

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Low-voltage electrical installations –
Part 7-713: Requirements for special installations or locations – Furniture**

**Installations électriques basse tension –
Partie 7-713: Exigences pour les installations et emplacements spéciaux –
Mobilier**



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IEC Central Office
3, rue de Varembe
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
Fax: +41 22 919 03 00
info@iec.ch
www.iec.ch

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

LOW-VOLTAGE ELECTRICAL INSTALLATIONS –**Part 7-713: Requirements for special installations or locations –
Furniture**

FOREWORD

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International Standard IEC 60364-7-713 has been prepared by IEC technical committee 64: Electrical installations and protection against electric shock.

This second edition cancels and replaces the first edition, published in 1996, and constitutes a technical revision.

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

- a new introduction added in accordance with the new standard Parts 700 introduction;
- changes to the scope have been made. The requirements of Part 7-713 now apply to electrical equipment of furniture connected to a supply with a nominal voltage U_0 not exceeding 230 V and a total load current not exceeding 32 A;
- the previous edition only covered single phase 16 A supplies; this new edition covers three-phase 32 A supplies;

- this new edition makes reference to Part 4-41 additional protection and requires that the fixed circuit is protected by an RCD with a rated residual operating current not exceeding 30 mA;
- IEC cable standards have been updated;
- requirements covered by the general rules, e.g. luminaire requirements, have been removed.

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

FDIS	Report on voting
64/1873/FDIS	64/1880/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, 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 A lists all of the "in-some-country" clauses on differing practices of a less permanent nature relating to the subject of this standard.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website 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

For the purpose of this part (IEC 60364-7-713), the requirements of the general parts 1 to 6 of IEC 60364 apply.

The IEC 60364-7-7XX parts of IEC 60364 contain particular requirements for special installations or locations which are based on the requirements of the general parts of IEC 60364 (IEC 60364-1 to IEC 60364-6). These IEC 60364-7-7XX parts are considered in conjunction with the requirements of the general parts.

The particular requirements of this part of IEC 60364 supplement, modify or replace certain of the requirements of the general parts of IEC 60364 being valid at the time of publication of this part. The absence of reference to a part or a clause of a general part means that the corresponding clauses of the currently valid general part are applicable (undated reference).

Requirements of other 7XX parts being relevant for installations covered by this part also apply. This part may therefore also supplement, modify or replace certain of these requirements valid at the time of its publication.

The clause numbering of this part follows the pattern and corresponding references of IEC 60364. The numbers following the particular number of this part are those of the corresponding parts, or clauses of the other parts of the IEC 60364 series, valid at the time of publication of this part, as indicated in the normative references of this document (dated reference).

If requirements or explanations additional to those of the other parts of the IEC 60364 series are needed, the numbering of such items appears as 713.101, 713.102, 713.103 etc.

NOTE In the case where new or amended general parts with modified numbering were published after this part was issued, the clause numbers referring to a general part in this 713 part may no longer align with the latest edition of the general part. Dated references should therefore be observed.

LOW-VOLTAGE ELECTRICAL INSTALLATIONS –

Part 7-713: Requirements for special installations or locations – Furniture

713 Furniture

713.1 Scope

The particular requirements of this part of IEC 60364 apply to the wiring system of furniture (and similar fitments) which is connected to the electrical installation.

Examples are beds, cupboards, desks and shop display cases, in which electrical equipment such as luminaires, installation couplers according to IEC 61535, socket-outlets, switching devices and wiring systems are installed.

The requirements of this part apply to all kinds of furniture, regardless of the connection to the electrical installation of the building, as long as the furniture together with its electrical installation is not the subject of another IEC publication.

The requirements of this part apply to electrical equipment of furniture connected to a supply with a nominal voltage U_0 not exceeding 230 V and a total load current not exceeding 32 A.

These requirements do not apply to electrical appliances and equipment specifically designed for installation in furniture and which are the subject of other IEC standards, for example radios, TV receivers, refrigerators and laboratory tables, installed in the furniture and ready for connection to the electrical installations of buildings via plugs and socket-outlets. For special locations, other specific requirements may apply, for example see IEC 60364-7-701.

713.2 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 60227-3, *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V – Part 3: Non-sheathed cables for fixed wiring*

IEC 60227-5, *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V – Part 5: Flexible cables (cords)*

IEC 60245-1, *Rubber insulated cables – Rated voltages up to and including 450/750 V – Part 1: General requirements*

IEC 60245-4, *Rubber insulated cables – Rated voltages up to and including 450/750 V – Part 4: Cords and flexible cables*

IEC 60670-1, *Boxes and enclosures for electrical accessories for household and similar fixed electrical installations – Part 1: General requirements*

IEC 61535, *Installation couplers intended for permanent connection in fixed installations*

IEC 62440, *Electric cables with a rated voltage not exceeding 450/750 V – Guide to use*

713.3 Terms and definitions

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

713.3.1 furniture

movable or immovable articles such as desks, chairs, tables and work benches, cupboards, shelves and beds which are used for activities associated with work or leisure

713.41 Protection for safety – Protection against electric shock

713.415 Additional protection

713.415.1 Additional protection: residual current protective devices (RCDs)

713.415.1.1

Add the following:

The electrical installation of the furniture shall be protected by an RCD with a rated residual operating current not exceeding 30 mA.

713.52 Selection and erection of electrical equipment – Wiring systems

Add the following:

713.522.116 Selection of wiring system

The wiring system for connecting furniture to the electrical installation shall be:

- rigid cable according to IEC 60227-3 or IEC 60245-1, if connected by permanent connection or installation coupler, as applicable; or of ordinary or heavy class of duty according to IEC 62440;
- rubber-insulated flexible cables and cords according to IEC 60245-4 or PVC-insulated flexible cables to IEC 60227-5 of ordinary or heavy class of duty according to IEC 62440, if connected by means of a plug and socket-outlet or by an installation coupler according to IEC 61535, as applicable.

Furniture intended to be moved shall be wired using flexible cables or cords according to IEC 60245-4 or IEC 60227-5.

Cables and cords shall be suitably protected against damage. They shall be securely fixed to the furniture or located in cable ducting, cable trunking, conduit, articulated systems for cable guiding, or a channel specially formed during the construction of the furniture.

713.55 Selection and erection of electrical equipment – Other equipment

Add the following:

713.553.101 Selection of accessories

Flush mounted boxes shall fulfil the requirements for hollow wall boxes according to IEC 60670-1.

Surface mounted boxes shall comply with IEC 60670-1.