SLOVENSKI STANDARD
SIST HD 384.7.702 S1:2000

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Electrical installations of buildings - Part 7: Requirements for special installations and locations - Chapter 702: Swimming pools (IEC 60364-7-702:1983, modified)

Electrical installations of buildings -- Part 7: Requirements for special installations or locations -- Section 702: Swimming pools (IEC 60364-7-702:1983, modified)

Elektrische Anlagen von Gebäuden -- Teil 7: Bestimmungen für Betriebsstätten, Räume und Anlagen besonderer Art -- Hauptabschnitt 702: Orte mit Schwimmbecken

Installations électriques des bâtiments -- Partie 7: Règles pour les installations et emplacements spéciaux -- Section 702: Piscines

Ta slovenski standard je istoveten z: **HD 384.7.702 S1:1991**

ICS:

91.140.50	Sistemi za oskrbo z elektriko	Electricity supply systems
97.220.10	Športni objekti	Sports facilities

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HARMONIZATION DOCUMENT HD 384.7.702 S1

DOCUMENT D'HARMONISATION

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Descriptors: Electrical installation, swimming pool, basin, electric shock, SELV, residual current protective devices, isolating transformer

ENGLISH VERSION

ELECTRICAL INSTALLATIONS OF BUILDINGS
PART 7: REQUIREMENTS FOR SPECIAL INSTALLATIONS OR LOCATIONS
SECTION 702 - SWIMMING POOLS
(IEC 364-7-702:1983, modified)

Installations électriques
des bâtiments
Septième partie: Règles
pour les installations
et emplacements spéciaux
Section 702 - Piscines
(CEI 364-7-702:1983, modifiée)

Elektrische Anlagen von Gebäuden
Teil 7: Bestimmungen für
Betriebsstätten, Räume und
Anlagen besonderer Art
Hauptabschnitt 702 - Orte mit
Schwimmbecken
(IEC 364-7-702:1983, modifiziert)

This Harmonization Document was approved by CENELEC on 1990-03-05. 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 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

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Ref. No. HD 384.7.702 S1:1991 E

FOREWORD

The CENELEC questionnaire procedure, performed for finding out whether or not the International Standard IEC 364-7-702:1983 could be accepted without textual changes, has shown that some CENELEC common modifications were necessary for the acceptance as Harmonization Document.
The reference document, together with the common modifications prepared by the CENELEC Subcommittee SC 64A, Electrical installations of buildings: protection against electric shock, was submitted to the CENELEC members for formal vote.

The text of the draft was approved by all CENELEC members with the exception of Austria and Sweden as HD 384.7.702 S1 on 5 March 1990.

The following dates were fixed:

- latest date of announcement of the HD at national level (doa) 1990-09-01
- latest date of publication of a new harmonized national standard (dop) 1991-11-15
- latest date of withdrawal of conflicting national standards (dow) 1991-11-15

Annexes designated "informative" are given only for information.
In this standard, annex ZA is informative.

ENDORSEMENT NOTICE

The text of the International Standard IEC 364-7-702:1983 was approved by CENELEC as a Harmonization Document with agreed common modifications as given below.

