

STIEBEL ELTRON

Simply the Best

Indirect Tanks for Domestic Hot Water

New!
Single coil tanks
with electric element



DHW Tanks

FOR ALL SOLAR, GEOTHERMAL
OR HYDRONIC APPLICATIONS

- › Heavy Gauge Steel With Porcelain Enamel Coating
- › Superb Quality Results In Long Service Life
Backed By A Lifetime Warranty
- › Sacrificial Anode Rod
- › Up To 3" R-21 Urethane Foam Insulation
For Low Standby Heat Loss
- › Large Clean-Out Port For Ease Of Maintenance



ISO 9001
CERTIFIED



800.582.8423

www.stiebel-eltron-usa.com

Engineering & Manufacturing Excellence

Over 90 Years Of German Technology

All Stiebel Eltron SBB/SB-E series tanks are made in our factories in Germany and Slovakia. They can be used in residential or commercial installations as indirectly-fired domestic hot water storage tanks in conjunction with any type of boiler, geothermal, or solar hot water application.

The vessels and heat exchangers in SBB/SB-E tanks are made from heavy gauge steel. All surfaces in contact with domestic hot water receive a thick porcelain enamel coating after shot-peening to clean the steel surface. In addition, vessel exteriors receive a light porcelain coating. Up to three inches of urethane foam insulation ensures that hot water stays hot, and standby heat loss is minimized. All SBB/SB-E tanks come with heavy-duty sacrificial anodes and visible anode wear indicators. SBB/SB-E tanks are also fitted with an extra-large clean-out port for ease of maintenance.



Tanks being porcelain-fired at Stiebel Eltron's factory in Holzminden, Germany

Stiebel Eltron SBB series tanks are equipped with either one or two large-bore heat exchangers, designed to maximize heat transfer. For solar thermal applications, an SBB tank can be used with an external backup heater, or an SB-E tank with its integral electric element can be used. Dual heat exchanger models are typically used in solar thermal applications by connecting the lower coil to the collector array, and the upper coil connected to any type of boiler for backup heat input or as a takeoff for a radiant heating loop.



SB-E as a standalone electric tank



SB-E as a solar thermal store with integral electric backup



SB-E as a solar thermal store with an electric boiler for floor heating



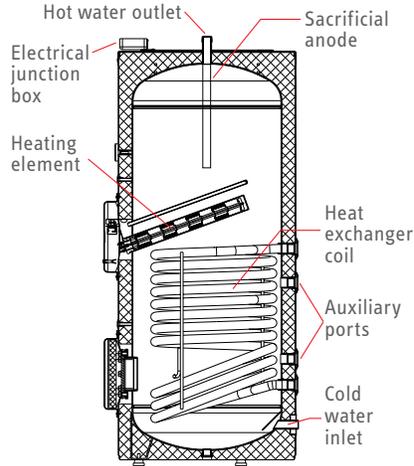
SB-E as a store for an air-source or ground-source heat pump

The SB 300 & 400 E's are versatile enough for several installation applications. Using a combination of the heat exchanger ports and the auxiliary ports, these tanks can serve as a store for many fuel sources, distribute stored heat to buffer tanks, or transfer heat wherever it is required.

New! SB-E Tanks

- › Solar-ready
- › Powder-coated steel jacket
- › Standard junction box for electrical connection
- › All connections are NPT
- › Two auxiliary ports
- › Heating element is jacketed and can be replaced without draining tank

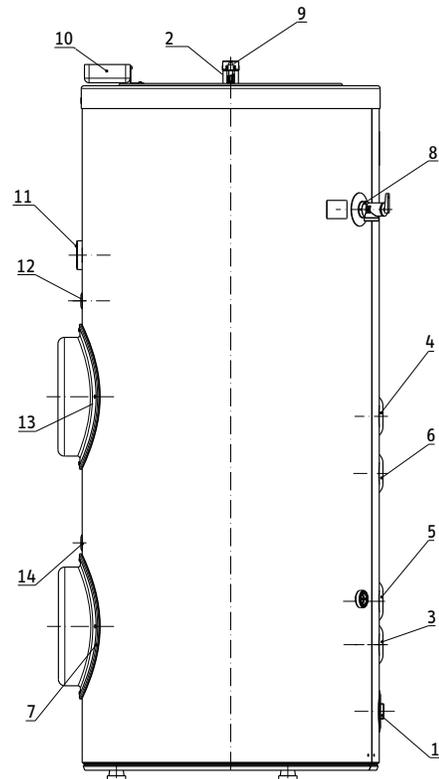
Single Heat Exchanger with Electric Element



