

Simply Smart Engineering.

**SIMPLY BETTER HOME HEATING.**



CONDENSING BOILERS

**Rinnai**<sup>®</sup>

**COMFORTING WARMTH AND SOOTHING HOT WATER**  
Delivered From One Smart System.





For nearly 100 years, we at Rinnai have been fiercely committed to delivering nothing less than our absolute best. Through teamwork, technology and innovation, we've become one of the world's largest gas appliance manufacturers, specializing in high-efficiency tankless water heaters and home heating solutions.

When it comes to home heating, it's all about comfort, convenience and reliability. At Rinnai, we design products that let you experience all three. Our extensive line of Condensing Boilers provides efficient whole-home heating, water heating or both in one advanced system.

We are passionately driven to create performance-proven products that exceed your expectations. Today, industry professionals and homeowners alike turn to Rinnai for a variety of product options that make life easier and more enjoyable. Now it's your turn. Start enjoying the comfort and dependability that only a Rinnai Condensing Boiler can deliver.

SIMPLY SMART ENGINEERING. SIMPLY BETTER HOME

# Rinnai Condensing

## Home and water heating. Keeping comfort coming.

Comfort means different things to different people. Whether it's consistent heat throughout a home, pleasant humidity levels, or continuous hot water, our industry-leading line of Condensing Boilers keeps comfort coming with unparalleled performance.

**Improve efficiency - increase comfort:** Advanced smart system technology includes an outdoor reset sensor that continually adjusts to changing temperatures.

**Hot water without interruption:** Our E Series "combi" models have the BTU to deliver whole-house heating and domestic hot water priority for homes with one to two bathrooms without compromise.

**Wide range of options:** Because comfort is such a personal choice, we offer nine models to give your customers a wide range of quality options for both existing homes and new construction.

## Enduring quality. Lasting peace of mind.

No one can predict the future, but the past is a good gauge of things to come. Rinnai's 100 years of superior engineering, safety and quality inspire peace of mind that our boilers will stand the test of time.

The Rinnai tradition of building in quality at every level with a 12-year heat exchanger warranty\* ensures many years of comfort and warmth. And our superior technical support for professionals along with durability testing means peace of mind and performance you can trust.

### Main features to ensure quality you can trust:

**Stainless steel heat exchanger:** Our proprietary self-cleaning, down-fired stainless steel heat exchanger with industry-leading performance and durability.

**OSS (one-side sealed) construction:** Maintains integrity during heat exchanger expansion and contraction.

**Factory-assembled low-loss header kit:** By shipping the low-loss header kit with the unit, we save installation professionals time and money compared to closely spaced tees.

**Integrated boiler pump:** Our boiler pump eliminates the need to size the pump for the boiler loop and keeps a tight rein on energy usage.

\* See Owner's Manual for complete warranty details.



# HEATING. Boilers



## Waste not, pay not with superior efficiency.

Conventional heating systems waste energy with significant heat loss expelled into the atmosphere. Rinnai Condensing Gas Boilers are designed to recover heat energy that is discharged into the flue and return it to the heat exchanger for maximum efficiency.

**Energy-smart performance:** Thanks to advanced technology, our condensing boilers have one of the highest AFUEs (Annual Fuel Utilization Efficiency) in the industry.

**Consistently comfortable heat:** Our modulating gas valve detects small temperature changes and responds with incremental increases in BTU.

**One complete system:** Our Condensing Boilers ship with a factory-assembled low-loss header (excluding ES0C), integrated boiler pump, and pre-programmed outdoor reset sensors.

**Efficient warmth:** You will experience a consistent level of warmth throughout your home and a consistent level of savings throughout the year.

**Quicker installation:** With multiple venting options you need for quicker installations and lower labor costs. With Rinnai, nothing goes to waste ... from the dollars spent on home and water heating to the time it takes to get a boiler up and running.

