

ICS 29.080.30

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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/Z 16935.6-2016

**Insulation coordination for equipment within low-voltage
systems - Part 2-2: Interface considerations - Application guide**

低压系统内设备的绝缘配合 第2-2部分：交界面考虑 应用指南

(English Translation)

Issued on: February 24, 2016

Implemented on: February 24, 2016

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

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References

Foreword

GB/T 16935 "Insulation coordination of low-voltage system equipment" is expected to be divided into the following sections.

--- Part 1. Principles, requirements and tests;

--- Part 2-1. Application Guidance GB/T 16935 Series Application Interpretation, Size Examples and Dielectric Test;

--- Part 2-2. Interface considerations Application Note;

--- Part 3. The use of coating, sealing and molding anti-fouling protection;

--- Part 4. High frequency voltage stress considerations;

--- Part 5. Determination of clearances and creepage distances of not more than 2mm.

This guidance document is part 2-2 of GB/T 16935.

This instructional document has been drafted in accordance with the rules given in GB/T 1.1-2009.

This guideline uses the translation method identical to that of IEC /T R60664-2-2.2002 (1st Edition)

Edge with Part 2-2. Interface Considerations Guide. " This guidance should be with technical documents GB/T 16935.1-2008 "low pressure system Insulation coordination of

in-plant equipment Part 1. Principle, requirements and testing "(IEC 60664-1:2007, IDT).

Our document, which corresponds in a consistent manner to the international documents that are normative references in this Guidance Document, is as follows.

--- GB/T 16895.10-2010 Electrical installations in buildings - Part 4-44. Safety protection voltage harassment and electromagnetic disturbance Protection (IEC 60364-4-44:2007, IDT)

--- GB/T 17626.5-2008 Electromagnetic compatibility test and measurement techniques surge (impact) immunity test (IEC 61000-4- 5:2005, IDT)

--- GB 18802.1-2011 low voltage surge protection device (SPD) Part 1. Surge protection performance of low voltage distribution system Requirements and test methods (IEC 61643-1:2005, MOD)

--- GB/T 18802.12-2014 Surge Protection Devices (SPD) for low voltage distribution systems - Part 12. Guidelines for Selection and Use (IEC 61643-12:2008, IDT)

--- GB/T 19271.3-2005 lightning electromagnetic shock protection Part 3. Surge protection devices (SPDs) requirements (IEC TS61312-3:2000, IDT)

The following editorial changes have been made to this technical document.

--- Remove the foreword of international standards;

--- Chapter 2 normative references added guidance. IEC TR62066 and other original footnotes 1) "will be published", now deleted, because Published

--- Chapter 3 and Chapter 4 cited GB/T 16935.1-2008 the provisions of the latest version were corrected.

Introduction

This guideline provides a common groundwork guideline for technical committees to consider interface issues related to insulation coordination. Exchange at low pressure In power systems and equipment, surge protection devices are a key element in achieving controlled overvoltage conditions. The purpose of this guide is to avoid all relevant members There will be conflicts between the meeting, in order to achieve the uniform requirements and guidelines. This guideline deals with the factors that influence the type of overvoltage that can be used to determine the device and equipment.

1 Scope

GB/T 16935 This section provides a summary of the different types of surge overvoltages that occur in low voltage devices and equipment. special Do not be.

The size and duration of typical surges and how often they occur;

- Over-voltage information generated by the interaction between power and communication systems;
- When considering the insulation with the interface interface guidance;
- Guidance on surge protection methods based on usability and risk considerations (including consideration of system interactions);
- Insist that the insulation should be combined with temporary over-voltage and other factors (including the use of surge protectors for protection and control).

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this document. For undated references, the latest edition (including all amendments) applies to this document.

Insulation coordination for equipment in low - voltage systems - Part 1. Principles, requirements and tests (IEC 60664-1.:1999); 2007, IDT)

IEC 60364-4-44, Low voltage electrical installations - Part 4-44. Safety protection Voltage disturbance and electromagnetic disturbance protection (Low-voltage electrical installations-Part 4-44. Protection for safety-Protection against voltage disturbances and electromagnetic disturbances)

IEC 61000-4-5 Electromagnetic compatibility test and measurement techniques surge (impact) immunity test (Electromagnetic compatibility-Testing and measuring technologies - Surge immunity test)

IEC TS61312-3 Lightning Electromagnetic Shock Protection (LEMP) Part 3. Surge Protection Devices (SPDs) Requirements
[Protection against lightning electromagnetic impulse (LEMP) -Part 3: Requirements of surge protective devices (SPDs)]

IEC 61643-1 Low-voltage Surge Protector (SPD) Part 1. Surge Protector Performance Requirements for Connection to Low-Voltage Power Distribution Systems and Test method (Surge protective devices connected isolated-voltage power distribution systems-Part 1. Performance requirements and testing methods)

IEC 61643-12 Low Voltage Surge Protective Devices (SPD) Part 12. Selection and Use of Surge Protector for Low Voltage Distribution Systems
(Low-voltage surge protective devices-Part 12: Surge protective devices connecting to low-voltage power distribution systems-Selection and application principles)

IEC /T R62066 Surge Overvoltage and Surge Protection in Low-Voltage AC Power Systems

(General basic information
regarding surge overvoltages and surge protection in low-voltage a.c. power systems)

3 Terms and definitions

The following terms and definitions apply to this document.

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