

- KW Savings
- KWH Savings
- Reduction of Amperage
- Voltage Regulation
- Power Factor Improvement

The following was observed at Abilbi Price, Inc. Sheridan Park Technology Center, Mississauga, Ontario:

The loads on the complex were constant due to all variable loads were rendered inoperable during testing.

All test loads remained fairly constant due to the steady temperature outside. The air handling load ran constant during test procedures.

6). On the line evaluation, KWII consumption was reduced.

4). True KW was reduced from 96.1 to 92.3. This was a 3.8 KW reduction in consumption.

3). The Power Factor was increased from .86 to .99.

2). Amperage was reduced from 108.6 AMPS to 89.3 AMPS, a 19.3 Amperage reduction.

1). Voltage had a 2.3 Volt increase from 600.8 (Average) Volts to 603.1 Volts.

With the USFS CME-3D 600V model energized into the Ventilation System Electrical System, at Abilbi Price, Inc. Sheridan Park Technology Center, Mississauga, Ontario, the following results were verified:

CONCLUSION:

9/13 1199910-70 ■ ■

Re: Test Results of the USFS Product

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LEGENDARY MEGA CORP.
ITAC

USES® TECHNOLOGY

The Effective Conservation of Electrical Energy

Parallel, wrap-around magnetic chokes in the USES® unit are oriented to couple magnetic forces generated across each electrical phase by the current. On the basis of the magnetic fields sensed, a signal is generated that enhances the AC waveform and matches it to the requirements of the inductive load. The peak portion of the current wave on the line side is decreased, requiring less output by the transformer, and therefore lower power bills. By-products of this process are superior surge and spike suppression. The net effect is smooth, efficient electrical power, and lower repair and maintenance costs.

USES® Pays For Itself:

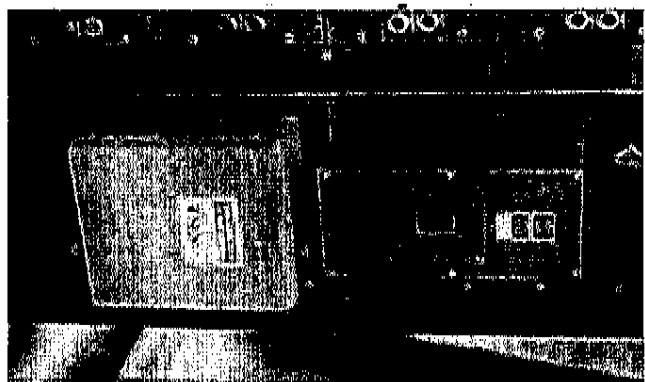
Units operating at their rated capacity on inductive loads, operating 24 hours per day, will pay back the purchase and installation costs between two and three years.

USES® Converts Electrical Waste to Useful Energy by:

- Matching voltage and current phases in inductive systems,
- Reducing peak portion of current wave connected to inductive loads,
- Reducing I²R losses,
- Balancing loads across phases.

Where are USES® Devices Installed?

Typically, the USES® units are installed at electrical panels supplying inductive loads and at disconnect links for large motors. Units are also installed at any panel for which surge protection is paramount.



USES® IS PATENTED

U.S. Patent issued on April 14, 1992. Further patent protection in 23 foreign countries.

U.S. PATENT NUMBER 5,105,327

EXCERPT (Page 6, Col. 1, Par. 7):

"It would be advantageous to provide apparatus for conditioning AC power to eliminate transients and surges and reduce the energy consumed by inductive and capacitive loads. It would be further advantageous if such apparatus improved the power factor at one or more loads coupled to an AC power distribution system. The present invention provides such apparatus."

ADDITIONAL INFORMATION/ VERIFICATION OF USES® POWER CONDITIONERS

- USES® is U.L.® (Underwriters Laboratories) listed (File Number E132743). U.L.® The American Mark of Safety.
- USES® has been approved and listed by CSA (Canadian Standards Association) (Category LR99910).
- USES® has been accepted to EPA Green Light Manufacturer Ally Program.
- USES® has been approved and listed by the City of New York Board of Electrical Control.
- USES® has been evaluated by U.S. Navy at three different shore sites. (Results on file).
- USES® has been approved by the State of Connecticut for use in all State agencies.



