## BUREAU OF INDIAN STANDARDS

## DRAFT FOR COMMENTS ONLY

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Draft Indian Standard

## Low-voltage fuses Part 4: Supplementary requirements for fuse-links for the protection of semiconductor devices

(First Revision of IS 13703(Part 4): 1993)

(ICS 29.200.50)

Fuses Sectional Committee ETD 39

Last Date for Comments 20 March 2022

## NATIONAL FOREWORD

This Indian Standard (*first revision*) which is identical with IEC 60269-4: 2016 'Low-voltage fuses Part 4: Supplementary requirements for fuse-links for the protection of semiconductor devices' 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 first published in 1980 and was based on IEC Pub 269-4: 1980. This revision has been undertaken to align this standard with the latest version of IEC 60269-4.

This edition includes the following significant technical changes with respect to the previous edition are:

- a) The introduction of voltage source inverter fuse-links, including test requirements;
- b) Coverage of the tests on operating characteristics for a.c. by the breaking capacity tests;
- c) The updating of examples of standardized fuse-links for the protection of semiconductor devices.

This part is to be used in conjunction with IS/IEC 60269-1:2014, Low-voltage fuses – Part 1: General requirements.

This Indian Standard supplement or modifies the corresponding clauses or subclauses of IS/IEC 60269-1:2014. Where no change is necessary, this Indian Standard indicates that the relevant clause or subclause applies. Tables and figures which are additional to those in IS/IEC 60269-1:2014 are numbered starting from 101. Additional annexes are lettered AA, BB, etc.

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:

- a) Wherever the words 'International Standard' appears referring to this standard, they should be read as 'Indian Standard'.
- 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.

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:

International Standard	Corresponding Indian Standard	Degree of Equivalence
IEC 60269-1, Low-voltage fuses – Part 1: General requirements	IS/IEC 60269-1: 2014 Low-Voltage Fuses Part 1 General Requirements	Identical with IEC 60269- 1:2014(CSV)
IEC 60269-2:2006, Low-voltage fuses – Part 2: Supplementary requirements for fuses for use by authorized persons (fuses mainly for industrial application) – Examples of standardized systems of fuses A to K	IS/IEC 60269-2: 2016 Low-Voltage Fuses Part 2 Supplementary Requirements for Fuses for Use by Authorized Persons (Fuses Mainly for Industrial Application) — Examples of Standardized Systems of Fuses A to K	Identical with IEC 60269-2:2016(CSV)
IEC 60269-3, Low-voltage fuses – Supplementary requirements for fuses for use by unskilled persons (fuses mainly for household and similar applications) – Examples of standardized systems of fuses A to F	IS/IEC 60269-3: 2010, Low-Voltage Fuses Part 3 Supplementary Requirements for Fuses for Use by Unskilled Persons (Fuses Mainly for Household and Similar Applications) — Examples of Standardized Systems of Fuses A to F	Identical with IEC 60269- 3:2013(CSV)
IEC TR 60269-5, Low-voltage fuses – Part 5: Guidance for the application of low-voltage fuses	IS/IEC TR 60269-5: 2014, Low-Voltage Fuses Part 5 Guidance for the Application of Low-Voltage Fuses	Identical with IEC 60269-5:2014
IEC 60269-6, Low-voltage fuses – Part 6: Supplementary requirements for fuse-links for the protection of solar photovoltaic energy systems	IS/IEC 60269-6: 2010, Low-Voltage Fuses Part 6 Supplementary Requirements for Fuse-Links for the Protection of Solar Photovoltaic Energy Systems	Identical with IEC 60269-6:2010
IEC 60664-1:2000, Insulation coordination for equipment within low-voltage 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 (Second Revision)	Identical with IEC 60664-1:2020

The technical committee has reviewed the provision of the following International Standard referred in this adopted standard and has decided that it is acceptable for usein conjunction with this standard:

Int	ernational Standard	Title

IEC 60417	Graphical symbols for use on equipment
ISO 3	Preferred numbers – Series of preferred numbers

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 (revised)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

**Note:** The technical content of this document has not been enclosed, as this is identical with the corresponding IEC standard. For details, please refer the corresponding IEC 60269-4:2016 or kindly contact:

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