

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

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**Electrical relays – Tests and measurements –  
Part 37: Terminal temperature rise at rated load**

**Relais électriques – Essais et mesurages –  
Partie 37: Échauffement des bornes à la charge assignée**



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IEC Secretariat  
3, rue de Varembe  
CH-1211 Geneva 20  
Switzerland

Tel.: +41 22 919 02 11  
[info@iec.ch](mailto:info@iec.ch)  
[www.iec.ch](http://www.iec.ch)

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COMMISSION

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTRICAL RELAYS –  
TESTS AND MEASUREMENTS –**

**Part 37: Terminal temperature rise at rated load**

**FOREWORD**

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IEC 63522-37 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
94/1131/FDIS	94/1145/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](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/publications](http://www.iec.ch/publications).

This International Standard is to be used in conjunction with IEC 63522-0:—<sup>1</sup>.

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.

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](http://webstore.iec.ch) in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

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

# ELECTRICAL RELAYS – TESTS AND MEASUREMENTS –

## Part 37: Terminal temperature rise at rated load

### 1 Scope

This part of IEC 63522 is used for testing all kinds of electrical relays and for evaluating their ability to perform under expected conditions of transportation, storage and all aspects of operational use.

NOTE Examples for electrical relays in the sense of this document include electromechanical relay, reed relays, reed contacts, reed switches, solid state relays, time relays and technology combinations of these.

The object of this document is to define a standard test method to measure terminal temperature rise at rated load, included solder terminals, flat quick-connect termination, screw and screwless type terminals, alternative termination types and sockets.

### 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 60584-1, *Thermocouples – Part 1: EMF specifications and tolerances*

IEC 60998-1, *Connecting devices for low voltage circuits for household and similar purposes – Part 1: General requirements*

IEC 60999-1, *Connecting devices – Electrical copper conductors – Safety requirements for screw-type and screwless-type clamping units – Part 1: General requirements and particular requirements for clamping units for conductors from 0,2 mm<sup>2</sup> up to 35 mm<sup>2</sup> (included)*

IEC 61810-1:2015, *Electromechanical elementary relays – Part 1: General and safety requirements*

IEC 63522-0:–, *Electrical relays – Tests and measurements – Part 0: General and guidance*<sup>2</sup>

IEC 63522-7, *Electrical relays – Tests and measurements – Part 7: Functional tests*<sup>3</sup>

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

<sup>3</sup> Under preparation: Stage at the time of publication: IEC/BPUB 63522-7:2024.