

STANDARD INFORMATION

Standard Number: CSA C22.2 No. 68

Standard Name: Motor-Operated Appliances (Household and Commercial)

Standard Edition and Issue Date: 8th Edition Dated August 1, 2018

Date of Revision: August 1, 2018

Date of Previous Revision of Standard: [CSA C22.2#68:2009 Ed.7 Update No. 3] dated November 1, 2015

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **April 1, 2021**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: A review of all Listing Reports is necessary to determine which products comply with new/revise 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requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revise requirements.

Overview of Changes:

This edition updates the 2009 edition of CSA C22.2 No. 68. The major differences are the addition of requirements for tool cabinets, material moving and transporting devices, and rechargeable battery-operated appliances.

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/revise paragraphs noted in the attached or explain why these new/revise 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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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.



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CLAUSE	VERDICT	COMMENT
		<i>Additions to existing requirements are <u>underlined</u> and deletions are shown lined out below.</i>
5	Info	Construction
5.9	Info	Electrical insulation
		<i>New clause added;</i>
5.9.3		Arcing or sparking parts of equipment used in a garage Parts that can create arcing or sparking (e.g., switches, receptacles, connectors, commutators, motors, etc.) shall be located not less than 460 mm above the floor level. Requirements for rechargeable battery-operated appliances are specified in Annex A.
5.24	Info	Rechargeable Battery-Operated Pedestrian Controlled Material Moving or Transporting Appliances
		<i>New clause added;</i>
5.24.1		The travelling speed of pedestrian controlled material moving or transporting appliances shall not exceed the normal adult walking speed of approximately 5.6 km/h (3.5 mph). <i>New clause added;</i>
5.24.2		The power switch to the driving motor of the pedestrian controlled material moving or transporting appliances shall be of momentary type that requires constant pressure to the actuator in order to activate the drive motor. <i>New clause added;</i>
5.24.3		The actuator of the power switch to the driving motor of pedestrian controlled material moving or transporting appliances shall be protected from accidental turn on. <i>New clause added;</i>
5.24.4		Pedestrian controlled material moving or transporting appliances that are supported by wheels only shall be equipped with parking brake(s) that can be activated with a single foot or hand action of the operator while in the position of operating the appliance. <i>New clause added;</i>
5.24.5		Pedestrian controlled motorized hand pallet trucks shall be marked in accordance with Annex A.



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		Vibrators and massage machines
6.2.2		<p>Equipment that is intended to be hand-held shall be subjected to the same tests as specified for hair clippers. Equipment that is not intended to be hand held while in use shall be operated continuously until constant temperatures are reached. Massagers with rope heaters shall meet the 300 h endurance test as specified in Clause 7.19 of CSA C22.2 No. 36.</p> <p><u>Household hand-held equipment shall be operated continuously at no-load for 20 min. Commercial hand-held equipment shall be operated at no-load for 5 min ON and 5 min OFF until constant temperatures are reached. Equipment that is not intended to be hand-held while in use shall be operated continuously until constant temperatures are reached. Massagers with rope heaters shall meet the 300 h endurance test as specified in Clause 22.102K of CAN/CSA-C22.2 No. 60335-2-23.</u></p>
Annex A		<i>New Annex Added;</i>
		Requirements for Rechargeable Battery Motor-Operated Appliances
A.1		This Annex covers motor-operated appliances (household and commercial) that are powered by rechargeable batteries, either solely, as an alternative, or in conjunction with other sources
A.2		Rechargeable battery motor-operated appliances (household and commercial) that are covered under this Annex shall meet the requirements specified in CSA C22.2 No. 0.23 with the conditions and specifications as required by Annex D of CSA C22.2 No. 0.23, as specified in Clauses A.3 to A.12 below.
A.3		<p>In reference to Indent A of Annex D of CSA C22.2 No. 0.23, except as indicated elsewhere in CSA C22.2 No. 0.23, the requirements in this Standard shall not apply or shall be amended as follows:</p> <ul style="list-style-type: none">a) Clause 8 (Cord-connected double-insulated appliances) does not apply in its entirety.b) The following Clauses do not apply:<ul style="list-style-type: none">Clause 3 (“Basic insulation”);Clause 3 (“Cord-connected equipment”);Clause 3 (“Double-insulated appliance”);Clause 3 (“Double insulation”);Clause 3 (“Permanently connected equipment”);Clause 3 (“Reinforced insulation”);Clause 3 (“Supplementary insulation”);Clause 5.2.3 (Supply cord material);Clause 5.2.5 (Nonmetallic enclosures);Clause 5.2.6 (Flammability of enclosures of unattended appliances);Clause 5.2.7 (Flammability of enclosures of attended appliances);Clause 5.2.8 (Flammability of enclosures);Clause 5.2.14.2 (Leakage current test);



