SLOVENSKI STANDARD
SIST EN 61810-1:2001

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Electromechanical non-specified time all-or-nothing relays - Part 1: General requirements

Electromechanical non-specified time all-or-nothing relays -- Part 1: General requirements

Elektromechanische Schaltrelais ohne festgelegtes Zeitverhalten -- Teil 1: Allgemeine Anforderungen

Relais electromécaniques de tout-ou-rien à temps non spécifié -- Partie 1: Prescriptions générales

Ta slovenski standard je istoveten z: **EN 61810-1:1998**

ICS:

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English version

Electromechanical non-specified time all-or-nothing relays
Part 1: General requirements
(IEC 61810-1:1998)

Relais electromécaniques de tout-ou-rien à temps non spécifié
Partie 1: Prescriptions générales
(CEI 61810-1:1998)

Elektromechanische Schaltrelais ohne festgelegtes Zeitverhalten
Teil 1: Allgemeine Anforderungen
(IEC 61810-1:1998)

This European Standard was approved by CENELEC on 1998-08-01. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 94/75/FDIS, future edition 1 of IEC 61810-1, prepared by IEC TC 94, All-or-nothing electrical relays, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61810-1 on 1998-08-01.

This European Standard supersedes EN 60255-1-00:1997.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 1999-08-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2003-08-01

Annexes designated "normative" are part of the body of the standard.
Annexes designated "informative" are given for information only.
In this standard, annexes A, B and ZA are normative and annexes C, D, E and F are informative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61810-1:1998 was approved by CENELEC as a European Standard without any modification.

In the official version, for annex F, Bibliography, the following notes have to be added for the standards indicated:

IEC 60947-1	NOTE: Harmonized as EN 60947-1:1997 (modified).
IEC 60947-4-1	NOTE: Harmonized as EN 60947-4-1:1992 (not modified).
IEC 60947-5-1	NOTE: Harmonized as EN 60947-5-1:1991 (not modified).
IEC 61812-1	NOTE: Harmonized as EN 61812-1:1996 (not modified).

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE: When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC Guide 109	1995	Environmental aspects - Inclusion in electrotechnical product standards	-	-
IEC 60050	series	International Electrotechnical Vocabulary (IEV)	-	-
IEC 60050(151)	1978	Chapter 151: Electrical and magnetic devices	-	-
IEC 60050(446)	1983	Chapter 446: Electrical relays	-	-
IEC 60068-1	1988	Environmental testing Part 1: General and guidance	EN 60068-1[1]	1994
IEC 60068-2-1	1990	Part 2: Tests - Tests A: Cold	EN 60068-2-1	1993
IEC 60068-2-2	1974	Part 2: Tests - Test B: Dry heat	EN 60068-2-2[2]	1993
IEC 60068-2-20	1979	Part 2: Tests - Test T: Soldering	HD 323.2.20 S3[3]	1988
IEC 60085	1984	Thermal evaluation and classification of electrical insulation	HD 566 S1	1990
IEC 60255-23	1994	Electrical relays Part 23: Contact performance	EN 60255-23	1996
IEC 60664-1 (mod)	1992	Insulation coordination for equipment within low-voltage systems Part 1: Principles, requirements and tests	HD 625.1 S1 + corr. November	1996 1996
IEC 60695-2-1/0	1994	Fire hazard testing Part 2: Test methods Section 1/sheet 0: Glow-wire test methods - General	EN 60695-2-1/0	1996

1) EN 60068-1 includes corrigendum October 1988 and A1:1992 to IEC 60068-1.

2) EN 60068-2-2 includes supplement A:1976 to IEC 60068-2-2.

3) HD 323.2.20 S3 includes A2:1987 to IEC 60068-2-20.

Publication	Year	Title	EN/HD	Year
IEC 60695-2-1/1 + corr. May	1994 1995	Part 2: Test methods Section 1/sheet 1: Glow-wire end-product test and guidance	EN 60695-2-1/1	1996
IEC 60695-2-1/2	1994	Part 2: Test methods Section 1/sheet 2: Glow-wire flammability test on materials	EN 60695-2-1/2	1996
IEC 60695-2-1/3	1994	Part 2: Test methods Section 1/sheet 3: Glow-wire ignitability test on materials	EN 60695-2-1/3	1996
IEC 60721-3-3	1994	Classification of environmental conditions Part 3: Classification of groups of environmental parameters and their severities -- Section 3: Stationary use at weather protected locations	EN 60721-3-3	1995
IEC 61210 (mod)	1993	Connecting devices - Flat quick-connect terminations for electrical copper conductors - Safety requirements	EN 61210	1995
IEC 61810-5	1998	Electromechanical non-specified time all-or-nothing relays Part 5: Insulation coordination	EN 61810-5	1998
IEC 61810-7	1997	Part 7: Test and measurement procedures	-	-
IEC QC 001001	1986	Basic rules of the IEC Quality Assessment System for Electronic Components (IECQ)	-	-

NORME INTERNATIONALE

INTERNATIONAL STANDARD

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Relais électromécaniques de tout-ou-rien à temps non spécifié –

Partie 1: Prescriptions générales

Electromechanical non-specified time all-or-nothing relays –

Part 1: General requirements

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTROMECHANICAL NON-SPECIFIED TIME ALL-OR-NOTHING RELAYS –

Part 1: General requirements

FOREWORD

1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The 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 the 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 National Committees.

