

SLOVENSKI STANDARD

SIST EN 60555-1:1995

01-april-1995

Motnje v napajalnih sistemih, ki jih povzročajo gospodinjske naprave in podobna električna oprema - 1. del: Definicije (IEC 60555-1:1982)

Disturbances in supply systems caused by household appliances and similar electrical equipment -- Part 1: Definitions

Rückwirkungen in Stromversorgungsnetzen, die durch Haushaltgeräte und durch ähnliche elektrische Einrichtungen verursacht werden -- Teil 1: Begriffe

Perturbations produites dans les réseaux d'alimentation par les appareils électrodomestiques et les équipements analogues -- Partie 1: Définitions

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Ta slovenski standard je istoveten z: **EN 60555-1:1987**

ICS:

29.240.01	Omrežja za prenos in distribucijo električne energije na splošno	Power transmission and distribution networks in general
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en

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EUROPEAN STANDARD

EN 60 555

NORME EUROPEENNE

Part 1

EUROPAISCHE NORM

April 1987

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KEY WORDS : Electromagnetic compatibility; disturbances; household electrical appliances; definitions

ENGLISH VERSION

DISTURBANCES IN SUPPLY SYSTEMS CAUSED BY HOUSEHOLD APPLIANCES AND SIMILAR ELECTRICAL EQUIPMENT.

PART 1 : DEFINITIONS.

(IEC 555-1 (1982 - 1st edition))

Perturbations produites dans Les
réseaux d'alimentation par Les
appareils électrodomestiques et
Les équipements analogues
Première partie: Définitions
(CEI 555-1 (1982 - 1ère édition))

Rückwirkungen in Stromversorgungs-
netzen, die durch Haushaltgeräte
und durch ähnliche elektrische
Einrichtungen verursacht werden
Teil 1: Begriffe
(IEC 555-1 (1982 - 1. Ausgabe))

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This European Standard was ratified by CENELEC on 27 February 1986. CENELEC members are bound to comply with the requirements of the CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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CENELEC

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

Central Secretariat: rue Bréderode 2, B-1000 Brussels

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Ref. No. EN 60 555-1:1987 E

BRIEF HISTORY

The CENELEC Questionnaire Procedure performed for finding out whether or not IEC 555-1 (first edition, 1982) could be accepted without textual changes, has shown that no common modifications were necessary for the acceptance as a European Standard (EN). The Reference Document was submitted to the CENELEC members for vote and acceptance by CENELEC.

TECHNICAL TEXT

The text of the International Standard IEC 555-1 (first edition, 1982) was approved by CENELEC on 27 February 1986 as a European Standard.

The following dates were fixed for the EN:

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Note: EN 60 555 Part 1, Part 2 and Part 3 supersedes EN 50 006.

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NORME
INTERNATIONALE
INTERNATIONAL
STANDARD

CEI
IEC
555-1

Première édition
First edition
1982

Perturbations produites dans les réseaux
d'alimentation par les appareils électro-
domestiques et les équipements analogues

Première partie:

Définitions

(standards.iteh.ai)

Disturbances in supply systems
caused by household appliances
and similar electrical equipment

Part 1:

Definitions

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International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**DISTURBANCES IN SUPPLY SYSTEMS
CAUSED BY HOUSEHOLD APPLIANCES
AND SIMILAR ELECTRICAL EQUIPMENT**

Part 1: Definitions

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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PREFACE

This standard has been prepared by IEC Technical Committee No. 77: Electromagnetic Compatibility between Electrical Equipment including Networks. <https://standards.iteh.ai/standards/sist/ee8a8202-3895-44f6-9323-1ad8cfcf0330/sist-en-60555-1-1995>

Drafts were discussed at the meetings held in Moscow in 1977 and in The Hague 1979. As a result of this latter meeting, a draft, Document 77(Central Office)4, was submitted to the National Committees for approval under the Six Months' Rule in June 1980.

The National Committees of the following countries voted explicitly in favour of publication:

Australia	Korea (Democratic People's Republic of)
Austria	Netherlands
Belgium	New Zealand
Canada	Norway
Egypt	Poland
Finland	South Africa (Republic of)
France	Sweden
Germany	Switzerland
Hungary	Turkey
Ireland	Union of Soviet
Israel	Socialist Republics
Italy	United States of America
Japan	Yugoslavia

Other IEC publication quoted in this standard:

Publication No. 50: International Electrotechnical Vocabulary (I.E.V.).

DISTURBANCES IN SUPPLY SYSTEMS CAUSED BY HOUSEHOLD APPLIANCES AND SIMILAR ELECTRICAL EQUIPMENT

Part 1: Definitions

1. Scope and object

This standard is one of a series which deals with disturbances in supply systems caused by household appliances and similar electrical equipment.

This series will consist of three parts:

Part 1: Definitions (IEC Publication 555-1).

Part 2: Harmonics (IEC Publication 555-2).

Part 3: Voltage fluctuations (IEC Publication 555-3).

2. General terms

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2.1 *Electromagnetic compatibility*

The ability of a device to function satisfactorily in its electromagnetic environment without introducing intolerable disturbances to that environment or to other devices therein.

2.2 *Input (or output) power control*

The methods and means of regulating the electric energy supplied to (or from) an apparatus, machine or system to achieve required performance.

2.3 *Control system*

A combination of control apparatus or devices co-ordinated to execute a planned set of controls, or to maintain a pre-set value.

2.4 *Cyclic on/off switching control*

An input power control which operates to switch the supply to the equipment on and off in a repetitive manner.

Note. — In a cyclic switching control system, electromechanical or electronic switches can be used.

2.5 *Programme (program) (of a control system)*

A set of command and information signals necessary for the achievement of a specific sequence of operations.

2.6 Multicycle control

The process of varying the ratio of the number of half-cycles of current conduction to the number of half cycles of non-conduction.

Note. — The various combinations of times of conduction and non-conduction enable, for example, the average power supplied to the controlled load to be varied.

2.6.1 Synchronous multicycle control

Multicycle control in which the starting instants of the operating intervals are synchronized with respect to the line voltage.

Notes 1. — For resistive loads, the starting instant is normally at voltage zero and current flows for an integral number of complete half-cycles.

This is sometimes known as “Burst firing control” and should not be confused with a firing technique for thyristors in which a burst or train of trigger pulses is applied.

2. — Figure 1, page 20, shows an idealized example of the current supplied to a resistive single-phase load controlled according to this principle.

2.7 Generalized phase control (for example, see Figure 2, page 20)

The process of varying, within the cycle (or half-cycle) of the supply voltage, the time interval or intervals during which current conduction occurs.

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2.7.1 Phase control

The process of varying, within the cycle (or half-cycle) of the supply voltage, the instant at which current conduction begins. In this process the conduction ceases at or about the passage of current through zero.

Notes 1. — Phase control is a particular case of generalized phase control.

2. — Variation of the instant at which current conduction begins (variation of the delay angle) makes it possible to vary the power supplied to a connected load.

3. — Figure 2d, page 20, shows an idealized example of the current supplied to a resistive single-phase load under symmetrical phase control.

2.8 Delay angle (I.E.V. 551-05-29)

The time expressed in angular measure by which the starting instant of current conduction is delayed by phase control.

Note. — The delay angle can be either constant or variable and is not necessarily intended to be the same for positive and negative half-cycles.

2.9 Symmetrical control (single-phase)

Control by a device designed to operate in an identical manner on the positive and negative half-cycles of an alternating voltage or current.