# The Ultra Experience Of An

# ENDLESS SUPPLY OF HOT WATER.





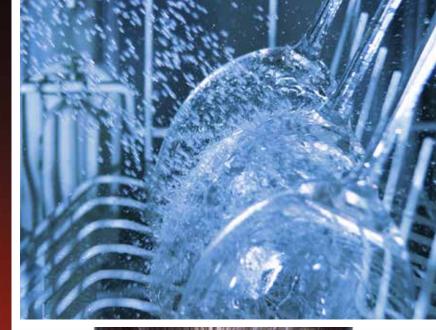
# Our performance is proven.

# OUR PROMISES ARE KEPT.

Nearly 100 years ago, we at Rinnai established a tradition of never settling for less than the absolute best—a tradition that has grown even stronger today.

Thanks to superior engineering, Rinnai water heating products raise the standard in comfort, convenience and reliability. In fact, our commitment to safety, quality and support has made Rinnai Tankless Water Heaters the #1 selling tankless brand in the U.S. and Canada.

From products to service and everything in between, our dedication to delivering our absolute best never wavers. We're stronger than ever, so that your confidence in choosing Rinnai can be, too.







# Enhancing the F HOME.

With either Rinnai Tankless Water Heaters or the RH180 Hybrid Tank-Tankless Water Heater, homeowners can now have more hot water than they ever thought possible.

The innovation behind our high-efficiency water heaters provides an endless supply of hot water wherever and whenever it's needed - even for multiple tasks at the same time. Showers and baths? Laundry and dishes? On-demand heating means hot water is always available, so prioritizing activities and scheduling water use is no longer necessary.

Because they operate on an as-needed basis, Rinnai Tankless Water Heaters can use up

to 40 percent\* less energy than traditional systems, which helps reduce utility costs. This efficient operation can also contribute to a favorable HERS rating and optimize LEED certification.

On top of efficiency, our tankless water heaters feature a copper heat exchanger for unparalleled quality, durability and safety. And their compact design offers substantial space savings in the home.

The flexibility and convenience of endless hot water. The reliability of proven engineering. It's everything homeowners need to feel comfortable.

## Only from Rinnai.

## Commercial Solutions where the demands are greatest,

## RINNAI DELIVERS.

Leveraging decades of global commercial water heating experience, Rinnai Tankless Water Heaters deliver performance and reliability. Precision engineering allows Rinnai Tankless Water Heaters to produce an endless supply of hot water to suit even the most demanding applications-from restaurants to hotels to multifamily residences to schools and more— conserving energy that can save thousands of dollars in capital, operational and life cycle costs, while providing redundancy and saving space.



<sup>\*</sup>As based on the average cost to run an electric tank water heater per the DOE Average Energy Costs (www.doe.gov), 2013.

# Rinnai Tankless Solutions Give You THE POWER TO LIVE BETTER.

### Tankless technology that saves you time.

**Never think about your hot water needs again:** Innovative technology provides an endless supply of hot water whenever and wherever it's needed – even for simultaneous uses at multiple fixtures. Showers and baths? Absolutely. Laundry and dishes? No problem. Prioritizing activities and scheduling hot water use is a thing of the past.

## Save money, splurge on performance.

**Designed for efficiency:** Rinnai's tankless technology features copper heat exchangers to provide maximum efficiency, and easily meet ENERGY STAR® qualifications and uses up to 40 percent less energy\* than a traditional tank.

**Save energy:** By operating only when hot water is needed, and no storage tank to heat and reheat water, our tankless technology helps save on energy and utility costs. The use of an electronic ignition means no standing pilot light that constantly uses energy.

A smart investment: Increase your home's value with premium technology, energy efficiency and an improved Home Energy Rating System (HERS) index score. Available energy efficiency rebates and tax credits offer the opportunity to help make your purchases more affordable.

Multiple sizes: Rinnai gives you options to right-size your installation and customize your efficiency.

**Replace parts, not systems:** Every part of a Rinnai Tankless Water Heater is replaceable. Components can be easily exchanged, if needed, versus replacing the entire system.

## Save space with a compact design.

**Maximum output, minimum space:** About the size of a small suitcase, at  $18.5'' \times 26'' \times 10''$  or smaller, the Rinnai can be installed on any wall or compact spaces. These wall-mounted units can be installed on the interior or exterior wall of the home to free up valuable space.

**Flexible installation:** Small size allows for installation in non-traditional spaces such as crawl spaces and attics, making it perfect for use in any size home, including manufactured and modular homes.

