SLOVENSKI STANDARD
SIST EN IEC 62368-1:2024/oprA1:2026

01-december-2026

Oprema za avdio/video, informacijsko in komunikacijsko tehnologijo - 1. del: Varnostne zahteve - Dopolnilo A1

Amendment 1 - Audio/video, information and communication technology equipment - Part 1: Safety requirements

Einrichtungen für Audio/Video-, Informations- und Kommunikationstechnik - Teil 1: Sicherheitsanforderungen

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Equipements des technologies de l'audio/vidéo, de l'information et de la communication - Partie 1: Exigences de sécurité

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ICS:

33.160.01	Avdio, video in avdiovizualni sistemi na splošno	Audio, video and audiovisual systems in general
35.020	Informacijska tehnika in tehnologija na splošno	Information technology (IT) in general

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108/871/CDV

COMMITTEE DRAFT FOR VOTE (CDV)

PROJECT NUMBER: **IEC 62368-1/AMD1 ED4**	
DATE OF CIRCULATION: **2026-11-06**	CLOSING DATE FOR VOTING: **2027-01-29**
SUPERSEDES DOCUMENTS: **108/849/CD, 108/867/CC**	

IEC TC 108 : SAFETY OF ELECTRONIC EQUIPMENT WITHIN THE FIELD OF AUDIO/VIDEO, INFORMATION TECHNOLOGY AND COMMUNICATION TECHNOLOGY

SECRETARIAT: United States of America	SECRETARY: Ms Valara Davis
OF INTEREST TO THE FOLLOWING COMMITTEES: TC 23,TC 34,TC 61,TC 62,TC 100	HORIZONTAL FUNCTION(S):
ASPECTS CONCERNED: Electromagnetic Compatibility,Safety	
☒ SUBMITTED FOR CENELEC PARALLEL VOTING	☐ NOT SUBMITTED FOR CENELEC PARALLEL VOTING

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The attention of IEC National Committees, members of CENELEC, is drawn to the fact that this Committee Draft for Vote (CDV) is submitted for parallel voting.

The CENELEC members are invited to vote through the CENELEC online voting system.

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TITLE:

Amendment 1 - Audio/video, information and communication technology equipment - Part 1: Safety requirements

PROPOSED STABILITY DATE: 2032

NOTE FROM TC/SC OFFICERS:

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0 Principles of this product safety standard

0.5 Safeguards

Replace the fifth paragraph with following:

0.5.5.2 Instructional safeguard

If exposure to an energy source capable of causing pain or injury is essential to the correct functioning of equipment, an **instructional safeguard** may be used to ensure protection of persons instead of another **safeguard**. The **instructional safeguard** may require a **personal safeguard**.

0.5.5.4 Skill safeguard (used by a skilled person)

Replace the second paragraph with following:

During equipment servicing, it is possible that a **skilled person** will need to remove or defeat an **equipment safeguard**. In this case, a **skilled person** is expected to then apply skill as a **safeguard** to avoid injury or fire.

1 Scope

In the third paragraph replace the fifth dash with the following:

– equipment intended to be used in tropical regions.

2 Normative references

Add the following normative reference:

ISO 4892-2:2013/AMD1:2021, Plastics – Methods of exposure to laboratory light sources – Part 2: Xenon-arc lamps

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3 Terms, definitions and abbreviated terms

3.3.6 Miscellaneous

3.3.6.21 subassembly

Replace the text with the following:

unit assembled separately and designed to be incorporated with other units into a larger manufactured equipment and that cannot work independently from the final equipment.

Note 1 to entry: A subassembly shall be regarded as a component in the final equipment.

3.3.18 FIW terms

3.3.18.1
fully insulated winding wire
FIW

Delete the last sentence of Note 1 to entry.

Add the following to the end of Note 2 to entry:

Some standards use **FIW** as winding wire that exhibits no electrical discontinuities when tested under specific conditions.

