# **Rinnai**® I-SERIES PLAN

Condensing Gas Boiler

Built for the PRO, by the PRO™





IP199199C Combi Model



## Built for the PRO, by the PRO™

The **NEW I-SERIES Plus™** line of **Solo** and **Combi Condensing Gas Boilers** offers unmatched value and performance with an expanded product line up to 199k Btu. Now you can **Rely on Rinnai** for all your Residential Heating projects no matter the size or complexity.





Smart Sense™ Adaptive Gas Valve technology is available on the following models:

IP060160, IP090099C, IP090160C, IP090199C, IP120199C,

no conversion kit required.

IP150199C, IP060S, IP090S, IP120S, IP150S





#### **Comfort & Convenience**

- NEW 4 Built-In Zones for better comfort levels
- NEW Smart Sense<sup>™</sup> Adaptive Gas Valve Technology (Up to 150k Btu models only)
- NEW 7 Heating Reset Curves (6 standard, 1 custom) for consistent temperatures
- NEW Advanced Controls with Intuitive Front Panel Display
- NEW Air Handler Connectivity
- NEW Smart-Circ<sup>™</sup> learns hot water patterns and automatically schedules recirculation during regular demand periods Requires external recirculation pump\*



Rinnai offers the most models with an industry-leading 96% AFUE\*

\*AHRI Directory of Certified Product Performance

#### **Operational Performance**

- Up to 96% AFUE for significant energy savings
- NEW Cascade up to 24 Combi boilers / 1 Combi boiler and up to 23 CX tankless units / up to 24 Solo boilers\*\*
- NEW Common Venting up to 8 units\*\*\*
- Low NOx Emissions (≤ 20ppm) in Compliance with SCAQMD
- High Altitude Approved up to 10,100 feet

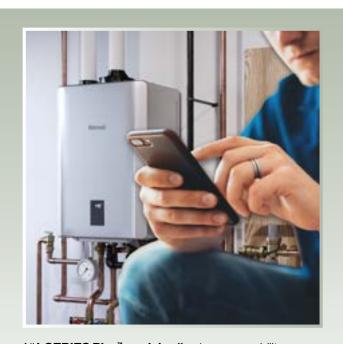
#### All Combi Models Deliver Simultaneous Domestic Hot Water and Space Heating

# Flexible Installation

- NEW Use the Rinnai Central<sup>™</sup> App for quick parameter settings
- NEW SmartConnect™
   Bluetooth® from your
   Hand-Held Device
- NEW Quick Set-Up screen for speedy unit configuration
- · Easy Hang Wall Bracket
- NEW Longer Venting Runs: 75 ft on 2" and 160 ft on 3" vent pipe



- \* Combi Units only
- \*\* Rinnai can cascade Solo ≥ 175k Btu up to 24 solo boilers
- \*\*\* Rinnai can common vent Solo Boilers up to 8 units ≥ 120k Btu



All I-SERIES Plus<sup>™</sup> models offer 4 zone capability, 2" venting up to 75 ft., and a proportional valve that allows simultaneous delivery of domestic hot water and space heating on all Combi Models.

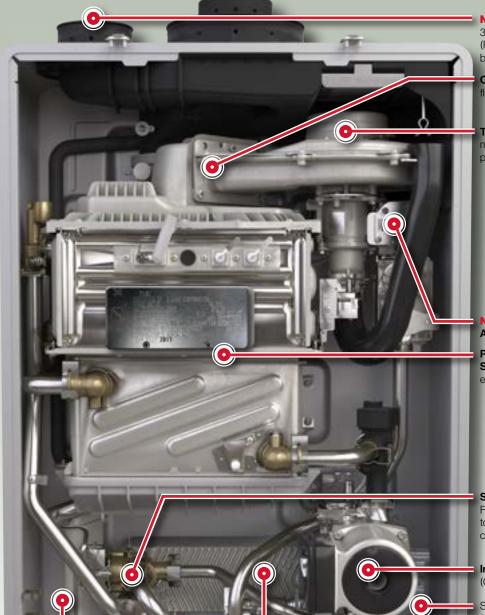


#### Look inside the I-SERIES Plus™

60-150k Btu Models

## **High-Efficiency Condensing Boiler**

Re-designed to Perform and Impress



**NEW 2-Inch longer Vent** runs up to 75 ft and 3-inch vent runs up to 160 ft. All venting materials (PVC/CPVC/PP/SS) approved. This applies to both, air intake and exhaust.

