



**SLOVENSKI STANDARD**  
**SIST EN 50083-1:1995/A1:1999**  
**01-april-1999**

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**Cabled distribution systems for television, sound and interactive multimedia signals -- Part 1: Safety requirements - Amendment A1**

Cable networks for television signals, sound signals and interactive services -- Part 1: Safety requirements

Kabelnetze für Fernsehsignale, Tonsignale und interaktive Dienste -- Teil 1: Sicherheitsanforderungen

Réseaux de distribution par câbles pour signaux de télévision, signaux de radiodiffusion sonore et services interactifs -- Partie 1: Règles de sécurité

<https://standards.iteh.ai/catalog/standards/sist/a0a85b98-0f2c-4f58-bc14-5b05b2252a34/sist-en-50083-1-1995-a1-1999>

**Ta slovenski standard je istoveten z: EN 50083-1:1993/A1:1997**

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**ICS:**

33.060.40      Kabelski razdelilni sistemi      Cabled distribution systems

**SIST EN 50083-1:1995/A1:1999**      en

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EUROPEAN STANDARD

EN 50083-1/A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 1997

UDC 621.397.743:621.316:614.8  
ICS 33.060.40

Descriptors: Telecommunications, television broadcasting, sound broadcasting, communication cables, television systems, safety, accident prevention, equipment protection, protection against electric shocks, fire protection, lighting protection

English version

**Cabled distribution systems for television,  
sound and interactive multimedia signals  
Part 1: Safety requirements**

Systemes de distribution par câbles  
destinés aux signaux de radiodiffusion  
sonore, de télévision et multimédias  
interactifs

Kabelverteilsysteme für Fernseh-,  
Ton- und interaktive Multimedia-Signale  
Teile 1: Sicherheitsanforderungen

Partie 1: Règles de sécurité

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This amendment A1 modifies the European Standard EN 50083-1:1993; it was approved by CENELEC on 1996-12-09. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 amendment 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, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and 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**

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## Foreword

This amendment to the European Standard EN 50083-1:1993 was prepared by Technical Committee CENELEC TC 209, Cabled distribution systems for television, sound and interactive multimedia signals.

The text of the draft was submitted to the Unique Acceptance Procedure (UAP) and was approved by CENELEC as amendment A1 to EN 50083-1 on 1996-12-09.

The following dates were fixed:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 1997-09-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 1997-09-01

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For products which have complied with EN 50083-1 before 1997-09-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2002-09-01.

*Replace the title of this standard by:*

Cabled distribution systems for television, sound and interactive multimedia signals  
Part 1: Safety requirements

## CONTENTS

*Replace clause 2 by:*

2 Terms, definitions, symbols and abbreviations

*Delete clause 12 "Laser radiation"*

## 1 Scope

*Replace the present scope by :*

### 1 Scope

#### 1.1 General

Standards of the EN 50083 series deal with cabled distribution systems for television, sound and interactive multimedia signals including equipment

- for headend-reception, processing and distribution of sound and television signals and their associated data signals and
- for processing, interfacing and transmitting all kind of interactive multimedia signals

using all applicable transmission media.

They cover all kinds of systems such as

- CATV-systems,
- MATV- and SMATV-systems,
- individual receiving systems

and all kind of equipment installed in such systems.

The extent of these standards is from the antennas, special signal source inputs to the headend or other interface points to the system up to the system outlet or the terminal input, where no system outlet exists.

The standardization of any user terminals (i.e. tuners, receivers, decoders, multimedia terminals etc.) is excluded.

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## 1.2 Specific scope of this part 1

This standard deals with the safety requirements applicable to fixed sited systems and equipment as described in the general part of this scope. As far as applicable it is also valid for mobile and temporarily installed systems e.g. caravans.

Additional requirements may apply, for example in relation to:

- electricity distribution systems (overhead or underground);
- other telecommunication services distribution systems;
- water distribution systems;
- gas distribution systems;
- lightning protection systems.

This standard is intended to provide specifically for the safety of the system, personnel working on it, subscribers and subscriber equipment. It deals only with safety aspects and is not intended to define a standard for the protection of equipment used in the system.

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### 2 Terms and definitions

Replace the title by: [SIST EN 50083-1:1995/A1:1999](https://standards.iteh.ai/catalog/standards/sist/a0a85b98-0f2c-4f58-bc14-5b05b2252a34/sist-en-50083-1-1995-a1-1999)  
<https://standards.iteh.ai/catalog/standards/sist/a0a85b98-0f2c-4f58-bc14-5b05b2252a34/sist-en-50083-1-1995-a1-1999>

