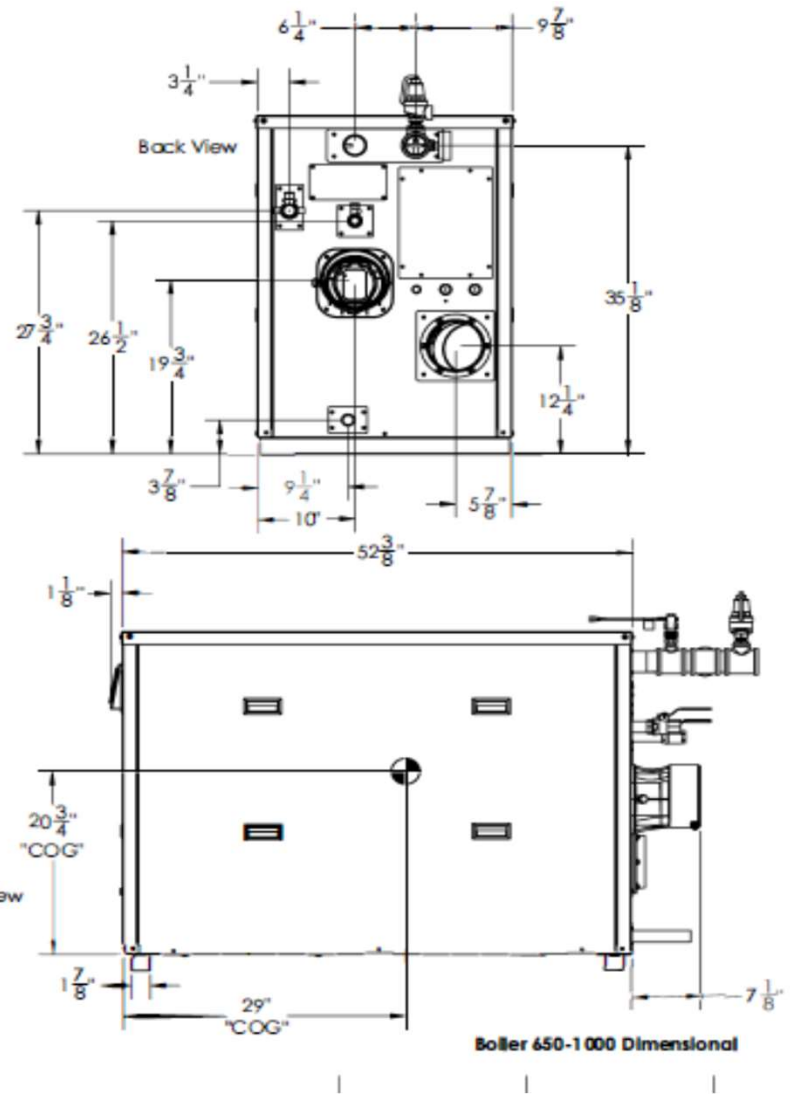
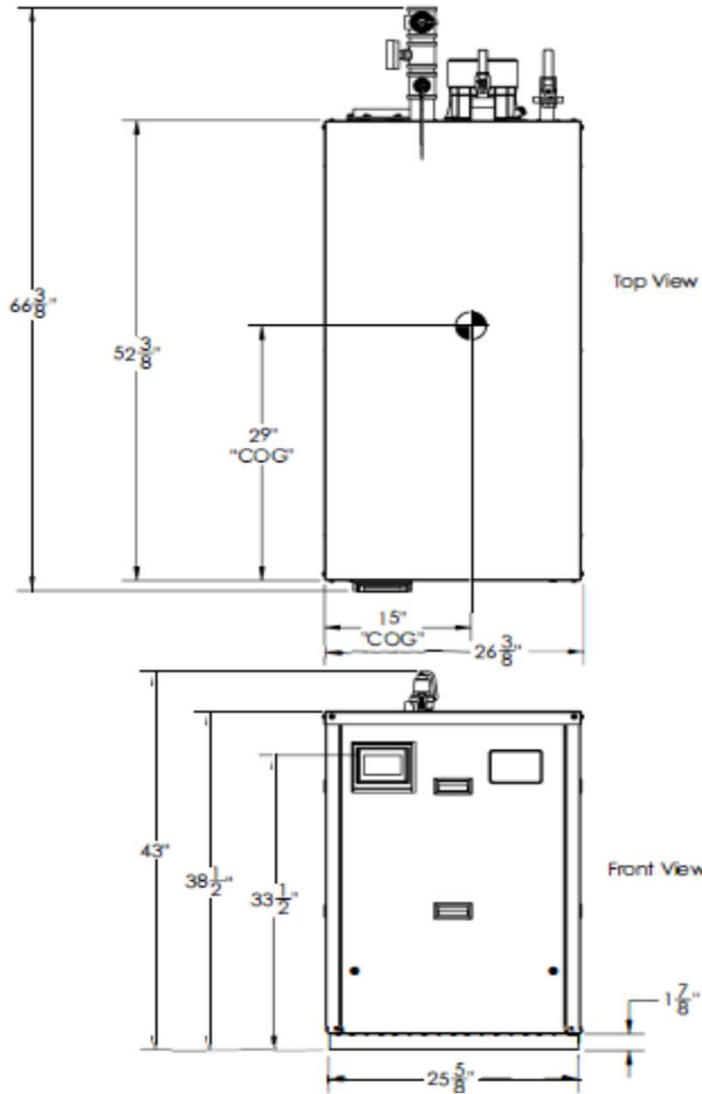