Combustion Check Valve prevents cold air or flue gases from entering living space

Turbo Fan enables longer vent runs with more options, works with gas valve for optimal performance and efficiency

NEW SMART SENSE **Adaptive Gas Technology** 

**Primary and Flat Plate Secondary Stainless** Steel Heat Exchangers for additional efficiency improvements

Servo-Based Temperature Controller; Water Flow and Bypass Servo Valves for DHW work together to deliver precise DHW temperature control (no mixing valve required)

**Integrated Pump** (Combi Models only)

Simultaneous space heating (SH) and

Domestic Hot Water (DHW) enabled by **Proportional Valve** 

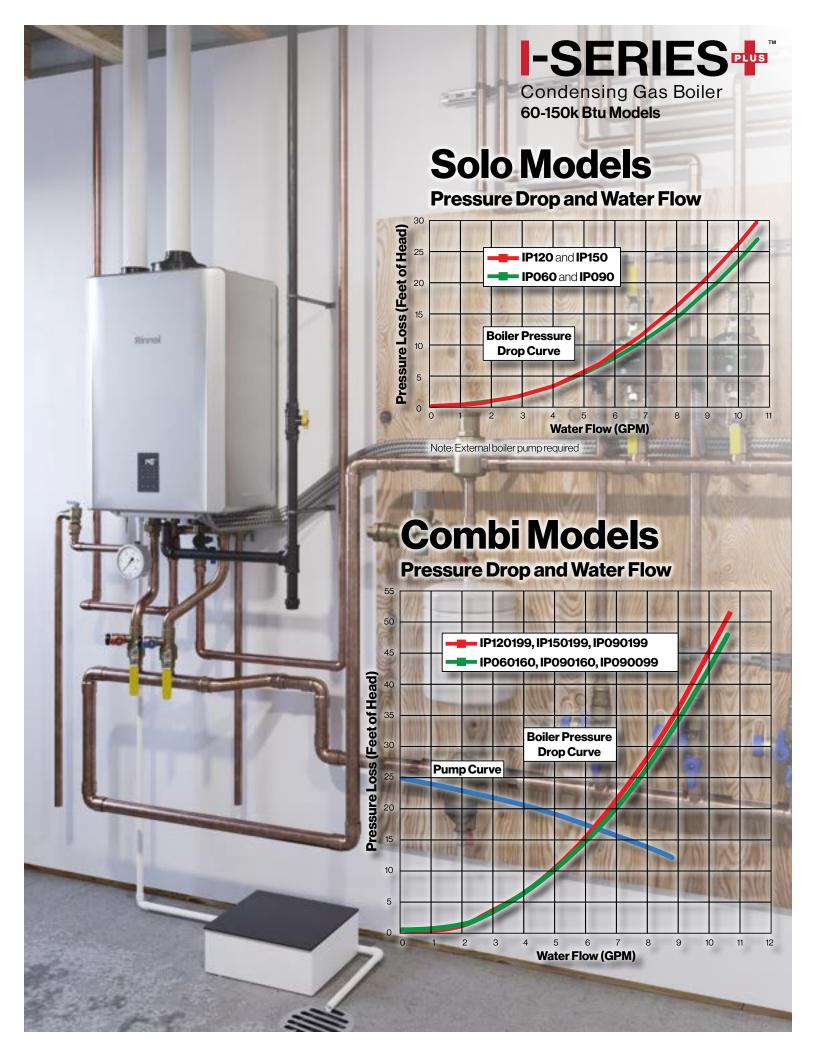
Integrated Condensate Trap to remove acidic condensate

