

# AMBIENT

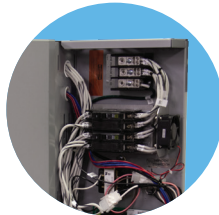
# electric boiler



## 100% EFFICIENT, ZERO EMISSIONS

- Modern residential design, easy to install (only 54 lbs.)
- 16, 20, & 24kW output (54.6, 68.2, & 82 MBH)
- Reliable, American-made, steel water tube heat exchanger
- UL 834 listed
- User-friendly boiler control
- Automatically cycles elements, extending product life
- Easy to service - complete interior access, top-mounted elements (no draining)
- Made in USA, supported by industry leading hydronics experts
- 20-year heat exchanger warranty, 2-year parts warranty

**U.S. Boiler Company**



# Electric Boiler Technical Information



## Specifications

Model	Boiler Size (kW)	Voltage (AC)	Output Power (Watts)	Output Power (MBH)	Amps	Element Size (Watts)	Pump Load (Amps)	Total Amps	MCA <sup>1</sup>	MOP <sup>2</sup>	Recommended Copper Wire <sup>3</sup>			Recommended Aluminum Wire <sup>4</sup>	
											140°F (60°C) AWG	167°F (75°C) AWG	194°F (90°C) AWG	140°F (60°C) AWG	167°F (75°C) AWG
EB-16	16	240	16,000	54.6	66.7	4,000	5	72.7	90.8	100	2	3	4	1/0	1
EB-20	20	240	20,000	68.2	83.3	5,000	5	89.3	111.7	125	1/0	2	2	2/0	2/0
EB-24	24	240	24,000	82.0	100.0	6,000	5	106.0	132.5	150	2/0	1/0	1	4/0	3/0

1. Minimum Circuit Ampacity (MCA) is a calculated value that specifies the minimum primary power wire size to determine the minimum wire size required for a field wired product.

2. Maximum Over-Current Protection (MOP) is a calculated value that determines the maximum size of the over-current protection device (fuse or breaker).

3. Recommended Field Wire Size per National Electric Code (NEC). Check with latest version of NEC and local codes. No more than three (3) current-carrying conductors in raceway. Based on ambient temperature of 86°F (30°C). Other ambient temperatures see NEC or CEC for correction factors. UL-834, Section 14.2.

4. Recommended aluminum wire (not for use in Canada). It is recommended to apply antioxidant paste for aluminum conductors. Aluminum is more malleable than copper - avoid cuts or nicks during termination.

## Standard Equipment

- Steel water tube heat exchanger, coated
- Steel jacket, powder coated
- Dual built-in 60-amp circuit breakers
- Cooling fan
- Flow switch
- Boiler control w/diagnostic display
  - Anti short-cycle timer
  - Automatic element cycling
  - Fault & dry-fire protection
  - Dual setpoint
  - DHW priority
- Secondary high limit (manual)
- Enhanced individual element relays, pump switching relay
- Temp/pressure gauge
- ASME pressure relief valve, 30 PSI
- Boiler drain valve

## Dimensions (in.), Weights (lbs.), & Volume (gal.)

Model	A	B	C	Boiler Supply	Boiler Return	Water Volume	Approximate Shipping Weight	Flow Switch Tee	Air Vent	Relief Valve	T/P Gauge
EB-16	23	18	9-3/4	3/4	3/4	2.2	70	3/4	3/4	3/4	1/4
EB-20	23	18	9-3/4	3/4	3/4	2.2	70	3/4	3/4	3/4	1/4
EB-24	23	18	9-3/4	3/4	3/4	2.2	70	3/4	3/4	3/4	1/4



Special circuit/outlet for 240V single phase service required for boiler power

