

MADALPINGELISED ELEKTRIPAIGALDISED. OSA 6:
KONTROLLITOIMINGUD

Low-voltage electrical installations - Part 6:
Verification

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>See Eesti standard EVS-HD 60364-6:2016 sisaldab Euroopa standardi HD 60364-6:2016 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 01.07.2016.</p> <p>Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.</p>	<p>This Estonian standard EVS-HD 60364-6:2016 consists of the English text of the European standard HD 60364-6:2016.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 01.07.2016.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p>
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English Version

**Low-voltage electrical installations - Part 6: Verification
(IEC 60364-6:2016)**

Installations électriques à basse tension - Partie 6:
Vérification
(IEC 60364-6:2016)

Errichten von Niederspannungsanlagen - Teil 6: Prüfungen
(IEC 60364-6:2016)

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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European foreword

The text of document 64/2107/FDIS, future edition 2 of IEC 60364-6 prepared by IEC/TC 64 "Electrical installations and protection against electric shock" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as HD 60364-6:2016.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2017-03-01
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2019-06-01

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

IEC 60238	NOTE	Harmonized as EN 60238.
IEC 60364-4-43	NOTE	Harmonized as EN 60364-4-43.
IEC 61557-2	NOTE	Harmonized as EN 61557-2.
IEC 61557-3	NOTE	Harmonized as EN 61557-3.
IEC 61557-5	NOTE	Harmonized as EN 61557-5.
IEC 61557-8	NOTE	Harmonized as EN 61557-8.
IEC 62020	NOTE	Harmonized as EN 62020.

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Low voltage electrical installations –
Part 6: Verification**

**Installations électriques à basse tension –
Partie 6: Vérification**



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INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Low voltage electrical installations –
Part 6: Verification**

**Installations électriques à basse tension –
Partie 6: Vérification**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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CONTENTS

FOREWORD.....	4
6.1 Scope	6
6.2 Normative references	6
6.3 Terms and definitions	7
6.4 Initial verification	7
6.4.1 General	7
6.4.2 Inspection	8
6.4.3 Testing	9
6.4.4 Reporting for initial verification	14
6.5 Periodic verification	15
6.5.1 General	15
6.5.2 Frequency of periodic verification	16
6.5.3 Reporting for periodic verification	16
Annex A (informative) Estimation of the resistance value likely to be obtained during continuity testing.....	18
Annex B (informative) Methods for measuring the insulation resistance/impedance of floors and walls to earth or to the protective conductor	19
B.1 General.....	19
B.2 Test method for measuring the impedance of floors and walls with a.c. voltage.....	19
B.3 Test electrode 1	20
B.4 Test electrode 2	20
Annex C (informative) Measurement of earth electrode resistance – Methods C1, C2 and C3	22
C.1 Method C1 – Measurement of earth electrode resistance using an earth electrode test instrument	22
C.2 Method C2 – Measurement of earth electrode resistance using a fault loop impedance test instrument.....	23
C.3 Method C3 – Measurement of earth electrode resistance using current clamps	24
Annex D (informative) Guidance on the application of the rules of Clause 6.4 – Initial verification.....	26
Annex E (informative) Model forms for reporting	29
Annex F (informative) Model forms for inspection of electrical installations	36
F.1 Model schedule for items requiring inspection for initial verification of an electrical installation.....	36
F.2 Model inspection schedule of items requiring inspection for an existing electrical installation.....	40
Annex G (informative) Model schedule of circuit details and test results	45
Annex H (informative) List of notes concerning certain countries.....	46
Bibliography	48
Figure B.1 – Test electrode 1	20
Figure B.2 – Test electrode 2	21
Figure C.1 – Measurement of the earth electrode resistance.....	23
Figure C.2 – Measurement of the earth electrode resistance using an earth fault loop impedance test instrument	24
Figure C.3 – Measurement of earth electrode resistance using current clamps	25

Table 6.1 – Minimum values of insulation resistance.....	10
Table A.1 – Specific conductor resistance R for copper wiring at 30 °C dependent on the nominal cross-sectional area S for rough calculation of conductor resistances	18
Table E.1 – Electrical installation verification report (new or altered installation)	29
Table E.2 – Electrical installation condition report (existing installations).....	32
Table G.1 – Model schedule of circuit details and test results	45

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LOW VOLTAGE ELECTRICAL INSTALLATIONS –**Part 6: Verification****FOREWORD**

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International Standard IEC 60364-6 has been prepared by the IEC technical committee 64: Electrical installations and protection against electric shock.

