



Undergrounding Strategies for Enhanced Grid Performance and Long-term Resilience

Delivering safer, more reliable power to the communities we serve.

Wildfires, hurricanes and other extreme weather events pose risks to utility power grids in the U.S. and globally. Utility undergrounding is a method to enhance grid safety and protect infrastructure from both natural and human-related threats. It also supports growing electricity demand by improving system reliability and resilience. Eaton offers a comprehensive range of utility and grid undergrounding solutions to help electric utilities build safer, more dependable electric grids.

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Powering Business Worldwide

Power distribution and protection



ISG-SD pad-mounted switchgear

- Padmount, submersible, vault and wall mount
- Rated up to 15.5kV/20kA, 27kV/16kA symmetrical
- 304 Stainless steel construction
- Virtually maintenance free



VFI liquid insulated switchgear

- FR3, E200 or mineral oil
- Vacuum fault interrupters
- Single-phase or three-phase tripping



Pad-mounted voltage regulators

- Advanced CL-7 control
- Improved aesthetics with small footprint
- Single-phase, 2-in-1 and 3-in-1 versions



Conventional single-phase pad-mounted transformer

- MaxiShrub (ANSI-Type 1), Shrubline (ANSI-Type 2) and Ranch Runner designs
- Electrical grade insulating mineral oil or fire-resistant FR3 fluid
- ANSI and NEMA standards



Extreme-duty hot (XHD type) capacitors

- Extended-foil elements, solderless connections and laser-cut aluminum foil in a high stacking factor design
- Superior corrosion resistance
- Continuous performance in ambient temperatures to +75 °C



Clear loadbreak connectors

- Only 600 amp loadbreak separable connector
- Configurable via variable junction technology
- Faster visible break, limiting outage time
- Minimizes outage sizes as sectionalizing point



T-OP-II deadbreak connectors

- One-piece design forms stick operator deadbreak T-body
- 900 amp rated, including shearbolts
- Available with 15, 25 and 35 kV 200 amp taps



Loadbreak connector portfolio

- Proven loadbreak portfolio with decades of field performance
- Available in 15, 25 and 35 kV large interface designs
- Broad range of accessories, including caps, junctions, arresters and standoffs

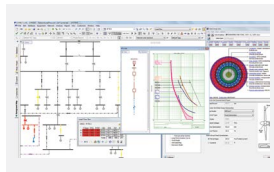
Cable accessories

Software solutions



CYMCAP cable ampacity software

- Provides reliable cable ampacity calculations
- Robust optimization algorithm for maximizing power in loaded circuits
- Steady state, cyclic loading and thermal transient simulations
- Complies with IEC 60287, IEC 60228 and IEC 60853 standards



CYME power engineering software

- Analyzes transmission and distribution networks for capacity planning
- Assesses impact of new technology, smart grid and distributed generation on network reliability

Eaton delivers unmatched undergrounding reliability with a full product line and end-to-end support.

To learn more about how we can help with your undergrounding initiatives, visit <https://www.eaton.com/undergrounding>

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