



SLOVENSKI STANDARD

SIST EN 60799:1999

01-julij-1999

Cord sets (IEC 60799:1984, modified)

Cord sets

Geräteanschlußleitungen (cord sets)

Cordons-connecteurs

STANDARD PREVIEW
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Ta slovenski standard je istoveten z: EN 60799:1987

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ICS:

29.060.20	Kabli	Cables
29.120.30	Xa āāā } ā^ā [ā^	Plugs, socket-outlets, couplers

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Cord sets

(includes Amendment A1 : 1994)

(IEC 799 : 1984 + A1 : 1993, modified)

Cordons-connecteurs
(inclut l'amendement A1 : 1994)
(CEI 799 : 1984 + A1 : 1993, modifié)

Geräteanschlußleitungen
(enthält Änderungen A1 : 1994)
(IEC 799 : 1984 + A1 : 1993, modifiziert)

iTeh STANDARD PREVIEW

This European Standard was approved by CENELEC on 1986-02-27. 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 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

Brief history

The CENELEC questionnaire procedure performed for finding out whether or not IEC 799 (1st edition, 1984) could be accepted without textual changes, has shown that a number of CENELEC common modifications were necessary for the acceptance of IEC 799 as a European Standard (EN). The Reference Document was submitted to the CENELEC members for vote and acceptance by CENELEC.

Technical text

The text of the International Standard IEC 799 (1st edition, 1984) was approved by CENELEC on 28th February 1986 as a European Standard with agreed common modification.

For the sake of clarity this CENELEC common modification have been incorporated at the appropriate place in the text of IEC 799 (1984).

This has been marked by a vertical line in the left-hand margin. The relevant parts of the original IEC text have been quoted as 'Information' directly after the text of the common modification.

The following dates were fixed:

doa	1986-07-01
dolp/dow	1987-07-01

Appendices designated 'normative' are part of the body of the standard. Appendices designated as 'informative' are given only for information.

Foreword to amendment A1

The CENELEC questionnaire procedure, performed for finding out whether or not amendment 1 : 1993 to the International Standard IEC 799 : 1984 could be accepted without textual changes, has shown that some common modifications were necessary for the acceptance as a European Standard.

The reference document, together with the common modifications prepared by the CENELEC Reporting Secretariat SR 23G, was submitted to the CENELEC members for formal vote and was approved by CENELEC as amendment A1 to EN 60799 on 8 March 1994.

The following dates were fixed:

- latest date of publication of an identical national standard (dop) 1995-03-15
- latest date of withdrawal of conflicting national standards (dow) 1995-03-15

For products which have complied with EN 60799 : 1987 before 1995-03-15, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production, until 2000-03-15.

<https://standards.iteh.ai/catalog/standards/sist/290a6df2-b3dd-4d9a-810d-1d956c54a103/sist-en-60799-1999>

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Information as to original IEC text.
Contents shall become a part of European Standard (EN) 60799.
The foreword of IEC Publication 799 (1984) is not part of this European Standard.
Appendix A (normative), Appendix B (normative) are not included in IEC 799 (1984).

Cord Sets

Information as to original IEC text.

The foreword of IEC Publication 799 (1984) is not part of the European Standard. It reads:

- 1) The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.
- 3) In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text for the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

Preface of IEC publication 799 (1984)

This standard has been prepared by Sub-Committee 23G: Appliance Couplers, of IEC Technical Committee No. 3: Electrical Accessories.

The text of this standard is based upon the following documents:

Six months' rule	Report on voting	Two months' procedure	Report on voting
23G(CO)27	23G(CO)32	23G(CO)35	23G(CO)37
23G(CO)42	23G(CO)48		

Further information can be found in the relevant Reports on Voting indicated in the table above.

In this standard, the following print types are used:

- Requirements proper : in roman type;
- *Test specifications* : in italic type;
- Explanatory matter : in smaller roman type.

NOTE. Other international publications quoted in this standard are given in appendix A (normative). Where those publications have been implemented as Harmonization Document (HD) reference to the relevant HDs has been included.

Information as to original IEC text. It reads:

The following IEC publications are quoted in this standard.

1 Scope

This standard specifies requirements for cord sets for household and similar general purpose equipment.

It does not apply to cord sets for industrial purposes (with plugs and connectors according to IEC Publication 309: *Plugs, socket-outlets and couplers for industrial purposes*), nor to cord extension sets.

