NuTone®



Want more efficient cooling? Look to a more efficient furnace.



iSEER®

Technical Overview for HVAC Contractors

ecoLogic® iQDrive

NuTone®

The efficiency homeowners want in a package you'll want to install.

NuTone's two-stage iSEER® furnaces have an extra benefit – they also boost cooling efficiency by up to one SEER point.



This extra energy savings is thanks to a highly efficient brushless DC motor. Of course, iSEER isn't the only cool thing about NuTone's furnace lineup. To see all the installation and comfort features, visit www.nutonehvac.com or contact your distributor.



iSEER makes servicing a snap.



iSEER offers you benefits beyond efficiency. The moisture-resistant controller is easy to access. Unlike other ECM motors, iSEER has its electronic controller separate from the motor to increase serviceability. Separate Digimotor analyzer accessory quickly helps the servicer determine if the motor is operable.

Here are some other important features of NuTone's iSEER furnaces:

- **Unmatched flexibility** – fixed-speed, two-stage furnaces featuring iSEER can be easily upgraded to variable-speed iSEER by changing a control board and wiring harnesses. There is no need to remove the blower housing.
- **Sound reduction** – the iSEER three-phase motor design produces a very low torque wave. Because the motor ramps up to speed, it minimizes the abrupt change in sound found when an induction (PSC) motor cycles on and off.
- **Self-adapting airflow** – on variable-speed models, NuTone's constant flow technology (patent pending) can be modified to deliver constant airflow into a broad range of external pressures in an air distribution system. And with iSEER, there is no need for external sensors.
- **Improved air distribution** – with the constant airflow provided by variable-speed iSEER, air distribution is improved throughout the static pressure range, which can help compensate for restrictive ducts.
- **Improved indoor air quality** – when run on low-speed, constant fan and in combination with high efficiency air filters, variable-speed iSEER models reduce hot and cold spots in the home.
- **Improved humidity control** – can be controlled by capable thermostat or controlled on blower board; reduces initial airflow to maximize humidity removal in cooling mode.





iSEER® is available in these reliable NuTone models.

These models come in upflow/ horizontal and downflow configurations.

80% AFUE two-stage, fixed-speed

80% AFUE two-stage, variable-speed



These models come in upflow/ horizontal configurations.

95.1% AFUE two-stage, fixed-speed

95.1% AFUE two-stage, variable-speed

ecoLogic®



These models come in dedicated upflow and downflow configurations.

96% AFUE two-stage, fixed-speed

96% AFUE two-stage, variable-speed

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Only the most energy-efficient, most environmentally responsible products receive our ecoLogic® seal of quality.

ENERGY STAR®. Awarded by the U.S. Department of Energy and the Environmental Protection Agency for helping to conserve energy, promote cleaner air and prevent global warming. To qualify, gas furnaces must have an AFUE of 95% or higher for northern states, at least 90% AFUE for southern states, have an approved energy efficient blower motor and cabinet air leakage of less than or equal to 2%.

ENERGY STAR PARTNER

The technology behind the SEER.

NuTone's iSEER is possible because of the ultra-high efficiency, microprocessor-controlled brushless DC motor utilizing proven ECM (Electronically Commutated Motor) technology in conjunction with advanced controls developed specifically for this application. When paired with a matched 13- or 14-SEER outdoor unit, NuTone iSEER two-stage furnaces can increase SEER up to one point. No additional kits are needed.

MOTOR COMPARISON CHART

	PSC	Broad Ocean ECM	GE ECM (Regal-Beloit)	Fixed-Speed iSEER®	Variable-Speed iSEER®
Technology	Induction Motor	Brushless DC	Brushless DC	Brushless DC	Brushless DC
Speeds	1 to 4	5	8 heating 12 cooling	16 heating 16 cooling	16 heating 16 cooling
Speed Range (RPM)	800-1100	600-1100	300-1200	350-1350	350-1350
Climate Profiles	No	No	Yes	Yes	Yes
Intelligent Controls	No	Constant torque	Constant airflow	Constant torque	Constant airflow
Peak Motor Efficiency	59%	80%	80%	80%	80%
iQ Drive® Ready	No	No	No	No	Yes
Summary	No features, base product	Limited features, high efficiency	Full features, maximum efficiency	Limited features, high efficiency	Full features, maximum efficiency

The NuTone product line features the above motors on various products.
NuTone two-stage gas furnaces and gas furnaces with ECM motors exclusively feature iSEER products.

iSEER® is just one cool part of the NuTone furnace lineup.

At just under 35 inches tall, this line of NuTone furnaces gets right down to business. They've been completely rethought, from the inside out, with features that make them incredibly easy to service even with the smaller size. Plus, an attractive appearance, sound reduction and a brand name homeowners trust make them just as easy to sell.

