CONDENSING BOILERS
MAC COMBI MAH HEATING
with ARTIFICIAL INTELLIGENCE [AI]

SMARTER & EASIER WITH 95% AFUE EFFICIENCY

[AI] CONTROL
Self-Monitoring
Self-Adjusting
Self-Commissioning*

* Simply press two buttons to set up combustion. Analyzer not required, but recommended.

LABOR SAVER™ MANIFOLD INCLUDED

*Unit must be registered within 60 days from the date of original installation.
All terms of Trinity Extended Service Agreement apply.

www.uticaboilers.com
PN 240011407 Rev. FM [2/26/2020]

The [AI] Control measures water temperature, flue gas temperature, flame signal, and pressure that can impact the boiler operation and CO levels. The [AI] Control will automatically shut down operation should these values exceed normal operating levels. This provides added protection for you and your family.

Utica Boilers prides ourselves on safety. Though the [AI] Control indirectly monitors CO levels and acts accordingly, it is not a replacement for a CO Detector in your home.
MODULATING TECHNOLOGY

The [AI] Control automatically modulates the gas input to the burner.

During times when the domestic hot water or heating demand is high, the control increases the amount of gas in order to meet the requirement. During times when the load demand is less, the [AI] Control decreases the gas input to only use the amount of fuel necessary.

Self-Monitoring
Self-Adjusting
Self-Commissioning

Optimum Efficiency

[AI] modulation saves energy by reducing the amount of gas used. Homeowners enjoy comfort, energy savings, and lower utility bills.

DID YOU KNOW...

...that the typical gas-fired water heater is wasting energy by constantly maintaining the temperature of the water in the tank?

It’s true. So why spend money continually heating water that you’re not even using? There is a better modern solution when replacing your heating boiler. Consider a MAC combination boiler or, “combi boiler.”

The benefits of the MAC combi boiler include:

• the highest efficiency level at 95% AFUE
• space savings/wall mounted
• the ability to both heat your home as well as provide your domestic hot water needs
• eliminates the wasted energy associated with traditional gas water heaters
• MONEY SAVINGS. By automatically modulating the gas input to the heating level that is needed, the boiler system operates at optimum efficiency, resulting in savings for you.

Everyone enjoys the comfort

Homeowners enjoy comfort, energy savings, and lower utility bills.

Contractors enjoy the comfort of satisfied customers.

The MAC combi boiler provides both your home heating needs and your domestic hot water needs in one super-efficient on-demand appliance.
95% AFUE
• Featuring [AI] Control Technology
  Recognizes Natural or LP Gas
  - No field conversion kit required
  - Self-Monitors and adjusts for fuel savings
  - Automatic Commissioning Combustion

• 7:1 Turndown Modulation Ratio in DHW Mode
• 5.7:1 Turndown Modulation Ratio in Heating Mode (150/125)
• 5.5:1 Turndown Modulation Ratio in Heating Mode (205/165)
• Primary/Secondary LABOR SAVER™ Manifold Included
• Warranty Coverage
  - FREE 2-Year Parts & Labor Limited Warranty*
  - 10-Year Limited Heat Exchanger
• Built by American Craftsmen since 1928

**EXCEPTIONAL SUPPORT**

When it comes to support, Utica Boilers offers service that’s beyond compare.

Our US-based support team is here for you AND your customers.

Our Dealer Portal offers a variety of resources, including tutorial videos and product specifications to help you every step of the way, from installation to maintenance to repair: www.uticadealer.com

Utica condensing boilers come with a FREE LABOR SAVER™ manifold, warranty, and support matched by no other manufacturer.

SAVE TIME & INCREASE PRODUCTIVITY with our LABOR SAVER™ MANIFOLD.

*Unit must be registered within 60 days from the date of original installation. All terms of Trinity Extended Service Agreement apply.
A CLOSER LOOK...

