



**NSAI**  
Standards

Irish Standard  
I.S. HD 60364-4-42:2011

# Low voltage electrical installations -- Part 4-42: Protection for safety - Protection against thermal effects (IEC 60364-4-42:2010 (MOD))

## I.S. HD 60364-4-42:2011

*Incorporating amendments/corrigenda issued since publication:*

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I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

<i>This document replaces:</i> HD 384.4.42 S1:1985 + A1:1992 + A2:1994	<i>This document is based on:</i> HD 60364-4-42:2011	<i>Published:</i> 18 March, 2011
This document was published under the authority of the NSAI and comes into effect on:  30 March, 2011		ICS number: 29.120.50 91.140.50
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English version

**Low voltage electrical installations -  
Part 4-42: Protection for safety -  
Protection against thermal effects  
(IEC 60364-4-42:2010, modified)**

Installations électriques basse tension -  
Partie 4- 42: Protection pour assurer la  
sécurité -  
Protection contre les effets thermiques  
(CEI 60364-4-42:2010, modifiée)

Errichten von Niederspannungsanlagen -  
Teil 4-42: Schutzmaßnahmen -  
Schutz gegen thermische Einflüsse  
(IEC 60364-4-42:2010, modifiziert)

This Harmonization Document was approved by CENELEC on 2011-02-14. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for implementation of this Harmonization Document at national level.

Up-to-date lists and bibliographical references concerning such national implementations may be obtained on application to the Central Secretariat or to any CENELEC member.

This Harmonization Document exists in three official versions (English, French, German).

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, 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

**Management Centre: Avenue Marnix 17, B - 1000 Brussels**

## Foreword

The text of the International Standard IEC 60364-4-42:2010, prepared by IEC TC 64, Electrical installations and protection against electric shock, together with common modifications prepared by the Technical Committee CENELEC TC 64, Electrical installations and protection against electric shock, was submitted to the formal vote and was approved by CENELEC as HD 60364-4-42 on 2011-02-14.

This European Standard supersedes HD 384.4.42 S1:1985 + A1:1992 + A2:1994.

The main changes with respect to HD 384.4.42 S1:1985 + A1:1992 + A2:1994 are listed below:

- The scope now includes protection against all thermal effects and flames in case of a fire hazard being propagated from electrical installations to other fire compartments segregated by barriers which are in the vicinity.
- Requirements associated with escape routes for evacuation in an emergency have been expanded/modified.
- Requirements associated with the nature of processed or stored materials have been expanded/modified.
- Requirements associated with combustible constructional materials have been expanded/modified.
- Requirements associated with fire propagating structures have been modified slightly.
- New requirements for the selection and erection of installations in locations which might endanger precious goods have been added.
- Protection against overheating now includes space heating appliances.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

The following dates were fixed:

- latest date by which the HD has to be implemented  
at national level by publication of a harmonized  
national standard or by endorsement (dop) 2012-02-14
- latest date by which the national standards conflicting  
with the HD have to be withdrawn (dow) 2014-02-14

Annexes ZA to ZD have been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 60364-4-42:2010 was approved by CENELEC as a Harmonization Document with agreed common modifications as given below.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

- |                         |   |
|-------------------------|---|
| [2] IEC 60079-14:1996   | NOTE Harmonized as EN 60079-14:1997 (not modified).   |
| [5] IEC 60332-1-2:2004  | NOTE Harmonized as EN 60332-1-2:2004 (not modified).  |
| [6] IEC 60332-3-21:2000 | NOTE Harmonized as EN 60332-3-21:2009 (modified).     |
| [7] IEC 60332-3-22:2000 | NOTE Harmonized as EN 60332-3-22:2009 (not modified). |

[8] IEC 60332-3-23:2000	NOTE Harmonized as EN 60332-3-23:2009 (not modified).
[9] IEC 60332-3-24:2000	NOTE Harmonized as EN 60332-3-24 (not modified).
[10] IEC 60332-3-25:2000	NOTE Harmonized as EN 60332-3-25:2009 (not modified).
[11] IEC 60364-4-43	NOTE Harmonized as HD 60364-4-43.
[13] IEC 60364-5-52	NOTE Harmonized as HD 60364-5-52.
[16] IEC 60598 series	NOTE Harmonized in EN 60598 series (partially modified).
[17] IEC 60598-1:2003	NOTE Harmonized as EN 60598-1:2004 (modified).
[18] IEC 60598-1:2008	NOTE Harmonized as EN 60598-1:2008 (modified).
[19] IEC 60670-1	NOTE Harmonized as EN 60670-1.
[20] IEC 60695-4	NOTE Harmonized as EN 60695-4.
[21] IEC 60702-1	NOTE Harmonized as EN 60702-1.
[22] IEC 60947-2	NOTE Harmonized as EN 60947-2.
[23] IEC 61034-2	NOTE Harmonized as EN 61034-2.
[25] IEC 61386-1	NOTE Harmonized as EN 61386-1.
[26] IEC 61439-1	NOTE Harmonized as EN 61439-1.
[27] IEC 62020	NOTE Harmonized as EN 62020.
[28] IEC 62305 series	NOTE Harmonized in EN 62305 series (partially modified).

## COMMON MODIFICATIONS

### 422 Precautions where particular risks of fire exist


#### 422.3

**Add** the following note:

NOTE 3 Other locations having similar risk as those mentioned in IEC 60364-5-51, Table 51A, BE2 should also be considered, for example commercial kitchens.

#### 422.3.1

**Modify** the Note as follows:

Luminaires marked  in accordance with EN 60598-1 are suitable for mounting on a normally flammable surface.

#### 422.3.9

**Modify** first line as follows:

Final circuits supplying or traversing the location and current using equipment, shall be protected against insulation faults as follows:

#### 422.3.12

**Modify** text as follows:

PEN conductors are not allowed in locations where condition BE2 applies, except for circuits traversing such locations and having no connection between their traversing PEN conductor and any conductive part in this location and erected in such a way as to reduce the risk of a fault between the pen conductor and any conductive part in the location to a minimum.

## Annex ZA

### (normative)

### Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60332	Series	Tests on electric and optical fibre cables under fire conditions	EN 60332	Series
IEC 60364-4-41 (mod)	2005	Low-voltage electrical installations - Part 4-41: Protection for safety - Protection against electric shock	HD 60364-4-41 + corr. July	2007 2007
IEC 60364-5-51 (mod)	2005	Electrical installations of building - Part 5-51: Selection and erection of electrical equipment - Common rules	HD 60364-5-51	2009
IEC 60598-2-24 (mod)	-	Luminaires - Part 2: Particular requirements - Section 24: Luminaires with limited surface temperatures	EN 60598-2-24	-
IEC 61084	Series	Cable trunking and ducting systems for electrical installations	-	-
IEC 61386	Series	Conduit systems for cable management	EN 61386	Series
IEC 61534	Series	Powertrack systems	EN 61534	Series
IEC 61537	-	Cable management - Cable tray systems and cable ladder systems	EN 61537	-

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