

Job: _____
 Engineer: _____
 Contractor: _____
 Prepared By: _____ Date: _____
 Model: _____

XPAK-FT®

Condensing Boiler

Hydronic Heating Boilers

Residential - Commercial

Models 88AR, 108AR, 198AR, 278AR & 398A

VERSA IC® Integrated Control Platform

Soft Start, Electronic Modulation, up to 10:1 Turndown

LCD Status Display with Full Diagnostics and Fault Memory

Zero Clearance to Combustibles

3-in-1 Vent adapter (PVC/CPVC - Duravent® Polypro - SS)

Meets 2012 NOx Requirements (< 14 ng/J (< 55 PPM NO_x))

Maximum Outlet Water Temperature: 195°F

Maximum System Temperature: 190°F

Limited 25-Year Thermal Shock Warranty

Limited 10-Year Heat Exchanger Warranty

Modbus RTU RS485 Port



Proudly Assembled in the USA

Heat Exchanger

- All Stainless Steel Construction
- Gasketless Heat Exchanger Design
- ASME H Stamped
- 80 PSIG Working Pressure
- National Board Approved
- ASME Pressure Relief Valve
- 30 PSIG – Standard
- Temperature and Pressure Gauge, Shipped Loose

Control

- 120V, 60Hz, 1Ø, Power Supply
- Versa IC Operating Control with LCD display.
- Outdoor reset with Indirect Priority
- 0-10 VDC input for BMS
- Cascade up to 4 boilers
- Spark Ignition (DSI)
- Remote Flame Sensor
- High Limit, Manual Reset, Fixed, 200°F
- Alarm Dry Contact Connection
- On/Off Power Switch
- Blocked Vent Pressure Switch
- Boiler, DHW & System Pump Contacts
- Water Temperature Sensors (4)10kΩ (2 shipped loose)

- Outdoor Air Sensor (1) 10kΩ (shipped loose)

Burner

- Ultra-Low NOx: Less than 14 ng/J

Gas Train

- Fuel
 - Natural Gas
 - Propane
- Dual-Seat Combination Valve
- Electronic Modulating Firing Mode (H7)

Construction

- Indoor Construction
- Front Controls Enclosed
- PolyTuf Powder Coat Finish
- Bottom Connections (Electrical, Gas, Water)
- Top Connections (Combustion Air, Vent)
- Design Certified ANSI Z21.13/ CSA 4.9
- Condensate Trap

Venting (PVC/CPVC*-Duravent Polypropylene – Centrotherm Polypropylene – Stainless Steel)

- Vent Termination

- D-11 - SS Termination
- D-94 - Horizontal twin pipe Poly
- D-95 - Horizontal Concentric Poly
- D-96 - Vertical Concentric Poly
- D-92 - Polypro reducer (88AR & 398A only)

Options – Shipped Loose

- F-1 Flow Switch – (Loose)
- F-10 Low Water Cut-Off, Manual Reset (88AR to 278AR)
- P-__ Pump: ____HP, 120V, 1Ø, 60Hz
 - Cast Iron
 - Bronze/SS
- S-1/S-2 High/Low Gas Pressure Switch, Manual Reset
- Z-12 Condensate Neutralizer Kit

Additional Options or Accessories

- _____

*Configured for PVC Vent Standard. Maximum System Temperature of 170°F for PVC Vent.

