Sisaldab värvilisi lehekülgi
Colour inside

MADALPINGELISED ELEKTRIPAIGALDISED. OSA 5-53: ELEKTRISEADMETE VALIK JA PAIGALDAMINE. LÜLITUS- JA JUHTIMISAPARATUUR

Low-voltage electrical installations - Part 5-53: Selection and erection of electrical equipment - Switchgear and controlgear

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-HD 60364-5-53:2022 sisaldab Euroopa standardi HD 60364-5-53:2022 ja selle paranduse AC:2022 ingliskeelset teksti.	This Estonian standard EVS-HD 60364-5-53:2022 consists of the English text of the European standard HD 60364-5-53:2022 and its corrigendum AC:2022.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas. Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 13.05.2022.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation. Date of Availability of the European standard is 13.05.2022.
Parandusega AC lisatud või muudetud teksti algus ja lõpp on tekstis tähistatud sümbolitega ▌AC〉 〈AC▐. Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.	The start and finish of text introduced or altered by corrigendum AC is indicated in the text by tags ▌AC〉 〈AC▐. The standard is available from the Estonian Centre for Standardisation and Accreditation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 91.140.50; 29.120.50

HARMONIZATION DOCUMENT

DOCUMENT D'HARMONISATION

HARMONISIERUNGSDOKUMENT

HD 60364-5-53

May 2022

ICS 91.140.50; 29.120.50

Supersedes HD 60364-5-534:2016 HD 60364-5-537:2016
HD 60364-5-53:2015 HD 60364-5-537:2016 + A11:2017
HD 60364-5-53:2015 + A11:2017

English Version

Low-voltage electrical installations - Part 5-53: Selection and erection of electrical equipment - Switchgear and controlgear

Installations électriques basse tension - Partie 5-53: Choix et mise en oeuvre des matériels électriques - Appareillage

Errichten von Niederspannungsanlagen - Teil 5-53: Auswahl und Errichtung elektrischer Betriebsmittel - Schalt- und Steuergeräte

This Harmonization Document was approved by CENELEC on 2018-08-16. 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).

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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. HD 60364-5-53:2022 E

AC Contents

〈AC

European foreword

This document (HD 60364-5-53:2022) has been prepared by CLC/TC 64 “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)	2022-11-13
• latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2025-05-13

This document supersedes HD 60364-5-53:2015, HD 60364-5-534:2016 and HD 60364-5-537:2016 and all of their amendments and corrigenda (if any).

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

Any feedback and questions on this document should be directed to the users’ national committee. A complete listing of these bodies can be found on the CENELEC website.

530 Introduction

530.1 Scope

This part of HD 60364 deals with general requirements for isolation, switching, control and monitoring and with the requirements for selection and erection of the devices provided to fulfil such functions.

530.2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

EN 60038, *CENELEC standard voltages (IEC 60038)*

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

EN 60309 (series), Plugs, socket-outlets and couplers for industrial purposes *(IEC 60309 series)*

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

HD 60364-4-41:2007, *Low-voltage electrical installations - Part 4-41: Protection for safety - Protection against electric shock (IEC 60364-4-41:2005)*

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

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 60364-4-443:2016, *Low-voltage electrical installations - Part 4-44: Protection for safety - Protection against voltage disturbances and electromagnetic disturbances - Clause 443: Protection against transient overvoltages of atmospheric origin or due to switching (IEC 60364-4-44:2007/A1:2015, mod.)*

HD 60364-4-46:2016, *Low-voltage electrical installations - Part 4-46: Protection for safety - Isolation and switching*

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.)*

HD 60364-5-54, *Low-voltage electrical installations - Part 5-54: Selection and erection of electrical equipment - Earthing arrangements and protective conductors (IEC 60364-5-54)*

EN 60669-1, Switches for household and similar fixed-electrical installations - Part 1: General requirements *(IEC 60669-1)*

