

Australian/New Zealand Standard™

**Powertrack systems**

**Part 1: General requirements  
(IEC 61534-1, Ed. 1 (2003) MOD)**



## **AS/NZS 61534.1:2008**

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-004, Electrical Accessories. It was approved on behalf of the Council of Standards Australia on 28 December 2007 and on behalf of the Council of Standards New Zealand on 18 January 2008.  
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# Australian/New Zealand Standard™

## Powertrack systems

### Part 1: General requirements (IEC 61534-1, Ed. 1 (2003) MOD)

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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-004, Electrical Accessories.

The objective of this Standard is to provide designers, manufacturers, importers, test laboratories and users with requirements for powertrack systems.

This Standard is an adoption with national modifications and has been reproduced from IEC 61534-1, Ed.1 (2003), *Powertrack systems – Part 1: General requirements*, and has been varied as indicated to take account of Australian/New Zealand conditions.

Variations to IEC 61534-1, Ed.1 (2003) are indicated at the appropriate places throughout this Standard. Strikethrough (~~example~~) identifies IEC text, tables and figures which, for the purposes of this Australian/New Zealand Standard, are deleted. Where text, tables or figures are added, each is set in its proper place and identified by shading (example). Added figures are not themselves shaded, but are identified by a shaded border.

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## INTRODUCTION

Particular requirements for specific types of powertrack systems will be specified in the relevant Parts 2 of IEC 61534, which are still under consideration.

For a specific type of powertrack system, Part 1 is to be considered, together with the appropriate particular requirements, which will supplement or modify some of the corresponding clauses in Part 1 to provide the complete requirements for each type of system. Where no such Part 2 exists, then Part 1 applies.

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Part 1: General requirements  
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Any table, figure or text of the international standard that is struck through is not part of this standard. Any Australian/New Zealand table, figure or text that is added is part of this standard and is identified by shading.

**1 Scope**

**1.1** This part of IEC 61534 specifies general requirements and tests for powertrack (PT) systems with a rated voltage not exceeding 277 V a.c. single phase, or 480 V a.c. two or three phase 50 Hz/60 Hz, with a rated current not exceeding 63 A. These systems are used for distributing electricity in household, commercial and industrial premises.

NOTE The extension of the scope to cover d.c. and communication systems is under consideration.

**1.2** Powertrack systems, according to this standard, are intended for use under the following conditions:

- an ambient temperature in the range  $-5\text{ }^{\circ}\text{C}$  to  $+40\text{ }^{\circ}\text{C}$ , the average value over a 24 h period not exceeding  $35\text{ }^{\circ}\text{C}$ ;
- a situation not subject to a source of heat likely to raise temperatures above the limits specified above;
- an altitude not exceeding 2 000 m above sea level;
- an atmosphere not subject to excessive pollution by smoke, chemical fumes, prolonged periods of high humidity or other abnormal conditions.

In locations where special conditions prevail, as in ships, vehicles and the like and in hazardous locations, for instance, where explosions are liable to occur, special constructions may be necessary.

This standard does not apply to:

- cable trunking systems and cable ducting systems covered by IEC 61084 [8] <sup>1)</sup>
- busbar trunking systems covered by IEC 60439-2 [5]
- electrical supply track systems for luminaires covered by IEC 60570 [6]

**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.

References to international standards that are struck through in this clause are replaced by references to Australian or Australian/New Zealand Standards that are listed immediately

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<sup>1)</sup> Figures in square brackets refer to the bibliography.