AMPW1000-4000 240602



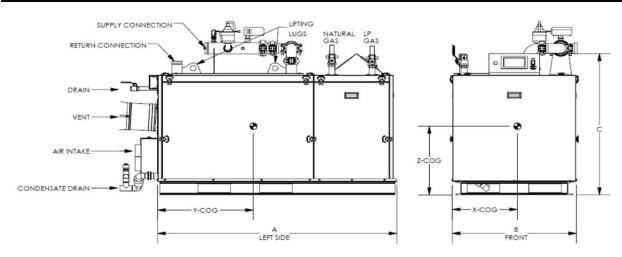
SUBMITTAL DATA SHEET

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									
	INF	TU	GROSS	THERMAL	HEATING	WATER	*FUEL		SHIPPING
	MIN	MAX	OUPUT	EFFICIENCY	SURFACE	CONTENT	NAT. GAS	PROPANE	WEIGHT
MODELS	(MBH)	(MBH)	(MBH)	(%)	(SQ/FT)	(GAL.)	MIN / MAX	MIN / MAX	(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



	"A"	"B"	"C"	VENT / AIR INTAKE			SUPPLY	RETURN
	LENGTH	WIDTH	HEIGHT	SIZE	EQUIV.	GAS	Grooved 0	Connection
MODELS	(Inches)	(Inches)	(Inches)	(Inches)	LENGTH (Ft.)	(Inches)	(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



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 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.

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		DPTION	AL EQUIPMENT		
	Hydronic Kit (Boiler Circulation Pump, Pu	mp Flanç	ge Kit and Condensate I	Neutralizer)	
	External High Limit Temperature Control,	Manual	Reset		
	Condensate Neutralizer				
	Supply Header Temperature Sensor:		Direct Immersion	☐ Well Immersion (with	ı Well)
	Outdoor Air Temperature Sensor:		Wired	Wireless	
	EMS Signal Converter Kit (Converts Energ	gy or Build	ding Management Syste	em 0-10v signal to 4-20mA)	
	Motorized Isolation Valves				
	Alarm Buzzer with Silencing Switch				
	Gas Valve Proving Switch				
	Vent Adapter - CPVC				
	Universal Communications Gateway (BA	Cnet, M	etasys, Modbus or Lonw	vorks)	
	Stackable Rack				
	Conductor Sequencing Panel The Conductor manages multiple condermodulation or on-off), and steam or hot the right boiler to match operating cond (EMS) interface including Modbus TCP/II add for the separate Lonworks gateway Extended Warranty	water apditions. The P, Modbu	oplications. It helps impr ne Conductor offers a si	ove system efficiency by sel ngle point boiler plant Energ	ecting and modulating y Management System
	3 Year Parts 5 Year Parts		10-Year Parts	5-Yr. Prts/Lbr.	☐ 10 Yr. Prts/Lbr



SUBMITTAL DATA SHEET

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
- * Unique to Concert

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

