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Electrical relays - Tests and measurements - Part 15: Robustness of terminals

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 04/25

Obsahuje: EN IEC 63522-15:2025, IEC 63522-15:2024

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EN IEC 63522-15

January 2025

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English Version

**Electrical relays - Tests and measurements - Part 15:
Robustness of terminals
(IEC 63522-15:2024)**

Relais électriques - Essais et mesurages - Partie 15:
Robustesse des bornes
(IEC 63522-15:2024)

Elektrische Relais - Mess- und Prüfverfahren - Teil 15:
Widerstandsfähigkeit der Klemmen
(IEC 63522-15:2024)

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Europäisches Komitee für Elektrotechnische Normung

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EN IEC 63522-15:2025 (E)**European foreword**

The text of document 94/1052/FDIS, future edition 1 of IEC 63522-15, prepared by TC 94 "Electrical relays" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 63522-15:2025.

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In the official version, for Bibliography, the following notes have to be added for the standard indicated:

IEC 61810-1:2015 NOTE Approved as EN 61810-1:2015 (not modified)

IEC 61810-1:2015/A1:2019 NOTE Approved as EN 61810-1:2015/A1:2020 (not modified)

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cencenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-2-21	-	Environmental testing - Part 2-21: Tests - Test U: Robustness of terminations and integral mounting devices	EN IEC 60068-2-21	-
IEC 60999-1	1999	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 ² up to 35 mm ² (included)	EN 60999-1	2000
IEC 61210 (mod)	2010	Connecting devices - Flat quick-connect terminations for electrical copper conductors - Safety requirements	EN 61210	2010
IEC 63522-0 ¹	-	Electrical relays - Tests and Measurements - Part 0: General and Guidance	EN IEC 63522-0 ²	-
IEC 63522-1 ³	-	Electrical relays - Tests and measurements - Part 1: Visual inspection and check of dimensions	EN IEC 63522-1 ⁴	-
IEC 63522-3 ⁵	-	Electrical relays - Tests and Measurements - Part 3: Relay coil properties	EN IEC 63522-3 ⁶	-
IEC 63522-6 ⁷	-	Electrical relays - Tests and measurements - Part 6: Contact-circuit resistance (or voltage drop)	EN IEC 63522-6 ⁸	-

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

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

³ Under preparation. Stage at the time of publication: IEC CDV 63522-1:2023.

⁴ Under preparation. Stage at the time of publication: prEN IEC 63522-1:2023.

⁵ Under preparation. Stage at the time of publication: IEC CDV 63522-3:2024.

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

⁷ Under preparation. Stage at the time of publication: IEC FDIS 63522-6:2024.

⁸ Under preparation. Stage at the time of publication: FprEN IEC 63522-6:2024.



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NORME INTERNATIONALE

**Electrical relays – Tests and measurements –
Part 15: Robustness of terminals**

**Relais électriques – Essais et mesurages –
Partie 15: Robustesse des bornes**

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INTERNATIONAL STANDARD

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**Electrical relays – Tests and measurements –
Part 15: Robustness of terminals**

**Relais électriques – Essais et mesurages –
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TESTS AND MEASUREMENTS –****Part 15: Robustness of terminals****FOREWORD**

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IEC 63522-15 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
94/1052/FDIS	94/1081/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 the 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 in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

ELECTRICAL RELAYS – TESTS AND MEASUREMENTS –

Part 15: Robustness of terminals

1 Scope

This document is used for testing electromechanical elementary relays (electromechanical relays, reed relays, reed contacts, reed switches and technology combinations of these) and for evaluating their ability to perform under expected conditions of transportation, storage and all aspects of operational use.

This document defines a standard test method that applies defined loads to relay terminals (direct axial pulls, bending or twisting) as they can be present in assembled configurations or during handling. In addition, it covers torque stress for nuts and threaded terminals as they are likely to be experienced during normal assembly operations.

2 Normative references

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IEC 60999-1:1999, *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 mm² up to 35 mm² (included)*

IEC 61210:2010, *Connecting devices – Flat quick-connect terminations for electrical copper conductors – Safety requirements*

IEC 63522-0:— *Electrical relays – Tests and measurements – Part 0: Testing – General and guidance*¹

IEC 63522-1, *Electrical relays – Tests and measurements – Part 1: Visual inspection and check of dimensions*²

IEC 63522-3, *Electrical relays – Tests and measurements – Part 3: Relay coil properties*³

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

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