

INTERNATIONAL STANDARD

NORME INTERNATIONALE

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

**Fiches, socles fixes de prise de courant, prises mobiles et socles de connecteur pour usages industriels –
Partie 2: Exigences dimensionnelles de compatibilité pour les appareils à broches et alvéoles**



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CONTENTS

FOREWORD.....	5
1 Scope.....	7
2 Normative references	7
3 Terms and definitions	8
4 General	8
5 Standard ratings	8
6 Classification of accessories.....	9
7 Marking	10
8 Dimensions.....	12
8.2.1 General	23
8.2.2 Checking plugs and appliance inlets	24
8.2.3 Checking socket-outlets.....	27
9 Protection against electric shock	33
10 Provision for earthing	33
11 Terminals and terminations.....	33
12 Interlocks.....	35
13 Resistance to ageing of rubber and thermoplastic material	35
14 Construction	35
15 Construction of fixed socket-outlets	38
16 Construction of plugs and portable socket-outlets.....	38
17 Construction of appliance inlets	39
18 Degrees of protection	39
19 Insulation resistance and dielectric strength	39
20 Breaking capacity	40
21 Normal operation	40
22 Temperature rise	40
23 Flexible cables and their connection	40
24 Mechanical strength	40
25 Screws, current-carrying parts and connections.....	40
26 Creepage distances, clearances and distances through sealing compound.....	41
27 Resistance to heat, to fire and to tracking.....	41
28 Corrosion and resistance to rusting	41
29 Conditional short-circuit current withstand test.....	41
30 Electromagnetic compatibility	41
Bibliography.....	75
Figure 201 – 16/20 A, 32/30 A, 63/60 A and 125/100 A socket-outlets having rated operating voltages exceeding 50 V – "go" gauges for checking dimensions d_1 , d_2 , l_1	18
Figure 202 – 16/20 A, 32/30 A, 63/60 A and 125/100 A socket-outlets having rated operating voltages exceeding 50 V – "no-go" gauges for checking dimensions d_1 , d_2	19

Figure 203 – 16/20 A, 32/30 A, 63/60 A and 125/100 A plugs and appliance inlets having rated operating voltages exceeding 50 V – "go" gauges for checking dimensions d_2 , d_4 , l_1	20
Figure 204 – 16/20 A, 32/30 A, 63/60 A and 125/100 A plugs and appliance inlets having rated operating voltages exceeding 50 V – "NO-GO" gauges for checking dimensions d_2 , d_4	21
Figure 205 – 16/20 A and 32/30 A socket-outlets having rated operating voltages not exceeding 50 V – Gauges for checking compatibility	22
Figure 206 – 16/20 A and 32/30 A plugs and appliance inlets having rated operating voltages not exceeding 50 V – Gauges for checking compatibility	23
Figure 207 – "NO-GO" gauges for checking 16/20 A, 32/30 A, 63/60 A and 125/100 A plugs and appliance inlets having rated operating voltages exceeding 50 V	25
Figure 208 – 16/20 A and 32/30 A plugs and appliance inlets having rated operating voltages not exceeding 50 V – Gauges for checking rigidity of enclosures of thermoplastic material under humid and warm conditions.....	25
Figure 209 – Device for testing non-solid pins.....	27
Figure 210 – Arrangement for test using "NO-GO" gauge for checking 16/20 A, 32/30 A, 63/60 A and 125/100 A socket-outlets having rated operating voltages exceeding 50 V	29
Figure 211 – Gauges for checking socket-outlets of 16/20 A, 32/30 A, 63/60 A and 125/100 A having rated operating voltages exceeding 50 V	30
Figure 212 – 16/20 A and 32/30 A socket-outlets having rated operating voltages not exceeding 50 V – Gauges for checking rigidity of enclosures of thermoplastic material under humid and warm conditions.....	31
Figure 213 – Gauge for checking phase holes	32
Figure 214 – Test of phase hole.....	32
Figure 215 – Socket-outlets with enclosures of resilient or thermoplastic material – Gauge for checking impossibility of single-pole insertion of a 10/16 A 250 V two-pole plug 33	
Figure 216 – Example of apparatus for checking the withdrawal force.....	36
Table 201 – Rated currents.....	9
Table 202 – Examples of marking for series I.....	10
Table 203 – Examples of marking for series II.....	10
Table 204 – Accessories with rated operating voltages exceeding 50 V	13
Table 205 – Accessories with rated operating voltages not exceeding 50 V	14
Table 206 – Retaining devices	14
Table 207 – Forces applied to "GO"/"NO-GO" gauges.....	15
Table 208 – General purpose accessories with rated operating voltage not exceeding 50 V16	
Table 209 – Special application accessories with rated operating voltage not exceeding 50 V	16
Table 210 – Positions of earthing contact	16
Table 211 – Test forces	24
Table 212 – Maximum displacement of the gauges	28
Table 3 – Size of connectable conductors.....	34
Table 213 – Pulling force on terminals	34
Table 214 – Diameter of pins of the test plug.....	35

Table 215 – Maximum withdrawal forces.....	36
Table 216 – Withdrawal forces.....	37

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**PLUGS, FIXED OR PORTABLE SOCKET-OUTLETS AND
APPLIANCE INLETS FOR INDUSTRIAL PURPOSES –****Part 2: Dimensional compatibility requirements
for pin and contact-tube accessories**

FOREWORD

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International Standard IEC 60309-2 has been prepared by subcommittee SC 23H: Plugs, socket-outlets and couplers for industrial and similar applications, and for electric vehicles, of IEC technical committee 23: Electrical accessories.

This fifth edition cancels and replaces the fourth edition published in 1999, Amendment 1:2005 and Amendment 2:2012. This edition constitutes a technical revision.

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

- a) addition of requirements and test for non-solid pins;
- b) additional rating IPX9;
- c) additional marking to indicate neutral terminal and/or earthing terminal.

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

FDIS	Report on voting
23H/481/FDIS	23H/487/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.

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 in IEC 60309-1:2021.

Clauses, subclauses, figures, tables and notes which are additional to those in IEC 60309-1:2021 are numbered starting from 201.

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 2: Dimensional compatibility requirements for pin and contact-tube accessories

1 Scope

This document applies to plugs, fixed or portable socket-outlets, and appliance inlets, hereinafter referred to as accessories, 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 125 A, primarily intended for industrial use, either indoors or outdoors.

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

NOTE 1 All references for accessories with a rated current of more than 125 A in IEC 60309-1 are not applicable to this document.

This document applies to accessories with pins and contact-tubes of standardized configurations.

This document applies to accessories, for use when the ambient temperature is normally within the range -25 °C to 40 °C .

The use of these accessories on building sites and for agricultural, commercial and domestic applications is not precluded.

This document applies to accessories with screwless-type terminals or insulation piercing terminals, with a rated current up to and including 32 A for series I and 30 A for series II.

Socket-outlets or appliance inlets incorporated in or fixed to electrical equipment are within the scope of this document. This document also applies to accessories intended to be used in extra-low voltage installations.

NOTE 2 This document does not apply to accessories primarily intended for domestic and similar general purposes.

In locations where special conditions prevail, for example on board ship or where explosions are liable to occur, additional requirements can be necessary.

2 Normative references

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

Additional normative references:

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

IEC 60364-4-41, *Low-voltage electrical installations – Part 4-41: Protection for safety – Protection against electric shock*