



Expanded offering provides for more efficient solutions

Inverter compressors versus fixed or digital scroll

The new inverter offering for RoofPak systems is at the forefront of HVAC compressor technology. New or replacement RoofPak units with inverter compressors drastically increase energy efficiencies and lower operating costs when compared to rooftop units using standard efficiency fixed or digital scroll compressors.

Inverter advantages over fixed speed compressors:

- Lower inrush current
- Increased compressor life
- Reduced space temperature fluctuations
- Superior dehumidification control
- Prevents dry coil/condensate re-evaporation and decreases space latent load

Inverter advantages over digital scroll compressors:

- Modulates motor speed to deliver setpoint (no fully loaded/unloaded operation)
- Motor does not run at full speed during unloaded operation
- Significant noise reduction

The inverter compressor difference

A Daikin variable speed inverter compressor with permanent magnet motor enhances energy efficiency at full-load as well as at part-load operation. In addition, the variable speed inverter compressor modulates, delivering only the required energy to satisfy space conditions. This provides building owners with superior temperature and humidity control as well as exceptional energy savings.

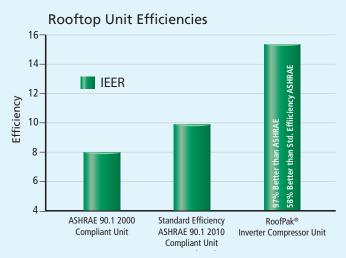
(Efficient Temp. Control) Temp. Setpoint

- Superior efficiencyReduced refrigerant
- pressure fluctuations
- Precise temp./humidity control
- Quieter operation
- Minimized cycling/voltage peaks
- Soft starts increase compressor life

The REAL measurement criteria for Rooftop efficiencies

Rooftop air conditioning efficiency is measured by two rating metrics – IEER (integrated energy efficiency ratio) for part-load operation where equipment operates at 98% of the time, and EER (energy efficiency rating) for full-load operation where equipment operates at 2% of the time. Since most of the operating hours are under part load conditions, it makes sense that customers should be most concerned about part-load efficiencies that occur during 98% of the equipment's operating time.

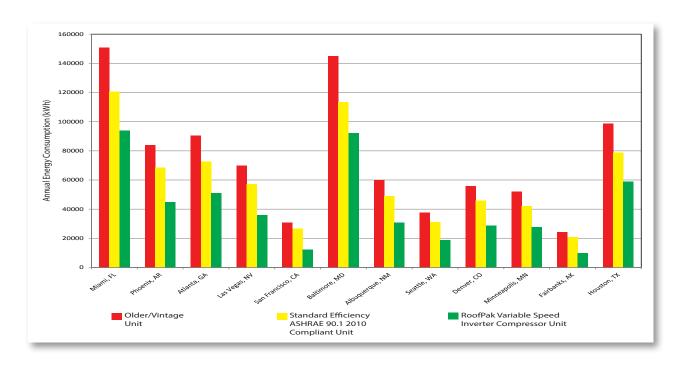
RoofPak units w/inverter compressors provide 58% better IEER than current standard efficiency compressors and ASHRAE's 90.1 (2010) standard, and 97% better than the ASHRAE 90.1 (2000) standard.



RoofPak is an ideal rooftop solution for applications like schools, large office buildings, health care facilities, hotels, casinos, and data centers. RoofPak units are also configurable for 100% dedicated outdoor air, VAV, single-zone VAV, or CAV systems.

RoofPak Units with Inverter Compressors Increase Energy Savings

To illustrate total energy savings, consider the following criteria detailing a Daikin 50-ton RoofPak VAV unit with variable speed inverter compressor technology versus a standard efficiency ASHRAE 90.1 (2010) compliant cooling only unit, as well as an older/vintage unit. To learn more about how RoofPak with advanced inverter technology can add to your energy savings and lower operating costs, contact www.DaikinApplied.com.





To learn more about RoofPak with advanced inverter compressor technology, contact your local Daikin Applied sales office or visit www. DaikinApplied.com to find an office near you.