**RATINGS AND TECHNICAL DATA**

<table>
<thead>
<tr>
<th>MODELS</th>
<th>INPUT MIN (MBH)</th>
<th>INPUT MAX (MBH)</th>
<th>GROSS OUTPUT MIN (MBH)</th>
<th>GROSS OUTPUT MAX (MBH)</th>
<th>THERMAL EFFICIENCY (%)</th>
<th>*DHW EFF.</th>
<th>WATER CONTENT (GPH)</th>
<th>NAT. GAS MIN / MAX</th>
<th>PROPER MIN / MAX</th>
<th>SHIPPING WEIGHT (LBS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMPW-1000</td>
<td>200</td>
<td>1000</td>
<td>980</td>
<td>980</td>
<td>98.0%</td>
<td>1188</td>
<td>12.0</td>
<td>4&quot;/14&quot;wc</td>
<td>8&quot;/14&quot;wc</td>
<td>2038</td>
</tr>
<tr>
<td>AMPW-1250</td>
<td>250</td>
<td>1250</td>
<td>1225</td>
<td>1225</td>
<td>98.0%</td>
<td>1485</td>
<td>12.0</td>
<td>4&quot;/14&quot;wc</td>
<td>8&quot;/14&quot;wc</td>
<td>2038</td>
</tr>
<tr>
<td>AMPW-1500</td>
<td>300</td>
<td>1500</td>
<td>1470</td>
<td>1470</td>
<td>98.0%</td>
<td>1782</td>
<td>13.9</td>
<td>4&quot;/14&quot;wc</td>
<td>8&quot;/14&quot;wc</td>
<td>2038</td>
</tr>
<tr>
<td>AMPW-2000</td>
<td>400</td>
<td>2000</td>
<td>1960</td>
<td>1960</td>
<td>98.0%</td>
<td>2376</td>
<td>17.2</td>
<td>4&quot;/14&quot;wc</td>
<td>8&quot;/14&quot;wc</td>
<td>2038</td>
</tr>
<tr>
<td>AMPW-2500</td>
<td>500</td>
<td>2500</td>
<td>2450</td>
<td>2450</td>
<td>98.0%</td>
<td>2970</td>
<td>36.4</td>
<td>4&quot;/14&quot;wc</td>
<td>8&quot;/14&quot;wc</td>
<td>2038</td>
</tr>
<tr>
<td>AMPW-3000</td>
<td>600</td>
<td>3000</td>
<td>2940</td>
<td>2940</td>
<td>98.0%</td>
<td>3564</td>
<td>36.4</td>
<td>4&quot;/14&quot;wc</td>
<td>8&quot;/14&quot;wc</td>
<td>2485</td>
</tr>
<tr>
<td>AMPW-3500</td>
<td>700</td>
<td>3500</td>
<td>3430</td>
<td>3430</td>
<td>98.0%</td>
<td>4158</td>
<td>47.1</td>
<td>4&quot;/14&quot;wc</td>
<td>8&quot;/14&quot;wc</td>
<td>2485</td>
</tr>
<tr>
<td>AMPW-4000</td>
<td>800</td>
<td>4000</td>
<td>3920</td>
<td>3920</td>
<td>98.0%</td>
<td>4752</td>
<td>47.1</td>
<td>4&quot;/14&quot;wc</td>
<td>8&quot;/14&quot;wc</td>
<td>2485</td>
</tr>
</tbody>
</table>

