

THERMON'S PCW SERIES

ELECTRIC HOT WATER BOILER FROM THE PRECISION BOILER FAMILY



PRECISION
BOILERS



A ROBUST AND POWERFUL ELECTRIC BOILER THAT
FITS INTO SMALLER SPACES

INTRODUCTION

PCW SERIES BOILER



Power, efficiency, and precise temperature control in a compact electric hot water boiler that is also easy to install. The PCW can be engineered to order, including skid packages. The vertical design doesn't require horizontal removal clearance, making it a great fit in existing piping systems or standing alone in smaller spaces.

KEY FEATURES

Small footprint saves installation and building construction costs.

Accessible temperature control with the control sensor located in the outlet pipe.

Individual immersion heating elements are 2 1/2" square flanged for ease of replacement. The elements are made of a highly corrosion resistant Incoloy 800 sheath, and nickel-chromium resistance wire packed in magnesium oxide powder encased in a U-tube design.

DESIGN ADVANTAGES

Ideal for new boiler applications or to RETROFIT existing installations, because it fits through many existing doorways with ease.

Available in ratings up to 600V and 720 KW.

Requires less square footage floor space and does not require horizontal clearance for element removal.

Individual flanged U-tube design heating element.

Shorter down time for element replacement.



DESIGN ADVANTAGES

PCW SERIES BOILER



STRINGENT STANDARDS

- ASME Section IV "H" Code
- UL Subject 834
- NEC/NFPA Article 424-G
- ASME Safety Code CSD-1 (>117 KW)

4 Inch HMI
(Only standard on the new PCW Standard Program, not the ETO PCW units)

STANDARD FEATURES AND ACCESSORIES

- Vessel (160 PSI / 250°F)
- Heavy Duty Steel Boiler Vessel Housing
- Four Inch Fiberglass Insulation
- 4" Flange
- Three Inch NPT Inlet and Outlet
- ASME Safety Relief Valve
- Pressure Gauge w/ Cock
- Drain Valve
- Incoloy-Sheathed Elements
- Electronic Digital Temperature Readout
- Integral Electric Control Panel with Key-Locked Door
- Internal Branch Circuit Fusing
- Main Supply Circuit Lugs
- 120 Volt Fused Control Transformer

- On/Off Switch w/ Pilot Light
- Manual Limit Toggle Switches (one per step)
- Status Pilot Light for each Stage/Step
- Probe-type Low Water Cut-Off
- Two Adjustable High Limit Cutouts:
(1) Auto Reset (1) Manual Reset Note:
Manual Reset provided only on units > 2 stages
- Automatic Temperature Control
- Progressive Sequencing Step Control
- NEMA 12 Control Panels
- Flow Switch
- On-Board Alarm Buzzer
- Panel Mounted Mushroom Style E-Stop