## Space to spare, no matter where.

When you're raising the bar on condensing boiler performance and efficiency, reducing their space requirements vs. traditional boilers simply comes with the territory. Rinnai Condensing Boilers can be easily retrofitted in existing homes or installed in new construction.

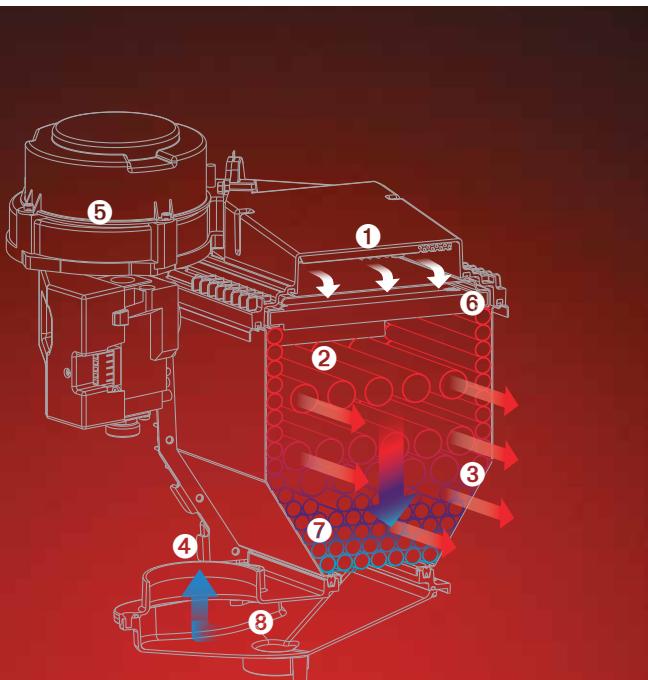
**The E Series "combi" model:** Provides heating and hot water in one compact wall-mounted design.

**The floor-standing Q Premier Series:** Features a boiler and tank all in one, presenting a complete, fully-assembled space-saving solution.

**Multiple venting options on all models:** Allows for installation in a variety of locations.

# RINNAI CONDENSING BOILERS

## Comfort, efficiency and



- ① Gas-Air Mix
- ② Combustion of Gas-Air Mix
- ③ Hot CH Water
- ④ Flue Gases
- ⑤ Fan and Venturi Assembly
- ⑥ Upside-Down Ceramic Burner
- ⑦ Stainless Steel Pipes
- ⑧ Condensate Outlet



- ① Stainless Steel Heat Exchanger
- ② Boiler Pump
- ③ Three-Way Diverting Valve
- ④ Expansion Tank (heating loop)
- ⑤ Domestic Tank Pump
- ⑥ Plate HEX (behind tank pump)
- ⑦ Temperature and Pressure Relief Valve
- ⑧ 24-Gallon Stainless Steel Charged Tank
- ⑨ Tank Drain Valve

### FOOTPRINT COMPARISON (PRODUCT + CLEARANCES)

Q Premier	Boiler and Indirect Tank System
Combination System	Typical Floor Standing Boiler
4.86 sq. ft.	19.08 sq. ft.

## THE RINNAI Q PREMIER

### ALL-IN-ONE RESIDENTIAL HEATING AND DOMESTIC HOT WATER.

Perfect for replacement or new construction, these all-in-one floor-standing boilers deliver high-volume hot water and efficient home heating.

#### BENEFITS UNIQUE TO Q PREMIER

- An abundance of hot water: QP130 provides 211 gallons in the first hour, while the QP85 provides 141 gallons
- Space-saving boiler saves more than five times the footprint of a traditional boiler and indirect tank system
- Easy set-and-connect installation: multiple plumbing and venting options; comes fully-assembled with integrated connections for domestic hot-water recirculation lines, factory-installed low-loss header and expansion tank
- Perfect for remodeling with zero-clearance installation design

#### DOMESTIC WATER COMPARISON

Model	QP130N	QP85	Traditional Boiler Installation
Tank Size	24 gal	45 gal	
BTU	130k	85k	157k*
First Hour	211**	141	212***

\* 141,000 output for domestic.

