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Mita Avanti, 3-11-28, Mita, Minato-ku, Tokyo, 108-0073 JAPAN

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Foreword

This Japanese Industrial Standard has been revised by the Minister of Economy, Trade and Industry based on the provision of Article 14, paragraph (1) of the Industrial Standardization Act applied mutatis mutandis pursuant to the provision of Article 16 of the said Act in response to a proposal for revision of Japanese Industrial Standard with a draft being attached, submitted by Japanese Standards Association (JSA), an accredited standards development organization. This edition replaces the previous edition (**JIS C 1302 : 2018**), which has been technically revised.

However, **JIS C 1302 : 2018** may be applied in the **JIS** mark certification based on the relevant provisions of Article 30, paragraph (1), etc. of the Industrial Standardization Act until 19 November 2026.

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Insulation resistance testers

Introduction

This Japanese Industrial Standard has been prepared based on **IEC 61557-1 : 2019, Edition 3**, and its Amendment 1 : 2024, as well as **IEC 61557-2 : 2019, Edition 3**, with some modifications of the technical contents. The amendment to the said International Standard has been incorporated into this Standard.

The vertical lines on both sides and dotted underlines indicate changes from the corresponding International Standards. A list of modifications with the explanations is given in Annex JA.

1 Scope

This Standard specifies requirements for portable insulation resistance testers of built-in battery type with rated output voltages of up to 1 000 V, which are used for the following a) to e).

- a) Insulation measurement of low-voltage distribution circuits The insulation measurement of circuits and equipment in distribution systems up to 1 000 V AC and 1 500 V DC, which are disconnected from the power source.
- b) Insulation measurement of equipment, appliances, components, etc.

NOTE 1 Photovoltaic arrays that are not in a power generating state are categorized as appliances or components.

- c) Insulation measurement of high-voltage facilities
- d) Insulation measurement of photovoltaic arrays in a power generating state by short-circuiting P-N terminals
- e) Insulation measurement of photovoltaic arrays in a power generating state without short-circuiting P-N terminals

NOTE 2 The International Standards corresponding to this Standard and the symbol of degree of correspondence are as follows.

IEC 61557-1 : 2019 *Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. — Equipment for testing, measuring or monitoring of protective measures — Part 1: General requirements + Amendment 1 : 2024*

IEC 61557-2 : 2019 *Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. — Equipment for testing, measuring or monitoring of protective measures — Part 2: Insulation resistance (overall evaluation: MOD)*

In addition, symbols 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 21-1.