

| | | |
|------------|---|----------------------------|
| STN | Systémy zbernicového vedenia. Časť 21: Osobitné požiadavky na systémy zbernicového vedenia určené na montáž na stenu a na strop. | STN EN 61534-21 |
| | | 35 7120 |

Powertrack systems - Part 21: Particular requirements for powertrack systems intended for wall and ceiling mounting

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

Táto norma bola označená vo Vestníku ÚNMS SR č. 01/15

Obsahuje: EN 61534-21:2014, IEC 61534-21:2014

Oznámením tejto normy sa od 24.07.2017 ruší
STN EN 61534-21 (35 7120) z júna 2007

120108

Úrad pre normalizáciu, metrológiu a skúšobníctvo SR, odbor SÚTN, 2015
Podľa zákona č. 264/1999 Z. z. v znení neskorších predpisov sa môžu slovenské technické normy
rozmnožovať a rozširovať iba so súhlasom Úradu pre normalizáciu, metrológiu a skúšobníctvo SR.

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 61534-21

August 2014

ICS 29.060.10; 29.120.20

Supersedes EN 61534-21:2006

English Version

**Powertrack systems - Part 21: Particular requirements for
powertrack systems intended for wall and ceiling mounting
(IEC 61534-21:2014)**

Systèmes de conducteurs préfabriqués - Partie 21:
Exigences particulières pour les systèmes de conducteurs
préfabriqués destinés au montage sur des murs et des
plafonds
(CEI 61534-21:2014)

Stromschienensysteme - Teil 21: Besondere Anforderungen
für Stromschienensysteme für Wand und Decke
(IEC 61534-21:2014)

This European Standard was approved by CENELEC on 2014-07-24. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Foreword

The text of document 23A/701/FDIS, future edition 2 of IEC 61534-21, prepared by SC 23A "Cable management systems", of IEC/TC 23 "Electrical accessories" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61534-21:2014.

The following dates are fixed:

- latest date by which the document has to be implemented at (dop) 2015-04-24 national level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with (dow) 2017-07-24 the document have to be withdrawn

This document supersedes EN 61534-21:2006.

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 standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2006/95/EC).

Endorsement notice

The text of the International Standard IEC 61534-21:2014 was approved by CENELEC as a European Standard without any modification.

Annex ZA
(normative)**Normative references to international publications
with their corresponding European publications**

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.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

| <u>Publication</u> | <u>Year</u> | <u>Title</u> | <u>EN/HD</u> | <u>Year</u> |
|---------------------|--------------|--|--------------------|--------------|
| IEC 61534-1 + A1 | 2011 2014 | Powertrack systems - Part 1: General requirements | EN 61534-1 + A1 | 2011 2014 |



INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Powertrack systems –
Part 21: Particular requirements for powertrack systems intended for wall and
ceiling mounting**

**Systèmes de conducteurs préfabriqués –
Partie 21: Exigences particulières pour les systèmes de conducteurs
préfabriqués destinés au montage sur des murs et des plafonds**





THIS PUBLICATION IS COPYRIGHT PROTECTED

Copyright © 2014 IEC, Geneva, Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either IEC or IEC's member National Committee in the country of the requester. If you have any questions about IEC copyright or have an enquiry about obtaining additional rights to this publication, please contact the address below or your local IEC member National Committee for further information.

Droits de reproduction réservés. Sauf indication contraire, aucune partie de cette publication ne peut être reproduite ni utilisée sous quelque forme que ce soit et par aucun procédé, électronique ou mécanique, y compris la photocopie et les microfilms, sans l'accord écrit de l'IEC ou du Comité national de l'IEC du pays du demandeur. Si vous avez des questions sur le copyright de l'IEC ou si vous désirez obtenir des droits supplémentaires sur cette publication, utilisez les coordonnées ci-après ou contactez le Comité national de l'IEC de votre pays de résidence.

IEC Central Office
3, rue de Varembé
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
Fax: +41 22 919 03 00
info@iec.ch
www.iec.ch

About the IEC

The International Electrotechnical Commission (IEC) is the leading global organization that prepares and publishes International Standards for all electrical, electronic and related technologies.

About IEC publications

The technical content of IEC publications is kept under constant review by the IEC. Please make sure that you have the latest edition, a corrigenda or an amendment might have been published.

IEC Catalogue - webstore.iec.ch/catalogue

The stand-alone application for consulting the entire bibliographical information on IEC International Standards, Technical Specifications, Technical Reports and other documents. Available for PC, Mac OS, Android Tablets and iPad.

IEC publications search - www.iec.ch/searchpub

The advanced search enables to find IEC publications by a variety of criteria (reference number, text, technical committee,...). It also gives information on projects, replaced and withdrawn publications.

IEC Just Published - webstore.iec.ch/justpublished

Stay up to date on all new IEC publications. Just Published details all new publications released. Available online and also once a month by email.

Electropedia - www.electropedia.org

The world's leading online dictionary of electronic and electrical terms containing more than 30 000 terms and definitions in English and French, with equivalent terms in 14 additional languages. Also known as the International Electrotechnical Vocabulary (IEV) online.

IEC Glossary - std.iec.ch/glossary

More than 55 000 electrotechnical terminology entries in English and French extracted from the Terms and Definitions clause of IEC publications issued since 2002. Some entries have been collected from earlier publications of IEC TC 37, 77, 86 and CISPR.

IEC Customer Service Centre - webstore.iec.ch/csc

If you wish to give us your feedback on this publication or need further assistance, please contact the Customer Service Centre: csc@iec.ch.

A propos de l'IEC

La Commission Electrotechnique Internationale (IEC) est la première organisation mondiale qui élabore et publie des Normes internationales pour tout ce qui a trait à l'électricité, à l'électronique et aux technologies apparentées.

