NSAI Standards

Standard Recommendation
S.R. CLC/TR 60269-5:2011

Low-voltage fuses -- Part 5: Guidance for the application of low-voltage fuses (IEC/TR 60269-5:2010 (EQV))

S.R. CLC/TR 60269-5:2011

Incorporating amendments/corrigenda issued since publication:

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TECHNICAL REPORT

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CLC/TR 60269-5

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English version

Low-voltage fuses - Part 5: Guidance for the application of low-voltage fuses

(IEC/TR 60269-5:2010)

Fusibles basse tension - Partie 5: Lignes directrices pour l'application des fusibles basse tension (CEI/TR 60269-5:2010)

Niederspannungssicherungen - Teil 5: Leitfaden für die Anwendung von Niederspannungssicherungen (IEC/TR 60269-5:2010)

This Technical Report was approved by CENELEC on 2011-04-25.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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Ref. No. CLC/TR 60269-5:2011 E

Foreword

This Technical Report consists of the text of the International Technical Report IEC/TR 60269-5:2010 prepared by SC 32B, Low-voltage fuses, of IEC TC 32, Fuses.

It was circulated for voting in accordance with the Internal Regulations, Part 2, Subclause 11.4.3.3 (simple majority) and was accepted by CENELEC as CLC/TR 60269-5 on 2011-04-25.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the Technical Report IEC/TR 60269-5:2010 was approved by CENELEC as a Technical Report without any modification.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC 60050-441	-	International Electrotechnical Vocabulary (IEV) - Chapter 441: Switchgear, controlgear and fuses	-	-
IEC/TR 60146-6	-	Semiconductor convertors - Part 6: Application guide for the protection of semiconductor convertors against overcurrent by fuses	-	-
IEC 60269	Series	Low-voltage fuses	EN 60269	Series
IEC 60269-1	-	Low-voltage fuses - Part 1: General requirements	EN 60269-1	-
IEC 60269-2	-	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 J	HD 60269-2	-
IEC 60269-3 (mod)	-	Low-voltage fuses - Part 3: Supplementary requirements for fuses for use by unskilled persons (fuses mainly for household or similar applications) - Examples of standardized systems of fuses A to F	HD 60269-3	-
IEC 60269-4	-	Low-voltage fuses - Part 4: Supplementary requirements for fuse-links for the protection of semiconductor devices	EN 60269-4	-
IEC 60364-4-41 (mod)	-	Low-voltage electrical installations - Part 4-41: Protection for safety - Protection against electric shock	HD 60364-4-41	-
IEC 60364-4-43 (mod)	-	Low voltage electrical installations - Part 4-43: Protection for safety - Protection against overcurrent	HD 60364-4-43	-
IEC 60364-5-52 (mod)	-	Low-voltage electrical installations - Part 5-52: Selection and erection of electrical equipment - Wiring systems	HD 60364-5-52	-
IEC/TR 60787	-	Application guide for the selection of high-voltage current-limiting fuse-links for transformer circuits	-	-
IEC 60947	Series	Low-voltage switchgear and controlgear	EN 60947	Series
IEC 60947-3	-	Low-voltage switchgear and controlgear - Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units	EN 60947-3	-

Publication	Year	Title	EN/HD	Year
IEC 60947-4-1	-	Low-voltage switchgear and controlgear - Part 4-1: Contactors and motor-starters - Electromechanical contactors and motor-starters	EN 60947-4-1	-
IEC/TR 61912-1	-	Low-voltage switchgear and controlgear - Overcurrent protective devices - Part 1: Application of short-circuit ratings	-	-

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

LOW-VOLTAGE FUSES –

Part 5: Guidance for the application of low-voltage fuses

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of 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, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as “IEC Publication(s)”). 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 liaising with the IEC also participate in this preparation. 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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IEC 60269-5, which is a technical report, has been prepared by subcommittee 32B: Low-voltage fuses, of IEC technical committee 32: Fuses.

This technical report cancels and replaces IEC/TR 61818, published in 2003, and IEC/TR 61459, published in 1996. It constitutes a minor revision by amending and restructuring the two replaced publications.

The text of this technical report is based on the following documents:

Enquiry draft	Report on voting
32B/554/DTR	32B/566/RVC

Full information on the voting for the approval of this technical report 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.

A list of all parts of the IEC 60269 series, under the general title: *Low-voltage fuses*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

Fuses protect many types of equipment and switchgear against the effects of over-current which can be dramatic:

- thermal damage of conductors or bus-bars;
- vaporisation of metal;
- ionisation of gases;
- arcing, fire, explosion,
- insulation damage.

Apart from being hazardous to personnel, significant economic losses can result from downtime and the repairs required to restore damaged equipment.

Modern fuses are common overcurrent protective devices in use today, and as such provide an excellent cost effective solution to eliminate or minimize the effects of overcurrent.