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SIST EN 60512-2-5:2004

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Connectors for electronic equipment - Tests and measurements - Part 2-5: Electrical continuity and contact resistance tests - Test 2e: Contact disturbance (IEC 60512-2-5:2003) Teh STANDARD PREVIEW

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EUROPEAN STANDARD

EN 60512-2-5

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 2003

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English version

Connectors for electronic equipment -Tests and measurements Part 2-5: Electrical continuity and contact resistance tests -**Test 2e: Contact disturbance**

(IEC 60512-2-5:2003)

Connecteurs pour équipements

électroniques -

Essais et mesures

Partie 2-5: Essais de continuité électrique

et de résistance de contact Essai 2e: Perturbation de contact

(CEI 60512-2-5:2003)

Steckverbinder für elektronische

Einrichtungen -

Mess- und Prüfverfahren

Teil 2-5: Prüfungen des elektrischen

Durchgangs und Durchgangswiderstands -

Prüfung 2e: Kontaktstörungen

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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 48B/1322/FDIS, future edition 1 of IEC 60512-2-5, prepared by SC 48B, Connectors, of IEC TC 48, Electromechanical components and mechanical structures for electronic equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60512-2-5 on 2003-07-01.

The following dates were fixed:

 latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement

(dop) 2004-04-01

 latest date by which the national standards conflicting with the EN have to be withdrawn

(dow) 2006-07-01

Endorsement notice

The text of the International Standard IEC 60512-2-5:2003 was approved by CENELEC as a European Standard without any modification.

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Connecteurs pour équipements électroniques – Essais et mesures –

Partie 2-5:

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Part 2-5:

Electrical continuity and contact resistance tests –

Test 2e: Contact disturbance

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CODE PRIX PRICE CODE

INTERNATIONAL ELECTROTECHNICAL COMMISSION

CONNECTORS FOR ELECTRONIC EQUIPMENT – TESTS AND MEASUREMENTS –

Part 2-5: Electrical continuity and contact resistance tests – Test 2e: Contact disturbance

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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 with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
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International Standard IEC 60512-2-5 has been prepared by subcommittee 48B: Connectors, of IEC technical committee 48: Electromechanical components and mechanical structures for electronic equipment.

This standard cancels and replaces Test 2e of IEC 60512-2, published in 1985, and constitutes a technical revision.

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

FDIS	Report on voting
48B/1322/FDIS	48B/1347/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.

The committee has decided that the contents of this publication will remain unchanged until 2007. At this date, the publication will be

- reconfirmed;
- withdrawn:
- · replaced by a revised edition, or
- amended.

CONNECTORS FOR ELECTRONIC EQUIPMENT – TESTS AND MEASUREMENTS –

Part 2-5: Electrical continuity and contact resistance tests – Test 2e: Contact disturbance

1 Scope and object

This part of IEC 60512, when required by the detail specification, is used for testing connectors for electronic equipment within the scope of IEC technical committee 48. This test may also be used for similar devices when specified in a detail specification.

The object of this test is to define a standard test method for detecting contact disturbance of electromechanical components under specified dynamic conditions.

NOTE Standard conditions of testing are defined in Part 1 of this standard.

2 Mounting of the test specimen

The test specimen shall be mounted in accordance with the requirements of the detail specification.

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3 Method of measuremen (standards.iteh.ai)

The contact disturbance shall be determined under dynamic conditions. The duration of the opening of closed contacts and/or/the closing of open contacts and/or/the closing of open contacts and/or/the component is subjected to bump? Shock subration of contacts and open contacts are contacts and open contacts and open contacts and open contacts are contacts and open contacts and open contacts are co

The monitoring of contact disturbance shall be made during the period specified in the relevant test and/or detail specification. The contacts may be monitored individually or in one or more groups as specified in the detail specification. When monitored in groups, closed contacts may be connected in series and open contacts may be connected in parallel.

NOTE If failure is indicated when testing contacts in groups, it is permitted to test individual contacts subsequently.

4 Requirements

The measurement shall be made with d.c. not exceeding 150 mA. The voltage source shall not exceed 10 V.

The duration of the contact disturbance shall not exceed the value specified in the relevant test and/or detail specification. Preferred values are 1 μ s, 10 μ s, 100 μ s, 1 ms and 10 ms.

A closed contact is considered disturbed when the voltage across it exceeds 50 % of the voltage source.

An open contact is considered disturbed when the voltage across it drops below 50 % of the voltage source.

In the case where the contact disturbance is considered to be a change of contact resistance, this change shall be specified in the detail specification

5 Details to be specified

When this test is required by the detail specification, the following details shall be specified:

- a) method of mounting and wiring the test specimen;
- b) monitoring period, if different from that specified in the relevant test method;
- c) contacts to be monitored and their operating condition;
- d) limit of duration of contact disturbance;
- e) change of contact resistance, if necessary;
- f) any deviation from the standard test method.

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