

STANDARD INFORMATION

Standard: CSA E60335-2-32

Standard ID: Safety of Household and Similar Electrical Appliances - Part 2-32: Particular Requirements for Massage Appliances [CSA E60335-2-32:2020 Ed.3]

Previous Standard ID: Safety of Household and Similar Electrical Appliances - Part 2: Particular Requirements for Massage Appliances [CSA E60335-2-32:2001 Ed.2]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **January 31, 2023**

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. Reports not updated to this version by the effective date above will be withdrawn.

This Standard is intended to be used in conjunction with CSA C22.2 No. 60335-1:16. Additional changes may be required to show compliance to the new edition of CSA C22.2 No. 60335-1:16.

Overview of Changes:

- Aligns the text with 60335-1
- Additional requirements for temperatures of external accessible surfaces
- New mechanical strength test for hand-held appliances

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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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>
7	Info	Marking and instructions <i>New clause added;</i>
7.1		<i>[Add the following dashed item to the list in the Part 1]</i> — date of manufacture in the form of a date or code identifying the period of manufacture.
7.12		The instructions for appliances having heated parts in contact with the skin shall include the substance of the following: The appliance has a heated surface. Persons insensitive to heat must be careful when using the appliance. <u>The instructions for appliances having a liquid container that is filled with water shall include the substance of the following:</u> <u>If water leaks from the appliance, the appliance should no longer be used.</u> <i>New clause added;</i>
7.16		If replaceable fuses are provided (internal or external to the appliance), the maximum size, in amperes, of the fuse to be used in each circuit shall be marked on or adjacent to its fuseholder. Other relevant ratings, including time characteristic, breaking capacity, and voltage, shall be included with the current rating if replacement with a fuse that has other ratings could result in non-compliance with this Standard.
7.16A		For permanently connected appliances where temperatures within the terminal box exceed 60 °C during the test of Clause 11, the following marking shall appear near the supply entrance or on the nameplate: USE SUPPLY WIRES SUITABLE FOR ___ °C And EMPLOYER DES FILS D'ALIMENTATION POUR ___ °C The temperature to be marked shall be 75 °C, 90 °C, or 110 °C for temperature ranges of 61 °C to 75 °C, 76 °C to 90 °C, or 91 °C to 110 °C respectively.



CLAUSE	VERDICT	COMMENT
11	Info	Heating
		<i>New clause added;</i>
11.3		<p>Where the external accessible surfaces are suitably flat and access permits, then the test probe of Figure 101 is used to measure the temperature rises of external accessible surfaces specified in Table 101. The probe is applied with a force of 4 N \pm 1 N to the surface in such a way that the best possible contact between the probe and the surface is ensured. The measurement is performed after a contact period of 30 s.</p> <p>The probe may be held in place using a laboratory stand clamp or similar device. Any measuring instrument giving the same results as the probe may be used.</p> <p><u>During the test, the temperature rises are monitored continuously and shall not exceed the values shown in Table 3 and Table 101.</u></p>
11.8		<p>The temperature rise of parts in contact with skin or hair shall not exceed the limits specified for handles that are continuously held.</p> <p>The water temperature at the middle of the water volume shall not exceed 50 °C.</p> <p>For massage pads with heating elements, the temperature limits specified for heating pads in IEC 60335-2-17 apply.</p>
13	Info	Leakage current and electric strength at operating temperature
		<i>New clause added;</i>
13.2		<p>For stationary class I appliances, except fixed appliances, the leakage current shall not exceed 0,75 mA.</p>
15	Info	Moisture resistance
		<i>New clause added;</i>
15.2		<p>Water filled foot massagers are completely filled with water containing approximately 1 % NaCl and are then emptied within 30 s by being tilted or overturned in the most unfavourable way.</p>
16	Info	Leakage current and electric strength
		<i>New clause added;</i>
16.2		<p>For stationary class I appliances, except fixed appliances, the leakage current shall not exceed 0,75 mA.</p>
19	Info	Abnormal operation
		<i>New clause added;</i>
19.13		<p>During the test of 19.101, the temperature rise of the surface of the container shall not exceed 60 K.</p>



