

Project name

Low voltage laboratory for fuse testing according to Directive 73/23 EEC and European Norm EN 60269-4

Phase no.: 3

Planned objective:

- Experiments for determining the technical performances of the new test circuits
- Performing tests on real products
- Corrective actions
- Drawing up technical procedures
- Drawing up and submitting the quality system documents and official request for getting the accreditations. Initiation and preliminary assessment of the documents.
- Settling the non-conformities identified at the quality system analysis at the highest level.

Activity description:

Activity III.1 Experiments for determining the technical performances of the new test circuits

The test circuits achieved according to the electric diagram were verified at the imposed rated parameters: voltages at the terminals of product to be tested of up to 100 V and rated current within the range 2.5 A - 2000 A.

Got results:

The test circuits – corresponded to the imposed technical conditions, both the voltage and current values being got within the imposed limits.

Performant test circuits – 1 pc.

Stage of achieving the planned objective/completion form:

The planned objective was achieved and finalized as a result of the carried out experiments, and the technical performances imposed to new test circuits were reached.

Activity III.2 Performing tests on real products

Representative fuses type MPR 660 V; 10 A ; 63 A ; 100 A and FM – 7.2 ; 63 A were verified in the low voltage laboratory.

The following verifications were performed:

- verification of heating limits and dissipated power;
- verification of breaking capacity in the series I_3 ;
- verification of time-current characteristic;

The verifications were carried out according to ST ICMET MI no. 13/2006, art. 3.2.

Got results:

Test report – 3 pcs.

Stage of achieving the planned objective/completion form:

The planned objective was achieved and finalized, three test reports: no. 9963/01.08.2007; no. 9156-1/06.08.2007; no. 9963-1/03.08.2007 were registered.

Activity III.3 Corrective actions

No non-conformity was found.

Got results:

Stage of achieving the planned objective/completion form:

Activity III.4 Drawing up technical procedures

For verifying the heating limits and dissipated power, technical procedure PT-10.02 was drawn up.

For verifying the breaking capacity in the series I_3 , technical procedure PT-10.03 was drawn up.

For verifying the limits and time-current characteristics, technical procedure PT-10.04 was drawn up.

The procedures describe the working mode with the test circuits of the Low voltage laboratory for verifying the fuses according to ST ICMET MI nr. 13/2006, complying with the safety technique specific to electric circuits.

There are presented the testing and measuring-recording diagrams for any verification provided in ST ICMET MI nr. 13/2006.

Got results:

Technical procedures – 3 pcs.

Stage of achieving the planned objective/completion form:

The planned objective was achieved and finalized as “Procedure – Verification of the heating limits and dissipated power – code PT 10.02”, “Procedure – Verification of breaking capacity in the series I_3 – code PT 10.03” and “Procedure– verification of limits and time-current characteristic – code PT 10.04”

Activity III.5 Drawing up and submitting the quality system documents and official request for getting the accreditations. Initiation and preliminary assessment of the documents.

The documentation necessary for submitting the accreditation request to the body authorized for this (RENAR), namely the Quality Manual MC – 10, General Procedures (PG 10.01 to PG 10.23), Technical Procedures PT 10.01 to PT 10.04, was drawn up.

As a result of the internal audit performed by the audit team of ICMET Craiova, no non-conformity was found, according to Audit Report no. 23/24.08.2007.

Got results:

Quality Manual – MC 10	- 1 pc.
General Procedures	- 23 pcs.
Technical Procedures	- 4 pcs.
Accreditation Request	- 1 pc.
Audit Report	- 1 pc.

Stage of achieving the planned objective/completion form:

The planned objective was achieved and finalized by submitting the documents to RENAR

Activity III.6 Settling the non-conformities identified at the quality system analysis at the highest level.

When analyzing the Quality Management System at the highest level, no non-conformity was found, according to Official Report no. 1/03.09.2007.

Got results:

Official Report = 1 pc.

Stage of achieving the planned objective/completion form:

The planned objective was achieved and finalized by drawing up the documents.