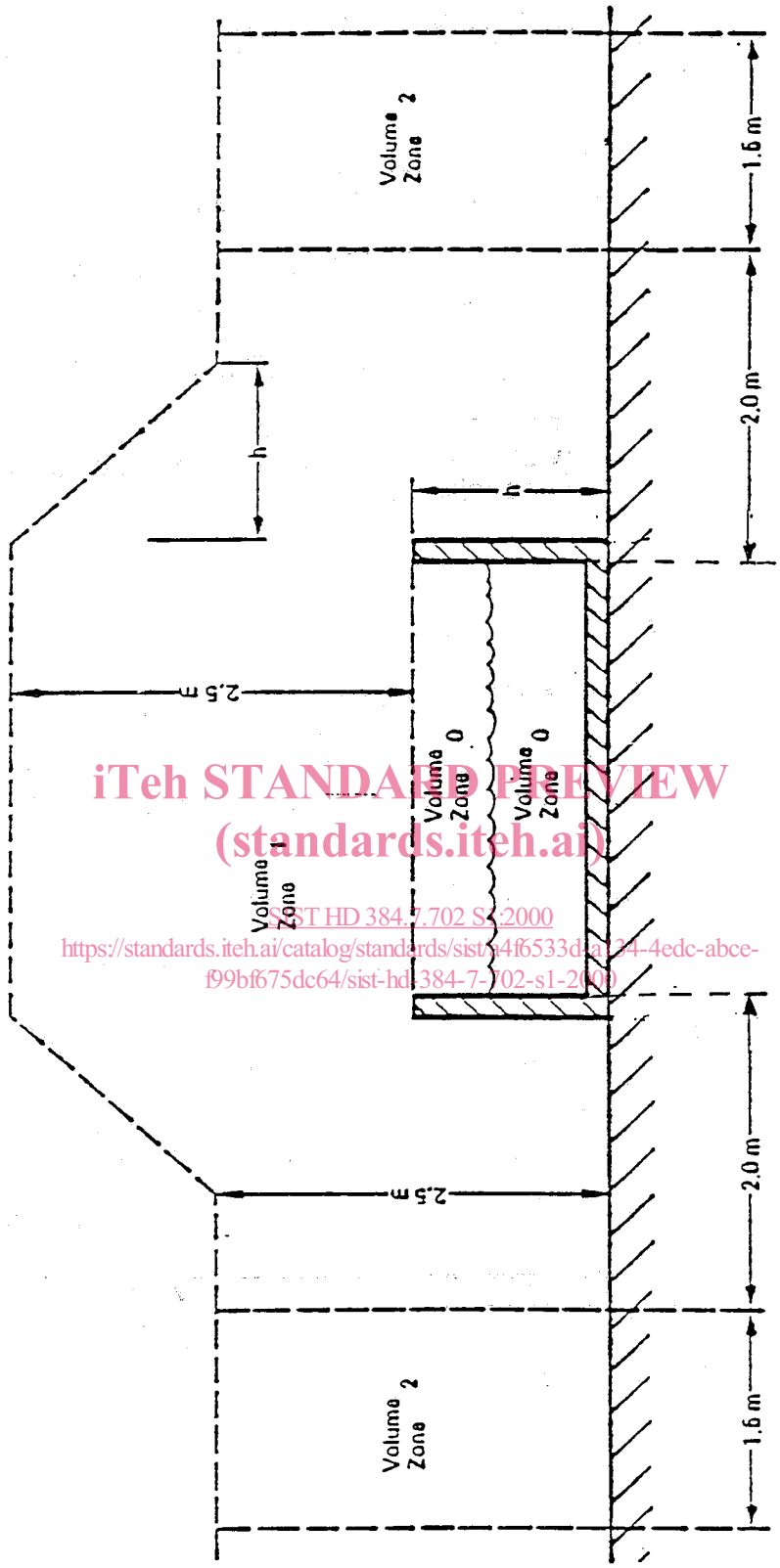
COMMON MODIFICATIONS

CLAUSE	COMMON MODIFICATION
702.32	The definition of Zone 0 is replaced by: " - Zone 0 is the interior of the basin and includes the portions of essential apertures in its walls or floor which are accessible to persons in the basin."
702.413.1.6	The following explanation is added: "For the purpose of this Section extraneous conductive parts include non-insulating floors."
702.471.0	The text of the clause is replaced by: "In Zones 0 and 1, only protection by SELV (Clause 411.1) at a nominal voltage not exceeding 12V a.c. or 30V d.c. is permitted, the safety source being installed external to Zones 0,1 and 2." (See however Sub-clause 702.53).

