



Power capacitor installation services

Eaton's engineering and consulting services focus on understanding business requirements, and setting strategies to ensure long-term, efficient and safe operation of your power system. Eaton's engineers and consultants can help diagnose problems and identify ways to improve performance, or transform concepts into flexible, practical solutions that can improve productivity and capital utilization. Eaton can help keep power systems safe, efficient, reliable and up-to-date.

Eaton's Cooper Power Systems™ power capacitors improve power system efficiency, and reduce electrical losses, peak demands, and CO₂ emissions while maximizing generation, transformer, and feeder capacity from the point of application to the generator. Eaton's designs improve power quality by supporting voltage and mitigating harmonic issues when applied as harmonic filters. With more than 70 years of capacitor development, more than 80 percent of our 2.4 kV through EHV designs are customized, from pole- and pad-mount to mobile capacitor banks. The Cooper Power Systems Volt/VAR management solution combines capacitors and voltage regulators with Yukon™ real-time automated Volt/VAR adjustment software to provide unmatched system-wide Power Factor and power quality functionality.

Capacitor bank pre-installation support

Eaton provides engineering services to support the initial design, engineering and protection of capacitors:

- Utility billing analysis to support improvement investments
- Specialized Power Factor, harmonic studies and filter design
- System conceptual and detailed electrical design
- Short-circuit, coordination, arc flash and load flow studies
- Start-up and commissioning test plans simulating all anticipated operating conditions

Capacitor new construction support

Eaton provides turnkey installation and full support from start-up to completion

- Acceptance testing of individual capacitor components including fuse checks, capacitor testing, tank and bushing inspections
- Switching, grounding, control and protection device testing and verification and expected trip functions
- System-wide commissioning to ensure proper normal and emergency operations
- Site supervision of equipment handling, installation, connection and energizing
- Training of equipment operational modes, control and protection schemes and troubleshooting guides

Capacitor operation and maintenance support

Eaton provides full maintenance services including period maintenance, multi-year service contracts and remote monitoring and alarming of potential failure indicators.

- Periodic maintenance during scheduled outages (fuse and capacitor testing, tank and bushing cleaning)
- Switching device maintenance and testing
- Power Factor and VAR (Volt-Ampere Reactive) controller operational testing
- Equipment thermographic surveys to identify electrical hot-spots
- Multi-year inspection and analysis, service contracts, and failure analysis

Capacitor life extension support

Eaton provides a full complement of the newest technologies to upgrade your existing capacitor control equipment, therefore providing the latest Power Factor and VAR control while maintaining your existing infrastructure. Our upgrade capacitor control solutions can be for local control or planned system-wide integrated control via our Cooper Power Systems Yukon system upgraded application software.

The power of Eaton

Eaton offers complete services for all your power distribution and automation needs. The Eaton global service team is one of the largest and most experienced teams of power system engineers in the industry available 24 hours a day. Eaton provides equipment acceptance testing, start-up and system commissioning; power system analysis including arc flash, harmonics and other power quality studies and field measurements; preventive maintenance, testing and field troubleshooting; multi-year service contracts; power system automation and remote monitoring; aftermarket life extension solutions; as well as turnkey project capabilities.

Eaton's field service engineers can install, start up, commission and service Cooper Power Systems as well as any other manufacturer's power equipment to precise standards with minimal disruption to ongoing facility operations.

For expert service, call
1-800-498-2678 or visit:
www.Eaton.com/EESS

For Cooper Power Systems capacitor product information, call **1-877-277-4636** or visit:
www.CooperPower.com

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