

12 V lithium-ion secondary batteries for automotive starting, lighting, ignition (SLI) applications and auxiliary purposes - Part 1: General requirements and methods of test

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

|                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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| <p>See Eesti standard EVS-EN IEC 63118-1:2024 sisaldab Euroopa standardi EN IEC 63118-1:2024 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 29.03.2024.</p> <p>Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.</p> | <p>This Estonian standard EVS-EN IEC 63118-1:2024 consists of the English text of the European standard EN IEC 63118-1:2024.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 29.03.2024.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p> |
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English Version

12 V lithium-ion secondary batteries for automotive starting,  
lighting, ignition (SLI) applications and auxiliary purposes - Part  
1: General requirements and methods of test  
(IEC 63118-1:2024)

Accumulateur ion-lithium 12 V pour les applications de  
démarrage, d'éclairage, d'allumage (SLI) et les utilisations  
auxiliaires des véhicules automobiles - Partie 1 - Exigences  
et méthodes d'essai générales  
(IEC 63118-1:2024)

12-Volt-Lithium-Ionen-Sekundärbatterien für Anwendungen  
und Hilfsanwendungen von Fahrzeug-SLI-Batterien - Teil 1:  
Allgemeine Anforderungen und Prüfverfahren  
(IEC 63118-1:2024)

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European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

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

## European foreword

The text of document 21/1177/FDIS, future edition 1 of IEC 63118-1, prepared by IEC/TC 21 "Secondary cells and batteries" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 63118-1:2024.

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 (dop) 2024-12-27
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2027-03-27

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In the official version, for Bibliography, the following notes have to be added for the standard indicated:

IEC 61434:1996 NOTE Approved as EN 61434:1996 (not modified)

IEC 63057:2020 NOTE Approved as EN IEC 63057:2020 (not modified)

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**12 V lithium-ion secondary batteries for automotive starting, lighting, ignition (SLI) applications and auxiliary purposes –  
Part 1: General requirements and methods of test**

**Accumulateur ion-lithium 12 V pour les applications de démarrage, d'éclairage, d'allumage (SLI) et les utilisations auxiliaires des véhicules automobiles –  
Partie 1 : Exigences et méthodes d'essai générales**



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# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**12 V lithium-ion secondary batteries for automotive starting, lighting, ignition (SLI) applications and auxiliary purposes –  
Part 1: General requirements and methods of test**

**Accumulateur ion-lithium 12 V pour les applications de démarrage, d'éclairage, d'allumage (SLI) et les utilisations auxiliaires des véhicules automobiles –  
Partie 1 : Exigences et méthodes d'essai générales**

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## CONTENTS

|                                                    |    |
|----------------------------------------------------|----|
| FOREWORD.....                                      | 3  |
| 1 Scope.....                                       | 5  |
| 2 Normative references .....                       | 5  |
| 3 Terms, definitions and symbols.....              | 6  |
| 3.1 Terms and definitions.....                     | 6  |
| 3.2 Symbols.....                                   | 7  |
| 4 Parameter measurement tolerances .....           | 7  |
| 5 Marking and designation.....                     | 7  |
| 6 Electrical tests.....                            | 8  |
| 6.1 General.....                                   | 8  |
| 6.2 Charging procedure for test purposes .....     | 8  |
| 6.3 Capacity .....                                 | 9  |
| 6.3.1 General .....                                | 9  |
| 6.3.2 Method .....                                 | 9  |
| 6.3.3 Acceptance criteria .....                    | 9  |
| 6.4 Discharge performance at low temperature ..... | 9  |
| 6.4.1 General .....                                | 9  |
| 6.4.2 Method .....                                 | 9  |
| 6.4.3 Acceptance criteria .....                    | 10 |
| 6.5 Charge performance at 0 °C and –18 °C .....    | 10 |
| 6.5.1 General .....                                | 10 |
| 6.5.2 Method .....                                 | 10 |
| 6.5.3 Acceptance criteria .....                    | 10 |
| 6.6 Charge retention .....                         | 11 |
| 6.6.1 General .....                                | 11 |
| 6.6.2 Method .....                                 | 11 |
| 6.6.3 Acceptance criteria .....                    | 11 |
| 6.7 Endurance .....                                | 11 |
| 6.7.1 Endurance in cycles.....                     | 11 |
| 6.7.2 Floating-calendar life test .....            | 13 |
| 7 Type test conditions .....                       | 14 |
| 7.1 General.....                                   | 14 |
| 7.2 Test items .....                               | 14 |
| Bibliography.....                                  | 15 |
| Table 1 – Type tests .....                         | 14 |

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**12 V LITHIUM-ION SECONDARY BATTERIES FOR  
AUTOMOTIVE STARTING, LIGHTING, IGNITION (SLI)  
APPLICATIONS AND AUXILIARY PURPOSES –****Part 1: General requirements and methods of test**

## FOREWORD

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IEC 63118-1 has been prepared by IEC technical committee 21: Secondary cells and batteries.  
It is an International Standard.

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

| Draft        | Report on voting |
|--------------|------------------|
| 21/1177/FDIS | 21/1185/RVD      |

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/publications](http://www.iec.ch/publications).

A list of all parts in the IEC 63118 series, published under the general title *12 V lithium-ion secondary batteries for automotive starting, lighting, ignition (SLI) applications and auxiliary purposes*, 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 [webstore.iec.ch](http://webstore.iec.ch) in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

# **12 V LITHIUM-ION SECONDARY BATTERIES FOR AUTOMOTIVE STARTING, LIGHTING, IGNITION (SLI) APPLICATIONS AND AUXILIARY PURPOSES –**

## **Part 1: General requirements and methods of test**

### **1 Scope**

This part of IEC 63118 specifies the general tests and requirements for the performance of lithium secondary batteries with a nominal voltage of 12 V permanently installed in road vehicles not for propulsion. The replacement of secondary batteries permanently installed in road vehicles not for propulsion is covered by this document.

The following are typical applications that utilize the batteries under the scope of this document: power source for the starting of internal combustion engines, lighting, stop and start function, on-board auxiliary equipment and energy absorption for regeneration from braking.

The batteries primarily used for propulsion of electric vehicles (EV) including battery electric vehicles (BEV), hybrid electric vehicles (HEV), and plug-in hybrid electric vehicles (PHEV) are not covered by this document.

This document includes:

- electrical characteristics tests methods and requirements;
- a life duration tests method.

This document does not include:

- dimensions;
- the system communication protocol;
- safety aspects.

NOTE The safety aspects of the batteries are covered by IEC 63057.

### **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 60050-482, *International Electrotechnical Vocabulary (IEV) – Part 482: Primary and secondary cells and batteries*, available at <http://www.electropedia.org>

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

ISO/IEC Guide 51, *Safety aspects – Guidelines for their inclusion in standards*