## Acme® True-Power® Power Line Conditioners

The average computer installation, representing mini-computer, workstations or personal computers, experiences an average of 100 power disturbances each month. These disturbances can cause equipment malfunction, loss of memory and inaccurate data, and in the worst cases complete failure of these delicate electronic devices. Computer installation manuals recommend dedicated service lines, but these are expensive to install, offer minimal future flexibility and do not provide total protection of the equipment. Acme offers a complete line of Power Protection Equipment. Refer to the "Product Selection Guide" for the product that best meets your requirements.

**Note:** This section of the general catalog contains complete specification and selection information on Acme's True-Power® power line conditioners.

## **APPLICATIONS**

- Computers and Data Processing Equipment
- Point of Sale Terminals
- Electronic Test Equipment
- X-Ray Equipment
- Critical Lighting Applications
- Programmable Controllers
- Security Systems
- Microprocessor Controls
- Communications Equipment
- Photographic Equipment
- Regulated DC Power Supplies
- Electronic Cash Registers
- Robotics
- Numerical Controls

Acme True-Power® products consist of speciality designed ferroresonant transformers. Although ferroresonant transformers have been an economical solution to power problems for many years, it took the skills of Acme's highly regarded engineering staff to refine it to meet today's exacting requirements.

For example, typical ferroresonant transformers have an input limited to 100-130 V. Acme's True-Power  $^{\circledR}$  units have an input range of +10/-20% around input voltage nominals of 120/208/240 and 480 volts. At 120 volt input, this relates to 95-130 volts.

The typical ferroresonant transformer has limited electrical noise suppression capability. True-Power® power line conditioners have the following noise attenuation capability:

Common Mode: 120 db Transverse Mode: 60 db

The typical ferroresonant transformer has an audible hum that can be objectionable in most offices. Acme's True-Power® power line conditioners are encapsulated in epoxy to lower sound levels below ANSI standard C 89.2.

The typical ferroresonant transformer has on output regulation of  $\pm$  3% for input line changes only. Acme's True-Power® power line conditioners have an output regulation of  $\pm$  3% for input line and load changes, making them suitable for operation at any load condition.

## **FEATURES**

- Reliable, regulated output voltage when input voltage varies, even to brownout levels.
- Extended operation to 65% of nominal when operated at 60% of full load.
- Noise rejection—effectively suppressing transient spikes and surges—120 db common mode and 60 db transverse mode.
- Rapid response to line and load changes—5% variation in 8m sec, 10% variation in 16m sec.
- Hold up time of 3m sec for complete loss of input power.
  - Inherent overload and short circuit protection, without thermo protectors, fuses or circuit breakers, for immediate recovery when the overload is removed.
  - Sinusoidal output features, less than 3% harmonic distortion, improves input wave forms which have total harmonic distortions of greater than 5%.
  - Available in 250 through 15,000 VA in hardwired and portable models.
  - Hardwired models will handle multiple primary input voltages.
  - Illuminated ON/OFF switch, multiple output receptacles and six foot input power cord on portable units.
  - UL Listed.
  - CSA Certified (Hardwire models).

## **Product Selection Guide**

| PROBLEM ENCOUNTERED  | Shielded<br>Isolation<br>Transformer | True-<br>Power® | SPS | UPS |
|--|--------------------------------------|-----------------|-----|-----|
| Power Failure  | _                                    | _               | Χ   | Χ   |
| Widely Varying Source Voltage  | _                                    | Χ               | _   | Χ   |
| Brown Outs   | _                                    | Χ               | Χ   | Χ   |
| Switching Of Power Factor Correction Capacitors  | Χ                                    | Χ               | Χ   | Χ   |
| Distorted Wave Shape Due To Harmonic Content   | _                                    | Х               | _   | Χ   |
| Common-Mode Transients   | Х                                    | Х               | _   | Χ   |
| Transverse-Mode Transients   | _                                    | Х               | Χ   | Χ   |
| Voltage Spikes Due To Proximity Of<br>Welding Equipment Or Certain<br>Medical Diagnostic Equipment         | X                                    | X               | Х   | Х   |
| Line Distortion Due To Noise Generated From Occasional Lightning Strikes                                   | Х                                    | Х               | Х   | Χ   |
| Operation Of Computer Storage Devices Such<br>As Floppy Disks Or Winchester Drives<br>Generates Transients | X                                    | X               | X   | X   |