

**SLOVENSKI
STANDARD**

SIST EN 61095:1995

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december 1995

Elektromehanski kontaktorji za gospodinjske in podobne namene

Electromechanical contactors for household and similar purposes (IEC 1095:1992)

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ENGLISH VERSION

Electromechanical contactors for household
and similar purposes
(IEC 1095:1992)

Contacteurs électromécaniques
pour usages domestiques et
analogues
(CEI 1095:1992)

Elektromechanische Schütze
für Hausinstallationen und
ähnliche Zwecke
(IEC 1095:1992)

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This European Standard was approved by CENELEC on 1992-12-09. 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, 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

IEC

The text of document 17B(CO)194/23E(CO)128, as prepared by Sub-Committee 17B: Low voltage switchgear and controlgear, of IEC Technical Committee N° 17: Switchgear and controlgear, in conjunction with Sub-Committee 23E: Circuit-breakers and similar equipment for household use, of IEC Technical Committee N° 23: Electrical accessories, was submitted to the IEC-CENELEC parallel vote in October 1991.

The reference document was approved by CENELEC as EN 61095 on 9 December 1992.

The following dates were fixed:

- latest date of publication of an identical national standard (dop) 1994-01-01
- latest date of withdrawal of conflicting national standards (dow) 1995-01-01

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For products which have complied with the relevant national standard before 1995-01-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2000-01-01.

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Annexes designated "normative" are part of the body of the standard. In this standard, annex ZA is normative.

ENDORSEMENT NOTICE

The text of the International Standard IEC 1095:1992 was approved by CENELEC as a European Standard without any modification.

ANNEX ZA (normative)

OTHER INTERNATIONAL PUBLICATIONS QUOTED IN THIS STANDARD
WITH THE REFERENCES OF THE RELEVANT EUROPEAN PUBLICATIONS

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

IEC Publication -----	Date -----	Title -----	EN/HD -----	Date -----
28	1925	International standard of resistance for copper	-	-
50(151)	1978	International Electrotechnical Vocabulary (IEV) - Chapter 151: Electrical and magnetic devices	-	-
50(441)	1984	Chapter 441: Switchgear, controlgear and fuses	-	-
50(604)	1987	Chapter 604: Generation, transmission and distribution of electricity Operation	-	-
50(826)	1982	Chapter 826: Electrical installations of buildings	HD 384.2 S1 + A1	1986 1993
68-2-3	1969	Environmental testing Part 2: Tests - Test Ca: Damp heat, steady state	HD 323.2.3 S2*	1987
73	1984	Colours of indicator lights and push-buttons	HD 354 S2	1987
85	1984	Thermal evaluation and classification of electrical insulation	HD 566 S1	1990
99-1	1970	Surge arresters - Part 1: Non-linear resistor type arresters for a.c. systems	-	-
112	1979	Method for determining the comparative and the proof tracking indices of solid insulating materials under moist conditions	HD 214 S2	1980
216	-	Guide for the determination of thermal endurance properties of electrical insulating materials	-	-

* HD 323.2.3 S2:1987 includes A1:1987 to IEC 68-2-3

IEC Publication -----	Date -----	Title -----	EN/HD -----	Date -----
364-4-443	1990	Electrical installations of buildings Part 4: Protection for safety Chapter 44: Protection against overvoltages - Section 443: Protection against overvoltages of atmospheric origin or due to switching (Corrigendum 1990)	-	-
417	1973	Graphical symbols for use on equipment Index, survey and compilation of the single sheets	HD 243 S10*	1993
439-1 (mod)	1985	Low-voltage switchgear and controlgear assemblies - Part 1: Requirements for type-tested and partially type-tested assemblies	EN 60439-1 + A1	1990 1993
445	1988	Identification of equipment terminals and of terminations of certain designated conductors, including general rules for an alphanumeric system	EN 60445	1990
447	1974	Standard directions of movement for actuators which control the operation of electrical apparatus	HD 331 S1	1977
529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529	1991
617-7	1983	Graphical symbols for diagrams Part 7: Switchgear, controlgear and protective devices	-	-
664	1980	Insulation co-ordination within low-voltage systems including clearances and creepage distances for equipment (First supplement: 1981)	-	-
695-2-1	1980	Fire hazard testing - Part 2: Test methods - Glow-wire test and guidance	HD 444.2.1 S1	1983
707	1981	Methods of test for the determination of the flammability of solid electrical insulating materials when exposed to an igniting source	HD 441 S1	1983
947-1 (mod)	1988	Low-voltage switchgear and controlgear Part 1: General rules (Corrigendum 1992)	EN 60947-1	1991

* HD 243 S10:1991 includes supplements A:1975 to K:1991 to IEC 417

IEC Publication -----	Date -----	Title -----	EN/HD -----	Date -----
947-4-1	1990	Part 4: Contactors and motor-starters Section One: Electromechanical contactors and motor-starters (Corrigendum 1991)	EN 60947-4-1	1992
947-5-1	1990	Part 5: Control-circuit devices and switching elements - Section One: Electromechanical control circuit devices (Corrigendum 1992)	EN 60947-5-1	1991

Other publication

ISO 2039-2:1987 - Plastics - Determination of hardness - Part 2: Rockwell hardness

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CEI
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Première édition
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Contacteurs électromécaniques pour usages
domestiques et analogues

iTeh STANDARD PREVIEW

Electromechanical contactors for household
and similar purposes

SIST EN 61095:1995

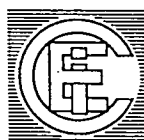
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International Electrotechnical Commission
Международная Электротехническая Комиссия

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PRICE CODE

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTROMECHANICAL CONTACTORS FOR HOUSEHOLD AND SIMILAR PURPOSES

FOREWORD

- 1) The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.
- 3) In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text of the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

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This International Standard has been prepared by Sub-Committee 17B: Low-voltage switchgear and controlgear, of IEC Technical Committee No. 4, in conjunction with Sub-Committee 23E: Circuit-breakers and similar equipment for household use, of IEC Technical Committee No. 23E: Electrical accessories.