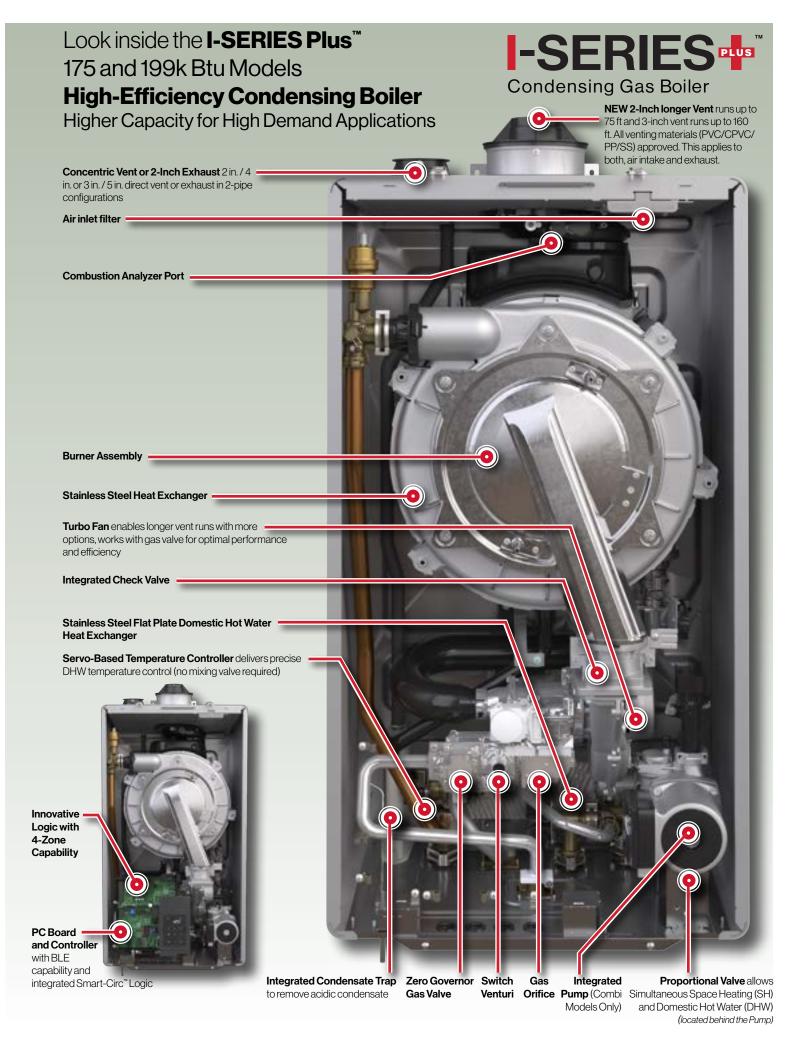
Stainless Steel Flat Plate Domestic Hot Water Heat Exchanger (Combi Models Only)

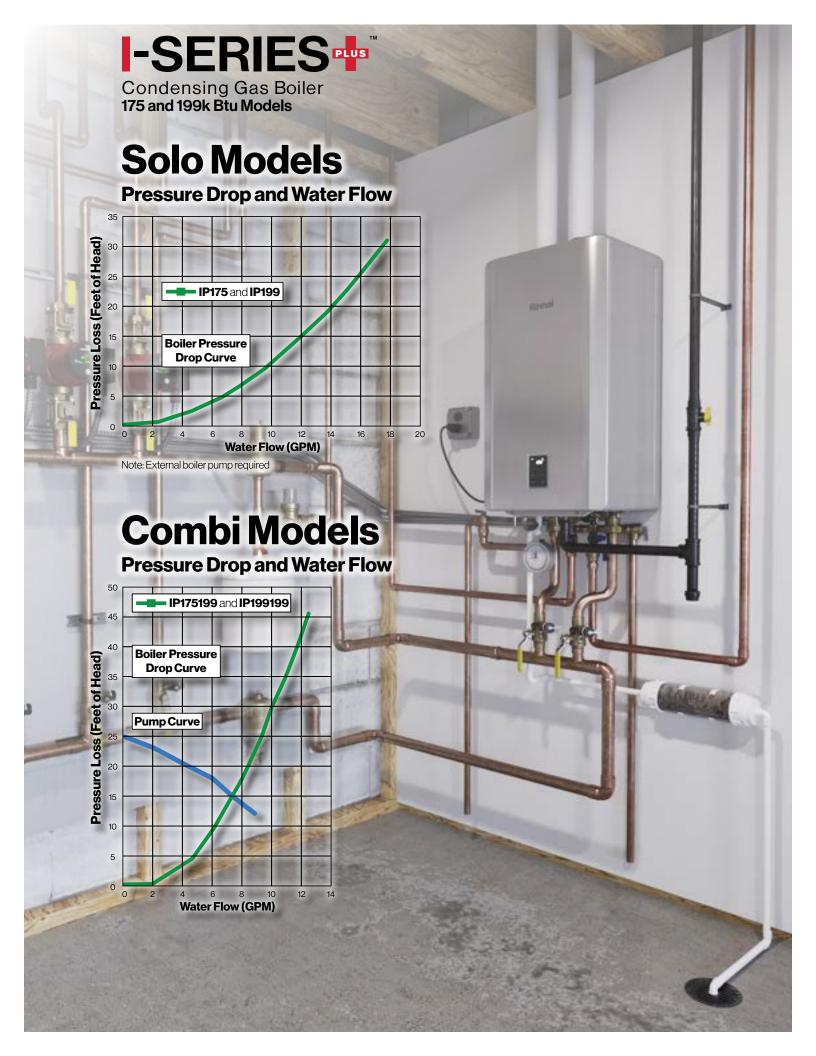
PC Board and Controller with BLE capability and integrated Smart-Circ™Logic

