

BSI Standards Publication

Electrical equipment for measurement, control and laboratory use — EMC requirements

Part 2-4: Particular requirements — Test configurations, operational conditions and performance criteria for insulation monitoring devices according to IEC 61557-8 and for equipment for insulation fault location according to IEC 61557-9



National foreword

This British Standard is the UK implementation of EN IEC 61326-2-4:2021. It is identical to IEC 61326-2-4:2020. It supersedes BS EN 61326-2-4:2013, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee GEL/65, Measurement and control.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 2-4: Particular requirements -Test configurations, operational conditions and performance criteria for insulation monitoring devices according to IEC 61557-8 and for equipment for insulation fault location according to IEC 61557-9

(IEC 61326-2-4:2020)

Matériel électrique de mesure, de commande et de laboratoire - Exigences relatives à la CEM - Partie 2-4: Exigences particulières - Configurations d'essai, conditions de fonctionnement et critères de performance pour les contrôleurs d'isolement conformes à l'IEC 61557-8 et pour les dispositifs de localisation de défaut d'isolement conformes à l'IEC 61557-9 (IEC 61326-2-4:2020)

Elektrische Mess-, Steuer-, Regel- und Laborgeräte - EMV-Anforderungen - Teil 2-4: Besondere Anforderungen -Prüfanordnung, Betriebsbedingungen und Leistungsmerkmale für Isolationsüberwachungsgeräte nach IEC 61557-8 und Geräte zur Isolationsfehlerortung nach IEC 61557-9 (IEC 61326-2-4:2020)

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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

EN IEC 61326-2-4:2021 (E)

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⊏uropean ioreword

The text of document 65A/981/FDIS, future edition 3 of IEC 61326-2-4, prepared by SC 65A "System aspects" of IEC/TC 65 "Industrial-process measurement, control and automation" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61326-2-4:2021.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2021-12-04 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2024-06-04 document have to be withdrawn

This document supersedes EN 61326-2-4:2013 and all of its amendments and corrigenda (if any).

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.

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association.

Endorsement notice

The text of the International Standard IEC 61326-2-4:2020 was approved by CENELEC as a European Standard without any modification.

(поппашуе)

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.

The Annex ZA of EN IEC 61326-1:2021 applies with the following additions:

| <u>Publication</u> | <u>Year</u> | <u>Title</u> | EN/HD | <u>Year</u> |
|--------------------|-------------|--|----------------|-------------|
| IEC 61326-1 | 2020 | Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 1: General requirements | EN IEC 61326-1 | 2021 |
| IEC 61557-8 | 2014 | 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 8: Insulation monitoring devices for IT systems | EN 61557-8 | 2015 |
| IEC 61557-9 | 2014 | 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 9: Equipment for insulation fault location in IT systems | EN 61557-9 | 2015 |



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTRICAL EQUIPMENT FOR MEASUREMENT, CONTROL AND LABORATORY USE – EMC REQUIREMENTS –

Part 2-4: Particular requirements –
Test configurations, operational conditions and performance
criteria for insulation monitoring devices according to IEC 61557-8
and for equipment for insulation fault location according to IEC 61557-9

FOREWORD

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International Standard IEC 61326-2-4 has been prepared by subcommittee 65A: System aspects, of IEC technical committee 65: Industrial-process measurement, control and automation.

This third edition cancels and replaces the second edition published in 2012. This edition constitutes a technical revision.

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

update of the document with respect to IEC 61326-1:2020.

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

| FDIS | Report on voting | |
|--------------|------------------|--|
| 65A/981/FDIS | 65A/992/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.

In this document the following print types are used:

 Terms used throughout this document which have been defined in Clause 3 of this document and of IEC 61326-1:2020: SMALL CAPITALS.

This part of the IEC 61326 series is to be used in conjunction with IEC 61326-1:2020 and follows the same numbering of clauses, subclauses, tables and figures.

When a particular subclause of IEC 61326-1 is not mentioned in this part, that subclause applies as far as is reasonable. When this standard states "addition", "modification" or "replacement", the relevant text in IEC 61326-1 is to be adapted accordingly.

NOTE The following numbering system is used:

- subclauses, tables and figures that are numbered starting from 101 are additional to those in IEC 61326-1;
- unless notes are in a new subclause or involve notes in IEC 61326-1, they are numbered starting from 101 including those in a replaced clause or subclause;
- additional annexes are lettered AA, BB, etc.

A list of all parts of the IEC 61326 series, under the general title *Electrical equipment for measurement, control and laboratory use, control and laboratory use – EMC requirements,* 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

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

ELECTRICAL EQUIPMENT FOR MEASUREMENT, CONTROL AND LABORATORY USE – EMC REQUIREMENTS –

Part 2-4: Particular requirements –
Test configurations, operational conditions and performance criteria for insulation monitoring devices according to IEC 61557-8 and for equipment for insulation fault location according to IEC 61557-9

1 Scope

In addition to IEC 61326-1, this part of IEC 61326 specifies more detailed test configurations, operational conditions and performance criteria than IEC 61326-1 for equipment for

- insulation monitoring according to IEC 61557-8;
- insulation fault location according to IEC 61557-9.

This applies to insulation monitoring devices and for equipment for insulation fault location systems permanently or semi-permanently connected to the distribution system.

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.

Clause 2 of IEC 61326-1:2020 applies, except as follows:

Addition:

IEC 61326-1:2020, Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 1: General requirements

IEC 61557-8:2014, 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 8: Insulation monitoring devices for IT systems

IEC 61557-9:2014, 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 9: Equipment for insulation fault location in IT systems

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 61326-1:2020 apply, except as follows.