### Stay green with a sustainable choice.

Earth-friendly efficiency: Our tankless technology achieves maximum energy efficiency, helping to conserve natural resources.

**Less waste:** Compact heat exchanger design, longer product lifespan compared to a traditional tank\*\* and recyclable parts means less waste in landfills.

**High standards for low emissions:** Lower CO<sub>2</sub> emissions contribute to cleaner air and a healthier environment.

# CONDENSING TECHNOLOGY

## The Rinnai Ultra Series

THE ULTIMATE IN EFFICIENCY.



Delivering our most energy-efficient performance, the Ultra Series features a condensing design with two heat exchangers to maximize heating value to enhance reliability and durability and reduce maintenance. The Ultra Series also offers our most hot water capacity per BTU, with the ability to support multiple, simultaneous hot water demands and more venting solutions on the same unit.

#### UNIQUE FEATURES OF ULTRA SERIES

- Energy Factor of up to .96
- Available in three sizes: 152,000, 180,000, and 199,000 BTU
- Allows for either Concentric Polypropylene or PVC/CPVC venting, providing the most venting flexibility in a single application of any manufacturer
- Faster hot water provided by integrated recirculation pump and internal bypass line inside the unit
- Easy maintenance is achieved with included isolation valves
- \* As based on the average cost to run an electric tank water heater per the DOE Average Energy Costs (www.doe.gov).
- \*\* Based on DOE ENERGY STAR® lifecycle estimates, tankless water heaters can last up to twice as long as traditional tank units, 2013.



# **CONDENSING TANKLESS TECHNOLOGY**

## **RINNAI ULTRA SERIES - RUR MODEL**

Imagine turning on a shower and getting hot water almost immediately. Considering the average family loses precious time and numerous gallons a day waiting for water to heat up, that would be an invaluable change in routine. If you're tired of standing idly by while time and water go down the drain, Rinnai has five words that are sure to inspire you: Faster Hot Water Is Here!

## **Bringing Faster Hot Water Home.**

Our focus on enhancing homeowners' lives by changing the way water is heated has created an exciting breakthrough in recirculation that puts faster hot water a turn of the knob away.

Rinnai's Ultra Series Tankless Water Heater RUR Models use thermal bypass technology that includes an integrated recirculation pump, an internal bypass line inside the unit and a thermal bypass valve provided inside the box to send unlimited hot water wherever and whenever it's needed, all in one comprehensive solution. By keeping a steady supply of heated water in the supply line during active circulation periods, the RUR makes hot water rapidly available in showers, sinks and appliances such as washing machines and dishwashers.

### Wait Less, Waste Less.

Getting hot water faster creates significant benefits above and beyond the convenience of saving time. Recirculation means less water and money down the drain, saving on natural resources and the utility costs related to gas and water usage. And you can save even more energy by programming the 24-hour digital controller that's included in the box. It enables the scheduling of multiple recirculation events throughout the day to align with usage patterns and ensure hot water is available at the fixtures during peak demand times such as early morning before work and school.

With the typical U.S. home wasting potentially thousands of gallons of water annually waiting for hot water, the RUR's fast-track delivery system pays off at the faucet and in the budget. And the convenience and comfort of hot water recirculation is an attractive feature that adds resale value to a home.

Adaptable to plumbing systems with or without a dedicated recirculation line, the Ultra Series Tankless Water Heater RUR Models are the only tankless water heaters to feature both Concentric and PVC/CPVC venting options on the same unit, offering the ultimate flexibility.

The pleasure of faster hot water is truly at hand. And big water and gas savings are on tap, too. Thanks to Rinnai's smart recirculation technology, there is less waiting and less waste.

Rinnai introduces the first and only tankless water heater in the industry to offer both concentric and PVC/CPVC venting and integrated recirculation on the same unit.

Rinnai Tankless Water Heaters deliver trusted quality and proven reliability you can count on. From efficient, durable products to experienced support, there is simply no better choice than Rinnai.

- Wide range of quality product offerings
- Easy, safe ventilation options
- 24/7 technical support for professionals
- Engineering application support for commercial customers
- Industry-leading recirculation capabilities
- More venting solutions on the same unit



- Concentric Vent Stack
- 2 Air Intake
- Burner & Gas Manifold
- 4 Primary Heat Exchanger
- 5 Secondary Heat Exchanger
- 6 Integrated Condensation
  Trap
- Built-In Circulation Pump
- Internal Bypass Line
- Modulating Gas Valve
- Built-In Surge Protector& PC Board

