



# **LAARS<sup>®</sup>**

## **NEOTHERM<sup>®</sup> LC**

**Commercial Modulating  
Condensing Boiler and  
Volume Water Heater**

### **FEATURES**

- Propane Models
- Large Color Touch Screen
- Up to 95% Thermal Efficiency
- Compact Footprint
- Easy Setup

# LAARS<sup>®</sup> NEOTHERM<sup>®</sup> LC

## COMMERCIAL CONDENSING BOILERS AND VOLUME WATER HEATERS



### POWERFUL PROPANE PERFORMANCE

- Thermal Efficiency as high as 95%
- 10:1 turndown
- Cascade up to 4 boilers with onboard control
- Cascade up to 8 boilers when coupled with Laars' M4 and M4EXT controllers
- Available in 1000 and 1200 MBH
- Available in propane only



Large, easy to use touch screen



### PROVEN CONSTRUCTION

- Dual-fired stainless steel water tube heat exchanger
- Equally sized dual burners act independently to maximize fuel utilization
- Dual burners for built-in redundancy
- Direct vent
- Sealed combustion chamber



### EASY TO OPERATE

- Onboard touch screen control system
- Quick setup
- Diagnostics made simple
- Built-in Modbus protocol



Color screen and gas valves can be adjusted (via access ports) at the same time when outer jacket is removed, making for fast and easy combustion setup.



Access to color display, internal components and pull out controls result in easy diagnostics and adjustments when sealed jacket is removed.

Contractor friendly design allows for faster setup and easier diagnostics.

# LAARS® NEOTHERM® LC FEATURES

- Full fire thermal efficiencies as high as 95%
- 10% to 100% modulation (10:1 turndown)
- Low NOx system
- Stainless steel, heat exchanger with welded construction (no gaskets)
- Sealed combustion
- Pre-mix stainless steel burner
- Horizontal or vertical direct vent
- Built in condensate trap
- Indirect water heater priority
- Large color touch screen display
- Compact footprint
- Direct spark ignition system
- Available with pump matched to unit
- 160 psi maximum working pressure
- Boiler: 75 psi (517kPa) ASME rated pressure relief valve
- Volume Water Heater: 125 psi (861 kPa) ASME rated pressure relief valve
- Water Flow Switch
- Temperature and Pressure gauge
- Drain Valve
- Multiple pump control for boiler pump, system pump and indirect domestic water pump, each with delay
- Cascading PID modulating feature for up to 4 boilers to be lead lagged, 8 with M4 controller
- Alarm output
- Outdoor reset
- PVC, CPVC, Polypropylene or Stainless steel venting
- Direct vent up to 100ft, Vertical or Horizontal
- Outdoor air temperature sensor
- On/off toggle switch
- Manual reset high limit
- Burner site glass
- All piping and wiring from the back of the boiler
- Modbus Communications
- Indoor/Outdoor installations
- ASME H-Stamp

## Warranty:

- 10 year limited Boiler warranty
- 8 year limited Volume Water Heater warranty

## NeoTherm LC Specifications

Size	Boiler Indoor Efficiencies		Boiler Outdoor Efficiencies		Water Heater Thermal Efficiency	Input MBH (kw)	Output MBH (kw)		Air Inlet in (cm)	Vent in (cm)	Connection Size (NPT)		Amp Draw (No Pump) FLA	Shipping Weight lbs (kg)
	Thermal	Combustion	Thermal	Combustion			Boiler	VWH			Water	Gas		
1000	94.2%	94.2%	94.2%	94.2%	95.0%	999 (293)	942 (276)	950 (278)	6 (15)	6 (15)	2	1 ½	6	750 (341)
1200	94.8%	95.1%	94.7%	95.1%	95.0%	1200 (351)	1,120 (328)	1,140 (334)	6 (15)	6 (15)	2	1 ½	11	770 (350)

## Boiler Temperature Rise in Degrees

Temperature Rise (°F)										
Size	20°F		30°F		40°F		50°F		60°F	
	Flow (gpm)	H/L (feet)	Flow (gpm)	H/L (feet)	Flow (gpm)	H/L (feet)	Flow (gpm)	H/L (feet)	Flow (gpm)	H/L (feet)
1000	95	26.7	62	12.8	48	8.2	38	5.5	32	4.0
1200	114	36.6	76	18.2	57	11.1	46	7.5	38	5.5

