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English version

**Co-ordination of electrical equipment for protection, isolation, switching
and control**

Coordination des dispositifs électriques

Koordinierung elektrischer Einrichtungen

This Harmonization Document was approved by CENELEC on 2013-12-30. 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 CEN-CENELEC Management Centre or to any CENELEC member.

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

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CENELEC

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

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Foreword

This document (HD 50573-5-57:2014) has been prepared by CLC/TC64 "Electrical installations and protection against electric shock".

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2014-12-30
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2016-12-30

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

During the design of an electrical installation, HD 60364 applies.

In an electrical installation, each device is required to comply with its relevant product standard according to Clause 133.1 of HD 60364-1:2008 and to Clause 511 of HD 60364-5-51:2009.

It is also recognized that in an electrical installation, the combination of various device shall be selected carefully so as not to impair safety. In case of a fault, the combination of several protective devices (circuit-breakers, fuses, residual current devices...) may also affect the continuity of supply of the installation if the upstream devices open, whereas the fault could be cleared by the downstream device.

This Harmonization Document is intended to bring complementary requirements to part 5 of HD 60364 for selection and erection of electrical equipment, and cover aspects of co-ordination.

570 Co-ordination of electrical equipment for protection, isolation, switching and control

570.1 Scope

This Harmonization Document specifies the requirements for the selection and erection of electrical equipments for protection, isolation, switching and control (hereafter referred to as electrical devices and assemblies) with respect to co-ordination.

This Harmonization Document applies to electrical installations as detailed in HD 60364-1:2008, 11.1. The requirements of this document are additional to those specified in HD 60364.

This Harmonization Document is intended to provide requirements for the safety of humans, livestock and property against danger and damage which may arise in the reasonable use of electrical installations and to specify requirements for the proper functioning of those installations. The requirements also cover aspects of continuity of supply of the installation.

This part covers co-ordination in the case of a fault condition (e.g. short circuit, overload, residual currents) and also takes into consideration aspects of HD 60364-1:2008, 33.1 relevant to the co-ordination of electrical devices as follows :

- overcurrent protective device (OCPD);
- control and protective switching device (CPS);
- residual current device (RCD);
- contactor and starter;
- switch and disconnecter.

NOTE 1 Co-ordination of monitoring devices is under consideration.

NOTE 2 Reference to the meaning of the acronyms used in this document may be found in Table 57.1.

This Harmonization Document does not provide requirements for the selection of an electrical device alone, but provides requirements for the selection of electrical devices to ensure electrical co-ordination between them.

570.2 Normative references

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

EN 60269 series, *Low-voltage fuses (IEC 60269 series)*

HD 60364-1:2008, *Low-voltage electrical installations – Part 1: Fundamental principles, assessment of general characteristics, definitions (IEC 60364-1:2005, mod.)*

HD 60364-4-43:2010, *Low-voltage electrical installations – Part 4-43: Protection for safety – Protection against overcurrent (IEC 60364-4-43:2008, mod. + corrigendum Oct. 2008)*

HD 60364-5-51:2009, *Electrical installations of buildings – Part 5-51: Selection and erection of electrical equipment – Common rules (IEC 60364-5-51:2005, mod.)*

EN 60669-2-2, *Switches for household and similar fixed electrical installations – Part 2-2: particular requirements – Electromagnetic remote-control switches (RCS) (IEC 60069-2-2)*

EN 60669-2-4, *Switches for household and similar fixed electrical installations – Part 2-4: particular requirements – Isolating switches (IEC 60669-2-4)*

EN 60947-1, *Low-voltage switchgear and controlgear – Part 1: General rules (IEC 60947-1)*

EN 60947-2:2006, *Low-voltage switchgear and controlgear – Part 2: Circuit-breakers (IEC 60947-2:2006)*

EN 60947-3, *Low-voltage switchgear and controlgear – Part 3: switches, disconnectors, switch-disconnectors and fuse-combination units (IEC 60947-3)*

EN 60947-4-1, *Low-voltage switchgear and controlgear – Part 4-1: Contactors and motor-starters – Electromechanical contactors and motor starters (IEC 60947-4-1)*

EN 60947-6-1, *Low-voltage switchgear and controlgear – Part 6-1: multiple function equipment – Transfer Switching Equipment (IEC 60947-6-1)*

EN 60947-6-2, *Low-voltage switchgear and controlgear – Part 6-2: multiple function equipment – Control and protective switching devices (or equipment) (CPS) (IEC 60947-6-2)*

EN 60898-1, *Electrical accessories – Circuit breakers for overcurrent protection for household and similar installations – Part 1: Circuit-breakers for a.c. operation (IEC 60898-1)*

EN 60898-2, *Electrical accessories – Circuit-breakers for overcurrent protection for household and similar installations – Part 2: Circuit-breakers for a.c. and d.c. operation (IEC 60898-2)*

EN 61008-2-1, *Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCB's) – Part 2-1: applicability of the general rules to rccb'S functionally independent of line (IEC 61008-2-1)*

EN 61009-2-1, *Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCBO's) – Part 2-1: applicability of the general rules to rcbo'S functionally independent of line the voltage (IEC 61009-2-1)*

EN 61095, *Electromechanical contactors for household and similar purposes (IEC 61095)*

EN 62423, *Type B residual current operated circuit-breakers with and without integral overcurrent protection for household and similar uses (Type B RCCBs and Type B RCBOs) (IEC 62423)*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN