SLOVENSKI STANDARD
kSIST FprEN 17128:2020

Lahka motorna vozila za prevoz ljudi in blaga ter s tem povezanih naprav in za katere ni potrebna homologacija za uporabo na cesti - Lahka osebna električna vozila (PLEV) - Varnostne zahteve in preskusne metode

Light motorized vehicles for the transportation of persons and goods and related facilities and not subject to type-approval for on-road use - Personal light electric vehicles (PLEV) - Safety requirements and test methods

Motorisierte (ride-on) Fahrzeuge ohne Zulassung für den öffentlichen Straßenverkehr, bestimmt für den Transport von Personen und Gütern - Side-by-Side-Fahrzeuge - Sicherheitstechnische Anforderungen und Prüfverfahren

Véhicules motorisés légers non soumis à la réception par type pour le transport de personnes, de marchandises ainsi que d’autres équipements - Véhicules tout terrain (VTT - Quads) et véhicules côte à côte - Exigences de sécurité et méthodes d’essai

Ta slovenski standard je istoveten z: **EN 17128:2020**

ICS:

43.120	Električna cestna vozila	Electric road vehicles

kSIST FprEN 17128:2020 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

FINAL DRAFT
FprEN 17128

October 2018

ICS 43.120

English Version

Light motorized vehicles for the transportation of persons and goods and related facilities and not subject to type-approval for on-road use - Personal light electric vehicles (PLEV) - Safety requirements and test methods

Véhicules légers motorisés non soumis à réception pour le transport de personnes, de marchandises ainsi que les installations d'utilisation - Véhicules électriques personnels légers (PLEV) - Exigences de sécurité et méthodes d'essai

Nicht-Typ zugelassene leicht motorisierte Fahrzeuge für den Transport von Personen und Gütern und damit verbundene Einrichtungen - Persönliche leichte Elektrofahrzeuge (PLEV) - Sicherheitstechnische Anforderungen und Prüfverfahren

This draft European Standard is submitted to CEN members for formal vote. It has been drawn up by the Technical Committee CEN/TC 354.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

This draft European Standard was established by CEN in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. FprEN 17128:2018 E

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European foreword

This document (FprEN 17128:2018) has been prepared by Technical Committee CEN/TC 354 “Light motorized vehicles for the transportation of persons and goods and related facilities and not subject to type-approval for on-road use”, the secretariat of which is held by AFNOR.

This document is currently submitted to the formal vote.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directives 2006/42/EC and 2014/30/EU.

For relationship with EU Directives 2006/42/EC and 2014/30/EU, and the standardization requests see informative Annexes ZA and ZB, which are an integral part of this document.

Introduction

This European Standard has been developed in response to an increased demand throughout Europe for light electrically powered vehicles of a type which are excluded from the scope of Regulation (EU) No 168/2013.

This has created the possibility to initiate a European standardization work for personal light electric vehicles. Such standardization will help manufacturers to ensure that safe products are put into the European market, will give to testing institutes common guidelines to assess the products, will initiate confidence to users and also be useful to convince member states to apply harmonized rules for the use of these vehicles with the aim decrease uncertainty due to different national regulation.

This European Standard will not deal with topics like comfort of the user, quality of the product or ergonomic issues unless there is an impact on the safety of the user.

This document is a type-C standard as stated in EN ISO 12100.

This document is of relevance, in particular, for the following stakeholder groups representing the market players with regard to machinery safety:

— machine manufacturers (small, medium and large enterprises);

— health and safety bodies (regulators, accident prevention organizations, market surveillance etc.)

Others can be affected by the level of machinery safety achieved with the means of the document by the above-mentioned stakeholder groups:

— machine users/employers (small, medium and large enterprises);

— machine users/employees (e.g. trade unions, organizations for people with special needs);

— service providers, e.g. for maintenance (small, medium and large enterprises);

— consumers (in case of machinery intended for use by consumers).

The above-mentioned stakeholder groups have been given the possibility to participate at the drafting process of this document.

The machinery concerned and the extent to which hazards, hazardous situations or hazardous events are covered are indicated in the Scope of this document.

When requirements of this type-C standard are different from those which are stated in type-A or type-B standards, the requirements of this type-C standard take precedence over the requirements of the other standards for machines that have been designed and built according to the requirements of this type-C standard.

