

Radiant Floor Heating

The Electro-Boiler provides an ideal water heating energy source for radiant floor tubing applications. An electric boiler system means lower equipment cost and off-peak electric rates makes the electric boiler your best economical value. As a compact wall mounted boiler, less space is required. Simplified controls will also reduce installation cost without compromising quality.

Standard Features

100% efficient Boiler system status lights

Element staging Pressure/temp gauge

Off-peak ready 20-year element warranty 2-year parts warranty

Built in accordance with the requirements of the ASME Boiler and Pressure Vessel Code

Strong factory support



Mini-Boiler Models

7	Preset Temp*	Outdoor Reset**	kW size	Btu/h size
EMB-S-1	\checkmark		1.1	3,754
EMB-S-2	\checkmark		2.5	8,532
EMB-S-4	\checkmark		5	17,065
EMB-†-5	\checkmark		4.5	15,358
EMB-†-7	\checkmark		7	23,891
EMB-†-9	✓		9	30,717

 $\dagger = S \text{ or } H$



TS Midsize Models

$\mathcal{E}_{i} = i$	Preset Temp*	Outdoor Reset**	kW size	Btu/h size	
EB-MS-10	\checkmark		10	34,000	
EB-MS-15	\checkmark		15	51,000	
EB-MS-20	\checkmark		20	68,000	
EB-MX-10	\checkmark	✓	10	34,000	
EB-MX-15	\checkmark	✓	15	51,000	
EB-MX-20	✓	✓	20	68,000	



TS Standard Models

	Preset Temp*	Outdoor Reset**	kW size	Btu/h size
EB-S-13	\checkmark		13.5	46,000
EB-S-18	\checkmark		18	61,000
EB-S-23	\checkmark		22.5	77,000
EB-S-27	\checkmark		27	92,000
EB-WX-13	\checkmark	✓	13.5	46,000
EB-WX-18	\checkmark	✓	18	61,000
EB-WX-23	\checkmark	✓	22.5	77,000
EB-WX-27	\checkmark	✓	27	92,000



TS Commercial Models

-	Preset Temp*	Outdoor Reset**	kW size	Btu/h size
240V Single	<u>Phase</u>			
EB-CX-31		\checkmark	31.5	107,500
EB-CX-36		\checkmark	36	123,000
EB-CX-40		\checkmark	40	136,000
EB-CX-44		✓	44	150,000

^{**}Output water temperature varies depending upon outside temperature.



^{*}Maintains desired output water temperature.

Hydronics Radiant Floor, with Electro-Boiler™

Application suggestions (average residential, size):

		EMB-S	ЕМВ-Н	EB-MS EB-S	EB-MX EB-WX	EB-CX
1.	Lower level, 1 zone - warm floor - with forced air heating system	\checkmark				
2.	Lower level, small and large zones - warm floor - with forced air		✓			
3.	Garage, residential, 1,000 sq. ft. max.	\checkmark				
4.	Lower level, large zones - warm floor - with forced air heating system			✓	✓	✓
5.	Lower level, large, many zones - warm floor - with forced air			√ †	√ †	√ †
6.	Slab on grade - only heating system				✓	✓
7.	Slab on grade, unequal, many zones - only heating system			√ †	√ †	√ †
8.	Whole house, zones - all radiant, two temp. requirement				√ †	√ †
9.	Whole house hydronics, zones - air handler coil, etc two temp. req.				√ †	√ †
10.	Garage or shop, one zone - only heating system			✓		✓
11.	Garage or shop, unequal, many zones - only heating system			√ †	√ †	√ †
12.	Large building, multi-boilers, large and many small zones - add EB-C-STG5			√ †	√ †	√ †
13.	Dual heat, standby gas boiler			✓	✓	✓

[†]Suggest adding EB-Z**-* zone controller board.

Off-peak electric rate, placement of tubing, spacing, etc. - application sheet BL002 has cross-section drawings

Electro Industries has installation training sessions or guides for various applications, request training schedule or assistance. In summary, for paragraphs 1 through 5 tubing can be in the concrete or under, preferably under. For paragraphs 6 through 13 tubing should be in the sand in order to effectively store heat and qualify for off-peak rates.

Accessories and Options

In addition to the Electro-Boiler itself, Electro Industries can provide you with accessories and installation packages leading up to the loop manifold. Our accessories and external controls are designed to match the Electro-Boiler features. Added system performance and long-term reliability is **improved** when matching controls and accessories to the same manufacturer's boiler.

Zone controller - some models can be installed directly within the TS boiler cabinet. Zone controllers feature easy installation, simplified wiring, and troubleshooting lights. In addition to these industry standard features, the Electro zone controller actually communicates with the boiler control and is used as a **staging mechanism**.

Two supply water temperature requirement - the two pump zone controller and the basic four zone valve controller include the ability to condition the TS Series boiler for a two temperature application. Priority zone operates at 150° or 176°, the remaining zone(s) operates at preset temp. This can eliminate mixing valves or injection pump requirements.

Plumbing kit - depending upon model series, there are four installation kits which provide all the necessary fittings, valves, expansion tank, etc. in a carton.

Circulating pump - two basic sizes, convenient to purchase item with plumbing kit.

Switching relay - sometimes needed for zone pumps and other control combinations.

NOTE: Slab thermostat is recommended, request document BL004.



03/22/2018 [±] BL003