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Electrical relays - Tests and measurements - Part 33:
Continuity of protective earthing connection

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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English Version

Electrical relays - Tests and measurements - Part 33: Continuity of protective earthing connection (IEC 63522-33:2025)

Relais électriques - Essais et mesurages - Partie 33:
Continuité de la connexion de terre de protection
(IEC 63522-33:2025)

Elektrische Relais - Mess- und Prüfverfahren - Teil 33:
Kontinuität der Schutzleiterverbindung
(IEC 63522-33:2025)

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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European foreword

The text of document 94/1129/FDIS, future edition 1 of IEC 63522-33, prepared by TC 94 "Electrical relays" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 63522-33:2025.

The following dates are fixed:

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The text of the International Standard IEC 63522-33:2025 was approved by CENELEC as a European Standard without any modification.

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

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Electrical relays - Tests and measurements -
Part 33: Continuity of protective earthing connection**

**Relais électriques - Essais et mesurages -
Partie 33: Continuité de la connexion de terre de protection**



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**Electrical relays - Tests and measurements -
 Part 33: Continuity of protective earthing connection**

FOREWORD

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IEC 63522-33 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
94/1129/FDIS	94/1161/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.

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

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 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 all kind 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 relays, reed relays, reed contacts, reed switches, solid state relays, time relays and technology combinations of these.

This document provides test methods to ensure that the connection between an earthing terminal and parts required to be connected thereto is of low resistance.

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:—, *Electrical relays - Tests and measurements - Part 0: Testing - General and guidance*²

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>

3.1

earthing terminal

terminal provided on equipment and intended for the electric connection with the earthing arrangement

Note 1 to entry: Earthing terminals are indicated by the protected earth sign in the proximity of the terminal.

[SOURCE: IEC 60050-195:2021, 195-02-31, modified – Note 1 to entry has been added.]

4 Test procedure

4.1 Purpose

To ensure that the connection between an earthing terminal and parts required to be connected thereto is of low resistance. This test applies only to relays suitable to be connected to mains circuits and which are provided with an earthing terminal.

NOTE Typically, product standards give constructional requirements on earthing terminals like cross section of wires, place of earthing terminal, tightening forces of screws, etc.

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