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## विद्युत उपकरणों के लिए संयोजक

### भाग 4 परीक्षण और मापन

अनुभाग 3 वोल्टेज प्रतिबल परीक्षण - परीक्षण 4सी  
पूर्व-विद्युतरोधित क्रिम्प बैरल का वोल्टेज प्रूफ

## Connectors for Electronic Equipment

### Part 4 Tests and Measurements

#### Section 3 Voltage Stress Tests - Test 4c

#### Voltage Proof of Pre-insulated Crimp Barrels

ICS 31.220.10

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भारतीय मानक ब्यूरो

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## NATIONAL FOREWORD

This Indian Standard which is identical to IEC 60512-4-3 : 2002 'Connectors for electronic equipment — Part 4: Tests and measurements, Section 3 Voltage stress tests - Test 4c Voltage proof of pre-insulated crimp barrels' issued by 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 (LITD 03) 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 should be 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****PART 4 TESTS AND MEASUREMENTS****SECTION 3 VOLTAGE STRESS TESTS - TEST 4C VOLTAGE  
PROOF OF PRE-INSULATED CRIMP BARRELS****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 detail a standard method to determine the ability of pre-insulated crimp barrels to withstand the crimp operation without damage to the insulation.

**2 Preparation of the specimen**

The specimen shall consist of a crimp contact or a terminal end having a pre-insulated crimp barrel and the appropriate cable/wire and shall be prepared in accordance with the detail specification.

The cable/wire, stripped as specified, shall be fitted to the crimp barrel and then crimped in the normal manner.

The conductive area of the contact/terminal end and the end of the conductor to which it is attached shall be sealed, for example by beeswax or other suitable sealing compound, ensuring that the sealing used does not cover the area of the contact deformed by the crimping tool.

**3 Test method**

The end of the specimen with the contact/terminal end shall be immersed in a 5 % aqueous sodium chloride solution to a depth such as will cover the crimp indentations, but will not immerse the open end.

A voltage shall be applied between the specimen and an immersed electrode placed at a distance not more than 50 mm from the specimen. The voltage shall be steadily increased at a rate not exceeding 500 V/s up to the proof voltage specified in the detail specification and kept at this value for  $60 \text{ s} \pm 5 \text{ s}$ .

**4 Requirement**

There shall be no breakdown.

## **5 Details to be specified**

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

- a) preparation of the specimen;
  - b) cable/wire to be used;
  - c) type and die setting of crimping tool;
  - d) proof voltage;
  - e) any deviation from the standard test method.
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### Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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