

STN	Uzemňovanie silnoprúdových inštalácií na striedavé napätie nad 1 kV Zmena A1	STN EN 50522/A1
		33 3201

Earthing of power installations exceeding 1 kV a.c.

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. 11/24

STN EN 50522 z marca 2023 sa bez tejto zmeny A1 môže používať do 2. 7. 2027.

Obsahuje: EN 50522:2022/A1:2024

139573

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 50522:2022/A1

September 2024

ICS 29.120.50

English Version

Earthing of power installations exceeding 1 kV a.c.

Prises de terre des installations électriques de puissance en courant alternatif de tension supérieure à 1 kV

Erdung von Starkstromanlagen mit Nennwechselspannungen über 1 kV

This amendment A1 modifies the European Standard EN 50522:2022; it was approved by CENELEC on 2024-07-02. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 amendment 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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN 50522:2022/A1:2024 (E)**Contents**

	Page
European foreword	3
1 Modification to Clause 2, “Normative references”	4
2 Modifications to Clause 3, “Terms and definitions”	4
3 Modification to 4.1, “General requirements”	5
4 Modifications to 4.2, “Electrical requirements”	5
5 Modifications to 4.3, “Safety criteria”	5
6 Modification to 4.4, “Functional requirements”	5
7 Modifications to 5.4, “Dimensioning with regard to touch voltages”	5
8 Modification to 6.1.1, “High and low voltage earthing systems”	5
9 Modification to 6.1.2, “LV supply only within HV substations”	6
10 Modification to 6.1.3, “LV supply leaving or coming to HV substations”	6
11 Modification to 6.1.4, “LV in the proximity of HV substation”	6
12 Modification to 7.1, “Installation of earth electrodes and earthing conductors”	6
13 Modification to 7.2, “Lightning and transients”	6
14 Modification to Clause 8, “Measurements”	6
15 Modification to 9.1, “Inspections”	6
16 Modification to 9.2, “Measurements”	6
17 Modification to A.1, “Method of calculating permissible touch voltages UT_p”	6

European foreword

This document (EN 50522:2022/A1:2024) has been prepared by CLC/TC 99X "Power installations exceeding 1 kV a.c. (1,5 kV d.c.)".

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) 2025-07-02
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2027-07-02

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

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

EN 50522:2022/A1:2024 (E)**1 Modification to Clause 2, “Normative references”**

Replace the reference to IEC 61936-1:2010 with the following:

IEC 61936-1:2021, Power installations exceeding 1 kV AC and 1,5 kV DC - Part 1: AC

2 Modifications to Clause 3, “Terms and definitions”

In 3.2:

delete “effective touch voltage”,

add “<effective>” *in the definition*

replace the first source with the following:

“[SOURCE: IEC 60050-195:2021, 195-05-11, modified – The symbol U_T has been added. In the definition, “by a human being or livestock” has been deleted. In Note 1 to entry, “of the human being or livestock” has been replaced by “of the person”.]”

replace the second source with the following:

“[SOURCE: IEC 61936-1:2021, 3.7.12, modified – Note 2 added]”

In 3.3, add the following source:

“[SOURCE: IEC 61936-1:2021, 3.7.13, modified – Note 1 added]”

In 3.4:

replace the first source with the following:

“[SOURCE: IEC 60050-195:2021, 195-05-09, modified]”

replace the second source with the following:

“[SOURCE: IEC 61936-1:2021, 3.7.14, modified – Note 1 added]”

In 3.5, add the following source:

“[SOURCE: IEC 61936-1:2021, 3.7.15]”

In 3.6, in the source, replace “IEC 61936-1:2010” with “IEC 61936-1:2021”.

In 3.7, in the source, replace “IEC 61936-1:2010” with “IEC 61936-1:2021”.

In 3.11:

delete “(earth fault location)”

delete the Note 1 to entry

replace “Note 2 to entry” with “Note 1 to entry”

add “in systems with” *at the end of* “For single earth faults, this is”, *and delete* “in systems with” *at the beginning of each list item*

replace “Note 3 to entry” with “Note 2 to entry”

add the following note to entry:

“Note 3 to entry: See Figures 2 to 7.”

replace the source with the following:

“[SOURCE: IEC 61936-1:2021, 3.7.25, modified – in Note 2 reference to EN 60909 series added, Note 3 with reference to Figures added]”.

koniec náhľadu – text ďalej pokračuje v platenej verzii STN