Railway applications - Fixed installations - D.C. surge arresters and voltage limiting devices -- Part 2: Voltage limiting devices

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NATIONAL FOREWORD

See Eesti standard EVS-EN 50526-2:2014 sisaldab Euroopa standardi EN 50526-2:2014 inglisekeelset teksti.	This Estonian standard EVS-EN 50526-2:2014 consists of the English text of the European standard EN 50526-2:2014.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 28.02.2014.	Date of Availability of the European standard is 28.02.2014.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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English version

Railway applications - Fixed installations - D.C. surge arresters and voltage limiting devices - Part 2: Voltage limiting devices

Applications ferroviaires - Installations fixes - Parafoudres et limiteurs de tension pour systèmes à courant continu - Partie 2: Limiteurs de tension

Bahnanwendungen - Ortsfeste Anlagen - Überspannungsableiter und Spannungsbegrenzungseinrichtungen - Teil 2: Spannungsbegrenzungseinrichtungen

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CENELEC

European Committee for Electrotechnical Standardization
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Foreword

This document (EN 50526-2:2014) has been prepared by CLC/SC 9XC "Electric supply and earthing systems for public transport equipment and ancillary apparatus (Fixed installations)".

The following dates are fixed:

• latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2014-12-30
• latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2016-12-30

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This European Standard, *Railway applications — Fixed installations — D.C. surge arresters and voltage limiting devices*, is in three parts:

— *Part 1: Surge arresters* deals with metal oxide arresters without gaps for d.c. railway traction systems (fixed installations) and is based on EN 60099-4, Ed. 2.2, 2009-5;

— *Part 2: Voltage limiting devices* [the present text] deals with voltage limiting devices for specific use in d.c. railway traction systems (fixed installations);

— *Part 3 Application guide* [currently at Enquiry stage] deals with a guide of application of metal-oxide arresters and of voltage limiting devices.

1 Scope

This European Standard applies to Voltage Limiting Devices (VLDs) to be applied in d.c. traction systems in order to comply with protective provisions against electric shock from d.c., and mixed a.c. – d.c. voltages, in accordance with the EN 50122 series, taking into account stray current provisions.

VLDs operate in such a way as to connect the track return circuit of d.c. railway systems to the earthing system or to conductive parts within the overhead contact line zone or current collector zone.

2 Normative references

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

EN 50122-1:2011, *Railway applications — Fixed installations — Electrical safety, earthing and the return circuit — Part 1: Protective provisions against electric shock*

EN 50122-3:2010, *Railway applications — Fixed installations — Electrical safety, earthing and the return circuit — Part 3: Mutual Interaction of a.c. and d.c. traction systems*

EN 50123-1:2003, *Railway applications — Fixed installations — D.C. switchgear — Part 1: General*

EN 50123-7 (all parts), *Railway applications — Fixed installations — D.C. switchgear — Part 7-x: Measurement, control and protection devices for specific use in d.c. traction systems*

EN 50124-1, *Railway applications — Insulation coordination — Part 1: Basic requirements — Clearances and creepage distances for all electrical and electronic equipment*

EN 50125-2, *Railway applications — Environmental conditions for equipment — Part 2: Fixed electrical installations*

EN 50163:2004, *Railway applications — Supply voltages of traction systems*

EN 50526-1:2012, *Railway applications — Fixed installations — D.C. surge arresters and voltage limiting devices — Part 1: Surge arresters*

EN 60060-1, *High-voltage test techniques — Part 1: General definitions and test requirements (IEC 60060-1)*

EN 60085, *Electrical insulation — Thermal evaluation and designation (IEC 60085)*

EN 60529:1991, *Degrees of protection provided by enclosures (IP Code) (IEC 60529:1989)*

EN 61643-311, *Components for low-voltage surge protective devices — Part 311: Performance requirements and test circuits for gas discharge tubes (GDT) (IEC 61643-311)*

EN ISO 4287, *Geometrical product specifications (GPS) — Surface texture: Profile method — Terms, definitions and surface texture parameters (ISO 4287)*

EN ISO 4892-1, *Plastics — Methods of exposure to laboratory light sources — Part 1: General guidance (ISO 4892-1)*

EN ISO 4892-2, *Plastics — Methods of exposure to laboratory light sources — Part 2: Xenon-arc lamps (ISO 4892-2)*

EN ISO 4892-3, *Plastics — Methods of exposure to laboratory light sources — Part 3: Fluorescent UV lamps (ISO 4892-3)*