

Examination Procedure Rubrik / Title Burn-in test	Beteckning / Document KBE EP-104
	Utgåva / Issue 2 (E)
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1 Scope

This examination procedure is applicable to electrical equipment and is to be performed as routine inspection or type inspection as specified in the Inspection Plan.

2 Objective

To burn in the equipment to stabilise performance, reveal and rectify any early faults and, concurrently with type inspection, to check the maximum operational data of the item or equipment.

3 Method

Testing is to be performed under, for the tested equipment, normal environmental conditions.

3.1 Routine inspection

The regular power supply is to be connected to the item or equipment, and input and output signals/load set within permissible limits so that maximum power dissipation results in the item or equipment. The test is to be run for 50 hours. If a malfunction occurs during the test, the reason for it must be analysed. If the fault is found to be caused by one defective component, operating within its specified range with adequate margins, the failing component may be replaced and the test continued for an additional period of 50 hours. In the event of any other kind of fault, the item or equipment is to be regarded as having failed the test.

3.2 Type inspection

Testing is to be carried out as described above for routine testing, but with the following differences:

- Power supply voltage is to be increased to 10 % above nominal value.
- The test duration is to be 200 hours.
- Temperature is to be measured at selected points inside the casing.

4 Acceptance Criteria

Throughout the test the item or equipment under test must meet specified requirements in terms of performance, stability and accuracy. This is to be verified by visual inspection and performance testing.

During type testing, the temperature at suitable points inside the casing is to be measured. Maximum temperature rise must comply with SS-EN 61010-1, with the following additions:

- Maximum temperature rise at specified maximum ambient temperature must not be so high that maximum permissible values are exceeded for components and materials used in the item or equipment.
- Maximum temperature rise of the air within the casing is to be less than 15 °C unless otherwise specified.
- No malfunction or degradation in performance data may occur.

5 Documentation

Inspection performed is to be documented in a inspection certificate, record or technical report as required in the Inspection Plan. Several examinations within one and the same Inspection Plan may be reported in the same document.

Examinations carried out as routine (100 %) inspection are to be reported to the Purchaser as original documents.

The document must as a minimum include the following:

- Items examined

Product, designation, quantity, serial numbers and reference to the Purchasers order.

- Identity/Traceability

The identity of the objects under examination in comparison with type tested items and in comparison with relevant specifications must be specified, unless the identity is certified in a separate document (as per KBE EP-180).

- Examination procedure

It must be clearly stated if the inspection has been performed according to this Examination Procedure or to any other procedure agreed upon.

- Measurement equipment

Type of equipment, accuracy, identification, etc, and current calibration data for the equipment used where performance is significant to the results.

- Results

It must be evident that the items have fulfilled stated requirements and acceptance criteria. Measured and recorded values that are to be documented as per the procedure as well as any deviations from requirements in applicable specifications or test procedures must be reported.

- Approval

Date of inspection and name of responsible inspector are to be included. The document must be reviewed and approved in accordance with the Manufacturers or the laboratory's internal QA/QC routines.