



# **LAARS<sup>®</sup>**

## **NEOTHERM<sup>®</sup>**

*High Efficiency  
Commercial Modulating,  
Condensing Boilers*

### **PACKED WITH FEATURES**

- Large Color Touch Screen
- Up to 96.6% Thermal Efficiency
- 5 Models 399 to 850 MBH
- Vent up to 100 feet, Horizontal or Vertical
- Zero Clearance to Combustibles for Tight Installations

# LAARS® NEOTHERM®

## Hydronic Boiler



NeoTherm is a direct vent, sealed combustion, condensing boiler with thermal efficiency as high as 96.6% that modulates with a 5 to 1 turndown.



Low NOx emissions, for a package that's easy to use and easy on the environment.



Available for propane gas, with a selection of factory mounted options, and five models (399 to 850 MBH), these indoor models are suitable for a broad variety of residential and commercial applications.

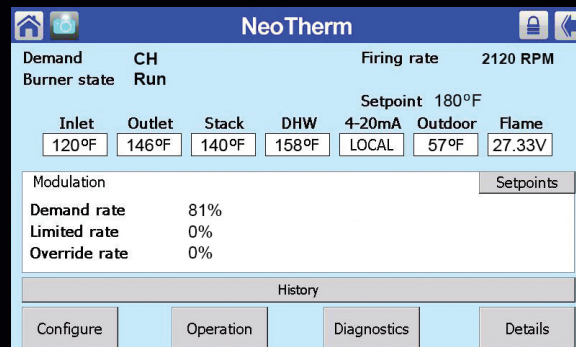


The boiler features an ASME stainless steel heat exchanger, optional boiler pump and LAARS control system.



### NEOTHERM CONTROLS FEATURES:

- Large, easy to navigate color touch screen
- Easy to use menus for login, quick start, advanced setup, tests and diagnostics
- Integrated PID temperature and ignition control
- Accepts 4-20mA or 0-10VDC input for modulation
- Cascade up to 8 NeoTherm boilers
- Quick start feature for easy one boiler setups
- Outdoor reset with customizable reset curves, DHW override and warm weather shutdown



- Complete diagnostics for analog and digital inputs
- Test feature allows for forced min and max firing
- Display holds, alerts and errors in clear text form
- Password protected parameters for installer use

# LAARS® NEOTHERM® HYDRONIC BOILER

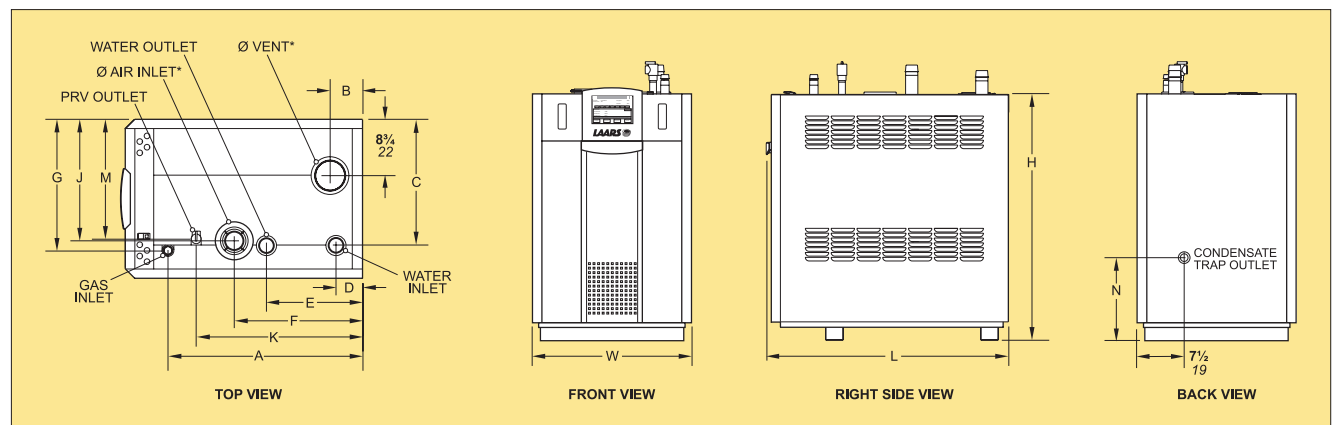
## Standard Equipment:

