

87% Efficient!

EMPTM Efficient Multi-Pass

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

- 87% AFUE, ENERGY STAR[®] certified
 - Exceeds DOE-2021 requirements
- 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
- Five sizes available, 0.60-1.60 GPH



Intelligent Controls Simplify Installation and Operation

Primary Ignition Controls

- Advanced display and diagnostics
 - Honeywell[®] R7284 (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

ECM Circulator included
(Taco or Grundfos)

**\$100+ value
at no extra charge!**

U.S. Boiler Company


EMP: Technical Information



Standard Equipment

- Precision cast and machined sections
- Return mixing 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, ECM
 - Taco® or Grundfos®
- Primary ignition controls
 - Honeywell® R7284 (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% 	Minimum Chimney Requirements			Approx. Shipping Weight. (lbs.)
	GPH	MBH ¹				Round Dia (In.)	Rect. (In. x In.)	Height (Ft.)	
EMP84E	0.60	84	74	64	87	6	8 x 8	15	430
EMP115E	0.80	115	101	88	87	6	8 x 8	15	430
EMP140E	1.00	140	123	107	87	6	8 x 8	15	545
EMP182E	1.30	182	160	139	87	7	8 x 8	15	658
EMP224E	1.60	224	197	171	87	7	8 x 8	15	771

Optional Equipment:

- Direct vent kit (140 & 182 P/N: 102130-02)
- Direct vent kit (224 P/N: 102130-03)
- Outdoor sensors; Hydrolevel® 48-140, 48-145
 - Available through wholesale distributors

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

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

Direct Vent Kit Dimensions (Inches)

Model	Vent Connector Diameter	Optional Starter "T" Depth 'D'
EMP140E	5	14
EMP182E	5	14
EMP224E	6	14.5