COMBI MODEL

- Auto Commissioning and Continuous Calibration functions optimize combustion and result in lower fuel bills
- Features 316L Stainless Steel Heat Exchanger and Burner
- Features such as, high limit sensors, pressure relief valve, low water sensor, and system pressure gauge ensure safety and top performance of the unit
- Control Panel features a backlit digital display that indicates boiler status, temperature, and diagnostics
- Preheat function
- Built in load matching Pump contributes to savings in electrical usage

HEATING ONLY MODEL

- 316L SS Heat Exchanger
- Digital Display with Backlight
- Ignitor
- Combustion Sight Glass
- Flame Sensor
- DHW Brazed Plate
- Load Matching Boiler Pump

HEATING MODEL WITH OPTIONAL INDIRECT HOT WATER HEATER

Our [AI] control is programmed to recognize an indirect tank, with no need for a separate relay. Utica Boilers H2O Indirect Hot Water Heaters are available in 30 to 115 gallon capacities and feature 316L stainless steel construction and top connections for an easy installation.
STANDARD EQUIPMENT

Heat Exchanger: 316L Stainless Steel Burner. MAC-205 and MAC-165 are also equipped with a stainless steel brazed plate heat exchanger

Primary/Secondary LABOR SAVER™ Manifold

Boiler Control Module: High Limit/Electronic Ignition Control

User Display Interface: Digital Temperature Display with diagnostics and programmable settings

Adaptive Combustion: Automatically Modulating Gas Valve, Stainless Steel Burner, Direct Spark Ignition, Separate Flame Sensor, 100% shutoff

Other: Assembled Boiler with Jacket, Induced Draft Fan, High limit sensors, 30psi Relief Valve, Low Water Pressure Switch, and Temperature/Pressure Gauge. Built-in Load Matching Pump

OPTIONAL EQUIPMENT:
Outdoor Temperature Sensor, Indirect Tank Sensor, Floor Stand Kit

LEARN MORE!
You can learn more about the MAC/MAH and our full line of products, services, training and support by visiting our website, or check out our Facebook page.

www.uticaboilers.com
**PHYSICAL DATA**

### PRODUCT DIMENSIONS

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>125 &amp; 150</th>
<th>205 &amp; 165</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEIGHT</td>
<td>30” [763mm]</td>
<td>30” [763mm]</td>
</tr>
<tr>
<td>WIDTH</td>
<td>17 3/4” [450mm]</td>
<td>17 3/4” [450mm]</td>
</tr>
<tr>
<td>DEPTH</td>
<td>13 9/16” [345mm]</td>
<td>21 1/2” [571]</td>
</tr>
<tr>
<td>CONDENSATE TRAP CONNECTION</td>
<td>13/16” [21mm] ID Hose</td>
<td>3/4” [19.1mm] NPT</td>
</tr>
<tr>
<td>SYSTEM SUPPLY</td>
<td>3/4” [19.1mm]</td>
<td>1” [25.4mm]</td>
</tr>
<tr>
<td>DHW OUTLET (125 OPTIONAL)</td>
<td>1/2” [15.9mm]</td>
<td>3/4” [19.1mm]</td>
</tr>
<tr>
<td>GAS CONNECTION</td>
<td>3/4” [19.1mm]</td>
<td>3/4” [19.1mm]</td>
</tr>
<tr>
<td>DHW (COLD WATER) INLET</td>
<td>1/2” [15.9mm]</td>
<td>3/4” [19.1mm]</td>
</tr>
<tr>
<td>SYSTEM RETURN</td>
<td>3/4” [19.1mm]</td>
<td>1” [25.4mm]</td>
</tr>
<tr>
<td>BOILER FILLING CONNECTION</td>
<td>1/2” [15.9mm]</td>
<td>External to Boiler</td>
</tr>
<tr>
<td>PRIMARY WATER CONTENT</td>
<td>1 gal [3.60L]</td>
<td>1 1/4 gal [4.73L]</td>
</tr>
</tbody>
</table>

### BOTTOM VIEWS

**125 HEAT-ONLY**

**150 COMBI**

**165 HEAT-ONLY**

**205 COMBI**

**FRONT VIEW**

all models

**TOP VIEW**

all models

- **Combustion Air**
- **Vent Connector**

**BOTTOM VIEWS**

- **A**
- **B**
- **C**
- **D**
- **E**
- **F**
- **G**
- **H**
- **I**
- **J**

**125 HEAT-ONLY**

- **150 COMBI**

**165 HEAT-ONLY**

- **205 COMBI**

- **Product Dimensions**

- **Condensing Combi & Heating Boilers**

- **www.uticaboilers.com**

**Mac|Mah**

**Condensing Combi & Heating Boilers**
# Product Specifications

## In Domestic Hot Water Mode

<table>
<thead>
<tr>
<th>MODEL</th>
<th>COMBI</th>
<th>MAC/hyphen.case150</th>
<th>MAX</th>
<th>MIN</th>
<th>Gallons per minute</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MAC-150</td>
<td>153</td>
<td>22</td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MAC-205</td>
<td>205</td>
<td>29.5</td>
<td>5.0</td>
<td></td>
</tr>
</tbody>
</table>

