
**Železniške naprave - Elektronski elektroenergetski pretvornik za fiksne postroje -
1. del: Splošne zahteve**

Railway applications - Electronic power converters for fixed installations - Part 1: General requirements

Bahnanwendungen- Leistungselektronische Stromrichter für ortsfeste Anlagen - Teil 1: Allgemeine Anforderungen

Applications ferroviaires - Convertisseurs électroniques de puissance pour installations fixes - Partie 1: Exigences générales

Ta slovenski standard je istoveten z: EN IEC 62590-1:2025

[SIST EN IEC 62590-1:2025](https://standards.slovenski-institut.si/standards/sist/38288051-0101-4878-8425-601177911405/sist-en-iec-62590-1-2025)

ICS:

29.200	Usmerniki. Pretvorniki. Stabilizirano električno napajanje	Rectifiers. Convertors. Stabilized power supply
45.040	Materiali in deli za železniško tehniko	Materials and components for railway engineering

SIST EN IEC 62590-1:2025**en**

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN IEC 62590-1

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ICS 45.060.01; 29.280

English Version

**Railway applications - Electronic power converters for fixed
installations - Part 1: General requirements
(IEC 62590-1:2025)**

Applications ferroviaires - Convertisseurs électroniques de
puissance pour installations fixes - Partie 1: Exigences
générales
(IEC 62590-1:2025)

Bahnanwendungen - Leistungselektronische Stromrichter
für ortsfeste Anlagen - Teil 1: Allgemeine Anforderungen
(IEC 62590-1:2025)

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

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 62590-1:2025 (E)**European foreword**

The text of document 9/3160/FDIS, future edition 1 of IEC 62590-1, prepared by TC 9 "Electrical equipment and systems for railways" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62590-1:2025.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2026-06-30
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2028-06-30

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Endorsement notice

The text of the International Standard IEC 62590-1:2025 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standard indicated:

IEC 60076-10	NOTE Approved as EN 60076-10
IEC 60146-1-1	NOTE Approved as EN IEC 60146-1-1
IEC 60146-2:1999	NOTE Approved as EN 60146-2:2000 (not modified)
IEC 61000-3 (series)	NOTE Approved as EN 61000-3 (series)
IEC 62924	NOTE Approved as EN 62924

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60071-1	-	Insulation co-ordination - Part 1: Definitions, principles and rules	EN IEC 60071-1	-
IEC 60364-1	-	Low-voltage electrical installations - Part 1: Fundamental principles, assessment of general characteristics, definitions	HD 60364-1	-
IEC 60529	-	Degrees of protection provided by enclosures (IP Code)	EN 60529	-
IEC 60664-1	-	Insulation coordination for equipment within low-voltage supply systems - Part 1: Principles, requirements and tests	EN IEC 60664-1	-
IEC 60721	series	Classification of environmental conditions	EN 60721	series
IEC 60850	-	Railway applications - Supply voltages of traction systems	EN 50163	-
IEC 61000-2-12	-	Electromagnetic compatibility (EMC) - Part 2-12: Environment - Compatibility levels for low-frequency conducted disturbances and signalling in public medium-voltage power supply systems	EN 61000-2-12	-
IEC 61936-1	-	Power installations exceeding 1 kV AC and 1,5 kV DC - Part 1: AC	EN IEC 61936-1	-
IEC 61992-7-1	2006	Railway applications - Fixed installations - DC switchgear - Part 7-1: Measurement, control and protection devices for specific use in d.c. traction systems - Application guide	EN 50123-7-1	2003
IEC 62236-2	-	Railway applications - Electromagnetic compatibility -- Part 2: Emission of the whole railway system to the outside world	EN 50121-2	-
IEC 62236-5	-	Railway applications - Electromagnetic compatibility -- Part 5: Emission and immunity of fixed power supply installations and apparatus	EN 50121-5	-

EN IEC 62590-1:2025 (E)

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 62497-1	2010	Railway applications - Insulation coordination - Part 1: Basic requirements - Clearances and creepage distances for all electrical and electronic equipment	EN 50124-1	-
IEC 62313	-	Railway applications - Power supply and rolling stock - Technical criteria for the coordination between power supply (substation) and rolling stock	EN 50388	-
IEC 62695	-	Railway applications - Fixed installations - Traction transformers	EN 50329	-

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

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