
**Železniške naprave – Elektrotehnična oprema za vozna sredstva – 5. del:
Elektrotehnične komponente – Pravila za visokonapetostne varovalke (IEC 60077-
5:2003)**

Railway applications - Electrotechnical equipment for rolling stock -- Part 5:
Electrotechnical components - Rules for HV fuses

Bahnanwendungen - Elektrische Betriebsmittel auf Bahnfahrzeugen -- Teil 5:
Elektrotechnische Bauteile - Regeln für Hochspannungssicherungen
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Applications ferroviaires - Equipements électriques du matériel roulant -- Partie 5:
Composants électrotechniques - Règles pour les fusibles à haute tension

Ta slovenski standard je istoveten z: EN 60077-5:2003

ICS:

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29.280	Električna vlečna oprema	Electric traction equipment

SIST EN 60077-5:2004

en

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EN 60077-5

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**Railway applications -
Electrotechnical equipment for rolling stock
Part 5: Electrotechnical components -
Rules for HV fuses
(IEC 60077-5:2003)**

Applications ferroviaires -
Equipements électriques
du matériel roulant

Partie 5: Composants électrotechniques -
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(CEI 60077-5:2003)

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This European Standard was approved by CENELEC on 2003-09-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

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CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 9/752/FDIS, future edition 1 of IEC 60077-5, prepared by IEC TC 9, Electrical equipment and systems for railways, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60077-5 on 2003-09-01.

This standard should be read in conjunction with EN 60077-1:2002 and EN 60077-2:2002.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2004-06-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2006-09-01

Annexes designated "normative" are part of the body of the standard.

Annexes designated "informative" are given for information only.

In this standard, annexes A and ZA are normative and annexes B to D are informative.

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60077-5:2003 was approved by CENELEC as a European Standard without any modification.

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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60050-441	1984	International Electrotechnical Vocabulary (IEV) Chapter 441: Switchgear, controlgear and fuses	-	-
IEC 60050-811	1991	Chapter 811: Electric traction	-	-
IEC 60077-1 (mod)	1999	Railway applications - Electric equipment for rolling stock Part 1: General service conditions and general rules	EN 60077-1	2002
IEC 60077-2 (mod)	1999	Part 2: Electrotechnical components - General rules	EN 60077-2	2002
IEC 60269-1	1998	Low-voltage fuses Part 1: General requirements	EN 60269-1	1998
IEC 60282-1	2002	High-voltage fuses Part 1: Current-limiting fuses	EN 60282-1	2002
IEC 60850	2000	Railway applications - Supply voltages of traction systems	-	-
IEC 61373	1999	Railway applications - Rolling stock equipment - Shock and vibration tests	EN 61373	1999
ISO 3	1973	Preferred numbers - Series of preferred numbers	-	-

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**NORME
INTERNATIONALE
INTERNATIONAL
STANDARD**

**CEI
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60077-5

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**Applications ferroviaires –
Equipements électriques du matériel roulant –**

**Partie 5:
Composants électrotechniques –
Règles pour les fusibles à haute tension**

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**Railway applications –
Electric equipment for rolling stock –**

**Part 5:
Electrotechnical components –
Rules for HV fuses**

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Международная Электротехническая Комиссия

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For price, see current catalogue*

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**RAILWAY APPLICATIONS –
ELECTRIC EQUIPMENT FOR ROLLING STOCK –**

**Part 5: Electrotechnical components –
Rules for HV fuses**

FOREWORD

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International Standard IEC 60077-5 has been prepared by IEC technical committee 9: Electrical equipment and systems for railways.

This standard shall be read in conjunction with IEC 60077-1 and IEC 60077-2.

The text of this standard is based on the following documents:

FDIS	Report on voting
9/752/FDIS	9/762/RVD

Full information on the voting for the approval of this standard 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.

IEC 60077 consists of the following parts under the general title *Railway applications – Electric equipment for rolling stock*:

Part 1 – General service conditions and general rules

Part 2 – Electrotechnical components – General rules

Part 3 – Electrotechnical components – Rules for d.c. circuit-breakers

Part 4 – Electrotechnical components – Rules for a.c. circuit-breakers

Part 5 – Electrotechnical components – Rules for HV fuses

The committee has decided that the contents of this publication will remain unchanged until 2011. At this date, the publication will be

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

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RAILWAY APPLICATIONS – ELECTRIC EQUIPMENT FOR ROLLING STOCK –

Part 5: Electrotechnical components – Rules for HV fuses

1 Scope and object

The purpose of this part of IEC 60077 is to give additional or amended rules for high voltage fuses as a supplement to those given by IEC 60077-2.

NOTE In this product standard the term high voltage fuses is used in the context of the voltages used in the field of railway rolling stock.

The high voltage fuses concerned are those to be connected into power and/or auxiliary circuits. The nominal voltage of these circuits lies between 600 V d.c. and 3 000 V d.c., according to IEC 60850. These fuses may also be used in auxiliary a.c. circuits up to a nominal voltage of 1 500 V.

NOTE Certain of these rules may, after agreement between user and manufacturer, be used for fuses installed on vehicles other than rail rolling stock such as mine locomotives, trolleybuses, etc.

This product standard together with IEC 60077-2 states specifically:

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- a) the characteristics of the fuses;
 - b) the service conditions with which the fuses have to comply with reference to:
 - operation and behaviour in normal service;
 - operation and behaviour in case of short circuit;
 - dielectric properties.
 - c) the tests intended for confirming the compliance of the fuse with the characteristics under the service conditions and the methods to be adopted for these tests;
 - d) the information to be marked on, or given with, the fuse.

This standard does not cover parallel connection of fuses.

During preparation of this product standard, IEC 60269-1 and IEC 60282-1 have been considered and their requirements have been kept as far as possible.

This product standard makes reference to the general rules for electrotechnical components given in IEC 60077-2, but for general conditions reference is made directly to IEC 60077-1.

2 Normative references

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.