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**Električni releji – 22-1. del: Preskusi električnih motenj merilnih relejev in  
zaščitne opreme – Preskus odpornosti z impulzi 1 MHz (IEC 60255-22-1:2005)**

Electrical relays - Part 22-1: Electrical disturbance tests for measuring relays and  
protection equipment - 1 MHz burst immunity tests (IEC 60255-22-1:2005)

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English version

**Electrical relays**  
**Part 22-1: Electrical disturbance tests**  
**for measuring relays and protection equipment -**  
**1 MHz burst immunity tests**  
**(IEC 60255-22-1:2005)**

Relais électriques  
Partie 22-1: Essais d'influence électrique  
concernant les relais de mesure  
et dispositifs de protection -  
Essais d'immunité à l'onde oscillatoire  
amortie 1 MHz  
(CEI 60255-22-1:2005)

Elektrische Relais  
Teil 22-1: Prüfungen der elektrischen  
Störfestigkeit von Messrelais  
und Schutzeinrichtungen -  
Prüfung der Störfestigkeit  
gegen 1-MHz-Störgrößen  
(IEC 60255-22-1:2005)

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This European Standard was approved by CENELEC on 2005-09-13. 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, 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 95/168/FDIS, future edition 2 of IEC 60255-22-1, prepared by IEC TC 95, Measuring relays and protection equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60255-22-1 on 2005-09-13.

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) 2006-07-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2008-10-01

Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 60255-22-1:2005 was approved by CENELEC as a European Standard without any modification.

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## Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60255-6 (mod)	- <sup>1)</sup>	Electrical relays Part 6: Measuring relays and protection equipment	EN 60255-6 + corr. February	1994 <sup>2)</sup> 1995
IEC 61000-4-12	1995	Electromagnetic compatibility (EMC) Part 4-12: Testing and measurement techniques - Oscillatory waves immunity test	EN 61000-4-12	1995

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<sup>1)</sup> Undated reference.

<sup>2)</sup> Valid edition at date of issue.

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INTERNATIONALE  
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60255-22-1

Deuxième édition  
Second edition  
2005-03

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**Relais électriques –**

**Partie 22-1:**

**Essais d'influence électrique concernant les  
relais de mesure et dispositifs de protection –  
Essais d'immunité à l'onde oscillatoire  
amortie 1 MHz**

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**Electrical relays –**

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**Part 22-1:**

**Electrical disturbance tests for measuring  
relays and protection equipment –  
1 MHz burst immunity tests**

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International Electrotechnical Commission  
Международная Электротехническая Комиссия

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**ELECTRICAL RELAYS –****Part 22-1: Electrical disturbance tests for measuring relays  
and protection equipment –  
1 MHz burst immunity tests**

## FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of 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, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). 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. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 60255-22-1 has been prepared by IEC technical committee 95: Measuring relays and protection equipment.

This second edition cancels and replaces the first edition published in 1988. This standard constitutes a technical revision. The main differences with respect to the previous edition concern:

- the definition of test severity levels;
- the reference to IEC 61000-4-12.

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

FDIS	Report on voting
95/168/FDIS	95/174/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.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

IEC 60255 consists of the following parts, under the general title *Electrical relays*:

- Part 3: Single input energizing quantity measuring relays with dependent or independent time
- Part 5: Insulation coordination for measuring relays and protection equipment – Requirements and tests
- Part 6: Measuring relays and protection equipment
- Part 8: Thermal electrical relays
- Part 11: Interruptions to and alternating component (ripple) in d.c. auxiliary energizing quantity of measuring relays
- Part 12: Directional relays and power relays with two input energizing quantities
- Part 13: Biased (percentage) differential relays
- Part 14: Endurance tests for electrical relay contacts – Preferred values for contact loads
- Part 15: Endurance tests for electrical relay contacts – Specification for the characteristics of test equipment
- Part 16: Impedance measuring relays
- Part 21-1: Vibration, shock, bump and seismic tests on measuring relays and protection equipment – Vibration tests (sinusoidal)
- Part 21-2: Vibration, shock, bump and seismic tests on measuring relays and protection equipment – Shock and bump tests
- Part 21-3: Vibration, shock, bump and seismic tests on measuring relays and protection equipment – Seismic tests
- Part 22-1: Electrical disturbance tests for measuring relays and protection equipment – 1 MHz burst immunity tests
- Part 22-2: Electrical disturbance tests for measuring relays and protection equipment – Electrostatic discharge tests
- Part 22-3: Electrical disturbance tests for measuring relays and protection equipment – Radiated electromagnetic field disturbance tests
- Part 22-4: Electrical disturbance tests for measuring relays and protection equipment – Electrical fast transient/burst immunity test
- Part 22-5: Electrical disturbance tests for measuring relays and protection equipment – Surge immunity test
- Part 22-6: Electrical disturbance tests for measuring relays and protection equipment – Immunity to conducted disturbances induced by radio frequency fields

- Part 22-7: Electrical disturbance tests for measuring relays and protection equipment – Power frequency immunity tests
- Part 23: Contact performance
- Part 24: Common format for transient data exchange (COMTRADE) for power systems
- Part 25: Electromagnetic emission tests for measuring relays and protection equipment
- Part 26: Electromagnetic compatibility requirements for measuring relays and protection equipment
- Part 27: Product safety requirements for measuring relays and protection equipment<sup>1</sup>

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

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<sup>1</sup> Under consideration.