**CPR183/F15**

**KENYA BUREAU OF STANDARDS**

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| **Document Type:** | **Adoption proposal** | |
| **Dates:** | Circulation date | Closing date |
| 2022-10-18 | 2022-11-18 |
| **TC Secretary** | **This form shall be filled, signed and returned to Kenya Bureau of Standards for the attention of Robert Njoroge (njoroger@kebs.org)** | |

The Kenya Bureau of Standards intends to adopt the International Standards listed below.

We are therefore seeking views from potential users in respect of the same. The Standards are available at the Kenya Bureau of Standards Information Resource Centre. Please tick and fill your preference of the listed option in the attached table against each of the standards.

Where the option is that the adoption is not acceptable, you **MUST** give a reason(s) and recommendation(s).

**NOTE 1:** Absence of any reply or comments shall be deemed to be an acceptance of the proposal for adoption and **shall constitute an approval vote**.

1. **Number**: ISO 21782-1:2019

**Title**: Electrically propelled road vehicles — Test specification for electric propulsion components — Part 1: General test conditions and definitions, First Edition

**Scope**: This document specifies the test procedures for performance and operating load for voltage class B electric propulsion components (motor, inverter, DC/DC converter) and their combinations (motor system) of electrically propelled road vehicles.

This document specifies the terms and definitions used in the ISO 21782 series and general test conditions.

<https://www.iso.org/standard/72335.html>

1. **Number**: ISO 21782-2:2019

**Title**: Electrically propelled road vehicles — Test specification for electric propulsion components — Part 2: Performance testing of the motor system, First Edition

**Scope**: This document specifies the performance tests for the motor system designed as a voltage class B electric propulsion system for electrically propelled road vehicles.

<https://www.iso.org/standard/72336.html>

1. **Number**: ISO 21782-3:2019

**Title**: Electrically propelled road vehicles — Test specification for electric propulsion components — Part 3: Performance testing of the motor and the inverter, First Edition

**Scope**: This document specifies performance tests for the motor and the inverter designed as a voltage class B electric propulsion system for electrically propelled road vehicles.

<https://www.iso.org/standard/72337.html>

1. **Number**: ISO 21782-4:2021

**Title**: Electrically propelled road vehicles — Test specification for electric propulsion components — Part 4: Performance testing of the DC/DC converter, First Edition

**Scope**: This document specifies performance tests and each evaluation for the DC/DC converter in the voltage class B electric propulsion system of electrically propelled road vehicles.

<https://www.iso.org/standard/76870.html>

1. **Number**: ISO 21782-5:2021

**Title**: Electrically propelled road vehicles — Test specification for electric propulsion components — Part 5: Operating load testing of the motor system, First Edition

**Scope**: This document specifies operating load tests and test criteria for the motor system designed as a voltage class B electric propulsion system for electrically propelled road vehicles.

<https://www.iso.org/standard/76873.html>

1. **Number**: ISO 21782-6:2019

**Title**: Electrically propelled road vehicles — Test specification for electric propulsion components — Part 6: Operating load testing of motor and inverter, First Edition

**Scope**: This document specifies operating load tests and test criteria for motor and inverter designed as a voltage class B electric propulsion system for electrically propelled road vehicles.

<https://www.iso.org/standard/72338.html>

1. **Number**: ISO 21782-7:2021

**Title**: Electrically propelled road vehicles — Test specification for electric propulsion components — Part 7: Operating load testing of the DC/DC converter, First Edition

**Scope**: This document specifies the operating load test and test criteria for the DC/DC converter designed as a voltage class B electric propulsion system of electrically propelled road vehicles.

<https://www.iso.org/standard/76874.html>

1. **Number**: ISO 23828:2022

**Title**: Fuel cell road vehicles — Energy consumption measurement — Vehicles fuelled with compressed hydrogen, First Edition

**Scope**: This document specifies the procedures for measuring the energy consumption and driving range of fuel cell passenger cars and light-duty trucks that use compressed hydrogen.

<https://www.iso.org/standard/78416.html>

1. **Number**: ISO 21498-1:2021

**Title**: Electrically propelled road vehicles — Electrical specifications and tests for voltage class B systems and components — Part 1: Voltage sub-classes and characteristics, First Edition

**Scope**: This document applies to voltage class B electric propulsion systems and connected auxiliary electric systems of electrically propelled road vehicles. Additionally, it applies to electric circuits and components in these systems. This document provides specifications of voltage sub-classes related to DC electric circuits. It also provides specifications of characteristics which are relevant for design and operation of systems and components for the voltage sub-classes.