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4 General requirements

4.1.3 Equipment design and construction

Replace the first dash in the third paragraph with the following:

– for **ordinary person** servicing, class 2 energy sources in accordance with 4.3.2.3, where an **instructional safeguard** is provided in accordance with Clause F.5, except that element 3 is optional; or

Add this new dash after the last dash in the third paragraph:

– for **safeguards** that only act as a **fire enclosure** or fire barrier.

4.8.5 Compliance criteria

Replace the last dashed item with the following:

– *it shall not be possible to remove the **battery** from the equipment with the test hook of Figure 20 using a force of not more than 20 N.*

5 Electrically-caused injury

5.2.2 Electrical energy source ES1 and ES2 limits

5.2.2.2 Steady state voltage and current limits

Replace Table 4 with the following:

Secretary Note:
Only the formulas in Column ES1 and ES2 limits, Current, RMS, Row AC > 1 kHz up to 100 kHz has have been updated

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113 **Table 4 – Electrical energy source limits for steady state ES1 and ES2**

Energy source	ES1 limits		ES2 limits		ES3
	Voltage	Current [a, c, d]	Voltage	Current [b, c, e]	
DC [c]	60V	2 mA	120 V	25 mA	> ES2
AC up to 1 kHz	U_{RMS} = 30 V U_{peak} = 42,4 V	I_{RMS} = 0,5 mA I_{peak}= 0,707 mA	U_{RMS} = 50 V U_{peak} = 70,7 V	I_{RMS} = 5 mA I_{peak}= 7,07 mA	
AC > 1 kHz up to 100 kHz	$U_{RMS} = (30 + 0{,}4\ f)$ V $U_{peak} = (42{,}4 + 0{,}4\sqrt{2}\ f)$ V		$U_{RMS} = (50 + 0{,}9\ f)$ V $U_{peak} = (70{,}7 + 0{,}9\sqrt{2}\ f)$ V		
AC above 100 kHz	U_{RMS} = 70 V U_{peak} = 99 V		U_{RMS} = 140 V U_{peak} = 198 V		
Combined AC and DC [f]	$\frac{U_{DC}(V)}{60}+\frac{U_{AC\ RMS}(V)}{U_{RMS\ limit}}\leq 1$ $\frac{U_{DC}(V)}{60}+\frac{U_{AC\ peak}(V)}{U_{peak\ limit}}\leq 1$	$\frac{I_{DC}(mA)}{2}+\frac{I_{AC\ RMS}(mA)}{0{,}5}\leq 1$ $\frac{I_{DC}(mA)}{2}+\frac{I_{AC\ peak}(mA)}{0{,}707}\leq 1$	See Figure 23	See Figure 22	

As an alternative to the requirements above, the values below can be used for purely sinusoidal waveforms

Energy source	ES1 limits Current [a, c] RMS	ES2 limits Current [b, c] RMS	ES3
AC up to 1 kHz	0,5 mA	5 mA	> ES2
AC > 1 kHz up to 100 kHz	$I_{RMS} = (0{,}5\ x\ \frac{f}{1\ kHz})$ mA [d]	$I_{RMS} = (5 + \frac{0{,}95\ f}{1\ kHz})$ mA [e]	
AC above 100 kHz	50 mA [d]	100 mA [e]	

Peak values shall be used for non-sinusoidal voltage and current. RMS values can be used only for sinusoidal voltage and current.

See 5.7 for measurement of **prospective touch voltage** and **touch current**.

Electric shock current limits are taken from IEC 60479-1 and IEC 60479-2.

f is in kHz

a Current is measured using the measuring network specified in Figure 4 of IEC 60990:2016.

b Current is measured using the measuring network specified in Figure 5 of IEC 60990:2016.

c For sinusoidal waveforms and DC, the current may be measured using a 2000 Ω resistor.

d Above 22 kHz the **accessible** area is limited to 1 cm².

e Above 36 kHz the **accessible** area is limited to 1 cm².

f $U_{RMS\ limit}$ is determined from the RMS voltage limit corresponding to the applicable frequency, and $U_{peak\ limit}$ is determined from the peak voltage limit corresponding to the applicable frequency.