# The Rinnai Ultra Series Tankless Water Heater SAVING TIME, WATER AND

## Recirculation in action...



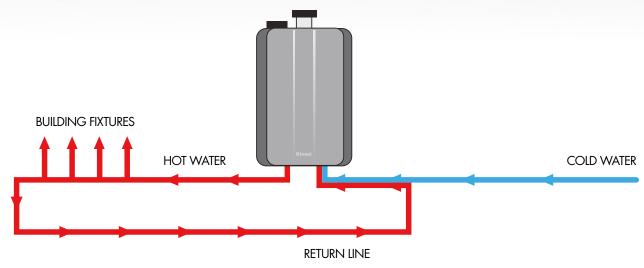
## **Dedicated Return Line**

Rinnai is the only manufacturer to offer a tankless unit, the RUR, which is easily adaptable to plumbing systems with or without a dedicated recirculation return line right out of the box.

In the Dedicated Recirculation Line Mode, the integrated pump circulates water from the tankless water heater through the hot water supply line and back to the tankless water heater via the dedicated return line. A temperature thermistor installed in the RUR's inlet pipe is utilized to control the on/off sequence of the integrated pump.

In homes with a dedicated return line, the RUR also provides for additional control of the integrated pump through Rinnai's time and temperature-based Comfort or Economy Mode. In the Comfort Mode, the pump on/off intervals can vary from 9 to 31 minutes depending on the temperature setting. When the return water reaches the temperature called for at the tankless water heater, the pump will turn off. In the Economy Mode, the pump on/off intervals are less frequent and vary from 18 to 62 minutes depending on the temperature setting, providing additional energy and cost savings.

#### **DEDICATED MODE**





#### **MC-195T Timer Controller**

Both indoor and outdoor RUR models include a MC-195T timer / controller, allowing you to adjust the timing and duration of the circulation system operation for maximum energy savings. Rinnai Circ-Logic technology built into the water heater operates the pump during active circulation periods.

## **RUR Models**

# MONEY WITH SMART RECIRCULATION.

# HOW THE RUR WORKS.

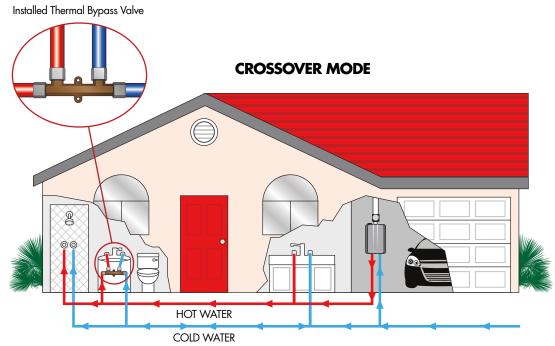
### **Crossover Valve**

In applications where a dedicated recirculation line is not available or too costly to install, the RUR Tankless Water Heater utilizes the Crossover Mode of hot water recirculation. The RUR's integrated recirculation pump, internal bypass line and thermal bypass valve, which is included as standard with every RUR model, make the Crossover Mode of recirculation possible. The valve is installed between the hot and cold supply lines on the furthest fixture in the plumbing line from the tankless water heater. The cold water line is then used temporarily as the return portion of the circulation loop.

In the Crossover Mode, the integrated pump circulates water from the tankless water heater through the hot water supply line, through the thermal bypass valve, and back to the tankless water heater via the cold water line. When hot water is detected at the valve, the water flow through the thermal bypass valve reduces down to barely a trickle, continuing to sense water temperature in the line. The pump will continue to operate and recirculate inside the water heater only until the end of the time interval and will restart at the beginning of the next interval. Installation of the bypass filter that's included in the box is used in the Crossover Mode to allow the internal circulation of water through the water heater after the thermal bypass valve has closed.

In Crossover Mode, the RUR again provides for additional control of the integrated pump through time-only based Comfort or Economy Mode settings. In Comfort Mode, the typical pump on/off intervals will vary depending on the length of recirculation loop used. For a short loop, the pump will be on for 8 minutes, off for 4; long loop, on for 16 minutes off for 4. In Economy Mode, again the typical pump on/off intervals will vary depending on the length of recirculation loop used. For a short loop, the pump will be on for 8 minutes, off for 10; long loop, on for 16 minutes, off for 10, providing additional energy and cost savings.

Regardless of the hot water recirculation method used, the end result is the same: During active circulation periods, hot water is always available as it circulates from the hot water line back to the Rinnai RUR Tankless Water Heater.