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		Clause 5.2.14.5 (Dielectric strength and insulation resistance test); Clause 5.5 (Supply connections); Clause 5.6 (Strain relief, flexing, and cord set retention); Clause 5.7.3 (Leads); Clause 5.10.2 a) and b) (Overheating protection); Clause 5.11.5 (Cord connected equipment); Clause 5.13.6 (Screw-shells); Clause 5.14.2 (Polarization of overcurrent protective device); Clause 5.14.3 (Ungrounded or double-insulated equipment); Clause 5.15 (Transformers); Clause 5.16 (Spacings); Clause 5.18 (Bonding and grounding); Clause 5.22.2 (Class 2 circuits); Clause 5.22.4 (Internal spacings); Clause 5.22.5 (Component failure); Clause 6.1.1 (Sequence of tests); Clause 6.1.2 (Test voltage); Clause 6.1.3 (Rated frequency); Clauses 6.2.1.1 to 6.2.1.5, and 6.3 (Starting); Clause 6.4 (Rating); Clause 6.5 (Temperature (normal)); Clause 6.6 (Dielectric strength); Clause 6.7 (Temperature abnormal); Clause 6.8 [Overload and endurance (switches and controls)]; Clause 6.9 [Leakage current (Update 3)]; Clause 6.11 (Physical abuse); Clause 6.12 (Strain relief, flexing, and cord set retention); Clause 6.13 (Speed control — Limited short-circuit); Clause 6.17 (High-current arc ignition); Clause 6.18 (Moisture-absorption resistance of insulation); Clause 6.19 (Standard flame); Clause 6.21 [Oven conditioning (nonmetallic enclosures)]; Clause 7.1 c), d), e), and f) (General); Clause 7.4 (Separately supplied components); Clause 7.5 (Single-motor equipment); Clause 7.6 (Voltage); Clause 7.10 (Receptacles); Clause 7.11 (Non-time-delay equipment); Clause 7.13 (Supply conductor temperatures); Clause 7.16.4 (GFCI marking); and Clause 7.18 (Commercial appliances for permanent connection).
		c) The portions of Clause 5.2.14 (Test for outdoor and car wash equipment) that require the outcome of the testing to comply with the leakage current test (Clause 5.2.14.2) and dielectric test (Clause 5.2.14.5) shall instead consider increased risk of injury to person,



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		<p>fire, or electric shock for those areas where the voltages are in excess of the hazardous voltage. See Clause 8 of CSA C22.2 No. 0.23. In the application of Clause 8 of CSA C22.2 No. 0.23, a part that is wetted during the testing of Clause 5.12.15 shall be considered an accessible part.</p> <p>d) The portions of Clauses 5.3 (Protection against corrosion), 5.4.3 (Connections to live metal parts), and 5.7.4 (Rigid wiring terminals), that require the spacings not to be smaller than those required by Clause 5.16, shall instead consider the creepage distances and clearances in Clause 20 of CSA C22.2 No. 0.23.</p> <p>e) Table 1 and Tables 3 to 10 do not apply.</p> <p>f) Figure 6 does not apply.</p>
A.4		With respect to Indent B of Annex D of CSA C22.2 No. 0.23, users of car wash equipment, high-pressure washer/cleaners, and watercrafts shall be considered to be wet during the use of these products, except for wet pick up and extractor-type appliances.
A.5		With respect to Indent C of Annex D of CSA C22.2 No. 0.23, LT specification shall be provided for detachable or separable battery packs for products intended for outdoor use or located or stored indoors where the temperature can be below 10 °C shall be considered to be exposed to environments that would require an ELT: -35 °C classification.
A.6		With respect to Indent D of Annex D of CSA C22.2 No. 0.23, during the heating test, appliances shall be operated under the maximum normal load condition in accordance with Clause 6.2.1.1.
A.7		With respect to Indent E of Annex D of CSA C22.2 No. 0.23, the temperature limits listed in Table 9.1 of CSA C22.2 No. 0.23 shall be considered suitable.
A.8		With respect to Indent F of Annex D of CSA C22.2 No. 0.23, during the abnormal tests, the appliance shall be operated at no-load in accordance to Clause 11.1.3 of CSA C22.2 No. 0.23.
A.9		With respect to Indent G of Annex D of CSA C22.2 No. 0.23, additional or alternate safety critical functions (SCFs) are specified in Tables A.1 and A.2 of this end-product Standard.
A.10		With respect to Indent H of Annex D of CSA C22.2 No. 0.23, the impact shall be on a concrete surface.
A.11		With respect to Indent I of Annex D of CSA C22.2 No. 0.23, products covered by this end-product Standard are not required to have this special switching arrangement.
A.12		With respect to Indent J of Annex D of CSA C22.2 No. 0.23, battery-operated appliances that may also be operated or charged by mains or a non-isolated source as described in CSA C22.2 No. 0.23, shall also meet the requirements of C22.2 No. 68 that apply to the risk of electric shock. For these types of appliances, the exempted requirements specified in Clause A.3, Items a) and b) of this end product Standard, might be applicable.



CLAUSE	VERDICT	COMMENT
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Protective devices employing electronics - Required performance levels

Table A.1	Type and purpose of SCF	Minimum performance level (PL)
	Protective devices employing electronics	Shall be evaluated using fault conditions of Clause 11.6 of CSA C22.2 No. 023 without the loss of the protective function

Motorized chairs, beds, and exercise appliances - Required performance levels

Table A.2	Type and purpose of SCF	Minimum performance level (PL)
	Control switches or devices employing electronics	C
	Provide desired switch-off the appliance if continued operation exposes the user to a risk of injury due to entrapment	C

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.