

LAARS[®] **NEOTHERM[®]**

Commercial Modulating,
Condensing Boilers



LAARS[®] 
Heating Systems Company
A subsidiary of **BRADFORD WHITE[®]** Corporation

LAARS® NEOTHERM®

Hydronic Boiler

NeoTherm is a direct vent, sealed combustion, condensing boiler with 95+% AFUE that modulates with a 5 to 1 turndown. The boiler features an ASME stainless steel heat exchanger, integral boiler pump (399 and 500 also available without pump) and low NOx emissions (10 ppm NOx), for a package that's easy to use, and easy on the environment.

NeoTherm is built standard with the new LAARS Integrated Control SystemSM that puts the ignition control, temperature control and high limit in one user-friendly device that does it all. The PID control system has outdoor reset and indirect water heater priority (sensors sold separately), frost protection, and loads of other features. It works with other controls to become part of a multiple boiler sequencing control, and works with building automation systems.

Available for natural or propane gas, with a selection of factory-mounted options, inputs of 285,000, 399,000 or 500,000 BTU/h indoor models are suitable for a broad variety of both large residential and small commercial applications.



LAARS® NEOTHERM® HYDRONIC BOILER



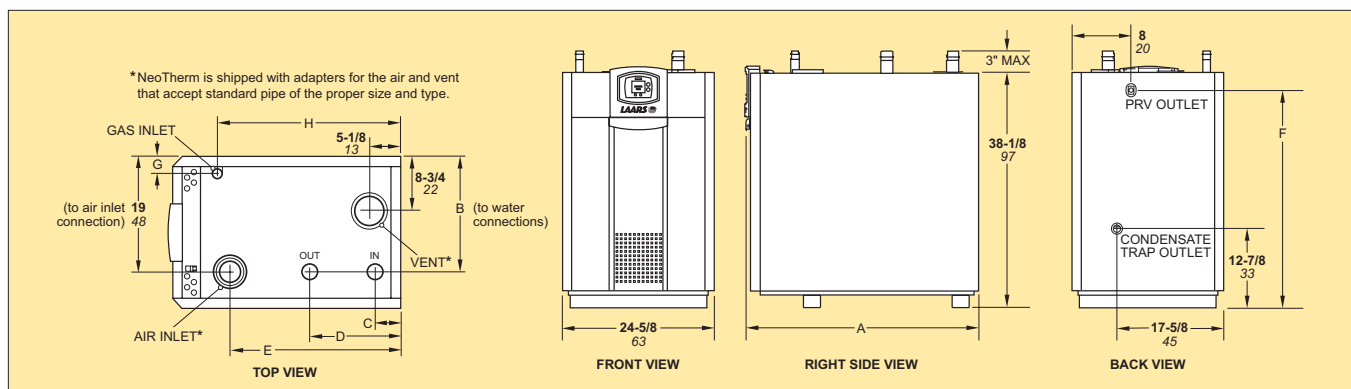
NeoTherm Features:

- Floor-standing condensing boiler
- All connections are on top of unit
- Stainless steel heat exchanger
- Rated for alcove and closet installations
- Easy to service
- Will qualify for Energy Rebates
- Low NOx emissions
- LAARS Integrated Control SystemSM
- Works with BAS

Standard Equipment:

- High condensing efficiency
- Modulation down to 20% of full fire (5:1 turndown)
- Sealed combustion chamber
- 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
- Spark ignition system
- 160 psi maximum working pressure
- Stainless steel heat exchanger with welded construction (no gaskets)
- ASME "H" stamp
- Boiler circulator, mounted and wired inside jacket
- 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
- Electronic PID modulating control
- Large user-interface and display
- Alarm output
- Accepts external (4-20mA) modulation control
- 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
- 12 year limited warranty

Size	AFUE %	Thermal Efficiency %	Combustion Efficiency %
285	95.7	n/a	94.4
399	n/a	94.0	95.6
500	n/a	95.0	95.0



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Model Number	Input		Output		A		B		C		D		E		F		G		H		Connections NPT Size in.	
	BTU/h	kW	BTU/h	kW	in.	cm.	in.	cm.	in.	cm.	in.	cm.	in.	cm.	in.	cm.	in.	cm.	in.	cm.	Water	Gas
NT-285	285,000	83.5	269,040	78.8	26 ⁵ / ₈	68	18 ¹ / ₂	47	5 ³ / ₄	15	14	36	17 ³ / ₄	45	35	89	14	36	20 ¹ / ₈	51	1 ¹ / ₄	3 ⁴ / ₄
NT-399	399,000	116.9	375,000	109.9	31 ¹ / ₂	80	18 ⁵ / ₈	47	4 ¹ / ₈	10	14 ⁵ / ₈	37	21 ³ / ₈	54	34 ¹ / ₂	88	19 ¹ / ₄	49	25	64	1 ¹ / ₄	3 ⁴ / ₄
NT-500	500,000	146.5	475,000	139.2	37 ³ / ₄	96	18 ³ / ₄	48	4 ¹ / ₈	10	14 ⁷ / ₈	38	27 ⁵ / ₈	70	34 ¹ / ₂	88	2 ³ / ₄	7	29 ³ / ₄	76	1 ¹ / ₂	1



View our entire product line at www.Laars.com



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