IEC 63522-52

Edition 1.0 2026-03

INTERNATIONAL STANDARD

Electrical relays - Tests and measurements -
Part 52: Coil overvoltage

ICS 29.120.70

ISBN 978-2-8327-1097-5

IEC 63522-52:2026-03(en)

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Electrical relays - Tests and measurements - Part 52: Coil overvoltage

FOREWORD

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IEC 63522-52 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
94/1182/FDIS	94/1189/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– withdrawn, or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 CCDV 63522-0:2025.

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, bistable relays, time relays and technology combinations of these.

This document defines a standard test method for coil overvoltage in device under test (DUT) equipped with a coil.

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 61810-1:2015, *Electromechanical elementary relays - Part 1: General and safety requirements*
IEC 61810-1:2015/AMD1:2019

IEC 63522-0:—[2], *Electrical relays - Tests and measurements - Part 0: General and guidance*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 61810-1, 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
power supply voltage
U_n
nominal voltage of power supply

4 Test procedure

4.1 Purpose

This test simulates the condition where the coil power supply voltage regulator fails, so that the output voltage of the generator rises above normal values and above the area of the tolerance.

[2] Under preparation. Stage at the time of publication: IEC CCDV 62522-0:2025.