

INTERNATIONAL STANDARD

This full version of IEC 60884-2-7:2025 includes the content of the references made to IEC 60884-1:2022

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

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INTERNATIONAL STANDARD

This full version of IEC 60884-2-7:2025 includes the content of the references made to IEC 60884-1:2022

**Plugs and socket-outlets for household and similar purposes –
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

Part 2-7: Particular requirements for cord extension sets

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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This extended version (EXV) of the official IEC Standard provides the user with the full content of the Standard.

IEC 60884-2-7:2025 EXV includes the content of IEC 60884-2-7:2025, and the references made to IEC 60884-1:2022.

The specific content of IEC 60884-2-7:2025 is displayed on a blue background.

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.

PLUGS AND SOCKET-OUTLETS FOR HOUSEHOLD AND SIMILAR PURPOSES –

Part 2-7: Particular requirements for cord extension sets

1 Scope

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.

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 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 60068-2-30, *Environmental testing – Part 2-30: Tests – Test Db: Damp heat, cyclic (12 + 12 h cycle)*

IEC 60068-2-31, *Environmental testing – Part 2-31: Tests – Test Ec: Rough handling shocks, primarily for equipment-type specimens*

IEC 60068-2-75, *Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests*

IEC 60112, *Method for the determination of the proof and the comparative tracking indices of solid insulating materials*

IEC 60227 (all parts), *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V*

IEC 60245 (all parts), *Rubber insulated cables – Rated voltages up to and including 450/750 V*

IEC 60417, *Graphical symbols for use on equipment* (available at <http://www.graphical-symbols.info/equipment>)

IEC 60423:2007, *Conduit systems for cable management – Outside diameters of conduits for electrical installations and threads for conduits and fittings*

IEC 60529:1989, *Degrees of protection provided by enclosures (IP Code)*

IEC 60529:1989/AMD1:1999

IEC 60529:1989/AMD2:2013

IEC 60669 (all parts), *Switches for household and similar fixed-electrical installations*

IEC 60669-2-1:2021, *Switches for household and similar fixed electrical installations – Part 2-1: Particular requirements – Electronic control devices*

IEC 60695-2-10:2021, *Fire hazard testing – Part 2-10: Glowing/hot-wire based test methods – Glow-wire apparatus and common test procedure*

IEC 60695-2-11:2021, *Fire hazard testing – Part 2-11: Glowing/hot-wire based test methods – Glow-wire flammability test method for end products (GWEPT)*

IEC 60884-1:2022, *Plugs and socket-outlets for household and similar purposes – Part 1: General requirements*

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

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

IEC 61032:1997, *Protection of persons and equipment by enclosures – Probes for verification*

IEC 61058 (all parts), *Switches for appliances*

IEC 61545, *Connecting devices – Devices for the connection of aluminium conductors in clamping units of any material and copper conductors in aluminium bodied clamping units*

ISO/IEC Guide 51, *Safety aspects – Guidelines for their inclusion in standards*

ISO 1456:2009, *Metallic and other inorganic coatings – Electrodeposited coatings of nickel, nickel plus chromium, copper plus nickel and of copper plus nickel plus chromium*

ISO 2081:2018, *Metallic and other inorganic coatings – Electroplated coatings of zinc with supplementary treatments on iron or steel*

