

# Encore®

## Encore® RMTGH-Series Super High Efficiency Condensing Tankless Gas Water Heaters

### EASY INSTALLATION

- PVC Vent runs up to 60' (2"), 150' (3")
- Enhanced design is up to 20% smaller and lighter making one-person installs even easier

### READY FOR RETROFITS

- **Industry Best!** 1/2" side to side clearance allows you to safely work in spaces the competition can't
- 1/2" Gas line compatibility (subject to local code)

### KEY FEATURES

- **Richmond® Exclusive!** Hot-start Programming™ ensures the unit is in a ready state between back-to-back usage, minimizing any cold water bursts
- Built-in EcoNet® Wi-Fi technology for direct control from your device (on select models)
- LeakGuard® – All-inclusive leak detection and prevention system that detects any leak that comes from the unit (on indoor Wi-Fi models)

### SPECIFICATIONS

Richmond Model Number		RMTGH-84DVLN-3		
Built-in LeakGuard™ Model Number			RMTGH-90DVELN-3 (Wi-Fi Model)	RMTGH-95DVELN-3 (Wi-Fi Model)
Gas Input Rate	MAX	157,000 BTU/h	180,000 BTU/h	199,900 BTU/h
	MIN	11,000 BTU/h	11,000 BTU/h	11,000 BTU/h
Uniform Energy Factor (UEF)		0.93		
Gallons Per Minute (GPM)	MAX (35°F)	8.4	9.0	9.5
	45°F Rise	6.7	7.7	8.5
	67°F Rise	4.6	5.2	5.7
Number of Bathrooms <sup>1</sup>		3	3 - 4	4
Temp. Range		100°F - 140°F		
Temp. Setting from Factory		120°F		
High Temp. Upgrade Available		No		
Freeze Protection		-30°F Air Intake <sup>2</sup> , -4°F Ambient		
Installation Type		Indoor (Outdoor Conversion Kit sold separately: RTGH-X)		
Heat Exchanger Material		Primary: Copper – Secondary: Stainless Steel		
Minimum Activation Flow		0.4 GPM		
Minimum Continuous Flow		0.26 GPM		
Maximum Altitude		7,800 ft.		
Ultra Low NOx		Meets 14 ng/J NOx requirements - SCAQMD Rule 1146.2 compliant		
Warranty		15 year Heat Exchanger   5-Year Parts   1-Year Labor		
Height		23.7"		
Width		17.7"		
Depth		9.8"		
Weight (Lbs.)		52.9		
Venting Diam. Allowed		2" / 3"		
Max. Single Vent Run (straight pipe)		60 ft (2") / 150 ft (3")		
Venting Materials		Sched. 40 PVC, CPVC, Polypropylene		
Manifold Controls (max. units)		6 Units <sup>3</sup>		
Controls		Built-in digital display		
Power Supply		120V 60Hz		
Max. Power Consumption		85W (Normal use), 0.7 Amps 132W (Antifreeze), 1.1 Amps 3.5W (Standby), 0.03 Amps <sup>4</sup>		
Gas Connection		3/4" NPT		
Hot Water Connection		3/4" NPT		
Cold Water Connection		3/4" NPT		
Condensate Connection		1/2" NPT		
Vent Connections Diameter		2" Band Connections (Adapter required to vent with 3" PVC from unit)		

All models are available in Natural Gas or Propane (LP). For Propane replace the N with P for LP model.



Vent termination included.

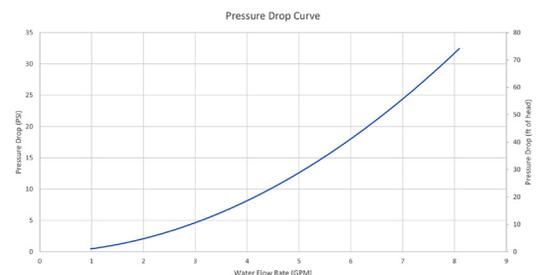
### RMTGH-Series Models

Indoor Models  
(Outdoor Conversion Kit Available: **RTGH-X**)  
11,000-199,900 BTU/h  
Natural Gas and  
Liquid Propane Models\*

\*Swap P for N in model number for Liquid Propane model



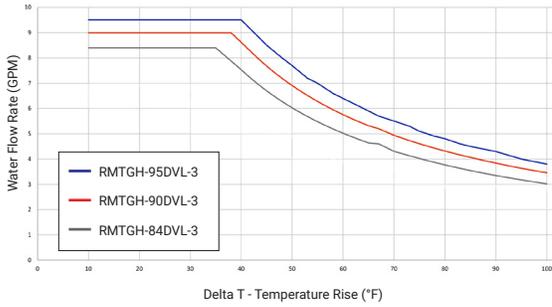
Clearances	
Top / Bottom	12"
Front	1/2" <sup>5</sup>
Sides	1/2"
Back / From Vent Pipe	0"



