

SLOVENSKI STANDARD

SIST EN IEC 61557-12:2022

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Nadomešča:

SIST EN 61557-12:2008

Električna varnost v nizkonapetostnih razdelilnih sistemih za izmenične napetosti do 1 kV in enosmerne napetosti do 1,5 kV - Oprema za preskušanje, merjenje ali nadzorovanje zaščitnih ukrepov - 12. del: Naprave za merjenje in nadzorovanje moči (PMD) (IEC 61557-12:2018)

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 12: Power metering and monitoring devices (PMD) (IEC 61557-12:2018)

Elektrische Sicherheit in Niederspannungsnetzen bis AC 1 000 V und DC 1 500 V - Geräte zum Prüfen, Messen oder Überwachen von Schutzmaßnahmen - Teil 12: Geräte zur Energiemessung und -überwachung (PMD) (IEC 61557-12:2018)

Sécurité électrique dans les réseaux de distribution basse tension jusqu'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 12: Dispositifs de comptage et de surveillance du réseau électrique (PMD) (IEC 61557-12:2018)

Ta slovenski standard je istoveten z: EN IEC 61557-12:2022

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| 17.220.20 | Merjenje električnih in magnetnih veličin | Measurement of electrical and magnetic quantities |
| 29.080.01 | Električna izolacija na splošno | Electrical insulation in general |
| 29.240.01 | Omrežja za prenos in distribucijo električne energije na splošno | Power transmission and distribution networks in general |

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en,fr,de

2003-01.Slovenski inštitut za standardizacijo. Razmnoževanje celote ali delov tega standarda ni dovoljeno.

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PREVIEW
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SIST EN IEC 61557-12:2022

<https://standards.iteh.ai/catalog/standards/sist/c70101ca-9386-4a9c-938a-b27365ead376/sist-en-iec-61557-12-2022>

EUROPEAN STANDARD
NORME EUROPÉENNE
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EN IEC 61557-12

January 2022

ICS 17.220.20; 29.080.01; 29.240.01

Supersedes EN 61557-12:2008 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 12: Power metering and
monitoring devices (PMD)
(IEC 61557-12:2018)

Sécurité électrique dans les réseaux de distribution basse
tension jusqu'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 12: Dispositifs de comptage et de
surveillance du réseau électrique (PMD)
(IEC 61557-12:2018)

Elektrische Sicherheit in Niederspannungsnetzen bis AC 1
000 V und DC 1 500 V - Geräte zum Prüfen, Messen oder
Überwachen von Schutzmaßnahmen - Teil 12: Geräte zur
Energiesmessung und -überwachung (PMD)
(IEC 61557-12:2018)

This European Standard was approved by CENELEC on 2021-11-10. CENELEC members are bound to comply with the CEN/CENELEC
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CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic,
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Turkey 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 IEC 61557-12:2022 (E)**European foreword**

The text of document 85/644/FDIS, future edition 2 of IEC 61557-12, 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 61557-12:2022.

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) 2026-11-10

This document supersedes EN 61557-12:2008 and all of its amendments and corrigenda (if any).

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This document has been prepared under a Standardization Request given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

For the relationship with EU Directive(s) / Regulation(s), see informative Annex ZZ, which is an integral part of this document.

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Endorsement notice

The text of the International Standard IEC 61557-12:2018 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 60044-7:1999 | NOTE | Harmonized as EN 60044-7:2000 (not modified) |
| IEC 60044-8:2002 | NOTE | Harmonized as EN 60044-8:2002 (not modified) |
| IEC 60051 (series) | NOTE | Harmonized as EN IEC 60051 (series) |
| IEC 60071-1:2006 | NOTE | Harmonized as EN 60071-1:2006 (not modified) |
| IEC 60359:2001 | NOTE | Harmonized as EN 60359:2002 (not modified) |
| IEC 60364-6 | NOTE | Harmonized as HD 60364-6 |
| IEC 60364-8-1 | NOTE | Harmonized as HD 60364-8-1 |
| IEC 61000-4-5 | NOTE | Harmonized as EN 61000-4-5 |
| IEC 61000-4-7:2002 | NOTE | Harmonized as EN 61000-4-7:2002 (not modified) |

