

SLOVENSKI STANDARD SIST EN 60309-4:2008 01-februar-2008

Jhj]zjhj b]WY]b'gdc^YnU]bXi ghf]^g_c'fUVc'!'("XY`.'Jhj b]WY]b'_cbY_hcf^j'g ghj_Uca ']b'n'nU_`Ydca 'U]'VfYn'b^Y[Ufh97'*\$' \$-!(.&\$\$*Ł

Plugs, socket-outlets and couplers for industrial purposes - Part 4: Switched socket-outlets and connectors with or without interlock (IEC 60309-4:2006)

Stecker, Steckdosen und Kupplungen für industrielle Anwendungen - Teil 4: Abschaltbare Steckdosen und Kupplungen mit oder ohne Verriegelung (IEC 60309-4:2006) **iTeh STANDARD PREVIEW**

(standards.iteh.ai)

Prises de courant pour usages industriels - Partie 4: Prises de courant et prises mobiles avec interrupteur, avec ou sans dispositif de verrouillage (IEC 60309-4:2006)

https://standards.iteh.ai/catalog/standards/sist/e37bee3c-102a-47af-861d-234a5b389563/sist-en-60309-4-2008

Ta slovenski standard je istoveten z: EN 60309-4:2007

ICS:

29.120.30

SIST EN 60309-4:2008 en,fr,de

iTeh STANDARD PREVIEW (standards.iteh.ai)

EUROPEAN STANDARD

EN 60309-4

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2007

ICS 29.120.30

English version

Plugs, socket-outlets and couplers for industrial purposes -Part 4: Switched socket-outlets and connectors with or without interlock (IEC 60309-4:2006, modified)

Prises de courant pour usages industriels -Partie 4: Prises de courant et prises mobiles avec interrupteur, avec ou sans dispositif de verrouillage (CEI 60309-4:2006, modifiée)

Stecker, Steckdosen und Kupplungen für industrielle Anwendungen -Teil 4: Abschaltbare Steckdosen und Kupplungen mit oder ohne Verriegelung (IEC 60309-4:2006, modifiziert)

iTeh STANDARD PREVIEW

(standards.iteh.ai)
This European Standard was approved by CENELEC on 2007-03-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

https://standards.iteh.ai/catalog/standards/sist/e37bee3c-102a-47af-861d-

Up-to-date lists and bibliographical references concerning 4 such anatonal standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization Comité Européen de Normalisation Electrotechnique Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 23H/189/FDIS, future edition 1 of IEC 60309-4, prepared by SC 23H, Industrial plugs and socket-outlets, of IEC TC 23, Electrical accessories, was submitted to the IEC-CENELEC parallel vote.

A draft amendment, containing some common modifications to the future IEC 60309-4, was prepared by CENELEC BTWG 112-1, Improvement of EN 60309-1 and EN 60309-2, and was submitted to formal vote.

The combined texts were approved by CENELEC as EN 60309-4 on 2007-03-01.

This standard is to be read in conjunction with EN 60309-1:1999 + A1:2007 and EN 60309-2:1999 + A1:2007.

Part 1 comprises clauses of a general character and the subsequent parts of the series deal with particular types.

The clauses of the subsequent parts supplement or modify the corresponding clauses in Part 1. Where the text of subsequent parts indicates an "addition" to or a "replacement" of the relevant requirement, test specification or explanation of Part 1, these changes are made to the relevant text of Part 1, which then becomes part of the standard. Where no change is necessary, the words "This clause of Part 1 is applicable" are used.

Clauses, subclauses, figures, tables and notes which are additional to those in Part 1 are numbered starting from 101.

The following dates were fixed:

(standards.iteh.ai)

- latest date by which the EN has to be implemented)309-4:2008
 at national level by publication of lancidentical g/standards/sist/e37bee3c-102a-47af-861d-national standard or by endorsement/4a5b389563/sist-en-60309-4-2008(dop)
 2008-03-01
- latest date by which the national standards conflicting with the EN have to be withdrawn

(dow) 2010-03-01

Annexes ZA and ZB have been added by CENELEC.

·_____

Endorsement notice

The text of the International Standard IEC 60309-4:2006 was approved by CENELEC as a European Standard with agreed common modifications as given below.

COMMON MODIFICATIONS

1 Scope

Add the following:

EN 60309-1 and EN 60309-2 contain common modifications regarding the use in Europe of AWG and MCM cables, voltages and Series II products.

Those common modifications apply also within the scope of the present European Standard as indicated in the relevant Part 1 or Part 2.

See Annex ZB for a list of additional references to AWG/MCM cables, non-European voltages and Series II products which are excluded from this standard.

iTeh STANDARD PREVIEW (standards.iteh.ai)

Annex ZA

(normative)

Normative references to international publications with their corresponding European publications

Addition to Annex ZA of EN 60309-1 & EN 60309-2:

Publication IEC 60073	Year _1)	<u>Title</u> Basic and safety principles for man-machine interface, marking and identification - Coding principles for indicators and actuators	<u>EN/HD</u> EN 60073	<u>Year</u> 2002 ²⁾
IEC 60417	Data- base	Graphical symbols for use on equipment	-	_
IEC 60617	Data- base	Graphical symbols for diagrams	-	-
IEC 60947-1	2004	Low-voltage switchgear and controlgear - Part 1: General rules	EN 60947-1 + corr. November	2004 2004
IEC 60947-4-1	_1)	Low-voltage switchgear and controlgear - Part 4-1: Contactors and motor-starters - Electromechanical contactors and motor- starters Standards.iten.al	EN 60947-4-1	2001 ²⁾
IEC 60947-5-1	2003 https://	Low-voltage switchgear and controlgear - stRart 5-1: Control circuit devices and switching elements 4 Electromechanical control circuit devices	EN 60947-5-1 aĤ8ćòrir. July	2004 2005
IEC 61032	_1)	Protection of persons and equipment by enclosures - Probes for verification	EN 61032	1998 ²⁾
IEC 61058-1 (mod)	_1)	Switches for appliances - Part 1: General requirements	EN 61058-1	2002 ²⁾

