



# SLOVENSKI STANDARD

## SIST IEC 60364-1:2005

01-ZVfi U-2005

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B]n\_cbUdYrcglbY`YY\_f] bY]býhUUVY`E`%`XY.`HYa Y`bUbu YUžcWwb`Yj Ub`Y  
gd`cýb]`nbU ]bcghžXYZb]WY`

Low-voltage electrical installations - Part 1: Fundamental principles, assessment of general characteristics, definitions

### iTeh STANDARD PREVIEW

Installations électriques à basse tension - Partie 1: Principes fondamentaux, détermination des caractéristiques générales, définitions

[SIST IEC 60364-1:2006](https://standards.iteh.ai/catalog/standards/sist/6b20ed32-c3f7-41ad-a4b7-50c93ad0786/sist-iec-60364-1-2006)

Ta slovenski standard je istoveten z: [IEC 60364-1:2005](https://standards.iteh.ai/catalog/standards/sist/6b20ed32-c3f7-41ad-a4b7-50c93ad0786/sist-iec-60364-1-2006) - &

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#### ICS:

91.140.50 Sistemi za oskrbo z elektriko Electricity supply systems

SIST IEC 60364-1:2005

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NORME  
INTERNATIONALE  
INTERNATIONAL  
STANDARD

CEI  
IEC  
364-1

Troisième édition  
Third edition  
1992-10

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**Installations électriques des bâtiments**

**Partie 1:**

Domaine d'application, objet  
et principes fondamentaux

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**Electrical installations of buildings**

SIST IEC 60364-1:2006

**Part 1:**

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**Scope, object and fundamental principles**

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International Electrotechnical Commission  
Международная Электротехническая Комиссия

CODE PRIX  
PRICE CODE

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## ELECTRICAL INSTALLATIONS OF BUILDINGS

## Part 1: Scope, object and fundamental principles

## FOREWORD

- 1) The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.
- 3) In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text of the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

This International Standard has been prepared by IEC Technical Committee No. 64: Electrical installations of buildings.

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This third edition of IEC 364-1 cancels and replaces the second edition issued in 1972 and the first edition of IEC 364-2 issued in 1970.

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

DIS	Report on Voting
64(CO)200	64(CO)223

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

## ELECTRICAL INSTALLATIONS OF BUILDINGS

### Part 1: Scope, object and fundamental principles

#### CHAPTER 11: SCOPE

11.1 This International Standard applies to electrical installations such as those of:

- a) residential premises;
- b) commercial premises;
- c) public premises;
- d) industrial premises;
- e) agricultural and horticultural premises;
- f) prefabricated buildings;
- g) caravans, caravan sites and similar sites;
- h) construction sites, exhibitions, fairs and other temporary installations;
- i) marinas and pleasure craft.

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11.2 It covers:

- a) circuits supplied at nominal voltages up to and including 1 000 V a.c. or 1 500 V d.c.;  
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for a.c., the preferred frequencies which are taken into account in this standard are 50 Hz, 60 Hz and 400 Hz. The use of other frequencies for special purposes is not excluded;
- b) circuits, other than the internal wiring of apparatus, operating at voltages exceeding 1 000 V and derived from an installation having a voltage not exceeding 1 000 V a.c., e.g. discharge lighting, electrostatic precipitators;
- c) any wiring systems and cables not specifically covered by the standards for appliances;
- d) all consumer installations external to buildings;
- e) fixed wiring for telecommunications, signalling, control and the like (excluding internal wiring of apparatus);
- f) the extension or alteration of the installation and also parts of the existing installation affected by the extension or alteration.

11.3 The standard does not apply to:

- a) electric traction equipment;
- b) electrical equipment of motor vehicles;
- c) electrical installations on board ships;

- d) electrical installations in aircraft;
- e) public street-lighting installations;
- f) installations in mines;
- g) radio interference suppression equipment, except so far as it affects safety of the installation;
- h) electric fences;
- i) lightning protection of buildings.

NOTE - Atmospheric phenomena are covered, however, in so far as effects on the electrical installations are concerned (e.g. with respect to selection of lightning arresters).

11.4 This standard is not intended to apply:

- to systems for distribution of energy to the public, or
- to power generation and transmission for such systems.

NOTE - Countries wishing to do so may, however, use this standard in whole or in part for that purpose.

11.5 Electrical equipment is dealt with only as far as its selection and application in the installation are concerned.

This applies also to assemblies of electrical equipment complying with the relevant standards.

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CHAPTER 12: OBJECT  
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12.1 This standard contains the rules for the design and erection of electrical installations so as to provide safety and proper functioning for the use intended.

12.2 Chapter 13 of this standard states the fundamental principles. It does not include detailed technical requirements which may be subject to modifications on account of technical developments.

12.3 Parts 3 to 7 of this standard deal with technical requirements, the observance of which is intended to ensure that electrical installations conform to the fundamental principles of chapter 13.



## CHAPTER 13: FUNDAMENTAL PRINCIPLES

NOTE - Where countries not yet having national regulations for electrical installations deem it necessary to establish legal requirements for this purpose, it is recommended that such requirements be limited to fundamental principles which are not subject to frequent modification on account of technical development. The contents of chapter 13 may be used as a basis for such legislation.

## SECTION 131 – PROTECTION FOR SAFETY

## 131.1 General

The requirements stated in this section are intended to ensure the safety of persons, livestock and property against dangers and damage which may arise in the reasonable use of electrical installations.

NOTE – In electrical installations, two major types of risk exist:

- shock currents;
- excessive temperatures likely to cause burns, fires and other injurious effects.

## 131.2 Protection against electric shock

131.2.1 *Protection against direct contact*

Persons and livestock shall be protected against dangers that may arise from contact with live parts of the installation.

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This protection can be achieved by one of the following methods:

- preventing a current from passing through the body of any person or any livestock;
- limiting the current which can pass through a body to a value lower than the shock current.

131.2.2 *Protection against indirect contact*

Persons and livestock shall be protected against dangers that may arise from contact with exposed-conductive-parts in case of a fault.

This protection can be achieved by one of the following methods:

- preventing a fault current from passing through the body of any person or any livestock;
- limiting the fault current which can pass through a body to a value lower than the shock current;
- automatic disconnection of the supply in a determined time on the occurrence of a fault likely to cause a current to flow through a body in contact with exposed-conductive-parts, where the value of that current is equal to or greater than the shock current.

NOTE - In connection with the protection against indirect contact, the application of the method of equipotential bonding is one of the important principles for safety.