**NEW Innovative Logic** comes with built-in 4-zone capability with option of designating one zone for DHW recirc pump or indirect tank (for heat only models)









#### **I-SERIES Plus**<sup>™</sup> Combi Models



# Rinnai. I-SERIES

Condensing Gas Boiler

Specifications  Heating Input Max CH (Btu)		Combi Models							
		IP060160C	IP090099C	IP090160C	IP090199C	IP120199C	IP150199C	IP175199C	IP199199C
		60,000	90,000	90,000	90,000	120,000	150,000	175,000	199,000
Heating Input Min CH (Btu)		15,000							
Heating Input Max DHW (Btu)		160,000	99,000	160,000	199,000	199,000	199,000	199,000	199,000
Efficiency (% AFUE)		95.5	96.0	96.0	96.0	96.0	96.0	95.0	95.0
Turndown Ratio (TDR)		11:1	7:1	11:1	13:1	13:1	13:1	11:1	10:1
Turndown Ratio (TDR) CH		4:1	6:1	6:1	6:1	8:1	10:1	10:1	10:1
DHW Max Flow Rate (GPM)		7.9	5.3	7.9	9.8			7.9	9.8
Flow Rate at 70°F (39°C) Rise	e		4.1			5.1		4.1	5.1
Fuel Type		NG/LP	NG/LP	NG/LP	NG/LP	NG/LP	NG/LP	NG/LP	NG/LP
Heat Exchanger Surface Area	a (sqft)		9.3	9.3 10.9				15.6	
Temperature Setting Range (	CH)	86°F-180°F (30°C-82°C)						86°F - 180°F (30°C - 82°C)	
Water Content (Gal)			0.75			0.88		2.4	
Max Water Operating Pressu	re (CH)	30 PSI (207 kPa)							
Gas Supply Pressure (Natural Gas)		3.5 - 10.5 in W.C. (0.87 - 2.61 kPa)							
Gas Supply Pressure (Propar	ne)	8.0 - 13.5 in W.C. (1.99 - 3.36 kPa)							
Electrical Data	Normal CH)	207 W					207 W		
	Standby	8 W					8W		
Max Current		14 Amps						14 Amps	
Sound Level dB(A)		43					42		
Weight	Unit	73.0 lb (33.0 kg)			76.1 lb (34.5 kg)			123.5 lb (56 kg)	
	Shipping		79.4 lb (36.1 kg)			82.7 lb (37.6 kg)		138.6 lb	(63 kg)
Dimensions WxHxDin. (mm) Unit Shipping		18.5 x 26.4 x 11.45 (471 x 671 x 290)					19.45 x 34.88 x 15.48 (494 x 886 x 393)		
		20.9 x 33.5 x 14.6 (532 x 852 x 370)					23.6 x 45.3 x 19.7 (600 x 1,150 x 500)		
Residential Warranty (Heat Exchanger)		12 Years on the Heat Exchanger							
Residential Warranty (Parts)		5 Years on Parts 5 Years							
Residential Warranty (Labor)		1 Year on the Labor							
Commercial Warranty (Heat Exchanger)		5 Years							
Commercial Warranty (Parts)		5 Years							
Commercial Warranty (Labor)		1 Year							
Certifications			CER!HID ⊕		NSF	CERTIFIED® OF INCIDENCE OF THE PROPERTY OF THE	(A <sub>S<sub>M</sub></sub>	) NE	

