



Lochinvar[®]
High Efficiency Water Heaters, Boilers and Pool Heaters

ARMOR
Condensing Water Heater
Submittal Sheet

AWP-Sub-08

ARMOR™ CONDENSING WATER HEATER PACKAGE SYSTEM

JOB NAME _____
LOCATION _____
ENGINEER _____
WHOLESALER _____
MECH. CONTRACTOR _____
MODEL NO. _____
TYPE GAS _____
Btu/hr INPUT _____
RECOVERY RATE IN GPH _____ @ _____ °F **RISE**
NOTES

STANDARD FEATURES

- › Up to 97% Thermal Efficiency
- › **Modulating Burner with 5:1 Turndown**
 - › Direct-Spark Ignition
 - › Low NOx Operation
 - › Sealed Combustion
 - › Low Gas Pressure Operation
- › **Vertical & Horizontal Direct-Vent**
 - › PVC, CPVC, Polypropylene or SS Venting up to 100 Feet
 - › PVC/CPVC Sidewall Vent Termination
- › **Stainless Steel Heat Exchanger**
 - › All Welded Construction, Gasketless Design
 - › 160 psi Working Pressure
 - › ASME Construction (AW 286-801)
- › Natural to L.P. Conversion Kit
- › All Bronze Circulating Pump
- › On/Off Switch
- › Flow Switch
- › ASME Temperature & Pressure Relief Valve (286-801)
- › Temperature & Pressure Gauge (AW 501-801)
- › Downstream Test Valves (AW 501-801)
- › Adjustable Leveling Legs
- › Tank Sensor
- › Adjustable High Limit w/ Manual Reset
- › Automatic Reset High Limit
- › Condensate Trap
- › Zero Clearances to Combustible Material
- › 5 Year Limited Warranty (See Warranty for Details)
- › 1 Year Parts Warranty (See Warranty for Details)

SMART SYSTEM FEATURES

- › **SMART SYSTEM Digital Operating Control**
- › Multi Color Graphic LCD Display
- › **Built in Cascading Sequencer for up to 8 Water Heaters**
 - › Lead Lag
 - › Efficiency Optimization
- › **Building Management System Integration**
 - › Modbus Communication (Optional)
 - › 0-10VDC Input to Control Modulation or Set point
 - › 0-10VDC Modulation Rate Output
 - › 0-10VDC Input to Enable/Disable call for heat
- › Access to BMS Settings Through Graphic LCD Display
- › Low Water Flow Safety Control & Indication
- › Inlet & Outlet Temperature Sensors & Readout
- › Flue Temperature Sensor
- › Water Heater Pump Control
- › Pump Delay with Freeze Protection
- › Pump Exercise
- › Night Setback
- › Building Recirculation loop Pump Control*
 - › Night Setback of Building Recirculation Loop*
- › Time Clock
- › **Maintenance Reminder**
 - › Ability to program name and number into the product as contact
- › **High Voltage Terminal Strip**
 - › 120 VAC / 60 Hertz / 1 Phase Power Supply
 - › Pump Control Contacts
 - › Water Heater Pump Control Contacts
 - › Building Recirculation Pump Control Contacts
- › **Low Voltage Terminal Strip**
 - › 24 VAC Auxiliary Device Relay
 - › Auxiliary Proving Switch Contacts
 - › Flow Switch Contacts
 - › Alarm on Any Failure Contacts
 - › Runtime Contacts
 - › Tank Sensor Contacts
 - › Cascade Contacts
 - › 0-10 VDC BMS External Control Contact
 - › 0-10VDC Boiler Rate Output Contacts
 - › Modbus Contacts

OPTIONAL EQUIPMENT

- › Alarm Bell
- › Condensate Neutralization Kit
- › High & Low Gas Pressure Switches (AW 501-801)
- › Concentric Vent Kit (3" & 4" PVC/CPVC only)
- › ModBus Communications
- › BMS Gateways for LonWorks or BACnet
- › SMART SYSTEM PC Software
- › Room Air Vent Kits
- › Stack Frame

