



# Peerless® *PUREFIRE*®

## PFC-850 Features and Standard Equipment

### **Performance:**

- Full Load Thermal Efficiency 96.2%
- Design Certified by SCAQMD for Low NOx Operation
- Dual Modulating Burners with 10:1 Overall Turndown Capability
- Factory Equipped for Outdoor Reset Operation
- Dual Temperature Settings for Central Heating and Domestic Hot Water
- Dual Flame Sensing for Reliable Ignition
- Suitable for Firing Natural or LP Gas
- Modbus Capable

### **Construction:**

- Designed, Constructed and Stamped in accordance with ASME Boiler & Pressure Vessel Code, Section IV
- Design Certified for Zero Clearance to Combustible Construction
- Space Saving Stackable Design
- Maximum Allowable Working Pressure: 160 PSI
- 304L Stainless Steel Heat Exchanger
- Heavy Gauge Support Structure & Cabinet
- Removable Jacket Panels
- Leveling Legs

### **Exhaust/Air Intake Piping:**

- Suitable for Direct Vent Combustion Operation with Inside or Outside Air
- Stainless Steel Drain Tee w/Condensate Neutralization
- Designed for Common Venting/Air Inlet
- Vent Temperature Sensor

### **Safety Features:**

- 30 PSIG ASME Safety Relief Valve (Loose)
- Pressure/Temperature Gauge (Loose)
- Integrated Connections for Low Water Cut Off or Flow Switch
- Manual Reset High Temperature Limit

### **Codes:**

- Design Certified to ANSI Z21.13
- CSD-1 Compliant
- California Emissions Compliant
- Massachusetts Plumbing Code Compliant

### **Control Features:**

- Plain English Status Display
- Factory Equipped for Multiple Boiler Cascade Operation
- Advanced Burner Control Logic for Common Venting of Multiple Boilers
- Flame Signal Logging Capability
- Freeze Protection
- DHW Tank Warm Hold
- Ramp Delay Step Modulation
- Outdoor Sensor Included
- System Type Presets
- Temperature Boost Function
- Warm Weather Shut Down
- Anti Cycling Logic
- Limited DHW Priority
- DHW Heat Economy Circulation
- Service Notification
- System Test for Manual Control of Firing Rate
- Fault History
- Alarm Contacts
- Analog Input for Set Point Control
- Modbus Communications Capability

### **Combustion System:**

- High Quality Low NOx Burner
- Dual Flame Sensing
- High Energy Spark Ignition

### **Condensate System:**

- Built-in Condensate Trap with Neutralization
- Blocked Condensate Switch
- Highly Visible, Easy Access Condensate Collector

### **Warranty:**

- One Year Parts Warranty
- One Year Labor Program\*
- 10 Year Limited Heat Exchanger Warranty
- Available 5 and 10 Year Extended Parts and Labor Warranty

\* Purchased by PB Heat, LLC, if Product and Installer/Service Provider are Registered with Program Administrator.

# PEERLESS® PUREFIRE® HIGH EFFICIENCY STAINLESS STEEL BOILER

## PEERLESS® PUREFIRE® PFC-850 BOILER RATINGS

Boiler	Input (MBH)		Heating Capacity (MBH)	Net Ratings (MBH)	Thermal Efficiency (%)
	Min	Max			
PFC-850	85	850	818	711	96.2

## PEERLESS® PUREFIRE® PFC-850 CAPACITIES

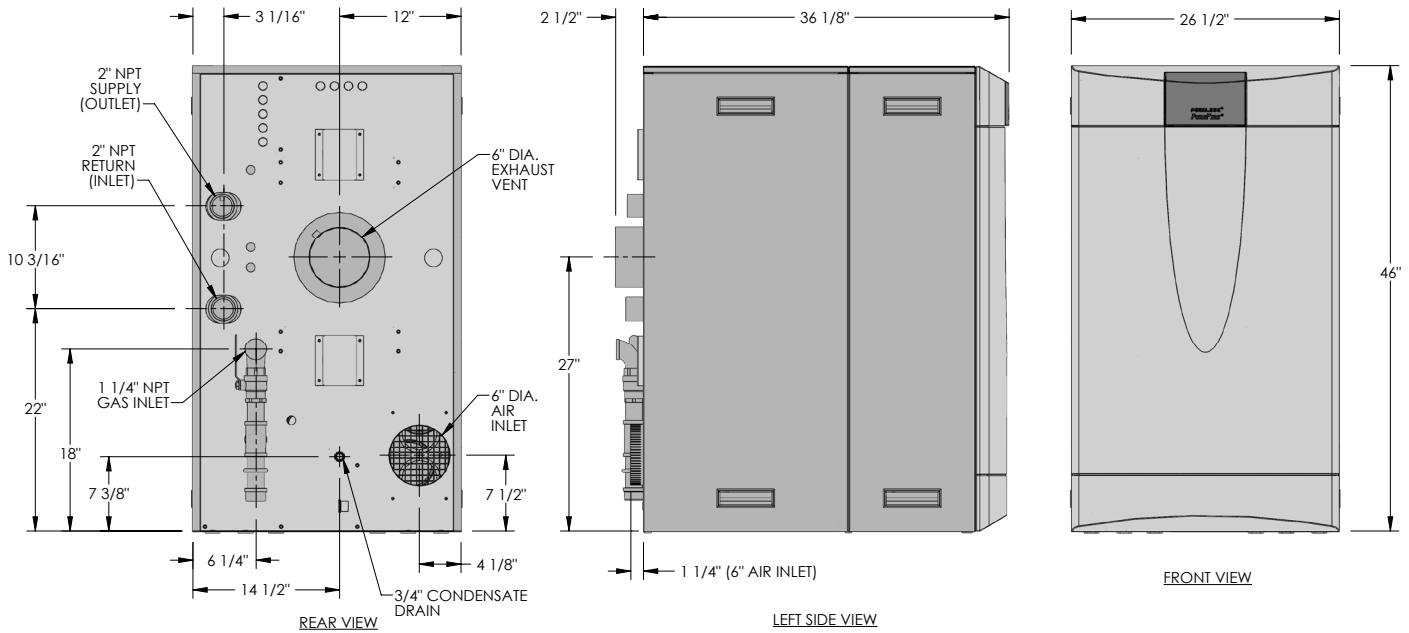
Gas Pressure Min/Max (Inch WC)		Total Water Capacity (Gallons)	Water Flow Rate & Pressure Drop			Total Combined Length of Air Intake & Vent (Feet)	Shipping Weight (Lbs)
			Design Temp Differential (°F)	Flow Rate (GPM)	Pressure Drop (Feet)		
3.5 (N)	13.5 (N)	6.2	20	81.8	24.94	200	345
8.0 (LP)	13.5 (LP)		30	54.5	11.83		
			40	40.9	7.00		

## PEERLESS® PUREFIRE® PFC-850 ELECTRICAL RATINGS

Supply Voltage (-15%, +10%)	Frequency (±10 Hz)	Blower Current (Amps)	Gas Valve Current (Amps)	Total Control Circuit Max. Current (Amps)	Circulating Pumps Max. Current (Amps)	Total Pump Circuit Max. Current (Amps)
120 VAC	60 Hz	2.50 x 2	0.21 x 2	3.15 x 2	10.00 x 2	20.00

### Optional Equipment:

- Domestic Water Tank Temperature Sensor
- System Sensor for Multiple Boilers
- 50 PSI Safety Relief Valve
- 100 PSI Safety Relief Valve
- 150 PSI Safety Relief Valve
- BACnet or LonWorks Gateway
- Common Vent Kit



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