

# JIS

JAPANESE  
INDUSTRIAL  
STANDARD

Translated and Published by  
Japanese Standards Association

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JIS D 1301 : 2001

**Electric vehicle—  
Measurement for driving range  
and energy consumption**

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ICS 43.120

**Descriptors** : road vehicles, electrically-operated devices, electricity supply meters,  
electricity consumption

**Reference number** : JIS D 1301 : 2001 (E)

## Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law.

At the establishment, **ISO/DIS 8714 : 2000** *Electric road vehicles—Reference energy consumption and range—Test procedures for passenger cars and light commercial vehicles* was used as the basis for conformity of Japanese Industrial Standard with International Standard.

Date of Establishment: 2001-04-20

Date of Public Notice in Official Gazette: 2001-04-20

Investigated by: Japanese Industrial Standards Committee  
Divisional Council on Aircraft and  
Automobiles

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JIS D 1301 : 2001, First English edition published in 2001-11

Translated and published by: Japanese Standards Association  
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In the event of any doubts arising as to the contents,  
the original JIS is to be the final authority.

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Printed in Japan

# Electric vehicle—Measurement for driving range and energy consumption

**Introduction** This Japanese Industrial Standard has been prepared based on **ISO/DIS 8714 : 2000** *Electric road vehicles—Reference energy consumption and range—Test procedures for passenger cars and light commercial vehicles* but modifying the technical contents.

The portions with sidelines or dotted underlines are the matters that the contents of the original International Standard are modified. The deviations is listed in Annex 1 together with details.

**1 Scope** This Japanese Industrial Standard specifies the test procedures to obtain the driving range and energy consumption of electric vehicles (excluding motorcycles and mopeds employing an electric motor as the prime mover) which utilize only an on-board battery (hereafter referred to as “traction battery”) as the power supply and have a gross vehicle mass not exceeding 3 500 kg.

Remarks : The International Standard corresponding to this Standard is given below.

In addition, abbreviations which denote the degree of correspondence in the contents between the relevant International Standard and **JIS** are **IDT** (identical), **MOD** (modified) and **NEQ** (not equivalent) according to **ISO/IEC Guide 21**.

ISO/DIS 8714 : 2000 *Electric road vehicles—Reference energy consumption and range—Test procedures for passenger cars and light commercial vehicles* (MOD)

**2 Normative references** The following standards contain provisions which, through reference in this Standard, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS C 1211 *Alternating-current watt-hour meters (for direct connection)*

JIS D 1010 *General rules of running test method of automobiles*

JIS D 1012 *Automobiles—Rate of fuel consumption test methods*

**3 Test vehicle and traction battery** The test vehicle (vehicle under test) and the traction battery shall be under the conditions stated below.

- a) The battery specified by the vehicle manufacturers shall be used as the traction battery, and it shall be properly managed.
- b) The vehicle shall have been run by 300 km or more with the traction battery being on-board. The break-in distance shall be recorded on Attached Table 5.
- c) The vehicle and battery shall previously be checked and maintained based on the specification of the vehicle manufacturer.
- d) The mass of test vehicle shall be such a mass that two persons (mass of one person is 55 kg) ride or the goods of 110 kg are loaded on the unladen vehicle specified in **JIS D 1010** (hereafter referred to as “test vehicle mass”).