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व्यापक परिचालन में मसौदा

प्रलेख प्रेषण सूचना

Ref	Date
टीईडी 27/ टी-12	29 08 2018

विद्युत एवं हाइब्रिड वाहन विषय समिति, टीईडी 27

- क) परिवहन इंजीनियरिंग विभाग परिषद |पंडविप| के सभी सदस्यों को
- ख) विद्युत एवं हाइब्रिड वाहन विषय समिति, टीईडी 27, के सभी सदस्यों को
- ग) अन्य सभी रूचि रखने वाले निकाय

महोदय/ महोदया,

निम्नलिखित प्रलेख संलग्न हैं:

प्रलेख संख्या	विषय
TED 27 (13050) W	विद्युत नोदित सडक वाहन — बाहरी विद्युत पॉवर आपूर्ति से कनेक्शन — सुरक्षा अपेक्षाएँ (ISO 17409:2015 का अभिन्न अभिग्रहण)

कृपया उपरोक्त मानक मसौदे का अवलोकन कर अपनी सम्मतियां यह बताते हुए भेजें, कि यदि अंततः यह मानक राष्ट्रीय मानक के रूप में स्वीकृत हो जाए, तो इस पर अमल करने में आपके व्यवसाय अथवा कारोबार में क्या कठिनाइयां आ सकती है ।

सम्मति की अन्तिम तिथि : 29 10 2018

सम्मति यदि कोई हो तो नीचे दिए गए प्रारूप में लिख कर, उपरिलिखित पते पर अधोहस्ताक्षरी को भेजें ।

यदि कोई सम्मति प्राप्त नहीं होती है अथवा सम्मति में केवल भाषा संबन्धी त्रुटि हुई तो उपरोक्त प्रलेख को यथावत अंतिम रूप दिया जायेगा । यदि कोई सम्मति तकनीकी प्रकृति

की हुई तो विषय समिति के अध्यक्ष के परामर्श से अथवा उनकी इच्छा पर आगे की कार्यवाही के लिए विषय समिति को भेजे जाने के बाद प्रलेख को अंतिम रूप दे दिया जाएगा ।

यह प्रलेख भारतीय मानक ब्यूरो की वैबसाइट www@bis.org.in पर भी उपलब्ध है ।

धन्यवाद

भवदीय

(आर आर सिंह)

वैज्ञानिक ई एवं प्रमुख
परिवहन इंजिनियरिंग विभाग

संलग्न: उपरिलिखित

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DRAFT IN WIDE CIRCULATION

DOCUMENT DESPATCH ADVICE

Ref	Date
TED 27/ T-12	29 08 2018

Electric and Hybrid Vehicles Sectional Committee, TED 27

- 1) All Members of Transport Engineering Division Council, TEDC
- 2) All Members of Electric and Hybrid Vehicles Sectional Committee, TED 27
- 3) All Others Interested.

Dear Sir/ Madam,

Please find enclosed the following draft standard:

Document No.	Title
TED 27 (13050) W	Electricity propelled road vehicles — Connection to an external electric power supply — Safety requirements (Identical adoption of ISO 17409:2015)

Kindly examine this draft standard and forward your views stating any difficulty which you are likely to experience in your business or profession, if this is finally adopted as National Standard.

Last date for comments : **29 10 2018**

Comments, if any, may please be made in the format given below and mailed to the undersigned at the above address.

In case no comments are received or comments received are of editorial nature, you will kindly permit us to presume your approval for the above document as finalized. However, in case of comments of technical in nature are received then it may be finalized either in consultation with the Chairman, Sectional Committee or referred to the sectional committee for further necessary action if so desired by the Chairman, Sectional Committee.

The document is also hosted on BIS website www.bis.org.in

Thanking you,

Yours faithfully,

(R R Singh)

Scientist 'E' & Head

Transport Engineering Department

Encl: As above

FORMAT FOR SENDING COMMENTS ON BIS DOCUMENTS

(Please use A4 size sheet of paper only and type within fields indicated. Comments on each clauses/sub-clauses/table/fig. etc be started on a fresh box. Information in Column 4 should include reasons for the comments and suggestions for modified wording of the clauses when the existing text is found not acceptable. Adherence to this format facilitates Secretariat's work)

Doc. No.: _____ TITLE: _____

LAST DATE OF COMMENTS: _____

NAME OF THE COMMENTATOR/ ORGANIZATION: _____

Sl. No.	Clause/ Sub-clause/ para/ table/ fig. No. commented	Type of Comments (General/ Editorial/ Technical)	Justification	Proposed change

For Comments only

Draft Indian Standard

Electrically propelled road vehicles — Connection to an external electric power supply — Safety requirements

ICS 43.120

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**Last date for receipt
of comments is 29 10 2018**

Electric and Hybrid Vehicles Sectional Committee, TED 27

NATIONAL FOREWORD

This draft Indian Standard which is identical with ISO 17409:2015 ‘Electrically propelled road vehicles — Connection to an external electric power supply — Safety requirements’ issued by the International Organization for Standardization (ISO) shall be adopted by the Bureau of Indian Standards on the recommendation of the Electric and Hybrid Vehicles Sectional Committee and approval of the Transport Engineering Division Council.

