**IS/IEC 60691: 2023**

***भारतीय मानक Indian Standards***

**तापीय-लिंक—**

**आवश्यकताएँ और अनुप्रयोग मार्गदर्शिका**

**(***दूसरा पुनरीक्षण***)**

**Thermal-Links—**

**Requirements and Application Guide**

(*Second Revision*)

ICS 29.120.50

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Fuses Sectional Committee, ETD 39

NATIONAL FOREWORD

This Indian Standard which is identical with IEC 60691:2023 ‘Thermal-links – Requirements and application guide’ issued by the International Electrotechnical Commission (IEC) was adopted by the Bureau of Indian Standards on the recommendation of the Fuses Sectional Committee and approval of the Electrotechnical Division Council.

This standard was initially published in 1993 and subsequently revised based on IEC 60691:2015. The second revision of this standard has been undertaken to align it with the latest version of IEC standard.

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

a) requirements for thermal-link packaged assemblies;

b) renew the requirements and definitions for Th-test;

The text of the 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:

1. Wherever the words ‘International Standard’ appears referring to this standard, they should be read as ‘Indian Standard’.
2. Comma (,) has been used as a decimal marker, while in Indian Standards the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to International Standards for which Indian Standards also exists. The corresponding Indian Standards, which are to be substituted, are listed below along with their degree of equivalence for the editions indicated:

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| ***International Standard*** | ***Corresponding Indian Standard*** | ***Degree of Equivalence*** |
| IEC 60065:2014, Audio, video and  similar electronic apparatus – Safety requirements | IS 616 : 2017, Audio, video and  similar electronic apparatus - Safety  requirements | Identical |
| IEC 60112:2020, Method for the  determination of the proof and the  comparative tracking indices of solid insulating materials | IS 2824: 2007 Method for the  determination of the proof and the  comparative tracking indices of solid insulating materials | Identical with IEC 60112 : 2003 |
| IEC 60127-2:2014, Miniature fuses – Part 2: Cartridge fuse-links | IS/IEC 60127-2 : 2003, Miniature  Fuses – Part 2: Cartridge Fuse-Links | Identical with IEC 60127-2:2003 |
| IEC 60216-5:2008, Electrical insulating materials – Thermal  endurance properties – Part 5:  Determination of relative thermal  endurance index (RTE) of an  insulating material | IS 8504 (Part 6) : 2012 Electrical insulating materials - Thermal  endurance properties: Part 6  determination of relative thermal  endurance index (RTE) of an  insulating material | Identical |
| IEC 60664-1:2020, Insulation  coordination for equipment within  low-voltage supply systems – Part 1: Principles, requirements and tests | IS 15382 (Part 1) : 2022, Insulation  Coordination for Equipment Within  Low-Voltage Systems – Part 1:  Principles, Requirements and Tests | Identical |
| IEC 60695-2-12:2021, Fire hazard  testing – Part 2-12: Glowing/hot-wire based test methods – Glow-wire flammability index (GWFI) test method for materials | IS/IEC 60695-2-12 : 2021, Fire  Hazard Testing Part 2: Glowing/hotwire based test methods Section 12: Glow-wire flammability index GWFI Test method for materials | Identical |
| IEC 60695-2-13:2021, Fire hazard  testing – Part 2-13: Glowing/hot-wire based test methods – Glow-wire ignition temperature (GWIT) test method for materials | IS/IEC 60695-2-13 : 2021, Fire  Hazard Testing Part 2 GlowingHot  wire based test methods Section 13  Glow-wire ignition temperature  GWIT test method for materials | Identical |
| IEC 60695-10-2:2014, Fire hazard  testing – Part 10-2: Abnormal heat – Ball pressure test method | IS/IEC 60695-10-2: 2014 - Fire  Hazard Testing Part 10 Abnormal  Heat Section 2 Ball pressure test  method | Identical |
| IEC 60695-11-10:2013, Fire hazard testing – Part 11-10: Test flames – 50 W horizontal and vertical flame test methods | IS/IEC 60695 (Part 11/Sec 10) 2013, Fire hazard testing: Part 11 test flames : Sec 10 50 w horizontal and vertical flame test methods | Identical |
| IEC 60730-1:2013, Automatic  electrical controls – Part 1: General requirements IEC 60730-1:2013/AMD1:2015 IEC 60730-1:2013/AMD2:2020 | IS/IEC 60730-1 : 1999 - Automatic  electrical controls for household and  similar use : part 1 General  Requirements | Identical with IEC 60730-1 :  1999 |

The technical committee has reviewed the provisions of the following international standards referred in this adopted standard and decided that they are acceptable for use in conjunction with this standard.

|  |  |
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| ***International Standard*** | ***Title*** |
| IEC 61210:2010 | Connecting devices – Flat quick-connect terminations for electrical copper  conductors – Safety requirements |

Only English language text has been retained while adopting it in this Indian Standard, and as such the page numbers given here are not the same as in the International Standard.

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, 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.