

Examination Procedure <small>Rubrik / Title</small> Setpoint stability of process parameter limits switches	<small>Beteckning / Document</small> KBE EP-143
	<small>Utgåva / Issue</small> 1 (E)
	<small>Datum / Date</small> 1997-09-17
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1 Scope

This Examination Procedure is applicable to process parameter limit switches and is to be carried out as routine inspection or type inspection, as specified in the Inspection Plan.

2 Objective

To verify the stability of the operating setpoint of process parameter limit switches.

3 Method

The trip point of the switch is to be set to about 20% of the working range. Actual trip value and hysteresis are then measured. The actuating parameter is to be varied three times over entire working range (0 - 100%). The trip value and hysteresis measurement is then repeated.

For pressure switches the input is to be cycled three times from zero to test pressure, before the measurement of trip point and hysteresis is repeated. Test pressure = 1,5 times the design pressure, or 0,4 MPa, whichever is the greater.

4 Acceptance criteria

The switch must not be damaged by the testing. Specified data must be met. Trip point settings and hysteresis must not change by more than 2% of the working range, unless otherwise agreed.

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.