AMP-L CONDENSING BOILERS - SUBMITTAL DATA SHEET



AMP-L CONDENSING BOILERS - SUBMITTAL DATA SHEET

| RATINGS AND CAPACITIES | | |
|--|------------------------------|---------|
| Input - Low fire: | 99,900 | BTU/HR |
| Input - High Fire: | 999,000 | BTU/HR |
| Output - High Fire: | 969,030 | BTU/HR |
| Boiler Horsepower: | 28.9 | BHP |
| Thermal Efficiency: | 97.0% | |
| Heating Surface: | 75.4 | Sq.Ft. |
| Water Content: | 8.1 | Gallons |
| Fuel: | Natural Gas or LP Gas | |
| Firing Rate: | Full Modulation | |
| Burner Turndown: | 10:1 | |
| Low NOx Emissions: | < 10 ppm | |
| Inlet Gas Pressure (NG): | 4" wc | Min. |
| Inlet Gas Pressure (LP): | 8" wc | Min. |
| | 14" wc | Max. |
| Shipping Weight, Approximate: | 600 | lbs |
| ASME Section IV (Max 160 PSIG / 210°F) | | |
| Setpoint range is 60-185°F | | |
| Adjustable, manual reset high limit setting of ≤ 200°F. | | |
| ASME H stamp MAWT is 210°F for the vessel. (For max setpoint, see Setpoint range.) | | |
| ETL Certified to ANSI Z21.13 / CSA 4.9 | | |
| ETL Certified to UL 795 / CSA 3.1 | | |



| FLOWS AND PRESSURE DROPS | | |
|--------------------------|------------|--------------|
| Delta T | Flow (GPM) | r P (Ft. Hd) |
| 20°F Δ T | 97 | 14.6 |
| 30°F Δ T | 65 | 7.2 |
| 40°F Δ T | 49 | 4.4 |

DIMENSIONS / CONNECTIONS

| | | |
|---------------------------------------|----------------|----------|
| Height: | 38-1/2" | (Note 1) |
| Width: | 26-3/8" | (Note 2) |
| Length: | 52-3/8" | (Note 3) |
| Supply Connection: | 2" NPT | |
| Return Connection: | 2" NPT | |
| Vent / Air Intake Connections: | 6" | |
| Condensate / Boiler Drain Connection: | 1" | |
| Gas Connection: | 1" NPT | |

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

AMP-L CONDENSING BOILERS - SUBMITTAL DATA SHEET

STANDARD EQUIPMENT

PRESSURE VESSEL DESIGN

Stainless Steel Heat Exchanger
 ASME Section IV Certified, "H" Stamp
 MAWP 160 PSIG & Max Temp 210°F
 Setpoint range is 60-185°F
 Adjustable, manual reset high limit setting of ≤ 200°F.
 ASME H stamp MAWT is 210°F for the vessel. (For max setpoint, see Setpoint range.)
 Ten Year Limited Pressure Vessel Warranty

COMBUSTION DESIGN

Stainless Steel Pre-Mix Burner
 Low NOx Emissions (< 10 ppm)
 Full Modulation, 10:1 Turndown
 Natural Gas or Propane
 4" wc (8" wc Propane) to 14" wc inlet gas pressure
 Direct Spark Ignition System
 High/Low gas pressure switches, manual reset
 Variable Speed Combustion Blower
 Blocked Vent Switch

VENTING

Category II or IV Venting
 Individual or Common (Engineered) Vent System
 Vertical or Horizontal
 3-in-1 Vent Connector: Accepts CPVC, PP or Stainless Steel
 Includes built-in vent gas sensor test port
 Combustion Air Intake - Sealed or Room

* Flue system material shall be capable of continuous operation at 210°F or higher and shall be certified to UL 1738 – venting system for gas-burning appliances cat II, III and IV.

