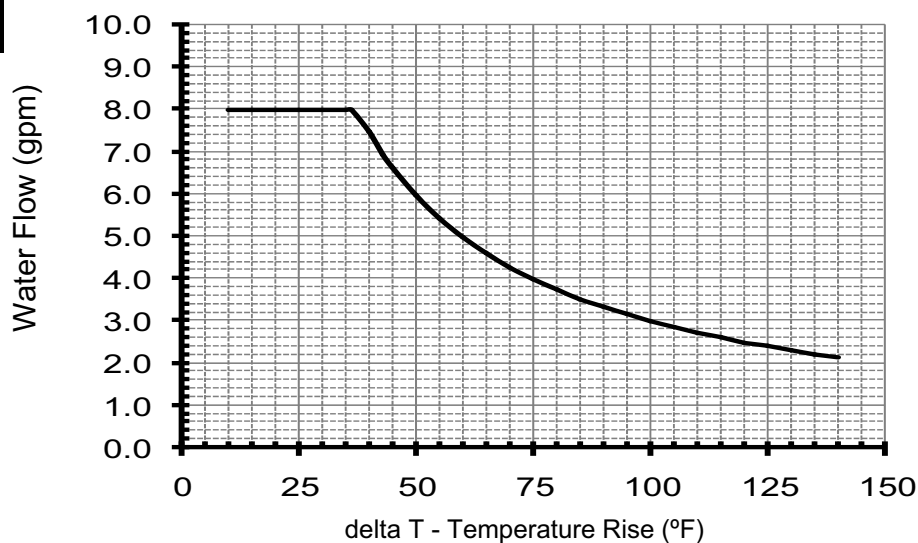




RC80E

Type of Appliance	Condensing, Tankless, Temperature controlled, continuous flow, gas hot water system, Energy Star Qualified
Thunder Group model number	RC80EN (Natural Gas) / RC80EL (Propane)
Operation / Installation	Forced combustion; outdoor only
Minimum/Maximum Gas Rate (Input)	9,500 (Natural Gas), 10,300 (Propane) - 157,000 BTU/h
Electrical	Appliance: AC 120 Volts - 60 Hz Temperature Controller: DC 12 Volts
Electrical Consumption	Normal: 44 w Standby: 2 w Anti-frost protection: 172 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: 8.0 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: 0.96 Propane: 0.96
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





RC80E

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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Top of heater - 12 inches Front (Panel) - 24 inches Front (Exhaust) - 24 inches Back of heater - 0 inches Bottom of heater - 12 inches Sides of heater - 6 inches
Clearances from Non-combustibles	<ul style="list-style-type: none"> Top of heater - 2 inches Front (Panel) - 0 inches * Front (Exhaust) - 24 inches Back of heater - 0 inches Bottom of heater - 2 inches Sides of heater - 1/8 inch
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 2.7" W.C. low fire 0.61" W.C. Propane Gas: high fire 3.6" W.C. low fire 0.92" 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: 63.9 lb (29 kg)		DIM	DESCRIPTION	in (mm)
				A	Width	18.5 (470)
				B	Depth	10.7 (271.9)
				C	Height - Unit	26.4 (670)
				D	Height - with brackets	28.4 (721.6)
				E	Hot Water Outlet - from wall	4.5 (115)
				F	Hot Water Outlet - from center	3.9 (100)
				G	Cold Water Inlet - from wall	3.0 (75.0)
				H	Cold Water Inlet - from center	0.5 (12.8)
				I	Gas Connection - from wall	4.1 (104)
				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	5.4 (137.6)
M	Condensate Drain - from center	7.7 (195)				