# PERFORMANCE PLATINUM



The new degree of comfort.®

# PERFORMANCE PLATINUM<sup>™</sup> Series Condensing Tankless Gas Water Heaters with Built-In Recirculation

#### **Key Features**

- Compatible with 1/2" gas line
- Built-in recirculation Provides instant hot water at the tap<sup>1</sup> saving time and reducing water waste
- Timer-Based Recirculation Gives homeowner options to program unit timer to match their daily routine
- Internal Recirculation Pumps water through the heat exchanger in a loop to prevent cold water bursts
- Automatic Freeze Protection Pump turns on at 46°F, recirculating internally to keep the unit safe from freezing temperatures

- Max vent lengths: 100' @ 3", 50' @ 2" — Means more flexible and versatile installation options
- Common vent two units Fewer wall penetrations, easier to install and more flexible options
- Vent with Room Air Intake (single units only, not common vented) — Save time and money on installation
- Max GPM of 11 for 199K BTU model





# ECOH200DVRHLN & ECOH180DVRHLN

Indoor Direct Vent Model 18,000-199,000 BTU/h Natural and LP Gas



## Installation Information

Rheem Model Number	ECOH200DVHRLN / ECOH180DVRHLN				
Height	28.7"				
Width	17.3"				
Depth	14.8"				
Weight	85 lbs				
Max. Vent Run	2"(50ft) / 3"(100ft)				
Venting Materials	Schedule 40 PVC, CPVC, PP				
Power Supply	120V 60Hz				
Max. Power Consumption	172W(82W+90W_PUMP				
Gas Conn.	3/4"				
Water Conn.	3/4"				

<sup>1</sup> Individual results may vary.

<sup>2</sup> Natural Gas models only, LP models rated only to sea level.

<sup>3</sup> Individual results may vary based on temperature rise demands.

#### **Specifications**

Rheem Model Number		ECOH200DVHRLN	ECOH180DVRHLN		
	MAX				
		199,000 BTU/h	180,000 BTU/h		
Gas Input Rate	MIN High Altitude	18,000 BTU/h	18,000 BTU/h		
	(2,500-8,400 ft.) <sup>2</sup>	180,000 BTU/h	180,000 BTU/h		
Uniform Energy Factor (UEF)		0.94	0.94		
Energy Factor (EF)		0.96	0.96		
	MAX GPM	11.0 Gal	9.9 Gal		
Gallons Per Minute (GPM)	45°F Rise	8.5 Gal	7.7 Gal		
(GP W)	77°F Rise	5.0 Gal	4.5 Gal		
Number of	Bathrooms <sup>3</sup>	4	3 - 4		
Temp. Range		100°F - 140°F			
Туре		Indoor Direct Vent (Outdoor Conversion Coming Soon)			
Flue System		Sealed Combustion Direct Vent, Single Vent			
Ignition System		Direct Electronic Ignition / Automatic Flame Sensing			
Burner System		Premixed Metal Fiber Burner			
Gas Valve System		Air ratio valve			
Minimum Flow Activation Flow		0.5 G	PM		
Minimum Continuous Flow Rate		0.4 GPM			
Internal Pipe Material		STS 304, Copper Tubing			
Water Holding Capacity		Under 2 Gallon			
Water Pressure	MAX	Hot water 150 psi			
water Pressure	MIN	15 psi			
Gas Pressure	Nat. Gas	5.0" WC to 10.5" WC			
Gas Flessule	LP Gas	9.5" WC to 13.0" WC			
Materials	Casing	Cold Rolled Carbon Steel			
Materials	Heat Exchanger	Heat Exchanger : STS 304			
Safety Devices		Flame Sensor, Overheat Cut Off Limit Switch , Gas Leak Detector sensor, Water Leak Detector Sensor Exhaust Temperature Sensor, Water Temperature Sensor			
Warr	ranty	12-Year Heat Exchanger – Residential 5-Year Heat Exchanger – Commercial 5-Year Parts including Pump 1-Year Labor			



Venting

Number of

Water Heaters

**Common Vented** 

1

2

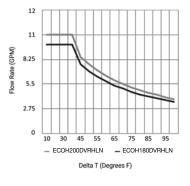
3/4"

1/2"

equivalent feet.

**Recirculation Lengths** 

### Water Heater Flow Rate Curves



Maximum Vent Length for Direct Vent (2 Pipe)

NOTE: Minimum vent length 7' for 2" and 3" venting.

Maximum Equivalent

**Recirculation Length** 

NOTE: Refer to fitting manufacturer guide for

pressure loss in fittings expressed as

2"

50'

N/A

500

200'

PIPE SIZE

3"

100'

50'

4"

N/A

83

18.00

16.00

14.00

£ 12.00

§ 10.00 8.00 Head

6.00

4.00

2.00 0.00

0.00

	Temperature Rise (° F)							
Model Number	35°	45°	50°	60°	70°	80°	90°	100°
ECOH200DVRHLN Water Flow (GPM)	11.0	8.5	7.7	6.4	5.5	4.8	4.3	3.8
ECOH180DVRHLN Water Flow (GPM)	9.9	7.7	6.9	5.8	5.0	4.3	3.9	3.5
Above estimates are for sizing purposes only.								

		Temp. -47°	Inlet Temp. 47-57°				Inlet Temp. 62-77°	
Model #	Max. GPM	Approx. Usage	Max. GPM	Approx. Usage	Max. GPM	Approx. Usage	Max. GPM	Approx. Usage
ECOH200DVRHLN	4.8	<b>00</b>	5.5	<b>000</b>	6.4	000	7.7	0000
ECOH180DVRHLN	4.3	00	5.0	<b>00</b>	5.8	000	6.9	0000

90°

45°

Venting Materials Allowed: PVC, CPVC, PP

Equivalent Elbow Lengths

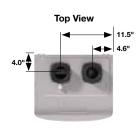
in Ft. of Straight Pipe

2"

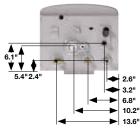
8'

4'

#### **Dimensions**



**Bottom View** 





# 2.5' **Recirculation Pump Head Loss Curve**

3"

5'



8.00

10.00

## **INCLUDED IN THE BOX:**

Tankless water heater with  $\checkmark$ built-in recirculation pump Brass service valves  $\checkmark$ **Crossover valve**  $\checkmark$ Pressure relief valve 5' 120V 3-prong power cord  $\checkmark$ Mounting & spare parts kit  $\checkmark$ Vent screens Use & care manual

#### **ALSO NEEDED FOR INSTALLATION:**

2.00

Schedule 40 PVC venting in 2"  $\checkmark$ or 3" (sold separately

4.00

6.00

Flow Rate (gpm)

- **120V** outlet near installation location\*
- Water and gas lines neare  $\checkmark$ instalation location\*
- **Condensate Wastewater**  $\checkmark$ Neutraizer (sold separately)\*

\*Check local code requirements

# **OPTIONAL ACCESSORIES:**

**On-Demand Recirculation kit** & Manual Wall Swith

Venting kits

12.00

#### Accessories available at homedepot.com

In keeping with its policy of continuous progress and product improvement, Rheem reserves the right to make changes without notice.