

## **SEER & AHRI Certification Information for Smart \$aver™ Heating Contractors**

Duke Energy's Smart \$aver™ 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 heating dealers.

**How does a system achieve 14 SEER?** – The efficiency of all heating and/or cooling systems 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. A matched system includes the exact combination of 1) Outdoor unit, 2) Indoor unit, 3) Indoor coil, and other features such as fan type (ECM), thermal expansion valve and/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 number.

**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 AHRI specifications are most important for the Smart \$aver™ program?**

- 1) Confirm the 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) The ARI SEER rating must be 14.00 or greater. Note: If a unit is rated 14 SEER in one combination, this does **not** mean it will be the same efficiency rating when combined with other components.
- 3) The indoor air handler fan must include a high efficiency fan motor on the indoor air handler. The qualifying motor must be a brushless DC motor that is electronically controlled. This motor is generally referred to as an Electronically Commutated Fan Motor or simply an ECM fan.

### **What if there is no ARI certification number for the components I need to install?**

This situation is not uncommon. For many reasons, the combination of components chosen as the best fit for your customer may not be rated by AHRI. If the system is installed properly, we trust it will heat and cool your customer's home as specified. The manufacturer may have even provided an SEER rating. However, the Smart \$aver™ program requires a known SEER rating as certified by AHRI. Duke Energy uses these known ratings to document our customer's energy efficiency benefits and to justify the program incentives. If a new system is not certified by AHRI or if your manufacturer cannot provide the ARI reference number, the new system will not qualify for Smart \$aver™.

**Where do I find AHRI information?** – See <http://www.ahridirectory.org> . If you cannot access this site, ask your product supplier for a list of ARI reference numbers for all the systems you sell.

**How do I use the AHRI on-line directory?** – When you search for a specific HVAC model, using fewer search criteria may be better. Do not try to fill in too many fields, and don't type in too much of the model number. If the model number string you are entering does not match EXACTLY with the string the manufacturer entered in the database, you will get zero results.

**Is the ARI certificate required with each application?** – Yes. Print the certificate from the Web site ([www.ahridirectory.org](http://www.ahridirectory.org)). This detail enables us to compare the system you installed with the exact components certified by AHRI. It also helps us read some hand written entries that are not legible.