

Medium Voltage Metal-Enclosed Harmonic Filter Banks

fact sheet



Product Overview

GE Metal-Enclosed Medium Voltage Harmonic filter banks are designed for industrial, utility, and commercial power systems to improve power factor, reduce harmonic distortion, increase system capacity, and improve voltage regulation.

Virtually any design constraint, provision, or harmonic related problem can be met. GE can design and guarantee filter systems to meet IEEE® 519 requirements.

Standard and custom designs are available for placement in outdoor or indoor substations (an enclosure integrity option can be added to allow for placement in publicly accessible areas) for power factor correction, loss reduction, and voltage support. The banks come fully assembled and ready for interconnection.

Features and Benefits

- Load interrupter air disconnect switch provides the “visible-break” required by NEC

- Key interlock system dictates a safe sequence of operation and entry into capacitor bank
- Blown fuse detection systems offer the highest level of reliability
- Main incoming fuses provide main bus protection and backup protection for capacitors
- Heavy-duty lightning arresters protect bank from lightning and switching transients
- Harmonic filter reactors provide the necessary reactance for tuning the capacitor bank to the desired frequency, as well as reducing the frequency and magnitude of inrush currents from back-to-back capacitor bank switching
- Long life and low maintenance vacuum switches control each stage
- Individual capacitor fusing improves bank reliability and protects against case-rupture
- Control power transformer is provided for protection, control and operation of the bank
- Ground bus assists in grounding during maintenance
- Automatic capacitor bank controller switches stages based on current, var load, power factor, temperature, time-of-day, metering pulses, or voltage
- On/off/auto switches allow both automatic and manual control as necessary
- Enclosure lights in the control, main-incoming fuse, and capacitor compartments allow easy viewing in nighttime conditions





Optional Accessories

- Digital power meter
- Roof bushings
- Zero-voltage closing vacuum switches
- NEMA 12/4X construction
- Current transformer
- Roll-out circuit breaker
- Exhaust fan

Applicability

Both indoor and outdoor designs are available with a host of options and accessories to fit the requirements and desired configurations of virtually all installations. Single stage and multi-stage, single tuned or multi-tuned filter banks, with or without high-pass configurations are available.

GE's medium voltage harmonic filter banks are designed to be connected anywhere in the electrical system. Typically, they are connected at the medium voltage service point between the utility supply and the customer.

With GE's Engineering staff, a harmonic filter bank can be designed to meet specific system requirements. GE provides this service as part of an equipment order.



For further product information, please contact your GE sales representative or email us at: energy.tdsolutions@ge.com.

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