

KVAR Energy Controller

We are proud to announce that O'Connor's Utility Management Company is now offering the KVAR Energy Controller (KVAR EC™). This system is CSA certified to reduce hydro costs:

- 6 – 10% residential
- 6 – 17% commercial
- 6 – 25% industrial

KVAR Energy Savings has a patent on the method and apparatus to bring the power factor to unity. This process allows for our trained technicians to observe in real time the impact of KVAR EC® technology on the load and the entire system. During this time the apparatus allows for our technician to fine tune the amount of capacitance and get maximum energy savings. This entire procedure can only be performed by KVAR Trained technicians with KVAR patented equipment.

BENEFITS OF POWER FACTOR CORRECTION

There are numerous benefits to be gained through power factor correction. These benefits range from **reduced demand charges** on your power system to **increased load carrying capabilities** in your existing circuits and overall reduced power system losses. And the benefits of power factor correction aren't just limited to the balance sheet; there are also huge environmental benefits associated with power factor correction, which means your company is **reducing its carbon footprint** and helping the environment.

1. REDUCED DEMAND CHARGES

Most electric utility companies charge for maximum metered demand based on either the highest registered demand in kilowatts (KW meter), or a percentage of the highest registered demand in KVA (KVA meter), whichever is greater. If the power factor is low, the percentage of the measured KVA will be significantly greater than the KW demand. Improving the power factor through power factor correction will therefore lower the demand charge, helping to reduce your electricity bill.

2. INCREASED LOAD CARRYING CAPABILITIES IN EXISTING CIRCUITS

Loads drawing reactive power also demand reactive current. Installing power factor correction capacitors at the end of existing circuits near the inductive loads reduces the current carried by each circuit. The reduction in current flow resulting from improved power factor may allow the circuit to carry new loads, saving the cost of upgrading the distribution network when extra capacity is required for additional machinery or equipment, saving your company thousands of dollars in unnecessary upgrade costs. In addition, the reduced current flow reduces resistive losses in the circuit.

3. IMPROVED VOLTAGE

A lower power factor causes a higher current flow for a given load. As the line current increases, the voltage drop in the conductor increases, which may result in a lower voltage at the equipment. With an improved power factor, the voltage drop in the conductor is reduced, improving the voltage at the equipment.

4. REDUCED POWER SYSTEM LOSSES

Although the financial return from conductor loss reduction alone is seldom sufficient to justify the installation of capacitors, it is sometimes an attractive additional benefit; especially in older plants with long feeders or in field pumping operations. System conductor losses are proportional to the current squared and, since the current is reduced in direct proportion to the power factor improvement, the losses are inversely proportional to the square of the power factor.

5. REDUCED CARBON FOOTPRINT

By reducing your power system's demand charge through power factor correction, your company is putting less strain on the electricity grid, therefore reducing its carbon footprint. Over time, this lowered demand on the electricity grid can account for hundreds of tons of reduced carbon production, all thanks to the improvement of your power system's electrical efficiency via power factor correction.

Commercial



Commercial applications for our KVAR Energy Controllers (KVAR ECs™) range from malls, hotels, resorts, casinos, supermarkets, bowling alleys, schools, universities, warehouses, large buildings, convenience stores, eateries, restaurants, cold storages, hardware stores, department stores, as well as other major commercial properties.

Residential



Expected savings 6% - 10%

Make your home more efficient by using the original KVAR Energy Controller (KVAR EC™).

Our company is where it all started. We own the patent that allows to determine in just a few minutes the type of energy controller that you need to save energy day in and day out

Industrial



Our corporation offers KVAR Power Factor Optimization™ Solutions for your industry. Our motor by motor approach or plant-wide deployments start saving energy and demand as soon as they are in service. Our KVAR Energy Controller (KVAR EC™) solutions are tailored to the application at hand.

BEVERAGE DISTRIBUTION

In Ocala, FL, KVAR Energy Controllers are continuing to save a major Budweiser Distributor upwards of 7% of their total energy consumption as well as helping to keep them well below their threshold required to avoid excess demand charges on their electric utility bills.

PUBLIC WORKS

In DeForest, WI, the KVAR Energy Controller has increased the efficiency of the Village's Well Pump by 11.3%, and will provide a return on the village's initial investment in 23 months. That's savings of around \$1,000 per year, on one pump, or \$25,000 over the life of the KVAR EC®!

OKLAHOMA TOWER

By improving power factor on large motors Oklahoma Tower, Grubb & Ellis | Levy Beffort managers were able to save over 13% of the electric energy used to cool and re-circulate air in the 31 story building.

POWER FACTOR PENALTIES

Power factor charges, also known as Reactive Power Penalties, can result in a 5-15% or greater increase the the demand part of your electric bill. In most cases, we can eliminate these charges, and provide a rapid, guaranteed return on your investment.

CUSTOM SOLUTIONS

KVAR manufactures over 700 Unique KVAR EC Combination, as well as Commercial-Off-The-Shelf KVAR ECs. The ability to customize KVAR ECs results in the best possible level of savings for individual motor loads.

KVAR TRAINING

KVAR's rigorous hands on distributor training course is delivered by KVAR Certified Electrical Engineers with over 30 years of experience in the electric power industry.

AMERICAN MADE

KVAR Energy Savings' corporate offices, on-site training facility, and manufacturing plant is proudly situated in Daytona Beach, Florida. KVAR's Absolute Quality policy is to continually strive for excellence in order to deliver the most accessible, cost effective and eco-friendly solutions for today's homes and business' worldwide.