

The logo for Eaton Cutler-Hammer, featuring the word "EATON" in a bold, sans-serif font with a dot between the "A" and "O", followed by a vertical line and the words "Cutler-Hammer" in a smaller, sans-serif font.The logo for Cutler-Hammer, featuring the words "Cutler-Hammer" in a bold, sans-serif font.

Passive Harmonic Filters

Product Focus

Power Factor and
Harmonic Solutions

Capitalizing on years of electrical distribution equipment experience and expertise, Eaton's Cutler-Hammer business now offers a wide range of reliable Passive Harmonic Filters. The application of power factor correction products has become more challenging due to the proliferation of drives and other harmonic producing loads. It is essential to choose a partner who has the knowledge to help avoid potential misapplications. The Cutler-Hammer business has the products and services to help you make informed choices when applying these products.

These products correct power factor, eliminate or reduce penalties charged by the utility, increase load capacity, and regulate voltage. Passive Harmonic Filters are available from 208V AC – 115 kV and kvar ratings of 1 – 15,000. These products will help you safely reduce energy consumption and diminish or eliminate power factor penalties. In many cases, the payback is less than two years.

The Cutler-Hammer Passive Harmonic Filter:

- Reduces or eliminates expensive penalties levied by the utility based on a low power factor.
- Increases available transformer and cable capacity.
- Protects against damaging and dangerous harmonic resonance.
- Operates effectively in a harmonic-rich environment.
- Reduces harmonic distortion (current and voltage).

Cutler-Hammer Passive Harmonic Filters are applicable when accurate power factor correction is required in environments where considerable harmonic distortion exists. These products are tuned to the 4.7th harmonic (other tuning frequencies are available). These passive harmonic filters will reduce harmonic current flowing in the power system, thereby reducing voltage distortion, helping your facility meet the IEEE 519 standard. The device will also reduce the potential for dangerous harmonic resonance.

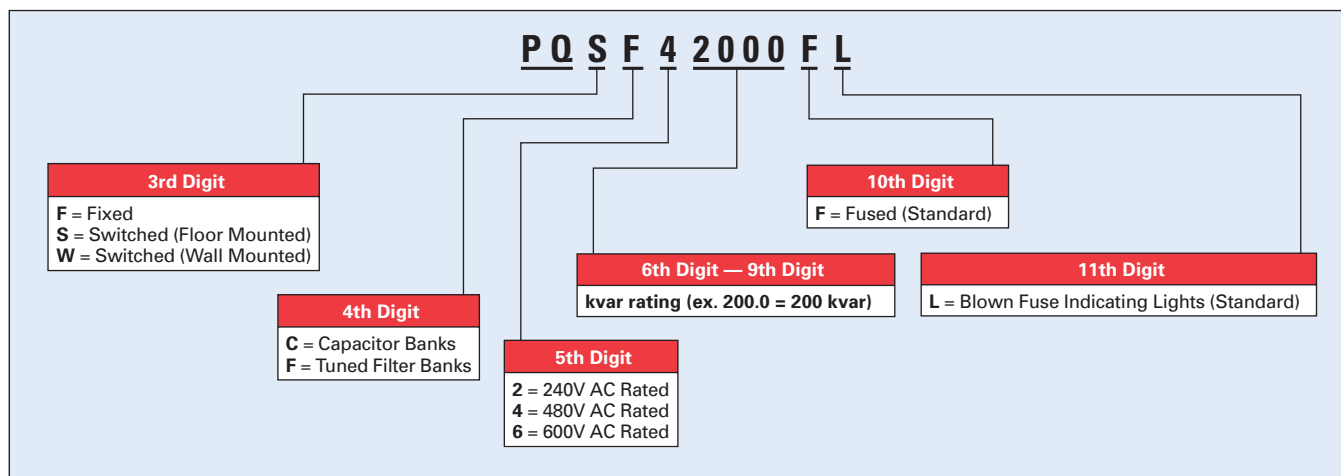
Passive Harmonic Filter Features

- Reduces harmonics and corrects and maintains desired power factor.
- Ideal for 6 pulse drive environments.
- Standard ratings up to 600V AC; other ratings available.
- UL® listed/CSA® listed.
- Iron core reactors.
- Tuned to the 4.7th harmonic (other tuning frequencies available).
- Fixed or automatically switched designs available.
- Capacitor cells have 5-year warranty.
- Custom designed medium voltage filters (through 115 kV) are available.



LV Fixed Harmonic Filters

Low Voltage Product Selection



Catalog Numbers

Low voltage harmonic filter catalog numbers are determined as specified above.

Note: Medium voltage units can be ordered by description through the factory.

Options Available

- Cutler-Hammer molded case circuit breakers.
- IQ metering.
- Remote alarm relay.
- Split-core current transformer.
- Hand-Off-Auto switch.
- NEMA® 3R.

Other Power Quality Products

- Fixed capacitor banks (low and medium voltage).
- Automatically switched capacitor banks (low and medium voltage).
- Active harmonic filters.
- 3rd harmonic blocking filters.
- Surge protection.
- Phase shifting transformers.
- K-Factor transformers.
- Rotary UPS.



LV Switched Harmonic Filter

Cutler-Hammer Power Quality Hotline

Having trouble understanding a problem related to power quality, reliability or energy management? Confused about what technology to apply to improve facility uptime or cut energy costs? Call our Power Quality Hotline at 1-800-809-2772 (option 1, sub-option 2) to talk to power quality experts, or e-mail us at PQHotline@eaton.com.

Total Solutions for Maximizing Uptime

Eaton's Cutler-Hammer Engineering Services and Systems (CHES) provides a full range of on-site services including: Installation, Start-Up/Commissioning, Preventive and Predictive Maintenance, Systems Integration, Power Systems Studies, Turnkey Solutions and Equipment Life Extension. And, by choosing our Start-Up/Commissioning services on your Cutler-Hammer product, you will receive a one-year extension to the factory warranty.

UL is a federally registered trademark of Underwriters Laboratories Inc. NEMA is the registered trademark and service mark of the National Electrical Manufacturers Association. CSA is a registered trademark of the Canadian Standards Association.

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