

INTERNATIONAL STANDARD

NORME INTERNATIONALE

BASIC SAFETY PUBLICATION

PUBLICATION FONDAMENTALE DE SÉCURITÉ

**Insulation coordination for equipment within low-voltage systems –
Part 1: Principles, requirements and tests**

**Coordination de l'isolement des matériels dans les systèmes (réseaux)
à basse tension –
Partie 1: Principes, exigences et essais**



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CONTENTS

| | | |
|-------|--|----|
| 1 | Scope and object..... | 7 |
| 2 | Normative references | 7 |
| 3 | Terms and definitions | 9 |
| 4 | Basis for insulation coordination | 14 |
| 4.1 | General | 14 |
| 4.2 | Insulation coordination with regard to voltage | 14 |
| 4.2.1 | General | 14 |
| 4.2.2 | Insulation coordination with regard to long-term a.c. or d.c. voltages | 15 |
| 4.2.3 | Insulation coordination with regard to transient overvoltage | 15 |
| 4.2.4 | Insulation coordination with regard to recurring peak voltage | 15 |
| 4.2.5 | Insulation coordination with regard to temporary overvoltage | 15 |
| 4.2.6 | Insulation coordination with regard to environmental conditions | 16 |
| 4.3 | Voltages and voltage ratings | 16 |
| 4.3.1 | General | 16 |
| 4.3.2 | Determination of voltage for long-term stresses | 16 |
| 4.3.3 | Determination of rated impulse voltage | 17 |
| 4.3.4 | Determination of recurring peak voltage | 19 |
| 4.3.5 | Determination of temporary overvoltage | 19 |
| 4.4 | Frequency | 20 |
| 4.5 | Time under voltage stress | 20 |
| 4.6 | Pollution | 20 |
| 4.6.1 | General | 20 |
| 4.6.2 | Degrees of pollution in the micro-environment | 21 |
| 4.6.3 | Conditions of conductive pollution | 21 |
| 4.7 | Information supplied with the equipment | 21 |
| 4.8 | Insulating material | 21 |
| 4.8.1 | Comparative tracking index (CTI) | 21 |
| 4.8.2 | Electric strength characteristics | 22 |
| 4.8.3 | Thermal characteristics | 22 |
| 4.8.4 | Mechanical and chemical characteristics | 22 |
| 5 | Requirements and dimensioning rules | 23 |
| 5.1 | Dimensioning of clearances | 23 |
| 5.1.1 | General | 23 |
| 5.1.2 | Dimensioning criteria | 23 |
| 5.1.3 | Electric field conditions | 24 |
| 5.1.4 | Altitude | 24 |
| 5.1.5 | Dimensioning of clearances of functional insulation | 24 |
| 5.1.6 | Dimensioning of clearances of basic, supplementary and reinforced insulation | 24 |
| 5.1.7 | Isolating distances | 25 |
| 5.2 | Dimensioning of creepage distances | 25 |
| 5.2.1 | General | 25 |
| 5.2.2 | Influencing factors | 25 |
| 5.2.3 | Dimensioning of creepage distances of functional insulation | 27 |
| 5.2.4 | Dimensioning of creepage distances of basic, supplementary and reinforced insulation | 27 |
| 5.2.5 | Reduction of creepage distances with the use of a rib (ribs) | 27 |

| | | |
|-------|--|----|
| 5.3 | Requirements for design of solid insulation | 28 |
| 5.3.1 | General | 28 |
| 5.3.2 | Stresses | 28 |
| 5.3.3 | Requirements | 30 |
| 6 | Tests and measurements | 32 |
| 6.1 | Tests | 32 |
| 6.1.1 | General | 32 |
| 6.1.2 | Test for verification of clearances | 33 |
| 6.1.3 | Tests for the verification of solid insulation | 36 |
| 6.1.4 | Performing dielectric tests on complete equipment | 41 |
| 6.1.5 | Other tests | 42 |
| 6.1.6 | Measurement accuracy of test parameters | 42 |
| 6.2 | Measurement of creepage distances and clearances | 43 |
| | Annex A (informative) Basic data on withstand characteristics of clearances | 48 |
| | Annex B (informative) Nominal voltages of supply systems for different modes of overvoltage control | 53 |
| | Annex C (normative) Partial discharge test methods | 55 |
| | Annex D (informative) Additional information on partial discharge test methods | 60 |
| | Annex E (informative) Comparison of creepage distances specified in Table F.4 and clearances in Table A.1 | 63 |
| | Annex F (normative) Tables | 64 |
| | Bibliography | 73 |
| | Figure 1 – Recurring peak voltage | 19 |
| | Figure 2 – Determination of the width (W) and height (H) of a rib | 28 |
| | Figure 3 – Test voltages | 40 |
| | Figure A.1 – Withstand voltage at 2 000 m above sea level | 50 |
| | Figure A.2 – Experimental data measured at approximately sea level and their low limits for inhomogeneous field | 51 |
| | Figure A.3 – Experimental data measured at approximately sea level and their low limits for homogeneous field | 52 |
| | Figure C.1 – Earthed test specimen | 55 |
| | Figure C.2 – Unearthed test specimen | 55 |
| | Figure C.3 – Calibration for earthed test specimen | 58 |
| | Figure C.4 – Calibration for unearthed test specimen | 58 |
| | Figure D.1 – Partial discharge test circuits | 60 |

Figure E.1 – Comparison of creepage distances specified in Table F.4 and clearances in Table A.1 63

Table A.1 – Withstand voltages in kilovolts for an altitude of 2 000 m above sea level 48

