# STANDARDS UPDATE NOTICE (SUN)
# ISSUED: September 24, 2020

## STANDARD INFORMATION

**Standard Number:** CSA C22.2 No. 21
**Standard Name:** Cord Sets and Power-Supply Cords
**Standard Edition and Issue Date:** 10th Edition dated November 1, 2018
**Date of Revision:** November 1, 2018
**Date of Previous Revision of Standard:** 9th Edition revised January 1, 2015

## EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

**Effective Date:** **June 1, 2021**

## IMPACT, OVERVIEW, AND ACTION REQUIRED

**Impact Statement:** A review of all Listing Reports is necessary to determine which products comply with new/revised requirements and which products will require re-evaluation. **NOTE:** Effective immediately, this revised standard will be exclusively used for evaluation of new products unless the Applicant requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revised requirements.

**Overview of Changes:**

- Cord Reels and power bars are now covered by CSA C22.2 No. 308
- New supplementary circuit (USB) and remote devices and adapter cord sets

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

**If the applicable requirements noted in the table are not described in your report(s), these requirements will need to be confirmed as met and added to your report(s) such as markings, instructions, test results, etc. (as required).**

**Client Action:**

**Information** – To assist our Engineer with review of your Listing Reports, please submit technical information in response to the new/revised paragraphs noted in the attached or explain why these new/revised requirements do not apply to your product (s).

***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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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 |
|---|---|---|
| | | *Additions to existing requirements are underlined and deletions are shown ~~lined out~~ below.* |
| | | |
| Entire Standard | | Cord reels and power bars have been moved to CSA C22.2 No. 308 and are no longer covered by CSA C22.2 No. 21. |
| 5 | Info | **Construction** |
| 5.1 | Info | **Fittings — General** |
| 5.1.5 | Info | **Identification and wiring** |
| 5.1.5.3 | | The conductor in the cord identified as follows shall be connected to the contact designated by the letter "W" or an equivalent means to designate the identified conductor:<br><br>a) finished to show a white or gray colour;<br>b) covered by a white or gray braid;<br>c) equivalently identified by:<br>i) a white or gray separator;<br>ii) a stripe, ridge, or groove on the outside surface of the insulation; or<br>iii) a tin or other white metallic coating on each strand;<br>d) has light blue colored or light blue coated insulation;<br>e) the cord has a jacket not integral with the circuit conductor insulation;<br>f) the power supply cord or cord set is factory installed in, or packaged with, an appliance; and<br>g) the shipping package is marked in accordance with Clause 8. |
| 5.2 | Info | **Plugs** |
| 5.2.1 | Info | **Blades** |
| 5.2.1.1 | | ***New clause added;***<br><br>A blade used in a 15 or 20 A NEMA attachment plug cap shall comply with UL 1659 or CSA Component No. 8. Where a blade is crimped and soldered, or welded, and/or where a blade is made mechanically secure and soldered directly to the conductor, connections need not comply with the performance requirements of UL 1659 or CSA Component No. 8. |
| 5.2.3 | Info | **Hospital grade attachment plugs** |
| 5.2.3.2 | | Blades shall be formed of solid brass material in conformance with CSA C22.2 No. 42 or ~~ANSI/NEMA WD 6~~. The bonding pin shall not be capable of being easily bent or removed without the use of tools. |
| 5.3 | Info | **Cord connectors** |

| CLAUSE | VERDICT | COMMENT |
|---|---|---|
| 5.3.1 | Info | **General** |
| 5.3.1.7 | | ***New clause added;***<br><br>Current carrying parts shall be either copper or copper alloy. |
| 5.3.5 | Info | **Cord connector — Outdoor** |
| 5.3.5.3 | | ***New clause added;***<br><br>A cord connector shall be resistant to sunlight and mechanical abuse and shall exclude moisture by tightly adhering to the jacket of the cord at the point that the cord enters the body, in accordance with the adhesion test, Clause 7.1.11. |
| 5.3.5.4 | | ***New clause added;***<br><br>A 5-15R outlet face of a 3-outlet cord connector need not comply with Clause 5.3.5.3 when<br><br>a) the length and width dimensions are at least three times the maximum thickness dimensions, excluding the grounding pin obstruction(s);<br>b) there is no outlet in the surfaces formed by the length and width dimensions; and<br>c) the angle between the adjacent faces containing outlets is not less than 135 degrees. See Figure 9. |
| 5.4 | Info | **Other components** |
| 5.4.8 | Info | **Overcurrent protection** |
| 5.4.8.5 | | ***New clause added;***<br><br>The overcurrent protective device shall provide protection for each unidentified circuit conductor, but not for any identified (grounded/bonded) circuit conductor or grounding/bonding conductor unless all branch circuit conductors are simultaneously open. The overcurrent protective device shall not open the grounding/bonding conductor. |
| 5.4.10 | | ***New section added;***<br><br>**Supplementary circuit** |
| 5.4.10.1 | | A supplementary charging circuit provided in a general-use cord set or power-supply cord shall comply with the requirements of CSA C22.2 No. 223 or UL 1310. |
| 5.4.10.2 | | A supplementary charging circuit provided in a special-use power-supply cord intended for ITE equipment shall comply with the requirements of CSA C22.2 No. 223 or UL 1310, or CAN/CSA-C22.2 No. 60950-1 or UL 60950-1. |

