

Cold Weather Heat Pumps

New high efficiency *inverter* model heat pumps from Amana and GREE blow the previous designs in heat pump technology out of the ballpark. They provide superior heating performance in single digit temperatures, unlike conventional heat pumps where performance drops significantly in temperatures below 35°F and expensive heat strips are required just to keep up.

Imagine staying warm down to temperatures as low as five degrees with a new inverter heat pump by GREE. The GREE Flexx maintains full capacity down to 5°F WITHOUT USING HEAT STRIPS! As a matter of fact, heat strips are optional in North Alabama with the New GREE technology. These heat pumps are a **viable alternative to a propane or natural gas furnace at substantial operating cost savings.**

Not only do the GREE Flexx heat pumps eliminate the need for heat strips, they are priced significantly lower than other equivalent SEER2 rated equipment.

Single and two stage conventional heat pumps lose heating capacity as the temperature outside drops. At 20°F they are only putting out half the heating capacity they are capable of at 47°F and need heat strips to keep up, all while blowing cold air at the vent.

Not only can the GREE Flexx heat way beyond expectations, it also runs circles around the conventional heat pump in Cooling mode. Most AC/heat pump units drop off capacity significantly when temperatures exceed 90°F. The GREE Flexx maintains full cooling capacity up to 115°F. This capacity becomes more and more relevant as we see hotter summer days occurring more often every year.

Ambient Outdoor Temperature Operation Range:

GREE Flexx-

Heating: -22°F to 75°F

100% capacity down to -5°F

78% capacity down to -22°F

Cooling: 5°F to 129°F

100% capacity up to 115°F

78% capacity up to 130°F

Features:

- **Vapor Injection**
 - The two stage, variable speed compressor with vapor injection provides high performance in extreme temperatures by redirecting gasses to boost pressures when needed.
- **Quiet**
 - The GREE Flexx produces noise as low as 55 dba at the outdoor unit and projects sound out and away from the home with side discharge.
- **Compatibility**
 - The GREE Flexx systems are compatible with most 24V thermostats.
- **Heavy Duty Construction**
 - Gree utilizes thicker gauge steel paneling to build their units to be more robust for harsh environments.
- **Strong Defrost Mode**
 - Provides longer runtimes during cold weather conditions to allow for the condenser unit to defrost completely in the presence of frost, ice, and snow.
- **Corrosion Resistance**
 - Indoor Blue Fin Coil - 500 hours salt spray tested
 - Outdoor Gold Fin Coil - 1500 hours salt spray tested
- **Side Discharge**
 - Allows more flexibility for mounting under decks or in tight areas
- **Warranty**
 - 10 year warranty on parts and compressor when installed as a complete system. One year labor.

Another great heat pump product to consider is the Amana “S” Series inverter system. This is a digitally integrated heat pump and a full variable control inverter system. The thermostat, the air handler and the outside condensing unit continuously talk to each other and change speeds to obtain the optimum run configuration to maximize both comfort and savings. Be mindful that inverter systems rarely run at full capacity for long. The Amana is like having an air conditioning system with **an accelerator pedal** instead of an on/off switch like conventional single or two stage systems.

Ambient Outdoor Temperature Operation Range:

Amana S Series-

Heating: -10°F to 70°F

76.5% capacity at 10°F

50% capacity down to -10°F

Cooling: 0°F to 115°F

89% capacity up to 115°F

100% capacity up to 95°F

Features:

- **Adaptive Inverter Technology**
 - The True Inverter variable speed system ramps up or down to hold steady set temperatures and humidity levels while maintaining thermal load requirements and saving energy in low load situations.

- **Ultra Quiet**
 - Side discharge projects sound out and away from the home. Much quieter than a traditional cube style unit which can produce 75 dba of noise on average, the Amana S Series Heat Pumps produce 56 dba in normal operation mode. They can be further set to Quiet Mode which lowers the noise levels down to 45 dba at the cost of decreased performance.

- **Swing Compressor**
 - The Swing Compressor is a new rotary style made with fewer parts and points of failure than a traditional Scroll Compressor and is covered by Amana’s Limited Lifetime Warranty.

- **Amana Smart Thermostat**
 - This sleek and stylish touch screen programmable communicating thermostat offers wifi integration, mobile control, geofencing, system diagnostic monitoring, and the option for remote system diagnostic monitoring with an annual subscription.

- **Self Monitoring**
 - The Amana S Series is fully loaded with sensors that detect temperature and pressures so that it can monitor, adapt, and change in response to dynamic operating conditions and user input.
- **Boost Mode**
 - Maintains performance for the hottest and coldest days of the year.
- **Intelligent Defrost Mode**
 - Provides longer runtimes in heating mode during cold weather conditions to prevent the buildup of frost, ice, and snow.
- **Corrosion Resistance**
 - Blue Fin Coils - 1000 hours salt spray tested corrosion resistance.
- **Amana Limited Lifetime Warranty**
 - In the event of a compressor failure, Amana will replace the condenser unit (the entire outside system assembly, not a part) at no cost. All remaining parts are covered under a 10 Year Parts Limited Warranty. Labor is warranted for the first year.

By combining the form factor and quiet operation of an outdoor mini-split unit, the increased thermal conductivity of a full sized indoor coil, the high efficiency of inverter technology, and the precision of mechanical metering devices, these new heat pumps from Amana and GREE represent the current state of the art of HVAC technology.