SLOVENSKI STANDARD
oSIST prEN IEC 61810-7-14:2023

01-oktober-2023

Električni releji - Preskusi in meritve - 7-14. del: Rast plesni

Electrical relays - Tests and Measurements - Part 7-14: Mould growth

Ta slovenski standard je istoveten z: **prEN IEC 61810-7-14:2023**

ICS:

29.120.70 Releji Relays

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94/936/CDV

COMMITTEE DRAFT FOR VOTE (CDV)

PROJECT NUMBER: **IEC 61810-7-14 ED1**	
DATE OF CIRCULATION: **2023-08-18**	CLOSING DATE FOR VOTING: **2023-11-10**
SUPERSEDES DOCUMENTS: **94/791/NP, 94/907/RVN**	

IEC TC 94 : ELECTRICAL RELAYS

SECRETARIAT: Austria	SECRETARY: Mr Bernhard Spalt
OF INTEREST TO THE FOLLOWING COMMITTEES:	PROPOSED HORIZONTAL STANDARD: ☐ Other TC/SCs are requested to indicate their interest, if any, in this CDV to the secretary.

FUNCTIONS CONCERNED:

☐ EMC ☐ ENVIRONMENT ☐ QUALITY ASSURANCE ☐ SAFETY

☒ SUBMITTED FOR CENELEC PARALLEL VOTING	☐ NOT SUBMITTED FOR CENELEC PARALLEL VOTING
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Recipients of this document are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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TITLE:

Electrical relays – Tests and Measurements – Part 7-14: Mould growth

PROPOSED STABILITY DATE: 2025

NOTE FROM TC/SC OFFICERS:

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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ELECTRICAL RELAYS – Tests and measurements

Part 7-14: Mould growth

FOREWORD

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The International Standards of the IEC 61810 have been prepared by IEC technical committee 94: All-or-nothing electrical relays.

The text of this International Standard is based on the following documents:

NP	Report on voting
94/791/NP	94/907/RVN

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of IEC 61810 series, published under the general title *Electromechanical elementary relays,* can be found on the IEC website.

60 This International Standard is to be used in conjunction with IEC 61810-1:2015.

61 The committee has decided that the contents of this document will remain unchanged until the
62 stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to
63 the specific document. At this date, the document will be

64 • reconfirmed,
65 • withdrawn,
66 • replaced by a revised edition, or
67 • amended.

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Electrical relays – Tests and Measurements

Part 7-14: Mould growth

1 Scope

This part of IEC 61810-7 is used for testing along with the appropriate severities and conditions for measurements and tests designed to assess the ability of specimens to perform under expected conditions of transportation, storage and all aspects of operational use.

The object of this test is for determining the extent to which electrical relays support mould growth and how any mould growth may affect the performance and other relevant properties/function of a relay.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60068-2-10:2019, *Environmental testing - Part 2-10: Tests – Test J and guidance: Mould growth*

IEC 61810-7-0:202X, *Electrical relays – Tests and Measurements – Part 7-0: Testing general*

IEC 61810-7-7:202X, *Electrical relays – Tests and Measurements – Part 7-7: Functional test*

3 Terms and definitions

Clause 3 of IEC 61810-7-0 is applicable.

4 Test procedure

4.1 Purpose

To assess the extent of mould growth on a relay, or the effect of mould growth on the function of a relay.

4.2 Procedure

The test shall be carried out in accordance with test J of IEC 60068-2-10 and if not otherwise specified test variant 1 with a test duration of 28 days (severity 1) applies.

As part of the initial measurements all DUT shall be tested in line with IEC 60068-2-10, clause 9 and IEC 61810-7-7 Functional test.

The final examination shall be followed IEC 60068-2-10, clause 12 and a final functional test according to IEC 61810-7-7.

4.3 Conditions to be specified

The conditions to be specified are the following.

All details following items a) to f) of Clause 13 of IEC 60068-2-10.

a) Test variant 1 or 2
b) Test variant 1 duration of incubation (severity)
c) Initial electrical and mechanical measurements and functional checks (only if performance deterioration is to be determined)
d) Preconditioning by cleaning
e) Inoculation method (if not by spraying)
f) Interruption of incubation for visual intermediate inspection

5 Evaluation

Final examinations shall include the following and be in line with Clause 12 of IEC 60068-2-10

a) Visual examination
b) Effect of growth
c) Extent of growth – any grade is permitted as long the following functional test is passed
d) Functional test according to IEC 61810-7-7, and the relay parameters are in line with the product specification.

Annex T
(informative)

Test report

The Test report shall consist of the following:

- Description of test specimen
- Test standard, edition and test variant
- Severity for test variant 1
- Test fungi (if deviating from the test standard)
- Initial, intermediate and final examinations (detailed)
- Cleaning of the specimen(s) (if applied)
- Method of inoculation
- Conditions of incubation (if deviating from the test standard)
- Mould growth on the control strips (after 7 days incubation)
- Test results (specific observations inclusive)
- Test criterion (permissible grade of mould growth if prescribed)
- Evaluation of the performance (basing on the test criterion)
- If applicable – any other observation

Bibliography

IEC 60068-1:2013, *Environmental testing — Part 1: General and guidance*

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