SLOVENSKI STANDARD
SIST EN 61038:1997

01-april-1997

Time switches for tariff and load control (IEC 1038:1990, modified)

Time switches for tariff and load control (IEC 1038:1990)

Messung der elektrischen Energie - Tarif- und Laststeuerung - Besondere Anforderungen für Schaltuhren

Comptage de l'électricité - Tarification et contrôle de charge - Prescriptions particulières pour horloges de tarification

Ta slovenski standard je istoveten z: **EN 61038:1992**

ICS:

39.040.99	Drugi merilniki časa	Other time-measuring instruments

SIST EN 61038:1997 **en**

EUROPEAN STANDARD — EN 61038

NORME EUROPEENNE

EUROPÄISCHE NORM — November 1992

UDC 621.316.578.1

Descriptors: Electrical energy, tariff control, load control, time switch

ENGLISH VERSION

Time switches for tariff and load control
(IEC 1038:1990, modified)

Horloges de commutation pour tarification et contrôle de charge
(CEI 1038:1990, modifiée)

Schaltuhren für Tarif- und Laststeuerung

(IEC 1038:1990, modifiziert)

This European Standard was approved by CENELEC on 1992-09-15. 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

Ref. No. EN 61038:1992 E

FOREWORD

Following the advice of CENELEC Technical Committee TC 13, Equipment for electrical energy measurement and load control, the CENELEC 69 Technical Board decided to submit the text of IEC 1038:1990, together with some common modifications prepared by TC 13, to the CENELEC formal vote.

The text of the draft was approved by CENELEC as EN 61038 on 15 September 1992.

The following dates were fixed:

- latest date of publication of an identical national standard	(dop)	1993-06-01
- latest date of withdrawal of conflicting national standards	(dow)	1993-06-01

For products which have complied with the relevant national standard before 1993-06-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 1998-06-01.

Annexes designated "normative" are part of the body of the standard. Annexes designated "informative" are given only for information. In this standard, annexes A, B, C and ZA are normative and annex D is informative.

STATEMENT

The International Standard IEC 1038:1990, together with the common modifications attached can be used in its present state. However the answers received from the members to the Primary Questionnaire showed that a number of complementary studies (which do not affect fundamentally the present text) were needed; these complementary studies have been proposed to IEC TC 13. They could lead to a draft amendment to IEC 1038, draft which should then be submitted to the parallel IEC/CENELEC voting procedure (this amendment could also include the common modifications).

Endorsement notice

The text of the International Standard IEC 1038:1990 was approved by CENELEC as a European Standard with agreed common modifications as given below.

COMMON MODIFICATIONS

5.6.6 Test of immunity to HF electromagnetic fields : *refer to the latest version of Publication IEC 801-3 (currently under révision, and at the DIS stage), which in particular extends the frequency range to 26-1000 MHz .*

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
50(301)	1983	International Electrotechnical Vocabulary (IEV) - Chapter 301: General terms on measurements in electricity	-	-
60	-	High-voltage test techniques	-	-
68-2-1 68-2-1A + A1	1974 1976 1983	Environmental testing Part 2: Tests - Tests A: Cold	HD 323.2.1 S2	1987
68-2-2	1974	Part 2: Tests - Test B: Dry heat	HD 323.2.2 S1*	1988
68-2-6	1982	Part 2: Tests - Test Fc and guidance: Vibration (sinusoidal)	HD 323.2.6 S2*	1988
68-2-27	1987	Part 2: Tests - Test Ea and guidance: Shock	HD 323.2.27 S2	1988
68-2-30	1980	Part 2: Tests - Test Db and guidance: Damp heat, cyclic (12 + 12-hour cycle)	HD 323.2.30 S2*	1987
85	1984	Thermal evaluation and classification of electrical insulation	HD 566 S1	1990
255-4 + A1	1976 1979	Electrical relays - Part 4: Single input energizing quantity measuring relays with dependent specified time	-	-
269-3	1987	Low-voltage fuses - Part 3: Supplementary requirements for fuses for use by unskilled persons (Fuses mainly for household and similar applications)	-	-
410	1973	Sampling plans and procedures for inspection by attributes	-	-

----

* HD 323.2.2 S1:1988 includes IEC 68-2-2A:1976
HD 323.2.6 S2:1988 includes A1:1983 + A2:1985 to IEC 68-2-6
HD 323.2.30 S2:1987 includes A1:1985 to IEC 68-2-30

