

# NOBLE<sup>®</sup>

FIRE TUBE

**HIGH EFFICIENCY  
CONDENSING BOILERS**

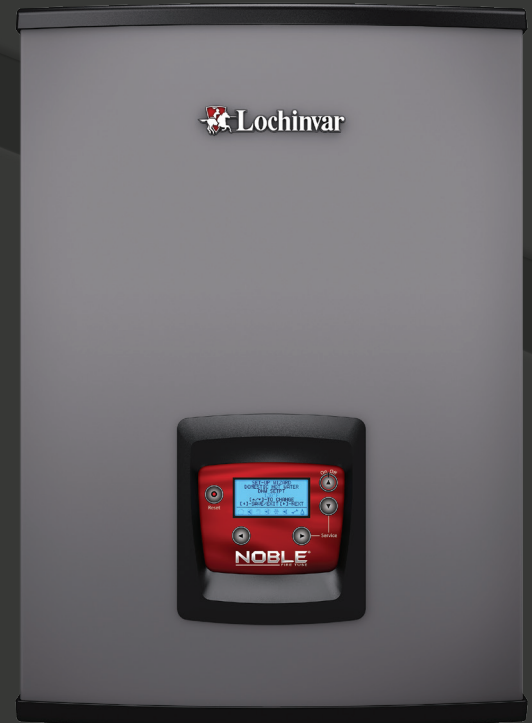
4 WALL MOUNT MODELS FROM  
80,000 TO 199,000 BTU/HR

95% AFUE

10:1 TURNDOWN RATIO

EASY INSTALLATION AND SERVICEABILITY

FEATURES  **SMART CONTROL**<sup>™</sup>  
OPERATING CONTROL



# STEP UP WITH NOBLE

**NOW FEATURING 2" VENTING ON ALL MODELS. EASILY REPLACE  
EXISTING EQUIPMENT AND REDUCE INSTALLATION COSTS**

DESIGNED ★ ENGINEERED ★ ASSEMBLED

# USA



# LOCHINVAR'S NOBLE® RESIDENTIAL BOILER

With the Noble fire-tube boiler, Lochinvar now offers one of the broadest lines of residential condensing boiler products in the industry. Designed, engineered and assembled in the USA, the Noble boiler delivers performance far beyond other value-priced residential boilers in its class. It touts several of the industry-leading features first pioneered by Lochinvar's KNIGHT boiler—the top-selling residential boiler since 2005 and still the leading premium solution in hydronic heating.



## VALUE PRICED AT THE TOP OF ITS CLASS

Step up from a traditional cast iron boiler to a high efficiency design with the Noble. It comes with many standard features, including a Universal Vent Connector—a multi-material connector that allows for PVC, CPVC, polypropylene and stainless-steel connections directly into the unit. It also offers a 10:1 turndown ratio, a built-in cascading sequencer for up to eight units, and Lochinvar's revered SMART CONTROL™ system, the gold standard for boiler control systems that includes an intuitive setup wizard and text-based display.

## COMPETITIVE COMPARISON

COMPETITION	DISPLAY	HEAT EXCHANGER	VENT CONNECTOR	MODULATION TURNDOWN	DESIGNED, ENGINEERED AND ASSEMBLED IN THE USA
<b>NOBLE®</b> <small>FIRE TUBE</small>	ENGLISH	FIRE TUBE HEAT EXCHANGER	UNIVERSAL VENT CONNECTOR	10:1	YES
<b>BRAND B</b>	CODES	FIRE TUBE HEAT EXCHANGER	VENT ADAPTERS NEEDED	UP TO 10:1	YES
<b>BRAND N</b>	CODES	FIRE TUBE HEAT EXCHANGER	VENT ADAPTERS NEEDED	UP TO 15:1	NO
<b>BRAND V</b>	CODES	WATER TUBE HEAT EXCHANGER	VENT ADAPTERS NEEDED	10:1	NO

# NOBLE<sup>®</sup>

FIRE TUBE



## NOBLE FEATURES

### 1 UNIVERSAL VENT CONNECTOR

Multi-material connector allows either PVC, CPVC, polypropylene or stainless steel connection directly to the appliance without adapters. Noble also has a built-in combustion analyzer port.

### 2 2 INCH VENT ON ALL MODELS UP TO 50 FEET AND 3 INCH VENT UP TO 100 FEET

Offers five venting options. It permits direct-vent air intake and exhaust runs up to 100 equivalent feet (3" vent) and up to 50ft. (2" vent) using either PVC, CPVC, polypropylene or AL29-4C stainless steel vent pipe.

