JOINT CANADA-UNITED STATES
NATIONAL STANDARD

ANSI/CAN/UL 2850:2026

STANDARD FOR SAFETY

Vehicle Systems of Electric Scooters and Motorcycles

ANSI/UL 2850-2026

SCC FOREWORD

National Standard of Canada

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UL Standard for Safety for Vehicle Systems of Electric Scooters and Motorcycles, ANSI/CAN/UL 2850

First Edition, Dated August 18, 2026

Summary of Topics

This First Edition of ANSI/CAN/UL 2850 dated August 18, 2026 is issued to reflect the first time ANSI and SCC approval dates as an American National Standard (ANS) and National Standard of Canada (NSC) and to incorporate the proposal(s) dated March 27, 2026 and June 12, 2026.

The new requirements are substantially in accordance with Proposal(s) on this subject dated March 27, 2026 and June 12, 2026.

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ANSI/UL 2850-2026

AUGUST 18, 2026

ANSI/CAN/UL 2850:2026

Standard for Vehicle Systems of Electric Scooters and Motorcycles

First Edition

August 18, 2026

This ANSI/CAN/UL Safety Standard consists of the First Edition.

The most recent designation of ANSI/UL 2850 as an American National Standard (ANSI) occurred on August 18, 2026. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page, Preface or SCC Foreword.

This Standard has been designated as a National Standard of Canada (NSC) on August 18, 2026.

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Preface

This is the First Edition of ANSI/CAN/UL 2850, Standard for Vehicle Systems of Electric Scooters and Motorcycles.

ULSE is accredited by the American National Standards Institute (ANSI) and the Standards Council of Canada (SCC) as a Standards Development Organization (SDO).

This Standard has been developed in compliance with the requirements of ANSI and SCC for accreditation of a Standards Development Organization.

This ANSI/CAN/UL 2850 Standard is under continuous maintenance, whereby each revision is approved in compliance with the requirements of ANSI and SCC for accreditation of a Standards Development Organization. In the event that no revisions are issued for a period of four years from the date of publication, action to revise, reaffirm, or withdraw the standard shall be initiated.

Annex A is identified as Normative for Canada and Informative for the US. Informative text is for informational purposes only, and Normative text is considered to be mandatory.

In Canada, there are two official languages, English and French. All safety warnings must be in French and English. Attention is drawn to the possibility that some Canadian authorities may require additional markings and/or installation instructions to be in both official languages.

This First Edition joint American National Standard and National Standard of Canada is based on, and now supersedes, the First Issue Outline of Investigation, UL 2850.

Comments or proposals for revisions on any part of the Standard may be submitted at any time. Proposals should be submitted via a Proposal Request in the Collaborative Standards Development System (CSDS) at https://csds.ul.com.

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This Edition of the Standard has been formally approved by the Technical Committee (TC) on Vehicle Systems of Electric Scooters and Motorcycles, TC 2850.

This list represents the TC 2850 membership when the final text in this Standard was balloted. Since that time, changes in the membership may have occurred.

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This Standard is intended to be used for conformity assessment.

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The intended primary application of this Standard is stated in its scope. It is important to note that it remains the responsibility of the user of the standard to judge its suitability for this particular application.

CETTE NORME NATIONALE DU CANADA EST DISPONIBLE EN VERSIONS FRANÇAISE ET ANGLAISE

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INTRODUCTION

1 Scope

1.1 This Standard covers the electrical systems of two- or three-wheeled electric scooters and electric motorcycles with respect to a risk of fire, electric shock, and explosion hazards associated with the battery powered electrical system during charging and discharging (use). Electric scooters are intended for over-the-road use. Electric motorcycles, including minibikes, are intended for any condition of use including off-road or over-the-road use.

1.2 This Standard covers the battery, battery management system, the interconnecting means from the charger to the battery (inlet connection), and the off-board charger (including all connections) specifically for use in the vehicle system being evaluated. Other components can be included in the vehicle system being evaluated, such as cables that interconnect the inlet connection to the battery, as they would be part of the minimum system. Those other components included as electrical components within the vehicle electrical system can be included at the manufacturers discretion.

1.3 This Standard is not intended to be used with other electrically powered vehicles such as micromobility systems which are covered under the Standard for Electrical Systems for Personal E-Mobility Devices, UL 2272, and eBikes which are covered under the Standard for Electrical Systems for eBikes, UL 2849.

1.4 Federal Motor Vehicle Safety Standards (FMVSS) outlined under 49 CFR, Chapter V, apply to electric scooters and electric motorcycles. Compliance with these FMVSS documents is outside the scope of this Standard.

2 Components

2.1 A component of a product covered by this Standard shall:

a) Comply with the requirements for that component as specified in this Standard;

b) Be used in accordance with its rating(s) established for the intended condition of use; and

c) Be used within its established use limitations or conditions of acceptability.

2.2 A component of a product covered by this Standard is not required to comply with a specific requirement that:

a) Involves a feature or characteristic not required in the application of the component in the product;

b) Is superseded by a requirement in this Standard; or

c) Is separately evaluated when forming part of another component, provided the component is used within its established ratings and limitations.

2.3 Specific components are incomplete in construction features or restricted in performance capabilities. Such components are intended for use only under limited conditions, such as certain temperatures not exceeding specified limits, and shall be used only under those specific conditions.

2.4 A component that is also intended to perform other functions such as overcurrent protection, ground-fault circuit-interruption, surge suppression, any other similar functions, or any combination thereof, shall comply additionally with the requirements of the applicable standard(s) that cover devices that provide those functions.

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