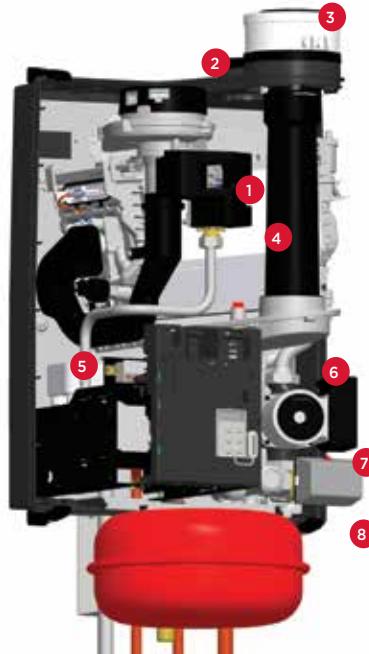
\*\* Based on AHRI testing standard for indirect-fired water heaters.

\*\*\* Based on 90° rise.

# beyond.



- ① Gas Valve  
② Fan  
③ Exhaust/Intake  
④ Stainless Steel Heat Exchanger  
⑤ 6.6 Gallon DHW Indirect Tank (Q175C Model)  
⑥ Boiler Pump  
⑦ Integrated Thermostatic Mixing Valve for DHW



- ① Gas valve  
② Fan  
③ Exhaust/Intake  
④ Stainless Steel Heat Exchanger  
⑤ DHW Plate Heat Exchanger  
⑥ Boiler Pump  
⑦ Three-Way Motorized Valve Allows Boiler to Switch Between Heating and DHW  
⑧ Expansion Tank

## THE RINNAI Q SERIES

### IDEAL FOR HOMES OR LIGHT COMMERCIAL

Ideal for light-commercial applications or any home with a separate indirect hot-water source, our wall-mounted boilers free up valuable floor space—while maintaining maximum comfort in your home.

### BENEFITS UNIQUE TO Q SERIES

- Energy-efficient home heating from four boiler models that have an optional 3-way diverter valve to simplify installations that have an indirect tank
- Consistent temperature delivery via a thermostatic mixing valve in our combi heating/hot-water boiler (Q175C) with an onboard 6.6 gallon fully-insulated, indirect tank
- Only use as much energy as needed with the fully modulating boiler pump that uses just the BTU needed to meet the immediate demand (maximum BTU input ranges from 85,000 to 205,000)
- Installation flexibility allows venting up to a total of 200 feet (100 feet vertically and 100 feet horizontally)

## THE RINNAI E SERIES

### HEATING AND HOT WATER IN ONE COMPACT UNIT

Perfect for homes with 1 to 2 baths, E Series Combi Boilers ensure homeowners won't have to sacrifice continuous hot water.

### BENEFITS UNIQUE TO E SERIES

- Space-saving, wall-mounted design integrates boiler pump and heating expansion tank
- Faster hot-water delivery with plate-warming feature
- Continuous hot water due to domestic hot water priority
- Increased efficiency designed to meet your home's needs (maximum BTU heating input from 75,000 to 110,000)
- Proven long-lasting durability from stainless steel domestic hot-water plate heat exchanger
- The E50C is specifically designed for multifamily applications or smaller single-family homes with up to 1.5 baths with no secondary piping or closely spaced tees required<sup>†</sup>

<sup>†</sup>Not required if the pressure drop in any system loop(s) does not exceed 4.6 of head at 4.5 GPM flow rate.

