NOBLE® FIRE TUBE

HIGH EFFICIENCY CONDENSING COMBINATION BOILERS



COMFORT DONE RIGHT.

95% AFUE Efficiency

Lochinvar SMART CONTROL™

TEN YEAR HEAT EXCHANGER
10/5
FIVE YEAR PARTS WARRANTY

DESIGNED ★ ENGINEERED ★ ASSEMBLED
USA

Lochinvar®

NOBLE® FIRE TUBE

A GAME-CHANGER IN COMBI WATER HEATING

Lochinvar has long been the innovation leader in commercial boilers—and now it's bringing that engineering excellence to residential combi boilers. Lochinvar's legendary reliability and performance are now available for apartments and homes, where the combi boiler's next-generation fire tube design can provide hot water supply and space heating faster and more efficiently than ever before.

The NOBLE™ combi boiler provides a space-saving choice for builders and specifiers, lowering installation costs by reducing the mechanical equipment needed to provide rapid, reliable hot water supply and efficient space heating. It also gives plumbing contractors a money-saving alternative for single-family housing with 1 or 2 bathrooms.



Advanced Electronic Control

The backlit, user-friendly LCD display provides diagnostic information and system status in real words, not codes. The Set-Up Wizard display makes it simple to set system parameters in just minutes, including:

- Space Heat Set Point (Coldest Day)
- Domestic Hot Water Set Point
- Maximum Space Heat Set Point
- Space Heat Rate Limiting
- Auto Reset High Limit
- Outdoor Temperature/Warm Weather Shutdown

DELIVERS MORE HOT WATER

It's sized large enough to quickly meet domestic hot water (DHW) load. Provides DHW from 2.6 (110) to 4.8 gpm (199) at a 77°F temperature rise.

FASTER DHW RESPONSE TIME

With many combi boilers when you turn on a hot water faucet, you initially get hot water and then a brief burst of cold water before the hot water resumes. Thanks to its patent-pending control technology, this combi boiler eliminates this cold water "sandwich."

QUIET OPERATION

Operates so silently that you often have to look at the user-friendly interface to see if it's running.

EASIER TO INSTALL AND PROGRAM

With our Set-Up Wizard, you can program the boiler in less than two minutes. The user-friendly interface uses real words—not confusing codes—to guide the installer in setting up vital system parameters.

BETTER TECHNICAL SUPPORT AND TRAINING

Answers are accessible whether online or on-campus. LochinvarU.com is always on, 24/7 for technical support. And Lochinvar University is the industry's best-equipped training center.

10:1 TURNDOWN RATIO

Operates as low as 10% of the maximum firing rate, preventing on/off short cycling at the lowest DHW demands or small heating demands.

AIR HANDLER INTERLOCK

Prevents cool air circulation in Hydro-Air installations when the appliance is making DHW.

CONSUMER FINANCING AVAILABLE

Check with your local Sales Representative for additional information.

RAISING THE BAR IN COMBI BOILER DESIGN

Removing the front panel provides convenient access to the combustion system, control panel and key components. This simple-to-install-and-service combi boiler is making an impact on the industry.

The unique fire tube heat exchanger design is what enables NOBLE to produce the results users deserve and have come to expect from Lochinvar.

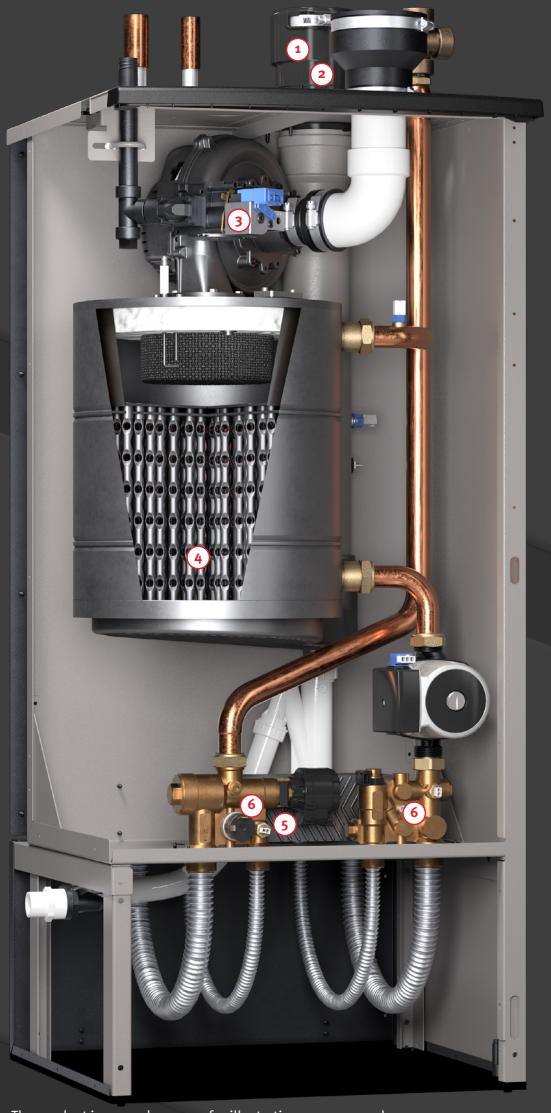


1 ADAPTER-FREE FLUE CONNECTION

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 DIRECT VENTING UP TO 100 FEET

