RUCS65i (REU-KCM2025FFU-US)

INTERNAL (INDOOR) CONDENSING TANKLESS WATER HEATER

RESIDENTIAL

SUPER HIGH-EFFICIENCY (CONDENSING) TANKLESS WATER HEATER

Installation Type	Internal (Indoor) Residential Applications; Certified for installation in Manufactured (Mobile) Homes
Model Number	RUCS65i (REU-KCM2025FFU-US)
Approved Gas Types	Natural and Propane
High Altitude Approved	Up to 5,400 ft. (1,646 m)
Water Flow Control	Water Flow Sensor, Electronic Water Control and Fixed Bypass Control
Uniform Energy Factor (UEF)	0.85
Energy Factor (For Canada)	0.93
Controller	• Standard: Status Monitor • Optional: MC-91-2US • Do not install MC-100V-1US, BC-100V-1US, or Control-R™ Wi-Fi Module
Certifications	AHRI, ANSI Z21.10.3, and CSA 4.3

Safety Devices

Flame Failure - Flame Rod, Boiling Protection, Combustion Fan RPM Check, Over Current - Glass Fuse, Remaining Flame (OHS), Thermal Fuse and Automatic Frost Protection

Included with Purchase

Tankless Water Heater and Self-Tapping Screws (x2)

Additional Features

- Complies with South Coast Air Quality Management District 14 ng/J or 20 ppm NOx Emission Levels
- Ultra Low NOx
- 1/2 in. (13 mm) Gas Line Compatible

FLEXIBLE VENTING OPTIONS

The RUCS65i can be installed using two configurations for venting. These options are:

1. Using a single concentric polypropylene (PP) pipe
2. Dual pipe installation (separate intake and exhaust) using PVC/CPVC/PP

The dual venting configuration on the top allows for maximum flexibility for installers and dealers—one concentric vent or two PVC/CPVC/PP pipes can be used for venting.

Designed for use with:

- Ubbink Polypropylene Concentric Vent
- Twin Pipe PVC/CPVC (3 in. and 4 in. configurations)
- Centrotherm 3 in. Polypropylene (with Centrotherm Twin Pipe Adapter)

Concentric PP	41 ft. (12.5 m)
Dual Pipe PP (Centrotherm)	41 ft. (12.5 m)
3 in. Twin Pipe PVC/CPVC/PP	41 ft. (12.5 m)
4 in. Twin Pipe PVC/CPVC/PP	100 ft. (30.5 m)

LOW LEAD CONTENT SANITATION

CERTIFIED TO ANSI Z21.10.3 — CSA 4.3

TECHNICAL SPECIFICATIONS

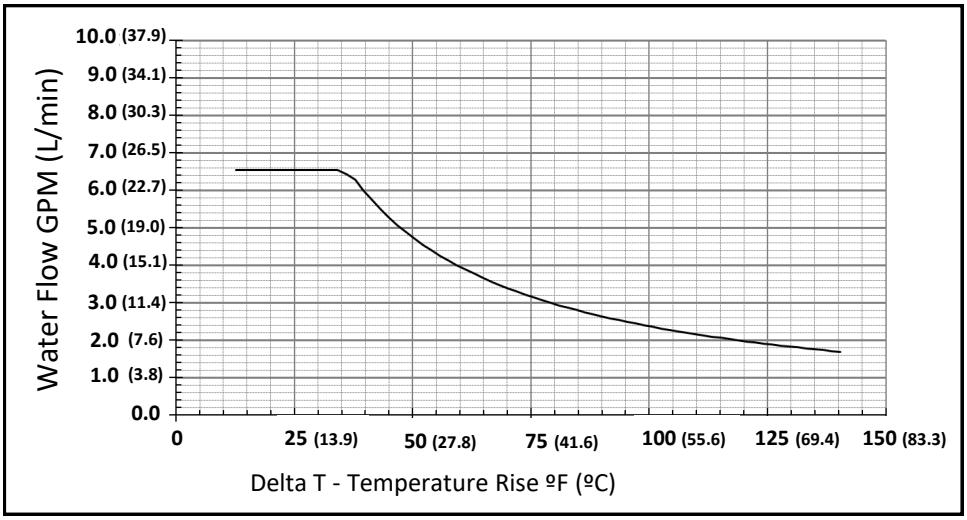
SPECIFICATION		RUCS65i
Dimensions - w, h, d		18.3 in. x 31.1 in. x 10.1 in. (466 mm x 789.6 mm x 257 mm)
Minimum Gas Consumption Btu/h		10,300
Maximum Gas Consumption Btu/h		130,000
Flow Rate[1] (Min - Max)		0.26 - 6.5 GPM (1.0 - 24.6 L/min)
Weight		57.3 lbs. (26kg.)
Sound Level		47 dB
Electrical	Normal	89 W
	Standby	1.3 W
	Freeze Protection	167 W
	Max Current	2.3 Amps
	Fuse	10 Amps
Temperature (with remote)		120°F - 140°F (49°C - 60°C)
Temperature (without remote)		120°F (49°C), 125°F (52°C), 135°F (57°C), or 140°F (60°C)
Gas Supply Pressure[2]		• Natural: 4 in. w.c. - 10.5 in. w.c. (2.5 mbar - 26.1 mbar) • Propane: 8 in. w.c. - 13.5 in. w.c. (20 mbar - 33.6 mbar)
Ignition System		Direct Electronic Ignition
Electronic Connections		• Appliance: AC 120 Volts, 60Hz • Temperature Controller: DC 12 Volts (Digital)
Water Supply Pressure		• Minimum: 50 PSI (Recommended 60-80 PSI for max performance) • Maximum: 150 PSI
Controller Cable		Non-Polarized Two Core Cable (Minimum 22 AWG)
Service Connections		• Gas Supply: 3/4 in. NPT • Cold Water Inlet: 3/4 in. NPT • Hot Water Outlet: 3/4 in. NPT • Condensate Drain: 1/2 in. NPT
Clearances from Combustibles		• Top: 6 in. (152 mm) • Bottom/Ground: 12 in. (305 mm) • Front: 6 in. (152 mm)* • Back: 0 in. • Sides: 2 in. (51 mm) • Vent: 0 in.
Clearances from Non-Combustibles		• Top: 2 in. (51 mm) • Bottom/Ground: 12 in. (305 mm) • Front: 6 in. (152 mm)* • Back: 0 in. • Sides: 1/2 in. (13 mm) • Vent: 0 in.

