

ПІДТВЕРДЖУВАЛЬНЕ ПОВІДОМЛЕННЯ

Державне підприємство
«Український науково-дослідний і навчальний центр проблем
стандартизації, сертифікації та якості»

(ДП «УкрНДНЦ»)

Наказ від 22.06.2015 № 61

CLC/TS 61643-22:2006

**Low-voltage surge protective devices
Part 22: Surge protective devices connected to telecommunications
and signalling networks - Selection and application principles**

прийнято як національний стандарт
методом «підтвердження» за позначенням

**ДСТУ CLC/TS 61643-22:2015
(CLC/TS 61643-22:2006, IDT)**

**Пристрої захисту від імпульсних перенапруг низьковольтні. Частина 22. Пристрої
захисту від імпульсних перенапруг, підключені до низьковольтних розподільчих систем.
Принципи вибору та застосування**

З наданням чинності від 2016-01-01

English version

Low-voltage surge protective devices
Part 22: Surge protective devices connected to telecommunications
and signalling networks -
Selection and application principles
(IEC 61643-22:2004, modified)

Parafoudres basse tension
Partie 22: Parafoudres connectés
aux réseaux de signaux
et de télécommunications -
Principes de choix et d'application
(CEI 61643-22:2004, modifiée)

Überspannungsschutzgeräte
für Niederspannung
Teil 22: Überspannungsschutzgeräte
für den Einsatz in Telekommunikations-
und signalverarbeitenden Netzwerken -
Auswahl- und Anwendungsprinzipien
(IEC 61643-22:2004, modifiziert)

This Technical Specification was approved by CENELEC on 2005-09-10.

CENELEC members are required to announce the existence of this TS in the same way as for an EN and to make the TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of the International Standard IEC 61643-22:2004, prepared by SC 37A, Low-voltage surge protective devices, of IEC TC 37, Surge arresters, together with common modifications prepared by the Technical Committee CENELEC TC 37A, Low voltage surge protective devices, was submitted to the formal vote and was approved by CENELEC as CLC/TS 61643-22 on 2005-09-10.

The following date was fixed:

- latest date by which the existence of the CLC/TS
has to be announced at national level (doa) 2006-07-01
-

Contents

Introduction	6
1 Scope	7
2 Normative references	7
3 Terms and definitions	7
4 Description of technologies	8
4.1 Voltage-limiting devices	8
4.1.1 Clamping-type	8
4.1.2 Switching-type	8
4.2 Current-limiting devices	8
4.2.1 Current-interrupting type	8
4.2.2 Current-reducing type	9
4.2.3 Current-diverting type	9
5 Parameters for selection of SPDs and appropriate tests from EN 61643-21	9
5.1 Controlled and uncontrolled environments	9
5.1.1 Controlled environments	9
5.1.2 Uncontrolled environments	9
5.2 SPD parameters that may affect normal system operation	10
6 Risk management	10
6.1 Risk analysis	11
6.2 Risk identification	11
6.3 Risk treatment	11
7 Application of SPDs	13
7.1 General	13
7.2 Coupling mechanisms	13
7.3 Application, selection and installation of surge protective devices (SPDs)	15
7.3.1 Application requirements for SPDs	15
7.3.2 SPD installation cabling considerations	20
8 Multiservice surge protective devices	23
9 Coordination of SPDs/ITE	23
Annex A (informative) Voltage-limiting devices	25
A.1 Voltage-clamping devices	25
A.1.1 Metal oxide varistor (MOV)	25
A.1.2 Silicon semiconductors	25
A.2 Voltage-switching devices	27
A.2.1 Gas discharge tube (GDT)	27
A.2.2 Air gaps	27
A.2.3 Thyristor surge suppressor (TSS) – Fixed voltage types (self-gating)	28