DESIGN ADVANTAGES

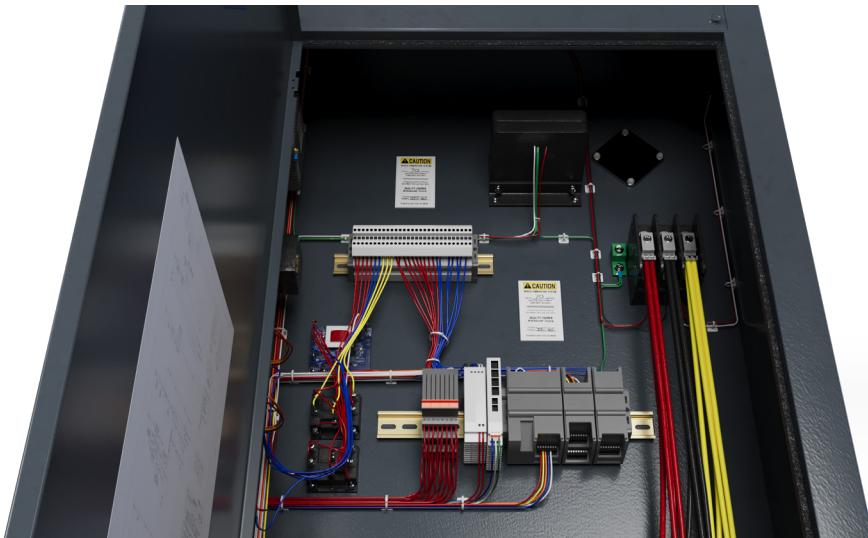
PCW SERIES BOILER



OPTIONAL EQUIPMENT AND ACCESSORIES

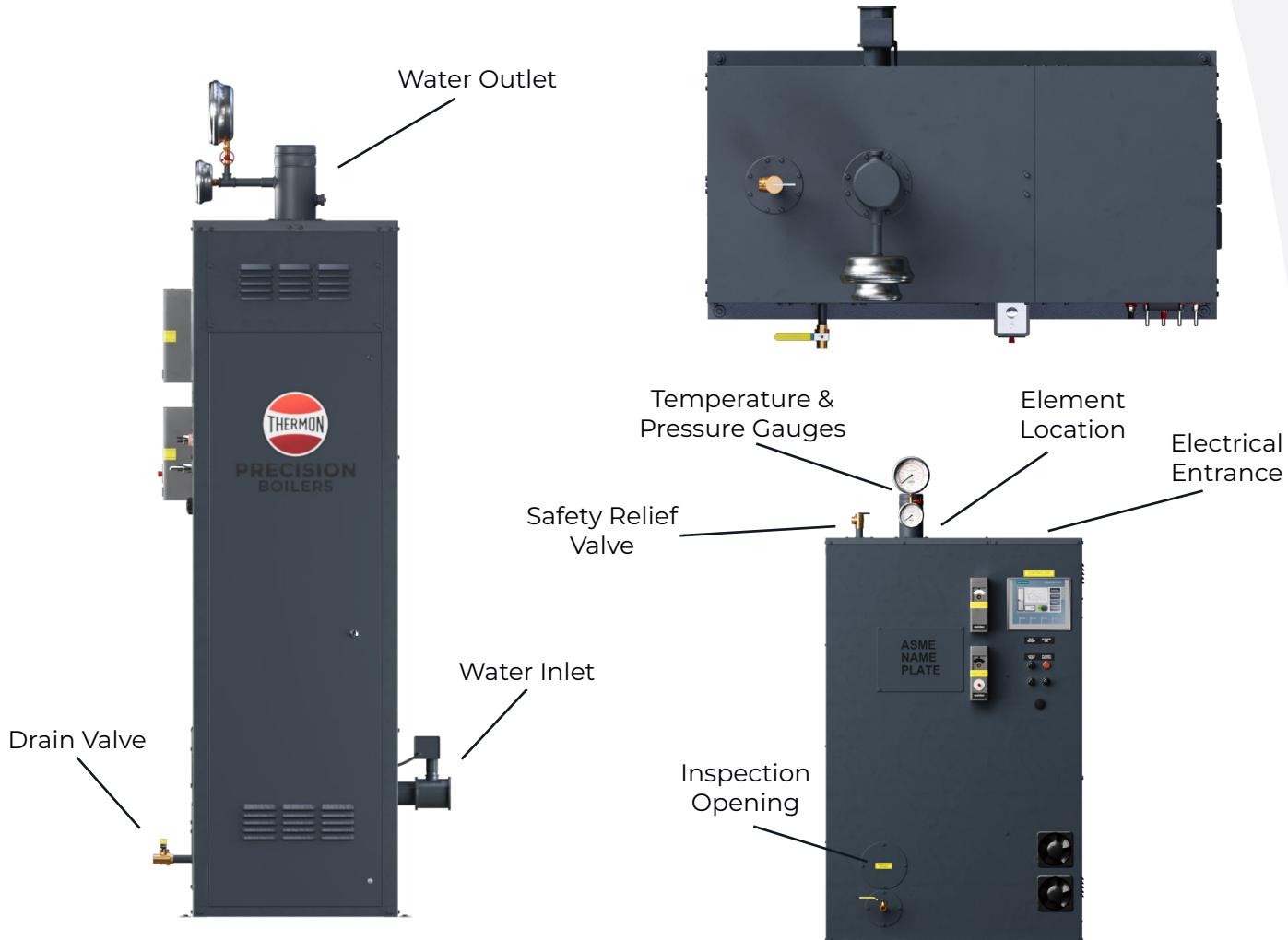
- Non-Fused Disconnect
- Fused Disconnect or Automatic Breaker
- Shunt Trip Circuit Interrupter
- Ground Fault Detection System
- Multi-functional power and energy meter
- Time Clock (24 hour or 7 day)
- Safety Door Interlock
- PLC's and Other Interface Provisions (Consult Factory)
- Outdoor Reset Control
- Auxiliary Low Water Cut-Off (Float or Probe Type) (Auxiliary probe type standard on units > 117 kW)
- Rating 5kA (standard) up to 100kA available
- Full stainless steel on all wetted parts
- SCR Controller for 0-100% capacity modulation
- NEMA 1, 4, and 4X Control Panel Options

