



MADISON ENERGY
EFFICIENCY MADE SIMPLE

Technology and Service Portfolio 2025





At Madison Energy, we are dedicated to revolutionizing energy efficiency with our cutting-edge technologies. Our innovative solutions are designed to target specific inefficiencies in your facilities, enhancing operational efficiency and reducing energy costs. From advanced HVAC systems to energy-efficient lighting and comprehensive energy management, our products are both effective and affordable. With a streamlined process that includes consultative approaches, proof of concept, and turnkey delivery, we ensure a hassle-free experience for our clients.

Effective Energy
Efficiency at Your
Fingertips

Number of
Systems Installed
80,000+

Total Dollars Saved
\$1 Billion+

Channel Partners
Worldwide
527

Madison's Historical
Performance
15+ Years

Projects Successfully
Completed
1,500+



Join the ranks of satisfied clients who have seen significant savings and a rapid return on investment with Madison Energy. Embrace the future of energy efficiency and sustainability with us.



CONTROL TEMPERATURE EFFECTIVELY & EFFICIENTLY

EnerG² retrofits existing refrigeration thermostats to provide more accurate temperature control by simulating the temperature of food and beverages instead of ambient air. It utilizes a specialized gel compound with thermal properties similar to those of the products being refrigerated. **EnerG²** requires no maintenance, has a lifetime warranty and is guaranteed to perform.

- 15 - 25% Energy Reduction
- 40 - 60% Compressor Cycle Reduction
- Increased Temperature Stability
- Decreased Maintenance
- 12-18-Month ROI



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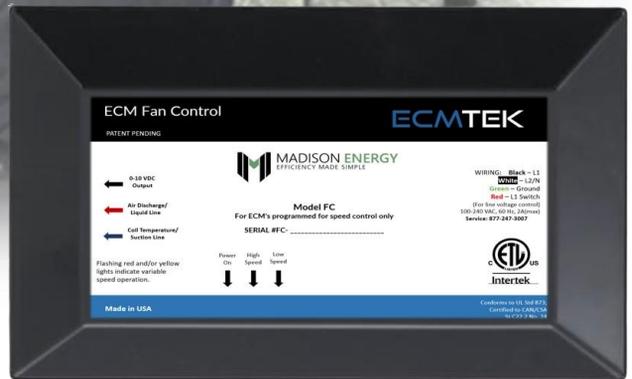
877-247-3007

www.madisonenergygroup.com

MAXIMIZING EFFICIENCY WITH SMART COOLING

ECMTEK offers a dual solution combining EC (electrically commutated) evaporator fan motors and controllers, enabling variable speed operation with reduced wattage consumption. Traditional fan motors convert all electrical energy into heat, which is counterproductive in refrigerated environments. **ECMTEK** addresses this by operating fans at lower speeds and significantly reducing heat output when cooling is not required, thereby substantially lowering overall energy consumption.

- 20 – 45% Energy Reduction
- 10 – 20% Compressor Cycle Reduction
- Increased Temperature Stability
- Decreased Maintenance
- 18-24-Month ROI



CLEAR DOORS, EFFICIENT STORES

Anti-Sweat Heater Controls significantly reduce energy consumption by up to 80% using sensor-based technology to modulate heaters, ensuring they operate only when necessary. Our system independently controls the three heating components (door, frame, mullion) to maximize efficiency. The built-in Programmed Maintenance Cycle (PMC) technology guarantees that display cases remain free of sweat, frost, and ice.

-  25 - 50% Energy Reduction
-  Keeps Door Free of Condensation
-  Built-in Programmed Maintenance Cycle
-  12-Month ROI



CONTROL TEMPERATURE EFFECTIVELY & EFFICIENTLY

The IntelliHVAC is an advanced control system that integrates proprietary fan and compressor timing controls. It is equipped with dual microprocessors that manage communication across the entire unit while continuously monitors system components to optimize timing sequences for enhanced operational efficiency. These sequences include a variable blower fan run-time mechanism that aligns fan operation with compressor run-time, capturing additional latent energy from the coil. Additionally, the compressor timing function minimizes unnecessary run-time when the coil is fully energized, further improving efficiency.

