

**Measuring relays and protection equipment -
Part 22-3: Electrical disturbance tests - Radiated
electromagnetic field immunity**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 60255-22-3:2008 sisaldab Euroopa standardi EN 60255-22-3:2008 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 20.10.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 17.09.2008.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 60255-22-3:2008 consists of the English text of the European standard EN 60255-22-3:2008.

This standard is ratified with the order of Estonian Centre for Standardisation dated 20.10.2008 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 17.09.2008.

The standard is available from Estonian standardisation organisation.

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Võtmesõnad: acceptance, electric relays, electrical equ, electrical protection, electrical testing, electromagnetic fields, inspection, interference rejections, measuring relays, protection devices, protective relays, relays, specification (approval), specifications, testing

Standardite reprodutseerimis- ja levitamisoigus 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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**Measuring relays and protection equipment -
Part 22-3: Electrical disturbance tests -
Radiated electromagnetic field immunity
(IEC 60255-22-3:2007)**

Relais de mesure
et dispositifs de protection -
Partie 22-3: Essais d'influence électrique -
Immunité aux champs électromagnétiques
rayonnés
(CEI 60255-22-3:2007)

Messrelais und Schutzeinrichtungen -
Teil 22-3: Prüfung der elektrischen
Störfestigkeit -
Prüfung der Störfestigkeit
gegen elektromagnetische Felder
(IEC 60255-22-3:2007)

This European Standard was approved by CENELEC on 2008-08-01. 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 95/209/FDIS, future edition 3 of IEC 60255-22-3, 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 60255-22-3 on 2008-08-01.

This European Standard supersedes EN 60255-22-3:2000.

The main change with respect to EN 60255-22-3:2000 concerns the extension of the frequency range to be tested.

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) 2009-05-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2011-08-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60255-22-3:2007 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60255-22-6	NOTE	Harmonized as EN 60255-22-6:2001 (not modified).
IEC 60255-26	NOTE	Harmonized as EN 60255-26:2005 (not modified).
IEC 61000-4-6	NOTE	Harmonized as EN 61000-4-6:2007 (not modified).
IEC 61000-4-12	NOTE	Harmonized as EN 61000-4-12:2006 (not modified).
IEC 61000-6-2	NOTE	Harmonized as EN 61000-6-2:2005 (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 60050-161	- ¹⁾	International Electrotechnical Vocabulary (IEV) - Chapter 161: Electromagnetic compatibility	-	-
IEC 60050-446	- ¹⁾	International Electrotechnical Vocabulary (IEV) - Chapter 446: Electrical relays	-	-
IEC 60050-448	- ¹⁾	International Electrotechnical Vocabulary (IEV) - Chapter 448: Power system protection	-	-
IEC 60255-6 (mod)	- ¹⁾	Electrical relays - Part 6: Measuring relays and protection equipment	EN 60255-6 + corr. February	1994 ²⁾ 1995
IEC 61000-4-3	- ¹⁾	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	EN 61000-4-3	2006 ²⁾

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

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MEASURING RELAYS AND PROTECTION EQUIPMENT –

Part 22-3: Electrical disturbance tests – Radiated electromagnetic field immunity

1 Scope and object

This part of IEC 60255 is based on IEC 61000-4-3, referring to that publication where applicable, and specifies the general requirements for radiated electromagnetic field 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 (EUT) will operate correctly when energised and subjected to an electromagnetic field from a radiation source operating within the frequency range 80 MHz to 2,7 GHz.

NOTE 1 The product standard IEC 60255-22-6 (based on IEC 61000-4-6) establishes the immunity of measuring relays and protection equipment over the frequency range of 0,15 MHz to 80 MHz.

NOTE 2 The test methods defined in this standard are structured for the primary objective of establishing adequate repeatability of results at various test facilities for qualitative analysis of effects. The test methods using a portable transmitter¹ are not taken into consideration here because the EMC directive now specifies a sweep test, calibrated field strengths must be used and the portable transmitter test is not generally reproducible.

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.

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 (IEV) – Chapter 161: Electromagnetic compatibility*

IEC 60050(446), *International Electrotechnical Vocabulary (IEV) – Chapter 446: Electrical relays*

IEC 60050(448), *International Electrotechnical Vocabulary (IEV) – Chapter 448: Power system protection*

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

IEC 61000-4-3, *Electromagnetic compatibility (EMC) – Part 4-3: Testing and measurement techniques – Radiated, radio-frequency, electromagnetic field immunity test*

¹ Specified in the first edition (1989) of this standard.