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|---|---|---|
| 5.4.11 | | ***New section added;***<br><br>**Devices employing remote control features** |
| 5.4.11.1 | | In addition to the requirements of this Standard, general-use cord sets and special-use power-supply cords employing remote control features shall comply with CSA C22.2 No. 205 or UL 244A. Compliance with CAN/CSA-E60730-1, and/or the applicable Part II standard from the CSA E60730-1 series fulfills these requirements. |
| 5.4.11.2 | | The electrical tungsten rating of the switching device shall be greater than or equal to the rating of the cord set or power-supply cord. |
| 5.4.11.3 | | The output shall not only be controlled by the remote controller. A separate individual switch/interface shall be provided on the unit to disconnect the main power of the device. |
| 5.4.11.4 | | If the switch is not used to directly control a load fitting, shall comply with the performance requirements contained in C22.2 CSA No. 111 or UL 20, for an ac only through cord switch or a special-use switch that complies with CSA C22.2 No. 55, or CAN/CSA-61058-1 or UL 61058-1. The switch shall be ac tungsten rated and have an electrical rating equal to or greater than the rating of the cord set or power-supply cord. These requirements shall apply to all switching mechanisms such as relays, supplementary protectors, and switches which contain symbols, words, or letters meaning ON/OFF. |
| 5.4.11.5 | | A general-use cord set employing a remote control feature shall be marked in accordance with Clauses 8.2.3.8. |
| 5.4.11.6 | | A special-use power supply cord employing a remote control feature shall be marked in accordance with Clause 8.2.3.9. |
| 6 | Info | **Assembly** |
| 6.7 | Info | **Extension cord sets** |
| 6.7.1 | Info | **Construction** |
| 6.7.1.1 | Info | **Outdoor-use assemblies** |
| 6.7.1.1.3 | | ***New clause added;***<br><br>An outdoor-use cord set employing a 14 AWG flexible cord with four to six cord connectors shall employ an overcurrent protective device and shall comply with the applicable requirements in Clauses 5.4.7 and 6.7. The rating of the over current device shall be equal to the rating of the cord set. |
| 6.8 | Info | **Adapter cord sets** |
| 6.8.3 | Info | **Flexible cord** |
| 6.8.3.3 | | ***New clause added;***<br><br>The length of an adapter cord set employing a 15 A plug and 20 A outlet shall not be greater than 0.6 m (2 ft). |

| CLAUSE | VERDICT | COMMENT |
|---|---|---|
| 7 | Info | **Performance** |
| 7.6 | Info | **Tests for overcurrent protective devices** |
| 7.6.3 | Info | **Short-circuit tests for all products with overcurrent protection** |
| 7.6.3.4 | | Each of three representative devices described in Clauses 7.6.3.2 and 7.6.3.3, with their protective devices in place, shall be subjected to the 120 V, 200- and 1000 A, 60 Hz short-circuit tests described in Clause 7.6.3.1. The representative device shall be connected to the power source by means of its attachment plug blades. The protector enclosure shall be surrounded with absorbent cotton. The results shall be acceptable if<br><br>a) there is no ignition of the cotton;<br>b) the cord does not flame or melt to the extent that bare conductors are exposed;<br>c) the contacts do not weld closed;<br>d) the protector shall trip the circuit;<br>e) the upstream fuse does not open during the short-circuit test;<br>f) the protector shall indicate whether the circuit is open or closed; and<br>g) the protector shall pass a dielectric withstand test between the line and the load. |
| 8 | Info | **Marking** |
| 8.2 | Info | **Extension cord sets** |
| 8.2.3 | Info | **Indoor-use extension cord sets** |
| 8.2.3.8 | | ***New clause added;***<br><br>A general-use cord set employing a remote control feature shall be molded or hot stamped on the device body with the following or equivalent, ”Remote Controlled Device”. |
| 8.2.3.9 | | ***New clause added;***<br><br>A special-use nondetachable power-supply cord employing a remote control feature shall be molded or hot stamped on the device body with the following or equivalent, ”Remote Controlled Device”. |
| 8.14 | Info | **Special-use cord sets** |
| 8.14.1 | | A cord set intended for special use shall be marked to indicate its specific use, electrical rating, and its temperature rating if other than the lowest temperature rating permissible for the particular cord type use. Special use cord sets intended for shipment to original equipment manufacturers incorporating CAN/CSA-60320-1 or UL 60320-1 appliance connectors and NEMA attachment plugs do not need to be marked to indicate their specific use. |

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|---|---|---|
| Annex F | | ***New Annex added;***<br><br>**Marine cord set**<br><br>This Annex covers requirements for cord sets intended for marine use. These cord sets are rated 15 A up to and including 60 A maximum and up to 600 V. See standard for details. |
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| | | CUSTOMERS PLEASE NOTE: This Table and column "Verdict" can be used in determining how your current or future production is or will be in compliance with new/revised requirements. |