



Lochinvar®

HIGH EFFICIENCY BOILERS & WATER HEATERS

POWER-FIN COMMERCIAL BOILER

Submittal Sheet

PBX-Sub-05

POWER-FIN® GAS BOILERS, MODELS 502, 752, 1002, 1302, 1501, 1701, & 2001

Job Name: _____ Model No. _____

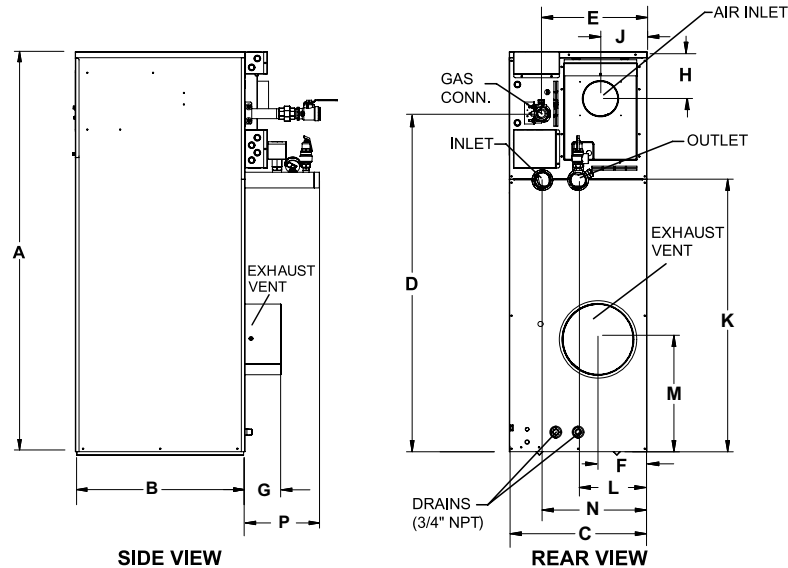
Location: _____ Type Gas: _____

Engineer: _____ Equipment Tag(s): _____

Wholesaler: _____

Contractor: _____

NOTES:



Power-Fin Boiler							Dimensions and Specifications								
Model No.	Input MBH	(B)/(F) Net AHRI		(M) Net AHRI		A	B	C	D	(B)/(F)		(M)		G	
		Thermal Efficiency	Output MBH	Rating MBH	Thermal Efficiency					Output MBH	Rating MBH	E	F		E
PBN0502	500	85.0%	425	370	85.0%	425	370	44-1/2"	28-1/2"	23-1/4"	34"	18-3/4"	18-1/2"	6-1/2"	6"
PBN0752	750	85.0%	638	554	85.0%	638	554	52"	28-1/2"	23-1/4"	41-3/4"	19"	18-3/4"	6-3/4"	6"
PBN1002	999	85.0%	850	739	85.0%	850	739	59-1/4"	28-1/2"	23-1/4"	48-3/4"	17"	18-3/4"	7-1/4"	6"
PBN1302	1,300	85.0%	1,105	961	85.0%	1,105	961	67-3/4"	28-1/2"	23-1/4"	57-1/4"	17"	18-3/4"	8-1/4"	6"
PBN1501	1,500	84.0%	1,260	1,096	85.0%	1,275	1,109	65-1/2"	29-3/4"	27-1/4"	59"	21"	20-3/4"	13-1/2"	8"
PBN1701	1,700	84.0%	1,428	1,242	85.0%	1,445	1,257	70"	29-3/4"	27-1/4"	63-1/2"	21"	20-3/4"	13-1/2"	8"
PBN2001	2,000	84.0%	1,680	1,461	85.0%	1,700	1,478	76-3/4"	29-3/4"	27-1/4"	70"	21"	20-3/4"	13-1/2"	8"