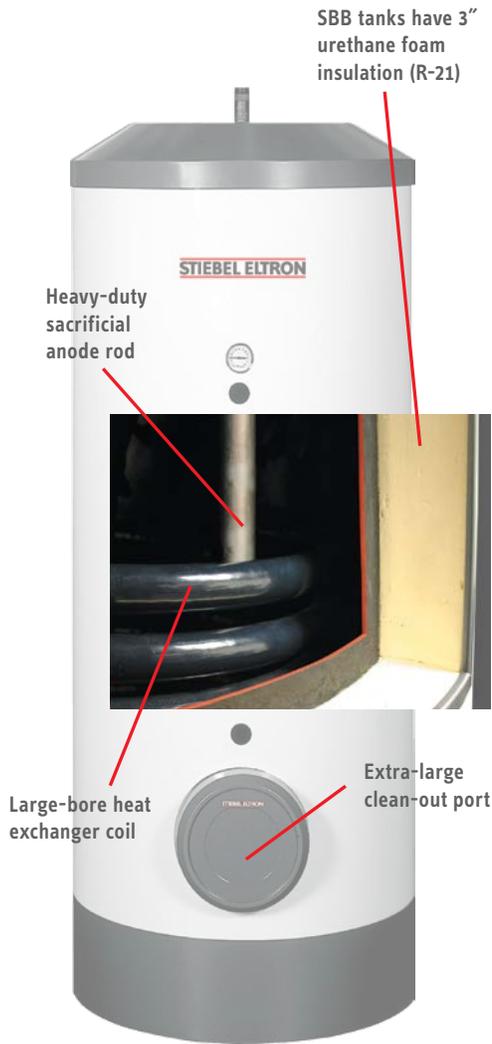
Stiebel Eltron SB-E tanks and heat exchangers are warranted against material defects for life. All other parts, excluding the sacrificial anode, are warranted for 10 years. See warranty for complete details.

| DHW Tank Model | SB 300 E | SB 400 E |
|---|---|--|
| Part number | 234110 | 234111 |
| CONTENTS | | |
| Storage capacity | 79.3 gal / 300 l | 105.6 gal / 400 l |
| Heat exchanger volume | 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 |
| Working pressure | 145 PSI / 10 bar | 145 PSI / 10 bar |
| Max. pressure of boiler loop | 145 PSI / 10 bar | 145 PSI / 10 bar |
| HEATING ELEMENT | | |
| Heating element voltage | 220-240 V | |
| Heating capacity | 10,239 BTU/hr / 3.0 kW | |
| 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 heating element cover | |
| Set range of thermostat | 86°F-167°F / 30°C-75°C | |
| OTHER | | |
| Cold/hot water connection | 1" male NPT | |
| Heat exchanger & auxiliary connections | 1" female NPT | |
| PERFORMANCE DATA | | |
| Standby losses in 24 hours | 2.8 kW / 9,553 BTU | 3.0 kW / 10,236 BTU |
| 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 |
| Recovery rate (electric element only) | 13.7 gal/hr / 51.8 l/hr | 13.7 gal/hr / 51.8 l/hr |
| DIMENSIONS | | |
| Height | 61 ¹ / ₈ " / 1552 mm | 60 ¹³ / ₁₆ " / 1544 mm |
| Diameter | 25 ⁹ / ₁₆ " / 650 mm | 29 ¹ / ₂ " / 750 mm |
| Insulation thickness | 2" / 50 mm | |
| Diameter without insulation | 21 ⁵ / ₈ " / 550 mm | 25 ⁹ / ₁₆ " / 650 mm |

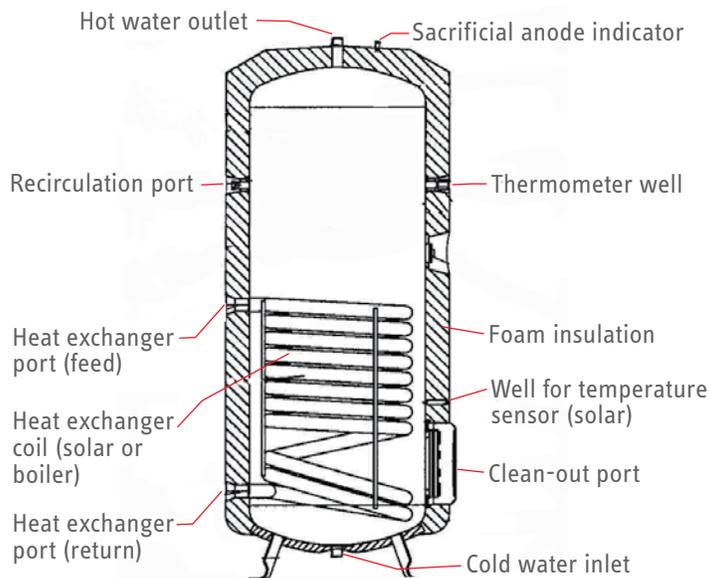
- 1 Cold water inlet
- 2 Hot water outlet
- 3 Lower heat exchanger port
- 4 Upper heat exchanger port
- 5 Lower auxiliary port
- 6 Upper auxiliary port
- 7 Clean-out port
- 8 T&P valve port
- 9 Anode replacement indicator
- 10 Junction box
- 11 Analog thermometer
- 12 Upper temperature sensor sleeve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



