

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Plugs, fixed or portable socket-outlets and appliance inlets for industrial purposes –

Part 4: Switched socket-outlets with or without interlock

Fiches, socles fixes de prise de courant, prises mobiles et socles de connecteur pour usages industriels –

Partie 4: Socles de prise de courant avec interrupteur, avec ou sans dispositif de verrouillage



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**PLUGS, FIXED OR PORTABLE SOCKET-OUTLETS AND
APPLIANCE INLETS FOR INDUSTRIAL PURPOSES –****Part 4: Switched socket-outlets
with or without interlock**

FOREWORD

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International Standard IEC 60309-4 has been prepared by subcommittee 23H: Plugs, socket-outlets and couplers for industrial and similar applications, and for electric vehicles, of IEC technical committee 23: Electrical accessories.

This second edition cancels and replaces the first edition published in 2006 and Amendment 1:2012. This edition constitutes a technical revision.

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

- updated in order to take into account the technical revisions to IEC 60309-1 and to IEC 60309-2.

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

FDIS	Report on voting
23H/482/FDIS	23H/488/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/standardsdev/publications.

This document is to be read in conjunction with IEC 60309-1:2021 and with IEC 60309-2:2021.

In this document, the following print types are used:

- requirements proper: in roman type;
- *test specifications: in italic type;*
- notes: in smaller roman type.

IEC 60309-1:2021 deals with general requirements and comprises all clauses of a general character.

Subsequent parts deal with the requirements of particular types of accessories. The clauses of these particular requirements supplement or modify the corresponding clauses of IEC 60309-1:2021 or of IEC 60309-2:2021.

Clauses, subclauses, figures, tables and notes which are additional to those of IEC 60309-1:2021 or of IEC 60309-2:2021 are numbered starting from 401.

A list of all parts in the IEC 60309 series, published under the general title *Plugs, fixed or portable socket-outlets and appliance inlets for industrial purposes*, can be found on the IEC website.

Future standards in this series will carry the new general title as cited above. Titles of existing standards in this series will be updated at the time of the next edition.

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

PLUGS, FIXED OR PORTABLE SOCKET-OUTLETS AND APPLIANCE INLETS FOR INDUSTRIAL PURPOSES –

Part 4: Switched socket-outlets with or without interlock

1 Scope

Clause 1 of IEC 60309-1:2021 or of IEC 60309-2:2021 applies as follows:

Replace the first two paragraphs by the following:

This part of IEC 60309 applies to self-contained products primarily intended for industrial use, either indoors or outdoors that combine the following items within a single enclosure:

- a fixed or portable socket-outlet according to IEC 60309-1 or IEC 60309-2 with a rated operating voltage not exceeding 1 000 V DC or 1 000 V AC with a frequency not exceeding 500 Hz and a rated current not exceeding 800 A;
- a switching device.

These products can incorporate an interlock and/or protective devices.

These accessories are intended to be installed by instructed persons or skilled persons only.

2 Normative references

Clause 2 of IEC 60309-1:2021 applies except as follows:

Additional normative references:

IEC 60073, *Basic and safety principles for man-machine interface, marking and identification – Coding principles for indicators and actuators*

IEC 60309-1:2021, *Plugs, fixed or portable socket-outlets and appliance inlets for industrial purposes – Part 1: General requirements*

IEC 60309-2:2021, *Plugs, fixed or portable socket-outlets and appliance inlets for industrial purposes – Part 2: Dimensional compatibility requirements for pin- and contact-tube accessories*

IEC 60617, *Graphical symbols for diagrams* (available at <http://std.iec.ch/iec60617>)

IEC 60947-1:2020, *Low-voltage switchgear and controlgear – Part 1: General rules*

IEC 60947-3, *Low-voltage switchgear and controlgear – Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units*

IEC 60947-4-1, *Low-voltage switchgear and controlgear – Part 4-1: Contactors and motor-starters – Electromechanical contactors and motor-starters*

IEC 60947-5-1, *Low-voltage switchgear and controlgear – Part 5-1: Control circuit devices and switching elements – Electromechanical control circuit devices*

IEC 61058-1, *Switches for appliances – Part 1: General requirements*

3 Terms and definitions

Clause 3 of IEC 60309-1:2021 or of IEC 60309-2:2021 applies except as follows:

Terms and definitions 3.6 to 3.9 do not apply.

Add the following terms and definitions:

3.401

switched socket-outlet

product (interlocked or non-interlocked) containing in a single enclosure a switching device and a socket-outlet, intended to be used in combination

3.402

interlocked socket-outlet

socket-outlet associated with an interlock

3.403

switching device

device designated to make or break the current in one or more electric circuits

[SOURCE IEC 60050-441:1984, 441-14-01]

3.403.1

mechanical switching device

switching device designed to close and open one or more electric circuits by means of separable contacts

[SOURCE: IEC 60050-441:1984, 441-14-02, modified – The note has been omitted.]

3.403.1.1

(mechanical) switch

mechanical switching device capable of making, carrying and breaking currents under normal circuit conditions which may include specified operating overload conditions and also carrying for a specified time currents under specified abnormal circuit conditions such as those of short-circuit

Note 1 to entry: A switch may be capable of making, but not breaking short-circuit currents.

[SOURCE: IEC 60050-411:1984, 441-14-10]

3.403.1.2

switch-disconnector

switch which, in the open position, complies with the requirements specified for the isolating function

[SOURCE: IEC 60050-411:1984, 441-14-12, modified – Reference made to the isolating function instead of to the requirements specified for a disconnector.]