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STN	**Súčasti pre nízkonapäťové prepäťové ochranné prístroje Časť 351: Požiadavky na prevádzkové vlastnosti a skúšobné metódy na oddeľovacie transformátory na ochranu pred rázom (SIT) v telekomunikačných a signalizačných sieťach**	**STN EN 61643-351** 34 1395

Components for low-voltage surge protective devices - Part 351: Performance requirements and test methods for telecommunications and signalling network surge isolation transformers (SIT)

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

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 06/17

Obsahuje: EN 61643-351:2017, IEC 61643-351:2016

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61643-351

February 2017

ICS 33.040.99

English Version

Components for low-voltage surge protective devices - Part 351: Performance requirements and test methods for telecommunications and signalling network surge isolation transformers (SIT) (IEC 61643-351:2016)

Composants pour parafoudres basse tension - Partie 351: Exigences de performance et méthodes d'essai pour les transformateurs d'isolement contre les surtensions dans les réseaux de signalisation et de télécommunications (IEC 61643-351:2016)

Bauelemente für Überspannungsschutzgeräte für Niederspannung - Teil 351: Leistungsanforderungen sowie Prüfschaltungen und -verfahren für Blitzisoliertransformatoren in Telekommunikations- und signalverarbeitenden Netzen (IEC 61643-351:2016)

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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

Ref. No. EN 61643-351:2017 E

European foreword

The text of document 37B/155/FDIS, future edition 1 of IEC 61643-351, prepared by SC 37B “Specific components for surge arresters and surge protective devices” of IEC/TC 37 “Surge arresters" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61643-351:2017.

The following dates are fixed:

• latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2017-09-02
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2019-12-02

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.

Endorsement notice

The text of the International Standard IEC 61643-351:2016 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60060-1:2010	NOTE	Harmonized as EN 60060-1:2010 (not modified).
IEC 60068-2-1:2007	NOTE	Harmonized as EN 60068-2-1:2007 (not modified).
IEC 60068-2-2:2007	NOTE	Harmonized as EN 60068-2-2:2007 (not modified).
IEC 60076-1	NOTE	Harmonized as EN 60076-1.
IEC 60721-3-9:1993	NOTE	Harmonized as EN 60721-3-9:1993 (not modified).
IEC 61340-4-8	NOTE	Harmonized as EN 61340-4-8.
IEC 61558-1	NOTE	Harmonized as EN 61558-1.
IEC 61558-2-4	NOTE	Harmonized as EN 61558-2-4.
IEC 61558-2-6	NOTE	Harmonized as EN 61558-2-6.

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

Publication	Year	Title	EN/HD	Year
IEC 60721-3-3	-	Classification of environmental conditions - Part 3: Classification of groups of environmental parameters and their severities - Section 3: Stationary use at weatherprotected locations	EN 60721-3-3	-
IEC/TR 60664-2-1	2011	Insulation coordination for equipment within low-voltage systems - Part 2-1: Application guide - Explanation of the application of the IEC 60664 series, dimensioning examples and dielectric testing	-	-

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COMPONENTS FOR LOW-VOLTAGE SURGE PROTECTIVE DEVICES –

Part 351: Performance requirements and test methods for telecommunications and signalling network surge isolation transformers (SIT)

FOREWORD

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International Standard IEC 61643-351 has been prepared by subcommittee 37B: Specific components for surge arresters and surge protective devices, of IEC technical committee 37: Surge arresters.

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

FDIS	Report on voting
37B/155/FDIS	37B/156/RVD

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

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

A list of all parts in the IEC 61643 series, published under the general title *Components for low-voltage surge protective devices*, can be found on the IEC website.

Future standards in this series will carry the new general title as cited above. Titles of existing standards in this series will be updated at the time of the next edition.

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

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

INTRODUCTION

This part of IEC 61643 covers surge isolation transformers whose rated impulse withstand voltage coordinates with the expected surge environment of the installation. This type of surge protective component, SPC, isolates and attenuates transient voltages in conjunction with current diverting components (e.g. GDT, MOV, etc.) or surge protective devices (SPDs). It can be used in SPDs.

COMPONENTS FOR LOW-VOLTAGE SURGE PROTECTION –

Part 351: Performance requirements and test methods for telecommunications and signalling network surge isolation transformers (SIT)

1 Scope

Surge isolation transformers (SITs) are used for signal transformer applications with signal levels up to 400 V peak to peak. SITs are transformers, with or without an internal-winding screen, with a rated impulse withstand voltage greater than the peak voltage of the expected common-mode surge environment. SITs are applicable to components for surge protection against indirect and direct effects of lightning or other transient overvoltage. SITs are used to mitigate the onward propagation of common-mode voltage surges. This part of IEC 61643 defines test circuits and test methods for determining and verifying the SIT surge parameters. Preferred performance values for key parameters are given.

This part of IEC 61643 does not cover SIT operation under differential-mode lightning surge conditions.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60721-3-3, *Classification of environmental conditions – Part 3: Classification of groups of environmental parameters and their severities – Section 3: Stationary use at weatherprotected locations*

IEC TR 60664-2-1:2011, *Insulation coordination for equipment within low-voltage systems – Part 2-1: Application guide – Explanation of the application of the IEC 60664 series, dimensioning examples and dielectric testing*