ISO 2093:1986, *Electroplated coatings of tin – Specification and test methods*

3 Terms and definitions

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

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

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

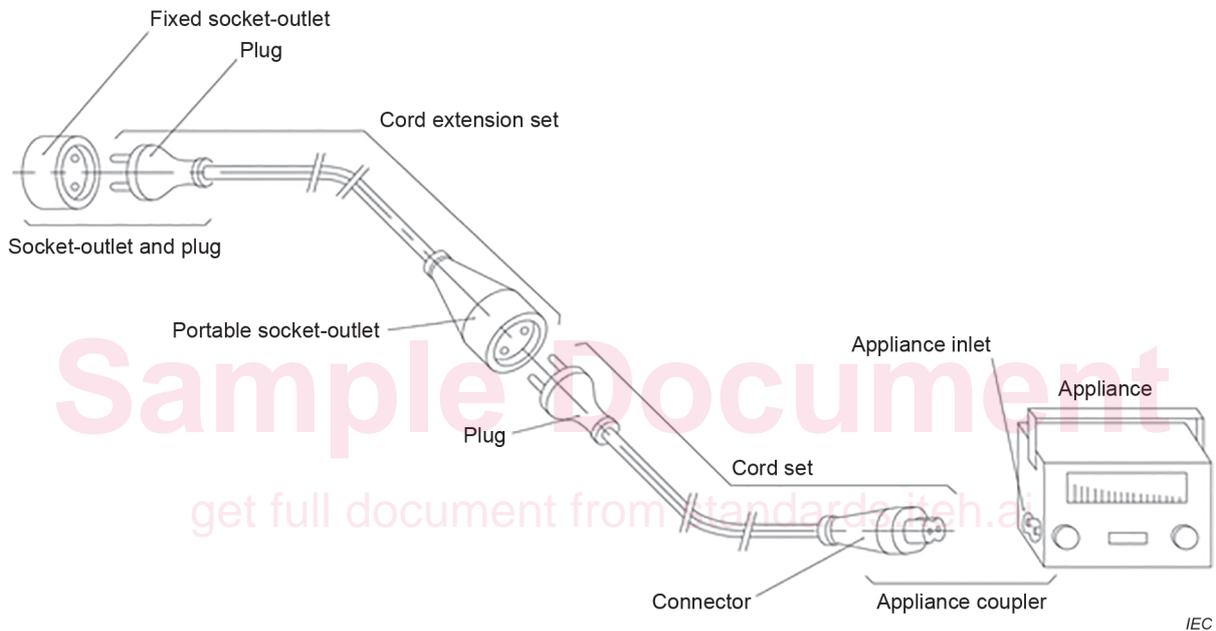
- IEC Electropedia: available at <https://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

NOTE 1 Where the terms "voltage" and "current" are used, they imply RMS values, unless otherwise specified.

NOTE 2 Throughout this document the word "earthing" is used for "protective earthing" unless otherwise stated.

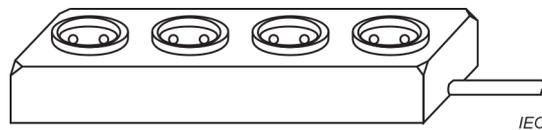
NOTE 3 The term "portable accessory" covers plugs, portable socket-outlets and cord extension sets. Examples of cord extension sets are shown in Figure 101.

NOTE 4 Throughout this document the term "socket-outlet" covers both fixed and portable socket-outlets, except where the reference is specific to one type or the other.



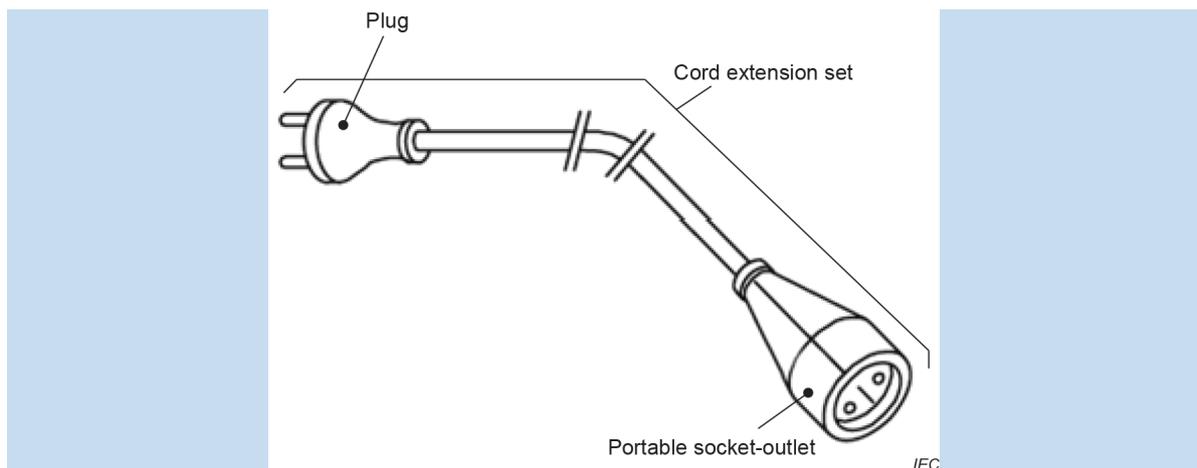
a) Diagram showing various accessories and their use

NOTE Appliance, appliance inlet and appliance coupler are used in this figure only for illustration purposes and they are not covered by this document.

