



IEC 63522-21

Edition 1.0 2025-08

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Electrical relays - Tests and measurements -
Part 21: Thermal endurance**

**Relais électriques - Essais et mesurages -
Partie 21: Endurance thermique**



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CONTENTS

FOREWORD	2
1 Scope	4
2 Normative references	4
3 Terms and definitions	4
4 Test procedure	4
4.1 Purpose	4
4.2 Procedure	5
4.3 Conditions to be specified	7
4.4 Test report	7
5 Evaluation	7
5.1 General	7
5.1.1 Overview	7
5.1.2 Intermediate and final measurements	7
5.1.3 Primary evaluation parameters	8
5.2 Test report	8
Bibliography	10
Figure 1 – Test sequence	6
Table 1 – Conditions	7
Table 2 – Duration level	8
Table 3 – Table of test report	9

INTERNATIONAL ELECTROTECHNICAL COMMISSION

Electrical relays - Tests and measurements - Part 21: Thermal endurance

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IEC 63522-21 has been prepared by IEC technical committee 94: Electrical relays. It is an International Standard.

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

Draft	Report on voting
94/1064/FDIS	94/1085/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all parts of IEC 63522 series, published under the general title *Electrical relays – Tests and measurements*, can be found on the IEC website.

This International Standard is to be used in conjunction with IEC 63522-0:–¹.

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

- reconfirmed,
- withdrawn, or
- revised.

¹ Under preparation. Stage at the time of publication: IEC CDV 63522-0:2024.

1 Scope

This part of IEC 63522 is used for testing along with the appropriate severities and conditions for measurements and tests designed to assess the ability of DUTs to perform under expected conditions of transportation, storage and all aspects of operational use.

This document defines a standard test method for evaluation of resistance against high temperature for long periods.

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 63522-0:–², *Electrical relays - Tests and measurements - Part 0: Testing - General and guidance*.

IEC 63522-6:–³, *Electrical relays - Tests and measurements - Part 6: Contact-circuit resistance (or voltage drop)*

IEC 63522-7:–⁴, *Electrical relays - Tests and measurements - Part 7: Functional tests*

IEC 63522-8:–⁵, *Electrical relays - Tests and measurements - Part 8: Timing*

IEC 63522-22, *Electrical relays - Tests and measurements - Part 22: Limiting continuous current*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 63522-0 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- IEC Electropedia: available at <https://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

4 Test procedure

4.1 Purpose

The thermal endurance assesses the influence of high temperature conditions, when energized for long periods, to a proper relay function.

² Under preparation. Stage at the time of publication: IEC CDV 63522-0:2024.

³ Under preparation. Stage at the time of publication: IEC FDIS 63522-6:2024.

⁴ Under preparation. Stage at the time of publication: IEC FDIS 63522-7:2024.

⁵ Under preparation. Stage at the time of publication: IEC FDIS 63522-8:2024.