### 2 Terms, definitions, symbols and abbreviations

Replace the numbers of the following subclauses:

old number	new number
2.1	2.1.1
2.2	2.1.2
2.3	2.1.3
2.4	2.1.4
2.5	2.1.5
2.6	2.1.6
2.7	2.1.7
2.8	2.1.8
2.9	2.1.9
2.10	2.1.10
2.11	2.1.11
2.12	2.1.12
2.13	2.1.13
2.14	2.1.14
2.15	2.1.15
2.16	2.1.16
2.17	2.1.17
2.18	2.1.18
2.19	2.1.19
2.20	2.1.20
2.21	2.1.21
2.22	2.1.22
2.23	2.1.23
2.24	2.1.24
2.25	2.1.25

old number	new number
2.26	2.1.26
2.27	2.1.27
2.28	2.1.28
2.29	2.1.29
2.30	2.1.30
2.31	2.1.31
2.32	2.1.32
2.33	2.1.33

Add the new title of subclause 2.1:

## 2.1 Terms and definitions

2.1.1 Replace the text by:

The general overall term used to define CATV-systems, MATV-systems, SMATV-systems and individual receiving systems.

Add the following definition:

### 2.1.34 SMATV-system; Satellite Master Antenna Television distribution system

A system designed to provide sound and television signals received by satellite receiving antenna eventually combined with terrestrial TV and/or radio signals, to households in one or more adjacent buildings.

Add new subclause 2.2:

## 2.2 Symbols

Under consideration

Add new subclause 2.3:

## 2.3 Abbreviations

a.c., AC	alternating current
CATV	Community Antenna Tele television (system)
d.c., DC	direct current
LPS	lightning protection system
MATV	Master Antenna Television (system)
r.f., RF	radio frequency
r.m.s., RMS	root mean square
SMATV	Satellite Master Antenna Television (system)
TV	television

NOTE 1: The abbreviations with small letters belong to EN 50083-1:1993; since 1995 abbreviations were changed in all new parts of EN 50083 as well as in all amendments to former parts of EN 50083 to capital letters in accordance with practical use.

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NOTE 2: Only the abbreviations used in the English version of this part of EN 50083 are mentioned in this subclause. The German and the French versions of this part may use other abbreviations. Refer to 2.3 of each language version for details.

### 3 General requirements

3.2 *Replace "HD 195" by "EN 60065".*

3.3 *Replace the text by:*

If equipment embodying laser products is used, special attention has to be paid to radiation safety. Refer to EN 60825-1 for requirements and recommendations.

### 5 Equipotential bonding and earthing

5.1 *Replace the second paragraph by:*

These bonding requirements are intended to protect only the cabled system and shall not be considered to provide protection against electric shock (hazardous body currents) from electrical installations.

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https://standards.iteh.ai/catalog/standards/sist/a0a85b98-0f2c-4f58-bc14-5b05b2252a34/sist-en-50083-1-1995-a1-1999](https://standards.iteh.ai/catalog/standards/sist/a0a85b98-0f2c-4f58-bc14-5b05b2252a34/sist-en-50083-1-1995-a1-1999)

5.2.6 *Replace the text by:*

When changing or removing distribution equipment or coaxial cable, care shall be taken to avoid leakage currents from the subscriber equipments that can cause overvoltages between the interrupted parts (inner and/or outer conductors) by opening the loop. Provision shall be made to maintain continuity of the outer/inner conductor system while units are changed or removed to avoid electric shock (hazardous body currents). An example is shown in figure 6.

5.2.9 *Replace "HD 195" by "EN 60065".*

### 6 Mains supplied equipment

6.1.1 *Replace the text by:*

The devices used in a cabled distribution system shall meet the requirements of EN 60065, class II equipment.

Only where the equipment supply is protected by a residual current leakage detector and there is no direct connection between the neutral supply and the protective earth, class I equipment can be used.



### 6.2.3 *Replace the NOTE by:*

NOTE: If different potentials build up between the protective conductor and the equipotential bonding terminal, e.g. in older buildings, the balancing currents shall not produce excessive heat.

## 7 **Network powering of the cabled distribution system**

*Add new subclause headline 7.1.1 after subclause 7.1 headline :*

### 7.1.1 **Maximum allowed line powering voltages**

*7.1.1 Replace the first sentence by:*

The line powering voltage between inner and outer conductors of the feeder cable shall not exceed 65 V RMS or 120 V DC.

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*Add new subclause 7.1.2* **(standards.iteh.ai)**

### 7.1.2 **General provisions for equipment**

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The equipment shall be so designed and constructed that no dangerous current can flow under normal operating or single fault conditions.

*7.2.3 Replace "HD 195" by "EN 60065".*

*7.2.4 Replace "HD 195" by "EN 60065".*

## 8 **Protection against contact and proximity to electric power distribution systems**

*8.2 Replace the last paragraph by:*

For systems carrying voltages of more than 1 kV, the distances shall be at least 3 m. The cabled distribution system shall not overcross in open air any power distribution system carrying voltages of more than 1 kV.

*Add new subclause 8.3:*

8.3 The installation of a power outlet and a system outlet in a common box is allowed only if the system outlet can be installed in such a way that the live parts of the electric power distribution system cannot be touched by the installer.