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REDLINE VERSION

INTERNATIONAL STANDARD

Plugs and socket-outlets for household and similar purposes – Part 2-7: Particular requirements for cord extension sets

IEC 60884-2-7:2025-02 RLV(en)

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IEC Secretariat
3, rue de Varembé
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
info@iec.ch
www.iec.ch

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PLUGS AND SOCKET-OUTLETS FOR HOUSEHOLD AND SIMILAR PURPOSES –

Part 2-7: Particular requirements for cord extension sets

FOREWORD

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This redline version of the official IEC Standard allows the user to identify the changes made to the previous edition IEC 60884-2-7:2011+AMD1:2013 CSV. A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text.

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IEC 60884-2-7 has been prepared by subcommittee 23B: Plugs, socket-outlets and switches, of IEC technical committee 23: Electrical accessories. It is an International Standard.

This second edition cancels and replaces the first edition published in 2011, and Amendment 1:2013. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) alignment to IEC 60884-1, fourth edition.

The text of this International Standard is based on the following documents:

Draft	Report on voting
23B/1548/FDIS	23B/1562/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

This document is to be used in conjunction with IEC 60884-1:2022.

This document supplements or modifies the corresponding clauses in IEC 60884-1:2022, so as to convert that publication into the IEC Standard: Particular requirements for cord extension sets.

Where this document states "addition", "modification" or "replacement", the relevant requirement, test specifications or explanatory matter in IEC 60884-1:2022 shall be adapted accordingly.

Subclauses, figures, tables or notes which are additional to those in IEC 60884-1:2022 are numbered starting from 101.

A list of all the parts in the IEC 60884 series, under the general title *Plugs and socket-outlets for household and similar purposes*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

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PLUGS AND SOCKET-OUTLETS FOR HOUSEHOLD AND SIMILAR PURPOSES –

Part 2-7: Particular requirements for cord extension sets

1 Scope

Replacement:

This part of IEC 60884 applies to cord extension sets, rewirable and non-rewirable, with or without earthing contact, with a rated voltage greater than 50 V but not exceeding 440 V and a rated current not exceeding 16 A, intended for household and similar purposes, either indoors or outdoors.

NOTE 1 In the following countries, cord extension sets only for equipment of class II are not allowed: DE, DK and UK ~~and CZ~~.

~~NOTE 2 In the following country, rewirable cord extension sets are not allowed: ZA.~~

This document does not apply to cord extension sets with means for reeling.

Cord extension sets intended to be used as socket-outlets for furniture are additionally covered by IEC 60884-2-8.

This document also applies to cord extension sets which are intended to be used in a cable reel, and which therefore become cable reels with a detachable flexible cable. For the combination of the cord extension set, the reel requirements and tests of IEC 61242 ~~have to be fulfilled~~ apply in addition.

Cord extension sets are suitable for use at ambient temperatures not normally exceeding +40 °C, but their average temperature over a period of 24 h does not exceed +35 °C, with a lower limit of the ambient air temperature of −5 °C.

NOTE 2 In the following country, cord extension sets comprising a socket-outlet for class II equipment are not permitted; socket-outlets in cord extension sets shall always be Class I as defined in IEC 61140: UK.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

IEC 60884-1:2022, Clause 2 is applicable with the following exceptions:

Addition:

IEC 60884-1:~~2002~~2022, *Plugs and socket-outlets for household and similar purposes – Part 1: General requirements*
~~Amendment 1 (2006)~~

~~IEC 60884-2-1, *Plugs and socket-outlets for household and similar purposes – Part 2-1: Particular requirements for fused plugs*~~

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IEC 60884-2-8:—, *Socket-outlets for furniture*[1]

~~IEC 61242, *Electrical accessories – Cable reels for household and similar purposes*~~

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- IEC Electropedia: available at https://www.electropedia.org/
- ISO Online browsing platform: available at https://www.iso.org/obp

IEC 60884-1:2022, Clause 3 is applicable except as follows.

Replacement of NOTE 3:

NOTE 3 The term "portable accessory" covers plugs, portable socket-outlets and cord extension sets. Examples of ~~the use of accessories~~ cord extension sets are shown in ~~Figure 1a) of IEC 60884-1~~ Figure 101.

Addition of the following figure after Figure 1:

[1] Under preparation. Stage at the time of publication: IEC CDV 60884-2-8:2024.

