



One platform, multiple sizes. Stainless Steel boiler specifically designed by Bosch.

Introducing: Buderus SSB Stainless Steel Boiler

Three Sizes with BTU inputs of 255, 399 and 511 MBH



BOSCH

Invented for life

Not just another stainless steel boiler.

The new Buderus SSB Series was specifically tailored by Bosch to give you all the same features and benefits from a small residential boiler through a large commercial cascade application. A single platform design for all Buderus SSB boilers makes installation and commissioning easy, regardless of the output required. The Buderus SSB boilers achieve a unique consistent combustion throughout the entire length of the burner tube thanks to a patented, laser perforated design.

With an efficiency of 96%, the Buderus SSB is loaded with standard features that include 5:1 turn down ratio; on-board control that includes weather compensation; mod-bus connectivity; a 2 wire cascades link; practical control solutions for any application; push terminal wiring; and a host of venting options. The Buderus SSB boilers are CSD1 compliant thanks to the built in low water cut off and adjustable manual reset high limit.

Feature rich with a peace of mind warranty, the Buderus SSB Boiler has all the quality you have come to expect from Bosch.

Buderus SSB Boiler Series:

- ▶ Peace of Mind: Limited lifetime warranty. 10 years full on the heat exchanger.
- ▶ Reliability: heat exchanger and entire burner assembly is made of 316L stainless steel.
- ▶ Comfort: for providing comfortable heating with or without indirect domestic hot water tank from a small studio unit up to commercial cascade applications.
- ▶ Ease of Installation: Automatic control unit for gas-fired appliances with a premix burner and a pneumatic air-gas system. Factory built-in LWCO and Safety Temperature High Limiter w/ manual reset.
- ▶ Control: The SSB has multiple parameters, for heating, domestic water heating, and circulator pump, each designed for the most common applications.



96%
Efficient

NEW: Buderus SSB Series

Stainless Steel Condensing Boiler Technical Specs

	Unit of Measure	SSB255	SSB399	SSB512
Type of Gas		Natural Gas, Propane		
Max input rate	BTU/hr (kW)	255,000 (75)	399,000 (117)	511,000 (150)
Min input rate	BTU/hr (kW)	51,180 (15)	79,800 (23.4)	102,400 (30)
Turndown	Rate (%)	5:1 (20 %)	5:1 (20 %)	5:1 (20 %)
NG consumption (max)	ft ³ /hr (m ³ /hr)	252 (7.14)	393 (11.1)	504 (14.3)
NG consumption (min)	ft ³ /hr (m ³ /hr)	50.4 (1.4)	78.7 (2.2)	101 (2.8)
Gas Connections (NPT)	Ø Inch	1"		
Max./ Min NG Pressure	Inch W.C. (mbar)	10.5 (26.15) / 3.5 (8.72)		
Max. / Min LPG Pressure	Inch W.C. (mbar)	13 (32.3) / 8 (19.9)		
Water Connections	Ø Inch	1 ½ "	1 ½ "	2"
Max. Allowable Working Pressure (MAWP)	PSI (bar)	80 (5.5)		
Recommended water flow @ max power (ΔT 36 °F / 20 °C)	GPM (m ³ /h)	14.2 (3.2)	22.2 (5.0)	28.4 (6.5)
Max water flow @ max power (ΔT 27 °F / 15 °C)	GPM (m ³ /h)	18.9 (4.3)	29.5 (6.7)	37.9 (8.6)
Min water flow @ max power (ΔT 54 °F / 30 °C)	GPM (m ³ /h)	9.5 (2.2)	14.8 (3.4)	18.9 (4.3)
Min water flow @ min power (ΔT 27 °F / 15 °C)	GPM (m ³ /h)	3.8 (0.9)	5.9 (1.3)	7.6 (1.7)
Water Pressure Drop @ recommended water flow	Feet W.C. (mbar)	5.3 (160)	11.0 (330)	21.7 (650)
Water Pressure Drop @ max water flow	Feet W.C. (mbar)	6.4 (190)	13.8 (410)	37.73 (1120)
Water Volume	Gallon (liter)	4.0 (15.2)	4.5 (17.0)	6.0 (23.0)
Vent/Air Intake Connections	Ø Inch (Ø mm)	3 (80)	4 (100)	4 (100)
Max operating temperature	°F (°C)	194 (90)	194 (90)	194 (90)
Max HE allowable temperature	°F (°C)	210 (98.9)	210 (98.9)	210 (98.9)
Ambient storage temperature dry	°F (°C)	5 to 150 (-15 to 65)	5 to 150 (-15 to 65)	5 to 150 (-15 to 65)
Ambient functioning temperature	°F (°C)	32 to 120 (0 to 49)	32 to 120 (0 to 49)	32 to 120 (0 to 49)
Surface heat exchanger	SQFT (m ²)	22.0 (2.0)	27.2 (2.5)	43.0 (4.0)
Standard Listings & Approvals		CSA, ASME, AHRI	CSA, ASME, AHRI	CSA, ASME, AHRI
Electrical Req. 120VAC/1PH/60Hz		4 FLA*		
Noise rating	dB	46	47	48
Weight (dry)	lbs (kg)	198 (90)	220 (100)	242 (110)
Min. clearance to combustibles*	Inch (mm)	2" (50.8)		
Dimension W x H x D - (inches rounded up to the nearest 1/8")	Inch (mm)	24 x 61½ x 21½ (609x1564x550)	24 x 61½ x 21½ (609x1564x550)	24 x 61½ x 21½ (609x1564x550)
Part Number		7738004894	7738004895	7738004896

* See manual for details



Venting Options

Included adapter allows connection to CPVC, PVC, PP, PP Flex, Stainless Steel AL29-4C, IPEX type IIA & IIB for use with:

- ▶ single pipe
- ▶ two pipe
- ▶ Concentric

Control

- ▶ SSB255 – 512 are equipped with Manual Reset High Limit and LWCO with test button
- ▶ SSB512 is also equipped with a 75lb pressure relief valve and Lo and Hi gas pressure switches with manual resets
- ▶ The SSB boiler can be connected to a room thermostat
- ▶ Add an outdoor air temperature sensor to the boiler for an outdoor reset supply temperature control for increased fuel efficiency and comfort

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