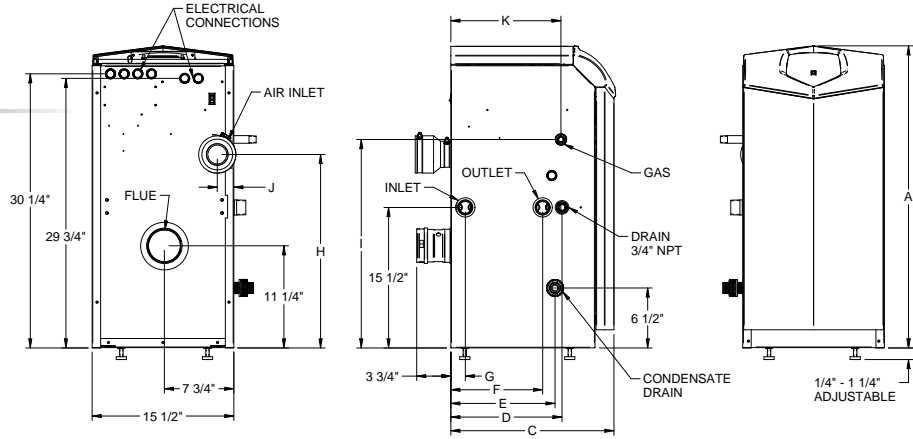
FIRING CONTROL SYSTEMS

- › M9 Standard Construction
- › M7 California Code (AW 286-801)
- › M13 CSD1 / FM / GE Gap (AW 501-801)

