# **Electrically propelled road vehicles - Terminology**

Electrically propelled road vehicles - Terminology



## EESTI STANDARDI EESSÕNA

## **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 13447:2001 sisaldab Euroopa standardi EN 13447:2001 ingliskeelset teksti.

Käesolev dokument on jõustatud 19.12.2001 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 13447:2001 consists of the English text of the European standard EN 13447:2001.

This document is endorsed on 19.12.2001 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

#### Käsitlusala:

This standard gives definitions used in European standards for electrically propelled road vehicles. It is not intended to give definitions of all terms concerning these vehicles, but to permit a good understanding of the content of standards dealing with electrically propelled road vehicles.

## Scope:

This standard gives definitions used in European standards for electrically propelled road vehicles. It is not intended to give definitions of all terms concerning these vehicles, but to permit a good understanding of the content of standards dealing with electrically propelled road vehicles.

**ICS** 01.040.43, 43.120

**Võtmesõnad:** batteries, definition, definitions, electromobiles, road vehicles, subsystems, terminology, types, vocabulary

## EUROPEAN STANDARD NORME EUROPÉENNE

## **EN 13447**

# EUROPÄISCHE NORM

April 2001

ICS 01.040.43; 43.120

#### English version

## Electrically propelled road vehicles - Terminology

Véhicules routiers à propulsion électrique - Terminologie

Elektrisch angetriebene Straßenfahrzeuge - Terminologie

This European Standard was approved by CEN on 8 March 2001.

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. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

This European Standard exists 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

## **Contents**

_		
Forew	vord	
1	Scope	
2	Normative references	4
3	Terms and definitions at the vehicle's level	
3.1	Electrically propelled road vehicle	
3.2	Types of electrically propelled road vehicles	
3.3	Driving modes	
3.4	Road operating abilities of an electrically propelled road vehicle	
3.5	Energy performances of the vehicle	7
3.6	Pollutant emissions of a thermal electric hybrid vehicle in hybrid mode	
3.7	Other definitions for electrically propelled road vehicles	
4	Sub-systems of the vehicle	
4.1	Power circuit	
4.2	Drive direction selector	
4.3	Auxiliary electrical functions	
4.4	Auxiliary network / Auxiliary electrical circuit	
4.5	Ancilliary function	
4.6	Electric power control	
4.7	Electric drive train	
4.8	Transmission	
4.9	Energy transmission	10
4.10	Electric power train	
4.11	Electric traction system	
4.12	On board energy source	
4.13	On board primary electric energy sourceOn board secondary electric energy source	
4.14 4.15	On board secondary electric energy source  Opening parts	
4.15 4.16	Connecting elements	
5 - 1	Definitions about battery and its environment	
5.1 5.2	CellBattery module	
5.2 5.3	Battery module	
5.3 5.4	Battery	
_		
6	General definitions applied to electrically propelled road vehicles	
6.1	Conductive part	
6.2	Live parts	
6.3	Exposed conductive part	
6.4 6.5	Electrical circuit	
6.6	Nominal voltage of an electrical system	
6.7	Working voltage of an electrical system	
6.8	Direct contact	
6.9	Indirect contact	
6.10	Basic insulation	
6.11	Supplementary insulation	
6.12	Double insulation	
6.13	Reinforced insulation	
6.14	Protection degrees	
6.15	Class I equipment	
6.16	Class II equipment	
	betical index	
•		
Diblia	paranhy	10

Page

## **Foreword**

This European Standard has been prepared by Technical Committee CEN/TC 301 "Electrically propelled road vehicles", the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2001, and conflicting national standards shall be withdrawn at the latest by October 2001.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following is the property of the propert countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

## 1 Scope

This standard gives definitions used in European standards for electrically propelled road vehicles. It is not intented to give definitions of all terms concerning these vehicles, but to permit a good understanding of the content of standards dealing with electrically propelled road vehicles.

## 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 1821-1:1996	Electrically propelled road vehicles - Measurement of road operating ability - Part 1 : Pure electric vehicles.
EN 1821-2:1999	Ellectrically propelled road vehicles - Measurement of road operating ability - Part 2 : Thermal electric hybrid vehicles.
EN 1986-1:1997	Electrically propelled road vehicles - Measurement of energy performances - Part 1 : Pure electric vehicles.
EN 1986-2:2001	Electrically propelled road vehicles - Measurement of energy performances - Part 2 : Thermal electric hybrid vehicles.
EN 60529	Degrees of protection provided by enclosures (IP Code) (IEC 60529:1989).
ISO 1176	Road vehicles - Masses - Vocabulary and codes.
IEV	International Electrotechnical Vocabulary.

## 3 Terms and definitions at the vehicle's level

## 3.1 Electrically propelled road vehicle

road vehicle in which electric energy is transformed by electrical machine(s) into mechanical energy for traction purposes

NOTE Traction is the term used with the same meaning as propulsion, but for historical reasons, this is the most widely used term.

## 3.2 Types of electrically propelled road vehicles

#### 3.2.1

## electrically supplied road vehicle

road vehicle which is supplied by electric energy as an external energy input for traction purpose

It comprises two families:

 first family: infrastructure independent (i.e. autonomous) when driving. This road vehicle has an on board secondary electric energy source for traction purposes which is recharged / replaced periodically;

NOTE Replacement / fuel refil of an on board primary electric energy source is not regarded as an electric energy supply.