



The Brute™ LX

Combination Boiler & Water Heater



*American-Made Heat Exchanger
Up to 95% AFUE Efficiency*

Energy Saving Home Heating and Hot Water in One



Built to be the Best™ | www.bradfordwhite.com

The Brute™ LX

Brute LX

Built to be the Best™

Introducing the Brute™ LX, a boiler and tankless water heater combined into one, ultra-efficient, space saving unit. ENERGY STAR® qualified and available in 10 models, the high output of the Brute™ LX provides reliable home heating and hot water for practically any size home, while its energy efficient and low emission performance reduces heating bills and is better for the environment.

Highlights

- **American Designed and Made Heat Exchanger**
- **95% Efficient (AFUE)**
- **Energy Star® Rated**
- **5:1 Modulation**
- **Flexible Installation**
- **Environmentally Friendly**
- **Low NOx Emissions**
- **Natural Gas & Propane Models**



Saves Money!

The Brute™ LX performs at an ultra-high 95% AHRI certified thermal efficiency, is ENERGY STAR® rated, and can potentially save thousands of dollars in fuel use over the product's lifetime.

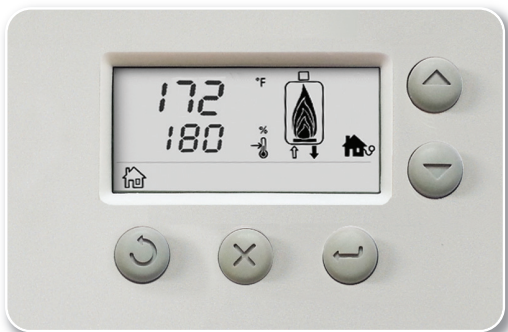


Modulating Technology

The Brute™ LX is fully modulating so it automatically adjusts how much fuel is used to match the demand for heat, from 20% to 100% of full power. The Brute™ LX will operate at 100% only on the coldest days of the year when demand is at its highest, and will modulate down on days requiring less heat. The result can save up to 20% on heating utility bills compared to standard “on-off” boilers.



The Single, Energy Efficient Solution



Advanced Integrated Controls

Brute™ LX models are equipped with an advanced, easy-to-use, integrated control system.

- *Easy-to-use push button input system*
- *Large display*
- *Clearly displayed functions for quick set-up and diagnostics*
- *Quick access buttons for temperature control and boiler status functions*

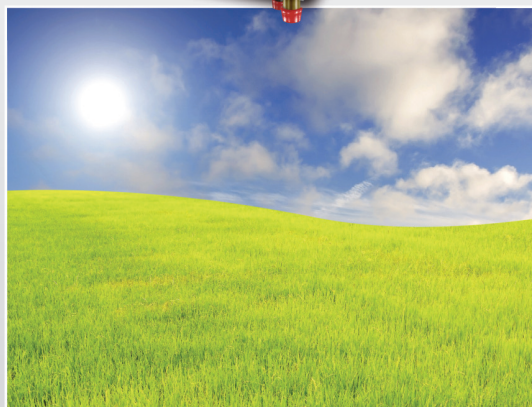
Flexible Installation

Top or bottom gas and heating connections, zero installation clearance, an included circulator, and the ability to vent up to 150 ft. with PVC, CPVC & Polypropylene – the Brute™ LX provides more options for the best and most expedient installations.



Environmentally Friendly

The Brute™ LX features low NOx emissions. NOx, Nitrogen Oxide, is a group of gases that form when fuel is burned at high temperatures, and it can react with other volatile compounds (VOC) to form air pollution known as smog. Brute™ LX models exceeds the most stringent regulations for air quality, so they provide efficient heat while minimizing the impact on the environment.