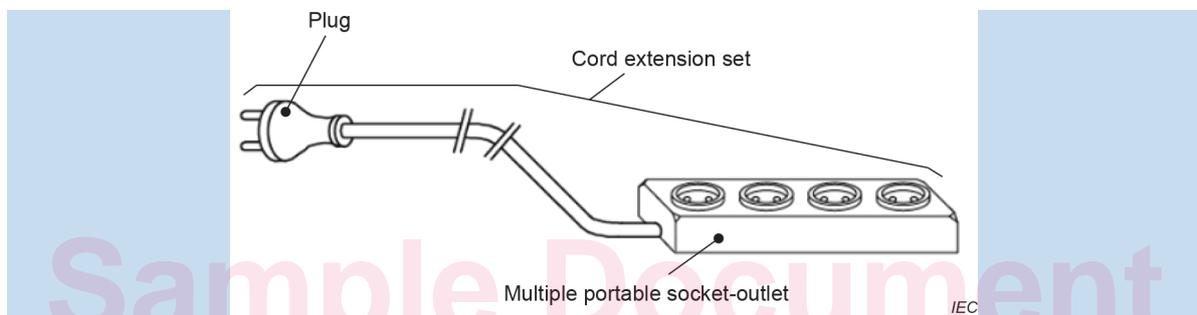


b) Example of a multiple socket-outlet

Figure 1 – Examples of accessories



a) Example of cord extension set



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

Figure 101 – Examples of cord extension sets

3.1

plug

accessory having pins designed to engage with the contacts of a socket-outlet

Note 1 to entry: A plug allows the manual connection and disconnection of an electrical load to an electrical supply by an ordinary person.

Note 2 to entry: The plug can be connected to a cable or integrated into an accessory.

Note 3 to entry: In adaptors, the plug can be integral or detachable, see IEC 60884-2-5.

Note 4 to entry: For special purposes such as lighting chains (see also IEC 60598-2-20), two or three single-core cables can be connected within the plug.

3.2

socket-outlet

accessory having socket-contacts designed to engage with the pins of a plug

Note 1 to entry: The socket-outlet can be connected to a cable or integrated into an accessory.

Note 2 to entry: In adaptors, the socket-outlet can be integral or detachable, see IEC 60884-2-5.

3.3

fixed socket-outlet

socket-outlet intended to be installed at a fixed location and be connected to fixed wiring

3.4**portable socket-outlet**

socket-outlet intended to be connected to or integral with one flexible cable and which can easily be moved from one place to another while connected to the supply

3.5**multiple socket-outlets**

combination of two or more socket-outlets

Note 1 to entry: An example is shown in Figure 1 b).

3.6**rewirable plug**

plug so constructed that the flexible cable can be replaced

3.7**non-rewirable plug**

assembly of the plug and the flexible cable so constructed that the flexible cable cannot be replaced

3.8**rewirable portable socket-outlet**

socket-outlet so constructed that the flexible cable can be replaced

3.9**non-rewirable portable socket-outlet**

assembly of the socket-outlet and the flexible cable so constructed that the flexible cable cannot be replaced

3.10**moulded-on accessory**

non-rewirable portable accessory the manufacture of which is completed by insulating material moulded around pre-assembled component parts and the terminations for the flexible cable

[SOURCE: IEC 60050-442:1998, 442-01-14, modified – "portable" has been added to the definition and "or cord" has been omitted.]

3.11**mounting box**

box intended for mounting in or on a wall, floor or ceiling, etc., for flush or surface application, intended for use with fixed socket-outlet(s)

3.12**cord set**

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 to the electrical supply

[SOURCE: IEC 60050-442:1998, 442-07-04, and IEC 60050-442:2008, 461-06-16]

3.13**cord extension set**

assembly consisting of one flexible cable fitted with one plug and one single or multiple portable socket-outlets

3.14**terminal**

insulated or non-insulated connecting device intended for reusable electrical connection of the external conductors

3.15**termination**

insulated or non-insulated connecting device intended for non-reusable electrical connection of the external conductors

3.16**clamping unit**

part(s) of the terminal necessary for the mechanical clamping and the electrical connection of the conductor(s), including the parts which are necessary to ensure correct contact pressure

[SOURCE: IEC 60050-442:1998, 442-06-12]

3.17**screw-type terminal**

terminal for the connection and subsequent disconnection of one conductor or the interconnection and subsequent disconnection of two or more conductors, the connection being made, directly or indirectly, by means of screws or nuts of any kind

Note 1 to entry: Term entries 3.18 to 3.23 are examples of screw-type terminals.

3.18**pillar terminal**

screw-type terminal in which the conductor is inserted into a hole or cavity, where it is clamped under the end of the screw or screws

Note 1 to entry: The clamping pressure may be applied directly by the end of the screw or through an intermediate clamping member to which pressure is applied by the end of the screw.

