



Lochinvar®

HIGH EFFICIENCY BOILERS & WATER HEATERS

POWER-FIN COMMERCIAL BOILER

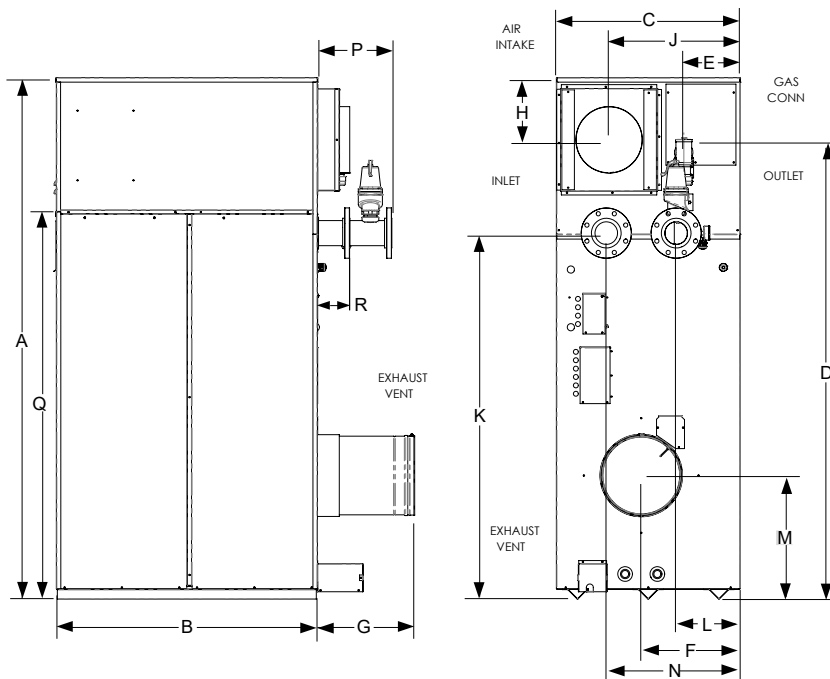
Submittal Sheet

PBXT-Sub-06

POWER-FIN® GAS BOILERS, MODELS PB 2500 – PB 5000

Job Name: _____ Model No. _____
Location: _____ Type Gas: _____
Engineer: _____ Equipment Tag(s): _____
Agent/Wholesaler: _____
Contractor: _____


NOTES:



Model Number Guide

PB	N	2500	M9
Model	Natural Gas	Btu/hr Input	Firing Controls

Power-Fin Boiler,
Natural Gas,
2,500,000 Btu/hr input,
M9 firing controls

Power-Fin Boiler							Dimensions and Specifications							
Model No.	Input MBH	AHRI Thermal %	Combustion Efficiency	Gross Output MBH	Net AHRI Rating MBH		A	B	C	D	E	F		
PBN2500	2,500	87.0%	87.0%	2,175	1,891	59"	44-1/2"	29-3/4"	49-3/4"	4"	15"			
PBN3000	3,000	87.0%	87.0%	2,610	2,270	65"	44-1/2"	29-3/4"	55-3/4"	4"	15"			
PBN3500	3,500	87.0%	87.0%	3,045	2,648	70-1/4"	47-1/4"	29-3/4"	62-1/2"	8-1/4"	15"			
PBN4000	4,000	87.0%	87.0%	3,480	3,026	79-3/4"	47-1/4"	29-3/4"	68-3/4"	8-1/4"	15"			
PBN5000	4,999	87.0%	87.0%	4,349	3,782	93-1/4"	46-3/4"	32-3/4"	82-1/4"	10"	17-3/4"			
Model No.	G	H	J	K	L	M	N	P	Q	R	Gas Conn.	Air Inlet	Vent Outlet	Ship Wt.
PBN2500	16"	9"	20-1/4"	37"	8-3/4"	23"	21-1/4"	12"	N/A	4-1/2"	2"	9"	9"	1470
PBN3000	16-1/4"	9"	20-1/4"	43"	8-3/4"	23"	21-1/4"	12"	N/A	4-1/2"	2"	9"	10"	1550
PBN3500	16-1/4"	9"	20-1/4"	48-1/2"	9"	23"	21-1/2"	12"	N/A	4-1/2"	2"	10"	10"	1696
PBN4000	16-1/4"	10-1/2"	20"	54"	8-3/4"	22-1/4"	21-1/4"	12"	58-1/2"	4-1/2"	2-1/2"	10"	12"	1841
PBN5000	17-1/2"	11"	23-1/2"	65-1/2"	11-1/2"	22"	24"	13-1/4"	69-1/2"	5-3/4"	2-1/2"	12"	14"	2152

Models listed above are natural gas. Change "N" to "L" for LP gas models. • Information is subject to change without notice. Dimensions shown are approximate and should not be used for construction purposes.



