SUBMITTAL DATA SHEET

JOB NAME: _____ DATE: _____

LOCATION: _____

ENGINEER: _____

WHOLESALER: _____

CONTRACTOR: _____

SUBMITTED TO: _____

MODEL DESIGNATION: _____ FUEL: _____

CHECK ONE:

_____ REFERENCE (NOT FOR PRODUCTION)

_____ APPROVED (IMMEDIATE PRODUCTION)

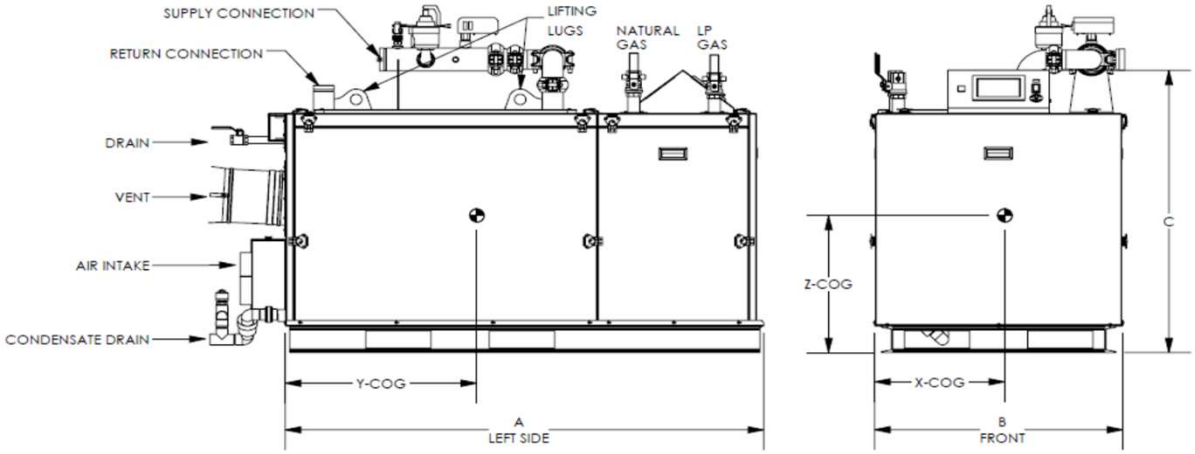
_____ APPROVED WITH CHANGES NOTED (IMMEDIATE PRODUCTION)

RATINGS AND TECHNICAL DATA

MODELS	INPUT MIN (MBH)	INPUT MAX (MBH)	GROSS OUPUT (MBH)	THERMAL EFFICIENCY (%)	HEATING SURFACE (SQ/FT)	WATER CONTENT (GAL.)	*FUEL NAT. GAS MIN / MAX	*FUEL PROPANE MIN / MAX	SHIPPING WEIGHT (LBS)
AMPW-1000	200	999	970	97.0%	100	12.0	4"/14"wc	8"/14"wc	922
AMPW-1250	250	1250	1213	97.0%	100	12.0	4"/14"wc	8"/14"wc	922
AMPW-1500	300	1500	1455	97.0%	120	13.9	4"/14"wc	8"/14"wc	1217
AMPW-2000	400	1999	1940	97.0%	153	17.2	4"/14"wc	8"/14"wc	1217
AMPW-2500	500	2500	2425	97.0%	301	34.6	4"/14"wc	8"/14"wc	2281
AMPW-3000	600	3000	2910	97.0%	301	34.6	4"/14"wc	8"/14"wc	2281
AMPW-3500	700	3500	3395	97.0%	403	47.1	4"/14"wc	8"/14"wc	2581
AMPW-4000	800	3999	3880	97.0%	403	47.1	4"/14"wc	8"/14"wc	2581

*Single or Dual Fuel Options

DIMENSIONS



MODELS	"A" LENGTH (Inches)	"B" WIDTH (Inches)	"C" HEIGHT (Inches)	VENT / AIR INTAKE SIZE (Inches)	VENT / AIR INTAKE EQUIV. LENGTH (Ft.)	GAS (Inches)	SUPPLY Grooved Connection (Inches)	RETURN Grooved Connection (Inches)
AMPW-1000	45-1/2"	34-1/4"	42-3/4"	8	Up to 300	1 NPT	3	2-1/2
AMPW-1250	45-1/2"	34-1/4"	42-3/4"	8	Up to 300	1 NPT	3	2-1/2
AMPW-1500	66-1/8"	34-1/4"	42-3/4"	8	Up to 300	** 1-1/4 NPT	3	2-1/2
AMPW-2000	66-1/8"	34-1/4"	42-3/4"	8	Up to 200	1-1/4 NPT	3	2-1/2
AMPW-2500	75-5/8"	46"	54-7/8"	10	Up to 300	1-1/2 NPT	4	4
AMPW-3000	75-5/8"	46"	54-7/8"	10	Up to 300	1-1/2 NPT	4	4
AMPW-3500	97-1/8"	46"	54-7/8"	12	Up to 300	2 NPT	4	4
AMPW-4000	97-1/8"	46"	54-7/8"	12	Up to 300	2 NPT	4	4

