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GB/T 18802.352-2022

Components for low-voltage surge protection - Part 352: Selection and application principles for telecommunications and signalling network surge isolation transformers (SITs)

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foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1.Structure and Drafting Rules for Standardization Documents" drafting.

This document is part 352 of GB/T 18802.GB/T 18802 has issued the following parts.

--- Low-voltage surge protector (SPD) Part 11.Performance requirements and test methods for surge protectors for low-voltage power supply systems;

--- Low-voltage surge protective device (SPD) Part 12.Guidelines for the selection and use of surge protective devices for low-voltage power distribution systems;

--- Low-voltage surge protective device Part 21.Surge protective device (SPD) performance requirements and test methods for telecommunications and signal networks;

--- Low-voltage surge protectors Part 22.Guidelines for the selection and use of surge protectors for telecommunications and signal networks;

--- Low-voltage surge protectors Part 31.Performance requirements and test methods for surge protectors used in photovoltaic systems;

--- Low-voltage surge protectors Part 32.Guidelines for the selection and use of surge protectors for photovoltaic systems;

--- Low-voltage surge protector components Part 311.Performance requirements and test circuits for gas discharge tubes (GDT);

--- Low-voltage surge protector components Part 312.Guidelines for the selection and use of gas discharge tubes (GDT);

--- Low-voltage surge protector components Part 321.Avalanche breakdown diode (ABD) specification;

--- Low-voltage surge protector components Part 331.Specifications for metal oxide varistors (MOV);

--- Low-voltage surge protector components Part 341.Surge suppression thyristor (TSS) specification;

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--- Low-voltage surge protector components Part 351.Performance requirements and

experiment method;

--- Low-voltage surge protector components Part 352.Selection and use of surge isolating transformers (SIT) for telecommunications and signal networks

Guidelines.

This document is equivalent to IEC 61643-352.2018 "Low Voltage Surge Protective Device Part 352.Surges in Telecommunications and Signaling Networks"

Guidelines for the Selection and Use of Isolation Transformers (SIT).

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

--- Added a footnote about changing some typographical errors in IEC 61643-352.2018;

--- Added a note referring to the lightning overvoltage of communication cables.

Please note that some contents of this document may refer to patents. The issuing agency of this document assumes no responsibility for identifying patents.

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Introduction

GB/T 18802 includes performance requirements and test methods for different types of low-voltage surge protectors, components of low-voltage surge protectors and

Its selection and use guidelines are proposed to be composed of fourteen parts.

--- Part 11.Surge protective device (SPD) performance requirements and test methods for low-voltage power supply systems. The purpose is to establish the applicable

Characteristics, standard test methods for protectors for protection against the indirect and direct effects of lightning or other transient overvoltage surges

and ratings etc.

--- Part 12.Guidelines for the selection and use of surge protective devices (SPD) for low-voltage power distribution systems. The purpose is to establish the applicable connection

Selective operation and safety of SPDs with AC 50Hz~60Hz voltage not exceeding 1000V or DC voltage not exceeding 1500V

Installation position and coordination principle.

--- Part 21.Surge protective device (SPD) performance requirements and test methods for telecommunications and signal networks. The purpose is to establish the applicable

Surge protectors for the protection of telecommunication and signaling networks directly or

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indirectly affected by lightning or other transient overvoltages

Performance requirements and test methods.

--- Part 22.Guidelines for the selection and use of surge protectors for telecommunications and signal networks. The purpose is to establish the nominal

Selection of surge protective devices (SPD) in telecommunication and signal networks with voltage not exceeding 1000V AC effective value and 1500V DC

guidelines for selection, operation, installation and coordination.

--- Part 31.Performance requirements and test methods for surge protectors for photovoltaic systems. The purpose is to establish the applicable to lightning

Performance requirements and test methods for surge protectors for protection against surges from the indirect and direct effects or other transient overvoltages.

--- Part 32.Guidelines for the selection and use of surge protectors for photovoltaic systems. The purpose is to establish a suitable connection to the AC

Photovoltaic system SPD with side voltage effective value not exceeding 1000V (50Hz or 60Hz) and DC side voltage not exceeding 1500V

Guidelines for selection, installation and fit.

--- Part 41.Performance requirements and test methods for surge protectors for DC low-voltage power systems. The purpose is to provide protection against lightning

Establish performance requirements and test methods for surge protective devices that protect against surges connected to direct effect or other transient overvoltages.

--- Part 311.Performance requirements and test circuits for gas discharge tubes (GDT). The purpose is to establish the nominal voltage applicable to the system

Gas discharge tubes used in telecommunications, signal and low-voltage power distribution networks not exceeding AC 1000V or DC 1500V

performance requirements and test loops.

--- Part 312.Guidelines for the selection and use of gas discharge tubes (GDT). The purpose is to establish the applicable system nominal voltage does not exceed

Selection of gas discharge tubes used in telecommunications, signal and low-voltage power distribution networks with AC 1000V or DC 1500V

Guidelines for selection and use.

--- Part 321.Avalanche breakdown diode (ABD) specification. The purpose is to establish the avalanche breakdown for surge protector components

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