



# **Electrically propelled road vehicles— Safety specifications**

## **Part 3: Protection of persons against electric shock**



This Australian Standard® was prepared by Committee EM-001, Electric Vehicle Operation. It was approved on behalf of the Council of Standards Australia on 4 June 2014. This Standard was published on 30 June 2014.

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- Australasian Road Rescue Organisation
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  - Australian Electric Vehicle Association
  - Australian Industry Group
  - Auto Skills Australia
  - ChargePoint
  - Consumers Federation of Australia
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Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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Australian Standard<sup>®</sup>

**Electrically propelled road vehicles—  
Safety specifications**

**Part 3: Protection of persons against  
electric shock**

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## PREFACE

This Standard was prepared by the Standards Australia Committee EM-001, Electric Vehicle Operation.

The objective of this Standard is to specify requirements for the electric propulsion systems and conductively connected auxiliary electric systems, if any, of electrically propelled road vehicles for the protection of persons inside and outside the vehicle against electric shock.

This Standard is identical with, and has been reproduced from ISO 6469-3:2011, *Electrically propelled road vehicles—Safety specifications, Part 3: Protection of persons against electric shock*

As this Standard is reproduced from an International Standard, the following applies:

- (a) In the source text ‘this part of ISO 6469’ should read ‘this Australian Standard’.
- (b) A full point substitutes for a comma when referring to a decimal marker.

None of the normative references in the source document have been adopted as Australian or Australian/New Zealand Standards.

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## AUSTRALIAN STANDARD

**Electrically propelled road vehicles—Safety specifications****Part 3:  
Protection of persons against electric shock****1 Scope**

This part of ISO 6469 specifies requirements for the electric propulsion systems and conductively connected auxiliary electric systems, if any, of electrically propelled road vehicles for the protection of persons inside and outside the vehicle against electric shock.

It does not apply to motorcycles and vehicles not primarily intended as road vehicles, such as material handling trucks or forklifts.

It applies only to on-board electric circuits with maximum working voltages according to voltage class B.

It does not provide comprehensive safety information for manufacturing, maintenance and repair personnel.

NOTE Requirements for the electric power supply interface conductively connected to the external power supply (grid) for charging the RESS are also specified in IEC 61851-1 and IEC 61851-21.

**2 Normative references**

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 6469-1, *Electrically propelled road vehicles — Safety specifications — Part 1: On-board rechargeable energy storage system (RESS)*

ISO 7010, *Graphical symbols — Safety colours and safety signs — Registered safety signs*

ISO 20653, *Road vehicles — Degrees of protection (IP-Code) — Protection of electrical equipment against foreign objects, water and access*

IEC 60664 (all parts), *Insulation coordination for equipment within low-voltage systems*