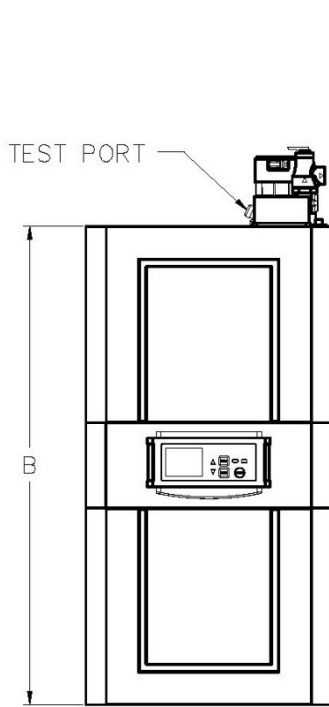


Raypak®
A Rheem® Company

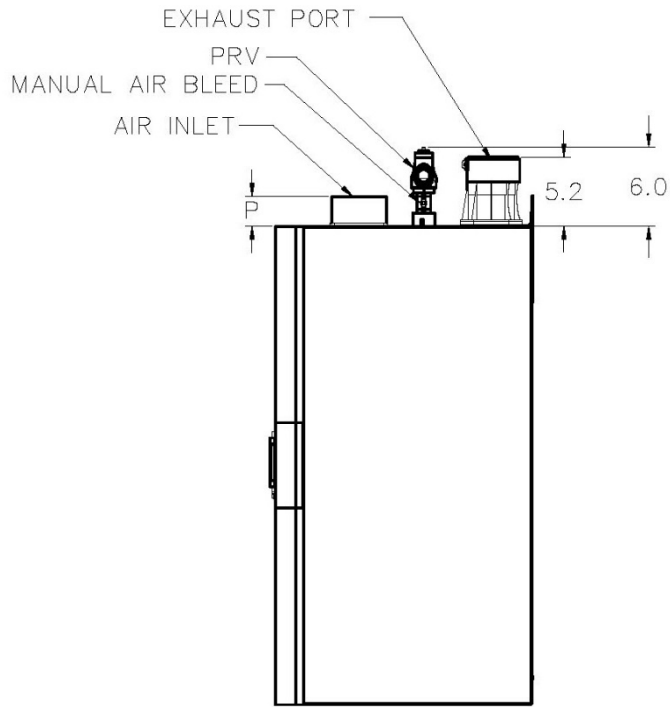
Raypak® XPak-FT® Residential Residential - Commercial Condensing Boiler

