



Edition 3.0 2025-02 REDLINE VERSION

# INTERNATIONAL STANDARD

Plugs and socket-outlets for household and similar purposes – Part 2-3: Particular requirements for switched socket-outlets without interlock for fixed installations

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ICS 29.120.30 ISBN 978-2-8327-0263-5

Warning! Make sure that you obtained this publication from an authorized distributor.

### CONTENTS

FOF	REWORD	4
1	Scope	6
2	Normative references	6
3	Terms and definitions	6
4	General requirements	7
5	General notes remarks on tests	7
6	Ratings	7
7	Classification	7
8	Marking	8
9	Checking of dimensions	9
10	Protection against electric shock	
11	Provision for earthing	9
12	Terminals and terminations	10
13	Construction of fixed socket-outlets	10
14	Construction of plugs and portable socket-outlets	
15	Interlocked socket-outlets	11
16	Resistance to ageing, protection provided by enclosures, and resistance to humidity	11
17	Insulation resistance and electric strength	11
18	Operation of earthing contacts	12
19	Temperature rise	12
20	Breaking capacity	12
21	Normal operation	14
22	Force necessary to withdraw the plug	15
23	Flexible cables and their connection	15
24	Mechanical strength	16
25	Resistance to heat	16
26	Screws, current-carrying parts and connections	16
27	Creepage distances, clearances and distances through sealing compound	16
28	Resistance of insulating material to abnormal heat, to fire and to tracking	17
29	Resistance to rusting	17
30	Additional tests on pins provided with insulating sleeves	
31	EMC requirements	17
32	Electromagnetic fields (EMF) requirements	17
Ann	nexes	18
	nex A (normative) Safety-related routine tests for factory-wired portable essories (protection against electric shock and correct polarity)	18
Ann	nex B (informative) Alternative gripping tests	18
Ann	nex C (normative) Switches incorporated in portable socket-outlets	18
	nex I (normative) Additional requirements and tests for plugs and socket-outlets for n-load (HL) application	18

Figure 101 – Example of apparatus for testing the making and breaking capacity and the normal operation of switches in switched socket-outlets	•	
Table 101 – Number of operations for normal operation test	15	
Table 102 – Creepage distances, clearances and distances through sealing compound	16	

### INTERNATIONAL ELECTROTECHNICAL COMMISSION

## PLUGS AND SOCKET-OUTLETS FOR HOUSEHOLD AND SIMILAR PURPOSES –

## Part 2-3: Particular requirements for switched socket-outlets without interlock for fixed installations

### **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.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) IEC draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). IEC takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, IEC had not received notice of (a) patent(s), which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at https://patents.iec.ch. IEC shall not be held responsible for identifying any or all such patent rights.

This redline version of the official IEC Standard allows the user to identify the changes made to the previous edition IEC 60884-2-3:2006. A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text.

IEC 60884-2-3 has been prepared by subcommittee 23B: Plugs, socket-outlets and switches, of IEC technical committee 23: Electrical accessories. It is an International Standard.

This third edition cancels and replaces the second edition published in 2006. 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/1546/FDIS	23B/1560/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 <a href="https://www.iec.ch/members\_experts/refdocs">www.iec.ch/members\_experts/refdocs</a>. The main document types developed by IEC are described in greater detail at <a href="https://www.iec.ch/publications">www.iec.ch/publications</a>.

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 switched socket-outlets without interlock for fixed installations.

When a particular subclause of IEC 60884-1:2022 is mentioned in this document, that subclause applies as far as reasonable. Where this document states "addition", "modification" or "replacement", the relevant text of IEC 60884-1:2022 is to be adapted accordingly.

In this document the following print types are used:

- requirements proper: in roman type;
- test specification: in italic type:
- explanatory notes: in small roman type.

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

A list of all parts in the IEC 60884 series, published 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 2-3: Particular requirements for switched socket-outlets without interlock for fixed installations

### 1 Scope

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

Replacement of the first paragraph:

This part of IEC 60884 applies to switched socket-outlets without interlock, for fixed installation, for AC only, with or without earthing contact, with a rated voltage not exceeding 440 V and a rated current not exceeding 32 A, intended for household and similar purposes, either indoors or outdoors.

NOTE 101 Switched socket-outlets can also be produced by combining a socket-outlet of IEC 60884-1 and a switch of IEC 60669-1<sup>1)</sup>.