-  10 - 30% Energy Reduction
-  10 - 15% Compressor Cycle Reduction
-  Increased Temperature Stability
-  Decreased Maintenance
-  18-Month ROI



ADAPTIVE SPEED, MAXIMUM EFFICIENCY

IntelliACC is a fan motor control system that converts single-speed, single-phase motors to adaptive variable speed. Leveraging Cube's Law, which states that a 20% decrease in speed results in a 50% reduction in energy consumption, IntelliACC optimizes efficiency. It soft starts the fan motor, reducing inrush current by 60% to lower demand, then gradually increases fan speed to full capacity, and decreases speed as the system approaches the setpoint. With machine learning capabilities, IntelliACC continuously adapts to climate conditions and system settings, ensuring optimal performance.

-  15 - 25% Energy Reduction
-  40 - 60% Compressor Cycle Reduction
-  Increased Temperature Stability
-  Decreased Maintenance
-  12-Month ROI



PRECISION CONTROL FOR COMPACT SPACES

IntelliPTAC was developed as an extension of IntelliHVAC, specifically for PTAC systems and the smaller spaces they serve. Utilizing the same advanced technology, IntelliPTAC features a variable timing mechanism for the post-purge fan, adjusting run-time based on the compressor's overall run-time. Additionally, it cycles the compressor after extended periods to conserve energy further.

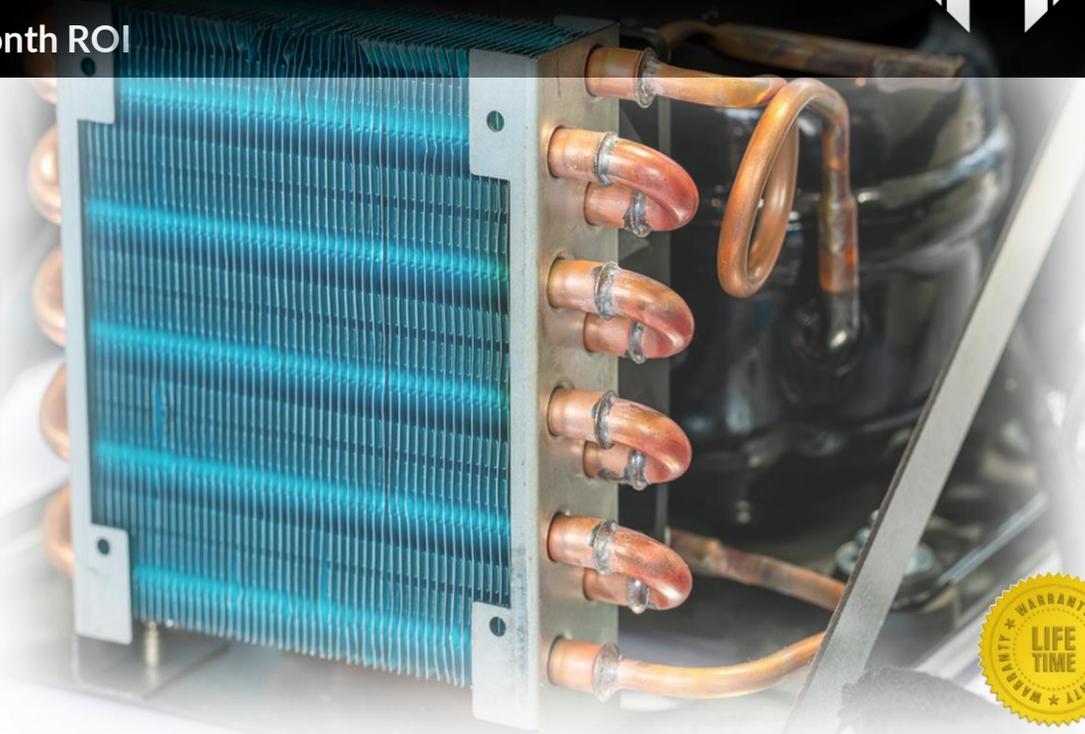
-  10 - 15% Energy Reduction
-  10% Compressor Cycle Reduction
-  Increased Temperature Stability
-  Decreased Maintenance
-  24-Month ROI



SUPERIOR PERFORMANCE; LASTING PROTECTION

SynCat360 is an advanced synthetic catalyst that enhances HVAC compressor performance by breaking down oil particles and restoring viscosity. It features two catalysts: one removes oil fouling to keep heat exchange surfaces clean, and the other accelerates refrigerant heat absorption for faster setpoint achievement and energy savings. Additionally, nanoparticles fill cracks and bond to refrigerant lines and coils, extending equipment life by preventing leaks and degradation.