* Temperature Rise from 40°F to 140°F
** Single or Dual Fuel Options

**DIMENSIONS**

<table>
<thead>
<tr>
<th>MODELS</th>
<th>&quot;A&quot; LENGTH (Inches)</th>
<th>&quot;B&quot; WIDTH (Inches)</th>
<th>&quot;C&quot; HEIGHT (Inches)</th>
<th>VENT / AIR INTAKE SIZE (Inches)</th>
<th>EQUIV. LENGTH (FL)</th>
<th>GAS (Inches)</th>
<th>SUPPLY RETURN</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMPW-1000</td>
<td>45-1/2&quot;</td>
<td>34-1/4&quot;</td>
<td>42-3/4&quot;</td>
<td>8</td>
<td>Up to 300</td>
<td>1 NPT</td>
<td>Grooved Connection (Inches)</td>
</tr>
<tr>
<td>AMPW-1250</td>
<td>45-1/2&quot;</td>
<td>34-1/4&quot;</td>
<td>42-3/4&quot;</td>
<td>8</td>
<td>Up to 300</td>
<td>1 NPT</td>
<td>3 2-1/2</td>
</tr>
<tr>
<td>AMPW-1500</td>
<td>66-1/8&quot;</td>
<td>34-1/4&quot;</td>
<td>42-3/4&quot;</td>
<td>8</td>
<td>Up to 300</td>
<td>&quot;*** 1-1/4 NPT&quot;</td>
<td>3 2-1/2</td>
</tr>
<tr>
<td>AMPW-2000</td>
<td>66-1/8&quot;</td>
<td>34-1/4&quot;</td>
<td>42-3/4&quot;</td>
<td>8</td>
<td>Up to 200</td>
<td>1-1/4 NPT</td>
<td>3 2-1/2</td>
</tr>
<tr>
<td>AMPW-2500</td>
<td>75-5/8&quot;</td>
<td>46&quot;</td>
<td>54-7/8&quot;</td>
<td>10</td>
<td>Up to 300</td>
<td>1-1/2 NPT</td>
<td>4 4</td>
</tr>
<tr>
<td>AMPW-3000</td>
<td>75-5/8&quot;</td>
<td>46&quot;</td>
<td>54-7/8&quot;</td>
<td>10</td>
<td>Up to 300</td>
<td>1-1/2 NPT</td>
<td>4 4</td>
</tr>
<tr>
<td>AMPW-3500</td>
<td>97-1/8&quot;</td>
<td>46&quot;</td>
<td>54-7/8&quot;</td>
<td>12</td>
<td>Up to 300</td>
<td>2 NPT</td>
<td>4 4</td>
</tr>
<tr>
<td>AMPW-4000</td>
<td>97-1/8&quot;</td>
<td>46&quot;</td>
<td>54-7/8&quot;</td>
<td>12</td>
<td>Up to 300</td>
<td>2 NPT</td>
<td>4</td>
</tr>
</tbody>
</table>

*** Propane is 1" NPT
PRESSURE VESSEL DESIGN
Stainless Steel Heat Exchanger
ASME Section IV Certified, "HLW" Stamp (1000 - 2000)
ASME Section IV Certified, "H" Stamp (2500 - 4000)
MAWP 160 PSIG & Max Temp 210°F
Five Year Limited Heat Exchanger Warranty
Ten Year Limited Pressure Vessel Warranty

WATER HEATER EQUIPMENT
Concert ™ Control (24 Vac)
High Limit Temp Control, Manual Reset
Low water cutoff, manual reset
Water Flow Switch
Supply, Return & DHW Water Temperature Sensors
Flue Gas Temperature Sensor
Condensate trap
Blocked Condensate Switch
Pressure & Temperature Gauge
ASME Temperature & Pressure Safety Relief Valve, 150 psi

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

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
- 208-230-240VAC/60HZ/3PH - High Voltage
Models 3500-4000:
- 208-230-240VAC/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

OPTIONAL EQUIPMENT

External High Limit Temperature Control, Manual Reset
Condensate Neutralizer
Hot Water Header Temperature Sensor: □ Direct Immersion □ Well Immersion (with Well)
EMS Signal Converter Kit (Converts Energy or Building Management System 0-10v signal to 4-20mA)
Alarm Buzzer with Silencing Switch
Gas Valve Proving Switch
Vent Adapter - CPVC or Polypropylene
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.

*B* 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.
CONCERT CONTROL FEATURES

Dashboard - Color Touchscreen Display, 4"
- Intuitive Icon Navigation
- "Quick" Setup Menus
- *Real Time BTU/H Display

Energy Efficiency Enhancer
- Anti-Cycling Technology
- Multiplier Unit Base Load Common Rate
- Boost Temperature & Time
- Ramp Delay
- Over-Temperature Safeguarding

Temperature Demand Inputs
- Time of Day Setback Capability
  (Enviracom Thermostat must be installed)

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

Two (2) Pump Control
- System Pump
- Alternative Control to Isolation Valve, Combustion
  Air Damper or Standby Loss Damper
- Pump Overrun for Heat Dissipation
- Pump Exercise
- Pump Rotor Seizing Protection

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 - Water Heaters & Pumps
- Resettable (Lockouts/Alarms/Cycles & Run Time)

Peer-to-Peer Boiler Communications
- Multiple Size Unit Sequencing Up to 8 Units
- Lead Boiler Automatic Rotation

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
  DWH, Sequencer and Fan
- Built-in Brown-Out Protection

Energy Management System (EMS) Interface
- *Firing Rate and Water Temperature Based Algorithms for Multiple Boilers; loss of EMS signal defaults to local settings
- 4-20mA 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 Units
- Download Parameters for Troubleshooting
- Import Data into .CRV Formatted Files for Performance Analysis

* Unique to Concert