Model _____

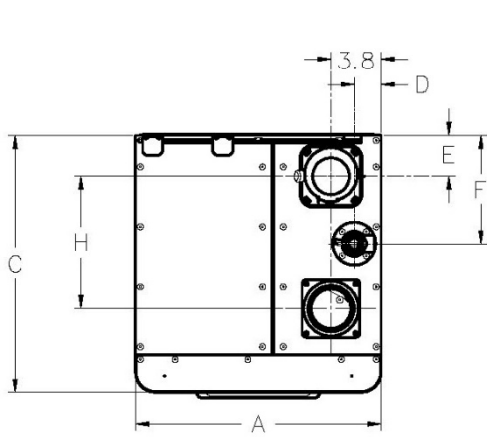
Models 88AR, 108AR, 198AR, 278AR & 398A



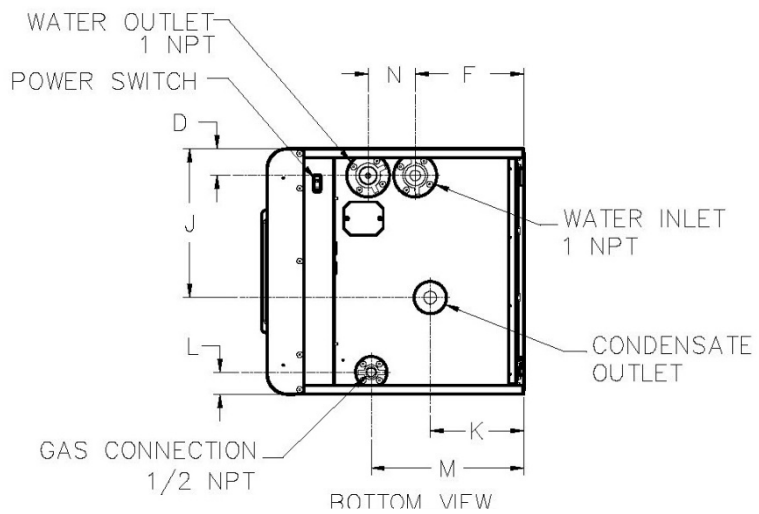
FRONT VIEW



SIDE VIEW



TOP VIEW



Model No.	A	B	C	D	E	F	H	J	K	L	M	N	P
<input type="checkbox"/> 88AR	16-7/16	35-7/8	16-1/2	2-1/8	2-3/4	6-3/8	7-7/8	9-1/2	5-1/2	1-1/2	4-5/8	2-7/8	2-3/8
<input type="checkbox"/> 108AR													
<input type="checkbox"/> 198AR	18-5/8	36-1/4	19-7/16	2	3-1/8	8-1/4	10	11-3/8	7-1/8	1-3/4	12-3/8	3-5/8	2-3/8
<input type="checkbox"/> 278AR													
<input type="checkbox"/> 398A	21-7/16	38-5/8	22-1/8	2-3/4	4	10-1/8	12	13	8-15/16	2-5/8	15-3/8	4	2-1/8

Model No.	AFUE Rating			Minimum Operating Input (MBH)	Water Conn. (NPT)	Gas Conn. (NPT)		Vent Size (In.)	
	Input (MBH)		%			Nat.	Pro.	Flue	Intake
	Min	Max							
<input type="checkbox"/> H7-88AR	17.0	85.0	95	12.0	1"	1/2"	1/2"	2" / 3" **	2" / 3" **
<input type="checkbox"/> H7-108AR	22.0	110.0	95	13.0	1"	1/2"	1/2"	3"	3"
<input type="checkbox"/> H7-198AR	39.8	199.0	95	28.4	1-1/4"	3/4"	3/4"	3"	3"
<input type="checkbox"/> H7-278AR	55.0	275.0	94.8	36.6	1-1/4"	3/4"	3/4"	3"	3"
<input type="checkbox"/> H7-398A	39.9	399.0	96*	39.9	1-1/2"	3/4"	3/4"	3" / 4" ***	3" / 4" ***

*Model 398A value is Thermal Efficiency.

**Model 88AR vent is 3" standard and can be reduced to 2" with shorter run.

***Model 398A vent is 4" standard and can be reduced to 3" with shorter run.

Model No.	Maximum Flow			Minimum Flow			30°F ΔT		40°F ΔT		50°F ΔT	
	GPM	ΔP (ft)	ΔT	GPM	ΔP (ft)	ΔT	GPM	ΔP (ft)	GPM	ΔP (ft)	GPM	ΔP (ft)
<input type="checkbox"/> H7-88AR	8.1	5.4	20	2.7	1.4	60	5.4	3.3	4.0	2.3	3.2	1.8
<input type="checkbox"/> H7-108AR	10.5	7.4	20	3.5	2.0	60	7.0	4.5	5.2	3.2	4.2	2.4
<input type="checkbox"/> H7-198AR	18.9	11.6	20	6.3	3.0	60	12.6	6.2	9.5	4.3	7.6	3.5
<input type="checkbox"/> H7-278AR	26.1	20.3	20	8.7	4.0	60	17.4	10.1	13.1	6.5	10.5	4.9
<input type="checkbox"/> H7-398A	38.3	14.1	20	12.8	3.4	60	25.5	7.4	19.2	5.0	15.3	4.0

Model No.	Standard Boiler Pump *	
	Pump	HP
<input type="checkbox"/> H7-88AR	Taco 007	1/25
<input type="checkbox"/> H7-108AR	Taco 007	1/25
<input type="checkbox"/> H7-198AR	Taco 0010	1/8
<input type="checkbox"/> H7-278AR	Taco 0012	1/8
<input type="checkbox"/> H7-398A	Taco 0012	1/8

*Pump selection based on 30°F ΔT with up to 50 eq. ft. of tubing