

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

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**Solderless connections –  
Part 3: Accessible insulation displacement (ID) connections – General  
requirements, test methods and practical guidance**

**Connexions sans soudure –  
Partie 3: Connexions autodénudantes accessibles – Règles générales, méthodes  
d'essai et guide pratique**





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INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**SOLDERLESS CONNECTIONS –****Part 3: Accessible insulation displacement (ID) connections –  
General requirements, test methods and practical guidance**

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International Standard IEC 60352-3 has been prepared by subcommittee 48B: Electrical connectors, of IEC technical committee 48: Electrical connectors and mechanical structures for electrical and electronic equipment.

This second edition cancels and replaces the first edition published in 1993. This edition constitutes a technical revision.

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

- a) Subclause 7.2.2: reduce the limit of duration of contact disturbance to 1  $\mu$ s.
- b) Subclause 7.2.3: reduce the limit of duration of contact disturbance to 1  $\mu$ s.
- c) Transferred Clauses 9 to 13 to Annex A (informative).
- d) The figures were revised for clarity.

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

| FDIS          | Report on voting |
|---------------|------------------|
| 48B/2789/FDIS | 48B/2802/RVD     |

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

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

A list of all parts in the IEC 60352 series, published under the general title *Solderless connections*, 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 "<http://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- withdrawn,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.

## INTRODUCTION

The two following parts of IEC 60352 are available on solderless insulation displacement connections:

- Part 3: Accessible insulation displacement connections – General requirements, test methods and practical guidance;
- Part 4: Solderless non-accessible insulation displacement connections – General requirements, test methods and practical guidance.

NOTE In this document the term "insulation displacement" is abbreviated to "ID", for example "ID connection", "ID termination".

Figure 1 illustrates examples of accessible and non-accessible insulation displacement connections that clarify the difference among them.

Part 3 includes requirements and relevant tests (normative) as well as a practical guidance in Annex A (informative) for accessible ID connections.

Two test schedules are provided:

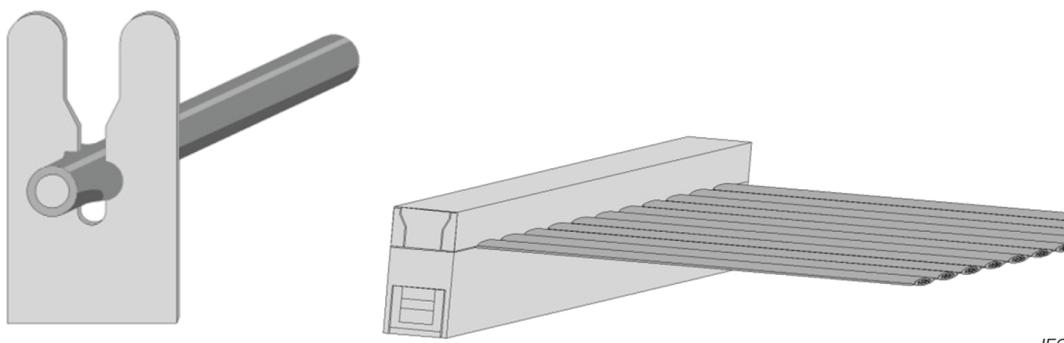
- the basic test schedule which applies to insulation displacement connections which conform to all prerequisites of Clause 5. It is derived from experience with successful applications of such connections;
- the full test schedule which applies to insulation displacement connections which do not fully conform to all prerequisites of Clause 5, for example which are manufactured using materials or finishes not included in Clause 5.

This philosophy permits cost and time effective performance verification using a limited basic test schedule for established insulation displacement connections and an expanded full test schedule for connections requiring more extensive performance validation.

The suitability of the accessible ID connection implies that the specified requirements and tests apply to all factors involved in producing a suitable ID connection, namely:

- the accessible ID termination, which may be part of a single-pole or multipole connector;
- the wire (or range of wires) for which the termination is suitable;
- the tools (if any) required to produce that type of solderless connection.

The practical guidance (informative Annex A) serves as a guideline for the required workmanship. Attention is drawn to the fact that some industries (e.g. automotive, aerospace, nuclear, military) may have specific workmanship standards and/or quality requirements, which are outside the scope of this standard.



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**Figure 1 – Example of accessible and non-accessible insulation displacement connection**

IEC Guide 109 advocates the need to minimise the impact of a product on the natural environment throughout the product life cycle.

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