## Madalpingelised liigpinge kaitseseadmed. Osa 11: Liigpinge kaitseseadmed, mis on ühendatud madalpingeliste elektrisüsteemidega. Nõuded ja katsed

Low-voltage surge protective devices Part 11: Surge protective devices connected to low-voltage power systems -Requirements and tests



#### **EESTI STANDARDI EESSÕNA**

#### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 61643-11:2003 sisaldab Euroopa standardi EN 61643-11:2002 ingliskeelset teksti.

Käesolev dokument on jõustatud 15.01.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 61643-11:2003 consists of the English text of the European standard EN 61643-11:2002.

This document is endorsed on 15.01.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

#### Käsitlusala:

Replace the existing scope by: This part of EN 61643 is applicable to devices for surge protection against indirect and direct effects of lightning or other transient overvoltages. These devices are packaged to be connected to 50/60 Hz a.c. power circuits, and equipment rated up to 1 000 V r.m.s.

#### Scope:

Replace the existing scope by: This part of EN 61643 is applicable to devices for surge protection against indirect and direct effects of lightning or other transient overvoltages. These devices are packaged to be connected to 50/60 Hz a.c. power circuits, and equipment rated up to 1 000 V r.m.s.

ICS 29.240.10

**Võtmesõnad:** definition, definitions, distribution networks, electrical engineering, electrical equipment, output determination, overvoltage protection, specification (approval), specifications, surge protection, voltage protection

## **EUROPEAN STANDARD**

## EN 61643-11

## NORME EUROPÉENNE

## **EUROPÄISCHE NORM**

May 2002

ICS 29.240.10

#### English version

# Low-voltage surge protective devices Part 11: Surge protective devices connected to low-voltage power systems Requirements and tests

(IEC 61643-1:1998 + corr. 1998, modified)

Parafoudres basse-tension
Partie 11: Parafoudres connectés aux
systèmes de distribution basse tension Prescriptions et essais
(CEI 61643-1:1998 + corr. 1998, modifiée)

Überspannungsschutzgeräte für Niederspannung Teil 11: Überspannungsschutzgeräte für den Einsatz in Niederspannungsanlagen -Anforderungen und Prüfungen (IEC 61643-1:1998 + Corr. 1998, modifiziert)

This European Standard was approved by CENELEC on 2001-10-01. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and 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 61643-1:1998 and its corrigendum December 1998, prepared by SC 37A, Low-voltage surge protective devices, of IEC TC 37, Surge arresters, together with the common modifications prepared by CLC/SR 37A was submitted to the Unique Acceptance Procedure.

The combined text was approved by CENELEC as EN 61643-11 on 2001-10-01.

The following dates were fixed:

 latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement

(dop) 2002-12-01

 latest date by which the national standards conflicting with the EN have to be withdrawn

(dow) 2004-10-01

Annexes designated "normative" are part of the body of the standard. In this standard, annexes A, B and ZA are normative. A Dreview Seneral at the Service of Annex ZA has been added by CENELEC.

#### **Endorsement notice**

The text of the International Standard IEC 61643-1:1999 with its corrigendum December 1998 was approved by CENELEC as a European Standard with agreed common modifications as given below.

#### **COMMON MODIFICATIONS**

#### **Title** Replace the existing title by:

Low-voltage surge protective devices -- Part 11: Surge protective devices connected to low-voltage power systems - Requirements and tests

#### Introduction Replace the first sentence by:

The present standard addresses requirements and tests for surge protective devices (SPDs).

#### 1 General

#### 1.1 Scope:

Replace the existing scope by:

This part of EN 61643 is applicable to devices for surge protection against indirect and direct effects of lightning or other transient overvoltages. These devices are packaged to be connected to 50/60 Hz a.c. power circuits, and equipment rated up to 1 000 V r.m.s.

#### **1.2** Normative references:

Delete reference to IEC 60898:1995

Add the following reference:

IEC 60364-5-534 1997 Electrical installations of buildings -

Part 5: Selection and erection of electrical equipment -Section 534: Devices for protection against overvoltages

#### 3 Definitions

#### **3.9** Replace the first sentence of the definition by:

it is defined by three parameters, a current peak value  $I_{\rm peak}$ , a charge Q and a specific energy W/R.

#### 3.12 Replace the existing definition and its title by:

#### standby power consumption $P_c$

power consumed by the SPD when energized at the maximum continuous operating voltage ( $U_c$ ) with balanced voltages and phase angles and connected in accordance with the manufacturer's instructions

#### **3.14** Replace the title of the definition by:

#### rated load current IL