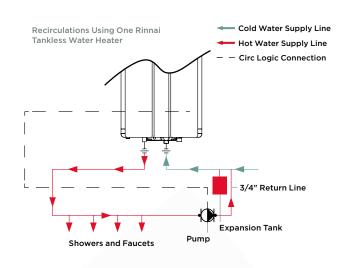


# Other Recirculation SOLUTIONS

Rinnai recirculation solutions build on the already endless supply of hot water Rinnai Tankless Water Heaters provide—adding the convenience of faster hot water.

Rinnai Circ-Logic technology comes standard on all Ultra and Luxury models, and can be used in combination with the following accessories to allow homeowners to set recirculation patterns that coincide with their hot water usage patterns. Hot water is available when needed, without the expense of circulating it during times of inactivity.

Feature	GTK15	MC195T & Pump	Pump Only with Circ-Logic Control
Override	No	Yes	No
Changes WH Temp	No	Yes	No
Displays WH Codes	No	Yes	No
Dedicated Return	Yes	Yes	Yes
24-Hour Clock	Yes	Yes	No
Timed Events	Yes	Yes	No
# Timed Events	Multiple	Multiple	N/A
Ultra Tankless HEX Limited Warranty with Recirculation <sup>1, 2</sup>	12 Years	12 Years	12 Years
Luxury Tankless HEX Limited Warranty with Recirculation <sup>3</sup>	3 Years	3 Years	3 Years



Period of coverage is reduced to 3 years from date of purchase when used as a recirculating water heater within a hot water recirculation loop, where the water heater is in series with a recirculation system and all recirculating water flows through the water heater, and where an aquastat/thermostat, timer, or an on-demand recirculation system is not incorporated.

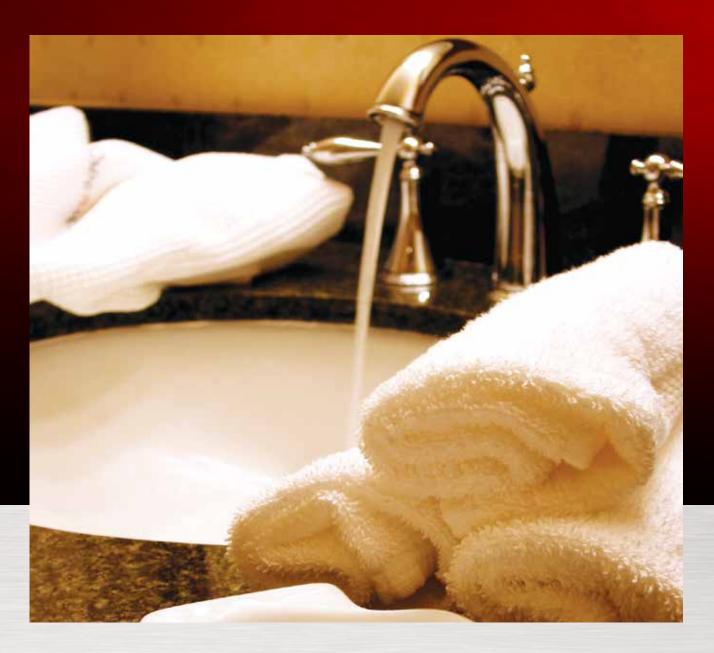
<sup>2</sup>The Rinnai Limited Warranty for a heat exchanger used in a recirculation system which is controlled through an aquastat/thermostat, timer, or an on-demand system is 12 years for residential applications and 5 years for commercial applications.

<sup>3</sup>Period of coverage is reduced to 3 years from date of purchase when used as a circulating water heater within a hot water circulation loop, where the water

heater is in series with a circulation system and all circulating water flows through the water heater, and where an on-demand recirculation system is not incorporated. On-demand recirculation is defined as a hot water recirculating loop or system that utilizes existing hot and cold lines or a dedicated return line, and only activates when hot water is used. It can be activated by a push-button, motion sensor, or voice activation but not by a temperature sensor. A timer added to a standard recirculating pump is not considered as on-demand.







#### **SOLUTION 1: GTK15 PUMP AND TIMER KIT**

Allows homeowners to schedule multiple recirculation events throughout the day to align with usage patterns, such as getting ready in the morning.

#### **SOLUTION 2: MC-195T TIMER CONTROLLER AND PUMP**

A stylish, wall-mountable digital control panel works seamlessly with Circ-Logic technology and any properly sized pump. Multiple unique recirculation events can be programmed as well as an override function for homeowners to start recirculation outside of scheduled events.

#### **SOLUTION 3: CIRC-LOGIC AND PUMP**

For recirculation without scheduled events, simply pair a Circ-Logic tankless unit with a properly sized pump. Recirculation intervals can be set to Comfort Mode (shorter time intervals) or Economy Mode (longer time intervals). Recirculation deactivates once the water has reached set temperature.