SBB Single Coil Tanks



SBB 300 S, SBB 400 S



Single Heat Exchanger



| DHW Tank Model | SBB 300 S | SBB 400 S |
|---|--|--|
| Part number | 221219 | 221222 |
| CONTENTS | | |
| Storage capacity | 80.6 gal / 305 l | 108.6 gal / 411 l |
| Upper heat exchanger volume | NA | NA |
| Lower heat exchanger volume | 2.7 gal / 10.2 l | 3.0 gal / 11.3 l |
| PRESSURE | | |
| Working pressure | 150 psi / 10 bar | 150 psi / 10 bar |
| Tested to pressure | 217 psi / 15 bar | 217 psi / 15 bar |
| Max. pressure of boiler loop | 150 psi / 10 bar | 150 psi / 10 bar |
| TEMPERATURE | | |
| Max. temp. upper loop | NA | NA |
| Max. temp. lower loop | 266 °F / 130 °C | 266 °F / 130 °C |
| HEAT EXCHANGER | | |
| Surface area of heat exchanger, upper | NA | NA |
| Surface area of heat exchanger, lower | 2325 in ² / 1.5 m ² | 2635 in ² / 1.7 m ² |
| WEIGHTS & DIMENSIONS | | |
| Tank weight empty | 292 lb / 133 kg | 371 lb / 169 kg |
| Tank weight full | 988 lb / 448 kg | 1304 lb / 591 kg |
| Height with insulation | 66 ¹ / ₈ " / 1679 mm | 72 ³ / ₄ " / 1848 mm |
| Width with insulation | 27 ⁹ / ₁₆ " / 700 mm | 29 ¹ / ₂ " / 750 mm |
| Thickness of insulation | 3" / 75 mm | 3" / 75 mm |
| OTHER | | |
| Cold/hot water connection | 1" male BSPP, with sweat adaptor to 1" copper pipe | |
| PERFORMANCE DATA | | |
| Standby losses in 24 hours | 6500 BTU / 1.9 kWh | 7500 BTU / 2.2 kWh |
| Continuous Draw (Lower Coil) ¹ | | |
| Flow Rate | 285.6 gal/hr / 1,081 l/hr | 312 gal/hr / 1,181 l/hr |
| Output | 150,168 BTU / 44 kW | 164,049 BTU / 48 kW |

