



LAARS[®] **NEOTHERM[®]**

**High Efficiency Modulating
Volume Water Heaters**

PACKED WITH FEATURES

- Large Color Touch Screen
- Less than 10ppm NOx
- 8 Models 150 to 850 MBH
- Vent up to 100 Feet, Horizontal or Vertical
- Meets Low Lead Requirements

LAARS[®] NEOTHERM[®]

Volume Water Heater



NeoTherm is a direct vent, sealed combustion, condensing volume water heater with ultra-high thermal efficiency that modulates with a 5 to 1 turndown.



Low NO_x emissions (<10ppm) and meets low lead installation requirements for a package that's easy to use and easy on the environment.



Available in three models (150-285 MBH) for natural gas or propane, and five models (399-850 MBH) for propane. These models are offered with a selection of factory mounted options making them suitable for a broad variety of residential and commercial applications.

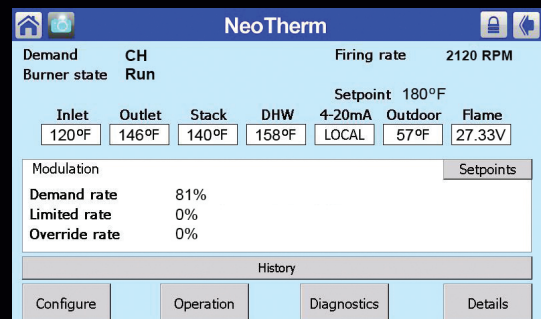


The heater features an ASME stainless steel heat exchanger, direct spark ignition system, optional heater pump and LAARS integrated control system.



NEOTHERM[®] INTEGRATED 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
- Lead Lag with up to 8 other NeoTherm volume water heaters
- Quick start feature for easy one boiler setups
- 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
- Modbus capable

LAARS® NEOTHERM® VOLUME WATER HEATER FEATURES



NeoTherm Features:

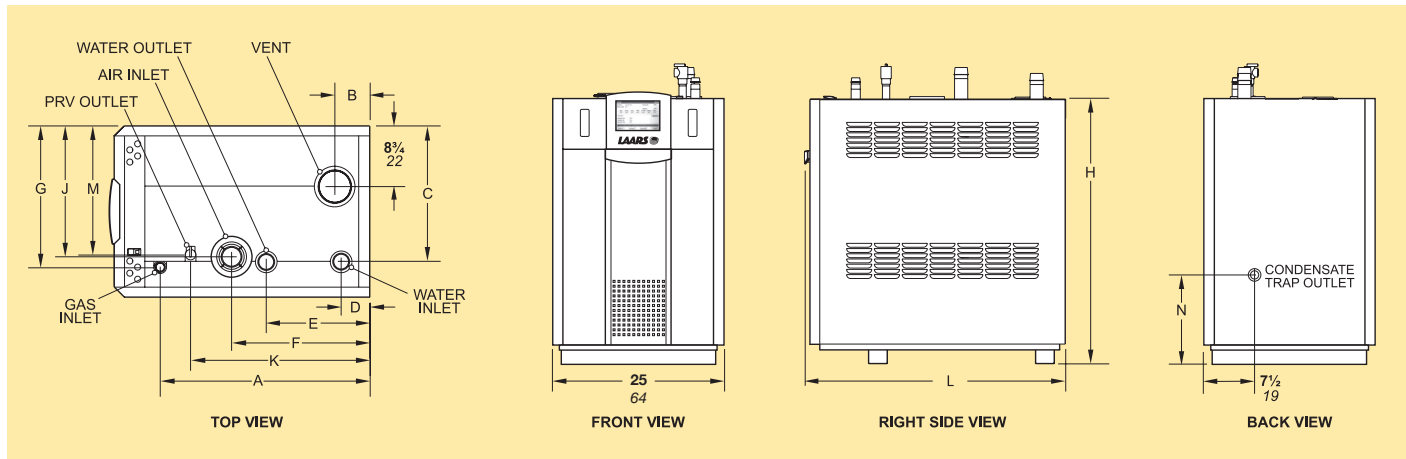
- All connections are on top of unit
- Easy to service
- Low NOx system
- LAARS Integrated Control System™
- Integrates with Building Automation Systems
- Meets NSF/ANSI-372 Low Lead Content Certification (MT2V)

