Förhandsgranskning / Preview

Direct current systems for relay protection, control and indication. Operation and maintenance instructions

General information

[Information within brackets in this document refers to local regulations]

These instructions provide advice and guidelines for the operation and maintenance of direct current systems for auxiliary power supply.

The instructions constitute a supplement to SSG 4111E and SSG 4905E.

Contents

1 Related documents

2 Organisation and planning

3 Monthly inspection and maintenance programme

4 Yearly inspection programme

5 Capacity test

Appendix 1: Monthly inspection checklist

Appendix 2: Annual inspection checklist

1 Related documents

The following have been used as reference and support:

- [SS 436 40 00 Electrical Installation Regulations]
- EN 50272-2:2001 Safety requirements for secondary batteries and battery installations
- Swedish Energy Committee Report: Direct current supply in transformer and hydroelectric power stations, order number 30239
- Technical data provided by the manufacturers

2 Organisation and planning

2.1 General

Installations are equipped with a direct current system based on chemical batteries in order to secure an uninterrupted power supply for the installation's most essential equipment.

Consequently, the system requires high reliability and availability with the rated power capacity.

Operational inspection and maintenance must be systematised in order to satisfy these requirements and provide a high level of safety. The purpose of these actions is to keep the equipment in good condition, ensure that it receives the necessary and supplier-stipulated maintenance, and test it in such a way that defects can be detected or foreseen at an early stage and thus be remedied or prevented in time.

Accordingly, maintenance for these systems should first and foremost be preventive. The monitoring system's task is to capture any faults that may occur despite good preventive maintenance. Any recurrent faults that can be identified should be remedied without delay in a way that ensures permanent improvement and makes it easier to maintain respect for error signals.

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