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Low-voltage electrical installations –

Part 7-708:
Requirements for special installations or locations – Caravan parks, camping parks and similar locations

Installations électriques à basse tension –

Partie 7-708:
Exigences pour les installations ou emplacements particuliers – Parcs de caravanes, parcs de camping et emplacements analogues

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

LOW-VOLTAGE ELECTRICAL INSTALLATIONS –

Part 7-708: Requirements for special installations or locations – Caravan parks, camping parks and similar locations

FOREWORD

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International Standard IEC 60364-7-708 has been prepared by IEC technical committee 64: Electrical installations and protection against electric shock.

This second edition of IEC 60364-7-708 cancels and replaces the first edition, published in 1988, as well as its amendment 1 (1993). It constitutes a technical revision.

The main changes with respect to the previous edition concern:

- requirements for the electrical installation of caravans and motor caravans are now covered by Part 721;
- requirements of this part are aligned with those in other parts of IEC 60364;
- one 30 mA RCD now protects only one socket-outlet.

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

FDIS	Report on voting
64/1572/FDIS	64/1587/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.

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

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

Future standards in this series will carry the new general title as cited above. Titles of existing standards in this series will be updated at the time of the next edition.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

INTRODUCTION

The requirements of this part of IEC 60364 supplement, modify or replace certain of the general requirements contained in Parts 1 to 6 of IEC 60364.

The clause numbering appearing after 708 refers to the corresponding parts or clauses of IEC 60364, Parts 1 to 6. Numbering of clauses does not, therefore, necessarily follow sequentially. Numbering of figures and tables takes the number of this part followed by a sequential number.

The absence of reference to a part or a clause means that the general requirements contained in Parts 1 to 6 of IEC 60364 are applicable.

LOW-VOLTAGE ELECTRICAL INSTALLATIONS –

Part 7-708: Requirements for special installations or locations – Caravan parks, camping parks and similar locations

708 Caravan parks, camping parks and similar locations

708.1 Scope

The particular requirements contained in this part of IEC 60364 apply only to circuits intended to supply leisure accommodation vehicles, tents or residential park homes in caravan parks, camping parks and similar locations.

NOTE 1 For the purposes of this part of IEC 60364, "caravan park" from now on will understand "caravan park and camping park and similar locations".

The particular requirements do not apply to the internal electrical installations of leisure accommodation vehicles, mobile or transportable units or residential park homes.

NOTE 2 For electrical installations in leisure accommodation vehicles, see IEC 60364-7-721.

NOTE 3 The electrical installations of residential park homes should comply with the general requirements of IEC 60364, together with the relevant particular requirements of Part 7.

NOTE 4 Reference throughout this standard to other "Parts" refers to various parts in the IEC 60364 series.

For the remainder of the electrical installation of caravan parks, the general requirements of IEC 60364 together with the relevant particular requirements of Part 7 apply.

708.2 Normative references

The following referenced documents are indispensable for the application 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.

IEC 60038, *IEC standard voltages*

IEC 60309-2, *Plugs, socket-outlets and couplers for industrial purposes – Part 2: Dimensional interchangeability requirements for pin and contact-tubes accessories*

IEC 60364-4-43, *Electrical installations of building – Part 4-43: Protection for safety – Protection against overcurrent*

IEC 60364-7 (all parts), *Low-voltage electrical installations*

IEC 62262, *Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)*

708.3 Terms and definitions

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

708.3.1
leisure accommodation vehicle
unit of living accommodation for temporary or seasonal occupation that may meet the requirements for the construction and use of road vehicles

708.3.1.1
caravan
trailer leisure accommodation vehicle, used for touring, that meets the requirements for the construction and use of road vehicles

708.3.1.2
motor caravan
camping car
self-propelled leisure accommodation vehicle, used for touring, that meets the requirements for the construction and use of road vehicles

NOTE The motor caravan is either adapted from a series production vehicle, or designed and built on an existing chassis, with or without the driving cab, the accommodation being either fixed or demountable.