IEC Publication	Date	Title	EN/HD	Date
417C	1977	Graphical symbols for use on equipment Index, survey and compilation of the single sheets - Third supplement	HD 243 S9*	1991
529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529	1991
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
721-3-3	1987	Classification of environmental conditions - Part 3: Classification of groups of environmental parameters and their severities - Stationary use at weatherprotected locations (Corrigendum April 1988)	HD 478.3.3 S1	1989
801-2	1984	Electromagnetic compatibility for industrial-process measurement and control equipment - Part 2: Electrostatic discharge requirements	HD 481.2 S1	1987
801-3	1984	Part 3: Radiatedelectromagnetic field requirements	HD 481.3 S1	1987
801-4	1988	Part 4: Electrical fast transient/burst requirements	-	-
817	1984	Spring-operated impact-test apparatus and its calibration	HD 495 S1	1987

---

* HD 243 S9:1991 includes supplements A:1974 to J:1990 to IEC 417

NORME INTERNATIONALE
INTERNATIONAL STANDARD

CEI
IEC
1038

Première édition
First edition
1991-11

Horloge de commutation pour tarification et contrôle de charge

Time switches for tariff and load control

Bureau Central de la Commission Electrotechnique Internationale 3, rue de Varembé Genève, Suisse

Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE V

Pour prix, voir catalogue en vigueur
For price, see current catalogue

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

TIME SWITCHES FOR TARIFF AND LOAD CONTROL

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.

This standard has been prepared by IEC Technical Committee No. 13: Equipment for electrical energy measurement and load control.

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

Six Months' Rule	Report on Voting
13(CO)1008	13(CO)1011

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

The annexes A, B and C are normative.

The annex D is informative.

TIME SWITCHES FOR TARIFF AND LOAD CONTROL

1 Scope

This international Standard specifies requirements for the type test of newly manufactured indoor time switches with operation reserve that are used to control electrical loads, multi-tariff registers and maximum demand devices at certain days and hours throughout the year. These time switches may employ various types of operation including the use of electronic circuits. This Standard does not apply to time switches operated by remote control or synchronized by radio-frequency.

This Standard includes time switches with analogue dials or digital display that are:

- synchronous;
- crystal-controlled.

This standard does not cover the acceptance tests and the conformity tests. (Nevertheless, an example of what could be an acceptance test is given in annex D.)

The reliability aspect is not covered either in this standard as there are no short term procedures available which would fit into type test documents to check these requirements satisfactorily.

2 Normative references

The following standards 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 standards 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 standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 50(301): 1983, *International Electrotechnical Vocabulary (IEV) Chapter 301: General terms on measurements in electricity.*

IEC 60: *High-voltage test techniques.*

IEC 68-2-1: 1974, *Environmental testing – Part 2: Tests. Tests A: Cold. (Amendment No. 1: 1983, First supplement: 1976).*

IEC 68-2-2: 1974, *Environmental testing – Part 2: Tests. Tests B: Dry Heat.*

IEC 68-2-6: 1982, *Environmental testing – Part 2: Tests. Test Fc and guidance: Vibration (sinusoidal).*

IEC 68-2-27: 1987, *Environmental testing – Part 2: Tests. Test Ea and guidance: Shock.*

IEC 68-2-30: 1980, *Environmental testing – Part 2: Tests. Test Db and guidance: Damp heat, cyclic (12 + 12-hour cycle).*

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

IEC 255-4: 1976, *Electrical relays. Single input energizing quantity measuring relays with dependent specified time. (Amendment No. 1: 1979).*

IEC 269-3, 1987, *Low voltage fuse - Part 3: Supplementary requirements for fuses for use by unskilled persons (fuses mainly for household and similar applications). (First supplement: Appendix A: Examples of standardized fuses for domestic and similar applications.)*

IEC 410: 1973, *Sampling plans and procedures for inspection by attributes.*

IEC 417C: 1977, *Graphical symbols for use on equipment. Index, survey and compilation of the single sheets. Third supplement.*

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

IEC 664: 1980, *Insulation co-ordination within low-voltage systems including clearances and creepage distances for equipment. (First supplement: 1981).*

IEC 695-2-1: 1980, *Fire hazard testing – Part 2: Test methods. Glow-wire test and guidance.*

IEC 721-3-3: 1987, *Classification of environmental conditions – Part 3: Classification of groups of environmental parameters and their severities. Stationary use at weatherprotected locations.*

IEC 801-2: 1984, *Electromagnetic compatibility for industrial-process measurement and control equipment – Part 2: Electrostatic discharge requirements.*

IEC 801-3: 1984, *Electromagnetic compatibility for industrial-process measurement and control equipment – Part 3: Radiated electromagnetic field requirements.*

IEC 801-4: 1988, *Electromagnetic compatibility for industrial-process measurement and control equipment – Part 4: Electrical fast transient/burst requirements.*

IEC 817: 1984, *Spring-operated impact-test apparatus and its calibration.*