

**FBE Series:**

FB-048-E

**48 kW**

Electric Steam Boiler



Fulton's FBE is a compact and reliable electric steam boiler capable of producing high-quality steam with nearly 100% efficiency. It is a clean running, combustion-free boiler with an ASME-M Stamp "Miniature Boiler" Certification. The compact design allows for use in small installation locations. The FBE is best used in applications that require high quality steam and a highly efficient boiler.

**STANDARD FEATURES:**

- Vertical heat exchanger
- Thick wall construction
- 99% Operating efficiencies
- 100 PSIG maximum allowable working pressure
- Can be trimmed 15, 50, or 100 PSIG
- Operating and high pressure limit switches
- NEMA 1 enclosure with locking electrical panel
- Zero NOx emissions
- Incoloy elements
- Stainless steel cabinet
- Low water light
- MM-150 float type level control
- MM-150 PLWCO with auto reset
- Probe type ALWCO with manual reset
- 5 year pressure vessel warranty expandable up to 10 years\*\*

**OPTIONS:**

- Element step sequencer
- Stainless steel pressure vessel
- Auto bottom blowdown
- Boiler alarm package
- Control circuit transformer

**PROJECT DETAILS:**

Project Name	
Date Submitted	
Fulton Representative	

City, State (Province)	
Engineer of Record	
Contractor	

**LISTINGS & COMPLIANCE:**

- ASME Section I code, "M" stamp
- UL approved
- CSD-1 and CSA Controls
- Exceeds AHRAE 90.1 efficiency requirements

**TRIM KIT ITEMS:**

- ASME Safety Relief Valve
- Pressure Gauge
- Installation, Operation and Maintenance Manual
- Gauge Glass and Protector Rods

**NOTE:**

Information provided in this document is based on standard boiler configurations only. Custom configurations may result in deviations.

\*\* With engineered system per Fulton warranty statement

**CAPACITIES:**

		FBE	FB-048-E
Unit Size	<b>HP</b>		<b>4.8</b>
	<b>kW</b>		<b>48</b>
Rated Output	<b>BTU/hr</b>		<b>163,693</b>
Steam Output F&A 212 F 0 PSIG	<b>lbs/hr</b>		<b>169</b>
	<b>kg/hr</b>		<b>77</b>

**CONNECTION SIZES:**

		FBE	FB-048-E	
Trim			15 PSI	100 PSI
Steam Outlet	<b>inches</b>		<b>1</b>	<b>1</b>
	<b>mm</b>		<b>25</b>	<b>25</b>
Feedwater Inlet	<b>inches</b>		<b>1/2</b>	<b>1/2</b>
	<b>mm</b>		<b>13</b>	<b>13</b>
Bottom Blowdown	<b>inches</b>		<b>1</b>	<b>1</b>
	<b>mm</b>		<b>25</b>	<b>25</b>
Water Column Drain	<b>inches</b>		<b>1</b>	<b>1</b>
	<b>mm</b>		<b>25</b>	<b>25</b>
Safety Valve Inlet x Outlet	<b>inches</b>		<b>1/2 x 3/4</b>	<b>3/4 x 1</b>
	<b>mm</b>		<b>13 x 19</b>	<b>19 x 25</b>

**ELECTRICAL REQUIREMENTS:**

		FBE	FB-048-E				
Electrical Supply	<b>Volts</b>		<b>208</b>	<b>240</b>	<b>380</b>	<b>480</b>	<b>575</b>
	$\emptyset$		<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
	<b>Hz</b>		<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>
Short Circuit Current Rating	<b>Amps</b>		<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>
NEMA Rating			<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
Full Load Amps (FLA)*	<b>Amps</b>		<b>134</b>	<b>116</b>	<b>73</b>	<b>59</b>	<b>47</b>

\*FLA is subject to change based on options, consult factory for job specific FLA

**WEIGHTS & VOLUMES:**

		FBE	FB-048-E
Water Capacity	<b>gallons</b>		<b>9</b>
	liters		<b>34</b>
Dry Weight	<b>lbs</b>		<b>356</b>
	<b>kg</b>		<b>161</b>
Operating Weight	<b>lbs</b>		<b>431</b>
	<b>kg</b>		<b>195</b>

**ELEMENTS:**

FBE		FB-048-E	
Number Of Elements:	<b>QTY (1)</b> <b>12 kW</b>	<b>QTY (2)</b> <b>18 kW</b>	

**DIMENSIONS:**

Refer to the Product Data Submittal Drawing for dimensions.