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Railway application - Fixed installations - D.C. surge arresters and voltage limiting devices - Part 3: Application Guide

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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English Version

Railway application - Fixed installations - D.C. surge arresters and voltage limiting devices - Part 3: Application Guide

Applications ferroviaires - Installations fixes - Parafoudres et
limiteurs de tension pour systèmes à courant continu -
Partie 3: Guide d'application

Bahnanwendungen - Ortsfeste Anlagen -
Überspannungsableiter und
Spannungsbegrenzungseinrichtung für
Gleichspannungsnetze - Teil 3: Anwendungsleitfaden

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| Content | Page |
|---|-------------|
| European foreword | 4 |
| Introduction | 5 |
| 1 Scope | 6 |
| 2 Normative references | 6 |
| 3 Terms and definitions..... | 7 |
| 4 General considerations | 13 |
| 4.1 General..... | 13 |
| 4.2 Application of surge arresters..... | 14 |
| 4.2.1 General..... | 14 |
| 4.2.2 Insulation level of equipment to be protected | 14 |
| 4.2.3 Internal overvoltages..... | 14 |
| 4.2.4 Lightning Overvoltages..... | 15 |
| 4.3 Application of VLDs..... | 16 |
| 4.3.1 General..... | 16 |
| 4.3.2 Short term protection | 16 |
| 4.3.3 Long term protection..... | 17 |
| 4.3.4 Selection of VLD-F or VLD-O | 17 |
| 5 Symbols for surge arresters and VLDs | 17 |
| 6 Guideline for Surge Arresters | 18 |
| 6.1 General..... | 18 |
| 6.1.1 Electrical characteristics | 18 |
| 6.1.2 Housing..... | 19 |
| 6.1.3 Porcelain-housed surge arresters | 19 |
| 6.1.4 Polymer-housed surge arresters | 19 |
| 6.2 Systems and equipment to be protected by surge arresters..... | 20 |
| 6.3 Nominal discharge current I_n | 23 |
| 6.4 Selection of Continuous Operating Voltage | 23 |
| 6.4.1 Continuous operating voltage U_c for arresters A1 | 23 |
| 6.4.2 Continuous operating voltage U_c for arresters A2 | 24 |
| 6.5 Protective level of A1 and A2 arresters..... | 24 |
| 6.6 Charge transfer capability | 27 |
| 6.6.1 General..... | 27 |
| 6.6.2 Typical overvoltages during clearing a line fault | 27 |
| 6.6.3 Arrester A1 | 33 |
| 6.6.4 Arrester A2 | 34 |
| 6.7 Procedure to select an A1 arrester | 34 |
| 6.8 Procedure to select an A2 arrester | 38 |
| 6.9 Connecting leads of arresters | 38 |
| 6.10 Earthing requirements..... | 38 |
| 7 Guideline for VLDs..... | 39 |
| 7.1 Introduction | 39 |
| 7.2 General..... | 40 |
| 7.3 Mass transit railways and trams (U_n up to d.c. 750 V) | 40 |
| 7.3.1 General..... | 40 |
| 7.3.2 Trams with OCL | 40 |
| 7.3.3 Metros with a conductor rail..... | 42 |
| 7.3.4 Light-rail metros with OCLs..... | 43 |
| 7.4 Railways (d.c. 1 500V ... d.c. 3 000 V) | 43 |
| 7.4.1 General..... | 43 |

| | | |
|-------|---|----|
| 7.4.2 | Application of VLDs along the lines or at the substations and in the sectioning posts | 43 |
| 7.4.3 | Recommended characteristics of VLDs | 45 |
| 7.5 | Workshops | 46 |
| 7.5.1 | Application of VLD-O | 46 |
| 7.5.2 | Application of VLD-F | 46 |
| 8 | Further considerations | 46 |
| 8.1 | Installation recommendations | 46 |
| 8.1.1 | Mounting aspect | 46 |
| 8.1.2 | Periodicity of inspection and management of alarms | 48 |
| 8.1.3 | Colours of the cables | 49 |
| 8.2 | Interaction between arresters and VLDs | 49 |
| 8.3 | Interaction with other systems | 49 |
| 8.3.1 | Interaction with signalling systems | 49 |
| 8.3.2 | Interaction with earthing systems | 50 |
| 8.3.3 | Interaction with tunnel earthing systems | 50 |
| 8.3.4 | Separation of a.c. cable screens | 50 |
| | Bibliography | 51 |

EN 50526-3:2016 (E)

European foreword

This document (EN 50526-3:2016) has been prepared by CLC/SC 9XC, "Electric supply and earthing systems for public transport equipment and ancillary apparatus (Fixed installations)", of CLC/TC 9X, "Electrical and electronic applications for railways".

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) 2016-12-07
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2018-12-07

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Introduction

This European Standard is divided into three parts.

Part 1 deals with metal oxide arresters without gaps for d.c. railway traction systems (fixed installations) and is based on EN 60099-4.

Part 2 deals with voltage limiting devices for specific use in d.c. railway traction systems (fixed installations).

Part 3 is a Guide of application of metal-oxide arresters and of voltage limiting devices.

EN 50526-3:2016 (E)

1 Scope

This Application Guide supports the European Standards EN 50526-1 and EN 50526-2.

Guidance is offered on the following subjects:

- the selection and installation of surge arresters;
- the selection and installation of voltage limiting devices as VLD-O and VLD-F;
- the arrangement of the surge arresters and VLDs.

Because of differences in the established, proven methods, electric traction systems of nominal voltage d.c. 600 V – d.c. 750 V are treated separately from the systems at higher nominal voltages.

This Application Guide only applies to d.c. electrified traction systems

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 50122-2:2010, *Railway applications - Fixed installations - Electrical safety, earthing and the return circuit - Part 2: Provisions against the effects of stray currents caused by d.c. traction systems*

EN 50123-2:2003, *Railway applications - Fixed installations - D.C. switchgear - Part 2: D.C. circuit breakers*

EN 50123-7-1:2003, *Railway applications - Fixed installations - D.C. switchgear - Part 7-1: Measurement, control and protection devices for specific use in d.c. traction systems - Application guide*

EN 50124-1:2001, *Railway applications - Insulation coordination - Part 1: Basic requirements - Clearances and creepage distances for all electrical and electronic equipment*

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 50526-2:2014, *Railway applications - Fixed installations - D.C. surge arresters and voltage limiting devices - Part 2: Voltage limiting devices*

EN 62305-2, *Protection against lightning - Part 2: Risk management.*

IEC 60050-195:1998, *International Electrotechnical Vocabulary - Chapter 195: Earthing and protection against electric shock*

IEC 60050-441:1984, *International Electrotechnical Vocabulary - Chapter 441: Switchgear, controlgear and fuses*

IEC 60050-604:1987, *International Electrotechnical Vocabulary. Chapter 604: Generation, transmission and distribution of electricity - Operation*

IEC 60050-811:1991, *International Electrotechnical Vocabulary - Chapter 811: Electric traction*

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