* Clearance for servicing is 24 in. (610 mm) in front of water heater.

[1] Minimum flow may vary slightly depending on the temperature setting and the inlet water temperature. Minimum activation flow is 0.4 GPM (1.5 L/min).

[2] The maximum gas supply pressure must stay within the ranges listed above.

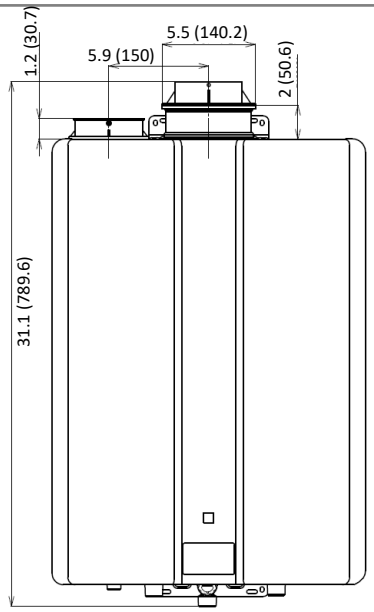
WATER FLOW CURVE



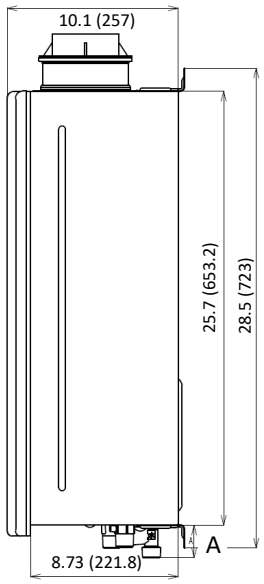
DIMENSIONS

in. (mm)

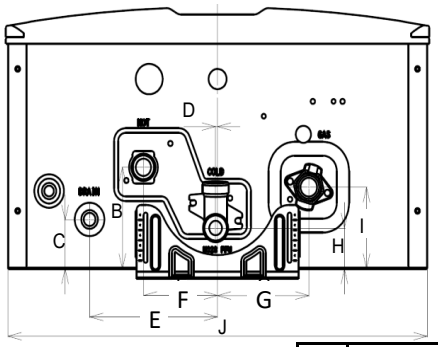
FRONT



SIDE



BOTTOM



DIM	Inches (mm)
A (GAS)	1.3 (33.2)
A (COLD)	1.93 (49)
A (HOT)	1.35 (34.4)
A (CONDENSATE OUTLET)	0.94 (23.9)
B	3.93 (100)
C	1.91 (48.6)

DIM	Inches (mm)
D	0.09 (2.2)
E	5.6 (142.3)
F	3.24 (82.4)
G	3.99 (101.4)
H	1.58 (40.1)
I	3.17 (80.4)
J	18.3 (466)