THE WHOLE HOME HEATING SOLUTION

TANKLESS GAS WATER HEATERS

COMBI BOILERS

BOILERS

Rheem.com/ThermaForce
ThermaForce™ Super High Efficiency Condensing Platform is the Newest Whole Home Heating Solution

From space heating to domestic hot water, it’s easier than ever to give homeowners a whole home heating solution that is simple, reliable and super high efficiency. ThermaForce™ is a single condensing platform for combi boiler, boiler and tankless water heaters designed for ultimate serviceability with four or five moving parts. Plus, its sleek European design, wireless cascading and patented labyrinth heat exchanger set it apart from the competition.

Key Platform Features

**Innovative Technology**
- **Patented labyrinth heat exchanger** - aluminum block heat exchanger with integrated copper waterways ensures maximum heat transfer with minimal heat loss
- **Advanced modulation and redundancy** - enhances cascade system efficiency with multiple units operating at low fire versus one unit operating at high fire to satisfy demand

**Super High Efficiency**
- **Reduces carbon footprint** by using less energy compared to standard units
- **Improves air quality** boiler and combi boilers reduce NOx emissions up to 75% compared to standard efficiency boilers, 65% reduction with tankless compared to standard gas tank

**Ultimate Serviceability**
- **Universal shared platform parts** make it easy to diagnose and service with common parts for all ThermaForce™ units
- **Unmatched streamlined design** - a total of four or five moving parts, unmatched in the industry, simplifies servicing. Fan, gas valve, damper, boiler pump (boiler/combi only) and bypass valve (select models)
- **Illuminated touchscreen control panel** provides operational status, troubleshooting information, and allows setting adjustments.
- **Field fuel convertible** - easily convert from natural gas to liquid propane with conversion kit
- **Versatile venting options** - provides installation flexibility with moveable combustion air intake (left/right) ability to flex vent in existing B vent and 2" inlet and exhaust with band connections
- **Easy grip connections** - extra long pipe fittings with notched sides for easy gripping with a wrench
First to Market Wireless Cascading

The Rheem® ThermaForce platform includes unique wireless cascading capabilities to meet the most demanding space heating and domestic hot water needs. The ThermaForce wireless cascade system is easy to set up, flexible and improves system efficiency and individual unit life.

U.S. Market Exclusive Condensing Combi to Combi Cascading for Domestic Hot Water and Space Heating

- **Cascade up to 8 ThermaForce units** for demanding space heating and domestic hot water applications.
- **Wi-Fi not required** - system uses radio frequency to communicate wirelessly.
- **Simple system setup** - enable the built-in cascade function on the unit’s display panel and connect the system sensors. No communication cables required.
- **Easy to scale** - size and add units later when demand increases.
- **Ultimate system redundancy** - system continues to operate during maintenance or repair of a cascaded unit.

**Wirelessly cascade up to eight units in multiple configurations**

All ThermaForce Models Deliver Proven Durability. The Innovative Heat Exchanger reduces thermal stress on copper tubing limiting lime scale and damage.
Combi Boilers - 2 in 1 design for space and water heating

RCBH-L125i, RCBH-L160i & RCBH-L199i
Indoor Direct Vent
125,000-199,000 BTU/h
Natural Gas/LP Convertible

ThermaForce combi boilers are packed with efficiency improving features in addition to a super high efficiency condensing heat exchanger.

**Built-in high efficiency variable speed boiler pump** uses less electricity than a standard pump.

**Outdoor reset technology** adjusts the boiler supply temperature automatically based on outdoor temperature fluctuations.

**ENERGY STAR® certified** with up to 96% AFUE and ASME-rated (excludes 160K combi model).³

**Combi Exclusives**

- Saves space and money with one appliance instead of two (boiler and tankless water heater).
- **U.S. Market exclusive** condensing combi to combi cascading for both space heating and domestic hot water.
Combustion Air Intake
Ability to move either to the left or right side for flexible installation

2” Inlet and Exhaust with Band Connections
Makes venting with 2” PVC easier for use in tighter spaces and reduces installation and labor costs

Innovative Labyrinth Heat Exchanger with Copper Waterways
Patented technology that ensures maximum heat transfer and minimal heat loss

