

LAARS[®] NEOTHERM[®]

Residential Modulating,
Condensing Boilers



95%+ AFUE



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



NEOTHERM®

A NEW GENERATION OF WARMTH

The NeoTherm residential condensing boiler is the latest technological advancement in home heating from Laars Heating Systems. Respected the world over, Laars represents 60 plus years of design and engineering innovation for residential, commercial and industrial space and water heating applications.

You can be sure that no company stands behind its products as well as Laars or offers the extensive support staff, the field technicians and network of service personnel that you'll find with Laars Heating Systems. From giant boilers for hotels, stadiums, schools and casinos to the reliable heating system in your home, Laars is the name to trust.



High in efficiency and low in emissions, the new NeoTherm® condensing boiler from Laars Heating Systems is a fully packaged, space-saving hydronic solution.



NeoTherm is a direct vent, sealed combustion, condensing boiler boasting 95% efficiency that modulates with a 5 to 1 turndown. Zero clearance to combustibles and the convenient top connections (horizontal or vertical direct vent) make NeoTherm perfect for tight installations. Featuring an ASME stainless steel heat exchanger and low NO_x emissions, NeoTherm is easy to use, and easy on the environment. Built standard with the new LAARS Integrated Control SystemSM, the ignition control, temperature control and high limit are contained in one safe user-friendly device.

NeoTherm is everything a modern boiler should be... easy-to-use, easy on the environment, powerful and compact. It's the perfect choice for today's demanding homeowner.

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TEN GREAT REASONS TO CHOOSE NEOTHERM FOR YOUR HOME HEATING NEEDS



- 1.** Energy Star certified
NeoTherm brings comfort and savings to the home with 95%+ efficiency.



- 2.** The direct vent, sealed combustion NeoTherm can vent up to 100' in PVC pipe - this keeps down installation costs. Combustion air can be ducted directly to the boiler - great in modern energy efficient homes.

- 3.** Compact in size, NeoTherm is approved for closet installations. It can fit almost anywhere!

- 4.** NeoTherm is easy to setup and install thanks to the LAARS integrated Control System that comes standard with each unit.



- 5.** NeoTherm modulates down to 20%, so it automatically and seamlessly matches the heating load of your home. NeoTherm saves up to 30% when compared to old cast-iron "on-off" boilers.

- 6.** NeoTherm is environmentally friendly and meets the most stringent U.S. state codes for NOx emissions.

- 7.** NeoTherm is available in four residential sizes that range from 80,000 BTU/hr to 210,000 BTU/hr.

- 8.** NeoTherm's condensing design makes it perfect for both radiant floor heating and baseboard systems.



- 9.** NeoTherm is competitively priced and provides ultra-high efficiency, making it the best choice in residential heating.

- 10.** NeoTherm is backed by a 12-year limited warranty, the best in the business. Just what you'd expect from a company committed to customer satisfaction.



FEATURES:

- Natural or propane gas
- Four Residential sizes (80,000 to 210,000 BTU)
- Water, air, vent and gas connections on top of boiler
- ASME Stainless steel heat exchanger
- Rated for alcove and closet installations
- Large user interface and display
- Perfect for radiant and baseboard heating

