

<b>STN</b>	<p><b>Elektrická bezpečnosť v nízkonapäťových rozvodových sietiach so striedavým napäťom do 1 000 V a s jednosmerným napäťom do 1 500 V Zariadenia na skúšanie, meranie alebo sledovanie činnosti prostriedkov ochrany Časť 4: Odpór vodičov uzemnenia a pospájania</b></p>	<p><b>STN EN IEC 61557-4</b></p>
		35 6230

Electrical safety in low voltage distribution systems up to 1 000 V AC and 1 500 V DC - Equipment for testing, measuring or monitoring of protective measures - Part 4: Resistance of earth connection and equipotential bonding

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. 01/22

Obsahuje: EN IEC 61557-4:2021, IEC 61557-4:2019

Oznámením tejto normy sa od 10.11.2024 ruší  
STN EN 61557-4 (35 6230) z decembra 2007

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**EUROPEAN STANDARD**  
**NORME EUROPÉENNE**  
**EUROPÄISCHE NORM**

**EN IEC 61557-4**

December 2021

ICS 17.220.20; 29.080.01; 29.240.01

Supersedes EN 61557-4:2007 and all of its amendments  
and corrigenda (if any)

## English Version

**Electrical safety in low voltage distribution systems up to 1 000 V  
AC and 1 500 V DC - Equipment for testing, measuring or  
monitoring of protective measures - Part 4: Resistance of earth  
connection and equipotential bonding  
(IEC 61557-4:2019)**

Sécurité électrique dans les réseaux de distribution basse tension au plus égale à 1 000 V c.a. et 1 500 V c.c. - Dispositifs de contrôle, de mesure ou de surveillance de mesures de protection - Partie 4: Résistance de conducteurs de terre et d'équipotentialité  
(IEC 61557-4:2019)

Elektrische Sicherheit in Niederspannungsnetzen bis AC 1 000 V und DC 1 500 V - Geräte zum Prüfen, Messen oder Überwachen von Schutzmaßnahmen - Teil 4: Widerstand von Erdungsleitern, Schutzleitern und Potentialausgleichsleitern  
(IEC 61557-4:2019)

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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 IEC 61557-4:2021 (E)****European foreword**

The text of document 85/686/FDIS, future edition 3 of IEC 61557-4, prepared by IEC/TC 85 "Measuring equipment for electrical and electromagnetic quantities" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61557-4:2021.

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) 2022-08-10
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024-11-10

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The text of the International Standard IEC 61557-4:2019 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 61010-1:2010 NOTE Harmonized as EN 61010-1:2010 (not modified)

## Annex ZA (normative)

### **Normative references to international publications with their corresponding European publications**

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NOTE 1 Where 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](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61010-031	-	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 031: Safety requirements for hand-held probe assemblies for electrical measurement and test	EN 61010-031	-
IEC 61010-2-030	2017	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-030: Particular requirements for equipment having testing or measuring circuits	EN IEC 61010-2-030	2021
-	-		+ A11	2021
IEC 61557-1	2019	Electrical safety in low voltage distribution systems up to 1 000 V AC and 1 500 V DC - Equipment for testing, measuring or monitoring of protective measures - Part 1: General requirements	EN IEC 61557-1	2021





IEC 61557-4

Edition 3.0 2019-07

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. – Equipment for testing, measuring or monitoring of protective measures –  
Part 4: Resistance of earth connection and equipotential bonding**

**Sécurité électrique dans les réseaux de distribution basse tension au plus égale à 1 000 V c.a. et 1 500 V c.c. – Dispositifs de contrôle, de mesure ou de surveillance de mesures de protection –  
Partie 4: Résistance de conducteurs de terre et d'équipotentialité**





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# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. – Equipment for testing, measuring or monitoring of protective measures –**

**Part 4: Resistance of earth connection and equipotential bonding**

**Sécurité électrique dans les réseaux de distribution basse tension au plus égale à 1 000 V c.a. et 1 500 V c.c. – Dispositifs de contrôle, de mesure ou de surveillance de mesures de protection –**

**Partie 4: Résistance de conducteurs de terre et d'équipotentialité**

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**INTERNATIONAL ELECTROTECHNICAL COMMISSION****ELECTRICAL SAFETY IN LOW VOLTAGE DISTRIBUTION SYSTEMS  
UP TO 1 000 V AC AND 1 500 V DC –  
EQUIPMENT FOR TESTING, MEASURING OR MONITORING  
OF PROTECTIVE MEASURES –****Part 4: Resistance of earth connection  
and equipotential bonding****FOREWORD**

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International Standard IEC 61557-4 has been prepared by IEC technical committee 85: Measuring equipment for electrical and electromagnetic quantities.

This third edition cancels and replaces the second edition published in 2007. This edition constitutes a technical revision.

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

- a) complement to the measurement category in Clause 4;
- b) correction of the equation for operating uncertainty;
- c) complement to the requirements for measuring with DC;

d) alignment of the structure with that of the whole IEC 61557 series.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
85/686/FDIS	85/695/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.

This International Standard is to be used in conjunction with IEC 61557-1:2019.

A list of all parts of the IEC 61557 series, published under the general title *Electrical safety in low voltage distribution systems up to 1 000 V AC and 1 500 V DC – Equipment for testing, measuring or monitoring of protective measures*, can be found on the IEC website.

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

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**ELECTRICAL SAFETY IN LOW VOLTAGE DISTRIBUTION SYSTEMS  
UP TO 1 000 V AC AND 1 500 V DC –  
EQUIPMENT FOR TESTING, MEASURING OR MONITORING  
OF PROTECTIVE MEASURES –**

**Part 4: Resistance of earth connection  
and equipotential bonding**

## 1 Scope

This part of IEC 61557 specifies the requirements applicable to equipment for measuring the resistance of earth conductors, protective earth conductors and conductors for equipotential bonding, including their connections and terminals, with an indication of the measured value or an indication of the limits.

## 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 61010-031, *Safety requirements for electrical equipment for measurement, control and laboratory use – Part 031: Safety requirements for hand-held and hand-manipulated probe assemblies for electrical test and measurement*

IEC 61010-2-030:2017, *Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 2-030: Particular requirements for equipment having testing or measuring circuits*

IEC 61557-1:2019, *Electrical safety in low voltage distribution systems up to 1 000 V AC and 1 500 V DC – Equipment for testing, measuring or monitoring of protective measures – Part 1: General requirements*

**koniec náhľadu – text d'alej pokračuje v platenej verzii STN**