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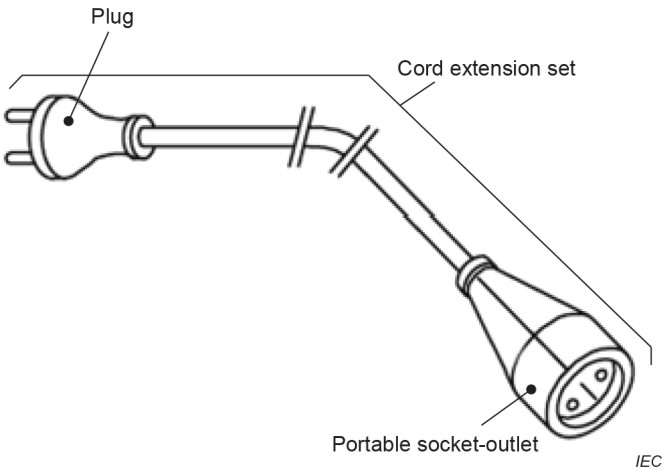
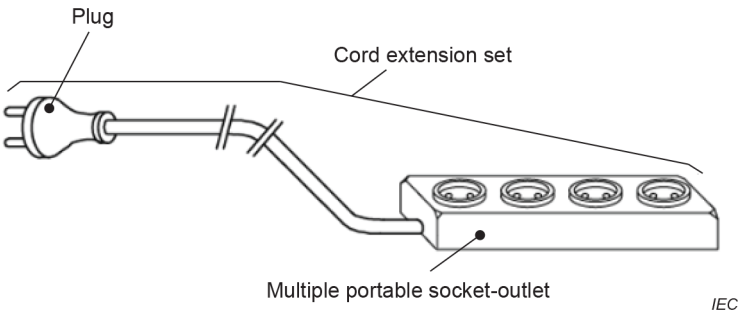


a) Example of cord extension set



b) Example of cord extension set with multiple socket-outlets

Figure 101 – Examples of cord extension sets

~~**3.12**~~
~~**cord extension set**~~

~~*Addition:*~~

~~NOTE 101 The term "plug" covers plugs and fused plugs. The term "socket-outlet" covers also socket-outlet with incorporated components such as switches and fuses etc. (see also 14.22).~~

Addition:

3~~.12~~.101
rewirable cord extension set
cord extension set so constructed that any of the accessories or the flexible cable can be replaced with the aid of a general purpose tool

3~~.12~~.102
non-rewirable cord extension set
cord extension set so constructed that it forms a complete unit with the flexible cable, the plug and the socket-outlet after connection and assembly by the manufacturer, the disassembly of which makes it permanently unfit for any further use

4 General requirements

IEC 60884-1:2022, Clause 4 is applicable except as follows:

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Addition of the following paragraph at the end of the clause:

Components such as plugs, socket-outlets (including multiple socket-outlets) and flexible cables of the cord extension sets shall be ~~fully~~ compliant with, and have been verified against, the relevant product standards for those components.

Cord extension sets intended to be used as socket-outlets for furniture shall in addition comply with IEC 60884-2-8.

5 General remarks on tests

Replacement:

5.1 General

Tests shall be carried out to prove compliance with the requirements laid down in this document.

~~*No extra requirements for components (plugs, socket outlets and flexible cables) have to be applied and the relevant tests shall not be repeated.*~~

Tests are carried out as follows:

– *type tests shall be carried out on representative specimens of each assembly;*
– *routine tests shall be carried out on each assembly manufactured according to this document.*

Subclauses 5.2 to 5.5 are applicable to type tests and 5.6 to routine tests.

NOTE In the following country, the following tests are carried out on samples of the cord extension set in accordance with the sampling requirements specified in Clauses 5, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 28, 29 and 30: ZA.

5.2 Products arrangement during test

The specimens are tested as delivered and under normal conditions of use.

5.3 Ambient test condition

Unless otherwise specified, the tests are carried out in the order of the clauses, at an ambient temperature between 15 °C and 35 °C.

In case of doubt, the tests are carried out at an ambient temperature of (20 ± 5) °C.

5.4 Additional samples

Three specimens are subjected to all the relevant tests.

5.5 Compliance general requirement

The specimens are submitted to all the relevant tests and the requirements are satisfied if all the tests are met.

If one specimen does not satisfy a test due to a process fault in the manufacturing of cord extension sets, that test and any preceding one which may have influenced the results of the test shall be repeated, and also the tests which follow shall be made in the required sequence on another full set of specimens, all of which shall comply with the requirements.

NOTE The applicant ~~may~~ can submit, together with a number of specimens specified in 5.4, the additional set of specimens which ~~may~~ can be required, should one specimen fail. The testing station will then, without further request,

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test the additional specimens and will only reject them if a further failure occurs. If the additional set of specimens is not submitted at the same time, the failure of one specimen will entail rejection.

5.6 Routine tests

Routine tests are specified in Annex A.

6 Ratings

IEC 60884-1:2022, Clause 6 is applicable except as follows.