Temperature Rise (°C)										
Size	11°C		17°C		22°C		28°C		33°C	
	Flow (l/m)	H/L (m)	Flow (l/m)	H/L (m)	Flow (l/m)	H/L (m)	Flow (l/m)	H/L (m)	Flow (l/m)	H/L (m)
1000	360	8.1	235	3.9	182	2.5	144	1.7	120	1.2
1200	432	11.2	288	5.5	216	3.4	173	2.3	144	1.7

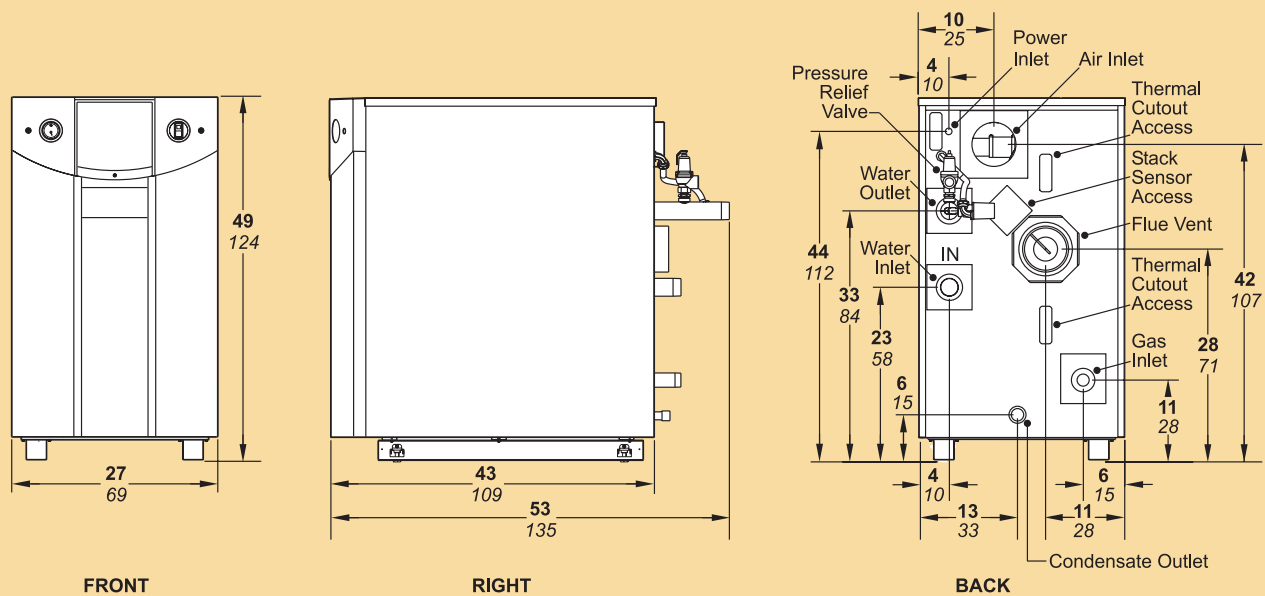
## Recovery Data Volume Water Heater

Design Temperature Rise Across Water Heater (gph)									
Size	40°F	50°F	60°F	70°F	80°F	90°F	100°F	120°F	140°F
1000	2857	2286	1905	1633	1429	1270	1143	952	816
1200	3420	2736	2280	1954	1710	1520	1368	1140	977

Design Temperature Rise Across Water Heater (iph)									
Size	22°C	28°C	33°C	39°C	44°C	50°C	56°C	67°C	78°C
1000	10799	8641	7201	6173	5402	4801	4321	3599	3084
1200	12927	10369	8641	7407	6482	5761	5185	4319	3701

# LAARS® NEOTHERM® LC DIMENSIONS

## NeoTherm 1000 and 1200 Dimensions



Compact in size, with minimal clearance needed and up to 100 feet of vent length (both vertical and horizontal), the NeoTherm LC brings up to 1.2 million BTU/hr into tight spaces but can also be installed outdoors giving ultimate flexibility to installers.



View our entire product line at [www.Laars.com](http://www.Laars.com)



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