## CONDENSING BOILER MODEL CHART

# Specifications

	Q Premier Series		Q Series					
<b>Models*</b>	QP85	QP130	Q85S	Q130S	Q175S			
<b>Dimensions</b>	23.6w x 61.8h x 25.2d	23.6w x 61.8h x 25.2d	19.7w x 26.8h x 15.2d	19.7w x 26.8h x 15.2d	26w x 26.8h x 15.2d			
<b>Weight** (lbs/kg)</b>	236 lbs (107 kg)	243 lbs (110.2 kg)	110 lbs (50 kg)	117 lbs (53 kg)	141 lbs (64 kg)			
<b>Fuel Type</b>	NG, LP with conversion kit		NG or LP, field convertible					
<b>Max. Heating Capacity (BTU)</b>	78,000 (23kW)	119,000 (35kW)	78,000 (23kW)	119,000 (35kW)	161,000 (45kW)			
<b>Min. Input (BTU)</b>	17,000 (5kW)	26,000 (8kW)	17,000-NG / 37,000-LP (5kW-NG / 11kW-LP)	26,000-NG / 59,000-LP (8kW-NG / 17kW-LP)	35,000-NG / (10kW-NG / 20kW-LP)			
<b>Max. Input (BTU)</b>	85,000 (25kW)	130,000 (38kW)	85,000 (25kW)	130,000 (38kW)	175,000 (50kW)			
<b>Max. Input (BTU-Heating)</b>	85,000 (25kW)	130,000 (38kW)	85,000 (25kW)	130,000 (38kW)	175,000 (50kW)			
<b>Turn Down Ratio</b>	5:1	5:1	5:1	5:1	5:1			
<b>DHW Activation Rate (G)</b>	141 Gallon / First Hr <sup>***</sup>	211 Gallon / First Hr <sup>***</sup>	Indirect Tank Compatible					
<b>DHW Activation Rate (LPM)</b>	533.7 Liter / First Hr <sup>***</sup>	798.7 Liter / First Hr <sup>***</sup>						
<b>Max. DHW @ 75° F ΔT</b>	N/A	N/A	Modulating					
<b>Max. DHW @ 23.9° C ΔT</b>	N/A	N/A						
<b>AFUE Rating</b>	95.4%	95.4%	95.4%	95.4%	95.0%			
<b>Circulating Pump</b>	Modulating		Modulating					
<b>Storage Capacity</b>	24 Gal							
<b>Approved Venting Material</b>	PVC, CPVC, PE, PEX, and stainless steel							
<b>Warranty</b>	12-year heat exchanger, 12-year tank, 2-year parts, 1-year labor		Standard Warranty Coverage					
<b>Certifications</b>	ENERGY STAR®							
<b>Included in the box</b>	<ul style="list-style-type: none"> <li>• PRV</li> <li>• 3" twin pipe adapters for venting</li> <li>• Temperature and pressure gauge</li> </ul>		<ul style="list-style-type: none"> <li>• Outdoor reset sensor</li> <li>• 3/4" gas shut-off valve</li> </ul>		<ul style="list-style-type: none"> <li>• Plumbing kit—includes pre-assembled low-loss header with isolation valves, PRV, boiler drain, temperature and pressure gauge, unions and insulation (PVC and PP)</li> <li>• 3" twin pipe adapters for venting</li> <li>• Wall mounting bracket</li> </ul>			

\* Residential installation only.

\*\* Shipping weight.

\*\*\* Based on AHRI testing standard for indirect-fired water heaters.