~~*Replacement:*~~

~~**6.2** The rated current of the cord extension set shall be the lowest value from~~

~~a) the rated current of the plug; or~~

~~b) the arithmetic sum of the highest rated currents of all plugs which can be inserted into the cord extension set; or~~

~~c) the rated current of the overcurrent protective device having the smallest rated current.~~

~~The rated voltage of the cord extension set is that of the plug.~~

~~*Compliance is checked by inspection of the marking.*~~

Addition:

6.101 Rated voltage

The rated voltage of the cord extension set is that of the plug.

Compliance is checked by inspection of the marking. In addition, the requirements of 14.103 shall be fulfilled.

6.102 Rated current

The rated current shall be the lowest value of the following:

– the rated current of the plug; or

– the arithmetic sum of the highest rated currents of all plugs which can be simultaneously inserted into the cord extension set; or

– the rated current of the incorporated overcurrent protective device having the smallest rated current, if any.

Compliance is checked by inspection of the marking. In addition, the requirements of 14.104 shall be fulfilled.

6.103 Power

The power of cord extension sets, when applicable, shall be calculated by multiplying the rated current (as determined in 6.102) and the nominal voltage of the supply system to which it can be connected, with a power factor equal to 1.

NOTE 101 Nominal voltages are defined in IEC 60038.

Compliance is checked by inspection of the marking.

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7 Classification

IEC 60884-1:2022, Clause 7 is not applicable except for 7.1.1, 7.1.2, and 7.1.3 and 7.1.4.

Replace 7.1.4 of IEC 60884-1:2022 with the following:

7.1.4 Classification according to the method of connecting the cable:

7.1.4.1 rewirable cord extension set;

7.1.4.2 non-rewirable cord extension set.

8 Marking

IEC 60884-1:2022, Clause 8 is applicable except as follows.

8.1 General

Delete the first three dashed ~~texts~~ list items.

Add the following paragraphs after the seventh dashed ~~text~~ list item:

For cord extension sets, the marking of the manufacturer's or responsible vendor's name, trademark or identification mark shall be applied only if the manufacturer of the cord extension set is different from the manufacturer of the socket-outlet.

NOTE 101 The marking of the name, trade mark or identification mark of the manufacturer or responsible vendor ~~may~~ can for example be applied on a sleeve or label provided around the cord.

For a cord extension set, the type reference, which may be a catalogue number, shall be placed on the smallest packaging unit or on the product.

Addition at the end of Subclause 8.1:

– in the case of multiple portable socket-outlets or when there is an overcurrent protective device, the power in watts.

~~*Addition at the end:*~~

The marking for power shall be completed by the word MAX. This marking shall be durable and easily legible with normal or corrected vision, without additional magnification.

The power is calculated using the nominal ~~supply~~ voltage of the fixed electrical installation to which it can be connected, the rated current in ~~volts~~ amperes and a power factor cos φ = 1.

~~NOTE 102 These markings may be shown as in the following examples:~~

NOTE 102 As an example, a 250 V / 16 A cord extension set has nominal supply voltage of 230 V and the corresponding marking would be:

MAX ~~2000~~ 3680 W or ~~2000~~ 3680 W MAX

The maximum admissible power marking shall not be hidden by any inserted plug.

9 Checking of dimensions

IEC 60884-1:2022, Clause 9 is not applicable, see Clause 4.

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10 Protection against electric shock

IEC 60884-1:2022, Clause 10 is not applicable, see Clause 4.

~~*Replacement of the text of Clause 10:*~~

~~**10.1** Cord extension sets shall be so designed and constructed that after they are wired and assembled as for normal use, live parts are not accessible, even after removal of parts which can be removed without the use of a tool.~~

~~*Compliance is checked by inspection and, if necessary, by the following test.*~~

~~*The standard test finger, test probe B of IEC 61032, is applied in every possible position, an electrical indicator with a voltage between 40 V and 50 V being used to show contact with the relevant parts.*~~

Replacement:

~~10.2~~10.101 Accessibility of live parts during normal use

Cord extension sets shall be so designed and constructed that after they are wired and assembled as for normal use, live parts are not accessible, even after removal of parts which can be removed without the use of a tool.

Compliance is checked by inspection and by applying with a test wire of 1,0 mm diameter (see Figure ~~10~~ 8 of IEC 60884-1:2022) a force of 1 N where the cable enters the plug and the portable socket-outlet in every possible position.

During this test, it shall not be possible to touch live parts with the gauge.

An electrical indicator with a voltage between 40 V and 50 V shall be used to ensure that there is no electrical contact with the relevant parts.

11 Provision for earthing

IEC 60884-1:2022, Clause 11 is not applicable, see Clause 4.

12 Terminals and terminations

IEC 60884-1:2022, Clause 12 is not applicable, see Clause 4.

13 Construction of fixed socket-outlets

IEC 60884-1:2022, Clause 13 is not applicable.

14 Construction of plugs and portable socket-outlets

Replacement of the title of Clause 14:

14 Construction of cord extension sets

IEC 60884-1:2022, Clause 14 is applicable except as follows:

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