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Elektromagnetisk kompatibilitet (EMC) – Fordringar på audio-, video-, och audiovisuell utrustning och på utrustning för ljusstyrning i studior och dylikt för yrkesmässigt bruk – Del 1: Emission

*Electromagnetic compatibility –
Product family standard for audio, video, audio-visual and
entertainment lighting control apparatus for professional use –
Part 1: Emissions*

Som svensk standard gäller europastandarden EN 55103-1:2009. Den svenska standarden innehåller den officiella engelska språkversionen av EN 55103-1:2009.

Nationellt förord

Tidigare fastställd svensk standard SS-EN 55103-1, utgåva 1, 1997, gäller ej fr o m 2012-07-01.

Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler för bl a säkerhet, prestanda, dokumentation, utförande och skötsel av elprodukter, elanläggningar och metoder. Genom att utforma sådana standarder blir säkerhetskraven tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

SEK är Sveriges röst i standardiseringsarbetet inom elområdet

SEK Svensk Elstandard svarar för standardiseringen inom elområdet i Sverige och samordnar svensk medverkan i internationell och europeisk standardisering. SEK är en ideell organisation med frivilligt deltagande från svenska myndigheter, företag och organisationer som vill medverka till och påverka utformningen av tekniska regler inom elektrotekniken.

SEK samordnar svenska intressenters medverkan i SEKs tekniska kommittéer och stödjer svenska experters medverkan i internationella och europeiska projekt.

Stora delar av arbetet sker internationellt

Utformningen av standarder sker i allt väsentligt i internationellt och europeiskt samarbete. SEK är svensk nationalkommitté av International Electrotechnical Commission (IEC) och Comité Européen de Normalisation Electrotechnique (CENELEC).

Standardiseringsarbetet inom SEK är organiserat i referensgrupper bestående av ett antal tekniska kommittéer som speglar hur arbetet inom IEC och CENELEC är organiserat.

Arbetet i de tekniska kommittéerna är öppet för alla svenska organisationer, företag, institutioner, myndigheter och statliga verk. Den årliga avgiften för deltagandet och intäkter från försäljning finansierar SEKs standardiseringsverksamhet och medlemsavgift till IEC och CENELEC.

Var med och påverka!

Den som deltar i SEKs tekniska kommittéarbete har möjlighet att påverka framtida standarder och får tidig tillgång till information och dokumentation om utvecklingen inom sitt teknikområde. Arbetet och kontakterna med kollegor, kunder och konkurrenter kan gynnsamt påverka enskilda företags affärsutveckling och bidrar till deltagarnas egen kompetensutveckling.

Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

SEK Svensk Elstandard

Box 1284
164 29 Kista
Tel 08-444 14 00
www.elstandard.se

English version

**Electromagnetic compatibility -
Product family standard for audio, video, audio-visual
and entertainment lighting control apparatus for professional use -
Part 1: Emissions**

Compatibilité électromagnétique -
Norme de famille de produits
pour les appareils à usage professionnel
audio, vidéo, audiovisuels et de
commande de lumière pour spectacles -
Partie 1: Emissions

Elektromagnetische Verträglichkeit -
Produktfamilienorm für Audio-, Video-
und audiovisuelle Einrichtungen sowie
für Studio-Lichtsteuereinrichtungen
für professionellen Einsatz -
Teil 1: Störaussendungen

This European Standard was approved by CENELEC on 2009-07-01. 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

This European Standard was prepared by the Technical Committee CENELEC TC 210, Electromagnetic compatibility (EMC).

The text of the draft was submitted to the formal vote and was approved by CENELEC as EN 55103-1 on 2009-07-01.

This European Standard supersedes EN 55103-1:1996.

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) 2010-07-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2012-07-01

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and covers protection requirements of EC Directive 2004/108/EC. See Annex ZZ.

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1 Scope

This European Standard for EMC emission requirements applies to professional audio, video, audio-visual and entertainment lighting control apparatus as defined in 3.6 intended for use in the environments described in Clause 4. This includes the digital apparatus defined in 3.5 and sub-assemblies, see 6.3.

Disturbances in the frequency range 0 Hz to 400 GHz are covered, but requirements are not set over the whole of that range. See Note 5.

NOTE 1 In Annex D, information is included on infra-red radiation in the wavelength range 0,7 μm to 1,6 μm .

Fault conditions of source or victim apparatus are not taken into account. Apparatus as defined in 3.4, 3.5 and 3.6 may be operated with any source of power.

NOTE 2 Sources of power may include, for example: the public low-voltage supply; private supplies with similar characteristics; a d.c. source provided specifically for the apparatus; batteries internal to the apparatus; stand-by generators. Some standards may not apply to private low-voltage supplies.

NOTE 3 In special cases, for instance when highly susceptible apparatus is being used in proximity, additional mitigation measures may have to be employed to reduce the electromagnetic emission further, below the specified levels.

NOTE 4 Professional-user receiving apparatus may be very sensitive to disturbance; see Annex E.

This European Standard does not apply to

- consumer apparatus,
- apparatus specifically designed for security systems, and
- apparatus designed to radiate electromagnetic energy for radio communications purposes.

NOTE 5 To ensure freedom from interference, manufacturers should consider the characteristics of other equipment likely to be in the same environment and thus determine whether limitation of emissions in additional frequency ranges is necessary.

The objective of this standard is to define limits and methods of measurement for apparatus defined in the scope, in relation to continuous and transient, conducted and radiated disturbances. These requirements represent essential electromagnetic compatibility 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.

EN 55013	2001	<i>Sound and television broadcast receivers and associated equipment - Radio disturbance characteristics - Limits and methods of measurement</i> (CISPR 13:2001, mod.)
EN 55014-1	2000	<i>Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission</i>
+ A1	2001	
+ A2	2002	(CISPR 14-1:2000 + A1:2001 + A2:2002)
EN 55022	2006	<i>Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement</i> (CISPR 22:2005, mod.)
EN 60268-3	2000	<i>Sound system equipment - Part 3: Amplifiers</i> (IEC 60268-3:2000)