3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.

4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.

5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.

6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61810-1 has been prepared by IEC technical committee 94: All-or-nothing electrical relays.

IEC 61810-1 cancels and replaces IEC 60255-1-00, published in 1975.

The text of this standard is based on the following documents:

FDIS	Report on voting
94/75/FDIS	94/82/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

Annexes A and B form an integral part of this standard.

Annexes C, D, E and F are for information only.

ELECTROMECHANICAL NON-SPECIFIED TIME ALL-OR-NOTHING RELAYS –

Part 1: General requirements

1 General

1.1 Scope and object

This part of IEC 61810 is a generic specification. It applies to electromechanical non-specified time all-or-nothing relays in a new condition only, which are used in many fields of electrotechnics (e.g. telecommunications, general industry equipment, etc.). Discrimination from other types of relays and related switching devices is given in annex C.

NOTE 1 – In particular, specified time all-or-nothing relays are covered by IEC 61812-1.

Nevertheless, parts of this standard may be used also for other types of relays, such as static all-or-nothing relays.

This standard states basic requirements for electromechanical non-specified time all-or-nothing relays. It comprises indications and explanations necessary for the understanding of the relevant basic characteristics of such relays.

These basic requirements together with the related test conditions ensure an acceptable quality level and make possible the comparison of relay types and corresponding data sheets.

Where the requirement of the detail specification is different from this standard but is more severe than the minimum requirements of 3.1, the detail specification takes precedence.

This standard contains standard values that reduce the variety of variants and facilitate the comparison of types.

NOTE 2 – Where, in this standard, the term 'detail specification' is used, it either has the meaning defined in A.7 of QC 001001 for application within the IECQ system, or it means any appropriate document, e.g. manufacturer's data sheet, test specification, customer detail specification.

NOTE 3 – In annex D, environmental aspects regarding design and manufacturing of relays are compiled.

1.2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 61810. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this part of IEC 61810 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

In addition, references to useful other standards in the field of relays are given in the bibliography contained in annex F.

IEC Guide 109:1995, *Environmental aspects – Inclusion in electrotechnical product standards*

IEC 60050, *International Electrotechnical Vocabulary (IEV)*

IEC 60050(151):1978, *International Electrotechnical Vocabulary (IEV) – Chapter 151: Electrical and magnetic devices*

IEC 60050(446):1983, *International Electrotechnical Vocabulary (IEV) – Chapter 446: Electrical relays*

IEC 60068-1:1988, *Environmental testing – Part 1: General and guidance*

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

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

IEC 60068-2-20:1979, *Environmental testing – Part 2: Tests – Test T: Soldering*

IEC 60085:1984, *Thermal evaluation and classification of electrical insulation*

IEC 60255-23:1994, *Electrical relays – Part 23: Contact performance*

IEC 60664-1:1992, *Insulation coordination for equipment within low-voltage systems – Part 1: Principles, requirements and tests*

IEC 60695-2-1/0:1994, *Fire hazard testing – Part 2: Test methods – Section 1/sheet 0: Glow-wire test methods – General*

IEC 60695-2-1/1:1994, *Fire hazard testing – Part 2: Test methods – Section 1/sheet 1: Glow-wire end-product test and guidance*

IEC 60695-2-1/2: 1994, *Fire hazard testing – Part 2: Test methods – Section 1/sheet 2: Glow-wire flammability test on materials*

IEC 60695-2-1/3:1994, *Fire hazard testing – Part 2: Test methods – Section 1/sheet 3: Glow-wire ignitability test on materials*

IEC 60721-3-3:1994, *Classification of environmental conditions – Part 3: Classification of groups of environmental parameters and their severities – Section 3: Stationary use at weatherprotected locations*

IEC 61210:1993, *Connecting devices – Flat quick-connect terminations for electrical copper conductors – Safety requirements*

IEC 61810-5:1998, *Electromechanical non-specified time all-or-nothing relays – Part 5: Insulation coordination*

IEC 61810-7:1997, *Electromechanical all-or-nothing relays – Part 7: Test and measurement procedures* [1)]

IEC QC 001001:1986, *Basic rules of the IEC Quality Assessment System for Electronic Components (IECQ)*

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1) The title of this standard will be aligned with the title of the series "Electromechanical non-specified time all-or-nothing relays" when a new edition is prepared.