

SB-E Indirectly Fired Water Heater Tanks**Features**

- » Heavy gauge steel with porcelain enamel coating
- » Superb quality with long service life
- » 3 kW electric heating element
- » Fitted with one large heat exchangers
- » 2 auxiliary ports
- » Sacrificial anode rod
- » Up to 2" R-14 urethane foam insulation for low standby heat loss
- » Large clean out port for ease of maintenance
- » Powder-coated steel outer jacket
- » Limited lifetime warranty

Models & Specifications

	SB 300 E	SB 400 E
Item Number	234110	234111
Hydraulic data		
Storage Capacity	79.3 gal / 300 l	105.6 gal / 400 l
Volume of heat exchanger	2.4 gal / 9.5 l	2.9 gal / 11.1 l
Surface area of heat exchanger	16.1 ft ² / 1.5 m ²	20.6 ft ² / 1.9 m ²
Heating element		
Heating element voltage	220-240 V	
Heating capacity	3.0 kW / 10,239 BTU/hr	
Frequency	60 Hz	
Rated current	12.5 A	
Required circuit breaker	20 A	
Heating element type	Dome element	
Heating element material	Ceramic	
Temperature control	Knob with °F & °C scale under the heating element cover	
Set range of thermostat	86°F-167°F / 30°C-75°C	
Miscellaneous		
Pressure drop at 4.4 gpm	3.7 ft. head / 11 kPa	4.0 ft. head / 12 kPa
Heat exchanger power rating Inlet 50 °F, 140 °F Outlet	165,000 BTU/hr / 48.4 kW	183,000 BTU/hr / 53.7 kW
Recovery rate (maximum input)	234 gal/hr / 885 l/hr	258 gal/hr / 976 l/hr
Recover rate (electric element only)	13.7 gal/hr / 51.8 l/hr	13.7 gal/hr / 51.8 gal/hr
Max. tank pressure	145 PSI / 10 bar	
Max. heat exchanger pressure	145 PSI / 10 bar	
Max. tank temperature	203°F / 95°C	
Tank heat loss in 24 hours	2.8 kW / 9,553 BTU	3.0 kW / 10,236 BTU
Empty weight	313 lb / 142 kg	399 lb / 181 kg
Filled weight	1,010 lb / 458 kg	1,334 lb / 605 kg
Type of anode	Magnesium with wear indicator	
Dimensions		
Height	61 ¹ / ₈ in / 1552 mm	60 ¹³ / ₁₆ in / 1544 mm
Diameter	25 ⁹ / ₁₆ in / 650 mm	29 ¹ / ₂ in / 750 mm
Insulation thickness	2 in / 50 mm	
Diameter without insulation	21 ⁵ / ₈ in / 550 mm	25 ⁹ / ₁₆ in / 650 mm



C USA

Tested and Certified by Water Quality Association against NSF/ANSI 372 for lead free compliance.

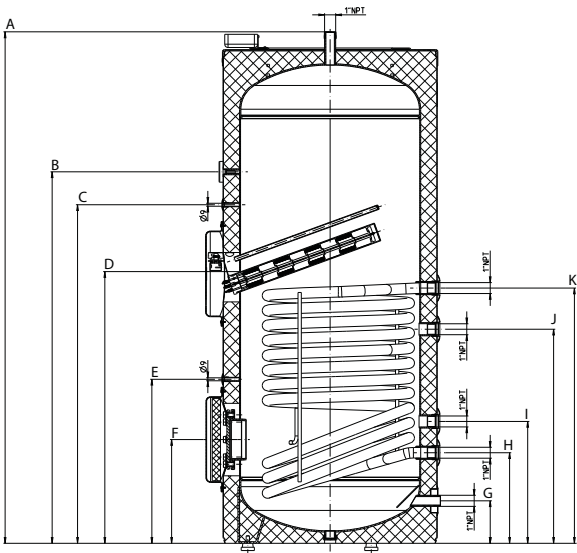


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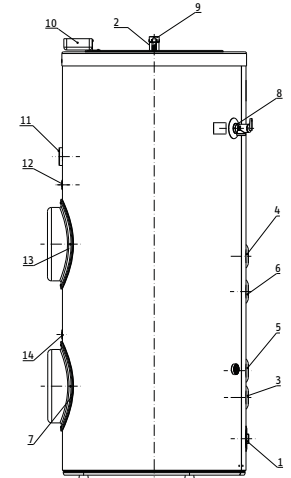
Certified to UL Std. 174
Conforms to CAN/CSA Std. 22.2 No. 110-94

