

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Railway applications – Rolling stock – Batteries for auxiliary power supply systems –**

**Part 4: Secondary sealed nickel-metal hydride batteries**

**Applications ferroviaires – Matériel roulant – Batteries pour systèmes d'alimentation auxiliaire –**

**Partie 4: Batterie d'accumulateurs nickel-hydrure métallique étanche**



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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## RAILWAY APPLICATIONS – ROLLING STOCK – BATTERIES FOR AUXILIARY POWER SUPPLY SYSTEMS –

### Part 4: Secondary sealed nickel-metal hydride batteries

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The text of this International Standard is based on the following documents:

FDIS	Report on voting
9/2638/FDIS	9/2665/RVD

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

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

This document is to be used in conjunction with IEC 62675, IEC 63115-1 and IEC 63115-2.

A list of all parts in the IEC 62973 series, published under the general title *Railway applications – Rolling stock – Batteries for auxiliary power supply systems*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

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# RAILWAY APPLICATIONS – ROLLING STOCK – BATTERIES FOR AUXILIARY POWER SUPPLY SYSTEMS –

## Part 4: Secondary sealed nickel-metal hydride batteries

### 1 Scope

This part of IEC 62973 applies to secondary sealed nickel-metal hydride battery technologies for auxiliary power supply systems used on rolling stock.

This document specifies the requirements of the characteristics and tests for the sealed nickel-metal hydride cells and supplements IEC 62973-1 which applies to any rolling stock types (e.g. light rail vehicles, tramways, streetcars, metros, commuter trains, regional trains, high speed trains, locomotives, etc.). Unless otherwise specified, the requirements of IEC 62973-1 apply.

This document also specifies the requirements of the interface between the batteries and the battery chargers.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 60077-1, *Railway applications – Electric equipment for rolling stock – Part 1: General service conditions and general rules*

IEC 62485-2, *Safety requirements for secondary batteries and battery installations – Part 2: Stationary batteries*

IEC 62675, *Secondary cells and batteries containing alkaline or other non-acid electrolytes – Sealed nickel-metal hydride prismatic rechargeable single cells*

IEC 62902:2019, *Secondary cells and batteries – Marking symbols for identification of their chemistry*

IEC 62973-1:2018, *Railway applications – Rolling stock – Batteries for auxiliary power supply systems – Part 1: General requirements*

IEC 63115-1:2020, *Secondary cells and batteries containing alkaline or other non-acid electrolytes – Sealed nickel-metal hydride cells and batteries for use in industrial applications – Part 1: Performance*

IEC 63115-2:2021, *Secondary cells and batteries containing alkaline or other non-acid electrolytes – Sealed nickel-metal hydride cells and batteries for use in industrial applications – Part 2: Safety*