**Rinnai appliances aren't just dependable and efficient, they're also faster and easier to install.**

JIM BLAKE  
Eastern Propane, District Manager

## E Series

5S	Q175C	Q205S	E75C	E110C
h x 15.2d	39.4w x 26.8h x 15.2d	26w x 26.8h x 15.2d	19.7w x 25.6h x 15.6d	19.7w x 25.6h x 15.6d
64 kg)	196 lbs (89 kg)	141 lbs (64 kg)	91 lbs (41 kg)	101 lbs (46 kg)
convertible			NG or LP, field convertible	
(47kW)	161,000 (47kW)	189,000 (55kW)	69,000 (20kW)	101,000 (30kW)
74,000-LP 22kW-LP)	35,000-NG / 74,000-LP (10kW-NG / 22kW-LP)	41,000-NG / 74,000-LP (12kW-NG / 22kW)	17,000-NG / 37,000-LP (5kW-NG / 11kW-LP)	26,000-NG / 59,000-LP (8kW-NG / 17kW-LP)
(51kW)	175,000 (51kW)	205,000 (60kW)	85,000 (25kW)	130,000 (38kW)
(51kW)	175,000 (51kW)	205,000 (60kW)	75,000 (22kW)	110,000 (32kW)
	5:1	5:1	5:1	5:1
	0 Gallon / Minute	Indirect Tank Compatible	0.39 Gallon / Minute	0.39 Gallon / Minute
	0 Liter / Minute		1.77 Liter / Minute	1.77 Liter / Minute
	4.1 Gallon / Minute		2.1 Gallon / Minute	2.1 Gallon / Minute
	15.5 Liter / Minute		7.9 Liter / Minute	7.9 Liter / Minute
%	95.0%	95.0%	95.5%	95.5%
ulating			Single Speed	
	6 Gal		N/A	
Polypropylene, Stainless Steel, PVC, CPVC				
(some restrictions apply): Residential: 12-year heat exchanger, 2-year parts, 1-year labor. Commercial: 5-year heat exchanger, 2-year parts, 1-year labor.				Standard Warranty†
CSA, NB, IBR, ASME, H				CSA, NB, H
<ul style="list-style-type: none"> <li>Outdoor reset sensor</li> <li>3/4" gas shut-off valve</li> <li>Flow restrictor (combi units only)</li> </ul>				<ul style="list-style-type: none"> <li>Wall mounting bracket</li> <li>Outdoor reset sensor</li> </ul>

† Rinnai Boiler Limited Warranty: covers defects in materials or workmanship; extends to original purchaser and subsequent transferees, while product remains at site of original installation. Reasonable labor: 1 year from date of purchase; Parts: 2 years from date of purchase; Heat exchanger: Residential – 12 years from date of purchase, Commercial – 5 years from date of purchase. Some restrictions apply. For complete warranty details, please visit [www.rinnai.us](http://www.rinnai.us).

## RINNAI CONDENSING BOILERS

# Accessories



SIDE-MOUNT LOW-LOSS HEADER PIPE KIT*		
KIT NO.	FITS MODEL NO.	BENEFITS
804000071	E75C / E110C	
804000072	Q85S / Q130S	
804000073	Q175C / Q175S / Q205S	<ul style="list-style-type: none"><li>• Solution for applications with height limitations</li><li>• Allows installer to connect system components at an optimal height</li><li>• Saves on time and labor</li><li>• Mounts to left side of boiler only</li></ul>

\*Pre-bent pipes only, low-loss header not included in kit.



CONDENSATE NEUTRALIZER KIT	
PART NO.	
804000074	<ul style="list-style-type: none"><li>• Raises pH before discharge into drain</li><li>• 1.6 gallons/hour (6.05 liters/hour)</li><li>• Mounts vertically or horizontally</li><li>• Fast, simple installation</li><li>• Clear capsule</li><li>• Refillable</li><li>• Parts included</li></ul>



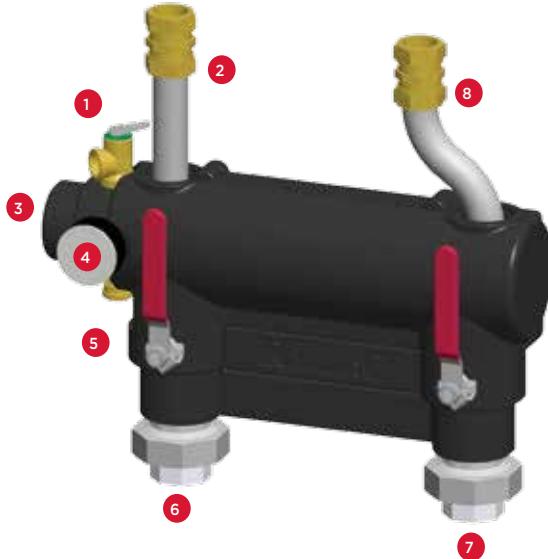
RS100 CONTROLLER**	
PART NO.	
RS100	<ul style="list-style-type: none"><li>• Simple digital controller with backlit display</li><li>• Direct communication with boiler</li><li>• Adaptive indoor reset control</li><li>• Error reporting and auto service message</li><li>• Local override of the room temperature</li><li>• Features three factory preset programs; programmable for holidays</li><li>• Customized program/profile can be created by user or installer to fit individual needs</li></ul>

\*\*Available for E Series and Q Series models; not available for QP Series.