ISO 9001
CERTIFIED

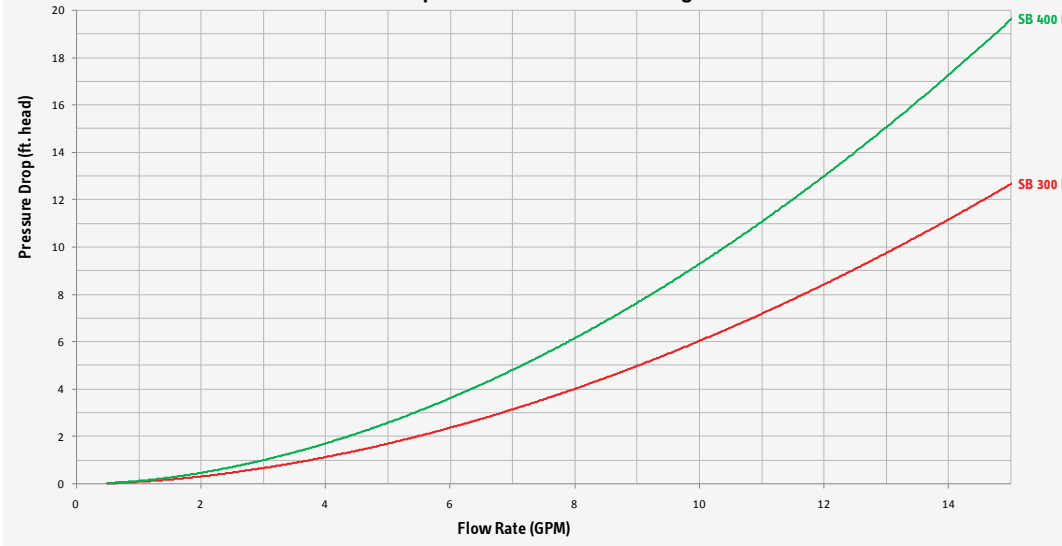
Dimensions



Type		SB 300 E	SB 400 E	Connection
A	Height to hot water outlet (overall height)	in/mm 61 ³ / ₈ / 1552	60 ¹³ / ₁₆ / 1544	1" NPT male
B	Height to thermometer	in/mm 44 ⁷ / ₁₆ / 1128	45 ⁵ / ₁₆ / 1145	
C	Height to upper temperature probe sensor sleeve	in/mm 40 ¹ / ₂ / 1028	42 ³ / ₄ / 1085	Ø 9mm
D	Height to heating element port	in/mm 32 ¹ / ₂ / 825	34 ⁷ / ₈ / 886	
E	Height to lower temperature sensor sleeve	in/mm 30 ¹ / ₂ / 775	32 ¹³ / ₁₆ / 830	Ø 9mm
F	Height to clean-out port	in/mm 12 ³ / ₈ / 315		Ø 115mm
G	Height to cold water inlet	in/mm 54 ³ / ₁₆ / 129	49 ¹ / ₁₆ / 110	1" NPT male
H	Height to heat exchanger lower port	in/mm 10 ¹³ / ₁₆ / 275	11 / 280	1" NPT female
I	Height to auxiliary heat source lower port	in/mm 14 ⁹ / ₁₆ / 370		1" NPT female
J	Height to auxiliary heat source upper port	in/mm 25 ⁹ / ₁₆ in. / 650	27 ⁹ / ₁₆ / 700	1" NPT female
K	Height to heat exchanger upper port	in/mm 19 ³ / ₈ in. / 498 mm		1" NPT female
L	Height to T&P valve port	in/mm 48 ³ / ₄ in. / 1228 mm		¾" NPT female



Pressure Drop Curve for SB-E Heat Exchangers



- 1 Cold water inlet
- 2 Hot water outlet
- 3 Lower heat exchanger port
- 4 Upper heat exchanger port
- 5 Lower auxiliary port
- 6 Upper auxiliary port
- 7 Clean-out port
- 8 T&P valve port
- 9 Anode replacement indicator
- 10 Junction box
- 11 Analog thermometer
- 12 Upper temperature sensor sleeve
- 13 Electric heating element
- 14 Lower temperature sensor sleeve

Specification

Tank shall be constructed of steel with porcelain enamel coating on all surfaces in contact with DHW. Tank shall be insulated with urethane foam insulation 2 in. (50 mm.) thick to R-14 with an steel outer casing cover. Standby heat loss shall be between 2.6 and 3.5 kWh (8,871-11,942 BTU) per 24 hours. Tank shall be delivered in cardboard packaging on a one-way pallet. Tank shall have been pressure tested to 217 PSA/15 bar and the maximum operating pressure shall be 145 PSI/10 bar. Tank shall be ETL certified in USA and Canada to IAS U.S. Requirements for Indirect Fired Water Heaters For Use With External Heat Source. No 1-91, Dated June 6, 1992. Tank shall be equipped with welded steel plain-ended pipe heat exchangers, hot water corrosion protection via special enamel coating and magnesium sacrificial anode, two immersion sleeves for housing of temperature probe and thermometer, 2 auxiliary circulation ports, inspection/cleaning port with cover.

Engineer/Architect _____	Date _____
Job Name/Customer _____	Location _____
Contractor _____	Representative _____
Qty _____	Volume _____
SBB model _____	