

# Performance 80 Ultra-Low NOx Gas Furnace

The Comfortmaker® Performance 80 ultra-low NOx gas furnace delivers consumer comfort in a unit that meets or exceeds California's South Coast Air Quality Management District (SCAQMD) and San Joaquin Valley Air Pollution Control District (SJVAPCD) new requirements for dramatically reduced NOx emissions. Offering features and benefits representative of our Performance Series gas furnaces, this furnace releases less nitrogen oxides (NOx) than current models. NOx contributes to the formation of smog and acid rain and the deterioration of water quality. The Performance 80 ultra-low NOx gas furnace also provides an alternative for homeowners concerned about the high electricity costs associated with heat pumps in these areas.

#### **Product Features and Benefits**

#### Efficiency

- 80% AFUE
- 40k, 60k, 80k and 100k Btu/h capacities

#### Technology

- Single-stage gas valve
- Fixed-Speeds, Constant Torque (FCT) ECM blower motor
- Pilot-free, hot surface ignition
- Variable-speed inducer motor
- Stainless steel tubular heat exchanger
- Ultra-low NOx burner technology

#### Performance

- Blocked vent protection
- Dual-fuel compatible
- Ultra-low NOx emissions meet 14 nanograms/joule limit, which is 65% less than the current low NOx standard in California
- Meets California's South Coast Air Quality Management District (SCAQMD) and San Joaquin Valley Air Pollution Control District (SJVAPCD) ultra-low NOx requirements

#### **Durability/Reliability**

- 20-gauge galvanized steel with appliance-finish cabinet
- Baked-on urethane base coat and polyester top coat paint in Baltic Grey
- Stainless steel heat exchanger for extreme durability and longevity

#### Compatibility

• Compatible with current single-stage Performance and Mainline air conditioners and heat pumps



Model N80ESU

#### Performance 80 Ultra-Low NOx Gas Furnace

Model	Btu/h Input	<b>Ton</b> (Up to)	AFUE	<b>H</b> (In.)	<b>D</b> (In.)	<b>W</b> (In.)
N80ESU040	40k	3	80%	33.33	29	17.5
N80ESU060	60k	4	80%	33.33	29	17.5
N80ESU080	80k	5	80%	33.33	29	21
N80ESU100	100k	5	80%	33.33	29	21

#### Flexibility and Peace of Mind for Your Customers

#### **Design and Installation**

- Flexible installation: upflow, downflow or horizontal
- Versatile venting for tight-fit applications

#### Warranty Coverage

- Ten-year parts limited warranty upon timely registration\*
- Twenty-year heat exchanger limited warranty

#### System Flexibility

- Pair our ultra-low NOx furnace with a Comfortmaker<sup>®</sup> air conditioner for year-round comfort
- Or, pair it with a Comfortmaker<sup>®</sup> heat pump and compatible thermostat to create a dual-fuel system

\* Except in jurisdictions where warranty benefits cannot be conditioned upon registration. See warranty certificate for terms and exclusions.

#### **Built with Strength**

Each unit is 100% run tested, and we design our products to give you the best in quality, energy efficiency and reliability. It's our tradition to deliver products that exceed homeowner expectations. Here are some features and functions that your customers will enjoy:



### Single-Stage Gas Valve delivers consistent, reliable performance and use of natural gas.

2 Stainless Steel Tubular Heat Exchanger – contributes to lasting durability with corrosion-resistant design.

**3 Hot Surface Ignition** – is one of the most robust and durable ignition systems available. It eliminates the need for a pilot light, reducing gas usage and promoting worry-free operation.

- 4 Fixed-Speeds, Constant Torque (FCT) ECM Blower Motor – during installation, select the motor speed taps to customize airflow for your customer's home.
- 5 Pre-Mix Burner combines combustion air with gas at the right ratio for a cleaner burn. Stainless steel components and the Comfortmaker® pre-mix burner design allows for the airflow within the box to selfcool the outer box of the burner.

#### **Key Selling Features**

### **Ultra-Low NOx**

Designed to meet or exceed California's South Coast Air Quality Management District (SCAQMD) and San Joaquin Valley Air Pollution Control District (SJVAPCD) standards for ultra-low NOx 14 ng/J emissions. The Performance 80 ultra-low NOx gas furnace provides warm winter heating with 65% lower NOx emissions than models compliant with current low NOx standards.

### Dual-Fuel Compatible

Combine a Comfortmaker ultra-low NOx gas furnace, a Comfortmaker heat pump and a compatible thermostat to create a dual-fuel system. Its ability to automatically switch between electric and gas heating makes a dualfuel system a good defense against unpredictable utility costs.

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## Efficiency

AFUE (Annual Fuel Utilization Efficiency) ratings are like your car's MPG – the higher the number, the greater the potential savings. The Performance 80 ultra-low NOx gas furnace delivers 80% AFUE heating. Equipped with an ECM blower motor, this furnace also achieves enhanced electrical efficiency and provides a boost to the cooling system's SEER (Seasonal Energy Efficiency Ratio) over older models with PSC motors.

## Environment

NOx emissions contribute to ground-level ozone, respiratory problems, acid rain, water quality deterioration and global warming. The Performance 80 ultra-low NOx gas furnace releases less NOx than current low NOx models.

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