RUC90i (KBD2934FFUD)

## 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
Energy Factor (EF)

## Service Connections

Isolation \& Pressure Relief Valves Included

## Water Flow Control

Minimum/Maximum Water Supply Pressure

Condensing, Tankless, Temperature controlled, continuous flow, gas hot water system, Energy Star Qualified
REU-KBD2934FFUD-US
Forced combustion; indoor only; Certified for installation in Manufactured (Mobile) Homes
15,200-180,000 BTU/h (4.5-52.8 kWh)
Appliance:
AC 120 Volts - 60 Hz
Temperature Controller:
DC 12 Volts

Normal: 75 w Standby: 2 w Anti-frost protection: 146 w
Max with pump: 8A Max without pump: 4A Fuse: 10A
Direct electronic ignition
Minimum flow rate: 0.26 GPM ( $1 \mathrm{l} / \mathrm{min}$ )
Minimum activation flow rate: 0.4 GPM ( $1.5 \mathrm{l} / \mathrm{min}$ )
Maximum flow rate: 9.0 GPM ( $29 \mathrm{l} / \mathrm{min}$ )
$98^{\circ}-120^{\circ} \mathrm{F}\left(37^{\circ}-49^{\circ} \mathrm{C}\right)$ (factory default) Maximum temperature is selectable at $120^{\circ} \mathrm{F}\left(49^{\circ} \mathrm{C}\right)$ or at $140^{\circ} \mathrm{F}\left(60^{\circ} \mathrm{C}\right) ; 98^{\circ}-185^{\circ} \mathrm{F}$
( $37^{\circ}-49^{\circ} \mathrm{C}$ ) available with the MCC-91-2 controller for commercial and hydronic applications
$120^{\circ} \mathrm{F}\left(49^{\circ} \mathrm{C}\right)$ (factory default) or $140^{\circ} \mathrm{F}\left(60^{\circ} \mathrm{C}\right)$
Natural or Propane (ensure unit matches gas type)
Natural Gas: 0.95
Propane: 0.95
Gas supply: $3 / 4$ inch ( 19 mm ) 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.

FLOW TABLE


External Recirculation Pump Control

## Controller

## Controller Cable

Safety Devices

## Clearances from Combustibles

* 24 inches ( 610 mm ) required for service


## Clearances from Non-combustibles

* 24 inches ( 610 mm ) required for service

Min. / Max. Gas Supply Pressure

## Manifold Gas Pressure (inches W.C.)

NOx

## Venting

Built in Rinnai Circ-Logic ${ }^{\text {TM }}$ : Recirculation program cycles external pump
MC-91-2US (included)
Deluxe and Bathroom controllers (Optional): MC-100V-1US, BC-100V-1US
MCC-91-2US (optional; for hydronic and commercial applications)
MC195T-US (optional; for use with Re-Circ Logic)
Non-polarized two-core cable, minimum 22 AWG

- Flame failure - Flame Rod
- Remaining flame (OHS)
- Boiling protection
- Thermal fuse
- Combustion fan rpm check
- Automatic frost protection
- Over current - glass fuse
- Top of heater - 6 inches ( 152 mm )
- Back of heater - 0 inches
- Front of heater - 6 inches *( 152 mm )
- Bottom of heater - 12 inches ( 305 mm )
- Sides of heater - 2 inches ( 51 mm )
- From vent pipe - 0 inches
- Top of heater - 2 inches ( 51 mm )
- Back of heater - 0 inches
- Front of heater - 6 inches *( 152 mm )
- Bottom of heater - 12 inches ( 305 mm )
- Sides of heater $-1 / 2$ inches ( 13 mm )

Natural Gas: min 4" W.C. (2.5mbar) max 10.5" W.C. (26.1mbar)
Propane Gas: min $8^{\prime \prime}$ W.C. (20mbar) max $13.5^{\prime \prime}$ W.C. (33.6mbar)
Natural Gas: high fire 2.5" W.C. (7.5mbar) low fire 0.42" W.C. (1.1mbar) Propane Gas: high fire 2.9" W.C. (8.7mbar) low fire 0.47" W.C. (1.2mbar)
Complies with South Coast Air Quality Management District $14 \mathrm{ng} / \mathrm{J}$ or 20 ppm NOx emission levels

Direct Vent system designed for use with Ubbink Polypropylene Concentric Vent, Twin Pipe PVC/CPVC ( $3^{\prime \prime}$ and 4" configurations), or Centrotherm 3" Polypropylene (with Centrotherm Twin Pipe Adapter) See installation and operation manual for details regarding installation and allowed vent lengths.

Limited Heat exchanger: 12 years* for residential, 10 years for residential and space heating, and 5 years* for Warranty commercial; 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.


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