CLAUSE	COMMON MODIFICATION
702.512.2	The text of the clause is replaced by: "Electrical equipment shall have at least the following degrees of protection: - in Zone 0: IPX8 - in Zone 1: IPX5, or for small swimming pools inside buildings which normally are not cleaned by means of water jets, IPX4 - in Zone 2 : IPX2 for swimming pools indoors IPX4 for swimming pools outdoors IPX5 in case where water jets are likely to occur for cleaning purposes;
702.520.02	The text of the clause is replaced by: "In Zone 0 and 1 wiring systems shall not have any metallic sheath or metallic covering." in Zone 2 wiring systems shall not have accessible metallic covering."
702.53	The text of the clause is replaced by: "In Zones 0 and 1 no switchgear and accessory shall be installed, with the exception, for small swimming pools where it is not possible to locate socket-outlets outside Zone 1, socket outlets are permitted in Zone 1 only if they are installed outside arms reach (i.e. 1.25m) from the Zone 0 border and placed at least 0.3 m above the floor and: - either they are protected by a residual current protective device with a rated residual operating current $I_{\Delta n}$ not exceeding 30 mA; - or they are individually protected by electrical separation (see Clause 413.5), under the condition that the insulating transformer is placed outside Zones 0, 1 and 2

CLAUSE	COMMON MODIFICATIONS
	In Zone 2, socket-outlets, switches and accessories are permitted only if the are : - either supplied individually by an isolating transformer complying with Sub-clause 413.5.1, - or supplied by SELV (Clause 411.1) - or protected by a residual current protective device with a rated residual operating current $I_{\Delta n}$ not exceeding 30 mA
702.55	Other equipment The text of the clause is replaced by: "In Zone 0 and 1, only fixed appliances specially intended for use in swimming pools may be installed. In Zone 2, appliances may be: - either Class II, if they are luminaires - or Class I and protected by residual current devices having operating current $I_{\Delta n} \leq 30$ mA, - or supplied by an isolating transformer complying with the provision of Sub-clause 413.5.1. Heating units embedded in the floor and intended for heating the location may be installed in all Zones provided that they are covered by an earthed metallic grid or by an earthed metallic sheath connected to the equipotential bonding specified in Sub-clause 702.413.1.6."

Figure 702B is replaced by the following:



Note. — The dimensions are measured taking account of walls and fixed partitions.

FIG. 702B. — Zone dimensions for bodies above ground.

ANNEX ZA (informative)

National A-deviations

A-deviation: National deviation due to regulations, the alteration of which is for the time being outside the competence of the CENELEC member.

This Harmonization Document does not fall under any Directive of the EC. In the relevant CENELEC countries these A-deviations are valid instead of the provisions of the Harmonization Document until they have been removed.

Clause	National Deviation
The following deviations are all valid for BELGIUM	
702.32	(R.G.I.E. - A.R. 10.3.1981 - Article 90 - § 01) A different classification of zones applies.
702.413.1.6	(R.G.I.E. - A.R. 10.3.1981) Delete the common modification.
702.471.0	(R.G.I.E. - A.R. 10.3.1981 - Article 90 - § 02) For Zone 0, the maximum voltage prescribed for the "volume enveloppe" is 25 V instead of 12 V. The protection by automatic disconnection of supply by a residual current device is not permitted in Zone 1.
702.512.2	(R.G.I.E. - A.R. 10.3.1981 - Article 90 - § 12) Electrical equipment shall have at least the following degrees of protection according to the location in which it is placed. - in Zone 0 or at least in the bath: IPX7 or IPX8 according to need; - in Zone 1 or at least in the "volume enveloppe": IPX5; - in Zone 2: IPX5 in the "volume de protection"; IPX4 in the "volume de circulation"
702.53 and 702.55	(R.G.I.E. - A.R. 10.3.1981 - Article 90 - § 6 to 11) Totally different dispositions apply

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