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**Electric vehicle—Electric motors—
Test method of maximum power**

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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 according to the proposal of establishing a Japanese Industrial Standard from Japan Automobile Research Institute (JARI) (adopting the Standard, **JEVS E702 : 2002**), with a draft of Industrial Standard based on the provision of Article 12 Clause 1 of the Industrial Standardization Law. Attention is drawn to the possibility that some parts of this Standard may conflict with a patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have technical properties. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying the patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have the said technical properties.

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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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Electric vehicle—Electric motors— Test method of maximum power

1 Scope This Japanese Industrial Standard specifies the test method of the maximum power of the electric vehicle in a state that the electric motor and the controller are combined.

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 B 7411 *Solid-stem general purpose liquid-in-glass thermometers*

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

JIS C 1102-3 *Direct acting indicating analogue electrical measuring instruments and their accessories Part 3 : Special requirements for wattmeters and varmeters*

JIS C 4034-1 *Rotating electrical machines Part 1 : Rating and performance*

JIS D 0112 *Glossary of terms relating to electric vehicles (Vehicles)*

JIS D 0113 *Glossary of terms relating to electric vehicles (Batteries)*

3 Definitions For the purposes of this Standard, the definitions given in **JIS D 0112** and **JIS D 0113** apply.

4 Testing equipment

4.1 Test specimens of electric motor and controller, prepared by carrying out the maintenance according to the specified procedure and carrying out sufficient running-in.

4.2 Auxiliary equipment of electric motor and controller as given in the following:

- a) cooling equipment;
- b) lubricating equipment;
- c) sensors (for temperature, rotational speed, etc.);
- d) others.

4.3 Transmission The motor shall be tested without a transmission. However, in the case of the electric motor impossible to operate in a state where transmission is separated by reason of the construction of vehicle or in the case of the electric motor difficult to connect directly to the power absorption equipment, the transmission may be equipped.

In this case, **1 (5)** in attached table 1 shall be filled out under the condition that the transmission gear ratio and transmission efficiency are clear.