LISTED 1449

TRANSIENT VOLTAGE SURGE SUPPRESSOR



LISTED 1449



LISTED 1449



LISTED 1449

INDUSTRIAL CONTROL EQUIPMENT



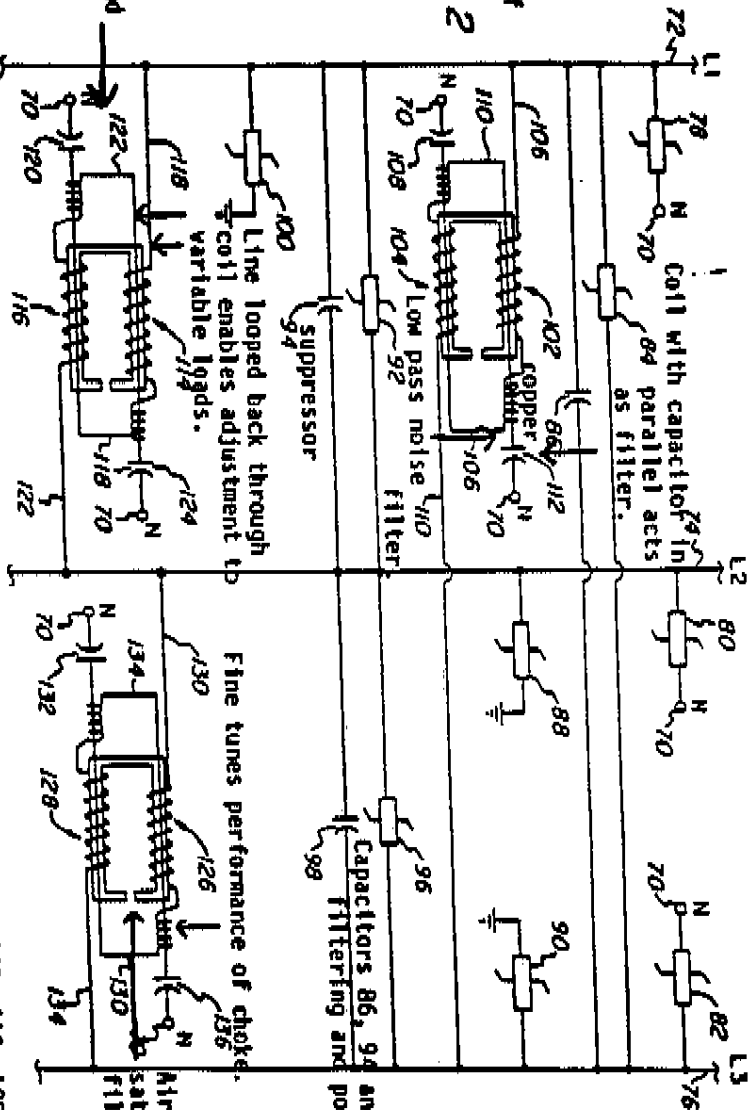
92A0590

NEMA 1

MOV's 78, 80 and 82 wired from phase to neutral;
 MOV's 84, 92 and 96 wired from phase to phase;
 MOV's 88, 90 and 100 wired from phase to ground.
 MOV's sized for appropriate clamping voltage.

Surge and spike protection from chokes, capacitors and MOV's. Chokes and capacitors in combination provide extremely fast response to transients.

Two matched sets of chokes per leg. FIG. 2

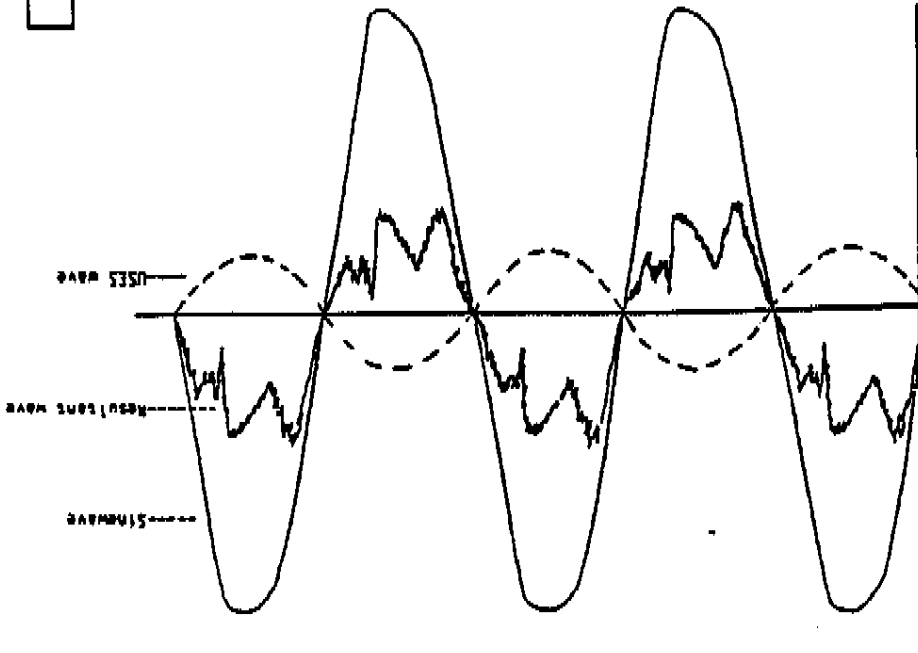


Parallel wraparound magnetic choke.
 Magnetic field established by parallel wraparound magnetic chokes capable of absorbing large amounts of energy. Chokes (inductors) act as transformers, which introduce complementary magnetic field in response to magnetic fields at leads.

Capacitors 108, 112, 120, 124, 132 and 136 contribute to surge and spike protection.
 Air gaps keep chokes from saturating and act as filters.
 Suppressors 84, 88, 92, 96, 98 and 100 provide noise filtering and power factor correction.
 Fine tunes performance of choke.
 Line looped back through variable lags.
 Coil with capacitor 74 in parallel acts as filter.
 Low pass noise filter.
 Suppressors 84, 88, 92, 96, 98 and 100 provide noise filtering and power factor correction.



