

SLOVENSKI STANDARD SIST HD 384.3 S2:2000

01-februar-2000

9`Y_lf] bY`]býhUW]'Y`n[fUXV`Ë' "XY`.`CWYbU'gd`cýb]\`_UfU_hYf]gh]_`f!97`*\$'*(Ë'.%-'z̃gdfYa Yb'YbL

Electrical installations of buildings -- Part 3: Assessment of general characteristics (IEC 60364–3:1993, modified)

Elektrische Anlagen von Gebäuden -- Teil 3: Bestimmungen allgemeiner Merkmale iTeh STANDARD PREVIEW

Installations électriques des bâtiments - Partie 3 Détermination des caractéristiques générales

SIST HD 384.3 S2:2000

Ta slovenski standard je istoveten z p 30/sist D 384.3 S2:1995

ICS:

91.140.50 Sistemi za oskrbo z elektriko Electricity supply systems

SIST HD 384.3 S2:2000 en

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST HD 384.3 S2:2000

https://standards.iteh.ai/catalog/standards/sist/d6aacba8-7c26-4763-b042-e78107c3f230/sist-hd-384-3-s2-2000

HARMONIZATION DOCUMENT DOCUMENT D'HARMONISATION **HARMONISIERUNGSDOKUMENT**

HD 384.3 S2

June 1995

ICS 91.140.50

Supersedes HD 384.3 S1:1985

Descriptors: Demand, diversity, systems, neutral, exposed conductive parts, supply, compatibility, maintainability, safety services

English version

Electrical installations of buildings Part 3: Assessment of general characteristics

(IEC 364-3:1993, modified)

Installations électriques des bâtiments Partie 3: Détermination des caractéristiques générales (CEI 364-3:1993, modifiée)

Elektrische Anlagen von Gebäuden Teil 3: Bestimmungen allgemeiner Merkmale (IEC 364-3:1993, modifiziert)

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST HD 384.3 S2:2000

https://standards.iteh.ai/catalog/standards/sist/d6aacba8-7c26-4763-b042-

e78107c3f230/sist-hd-

This Harmonization Document was approved by CENELEC on 1994-12-06. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for implementation of this Harmonization Document on a national level.

Up-to-date lists and bibliographical references concerning such national implementation 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, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Page 2 HD 384.3 S2:1995

Foreword

The text of the International Standard IEC 364-3:1993, prepared by IEC TC 64, Electrical installations of buildings, together with common modifications prepared by SC 64B, Protection against thermal effects, of Technical Committee CENELEC TC 64, was submitted to the formal vote and was approved by CENELEC as HD 384.3 S2 on 1994-12-06.

The following dates were fixed:

latest date by which the existence of the HD
 has to be announced at national level
 (do

(doa) 1995-06-01

 latest date by which the HD has to be implemented at national level by publication of a harmonized national standard or by endorsement

(dop) 1995-12-01

 latest date by which the national standards conflicting with the HD have to be withdrawn

(dow) 1995-12-01

For products which have complied with HD 384.3 S1:1985 before 1995-12-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2000-12-01.

Annexes designated "normative" are part of the body of the standard.

Annexes designated "informative" are given for information only.

In this standard, annexes C, D and ZA are normative and annexes A, B and ZB are informative.

Annexes ZA and ZB have been added by CENELEC.

s.iteh.ai/catalog/standards/sist/d6aacba8-7c26-4763-b042

e78107c3f230/sist-hd-384-3-s2-2000

Page 3 HD 384.3 S2:1995

Endorsement notice

The text of the International Standard IEC 364-3:1993 was approved by CENELEC as a Harmonization Document with agreed common modifications as given below.

COMMON MODIFICATIONS

3.2 Normative references

Replace the text of this subclause by:

NOTE: Normative references to international publications are listed in annex ZA (normative).

