

ELECTRIC BOILERS  
7 KW TO 36 KW

# bth ultra



## MAXIMUM EFFICIENCY. OPTIMAL PERFORMANCE.

**bth ULTRA™** electrical boilers are compact and highly performant. Available in a wide array of performance levels and voltages, these highly versatile systems are very energy-efficient and can be used for residential, commercial and institutional applications. Lightweight and robust, the **bth ULTRA™** is easily installed and can supply all types of hot water heating systems.



Peak-performance  
heating systems

# bthultra

ELECTRIC BOILERS  
7 KW TO 36 KW

## Reliability and performance in compact sizes.

**bth ULTRA™** electric boilers are available in a wide variety of performance levels, from 7 kW to 36 kW, and with multiple voltage options. They can meet any—and all—of your hydronic heating needs.

Whether you need to heat a condominium, single-family home or commercial building, **bth ULTRA™** is an ultra-silent solution for new installations or replacement of an existing system. Its compact size is ideal for small spaces. In addition, the piping can be connected in multiple ways, making the on-wall boiler installation very easy.

The **bth ULTRA™** can be combined with an auxiliary heater for a dual-energy system. Thanks to its **T2 UltraSmart®** controller, the boiler provides optimal comfort with accurate temperature management.

Producing no combustion or GHG emissions, the **bth ULTRA™** is a highly energy-efficient and green alternative. Maintenance is simple and kept to a minimum.



**THE BTH ULTRA™ BOILERS ARE IDEAL FOR HEATED FLOORS, RADIATORS AND HOT WATER BASEBOARDS.**

OUR BOILERS CAN ALSO BE THE PERFECT SOLUTION TO COMPLEMENT YOUR EXISTING GEOTHERMAL, HEAT PUMP, BIOMASS OR SOLAR ENERGY HEATING SYSTEM.



## bth ULTRA™

7 KW TO 36 KW

The intelligent **T2 UltraSmart®** controller modulates the power level based on the system requirements and adjusts the water temperature based on outdoor temperature.

- Accurate and easily configurable **T2 UltraSmart®** controller with backlight display
- Preset configurations based on heating distribution system
- Outdoor sensor that modulates boiler water temperature
- The **T2 UltraSmart®** controller enables users to view the boiler's operation status at a glance

- Heating stops when outside temperature gets warmer
- "Boost" mode that automatically increases the temperature when needed
- Works only when triggered by the thermostat
- Ability to purge the pump when system is not running
- Adjustable between 50 °F and 190 °F
- Safety control to limit excessively high temperatures
- Electrical supply and heat pump contact (contact only with commercial boilers)
- Breakers with 33 & 36 kW residential models
- 24 V electrical supply for thermostat and other accessories
- 30 PSI safety relief valve
- Drain/purge valve

bth ULTRA™

RESIDENTIAL

COMMERCIAL

4 CONNECTIONS  
INLET AND OUTLET



MODEL	12 to 24 kW	27 to 29 kW	33 to 36 kW	7 to 36 kW
WEIGHT	63 lb	75 lb	75 lb	75 lb
VOLUME	2 US gallons	3 US gallons	3 US gallons	3 US gallons
MAXIMUM OPERATING PRESSURE	30 PSI	30 PSI	30 PSI	30 PSI
MECHANICAL CONNECTION	1" NPT female	1 1/4" NPT female	1 1/4" NPT female	1 1/4" NPT female

## RESIDENTIAL 240 VAC / 60 Hz / 1 phase<sup>1</sup>

Model	Power <sup>2</sup>		Amps <sup>3</sup>	240 V Elements	Stages	Recommended electrical supply <sup>4</sup>		
	kW	BTU/h				Cu Wire	Al Wire	Breaker
BTH ULTRA 12	12	40 944	50.0	4 x 3 kW	4	6	4	70
BTH ULTRA 15	15	51 180	62.5	2 x 3 kW + 2 x 4.5 kW	4	6	4	80
BTH ULTRA 18	18	61 416	75.0	4 x 4.5 kW	4	4	2	100
BTH ULTRA 20	20	68 240	83.3	4 x 5 kW	4	3	2	110
BTH ULTRA 24	24	81 888	100.0	4 x 6 kW	4	2	0	125
BTH ULTRA 27	27	92 124	112.5	6 x 4.5 kW	6	1 x 1 or 2 x 6 <sup>4</sup>	2 x 4 <sup>4</sup>	2 x 80 or 150
BTH ULTRA 29	29	98 948	120.8	4 x 5 kW + 2 x 4.5 kW	6	1 x 1 or 2 x 6 <sup>4</sup>	2 x 4 <sup>4</sup>	2 x 80 or 175
BTH ULTRA 33	33	112 596	137.5	3 x 5 kW + 3 x 6 kW	6	2 x 4 <sup>4</sup>	2 x 2 <sup>4</sup>	2 x 100
BTH ULTRA 36	36	122 832	150.0	6 x 6 kW	6	2 x 4 <sup>4</sup>	2 x 2 <sup>4</sup>	2 x 100

<sup>1</sup> Electric supply 120/240 V or 120/208 V 1 phase (L1-N-L2) with three 90 °C conductors and a ground or two conductors with a ground if the boiler does not require a 120 VAC pump or accessories.

