Flow battery energy systems for stationary applications - Part 1: Terminology and general aspects



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English Version

Flow battery energy systems for stationary applications - Part 1: Terminology and general aspects (IEC 62932-1:2020)

Systèmes de production d'énergie de batteries d'accumulateurs à circulation d'électrolyte pour applications stationnaires - Partie 1: Terminologie et aspects généraux (IEC 62932-1:2020)

Flussbatterie-Systeme für stationäre Anwendungen - Teil 1: Terminologie und allgemeine Aspekte (IEC 62932-1:2020)

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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

The text of document 21/1027/FDIS, future edition 1 of IEC 62932-1, prepared by IEC/TC 21 "Secondary cells and batteries" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62932-1:2020.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-03-24

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FLOW BATTERY ENERGY SYSTEMS FOR STATIONARY APPLICATIONS -

Part 1: Terminology and general aspects

FOREWORD

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International Standard IEC 62932-1 has been prepared by IEC technical committee 21: Secondary cells and batteries, in collaboration with IEC technical committee 105: Fuel cell technologies.

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

FDIS	Report on voting
21/1027/FDIS	21/1037/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.

A list of all parts in the IEC 62932 series, published under the general title *Flow battery energy systems for stationary applications*, 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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FLOW BATTERY ENERGY SYSTEMS FOR STATIONARY APPLICATIONS -

Part 1: Terminology and general aspects

1 Scope

This part of IEC 62932 relates to flow battery energy systems (FBES) used in electrical energy storage (EES) applications and provides the main terminology and general aspects of this technology, including terms necessary for the definition of unit parameters, test methods, safety and environmental issues.

2 Normative references

There are no normative references in this document.

3 Terms, definitions and abbreviated terms

3.1 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

3.1.1

ambient temperature

environmental temperature around a flow battery energy system

3.1.2

auxiliary energy

energy consumed by all the auxiliary equipment and components of a flow battery and of a flow battery energy system

Note 1 to entry: The equipment and components include, but are not limited to, battery management system, battery support system, fluid circulation system.

3.1.3

battery management system

BMS

electronic system associated with a flow battery energy system which monitors and/or manages its state, calculates secondary data, reports that data and/or controls its environment to influence the flow battery energy system's performance and/or service life

Note 1 to entry: The function of the battery management system can be fully or partially assigned to the battery pack and/or to equipment that uses flow battery energy store systems.

[SOURCE: IEC 61427-2:2015, 3.8, modified – admitted terms "battery management unit" and "BMU" omitted, "battery" replaced by "flow battery energy system", Notes 2 to 4 deleted.]