312 Types of distribution system

312.2.3 Replace the text of this subclause by:

312.2.3 IT system

The IT power system has all live parts isolated from earth or one point connected to earth through an impedance, the exposed-conductive parts of the electrical installation being either:

(Standards.iteh.ai)

- separately earthed;
- collectively earthed; SIST HD 384.3 S2:2000
- collectively a connected at outher searthing of 7 the 4 system (see HD 384.4.41, subclause 413.1 \cdot 5) 1.07 cs. 10.00 sixted at 1.00 si

313 Supplies

313.2 Put the last sentence of this subclause in a note.

32 Classification of external influences

Replace the title and text of this clause by "void" and move the text to annex ZB (informative).

Page 4 HD 384.3 S2:1995

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

This Harmonization Document incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this Harmonization Document only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE: When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
IEC 364-4-41	199211	Electrical installations of buildings Part 4: Protection for safety Chapter 41: Protection against electric shock		-
IEC 617-11	1983 i]	Graphical symbols for diagrams Part 11: Architectural and topographical installation plans and diagrams (Standards item a)	X	-
IEC 721-3-0	1984 https://	Classification of environmental conditions Part 3: Classification of groups of environmental parameters and their severities - introduction severities - introduction severities - 1000 sistend-384-3-s2-2000	EN 60721-3-0 ²⁾	1993
IEC 721-3-3	1987	Stationary use at weatherprotected locations	EN 60721-3-3 ³⁾	1993
IEC 721-3-4	1987	Stationary use at non-weatherprotected locations	EN 60721-3-44)	1993

¹⁾ IEC 364-4-41:1977 is harmonized as HD 384.4.41 S1:1980.

²⁾ EN 60721-3-0 includes A1:1987 to IEC 721-3-0.

³⁾ EN 60721-3-3 includes A1:1991 to IEC 721-3-3.

⁴⁾ EN 60721-3-4 includes A1:1991 to IEC 721-3-4.

Page 5 HD 384.3 S2:1995

Annex ZB (informativ)

Classification of external influences

NOTE: This annex is given for information: countries are free to introduce or not the classification in their national standards.

Insert the text of clause 32 of IEC 364-3:1993.

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST HD 384.3 S2:2000</u> https://standards.iteh.ai/catalog/standards/sist/d6aacba8-7c26-4763-b042-e78107c3f230/sist-hd-384-3-s2-2000

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST HD 384.3 S2:2000

https://standards.iteh.ai/catalog/standards/sist/d6aacba8-7c26-4763-b042-e78107c3f230/sist-hd-384-3-s2-2000

NORME INTERNATIONALE INTERNATIONAL STANDARD

CEI IEC 364-3

Deuxième édition Second edition 1993-03

Installations électriques des bâtiments

Troisième partie:

Détermination des caractéristiques générales

iTeh Electrical installations of buildings (standards.iteh.ai) Part 3:

Assessment of general characteristics

https://standards.iteh.ai/catalog/standards/sist/d6aacba8-7c26-4763-b042-e78107c3f230/sist-hd-384-3-s2-2000

© CEI 1993 Droits de reproduction réservés — Copyright – all rights reserved

Aucune partie de cette publication ne peut être reproduite ni utilisée sous quelque forme que ce soit et par aucun procédé, électronique ou mécanique, y compris la photocopie et les microfilms, sans l'accord écrit de l'éditeur.

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

Bureau Central de la Commission Electrotechnique Internationale 3, rue de Varembé Genève, Suisse



Commission Electrotechnique Internationale International Electrotechnical Commission Международная Электротехническая Комиссия CODE PRIX
PRICE CODE

Pour prix, voir catalogue en vigueur For price, see current catalogue

CONTENTS

		Page
FOR	REWORD	. 5
Clause	e	
3.1	General	. 7
3.2	Normative references	
31	Purposes, supplies and structure	. 9
	311 Maximum demand and diversity	
	312 Types of distribution system	
	314 Division of installation	
32	Classification of external influences	. 17
	321 Environments	. 19
	322 Utilization	. 35
-	323 Construction of buildings	
33	Compatibility iTeh STANDARD PREVIEW	39
34.	Maintainability (standards.iteh.ai)	39
35	Safety services SIST HD 384.3 S2:2000 Safety services SIST HD 384.3 S2:2000	
	107 - 107 -	. 39
100	352 Classification	
Appe	endices	
Α -	- Concise list of external influences	. 43
В -	- Interdependence of air temperature, relative air humidity and absolute air humidity	45
С -	- Classification of mechanical conditions	57
D -	- Classification of macro-environments	5 9

