





The **Keystone KWC Series** Boiler is an affordable oil-fired heating solution. 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.

**Swing Burner Door** - Provides easy access for servicing and maintaining the burner/boiler.

## **PRODUCT FEATURES**

- 5 Models with 112 MBH 217 MBH Inputs
- Up to 86.2% AFUE
- 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 Limited Warranty (Residential)

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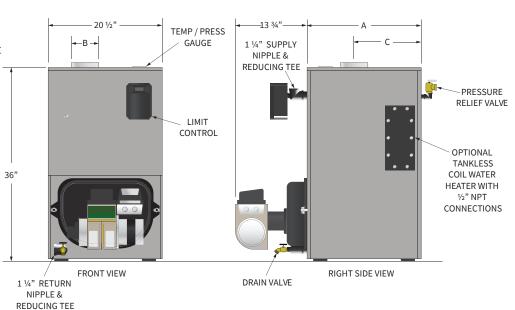
Simple, Comfortable, Affordable.

# **KWC Series** Oil-Fired Hot Water Boilers



## **Standard Equipment:**

- Assembled boiler with insulated jacket
- Completely installed and wired Beckett AFG Series Oil Burner
- Flue Brush
- Target Wall (Vacuum Formed Refractory Ceramic Fiber)
- DuraBlanket Insulation Chamber
- Barometric Draft Control 6"
- Combination Temperature/Pressure gauge
- Pre-wired 5' pump harness for supply or return mounting in the field
- 3/4" Boiler Drain Valve
- 30 psi ASME Relief Valve