Offers five venting options for tremendous installation flexibility. It permits direct-vent air intake and exhaust runs up to 100 equivalent feet using either PVC, CPVC, polypropylene or AL29-4C stainless steel vent pipe.



The product images shown are for illustration purposes only and may not be an exact representation of the product.

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 INNOVATIVE FIRE-TUBE HEAT EXCHANGER

The fire tube design can produce a higher heat transfer coefficient than traditional fire tubes.

5 BRAZED PLATE HEAT EXCHANGER

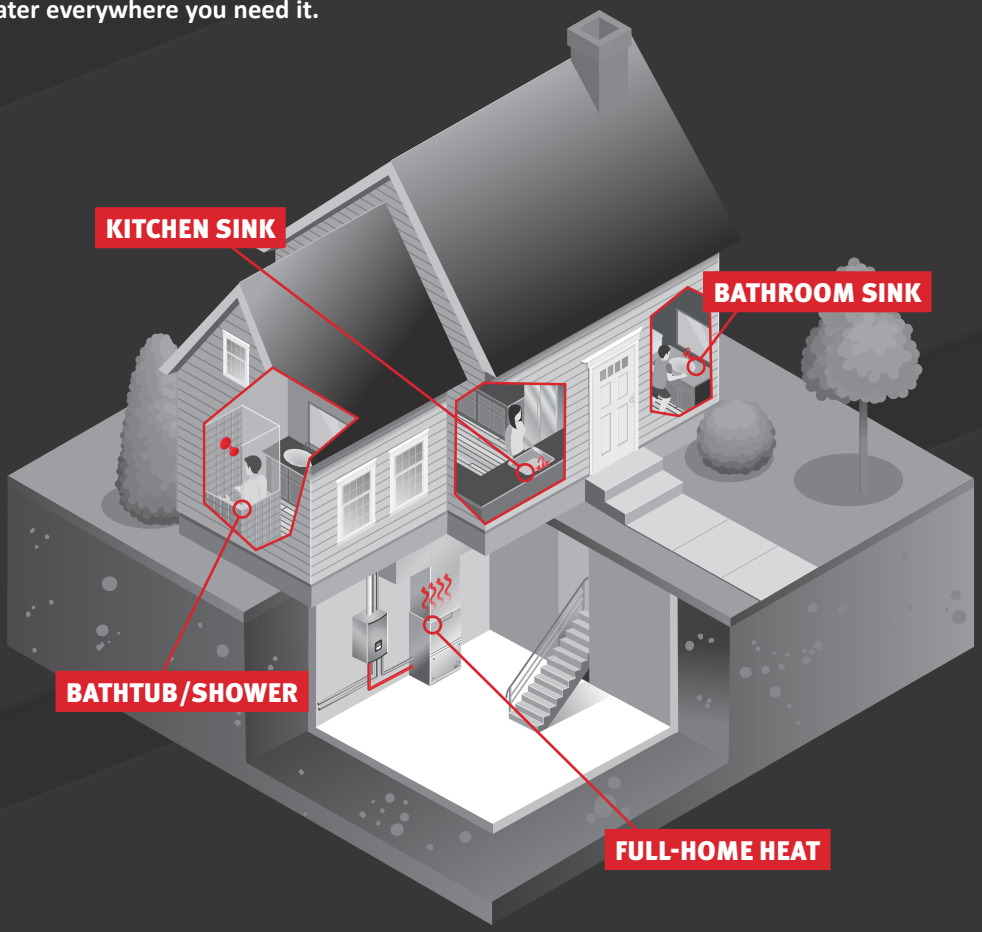
Stainless Steel Heat Exchanger that quickly transfers heat from the boiler system to the domestic water satisfying DHW load.

6 WATER CONNECTIONS FOR EASY INSTALLATION

Top connections on the floor model and NPT on the wall model make for simplified installation no matter the application

A TRUE ALL-IN-ONE SOLUTION

Heat and hot water everywhere you need it.