The text of ISO Standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words ‘International Standard’ appear referring to this standard, they should be read as ‘Indian Standard’.
- b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appear to the following International Standard for which Indian Standard also exists. The corresponding Indian Standard which is to be substituted in its place is listed below along with its degree of equivalence for the edition indicated:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
ISO 13849-1 Safety of machinery — Safety-related parts of control systems — Part 1: General principles of design	MED 40 (11996)/ ISO 13849-1 Safety of machinery — Safety-related parts of control systems — Part 1: General principles of design <i>(under preparation)</i>	Identical
ISO 13849-2 Safety of machinery — Safety-related	MED 40 (11997)/ ISO 13849-2 Safety of machinery — Safety-	Identical

parts of control systems — Part 2: Validation	related parts of control systems — Part 2: Validation (<i>under preparation</i>)	
ISO 26262 (all parts) Road vehicles — Functional Safety	TED 11 (10624-27, 10629, 10657-10661)/ ISO 26262 (all parts) Road vehicles — Functional Safety (<i>under preparation</i>)	Identical
IEC 60309-1 Plugs, socket-outlets and couplers for industrial purposes — Part 1: General requirements	IS/ IEC 60309 (Part 1):2002/ IEC 60309-1:1999 Plugs, socket-outlets and couplers for industrial purposes — Part 1: General requirements	Identical
IEC 60309-2 Plugs, socket-outlets and couplers for industrial purposes — Part 2: Dimensional interchangeability requirements for pin and contact-tube accessories	IS/ IEC 60309 (Part 2):2002/ IEC 60309-2:1999 Plugs, socket-outlets and couplers for industrial purposes — Part 2: Dimensional interchangeability requirements for pin and contact-tube accessories	Identical
IEC 60664-2-1 Insulation coordination for equipment within low-voltage systems - Part 2-1: Application guide - Explanation of the application of the IEC 60664 series, dimensioning examples and dielectric testing	IS 15382(Part 2/ Sec 1):2014/ IEC 60664-2-1:2011 Insulation coordination for equipment within low-voltage systems Part 2 Application guide Section 1 Explanation of the IEC 60664 series, dimensioning examples and dielectric testing	Identical
IEC 60884-1 Plugs and socket-outlets for household and similar purposes — Part 1 : General requirements	IS 1293:2005 Plugs and socket-outlets of rated voltage up to and including 250 volts and rated current up to and including 16 Amperes-Specification	Modified
IEC 61851-1 Electric vehicle conducive charging system — Part 1: General requirements	IS 17017 (Part 1):2018 Electric vehicle conducive charging system — Part 1: General requirements	Modified

The technical committee has reviewed the provisions of the following International Standards referred in this adopted standard and has decided that they are acceptable for use in conjunction with this standard:

<i>International/ Other Standard</i>	<i>Title</i>
ISO 6469-1	Electrically propelled road vehicles — Safety specifications — Part 1: On-board rechargeable energy storage systems (RESS)
ISO 6469-3	Electrically propelled road vehicles — Safety specifications — Part 3: Protection of persons against electric shock
ISO 20653	Road vehicles — Degrees of protection (IP code) — Protection of electrical equipment against foreign objects, water and access
IEC 60364-4-43	Electrical installations of buildings — Part 4-43: Protection for safety — Protection against overcurrent
IEC 60364-5-54	Low-voltage electrical installations — Part 5-54: Selection and erection of electrical equipment — Earthing arrangements and protective conductors
IEC 60364-6	Low-voltage electrical installations — Part 6: Verification
IEC 60664 (all parts except Part 2 Section 1)	Insulation coordination for equipment within low-voltage systems
IEC 61851-23	Electric vehicle conductive charging system — Part 23: D C electric vehicle charging station
IEC 62196-1	Plugs, socket-outlets, vehicle connectors and vehicle inlets — Conductive charging of electric vehicles — Part 1: General requirements
IEC 62196-2	Plugs, socket-outlets, vehicle connectors and vehicle inlets — Conductive charging of electric vehicles — Part 2: Dimensional compatibility and interchangeability requirements for a.c pin and contact-tube accessories
IEC 62196-3	Plugs, socket-outlets, vehicle connectors and vehicle inlets — Conductive charging of electric vehicles — Part 3: Dimensional compatibility and interchangeability requirements for dedicated d.c and combined a.c/ d.c. pin and contact-tube vehicle couplers
ISO/IEC 15118 (all parts)	Road vehicles — Vehicle to grid communication interface

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. The Bureau of Indian Standards shall not be held responsible for identifying any or all such patent rights.

In reporting the result of a test or analysis made in accordance with this standard, if the final value, observed or calculated, is to be rounded off, it shall be done in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'.

Scope

This International Standard specifies electric safety requirements for conductive connections of electrically propelled road vehicles to an external electric power supply using a plug or vehicle inlet.

It applies to electrically propelled road vehicles with voltage class B electric circuits. In general, it may apply to motorcycles and mopeds if no dedicated standards for these vehicles exist.

It applies only to vehicle power supply circuits. It applies also to dedicated power supply control functions used for the connection of the vehicle to an external electric power supply.

It does not provide requirements regarding the connection to a non-isolated d.c. charging station. It does not provide comprehensive safety information for manufacturing, maintenance, and repair personnel.

The requirements when the vehicle is not connected to the external electric power supply are specified in ISO 6469-3.

NOTE 1 This International Standard does not contain requirements for vehicle power supply circuits using protection by class II or double/reinforced insulation but it is not the intention to exclude such vehicle applications.

NOTE 2 Requirements for EV supply equipment are specified in IEC 61851.

'FOR COMPLETE TEXT OF THE DOCUMENT KINDLY REFER ISO 17409:2015 or CONTACT:

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