INTERNATIONAL STANDARD

IEC 60254-1

Fourth edition
2005-04

Lead-acid traction batteries –

Part 1: General requirements and methods of test

*This **English-language** version is derived from the original **bilingual** publication by leaving out all French-language pages. Missing page numbers correspond to the French-language pages.*

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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FOREWORD

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International Standard IEC 60254-1 has been prepared by IEC technical committee 21: Secondary cells and batteries.

This fourth edition cancels and replaces the third edition, published in 1997, and constitutes a technical revision. The principal change in this edition is the removal of the original Clause 6 dealing with "Testing procedures for light road vehicle traction batteries", as this is now covered by IEC 61982-2. The "high rate discharge test" has been changed from 0,5 h to 1 h and the temperature co-efficient of resistance for 1h discharge included. The opportunity has also been taken to introduce relatively minor revisions where these are now more appropriate due to developments.

The text of this standard is based on the following documents:

FDIS	Report on voting
21/619/FDIS	21/622/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

IEC 60254 consists of the following parts under the general title *Lead-acid traction batteries:*

Part 1: General requirements and methods of test

Part 2: Dimensions of cells and terminals and marking of polarity on cells

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

LEAD-ACID TRACTION BATTERIES –

Part 1: General requirements and methods of test

1 Scope and object

This part of IEC 60254 is applicable to lead-acid traction batteries used as power sources for electric propulsion.

The tests defined are relevant to all traction battery applications which include road vehicles, locomotives, industrial trucks and mechanical handling equipments. Tests which may be used specifically to test batteries developed for use in vehicles such as light passenger vehicles, motor cycles, light commercial vehicles, etc. may be found in alternative standards e.g. IEC 61982-2.

The object of this standard is to specify certain essential characteristics of traction batteries or cells, together with the relevant test methods of those characteristics.

Although Part 2 of this standard defines dimensions of commonly used traction cells, the tests in Part 1 may be applied to cells and monobloc batteries of other dimensions, if the application is appropriate.

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.

IEC 60051 (all parts), *Direct acting indicating analogue electrical measuring instruments and their accessories*

IEC 60254-2:1997, *Lead-acid traction batteries - Part 2: Dimensions of cells and terminals and marking of polarity on cells*

Amendment 1 (2000)