
**Electrically propelled road vehicles —
Safety specifications —**

**Part 2:
Vehicle operational safety**

*Véhicules routiers électriques — Spécifications de sécurité —
Partie 2: Sécurité fonctionnelle du véhicule*





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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 37, *Electrically propelled vehicles*.

This third edition cancels and replaces the second edition (ISO 6469-2:2009), which has been technically revised. The main changes compared to the previous edition are as follows:

- clarification of the single-point failure definition and related measures;
- improvement of the operational safety requirements for the driving-enabled mode;
- elimination of marking requirements;
- clear requirements for connection of the vehicle to an external electric power supply;
- simplification of EMC requirements.

Electrically propelled road vehicles — Safety specifications —

Part 2: Vehicle operational safety

1 Scope

This document specifies requirements for operational safety specific to electrically propelled road vehicles, for the protection of persons inside and outside the vehicle.

NOTE 1 Relevant requirements for motorcycles and mopeds are described in ISO 13063.

This document does not provide comprehensive safety information for manufacturing, maintenance and repair personnel.

This document does not consider specific aspects of driving automation features.

NOTE 2 For definition of the term “driving automation features”, see SAE J3016.

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.

ISO 11451 (all parts), *Road vehicles — Vehicle test methods for electrical disturbances from narrowband radiated electromagnetic energy*

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

3.1 auxiliary electric system

vehicle system, other than for vehicle propulsion, that operates on electric energy

3.2 case A

connection of an *EV* (3.7) to the supply network with a plug and cable permanently attached to the EV

3.3 case B

connection of an *EV* (3.7) to the a.c. supply network with a cable assembly detachable at both ends