# Venting.

## FLEXIBLE VENTING OPTIONS FOR RINNAI

### Low-Loss Header

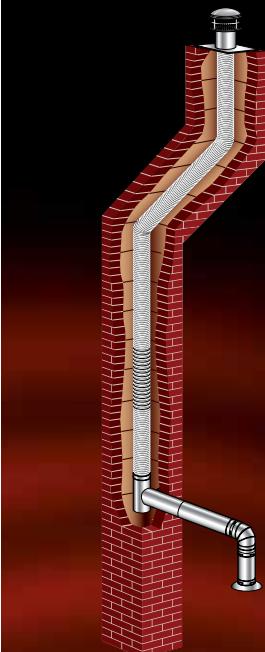


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|---------------------------------------|-----------------|
| ① PRV                                 | ⑤ Boiler Drain  |
| ② Boiler Supply                       | ⑥ System Supply |
| ③ Supply Connection for Indirect Tank | ⑦ System Return |
| ④ Pressure and Temperature Gauge      | ⑧ Boiler Return |

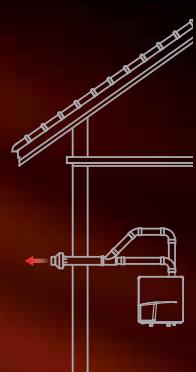
In order to optimize overall performance and provide durability, every Rinnai boiler includes a factory-assembled low-loss header. The easy-to-install low-loss header eliminates the need for balanced pump sizing, simplifying system design.

- Reduced installation time compared to traditional closely spaced Ts with factory-assembled kit
- Space-saving compact design
- More efficient heat transfer and reduced heat loss due to fully insulated header

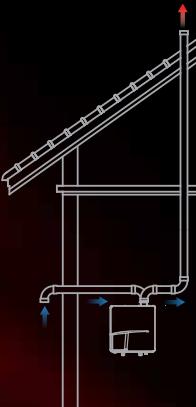
Rinnai Condensing Wall-Mounted Gas Boilers ensure a simple installation in any home, and are ready for direct-vent right out of the box—through either a wall or roof penetration. The twin-pipe adapter included allows venting with outside air intake. A comforting combination of safety and flexibility is available with concentric venting, which permits outside air intake through a single wall or roof penetration.



Chimney Liner:  
Simpson Fas-n-seal  
Duravent flex liner



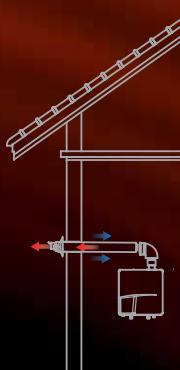
Twin-pipe with concentric  
sidewall termination



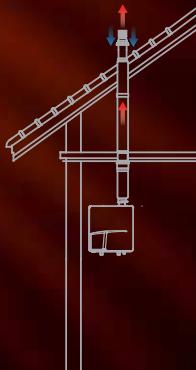
Vertical vent and hori-  
zontal air intake



Twin-pipe with concentric  
vertical termination



Concentric pipe with  
horizontal sidewall  
termination



Concentric pipe with  
roof termination

# 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.



Learn more about Rinnai high-performance Tankless Water Heaters, Hybrid Tank-Tankless Water Heaters, Boilers, Vent-Free Fan Convector and EnergySaver® Direct Vent Wall Furnaces at [www.rinnai.us](http://www.rinnai.us)

# Rinnai®

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