## In Space Heating Mode

<table>
<thead>
<tr>
<th>MODEL</th>
<th>COMBI</th>
<th>MAC/hyphen.case150</th>
<th>MAX</th>
<th>MIN</th>
<th>Heating Capacity MBH</th>
<th>Efficiency AFUE %</th>
<th>Net Water MBH (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MAC-150</td>
<td>125</td>
<td>22</td>
<td>113</td>
<td>95</td>
<td>98</td>
<td>98</td>
</tr>
<tr>
<td></td>
<td>MAC-205</td>
<td>164</td>
<td>29.5</td>
<td>153</td>
<td>95</td>
<td>133</td>
<td>133</td>
</tr>
<tr>
<td></td>
<td>HEAT ONLY</td>
<td>MAH-125</td>
<td>125</td>
<td>22</td>
<td>113</td>
<td>95</td>
<td>98</td>
</tr>
<tr>
<td></td>
<td>MAH-165</td>
<td>164</td>
<td>29.5</td>
<td>153</td>
<td>95</td>
<td>133</td>
<td>133</td>
</tr>
</tbody>
</table>

(1) Net Water Rating shown based on piping and pickup allowance of 1.15. Consult manufacturer before selecting boilers for installation having unusual piping and pickup requirements, such as intermittent system operation, extensive piping systems, etc.

## Vent Material / Size

<table>
<thead>
<tr>
<th>MODEL</th>
<th>COMBI</th>
<th>MAC/hyphen.case150</th>
<th>COAXIAL (2)</th>
<th>2-PIPE Polypropylene (2)</th>
<th>2-PIPE CPVC (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MAC-150</td>
<td>2/4” (60mm/100mm)</td>
<td>2” or 3” (60mm or 80mm)</td>
<td>3”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MAC-205</td>
<td>3/5” (80mm/125mm)</td>
<td>2” or 3” (60mm or 80mm)</td>
<td>3”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HEAT ONLY</td>
<td>MAH-125</td>
<td>2/4” (60mm/100mm)</td>
<td>2” or 3” (60mm or 80mm)</td>
<td>3”</td>
</tr>
<tr>
<td></td>
<td>MAH-165</td>
<td>3/5” (80mm/125mm)</td>
<td>2” or 3” (60mm or 80mm)</td>
<td>3”</td>
<td></td>
</tr>
</tbody>
</table>

(2) Refer to IOM and vent pipe manufacturer’s instructions for equivalent lengths and approved venting materials.

## Boiler Clearances

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Combustible Materials (3)</th>
<th>Manufacturer Recommended for Service (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOP</td>
<td>0” (0cm)</td>
<td>8-5/8” (220mm)</td>
</tr>
<tr>
<td>LEFT</td>
<td>1-3/4” (45mm)</td>
<td>1-3/4” (45mm)</td>
</tr>
<tr>
<td>RIGHT</td>
<td>1-3/4” (45mm)</td>
<td>1-3/4” (45mm)</td>
</tr>
<tr>
<td>FRONT</td>
<td>0” (0cm)</td>
<td>17-3/4” (450mm)</td>
</tr>
<tr>
<td>BACK</td>
<td>0” (0cm)</td>
<td>0” (0cm)</td>
</tr>
<tr>
<td>BOTTOM</td>
<td>0” (0cm)</td>
<td>*9-13/16” (250mm)</td>
</tr>
<tr>
<td>COMBUSTION AIR/VENT PIPING</td>
<td>0” (0cm)</td>
<td>6” (160mm)</td>
</tr>
</tbody>
</table>

(3) Required distance measured from boiler jacket.
(4) Service, proper operation clearance recommendation.
* Allowance for piping at the bottom of the boiler not included.

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### Certifications

![AHRI Certified](https://www.ahri.org)
![US (SE) Certified](https://www.us-cert.org)
![ASME H (ME) Certified](https://www.asme.org)

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