भारतीय मानक **IS/IEC 60512-2-6 : 2002**

Indian Standard

विद्युत उपकरणों के लिए संयोजक — परीक्षण और मापन

भाग 2 विद्युत अविच्छिन्नता और संपर्क प्रतिरोध परीक्षण

अनुभाग 6 परीक्षण 2 एफ: हाउसिंग (शेल) विद्युत अविच्छिन्नता

Connectors for Electronic Equipment — Tests and Measurements

Part 2 Electrical Continuity and Contact Resistance Tests

Section 6 Test 2f: Housing (Shell) Electrical Continuity

ICS 31.220.10

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Electromechanical Components and Mechanical Structures for Electronic Equipment Sectional Committee, LITD 03

NATIONAL FOREWORD

This Indian Standard which is identical to IEC 60512-2-6 : 2002 'Connectors for electronic equipment — Tests and measurements — Part 2: Electrical continuity and contact resistance tests, Section 6 Test 2f: Housing (shell) electrical continuity' issued by the International Electrotechnical Commission (IEC) was adopted by the Bureau of Indian Standards on the recommendation of the Electromechanical Components and Mechanical Structures for Electronic Equipment Sectional Committee and approval of the Electronics and Information Technology Division Council.

The other parts in this series are:

Part 1 Generic specification
Part 2 Electrical continuity and contact resistance tests
Part 3 Insulation test
Part 4 Voltage stress tests

The text of IEC standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions are however not identical to those used in Indian Standards. Attention is particularly drawn to the following:

a) Wherever the words 'International Standard' appears referring to this standard, they shouldbe read as 'Indian Standard'; and

b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded-off value should be the same as that of the specified value in this standard.

Indian Standard

CONNECTORS FOR ELECTRONIC EQUIPMENT — TESTS AND MEASUREMENTS

PART 2 ELECTRICAL CONTINUITY AND CONTACT RESISTANCE TESTS

SECTION 6 TEST 2F: HOUSING (SHELL) ELECTRICAL CONTINUITY

1 General

1.1 Scope and object

This part of IEC 60512, when required by the detail specification, is used for testing electromechanical components 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 measuring the resistance between component housings (shells) which are intended to provide electrical continuity when mated.

This test is not intended to verify shielding against magnetic or r.f. interference.

1.2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 60512. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 60512 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60512-2-2, *Connectors for electronic equipment – Tests and measurements – Part 2-2: Electrical continuity and contact resistance tests – Test 2b: Contact resistance – Specified test current method*

IEC 60512-2-3, *Connectors for electronic equipment – Tests and measurements – Part 2-3: Electrical continuity and contact resistance tests – Test 2c: Contact resistance variation*

2 General requirements

Components having metallic or other conductive material or coating housings (shells) intended to provide electrical continuity when mated shall be tested as follows:

– Measurements shall be made on mated sets of components.

– Free components shall be fitted with short lengths of wire or cable, as specified in the detail specification.

The resistance shall be measured through all joints connected in series, as follows:

– from cable braid and/or housing (shell) to mounting panel where one of the components is a fixed type;
– between cable braids for free components;
– between mounting panels where both connectors are fixed.

The resistance measurements shall be made according to test 2b of IEC 60512-2-2 or test 2c of IEC 60512-2-3.

3 Test requirement

The value of the resistance shall not exceed the value specified in the detail specification.

4 Details to be specified

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

a) method of mounting the specimen;
b) points at which measurements are to be made;
c) test current and test method (test 2b of IEC 60512-2-2 or test 2c of IEC 60512-2-3) to be used;
d) maximum permissible resistance;
e) any deviation from the standard test method.

Bureau of Indian Standards

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Review of Indian Standards

Amendments are issued to standards as the need arises on the basis of comments. Standards are also reviewed periodically; a standard along with amendments is reaffirmed when such review indicates that no changes are needed; if the review indicates that changes are needed, it is taken up for revision. Users of Indian Standards should ascertain that they are in possession of the latest amendments or edition by referring to the website-www.bis.gov.in or www.standardsbis.in.

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Amendments Issued Since Publication

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