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International Standard

ISO/FDIS 18243

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

Cyclomoteurs et motocycles à propulsion électrique — Spécifications d'essai et exigences de sécurité pour les systèmes de batterie au lithium-ion

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Foreword

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

This second edition cancels and replaces the first edition (ISO 18243:2017), which has been technically revised. It also incorporates the Amendment(s) ISO 18243:2017/Amd 1:2020.

The main changes are as follows:

— new safety requirement of undertemperature condition;

— new safety requirement of overcurrent protection;

— alignment with ISO 6469-1 and ISO 12405-4.

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Introduction

Lithium-ion based battery systems are an efficient alternative energy storage system for electrically propelled mopeds and motorcycles. The requirements for lithium-ion based battery systems to be used as power source for the propulsion of electrically propelled mopeds and motorcycles are significantly different to those batteries used for consumer electronics or stationary usage.

This document provides specific test procedures for lithium-ion battery packs and systems specifically developed for propulsion of mopeds and motorcycles. This document specifies such tests and related requirements to ensure that a battery pack or system is able to meet the specific needs of the mopeds and motorcycles industry.

It enables mopeds and motorcycles manufacturers to choose test procedures to evaluate the characteristics of a battery pack or system for their specific requirements.