This second edition cancels and replaces the first edition published in 2006 and constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) Normative references updated to current publications;
- b) Re-numbered to align with current IEC numbering;
- c) Initial inspection requirements: 3 items added;
- d) Testing sequence changed;
- e) General requirements for periodic reporting – more details added;
- f) New Annex A: Table A.1 – Specific resistance values for copper conductors;

- g) Annex D: Example of a diagram suitable for evaluation of voltage drop. Content removed;
- h) Annex E: Recommendation for electrical equipment which is being re-used in an electrical installation. Content removed;
- i) Annex F: Content replaced with new Annex E – Model forms for reporting;
- j) Annex G: Changed to Annex F – Model forms for inspection of electrical installations;
- k) Annex H: Changed to Annex G – Model schedule of circuit details and test results;
- l) Annex H: Listing of notes concerning some countries;
- m) Bibliography – Updated:

The text of this standard is based on the following documents:

FDIS	Report on voting
64/2107/FDIS	64/2114/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 60364 series, published under the general title *Low voltage electrical installations*, can be found on the IEC website.

The reader's attention is drawn to the fact that Annex H lists all of the “in-some-country” clauses on differing practices of a less permanent nature relating to the subject of this standard.

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LOW VOLTAGE ELECTRICAL INSTALLATIONS –

Part 6: Verification

6.1 Scope

This part of IEC 60364 provides requirements for initial and periodic verification of an electrical installation.

Clause 6.4 provides requirements for initial verification, by inspection and testing, of an electrical installation to determine, as far as reasonably practicable, whether the requirements of the other parts of IEC 60364 have been met and requirements for the reporting of the results of the initial verification. The initial verification takes place upon the completion of a new installation or completion of an addition or an alteration to an existing installation.

Clause 6.5 provides requirements for periodic verification of an electrical installation to determine, as far as reasonably practicable, whether the installation and all its constituent equipment are in a satisfactory condition for use and requirements for the reporting of the results of the periodic verification.

6.2 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.

IEC 60079-17, *Explosive atmospheres – Part 17: Electrical installations inspection and maintenance*

IEC 60364 (all parts), *Low-voltage electrical installations*

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

IEC 60364-4-42:2010, *Low-voltage electrical installations – Part 4-42: Protection for safety – Protection against thermal effects*
IEC 60364-4-42:2010/AMD1:2014

IEC 60364-4-44:2007, *Low-voltage electrical installations – Part 4-44: Protection for safety – Protection against voltage disturbances and electromagnetic disturbances*
IEC 60364-4-44:2007/AMD1:2015

IEC 60364-5-51:2005, *Electrical installations of buildings – Part 5-51:– Selection and erection of electrical equipment – Common rules*

IEC 60364-5-52:2009, *Low-voltage electrical installations – Part 5-52: Selection and erection of electrical equipment – Wiring systems*

IEC 60364-5-53:2001, *Electrical installations of buildings – Part 5-53: Selection and erection of electrical equipment – Isolation, switching and control*
IEC 60364-5-53:2001/AMD1:2002
IEC 60364-5-53:2001/AMD2:2015

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

IEC 61557 (all parts), *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*

IEC 61557-6, *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 6: Effectiveness of residual current devices (RCD) in TT, TN and IT systems*

6.3 Terms and definitions

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

6.3.1

verification

all measures by means of which compliance of the electrical installation with the relevant requirements of IEC 60364 is checked

Note 1 to entry: Verification comprises inspection, testing and reporting.

6.3.2

inspection

examination of an electrical installation using all appropriate senses in order to ascertain correct selection and proper erection of electrical equipment

6.3.3

testing

implementation of measures to assess an electrical installation by means through which its effectiveness is proved

Note 1 to entry: Testing includes ascertaining values by means of appropriate measuring instruments, said values not being detectable by inspection.

6.3.4

reporting

recording of the results of inspection and testing

6.3.5

maintenance

combination of all technical and administrative actions, including supervisory actions, intended to retain an item in, or restore it to, a state in which it can perform a required function

6.4 Initial verification

6.4.1 General

6.4.1.1 Every installation shall be verified during erection, as far as reasonably practicable, and on completion, before being put into service.

6.4.1.2 The information required by IEC 60364-5-51:2005, 514.5 and other information necessary for initial verification shall be made available to the person carrying out the initial verification.

6.4.1.3 The initial verification shall include comparison of the results with relevant criteria to confirm that the requirements of the IEC 60364 series have been met.