

<b>Examination Procedure</b>  Rubrik / Title <b>Verification of function and performance</b>	Beteckning / Document <b>KBE EP-152</b>
	Utgåva / Issue <b>2 (E)</b>
	Datum / Date <b>2003-04-01</b>
	Ersätter / Supersedes <b>1 (E)</b>

## 1 Scope

This Examination Procedure is applicable as type inspection to I&C equipment and items as specified in the Inspection Plan.

## 2 Objective

To verify that the equipment meets specified performance requirements when used in the intended application.

## 3 Method

### 3.1 Standards

SS-EN 61298-2 and SS-EN 61298-3 (identical to IEC 61298-2 and IEC 61298-3).

### 3.2 Tests

Testing should be performed at least according to SS-EN 61298-2, sections 4, 5, 6 and 7.1 and according to SS-EN 61298-3, sections 10, 11, 18, and 19 concerning the following:

- Accuracy
- Dynamic behaviour
- Functional characteristic
- Start-up drift
- Over-range
- Output load effect
- Effect of open- or short-circuited input
- Effect of open- or short-circuited output

## 4 Acceptance Criteria

All measured values must, within reasonable margins for production tolerances, meet the requirements set out in the Technical Specification and associated documents (i.e. usually the Manufacturers data sheets). A margin of 10% is normally acceptable.

## 5 Documentation

Type inspection (design verification) carried out is to be documented in a technical report as required in the Inspection Plan. The complete type inspection of the product may be documented in the same report.

The report must as a minimum include the following:

- Product identification

Product type, designations, versions, variations, etc.

- Test specimens

Type, designation, quantity, serial numbers, preparations, etc.

- Identity / Traceability

The identity of the product/test specimens in comparison with the Manufacturers specification and/or in comparison with the Technical Specification must be clearly specified as per KBE EP-180.

- Test procedure

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

- Acceptance criteria

Performance requirements before, during and after specified tests.

- Test set-up

Detailed description of test set-ups, electrical and mechanical interfaces.

- Measurement equipment

Type of equipment, accuracy, identification, etc, and current calibration data for monitoring and recording equipment.

- Results

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. Date of inspections and name of responsible inspectors are to be included.

- Summary and conclusion

It must be evident that the product has fulfilled stated requirements and acceptance criteria.

- Approval

The report must be reviewed and approved in accordance with the Manufacturers or the laboratory's internal QA/QC routines.