



# CU199e-N

EXTERNAL (OUTDOOR)  
CONDENSING TANKLESS WATER HEATER

## Engineering Specifications CU199e-N (REU-N3237WC-US)

Water Heater(s) shall be externally mounted, commercial condensing, multiple point-of-use, gas fired, water heater(s) design certified to the ANSI Z21.10.3 standard for gas fired water heaters.

Water Heater(s) shall have a commercial energy star rating.

Water Heater(s) shall have a thermal efficiency of up to 97% and a Uniform Energy Factor of 0.93.

Each Water Heater shall produce no more than 20 ppm NO<sub>x</sub> emissions when tested in accordance with the Rules and Regulations of the South Coast Air Quality Management District (SCAQMD).

Water Heater(s) shall be configured to operate with natural gas and a 120 volt/60 Hz AC power source.

Water Heater(s) shall have a BTU input range of 15,000 BTU/hr to 199,000 BTU/hr, and a maximum hot water outlet capacity of 8.0 gallons per minute (with a 30°F temperature rise).

Water Heater(s) shall be microprocessor controlled and utilize a direct electronic ignition system (with no standing pilot), fully modulating gas control valve, turbine flow meter, automatic electro-mechanical water flow control valve, and water temperature thermistors to maintain outlet water temperature between  $\pm 2^{\circ}\text{F}$  of set point temperature. Microprocessor shall have built in recirculation logic to control a pump's heating cycles.

Water Heater(s) shall incorporate the following internal safety devices: flame failure lockout, boiling protection lockout, thermal overheat protection, internal freeze protection for ambient temperatures as low as  $-4^{\circ}\text{F}$ , and lockout protection in the event of a blocked flue.

Water Heater(s) shall be provided with a temperature thermostat with an adjustable set point range of 98°F to 185°F.

Water Heater(s) shall also be capable of storing and displaying a history of up to nine diagnostic maintenance codes, via the display on the temperature thermostat controller.

Water Heater(s) shall have downward fired fiber mesh burners, solid brass water flow control valve, and solid brass inlet and outlet water connections.

Water Heater(s) shall have a primary stainless steel heat exchanger and a secondary stainless steel heat exchanger warranted against material defects or workmanship for a period of

- Heat Exchanger: 8 years or 12,000 operation hours, whichever occurs first
- All Other Parts and Components: 5 Years
- Reasonable Labor: 1 Year

For full warranty details refer to water heater manual, available at [www.rinnai.us](http://www.rinnai.us).