<https://www.iso.org/standard/78209.html>

1. **Number**: ISO 21498-2:2021

**Title**: Electrically propelled road vehicles — Electrical specifications and tests for voltage class B systems and components — Part 2: Electrical tests for components, First Edition

**Scope**: This document applies to voltage class B electric propulsion systems and connected auxiliary electric systems of electrically propelled road vehicles. It applies to electric circuits and components in these systems.

This document focuses on the characteristics at the DC voltage class B terminals of these components as specified in ISO 21498-1. It describes testing methods, test conditions and test requirements for components exposed to electrical behaviour caused by operation of electric loads and power sources.

<https://www.iso.org/standard/78210.html>

1. **Number**: ISO 20762:2018

**Title**: Electrically propelled road vehicles — Determination of power for propulsion of hybrid electric vehicle, First Edition

**Scope**: This document specifies measurement methods for the maximum system propulsion power of hybrid-electric vehicles (HEV).The results can be compared with the data of internal combustion engine vehicles (ICEV) power measured with the relevant current method.NOTE ISO 1585 and UN Regulation No. 85, for example.

This document applies only to the vehicles with the following characteristics:

— HEVs with an internal combustion engine (ICE) and one or more electric motors powered by one or more rechargeable energy storage systems (RESS) for propulsion;

— vehicles classified as passenger cars or light duty trucks.

<https://www.iso.org/standard/68993.html>

1. **Number**: ISO/TS 19466:2017

**Title**: Electrically propelled mopeds and motorcycles — Test method for evaluating performance of regenerative braking systems, First Edition

**Scope**: ISO/TS 19466:2017 specifies test procedures for measuring performance of regenerative braking systems used for electric motorcycles and mopeds that are propelled by traction motors with electric batteries. Performance of regenerative braking systems is dealt with two perspectives: first, how much a regenerative braking system can extend range of a motorcycle or moped or reduce energy consumption, and second, the efficiency of the driving motor system when working as generator in regenerative braking mode.

<https://www.iso.org/standard/71552.html>

1. **Number**: ISO 18246:2015

**Title**: Electrically propelled mopeds and motorcycles — Safety requirements for conductive connection to an external electric power supply, First Edition

**Scope** ISO 18246:2015 specifies safety requirements for conductive connection to an external electric power supply of electrically propelled mopeds and motorcycles. It is not applicable to vehicles not in normal conditions, such as damaged vehicles and vehicles which have mechanical and/or electrical failure. It applies only to on-board charging systems between the plug or vehicle couplers and RESS circuits. The safety requirements for vehicles not connected to external power supply are specified in ISO 13063.

<https://www.iso.org/standard/61859.html>

1. **Number**: ISO 23280:2022

**Title**: Electrically propelled mopeds and motorcycles — Test method for evaluation of energy performance using motor dynamometer, First Edition

**Scope**: This document specifies a test method to evaluate energy performance of electric motorcycles and mopeds by measuring performance of a test motor system (3.4) to be installed to an electric moped or motorcycle under consideration. The test is carried out on a motor dynamometer test bench where the traction motor system is connected to a load motor system (3.3) that simulates resistance torque arising from running resistance of vehicle and drive train friction loss and inertia effect. This method provides estimates of specific energy consumption and range of an electric moped or motorcycle to which the traction motor system is intended to be applied. This document is only applicable to two-wheeled motorcycles and mopeds.

<https://www.iso.org/standard/75120.html>

**ADOPTION PROPOSAL**

| **S/No.** | **Standard Number** | **Adoption acceptable as presented** | **Adoption proposal not acceptable** | **Reason why adoption proposal not acceptable** | **Proposed Change/recommendation(s)** |
| --- | --- | --- | --- | --- | --- |
|  | ISO 21782-1:2019 |  |  |  |  |
|  | ISO 21782-2:2019 |  |  |  |  |
|  | ISO 21782-3:2019 |  |  |  |  |
|  | ISO 21782-4:2019 |  |  |  |  |
|  | ISO 21782-5:2019 |  |  |  |  |
|  | ISO 21782-6:2019 |  |  |  |  |
|  | ISO 21782-7:2019 |  |  |  |  |
|  | ISO 23828:2022 |  |  |  |  |
|  | ISO 21498-1:2021 |  |  |  |  |
|  | ISO 21498-2:2021 |  |  |  |  |
|  | ISO 20762:2018 |  |  |  |  |
|  | ISO/TS 19466:2017 |  |  |  |  |
|  | ISO 18246:2015 |  |  |  |  |
|  | ISO 23280:2022 |  |  |  |  |

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| Name and (of respondent) |  | Position |  |
| Signature |  |  |  |

On behalf of: (Name of organization)

Date (& stamp):