SLOVENSKI STANDARD
SIST EN 60352-3:2002

01-september-2002

Solderless connections - Part 3: Solderless accessible insulation displacement connections - General requirements, test methods and practical guidance (IEC 60352-3:1993)

Solderless connections -- Part 3: Solderless accessible insulation displacement connections - General requirements, test methods and practical guidance

Lötfreie elektrische Verbindungen -- Teil 3: Lötfreie zugängliche Schneidklemmverbindungen - Allgemeine Anforderungen, Prüfverfahren und Anwendungshinweise

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

Ta slovenski standard je istoveten z: **EN 60352-3:1994**

ICS:

29.120.20	Spojni elementi	Connecting devices

SIST EN 60352-3:2002 **en**

EUROPEAN STANDARD | EN 60352-3

NORME EUROPEENNE

EUROPÄISCHE NORM | October 1994

ICS 29.120.20

Descriptors: Solderless connections, solderless accessible insulation displacement connections

ENGLISH VERSION

Solderless connections
Part 3: Solderless accessible insulation displacement connections - General requirements, test methods and practical guidance
(IEC 352-3:1993)

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

(CEI 352-3:1993)

Lötfreie elektrische Verbindungen
Teil 3: Lötfreie zugängliche Schneidklemmverbindungen
Allgemeine Anforderungen, Prüfverfahren und Anwendungshinweise
(IEC 352-3:1993)

This European Standard was approved by CENELEC on 1994-05-15. 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.

Up-to-date lists and bibliographical references concerning such national 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, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and 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

Ref. No. EN 60352-3:1994 E

FOREWORD

The CENELEC questionnaire procedure, performed for finding out whether or not the International Standard IEC 352-3:1993 could be accepted without textual changes, has shown that no common modifications were necessary for the acceptance as European Standard.

The reference document was submitted to the CENELEC members for formal vote and was approved by CENELEC as EN 60352-3 on 15 May 1994.

The following dates were fixed:

- latest date of publication of an identical national standard	(dop)	1995-07-15
- latest date of withdrawal of conflicting national standards	(dow)	1995-07-15

Annexes designated "normative" are part of the body of the standard. In this standard, annex ZA is normative.

ENDORSEMENT NOTICE

The text of the International Standard IEC 352-3:1993 was approved by CENELEC as a European Standard without any modification.

ANNEX ZA (normative)

OTHER INTERNATIONAL PUBLICATIONS QUOTED IN THIS STANDARD WITH THE REFERENCES OF THE RELEVANT EUROPEAN PUBLICATIONS

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

NOTE : When the international publication has been modified by CENELEC common modifications, indicated by (mod), the relevant EN/HD applies.

IEC Publication	Date	Title	EN/HD	Date
50(581)	1978	International Electrotechnical Vocabulary (IEV) - Chapter 581: Electromechanical components for electronic equipment	-	-
68-1	1988	Environmental testing - Part 1: General and guidance (corrigendum October 1988)	EN 60068-1*	1994
68-2-60	1989	Part 2: Tests Test Ke: Corrosion tests in artifical atmosphere at very low concentration of polluting gas(es)	-	-
189-3 A1	1988 1989	Low-frequency cables and wires with PVC insulation and PVC sheath - Part 3: Equipment wires with solid or stranded conductor, PVC insulated, in singles, pairs and triples	-	-
512-1 A1	1984 1988	Electromechanical components for electronic equipment; basic testing procedures and measuring methods - Part 1: General	-	-
512-2	1985	Part 2: General examination, electrical continuity and contact resistance tests, insulation tests and voltage stress tests	-	-
512-4	1976	Part 4: Dynamic stress tests	-	-

---

* EN 60068-1 includes A1:1992 to IEC 68-1

IEC Publication	Date	Title	EN/HD	Date
512-5	1992	Part 5: Impact tests (free components), static load tests (fixed components), endurance tests and overload test	-	-
512-6	1984	Part 6: Climatic tests and soldering tests	-	-
673 A1 A2 A3	1980 1984 1986 1989	Low-frequency miniature equipment wires with solid or stranded conductor, fluorinated polyhydrocarbon type insulation, single	-	-

---

NORME INTERNATIONALE
INTERNATIONAL STANDARD

CEI
IEC
352-3

Première édition
First edition
1993-02

Connexions sans soudure

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

Solderless connections

Part 3:
Solderless accessible insulation displacement connections – General requirements, test methods and practical guidance

Bureau Central de la Commission Electrotechnique Internationale 3, rue de Varembé Genève, Suisse

Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE V

Pour prix, voir catalogue en vigueur
For price, see current catalogue

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

SOLDERLESS CONNECTIONS

Part 3: Solderless accessible insulation displacement connections – General requirements, test methods and practical guidance

FOREWORD

1) The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.

2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.

3) In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text of the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

4) The IEC has not laid down any procedure concerning marking as an indication of approval and has no responsibility when an item of equipment is declared to comply with one of its recommendations.

International Standard IEC 352-3 has been prepared by IEC technical committee 48: Electromechanical components and mechanical structures for electronic equipment.