NuTone gas furnaces are available in upflow/horizontal and downflow configurations.

- **80% AFUE single-stage, PSC**
- **80% AFUE two-stage, fixed-speed (iSEER)**
- **80% AFUE two-stage, variable-speed (iSEER, iQ Drive® Ready)**
- **92.1% AFUE single-stage, fixed-speed**
- **95% AFUE single-stage, PSC**
- **95.1% AFUE two-stage, fixed-speed (iSEER)***
- **95.1% AFUE two-stage, variable-speed (iSEER, iQ Drive Ready, ecoLogic®)***
- **96% AFUE two-stage, fixed-speed (iSEER, ECM)****
- **96% AFUE two-stage, variable-speed (iSEER, iQ Drive Ready, ecoLogic)****

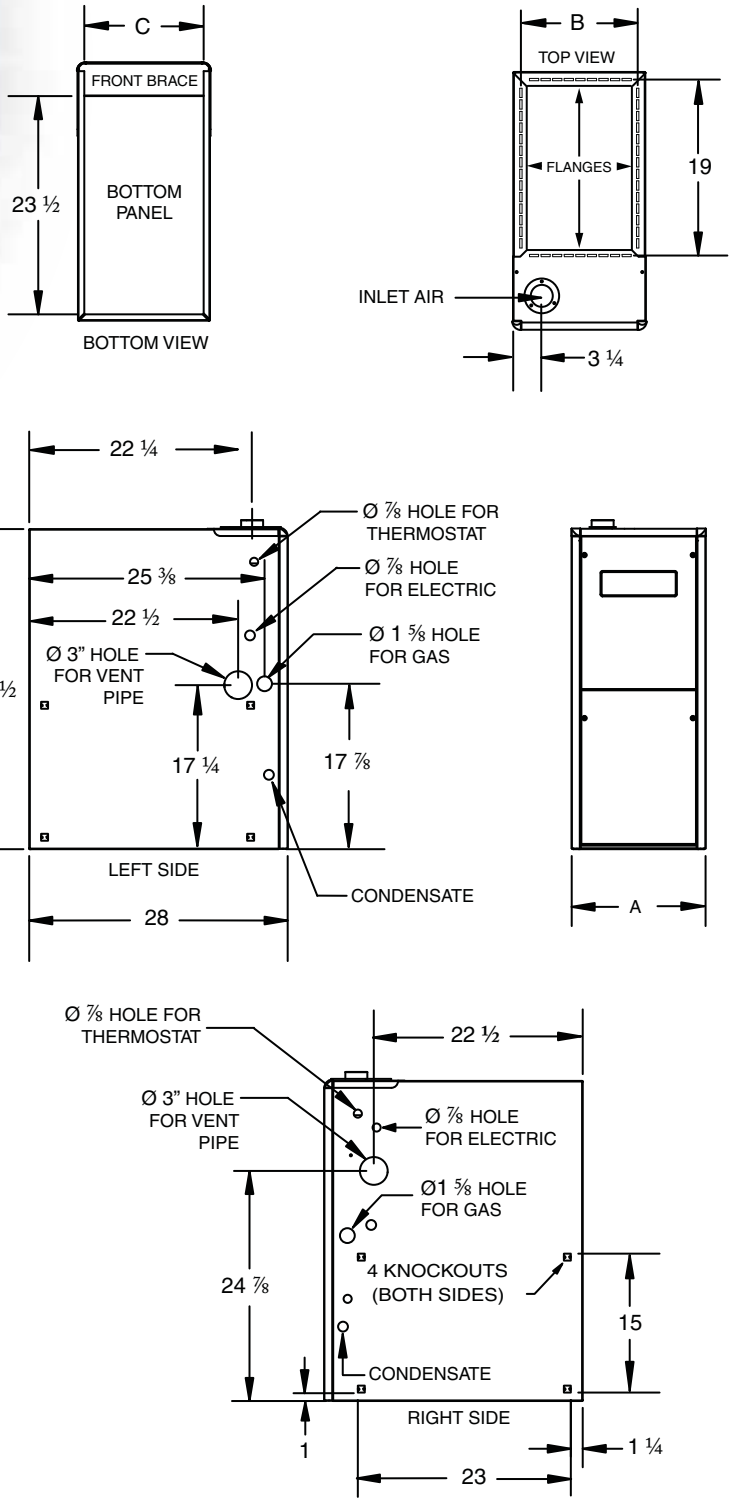
* Upflow/Horizontal only

** Dedicated Upflow and Downflow

Find out what NuTone furnaces can do for you. Visit www.nutonehvac.com or contact your distributor to learn more.

iQ Drive® READY

iQ Drive Ready furnaces are fully compatible with the iQ Drive air conditioner and heat pump systems. No additional kits are needed.



NuTone®

Heating and Cooling Products

www.nutonehvac.com

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