Illuminated Touchscreen Control Panel
Easy-to-use menus for setting changes, making setup easier than ever. Illuminated flame icon identifies when burner is on for quick setup and operational status

Bypass Valve

Condensate Trap

3/4” Domestic Water Connections

1” Space Heating Connections

Field Convertible Gas Valve
Field gas conversion kit to easily convert from natural gas to liquid propane if needed

Built-In ECM Boiler Pump
Saves both installation time and cost with a variable speed, high-efficiency pump that uses 50% less electricity than a standard pump

Damper

Burner Fan

All ThermaForce Models Simplify Installation by offering the same versatile venting options and flexible gas connections.
Condensing **Boilers** offer efficient space heating

**RHBH-L99i & RHBH-L120i**
Indoor Direct Vent, 99,000-120,000 BTU/h, Natural Gas/LP Convertible

See Available Models section for breakdown of what is included in the box for each model.

**Boiler Key Benefits**

ThermaForce boilers offer the ultimate efficiency for home space heating through the innovative heat exchanger and additional efficiency improving features.

**Built-in high efficiency variable speed boiler pump** uses less electricity than a standard pump.

**Outdoor reset technology** adjusts the boiler supply temperature automatically based on outdoor temperature fluctuations.

**ENERGY STAR® certified** with up to 96% AFUE and ASME-rated.

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**BOILERS**

2" Inlet and Exhaust with Band Connections

Combustion Air Intake

Innovative Labyrinth Heat Exchanger with Copper Waterways

Damper

Burner Fan

Field Convertible Gas Valve

Built-In ECM Boiler Pump

Condensate Trap

1" Space Heating Connections

Condensing Boilers offer efficient space heating

Qualifies for Tax Credits
Get premium performance even in hard water regions with **Tankless Gas Water Heaters**

**RTGH-L199i**
Indoor Direct Vent, 199,000 BTU/h, Natural Gas/LP Convertible

*See Available Models section for breakdown of what is included in the box for each model.*

**Tankless Key Benefits**

- **Premium performance in extreme hard water regions** cast aluminum heat exchanger protects copper water ways and minimizes lime formation.
- **Industry's most comprehensive warranty**
  Enjoy peace of mind with a 15-year heat exchanger (replace entire unit not just heat exchanger) and 5-year parts warranty.
- **Save up to 32% per year** in energy costs over a standard 50-gallon gas residential tank water heater.
### ThermaForce™ Combi and Boiler Specifications