708.3.1.3
mobile home
transportable leisure accommodation vehicle that includes means for mobility but does not meet the requirements for the construction and use of road vehicles

708.3.2
caravan pitch
plot of ground intended to be occupied by a leisure accommodation vehicle

708.3.3
caravan park/camping park
area of land that contains two or more caravan pitches and/or tents

708.3.4
residential park home
factory-produced relocatable dwelling

708.30 Assessment of general characteristics

708.312 Types of distribution system

708.312.2 Types of system earthing

708.312.2.1 TN-systems

Add the following:

For a TN-system, the final circuit for the supply to a leisure accommodation vehicle, tent or residential park home shall not include a PEN conductor.

708.313 Supplies

708.313.1.2

Add the following:

The nominal supply system voltage shall be selected from IEC 60038.

The nominal supply voltage shall not exceed 230 V single-phase, or 400 V three-phase.

708.4 Protection for safety

708.41 Protection against electric shock

708.411.2 Requirements for basic protection

708.41.B.2 Obstacles

Protection by obstacles shall not be used.

708.41.B.3 Placing out of reach

Protection by placing out of reach shall not be used.

708.41.C.1 Non-conducting location

Protection by non-conducting location shall not be used.

NOTE This precludes the use of class 0 equipment.

708.41.C.2 Protection by earth-free local equipotential bonding

Protection by earth free local equipotential bonding shall not be used.

708.5 Selection and erection of electrical equipment

708.512 Operational conditions and external influences

708.512.2 External influences

Add the following:

NOTE In a caravan park or camping park, special consideration is given to the protection of people, due to the fact that the human body may be in contact with earth potential, to the protection of wiring due to tent pegs or ground anchors and to the movement of heavy or high vehicles.

708.512.2.1.1 Presence of water (AD)

In a caravan park, equipment shall be selected with a degree of protection of at least IPX4 in order to protect against water splashes (AD4).

708.512.2.1.2 Presence of solid foreign bodies (AE)

Equipment installed on a caravan pitch or a tent pitch shall be selected or provided with a degree of protection of at least IP4X in order to protect against the ingress of very small objects (AE3).

708.512.2.1.3 Impact (AG)

Equipment installed in a caravan park shall be protected against mechanical damage (impact of medium severity AG2). Protection of the equipment shall be afforded by one or more of the following:

– the position or location shall be selected to avoid damage by any reasonably foreseeable impact;

– local or general mechanical protection shall be provided;

– equipment shall be installed that complies with a minimum degree of protection against external mechanical impact of IK07 (see IEC 62262).

708.521 Types of wiring systems

708.521.7 Wiring systems in caravan parks

708.521.7.1 The following wiring systems are suitable for distribution circuits feeding caravan pitch or tent pitch electrical supply equipment:

a) underground cables;

b) overhead cables or overhead insulated conductors.

NOTE The preferred method of supply for feeding the caravan pitch or tent pitch electrical supply equipment is by means of underground distribution circuits.

708.521.7.2 Underground cables

An underground distribution circuit shall, unless provided with additional mechanical protection, be buried at a sufficient depth to avoid being damaged, e.g. by tent pegs or ground anchors or by the movement of vehicles.

NOTE 1 A depth of 0,5 m is generally considered as a minimum depth to fulfill this requirement. Alternatively the cable may be installed outside the pitch or other area where tent pegs or ground anchors may be driven.

NOTE 2 For conduit systems buried underground, see IEC 61386-24.

708.521.7.3 Overhead cables or overhead insulated conductors

Every overhead conductor shall be insulated.

Poles and other supports for overhead wiring shall be located or protected so that they are unlikely to be damaged by any foreseeable movement of vehicles.

Every overhead conductor shall be at a height above ground of not less than 6 m in all areas subject to the movement of vehicles and 3,5 m in all other areas.

708.53.1 Devices for fault protection by automatic disconnection of supply

708.531.2 Residual current protective devices (RCDs)

Add the following:

Every socket-outlet shall be individually protected by an RCD having a rated residual operating current not exceeding 30 mA. Devices selected shall disconnect all poles, including the neutral.

A final circuit intended for the fixed connection for a supply to a mobile home or a residential park home shall be individually protected by an RCD having a rated residual operating current not exceeding 30 mA. Devices selected shall disconnect all poles, including the neutral.

708.533 Devices for protection against overcurrent

In addition the following applies:

Every socket-outlet shall be individually protected by an overcurrent protective device, in accordance with the requirements of IEC 60364-4-43.