

**Raudteealased rakendused. Vooluvõtusüsteemid.
Pantograafi ja kontaktliini vastastikuse toime tehnilised
kriteeriumid (vaba juurdepääsu saavutamiseks)**

**Railway applications - Current collection systems -
Technical criteria for the interaction between
pantograph and overhead line (to achieve free access)**

EESTI STANDARDI EESSÕNA

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English version

**Railway applications -
Current collection systems -
Technical criteria for the interaction between pantograph and overhead
line (to achieve free access)**

Applications ferroviaires -
Systèmes de captage de courant -
Critères techniques d'interaction entre le
pantographe et la ligne aérienne de
contact (réalisation du libre accès)

Bahnanwendungen -
Zusammenwirken der Systeme -
Technische Kriterien für das
Zusammenwirken zwischen
Stromabnehmer und Oberleitung für einen
freien Zugang

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Europäisches Komitee für Elektrotechnische Normung

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Contents

	Page
Foreword	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	6
4 Symbols and abbreviations	9
5 Geometry	10
5.1 General	10
5.2 Overhead contact line characteristics	10
5.2.1 General	10
5.2.2 Gauges	10
5.2.3 Contact wire height	10
5.2.4 Contact wire gradient	11
5.2.5 Lateral deviation	11
5.2.6 Contact wire uplift	12
5.2.7 Neutral sections	12
5.2.8 Change over area between pantograph profiles	12
5.3 Pantograph characteristics	12
5.3.1 General	12
5.3.2 Assessment of the pantograph profile	13
5.3.3 Conducting range	15
6 Material interfaces	15
6.1 General	15
6.2 Contact wire	15
6.3 Contact strips	15
7 Interaction performance	16
7.1 General	16
7.2 Current capacity	16
7.3 Dynamic behaviour and quality of current collection	17
8 Operational requirements	20
8.1 Additional characteristics for automatic dropping device	20
8.2 Minimum and maximum spacing between two operating pantographs	20
A.1 Neutral sections	22
A.1.1 Principle of neutral section	22
A.1.2 Long neutral section	22
A.1.3 Short neutral section	23
A.1.4 Split neutral section	24
A.1.5 Arrangement of pantograph on trains	24
A.2 Profiles for interoperable pantograph head	26
A.2.1 Pantograph head with length of 1 600 mm	26
A.2.2 Pantograph head with length of 1 950 mm	27
A.3 Additional tests for DC systems	27
A.3.1 Current at standstill	27

A.3.2 Testing conditions.....	27
A.3.3 Testing procedure.....	28
A.4 Visualisation of mean contact forces.....	28
B.1 National characteristics	30
B.2 General characteristics of pantograph head	36

Figures

Figure 1 – General detail of pantograph with independently suspended collector head	14
Figure 2 – Transition point – 1 600 mm and 1 950 mm pantograph head	15
Figure A.1 – Principle of neutral section.....	22
Figure A.2 – Long neutral section	22
Figure A.3 – Short neutral section.....	23
Figure A.4 – Split neutral section	24
Figure A.5 – Arrangement of pantograph on trains	25
Figure A.6 – Profile of pantograph head with length of 1 600 mm	26
Figure A.7 – Profile of pantograph head with length of 1 950 mm	27
Figure A.8 – Visualisation of contact forces a.c.	28
Figure A.9 – Visualisation of contact forces DC 1,5 kV.....	29
Figure A.10 – Visualisation of contact forces DC 3,0 kV.....	29
Figure B.1 – Pantograph head with length of 1 450 mm.....	36
Figure B.2 – Pantograph head with length of 1 950 mm (Type 1)	36
Figure B.3 – Pantograph head with length of 1 600 mm (GB, CTRL).....	37
Figure B.4 – Pantograph head with length of 1 950 mm (Type 2)	37
Figure B.5 – Pantograph head with length of 1 800 mm (NO, SE)	38
Figure B.6 – Pantograph head with length of 1 600 mm (GB)	39
Figure B.7 – Pantograph head with length of 1 950 mm (PL).....	40
Figure B.8 – Pantograph head with length of 1 760 mm (BE).....	41

Tables

Table 1 – Range of nominal contact wire height for AC and DC systems	10
Table 2 – Maximum lateral deviation.....	11
Table 3 – Pantograph characteristics for AC and DC systems	13
Table 4 – Static contact forces	17
Table 5 – Maximum current at standstill.....	17

Table 6 – Limits for interaction performance (contact force).....	19
Table 7 – Values for interaction performance (arcs).....	20
Table 8 – Minimum distances of operating pantographs	21
Table B.1 – Overhead contact line characteristics for AC systems	31
Table B.2 – Overhead contact line characteristics for DC systems	31
Table B.3 – Rolling stock characteristics for AC systems	32
Table B.4 – Rolling stock characteristics for DC systems.....	33
Table B.5 – Interaction performance for AC systems	34
Table B.6 – Interaction performance for DC systems	35
Table C.1 – Contact strip material normally used	42

Foreword

This document (EN 50367:2012) 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) 2013-03-19
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2015-03-19

This document supersedes EN 50367:2006.

EN 50367:2012 includes the following significant technical changes with respect to EN 50367:2006: general technical updating since last version; inclusion of requirements for pantographs with contact strips with independent suspensions; reference to EN 15273 for lateral deviation.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive(s) see informative Annex ZZ, which is an integral part of this document.

1 Scope

This European Standard specifies requirements for the interaction between pantographs and overhead contact lines, to achieve interoperability.

NOTE These requirements are defined for a limited number of pantograph types, referred to as 'interoperable pantograph', together with the geometry and characteristics of compatible overhead contact lines.

This European Standard describes parameters and values for all planned lines and future lines.

Annex B gives some parameters for existing lines (informative).

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 50119:2009, *Railway applications – Fixed installations – Electric traction overhead contact lines*

EN 50149, *Railway applications – Fixed installations – Electric traction – Copper and copper alloy grooved contact wires*

EN 50206-1:2010, *Railway applications – Rolling stock – Pantographs: Characteristics and tests – Part 1: Pantographs for main line vehicles*

EN 50317:2012, *Railway applications – Current collection systems – Requirements for and validation of measurements of the dynamic interaction between pantograph and overhead contact line*

EN 50318, *Railway applications – Current collection systems – Validation of simulation of the dynamic interaction between pantograph and overhead contact line*

EN 50388:2012, *Railway applications – Power supply and rolling stock – Technical criteria for the coordination between power supply (substation) and rolling stock to achieve interoperability*

EN 50405, *Railway applications – Current collection systems – Pantographs, testing methods for carbon contact strips*

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

EN 15273 (all parts), *Railway applications – Gauges*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60050-811:1991 and the following apply.

3.1

arcing

flow of current through an air gap between a contact strip and a contact wire usually indicated by the emission of intense light

[SOURCE: EN 50317:2012]

3.2

automatic dropping device

device that lowers the pantograph in the event of pantograph head failure or damage of the pantograph head

[SOURCE: EN 50206-1:2010]