Information as to original IEC text.

Explanation deleted. It reads:

Although electrical supply flexes provided with rewirable plugs and connectors are not 'cord sets' in the sense of this standard, but considered as being similar to 'cord sets' and serving the same purpose, it is recommended to apply the requirements as specified in this standard to such assemblies as well as far as is reasonable.

2 Definition

A cord set is an assembly consisting of a flexible cable or cord fitted with a non-rewirable plug and a non-rewirable connector intended for the connection of an electrical appliance or equipment to the electrical supply.

The definitions of 'non-rewirable plug' and 'non-rewirable connector' are given in IEC Publication 884-1: *Plugs and Socket-outlets for Household and Similar Purposes, Part 1: General Requirements*, and EN 60320 Part 1: *Appliance Couplers for Household and Similar General Purposes*, respectively.

The difference between a cord set and a cord extension set is that the latter has a portable socket-outlet instead of a connector and cannot be used to connect appliances or equipment directly to the electrical supply.

Non-rewirable plugs attached to a length of cord, sometimes called 'incomplete cord sets', are covered by IEC Publication 884-1.

3 General requirement

Cord sets shall be so designed and constructed that in their intended use their performance is reliable and without danger to the user or surroundings or to an appliance or equipment having an appliance inlet corresponding to the connector.

Information as to original IEC text. It reads:

Cord sets shall be so designed and constructed that in normal use their performance is reliable and without danger to user or surroundings.

In general, compliance is checked by carrying out all the tests specified.

4 Requirements

4.1 Requirements for component parts

The plug of a cord set shall comply with the relevant requirements for non-rewirable plugs in national standards.

Information as to original IEC text. It reads:

The plug of a cord set shall comply with the requirements of IEC Publication 884-1.

The connector of a cord set shall comply with the requirements of EN 60320 : Part 1.

The flexible cable of a cord set shall comply with the requirements of HD 21 or HD 22.

Information as to original IEC text. It reads:

The flexible cable or cord of a cord set shall comply with the requirements of IEC Publication 227: *Polyvinyl Chloride Insulated Cables of Rated Voltages up to and including 450/750 V* or IEC Publication 245: *Rubber Insulated Cables of Rated Voltages up to and including 450/750 V*.

Compliance with the requirements of plugs, connectors and flexible cables or cords is checked by the tests specified in the relevant standards.

During the test of the plug (or the connector), the influence on the connector (or on the plug) is ignored.

Information as to original IEC text of the deleted paragraph. It reads:

The end of a stranded conductor shall not be consolidated by soft soldering at places where the conductor is subject to contact pressure unless the clamping means is designed so as to obviate the risk of a bad contact due to cold flow of the solder.

The following types of plug as given in IEC Publication 83: *Plugs and Socket-outlets for Domestic and Similar General Use*. Standards, may be used in cord sets:

Group A: types A 1-15, A 5-15;

Group B: type B 2;

Group C: types C 2b, C 3b, C 4, C 5, C 6.

4.2 Requirements for the assembly

4.2.1 Rated voltage

The rated voltage of the connector and flexible cable or cord shall be not less than the rated voltage of the plug.

4.2.2 Rated current

The rated current of the plug shall be not less than the rated current of the connector.

4.2.3 Class of equipment

The plug and the connector shall be of a type intended for the connection of the same class of equipment as given in IEC 536: *Classification of Electrical and Electronic Equipment with Regard to Protection against Electric Shock*.

A cord set comprising a connector for Class II equipment may, however comprise a plug for Class I equipment to Group B of IEC 83 or to other three-pin systems.

4.2.4 Marking

Plugs and connectors shall be marked as specified in the relevant standards.

Cord sets that are not delivered together with an appliance and of which the plug and the connector have not been made by the same manufacturer shall, in addition, be marked with either the name, trade mark or identification mark of the maker of the complete cord set or of the responsible vendor.

This marking may also be put on the packing.

Information as to original IEC text. It reads:

This marking shall not be put on the packing.

The marking of the name, trade mark or identification mark of the maker or responsible vendor, may, for example be applied on a sleeve provided around the cord set.

Plugs, connectors or cord sets for the connection of Class II equipment shall not be marked with the symbol for Class II construction (the double square).

