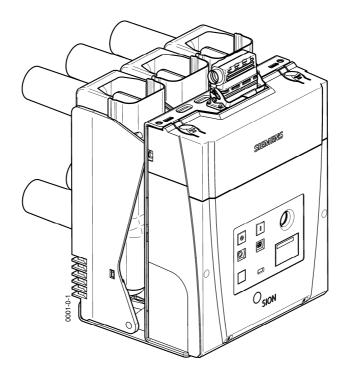
# SIEMENS SION<sup>®</sup>

Vacuum circuit-breakers 3AE –Z M30 7.2–17.5kV, 12.5–31.5kA

# **OPERATING INSTRUCTIONS**





# Danger



Risk of injury!

Working on the activated and deactivated SION® vacuum circuit-breaker with the spring energy store charged can lead to extremely dangerous injuries.

Before beginning maintenance work, observe the five safety rules for high-voltage devices specified in EN 50110-1, namely

- Disconnect and isolate;
- Safeguard against reactivation;
- Ascertain the safe isolation from supply state;
- Earth and short-circuit;
- Cover or cordon off neighboring live parts.

Close and open the vacuum circuit-breaker manually. By doing so, you will make sure the circuit-breaker is open and the spring energy store is relaxed.

Make sure that maintenance work on the SION® vacuum circuit-breaker is carried out only by qualified personnel who are familiar with the operating instructions and who observe the warning notices.

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## **Qualified personnel**

For the purpose of these operating instructions or warning notes on the SION<sup>®</sup> vacuum circuit-breaker itself, a "qualified person" is one who is familiar with the installation, construction and operation of the product and the hazards involved. In addition, he has the following qualifications, for example:

- Is trained and authorized to switch on, switch off, ground and mark circuits and equipment in accordance with established safety practices.
- Is trained in the proper care and use of protective equipment in accordance with established safety practices.
- Is trained in rendering first aid.

#### Note



Product liability claims are preserved only if maintenance work is carried out by Siemens personnel trained and certified to do so.

### Preventive maintenance

SION® -Z M30 vacuum circuit-breakers are approved, thanks to design measures and the application of special testing technology, for a useful life of up to 30,000 mechanical switching cycles provided the recommended maintenance measures are observed.

To maintain the reliability of the SION® -Z M30 vacuum circuit-breaker for a useful life of 30,000 switching cycles, we recommend maintenance work be carried out regularly by Siemens certified personnel, depending on operating conditions in compliance with IEC 62271-1 (ambient temperature, humidity, load carrying capacity and installation altitudes), the mechanical switching cycles and the operating time:

- After 10,000 and 20,000 switching cycles, perform visual inspections and lubricate and grease moving parts such as latches, rollers and levers in the operating mechanism.
- If there is a need to replace parts of the SION® -Z M30 vacuum circuit-breaker, especially the motor, the closing spring completely (including the recoil spring), the shock absorber and the transmission may only be replaced by Siemens certified personnel.

# **Service**

For details of contacts for service work, consult Siemens PTD Services
Phone: +49 180/5247000

Fax: +49 180/5242471 or

- Internet Web address: www.siemens.com/energy-support
- By email: support.energy@siemens.com
- Any local Siemens office.

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