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

DIS	Reports on Voting
17B(CO)194 23E(CO)128	17B(CO)204 23E(CO)137

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

INTRODUCTION

This International Standard gives requirements for contactors household and similar purposes, including contactors for distribution control in buildings which may be subject to national regulations including approval (certification) by appropriate testing authorities.

Contactors for such purposes have particular requirements which include test sequences and sampling plans to facilitate testing and approval under third-party approval (certification) schemes where such mandatory requirements exist.

Contactors according to this standard are limited in the range of operational currents and operational voltages to values appropriate to the applications. Such contactors are for use in circuits of limited prospective short-circuit fault current for which they need to be co-ordinated with an appropriate short-circuit protective device to provide suitable co-ordination.

This standard defines in a single document the specific utilization category for a described application and states the relevant requirements. As far as possible, it is in line with the requirements contained in IEC 947-4-1 "Electromechanical contactors and motor-starters".

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This standard also applies to contactors which are components of an appliance, unless otherwise stated in the standard covering the relevant appliance.

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ELECTROMECHANICAL CONTACTORS FOR HOUSEHOLD AND SIMILAR PURPOSES

1 Scope

This International Standard applies to electromechanical air break contactors for household and similar purposes provided with main contacts intended to be connected to circuits the rated voltage of which does not exceed 440 V a.c. with rated operational currents less than or equal to 63 A for utilization category AC-7a and 32 A for utilization category AC-7b, and rated conditional short-circuit current less than or equal to 6 kA.

The contactors dealt with in this standard are not normally designed to interrupt short-circuit currents. Therefore, suitable short-circuit protection (see 9.3.4) shall form part of the installation.

This standard does not apply to:

- contactors complying with IEC 947-4-1;
- semiconductor contactors;
- contactors designed for special applications;
- auxiliary contacts of contactors. These are dealt with in IEC 947-5-1.

This standard states:

- 1) The characteristics of contactors.
- 2) The conditions with which contactors shall comply with reference to:
 - a) their operation and behaviour;
 - b) their dielectric properties;
 - c) the degrees of protection provided by their enclosures, where applicable;
 - d) their construction.
- 3) The tests intended for confirming that these conditions have been met, and the methods to be adopted for these tests.
- 4) The test sequences and the number of samples to be submitted for certification purpose.
- 5) The information to be given with contactors or in the manufacturer's literature.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this International Standard 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.

IEC 28: 1925, *International standard of resistance for copper.*

IEC 50(151): 1978, *International Electrotechnical Vocabulary (IEV), Chapter 151: Electrical and magnetic devices.*

IEC 50(441): 1984, *International Electrotechnical Vocabulary (IEV), Chapter 441: Switchgear, controlgear and fuses.*

IEC 50(604): 1987, *International Electrotechnical Vocabulary (IEV), Chapter 604: Generation, transmission and distribution of electricity - Operation.*

IEC 50(826): 1982, *International Electrotechnical Vocabulary (IEV), Chapter 826: Electrical installations of buildings.*

IEC 68-2-3: 1969, *Environmental testing, Part 2: Tests - Test Ca: Damp heat, steady state.*

IEC 73: 1984, *Colours of indicator lights and push-buttons.*

IEC 85: 1984, *Thermal evaluation and classification of electrical insulation.*

IEC 99-1: 1970, *Lightning arresters, part 1: Non-linear resistor type arresters for a.c. systems.*

IEC 112: 1979, *Method for determining the comparative and the proof tracking indices of solid insulating materials under moist conditions.*

IEC 216, *Guide for the determination of thermal endurance properties of electrical insulating materials.*

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IEC 364-4-443: 1990, *Electrical installations of buildings, Part 4: Protection for safety. Chapter 44: Protection against overvoltages. Section 443: Protection against overvoltages of atmospheric origin or due to switching.*

IEC 417: 1973, *Graphical symbols for use on equipment. Index, survey and compilation of single sheets.*

IEC 439-1: 1985: *Low-voltage switchgear and controlgear assemblies, Part 1: Requirements for type-tested and partially type-tested assemblies.*

IEC 445: 1988, *Identification of equipment terminals and of terminations of certain designated conductors, including general rules of an alphanumeric system.*

IEC 447: 1974, *Standard directions of movement for actuators which control the operation of electrical apparatus.*

IEC 529: 1989, *Degrees of protection provided by enclosures (IP Code).*

IEC 617-7: 1983, *Graphical symbols for diagrams, Part 7: Switchgear, controlgear and protective devices.*

IEC 664: 1980, *Insulation co-ordination within low-voltage systems including clearances and creepage distances for equipment.*