

## C199i (KBD3237FFUDC)

Type of Appliance

Rinnai model number

**Operation / Installation** 

Minimum/Maximum Gas Rate (Input)

**Electrical** 

**Electrical Consumption** 

**Amperage** 

**Ignition System** 

**Hot Water Capacity** 

**Temperature** 

**Temperature (without remote)** 

**Approved Gas Types** 

Thermal Efficiency

**Service Connections** 

**Isolation & Pressure Relief Valves Included** 

**Water Flow Control** 

Minimum/Maximum Water Supply Pressure

Commercial Condensing Tankless Water Heater,

Commercial Energy Star

REU-KBD3237FFUDC-US

Forced combustion; indoor only;

15,200 - 199,000 BTU/h (4.5-58.3 kWh)

Appliance: AC 120 Volts - 60 Hz

Temperature Controller: DC 12 Volts

Normal: 75 w Standby: 2 w Anti-frost protection: 146 w

Max: 4A

Direct electronic ignition

Minimum flow rate: 0.26 GPM (1 l/min)

Minimum activation flow rate: 0.4 GPM (1.5 l/min)

Maximum flow rate: 9.8 GPM (37.1 l/min)

Factory Default Range - 98°-120° F (37°- 49°C) Optional Range - 98° - 185° F (37°- 85°C)

120° F 49°C) (factory default) or 140° F (60°C)

Natural or Propane (ensure unit matches gas type)

Natural Gas: 96% Propane: 96%

Gas supply: 3/4 inch (19mm) MNPT Cold water inlet: 3/4 inch (19mm) MNPT Hot water outlet: 3/4 inch (19mm) MNPT

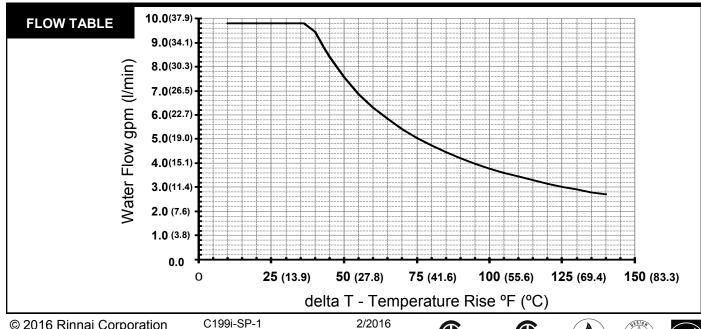
Isolation Valves are certified to NSF/ANSI 61 for potable water

Water flow sensor, electronic water control and by-pass control

20 - 150 PSI (138-1035 KPa) (recommended 60 - 80 PSI (414 - 552

KPa) for optimal performance)

Rinnai is continually updating and improving products; therefore, specifications are subject to change without prior notice. Local, state, provincial and federal codes must be adhered to prior to installation.











Controller

**Controller Cable** 

**Safety Devices** 

## **Clearances from Combustibles**

\* 24 inches (610mm) required for service

## **Clearances from Non-combustibles**

\* 24 inches (610mm) required for service

Min. / Max. Gas Supply Pressure

Manifold Gas Pressure (inches W.C.)

**NOx** 

Venting

MC-91-2US (included)

Non-polarized two-core cable, minimum 22 AWG

- Flame failure Flame Rod
- Boiling protection
- Combustion fan rpm check
- Over current glass fuse
- Remaining flame (OHS) Thermal fuse
- Automatic frost protection

· Back of heater - 0 inches

• From vent pipe - 0 inches

- Top of heater 6 inches (152mm)
- Front of heater 6 inches \*(152mm)
  Bottom of heater 12 inches (305mm)
- Sides of heater 2 inches (51mm)
- Top of heater 2 inches (51mm)
  - · Back of heater 0 inches
- Front of heater 6 inches \*(152.mm)
  Bottom of heater 12 inches (305mm)
- Sides of heater 1/2 inches (13mm) From vent pipe 0 inches

Natural Gas: min 4" W.C. (2.5mbar) max 10.5" W.C. (26.1mbar) Propane Gas: min 8" W.C. (20mbar) max 13.5" W.C. (33.6mbar)

Natural Gas: high fire 3.0" W.C. (7.5mbar) low fire 0.42" W.C. (1.1mbar) Propane Gas: high fire 3.5" W.C. (8.7mbar) low fire 0.47" W.C. (1.2mbar)

Complies with South Coast Air Quality Management District 14 ng/J or 20 ppm NOx emission levels

- -Ubbink Polypropylene Concentric Vent
- -Twin Pipe PVC/CPVC (3" and 4" configurations)
- -Centrotherm 3" Polypropylene (with Centrotherm Twin Pipe Adapter);
- -Common Vent Solutions
- -Room Air (Room air can be used only in commercial common vent applications where the exhaust terminates vertically)

See installation and operation manual for more details.

Limited Warranty Heat exchanger: 6 years\*, All other parts: 5 years\*; Labor: 1 year;

(\* 3 years if used as a circulating water heater within a circulation loop, when the water heater is in series with a circulation system and all circulating water flows through the water heater, and where an aquastat / thermostat, timer, or an on-demand recirculation system is not incorporated.) Refer to the manual for complete warranty information.