-  10 – 30% Energy Reduction
-  20 – 30% Compressor Cycle Reduction
-  Eliminates Oil Fouling
-  Extends Life of Equipment
-  12-18-Month ROI



ENGINEERED CLEAN POWER; SYSTEMS PROTECTED

The **M1-ECP** is an advanced electrical filter designed to effectively mitigate power issues. It filters out harmful power harmonics and reduces EMF radiation, ensuring clean and stable electrical current in your home. This not only enhances the efficiency of your electrical system but also protects your appliances from potential damage caused by power surges and fluctuations. The **M1-ECP** is easy to install and integrates seamlessly with your existing electrical setup, providing immediate benefits without the need for extensive modifications.

-  Advanced Electrical Filter
-  Harmonic Filtering
-  EMF Radiation Reduction
-  Increased Overall Efficiency by 8%
-  Appliance and Equipment Protection



PURE AIR, HEALTHIER WORKSPACES

The Madison Aire UVC LED Light Bar installs in HVAC systems near the coil, ensuring your work family breathes the safest air possible. This powerful 18-inch light bar can effectively sterilize a 5-ton HVAC system, equipped with a high-quality driver that delivers 26,000 watts of continuous 265nm UVC light. Testing shows that within two hours of activation, the Madison Aire virtually eliminates harmful bacteria, viruses, and other pathogens, as well as some odors, from your workspace.

-  Eliminates 99.9% of Bacteria, Viruses, etc.
-  Lab Tested
-  CE & RoHS Certified
-  Solid design, 2mm thick aluminum PCB mounted on ribbed metal extrusion for increased heat dissipation and longer life.



BRIGHT SOLUTIONS, EXPERTLY DESIGNED

Our advanced LED solutions provide superior illumination while significantly reducing energy consumption and maintenance costs. Whether you're implementing small to large-scale projects, our team offers detailed design and expert analysis to ensure optimal performance. Designed for longevity and durability, commercial LEDs offer a brighter, more consistent light output, enhancing the ambiance and safety of your workspace. With a variety of customizable options, our LEDs can be tailored to meet the specific needs of any commercial environment.

-  Expert Design
-  Superior Illumination
-  Maximum Efficiency
-  Incentive and Rebate Capture
-  Rapid ROI



THE FOREFRONT OF RENEWABLE ENERGY

Madison Solar develops solar projects, including rooftop solar, ground mounts, and microgrid solutions, across the U.S. Our team comprises some of the industry's top engineers, with decades of experience in alternative energy projects. What sets our solar projects apart is our "reduce before we produce" approach. We focus on maximizing the reduction of your energy consumption before designing the solar solution, allowing us to achieve higher offset percentages than virtually anyone else.

- 🔧 **Expert Team:** Our engineers are industry leaders with decades of experience in alternative energy projects.
- 🔧 **Energy Reduction Focus:** We prioritize reducing your energy consumption before designing your solar solution, ensuring maximum efficiency.
- 🔧 **High Offset Percentages:** Our unique approach allows us to achieve higher energy offset percentages than most competitors.
- 🔧 **Innovative Technology:** Utilizing the latest advancements in solar technology to deliver cutting-edge solutions.
- 🔧 **End-to-End Service:** Providing comprehensive support from initial consultation through installation and maintenance.



HARVESTING THE SUN, DELIVERING THE FUTURE

Discover the future of renewable energy with our innovative Community Solar Gardens. Designed specifically for clients seeking sustainable and cost-effective power solutions, our solar gardens offer a unique alternative to traditional rooftop solar installations. By participating in a community solar project, you can enjoy the benefits of clean, renewable energy without the need for individual rooftop panels. This approach not only reduces your energy costs but also avoids the complexities and maintenance associated with rooftop systems. Harness the power of the sun and make a positive impact on both your bottom line and the planet.

-  Remote Renewable Power Production
-  Dedicated Source of Power
-  Significant Expense Reduction
-  Zero Cost / Zero Maintenance
-  Immediate ROI



EFFICIENCY REDEFINED, SUSTAINABILITY ACHIEVED

Unlock the potential of energy efficiency with our Combined Heat and Power (CHP) projects. CHP systems simultaneously generate electricity and useful thermal energy from a single fuel source, achieving efficiency levels of over 75% compared to the 50% efficiency of conventional methods. This increased efficiency translates to significant cost savings on energy bills and a rapid return on investment. CHP also enhances energy reliability and resilience, making it an ideal solution for critical infrastructure and facilities with high energy demands. Invest in CHP and experience the dual benefits of economic savings and environmental stewardship.

-  Increased Efficiency over 75%
-  Rapid Return on Investment
-  Enhanced Reliability
-  Avoided Transmission Losses
-  Environmental Benefits