### 3 ADVANCED NEGATIVE REGULATION TECHNOLOGY

Safely and reliably operates with supply gas pressure as low as 4 inches water column. Its negative regulation (neg/reg) technology eliminates mechanical dampers as it automatically adjusts fan speed to ensure the correct volume and mix of fuel and air throughout the firing range.

### 4 FIRE-TUBE HEAT EXCHANGER

Low pressure drop saves on pump operation costs and provides installation flexibility, while stainless steel fights off corrosion.

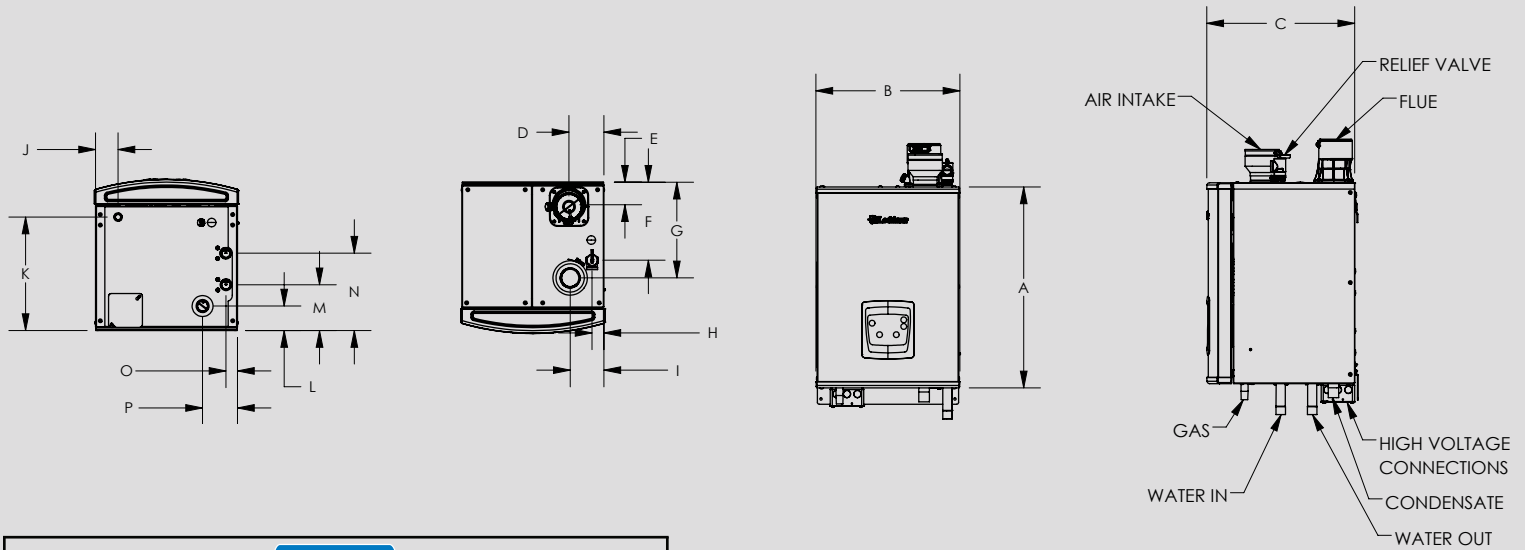


## ALWAYS LEADING THE CHARGE

The Noble residential boiler is the perfect hydronic heating solution for homeowners seeking the reliability, ease of installation, and engineering prowess of a Lochinvar high efficiency product. The Noble boiler is available in four sizes: the NKB080N with max input of 80,000 BTU/hr, the NKB110N with max input of 110,000 BTU/hr, the NKB150N with max input of 150,000 BTU/hr and the NKB199N with a max input of 199,000 BTU/hr.

The Noble boiler was designed for durability with 95% AFUE efficiency, a fire-tube stainless steel heat exchanger, and a 10/5 (heat exchanger/parts) warranty. The Noble boiler is also engineered with installation and serviceability in mind, including a simple layout and construction as well as technical support from Lochinvar professionals.

