SLOVENSKI STANDARD
SIST EN 60664-3:2017

01-september-2017

Nadomešča:
SIST EN 60664-3:2004
SIST EN 60664-3:2004/A1:2010

Uskladitev izolacije za opremo v okviru nizkonapetostnih sistemov - 3. del: Zaščita pred onesnaženjem s prevlekami, zapiranjem v ohišja ali zalivanjem (IEC 60664-3:2016)

Insulation coordination for equipment within low-voltage systems - Part 3: Use of coating, potting or moulding for protection against pollution (IEC 60664-3:2016)

Isolationskoordination für elektrische Betriebsmittel in Niederspannungsanlagen - Teil 3: Anwendung von Beschichtungen, Eingießen oder Vergießen zum Schutz gegen Verschmutzung (IEC 60664-3:2016)

Coordination de l'isolement des matériels dans les systèmes (réseaux) à basse tension - Partie 3: Utilisation de revêtement, d'empotage ou de moulage pour la protection contre la pollution (IEC 60664-3:2016)

Ta slovenski standard je istoveten z: **EN 60664-3:2017**

ICS:

29.080.30	Izolacijski sistemi	Insulation systems

SIST EN 60664-3:2017 **en**

EUROPEAN STANDARD

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English Version

Insulation coordination for equipment within low-voltage systems - Part 3: Use of coating, potting or moulding for protection against pollution (IEC 60664-3:2016)

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This European Standard was approved by CENELEC on 2016-12-09. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

European foreword

The text of document 109/153/FDIS, future edition 3 of IEC 60664-3, prepared by IEC/TC 109 “Insulation co-ordination for low-voltage equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60664-3:2017.

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)	2017-12-16
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2020-06-16

This document supersedes EN 60664-3:2003.

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 60664-3:2016 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 60194:2006	NOTE Harmonized as EN 60194:2006

Annex ZA
(normative)
Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When 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 60068-2-14	-	Environmental testing -- Part 2-14: Tests - Test N: Change of temperature	EN 60068-2-14	-
IEC 60068-2-78	-	Environmental testing -- Part 2-78: Tests - Test Cab: Damp heat, steady state	EN 60068-2-78	-
IEC 60326-2	1990	Printed boards -- Part 2: Test methods	-	-
+ A1	2001		+ A1	2001
IEC 60664-1	2007	Insulation coordination for equipment within low-voltage systems -- Part 1: Principles, requirements and tests	EN 60664-1	2007
IEC 61189-2	2006	Test methods for electrical materials, printed boards and other interconnection structures and assemblies -- Part 2: Test methods for materials for interconnection structures	EN 61189-2	2006
IEC 61189-3	2007	Test methods for electrical materials, printed boards and other interconnection structures and assemblies -- Part 3: Test methods for interconnection structures (printed boards)	EN 61189-3	2008
IEC 61249-2	series	Materials for printed boards and other interconnecting structures	EN 61249-2	series
IEC Guide 104	2010	The preparation of safety publications and the use of basic safety publications and group safety publications	-	-
ISO/IEC Guide 51	-	Safety aspects - Guidelines for their inclusion in standards	-	-

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

BASIC SAFETY PUBLICATION

PUBLICATION FONDAMENTALE DE SÉCURITÉ

Insulation coordination for equipment within low-voltage systems – Part 3: Use of coating, potting or moulding for protection against pollution

Coordination de l'isolement des matériels dans les systèmes (réseaux) à basse tension – Partie 3: Utilisation de revêtement, d'empotage ou de moulage pour la protection contre la pollution

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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INSULATION COORDINATION FOR EQUIPMENT WITHIN LOW-VOLTAGE SYSTEMS –

Part 3: Use of coating, potting or moulding for protection against pollution

FOREWORD

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International Standard IEC 60664-3 has been prepared by IEC technical committee TC 109: Insulation co-ordination for low-voltage equipment.

It has the status of a basic safety publication in accordance with IEC Guide 104.

This third edition cancels and replaces the second edition published in 2003 and Amendment 1:2010. This edition constitutes a technical revision.

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

a) information added concerning interpolation;
b) provided scratch test is only for type 2 **protection**;

c) renumbered the scratch test to follow the visual examination test, since it makes more sense there;

d) separated the tables under what is now called Annex A, to make them clearer.

The text of this standard is based on the following documents:

FDIS	Report on voting
109/153/FDIS	109/154/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

In this standard, the following types are used:

– Terms used throughout this standard which have been defined in Clause 3: **bold type**

A list of all parts in the IEC 60664 series, published under the general title *Insulation coordination for equipment within low-voltage systems*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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

INTRODUCTION

This part of IEC 60664 details the conditions in which the reduction of clearance and creepage distances can apply to rigid assemblies such as **printed boards** or terminals of components. **Protection** against pollution can be achieved by any kind of encapsulation such as **coating**, potting or moulding. The **protection** may be applied to one or both sides of the assembly. This standard specifies the insulating properties of the protecting material.

Between any two unprotected conductive parts, the clearance and creepage distance requirements of IEC 60664-1 apply.

This document refers only to permanent **protection**. It does not cover assemblies after repair.

Technical committees should consider the influence on the **protection** of overheating **conductors** and components, especially under fault conditions, and to decide if any additional requirements are necessary.

Safe performance of assemblies is dependent upon a precise and controlled manufacturing process for the application of the protective system. Requirements for quality control, e.g. by sampling tests, should be considered by technical committees.