



SLOVENSKI STANDARD
SIST EN IEC 63522-8:2025

01-marec-2025

Električni releji - Preskusi in meritve - 8. del: Časovni načrt

Electrical relays - Tests and Measurements - Part 8: Timing

Elektrische Relais - Mess- und Prüfverfahren - Teil 8: Zeitplan

Relais électriques - Essais et mesurages - Partie 7-8: Contrôle des temps

Ta slovenski standard je istoveten z: EN IEC 63522-8:2024

ICS:

29.120.70 Releji <https://standards.sist.si/standards/sist/a15f6486-5-91fd-8c5b5a0feb3d/sist-en-iec-63522-8-2025>

SIST EN IEC 63522-8:2025

en

EUROPEAN STANDARD

EN IEC 63522-8

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2024

ICS 29.120.70

English Version

Electrical relays - Tests and measurements - Part 8: Timing (IEC 63522-8:2024)

Relais électriques - Essais et mesurages - Partie 8:
Contrôle des temps
(IEC 63522-8:2024)

Elektrische Relais - Mess- und Prüfverfahren - Teil 8:
Zeitplan
(IEC 63522-8:2024)

This European Standard was approved by CENELEC on 2024-12-10. 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

<https://standards.iteh.ai/>

<https://standards.iteh.ai/catalog/standards/sist/a15f6486-eb86-4af5-91fd-8c5b5a0feb3d/sist-en-iec-63522-8-2025>



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

EN IEC 63522-8:2024 (E)**European foreword**

The text of document 94/1036/FDIS, future edition 1 of IEC 63522-8, prepared by TC 94 "Electrical relays" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 63522-8:2024.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2025-12-31 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2027-12-31 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.

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 63522-8:2024 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 60947-2	NOTE	Approved as EN 60947-2
IEC 60947-5-1	NOTE	Approved as EN 60947-5-1
IEC 61810-7:2006	NOTE	Approved as EN 61810-7:2006 (not modified)
IEC 61812-1:2023	NOTE	Approved as EN IEC 61812-1:2024 (not modified)

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.cencenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 63522-0 ¹	-	Electrical relays - Tests and Measurements - Part 0: General and Guidance	EN 63522-0 ²	-

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

[SIST EN IEC 63522-8:2025](https://standards.iteh.ai/catalog/standards/sist/a15f6486-eb86-4af5-91fd-8c5b5a0feb3d/sist-en-iec-63522-8-2025)

<https://standards.iteh.ai/catalog/standards/sist/a15f6486-eb86-4af5-91fd-8c5b5a0feb3d/sist-en-iec-63522-8-2025>

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

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



IEC 63522-8

Edition 1.0 2024-11

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Electrical relays – Tests and measurements –
Part 8: Timing**

**Relais électriques – Essais et mesurages –
Partie 8: Contrôle des temps**

[SIST EN IEC 63522-8:2025](https://standards.iteh.ai/catalog/standards/sist/a15f6486-eb86-4af5-91fd-8c5b5a0feb3d/sist-en-iec-63522-8-2025)

<https://standards.iteh.ai/catalog/standards/sist/a15f6486-eb86-4af5-91fd-8c5b5a0feb3d/sist-en-iec-63522-8-2025>

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 29.120.70

ISBN 978-2-8322-9904-3

**Warning! Make sure that you obtained this publication from an authorized distributor.
Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.**

CONTENTS

FOREWORD.....	3
1 Scope.....	5
2 Normative references	5
3 Terms and definitions	5
3.1 General.....	5
3.2 Terms and definitions related to electromechanical elementary relays	5
3.3 Terms and definitions related to time relays	7
4 Test procedure	8
4.1 Timing tests for elementary relays	8
4.1.1 Purpose.....	8
4.1.2 Procedure.....	8
4.1.3 Conditions	9
4.2 Timing test for time relays.....	10
4.2.1 Purpose.....	10
4.2.2 Procedure.....	11
4.2.3 Conditions	11
5 Evaluation	11
5.1 Timing tests for elementary relays	11
5.1.1 General	11
5.1.2 Operate / set time	12
5.1.3 Release / reset time.....	12
5.1.4 Bounce time	12
5.1.5 Stabilization time	12
5.1.6 Minimum time of energization	12
5.1.7 Contact time difference	12
5.2 Timing tests for time relays	12
5.2.1 Calculation of setting accuracy and repeatability	12
5.2.2 Calculation of the influence of input voltage and ambient temperature	13
5.3 Test report	13
5.3.1 General	13
5.3.2 Elementary relay timing test report	13
5.3.3 Time relay timing test report	14
Annex A (informative) Calculation example for setting accuracy, repeatability and effect of influence in time relays	15
A.1 General.....	15
A.2 Example of calculation	15
Bibliography.....	16
Figure 1 – Typical circuit for the measurement of time parameters.....	9
Figure 2 – Typical traces on an oscilloscope screen during time measurements	10
Table 1 – Changing of influencing quantities.....	11
Table A.1 – Calculation formulae	15

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTRICAL RELAYS –
TESTS AND MEASUREMENTS –**
Part 8: Timing**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.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) IEC draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). IEC takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, IEC had not received notice of (a) patent(s), which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at <https://patents.iec.ch>. IEC shall not be held responsible for identifying any or all such patent rights.

IEC 63522-8 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
94/1036/FDIS	94/1078/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.

iTeh Standards (<https://standards.itih.ai>) Document Preview

[SIST EN IEC 63522-8:2025](https://standards.itih.ai/catalog/standards/sist/a15f6486-eb86-4af5-91fd-8c5b5a0feb3d/sist-en-iec-63522-8-2025)

<https://standards.itih.ai/catalog/standards/sist/a15f6486-eb86-4af5-91fd-8c5b5a0feb3d/sist-en-iec-63522-8-2025>