Note 2 to entry: Examples of pillar terminals are shown in Figure 9.

3.19**stirrup terminal**

pillar terminal where the clamping pressure may be applied indirectly by an intermediate clamping member when the screw is tightened

Note 1 to entry: Examples of stirrup terminals are shown in Figure 9.

3.20**screw head terminal**

screw-type terminal in which the conductor is clamped under the head of the screw

Note 1 to entry: The clamping pressure may be applied directly to the head of a screw or through an intermediate part, such as a washer, clamping plate or anti-spread device.

Note 2 to entry: Examples of screw head terminals are shown in Figure 10.

3.21**stud terminal**

screw-type terminal in which the conductor is clamped under a nut

Note 1 to entry: The clamping pressure may be applied directly by a suitably shaped nut or through an intermediate part, such as a washer, clamping plate or anti-spread device.

Note 2 to entry: Examples of stud terminals are shown in Figure 10.

3.22 saddle terminal

screw-type terminal in which the conductor is clamped under a saddle by means of two or more screws or nuts

Note 1 to entry: Examples of saddle terminals are shown in Figure 11.

3.23 mantle terminal

screw-type terminal in which the conductor is clamped against the base of a slot in a threaded stud by means of a nut

Note 1 to entry: The conductor is clamped against the base of the slot by a suitably shaped washer under the nut, by a central peg if the nut is a cap nut, or by equally effective means for transmitting the pressure from the nut to the conductor within the slot.

Note 2 to entry: Examples of mantle terminals are shown in Figure 12.

3.24 screwless-type terminal

connecting device for the connection and subsequent disconnection of a rigid (solid or stranded) or flexible conductor or the interconnection of two or more conductors, capable of being dismantled, the connection being made, directly or indirectly, by means of springs, parts of angled, eccentric or conical form, etc., without special preparation of the conductor concerned, other than removal of insulation

3.25 thread-forming screw

screw having an uninterrupted thread, which by screwing in, forms a thread by displacing material

Note 1 to entry: An example of a thread-forming screw is shown in Figure 2.

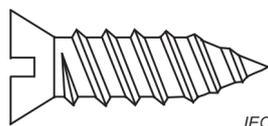


Figure 2 – Example of thread-forming screw

3.26 thread-cutting screw

screw having an interrupted thread, which by screwing in, forms a thread by removing material

Note 1 to entry: An example of a thread-cutting screw is shown in Figure 3.

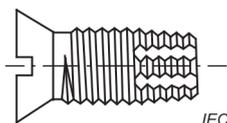


Figure 3 – Example of thread-cutting screw

3.27 rated voltage

voltage assigned by the manufacturer for a specified operating condition of an accessory

[SOURCE: IEC 60050-442:1998, 442-01-03, modified – The domain "(for accessories)" has been omitted.]

3.28
rated current

current assigned by the manufacturer for specified operating condition of an accessory

Note 1 to entry: Examples of the operating conditions are ambient condition, characteristics of the power supply, duty cycle or duty type.

[SOURCE: IEC 60050-442:1998, 442-01-02, modified – The domain "(for accessories)" has been omitted and the note to entry added.]

3.29
shutter

movable part incorporated into a socket-outlet arranged to shield at least the live socket-contacts automatically when the plug is withdrawn

3.30
type test

test of one or more devices made to a certain design to show that the design meets certain specifications

3.31
routine test

test to which each individual device is subjected during and/or after manufacture to ascertain whether it complies with certain criteria

3.32
base

part of the socket-outlet supporting the socket-contacts

3.33
live part

conductor or conductive part intended to be energized in normal use, including a neutral conductor, but by convention not a PEN conductor

Note 1 to entry: Live parts according to this document are always considered as hazardous with the exception of SELV circuits.

[SOURCE: IEC 60050-826:2004, 826-12-08, modified – "operation" has been replaced with "use"; "or PEM conductor or PEL conductor" and the note to entry omitted.]

3.34
cable anchorage

part of an accessory which has the ability to limit the displacement of a fitted flexible cable against pull, push and turning forces

3.35
main part

assembly consisting of the base and other parts

Note 1 to entry: This assembly is not intended to be dismantled at any time after manufacture.

3.36
grommet

component used to support and protect the cable or conduit at the point of entry

Note 1 to entry: A grommet may also prevent the ingress of moisture or contaminants.

Note 2 to entry: Examples of membranes and grommets are shown in Figure 4.