# FLEXIBLE TANKLESS

# A First in Both Concentric and PVC/CPVC Venting for Condensing Tankless Water Heaters On One Unit

The new RUC98i, RUC90i and RUC80i models of the Rinnai Ultra Series Tankless Water Heaters are the only tankless water heaters to offer Concentric Polypropylene or PVC/CPVC venting options on the same unit. The dual venting configuration on the top of the new RUC Tankless Water Heaters allows for maximum flexibility for installers and dealers — one Concentric vent or two PVC/CPVC pipes can be used for venting.

As the #1 selling brand of tankless water heaters in the U.S. and Canada, we still favor Concentric Polypropylene for its superior joint fit, no cure time, quick installation and reduced wall or roof penetrations, but as leaders in the industry, we understand that PVC/CPVC can sometimes be more readily available or preferred in some installations.

Rinnai is the only tankless water heater manufacturer to offer both Concentric and PVC/CPVC on the same unit, providing more venting options right out of the box — saving time, money and offering the best flexibility for faster installations in homes and businesses — from one project to the next.

Some of the dual pipe venting options that are now available with the RUC Tankless Water Heaters include:

• 3" or 4" PVC/CPVC\*

• Snorkel and Tee Terminations\*

Intake Cap

- 3" Centrotherm InnoFlue Vent System (ULC-S636 listed)\*
- IPEX Concentric and Low Profile Termination Kit\*

<sup>\*</sup>Reference Rinnai Tankless Water Heater Installation and Operation Manual for further information.



For concentric venting, installers simply remove and discard the exhaust adaptor ring.

For PVC/CPVC configurations, the intake cap is removed and discarded. With this option, installers can use three- or four-inch PVC/CPVC pipe for the intake and exhaust.

VENT TYPE	NATURAL GAS UNITS MAXIMUM EQUIVALENT VENT LENGTH	PROPANE UNITS MAXIMUM EQUIVALENT VENT LENGTH
Concentric PP	65 Feet*	41 Feet
Twin Pipe PP (Centrotherm)	41 Feet*	41 Feet

VENT TYPE	NATURAL GAS UNITS MAXIMUM EQUIVALENT VENT LENGTH	PROPANE UNITS MAXIMUM EQUIVALENT VENT LENGTH
3" PVC/CPVC	65 Feet*	41 Feet
4" PVC/CPVC	100 Feet*	65 Feet

<sup>\*</sup>Maximum equivalent vent lengths are specific to the fuel type of the tankless water heater. Use of elbows in installation will reduce the maximum vent length. It is imperative when performing equivalent vent length calculations, that you refer to the Installation Manual and any applicable technical bulletins.

# VENTING OPTIONS

## **Optimized Concentric Venting for Non-Condensing Tankless Water Heaters**

Rinnai Tankless Water Heaters were the first to use a unique Concentric Venting System, a single-vent assembly option featuring an inner tube for exhaust and an outer tube for fresh air from outdoors. The result is a direct-vent, sealed combustion system that offers optimum safety and performance.

Beyond performance, our concentric system option can make installation faster and easier with:

- Single penetration through the wall reducing install time and costs
- Simple positive-fit components for secure connection
- Joint seals that expand and contract with weather to prevent damage
- Ease of assembly, adjustment and disassembly

## Rinnai Makes Your 1/2" Gas Line an Option, Not an Obstacle.

If your tankless water heater installation calls for the use of ½" gas line, Rinnai has two words for you... no problem. Pick the gas line – and the Rinnai – that's right for you.\*

Rinnai Tankless Water Heaters are designed to always provide maximum performance and operating efficiency using either a 34" or 1/2" gas line, as long as sufficient gas flow is available.

Because an undersized gas line can stress a tankless system and potentially reduce its life span, Rinnai Tankless Water Heaters, unlike other tankless systems, are equipped with innovative technology that safely ceases operation if it detects inadequate gas flow in order to avoid compromising performance and efficiency.

		SCH 40 METALLIC PIPE SIZE		
RINNAI TANKLESS WATER HEATER MODELS	NAME PLATE RATINGS (BTU/H)	1/2″	3/4"	
			IMUM NT LENGTH	
V53e	120,000	100′	450′	
V65e	150,000		300′	
V65i	150,000	70′	300	
RUC80i / RU80e	152,000		166′	
RL75i				
RL75e	180,000	50′	200′	
V <i>7</i> 5i	160,000	30	200	
V75e				
RLX94i	192,000			
RUC98i				
RU98e	100,000	40′	175′	
RL94i	199,000			
RL94e				
INITENIDED LICE, I.: i: -1 C	.   D (00:		. D	

INTENDED USE: Initial Supply Pressure of 8.0 in w.c. or greater; Inlet Pressure: less than 2 psi; Pressure Drop: 3-inch Water Column; Specific Gravity: 0.60

Source: NFPA 54/ANSI Z223.1 National Fuel Gas Code



The table to the left lists the maximum length for both  $\frac{1}{2}$ " and  $\frac{3}{4}$ " gas lines when paired with each of Rinnai's Tankless Water Heaters.