<sup>1</sup> Based on simultaneous showers using 2.5 GPM flow rate pre-mixed with cold water line. Flow rates vary depending on temperature of incoming cold water and water heater set temperature. Refer to flow rate curves for accurate sizing. <sup>2</sup> For indoor application, this is the temperature of outdoor intake air. <sup>3</sup> Manifolds with standard RJ11 communication cables. <sup>4</sup> If anti freeze is on and combustion is on, total W will be 217W (85+132). <sup>5</sup> Recommended 24" clearance for service.

# Encore® RMTGH-Series Super High Efficiency Condensing Tankless Gas Water Heaters

## WATER HEATER FLOW RATE CURVES

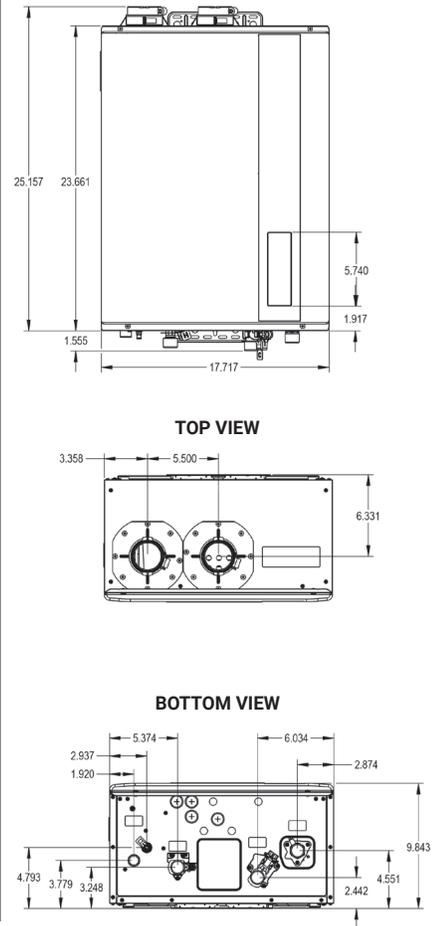


### Water Flow (GPM)

Model Number	Temperature Rise (°F)									
	35°	45°	50°	60°	67°	70°	80°	90°	100°	
RMTGH-95DVL-3	9.5	8.5	7.7	6.4	5.7	5.5	4.8	4.3	3.8	
RMTGH-90DVL-3	9.0	7.7	6.9	5.8	5.2	4.9	4.3	3.8	3.5	
RMTGH-84DVL-3	8.4	6.7	6.0	6.0	4.6	4.3	3.8	3.3	3.0	

Above estimates are for sizing purposes only.

## Dimensions



## VENTING

SINGLE UNIT: MAX. EQUIVALENT VENT LENGTHS - STRAIGHT PIPE		
Number of 90° Elbows	Max Length 2" straight pipe	Max. length 3" straight pipe
0	60 ft. (18.3 m)	150 ft. (45.7 m)
1	54 ft. (16.5 m)	144 ft. (43.9 m)
2	48 ft. (14.6 m)	138 ft. (42.7 m)
3	42 ft. (12.8 m)	132 ft. (40.2 m)
4	36 ft. (11.0 m)	126 ft. (38.4 m)
5	30 ft. (9.1 m)	120 ft. (36.6 m)
6	24 ft. (7.3 m)	114 ft. (34.7 m)

	Equivalent Ft. of Elbows	
	2" Pipe	3" Pipe
90° Elbow	6 ft (1.83 m)	6 ft (1.83 m)
45° Elbow	3 ft. (0.9 m)	3 ft. (0.9 m)

**Venting Materials Allowed: Schedule 40 PVC, CPVC, Polypropylene**

Min. Vent Length Straight Pipe	
Number of 90° Elbows	Min. Length 2" 3" pipe
1	1.0 ft (0.3 m)

Hanging bracket, pressure relief valves and bird screens are included with water heater.

## PARTS & ACCESSORIES

Condensate Neutralizer	Recirculation Pump	Pipe Cover	Horizontal Vent Termination	Concentric Vent Termination	AllClear® Water Treatment System	Isolation Valve Kit	Manifold Cables	Outdoor Conversion Kit
RTG20329AR (optional)	AP17920	AP22097	2" US: SP21069G 3" US: SP21069E	2" - SP20897 3" - SP20245	RTG20251	RTG20326	RCPN-AMP03-0013111101-0003 (48")	RTGH-X