** Propane is 1" NPT

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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 HLW stamp MAWT is 210°F for the vessel.
    - (For max setpoint, see Setpoint range.)
- Five Year Limited Heat Exchanger Warranty
- Ten Year Limited Pressure Vessel Warranty

COMBUSTION DESIGN

- Stainless Steel Pre-Mix Burner
- Low NOx Emissions (< 10 ppm)
- Full Modulation, 5:1 Turndown
- Natural Gas, Propane or Dual Fuel (Gas/Gas)
- 4" wc (8" wc Propane) to 14" wc inlet gas pressure
- Direct Spark Ignition System with UV Scanner
- High/Low gas pressure switches, manual reset
- Zero governor gas valve
- Variable Speed Combustion Blower
- Air Proving Switch
- Blocked Vent Switch
- Manual fuel changeover switch (Dual Fuel Only)

VENTING

- Category II or IV Venting
- Indivdual or Common (Engineered) Vent System
- Vertical or Horizontal
- CPVC, PP or SS Venting *Materials Acceptable
- Combustion Air Intake - Sealed or Room

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 Temperature & Pressure Safety Relief Valve, 150 psi

ELECTRICAL DESIGN

Models 1000-2500:

- 120-208-230VAC/60HZ/1PH - High Voltage
  (1500 to 2500 - Optional 208-230-460VAC/60HZ/3PH)

Models 3000:

- 208-230-240VAC/60HZ/1PH - High Voltage
- 208-230-240-460VAC/60HZ/3PH - High Voltage

Models 3500-4000:

- 208-230-240-460VAC/60HZ/3PH - High Voltage
- 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

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

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: ☐ Direct Immersion ☐ Well Immersion (with Well)

_____ Outdoor Air Temperature Sensor: ☐ Wired ☐ 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

_____ Gas Valve Proving Switch

_____ Vent Adapter - CPVC

_____ Universal Communications Gateway (BACnet, Metasys, Modbus or Lonworks)

_____ Stackable Rack

_____ 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-Yr. Prts/Lbr. ☐ 10 Yr. Prts/Lbr

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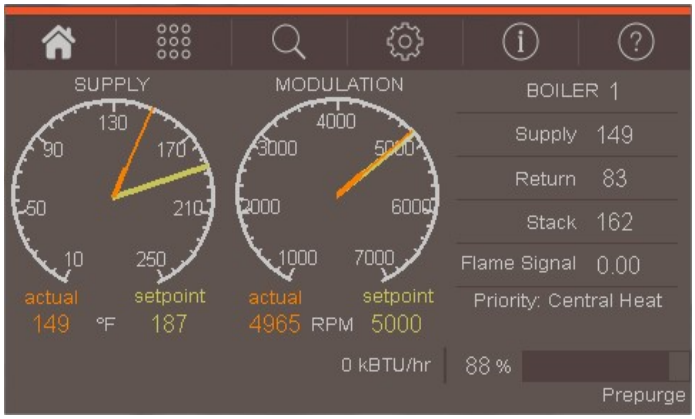
CONCERT CONTROL FEATURES



Dashboard - Color Touchscreen Display, 7"
- 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 (Enviracom Thermastat 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 Isolation Valve, Combustion Air Damper or Standby Loss Damper
- Pump Overun 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
- 4-20mAdc Input/Output (0-10Vdc Optional Converter)
- ModBus Input/Output (BACnet or LonWorks Optional Gateway)
- Simultaneous Interface with Peer-to-Peer

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

Energy Efficiency Enhancer
- Anti-Cycling Technology
- Multipler boiler base load common rate
- Outdoor Air Temperature Reset Curve
- Warm Weather Shutdown
- Boost Temperature & Time
- Ramp Delay
- Over-Temperature 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, DWH, Sequencer and Fan
- Built-in Brown-Out Protection

* Unique to Concert