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTRICAL INSTALLATIONS OF BUILDINGS

Part 3: Assessment of general characteristics

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.

iTeh STANDARD PREVIEW

This standard has been prepared by IEC Technical Committee No. 64: Electrical installations of buildings. (standards.iteh.ai)

This second edition of this standard cancels and replaces IEC 364-3 (1977), IEC 364-3A (1979), IEC 364-3B (1980) and amendment No.d (1980) ba8-7c26-4763-b042-

e78107c3f230/sist-hd-384-3-s2-2000

This new edition includes the texts of the publications quoted below:

Six Months' Rule	Reports on Voting	IEC references
64(CO)35]	64(CO)43	
64(CO)39 }	64(CO)55 }	364-3 (1977)
64(CO)40	64(CO)56	
64(CO)84	64(CO)98	364-3 Amend. 1 (1980)
64(CO)66	64(CO)71	364-3A (1979)
64(CO)85	64(CO)99	364-3B (1980)

and the new text based on the following documents:

Six Months' Rule	Reports on Voting	
64(CO)194	64(CO)206	
64(CO)183	64(CO)224	

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

Appendices C and D are normative; appendices A and B are informative.

ELECTRICAL INSTALLATIONS OF BUILDINGS

Part 3: Assessment of general characteristics

3.1 General

An assessment shall be made of the following characteristics of the installation in accordance with the chapters indicated:

- the purposes for which the installation is intended to be used, its general structure and its supplies (31);
- the external influences to which it is to be exposed (32);
- the compatibility of its equipment (33);
- its maintainability (34).

Those characteristics shall be taken into account in the choice of methods of protection for safety (see part 4) and the selection and erection of equipment (see part 5).

NOTE - For telecommunications installations, account should be taken of any IEC standards and publications of the CCITT and the CCIR relevant to the type of installation concerned.

3.2 Normative referencesh STANDARD PREVIEW

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 364. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this part of IEC 364 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 364-4-41: (1992), Electrical installations of buildings - Part 4: Protection for safety - Chapter 41: Protection against electric shock.

IEC 617-11: (1983), Graphical symbols for diagrams – Part 11: Architectural and topographical installation plans and diagrams.

IEC 721-3-0: (1984), Classification of environmental conditions - Part 3: Classification of groups of environmental parameters and their severities. Introduction.

IEC 721-3-3: (1987), Classification of environmental conditions - Part 3: Classification of groups of environmental parameters and their severities. Stationary use at weatherprotected locations.

IEC 721-3-4: (1987), Classification of environmental conditions - Part 3: Classification of groups of environmental parameters and their severities. Stationary use at non-weatherprotected locations.

- 9 -

31 Purposes, supplies and structure

- 311 Maximum demand and diversity
- 311.1 For economic and reliable design of an installation within thermal and voltage drop limits, a determination of maximum demand is essential.

311.2 In determining the maximum demand of an installation or part thereof diversity may be taken into account.

NOTE - Guidance on the calculation of diversity is under consideration.

312 Types of distribution system

The following characteristics of the distribution system are to be assessed:

- types of systems of live conductors;
- types of system earthing.

312.1 Types of system of live conductors

The following systems of live conductors are taken into account in this standard:

A.C. systems

(standards.iteh.ai)

Single-phase 2-wire

2191 PID 384.3 S2:2000

Single-phase 3 wire standards.iteh.ai/3twire tandards/sist/d6aacba8-7c26-4763-b042-

e78107c3f230/sist-hd-384-3-s2-2000

Two-phase 3-wire

Two-phase 5-wire

Three-phase 3-wire

Three-phase 4-wire

312.2 Types of system earthing

The following types of system earthing are taken into account in this standard.

NOTES

1 Figures 31A to 31E, pages 11, 13 and 15, show examples of commonly used three-phase systems.