

COMBINED ELECTRIC BOILER  
AND INSTANTANEOUS WATER HEATER  
6 KW TO 30 KW

# combomax109



COMMERCIAL



## THE ULTIMATE COMBINATION

Get optimal performance and enjoy multiple savings with the **COMBOMAX 109**, an electric boiler designed to produce domestic hot water that can also be connected to any hydronic heating system. This equipment is practically maintenance-free and ideal for multi-unit or commercial installations.



Peak-performance  
heating systems

# combomax109

COMBINED ELECTRIC BOILER  
AND INSTANTANEOUS WATER HEATER  
6 KW TO 30 KW

COMMERCIAL

## An uncompromising combination

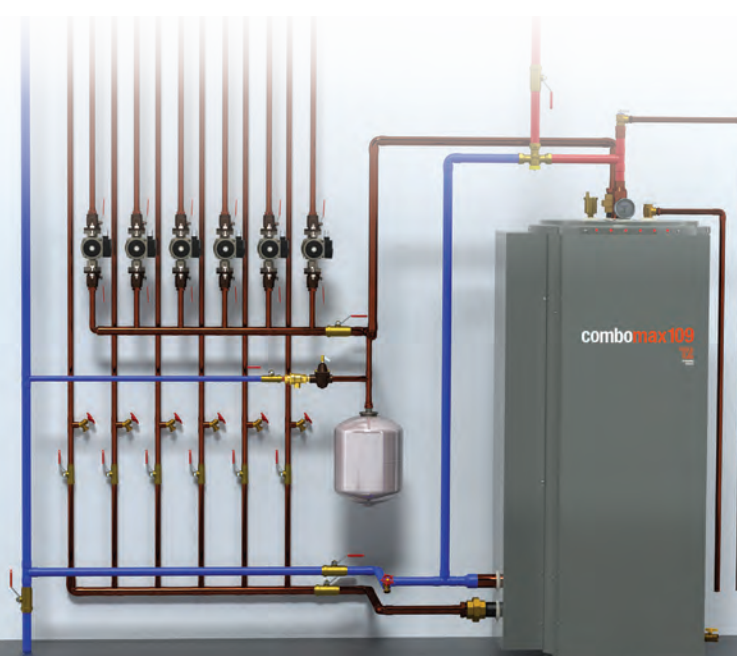
**COMBOMAX 109** is an electric boiler compatible with any hydronic heating system. It has been designed for multi-unit or commercial installations. Its instantaneous water heating system uses the heat transfer liquid from the reservoir to indirectly heat domestic water in less than 7 seconds. Domestic water circulates through completely independent copper coils connected to the water supply. Hot water is refreshed at every use to prevent the formation of bacteria, such as legionella, to ensure exceptional water quality.

### COMBINED SAVINGS ON EVERY LEVEL

The **COMBOMAX 109** takes up no more space than a conventional commercial water heater. Its installation requires less space, materials and labor compared to separately installed systems. This combination also has a lifetime of more than 30 years, so there is no need to replace the water heater every 7 to 10 years. The **COMBOMAX 109** can serve to supply domestic hot water on its own, in absence of a hydronic heating system.

This system is practically maintenance-free and guaranteed for 10 years and is intended for those seeking exceptional water quality and long-lasting equipment.

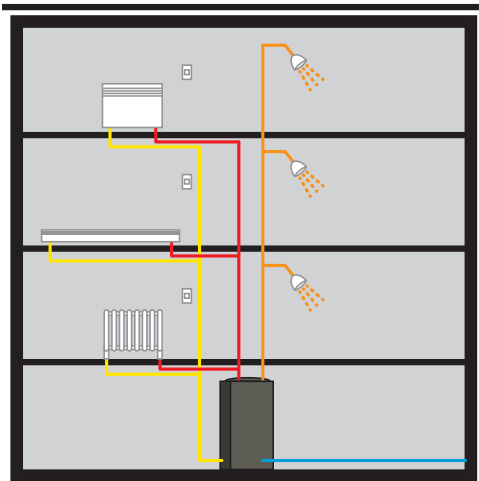
HEATING AND DOMESTIC HOT  
WATER APPLICATION  
6 apartments





The electric boiler and instantaneous water heater combination can be used for domestic hot water only or connected to any hydronic heating system to meet the demands of a multi-unit or commercial building.

To supply a larger number of units, several **COMBOMAX 109** systems can be installed in parallel.



