

USES[®] SHUNT EFFICIENCY SYSTEM

The patented **USES[®] Shunt Efficiency System** provides power conditioning and protection from potentially damaging power line surges and spikes. Additionally, the **USES[®] Shunt Efficiency System** can reduce the electrical energy costs associated with the operation of inductive loads — motor driven equipment and appliances and magnetically ballasted lighting systems.

USES[®] technology capabilities include:

- Protection from surges and spikes, including secondary lightning effects;
- Power conditioning, dynamic power factor correction, RF noise reduction, and reduction of the total current content including harmonic current; and
- Reduction of the electrical power drawn from the utility to operate inductive loads such as air conditioning and ventilation systems, pumps, compressors, & magnetically ballasted fluorescent & high pressure sodium lighting systems.

The benefits derived from USES[®] units include:

- Improved equipment reliability, including computer and electronic systems;
- Reduced life cycle maintenance, repair, and replacement costs; and
- An average return on investment is from 6 to 36 months.

The **USES**[®] approach is superior to other methods for improving electrical system performance, reliability, and efficiency from both an operational and cost standpoint. The technology's patent and listing by UL and CSA attest to the validity of **USES**[®] capabilities. The devices are maintenance-free, have a three year limited warranty, and have a projected life of 10 years. Models range from 120/240 volt residential units up to three-phrase 600 volt industrial units.

USES[®] works, it works very well, and it saves energy and money. The unique application of the wrap-around magnetic chokes enables wasted magnetic energy to be converted to useful energy, which is then supplied to the electrical system. This reduces the electrical power that the utility must provide resulting in lower electric bills. The units consistently provide real power (KW) savings when installed in systems with inductive loads. These savings exceed the KW reduction achieved merely from the reduction of I²R losses. Specific savings are contingent on the electrical load configuration, equipment operating hours, and KWH cost. Additional savings can be realized from the reduction of demand charges and the reduction or elimination of power factor penalties. Units generally pay for themselves through utility cost savings in approximately 2 years.