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Reläer – Provningsmetoder och mätning – Del 9: Klimatprovning

*Electrical relays –
Tests and Measurements –
Part 9: Climatic tests*

Som svensk standard gäller europastandarden EN IEC 63522-9:2025. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 63522-9:2025.

Nationellt förord

Europastandarden EN IEC 63522-9:2025

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 63522-9, First edition, 2025 - Electrical relays – Tests and Measurements – Part 9: Climatic tests**

utarbetad inom International Electrotechnical Commission, IEC.

ICS 29.120.70

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English Version

Electrical relays - Tests and measurements - Part 9: Climatic
tests
(IEC 63522-9:2025)

Relais électriques - Essais et mesurages - Partie 9: Essais
climatiques
(IEC 63522-9:2025)

Elektrische Relais - Mess- und Prüfverfahren - Teil 9:
Klimatische Prüfungen
(IEC 63522-9:2025)

This European Standard was approved by CENELEC on 2025-05-22. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

The text of document 94/1068/FDIS, future edition 1 of IEC 63522-9, prepared by TC 94 "Electrical relays" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 63522-9:2025.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2026-06-30 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2028-06-30 document have to be withdrawn

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

This document is read in conjunction with EN IEC 63522-0¹.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 63522-9:2025 was approved by CENELEC as a European Standard without any modification.

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

IEC 60038	NOTE	Approved as EN 60038
IEC 60060-1	NOTE	Approved as EN 60060-1
IEC 60068-2-20	NOTE	Approved as EN IEC 60068-2-20
IEC 60085	NOTE	Approved as EN 60085
IEC 60364-4-44	NOTE	Approved as HD 60364-4-444
IEC 60664 (series)	NOTE	Approved as EN 60664 (series)
IEC 60695-2-10	NOTE	Approved as EN IEC 60695-2-10
IEC 60947-2:2016	NOTE	Approved as EN 60947-2:2017 (not modified)
IEC 60947-5-1	NOTE	Approved as EN IEC 60947-5-1
IEC 61210	NOTE	Approved as EN 61210
IEC 61810-1	NOTE	Approved as EN 61810-1
IEC 61810-7:2006	NOTE	Approved as EN 61810-7:2006 (not modified)

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

IEC 61984

NOTE Approved as EN 61984

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

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.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-2-1	1990	Environmental testing - Part 2-1: Tests - Tests A: Cold	EN 60068-2-1	2007
+ A1	1993		-	-
+ A2	1994		-	-
IEC 60068-2-2	1974	Environmental testing - Part 2-2: Tests - Tests B: Dry heat	EN 60068-2-2	2007
+ A1	1993		-	-
+ A2	1994		-	-
IEC 60068-2-13	-	Environmental testing - Part 2-13: Tests - Test M: Low air pressure	EN IEC 60068-2-13	-
IEC 60068-2-30	-	Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle)	EN 60068-2-30	-
IEC 60068-2-78	-	Environmental testing - Part 2-78: Tests - Test Cab: Damp heat, steady state	EN 60068-2-78	-
IEC 63522-0	— ²	Electrical relays - Tests and Measurements - Part 0: General and Guidance	EN IEC 63522-0	— ³
IEC 63522-1	— ⁴	Electrical relays - Tests and measurements - Part 1: Visual inspection and check of dimensions	EN IEC 63522-1	— ⁵
IEC 63522-5	— ⁶	Electrical relays - Tests and	EN IEC 63522-5	— ⁷

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

³ Under preparation. Stage at the time of publication: prEN IEC 63522-0:2024.

⁴ Under preparation. Stage at the time of publication: IEC FDIS 63522-1:2024.

⁵ Under preparation. Stage at the time of publication: FprEN IEC 63522-1:2025.

⁶ Under preparation. Stage at the time of publication: IEC CDV 63522-5:2024.

⁷ Under preparation. Stage at the time of publication: prEN IEC 63522-5:2025.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
		measurements - Part 5: Insulation resistance		
IEC 63522-6	2025	Electrical relays - Tests and measurements - Part 6: Contact-circuit resistance (or voltage drop)	EN IEC 63522-6	2025

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Electrical relays – Tests and measurements –
Part 9: Climatic tests**

**Relais électriques – Essais et mesurages –
Partie 9: Essais climatiques**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
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INTERNATIONALE

ICS 29.120.70

ISBN 978-2-8327-0346-5

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTRICAL RELAYS –
TESTS AND MEASUREMENTS –****Part 9: Climatic tests****FOREWORD**

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as “IEC Publication(s)”). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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IEC 63522-9 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
94/1068/FDIS	94/1097/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.

ELECTRICAL RELAYS – TESTS AND MEASUREMENTS –

Part 9: Climatic tests

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.

It defines standard test methods to determine the ability of the relay to withstand certain climatic test conditions, a sequence of such climatic test conditions or climatic storage conditions.

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 60068-2-1:1990, *Environmental testing – Part 2-1: Tests – Test A: Cold*

IEC 60068-2-1:1990/AMD1:1993

IEC 60068-2-1:1990/AMD2:1994

IEC 60068-2-2:1974, *Environmental testing – Part 2-2: Tests – Test B: Dry heat*

IEC 60068-2-2:1974/AMD1:1993

IEC 60068-2-2:1974/AMD2:1994

IEC 60068-2-13, *Environmental testing – Part 2-13: Tests – Test M: Low air pressure*

IEC 60068-2-30, *Environmental testing – Part 2-30: Tests – Test Db: Damp heat, cyclic (12 h+ 12 h cycle)*

IEC 60068-2-78, *Environmental testing – Part 2-78: Tests – Test Cab: Damp heat, steady state*

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

IEC 63522-1:–³, *Electrical relays – Tests and measurements – Part 1: Visual inspection and check of dimensions*

IEC 63522-5:–⁴, *Electrical relays – Tests and measurements – Part 5: Insulation resistance*

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 63522-1:2024.

⁴ Under preparation. Stage at the time of publication: IEC CDV 63522-5:2024.

IEC 63522-6:2025, *Electrical relays – Tests and measurements – Part 6: Contact-circuit resistance (or voltage drop)*