

# **TECHNICAL DATA SHEET**

FBE Series: FB-144-E **144 kW** Electric Steam Boiler



Fulton's FBE is a compact and reliable electric steam boiler capable of producing highquality 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 efficiences
- 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 |  |

#### LISTINGS & COMPLIANCE:

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

| City, State (Province) |  |
|------------------------|--|
| Engineer of Record     |  |
| Contractor             |  |

#### 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



Fulton practices continuous product improvement and reserves the right to change specifications and/or dimensions without notice. Always refer to the current documentation available for download on <u>Fulton.com</u>

### CAPACITIES:

|                                     | FBE                    | FB-144-E          |
|-------------------------------------|------------------------|-------------------|
| Linit Cine                          | HP                     | 14.4              |
| Unit Size                           | kW                     | 144               |
| Rated Output                        | BTU/hr                 | 491,413           |
| Steam Output<br>F&A 212 F<br>0 PSIG | <b>lbs/hr</b><br>kg/hr | <b>506</b><br>230 |

## **CONNECTION SIZES:**

|                             | FBE    |           | FB-144-E  |
|-----------------------------|--------|-----------|-----------|
| Trim                        |        | 15 PSI    | 100 PSI   |
| Oha and Ohathat             | inches | 3         | 2         |
| Steam Outlet                | mm     | 76        | 51        |
| Feedwater Inlet             | inches | 1/2       | 1/2       |
|                             | mm     | 13        | 13        |
|                             | inches | 1         | 1         |
| Bottom Blowdown             | mm     | 25        | 25        |
| Water Column Drain          | inches | 1         | 1         |
|                             | mm     | 25        | 25        |
| Safety Valve Inlet x Outlet | inches | 1 x 1 1/2 | 1 x 1 1/4 |
|                             | mm     | 25 x 38   | 25 x 32   |

## **ELECTRICAL REQUIREMENTS:**

|                              | FBE              |                       |                       | FB-144-E              |                       |                       |
|------------------------------|------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Electrical Supply            | Volts<br>Ø<br>Hz | <b>208</b><br>3<br>60 | <b>240</b><br>3<br>60 | <b>380</b><br>3<br>60 | <b>480</b><br>3<br>60 | <b>575</b><br>3<br>60 |
| Short Circuit Current Rating | Amps             | 5,000                 | 5,000                 | 5,000                 | 5,000                 | 5,000                 |
| NEMA Rating                  |                  | 1                     | 1                     | 1                     | 1                     | 1                     |
| Full Load Amps (FLA)*        | Amps             | 400                   | 347                   | 219                   | 173                   | 139                   |

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

#### **WEIGHTS & VOLUMES:**

|                  | FBE                      | FB-144-E          |
|------------------|--------------------------|-------------------|
| Water Capacity   | <b>gallons</b><br>liters | <b>23</b><br>87   |
| Dry Weight       | lbs<br>kg                | <b>645</b><br>293 |
| Operating Weight | lbs<br>kg                | <b>837</b><br>380 |



Fulton practices continuous product improvement and reserves the right to change specifications and/or dimensions without notice. Always refer to the current documentation available for download on <u>Fulton.com</u>

#### **ELEMENTS:**

| FBE                 | FB-144-E         |
|---------------------|------------------|
| Number Of Elements: | QTY (8)<br>18 kW |

# DIMENSIONS:

Refer to the Product Data Submittal Drawing for dimensions.



Fulton practices continuous product improvement and reserves the right to change specifications and/or dimensions without notice. Always refer to the current documentation available for download on <u>Fulton.com</u>