The new degree of comfort.®

# Rheem® ThermaForce™ Super High-Efficiency Condensing Tankless Gas Water Heaters

#### Flexible Installation

- Moveable combustion air intake (left/ right) and ability to flex vent in existing B-vent
- Extra long pipe fittings with notched sides for easy gripping with wrench
- Only 4 moving parts Fan, Mixing Valve, Gas Valve, and Damper
- Universal shared platform parts Easily diagnose and service with common parts for all ThermaForce™ units

#### **Key Features**

- Innovative single pass Labyrinth Heat Exchanger with Integrated copper waterway ensures maximum heat transfer with minimal heat loss
- Wireless cascading using RF balances workload of each unit for longer life
- Built-in Illuminated Touchscreen Control Panel
- Stands up to extreme hard water applications

#### **Specifications**

MODEL NO.		CRTGH-L199i		
Input Rate	MAX	199,000 BTU/h		
input nate	MIN	28,500 BTU/h		
Uniform Energy Factor (UEF)		0.90		
	MAX (35°F)	10.1		
Gallons per Minute (GPM)	45°F Rise	7.9		
	67°F Rise	5.4		
Set Point Temperature Range		105°F - 149°F		
Installation Type		Indoor only wall-hung		
Fuel Type		Compatible with Natural Gas and LP (Ships NG with LP Converstion kit included)		
Heat Exchanger Material		Copper tubes in AL block		
Water Pressure		40 - 150 PSI		
Maximum Altitude		10,100 ft NG / 7,800 ft LP		
Minimum Activation Flow		0.5 GPM		
Ambient Temperature - Low	(°F)	32°		
Ambient Temperature – High (°F)		122°		
Max relative humidity (non-condensing)		90%		
Height		29.8"		
Width		17.7"		
Depth		10.9"		
Weight (empty)		68 lbs.		
Power Supply		120V / 60Hz		
Venting		2" or 3" ULC-636 PVC, CPVC, Polypropylene		
Vent Clearances		0" to combustibles		
Safety Devices		Flame Proving module, Flue Gas Temperature Sensor, Protective fuse		
Ultra Low NOx		Meets 14 ng/J NOx requirements - SCAQMD Rule 1146.2 compliant		
Warranty¹		15-Year Heat Exchanger, 5-Year Parts, 1-Year Labor - Residential; 5-Year Heat Exchanger, 5-Year Parts - Commercial		



## CRTGH-L199i

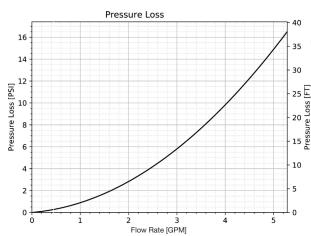
Indoor Direct Vent 28,500-199,000 BTU/h Natural Gas/LP Convertible





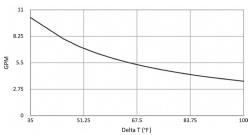


Water heater pressure drop – ThermaForce™ CRTGH-L199i



See Warranty Certificate for complete information

### **Water Heater Flow Rate Curves**



	Temperature Rise (°F)								
Model Number	35°	45°	50°	60°	65°	70°	80°	90°	100°
CRTGH-L199i Water Flow (GPM)	10.2	8.0	7.2	6.0	5.5	5.1	4.5	4.0	3.6

Above estimates are for sizing purposes only.

## **Specifications**

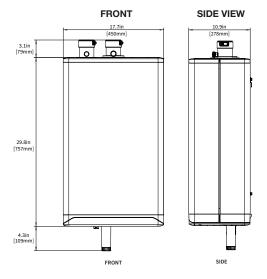
VENTING	MAXIMUM EQUIVALENT LENGTH		
ULC-636 PVC, CPVC or Polyproyplene	(each side)		
2"	65' 2		
3"	120'		
2" or 3" 90° Long Sweep Vent Elbow	Allow 5 equivalent feet		
2" or 3" 90° Short Sweep Vent Elbow	Allow 8 equivalent feet		
2" or 3" 45° Vent Elbow	Allow 3 equivalent feet		
Polyproyplene			
PPs 87-90° Elbow	Allow 8 equivalent feet		
Flex PPS			
3" PPs Flex	35' Actual (Equivalent = Actual x 1.4)		

<sup>&</sup>lt;sup>2</sup> Approximate input derate of 10 - 16% at 2" maximum vent length.

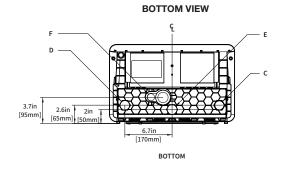
SURFACE	MIN. DISTANCE FROM COMBUSTIBLE SURFACES	RECOMMENDED DISTANCE FOR INSTALLATION AND SERVICE
Front	2"	24"
Rear	0"	0"
Left Side	1.5"	6"
Right Side	4"	6"
Тор	2"	24"
Bottom	8"	24"

	PIPING CONNECTIONS	DIMENSION
А	Exhaust Outlet	2" Schedule 40 PVC
В	Combustion Air Inlet	2" Schedule 40 PVC
С	Cold Domestic Water Connection	34" Male NPT
D	Hot Domestic Water Connection	¾" Male NPT
Е	Gas Connection	34" Male NPT
F	Condensate Connection	¾" Hose

### **Dimensions**



# **TOP VIEW** B (ALTERNATE) ТОР



#### **Parts & Accessories**

Floor Stand	Service Parts Kit	2" PVC Sidewall Vent Kit	3" PVC Sidewall Vent Kit
P-267C	P-911R	P-741	P-742

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

Rheem Canada Ltd./Ltée • 125 Edgeware Road, Unit 1 Brampton, Ontario L6Y 0P5 · www.rheem.ca