

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Low-voltage electrical installations –
Part 7-722: Requirements for special installations or locations – Supplies for
electric vehicles**

**Installations électriques à basse tension –
Partie 7-722: Exigences pour les installations et emplacements spéciaux –
Alimentation des véhicules électriques**





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INTERNATIONAL ELECTROTECHNICAL COMMISSION

LOW-VOLTAGE ELECTRICAL INSTALLATIONS –**Part 7-722: Requirements for special installations or locations –
Supplies for electric vehicles**

FOREWORD

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International Standard IEC 60364-7-722 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 2015. This edition constitutes a technical revision.

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

- a) introduction of requirements for electrical installations incorporating wireless power transfer systems;
- b) clarification of the requirements regarding the protective measure placing out of reach in order to allow the use of pantographs in areas accessible to the public;
- c) introduction of requirements covering the case where the EV may operate as a source in parallel with other sources.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
64/2285/FDIS	64/2318/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 60364 series, published 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 document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

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- withdrawn,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

INTRODUCTION

For the purpose of this part of IEC 60364 (IEC 60364-7-722) 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 the exclusion of a part or a clause of a general part means that the corresponding clauses of the 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 publication of this part.

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 722.101, 722.102, 722.103, etc.

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 Part 722 may no longer align with the latest edition of the general part. Dated references should be observed.

LOW-VOLTAGE ELECTRICAL INSTALLATIONS –

Part 7-722: Requirements for special installations or locations – Supplies for electric vehicles

722 Supplies for electric vehicles

722.1 Scope

The particular requirements of this document apply to

- circuits intended to supply energy to electric vehicles, and
- circuits intended for feeding back electricity from electric vehicles.

Circuits covered by this document are terminated at the connecting point.

NOTE 1 The requirements for EV supply equipment for conductive charging and the relevant charging modes are described in IEC 61851 (all parts). The requirements for EV supply equipment for wireless power transfer are described in IEC 61980 (all parts).

NOTE 2 This document does not cover the assessment of the risk of explosion due to the possible production of hydrogen/other flammable gases during the battery recharging phase.

722.2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 60269 (all parts), *Low voltage fuses*

IEC 60309-1:1999, *Plugs, socket-outlets and couplers for industrial purposes – Part 1: General requirements*

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

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

IEC 60364-4-41:2005, *Low-voltage electrical installations – Part 4-41: Protection for safety – Protection against electric shock*
IEC 60364-4-41:2005/AMD1:2017

IEC 60364-8-2, *Low-voltage electrical installations – Part 8-2: Prosumer's low-voltage electrical installations*¹

IEC 60898 (all parts), *Electrical accessories – Circuit-breakers for overcurrent protection for household and similar installations*

IEC 60947-2, *Low-voltage switchgear and controlgear – Part 2: Circuit-breakers*

¹ Under preparation. Stage at the time of publication IEC RFDIS 60364-8-2:2018.