

STANDARD INFORMATION

Standard: CSA E60335-2-29 / CSA C22.2 No. 60335-2-29

Standard ID: Household and Similar Electrical Appliances - Safety - Part 2-29: Particular Requirements for Battery Chargers [CSA C22.2#60335-2-29:2020 Ed.4]

Previous Standard ID: Household and Similar Electrical Appliances - Safety - Part 2-29: Particular Requirements for Battery Chargers (R2016) [CSA E60335-2-29:2006 Ed.3]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **October 1, 2022**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: Per our accreditation, Intertek is required to review reports against the standard revisions to confirm compliance. Once compliance is confirmed, the standard reference in the report is updated to show continued compliance to the technical requirements of the standard.

Standard Number has been changed from CSA E60335-2-29 to CSA C22.2#60335-2-29

Overview of Changes:

- Revised the drop test to refer to IEC 60068-2-31
- Requirements for supply cords on battery chargers used at low temperatures
- Requirements for battery chargers having an output voltage exceeding SELV have been added
- A classification for battery chargers used outdoors has been added

Specific details of new/revise requirements are found in table below.

Current Listings Not Active? – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.



STANDARD INFORMATION

CLAUSE	VERDICT	COMMENT
		<i>Additions to existing requirements are <u>underlined</u> and deletions are shown lined-out below.</i>
10	Info	Power input and current
		The no-load d.c. output voltage shall not exceed 42,4 V.
		Compliance is checked by supplying the battery charger at rated voltage and measuring the no-load d.c. output voltage.
10.101		<u>The DC output voltage of type 1 battery chargers shall not exceed 120 V. The DC output voltage of type 2 battery chargers shall not exceed 250 V.</u>
		<u>Compliance is checked by supplying the battery charger at rated voltage and measuring the DC output voltage.</u>
21	Info	Mechanical strength
		Battery chargers, other than built-in battery chargers, having a mass not exceeding 5 kg are subjected <u>to the test free-fall – procedure 1, of IEC 60068-2-31</u> , which is carried out on three appliances.
21.101		The battery chargers are dropped from a height of 1 m, each appliance being dropped from a different position.
		After the test the battery chargers shall show no damage that could impair compliance with 8.1, 15.1.1, 16.3 and Clause 29.
		<i>New clause added;</i>
21.101DV		Modification to replace the first paragraph of 21.101 of the Part 2 with the following: Direct plug-in battery chargers are subjected to the test free-fall – procedure 1, of IEC 60068-2-31, which is carried out on three appliances.
24	Info	Components
		<i>New clause added;</i>
24.4		The requirement is also applicable to plugs, connectors, socket-outlets and appliance outlets in the battery charger output circuit.



CLAUSE	VERDICT	COMMENT
25	Info	Supply connection and external flexible cords <i>New clause added;</i>
25.5		The requirement is also applicable to output flexible cords for battery chargers having a rated output voltage exceeding 42,4 V. <i>New clause added;</i> TYPE Z ATTACHMENTS are allowed.
25.5DV		The requirement is also applicable to output flexible cords for battery chargers having an output voltage exceeding – 60 V, provided that the peak-to-peak ripple does not exceed 10%; or – 42,4 V peak, otherwise. Addition: <u>The requirement is also applicable to output flexible cords for battery chargers having a rated output voltage exceeding 42,4 V.</u>
25.7		Battery chargers for charging vehicle batteries shall not be fitted with natural rubber-sheathed supply cords. <u>For battery chargers intended for use at low temperatures, the supply cord shall have properties not less than those specified for ordinary polychloroprene sheathed cords (code designation 60245 IEC 57).</u> <i>New clause added;</i> Addition: The requirement is also applicable to output flexible cords for battery chargers having an output voltage exceeding – 60 V, provided that the peak-to-peak ripple does not exceed 10%; or – 42,4 V peak, otherwise.
25.7DV		Battery chargers for charging vehicle batteries shall not be fitted with natural rubber-sheathed SUPPLY CORDS. The input cord for battery chargers shall be not less than 1,8 m long when measured from the face of the attachment plug to the plane of the cord-entry hole in the battery charger. A battery charger intended for mounting in a fixed location may have a shorter cord length. A battery charger with a mass of 455 g or less shall be acceptable if the total combined length of the input and output cords is 1,8 m or more and the length of the input cord is at least 1 m. The type of SUPPLY CORD shall be in accordance with Table 25.7DV.101.



CLAUSE	VERDICT	COMMENT
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New table added;

Supply cord types

Table
25.7DV.101

Appliance	Supply cord type
Portable battery charger	SPT-2, SV, SVT, or equivalent.
Stationary battery charger	S, SE, SO, SPT-3, ST, STO, SJ, SJO, SJT, SJTO, or equivalent.
Battery charger for outdoor use	SOW, SJOW, STOW, SJTOW or equivalent.

New clause added;

25.8

The requirement is also applicable to output flexible cords for battery chargers having a rated output voltage exceeding 42,4 V.

New clause added;

25.8 DV

The requirement is also applicable to output flexible cords for battery chargers having an output voltage exceeding

- 60 V, provided that the peak-to-peak ripple does not exceed 10%; or
- 42,4 V peak, otherwise.

New clause added;

25.15

The requirement is also applicable to output flexible cords for battery chargers having a rated output voltage exceeding 42,4 V.

New clause added;

25.15DV

The requirement is also applicable to output flexible cords for battery chargers having an output voltage exceeding

- 60 V, provided that the peak-to-peak ripple does not exceed 10%; or
- 42,4 V peak, otherwise.

26

Info

Terminals for external conductors

New clause added;

26.5

This requirement does not apply to the terminals of the output circuit having a no-load voltage not exceeding 42,4 V.

New clause added;

26.5 DV

This requirement does not apply to the terminals of the output circuit having a no-load voltage not exceeding

- 60 V, provided that the peak-to-peak ripple does not exceed 10%; or
- 42,4 V peak, otherwise.



CLAUSE	VERDICT	COMMENT
29	Info	Clearances, creepage distances and solid insulation <i>New clause added;</i>
29.2		For battery chargers for outdoor use, the microenvironment is pollution degree 3 unless the insulation is enclosed or located so that it is unlikely to be exposed to pollution during normal use of the appliance.