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

**Part 1:
On-board rechargeable energy storage
system (RESS)**

Véhicules routiers électriques — Spécifications de sécurité —

*Partie 1: Système de stockage de l'énergie rechargeable à bord du
véhicule (RESS)*



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Contents

Page

Foreword.....	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions.....	1
4 Environmental and operating conditions.....	3
5 Marking	3
6 Requirements for RESS	4
6.1 Isolation resistance of the RESS.....	4
6.2 Clearance and creepage distance.....	6
6.3 Requirements for the emission of hazardous gases and other hazardous substances.....	7
6.4 Heat generation from the RESS	7
7 RESS over-current interruption.....	7
8 Specific RESS crash-test requirements	7
8.1 Protection of occupants.....	7
8.2 Protection of a third party.....	8
8.3 Protection against a short-circuit.....	8
Bibliography	9

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 6469-1 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 21, *Electrically propelled road vehicles*.

This second edition cancels and replaces the first edition (ISO 6469-1:2001), which has been technically revised.

ISO 6469 consists of the following parts, under the general title *Electrically propelled road vehicles — Safety specifications*:

- *Part 1: On-board rechargeable energy storage system (RESS)*
- *Part 2: Vehicle operational safety means and protection against failures*
- *Part 3: Protection of persons against electric shock*

Electrically propelled road vehicles — Safety specifications —

Part 1:

On-board rechargeable energy storage system (RESS)

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1 Scope

This part of ISO 6469 specifies requirements for the on-board rechargeable energy storage systems (RESS) of electrically propelled road vehicles, including battery-electric vehicles (BEVs), fuel-cell vehicles (FCVs) and hybrid electric vehicles (HEVs), for the protection of persons inside and outside the vehicle and the vehicle environment. Flywheels are not included in the scope of this part of ISO 6469.

This part of ISO 6469 does not apply to RESS in motorcycles and vehicles not primarily intended as road vehicles, such as material handling trucks or fork-lift trucks.

This part of ISO 6469 applies only to RESS in on-board voltage class B (see 3.18) electric circuits for vehicle propulsion.

This part of ISO 6469 does not provide comprehensive safety information for manufacturing, maintenance and repair personnel.

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.

ISO 6469-3, *Electric road vehicles — Safety specifications — Part 3: Protection of persons against electric shock*

ISO 7010, *Graphical symbols — Safety colours and safety signs — Safety signs used in workplaces and public areas*

ISO 20653, *Road vehicles — Degrees of protection (IP-Code) — Protection of electrical equipment against foreign objects, water and access*

3 Terms and definitions

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