This document applies to socket-outlets controlled by a manually operated mechanical switch.

#### 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 except as follows.

#### Addition:

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

<sup>4)</sup> IEC 60669-1, Switches for household and similar fixed-electrical installations - Part 1: General requirements



Edition 3.0 2025-02

# INTERNATIONAL STANDARD

Plugs and socket-outlets for household and similar purposes – Part 2-3: Particular requirements for switched socket-outlets without interlock for fixed installations



### CONTENTS

FOF	REWORD	4
1	Scope	6
2	Normative references	6
3	Terms and definitions	6
4	General requirements	7
5	General remarks on tests	7
6	Ratings	7
7	Classification	7
8	Marking	8
9	Checking of dimensions	8
10	Protection against electric shock	9
11	Provision for earthing	9
12	Terminals and terminations	9
13	Construction of fixed socket-outlets	10
14	Construction of plugs and portable socket-outlets	11
15	Interlocked socket-outlets	11
16	Resistance to ageing, protection provided by enclosures, and resistance to humidity	11
17	Insulation resistance and electric strength	11
18	Operation of earthing contacts	12
19	Temperature rise	12
20	Breaking capacity	12
21	Normal operation	14
22	Force necessary to withdraw the plug	15
23	Flexible cables and their connection	15
24	Mechanical strength	15
25	Resistance to heat	15
26	Screws, current-carrying parts and connections	15
27	Creepage distances, clearances and distances through sealing compound	15
28	Resistance of insulating material to abnormal heat, to fire and to tracking	16
29	Resistance to rusting	16
30	Additional tests on pins provided with insulating sleeves	16
31	EMC requirements	16
32	Electromagnetic fields (EMF) requirements	16
Ann	nexes	17
	nex A (normative) Safety-related routine tests for factory-wired portable essories (protection against electric shock and correct polarity)	17
Ann	nex B (informative) Alternative gripping tests	17
Ann	nex C (normative) Switches incorporated in portable socket-outlets	17
	nex I (normative) Additional requirements and tests for plugs and socket-outlets for n-load (HL) application	17
٠.	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	

Figure 101 – Example of apparatus for testing the making and breaking capacity and the normal operation of switches in switched socket-outlets	. 13
Table 101 – Number of operations for normal operation test	. 14
Table 102 - Creepage distances, clearances and distances through sealing compound	. 16

### INTERNATIONAL ELECTROTECHNICAL COMMISSION

## PLUGS AND SOCKET-OUTLETS FOR HOUSEHOLD AND SIMILAR PURPOSES –

## Part 2-3: Particular requirements for switched socket-outlets without interlock for fixed installations

### **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.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) IEC draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). IEC takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, IEC had not received notice of (a) patent(s), which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at https://patents.iec.ch. IEC shall not be held responsible for identifying any or all such patent rights.

IEC 60884-2-3 has been prepared by subcommittee 23B: Plugs, socket-outlets and switches, of IEC technical committee 23: Electrical accessories. It is an International Standard.

This third edition cancels and replaces the second edition published in 2006. 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/1546/FDIS	23B/1560/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 <a href="https://www.iec.ch/members\_experts/refdocs">www.iec.ch/members\_experts/refdocs</a>. The main document types developed by IEC are described in greater detail at <a href="https://www.iec.ch/publications">www.iec.ch/publications</a>.

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 switched socket-outlets without interlock for fixed installations.

When a particular subclause of IEC 60884-1:2022 is mentioned in this document, that subclause applies as far as reasonable. Where this document states "addition", "modification" or "replacement", the relevant text of IEC 60884-1:2022 is to be adapted accordingly.

In this document the following print types are used:

- requirements proper: in roman type;
- test specification: in italic type;
- explanatory notes: in small roman type.

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

A list of all parts in the IEC 60884 series, published 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 2-3: Particular requirements for switched socket-outlets without interlock for fixed installations

### 1 Scope

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

Replacement of the first paragraph:

This part of IEC 60884 applies to switched socket-outlets without interlock, for fixed installation, for AC only, with or without earthing contact, with a rated voltage not exceeding 440 V and a rated current not exceeding 32 A, intended for household and similar purposes, either indoors or outdoors.

This document applies to socket-outlets controlled by a manually operated mechanical switch.

### 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 except as follows.

Addition:

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