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| IEC 61000-4-15 | NOTE | Harmonized as EN 61000-4-15 |
| IEC 61010-2-030 | NOTE | Harmonized as EN IEC 61010-2-030 |
| IEC 61010-2-031 | NOTE | Harmonized as EN 61010-2-031 |
| IEC 61010-2-032 | NOTE | Harmonized as EN IEC 61010-2-032 |
| IEC 61140:2001 | NOTE | Harmonized as EN 61140:2002 (not modified) |
| IEC 61557-2:2007 | NOTE | Harmonized as EN 61557-2:2007 (not modified) |
| IEC 61557-3:2007 | NOTE | Harmonized as EN 61557-3:2007 (not modified) |
| IEC 61557-4:2007 | NOTE | Harmonized as EN 61557-4:2007 (not modified) |
| IEC 61557-5:2007 | NOTE | Harmonized as EN 61557-5:2007 (not modified) |
| IEC 61557-7:2007 | NOTE | Harmonized as EN 61557-7:2007 (not modified) |
| IEC 61557-8:2014 | NOTE | Harmonized as EN 61557-8:2015 (not modified) |
| IEC 61557-9:2014 | NOTE | Harmonized as EN 61557-9:2015 (not modified) |
| IEC 61557-13:2011 | NOTE | Harmonized as EN 61557-13:2011 (not modified) |
| IEC 61869-2:2012 | NOTE | Harmonized as EN 61869-2:2012 (not modified) |
| IEC 61869-3:2011 | NOTE | Harmonized as EN 61869-3:2011 (not modified) |
| IEC 62020 | NOTE | Harmonized as EN 62020 |
| IEC 62052-11:2003 | NOTE | Harmonized as EN 62052-11:2003 (not modified) |
| IEC 62053 (series) | NOTE | Harmonized as EN 62053 (series) |
| IEC 62053-21:2003 | NOTE | Harmonized as EN 62053-21:2003 (not modified) |
| IEC 62053-22:2003 | NOTE | Harmonized as EN 62053-22:2003 (not modified) |
| IEC 62053-23:2003 | NOTE | Harmonized as EN 62053-23:2003 (not modified) |
| IEC 62053-24:2014 | NOTE | Harmonized as EN 62053-24:2015 (not modified) |
| IEC 62586 (series) | NOTE | Harmonized as EN 62586-2:2017/A1 (series) |
| IEC 62586-1 | NOTE | Harmonized as EN 62586-1 |
| ISO 50001 | NOTE | Harmonized as EN ISO 50001 |

Annex ZA

(normative)

Normative references to international publications with their corresponding European publications

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.

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.

| Publication | Year | Title | EN/HD | Year |
|-----------------|------|--|--------------------|------|
| IEC 60068-2-1 | - | Environmental testing - Part 2-1: Tests - Test A: Cold | EN 60068-2-1 | - |
| IEC 60068-2-2 | - | Environmental testing - Part 2-2: Tests - Test B: Dry heat | EN 60068-2-2 | - |
| IEC 60068-2-30 | - | Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle) | EN 60068-2-30 | - |
| IEC 60529 | - | Degrees of protection provided by enclosures (IP Code) | - | - |
| IEC 61000-4-30 | 2015 | Electromagnetic compatibility (EMC) - Part 4-30: Testing and measurement techniques - Power quality measurement methods | EN 61000-4-30 | 2015 |
| IEC 61010-1 | 2010 | Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements | EN 61010-1 | 2010 |
| + A1 (mod) | 2016 | | + A1 | 2019 |
| 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 61326-1 | 2012 | Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 1: General requirements | EN 61326-1 | 2013 |
| IEC 62053-31 | 1998 | Electricity metering equipment (a.c.) - Particular requirements - Part 31: Pulse output devices for electromechanical and electronic meters (two wires only) | EN 62053-31 | 1998 |

Annex ZZ (informative)

Relationship between this European standard and the safety objectives of Directive 2014/35/EU [2014 OJ L96] aimed to be covered

This European Standard has been prepared under a Commission's standardization request relating to harmonized standards in the field of the Low Voltage Directive, M/511, to provide one voluntary means of conforming to safety objectives of Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonization of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits [2014 OJ L96].