A propos des publications IEC

Le contenu technique des publications IEC est constamment revu. Veuillez vous assurer que vous possédez l'édition la plus récente, un corrigendum ou amendement peut avoir été publié.

Catalogue IEC - webstore.iec.ch/catalogue

Application autonome pour consulter tous les renseignements bibliographiques sur les Normes internationales, Spécifications techniques, Rapports techniques et autres documents de l'IEC. Disponible pour PC, Mac OS, tablettes Android et iPad.

Recherche de publications IEC - www.iec.ch/searchpub

La recherche avancée permet de trouver des publications IEC en utilisant différents critères (numéro de référence, texte, comité d'études,...). Elle donne aussi des informations sur les projets et les publications remplacées ou retirées.

IEC Just Published - webstore.iec.ch/justpublished

Restez informé sur les nouvelles publications IEC. Just Published détaille les nouvelles publications parues. Disponible en ligne et aussi une fois par mois par email.

Electropedia - www.electropedia.org

Le premier dictionnaire en ligne de termes électroniques et électriques. Il contient plus de 30 000 termes et définitions en anglais et en français, ainsi que les termes équivalents dans 14 langues additionnelles. Egalement appelé Vocabulaire Electrotechnique International (IEV) en ligne.

Glossaire IEC - std.iec.ch/glossary

Plus de 55 000 entrées terminologiques électrotechniques, en anglais et en français, extraites des articles Termes et Définitions des publications IEC parues depuis 2002. Plus certaines entrées antérieures extraites des publications des CE 37, 77, 86 et CISPR de l'IEC.

Service Clients - webstore.iec.ch/csc

Si vous désirez nous donner des commentaires sur cette publication ou si vous avez des questions contactez-nous: csc@iec.ch.



INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Powertrack systems –
Part 21: Particular requirements for powertrack systems intended for wall and
ceiling mounting**

**Systèmes de conducteurs préfabriqués –
Partie 21: Exigences particulières pour les systèmes de conducteurs
préfabriqués destinés au montage sur des murs et des plafonds**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

PRICE CODE
CODE PRIX



ICS 29.060.10, 29.120.20

ISBN 978-2-8322-1642-2

**Warning! Make sure that you obtained this publication from an authorized distributor.
Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.**

CONTENTS

| | |
|--|----|
| FOREWORD | 3 |
| 1 Scope | 5 |
| 2 Normative references | 5 |
| 3 Terms and definitions | 5 |
| 4 General requirements | 6 |
| 5 General notes on tests | 6 |
| 6 Ratings | 6 |
| 7 Classification | 6 |
| 8 Marking and documentation | 7 |
| 9 Construction | 7 |
| 10 Clearances, creepage distances and solid insulation | 7 |
| 11 Protection against electric shock | 7 |
| 12 Terminals and terminations | 7 |
| 13 Screws, current carrying parts and connections | 7 |
| 14 Mechanical strength | 7 |
| 15 Insulation resistance test and dielectric strength test | 9 |
| 16 Normal operation | 9 |
| 17 Temperature rise | 9 |
| 18 Short-circuit protection and short-circuit withstand strength | 9 |
| 19 Resistance to heat | 9 |
| 20 Fire hazard | 9 |
| 21 External influences | 9 |
| 22 Electromagnetic compatibility | 9 |
| Annex AA (normative) Additional test requirements for PT systems already complying with IEC 61534-21:2006 | 10 |

INTERNATIONAL ELECTROTECHNICAL COMMISSION

POWERTRACK SYSTEMS –**Part 21: Particular requirements for powertrack systems
intended for wall and ceiling mounting****FOREWORD**

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61534-21 has been prepared by subcommittee 23A: Cable management systems, of IEC technical committee 23: Electrical accessories.

This second edition cancels and replaces the first edition published in 2006 and constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- Clauses 18 to 22 have been adapted to IEC 61534-1:2011 and include short-circuit test requirements;
- Additional classification, terms and requirements for wall powertrack (PT) systems mounted at the skirting level (close to the floor) position.

The text of this standard is based on the following documents:

| FDIS | Report on voting |
|--------------|------------------|
| 23A/701/FDIS | 23A/707/RVD |

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

This standard is to be used in conjunction with IEC 61534-1:2011, *Powertrack systems – Part 1: General requirements*.

This Part 21 supplements or modifies the corresponding clauses of IEC 61534-1. Where a particular clause or subclause of IEC 61534-1:2011 is not mentioned in this Part 21, that clause or subclause applies as far as is reasonable. Where this Part 21 states "addition" or "replacement", the relevant text of IEC 61534-1:2011 is to be adapted accordingly.

Subclauses, tables and figures which are in addition to those in IEC 61534-1:2011 are numbered starting with 101.

A list of all parts in the IEC 61534 series, published under the general title *Powertrack systems*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

POWERTRACK SYSTEMS –

Part 21: Particular requirements for powertrack systems intended for wall and ceiling mounting

1 Scope

Clause 1 of IEC 61534-1:2011 and IEC 61534-1:2011/AMD1:2014 is applicable except as follows:

1.1 *Addition:*

This part of IEC 61534 specifies the particular requirements and tests for PT systems intended for mounting on walls and/or ceiling. They may be installed flush or semi-flush, surface mounted, suspended or spaced away from the surface using fixing devices.

2 Normative references

Clause 2 of IEC 61534-1:2011 is applicable except as follows:

Addition:

IEC 61534-1:2011, *Powertrack systems – Part 1: General requirements*
IEC 61534-1:2011/AMD1:2014

koniec náhľadu – text ďalej pokračuje v platenej verzii STN