Standard Equipment:

- High condensing efficiency
- Horizontal or vertical direct vent
- 5:1 turndown
- Vent and air pipe lengths of up to 100 equivalent feet (each)
- Built-in condensate trap
- Spark ignition system
- Sensor for domestic water tank
- 160 psi maximum working pressure
- Stainless steel heat exchanger with welded construction (no gaskets)
- Optional pumps (sized to model) available for field installation
- ASME "H" stamp
- Water flow switch (399 & 850)
- 125 psi (861 kPa) ASME rated pressure relief valve
- Temperature & pressure gauge
- Drain valve
- Alarm output
- On/off toggle switch
- Manual reset high limit
- Burner sight glass
- Zero clearance to combustible surfaces for alcove and closet installations
- 8 year limited warranty

Size	Natural Gas	Size	Input		Output	
			MBH	kW	MBH	kW
NTV 150	X	X	150	43.9	142.5	42.8
NTV 199	X	X	199	58.3	193.0	56.6
NTV 285	X	X	285	83.5	270.8	79.3
NTV 399	N/A	X	399	116.8	383.0	112.3
NTV 500	N/A	X	500	146.4	480.0	141.1
NTV 600	N/A	X	600	175.7	582.0	170.5
NTV 750	N/A	X	750	219.6	705.0	206.7
NTV 850	N/A	X	850	248.9	816.0	239.1

Dimensional Data



Laars NeoTherm®

Size	A		B		C		D		E		F		G		H		J		K		L		M		N		Shipping Weight		Connections	
	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	lbs	kg	Gas	Water
NTV 150	13 1/4	34	5 1/4	14	19	48	3 1/4	8	10 3/4	28	7 1/2	19	14 1/4	36	38 1/4	97	19 1/2	49	7 1/2	19	19 1/2	49	15 1/4	39	13	33	228	103	1/2 NPT	1 1/4 NPT
NTV 199	20 1/2	52	5 1/4	14	19	48	3 1/4	8	17 3/4	45	7 1/2	19	14 1/4	36	38 1/4	97	19 1/2	49	11 3/4	30	26 3/4	68	15 1/4	39	13	33	270	123	1/2 NPT	1 1/4 NPT
NTV 285	20 1/4	52	7 1/4	19	19 3/4	50	4 1/4	16	11 1/4	29	13 1/2	34	14	36	38 1/4	97	15	38	17	43	26 3/4	68	18 3/4	48	13	33	299	136	3/4 NPT	2 NPT
NTV 399	25	64	5 1/4	13	19 3/4	50	4 1/4	11	14 3/4	37	18 1/2	47	19 1/4	49	38 1/4	97	16 1/2	42	21 3/4	55	31 1/2	80	18 3/4	48	13	33	364	165	3/4 NPT	2 NPT
NTV 500	30 1/4	77	5 1/4	13	19 3/4	50	4 1/4	11	15 1/4	38	20	51	20 1/2	52	38 1/4	97	19	48	26	66	37 3/4	96	18 3/4	48	13	33	419	190	1 NPT	2 NPT
NTV 600	29 3/4	76	5	13	19 1/2	50	4 1/4	11	15	38	20	51	3	8	38 1/4	97	19	48	26	66	37 3/4	96	18 3/4	48	8 1/4	21	426	193	1 NPT	2 NPT
NTV 750	35 1/2	90	6	15	19 1/2	50	5 1/4	13	19	48	40 1/2	103	3 1/4	8	38 1/4	97	19	48	30 3/4	78	51	130	18 3/4	48	8 1/4	21	481	218	1 1/2 NPT	2 NPT
NTV 850	39 3/4	101	6	15	19 1/2	50	5 1/4	13	19	48	44 1/4	114	3 1/2	9	38 1/4	97	19	48	35	89	55 1/4	130	18 3/4	48	8 1/4	21	503	228	1 1/2 NPT	2 NPT



View our entire product line at www.Laars.com



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