## INTERNATIONAL STANDARD

ISO 13063-2

First edition 2022-07

# Electrically propelled mopeds and motorcycles — Safety specifications —

Part 2: **Vehicle operational safety** 

Cyclomoteurs et motocycles à propulsion électrique — 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 <a href="www.iso.org/directives">www.iso.org/directives</a>).

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 <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

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

This first edition of ISO 13063-2, together with ISO 13063-1 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;
- improvement of the operational safety requirements for the driving-enabled mode;
- addition of the requirement for vehicles with a permanently connected recharge cable according to case A of IEC 61851-1;
- alignment with ISO 6469-2.

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 <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>

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

## Part 2:

## Vehicle operational safety

## 1 Scope

This document specifies requirements for operational safety means and protection against failures related to hazards specific to any kind of electrically propelled mopeds and motorcycles when used in normal conditions.

It is applicable only if the maximum working voltage of the on-board electrical circuit does not exceed 1 000 V alternating current (a.c.) or 1 500 V direct current (d.c.).

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 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 terminology databases for use in standardization at the following addresses:

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

#### 3.1

### driving-enabled mode

operating mode in which the vehicle can be moved by its own propulsion system (3.13) by one action

Note 1 to entry: Examples for this action are: rev up the throttle grip, activation of an equivalent control, release of the brake system.

[SOURCE: ISO 6469-2:2022, 3.5, modified — Note 1 to entry modified.]