**ELECTRICAL** 

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

### RATINGS

AHRI CERTIFIED RATINGS					DIMENSIONS							
Firing Rate GPH	Input MBH <sup>(1)</sup>	Heating Capacity MBH <sup>(1)(2)</sup>	Net AHRI Rating MBH <sup>(1)(3)</sup>	Efficiency AFUE% <sup>(2)</sup>	# of Sec.	Tankless Coil GPM <sup>(4)</sup>	Chimney Size	Water Content Gallons	- A - Depth	-B- Flue Dia.	- C -	Weight Lbs.
0.80	112	98	85	86.0	3	3.05	8" x 8" x 15'	9.6	14 1/2"	6"	8"	470
1.00	140	122	106	86.2	4	3.25	8" x 8" x 15'	11.6	17 3/4"	6"	9 5/8"	545
1.25	175	152	132	86.0	4	3.50	8" x 8" x 15'	11.6	17 3/4"	6"	9 5/8"	545
1.35	189	167	145	86.0	5	3.60	8" x 8" x 15'	13.7	21"	6"	11 1/2"	630
1.55	217	189	164	86.0	5	3.80	8" x 8" x 15'	13.7	21"	6"	11 1/2"	630
	Rate GPH 0.80 1.00 1.25 1.35	Firing Rate GPH      Input MBH <sup>(1)</sup> 0.80      112        1.00      140        1.25      175        1.35      189	Firing Rate GPH      Input MBH <sup>(1)</sup> Heating Capacity MBH <sup>(1)(2)</sup> 0.80      112      98        1.00      140      122        1.25      175      152        1.35      189      167	Firing Rate GPH      Input MBH <sup>(1)</sup> Heating Capacity MBH <sup>(1)(2)</sup> Net AHRI Rating MBH <sup>(1)(2)</sup> 0.80      112      98      85        1.00      140      122      106        1.25      175      152      132        1.35      189      167      145	Firing Rate GPH      Input MBH <sup>(1)</sup> Heating Capacity MBH <sup>(1)(2)</sup> Net AHRI Rating MBH <sup>(1)(3)</sup> Efficiency AFUE% <sup>(2)</sup> 0.80      112      98      85      86.0        1.00      140      122      106      86.2        1.25      175      152      132      86.0        1.35      189      167      145      86.0	Firing Rate GPH      Input MBH <sup>(1)</sup> Heating Capacity MBH <sup>(1)</sup> Net AHRI Rating MBH <sup>(1)</sup> Efficiency AFUE% <sup>(2)</sup> # of sec.        0.80      112      98      85      86.0      3        1.00      140      122      106      86.2      4        1.25      175      152      132      86.0      4        1.35      189      167      145      86.0      5	Firing Rate GPH      Input MBH <sup>(1)</sup> Heating Capacity MBH <sup>(1)(2)</sup> Net AHRI Rating MBH <sup>(1)(2)</sup> Efficiency AFUE99/2 <sup>1</sup> # of Scular GPM <sup>(4)</sup> Tankless Coil GPM <sup>(4)</sup> 0.80      112      98      85      86.0      3      3.05        1.00      140      122      106      86.2      4      3.25        1.25      175      152      132      86.0      5      3.60        1.35      189      167      145      86.0      5      3.60	Firing Rate GPH      Input MBH <sup>(1)</sup> Heating Capacity MBH <sup>(1)(2)</sup> Net AHRI Rating MBH <sup>(1)(2)</sup> Efficiency AFUE% <sup>(2)</sup> # of Sec.      Tankless Coil GPM <sup>(4)</sup> Chimney Size        0.80      112      98      85      86.0      3      3.05      8"x 8" x 15'        1.00      140      122      106      86.2      4      3.25      8"x 8" x 15'        1.25      175      152      132      86.0      4      3.50      8"x 8" x 15'        1.35      189      167      145      86.0      5      3.60      8"x 8" x 15'	Firing Rate GPH      Input MBH <sup>(1)</sup> Heating capacity MBH <sup>(1)(2)</sup> Net AHRI Rating MBH <sup>(1)(2)</sup> Efficiency AFUE% <sup>(2)</sup> # of sec.      Tankless Coil GPM <sup>(4)</sup> Chimney Size      Water Content Gallons        0.80      112      98      85      86.0      3      3.05      8"x 8"x 15'      9.6        1.00      140      122      106      86.2      4      3.25      8"x 8"x 15'      11.6        1.25      175      152      132      86.0      4      3.50      8"x 8"x 15'      11.6        1.35      189      167      145      86.0      5      3.60      8"x 8"x 15'      13.7	Firing Rate GPH      Input MBH <sup>(1)</sup> Heating Capacity MBH <sup>(1)(2)</sup> Net AHRI Rating MBH <sup>(1)(2)</sup> Efficiency AFUE99 <sup>(2)</sup> # of sc.      Tankless Coil GPM <sup>(4)</sup> Chimney Size      Water Content Gallons      - A - Depth        0.80      112      98      85      86.0      3      3.05      8"x 8"x 15'      9.6      14 1/2"        1.00      140      122      106      86.2      4      3.25      8"x 8"x 15'      11.6      17 3/4"        1.25      175      152      132      86.0      4      3.50      8"x 8"x 15'      11.6      17 3/4"        1.35      189      167      145      86.0      5      3.60      8"x 8"x 15'      13.7      21"	Firing Rate GPH      Input Gapacity MBH <sup>(1)</sup> Net AHRI Rating MBH <sup>(1)</sup> Efficiency AFUE <sup>(0)</sup> # of AFUE <sup>(0)</sup> Tankless Coil GPM <sup>(4)</sup> Chimney Size      Water Content Gallons      -A - Depth Flue Dia        0.80      112      98      85      86.0      3      3.05      8"x 8"x 15'      9.6      14 1/2"      6"        1.00      140      122      106      86.2      4      3.25      8"x 8"x 15'      11.6      17 3/4"      6"        1.25      175      152      132      86.0      4      3.50      8"x 8"x 15'      11.6      17 3/4"      6"        1.35      189      167      145      86.0      5      3.60      8"x 8"x 15'      11.6      17 3/4"      6"	Firing Rate GPH    Input (MBH <sup>(1)</sup> )    Heating Capacity (MBH <sup>(1)</sup> )    Net AHR Rating (MBH <sup>(1)</sup> )    Efficiency (AFUE%) <sup>(2)</sup> # of Sec.    Tankless (Coil GPM <sup>(4)</sup> )    Chimney (Size)    Water (Content Gallons)    -A- Depth (Gallons)    -B- Flue (Dia.)    -C-      0.80    112    98    85    86.0    3    3.05    8" x 8" x 15'    9.6    14 1/2"    6"    8"      1.00    140    122    106    86.2    4    3.25    8" x 8" x 15'    11.6    17 3/4"    6"    95/8"      1.25    175    152    132    86.0    4    3.60    8" x 8" x 15'    11.6    17 3/4"    6"    95/8"      1.35    189    167    145    86.0    5    3.60    8" x 8" x 15'    13.7    21"    6"    11/2"

#### (T) = with Tankless Coil

(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) Refer to IOM and vent pipe manufacturer's instructions for equivalent lengths and approved venting materials.

(5) Capacity GPM applies to models with a tankless coil (T).







Working Pressure

www.penncoboilers.com



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