

**Measuring relays and protection equipment -- Part 22-5:
Electrical disturbance tests - Surge immunity test**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 60255-22-5:2011 sisaldab Euroopa standardi EN 60255-22-5:2011 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 30.04.2011 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 01.04.2011.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 60255-22-5:2011 consists of the English text of the European standard EN 60255-22-5:2011.

This standard is ratified with the order of Estonian Centre for Standardisation dated 30.04.2011 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

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The standard is available from Estonian standardisation organisation.

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English version

**Measuring relays and protection equipment -
Part 22-5: Electrical disturbance tests -
Surge immunity test
(IEC 60255-22-5:2008)**

Relais de mesure et dispositifs de
protection -
Partie 22-5: Essais d'influence électrique -
Essais d'immunité aux ondes de choc
(CEI 60255-22-5:2008)

Messrelais und Schutzeinrichtungen -
Teil 22-5: Prüfung der elektrischen
Störfestigkeit -
Prüfungen der Störfestigkeit gegen
Stoßspannungen
(IEC 60255-22-5:2008)

This European Standard was approved by CENELEC on 2011-01-02. 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.

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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 95/242/FDIS, future edition 2 of IEC 60255-22-5, 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 60255-22-5 on 2011-01-02.

This European Standard supersedes EN 60255-22-5:2002.

The main change with respect to EN 60255-22-5:2002 concerns line to earth tests (see Figures 8, 9, 10).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

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) 2011-10-02
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2014-01-02

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60255-22-5:2008 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 60255-27:2005 NOTE Harmonized as EN 60255-27:2005 (not modified).

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 60255-6	1988	Electrical relays - Part 6: Measuring relays and protection equipment	EN 60255-6	1994
IEC 61000-4-5	2005	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test	EN 61000-4-5	2006

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MEASURING RELAYS AND PROTECTION EQUIPMENT –

Part 22-5: Electrical disturbance tests – Surge immunity test

1 Scope and object

This part of IEC 60255 is based on IEC 61000-4-5, referring to that publication where applicable, and specifies the general requirements for surge immunity tests for measuring relays and protection equipment for power system protection, including the control, monitoring and process interface equipment used with those systems.

The objective of the tests is to confirm that the equipment under test will operate correctly when energized and subjected to high-energy disturbances on the power and interconnection lines, caused by surge voltages from switching and lightning effects.

This standard does not intend to test the capability of the insulation to withstand high-voltage stress. The insulation test is covered by IEC 60255-27.

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 define:

- terms used;
- test severity levels;
- 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 60255-6:1988, *Electrical relays – Part 6: Measuring relays and protection equipment*

IEC 61000-4-5:2005, *Electromagnetic compatibility (EMC) – Part 4-5: Testing and measurement techniques – Surge immunity test*