Model No.	H	J	K	L	M	N	Vent Sizes							Ship Wt. (lbs)
							(B)/(F) P	(M) P	Gas Conn.	Air Inlet	(B)/(F) Cat I	(M)* Cat II	(M) Cat IV	
PBN0502	8"	7-3/4"	23"	11-1/2"	11-1/4"	17-1/2"	15-1/4"	15-1/4"	1"	5"	7"	7"	4"	505
PBN0752	8"	7-3/4"	30-1/2"	11-1/2"	11-1/4"	17-1/2"	15-1/4"	15-1/4"	1-1/4"	5"	9"	9"	5"	554
PBN1002	8"	7-3/4"	37-3/4"	11-1/2"	11-1/4"	17-1/2"	15-1/4"	15-1/4"	1-1/4"	6"	10"	10"	6"	603
PBN1302	8"	7-3/4"	46-1/4"	11-1/2"	19-1/2"	17-1/2"	15-1/4"	15-1/4"	1-1/4"	6"	12"	12"	8"	652
PBN1501	10"	9-1/2"	43-1/2"	5-3/4"	22-1/4"	21-1/2"	24-1/2"	19-1/2"	1-1/2"	6"	12"	8"	6"	1,065
PBN1701	10"	9-1/2"	48"	5-3/4"	25"	21-1/2"	24-1/2"	19-1/2"	1-1/2"	7"	14"	9"	7"	1,100
PBN2001	10"	9-1/2"	54-3/4"	5-3/4"	27-1/2"	21-1/2"	24-1/2"	19-1/2"	1-1/2"	8"	14"	10"	8"	1,127

Notes: Change 'N' to 'L' for LP Gas Model. No deration on LP models. All water connections are 2-1/2" *w/CAT II conversion kit

POWER-fin®

Codes & Registrations

ANSI Z21.13/CSA Certified
ASME Certified, "H" Stamp / National Board
California Code Compliant
SCAQMD Certified
CSD1 / Factory Mutual / GE Gap Compliant
Canadian Registration Number (CRN)
AHRI Certified



Standard Features

- › **85% Thermal Efficiency**
- › **Outdoor Ready**
- › **Modulating Burner with 5:1 Turndown**
 - Hot Surface Ignition
 - Low NOx Operation
 - Sealed Combustion
 - Low Gas Pressure Operation
- › **Vertical & Horizontal Venting**
 - Venting up to 50 Feet
 - Category I or Category IV Venting
 - Cat IV converts to Cat II w/optional vent kit
- › **ASME Copper-Finned Tube Heat Exchanger**
 - ASME Certified, "H" Stamped
 - Gasketless design
 - 160 psi working pressure
- › **On/Off Switch**
- › **Adjustable High Limit w/ Manual Reset**
- › **Flow Switch**
- › **Low Air Pressure Switch**
- › **Downstream Test Cocks**
- › **50 psi ASME Relief Valve**
- › **Combustion Air Filtration**
- › **Temperature & Pressure Gauge**
- › **Zero Clearances to Combustible Material**
- › **1 Year Warranty on Parts**
- › **10 Year Limited Warranty**
(See Warranties for Details)

Smart Touch™ Features

- › **SMART TOUCH Operating Control**
 - Full-Color 8" Touchscreen LCD Display
 - CON-X-US Remote Connect
 - Front-End Loading Capability with Crest Boilers
 - Building Management System Integration with 0-10 VDC Input
 - Outdoor Reset Control
 - Dual Level Password Security
 - Inlet & Outlet Temperature Readout
 - Freeze Protection
 - Service Reminder
 - Time Clock
- › **Built-in Cascading Sequencer for up to 8 Boilers**
 - Built-in Redundancy
 - Cascade Multiple Sized Boilers
 - Lead/Lag Cascade
 - Efficiency Optimized Cascade

- › **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**
- › **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 Contacts**
 - System Pump
 - Boiler Pump
 - Domestic Hot Water Pump
- › **High-Voltage Terminal Strip**
 - 120V/60 Hertz/1 Phase Power Supply
- › **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 Contacts
 - Louver Proving Contacts
 - System Sensor Contacts
 - DHW Tank Sensor Contacts
 - Outdoor Air Sensor Contacts
 - Cascade Contacts
 - 0-10 VDC BMS External Control Contact
 - 3 Way Valve Contacts

Firing Codes

- M Indicates 5:1 Turndown, Category IV
- B Indicates 2:1 Turndown, Category I
- F Indicates 100% On/Off Fire, Category I
- M9 Standard
- B9 or F9 Special Order Factory Trimmed

Optional Equipment

- Cupro-Nickel Heat Exchanger
- High and Low Gas Pressure Switches w/Manual Reset (required for CSD-1/FM/GE Gap)
- Low Temperature Valve
- Motorized Mixing Valve
- Outdoor Kit
- Low Water Cutoff w/ Manual Reset & Test (required for California Code)
- Alarm Bell
- Modbus Communications
- BACnet MSTP Communications
- BMS Gateway to LON or BacNet IP
- Wireless Outdoor Sensor
- › **Vent Kit**
 - Horizontal Exhaust Cap
 - Horizontal Air Intake Cap
 - Horizontal Direct Vent Cap
 - Category IV to Category II Conversion Kit



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