<sup>1.</sup> Ratings are the same for natural gas models and converted to propane gas.

 $<sup>2. \ \</sup> Values are based standard test procedures prescribed by the U.S. Department of Energy. .$ 

<sup>3.</sup> The net AHRI ratings are based on piping and pickup allowances of 1.15. Please contact Rinnai for selecting boilers that have unusual piping or system components.

<sup>4.</sup> Rinnai reserves the right to change specifications without notice.

### **I-SERIES Plus**<sup>™</sup> Solo Models



# Rinnai<sub>®</sub> I-SERIES \*\*\*

Condensing Gas Boiler

Specifications		Solo Models							
Specifications		IP060S	IP090S	IP120S	IP150S	IP175S	IP199S		
Heating Input Max CH (Btu)	60,000	90,000	120,000	150,000	175,000	199,000			
Heating Input Min CH (Btu)		15,000							
Heating Input Max DHW (Btu)		N/A							
Efficiency (% AFUE)		95.5	96.0	96.0	96.0	95.0	95.0		
Turndown Ratio (TDR)		N/A							
Turndown Ratio (TDR) CH		4:1	6:1	8:1	10:1	10:1	10:1		
DHW Max Flow Rate (GPM)				N	′A				
Flow Rate at 70°F (39°C) Rise		N/A							
Fuel Type		NG/LP	NG/LP	NG/LP	NG/LP	NG/LP	NG/LP		
Heat Exchanger Surface Area (sq	ft)	9	.3	10	.9	15.6			
Temperature Setting Range (CH)				86°F - 180°F (	30°C - 82°C)	•			
Water Content (Gal)		0.	75	0.0	38	2.4			
Max Water Operating Pressure (C	H)	30 PSI (207 kPa)							
Gas Supply Pressure (Natural Gas	s)	3.5 - 10.5 in W.C. (0.87 - 2.61 kPa)							
Gas Supply Pressure (Propane)		8.0 - 13.5 in W.C. (1.99 - 3.36 kPa)							
Electrical Data	Normal CH)	36 W	53 W	50 W	50 W	90 W	98 W		
	Standby	8W				8W			
	Max Current	14 Amps			14 Amps				
Sound Level dB(A)	^	40	40	40	42	40	42		
Weight	Unit	62.6 lb (28.4 kg) 64.8 lb (29.4 kg)			112.4 lb (51 kg)				
	Shipping	69.1 lb (	34.1 kg)	71.3 lb (3	32.4 kg)	127.6 lb	(58 kg)		
Dimensions W x H x D in. (mm)	Unit	18.5 x 25.75 x 11.5 (470 x 654 x 291)				19.45 x 34.88 x 15.48 (494 x 886 x 393)			
	Shipping		20.9 x 33.5 x 14.6	23.6 x 45.3 x 19.7 (600 x 1,150 x 500)					
Residential Warranty (Heat Excha	12 Years on the Heat Exchanger								
Residential Warranty (Parts)	5 Years on Parts 5 Years								
Residential Warranty (Labor)	1 Year on the Labor 1 Year								
Commercial Warranty (Heat Exch	5 Years								
Commercial Warranty (Parts)	5 Years								
Commercial Warranty (Labor)	1 Year								
Certifications			ottiffe o	AND AND	CERTIFIED Sea, and afficient states	(ASME) (18)			

- 1. Ratings are the same for natural gas models and converted to propane gas.
- Values are based standard test procedures prescribed by the U.S. Department of Energy.
   The net AHRI ratings are based on piping and pickup allowances of 1:15. Please contact Rinnai for selecting boilers that have unusual piping or system components.
- 4. Rinnai reserves the right to change specifications without notice.

