BZO 63kA uprate

FERRELL

Substation equipment life extension solutions

Aging infrastructure, changing workforce demographics and an increasing emphasis on reliability present new challenges for the modern utility organization. Based on recent transmission planning studies, many utilities are finding that their future substation fault duty requirements may exceed the maximum fault duty of their current high-voltage breakers.

Siemens has designed an uprate solution for BZO6 115 – 138 kV and BZO 242-3 kV high-voltage oil circuit breakers to increase fault duty rating from 40/50kA to 63kA. To perform the uprate, the existing moving and stationary contacts assemblies are removed. The aluminum cylinder is replaced with a manganese bronze cylinder. The 8-finger contact assembly is replaced and upgraded to a 10-finger assembly to provide additional contact surface. Siemens can perform the uprate on a turnkey basis. We provide a field service project engineer, all labor, tools, and test equipment to perform major maintenance and uprate per OEM specifications (see sample workscope description on reverse side). Customers receive a new 63kA nameplate and 12 month limited warranty.

Customer benefits:

- Single source supplier with no third parties to coordinate
- Factory trained, certified field engineers who specialize in highvoltage breakers
- Comprehensive project management with access to OEM engineering departments who understand your breaker design and technology
- Turnkey installations can also include extended warranty



SIEMENS

Ingenuity for life

BZO6 40kA Cylinder and Contact Assembly



BZO6 63kA Cylinder and Contact Assembly



Turnkey maintenance

Siemens will provide a field service project engineer, all labor, tools, and test equipment to perform major maintenance and uprate per OEM specifications.

- Place additional lock and tag on disconnect switch to isolate breaker.
- Perform "as found" tests on the breaker (timing, ductor, and oil analysis).
- Remove and store the oil from the circuit breaker onsite.
- Remove the stationary and moving interrupter assemblies for inspection.
- Perform a site inspection to ensure the stationary interrupter shells can be reused and moving contact assembly structures are satisfactory for refurbishment and upgrade.

- Inspect operator assembly and pump/reservoir for leaks.
- Change oil in reservoir and replace hydraulic filter as applicable.
- Replace complete moving and stationary interrupter assemblies excluding resistors.
- Check auxiliary switch and lightly lubricate bearings and coupling linkage.
- Test insulating oil before refilling.
- Filter press insulating oil before refilling breaker tanks.
- Complete up-rate checklist per OEM specifications.
- Complete all operational and electrical tests.
- Submit maintenance and uprate reports.

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For more information, please contact our Customer Support Center. Phone: 1-800-333-7421

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