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Järnvägsanläggningar – Fasta installationer – Del 2: Skyddsåtgärder för begränsning av läckströmmar från likströmsbanor

Railway applications –

Fixed installations –

*Part 2: Protective provisions against the effects of stray currents
caused by d.c. traction systems*

Som svensk standard gäller europastandarden EN 50122-2:1998. Den svenska standarden innehåller den officiella engelska språkversionen av EN 50122-2:1998.

Nationellt förord

SS-EN 50122-2 ersätter de avsnitt i SEN 08 04 01, utgåva 2, 1976, som omfattar åtgärder i bananläggningar för minskning av läckströmmar.

De avsnitt i SEN 08 04 01 som behandlar åtgärder i andra likströmsanläggningar samt åtgärder i konstruktioner utsatta för vagabonderande strömmar fortsätter att gälla. Arbete med en motsvarande europastandard pågår.

ICS 29.120.50; 45.020

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EUROPEAN STANDARD

EN 50122-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

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ICS 29.120.50; 45.020

Descriptors: Railway fixed equipment, electric traction, direct current, safety, safety measures, corrosion prevention, stray current corrosion, cathodic protection

English version

Railway applications - Fixed installations
Part 2: Protective provisions against the effects of
stray currents caused by d.c. traction systems

Applications ferroviaires - Installations fixes
Partie 2: Mesures de protection contre les effets des courants vagabonds issus de la traction électrique à courant continu

Bahnanwendungen - Ortsfeste Anlagen
Teil 2: Schutzmaßnahmen gegen die Auswirkungen von Streuströmen verursacht durch Gleichstrombahnen

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CENELEC

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

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Foreword

This European Standard was prepared by SC 9XC, Electric supply and earthing systems for public transport equipment and ancillary apparatus (fixed installations), of Technical Committee CENELEC TC 9X, Electrical and electronic applications for railways.

The text of the draft was submitted to the formal vote and was approved by CENELEC as EN 50122-2 on 1998-04-01.

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) 1999-03-01

 - latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 1999-03-01
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1 Scope

This standard specifies requirements for protective provisions against the effects of stray currents which result from the operation of d.c. traction systems.

As experience for several decades has not shown evident corrosion effects from a.c. traction systems and actual investigations are not completed, this standard only deals with stray currents flowing from a d.c. traction system.

This standard applies to all metallic fixed installations which form part of the traction system, and also to any other unrelated metallic components located in any position in the earth, which may carry stray currents resulting from the operation of the railway system.

This standard applies to all new electrification of a d.c. railway system. The principles may also be applied to existing electrified systems where it is necessary to consider the effects of stray currents.

The range of application includes:

- railways;
- guided mass transport systems such as:
Tramways, elevated and underground railways, mountain railways, trolleybus systems and magnetic levitated systems;
- material transportation systems.

This standard does not apply to:

- a) mine traction systems in underground mines;
- b) cranes, transportable platforms and similar transportation equipment on rails, temporary structures (e.g. exhibition structures) in so far as these are not supplied directly from the contact line system and are not endangered by the traction power supply system;
- c) suspended cable cars;
- d) funicular railways;
- e) maintenance work.

2 Normative references

This European Standard incorporates by dated or undated references, 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.

EN 50122-1 Railway applications - Fixed installations
Part 1: Protective provisions relating to
electrical safety and earthing

EN 50162*) Protection against corrosion by stray
currents from d.c. current systems

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*) At present under preparation.