Additional Accessories						
Part Number	Descripti	on				
807000212	Primary-secondary heating Kit, I-Series Boiler (Combi Models only)	1				
807000213	Primary-secondary heating Kit, I-Series Boiler (Heat only)	St.				
804000074	Condensate Neutralizer Kit (All Models)	Age of				
809000114	Refill - Condensate Neutralizer (All Models)					
103000038	Scale Cutter System (Combi Models only)					
103000039	Scale Cutter Refill Cartridge (Combi Models only)	9				
MIVK-T-LW	DHW Isolation Valve Kit, Compact design, Ease in Flushing (Combi Models only)					
MC-601	Temperature Controller (Combi Models only)					
RTBRACKA	Boiler rack, standard height					
RTBRACKS	Boiler rack, low profile					
RTBRACKEXT	Rack extension kit, add-on					

Installation and Venting Components								
2in. Venting for Room Air and Twin Pipe								
Part Number	Description	Inner Exhaust Material	Outer Intake Material					
222715NPP	2 in. Condensing Fixing Clip Metal Qty 10	PP	Plastic					
223085NPP	2 in. Condensing Wall Terminal Twin Pipe	PP	Plastic					
222710NPP	2 in. Condensing 45 Degree Elbow (20/ Box)	PP	Plastic					
222711NPP	2 in. Condensing 90 Degree Elbow (20/ Box)	PP	Plastic	9				
222712NPP	2 in. Condensing Vent Pipe Extension 39 in. (4/ Box)	PP	Plastic	1				
222714NPP 2 in. Condensing Vent Pipe Extension 79 in. (4/ Box)		PP	Plastic					
2in. / 4in. Installation Venting Components								
Part Number	Description	Inner Exhaust Material	Outer Intake Material					
710202NPP	2 in. / 4 in. Condensing 90 Degree Diverter Nose	PP	Plastic	9				
710215NPP	2 in. / 4 in. Condensing 45 Degree Diverter Nose	PP	Plastic					
229011NPP	2 in. / 4 in. Condensing Horizontal Termination Kit 8.7 in.	PP	Plastic	- An				
229012NPP	2 in. / 4 in. Condensing Horizontal Termination Kit 12 in.	PP	Plastic					
229013NPP	2 in. / 4 in. Condensing Horizontal Termination Kit 21 in.	PP	Plastic					
229016NPP	2 in. / 4 in. Condensing 21 in. Wall Term w/2 wall plates	PP	Plastic	00				
224356NPP	2 in. / 4 in. Condensing Roof Discharge Term 20 in. Above Roof	PP	Plastic	•				
229205NPP	2 in. / 4 in. Condensing 45 Degree Elbow Qty 2	PP	Plastic	010				
229230NPP	2 in. / 4 in. Condensing 90 Degree Elbow Qty 2	PP	Plastic	0.0				

Additional Accessories						
Part Number	Description					
146141	Roof Flashing Assembly (flat roof)					
189950	Shingle Roof Flashing (1/12 to 6/12 pitch; plastic)					
189951	Shingle Roof Flashing (6/12 to 12/12 pitch; plastic)					
189952	Shingle Roof Flashing (8/12 to 16/12 pitch; plastic)					
50171949	Tile/Shingle Roof Flashing (1/12 to 6/12 pitch; metal)					
50171961	Tile/Shingle Roof Flashing (6/12 to 12/12 pitch; metal)					
50171954	Tile/Shingle Roof Flashing (8/12 to 16/12 pitch; metal)					
242141	Flashing for Metal Roof	Suitable for use with plastic and	- SAK			
710342	Rubber Wall Plate (white)	metal components				
710602	Rubber Wall Plate (black)		0			
224045	Thimble (1 piece per box)					
169044	Universal Pipe Clamp - Plastic		Ø			
224097	Metal Pass Through Plate		-			
224042	Universal Bug Guard		THE RESERVE TO SERVE			





