

# JIS

JAPANESE  
INDUSTRIAL  
STANDARD

Translated and Published by  
Japanese Standards Association

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**JIS E 4014** : 2012

(JARI/JSA)

**Rolling stock — Test methods for  
insulation resistance and withstand  
voltage**

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ICS 45.060.01

Reference number : JIS E 4014 : 2012 (E)

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E 4014 : 2012

Date of Establishment: 1989-12-25

Date of Revision: 2012-03-28

Date of Public Notice in Official Gazette: 2012-03-28

Investigated by: Japanese Industrial Standards Committee  
Standards Board

Technical Committee on Railways and Rolling Stock

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JIS E 4014 : 2012, First English edition published in 2012-09

Translated and published by: Japanese Standards Association  
4-1-24, Akasaka, Minato-ku, Tokyo, 107-8440 JAPAN

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Printed in Japan

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## Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Land, Infrastructure, Transport and Tourism through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by Japan Association of Rolling Industries (JARI)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently **JIS E 4014:2007** is replaced with this Standard.

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# Rolling stock — Test methods for insulation resistance and withstand voltage

## Introduction

This Japanese Industrial Standard was established in 1989, and has been revised once up to now. Although the previous revision was made in 2007, this Standard is again revised in order to reflect the revised publication of the closely related standard.

No corresponding International Standard has been established at this point.

## 1 Scope

This Standard specifies the test methods for the insulation resistance test and the withstand voltage test (hereafter generically referred to as the “tests”) of newly constructed rolling stock. It is not applicable to the tests for individual devices or parts.

The rolling stock covered by this Standard are those for Shinkansen railway, railway other than Shinkansen (hereafter referred to as the “ordinary railway”), and those for special railway [e.g. trolley bus system, funicular railway, levitated railway, straddled-type monorail, suspended-type monorail and guide-way type new transit system <sup>1)</sup>].

Note <sup>1)</sup> The guide-way type new transit system means, for example, vehicle with rubber-tired wheels running on specified guide-way.

## 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. For standards with the year indication, only the editions of the indicated year shall be applied and the revisions (including amendments) made thereafter shall not be applied. For those without the indication of the year, the most recent edition (including amendments) shall be applied.

JIS C 1102-2 *Direct acting indicating analogue electrical measuring instruments and their accessories — Part 2 : Special requirements for ammeters and voltmeters*

NOTE : Corresponding International Standard : IEC 60051-2 : 1984 *Direct acting indicating analogue electrical measuring instruments and their accessories — Part 2 : Special requirements for ammeters and voltmeters* (IDT)

JIS C 1302 *Insulation resistance testers*

NOTE : Corresponding International Standard : IEC 61557-1 : 2007 *Electrical safety in low voltage distribution systems up to 1 000V a.c. and 1 500 V d.c. — Equipment for testing, measuring or monitoring of protective measures — Part 1 : General requirements* (MOD) and IEC 61557-2 : 2007 *Electrical safety in low voltage distribution systems up to 1 000V*