The Noble™ fire tube combi boiler is a money-saving solution that delivers both immediate hot water and comfortable home heating.

Lower Your Energy Bills

The ENERGY STAR® qualified Noble combi boiler delivers 95% efficiency, which means 95 cents out of every energy dollar gets converted into dependable hot water and comfortable space heating.

Save Space

At about the size of a suitcase the Noble combi boiler is small enough to fit in a closet or small room, so it doesn't dominate your living space.

Endless Hot Water

The Noble combi boiler delivers 4.8 gallons of hot water per minute*—the highest capacity in the combi market—so users can run multiple fixtures at the same time.

Quicker Hot Water

With the patented control technology of the Noble combi boiler, Noble can make immediate hot water for showers, cooking and more.

Rugged Reliability

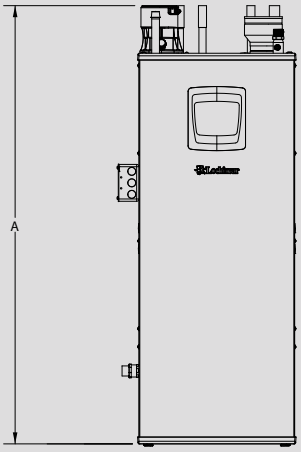
Noble's simple design is easy to service and its commercial grade construction ensures long lasting reliability.

Outstanding Warranty

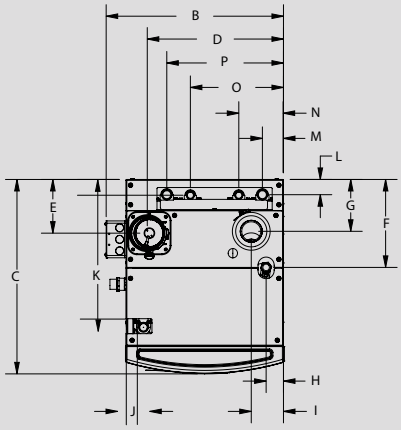
You get 10 worry-free years of protection on the boiler heat exchanger, plus five years of coverage on all other parts.

NOBLE COMBI BOILER FLOOR MOUNT DIMENSIONS AND SPECIFICATIONS

FRONT



TOP



NOBLE COMBI BOILER

AHRI CERTIFIED

DIMENSIONS AND SPECIFICATIONS

Model Number	Input (MBH) Max.	Min.	AFUE%	Heating Capacity MBH	Net AHRI Rating MBH	A	B	C	D	E	F	G
NCF110	110	11	95	102	89	47.5	19.25	21	14.75	6	9.5	5.75
NCF150	150	15	95	139	121	47.75	21	21.25	5.75	5.75	9.75	14.75
NCF199	199	19.9	95	185	161	47.75	21	21.25	5.75	6	10	14.5

DIMENSIONS AND SPECIFICATIONS

H	I	J	K	L	M	N	O	P	Gas Conn.	Boiler Water Conn.	DHW Water Conn.	Air Inlet	Vent Size	Ship Wt.
2	3.5	2	14.25	1.75	2.25	4.75	10	12.75	1/2	1	3/4	3	3	184
2.75	5.75	2	14.25	1.75	3.25	5.75	11	13.5	1/2	1	3/4	3	3	201
2.25	5.75	2	14.25	1.75	2.5	5.25	10.5	13	1/2	1	3/4	3	3	215

Notes: Indoor installation only. All information subject to change. Change "N" to "L" for LP gas models. *The Net AHRI Water Ratings shown are based on a piping and pickup allowance of

DHW Delivery (GPM)

Model	77° Temp. Rise	70° Temp. Rise
110	2.6	2.9
150	3.6	3.9
199	4.8	5.2

SMART CONTROL™ FEATURES

- **SMART CONTROL Digital Operating Control**
  - LCD Display with words not codes
- **Outdoor Reset Control with Outdoor Air Sensor**
- **Programmable System Efficiency Optimizers**
  - DHW Response Time
  - DHW Pre Heat
  - Outdoor Air Reset Curve
- **Two Pump Control**
  - System Pump
  - Boiler Pump
- **High-Voltage Junction Box**
  - 120 VAC / 60 Hertz / 1 Phase Power Supply
- **Low Voltage Terminal Strip**
  - Air Handler Interlock
  - Flow Switch 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**