- Qualifies for many local utility rebates
- 12 year limited warranty



LAARS® NEOTHERM® RESIDENTIAL HYDRONIC BOILER



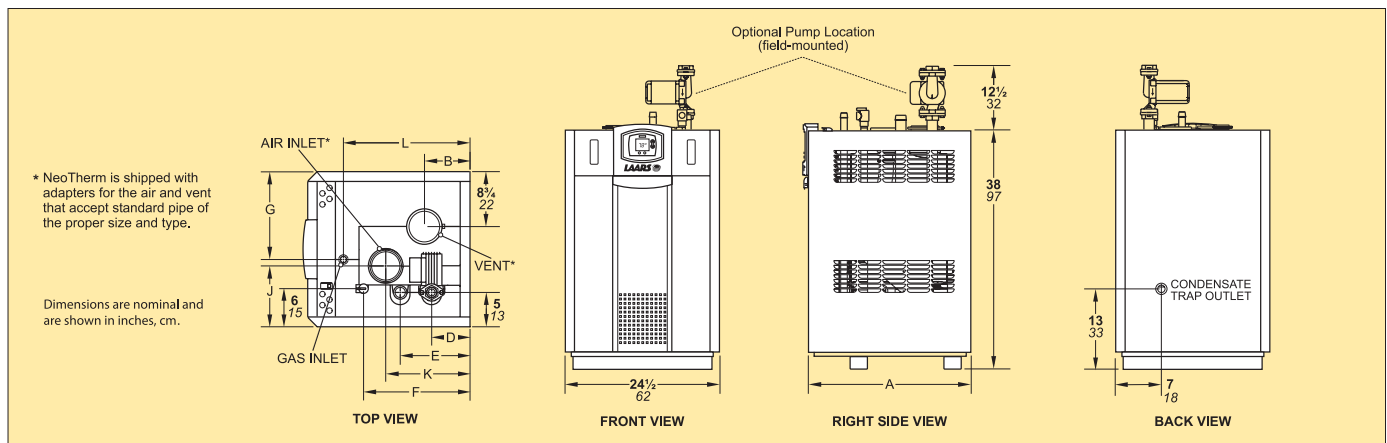
NeoTherm Features:

- 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
- 95%+ AFUE
- 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 NO_x system exceeds the most stringent regulations for air quality – 10ppm NO_x
- 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
- Indirect water heater priority (sensor included)
- ASME 30 psi (207 kPa) working pressure heat exchanger
- ASME "H" stamp
- Stainless steel heat exchanger with welded construction (no gaskets)
- 30 psi (207 kPa) ASME rated pressure relief valve
- Temperature and pressure gauge
- Drain valve
- Multiple pump control for boiler, system and indirect domestic water pumps, each with delay
- Optional pump (sized to model) available for field installation
- Electronic PID modulating control
- Direct spark ignition
- Large user-interface and display
- Alarm output
- Accepts external (4- 20mA or 0-10VDC) modulation signal
- Outdoor reset (sensor included)
- On/Off toggle switch
- Manual reset high limit
- Burner site glass
- Flue gas temperature cutoff
- Zero clearance to combustible surfaces
- 12-year limited warranty

	Input	Output	AFUE %
Size	BTU/h	BTU/h	
80	80000	76160	95.2
105	105000	100065	95.3
150	150000	142800	95.2
210	210000	200340	95.4



	A		B		D		E		F		G		J		K		L		Air Inlet*		Vent*		Connections		Max Vent Length CVPC			Weight
Size	in	cm	in	cm	in	cm	in	cm	in	cm	in	cm	in	cm	in	cm	in	cm	in	cm	in	cm	Water	Gas	2" Dia.	3" Dia.		lbs.
80	19 1/2	49	9 1/2	24	7 1/2	19	11	28	10 3/4	27	13 3/4	35	3 1/2	9	11 3/4	30	13 1/2	34	2	5	2	5	1 NPT	1/2 NPT	40 ft.	100 ft.		181
105	19 1/2	49	8 1/4	21	6 1/4	16	11	28	9	22	14 1/4	36	3 1/2	9	11 3/4	30	13 1/2	34	2	5	2	5	1 NPT	1/2 NPT	40 ft.	100 ft.		188
150	19 1/2	49	5 1/2	14	3 1/4	8	11	28	7 1/2	19	14 1/4	36	5	13	7 1/2	19	13 1/2	34	3	7	3	7	1 NPT	1/2 NPT	n/a	100 ft.		201
210	26 3/4	68	5 1/2	14	5 1/2	8	18	45	11 3/4	30	14 1/4	36	5	13	7 1/2	19	20 1/2	52	3	7	3	7	1 NPT	1/2 NPT	n/a	100 ft.		246