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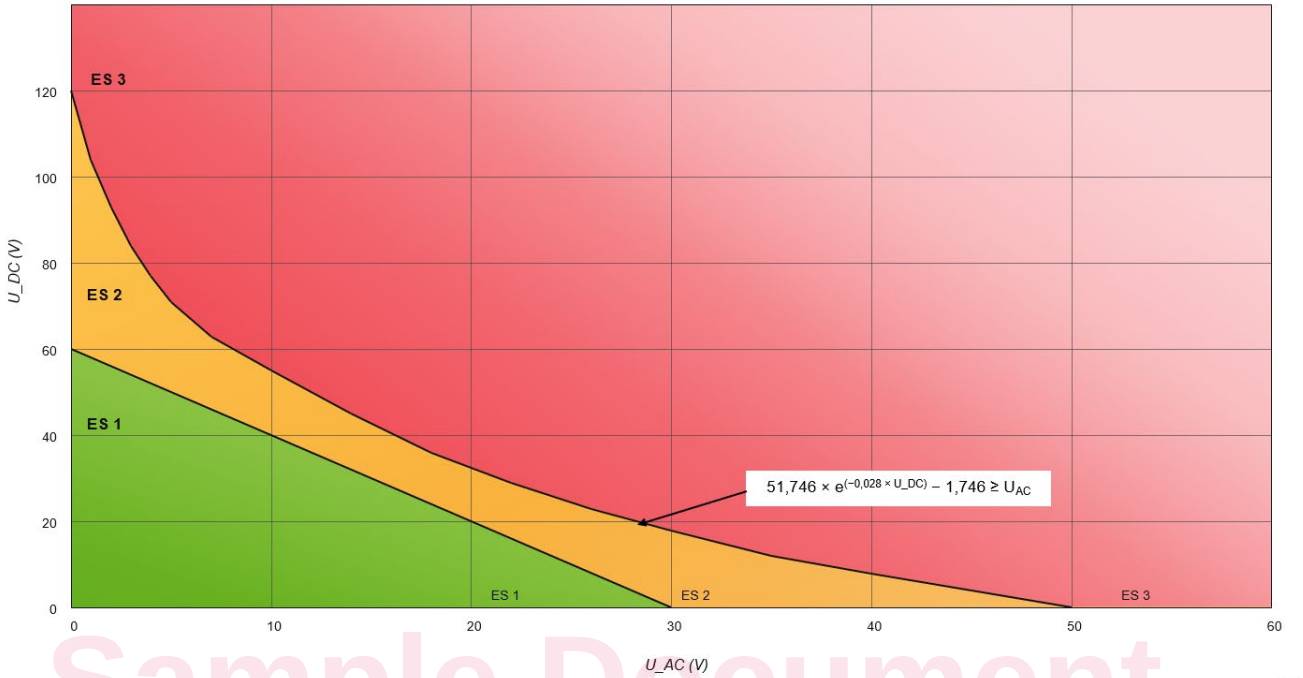
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Replace Figure 23 with the following:

Secretary Note:
The "(V)" replaces (mA) twice in the bottom and in the left of the figure.
The rest of Figure 23 is identical with the previous figure.



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Figure 23 – Maximum values for combined AC voltage and DC voltage

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5.3 Protection against electrical energy sources

5.3.2 Accessibility to electrical energy sources and safeguards

5.3.2.1 Requirements

Replace the last dashed item of the first paragraph with the following:

– an ES3 **basic safeguard**; and

– **FIW** transformer windings serving as an ES2 **basic safeguard**; and

– **FIW** transformer windings serving as an ES3 **reinforced safeguard.**

Replace the last dashed item of the third paragraph with the following:

– an ES3 **basic safeguard**; and

– **FIW** transformer windings serving as an ES3 **reinforced safeguard**.

5.4 Insulation materials and requirements

5.4.2 Clearances

5.4.2.3.2.4 Determining external circuit transient voltages

Replace Note 3 with the following:

NOTE 3 In Europe, the requirement for interconnection with an external circuit is in addition given in EN IEC 63044-3:2018.

5.4.10 Safeguards against transient voltages from external circuits

5.4.10.3 Compliance criteria

In the last dash, replace the 2 MW with 2 MΩ.

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