EN 60669-2-1, *Switches for household and similar fixed electrical installations – Part 2-1: Particular requirements – Electronic switches (IEC 60669-2-1)*

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 60669-2-3, *Switches for household and similar fixed electrical installations - Part 2-3: Particular requirements - Time delay switches (TDS) (IEC 60669-2-3)*

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

EN 60669-2-5, *Switches for household and similar fixed electrical installations - Part 2-5: Particular requirements - Switches and related accessories for use in home and building electronic systems (HBES) (IEC 60669-2-5)*

EN 60669-2-6, *Switches for household and similar fixed electrical installations - Part 2-6: Particular requirements - Fireman's switches for exterior and interior signs and luminaires (IEC 60669-2-6)*

EN 60670 (all parts), *Boxes and enclosures for electrical accessories for household and similar fixed electrical installations (IEC 60670)*

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 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 60947-4-2, *Low-voltage switchgear and controlgear - Part 4-2: Contactors and motor-starters - AC semiconductor motor controllers and starters (IEC 60947-4-2)*

EN 60947-4-3, *Low-voltage switchgear and controlgear - Part 4-3: Contactors and motor-starters - AC semiconductor controllers and contactors for non-motor loads (IEC 60947-4-3)*

EN 60947-5-1, Low-voltage switchgear and controlgear - Part 5-1: Control circuit devices and switching elements - Electromechanical control circuit devices *(IEC 60947-5-1)*

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 60947-7-1, *Low-voltage switchgear and controlgear - Part 7-1: Ancillary equipment - Terminal blocks for copper conductors (IEC 60947-7-1)*

EN 61008-1, *Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs) - Part 1: General rules (IEC 61008-1)*

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 voltage (IEC 61008-2-1)*

EN 61009-1, *Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCBOs) - Part 1: General rules (IEC 61009-1)*

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 voltage (IEC 61009-2-1)*

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

EN 61439 (all parts), *Low-voltage switchgear and controlgear assemblies (IEC 61439, all parts)*

EN 61557-8, *Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. - Equipment for testing, measuring or monitoring of protective measures - Part 8: Insulation monitoring devices for IT systems (IEC 61557-8)*

EN 61557-9, *Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. - Equipment for testing, measuring or monitoring of protective measures - Part 9: Equipment for insulation fault location in IT systems (IEC 61557-9)*

EN 61643-11:2012, *Low-voltage surge protective devices - Part 11: Surge protective devices connected to low-voltage power systems - Requirements and test methods (IEC 61643-11:2011, mod.)*

CLC/TS 61643-12, *Low-voltage surge protective devices - Part 12: Surge protective devices connected to low-voltage power distribution systems - Selection and application principles (IEC 61643-12)*

EN 61984:2009, *Connectors - Safety requirements and tests (IEC 61984:2008)*

EN 61995 (series), Devices for the connection of luminaires for household and similar purposes *(IEC 61995 series)*

EN 62020, *Electrical accessories - Residual current monitors for household and similar uses (RCMs) (IEC 62020)*

EN 62208, *Empty enclosures for low-voltage switchgear and controlgear assemblies - General requirements (IEC 62208)*

EN 62305-1, *Protection against lightning - Part 1: General principles (IEC 62305-1)*

EN 62305-2, *Protection against lightning - Part 2: Risk management (IEC 62305-2)*

EN 62305-4, *Protection against lightning - Part 4: Electrical and electronic systems within structures (IEC 62305-4)*

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

EN 62606, *General requirements for arc fault detection devices (IEC 62606)*

EN 62626-1, *Low-voltage switchgear and controlgear enclosed equipment - Part 1: Enclosed switch-disconnectors outside the scope of IEC 60947-3 to provide isolation during repair and maintenance work (IEC 62626-1)*

IEC 60417, *Graphical symbols for use on equipment*

IEC 60884 (series), *Plugs and socket-outlets for household and similar purposes*

IEC 60906 (series), *IEC system of plugs and socket-outlets for household and similar purposes*

530.3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/