



The new degree of comfort.®



Residential Gas  
ThermaForce Super High Efficiency  
Condensing Tankless Water Heaters

# Rheem® ThermaForce™ Super High-Efficiency Condensing Tankless Gas Water Heaters

## Flexible Installation

- Moveable combustion air intake (left/ right) and ability to flex vent in existing B-vent
- Extra long pipe fittings with notched sides for easy gripping with wrench
- Only 4 moving parts – Fan, Mixing Valve, Gas Valve, and Damper
- Universal shared platform parts – Easily diagnose and service with common parts for all ThermaForce™ units

## Key Features

- Innovative single pass Labyrinth Heat Exchanger with Integrated copper waterway ensures maximum heat transfer with minimal heat loss
- Wireless cascading using RF balances workload of each unit for longer life
- Built-in Illuminated Touchscreen Control Panel
- Stands up to extreme hard water applications

## Specifications

| MODEL NO.                              |            | RTGH-L199i                                                                                                               |
|----------------------------------------|------------|--------------------------------------------------------------------------------------------------------------------------|
| Input Rate                             | MAX        | 199,000 BTU/h                                                                                                            |
|                                        | MIN        | 28,500 BTU/h                                                                                                             |
| Uniform Energy Factor (UEF)            |            | 0.90                                                                                                                     |
| Gallons per Minute (GPM)               | MAX (35°F) | 10.1                                                                                                                     |
|                                        | 45°F Rise  | 7.9                                                                                                                      |
|                                        | 67°F Rise  | 5.4                                                                                                                      |
| Set Point Temperature Range            |            | 105°F - 149°F                                                                                                            |
| Installation Type                      |            | Indoor only wall-hung                                                                                                    |
| Fuel Type                              |            | Compatible with Natural Gas and LP (Ships NG with LP Conversion kit included)                                            |
| Heat Exchanger Material                |            | Copper tubes in AL block                                                                                                 |
| Water Pressure                         |            | 40 - 150 PSI                                                                                                             |
| Maximum Altitude                       |            | 10,100 ft NG / 7,800 ft LP                                                                                               |
| Minimum Activation Flow                |            | 0.5 GPM                                                                                                                  |
| Ambient Temperature – Low (°F)         |            | 32°                                                                                                                      |
| Ambient Temperature – High (°F)        |            | 122°                                                                                                                     |
| Max relative humidity (non-condensing) |            | 90%                                                                                                                      |
| Height                                 |            | 29.8"                                                                                                                    |
| Width                                  |            | 17.7"                                                                                                                    |
| Depth                                  |            | 10.9"                                                                                                                    |
| Weight (empty)                         |            | 68 lbs.                                                                                                                  |
| Power Supply                           |            | 120V / 60Hz                                                                                                              |
| Venting                                |            | 2" or 3" PVC, CPVC, Polypropylene                                                                                        |
| Vent Clearances                        |            | 0" to combustibles                                                                                                       |
| Safety Devices                         |            | Flame Proving module, Flue Gas Temperature Sensor, Protective fuse                                                       |
| Ultra Low NOx                          |            | Meets 14 ng/J NOx requirements - SCAQMD Rule 1146.2 compliant                                                            |
| Warranty <sup>1</sup>                  |            | 15-Year Heat Exchanger,<br>5-Year Parts, 1-Year Labor - Residential;<br>5-Year Heat Exchanger, 5-Year Parts - Commercial |

<sup>1</sup>See Warranty Certificate for complete information

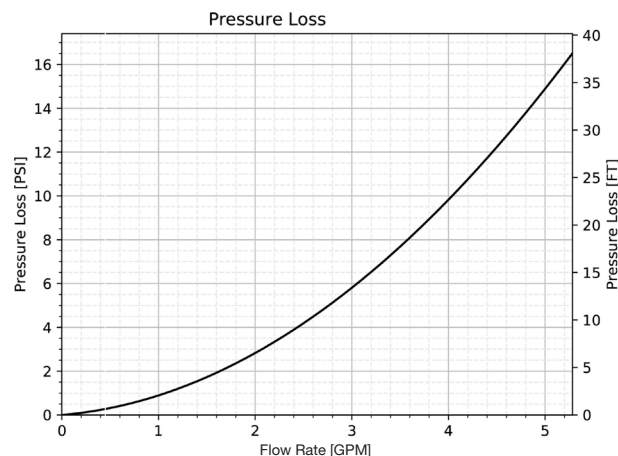


## RTGH-L199i

Indoor Direct Vent  
28,500-199,000 BTU/h  
Natural Gas/LP Convertible



Water heater pressure drop – ThermaForce™ RTGH-L199i



INTEGRATED HOME COMFORT

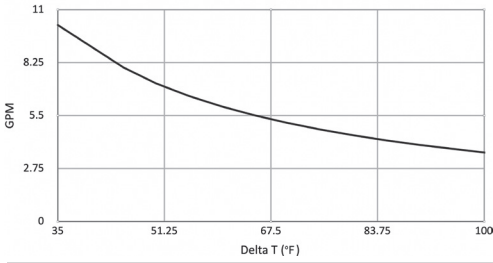


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## Water Heater Flow Rate Curves



| Model Number                | Temperature Rise (°F) |     |     |     |     |     |     |     |      |  |
|-----------------------------|-----------------------|-----|-----|-----|-----|-----|-----|-----|------|--|
|                             | 35°                   | 45° | 50° | 60° | 65° | 70° | 80° | 90° | 100° |  |
| RTGH-L199i Water Flow (GPM) | 10.2                  | 8.0 | 7.2 | 6.0 | 5.5 | 5.1 | 4.5 | 4.0 | 3.6  |  |

Above estimates are for sizing purposes only.