#### **How To Properly Size Your Gas Line:**

- Determine what type of gas is being utilized
- Determine the inlet pressure
- Determine the allowed pressure drop
- Determine what other types of gas appliances are sharing the gas line
- Determine the maximum loads expected on the whole system

\*For complete information on gas sizing for Rinnai Tankless Water Heaters, consult the Operation and Installation Manual.



# **VENTING PARTS**



TERMINATION & TERMINATION KITS						
Part Number	lmage	Description		Inner Exhaust Material	Outer Intake Material	
223176PP	1	Condensing Horizontal Termination Kit	12"	PP	Plastic	
223177PP	1	Condensing Horizontal Termination Kit	21"	PP	Plastic	
223186PP	2	Condensing Horizontal Term Diverter Kit	19"	PP	Plastic	
184162PP	3	Condensing Roof Discharge Termination Short (above)	38"	PP	Plastic	
224047PP	4	Condensing Raised Horizontal Termination Kit ("Snorkel")	_	PP	Plastic	

Termination Kits include elbow and rubber wall plate.

<b>ELBOWS</b>				
Part Number	lmage	Description	Inner Exhaust Material	Outer Intake Material
224077PP	5	45-Degree Elbow (Quantity of 2)	PP	Plastic
224078PP	6	90-Degree Elbow	PP	Plastic

VENT PIPE EXTENSIONS					
Part Number	lmage	Description		Inner Exhaust	Outer Intake Material
224087PP	7	Vent Pipe Extension	10"	PP	Plastic
224079PP	7	Vent Pipe Extension	19.5"	PP	Plastic
224080PP	7	Vent Pipe Extension	39"	PP	Plastic

ADDITIONAL			
Part Number	Image	Description	
146141	8	Roof Flashing Assembly (flat roof)	Suitable for use
189950	9	Shingle Roof Flashing (1/12 to 6/12 pitch; plastic)	with plastic and metal components
189951	9	Shingle Roof Flashing (6/12 to 12/12 pitch; plastic)	
189952	9	Shingle Roof Flashing (8/12 to 16/12 pitch; plastic)	
50171949	10	Tile/Shingle Roof Flashing (1/12 to 6/12 pitch; metal)	
50171961	10	Tile/Shingle Roof Flashing (6/12 to 12/12 pitch; metal)	
50171954	10	Tile/Shingle Roof Flashing (8/12 to 16/12 pitch; metal)	
242141	11	Flashing for Metal Roof	
710342	12	Rubber Wall Plate (white)	
710602	12	Rubber Wall Plate (black)	
224045	13	Thimble (1 piece per box)	
169044	14	Pipe Clamp	
224097	15	Metal Pass Through Plate	
224042	16	Universal Bug Guard	





# **ACCESSORIES**

To further enhance the performance of Rinnai tankless water heating products, these accessories add even more flexibility.

SCALECUTTER®				
Part Number	Description	Feed		
103000038	ScaleCutter System 3/4" Feed	3/4"		
103000039	ScaleCutter System Refill	3/4"		



DIGITAL TEMPERATURE CONTROLLER					
Part Number	Description	Temp. Range	Color		
MC-91-25	Residential/Commercial Standard Digital Controller	98°–140°F	Silver		
MC-91-2W	Residential/Commercial Standard Digital Controller	98°–140°F	White		
MCC-91-2W	Commercial Controller	>140°F	White		
MC-100V-1S	Deluxe Digital Controller with Clock and Call Feature	98°–140°F	Silver		
MC-100V-1W	Deluxe Digital Controller with Clock and Call Feature	98°–140°F	White		
BC-100V-1S	Bath Fill Digital Controller	98°–140°F	Silver		
BC-100V-1W	Bath Fill Digital Controller	98°–140°F	White		
MC-195T-US	Timer Controller for Recirculation	98°–140°F	Silver/Black		