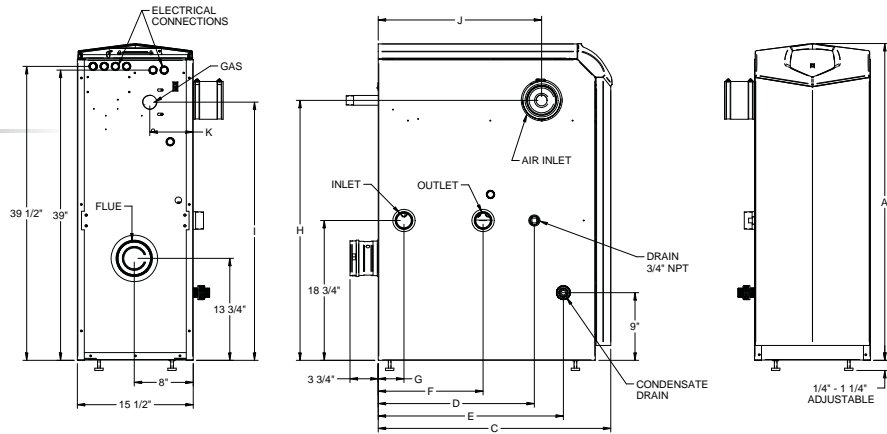
*Exclusive to Lochinvar

ARMOR Condensing Water Heater Dimensions & Specifications

MODELS 151-200



MODELS 286-801

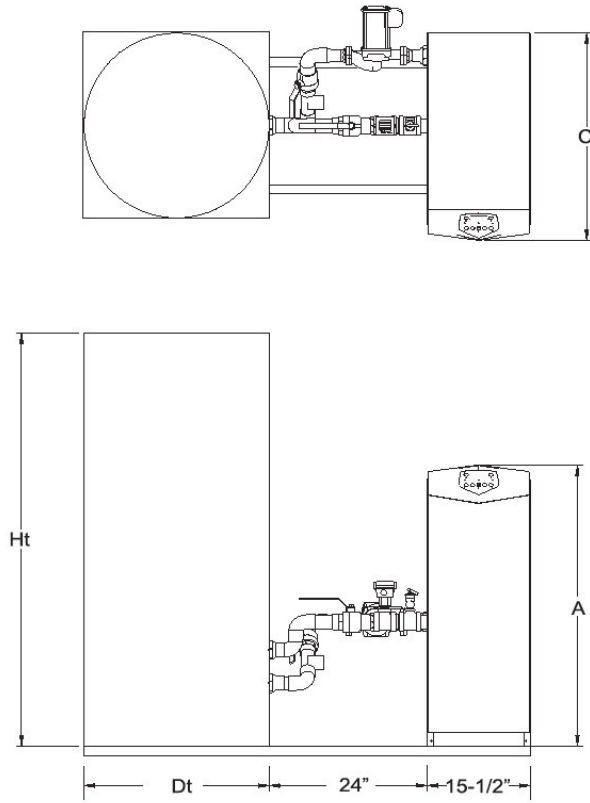


Model Number	Btu/hr Input	GPH @ 100° Rise	A	C	D	E	F	G	H	I	J	K	Gas Conn.	Water Conn.	Air Inlet	Vent Size	Shipping Wt. (lbs.)
AWN151PM	150,000	173	33-1/4"	18"	12-1/4"	11-1/2"	10"	1-1/2"	21-1/4"	23"	1-3/4"	12"	1/2"	1-1/4"	3"	3"	165
AWN200PM	199,999	235	33-1/4"	22-1/4"	16-1/2"	15-3/4"	14-1/4"	5-1/4"	21-1/4"	23"	1-3/4"	16-1/4"	1/2"	1-1/4"	3"	3"	181
AWN286PM	285,000	332	42-1/2"	19-3/4"	12-3/4"	13-1/2"	6"	2"	34"	31"	11-3/4"	4-1/4"	3/4"	2"	4"	4"	236
AWN400PM	399,999	465	42-1/2"	27"	21"	20-3/4"	14"	3-1/2"	34"	34"	18-3/4"	2"	1"	2"	4"	4"	292
AWN501PM	500,000	582	42-1/2"	31-1/2"	21"	25"	14"	3-1/2"	35"	35"	22"	5-3/4"	1"	2"	4"	4"	333
AWN601PM	600,000	698	42-1/2"	36-1/4"	25"	21"	14"	3-1/2"	36"	32-3/4"	19-1/2"	5-1/2"	1-1/2"	2"	4"	4"	380
AWN701PM	700,000	815	42-1/2"	40-1/4"	29"	23"	17"	3-1/2"	36"	32-3/4"	23-1/2"	3-1/4"	1-1/2"	2"	4"	6"	461
AWN801PM	800,000	931	42-1/2"	45-1/4"	33-1/4"	23"	17"	3-1/2"	36"	32-3/4"	27-3/4"	3-1/4"	1-1/2"	2"	4"	6"	527

Armor Package Systems Gas Water Heater Dimensions & Specifications

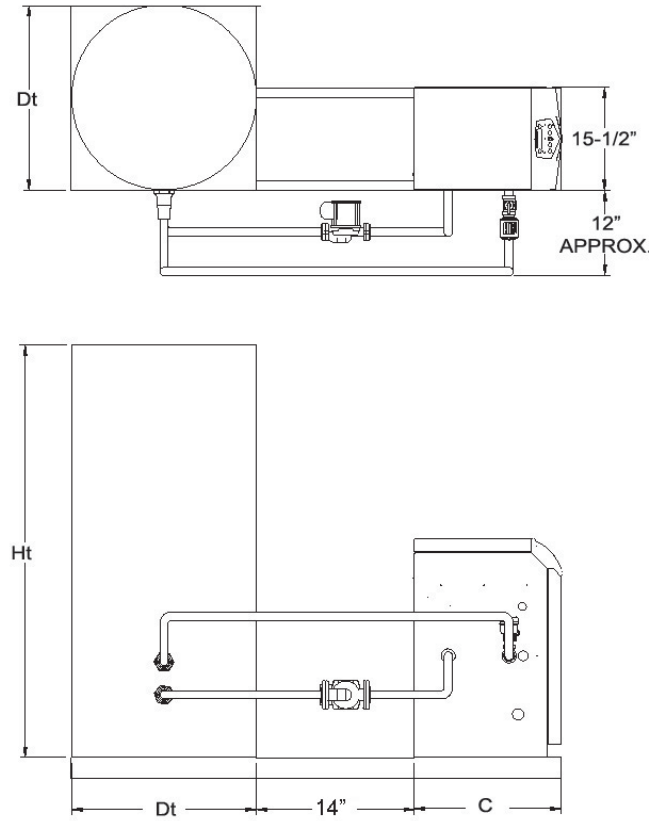
PS Configuration

AW 151-801 with a 119-504 gallon capacity Jacketed and Insulated Lock-Temp Vertical Tank.



