ClimaStat

When installed on unitary HVAC systems, ClimaStat™ improves energy efficiency 15 to 30 percent and doubles dehumidification capability. It cost-effectively reduces energy bills and improves comfort.

ClimaStat™ is based on a new paradigm for optimization of major elements of unitary HVAC equipment, including refrigerant management, compressor, cooling coil, and air flow. It utilizes readily available, easily serviceable components for new units or retrofit of existing equipment.

How It Works

ClimaStat advances unitary system technology by responding to varying latent (moisture) loads in addition to conventional sensible (temperature) load control. Our patented variable-SHR system adjusts system operation throughout the day. The technology revises the traditional refrigeration cycle to release equipment design constraints that hamper conventional equipment performance. Liquid refrigerant flows in the cooling coil from entry to exit to maximize heat transfer. All operating parameters, including fan speeds, coil temperatures, and refrigerant level are varied to best meet cooling demands in any climate.

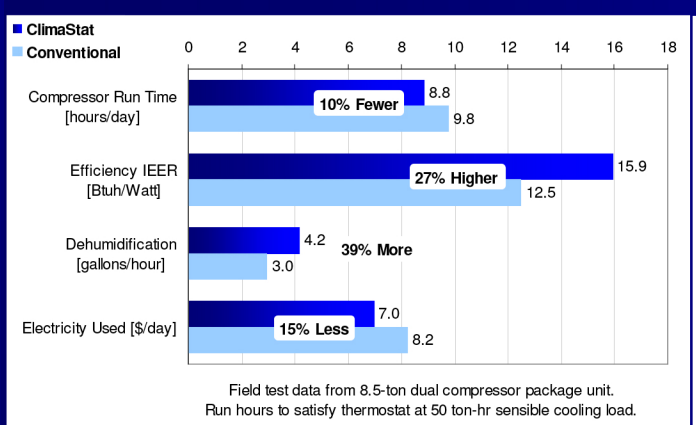
Competitive Advantage

ClimaStat can cost-effectively reduce energy costs vs. competing technologies that reduce energy use but cost too much to be economically justifiable for the commercial unitary market, which requires fast return on investment. Conventional air conditioners are a fixed single-point design compromise that can function under a range of climate conditions, but are optimal for none.

46 percent of buyers indicate that lower energy costs is their most important factor in choosing new air conditioning equipment.

41 percent indicate that better humidity control is the characteristic in their systems most in need of improvement.

ClimaStat meets both needs without compromise.



Field test data from 8.5-ton dual compressor package unit.
Run hours to satisfy thermostat at 50 ton-hr sensible cooling load.