<sup>2</sup> Multiply by .75 for 208 VAC supply. <sup>3</sup> Multiply by .867 for 208 VAC supply. <sup>4</sup> See Installation Manual.

## COMMERCIAL 208 VAC / 60 Hz / 3 phases<sup>1</sup>

Model	Power <sup>2</sup>		Amps <sup>3</sup>	240 V Elements	Stages	Recommended electrical supply <sup>4</sup>		
	kW	BTU/h				Cu Wire	Al Wire	Breaker
BTH ULTRA 7	7	22 860	18.8	3 x 3 kW	1	10	10	30
BTH ULTRA 10	10	34 461	28.2	3 x 4.5 kW	1	8	6	40
BTH ULTRA 11	11	38 214	31.4	3 x 5 kW	1	8	6	40
BTH ULTRA 13	13	46 062	37.6	6 x 3 kW	2	8	6	50
BTH ULTRA 17	17	58 004	47.1	3 x 3 kW + 3 x 4.5 kW	2	6	6	60
BTH ULTRA 20	20	68 922	56.5	6 x 4.5 kW	2	6	4	80
BTH ULTRA 22	22	76 770	62.7	6 x 5 kW	2	6	4	80
BTH ULTRA 25	25	84 276	69.0	3 x 5 kW + 3 x 6 kW	2	4	3	90
BTH ULTRA 27	27	92 124	75.3	6 x 6 kW	2	4	2	100

<sup>1</sup> Electrical supply 208 V or 240 V 3 phases (L1-L2-L3) with three 90 °C conductors and a ground.

<sup>2</sup> Multiply by 1.34 for 240 VAC supply. <sup>3</sup> Multiply by 1.15 for 240 VAC supply.

## COMMERCIAL 480 VAC / 60 Hz / 3 phases<sup>1</sup>

Model	Power		Amps	277 V Elements	Stages	Recommended electrical supply <sup>4</sup>		
	kW	BTU/h				Cu Wire	Al Wire	Breaker
BTH ULTRA 15	15	51 180	18.0	3 x 5 kW	1	10	10	30
BTH ULTRA 18	18	61 416	21.6	3 x 6 kW	1	10	10	30
BTH ULTRA 30	30	102 360	36.1	6 x 5 kW	2	8	6	50
BTH ULTRA 36	36	122 832	43.3	6 x 6 kW	2	6	4	60

<sup>1</sup> Electric supply 480 V 3 phases (L1-L2-L3) with three 90 °C conductors and a ground.

## COMMERCIAL 600 VAC / 60 Hz / 3 phases<sup>1</sup>

Model	Power		Amps	347 V Elements	Stages	Recommended electrical supply <sup>4</sup>		
	kW	BTU/h				Cu Wire	Al Wire	Breaker
BTH ULTRA 9	9	30 708	8.7	3 x 3 kW	1	14	12	15
BTH ULTRA 13	13	44 356	12.5	3 x 4.5 kW	1	12	10	20
BTH ULTRA 18	18	61 416	17.3	6 x 3 kW	2	10	10	30
BTH ULTRA 22	22	75 064	21.2	3 x 3 kW + 3 x 4.5 kW	2	10	10	30
BTH ULTRA 27	27	92 124	26.0	6 x 4.5 kW	2	8	6	40
BTH ULTRA 30	30	102 360	28.9	6 x 5 kW	2	8	6	40
BTH ULTRA 36	36	122 832	34.6	6 x 6 kW	2	8	6	50

<sup>1</sup> Electric supply 600 V 3 phases (L1-L2-L3) with three 90 °C conductors and a ground.

<sup>4</sup> The wire gauges and breaker capacity must be in conformity with the standards of the National Electrical Code (NEC), Canadian Electrical Code (CEC) and local codes (if applicable).

**15-YEAR WARRANTY**  
ON THE RESERVOIR

**2-YEAR WARRANTY**  
ON ELECTRICAL AND MECHANICAL PARTS



Thermo 2000 manufactures peak-performance heating systems for domestic hot water and hydronic heating systems. Since 1978, the company's innovations have provided sustainable solutions for residential, commercial and institutional applications.

**THERMO 2000 Inc.**  
500 9th Avenue  
Richmond, QC J0B 2H0

**1 888 854-1111** Toll-free  
819 826-5613 Telephone

**thermo2000.com**