OIL-FIRED WATER BOILER
EMPIRE EWC CAST IRON

UP TO 86.2% AFUE EFFICIENCY

The EWC Series is an atmospheric chimney vent boiler with inputs from 112 - 217 MBH. The boiler features a dependable cast iron heat exchanger with cast iron push nipples and a Hydrolevel Operating Control with digital temperature display and diagnostics.

In the Less Coil version, the control monitors water temperature and delays the burner starting until any residual heat has been transferred. Thermal purge logic measures the rate of temperature change inside the boiler and delays burner firing accordingly, maximizing efficiency by turning on the burner only when needed.

In the With Coil version, the Low Limit Control seeks maximum temperature to satisfy domestic hot water call bypassing thermal purge logic.

EWC FEATURES

- 112 MBH - 217 MBH
- Dependable Cast Iron Heat Exchanger with Cast Iron Push Nipples
  - The sections and push nipples expand at the same rate when heated. By using similar materials instead of less expensive gaskets, the boiler maintains a water tight seal
- HydroLevel 3250 Operating Control:
  - Digital Temperature Display and Diagnostics
  - Adjusts Water Temperature based on demand
  - Built-in Low Water Cut Off (LWCO)
- Optional Tankless Domestic Hot Water Heater Coil
- Innovative American Manufacturing

20 Year Non-Prorated Limited Warranty (Residential Applications)
## PRODUCT SPECIFICATIONS

### RATINGS

<table>
<thead>
<tr>
<th>MODEL</th>
<th>Firing Rate GPH</th>
<th>Input MBH</th>
<th>Heating Capacity MBH</th>
<th>Net AHRI Rating MBH</th>
<th>Efficiency AFUE%</th>
<th># of Sec.</th>
<th>Tankless Coil GPM</th>
<th>Chimney Size</th>
<th>Water Content Gallons</th>
<th>- A - Width</th>
<th>- B - Height</th>
<th>- C - Depth</th>
<th>Weight Lbs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3EWC0.80(T)</td>
<td>0.80</td>
<td>112</td>
<td>98</td>
<td>85</td>
<td>86</td>
<td>3</td>
<td>3.05</td>
<td>8&quot; x 8&quot; x 15'</td>
<td>9.6</td>
<td>20 1/2&quot;</td>
<td>36&quot;</td>
<td>14 1/2&quot;</td>
<td>470</td>
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<tr>
<td>4EWC1.00(T)</td>
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<td>106</td>
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<td>3.25</td>
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<td>11.6</td>
<td>20 1/2&quot;</td>
<td>36&quot;</td>
<td>17 3/4&quot;</td>
<td>545</td>
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<td>20 1/2&quot;</td>
<td>36&quot;</td>
<td>17 3/4&quot;</td>
<td>545</td>
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<tr>
<td>5EWC1.55(T)</td>
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<td>36&quot;</td>
<td>21&quot;</td>
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</tbody>
</table>

(T) Tankless Coil Models

(1) MBH = 1000 Btu/hr (British Thermal Units Per Hour)
(2) Heating capacity and AFUE (Annual Fuel Utilization Efficiency) are based on DOE (Department of Energy) test procedure.
(3) Net AHRI ratings shown are based on piping allowance of 1.15. Consult manufacturer before selecting a boiler for installations having unusual piping and pickup requirements, such as intermittent system operation, extensive piping systems, etc.
(4) Capacity GPM applies to models with a tankless coil (T).

### CONNECTIONS

| Water Return & Supply | 1-1/4” NPT |

### ELECTRICAL

120 V ac, 60 hertz, 1 phase, less than 12 amps (15 amp circuit recommended)

### STANDARD EQUIPMENT

- **Boiler Control Module:** Hydrolevel Fuel Smart HydroStat, combination Low Water Cut Off with boiler temperature reset and circulator control.
- **Display Interface:** Digital display with easy to set dial-type limit settings.
- **Heat Exchanger:** cast iron sections with cast iron push nipples and swing door.
- **Combustion:** Completely installed and wired Beckett AFG Series Oil Burner (3 & 4 Section F Head; 5 Section MD Head) equipped with Nozzle, Primary Control, CAD Cell, PSC Motor, Interrupted Duty Ignition and Clean Cut Pump; Flue Brush; Swing Fire Door with Insulation (Vacuum Formed Ceramic Fiber), Target Wall (Vacuum Formed Refractory Ceramic Fiber); Dura Blanket Insulation Chamber. Chamber, and Barometric Draft Control 6”.
- **Other:** Assembled Cast Iron Boiler with Insulated Jacket, Combination Temperature/Pressure Gauge, Circulator Pump wired with 5’ harness for supply or return mounting in the field, 3/4” Boiler Drain Valve, 30 psi ASME Relief Valve, extra Boiler Tap for Expansion Tank or Air Elimination.

### OPTIONS

- Beckett Burner; Manual Reset High Limit with plug-in Molex connector, and Direct Vent, Taco ECM Pump, Grundfos Pump, B&G Pump