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INTERNATIONAL STANDARD



**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 2: Insulation resistance**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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CONTENTS

FOREWORD	3
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Requirements	6
4.1 General requirements	6
4.2 Output voltage	6
4.3 Rated current	6
4.4 Measuring current	6
4.5 Influence of external capacitors	7
4.6 Overvoltage	7
5 Marking and operating instructions	7
5.1 Marking	7
5.2 Operating instructions	8
6 Tests	8
6.1 General	8
6.2 Operating uncertainty	8
6.3 Open-circuit voltage	9
6.4 Rated current	9
6.5 Measuring current	9
6.6 Overload Overvoltage tests	9
6.6.1 Overload Overvoltage tests with AC voltage	9
6.6.2 Overload Overvoltage tests with DC voltage	10
6.7 Battery life in battery operated instruments	10
6.8 Stability test	10
Figure 1 – Example of a pictogram for a 500 V AC system	7
Table 1 – Calculation of operating uncertainty	9

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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SYSTEMS UP TO 1 000 V AC AND 1 500 V DC –
EQUIPMENT FOR TESTING, MEASURING
OR MONITORING OF PROTECTIVE MEASURES –****Part 2: Insulation resistance****FOREWORD**

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International Standard IEC 61557-2 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) addition of requirements as regards measurement category;
- b) addition of new requirements for operating instructions;
- c) 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
85/688/FDIS	85/693/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.

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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 2: Insulation resistance

1 Scope

This part of IEC 61557 specifies the requirements applicable to equipment for measuring the insulation resistance of equipment and installations in the de-energized state.

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:~~2004~~2010, *Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 1: General requirements*
IEC 61010-1:2010/AMD1:2016¹

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 61010-2-034:2017, *Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 2-034: Particular requirements for measurement equipment for insulation resistance and test equipment for electric strength*

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*

¹ A consolidated version of this publication exists, comprising IEC 61010-1:2010 and IEC 61010-1:2010/AMD1:2016.

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 2: Insulation resistance

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 2: Résistance d'isolement

CONTENTS

FOREWORD	3
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Requirements	6
4.1 General requirements	6
4.2 Output voltage	6
4.3 Rated current	6
4.4 Measuring current	6
4.5 Influence of external capacitors	6
4.6 Overvoltage	6
5 Marking and operating instructions	7
5.1 Marking	7
5.2 Operating instructions	7
6 Tests	8
6.1 General	8
6.2 Operating uncertainty	8
6.3 Open-circuit voltage	8
6.4 Rated current	8
6.5 Measuring current	9
6.6 Overvoltage tests	9
6.6.1 Overvoltage tests with AC voltage	9
6.6.2 Overvoltage tests with DC voltage	9
6.7 Battery life in battery operated instruments	9
6.8 Stability test	9
Figure 1 – Example of a pictogram for a 500 V AC system	7
Table 1 – Calculation of operating uncertainty	8

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 2: Insulation resistance**

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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 2: Insulation resistance

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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*

¹ A consolidated version of this publication exists, comprising IEC 61010-1:2010 and IEC 61010-1:2010/AMD1:2016.

SOMMAIRE

AVANT-PROPOS	11
1 Domaine d'application	13
2 Références normatives	13
3 Termes et définitions	13
4 Exigences.....	14
4.1 Généralités	14
4.2 Tension de sortie	14
4.3 Courant assigné.....	14
4.4 Courant de mesure	14
4.5 Influence des condensateurs externes	14
4.6 Surtension	14
5 Marquage et instructions de fonctionnement.....	15
5.1 Marquage	15
5.2 Instructions de fonctionnement	15
6 Essais	16
6.1 Généralités	16
6.2 Incertitude de fonctionnement.....	16
6.3 Tension en circuit ouvert.....	16
6.4 Courant assigné.....	16
6.5 Courant de mesure	17
6.6 Essais de surtension.....	17
6.6.1 Essais de surtension avec une tension alternative	17
6.6.2 Essais de surtension avec une tension continue	17
6.7 Durée de vie des batteries des instruments fonctionnant sur batterie	17
6.8 Essai de stabilité.....	18
Figure 1 – Exemple de pictogramme pour un réseau de 500 V en courant alternatif.....	15
Tableau 1 – Calcul de l'incertitude de fonctionnement.....	16

COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

**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 2: Résistance d'isolement**AVANT-PROPOS**

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La Norme internationale IEC 61557-2 a été établie par le comité d'études 85 de l'IEC: Equipement de mesure des grandeurs électriques et électromagnétiques.

Cette troisième édition annule et remplace la deuxième édition parue en 2007. Cette édition constitue une révision technique.

Cette édition inclut les modifications techniques majeures suivantes par rapport à l'édition antérieure:

- a) ajout d'une exigence relative à la catégorie de mesure;

- b) ajout de nouvelles exigences relatives aux instructions de fonctionnement;
- c) alignement de la structure sur l'ensemble de la série IEC 61557.

Le texte de cette Norme internationale est issu des documents suivants:

FDIS	Rapport de vote
85/688/FDIS	85/693/RVD

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à l'approbation de cette Norme internationale.

Ce document a été rédigé selon les Directives ISO/IEC, Partie 2.

Cette Norme internationale doit être utilisée conjointement avec l'IEC 61557-1:2019.

Une liste de toutes les parties de l'IEC 61557, publiées sous le titre général *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*, peut être consultée sur le site web de l'IEC.

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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 2: Résistance d'isolement

1 Domaine d'application

La présente partie de l'IEC 61557 spécifie les exigences applicables aux appareils destinés à mesurer la résistance d'isolement d'appareils et d'installations hors tension.

2 Références normatives

Les documents suivants cités dans le texte constituent, pour tout ou partie de leur contenu, des exigences du présent document. Pour les références datées, seule l'édition citée s'applique. Pour les références non datées, la dernière édition du document de référence s'applique (y compris les éventuels amendements).

IEC 61010-1:2010, *Règles de sécurité pour appareils électriques de mesure, de régulation et de laboratoire – Partie 1: Exigences générales*
IEC 61010-1:2010/ AMD1:2016¹

IEC 61010-031, *Règles de sécurité pour appareils électriques de mesure, de régulation et de laboratoire – Partie 031: Exigences de sécurité pour sondes équipées portatives et manipulées à la main pour mesure et essais électriques*

IEC 61010-2-034:2017, *Exigences de sécurité pour appareils électriques de mesure, de régulation et de laboratoire – Partie 2-034: Exigences particulières applicables aux appareils de mesure de la résistance d'isolement et aux appareils d'essai de rigidité diélectrique*

IEC 61557-1:2019, *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 1 – Exigences générales*

¹ Il existe une version consolidée de cette publication comprenant l'IEC 61010:2010 et l'IEC 61010:2010/AMD1:2016.