Raudteealased rakendused. Vooluvõtusüsteemid. Pantograafi ja liinivahelise dünaamilise vastasmõju mõõtmiste esitatavad nõuded ja hindamine

Railway applications - Current collection systems - Requirements for and validation of measurements of the dynamic interaction between pantograph and overhead contact line

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 50317:2003 sisaldab Euroopa standardi EN 50317:2002 ingliskeelset teksti. Käesolev dokument on jõustatud 05.02.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 50317:2003 consists of the English text of the European standard EN 50317:2002. This document is endorsed on 05.02.2003 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: The European standard specifies the functional requirements for output and accuracy of measurements of the dynamic interaction between pantograph and overhead contact line	**Scope:** The European standard specifies the functional requirements for output and accuracy of measurements of the dynamic interaction between pantograph and overhead contact line

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Võtmesõnad: calibration, conversational mode, definitions, electric outlets, electric sockets, interaction, measurement, measuring instruments, overhead power lines, traction-current-collectin

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English version

Railway applications - Current collection systems - Requirements for and validation of measurements of the dynamic interaction between pantograph and overhead contact line

Applications ferroviaires - Systèmes de captage de courant - Prescriptions et validation des mesures de l'interaction dynamique entre le pantographe et la caténaire

Bahnanwendungen - Stromabnahmesysteme - Anforderungen und Validierung von Messungen des dynamischen Zusammenwirkens zwischen Stromabnehmer und Oberleitung

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
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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 50317 on 2002-04-01.

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) 2003-04-01

- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2005-04-01

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and supports the Interoperability Directive, 96/48/EC.

Contents

1 Scope

This European Standard specifies the functional requirements for output and accuracy of measurements of the dynamic interaction between pantograph and overhead contact line.

2 Normative references

This European Standard incorporates, by dated or undated reference, 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 (including amendments).

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

3 Definitions

For the purpose of this standard, the following definitions apply:

3.1
pantograph head
pantograph equipment comprising the contact strips and their mountings

3.2
contact point
point of mechanical contact between a contact strip and a contact wire

3.3
working area of pantograph head
lateral and vertical range of possible contact points on the contact strips during normal operation

3.4
contact force
vertical force applied by the pantograph to the overhead contact line. The contact force is the sum of the forces of all contact points

3.5
mean force
F_M
statistical mean of the contact force

3.6
static force
mean vertical force exerted upward by the collector head on the contact wire, and caused by the pantograph raising device, whilst the pantograph is raised and the vehicle is at standstill
[EN 50206-1]

3.7
aerodynamic force
additional vertical force applied to the pantograph as a result of air flow around the pantograph assembly