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

DIS	Report on Voting
48(CO)331	48(CO)339

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

INTRODUCTION

Two standards are available on solderless insulation displacement connections:

Part 3: Solderless 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.

This standard includes requirements, tests and practical guidance information.

Two test schedules are provided:

– The Basic Test Schedule applies to insulation displacement connections which conform to all requirements of section 2.

These requirements are derived from experience with successful applications of such connections.

– The Full Test Schedule applies to insulation displacement connections which do not fully conform to all requirements of section 2, for example those which are manufactured using materials or surface finishes not included in section 2.

This philosophy permits cost and time effective performance verification using a limited Basic Test Schedule for established connections and an expanded Full Test Schedule for connections requiring more extensive performance validation.

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

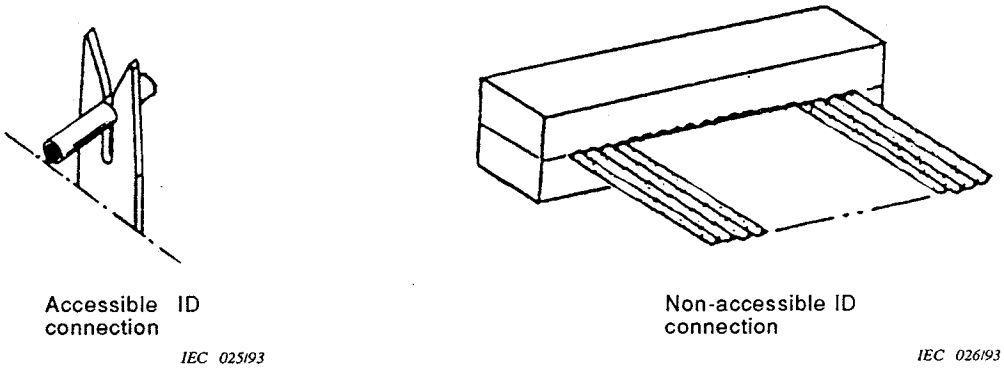

Figure 1 – Example of accessible and non-accessible insulation displacement connection

SOLDERLESS CONNECTIONS

Part 3: Solderless accessible insulation displacement connections – General requirements, test methods and practical guidance

SECTION 1: GENERAL

1 Scope

This part of IEC 352 is applicable to ID connections which are accessible for tests and measurements according to section 3 and which are made with:

- appropriately designed ID terminations;
- wires having solid round conductors of 0,25 mm to 3,6 mm nominal diameter;
- wires having stranded conductors of 0,05 mm^2 to 10 mm^2 cross-section;

for use in telecommunication equipment and in electronic devices employing similar techniques.

Information on materials and data from industrial experience is included in addition to the test procedures to provide electrically stable connections under prescribed environmental conditions.

2 Object

To determine the suitability of accessible ID connections under specified mechanical, electrical and atmospheric conditions.

There are different designs and materials for ID terminations in use. For this reason only fundamental parameters of the termination are specified while the performance requirements of the wire and the complete connection are specified in full detail.

To provide a means of comparing test results when the tools used to make the connections are of different designs or manufacture.

3 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 352. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this part of IEC 352 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 50(581): 1978, *International Electrotechnical Vocabulary (IEV) – Chapter 581: Electromechanical components for electronic equipment*

IEC 68-1: 1988, *Environmental testing – Part 1: General and guidance*

IEC 68-2-60 TTD: 1989, *Environmental testing – Part 2: Tests – Test Ke: Corrosion tests in artificial atmosphere at very low concentration of polluting gas(es)*

IEC 189-3: 1988, *Low-frequency cables and wires with PVC insulation and PVC sheath – Part 3: Equipment wires with solid or stranded conductor, PVC insulated, in singles, pairs and triples.*
Amendment 1 (1989)

IEC 352-4, *Solderless connections – Part 4: Solderless non-accessible insulation displacement connections – General requirements, tests methods and practical guidance (under consideration)*

IEC 512-1: 1984, *Electromechanical components for electronic equipment; basic testing procedures and measuring methods – Part 1: General.*
Amendment 1 (1988)

IEC 512-2: 1985, *Electromechanical components for electronic equipment, basic testing procedures and measuring methods – Part 2: General examination, electrical continuity and contact resistance tests, insulation tests and voltage stress tests*

IEC 512-4: 1976, *Electromechanical components for electronic equipment; basic testing procedures and measuring methods – Part 4: Dynamic stress tests*

IEC 512-5: 1992, *Electromechanical components for electronic equipment; basic testing procedures and measuring methods – Part 5: Impact tests (free components), static load tests (fixed components), endurance tests and overload tests*

IEC 512-6: 1984, *Electromechanical components for electronic equipment; basic testing procedures and measuring methods – Part 6: Climatic tests and soldering tests*

IEC 673: 1980, *Low-frequency miniature equipment wires with solid or stranded conductor, fluorinated polyhydrocarbon type insulation, single.*
Amendment 3 (1989)

4 Definitions

Terms and definitions used in and applicable to this part of IEC 352 are included in IEC 50(581). IEC 512-1 also contains some applicable terms and definitions.