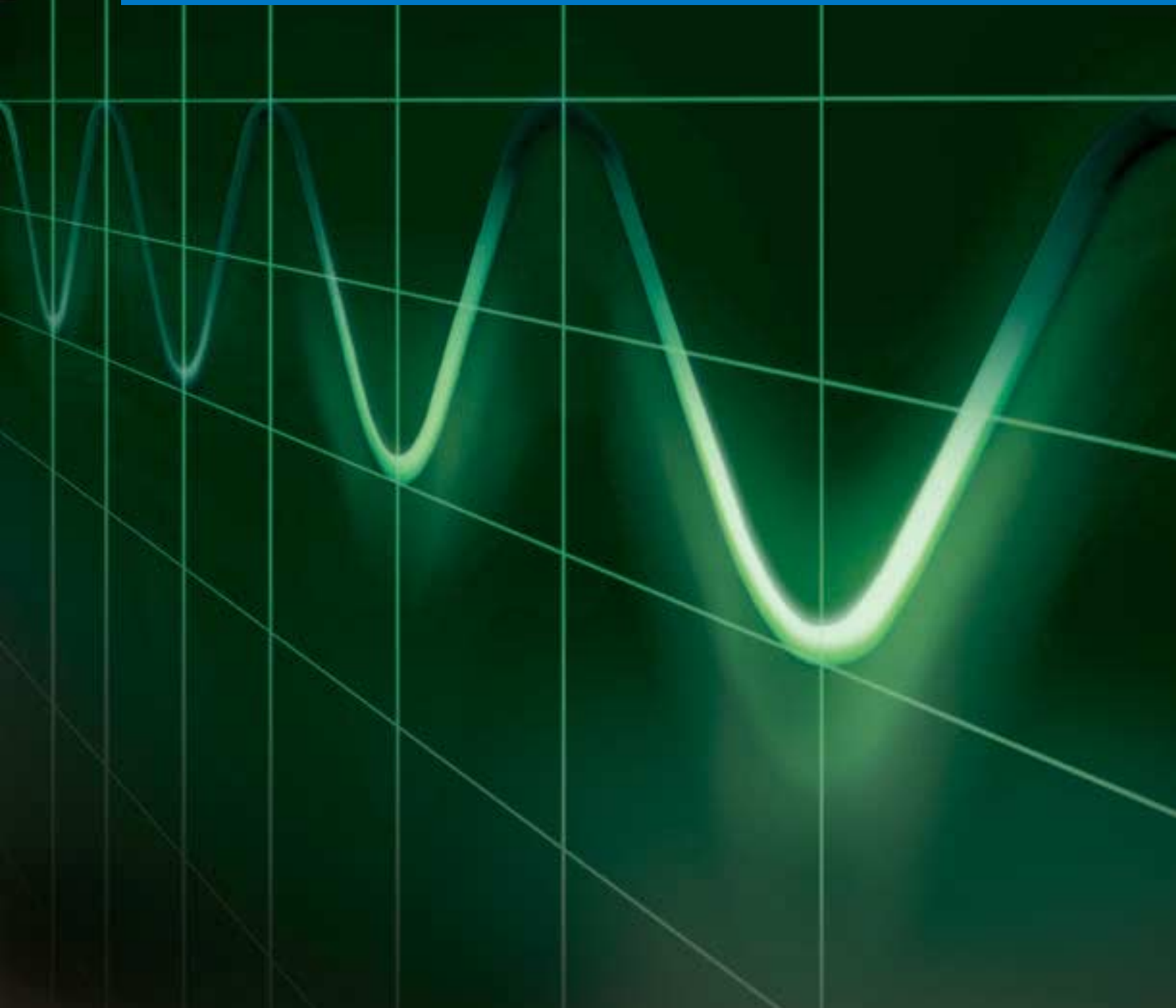


The Eaton logo is displayed in white, bold, sans-serif font. It consists of the letters 'E', 'A', 'T', and 'N' with a small circle between the 'A' and 'T'. The background of the top half of the page is a grayscale photograph of an electrical control panel with various components and wiring.The Cutler-Hammer logo is displayed in white, bold, sans-serif font. It consists of the words 'Cutler-Hammer' in a single line. The background of the top half of the page is a grayscale photograph of an electrical control panel with various components and wiring.

CPX9000 Clean Power Solution

Product Focus



CPX9000

The Best Solution for Clean Power.

The new CPX9000 is the most advanced Clean Power Solution.

Based on Cutler-Hammer's high-tech and highly successful 9000 Series of adjustable frequency drives, the CPX9000 uses advanced 18-pulse, Clean Power technology to significantly reduce line harmonics at the drive input terminals, resulting in one of the purest sinusoidal waveforms available.