1 Scope

This document applies to personal light electric vehicles totally or partially electrically powered from self-contained power sources with or without self-balancing system, with exception of vehicles intended for hire from unattended station.

This document applies to personal light electric vehicles with or without self-balancing system totally or partially electrically powered from self-contained power sources having battery voltages up to 100VDC, with or without an integrated battery charger with up to a 240VAC input and specifies safety requirements, test methods, marking and information relating to personal light electric vehicles to reduce the risk of injuries to both third parties and the user during intended use, i.e. when used as intended and under conditions of misuse that are reasonably foreseeable by the manufacturer.

This document does not apply to:

— vehicles that are considered as toys;

— vehicles without self-balancing system with a seat;

— vehicles intended for competition;

— electrically powered assisted cycle (EPAC);

— vehicles and/or devices intend for use for medical care;

— electric vehicles having a maximum speed above 25 Km/h;

— vehicles having a rated voltage of more than 100VDC or 240VAC;

— vehicles without an on-board driving operator.

NOTE 1 EN ISO 13482 gives the requirements for vehicles without on-board driving operator.

NOTE 2 see D.2.

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.

EN 22248, *Packaging - Complete, filled transport packages - Vertical impact test by dropping (ISO 2248:1985)*

EN 55012, *Vehicles, boats and internal combustion engines - Radio disturbance characteristics - Limits and methods of measurement for the protection of off-board receivers (CISPR 12)*

EN 55025, *Vehicles, boats and internal combustion engines — Radio disturbance characteristics — Limits and methods of measurement for the protection of on-board receivers (CISPR 25)*

EN 60068-2-64, *Environmental testing - Part 2-64: Tests - Test Fh: Vibration, broadband random and guidance (IEC 60068-2-64)*

EN 60068-2-75, *Environmental testing - Part 2-75: Tests - Test Eh: Hammer tests (IEC 60068-2-75)*

EN 60335-1:2012, *Household and similar electrical appliances - Safety - Part 1: General requirements (IEC 60335-1:2010)*

EN 60335-2-29, *Household and similar electrical appliances - Safety - Part 2-29: Particular requirements for battery chargers (IEC 60335-2-29)*

HD 60364-5-52:2011, *Low-voltage electrical installations - Part 5-52: Selection and erection of electrical equipment - Wiring systems (IEC 60364-5-52:2009, modified)*

EN 60529:1991, *Degrees of protection provided by enclosures (IP Code) (IEC 60529:1989)*

EN 61000-4-2, *Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test (IEC 61000-4-2)*

EN 61000-6-1, *Electromagnetic compatibility (EMC) - Part 6-1: Generic standards - Immunity for residential, commercial and light-industrial environments (IEC 61000-6-1)*

EN 61000-6-3, *Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments (IEC 61000-6-3)*

EN 61140, *Protection against electric shock — Common aspects for installation and equipment (IEC 61140)*

EN 61851 (all parts), *Electric vehicle conductive charging system (IEC 61851)*

EN ISO 12100:2010, *Safety of machinery - General principles for design - Risk assessment and risk reduction (ISO 12100:2010)*

EN 60204-1, *Safety of machinery - Electrical equipment of machines - Part 1: General requirements (IEC 60204-1)*

EN 62133 (all parts), *Secondary cells and batteries containing alkaline or other non-acid electrolytes — Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications (IEC 62133)*

ISO 6742-1, *Cycles — Lighting and retro-reflective devices — Part 1: Lighting and light signalling devices*

ISO 6742-2, *Cycles — Lighting and retro-reflective devices — Part 2: Retro-reflective devices*

ISO 14878, *Cycles — Audible warning devices — Technical specification and test methods*

EN 50272 (all parts), *Safety requirements for secondary batteries and battery installations*

ISO 11452-1, *Road vehicles — Component test methods for electrical disturbances from narrowband radiated electromagnetic energy — Part 1: General principles and terminology*

ISO 11452-2, *Road vehicles — Component test methods for electrical disturbances from narrowband radiated electromagnetic energy — Part 2: Absorber-lined shielded enclosure*

ISO 11452-3, *Road vehicles — Component test methods for electrical disturbances from narrowband radiated electromagnetic energy — Part 3: Transverse electromagnetic (TEM) cell*

ISO 11452-4, *Road vehicles — Component test methods for electrical disturbances from narrowband radiated electromagnetic energy — Part 4: Harness excitation methods*