

**Elektrilised releed ja kaitseseadmed. Osa 22-4:
Elektriliste häiringute katsetused.
Immuunsuskatsetused kiiretele transientidele ja
impulsipakettidele**

Measuring relays and protection equipment -- Part 22-4: Electrical disturbance tests - Electrical fast transient/burst immunity test

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 60255-22-4:2008 sisaldab Euroopa standardi EN 60255-22-4:2008 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 24.07.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 05.06.2008.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 60255-22-4:2008 consists of the English text of the European standard EN 60255-22-4:2008.

This standard is ratified with the order of Estonian Centre for Standardisation dated 24.07.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 05.06.2008.

The standard is available from Estonian standardisation organisation.

ICS 29.120.70

Võtmesõnad: electric relays, electrical engineering, electrical equ, electrical protection equipment, influence quantities, interference rejections, measuring relays, protection devices, protective relays, relays, testing

Standardite reprodutseerimis- ja levitamiseõigus 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:
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English version

**Measuring relays and protection equipment -
Part 22-4: Electrical disturbance tests -
Electrical fast transient/burst immunity test
(IEC 60255-22-4:2008)**

Relais de mesure
et dispositifs de protection -
Partie 22-4: Essais d'influence électrique -
Essai d'immunité aux transitoires
électriques rapides en salves
(CEI 60255-22-4:2008)

Messrelais und Schutzeinrichtungen -
Teil 22-4: Prüfungen
der elektrischen Störfestigkeit -
Prüfung der Störfestigkeit gegen schnelle
transiente elektrische Störgrößen/Burst
(IEC 60255-22-4:2008)

This European Standard was approved by CENELEC on 2008-05-01. 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.

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, 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

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Foreword

The text of document 95/228/FDIS, future edition 3 of IEC 60255-22-4, 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 60255-22-4 on 2008-05-01.

This European Standard supersedes EN 60255-22-4:2002.

The main change with respect to EN 60255-22-4:2002 is:

- the improvement of the test severity level regarding the repetition rate.

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) 2009-02-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2011-05-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60255-22-4:2008 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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60050-161	- ¹⁾	International Electrotechnical Vocabulary (IEV) - Chapter 161: Electromagnetic compatibility	-	-
IEC 60255-6	1988	Electrical relays - Part 6: Measuring relays and protection equipment	EN 60255-6 + corr. February	1994 1995
IEC 61000-4-4	2004	Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test	EN 61000-4-4	2004

¹⁾ Undated reference.

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MEASURING RELAYS AND PROTECTION EQUIPMENT –

Part 22-4: Electrical disturbance tests – Electrical fast transient/burst immunity test

1 Scope and object

This part of IEC 60255-22 is based on IEC 61000-4-4, referring to that publication where applicable, and specifies the general requirements for electrical fast transient immunity tests for measuring relays and protection equipment for power system protection, including the control, monitoring and process interface equipment used with these systems.

The objective of the tests is to confirm that the equipment under test will operate correctly when energized and subjected to repetitive fast transients (bursts) such as those originating from interrupting of inductive loads, relay contact bounce, etc.

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:

- definitions of terms used;
- test severity level;
- test equipment;
- test set-up;
- test procedures;
- criteria for acceptance;
- test report requirements.

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 60050-161, *International Electrotechnical Vocabulary – Chapter 161: Electromagnetic compatibility*

IEC 60255-6:1988, *Electrical relays – Part 6: Measuring relays and protection equipment*

IEC 61000-4-4:2004, *Electromagnetic compatibility (EMC) – Part 4-4: Testing and measurement techniques – Electrical fast transient/burst immunity test*

3 Terms and definitions

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

3.1 EUT

equipment under test, which may be either a measuring relay or a protection equipment