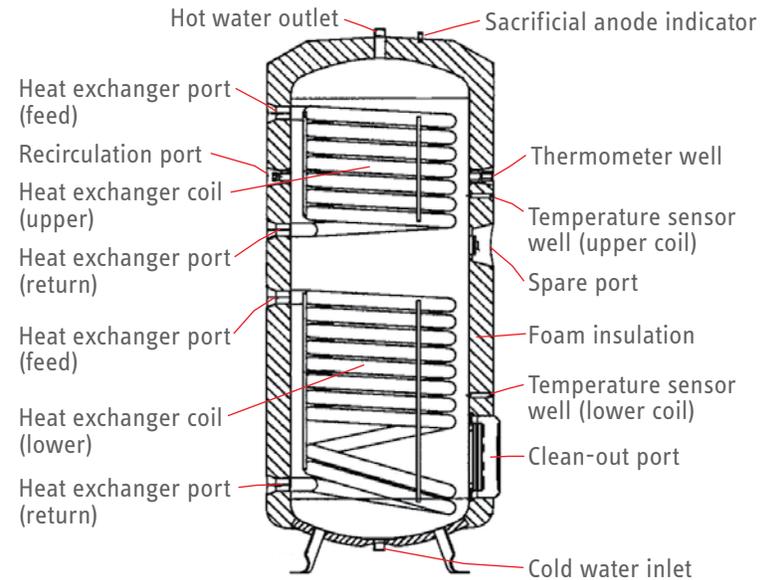
SBB Dual Coil Tanks

Dual Heat Exchanger



| DHW Tank Model | SBB 300 Plus | SBB 400 Plus |
|---|---|--|
| Part number | 187873 | 187874 |
| CONTENTS | | |
| Storage capacity | 80.6 gal / 305 l | 108.6 gal / 411 l |
| Upper heat exchanger volume | 1.9 gal / 7.3 l | 2.2 gal / 8.2 l |
| Lower heat exchanger volume | 2.7 gal / 10.2 l | 3.0 gal / 11.3 l |
| PRESSURE | | |
| Working pressure | 150 psi / 10 bar | 150 psi / 10 bar |
| Tested to pressure | 217 psi / 15 bar | 217 psi / 15 bar |
| Max. pressure of boiler loop | 150 psi / 10 bar | 150 psi / 10 bar |
| TEMPERATURE | | |
| Max. temp. upper loop | 266 °F / 130 °C | 266 °F / 130 °C |
| Max. temp. lower loop | 266 °F / 130 °C | 266 °F / 130 °C |
| HEAT EXCHANGER | | |
| Surface area of heat exchanger, upper | 1705 in ² / 1.1 m ² | 2015 in ² / 1.3 m ² |
| Surface area of heat exchanger, lower | 2325 in ² / 1.5 m ² | 2635 in ² / 1.7 m ² |
| WEIGHTS & DIMENSIONS | | |
| Tank weight empty | 339 lb / 154 kg | 412 lb / 187 kg |
| Tank weight full | 1051 lb / 477 kg | 1362 lb / 618 kg |
| Height with insulation | 66 ¹ / ₈ " / 1679 mm | 72 ³ / ₄ " / 1848 mm |
| Width with insulation | 27 ⁹ / ₁₆ " / 700 mm | 29 ¹ / ₂ " / 750 mm |
| Thickness of insulation | 3" / 75 mm | 3" / 75 mm |
| OTHER | | |
| Cold/hot water connection | 1" male BSPP, with sweat adaptor to 1" copper pipe | |
| HX/Aux. connections | 1" female male BSPP, with sweat adaptor to 1" copper pipe | |
| PERFORMANCE DATA | | |
| Standby losses in 24 hours | 6500 BTU / 1.9 kWh | 7500 BTU / 2.2 kWh |
| Continuous Draw (Upper Coil) ¹ | | |
| Flow Rate | 212.4 gal/hr / 804 l/hr | 244.9 gal/hr / 927 l/hr |
| Output | 111,680 BTU / 33 kW | 128,768 BTU / 37.7 kW |
| Continuous Draw (Lower Coil) ¹ | | |
| Flow Rate | 285.6 gal/hr / 1,081 l/hr | 312 gal/hr / 1,181 l/hr |
| Output | 150,168 BTU / 44 kW | 164,049 BTU / 48 kW |

SBB 300 Plus, SBB 400 Plus



Stiebel Eltron SBB tanks and heat exchangers are warranted against material defects for life. All other parts, excluding the sacrificial anode, are warranted for 10 years. See warranty for complete details.



1924

Sometimes a “little thing” leads to a whole lot more

Dr. Theodor Stiebel designed the first coil immersion heater and founded “ELTRON Dr. Theodor Stiebel” in 1924 in a small workshop on Reichenberger Strasse in Berlin, Germany.

Since then, Stiebel Eltron has manufactured 20 million tankless electric water heaters, holds hundreds of patents, has won more than fifty design awards, and continues to stay at the forefront of water heating technology.



2015

Continuing to lead innovation in energy efficiency

One of the first manufacturers to develop and manufacture heat pumps and solar thermal water heating, Stiebel Eltron has been a technological leader in renewable energy since 1976.

Today Stiebel Eltron is the heat pump market leader in Germany, and continues creating innovative, energy efficient products for the homes of the future.



Stiebel Eltron Family of Energy Saving Water Heating Products



Efficient tankless electric water heaters

TANKLESS HOT WATER



Point-of-use Tankless



Whole House Tankless



Stiebel Eltron's plant in Holzminden, Germany.

Stiebel Eltron has been a world leader in the development of advanced water heating technology for more than 90 years. Our pursuit of engineering excellence and high-quality manufacturing results in products fulfilling the highest expectations of performance and reliability. They are...**Simply the Best.**

RENEWABLE ENERGY



Complete Solar Hot Water Components



Heat Pump Water Heaters



Solar Thermal & Heat Pump Water Heaters