## NOBLE BOILER DIMENSIONS AND SPECIFICATIONS



### NOBLE BOILER



Model Number	Input MBH		AFUE%	Heating Capacity MBH	Net AHRI Rating MBH	A	B	C	D	E	F	G	H
	Max	Min											
NKB080N	80	8.3	95.0	74	64	24"	17-1/4"	17-1/4"	2-1/4"	5-1/8"	8-1/2"	5-1/8"	1-1/2"
NKB110N	110	11.0	95.0	102	89	24"	17-1/4"	18"	2-3/4"	2-7/8"	9"	5-1/2"	2-7/8"
NKB150N	150	15.0	95.0	139	121	24"	17-1/4"	18"	4-1/2"	2-3/4"	9-1/8"	11-3/4"	4-1/2"
NKB199N	199	19.9	95.0	185	161	24"	17-1/4"	18"	4-1/8"	2-3/4"	9-3/8"	11-1/2"	4"

Model Number	I	J	K	L	M	N	O	P	Gas Conn.	Water Conn.	Air Inlet	Vent Size	Shipping Wt. (lbs.)
NKB080N	1-1/2"	6-3/8"	12-5/8"	5-1/8"	4-5/8"	8-1/2"	1-1/2"	2-1/2"	1/2"	1"	2"	2"	120
NKB110N	2-7/8"	7-3/4"	13-1/8"	2-7/8"	5-1/2"	9"	2"	3"	1/2"	1"	3"	3"	126
NKB150N	4-1/2"	2-7/8"	13-1/8"	3"	5-3/8"	9-1/8"	1-7/8"	4-5/8"	1/2"	1"	3"	3"	132
NKB199N	4"	2-3/4"	13-1/2"	2-7/8"	5-1/2"	9-1/4"	1-3/8"	1-3/8"	1/2"	1"	3"	3"	140

Information subject to change without notice. Change "N" to "L" for LP gas models. The Net AHRI Water Ratings shown are based on a piping and pickup allowance of 1.15. Lochinvar should be consulted before selecting a boiler for installations having unusual piping and pickup requirements, such as intermittent system operation, extensive piping systems, etc. The ratings have been determined under the provisions governing forced draft burners.

## SMART CONTROL™ FUNCTIONS AND FEATURES

### SMART CONTROL™ FEATURES

- ▶ **SMART CONTROL Digital Operating Control**
  - LCD Display with words not codes
- ▶ **Outdoor Reset Control with Outdoor Air Sensor**
- ▶ **Domestic Hot Water Prioritization**
  - Separately Adjustable Space Heat/DHW Switching Times
- ▶ **Programmable System Efficiency Optimizers**
  - Space Heating Max Rate Limiting
  - Anti Cycling
  - Outdoor Air Reset Curve
- ▶ **Three Pump Control**
  - System Pump
  - Boiler Pump
  - DHW Pump
- ▶ **High-Voltage Junction Box**
  - 120 VAC / 60 Hertz / 1 Phase Power Supply
- ▶ **Low Voltage Terminal Strip**
  - Flow Switch Contacts
  - Tank Sensor Contacts
  - SH Thermostat Contacts
  - DHW Thermostat Contacts
  - Low-Water Cutoff Connection
  - System Sensor Contacts
  - Outdoor Air Sensor Contacts
  - Cascade Contacts

- ▶ **Time Clock for Data Logging**
  - Last 10 Lockouts
- ▶ **Low-Water Flow Safety Control & Indication**
- ▶ **Password Security**
- ▶ **Built-in Cascading Sequencer for up to 8 units**
  - Multiple Size Boiler Cascade

### STANDARD FEATURES

- ▶ **Modulating Burner with 10:1 Turndown**
  - Direct-Spark Ignition
  - Low-NOx Operation
- ▶ **ASME Stainless Steel Heat Exchanger**
- ▶ **Vertical & Horizontal Direct-Vent**
  - PVC, CPVC, Polypropylene or SS Venting
  - up to 100 feet
- ▶ **Condensate Trap**
- ▶ **California Code Compliant**
- ▶ **Other Features**
  - Automatic Reset High Limit
  - Adjustable High Limit w/Manual Reset
  - Wall-Mount Bracket
  - Zero Clearances to Combustible Materials
  - 10-Year HEX Warranty (See Warranty for Details)
  - 5-Year Parts Warranty

### OPTIONAL EQUIPMENT

- Low-Water Cutoff w/Manual Reset & Test
- Concentric Vent Kit
- Condensate Neutralization Kit
- Sidewall Vent Termination
- Floor Stand
- Wireless Outdoor Sensor
- Natural to LP Gas Conversion Kit



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