- Domestic cold water
- Heating water supply
- Domestic hot water
- Heating water return



### STANDARD EQUIPMENT

- 1- HEATING WATER RETURN
- 2- HEATING WATER OUTLET
- 3- COLD WATER SUPPLY
- 4- DOMESTIC HOT WATER OUTLET
- 5- COPPER COILS
- 6- ELECTRICAL COMPARTMENT
- 7- ELECTRIC ELEMENTS
- 8- BOILER PRESSURE RELIEF VALVE
- 9- DRAIN VALVE
- 10- AUTOMATIC AIR VENT
- 11- TEMPERATURE AND PRESSURE INDICATOR
- 12- RECIRCULATING PUMP
- 13- ADJUSTABLE LEGS

The **COMBOMAX 109** can be installed as a dual-energy system. It can be connected to an existing boiler to supply heating and domestic hot water to multiple units.



DOMESTIC HOT WATER  
APPLICATION ONLY  
15 apartments

### COMBOMAX 109

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

Model	Power <sup>2</sup>				Stages	Suggested electrical input <sup>3</sup>		
	kW	BTU/h	Amps <sup>3</sup>	Elements 240V		Cu wire	Al wire	Breaker
COMBOMAX 109-6	6	20 472	25.0	2 x 3 kW	2	8	6	40
COMBOMAX 109-8	8	27 296	33.3	1 x 3 kW + 1 x 5 kW	2	8	6	50
COMBOMAX 109-10	10	34 120	41.6	2 x 5 kW	2	6	4	60
COMBOMAX 109-12	12	40 944	50.0	4 x 3 kW	4	6	4	70
COMBOMAX 109-15	15	51 180	62.5	2 x 3 kW + 2 x 4.5 kW	4	6	4	80
COMBOMAX 109-18	18	61 416	75.0	4 x 4.5 kW	4	4	2	100
COMBOMAX 109-20	20	68 240	83.4	4 x 5 kW	4	3	2	110
COMBOMAX 109-24	24	81 888	100.0	4 x 6 kW	4	3	0	125
COMBOMAX 109-27	27	92 124	112.5	6 x 4.5 kW	6	1	00	150
COMBOMAX 109-30	30	102 360	125.0	6 x 5 kW	6	1	00	175

<sup>1</sup> Electrical supply 120/240 VAC or 120/208 VAC single-phase (L1-N-L2) with three 90°C conductors with a ground.

<sup>2</sup> Multiply by .75 for 208 VAC electrical supply.

<sup>3</sup> Multiply by .867 for 208 VAC electrical supply.

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

Model	Power				Stages	Suggested electrical input <sup>3</sup>		
	kW	BTU/h	Amps	Elements 347V		Cu wire	Al wire	Breaker
COMBOMAX 109-9	9	30 708	8.7	3 x 3 kW	1	14	12	15
COMBOMAX 109-13	13	44 356	12.5	3 x 4.5 kW	1	12	10	20
COMBOMAX 109-18	18	61 416	17.3	6 x 3 kW	2	10	10	30
COMBOMAX 109-22	22	75 064	21.2	3 x 3 kW + 3 x 4.5 kW	2	10	10	30
COMBOMAX 109-27	27	92 124	26.0	6 x 4.5 kW	2	8	6	40
COMBOMAX 109-30	30	102 360	28.9	6 x 5 kW	2	8	6	40

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

<sup>3</sup> The wire gauges and circuit breaker capacities must comply with the National Electrical Code (NEC), the Canadian Electrical Code (CEC) and any local codes, if applicable.

#### Domestic hot water production at 110°F\* (US gallons)

Power kW	COMBOMAX 109	
	1 hour	Continuous
6	158	35
8	170	47
9	176	53
10	182	59
12	193	70
13	199	76
15	211	88
18	229	106
20	240	117
22	252	129
24	264	141
27	282	159
30	299	176

\* Based on a 40°F domestic cold water supply and a heating water temperature of 180°F.



<b>VOLUME</b>	125 US gallons
<b>WEIGHT</b>	630 lbs
<b>MAXIMUM PRESSURE</b>	
• HEATING	30 PSI
• DOMESTIC HOT WATER	125 PSI
<b>BOILER CONNECTIONS</b>	2" NPT male
<b>POTABLE WATER CONNECTIONS</b>	2" Sweat M

#### 10-YEAR WARRANTY

ON THE RESERVOIR AND COPPER COILS

#### 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](http://thermo2000.com)