Table A.2 – Altitude correction factors 49

Table B.1 – Inherent control or equivalent protective control 53

Table B.2 – Cases where protective control is necessary and control is provided by surge arresters having a ratio of clamping voltage to rated voltage not smaller than that specified by IEC 60099-1 54

Table F.1 – Rated impulse voltage for equipment energized directly from the low-voltage mains 64

Table F.2 – Clearances to withstand transient overvoltages 65

Table F.3a – Single-phase three or two-wire a.c. or d.c. systems 66

Table F.3b – Three-phase four or three-wire a.c. systems 67

Table F.4 – Creepage distances to avoid failure due to tracking 68

Table F.5 – Test voltages for verifying clearances at different altitudes 70

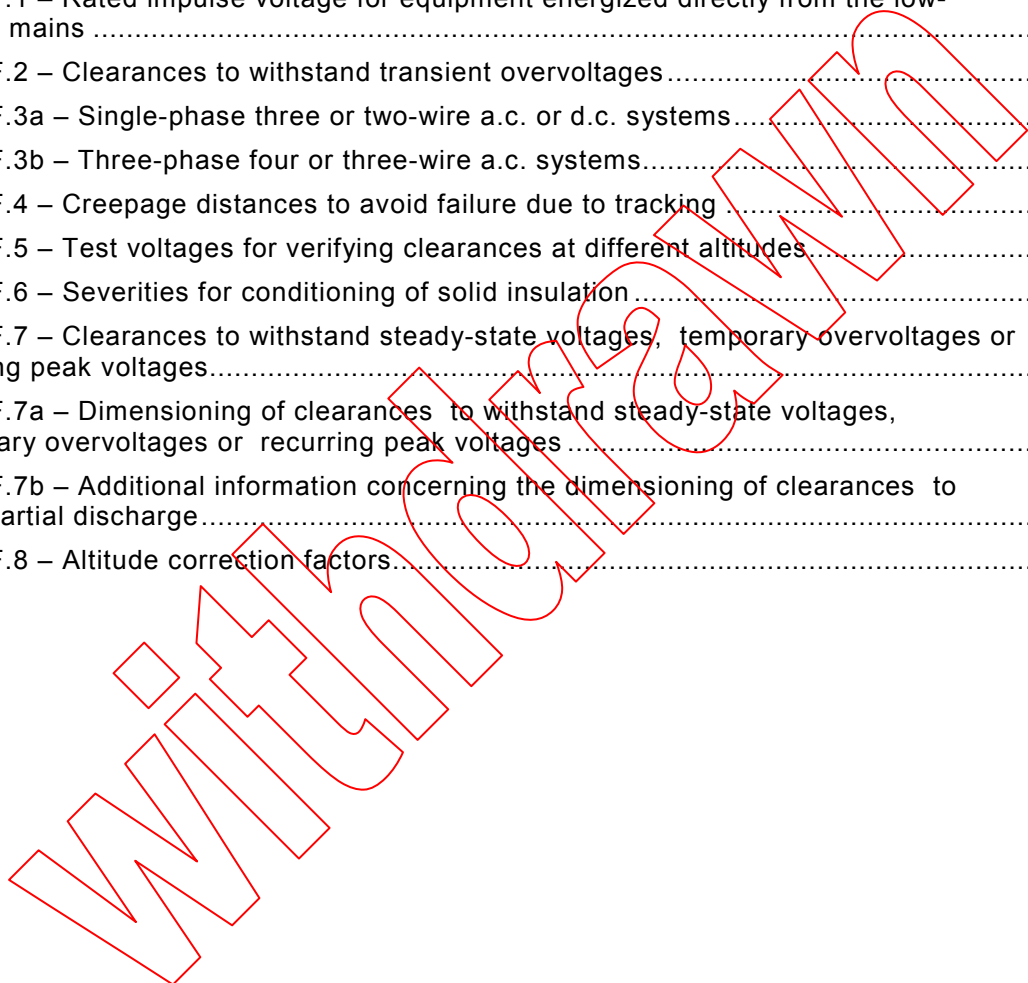
Table F.6 – Severities for conditioning of solid insulation 70

Table F.7 – Clearances to withstand steady-state voltages, temporary overvoltages or recurring peak voltages 71

Table F.7a – Dimensioning of clearances to withstand steady-state voltages, temporary overvoltages or recurring peak voltages 71

Table F.7b – Additional information concerning the dimensioning of clearances to avoid partial discharge 71

Table F.8 – Altitude correction factors 72



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International Standard IEC 60664 has been prepared by technical committee 109: Insulation coordination for low-voltage equipment.

This second edition cancels and replaces the first edition, published in 1992, amendments 1 (2000) and 2 (2002) and a corrigendum (2002).

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

In addition to a number of editorial improvements, the following main changes have been made with respect to the previous edition:

- Amendment of Japanese mains conditions with regard to the rated impulse voltages, the rationalized voltages and the nominal voltages of supply systems for different modes of overvoltage control
- Amendment of dimensioning of clearances smaller than 0,01 mm

- Alignment of the table and the corresponding formula regarding test voltages for verifying clearances at different altitudes
- Amendment of interpolation of the creepage distance values for functional insulation
- Amendment of creepage distance dimensioning taking into account ribs
- Revision of the former Clause 4 "Tests and measurements" (now Clause 6) to achieve a more detailed description of the tests and their purpose, the test equipment and possible alternatives
- Change of Annex C "Partial discharge test methods" from a former technical report, Type 2 (now called TS), to a normative Annex C.

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

| CDV | Report on voting |
|------------|------------------|
| 109/58/CDV | 109/62/RVC |

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.

A list of all parts in the IEC 60664 series, 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 maintenance result date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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