



LAARS[®] **NEOTHERM[®]**

*High Efficiency
Commercial Modulating,
Condensing Boilers*

PACKED WITH FEATURES

- Large Color Touch Screen
- Less than 10ppm NOx
- Up to 96.6% Thermal Efficiency
- 6 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 NO_x emissions (<10 ppm NO_x), for a package that's easy to use and easy on the environment.



Available for natural or propane gas, with a selection of factory mounted options, and 5 sizes from 399 to 850 MBH, these indoor models are suitable for a broad variety of residential and commercial applications.

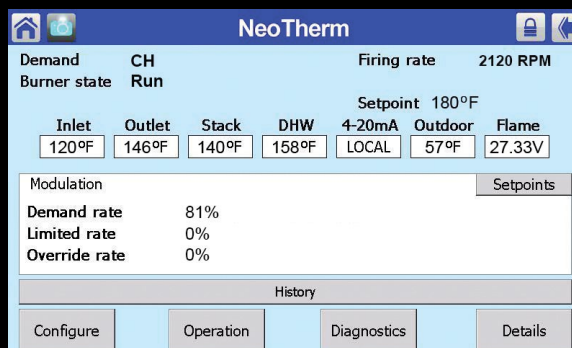


The boiler features an ASME stainless steel heat exchanger, optional boiler pump and LAARS control system.



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 4-10mA 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:

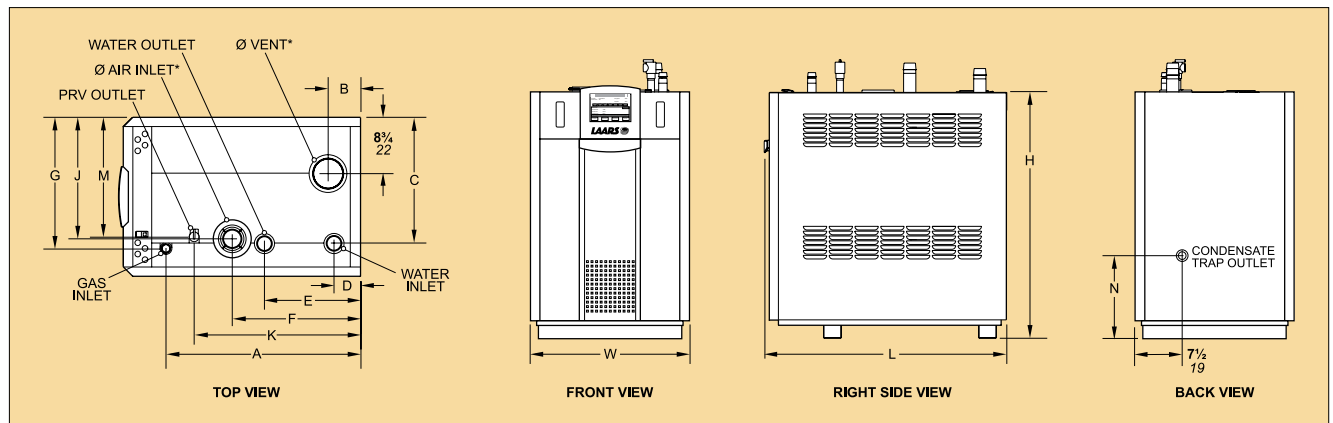
- High condensing efficiency
- Modulation down to 20% of full fire (5:1 turndown)
- Sealed combustion chamber
- Stainless Steel Heat Exchanger
- Pre-mix stainless steel burner
- Low NOx system (<10ppm) exceeds the most stringent regulations for air quality
- Horizontal or vertical direct vent
- Horizontal 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 combustible surfaces for alcove and closet installations
- 10 year limited warranty

NeoTherm Boiler

Size	Thermal Efficiency %	Combustion Efficiency %	AFUE %	Input		Output		Connection Size (NPT)		Shipping Weight	
				BTU/h	kW	BTU/h	kW	Water	Gas	lbs.	kg
399	96.5	96.5	N/A	399,900	117.2	386,000	113.1	1½"	¾"	364	165
500	95.0	95.0	N/A	500,000	146.4	475,000	139.2	1½"	1"	419	190
600	95.3	96.0	N/A	600,000	175.7	572,000	167.6	1½"	1"	426	193
750	96.6	96.6	N/A	750,000	219.8	724,000	212.1	2"	1½"	481	218
850	95.7	95.7	N/A	850,000	248.9	813,000	238.2	2"	1½"	503	228

Dimensions are nominal.

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	in. cm
399	25 64	31½ 80	25 64	5¼ 13	19¾ 50	4¼ 11	14¾ 37	18½ 47	19¼ 49	38¾ 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	38¾ 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	38¾ 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	38¾ 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	38¾ 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



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