi, 4" wc (A | VAILABLE ONI | LY on Models | |
| Copper Fin-tube construction | Siemens RWF55 operating control | ┨ □ | 750-2000) [FACTO | | | | |
| Carbon steel or cast iron header design | High limit w/ manual reset safety temperature control | | Line Reactor Adds voltage / spike protection for the | | | | |
| Gasketless heat exchanger | Water flow switch | | VFD. (Highly recomm | nended for areas wit | h dirty voltage .) | | |
| ASME Section IV certified "H" stamp | Low water cut-off with manual reset safety controller | | Honeywell 7800 | Series display | with ModBus | Module | |
| MAWP 160 PSI & max design temp 250°F | Outlet temperature sensor | | Line Reactor Add | | | or the blower's | |
| 5-year heat exchanger warranty | Combustion air switch | | VFD. (Highly recomm | nended for areas wit | h dirty voltage .) | | |
| 20-year thermal shock warranty | Pressure and temperature gauge | | Outdoor Air Sen | | | | |
| | Safety relief valve (Optional pressuress 30 - 150 PSI; See details | | Condensate neu | | | | |
| <u>COMBUSTION DESIGN</u> | above.) | | | 3 850 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) | options. See details above.) | lacksquare | Pump Kit (Boiler C | | , Pump Flang | e Kit Sized | |
| Whisper quet operation (<50 dBA) | BURNER EQUIPMENT | | based on a 20°F I | Delta I | | | |
| 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 | Natural or LP gas | | ModBus RS485 cc | mmunication fo | r Siemens RW | F55 and | |
| Reliable electric spark-to-pilot ignition | Pilot gas valve / Pilot gas regulator | \mathbb{I}^{-} | Honeywell Flame Safeguard Control (Boiler to BMS System | | | | |
| 10-year burner warranty | Siemens SKP-75 gas valve | | Universal comms. gtwy (BACnet MS/TP, BACnet/IP, N2, Modbo | | | , N2, Modbus TCP) | |
| Honeywell UV-Scanner | Low and high gas pressure switches with manual reset | | ☐ Local / remote switch | | | | |
| | | | Alarm bell with: | silencing switch | า | | |
| <u>VENTING</u> | SIEMENS RWF55 OPERATING CONTROL FEATURES | | Relays: | General Alarm | | Boiler Status | |
| Sealed or room air combustion | Adjustable set point | | Conductor Sequen | | | applications | |
| Direct vent (sidewall or vertical) (Cat IV) | Remote set point (0-10v or 4-20 mA) | | without BMS. Conto | | | | |
| 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. | | | boilers (full modulation), and steam or hot water applications. It helps improve system efficiency by selecting and modulating the | | | | |
| | | | boiler to match o | | | | |
| IMPORTANT NOTE: For installation and opera | ation only in climates where the ambient temperature will no | single | e point boiler plant | Energy Manage | ement System | (EMS) interface | |
| | e protected from standing water. Install on a level platform. | | standard. If Lonw | | | | |
| , , , , , | rerhang less than 3 feet from its top. The area under the | II . | | | • | | |
| overhang must be open on 3 sides. Never in | · · · · · · · · · · · · · · · · · · · | | | | | | |
| | | | Extended V | Varranty Op | tions Avai | ilable: | |
| | | | Exicilaca V | 3-Year | 5-Year | 10 Year | |
| | | | Parts Only | <u> </u> | | | |
| | | | Parts and Labor | N/A | | | |