4.2.5 Type of cord

The flexible cable or cord of a cord set shall be not lighter than the type, and have a cross-sectional area not less than that specified in the following table, depending on the type of connector incorporated in the cord set.

A flexible cable or cord of a lower IEC code designation (e.g. H03VVH2-F) is 'lighter' than a flexible cable or cord of a higher code designation (e.g. H05VV-F).

Information as to original IEC text.

The IEC cord types have been substituted by the harmonized cord types (see appendix B).

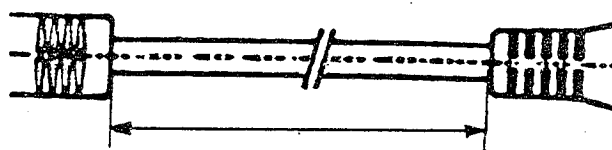
Compliance with the requirements of 4.2.1 to 4.2.5 is checked by inspection.

4.2.6 Lengths of cord

The length of the flexible cord of a cord set shall be not more than 2 m if the cord has a cross-sectional area of 0,5 mm² or less.

Flat twin tinsel cords, IEC code designation 227 IEC 41, have a cross-section less than 0,5 mm².

The length of the flexible cable or cord not exceeding 2 m, is the length as shown below:



Compliance with the requirements is checked by inspection and measurement.

5 Continuity and polarity

In cord sets for use in polarized systems, the continuity between corresponding plug-pins and connector-contacts shall be maintained correctly in each pole.

Compliance is checked by measurement.

Connector			Lightest type of flexible cable or cord and minimum cross-sectional area	
Rated current (A)	Class of equipment	for . . . conditions		
0,2	II	cold	H03VH-Y	1)
2,5	I	cold	H03VV-F	0,75 mm ²
2,5	II	cold	H03VV-F or H03VVH2-F	0,75 mm ² 2)
6	II	cold	H03VV-F or H03VVH2-F	0,75 mm ²
10	I	cold	H05VV-F or H05RR-F	0,75 mm ² 3)
10	I	hot or very hot	H05RR-F or H03RT-F	0,75 mm ² 3)
10	II	cold	H05VV-F or H05VVH2-F or H05RR-F	0,75 mm ² 3)
16	I	cold	H05VV-F or H05RR-F	1 mm ² 3)
16	I	very hot	H05RR-F or H03RT-F	1 mm ² 3)
16	II	cold	H05VV-F or H05RR-F	1 mm ² 3)

1) See 4.2.6.

2) If the flexible cable or cord has a length not exceeding 2 m, a cross-sectional area of 0,5 mm² is allowed (see 4.2.6).

3) If the cord has a length exceeding 2 m, nominal cross-sectional areas shall be
1 mm² for 10 A connectors;
1,5 mm² for 16 A connectors.

Appendix A (normative)

Other international publications quoted in this standard

* This publication is under revision or a revised version has been issued.

mod = modified by CENELEC common modifications

IEC publications	HD	Date of Issue of HD
83 <i>Plugs and socket-outlets for domestic and similar general use standards</i>	—	—
227** <i>Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V</i>	—	—
245** <i>Rubber insulated cables of rated voltages up to and including 450/750 V</i>	—	—
309 <i>Plugs, socket-outlets and couplers for industrial purposes</i>	HD 196	05.75
320 <i>Appliance couplers for household and similar general purposes</i>	—	—
536* <i>Classification of electrical and electronic equipment with regard to protection against electric shock</i>	HD 366	03.77
884-1 <i>Plugs and socket-outlets for household and similar purposes</i> Part 1: General requirements	—	—
** These IEC publications have been revised as given after. A selection of the flexible cables or cords (lightest types allowed) relevant to EN 60799 has been made out of these modified publications and have been introduced into EN 60799.		
227-1 (mod) <i>Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V</i> Part 1: General requirements	HD 21.1 S2	11.81
227-2 (mod) <i>Test methods</i>	HD 21.2 S2	11.81
227-5* (mod) <i>Flexible cables (cords)</i>	HD 21.5 S3	11.81
245-1* (mod) <i>Rubber insulated cables of rated voltages up to and including 450/750 V</i> Part 1: General requirements	HD 22.1 S2	11.81
245-2 (mod) <i>Test methods</i>	HD 22.2 S2	11.81
245-4* (mod) <i>Cords and flexible cables</i>	HD 22.4 S2	11.81