BOILER EQUIPMENT

Concert™ Control (24 Vac)
 High Limit Temp Control, Manual Reset
 Low water cutoff, manual reset
 Water Flow Switch
 Supply & Return Water Temperature Sensors
 Flue Gas Temperature Sensor
 Condensate trap
 Blocked Condensate Switch
 Pressure & Temperature Gauge
 ASME Relief Valve
 (Available 30, 50, 60, 75,100, 125 or 150 psig)

ELECTRICAL DESIGN

Models 400-500:

- 120 VAC Only
 Amp Draw: 7.0 Amps

Models 650-1000L:

- 120 VAC Only
 Amp Draw: 8.0 Amps
 - PCB (Printed Circuit Board) Fused Connections

24VAC/5VDC - Low Voltage PCB

- EMS Communications
 (Dual RJ45 Jacks for Peer-To-Peer or ModBus)
 - Boiler Options (Sensors)
 - Pumps (Boiler, DHW, System) & Auxiliary Devices

OPTIONAL EQUIPMENT

- Hydronic Kit (Boiler Circulation Pump, Pump Flange Kit and Condensate Neutralizer)
- External High Limit Temperature Control, Manual Reset
- Condensate Neutralizer
- Supply Header Temperature Sensor:

| | |
|--------------------------|------------------|
| <input type="checkbox"/> | Direct Immersion |
| <input type="checkbox"/> | Wired |
- Outdoor Air Temperature Sensor:

| | |
|--------------------------|----------------------------|
| <input type="checkbox"/> | Well Immersion (with Well) |
| <input type="checkbox"/> | Wireless |
- EMS Signal Converter Kit (Converts Energy or Building Management System 0-10v signal to 4-20mA)
- Motorized Isolation Valves
- Alarm Buzzer with Silencing Switch
- PVC Starter Kit
- Universal Communications Gateway (BACnet, Metasys, Modbus or Lonworks)
- Conductor Sequencing Panel

The Conductor manages multiple condensing & non-condensing, small & large heat output, new and/or existing boilers (full modulation or on-off), 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

3-Year Parts

5-Year Parts

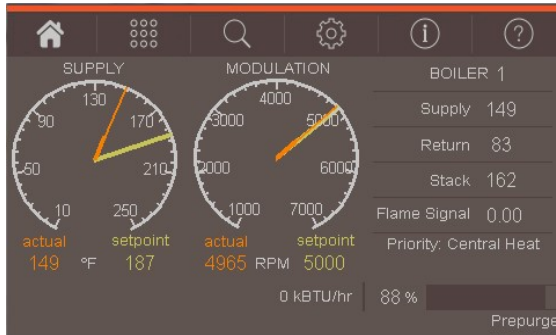
10-Year Parts

5-Year Parts/Labor

10-Year Parts/Labor

AMP-L CONDENSING BOILERS - SUBMITTAL DATA SHEET

CONCERT CONTROL FEATURES



Dashboard - Color Touchscreen Display, 4"

- Intuitive Icon Navigation
- "Quick" Setup Menus
- *Real Time BTU/H Display

Two (2) Temperature Demand Inputs

- Outdoor Air Reset Curve for Each Input
- Time of Day Setback Capability
- (Envirocom Thermostat must be installed)

Three (3) Pump Control

- Boiler Pump With On/Off or Variable Speed Control
- Domestic Hot Water (DHW) Pump
- System Pump
- Alternative Control to Combustion
 - Air Damper or Standby Loss Damper
- Pump Overrun for Heat Dissipation
- Pump Exercise
- Pump Rotor Seizing Protection

Peer-to-Peer Boiler Communications

- Multiple Size Boiler Sequencing Up to 8 Units
- *Two (2) Boiler Start/Stop Trigger
- Lead Boiler Automatic Rotation

Energy Management System (EMS) Interface

- *Firing Rate and Water Temperature Based Algorithms for Multiple Boilers; loss of EMS signal defaults to local boiler settings
- 420mAdc Input/Output (010Vdc Optional Converter)
- ModBus Input/Output (BACnet or LonWorks Optional Gateway)
- Simultaneous Interface with PeertoPeer

USB Data Port Transfer

- Upload Settings Between Boilers
- Download Parameters for Troubleshooting
- Import Data into .CRV Formatted Files for Performance Analysis

* Unique to Concert



Energy Efficiency Enhancer

- AntiCycling Technology
- Multiplier boiler base load common rate
- Outdoor Air Temperature Reset Curve
- Warm Weather Shutdown
- Boost Temperature & Time
- Ramp Delay
- OverTemperature Safeguarding

Self-Guiding Diagnostics

- Identifies Fault
- Describes Possible Problems
- Provides Corrective Actions
- Time/Date Stamp on Alarms and Lockouts

Unmatched Archives

- Historical Trends Collects Up to 4 months Data
- Event History Up to 3000 Alarms, Lockouts and Cycle & Run Times
- Alarm Limit String Faults, Holds, Lockouts and Others
- Cycle & Run Time Boilers & Pumps
- Resettable (Lockouts/Alarms/Cycles & Run Time)

Domestic Hot Water Priority

- DHW Tank Piped With Priority in the Boiler Loop
- DHW Tank Piped as a Zone in the System With the Pumps Controlled by the Concert Control
- DHW Modulation Limiting
- Status Screens
- Sensor Monitoring and Control

Other Features

- Factory Default Settings
 - Three Level Password Security
 - Frost Protection
- Contractor Contacts (Up to 3)
- Low Water Flow Safety Control & Indication
- Proportion Integral Derivative (PID) Parameters for Central Heat, DHW, Sequencer and Fan