PU Configuration

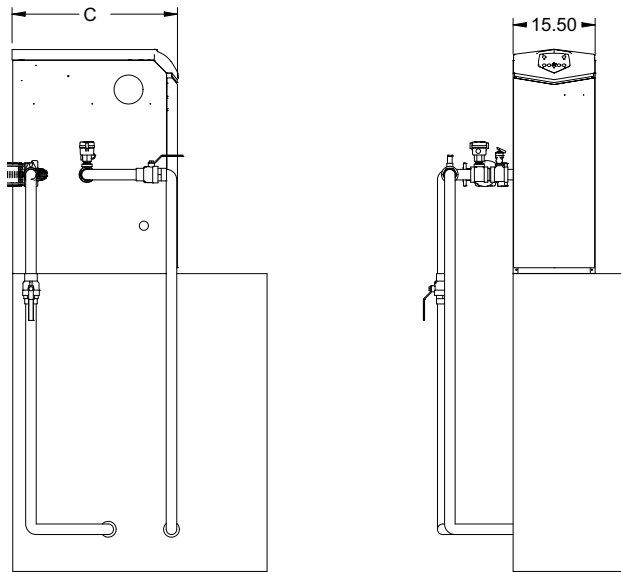
AW 151-801 with a 119-504 gallon capacity Jacketed and Insulated Lock-Temp Vertical Tank.



Armor Package Systems Gas Water Heater Dimensions & Specifications

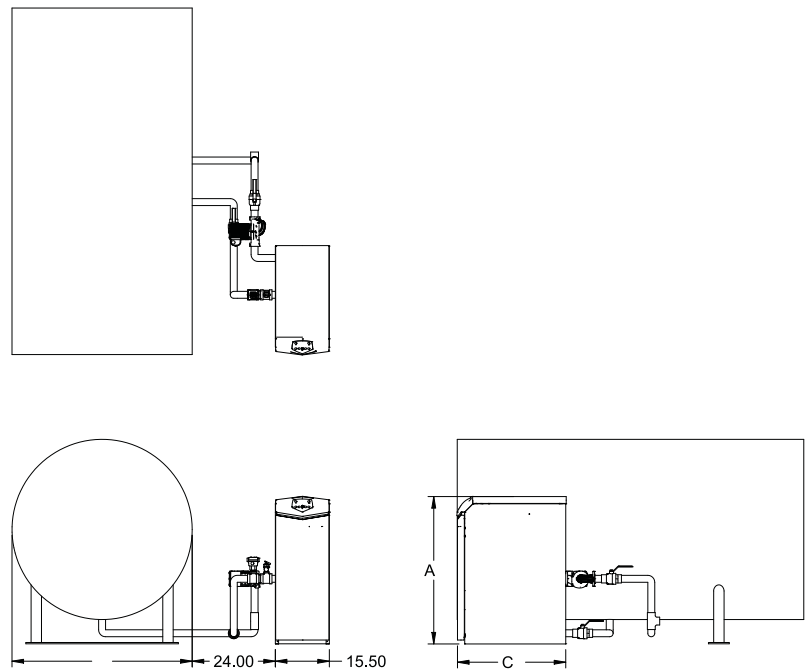
PT Configuration

AW 151-801 with a 119-504 gallon capacity Jacketed and Insulated Lock-Temp Vertical Tank.



PW Configuration

AW 151-801 with a 119-504 gallon capacity Jacketed and Insulated Lock-Temp Vertical Tank.



VERTICAL ROUND JACKETED TANK DIMENSIONS			
Gallon	H _T	D _T	Weight
119	62-1/2"	28"	345
200	77-1/4"	32"	600
257	91"	34"	1108
318	80"	40"	1290
432	80"	46"	1,512
504	92"	46"	1,623

NOTE: Tanks over 500 gallon are available for package systems. Vertical tanks over 650 gallons require breakaway frames for shipping purposes. Consult factory for details.

NOTE: If overall dimensions are critical consult factory.
All package systems are skid mounted.
*Add 3" to tank H_T for I-Beam skid.

Package systems with multiple units or storage tanks 752 gallons and larger will be designed as a "Breakaway" system. Breakaway systems are factory disassembled for shipping purposes and require some field reassembly. Consult factory for details.



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LOW LEAD CONTENT HLW

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