HIGH EFFICIENCY COMMERCIAL BOILERS

POWER-fin®

CONXUS®
REMOTE CONNECT NOW AVAILABLE

SMART TOUCH™
TOUCHSCREEN LCD DISPLAY NOW AVAILABLE

7 MODELS: 500,000 to 2.0 MILLION BTU/HR

5:1 TURNDOWN RATIO

OUTDOOR INSTALLATION APPROVED

CASCADE SEQUENCER WITH CASCADE REDUNDANCY

85% Thermal Efficiency

Lochinvar
HIGH EFFICIENCY BOILERS & WATER HEATERS

Lochinvar.com
THE ORIGINAL BOILER CONTINUES TO SET THE STANDARD

In 1986, Power-Fin® redefined the industry with its space-saving design, groundbreaking efficiency and venting flexibility. Now, over 30 years later, we continue to raise the standard with an easy to operate touch screen user interface, remote boiler control and enhanced communications. The advanced Smart Touch™ color display includes CON•X•US® remote connectivity via WiFi or Ethernet for easy control at your fingertips, from anywhere. And a simple drop in Modbus or BACnet card allows for easy integration into a Building Management System.

Enhanced Operating Control
The Power-Fin now offers the industry-best Smart Touch™ 8” LCD full color touchscreen with easy-to-understand info-graphics. It is equipped with CON•X•US® connectivity that lets you remotely monitor and optimize the performance of the entire boiler plant.

BURNER MODULATION BOOSTS EFFICIENCY AND LOWERS COSTS
With thermal efficiency of 85%, Power-Fin boilers feature a 5:1 turndown ratio that will precisely match the firing rate to heating load requirements—at any point from 20% to full firing rate. This results in less equipment cycling for greater efficiency and cost savings.

READY FOR OUTDOOR INSTALLATION
In warm-weather sites where the mechanical room is overcrowded, the Power-Fin can be easily installed either outdoors or on a rooftop. Its optional hood and screen protector make outdoor installation fast and trouble free.

VENTING SOLUTIONS
The Power-Fin offers seven venting options for ease of installation and venting flexibility to meet the most challenging installation requirements. The Power-Fin permits air intake and exhaust terminations to be horizontal through a sidewall or vertical through a roof. Consult the installation and operation manual for detailed venting guidelines.
Peace Of Mind, When It Matters Most

Cascade Redundancy provides peace of mind because it helps ensure that a Power-Fin boiler system will always deliver reliable performance with no downtime. If the lead boiler is turned off for maintenance, Cascade Redundancy automatically shifts the lead role to the second sequenced boiler. Up to eight Power-Fin boilers can be sequenced using a 2-wire daisy-chain connection. Cascade sequencing can be programmed for Lead-Lag or Efficiency Optimized operation.

With Lead-Lag operation, one lead boiler modulates to capacity on demand. As load increases, the system then cascades to additional lag boilers in sequence. The first-on role shifts daily, distributing equal run times to each unit.

In an Efficiency Optimized system (see illustration left), all boilers fire and modulate simultaneously at the same Btu/hr input rates.
### Power-Fin® Boiler Dimensions and Specifications

**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**

### 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 Trimmmed

**Optional Equipment**
- Cupron-Nickel Heat Exchanger
- High and Low Gas Pressure Switches
  - w/Manual Reset (required for CSD-1/PM/UE Gas)
- 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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**Power-Fin Boiler Specifications**

**Model Number Guide**

- Power-Fin Boiler,
- Natural Gas,
- 1,500,000 Btu/hr input,
- M9 firing controls

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**Power-Fin Boiler Dimensions and Specifications**

#### Model Number Guide

- E
- F
- G

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**Model Number Specifications**

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<th>Model Number</th>
<th>Input MBH</th>
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<th>Output MBH</th>
<th>Net AHRI Rating MBH</th>
<th>(M) Thermal Efficiency</th>
<th>Output MBH</th>
<th>Net AHRI Rating MBH</th>
<th>A</th>
<th>B</th>
<th>C</th>
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**Notes:** Change ‘N’ to ‘L’ for LP Gas Model. No deration on LP models. All water connections are 2-1/2".

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**Piping Diagram**

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**Lochinvar.com**

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**Dimensions and Specifications**

- Power-Fin Boiler
- High Efficiency Boilers & Water Heaters