

## UtiliGuard-ECP (Efficiency Control Processor)

The ECP unit fine-tunes the electrical system in your home or facility. This fine tuning reduces heat generation, reduces amperage and results in reduced consumption of electricity. It causes less waste of electrical energy while increasing the life of the inductive equipment in your home or office. It protects against power surges and increases the capacity to the electrical panel by making it run cooler. **All this means extra \$\$\$ in your pocket.**

How The UtiliGuard-ECP unit works:

The UtiliGuard-ECP unit increases the individual load's power factor or efficiency, by the amount of reactive power (KVAR) that the load draws from the utility company. UtiliGuard-ECP units store the reactive power (KVAR) needed for the creation of the EMF within the inductive load. As the motor operates, this reactive power is "pulled" and "pushed" to and from the UtiliGuard-ECP unit by the motor. As you can see, the required amount of Reactive Power that was normally supplied by the Utility Company is now supplied at each load from the UtiliGuard-ECP unit, which in turn reduces your overall energy requirement needed from the utility company.

The technology applied by the UtiliGuard-ECP unit reclaims, stores and supplies power to inductive motors and loads. This process provides the reactive power (kVAR) required to establish the electromagnetic field (EMF) around the inductive windings of a motor, while reclaiming and recycling the power during the normal working phase. The power reclaimed and recycled by the UtiliGuard-ECP unit would normally be pushed back through the power distribution lines.

As a result of providing reactive power (kVAR) locally, **motors run cooler and more efficient.** This equates to "\$\$\$" savings and longer equipment life.

The **UtiliGuard ECP** unit is designed to provide significant savings on electric bills increase the life of electrical motors through heat reduction and provide surge protection for the entire home or facility. Using methods employed at large industrial complexes, **now reduced to a compact unit**, to reclaim and recycle electrical energy. The application has benefits to both the **user** and the **supplier** of electrical power.

**Commercial units** are individually sized for maximum efficiency. Your savings on commercial units could be up to 20% or more because of the larger motors being optimized.

**How do you achieve savings?**

When motors in your home start, they ask the utilities transformer for power (voltage and amperage) to run. This demand for power runs through the house wiring, the panel box, the meter and down the lines to the transformer. This demand for power heats up and strains the motors and wiring in the home, this heat ( $I^2R$  losses) is watts. The UtiliGuard-ECP Unit once installed stores and releases to the motors what they need to function properly, thus reducing heat on the wires and the motors. Lowering this heat will reduce your electric bill, reduce the chance of fires and increase the life of the motors.