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Standards

Irish Standard  
I.S. HD 60364-4-41:2007

# Low-voltage electrical installations -- Part 4-41: Protection for safety - Protection against electric shock (IEC 60364-4-41:2005 (MOD))

## I.S. HD 60364-4-41:2007

*Incorporating amendments/corrigenda issued since publication:*

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

<p><i>This document replaces:</i> HD 384.4.41 S2:1996 + A1:2002, HD 384.4.46 S2:2001, HD 384.4.47 S2:1995</p>	<p><i>This document is based on:</i> HD 60364-4-41:2007</p>	<p><i>Published:</i> 31 January, 2007</p>
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English version

**Low-voltage electrical installations –  
Part 4-41: Protection for safety -  
Protection against electric shock  
(IEC 60364-4-41:2005, modified)**

Installations électriques à basse tension –  
Partie 4-41: Protection pour assurer  
la sécurité -  
Protection contre les chocs électriques  
(CEI 60364-4-41:2005, modifiée)

Errichten von Niederspannungsanlagen –  
Teil 4-41: Schutzmaßnahmen -  
Schutz gegen elektrischen Schlag  
(IEC 60364-4-41:2005, modifiziert)

This Harmonization Document was approved by CENELEC on 2006-02-01. 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, 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**

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**Foreword**

The text of document 64/1489/FDIS, future edition 5 of IEC 60364-4-41, prepared by IEC TC 64, Electrical installations and protection against electric shock, was submitted to the IEC-CENELEC parallel vote.

A draft amendment, prepared by SC 64A, Protection against electric shock, of Technical Committee CENELEC TC 64, Electrical installations and protection against electric shock, was submitted to the formal vote.

The combined texts were approved by CENELEC as HD 60364-4-41 on 2006-02-01.

This Harmonization Document supersedes HD 384.4.41 S2:1996 + A1:2002 and HD 384.4.47 S2:1995.

The following dates were fixed:

- latest date by which the existence of the HD (doa) 2006-08-01  
has to be announced at national level
- latest date by which the HD has to be implemented (dop) 2007-08-01  
at national level by publication of a harmonized  
national standard or by endorsement
- latest date by which the national standards conflicting (dow) 2009-02-01  
with the HD have to be withdrawn

Annexes ZA and ZB have been added by CENELEC.

In this document, the common modifications to the International Standard are indicated by a vertical line in the left margin of the text.

The contents of the corrigendum of July 2007 have been included in this copy.

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## **410 Introduction**

This Part 4-41 of HD 60364 deals with protection against electric shock as applied to electrical installations. It is based on EN 61140 which is a basic safety standard that applies to the protection of persons and livestock. EN 61140 is intended to give fundamental principles and requirements that are common to electrical installations and equipment or are necessary for their co-ordination.

The fundamental rule of protection against electric shock, according to EN 61140, is that hazardous-live-parts must not be accessible and accessible conductive parts must not be hazardous live, neither under normal conditions nor under single fault conditions.

According to 4.2 of EN 61140, protection under normal conditions is provided by basic protective provisions and protection under single fault conditions is provided by fault protective provisions. Alternatively, protection against electric shock is provided by an enhanced protective provision, which provides protection under normal conditions and under single fault conditions.

This standard in accordance with IEC Guide 104 has the status of a group safety publication (GSP) for protection against electric shock.

In the previous edition HD 384.4.41 S2:1996

- protection under normal conditions (now designated basic protection) was referred to as protection against direct contact and
- protection under fault conditions (now designated fault protection) was referred to as protection against indirect contact.

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