



Type of Appliance

Condensing, Tankless, Temperature controlled, continuous flow, gas hot water system, Energy Star Qualified

Thunder Group model number

RC98iL (Propane); RC98iN (Natural Gas)

Operation / Installation

Forced combustion; indoor only

Minimum/Maximum Gas Rate (Input)

9,500 (Natural Gas), 10,300 (Propane) - 199,000 BTU/h

Electrical

Appliance: AC 120 Volts - 60 Hz
Temperature Controller: DC 12 Volts

Electrical Consumption

Normal: 80 w Standby: 2 w Anti-frost protection: 220 w

Ignition System

Direct electronic ignition

Hot Water Capacity

Minimum flow rate: 0.26 GPM
Minimum activation flow rate: 0.4 GPM
Maximum flow rate: 9.8 GPM

Temperature

98° - 120° F (factory default) Maximum temperature is selectable at 120° F or at 140° F; 98° - 185° F available with the MCC-91 controller for commercial and hydronic applications

Temperature (without remote)

120° F (factory default) or 140° F

Approved Gas Types

Natural or Propane (ensure unit matches gas type)

Energy Factor (EF)

Natural Gas: 0.94 Propane: 0.94

Service Connections

Gas supply: 3/4 inch MNPT
Cold water inlet: 3/4 inch MNPT
Hot water outlet: 3/4 inch MNPT

Isolation & Pressure Relief Valves Included

Heavy duty forged brass Webstone Isolator valves EXP E2, certified to NSF/ANSI 61-8 for potable water

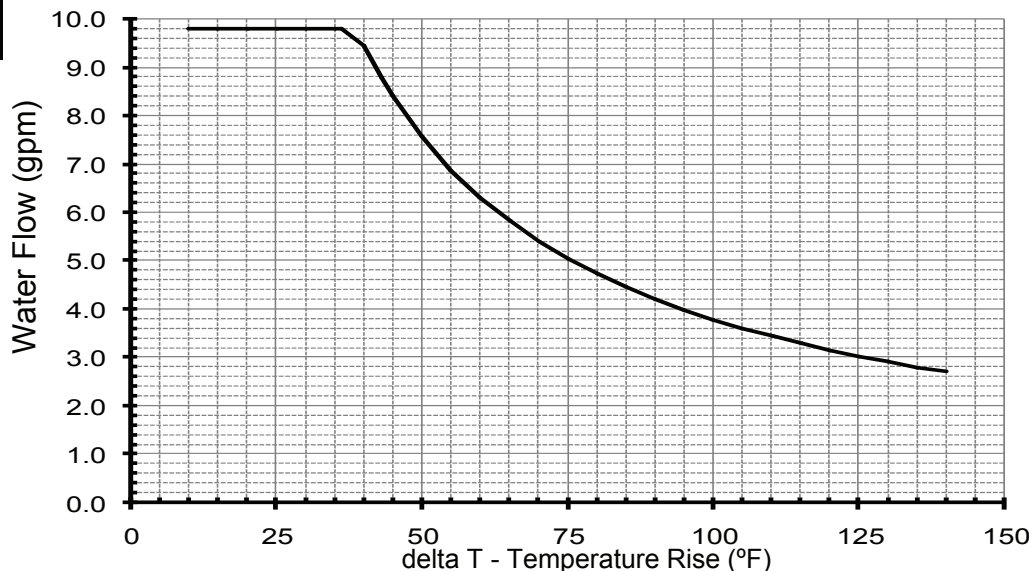
Water Flow Control

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

Minimum/Maximum Water Supply Pressure

15 - 150 PSI (50 PSI or above is recommended for maximum flow)

FLOW TABLE





Controller

MC-91-1US (included)
 Deluxe controller: MC-100V-1US (optional)
 Bathroom controller: BC-100V-1US (optional)
 MCC-91-1US (for commercial applications)

Controller Cable

Non-polarized two-core cable, minimum 22 AWG

Safety Devices

- ? Flame failure - Flame Rod
- ? Boiling protection
- ? Combustion fan rpm check
- ? Over current - glass fuse (3 amp)
- ? Remaining flame (OHS)
- ? Thermal fuse
- ? Automatic frost protection

Clearances from Combustibles

* 24 inches required for serviceability

- ? Top of heater - 6 inches
- ? Front of heater - 6 inches *
- ? Sides of heater - 2 inches
- ? Back of heater - 0 inches
- ? Bottom of heater - 12 inches
- ? From vent pipe - 0 inches

Clearances from Non-combustibles

* 24 inches required for serviceability

- ? Top of heater - 2 inches
- ? Front of heater - 6 inches *
- ? Sides of heater - 1/2 inches
- ? Back of heater - 0 inches
- ? Bottom of heater - 12 inches
- ? From vent pipe - 0 inches

Min. / Max. Gas Supply Pressure

Natural Gas: min 5" W.C. max 10.5" W.C.
 Propane Gas: min 8" W.C. max 13.5" W.C.

Manifold Gas Pressure (inches W.C.)

Natural Gas: high fire 2.3" W.C. low fire 0.75" W.C.
 Propane Gas: high fire 3.3" W.C. low fire 1.12" W.C.

NOx

Meets California and Texas NOx Emission Rules

Warranty

Heat exchanger: 12 years* for residential and 5 years* for commercial and hydronic applications; (10 years* if used with the Rinnai Hydronic Air Handler); 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, all circulating water flows through the water heater and without an on-demand recirculation system). Refer to the manual for complete warranty information.

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.

DIMENSIONS

WEIGHT: 70.5 lb (32 kg)

DIM	DESCRIPTION	in (mm)
A	Width	18.5 (470)
B	Depth	10.1 (256.9) *
C	Height - Unit	26.4 (670)
D	Height - with brackets	28.5 (723.2)
E	Hot Water Outlet - from wall	3.9 (100) *
F	Hot Water Outlet - from center	3.9 (100)
G	Cold Water Inlet - from wall	2.5 (64.6) *
H	Cold Water Inlet - from center	1.1 (27.7)
I	Gas Connection - from wall	3.5 (89) *
J	Gas Connection - from center	4.1 (103.2)
K	From base to gas connection	1.6 (40.2)
	From base to cold connection	2.0 (50.2)
	From base to hot connection	1.6 (41.2)
L	Condensate Dain - from wall	4.8 (122.6) *
M	Condensate Drain - from center	7.7 (195)

* This is the minimum dimension from the wall. The wall bracket is adjustable to allow an additional 1.57 inches (40)