To Space Heating and Domestic Hot Water

Standard Features

- *High efficiency, condensing design*
- *Modulation down to 20% of full fire (5:1 turndown)*
- *Sealed combustion chamber*
- *Pre-mix stainless steel burner*
- *Low NOx system exceeds the most stringent regulations for air quality – 10 ppm NOx*
- *Horizontal or vertical direct vent*
- *Vent and air pipe lengths of up to 150 equivalent feet (each)*
- *Horizontal vent and air terminals*
- *Stainless steel heat exchanger with welded construction*
- *ASME 30 psi (207kPa) working pressure heat exchanger*
- *ASME “H” stamp*
- *30 psi (207kPa) ASME pressure relief valve*
- *Auto cascade setup*
- *Boiler pump wired and mounted inside jacket*
- *Built-in condensate trap and drain, priming not required*
- *Automatic air vent*
- *Temperature and pressure gauge*
- *Boiler water pressure switch*
- *Blocked vent pressure switch*
- *Blocked condensate pressure switch*
- *Burner site glass*
- *Electronic PID modulating control*
- *Direct spark ignition*
- *Multiple pump control for boiler pump and system pump, each with delay*
- *Domestic Hot Water Pump Output*
- *Customizable Freeze Protection*
- *Anti-short cycling*
- *Large user-interface and display*
- *Alarm output*
- *Accepts external (4-20mA or 0-10VDC) modulation signal*
- *Outdoor reset (sensor included)*
- *Outdoor air reset curve*
- *Vent temp auto turn-down before lockout*
- *Manual reset high limit*
- *Lighted on/off toggle switch*
- *Wall mount bracket*
- *Field convertible between natural gas and propane*
- *Zero clearance to combustable surfaces*
- *15-Year limited warranty*
- *2-Year parts warranty*



A Look Inside

The Brute™ LX combination “combi” boiler and tankless water heater:

- Large flat plate heat exchanger safely and efficiently transfers heat from the boiler to your domestic water
- Ample hot water supply

Two pipe or concentric venting options for flexible installations

- Two pipe up to 150 feet vertical or horizontal lengths
- PVC, CPVC, Polypropylene, or stainless steel material options

Robust smooth burning stainless steel mesh burner

- Highly efficient, reliable, and environmentally friendly

American Designed & Made, Stainless Steel Heat Exchanger:

- Micro-fined heating tubes and patented flue gas channels transfer the maximum amount of heat possible

Top and bottom gas and heating connections

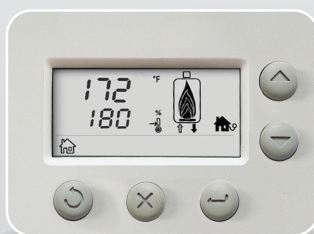
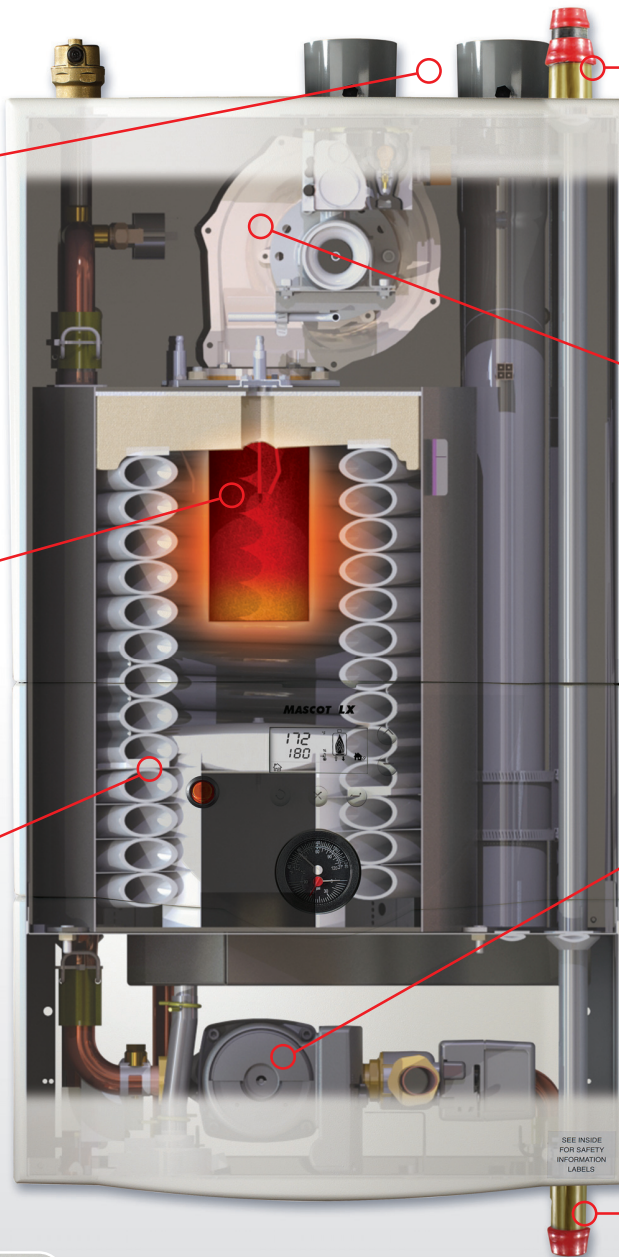
- Give contractors flexibility when installing
- Makes for a cleaner looking installation

