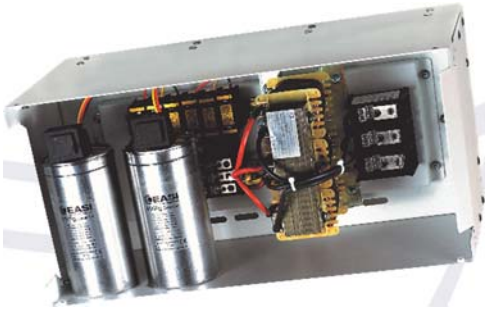
PowerLiner™

Passive Harmonics Correction



Benefits Quick Look
Extends the Life of Equipment
Reduces Harmonics Issues in the Facility
Increases Electrical Capacity
Cools Overheated Lines and Panels
Lowers kW Consumption and Demand
Improves the Facility's Power Factor
Helps Meet IEEE-519-1992 Standards
Lasts for 140,000+ Hours of Service

The **PowerLiner™** was designed to meet the growing need to reduce the costs associated with today's non-linear electrical equipment. More AC to DC conversion equipment is being used in today's buildings from Variable Frequency Drivers (VFD's) to DC Drives, Rectified DC Power Systems, Welders, Robotics, and Arc Lighting. Harmonic current is becoming a predominant part of every business' electrical demand. The Passive Harmonic Reactive Power Correction System cancels a portion of this harmonic power normally drawn by these loads, thereby reducing kilowatt hour consumption, as well as any problems associated with harmonics inside your facility.

The PowerLiner™ reduces the harmonic energy normally demanded by this equipment by cancelling a substantial portion of the fifth (5^{th}) and seventh (7^{th}) harmonic currents supplied to the load. This saves energy, reduces heat generation inside equipment, frees up new electrical capacity in the facility, and most importantly, produces direct kilowatt hour reduction on the electricity bill by reducing the alternating current distribution losses in a facility.

We manufacture a complete range of low voltage, three-phase Passive Harmonic Reactive Power Correction Systems, in a stepped model range from 1.3 KVAR to 30 KVAR, with four voltage lines. They are as follows: 200-240V, 380-440V, 440-480V, and 600V three-phase, for both 50Hz and 60Hz applications. KVAR requirements above 30 KVAR are available by simply paralleling multiple units. All models use an advanced inert gas filled, dry polypropylene and self-healing film, single-mounting-bolt cylindrical capacitor style, which is manufactured in an ISO 9001 certified facility, and includes a CE IP-21 certified cap mounted wiring block plus an integral 0.3 to 3 second fast discharge reactor module that dramatically exceeds UL/CSA mandated voltage discharge standards. They also include built-in protection from voltage transients and have a very long service lifetime.

All models are built into EIS's U-series of modular powder coated steel enclosures that can ship in either NEMA 1 or NEMA 3R configurations. EIS also offers the following upgrades to the U-series: a factory installed gasket and grommet upgrade to the NEMA 12 configuration, NEMA 7 and NEMA 9 explosion-proof enclosures, NEMA 4X corrosion proof enclosures, current sensing disconnects, internally mounted fusing, and LED indicator lights.

The primary components in our PowerLiner™ are all EIS's own design, and are not commodity items purchased on the open market. By having end to end control of our product development, design, and manufacturing, EIS is able to offer products that radically exceed the normal performance, longevity, features, and power quality standards offered by other products. All EIS products are state-of-the-art in performance, world standards compliance, and value added features.