

# ILNAS

Institut luxembourgeois de la normalisation  
de l'accréditation, de la sécurité et qualité  
des produits et services

## ILNAS-EN 62311:2008

### **Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz - 300 GHz)**

Evaluation des équipements  
électroniques et électriques en relation  
avec les restrictions d'exposition  
humaine aux champs

Bewertung von elektrischen und  
elektronischen Einrichtungen in Bezug  
auf Begrenzungen der Exposition von  
Personen in elektromagnetischen

## National Foreword

This European Standard EN 62311:2008 was adopted as Luxembourgish Standard ILNAS-EN 62311:2008.

Every interested party, which is member of an organization based in Luxembourg, can participate for FREE in the development of Luxembourgish (ILNAS), European (CEN, CENELEC) and International (ISO, IEC) standards:

- Participate in the design of standards
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English version

**Assessment of electronic and electrical equipment  
related to human exposure restrictions  
for electromagnetic fields (0 Hz - 300 GHz)**  
(IEC 62311:2007, modified)

Evaluation des équipements  
électroniques et électriques  
en relation avec les restrictions  
d'exposition humaine  
aux champs électromagnétiques  
(0 Hz - 300 GHz)  
(CEI 62311:2007, modifiée)

Bewertung von elektrischen  
und elektronischen Einrichtungen  
in Bezug auf Begrenzungen  
der Exposition von Personen  
in elektromagnetischen Feldern  
(0 Hz - 300 GHz)  
(IEC 62311:2007, modifiziert)

This European Standard was approved by CENELEC on 2007-12-04. 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: rue de Stassart 35, B - 1050 Brussels**

## Foreword

The text of document 106/129/FDIS, future edition 1 of IEC 62311, prepared by IEC TC 106, Methods for the assessment of electric, magnetic and electromagnetic fields associated with human exposure, was submitted to the IEC-CENELEC parallel vote.

A draft amendment, prepared by the Technical Committee CENELEC TC 106X, Electromagnetic fields in the human environment, was submitted to the Unique Acceptance Procedure.

The combined texts of IEC 62311:2007 and the draft amendment prAA were approved by CENELEC as EN 62311 on 2007-12-04.

This European Standard supersedes EN 50392:2004.

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- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2011-01-01

Annex ZA has been added by CENELEC.

## Endorsement notice

The text of the International Standard IEC 62311:2007 was approved by CENELEC as a European Standard with agreed common modifications as given below.

### COMMON MODIFICATIONS

## 2 Normative references

Add:

Council Recommendation 1999/519/EC of 12 July 1999 on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz), Official Journal L 199 of 30 July 1999

## 3 Definitions

**3.4** Replace "current density" by "induced current density".

Replace the whole Clause 4 by:

## 4 Compliance criteria

The electronic and electrotechnical apparatus shall comply with the basic restriction as specified in Annex II of Council Recommendation 1999/519/EC.

NOTE 1 The time averaging in the EU-Recommendation applies.

The reference levels in the Council Recommendation 1999/519/EC on public exposure to electromagnetic fields are derived from the basic restrictions using worst-case assumptions about exposure. If the reference levels are met, then the basic restrictions will be complied with, but if the reference levels are exceeded, that does not necessarily mean that the basic restrictions will not be met. In some situations, it will be necessary to show compliance with the basic restrictions directly, but it may also be possible to derive compliance criteria that allow a simple measurement or calculation to demonstrate compliance with the basic restriction. Often these compliance criteria can be derived using realistic assumptions about conditions under which exposures from a device may occur, rather than the conservative assumptions that underly the reference levels.

NOTE 2 The limit is the basic restriction.

If the technology in the apparatus is not capable of producing an E-field, H-field or contact current, at the normal user position, at levels higher than 1/2 the limit values then the apparatus is deemed to comply with the requirements in this standard in respect of that E-field, H-field or contact current without further assessment.

## Bibliography

Add the following note for the standard indicated:

ISO/IEC 17025      NOTE      Harmonized as EN ISO/IEC 17025:2005 (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	-	-

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1) Undated reference.



# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Assessment of electronic and electrical equipment related to human exposure  
restrictions for electromagnetic fields (0 Hz – 300 GHz)**

**Evaluation des équipements électroniques et électriques en relation avec  
les restrictions d'exposition humaine aux champs électromagnétiques  
(0 Hz – 300 GHz)**

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