ADDITIONAL ACCESSORIES				
Part Number	Description	Series		
GTK15	Grundfos® Pump with Timer Kit for Rinnai Circ-Logic Enabled Units	Ultra/ Luxury		
804000074	Condensate Neutralizer Kit for Condensing Tankless Models	Ultra		
PC-20-W	Pipe Cover Enclosure for Model V53e	Value		
PCD03-EWV	Pipe Cover Enclosure (Euro White)	Value (V65 / V75)		
PCD03-SM2	Pipe Cover Enclosure	Luxury		
PCD07-SM	Pipe Cover Enclosure	Ultra		
RGB-20U	Universal Tankless Recess Box for Model V53e	Value		
RGB-25U-C	Universal Tankless Recess Box for Models RL94e, RL75e, V75e, V65e (VA, VB, VC)	Luxury/ Value		
RGB-CTWH-2	Tankless Recess Box for Condensing Models	Ultra		
REU-MSB-M	Multi-Unit Controller Master Unit	Ultra/ Luxury		
REU-MSB-C1	Cable to Connect Ultra and Luxury Series Water Heaters	Ultra/ Luxury		
REU-MSB-C2	Cable to Connect MSB-M Control Units	Ultra/ Luxury		
REU-EZC-1US	EZConnect® Cable for Connecting 2 Units	All		



Grundfos Pump with Timer Kit





Pipe Cover Enclosure



## **CONDENSING TANKLESS WATER HEATERS & RH180 HYBRID TANK**

	<b>Ultra Series</b>			
	RUR №	Nodels		RUC Models
Model	RUR98i	RUR98e	RUC98i	RUC90i
Dimensions in Inches (w, h, d)	18.5 x 26 x 10	18.5 x 26 x 10	18.5 x 26 x 10	18.5 x 26 x 10
Weight (lbs / kg)	72.8 / 33	72.8 / 33	61.7 / 28.0	61.7 / 28.0
nstallation Type	Indoor	Outdoor	Indoor	Indoor
Min./Max. BTU (natural gas)	15,200/199,000	15,200/199,000	15,200/199,000	15,200/180,000
Min./Max. BTU (propane)	15,200/199,000	15,200/199,000	15,200/199,000	15,200/180,000
nergy Factor	0.95	0.95	0.95	0.96
emp. Range Residential*	98°–140° F	98°–140° F	98°–140° F	98°–140° F
emp. Range Commercial†	98°–140° F	98°–140° F	98°–185° F	98°–185° F
Min. Activation Rate	0.4 gpm	0.4 gpm	0.4 gpm	0.4 gpm
Flow Rate 70° / 50° Temp. Rise)	5.5 / 7.7	5.5 / 7.7	5.4 / 7.6	5.0 / 7.0
Hot Water Flow Rate Range	0.26-9.8 gpm	0.26-9.8 gpm	0.26-9.8 gpm	0.26-9.0 gpm
Controller (standard)§	MC-195T-US	MC-195T-US	MC-91-2US	MC-91-2US
Controllers (optional)§*	MC-91-2US	MC-91-2US	MC-195T-US, MC-100V-1US, BC-100V-1US, MCC-91-2US	MC-195T-US, MC-100V-1US, BC-100V-1US, MCC-91-2US
Jitra Low NOx	yes	yes	yes	yes
Warranty Residential)		Limited 12-year on heat ex 1-year on labor (5-ye	changer, 5-year on parts, ear optional on labor)	
Varranty Commercial)		Limited 5-year on heat exc 1-year on labor (2-ye	schanger, 5-year on parts, ear optional on labor)	
Circ-Logic Compatible (S/N)	FL.BA-038396	,	DB.BA-006175	FL.BA-037462
Circ-Logic Compatible (P/N)**	1 L.BA-030370	FL.BA-038405	DB.BA-0001/3	1L.BA-03/402
Mobile Home Certified	REU-KBP3237FFUD	FL.BA-038405 REU-KBP3237WD-US	REU-KB3237FFUD-US	REU-KBD2934FFUD-US
Valves Shipped in Box				
	REU-KBP3237FFUD	REU-KBP3237WD-US  yes  yes	REU-KB3237FFUD-US yes yes	REU-KBD2934FFUD-US
High Altitude Approved	REU-KBP3237FFUD  yes  yes	REU-KBP3237WD-US  yes  yes  Up to 10	REU-KB3237FFUD-US yes yes 0,200 ft.	REU-KBD2934FFUD-US  yes  yes
	REU-KBP3237FFUD yes	REU-KBP3237WD-US  yes  yes	REU-KB3237FFUD-US yes yes	REU-KBD2934FFUD-US yes
ligh Altitude Approved	REU-KBP3237FFUD  yes  yes  AHRI, CSA, NSF,	REU-KBP3237WD-US  yes  yes  Up to 10  AHRI, CSA, NSF,	REU-KB3237FFUD-US yes yes 0,200 ft. AHRI, CSA, NSF,	REU-KBD2934FFUD-US  yes  yes  AHRI, CSA, NSF,
High Altitude Approved Certifications	REU-KBP3237FFUD  yes  yes  AHRI, CSA, NSF, ENERGY STAR®  Concentric or	REU-KBP3237WD-US  yes  yes  Up to 10  AHRI, CSA, NSF, ENERGY STAR®	REU-KB3237FFUD-US  yes  yes  0,200 ft.  AHRI, CSA, NSF, ENERGY STAR®  Concentric or	REU-KBD2934FFUD-US  yes  yes  AHRI, CSA, NSF, ENERGY STAR®  Concentric or

