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IT-SÜSTEEMIDES

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 11: Effectiveness of residual current monitors (RCM) in TT, TN and IT systems

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN IEC 61557-11:2022 sisaldab Euroopa standardi EN IEC 61557-11:2022 ingliskeelset teksti.	This Estonian standard EVS-EN IEC 61557-11:2022 consists of the English text of the European standard EN IEC 61557-11:2022.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
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ICS 17.200.20, 29.080.01, 29.240.01

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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 11: Effectiveness of
residual current monitors (RCM) in TT, TN and IT systems
(IEC 61557-11:2020)

Sécurité électrique dans les réseaux de distribution basse
tension au plus égale à 1000 V c.a. et 1500 V c.c. -
Dispositifs de contrôle, de mesure ou de surveillance de
mesures de protection - Partie 11: Efficacité des contrôleurs
d'isolement à courant différentiel résiduel (RCM) dans les
réseaux TT, TN et IT
(IEC 61557-11:2020)

Elektrische Sicherheit in Niederspannungsnetzen bis AC
1 000 V und DC 1 500 V - Geräte zum Prüfen, Messen oder
Überwachen von Schutzmaßnahmen - Teil 11:
Wirksamkeit von Differenzstrom-Überwachungsgeräten
(RCM) in TT-, TN- und IT-Systemen
(IEC 61557-11:2020)

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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

European foreword

The text of document 85/720/FDIS, future edition 2 of IEC 61557-11, 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 61557-11:2022.

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) 2023-01-06
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2025-04-06

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

IEC 60364-4-41	NOTE	Harmonized as HD 60364-4-41
IEC 60364-6	NOTE	Harmonized as HD 60364-6
IEC 60947-2	NOTE	Harmonized as EN 60947-2
IEC 61008-1	NOTE	Harmonized as EN 61008-1
IEC 61326-2-2	NOTE	Harmonized as EN IEC 61326-2-2
IEC 62020-1:2020	NOTE	Harmonized as EN IEC 62020-1:2021 (not modified)

INTERNATIONAL STANDARD

NORME INTERNATIONALE

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 11: Effectiveness of residual current monitors (RCM) in TT, TN and IT systems

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 11: Efficacité des contrôleurs d'isolement à courant différentiel résiduel (RCM) dans les réseaux TT, TN et IT



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INTERNATIONAL STANDARD

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Partie 11: Efficacité des contrôleurs d'isolement à courant différentiel résiduel (RCM) dans les réseaux TT, TN et IT

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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 11: Effectiveness of residual current
monitors (RCM) in TT, TN and IT systems**

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International Standard IEC 61557-11 has been prepared by IEC technical committee 85: Measuring equipment for electrical and electromagnetic quantities.

This second edition cancels and replaces the first edition published in 2009. This edition constitutes a technical revision.

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

- a) document title modified to include all types of RCM;
- b) terms aligned with IEC 60050;
- c) addition of requirements for testing new types of RCM;
- d) moving of requirements for RCM Type B from former Annex A to main body text;

e) 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
85/720/FDIS	85/722/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 in 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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- withdrawn,
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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 11: Effectiveness of residual current monitors (RCM) in TT, TN and IT systems

1 Scope

This part of IEC 61557 specifies the requirements for test equipment applied to the testing of the effectiveness of residual current monitors (RCM) that are already installed in distribution systems.

This test equipment can be used in any kind of network, such as a TN, TT or IT system. The test equipment can also be used for testing directionally discriminating residual current monitors (RCM) in IT systems.

It is not the purpose of this document to verify the residual current monitors (RCM) according to their product standards.

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 61010-1:2010, *Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 1: General requirements*

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*

IEC 61557-6, *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 6: Effectiveness of residual current devices (RCD) in TT, TN and IT systems*

3 Terms and definitions

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