

## **SEER & AHRI Certification Information for Duke Energy Smart Saver™ Customers**

Duke Energy's Smart Saver™ Program requires the installation of a heat pump (HP) or air conditioner (AC) of 14.00 SEER or greater (as certified by AHRI) and an ECM fan motor. The following frequently asked questions answer the common questions received from our customers.

**What is AHRI?** – The Air-Conditioning, Heating, and Refrigeration Institute (AHRI) is the trade association representing manufacturers of air conditioning, heating and commercial refrigeration equipment. AHRI standards establish rating criteria and procedures for measuring and certifying product performance. A certification by AHRI demonstrates that a manufacturer's performance claim has been independently measured and verified.

**What is SEER?** – The Seasonal Energy Efficiency Ratio is a measure of the efficiency of your heat pump or air conditioner when it cools your home. The higher the number, the more efficient your air conditioning will be, which will lower your energy costs.

**What is a 14 SEER rating?** – Heat pumps and air conditioners manufactured today will range from a rating of 13 SEER to over 18 SEER. A 14 SEER system is an upgrade from the minimum of 13 SEER. You must purchase a system that is 14.00 SEER or greater to qualify for the Smart Saver™ program. The system must also include an Electronically Commutated Fan Motor (ECM).

**How does a system achieve a rating of 14 SEER?** – The efficiency of your new heating and/or cooling system depends on the components that make up the system. These components must be a "matched system" as defined by the manufacturer in order to achieve the rated efficiency.

**What are the critical parts to a "matched system?"** – A "matched system" contains three main components:

- 1) Outdoor unit – for most systems, this component is the compressor unit that sits outside your home.
  - 2) Indoor unit – this component is the furnace cabinet and fan that is in the home, garage, basement or sometimes the attic or crawl space (the areas that most often house your air filter).
  - 3) Indoor coil – this component is a very important part within the indoor furnace cabinet.
- Other features or components that increase heat pump and air conditioner system efficiency are the type of fan motor (ECM), a thermal expansion valve or a fan delay relay switch.

**Who decides if the system is "matched?"** – The manufacturer chooses and then tests hundreds of combinations of all the components they make. These combinations must be tested under conditions set forth by AHRI. Once a certain combination passes the tests and is "rated," this combination is given an ARI certification or reference number.

**What specifications are most important for the Smart Saver™ program?**

- 1) Confirm your new system components are an exact match per the manufacturer, and these combined components are certified by AHRI and have an ARI reference number.
- 2) Ask for the ARI SEER. It must be 14.00 SEER rating or greater to qualify for Smart Saver™.
- 3) Your new system must also include an ECM fan motor on the indoor furnace or air handler.

**Where do I find AHRI product information?** - <http://www.ahridirectory.org>

**What if my new system has no ARI certification number?** – This situation is not uncommon. For many reasons, the combination of components chosen by your heating and cooling contractor may not be rated by AHRI. If your system is installed properly, it should still heat and cool your home as the contractor specified. The contractor and/or the manufacturer may even give you a SEER rating. However, the Smart Saver™ program requires a known SEER as certified by AHRI. Duke Energy uses these known ratings to document our customers' energy efficiency benefits and to justify the program incentives. If a new system is not certified by AHRI or the contractor cannot provide the ARI reference number, the new system will not qualify for the Smart Saver™ program.