- High condensing efficiency
- Modulation down to 20% of full fire (5:1 turndown)
- Sealed combustion chamber
- Stainless Steel Heat Exchanger
- Pre-mix stainless steel burner
- Low NOx system
- Horizontal or vertical direct vent
- Horizontal vent and air terminals
- Vent and air pipe lengths of up to 100 equivalent feet (each)
- Built-in condensate trap
- Vent temperature cutoff feature
- Integrates with Building Automation Systems
- Spark ignition system
- 160 psi maximum working pressure
- Stainless steel heat exchanger with welded construction (no gaskets)
- ASME "H" stamp
- 75 psi (517 kPa) ASME rated pressure relief valve
- Temperature & pressure gauge
- Drain valve
- Multiple pump control for boiler pump, system pump and indirect domestic water pump, each with delay
- Connections from top of unit
- Electronic PID modulating control
- Large color touch screen
- Alarm output
- Accepts external 4-20mA modulation control (0-10V optional)
- Indirect water heater priority with sensor
- Outdoor reset with sensor
- On/off toggle switch
- Manual reset high limit
- Burner sight glass
- Zero clearance to combustibles surfaces for alcove and closet installations
- 10 year limited warranty

## NeoTherm Boiler

Size	Natural Gas	Propane	Input		Output		Connection Size (NPT)		Shipping Weight	
			MBH	kW	MBH	kW	Water	Gas	lbs.	kg
NTH 399	N/A	X	399	117.2	386	113.1	1 1/2"	3/4"	364	165
NTH 500	N/A	X	500	146.4	475	139.2	1 1/2"	1"	419	190
NTH 600	N/A	X	600	175.7	572	167.6	1 1/2"	1"	426	193
NTH 750	N/A	X	750	219.8	724	212.1	2"	1 1/2"	481	218
NRH 850	N/A	X	850	248.9	813	238.2	2"	1 1/2"	503	228

## Dimensional Data



	W		L		A		B		C		D		E		F		G		H		J		K		M		N		Air Inlet Collar Diameter*	Vent Collar Diameter*		
Size	in.	cm	in.	cm	in.	cm	in.	cm	in.	cm	in.	cm	in.	cm	in.	cm	in.	cm	in.	cm	in.	cm	in.	cm	in.	cm	in.	cm	in.	cm		
399	25	64	31½	80	25	64	5¼	13	19¾	50	4¼	11	14¾	37	18½	47	19¼	49	38¼	97	16½	42	21¾	55	18¾	48	13	33	4½	11	4½	11
500	25	64	37¾	96	30¾	77	5¼	13	19¾	50	4¼	11	15½	38	20	51	20½	52	38¼	97	19	48	26	66	18¾	48	13	33	4½	11	4½	11
600	25	64	37¾	96	29¾	76	5	13	19½	50	4¼	11	15	38	20	51	3	8	38¼	97	19	48	26	66	18¾	48	8¼	21	4½	11	4½	11
750	25	64	51	130	35½	90	6	15	19½	50	5¼	13	19	48	40½	103	3¼	8	38¼	97	19	48	30¾	78	18¾	48	8¼	21	4½	11	6½	17
850	25	64	55¼	130	39¾	101	6	15	19½	50	5¼	13	19	48	44¾	114	3½	9	38¼	97	19	48	35	89	18¾	48	8¼	21	4½	11	6½	17

\*NeoTherm boilers are shipped with adapters for the air and vent collars that accept 4" or 6" pipe



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



**LAARS®**  
Heating Systems Company

**Customer Service and Product Support:** 800.900.9276 • Fax 800.559.1583

**Headquarters:** 20 Industrial Way, Rochester, NH 03867 • 603.335.6300 • Fax 603.335.3355

9 Brigden Gate, Halton Hills, Ontario, Canada, L7G 0A3 • 905.203.0600 • Fax 905.636.0666

[www.LAARS.com](http://www.LAARS.com)