

**Võrgusagedusele pealdatud kõrgsagedussignaali-
vastuvõtjad tariifi ja koormuse juhtimiseks**

**Electronic ripple control receivers for tariff and load
control**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 61037:2001 sisaldab Euroopa standardi EN 61037:1992+A1:1996+A2:1998 ingliskeelset teksti.	This Estonian standard EVS-EN 61037:2001 consists of the English text of the European standard EN 61037:1992+A1:1996+A2:1998.
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Descriptors: Electrical energy, tariff control, load control, ripple control, centralized ripple control, electronic ripple control receiver

English version

Electronic ripple control receivers for tariff and load control

(IEC 1037 : 1990, modified)

Récepteurs électroniques de télécommande
centralisée pour tarification et contrôle de charge
(CEI 1037 : 1990, modifiée)

Elektronische
Rundsteuerempfänger für
Tarife und Laststeuerung
(IEC 1037 : 1990, modifiziert)

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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.

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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

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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 1037 : 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 61037 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, D, E, F and ZA are normative and annexes G, H, J and K are informative.

Statement

The International Standard IEC 1037 : 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 1037, draft which should then be submitted to the parallel IEC/CENELEC voting procedure (this amendment could also include the common modifications).

In addition, it is to be noted that the harmonics levels specified in 4.6.2, as well as the EMC requirements might have to be reconsidered in the future in the light of the studies carried out in CENELEC TC 110 and CENELEC BTTF 68-6 (DISNORM 12).

Contents

	Page
Committees responsible	Inside front cover
National foreword	ii
Specification	
1 Scope	1
2 Normative references	1
3 Definitions	3
4 Requirements	7
5 Tests and test conditions	17
Annexes	
A Relationship between ambient air temperature and relative humidity	28
B Reference and limiting values of the influence quantities	29
C Electromagnet for testing the influence of externally-produced magnetic fields	30
D Harmonic levels	31
E Selection of frequency for tests with harmonics	32
F Combination of parameters for operation and non-operation tests	33
G Acceptance tests	34
H Code terms	36
J Example of a test configuration	37
K Values of the influence quantities for the different tests	38
Tables	
1 Clearances and creepage distances for the terminal block	9
2 Temperature range	11
3 Relative humidity	11
4 Rated breaking voltages	12
5 Rated breaking currents	12
Figures	
E.1 Examples for selection of the frequency H_c	32
E.2 Frequency deviations for measurement of the disturbance limit curves	32

The Technical Committee has reviewed the provisions of IEC 255-4 : 1976, IEC 269-3 : 1987, IEC 410 : 1973, IEC 529 : 1989, IEC 664 : 1980, IEC 721-3-3 : 1987, IEC 801-4 : 1988 and IEC/CISPR 14 : 1985, to which reference is made in the text, and has decided that they are acceptable for use in conjunction with this standard.

Related British Standards are as follows.

International standard	Related British Standard
IEC 410 : 1973	BS 6001 Sampling procedures for inspection by attributes Part 1 : 1972 Specification for sampling plans indexed by acceptable quality level (AQL) for lot-by-lot inspection
IEC 529 : 1989	BS 5685 Electricity meters Part 2 : 1986 Specification for single-phase coin operated prepayment flat rate and two-part tariff watt-hour meters of Class 2 and fixed charge collectors of Class 2
IEC 664 : 1980	PD 6499 : 1981 Guide to insulation co-ordination within low-voltage systems including clearances and creepage distances for equipment
IEC/CISPR 14 : 1985	BS 800 : 1988 Specification for limits and methods of measurement of radio interference characteristics of household electrical appliances, portable tools and similar electrical apparatus

Compliance with a British Standard does not of itself confer immunity from legal obligations.

ELECTRONIC RIPPLE CONTROL RECEIVERS FOR TARIFF AND LOAD CONTROL

1 Scope

This International Standard specifies requirements for the type test of indoor electronic ripple control receivers for the reception and interpretation of pulses of a single audio frequency superimposed on the voltage of the electricity distribution network and for the execution of the corresponding switching operations. In this system the mains frequency is generally used to synchronize the transmitter and receivers. Neither the control frequency, nor the encoding are standardized in this standard.

This standard gives no requirements for constructional details internal to the receiver.

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 G (informative).)

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

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, 302, 303): 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).*

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

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

IEC 529: 1989, *Classification of 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 weather-protected 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.*

IEC/CISPR 14: 1985, *Limits and methods of measurement of radio interference characteristics of household electrical appliances, portable tools and similar electrical apparatus. (Amendment No. 1: 1987.)*