CLAUSE	VERDICT	COMMENT
20	Info	Stability and mechanical hazards <i>New clause added;</i> Hand-held appliances are subjected to the test while placed on their charging stands. Modification: The appliance shall not overturn unless the appliance or part of the appliance which overturns complies with all of the following: 20.1 <ul style="list-style-type: none">– it only contains circuits operating at safety extra-low voltage according to 8.1.4;– it only contains low power circuits according to 19.11.1;– it is dropped from a height of 1 m on a rigidly supported concrete surface 5 times, the appliance being held in different positions likely to occur. After the drops, the appliance or part of the appliance as relevant shall show no damage so that compliance with 15.1 and 20.2 is not impaired;– it has a maximum weight of 450 g when ready for use;– it does not have sharp edges when ready for use. An edge with a radius of 1 mm or more is not considered a sharp edge.
21	Info	Mechanical strength <i>New clause added;</i> The hand-held part of the appliance is placed in a sling that is constructed by tying together the four corners of a single layer of cheesecloth. The lowest point of the sling is suspended at a height of 900 mm above a concrete or similar hard surface. 21.101 The hand-held part of the appliance in the sling is dropped from a stationary position. The test is carried out a total of five times with the hand-held part of the appliance being positioned so that it falls onto the concrete surface in five different orientations. The appliance shall not be damaged to such an extent that compliance with 8.1 and Clause 29 is impaired.
22	Info	Construction <i>New clause added;</i> Appliances rated less than 150 V may use a single-pole switch for disconnection from the supply mains if the supply cord or cord set is polarized. This switch shall not be used to disconnect the neutral supply conductor. 22.2 All other appliances shall provide all-pole disconnection from the supply mains.



CLAUSE	VERDICT	COMMENT
22.39A- 22.39F		<i>New clauses added;</i> These clauses contain requirements for lamps. See standard for details.
22.101		<i>New clause added;</i> Appliances shall be constructed so that hair cannot be drawn into the appliance or be entangled in moving parts. Compliance is checked by inspection.
22.102		<i>New clause added;</i> Appliances that use water and in which air is circulated shall be constructed so that the water cannot penetrate into the motor and come into contact with live parts or basic insulation. Compliance is checked by the following test. The overflow outlet is blocked and the appliance is filled until water overflows. Non-return valves are rendered inoperative one at a time. After the test, there shall be no trace of water on insulation that could result in a reduction of clearances or creepage distances below the values specified in Clause 29.
22.102A- 22.102C		<i>New clauses added;</i> These clauses contain requirements for supply cords. See standard for details.
25	Info	Supply connection and external flexible cords <i>New clause added;</i> Supply cords shall have temperature ratings that are suitable for the temperature encountered on surfaces of the appliance that the supply cord could contact during normal use. Supply cords for household floor-standing appliances shall be type SV or SVT. Equivalent "Not for hard usage" cords may be used. Supply cords for other household appliances shall be type SPT-1 if rated more than 0.5 A. Equivalent "Not for hard usage" flexible cords may be used. If rated 0.5 A or less, tinsel cord types TPT or TST may be used if the cord is not longer than 2.45 m (8 ft) and the cord is attached to the appliance directly or by a plug other than a standard flatiron or appliance plug. Supply cords for commercial floor-standing appliances shall be type SJ or SJT. Equivalent "For hard usage" cords may be used. Supply cords for other commercial appliances shall be type SV. Equivalent "Not for hard usage" cords may be used.



CLAUSE	VERDICT	COMMENT
		<i>New clause added;</i>
25.25A		<p>A hand-held appliance rated over 30 V that employs a cord set shall have the appliance inlet and cord set connector tested as follows.</p> <p>The appliance plug retention system shall be subjected to 1000 cycles of plug insertion and removal, with each cycle consisting of an insertion into and removal from the appliance.</p> <p>The insertion and removal of the plug shall be done at a rate not exceeding 10 cycles/min, unless the manufacturer agrees to a faster rate. The appliance shall not be energized.</p> <p>At the end of the test, the plug retention system shall withstand for 1 min a 4.4 N withdrawal force axially applied to the cord, without the plug becoming disengaged from the retention system.</p>
		<i>New clause added;</i>
25.25B		Appliances intended to be permanently connected shall have a terminal box, or the equivalent, suitable for conduit connection to the supply. Terminal boxes shall comply with CSA C22.2 No. 0, CSA C22.2 No. 18.1, or CSA C22.2 No. 18.2.
26	Info	Terminals for external conductors
		<i>New clause added;</i>
26.6		Terminal parts such as binding head screws, bolts, and studs of hand-held appliances shall not be smaller than Size No. 3.
30	Info	Resistance to heat and fire
		<i>New clause added;</i>
30.2A		<p>Non-metallic enclosures for live parts shall comply with the following temperature stability (mould stress relief) test.</p> <p>The appliance shall be placed in a circulating-air oven for 7 h at 70 °C or a temperature 10 K higher than the maximum temperature rise on the enclosure during the test of Clause 11 plus 25 °C, whichever is higher.</p> <p>After the test, the appliance shall continue to comply with the requirements of Clauses 8, 16, and 29.</p>