

87% Efficient!

EMPTM Efficient Multi-Pass

Oil Fired, Chimney or Direct Vented, Cast Iron Water Boiler



- 87% AFUE, ENERGY STAR[®] certified
- 3-pass cast iron sectional design
- Integral, pre-installed low water cut-off (LWCO)
- Beckett[®] and Carlin[®] burner options
- Designed for ease of service
 - Reversible swing-away burner door
 - No target wall
 - Removable rear plates access flue passages
- Lifetime limited warranty
- Seven sizes available, 0.60-2.40 GPH

Intelligent Controls Simplify Installation and Operation

Primary Ignition Controls

- Advanced display and diagnostics
 - Beckett[®] GeniSys[®] 7565 (for Beckett burner builds)
 - Carlin[®] Pro-XTM 70200 (for Carlin burner builds)

HydroStat[®] 3250 Three Function Hydronic Control

- Easy temperature control
- Low water cut off – selectable auto or manual reset
- Fuel savings with thermal targeting or traditional outdoor reset capability
- Thermal pre-purge circulation uses latent heat before starting new heat cycle
- Easy settings and monitoring
- Primary circulator control function
- LED active status indicators assist contractors and consumers
 - High temperature, LWCO, economy operation
- Dynamic digital display
 - Displays boiler supply temperature and outdoor temperature (if ODR installed)
 - Automatically displays set points during adjustments

Circulator included (Taco[®] or Grundfos[®])
\$100+ value at no extra charge!

Return blending manifold
accelerates water mixing and
protects heat exchanger



U.S. Boiler Company


EMP: Technical Information



Standard Equipment

- Precision cast and machined sections
- Return blending manifold
- Powder coated steel jacket
- Insulated jacket (3")
- Reversible burner door
- Removable clean-out ports
- Mounted and wired controls
- 30 PSI relief valve
- Barometric draft regulator
- Boiler drain valve
- Circulator
 - Taco® or Grundfos®
- Primary ignition controls
 - Beckett® GeniSys® 7565 (Beckett®)
 - Carlin® Pro-X™ 70200 (Carlin)
- HydroStat® 3250 hydronic control
 - LWCO, auto or manual
 - Temp control, economy operation
 - Thermal targeting
 - Thermal pre-purge
 - Primary circulator control
 - LED status indicators, digital display

EMP Ratings & Specifications

Model	Burner Capacity		DOE Heating Cap. (MBH) ²	Net AHRI Ratings Water (MBH) ³	AFUE% 	Approximate Shipping Weight. (lbs.)
	GPH	MBH ¹				
EMP84E	0.60	84	74	64	87	430
EMP115E	0.80	115	101	88	87	430
EMP140E	1.00	140	123	107	87	545
EMP182E	1.30	182	160	139	87	658
EMP224E	1.60	224	197	171	87	771
EMP280E	2.00	280	244	212	87	771
EMP336E	2.40	336	289 ⁴	251	86 ⁵	884

NOTE: Maximum working pressure: water : 30 PSI standard, 40 PSI optional

1. MBH refers to thousands of BTUs per hour

2. Based on standard test procedure prescribed by the U.S. DOE at combustion conditions of 13.0% CO₂

3. Net AHRI ratings are based on a piping and pickup allowance of 1.15

4. Gross output

5. Thermal efficiency



For direct vent applications, order boiler as "less burner", and add Beckett NX burner and DV kit from listings below

Dimensions (Inches)

Model	'A'	'B'	'C'
EMP84E	16-5/8	24	5
EMP115E	16-5/8	24	5
EMP140E	22-5/8	24	6
EMP182E	28-5/8	30	6
EMP224E	34-5/8	36	7
EMP280E	34-5/8	36	7
EMP336E	40-5/8	36	7

Direct Vent Burners & Kits

Part No.	Description
112207-01	Beckett NX for EMP140E
112208-01	Beckett NX for EMP182E
112209-01	Beckett NX for EMP224E
102130-02	DV kit for EMP140E & EMP182E, 5"
102130-03	DV kit for EMP224E, 6"

