

The **KVAR PFC 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.



The **KVAR PFC Unit** fine-tunes the electrical system in your home or office. 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 dollars in your pocket. All KVAR PFC products are backed with a comprehensive full five year factory warranty.

### How the KVAR PFC Unit works

The **KVAR PFC Unit** increases power factor, by reducing the amount of reactive power (kVAR) that the load draws from the utility company. **KVAR PFC 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 **KVAR PFC Unit** by the motor. The amount of reactive power purchased from the utility company by power factor optimization has been greatly reduced, or eliminated.

#### Clients are benefited:

- through lower power bills.
- by less heat generated in motors and appliances, which will increase the productive life cycle of these products.
- with power surge protection for the whole home or facility.

**Power Suppliers** benefit by being able to supply power to more customers without the generation or acquisition of additional power, and reduces capital expenditures by leveraging the existing infrastructure.

The technology applied by the **KVAR PFC 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 KVAR PFC 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 **substantial** savings and longer equipment life.

#### Benefits:

- Reduces electricity required by existing inductive loads
- Enhances capacity of existing electrical system
- Eliminates danger of harmful power surges on appliances and sensitive electronic equipment
- Reduces harmful effects caused by electrical noise in the electrical system

#### Features:

- Electrical Noise Reduction
- Power Factor Optimization
- Voltage Regulation