



The Articmaster™

Air-Conditioning Energy Efficiency Retrofit *Reduce your Air-Conditioning Electricity Bill by 20%*

Reduce cooling electric bills by about 20%.

The Articmaster product improves the efficiency of air conditioners by about 20%. The payback period is typically less than three years, and in many applications, the payback is less than twenty-four months.

Reduce Peak Demand Charges.

Utilities charge a special fee based on the maximum electrical demand in a billing period. This *peak demand* correlates directly to hot summer days. Reducing electricity for air conditioning is the most effective way to reduce peak demand. Reducing peak demand helps utilities avoid running high-cost, fossil-fuel, temporary power plants on hot summer days.

Advanced Refrigerant Optimization

The Articmaster is unique among Air-Conditioning Energy Efficiency devices in that it directly *optimizes the performance of the refrigerant*.

Applicable to the widest array of systems

The Articmaster works on nearly all Refrigeration, Air-conditioning, and Heat Pump systems. Models are available for residential 3 Ton units up to commercial 100 Ton units and greater. The Articmaster works with all refrigerants, including ammonia.*



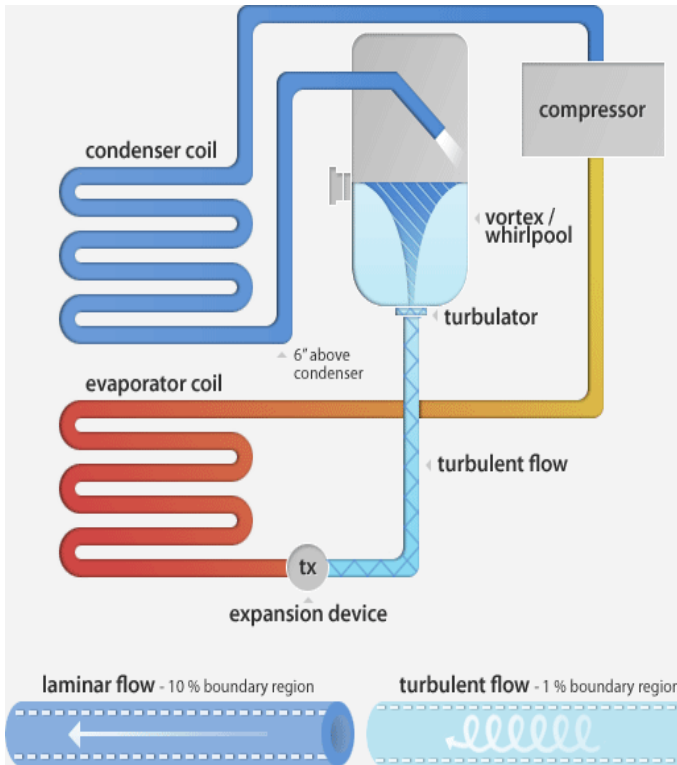
Articmaster is eligible for utility rebates

In a controlled study for a computer server room in a Santa Clara, California business, Articmaster achieved a documented **33.4% reduction** in kilowatt-hours per day, and the project qualified for a Customer Directed Rebate from Silicon Valley Power.

**Special models are required for ammonia systems*



How Does the Articmaster Work?



The Articmaster is a condenser control.

The chief function of the Articmaster is to increase the capacity of the condenser. This increased capacity enhances the condenser's ability to reject heat, which in turn reduces the compressor's load and lowers amperage draw and energy consumption.

The Articmaster varies and controls the amount of refrigerant held in the condenser for heat rejection. The hotter the ambient temperature, the less refrigerant is held back in the condenser coils (and the more refrigerant resides in the Articmaster). The colder it gets, the more refrigerant is held back in the condenser coils. Refrigerants work most efficiently within a narrow band of pressure and temperature. The Articmaster allows the refrigerant level in the condenser to adjust and remain closer to the most efficient band of temperature and pressure. The Articmaster is a simple device that employs complex principles (including fluid mechanics, thermodynamics, heat transfer, and diurnal variation) to optimize system efficiency and reduce energy consumption.

Longer Compressor Life

- Turbulent flow of refrigerant prevents oil pooling and circulates lubricant back to the compressor where it is needed

Colder Air Output

- Reduced discharge and suction pressures
- Increased condensate yields drier, colder air

Over 4,000 units installed world-wide

- Satisfied customers include NASA, GTE, Switch & Data, State of California Archives, Domino's Pizza, Jack-in-the-Box, and more

High Return on Investment

- No moving parts, No electrical components
- Over 30 year life expectancy
- Typical payback 12 to 24 months

Made in U.S.A.

- Designed and manufactured in the U.S.
- UL Listed
- ASHRAE Certification

Energy Efficiency is a Smart Investment

- Realize the benefits of renewable energy at a fraction of the cost.