٠,

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

Annex ZB

(normative)

References to AWG/MCM cables, non-European voltages and/or Series II which are excluded from this standard

The list below includes references to AWG/MCM cables, non-European voltages and/or Series II which are excluded from this standard according to the specific rules given in Annex ZB of EN 60309-1:1999/A1:2007 or Annex ZC of EN 60309-2:1999/A1:2007 respectively.

EN 60309-4			
12.1.2, Table 101			
Clause 22, Table 8			

iTeh STANDARD PREVIEW (standards.iteh.ai)

iTeh STANDARD PREVIEW (standards.iteh.ai)

NORME INTERNATIONALE INTERNATIONAL STANDARD

CEI IEC 60309-4

> Première édition First edition 2006-06

Prises de courant pour usages industriels -

Partie 4:

Prises de courant et prises mobiles avec interrupteur, avec ou sans dispositif

i de verrouillage RD PREVIEW

(standards.iteh.ai)

Plugs, socket-outlets and couplers for industrial purposes – https://standards.iteh.avcatalog.standards/sisves/bee3c-102a-47af-861d-

standards.iten.avcatalog/standards/sist/e3/bee3c-102a-4/ai-861 _____234a5b389563/sist-en-60309-4-2008

Part 4:

Switched socket-outlets and connectors with or without interlock

© IEC 2006 Droits de reproduction réservés — Copyright - all rights reserved

Aucune partie de cette publication ne peut être reproduite ni utilisée sous quelque forme que ce soit et par aucun procédé, électronique ou mécanique, y compris la photocopie et les microfilms, sans l'accord écrit de l'éditeur.

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Electrotechnical Commission, 3, rue de Varembé, PO Box 131, CH-1211 Geneva 20, Switzerland Telephone: +41 22 919 02 11 Telefax: +41 22 919 03 00 E-mail: inmail@iec.ch Web: www.iec.ch



CODE PRIX PRICE CODE

CONTENTS

FO	FOREWORD		
1	Scope	q	
2	Definitions		
3	Normative references		
4	General		
5	Standard ratings		
6	Classification		
7	Marking		
8	Dimensions		
9	Protection against electric shock		
10	Provision for earthing		
11	Terminals		
12	Interlocks, switches and their components	23	
13	Resistance to ageing of rubber and thermoplastic material		
14			
15	General construction Construction of socket-outlets ANDARD PREVIEW	33	
16	Construction of plugs and confectors and sitch ai		
17	Construction of appliance inlets	33	
18	Degrees of protection SIST EN 60309-4:2008 https://standards.itch.ai/catalog/standards/sist/e37bee3c-102a-47af-861d- Insulation resistance and dielectric sitength_en-60309-4-2008	33	
19	https://standards.iteh.ai/catalog/standards/sist/e3/bee3c-102a-4/at-861d- Insulation resistance and dielectric strength en-60308-4-2008	33	
20	Breaking capacity		
21	Normal operation	35	
22	Temperature rise	35	
23	Flexible cable and their connection	37	
24	Mechanical strength	39	
25	Screws, current-carrying parts and connections	41	
26	Creepage distances, clearances and distances through sealing compound	41	
27	Resistance to heat, fire and tracking	41	
28	Corrosion and resistance to rusting	41	
29	Conditional short-circuit current withstand test	41	

INTERNATIONAL ELECTROTECHNICAL COMMISSION

PLUGS, SOCKET-OUTLETS AND COUPLERS FOR INDUSTRIAL PURPOSES –

Part 4: Switched socket-outlets and connectors with or without interlock

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.

 234a5b389563/sist-en-60309-4-2008
- 5) IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with an IEC Publication.
- 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) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

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

The text of this standard is based on the following documents:

FDIS	Report on voting
23H/189/FDIS	23H/192/RVD

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

This standard is to be read in conjunction with IEC 60309-1 (1999) and IEC 60309-2 (1999).

Part 1 comprises clauses of a general character and the subsequent parts of the series deal with particular types.

The clauses of the subsequent parts supplement or modify the corresponding clauses in Part 1. Where the text of subsequent parts indicates an "addition" to or a "replacement" of the relevant requirement, test specification or explanation of Part 1, these changes are made to the relevant text of Part 1, which then becomes part of the standard. Where no change is necessary, the words "This clause of Part 1 is applicable" are used.

Clauses, subclauses, figures, tables and notes which are additional to those in Part 1 are numbered starting from 101.

The IEC 60309 series, under the general title *Plugs, socket-outlets and couplers for industrial purposes* comprises the following parts:

Part 1: General requirements

Part 2: Dimensional interchangeability requirements for pin and contact-tube accessories

Part 4: Switched socket-outlets and connectors with or without interlock

The committee has decided that the contents of this publication 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, (standards.iteh.ai)

- withdrawn,
- replaced by a revised edition, or <u>SIST EN 60309-4:2008</u>
- amended. https://standards.iteh.ai/catalog/standards/sist/e37bee3c-102a-47af-861d-234a5b389563/sist-en-60309-4-2008