The CPX9000 delivers "True Power Factor," so in addition to reducing harmonic distortion, the CPX9000 prevents overheating of transformers and the overloading of breakers and feeders. It allows adjustable frequency drives to be applied to generators and other high impedance power systems.

Designed to exceed the IEEE 519-1992 requirements for harmonic distortion, the CPX9000 is the clear choice for applications in the Water, Wastewater, HVAC, Industrial, and Process industries where harmonics are a concern.

Facility analysis simulations and services.

While utilities may deliver relatively clean power (pure sinusoidal waveforms), nonlinear loads such as computers, drives, and electronic ballasts can introduce undesirable harmonic currents into the power system.

Many facilities demand the IEEE 519-1992 standard for minimizing harmonic distortion be met to eliminate the potential for equipment failures which lead to increased downtime and costs.

The first step in developing a Clean Power Solution is a facility analysis. Cutler-Hammer performs facility simulations for existing facilities and during the design and construction phase of new facilities. In addition to providing Clean Power with the CPX9000, the Cutler-Hammer Engineering Services organization is equipped to measure, analyze, and correct harmonic and other power quality issues. Contact Cutler-Hammer to get started on improving your power quality and power management.

Ensuring IEEE Compliance.

After the simulation is complete, a number of steps can be taken to ensure IEEE 519-1992 compliance. The major technologies are passive filters, active filters, additional inductive reactance, phase-shifted sources, 12-pulse rectifiers and the CPX9000 Clean Power drive. While all of technologies are viable, the CPX9000 is selected most often because unlike the other technologies, it meets IEEE 519-1992 in every case at the drive input connection even if power system conditions change. This means no re-tuning, no adjustments and no new system analysis.

Cutler-Hammer offers a wide range of power quality and power management tools that allow you to take control of your power. This ranges from high-tech harmonic analyzers to sophisticated facility-wide PowerNet monitoring and management systems.



The 18-Pulse rectifier assembly is modular, compact and uses diode packs to eliminate bulky external charging circuitry.



A full range of configuration options includes a variety of bypass contactors and cutting edge starters, such as Eaton Cutler-Hammer's *IT* reduced voltage soft starters.

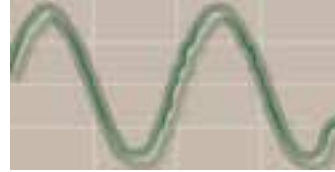
Designed to exceed IEEE 519-1992 requirements for harmonic distortion, the CPX9000 is the clear choice for applications in the water, wastewater, HVAC, industrial and process industries where power quality and harmonics are a concern.



6-Pulse drives typically have distortion with steep current rises.



12-Pulse drives typically produce a rough sinusoidal waveform.



The CPX9000 Clean Power Solution dramatically reduces harmonic distortion for a clean waveform.



18-pulse drives exceed the IEEE standard of 5% THD. The chart illustrates differences between 6-, 12- and 18-Pulse solutions. For sensitive medical and electronic equipment, Eaton's CPX9000 is unsurpassed.



CPX9000 Standard Features:

- SVMulti-Line™, easy-to-use operator control panel
- SVDrive™, windows-based programming software
- Selectable sensorless vector
- Input fuses and MOV for input protection
- Pre-engineered compact NEMA1 or dust-resistant enclosures

Options include integration of PanelMate® operator interface stations and automation PCs.

Communications Capabilities:

- Devicenet
- Profibus DP
- Ethernet
- Modbus-RTU
- Lonworks & key HVAC protocols



Eaton's electrical business is a global leader in electrical control, power distribution, and industrial automation products and services. Through advanced product development, world-class manufacturing methods, and global engineering services and support, Eaton's electrical business provides customer-driven solutions under brand names such as Cutler-Hammer®, Powerware®, Durant®, Heinemann®, Holec® and MEM®, which globally serve the changing needs of the industrial, utility, light commercial, residential, and OEM markets. For more information, visit www.EatonElectrical.com.

Eaton Corporation is a diversified industrial manufacturer with 2005 sales of \$11.1 billion. Eaton is a global leader in electrical systems and components for power quality, distribution and control; fluid power systems and services for industrial, mobile and aircraft equipment; intelligent truck drivetrain systems for safety and fuel economy; and automotive engine air management systems, powertrain solutions and specialty controls for performance, fuel economy and safety. Eaton has 59,000 employees and sells products to customers in more than 125 countries. For more information, visit www.eaton.com.

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Printed in USA
Form No. BR04007001E
January 2006