Elektromagnetiline ühilduvus. Osa 4-6: Katsetus- ja mõõtetehnika. Häiringukindluskatsetus raadiosagedusliku elektromagnetvälja toimel indutseerunud juhtivuslike häiringute korral

Electromagnetic compatibility (EMC) -- Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 61000-4-6:2009 sisaldab Euroopa standardi EN 61000-4-6:2009 ingliskeelset teksti.

4-6:2009 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse

Standard on kinnitatud Eesti Standardikeskuse 29.05.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 31.03.2009.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 61000-4-6:2009 consists of the English text of the European standard EN 61000-4-6:2009.

This standard is ratified with the order of Estonian Centre for Standardisation dated 29.05.2009 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.

ICS 33.100.20

Võtmesõnad: electric equipment, electromagnetic compatibility, electronic equipment, radio disturbances

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.

EUROPEAN STANDARD

EN 61000-4-6

NORME EUROPÉENNE EUROPÄISCHE NORM

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ICS 33.100.20

Supersedes EN 61000-4-6:2007 + IS1:2009

English version

Electromagnetic compatibility (EMC) Part 4-6: Testing and measurement techniques Immunity to conducted disturbances, induced by radio-frequency fields (IEC 61000-4-6:2008)

Compatibilité électromagnétique (CEM) -Partie 4-6: Techniques d'essai et de mesure -Immunité aux perturbations conduites, induites par les champs radioélectriques (CEI 61000-4-6:2008) Elektromagnetische Verträglichkeit (EMV) -Teil 4-6: Prüf- und Messverfahren -Störfestigkeit gegen leitungsgeführte Störgrößen, induziert durch hochfrequente Felder (IEC 61000-4-6:2008)

This European Standard was approved by CENELEC on 2009-03-01. 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

Central Secretariat: avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 77B/571/FDIS, future edition 3 of IEC 61000-4-6, prepared by SC 77B, High frequency phenomena, of IEC TC 77, Electromagnetic compatibility, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61000-4-6 on 2009-03-01.

This European Standard supersedes EN 61000-4-6:2007 + corrigendum August 2007 + IS1:2009.

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) 2009-12-01

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

(dow) 2012-03-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61000-4-6:2008 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 61000-4-3 NOTE Harmonized as EN 61000-4-3:2006 (not modified).

CISPR 16-1-2 NOTE Harmonized as EN 55016-1-2:2004 (not modified).

CISPR 20 NOTE Harmonized as EN 55020:2007 (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.

Publication	<u>Year</u>	<u>Title</u>	EN/HD	Vear
Publication IEC 60050-161	_1)	International Electrotechnical Vocabulary	<u>EN/HD</u> -	<u>Year</u> -
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INTRODUCTION

IEC 61000 is published in separate parts according to the following structure:

Part 1: General

General considerations (introduction, fundamental principles)
Definitions, terminology

Part 2: Environment

Description of the environment Classification of the environment Compatibility levels

Part 3: Limits

Emission limits

Immunity limits (in so far as they do not fall under the responsibility of the product committees)

Part 4: Testing and measurement techniques

Measurement techniques
Testing techniques

Part 5: Installation and mitigation guidelines

Installation guidelines
Mitigation methods and devices

Part 6: Generic standards

Part 9: Miscellaneous

Each part is further subdivided into several parts, published either as international standards or as technical specifications or technical reports, some of which have already been published as sections. Others will be published with the part number followed by a dash and a second number identifying the subdivision (example: 61000-6-1).

This part is an international standard which gives immunity requirements and test procedure related to conducted disturbances induced by radio-frequency fields.

ELECTROMAGNETIC COMPATIBILITY (EMC) -

Part 4-6: Testing and measurement techniques – Immunity to conducted disturbances, induced by radio-frequency fields

1 Scope and object

This part of IEC 61000 relates to the conducted immunity requirements of electrical and electronic equipment to electromagnetic disturbances coming from intended radio-frequency (RF) transmitters in the frequency range 9 kHz up to 80 MHz. Equipment not having at least one conducting cable (such as mains supply, signal line or earth connection) which can couple the equipment to the disturbing RF fields is excluded.

NOTE 1 Test methods are defined in this part for measuring the effect that conducted disturbing signals, induced by electromagnetic radiation, have on the equipment concerned. The simulation and measurement of these conducted disturbances are not adequately exact for the quantitative determination of effects. The test methods defined are structured for the primary objective of establishing adequate repeatability of results at various facilities for quantitative analysis of effects.

The object of this standard is to establish a common reference for evaluating the functional immunity of electrical and electronic equipment when subjected to conducted disturbances induced by radio-frequency fields. The test method documented in this part of IEC 61000 describes a consistent method to assess the immunity of an equipment or system against a defined phenomenon.

NOTE 2 As described in IEC Guide 107, this standard is a basic EMC publication for use by product committees of the IEC. As also stated in Guide 107, the IEC product committees are responsible for determining whether this immunity test standard should be applied or not, and if applied, they are responsible for determining the appropriate test levels and performance criteria. TC 77 and its sub-committees are prepared to co-operate with product committees in the evaluation of the value of particular immunity tests for their products.

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