

**Elektrilise ajamiga maantesõidukid.  
Energeetiliste tööparameetrite  
mõõtmine. Osa 1: Elektrisõidukid**

Electrically propelled road vehicles - Measurement  
of energy performances - Part 1: Pure electric  
vehicles

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1986-1:2000 sisaldab Euroopa standardi EN 1986-1:1997 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 11.01.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1986-1:2000 consists of the English text of the European standard EN 1986-1:1997.</p> <p>This document is endorsed on 11.01.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b></p> <p>Käesolev standard määrab kindlaks (ainult elektri jõul töötavate) elektrilise ajamiga maanteesõidukite energiatarbe määra mõõtmisprotseduuri. Käesolev standard kehtib M1, M2, N1 kategooria sõidukite ning kolme- ja neljarattaliste mootorratta tüüpi N2 kategooria sõidukite kohta. Standard ei kehti maanteesõidukitele, mis on kombineeritud elektrilise või osalise elektrilise ajamiga.</p>	<p><b>Scope:</b></p>
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ICS 43.120

**Võtmesõnad:** elektrisõidukid, energiatarve, maanteesõidukid, mõõtmine, testimine, testimistingimused, töötamise kestus

ICS 43.120

Descriptors: Road vehicles, electric vehicles, energy consumption, testing.

**English version**

**Electrically propelled road vehicles**

Testing of energy performance

Part 1: Pure electric vehicles

Véhicules routiers à propulsion électrique – Mesurage de la performance énergétique – Partie 1: Véhicules électriques purs

Elektrisch angetriebene Straßenfahrzeuge – Meßverfahren für Energieausnutzung – Teil 1: Reine Elektrofahrzeuge

This European Standard was approved by CEN on 1997-06-28.

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

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**CEN**

European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

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## 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 January 1998, and conflicting national standards shall be withdrawn at the latest by January 1998.

The European Standard EN 1986 consists of the following parts under the general title "Electrically road vehicles - Measurement of energy performances" :

- Part 1 : Pure electric vehicles ;
- Part 2 : Thermal electric hybrid vehicles ;
- Part 3 : Other electric hybrid vehicles than those fitted with a thermal machine.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following 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 specifies the procedure to apply in order to measure the range and the consumption of the electrically propelled road vehicles (pure electric vehicles).

This standard applies to the categories of vehicles M<sub>1</sub>, M<sub>2</sub>, N<sub>1</sub> and N<sub>2</sub> <sup>1)</sup> motor tricycles and quadricycles <sup>2)</sup> from the motorcycles type.

This standard does not apply to electric hybrid or partially electrically propelled road vehicles.

NOTE : An electrically propelled road vehicle is also named an electric vehicle.

## 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.

EN 1821-1	1996	Electrically propelled road vehicles - Measurement of road operating ability - Part 1: Pure electric vehicles.
IEC 687	1992	Alternating current static watt-hour meters for active energy (classes 0,2 S and 0,5 S).

## 3 Definitions

For the purposes of this standard, the following definitions apply:

### 3.1 energy consumption

The quantity of active energy from the mains, divided by the test distance travelled, that the vehicle uses after driving one of the two proposed test sequences (see 4.1), from a fully charged battery, expressed in watthours per kilometre.

### 3.2 range

Distance covered in kilometres by an electric vehicle over the test sequence n°2 from a fully charged battery (see 7.1.3 in EN 1821-1:1996) to the end of test criteria.

<sup>1)</sup> Categories of vehicles M<sub>1</sub>, M<sub>2</sub>, N<sub>1</sub> and N<sub>2</sub>, are defined in Directive 92/53/EEC.

<sup>2)</sup> Motor tricycles and quadricycles are defined in Directive 92/61/EEC.