Mõõtereleed ja kaitseseadmed. Osa 22-1: Elektriliste häiringute katsetused. Häiringukindluskatsetus 1 MHz impulsipaketile

Measuring relays and protection equipment -Part 22-1: Electrical disturbance tests - 1 MHz
burst immunity tests



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 60255-22-1:2008 sisaldab Euroopa standardi EN 60255-22-1:2008 ingliskeelset teksti.

This Estonian standard EVS-EN 60255-22-1:2008 consists of the English text of the European standard EN 60255-22-1:2008.

Standard on kinnitatud Eesti Standardikeskuse 24.03.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

This standard is ratified with the order of Estonian Centre for Standardisation dated 24.03.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 22.02.2008.

Date of Availability of the European standard text 22.02.2008.

Standard on kättesaadav Eesti standardiorganisatsioonist.

The standard is available from Estonian standardisation organisation.

ICS 29.120.70

Võtmesõnad:

Standardite reprodutseerimis- ja levitamisõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega: Aru 10 Tallinn 10317 Eesti; www.evs.ee; Telefon: 605 5050; E-post: info@evs.ee

EUROPEAN STANDARD

EN 60255-22-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

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Supersedes EN 60255-22-1:2005

English version

Measuring relays and protection equipment Part 22-1: Electrical disturbance tests 1 MHz burst immunity tests

(IEC 60255-22-1:2007)

Relais de mesure et dispositifs de protection -Partie 22-1: Essais d'influence électrique -Essais d'immunité à l'onde oscillatoire amortie 1 MHz (CEI 60255-22-1:2007) Messrelais und Schutzeinrichtungen -Teil 22-1: Prüfungen der elektrischen Störfestigkeit -Prüfung der Störfestigkeit gegen 1-MHz-Störgrößen (IEC 60255-22-1:2007)

This European Standard was approved by CENELEC on 2008-02-01. 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.

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CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the 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 95/204/CDV, future edition 3 of IEC 60255-22-1, prepared by IEC TC 95, Measuring relays and protection equipment, was submitted to the IEC-CENELEC Parallel Unique Acceptance Procedure and was approved by CENELEC as EN 60255-22-1 on 2008-02-01.

This European Standard supersedes EN 60255-22-1:2005.

The main differences with respect to EN 60255-22-1:2005 are:

- this document is based on EN 61000-4-18;
- a capacitor was added for testing shielded communication lines when earthed at one end only;
- the test procedure for communication ports is clarified;
- the length of the communication cable for testing is fixed at 10 m;
- connection to earth removed in Figure 4 for test generator terminal.

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) 2008-11-01

latest date by which the national standards conflicting with the EN have to be withdrawn

2011-02-01 (dow)

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60255-22-1:2007 was approved by CENELEC as a European Standard without any modification.

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

| Publication IEC 60255-6 | Year1) | Title Electrical relays - Part 6: Measuring relays and protection equipment | EN/HD EN 60255-6 + corr. February | <u>Year</u> 1994 ²⁾ 1995 |
|---|--------|---|---|---|
| IEC 61000-4-18 | 2006 | Electromagnetic compatibility (EMC) - Part 4-18: Testing and measurement techniques - Damped oscillatory wave immunity test | EN 61000-4-18 + corr. September | 2007 |
| 1) Undated reference 2) Valid edition at da | | | | |

¹⁾ Undated reference.

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MEASURING RELAYS AND PROTECTION EQUIPMENT -

Part 22-1: Electrical disturbance tests – 1 MHz burst immunity tests

1 Scope and object

This part of IEC 60255 is based on IEC 61000-4-18, referring to that publication where applicable, and specifies the general requirements for 1 MHz oscillatory wave immunity tests for measuring relays and protection equipment for power system protection, including the control, monitoring and process interface equipment used with the relays and protection equipment.

The objective of the tests is to confirm that the equipment under test will operate correctly when energised and subjected to repetitive damped oscillatory waves such as those originating from closing or opening circuit breakers or disconnectors in high voltage substations or power plants.

The requirements specified in this standard are applicable to measuring relays and protection equipment in a new condition and all tests specified are type tests only.

The object of this standard is to state:

- definition of terms used;
- test severity levels;
- test equipment;
- test set-up;
- test procedure;
- criteria for acceptance;
- test report.

2 Normative references

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.

IEC 60255-6, Electrical relays - Part 6: Measuring relays and protection equipment

IEC 61000-4-18:2006, Electromagnetic Compatibility (EMC) – Part 4-18: Testing and measurement techniques – Damped oscillatory wave immunity test

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.