Fully modulating system: the Brute™ LX smoothly adjusts how much gas is used based on exact heating needs in the house

- No more turning full on and full off like old systems
- Results in ultra, fuel efficient operation

Circulator and Primeless condensate trap included

- Reduces installation time and complexity making for an easier startup

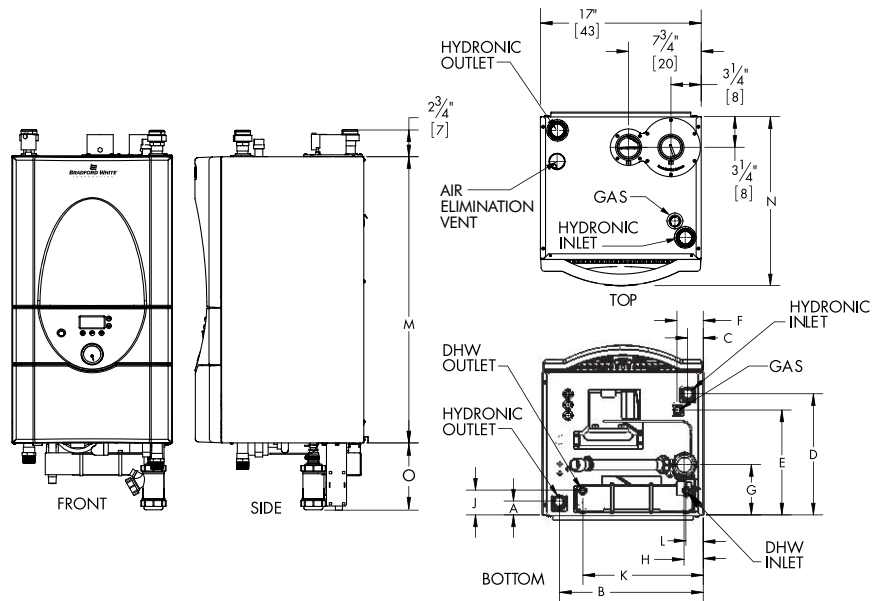


A control system so advanced it's simple!

Specs at a Glance

Brute™ LX Model Numbers

Combination Boiler and Water Heater	
Model Number	Input MBTU/Hr.
BLXC-125	125,000
BLXC-150	150,000
BLXC-175	175,000
Heating Only Boiler	
Model Number	Input MBTU/Hr.
BLXH-050	50,000
BLXH-075	75,000
BLXH-100	100,000
BLXH-125	125,000
BLXH-150	150,000
BLXH-175	175,000
BLXH-220	220,000