<sup>\*</sup> Can be selected by installer. Units come with a default maximum temperature of 120° F for increased safety and code compliance. An option to increase the maximum temp to 140° F is also available.

† To achieve temperatures over 140° F, an MCC-91 commercial controller must be purchased separately.



## - TANKLESS WATER HEATER MODEL CHART AND SPECIFICATIONS.

	RU Models		
RUC80i	RU98e	RU90e	RU80e
18.5 x 26 x 10	18.5 x 26 x 10	18.5 x 26 x 10	18.5 x 26 x 10
61.7 / 28.0	61.7 / 28.0	61.7 / 28.0	61.7 / 28.0
Indoor	Outdoor	Outdoor	Outdoor
15,200/152,000	15,200/199,000	15,200/180,000	15,200/152,000
15,200/152,000	15,200/199,000	15,200/180,000	15,200/152,000
0.96	0.95	0.96	0.96
98°–140° F	98°–140° F	98°–140° F	98°–140° F
98°–185° F	98°–185° F	98°–185° F	98°–185° F
0.4 gpm	0.4 gpm	0.4 gpm	0.4 gpm
4.2 / 5.9	5.4 / 7.6	5.0 / 7.0	4.2 / 5.9
0.26-8.0 gpm	0.26-9.8 gpm	0.26-9.0 gpm	0.26-8.0 gpm
MC-91-2US	MC-91-2US	MC-91-2US	MC-91-2US
MC-195T-US, MC-100V-1US, BC-100V-1US, MCC-91-2US	MC-195T-US, MC-100V-1US, BC-100V-1US, MCC-91-2US	MC-195T-US, MC-100V-1US, BC-100V-1US, MCC-91-2US	MC-195T-US, MC-100V-1US, BC-100V-1US, MCC-91-2US
yes	yes	yes	yes
Limited 12-year on heat exchanger, 5-year on parts, 1-year on labor (5-year optional on labor)			
Limited 5-year on heat exchanger, 5-year on parts, 1-year on labor (2-year optional on labor)			
DB.BA-006201	DB.BA-006213	FL.BA-037462	DB.BA-006195
REU-KB2530FFUD-US	REU-KB3237WD-US	REU-KBD2934FFUD-US	REU-KB2530WD-US
yes	yes	yes	yes
yes	yes	yes	yes
AHRI, CSA, NSF, ENERGY STAR®	Up to 10 AHRI, CSA, NSF, ENERGY STAR®	0,200 H.  AHRI, CSA, NSF,  ENERGY STAR®	AHRI, CSA, NSF, ENERGY STAR®
Concentric or PVC / CPVC	N/A	N/A	N/A
no	yes	no	no
yes	yes	yes	yes

<sup>§</sup> MC-91-2 controllers are backwards compatible with previous water heaters. Note: RH180 electrical requirements: AC 120 Volts -



<sup>60</sup> Hz, suppied with 6-foot plug-in power cord.

\*\* Ultra Series Models (KB) – Circ-Logic availability beginning April 2012. KB models with serial numbers higher than those listed will ship with Circ-Logic installed. Lower serial numbers do not have Circ-Logic.

\*\*\*See page 11 in this brochure for complete installation parameters. For complete information on gas sizing for Rinnai Tankless

Water Heaters, consult the Operation and Installation Manual.

# A tradition of

#### TRUE RELIABILITY.

For nearly 100 years, we at Rinnai have been fiercely committed to delivering nothing less than a superior experience at every touch point.

Beyond manufacturing the highest quality products, our people stand behind all that we make—before, during and long after installation. From the 24/7/365 technical support for professionals, to our national network of independent installers for homeowners, to on-staff engineers who can assist with choosing the right products and sizes—we're inspiring confidence right along with the comfort our solutions provide.





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