**FLEXIBLE VENTING OPTIONS**
- Concentric or Schedule 40 PVC/CPVC
- Direct Vent (Concentric and Twin Pipe)
- Non-Direct Vent (Room Air)
- Common Vent (Direct Vent and Room Air)
- Maximum Equivalent Vent Lengths:
  - Twin Pipe
    - Vent Sizes: 2 in. (51 mm), 3 in. (76 mm)
    - Vent Sizes: 65 ft (20 m), 150 ft (46 m)
  - Concentric
    - Vent Sizes: 2 in. x 4 in., 3 in. x 5 in.
    - Vent Sizes: 65 ft (20 m), 150 ft (46 m)

**EASE OF INSTALLATION AND SERVICEABILITY**
- Compact Design to Save Space
- Wi-Fi Technology for Remote Monitoring and Management
- Sliding Mounting Bracket for Easy Installation
- Simple Gas Conversion

**OPTIONAL ACCESSORIES**
Room Air Screen, Condensate Neutralizer, ScaleCutter, Drain Down Kit, Additional.Controllers, Pipe Cover, Recirculation Pump, DPS/MIS Switch, EZConnect™ Cables, control-r™ Wi-Fi Module, Wireless Accessories, and many more. Visit rinnai.us for a complete list of accessories.

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**SUPER-HIGH-EFFICIENCY (CONDENSING) TANKLESS WATER HEATER**

**Installation Type**
- Internal (Indoor) Residential Applications.
- Manufactured (Mobile) Home Certified

**Model Numbers**
- RU199i (REU-N3237FF-US)
- RU180i (REU-N2934FF-US)
- RU160i (REU-N2530FF-US)
- RU130i (REU-N2024FF-US)

**Approved Gas Types**
- Natural and Propane

**Efficiency**
- UEF: 0.93 (RU199i, RU180i, RU160i)
  - 0.91 (RU130i)
- EF: 0.96 (RU199i)
  - 0.95 (RU180i, RU160i, RU130i)

**High Altitude Approved**
- Up to 10,200 ft (3,109 m)

**Water Flow Control**
- Water Flow Sensor, Electronic Water Control and Bypass Control

**Controller**
- Standard: Integrated Controller

**Certifications**
- AHRI, ANSI Z21.10.3, CSA 4.3, and ENERGY STAR®

**Warranty**
- Heat Exchanger: 15 years or 12,000 operation hours, whichever occurs first
- All Other Parts and Components: 5 Years
- Reasonable Labor: 1 Year

**Safety Devices**
- Flame Failure - Flame Rod, Boiling Protection, Combustion Fan RPM Check, Over Current - Glass Fuse, Remaining Flame (OHS) and Automatic Frost Protection

**Included with Purchase**
- Tankless Water Heater, Wall Mounting Bracket, Pressure Relief Valve and Adapter, Isolation Valve Kit, Vent Screens (x2), Vent Screen Screws (x2) and Self-Tapping Screws (x2)

**Additional Features**
- Mobile Home Certified
- Ultra Low NOx
- Tankless Rack System™ Compatible
- 1/2 in. (13 mm) Gas Line Compatible
- Complies with South Coast Air Quality Management District 14 ng/J or 20 ppm NOx Emission Levels

CERTIFIED TO ANSI Z21.10.3 — CSA 4.3

RINNAI.US • 1-800-621-9419
**SENSEI™ TECHNICAL SPECIFICATIONS**

<table>
<thead>
<tr>
<th>SPECIFICATION</th>
<th>RU199i</th>
<th>RU180i</th>
<th>RU160i</th>
<th>RU130i</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions - w, h, d</td>
<td>18.5 in. x 26.4 in. x 11.4 in. (470 mm x 670 mm x 290 mm)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum Gas Consumption Btu/h</td>
<td></td>
<td></td>
<td></td>
<td>15,000</td>
</tr>
<tr>
<td>Maximum Gas Consumption Btu/h</td>
<td>199,000</td>
<td>180,000</td>
<td>160,000</td>
<td>130,000</td>
</tr>
<tr>
<td>Flow Rate</td>
<td>0.26 - 9.8 GPM (1.0 - 37 L/min)</td>
<td>0.26 - 9.0 GPM (1.0 - 34 L/min)</td>
<td>0.26 - 8.0 GPM (1.0 - 30 L/min)</td>
<td>0.26 - 6.6 GPM (1.0 - 24 L/min)</td>
</tr>
<tr>
<td>Max Flow Rate with Parameter Adjustment</td>
<td>11 GPM (42 L/min)</td>
<td>10 GPM (38 L/min)</td>
<td>9 GPM (34 L/min)</td>
<td>7 GPM (26 L/min)</td>
</tr>
<tr>
<td>Weight</td>
<td>64 lb (29 kg)</td>
<td>64 lb (29 kg)</td>
<td>62 lb (28 kg)</td>
<td>62 lb (28 kg)</td>
</tr>
<tr>
<td>Sound Level</td>
<td>48 dB</td>
<td>47 dB</td>
<td>47 dB</td>
<td>47 dB</td>
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</tbody>
</table>

**Electrical**

- Normal: 84 W | 65 W | 52 W | 38 W |
- Standby: 1.3 W |
- Freeze Protection: 148 W |
- Max Current: 4 Amps |
- Fuse: 10 Amps |
- Temperature: Minimum: 98° F (37° C) Default | Maximum: 120° F (49° C) Default |

**By-Pass Flow Control**

- Natural: 3.5 in. w.c. - 10.5 in. w.c. |
- Propane: 8.0 in. w.c. - 13.5 in. w.c. |
- Direct Electronic Ignition |

**Gas Supply Pressure**

- Natural: 3.5 in. w.c. - 10.5 in. w.c. |
- Propane: 8.0 in. w.c. - 13.5 in. w.c. |
- Ignition System: Direct Electronic Ignition |

**Electronic Connections**

- Appliance: AC 120 Volts, 60Hz. |
- Temperature Controller: DC 12 Volts (Digital) |

**Water Supply Pressure**

- Minimum: 50 PSI (Recommended 60 - 80 PSI for max performance) |
- Maximum: 150 PSI |

**Controller Cable**

- Non-Polarized Two Core Cable (Minimum 22 AWG) |

**Service Connections**

- Gas Supply: 3/4 in. (19 mm) NPT |
- Cold Water Inlet: 3/4 in. (19 mm) NPT |
- Hot Water Outlet: 3/4 in. (19 mm) NPT |
- Condensate Drain: 1/2 in. (13 mm) NPT |

**Clearances**

- Top: 2 in. (51 mm)* |
- Bottom/Ground: 12 in. (305 mm) |
- Front: 0 in.** |
- Back: 0 in. |
- Sides: 2 in. (51 mm)*** |
- Vent: 0 in. |
- **0 in. from vent components |
- ** Clearance for servicing is 24 in. (610 mm) in front of water heater |
- *** Add 0.25 in. (6.35 mm) for recess box |

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**SENSEI™ WATER FLOW CURVE**

Flow curves apply only to incoming water temperatures of 70° F (21° C) or less. For incoming water temperatures greater than 70° F (21° C), please contact Rinnai.

**NOTE:** Maximum flow rates may vary based on set temperature, Delta T and altitude.

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**SENSEI™ DIMENSIONS**

<table>
<thead>
<tr>
<th>Connection</th>
<th>in.</th>
<th>mm</th>
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<tr>
<td>COLD</td>
<td>F</td>
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<tr>
<td></td>
<td>C</td>
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<td>PRV</td>
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