

Fact sheet

Buderus SSB Industrial Boiler



Stainless steel boiler designed for commercial applications

A single platform design for all models makes installation and start-up easy. The on-board control takes the guess work out of the most common applications. The patented design provides a unique, consistent combustion for longevity and durability. All designed to make installation through operation uncommonly easy.

The Buderus SSB Industrial Boiler is the dual heat exchanger model available in 790, 1024 MBH and 1024 MBH low-btu option. All modes were designed specifically for US & Canada commercial market and can use either NG or LP, with a maximum vent length of 100 feet for intake plus exhaust, minimal clearance to combustibles, and a compact foot print.

Designed to be used for both space heating and domestic hot water, the SSB works with multiple building communication options, including Modbus, BACnet and LonWorks. Integrated cascading allows configurations to meet heating demands of 4096 MBH making the SSB boiler ideal for many applications including schools, hotels, office buildings and warehouses.



Features

- ▶ Dual heat exchangers for increased capacity
- ▶ up to 10:1 turndown and built-in redundancy
- ▶ Flanged supply and return connections on both sides of the units for flexible install locations.
- ▶ Cascade up to four SSB1000TL boilers to achieve up to 4096 MBH.
- ▶ 7" external touchscreen display for easy system monitoring
- ▶ Internal HMI screen provides system level parameter adjustment



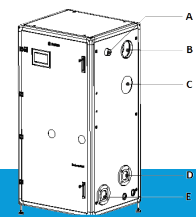
Integrated Control

- ▶ Manual Reset High Limit and LWCO with test button
- ▶ Easily connected to a room thermostat
- ▶ Outdoor reset and domestic hot water priority standard
- ▶ Smart System Control "Argus Vision" for easy set up and commissioning



Heat Exchanger

- ▶ Proven 316L stainless steel heat exchanger
- ▶ Dependable Water tube heat exchanger with easily accessed supply and return connections
- ▶ Thermal efficiency levels up to 96.8% can be achieved with up to 10:1 modulation
- ▶ Precision welded for reliability



Connections

ITEM	DESCRIPTION	SSB800 & SSB1000	SSB1000TL
A	Gas Inlet	2" NPT	3" Flanged
B	Flue Exhaust	6"	10"
C	Air Intake	6"	10"
D	System Return (Flanged)	3"	5"
E	System Supply (Flanged)	3"	5"

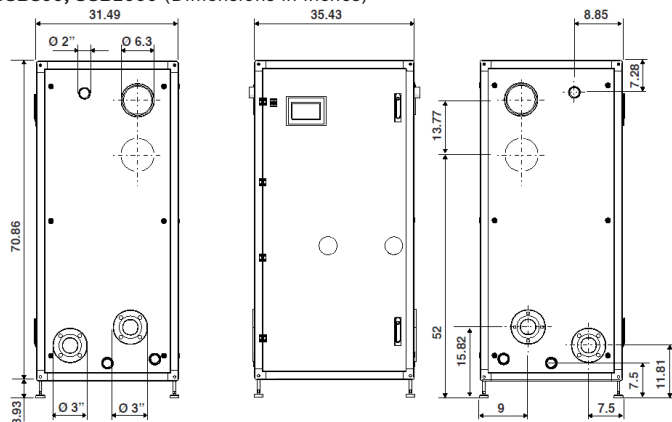
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Bosch SSB Industrial Boiler

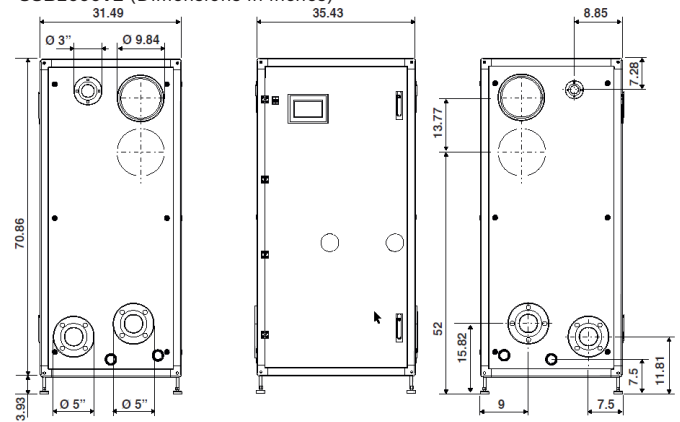
MODEL		SSB800	SSB1000	SSB1000TL
PERFORMANCE DATA	UNIT OF MEASURE			
Type of Gas		Natural Gas, Propane		
Max input rate	BTU/hr (kW)	798,000 (234)	1,024,000 (300)	1,024,000 (300)
Min input rate	BTU/hr (kW)	96,100 (28.2)	96,100 (28.2)	96,100 (28.2)
Turndown	Rate (%)	8:1 (12.5 %)	10:1 (10%)	10:1 (10%)
Gas Connections (NPT)	Ø Inch	2	2	3 (Flanged)
Max./ Min NG Pressure	Inch W.C. (mbar)	20 (50) / 3.5 (8.72)		
Max. / Min LPG Pressure	Inch W.C. (mbar)	20 (50) / 8 (19.9)		
Water Connections	Ø Inch	3		5
Max. Allowable Working Pressure (MAWP)	PSI (bar)	80 (5.5)		
Water flow at max power (ΔT 36°F / 20°C)	GPM (m3/h)	44 (10)	57 (13)	57 (13)
Water flow at max power (ΔT 45°F / 25°C)	GPM (m3/h)	35 (8)	44 (10)	44 (10)
Water pressure drop at min water flow	Feet W.C. (mbar)	7 (209)	8 (239)	7 (209)
Water pressure drop at max water flow	Feet W.C. (mbar)	19 (568)	33 (986)	29 (866)
Water Volume	Gallon (liter)	13.0 (50)	16.0 (60)	20.0 (75)
Vent/Air Intake Connections	Ø Inch (Ø mm)	6 (160)	6 (160)	10 (254)
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 158 (-15 to 70)	5 to 158 (-15 to 70)	5 to 158 (-15 to 70)
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 (m2)	56 (5.2)	88 (8.2)	88 (8.2)
Standard Listings & Approvals		ASME Sect.IV	ASME Sect.IV	ASME Sect.IV
Electrical Req. 120VAC/1PH/60Hz		15.1 FLA *		
Noise rating	dB	51	52	52
Weight (dry)	lbs (kg)	860 (390)	992 (450)	1124 (510)
Min. clearance to combustibles*	Inch (mm)	24 (610)		
Dimension W x H x D - (inches rounded up to the nearest 1/8")	Inch (mm)	31 1/2 x 35 7/16 x 70 7/8 (800x900x1800)	31 1/2 x 35 7/16 x 70 7/8 (800x900x1800)	31 1/2 x 35 7/16 x 70 7/8 (800x900x1800)

*See manual for details

SSB800, SSB1000 (Dimensions in inches)



SSB1000TL (Dimensions in inches)



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75H995354 08-2017

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