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZZ.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding safety objectives of that Directive, and associated EFTA regulations.

Table ZZ.1 — Correspondence between this European standard and Annex I of Directive 2014/35/EU [2014 OJ L96]

| Safety objectives of Directive 2014/35/EU (Annex I) | Clause(s) / subclause(s) of this EN | Remarks / Notes |
|---|---|-----------------|
| 1. General conditions | | |
| 1 (a) the essential characteristics, the recognition and observance of which will ensure that electrical equipment will be used safely and in applications for which it was made, shall be marked on the electrical equipment, or, if this is not possible, on an accompanying document | 1; 2; 3; 4; 5; 6 | |
| 1 (b) the electrical equipment, together with its component parts, shall be made in such a way as to ensure that it can be safely and properly assembled and connected | 1; 2; 3; 4; 5; 6 | |
| 1 (c) the electrical equipment shall be so designed and manufactured as to ensure that protection against the hazards set out in points 2 and 3 is assured, providing that the equipment is used in applications for which it was made and is adequately maintained | Same as those covering safety objectives 2 a) to 2 d) and 3 a) to 3 c) in addition to the clauses 1; 3; 4 | |
| 2. Protection against hazards arising from the electrical equipment | | |
| Measures of a technical nature shall be laid down in accordance with point 1, in order to ensure that: | | |
| 2 (a) persons and domestic animals are adequately protected against the danger of physical injury or other harm which might be caused by direct or indirect contact | 4.9; 4.10; 6.1; 6.2; 6.3 | |

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| 2 (b) temperatures, arcs or radiation which would cause a danger, are not produced | 4.9; 4.10; 6.1; 6.2; 6.3 | |
| 2 (c) persons, domestic animals and property are adequately protected against non-electrical dangers caused by the electrical equipment which are revealed by experience | 4.9; 4.10; 6.1; 6.2; 6.3 | |
| 2 (d) the insulation is suitable for foreseeable conditions | 4.9; 4.10; 6.1; 6.2; 6.3 | |
| 3. Protection against hazards which may be caused by external influences on the electrical equipment Technical measures shall be laid down in accordance with point 1, in order to ensure that the electrical equipment: | | |
| 3 (a) meets the expected mechanical requirements in such a way that persons, domestic animals and property are not endangered | 4.9; 4.10; 6.1; 6.2; 6.3 | |
| 3 (b) is resistant to non-mechanical influences in expected environmental conditions, in such a way that persons, domestic animals and property are not endangered | 4.9; 4.10; 6.1; 6.2; 6.3 | |
| 3 (c) does not endanger persons, domestic animals and property in foreseeable conditions of overload | 4.10; 5.2; 5.3; 6.1; 6.2; 6.3 | |

WARNING 1 — Presumption of conformity stays valid only as long as a reference to this European standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

WARNING 2 — Other Union legislation may be applicable to the product(s) falling within the scope of this standard.



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Edition 2.0 2018-10

INTERNATIONAL STANDARD

NORME INTERNATIONALE



iTeh STANDARD

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 12: Power metering and monitoring devices (PMD)

Sécurité électrique dans les réseaux de distribution basse tension jusqu'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 12: Dispositifs de comptage et de surveillance du réseau électrique (PMD)

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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 12: Power metering and monitoring devices (PMD)

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This second edition cancels and replaces the first 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) PMD-A has been withdrawn due the fact these devices are now mainly covered by the IEC 62586 series of standards.
- b) Three categories of PMD have been created with a list of minimum required functions for each category.