Codes & Registrations

ANSI Z21.13/CSA Certified
ASME Certified, "H" Stamp / National Board
California Code Compliant
Bay Area Air Quality Management District Qualified
CSD1 / Factory Mutual / GE Gap Compliant
Canadian Registration Number (CRN)
AHRI Certified



Standard Features

87% Thermal Efficiency (AHRI)
Modulating Burner with 5:1 Turndown
Outdoor Ready
CSD-1 Compliant
Direct-Spark Ignition
Low NOx Operation
Sealed Combustion
ASME Copper-Finned Tube Heat Exchanger
ASME Certified, "H" Stamped
Gasketless Design
160 psi Working Pressure
On/Off Switch
Adjustable High Limit with Manual Reset
Condensate Trap w/Blocked Drain Switch
Drain Valve
System Sensor
Outdoor Air Sensor
Inlet & Outlet Temperature Sensors
High-Voltage Terminal Strip
Low-Voltage Terminal Strip
50 psi ASME Relief Valve
Temperature & Pressure Gauge
Zero Clearances to Combustible Materials
Low & High Manual Reset Gas Pressure Switches
See Warranty for Details:
10-Year Limited Warranty
1-Year Warranty on Parts

Smart Touch™ Features

CON-X-US Remote Connect
Full-Color 8" Touchscreen LCD Display
Built-in Cascading Sequencer for up to 8 Boilers
› Built-in Redundancy
› Cascade Multiple Sized Boilers
› Lead/Lag Cascade
› Efficiency Optimized Cascade
Front-End Loading Capability with Crest Boilers
Building Management System Integration w/ 0-10 VDC Input

Outdoor Reset Control

Password Security

Domestic Hot Water Prioritization

- › DHW tank piped with priority in the boiler loop
- › DHW tank piped as a zone in the system with the pumps controlled by the Smart System
- › DHW Modulation Limiting
- › Separately Adjustable SH/DHW Switching Times

Low Water Flow Safety Control & Indication

Inlet & Outlet Temperature Readout

Freeze Protection

Service Reminder

Time Clock

Data Logging

- › Hours Running, Space Heating
- › Hours Running, Domestic Hot Water
- › Hours Running, Modulation Rate
- › Ignition Attempts
- › Last 10 Lockouts

Programmable System Efficiency Optimizers

- › Night Setback
- › Anti-Cycling
- › Outdoor Air Reset Curve
- › Ramp Delay
- › Boost Temperature & Time
- › Modulation Factor Control

Three Pump Control

- › System Pump
- › Boiler Pump
- › Domestic Hot Water Pump

High-Voltage Terminal Strip

- › 240V/1PH/60Hz Power Supply (PB2500-PB3000)
- › 208V/3PH/60Hz Power Supply (PB3500-PB4000)
- › 480V/3PH/60Hz Power Supply (PB5000)
- › System Pump, Boiler Pump & DHW Pump Power

Low-Voltage Terminal Strip

- › 24 VAC Auxiliary Device Relay
- › Auxiliary Proving Switch Contacts
- › Alarm on Any Failure Contacts
- › Runtime Contacts
- › DHW Thermostat Contacts
- › Unit Enable/Disable Contacts
- › System Sensor Contacts
- › DHW Tank Sensor Contacts
- › Outdoor Air Sensor Contacts
- › Cascade Contacts
- › 0-10V DC BMS External Control Contact
- › 3 Way Valve Contacts

Firing Codes

- | | |
|----|-----------------------|
| M9 | Standard Construction |
| M7 | California Code |

Optional Equipment

Alarm on Any Failure
BACnet MSTP Communications
BMS Gateway to LON or BacNet IP
Cupro-Nickel Heat Exchanger
Low Temperature Valve
Low Temperature Valve (Motorized)
Low Water Cutoff w/ Manual Reset & Test
Modbus Communications
Outdoor Kit
Step Down Gas Regulator
› 2 PSI Inlet Max
› 5 PSI Inlet Max
Transformer Kit (field installed)
All unit requirements and kits are 60 Hz
› 208V/1PH → 240V/1PH (PB 2500-3000)
› 480V/3PH → 208V/3PH (PB 3500-4000)
› 600V/3PH → 208V/3PH (PB 3500-4000)
› 208V/3PH → 480V/3PH (PB 5000)
› 600V/3PH → 480V/3PH (PB 5000)
Wireless Outdoor Sensor



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