<table>
<thead>
<tr>
<th>Model Number</th>
<th>RCBH-L125i</th>
<th>RCBH-L160i</th>
<th>RCBH-L199i</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input Rate (Heating Mode)</strong></td>
<td>MAX: 99,000 BTU/h</td>
<td>125,000 BTU/h</td>
<td>125,000 BTU/h</td>
</tr>
<tr>
<td><strong>Output Rate (Heating Mode)</strong></td>
<td>MIN: 16,500 BTU/h</td>
<td>23,000 BTU/h</td>
<td>28,500 BTU/h</td>
</tr>
<tr>
<td><strong>Input Rate (Domestic Hot Water)</strong></td>
<td>MAX: 89,000 BTU/h</td>
<td>111,000 BTU/h</td>
<td>111,000 BTU/h</td>
</tr>
<tr>
<td><strong>Output Rate (Domestic Hot Water)</strong></td>
<td>MIN: 15,800 BTU/h</td>
<td>22,000 BTU/h</td>
<td>27,100 BTU/h</td>
</tr>
<tr>
<td><strong>AFUE</strong></td>
<td>95%</td>
<td>94%</td>
<td>94%</td>
</tr>
<tr>
<td><strong>Weight (Lbs.)</strong></td>
<td>MAX: 85</td>
<td>84</td>
<td>84</td>
</tr>
<tr>
<td><strong>Boiler Flow Rate - GPM</strong></td>
<td>MIN: 2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Max Relative Humidity (Non-Condensing)</strong></td>
<td>90%</td>
<td>90%</td>
<td>90%</td>
</tr>
<tr>
<td><strong>Temp Range</strong></td>
<td>Heating Mode: 51°F-194°F</td>
<td>Domestic Hot Water: 105°F-149°F</td>
<td>Domestic Hot Water: 105°F-149°F</td>
</tr>
<tr>
<td><strong>Minimum Activation Flow Rate (DHW)</strong></td>
<td>0.5 GPM</td>
<td>0.5 GPM</td>
<td>0.5 GPM</td>
</tr>
<tr>
<td><strong>Gallons Per Minute - GPM (Domestic Hot Water)</strong></td>
<td>MAX: 10</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td><strong>67°F Rise</strong></td>
<td>3.2</td>
<td>4.1</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model Number</th>
<th>RHBH-L99i</th>
<th>RHBH-L120i</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input Rate</strong></td>
<td>MAX: 99,000 BTU/h</td>
<td>120,000 BTU/h</td>
</tr>
<tr>
<td><strong>Output Rate</strong></td>
<td>MIN: 16,500 BTU/h</td>
<td>13,650 BTU/h</td>
</tr>
<tr>
<td><strong>AFUE</strong></td>
<td>96%</td>
<td>95%</td>
</tr>
<tr>
<td><strong>Gas Pressure</strong></td>
<td>MAX: 14” WC</td>
<td>MIN: 4” WC</td>
</tr>
<tr>
<td><strong>Weight (Lbs.)</strong></td>
<td>85</td>
<td>85</td>
</tr>
<tr>
<td><strong>Boiler Flow Rate - GPM</strong></td>
<td>MAX: 10</td>
<td>11</td>
</tr>
<tr>
<td><strong>MIN</strong></td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Max Relative Humidity (Non-Condensing)</strong></td>
<td>90%</td>
<td>90%</td>
</tr>
<tr>
<td><strong>Temp Range</strong></td>
<td>Heating Mode: 51°F-194°F</td>
<td>Domestic Hot Water: 105°F-149°F</td>
</tr>
<tr>
<td><strong>Max equivalent vent length 2” (each side)</strong></td>
<td>65’</td>
<td></td>
</tr>
<tr>
<td><strong>Max equivalent vent length 3” (each side)</strong></td>
<td>120’</td>
<td></td>
</tr>
<tr>
<td><strong>Warranty</strong></td>
<td>10-Year Heat Exchanger, 5-Year Parts, 1-Year Labor</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model Number</th>
<th>RTGH-L199i</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input Rate</strong></td>
<td>MAX: 199,000 BTU/h</td>
</tr>
<tr>
<td><strong>Uniform Energy Factor (UEF)</strong></td>
<td>MIN: 28,500 BTU/h</td>
</tr>
<tr>
<td><strong>Gallons Per Minute - GPM</strong></td>
<td>0.90</td>
</tr>
<tr>
<td><strong>Max Relative Humidity (Non-Condensing)</strong></td>
<td>90%</td>
</tr>
<tr>
<td><strong>Temp Range</strong></td>
<td>51°F-194°F</td>
</tr>
<tr>
<td><strong>Fuel Type</strong></td>
<td>Compatible with Natural Gas and LP (Ships NG with LP Conversion kit included)</td>
</tr>
<tr>
<td><strong>Max Relative Humidity (Non-Condensing)</strong></td>
<td>90%</td>
</tr>
<tr>
<td><strong>Temp Range</strong></td>
<td>51°F-194°F</td>
</tr>
<tr>
<td><strong>Venting</strong></td>
<td>2” or 3” PVC, CPVC, Polypropylene</td>
</tr>
<tr>
<td><strong>Vent Clearances</strong></td>
<td>0” to combustibles</td>
</tr>
<tr>
<td><strong>Warranty</strong></td>
<td>15-Year Heat Exchanger, 5-Year Parts, 1-Year Labor - Residential</td>
</tr>
</tbody>
</table>

1 Based on comparison of ThermaForce™ combi and boiler against a minimum efficiency boiler with like fuel type.
2 Based on comparison of ThermaForce™ tankless against a standard residential 50 gallon tank type model with like fuel type not to exceed 75,000 BTU.
3 160K combi boiler model is not ENERGY STAR® certified.
4 Based on comparison of ThermaForce™ combi and boiler against a minimum efficiency boiler with like fuel type.
5 See Warranty Certificate for complete information.