Contact factory for many other options to meet your specific requirements



DIMENSIONAL DATA

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APPLICATIONS, MARKETS, AND FACILITIES

- Temperature Limit, Auto Reset
- Temperature Limit, Manual Reset
- Manual Limit Switches
- Pilot Lights, Amber (Steps “ON”)
- PB Switches (Low Water Cutoff “Test”/“Reset”)
- Toggle Switch (Control Power)
- Pilot Light, Amber (Control Power “ON”)
- Pilot Light, Red (Low Water)
- Temperature Setpoint / Control / Readout
- Safety Relief Valve
- Temperature and Pressure Gauges
- Drain Valve

DESIGN ADVANTAGES

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Precision Boilers product designs are engineered for quality performance and accessibility to facilitate service and operation.

PCW Compact Electric Hot Water Boilers are an ideal choice for industrial applications demanding consistent, high quality steam production.

APPLICATIONS, MARKETS, AND FACILITIES

- Central Steam Plants
- Hospitals, Universities, Institutional Facilities
- Food Processing
- Pharmaceutical
- Beverage Distillation and Production



WHY CHOOSE THERMON?



PCW SERIES BOILER

Thermon is a diversified technology company and a global leader in industrial process heating, temperature maintenance, environmental monitoring, and temporary power distribution solutions. We deliver engineered solutions that enhance operational awareness, safety, reliability, and efficiency to deliver the lowest total cost of ownership.

Thermon offers over 250 products, software and services across multiple brands, providing a range of offerings from boilers, transportation heaters, and liquid load banks to tubing bundles and heat trace. We are the silent guardians of critical infrastructure. From the relentless demands of chemical plants and the intricate networks of rail and transit to the vital pulse of power generation, we innovate solutions that ensure optimal operation, protect critical assets, and maximize efficiency.

We care deeply about the success of our customers, the well-being of our people, and the reliability of every product we design. This drives our unwavering commitment to safety and integrity in everything we do. Through collaboration, we unite a rich legacy of expertise with a trusted global team, partnering side-by-side with our customers. We transfer the warmth needed to make life work.



LIMITED WARRANTY

PCW SERIES BOILER



Thermon's Precision Boilers Family warrants all electrical components (except pilot lights and fuses), pressure vessel and heating elements, if found defective in workmanship or material while under normal use and service within the first year of operation or until 18 months after shipment from Precision's factory, whichever occurs first, after authorized return by purchaser to Precision (at purchaser's expense) and after examination discloses to Precision's reasonable satisfaction to be defective. The repair or replacement of defective parts will be made by Precision without charge. Precision will not be held responsible for any field charges in connection with the removal or replacement of allegedly defective parts, nor for incidental or consequential damages. This guarantee does not include damage resulting from unsuitable water.

NOTE: In pursuing our policy of continuous development of products, Precision reserves the right to vary any detail in this bulletin without notice.

Other Thermon products: <https://thermon.com/products/>



For more information, email info@thermon.com