STANDARD FEATURES

- **ENERGY STAR Most Efficient Recognition**
- **95% DOE AFUE Efficiency**
- **Modulating Burner with 10:1 Turndown**
  - Direct-Spark Ignition
  - Low-NOx Operation
- **ASME Stainless Steel Heat Exchanger**
  - 50 psi Working Pressure w/ASME Relief Valve
- **Vertical & Horizontal Direct-Vent**
  - PVC, CPVC, Polypropylene or SS Venting up to 100 feet
- **Condensate Trap**
- **Other Features**
  - Automatic Reset High Limit
  - Adjustable High Limit w/Manual Reset
  - Built-in Circulating Pump
  - Wall-Mount Bracket (NKC only)
  - Zero Clearances to Combustible Materials
  - 10-Year Warranty (See Warranty for Details)
  - 5-Year Parts Warranty

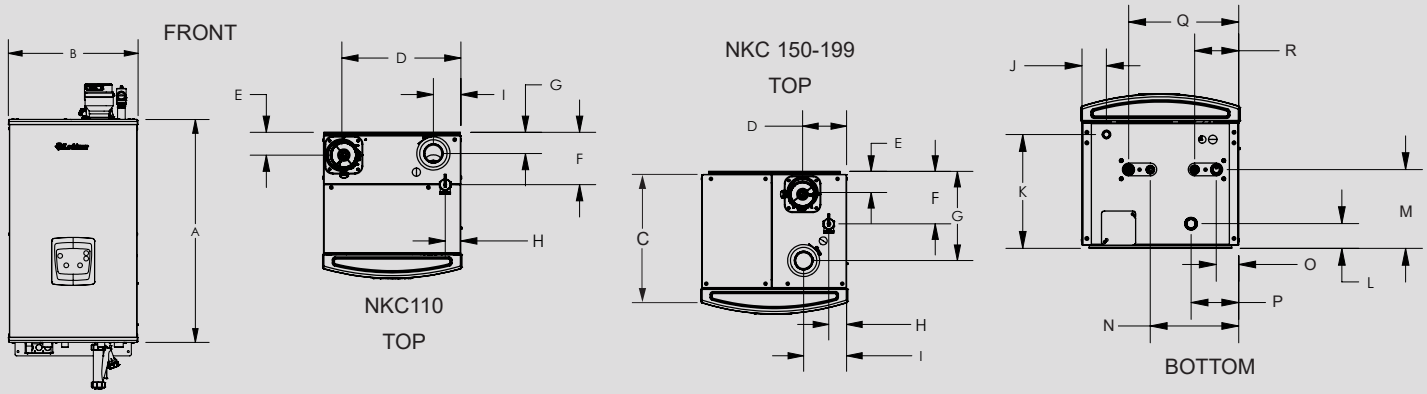
OPTIONAL EQUIPMENT

- Low-Water Cutoff w/Manual Reset & Test
- Concentric Vent Kit
- Condensate Neutralization Kit
- Sidewall Vent Termination
- Wireless Outdoor Sensor
- Nat to LP Gas Conversion Kit
- Isolation/Flush Valves
- DHW Piping Kit
- Primary Secondary Piping Kit

FIRING CODES

- M9 Standard Construction/California Code

NOBLE COMBI BOILER DIMENSIONS AND SPECIFICATIONS



NOBLE COMBI BOILER

AHRI CERTIFIED

DIMENSIONS AND SPECIFICATIONS

Model Number	Input (MBH) Max.	Min.	AFUE%	Heating Capacity MBH	Net AHRI Rating MBH	A	B	C	D	E	F	G
NKC110N	110	11	95.0	102	89	32-1/2"	17-1/4"	18"	14-3/4"	2-3/4"	6-1/2"	2-3/4"
NKC150N	150	15	95.0	139	121	32-1/2"	18-3/4"	18"	6-3/4"	2-3/4"	6-3/4"	11-3/4"
NKC199N	199	19.9	95.0	185	161	32-1/2"	18-3/4"	18"	5-1/2"	2-3/4"	6-3/4"	11-1/2"

DIMENSIONS AND SPECIFICATIONS

H	I	J	K	L	M	N	O	P	Q	R	Gas Conn.	Water Conn.	Air Inlet	Vent Size	Ship Wt.
2"	3-1/2"	8-3/4"	13-1/2"	2-3/4"	9"	10-1/2"	5"	14-1/2"	12-3/4"	5"	1/2"	1"	3"	3"	139
2-1/2"	6-1/4"	2-3/4"	13-1/2"	3"	9"	11-1/2"	5"	6-1/4"	13-3/4"	6"	1/2"	1"	3"	3"	142
2-1/4"	5-1/2"	2-3/4"	13-1/2"	2-3/4"	9-1/2"	10-1/2"	2-3/4"	5-1/2"	13"	5-1/4"	1/2"	1"	3"	3"	159

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*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.

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ENERGY STAR · LOW LEAD CONTENT · LOW NOx · CERTIFIED · DESIGN CERTIFIED · ASME H