2



USES® Technology:
AC Wave Form Improvement

- Results:
- At your utility meter: lower consumption (bills) from suppressed surges and spikes, reduced wattage, harmonics and current on phases and neutral, phase current balancing and improved PF.
 - At your electrical loads: clean power.

Historically, improvements in electrical system efficiencies concentrate on improving the performance of loads by incorporating capacitors and developing more efficient motors and energy efficient lighting.

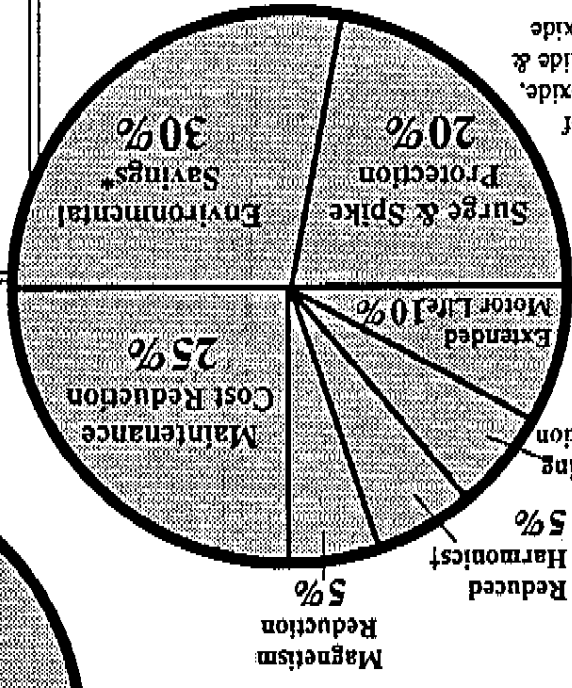
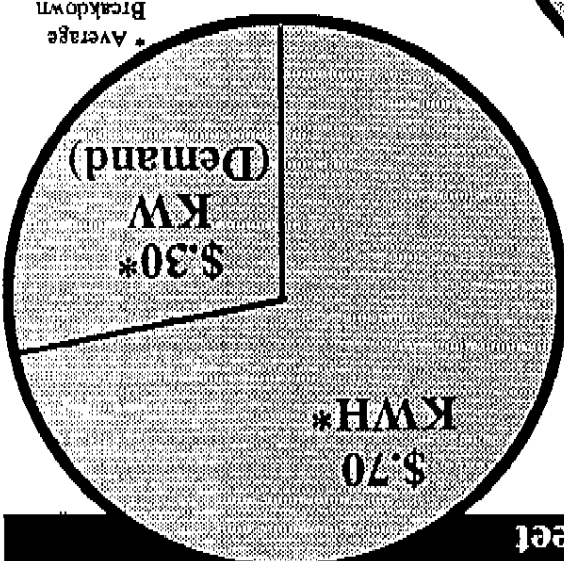
The transformer supplying power to your electrical loads is an overlooked component of your electrical system. When the magnetic field within the transformer is improved, the transformer provides more efficient power to all loads it supplies. USES® helps the transformer operate more efficiently without changing current or voltage to electrical loads.

HOW USES® OPERATES



EWM Savings Fact Sheet

Energy Savings Profile



* Reduces emissions of Carbon Dioxide, Sulfur Dioxide & Nitrogen Oxide (units with a neutral) on wye units
 † WYE (Y)

The charts above graphically illustrate the potential for "hard" and "soft dollar" savings through use of the USES® Power Conditioning System. While showing where the savings will be realized, they also emphasize the System's many capabilities beyond simply lowering electric bills.

USES® technology incorporates all of these features in one package. To achieve all of the benefits of an USES® System would require the purchase of an unlimited number of electrical devices (such as the following) and without being able to achieve USES® measurable results.

- (1) Capacitors or soft starts for motors
- (2) Power factor correction devices
- (3) Spike or surge protection outlet strips
- (4) Lightning arrestor equipment
- (5) Timers, special lighting
- (6) Load balance equipment
- (7) Magnesium reduction equipment
- (8) DSM equipment
- (9) VFDs and VSDDs
- (10) Soft start equipment

- ### USES® Features & Benefits
- Addresses inductive loads
 - Reduces maintenance of motors
 - Protects from surges and spikes
 - Mitigates lightning damage
 - Helps lower KW demand
 - Helps lower KWH
 - Helps to balance loads
 - Corrects power factor
 - Reduces magnetism
 - Easy installation
 - UL Listed #E132743
 - CSA Approved #LR99910
 - EPA/Green Lights - Ally
 - Alliance To Save Energy
 - NYC Approved #92A0390
 - 3-year limited warranty
 - Prolongs motor life
 - Suppresses contact arcing
 - Increases motor compressor reliability
 - Reduces electrical noise and total harmonic current content
 - Improves voltage regulation
 - Protects computers
 - Protects sensitive electrical equipment
 - Increases lamp life
 - Balances and reduces loads on panels
 - Reduces exposure to magnetic fields at electrical service
 - Safety to individual motors and the distribution system
 - No maintenance required