## Specifications

| VENTING                                       | MAXIMUM EQUIVALENT LENGTH              |
|-----------------------------------------------|----------------------------------------|
| <b>Schedule 40 PVC, CPVC or Polypropylene</b> | (each side)                            |
| 2"                                            | 65' <sup>2</sup>                       |
| 3"                                            | 120'                                   |
| 2" or 3" 90° Long Sweep Vent Elbow            | Allow 5 equivalent feet                |
| 2" or 3" 90° Short Sweep Vent Elbow           | Allow 8 equivalent feet                |
| 2" or 3" 45° Vent Elbow                       | Allow 3 equivalent feet                |
| <b>Polypropylene</b>                          |                                        |
| PPs 87-90° Elbow                              | Allow 8 equivalent feet                |
| <b>Flex PPS</b>                               |                                        |
| 3" PPs Flex                                   | 35' Actual (Equivalent = Actual x 1.4) |

<sup>2</sup> Approximate input derate of 10 - 16% at 2" maximum vent length.

| SURFACE    | MIN. DISTANCE FROM COMBUSTIBLE SURFACES | RECOMMENDED DISTANCE FOR INSTALLATION AND SERVICE |
|------------|-----------------------------------------|---------------------------------------------------|
| Front      | 2"                                      | 24"                                               |
| Rear       | 0"                                      | 0"                                                |
| Left Side  | 1.5"                                    | 6"                                                |
| Right Side | 4"                                      | 6"                                                |
| Top        | 2"                                      | 24"                                               |
| Bottom     | 8"                                      | 24"                                               |

| PIPING CONNECTIONS |                                | DIMENSION          |
|--------------------|--------------------------------|--------------------|
| A                  | Exhaust Outlet                 | 2" Schedule 40 PVC |
| B                  | Combustion Air Inlet           | 2" Schedule 40 PVC |
| C                  | Cold Domestic Water Connection | ¾" Male NPT        |
| D                  | Hot Domestic Water Connection  | ¾" Male NPT        |
| E                  | Gas Connection                 | ¾" Male NPT        |
| F                  | Condensate Connection          | ¾" Hose            |

## Parts & Accessories

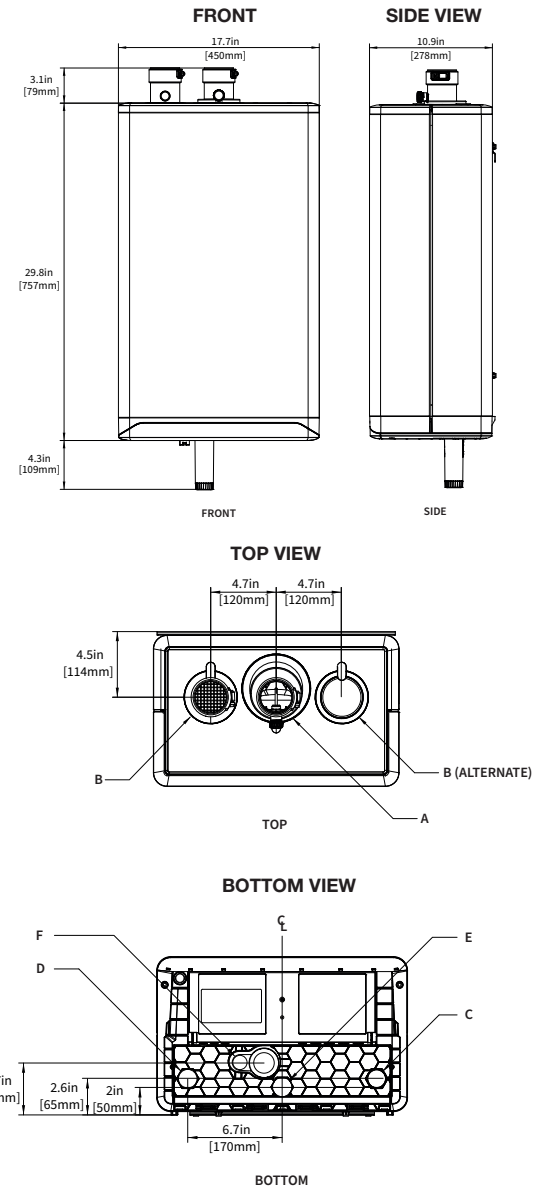
| Floor Stand<br>P-267C | Service Parts Kit<br>P-911R | 2" PVC Sidewall Vent Kit<br>P-741 | 3" PVC Sidewall Vent Kit<br>P-742 |
|-----------------------|-----------------------------|-----------------------------------|-----------------------------------|
|                       |                             |                                   |                                   |

In keeping with its policy of continuous progress and product improvement, Rheem reserves the right to make changes without notice.

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## Dimensions



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