
**Electrically propelled mopeds and
motorcycles — Safety specifications —**

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

*Cyclomoteurs et motocycles à propulsion électrique — Spécifications
de sécurité —*

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



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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).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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For an explanation of 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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 38, *Motorcycles and mopeds*.

This first edition of ISO 13063-1, together with ISO 13063-2 and ISO 13063-3, cancels and replaces ISO 13063:2012, which has been technically revised.

The main changes are as follows:

- splitting the document into three documents which consist of the following parts, under the general title *Electrically propelled mopeds and motorcycles — Safety specifications*:
 - *Part 1: On-board rechargeable energy storage system (RESS)*;
 - *Part 2: Vehicle operational safety*;
 - *Part 3: Electrical safety*;
- requirements for lithium-ion batteries refer to ISO 18243;
- requirements for the connector of the removable RESS are provided.

A list of all parts in the ISO 13063 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Electrically propelled mopeds and motorcycles — Safety specifications —

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

1 Scope

This document specifies safety requirements for rechargeable energy storage systems (RESS) of electrically propelled mopeds and motorcycles for the protection of persons.

It does not provide the comprehensive safety information for the manufacturing, maintenance and repair personnel.

NOTE Additional safety requirements can apply for RESS that can be recharged by means different from supplying electric energy (e.g. redox flow battery).

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 13063-3: 2022, *Electrically propelled mopeds and motorcycles — Safety specifications— Part 3: Electrical safety*

ISO 18243, *Electrically propelled mopeds and motorcycles — Test specifications and safety requirements for lithium-ion battery systems*

3 Terms and definitions

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

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

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

3.1

clearance

shortest distance in air between two *conductive parts* (3.2)

[SOURCE: IEC 60050-426:2020, 426-04-12]

3.2

conductive part

part which can carry electric current

[SOURCE: IEC 60050-195:2021, 195-01-06]