Brute™ LX Dimensional Data

Brute™ LX Model	A		B		C		D		E		F		G		H		J		K		L		M		N		O	
	in.	cm	in.	cm	in.	cm	in.	cm	in.	cm	in.	cm	in.	cm	in.	cm	in.	cm	in.	cm	in.	cm	in.	cm	in.	cm	in.	cm
50 MBH	1	3	15.75	40	3.75	9	9.25	24	8	20	1.50	4	5.75	14	15.50	39	-	-	-	-	-	-	30.50	78	15.75	40	4.63	12
75 MBH	1	3	15.75	40	3.75	9	9.25	24	8	20	1.50	4	5.75	14	15.50	39	-	-	-	-	-	-	30.50	78	15.75	40	4.63	12
100 MBH	1	3	15.50	39	1.25	3	12.75	33	11	28	1.25	3	9.50	24	14.75	37	-	-	-	-	-	-	30.50	78	18	46	4.63	12
125 MBH	1	3	15.50	39	1.25	3	12.75	33	11	28	1.25	3	9.50	24	14.75	37	2.75	7	12.75	33	2	5	30.50	78	18	46	4.63	12
150 MBH	1.50	4	15.25	39	1.75	4	13	33	11.25	28	2.75	7	5.25	14	2	5	2.75	7	12.75	33	1.75	5	35.50	90	18	46	8.88	23
175 MBH	1.50	4	15.25	39	1.75	4	13	33	11.25	28	2.75	7	5.25	14	2	5	2.75	7	12.75	33	1.75	5	35.50	90	18	46	8.88	23
220 MBH	1.50	4	15.25	39	1.75	4	13	33	11.25	28	2.75	7	5.25	14	3	5	-	-	-	-	-	-	38.50	98	18	46	8.88	23

Brute™ LX Specifications

	Units	Size									
		50H	75H	100H	125		150		175		220H
		Heating	Heating	Heating	Heating	Combi	Heating	Combi	Heating	Combi	Heating
Input - Max Fire	BTU/Hr. (kW)	50,000 (14.6)	75,000 (22)	100,000 (29.3)	125,000 (36.6)		150,000 (43.9)		175,000 (51.2)		220,000 (64.4)
Input - Min Fire	BTU/Hr. (kW)	10,000 (2.9)	15,000 (4.4)	20,000 (5.9)	25,000 (7.3)		30,000 (8.8)		35,000 (10.2)		44,000 (12.9)
Heating Capacity	BTU/Hr. (kW)	46,000 (13.5)	70,000 (20.5)	93,000 (27.2)	116,000 (34.0)		139,000 (40.7)		166,000 (48.6)		206,000 (60.4)
DHW Max Outlet Water Temp	°F (°C)	-	-	-	-	180 (60)	-	180 (60)	-	180 (60)	-
DHW Max Flow Rate (dt @ 77°F)	gpm (l/m)	-	-	-	-	3.1 (12)	-	3.7 (14)	-	4.3 (16)	-
Flow Rate Min	gpm (l/m)	-	-	-	-	0.5 (1.9)	-	0.5 (1.9)	-	0.5 (1.9)	-
Pressure Relief Setting	psi (kPa)	30 (207)									
Gas Connection	NPT	-	1/2"								
Hydronic Connection	NPT	-	3/4"					1"			
Domestic Water Connection	NPT	-	-	-	-	1/2"	-	1/2"	-	1/2"	-
Weight	lbs (kg)	88 (40)	97 (44)	112 (51)	126 (57)	133 (60)	140 (64)	148 (67)	153 (69)	163 (74)	161 (73)
Air and Vent - Two Pipe	inch (cm)	2 (5)				3 (7.6)					
Air and Vent - Concentric	inch (cm)	3" / 5" (7.6 / 12.7)									
Electrical Supply	Volts	-	120 (60Hz)								

Dimensions are nominal and are shown in inches, cm.

*125,150 and 175 Combi units.

Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement.



BLX-0815



Committed to American Manufacturing, Wholesale Distribution, and Professional Installation.

BRADFORD WHITE®
WATER HEATERS
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