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INTERNATIONAL STANDARD



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Plugs and socket-outlets for household and similar purposes –

Part 1: General requirements

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

PLUGS AND SOCKET-OUTLETS FOR HOUSEHOLD AND SIMILAR PURPOSES –

Part 1: General requirements

FOREWORD

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International Standard IEC 60884-1 has been prepared by subcommittee 23B: Plugs, socketoutlets and switches, of IEC technical committee 23: Electrical accessories.

This consolidated version of IEC 60884-1 consists of the third edition (2002) [documents 23B/658/FDIS and 23B/664/RVD] and its amendment 1 (2006) [documents 23B/816/FDIS and 23B/821/RVD].

The technical content is therefore identical to the base edition and its amendment and has been prepared for user convenience.

It bears the edition number 3.1.

A vertical line in the margin shows where the base publication has been modified by amendment 1.

Annexes A and B form an integral part of this standard.

Annex C is for information only.

IEC 60884-1 consists of the following parts, under the general title *Plugs, and socket-outlets for household and similar purposes*:

- Part 1: General requirements
- Part 2-1: Particular requirements for fused plugs,
- Part 2-2: Particular requirements for socket-outlets for appliances
- Part 2-3: Particular requirements for switched socket-outlets without interlock for fixed installations
- Part 2-4: Particular requirements for plugs and socket-outlets for SELV
- Part 2-5: Particular requirements for adaptors
- Part 2-6: Particular requirements for switched socket-outlets with interlock for fixed installations

NOTE In this standard, the following print types are used.

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

The committee has decided that the contents of the base publication and its amendments will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

PLUGS AND SOCKET-OUTLETS FOR HOUSEHOLD AND SIMILAR PURPOSES –

Part 1: General requirements

1 Scope

This part of IEC 60884 applies to plugs and fixed or portable socket-outlets for a.c. only, with or without earthing contact, with a rated voltage greater than 50 V but not exceeding 440 V and a rated current not exceeding 32 A, intended for household and similar purposes, either indoors or outdoors.

The rated current is limited to 16 A maximum for fixed socket-outlets provided with screwless terminals.

This standard does not cover requirements for flush mounting boxes: however, it covers only those requirements for surface-type mounting boxes which are necessary for the tests on the socket-outlet.

NOTE 1 General requirements for mounting boxes are given in IEC 60670.

This standard also applies to plugs incorporated in cord sets, to plugs and portable socketoutlets incorporated in cord extension sets and to plugs and socket-outlets which are a component of an appliance, unless otherwise stated in the standard for the relevant appliance.

This standard does not apply to

- plugs, socket-outlets and couplers for industrial purposes;
- appliance couplers;
- plugs, fixed and portable socket-outlets for ELV;

NOTE 2 ELV values are specified in IEC 60364-4-41.

- fixed socket-outlets combined with fuses, automatic switches, etc.

NOTE 3 Socket-outlets with pilot lights are allowed provided that pilot lights comply with the relevant standard, if any.

Plugs and fixed or portable socket-outlets complying with this standard are suitable for use at ambient temperatures not normally exceeding 25 °C, but occasionally reaching 35 °C.

NOTE 4 Socket-outlets complying with this standard are only suitable for incorporation in equipment in such a way and in such a place that it is unlikely that the surrounding temperature exceeds 35 °C.

In locations where special conditions prevail, such as in ships, vehicles and the like and in hazardous locations, for example where explosions are liable to occur, special constructions may be required.

2 Normative references

The following referenced documents are indispensable for the application 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 60050-151:2001, International Electrotechnical Vocabulary – Part 151: Electrical and magnetic devices

IEC 60050-442:1998, International Electrotechnical Vocabulary – Part 442: Electrical accessories

IEC 60050-826:1982, International Electrotechnical Vocabulary – Part 826: Electrical installations of buildings

IEC 60068-2-30:1980, Environmental testing – Part 2: Tests – Test Db and guidance: Damp heat, cyclic (12 + 12-hour cycle)

IEC 60068-2-32:1975, Environmental testing – Part 2: Tests – Test Ed: Free fall (Procedure 1)

IEC 60112:1979, Method for determining the comparative and the proof tracking indices of solid insulating materials under moist conditions

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 60417-2:1998, Graphical symbols for use on equipment – Part 2: Symbol originals

IEC 60423:1993, Conduits for electrical purposes – Outside diameters of conduits for electrical installations and threads for conduits and fittings

IEC 60529:2001, Degrees of protection provided by enclosures (IP Code)

IEC 60695-2-10:2000, Fire hazard testing – Part 2-10: Glowing/hot-wire based test methods – Glow-wire apparatus and common test procedure

IEC 60695-2-11:2000, Fire hazard testing – Part 2-11: Glowing/hot-wire based test methods – Glow-wire flammability test method for end-products

IEC 60884-2-6:1997, Plugs and socket-outlets for household and similar purposes – Part 2-6: Particular requirements for switched socket-outlets with interlock for fixed electrical installations

IEC 60999-1:1999, Connecting devices – Electrical copper conductors – Safety requirements for screw-type and screwless-type clamping units – Part 1: General requirements and particular requirements for clamping units for conductors from 0,2 mm² up to 35 mm² (included)

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

IEC 61140:2001, Protection against electric shock – Common aspects for installation and equipment

ISO 1456:1988, Metallic coatings – Electrodeposited coatings of nickel plus chromium and of copper plus nickel plus chromium

ISO 1639:1974, Wrought copper alloys – Extruded sections – Mechanical properties ¹)

ISO 2039-2:1987, Plastics – Determination of hardness – Part 2: Rockwell hardness

ISO 2081:1986, Metallic coatings – Electroplated coatings of zinc on iron or steel

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