LT SERIES



Wall-Mounted Modulating, Condensing, Tankless Water Heater

LT199NXX1 and LT199PXX1

Date:	
	LAARS
Project #:	Heating Systems Company
	Submittal Data
Engineer:	Project Name:
Prepared By:	Location:
Bid Date:	Contractor:

Standard

- Features
- Wall-mounted design with wall bracket included
- Indoor or outdoor (with opt. kit)
- 0.96 Uniform Energy Factor
- 15:1 turndown
- 185°F max water temperature allows for residential or commercial use
- Cascadable up to 16 units
 (can include up to 2 recirc heaters)
- ENERGY STAR® qualified
- AHRI certified
- Low lead compliant with
 NSF/ANSI 372

- Low NOx system exceeds the most stringent NOx regulations
- Natural or propane
- Sealed combustion chamber
- Pre-mix metal fiber burner
- Vent with PVC, CPVC, stainless
 steel or polypropylene
- Horizontal or vertical direct vent
- Vent and air pipe lengths of up to 150 equivalent feet (each)
- Two 2" vent screens included
- Bottom water connections

- 304 stainless steel primary and secondary heat exchangers
- Direct electronic ignition with automatic flame sense
- Built-in condensate trap and drain
- Inlet air filter
- Inlet water filter
- Overheat cutoff switch
- Water leakage detector
- Exhaust temperature sensor
- Water temperature sensor
- Spare gasket kit included

Tankless Water Heater Data	Number of Units	Heater Type Natural Gas LT199NXX1	Propane LT199PXX1
Accessories for Field Mounting	 Condensate Neutralizer Cascade Rack System Polypropylene Common Vent System 	 Cascade Cable (one per heater) Piping Manifold System Non-Return Valve for PVC/CPVC Common Vent System 	3" Vent / Air Pipe Screen





Intertek

Heater Data

ĺ	Model	Gas Type	Max	Input	Min Input		Turndown Ratio	AHRI Certified Uniform Energy		roduct /eight		nipping Veight
			MBH	kw	MBH	kw		Factor	lbs	kg	lbs	kg
ſ	LT199NXX1	Natural	199	58.3	18	5.3	15:1	0.96	78	35	89	40
ĺ	LT199PXX1	Propane	199	58.3	18	5.3	15:1	0.96	78	35	89	40

Model	Gas Type	Water Connection Size	Water Pressure		Gas Connection Size	Gas Pi	ressure
			psi	kPa		in. W.C.	kPa
LT199NXX1	Natural	3/4" NPT	15-150	103.4-1033.5	3/4" NPT	3.5-10.5	0.86-2.58
LT199PXX1	Propane	3/4" NPT	15-150	103.4-1033.5	3/4" NPT	8.0-14.0	1.97-3.45

Domestic Hot Water

	Capacity						
35°F Te	mp Rise	45°F Temp Rise		77°F Temp Rise		Minimum Water Flow	
GPM	l/m	GPM	l/m	GPM	l/m	GPM	l/m
11.1	42	8.7	33	5.1	19	0.5	1.9

Clearances

	Non-Comb	ation From ustible and le Surfaces		ed Service ances
	inches	ст	inches	ст
Тор	10	25	18	46
Back	1	2.5	1	2.5
Front	4	10	40	101
Side	4	10	8	20
Bottom	10	25	24	61

Electrical

Data

Power Supply			Power Consumption	
Main Supply	Maximum Current	Standby	Operation	Anti-Freeze
120V 60Hz	Less than 2A	2.7W	74W	53W

Venting

System

2" Combustion Air / Vent Pipe			3" Com	bustion Air	/ Vent Pipe
	Equivalent gth*	Max Number of Elbows	Maximum Equivalent Length*		Max Number of Elbows
ft	m	5	ft	m	0
60	18	5	150	45	0

*For each elbow, reduce maximum allowable length:

8 ft (2.4m) for each 2" 90° elbow

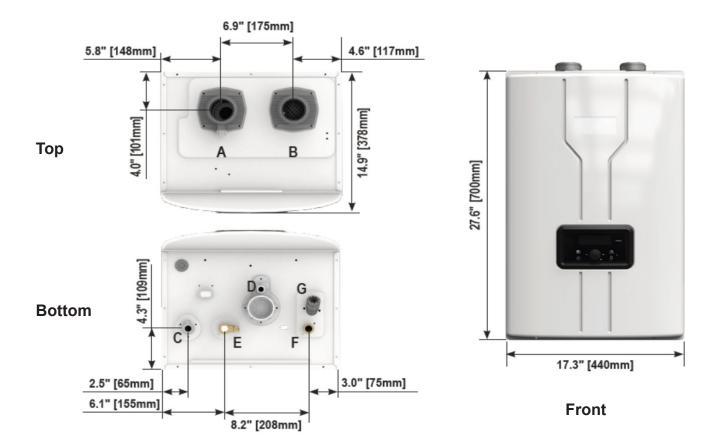
4 ft (1.2m) for each 2" 45° elbow

5 ft (1.5m) for each 3" 90° elbow

3 ft (0.9m) for each 3" 45° elbow

Dimensional Data

	Models LT199NXX1 & LT199PXX1					
	Description	Size				
А	Exhaust	2" PVC				
В	Air Intake	2" PVC				
С	Gas	3/4" NPT				
D	Condensate	1/2" NPT				
Е	Hot Water	3/4" NPT				
F	Cold Water	3/4" NPT				
G	Cold Water Filter	-				





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 Document 2184B