

FRIGIDAIRE

COMFORT THAT FITS YOUR LIFE

# iSEER<sup>®</sup> Technology

Technical Overview for Dealers.

**How furnaces get cool.**



# Efficient motor. Efficient design. Efficient way to make the sale.

Frigidaire's two-stage iSEER® furnaces have an extra benefit – they also boost cooling efficiency by up to 1 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 Frigidaire's furnace lineup. To see all the new installation and comfort features, visit [www.frigidaire.net](http://www.frigidaire.net) or contact your distributor.




iSEER is available in these reliable Frigidaire models.

Models can be vented horizontally or vertically and come in upflow and downflow configurations.

80% AFUE two-stage, fixed-speed  
80% AFUE two-stage, variable-speed



95.1% AFUE two-stage, fixed-speed  
95.1% AFUE two-stage, variable-speed 

97+% AFUE iQ Drive® fully modulating  
upflow gas furnace 



iQ Drive®



Two-stage, variable-speed 95% AFUE and 97+% AFUE iQ Drive modulating qualify for the ecoLogic green seal. See [www.ecoLogicHVAC.com](http://www.ecoLogicHVAC.com) to learn more.

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# The technology behind the SEER.

Frigidaire'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, Frigidaire iSEER two-stage furnaces can increase SEER up to one point. No additional kits are needed.

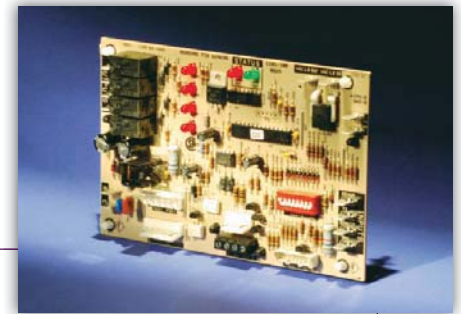
## MOTOR COMPARISON CHART

|                       | PSC                       | GE X13<br>(Regal-Beloit)          | GE ECM<br>(Regal-Beloit)          | Fixed Speed<br>iSEER®             | Variable Speed<br>iSEER®          |
|-----------------------|---------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Technology            | Induction Motor           | Brushless DC                      | Brushless DC                      | Brushless DC                      | Brushless DC                      |
| Speeds                | 1 to 4                    | 5                                 | 8 heating<br>12 cooling           | 16 heating<br>16 cooling          | 8 heating<br>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 Frigidaire product line features the above motors on various products. Frigidaire two-stage and modulating gas furnaces exclusively feature iSEER products.

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.



- Unmatched flexibility - fixed-speed, two-stage furnaces featuring iSEER can be easily upgraded to variable-speed iSEER by changing a control board. 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, Frigidaire'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 helps 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.

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

At just under 35 inches tall, the Frigidaire furnace line 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.

Frigidaire furnaces are available in the following models. Most can be vented horizontally or vertically and come in upflow and downflow configurations.

- 80% AFUE single-stage, fixed-speed
- 80% AFUE two-stage, fixed-speed (iSEER)
- 80% AFUE two-stage, variable-speed (iSEER, iQ Drive® Ready)
- 92.1% AFUE single-stage, fixed-speed
- 95.1% AFUE two-stage, fixed-speed (iSEER)
- 95.1% AFUE two-stage, variable-speed (iSEER, iQ Drive Ready, ecoLogic)
- 97+% AFUE iQ Drive fully modulating (iSEER, iQ Drive Ready, ecoLogic)

Find out what Frigidaire furnaces can do for you. Visit [www.frigidaire.net](http://www.frigidaire.net) or contact your distributor to learn more.



iQ Drive Ready furnaces are fully compatible with the 23-SEER iQ Drive air conditioner and 20-SEER iQ Drive heat pump systems. No additional kits are needed.

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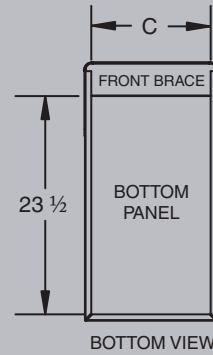


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BOTTOM VIEW