#### **Installation and Venting Components** 2in. / 4in. Installation Venting Components **Inner Exhaust Outer Intake Part Number Description Material Material** PP 229253NPP 2 in. / 4 in. Condensing Horizontal Starter Adapter **Plastic** 229308NPP 2 in. / 4 in. Condensing Vent Pipe Extension 10 in. PP **Plastic** 229309NPP 2 in. / 4 in. Condensing Vent Pipe Extension 19.5 in. PP **Plastic** PP 229310NPP 2 in. / 4 in. Condensing Vent Pipe Extension 39 in. **Plastic** 227412NPP 2 In. / 4 In. Condensing Vertical Starter Adapter PP **Plastic** 185348NPP 2 in. / 4 in. Condensing Roof Term Extension Kit PP **Plastic 3in. Venting Components Inner Exhaust Outer Intake Part Number Description Material Material PVC** 196116PVC 3 in. Concentric PVC **PVC** Condensing Horizontal Vent Termination, 3" PVC Low 196985PVC **PVC PVC** Profile Flush Mount **IPEX Venting Components Inner Exhaust Outer Intake Part Number Description Material Material** 196005PVC IPEX 2 in. Concentric Termination 2 x 16 **PVC PVC** 196105PVC IPEX 2 in. Concentric Termination 2 x 28 **PVC PVC** 196125PVC IPEX 2 in. Concentric Termination 2 x 40 **PVC PVC** 192984PVC **PVC PVC** IPEX PVC Low Profile Termination 2 in.

# **Accessories**

## **3in. / 5in. Installation Venting Components**

Inner Exhaust Outer Intake						
Part Number	Description	Material	Material			
223174PP	Condensing Horizontal Termination Kit • 8.7" / 220.9 mm	PP	Plastic	- 600		
223176PP	Condensing Horizontal Termination Kit • 12" / 304.8 mm	PP	Plastic	A 194		
223177PP	Condensing Horizontal Termination Kit • 21" / 533.4 mm	PP	Plastic			
223186PP	Condensing Horizontal Termination Diverter Kit • 19" / 482.6 mm	PP	Plastic			
184162PP	Condensing Roof Discharge Termination Short (above roof) 38" / 965.2 mm	PP	Plastic	‡		
224047PP	Condensing Raised Horizontal Termination Kit (Snorkel)	PP	Plastic			
185344PP	3"/5" Roof Termination Extension Kit	PP	Plastic			
185346PP	3"/5" Condensing Termination Extension	PP	Plastic	1		
185347PP	3"/5" Separation Kit	PP	Plastic			
187585PP	Twin Pipe Adapter for use w/ PVC/CPVC (Special Order Only)	PP	Plastic	-		
224077PP	45-Degree Elbow (Quantity of 2)	PP	Plastic	0		
224078PP	90-Degree Elbow	PP	Plastic			
224087PP	Vent Pipe Extension • 10"/ 254 mm	PP	Plastic			
224079PP	Vent Pipe Extension • 19.5" / 495.3 mm	PP	Plastic			
224080PP	Vent Pipe Extension • 39" / 990.6 mm	PP	Plastic			



# Rinnai

## **Over 100 Years of Smart Comfort**

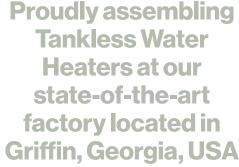


With headquarters in Japan and a global network of subsidiaries and sales offices, Rinnai has enhanced the way businesses and residences heat their water.

Dedicated to a smarter kind of comfort. our value-added products continue to stay in step with demands of a changing world.







Rinnai established its US operations in 1974 and introduced Tankless Water Heating to the North American Market in 1999.



RE•SERIES™ Non-Condensing Tankless Water Heaters beginning in 2022.

Rinnai continues to make significant investments in expanding its operations and product portfolio.







# Creating a healthier way of living.®

Learn more about Rinnai high-performance Tankless Water Heaters, Hybrid Water Heating Systems, Boilers, Vent-Free Fan Convectors, EnergySaver® Direct Vent Wall Heaters, Hydronic Air Handlers, Electric Heat Pump Water Heaters, and Accessories.

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Rinnai America Corporation | 103 International Drive | Peachtree City, Georgia 30269 | rinnai.us | rinnai.ca | 1 • 800 • 621 • 9419







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