

**Electrical installations of buildings - Part 4: Protection
for safety - Chapter 42: Protection against electric shock**

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-HD 384.4.42 S1:2003 sisaldab Euroopa standardi HD 384.4.42 S1:1985+A1:1992+A2:1994 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 05.02.2003 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 16.10.1985.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-HD 384.4.42 S1:2003 consists of the English text of the European standard HD 384.4.42 S1:1985+A1:1992+A2:1994.

This standard is ratified with the order of Estonian Centre for Standardisation dated 05.02.2003 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 16.10.1985.

The standard is available from Estonian standardisation organisation.

ICS 91.140.50

Standardite reprodutseerimis- ja levitamiseõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

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ENGLISH VERSION

UDC: 621.316.172.744.001.25 537.321::614.841.34(083.71)

Key words: Electrical installations in buildings; protective measures for indoor installations; safety requirements; thermal effects; protection against fire; definitions

ELECTRICAL INSTALLATIONS OF BUILDINGS
PART 4: PROTECTION FOR SAFETY
CHAPTER 42: Protection against thermal effects

**Installations électriques des
bâtiments. Quatrième partie:**
Protection pour assurer la sécurité
Chapitre 42: Protection contre
les effets thermiques

Elektrische Anlagen von Gebäuden
Teil 4: Schutzmassnahmen
Kapitel 42: Schutz gegen thermische
Einflüsse

BODY OF HD

The Harmonization Document consists of:

- IEC 364-4-42 (1980) edition 1, , together with
- the CENELEC common modifications prepared by CENELEC/TC 64, appended

This Harmonization Document was approved by CENELEC on **13 April 1983**.

The English and French versions of this HD are provided by the text of the IEC publication and the German version is the official translation of the IEC text. All texts prepared by CENELEC exist in three official versions (English, French, and German).

According to the CENELEC Internal Regulations the CENELEC member National Committees are bound:

to announce the existence of this Harmonization Document at national level

by or before **1986-01-01**

to publish their new harmonized national standard

by or before **1986-10-01**

to withdraw all conflicting national standards

by or before **1987-10-01**.

Harmonized national standards are listed on the HD information sheet, which is available from the CENELEC National Committees or from the CENELEC General Secretariat.

The CENELEC National Committees are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxemburg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

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PREFACE

1.- Reference Document

The reference Document for this Harmonization Document is the International Electrotechnical Commission Standard IEC: 364-4-42, First Edition, 1980, prepared by IEC Technical Committee 64: Electrical installations of buildings.

2.- Scope

The scope of this Harmonization Document is CENELEC Harmonization Document HD. 384.1.

3.- CENELEC Common Modifications

CENELEC Common Modifications of the Reference Document are numbered and indicated by marginal side-lining. Justifications for the common modifications are stated in Appendix A.

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ELECTRICAL INSTALLATIONS OF BUILDINGS

Part 4: Protection for safety

42. PROTECTION AGAINST THERMAL EFFECTS

Note.- Fire terms and related tests are for future work by cooperation between the ISO and the IEC. The terms used in this chapter are provisional.

421. General

Persons, fixed equipment, and fixed materials adjacent to electrical equipment, shall be protected against harmful effects of heat developed by electrical equipment, or thermal radiation, particularly the following effects:

- (1) |
- combustion, ignition or degradation of materials ;
 - risk of burns ;
 - impairment of the safe function of installed equipment.

Note.- Protection against overcurrent is dealt with in HD 384-4-43.

422. Protection against fire

422.1 Electrical equipment shall not present a fire hazard to adjacent materials.

- (2) |
- Any relevant erection instructions of the manufacturer shall be observed in addition to the requirements of this HD.

422.2 Where fixed equipment may attain surface temperatures which could cause a fire hazard to adjacent materials, the equipment shall either:

- be mounted on or within materials which will withstand such temperatures and are of low thermal conductance, or
- be screened from elements of building construction by materials which will withstand such temperatures and are of low thermal conductance, or
- be mounted to allow safe dissipation of heat at a sufficient distance from any material on which such temperatures could have deleterious thermal effects, any means of support being of low thermal conductance.

422.3 Where arcs or sparks may be emitted by permanently connected equipment in normal service, the equipment shall either:

- be totally enclosed in arc-resistant material, or
- be screened by arc-resistant material from building elements on which the arcs could have deleterious thermal effects, or