

Issued: July 1, 2016

#### **Standard Information**

Standard Number: CSA C22.2 No. 207

Standard Name: Portable and stationary electric signs and displays Standard Edition and Issue Date: 2<sup>nd</sup> Edition Dated June 1, 2015

Date of Previous Revision to Standard: 1<sup>st</sup> Edition Revised October 1, 1989

#### **Effective Date of New/Revised Requirements**

Effective Date (see Schedule below): May 1, 2017

#### Impact, Overview, Fees 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requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revised requirements.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: CSA C22.2 No. 207-15 incorporates the requirements of TILs B-46, B-53 and B-55. 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).

Schedule: So that shipping of products with Listing Marks will not be interrupted, an approximate schedule has been established to ensure Listing Reports are found compliant by Effective Date:

- September 1, 2016 = 8 Month Report Review Intertek will review all Reports. Update if compliance is verified or issue Findings Letter/Quote for any re-evaluations needed
- November 1, 2016 = 6 Month Quote Cut-off Quotes returned for necessary re-evaluations
- May 1, 2017 = Effective Date ATM Suspended for all non-compliant Reports

Fees: An initial review of Listing Report (s) will be covered by a direct billing project and will be invoiced at not more than \$1000 per report.

#### **Client Action Required:**

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 - Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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.



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### **Description of New/Revised Technical Requirements**

Clause	Verdict	Comment
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1	Info	Updated to cover LED light sources and retrofit kits for sign conversion. Voltage limits for portable and show - window luminous discharge tube signs and displays for indoor use have been added to reflect CEC Part 1 requirements.
		New clause added;
4.2.5		Printed circuit boards
		Printed circuit boards shall comply with the requirements of Annex E of CSA C22.2 No. 1993.
		New section added;
4.2.6		LED lamps, modules, and controlgear
4.2.6.1		LED modules shall comply with CAN/CSA-C22.2 No. 62031 or CSA C22.2 No. 250.13.
4.2.6.2		LED controlgear shall comply with CAN/CSA-C22.2 No. 61347-2-13 or CSA C22.2 No. 250.13.
4.3	Info	Electrical enclosures
4.3.3	Info	Enclosure materials and metal thickness
4.3.3.2		Additions to existing requirements are <u>underlined</u> and deletions are shown <del>lined out</del> below.  Nonmetallic enclosures shall be capable of withstanding the flame test of Clause 3.22.5, except for glass or ceramic materials.  Enclosures or baffles of polymeric material shall, based on the specific application, have performance characteristics as identified in Table 1 and the following requirements, as applicable:  a) For fixed or stationary signs, the polymeric ball impact test of Clause 16.41 of CSA C22.2 No. 250.0 applies for the parts that can be subjected to impact after final installation.  b) For portable signs, the drop-impact test of Clause 8.8 of CSA C22.2 No. 1993 applies.  c) Enclosures shall comply with the mould stress-relief test of Clause 16.4 of CSA C22.2 No. 250.0 for moulded or formed thermoplastic material.  d) Enclosures shall meet the flammability ratings from lower to higher: HB, V-2, V-1, V-0, 5-VB, 5-VA.  e) An enclosure shall have an RTI (relative temperature index rating) equal to or greater than its maximum operating temperature, or a generic thermal index as specified in CAN/CSA-C22.2 No. 0.17.  f) An enclosure of polymeric material where any uninsulated live parts are located within 0.8 mm (0.032 in) of the enclosure shall meet the requirements of Table 1 for CTI (comparative tracking index rating), HWI (hot-wire ignition rating), and HAI (high-current arc resistance to ignition rating), respectively corresponding to the tests as specified in CAN/CSA-C22.2 No.



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Clause	Verdict	Comment
		New section added;
4.8.5		, and the second
		Separation of circuits
4.8.5.1		Conductors of different class circuits, such as Class 2 and branch circuits, that might come
		into contact with each other including wires in the same cable, raceway or enclosure, shall have insulation rated for the highest of the circuit voltages, or shall be separated by a
4.0.3.1		minimum of 6.4 mm (0.25 in), or by the proper routing of the conductors within the unit, or by
		the effective use of barriers, clamps, or equivalent separation.
		A barrier used to separate different class circuit wiring in a field wiring compartment shall be
		made of
		a) 0.4 mm (0.016 in) or thicker metal bonded to other grounded parts of the sign;
4.8.5.2		b) 0.7 mm (0.028 in) or thicker vulcanized fibre;
		c) 0.25 mm (0.010 in) or thicker impregnated glass fibre sleeving rated for subjected
		temperature;
		d) 2 mm (0.440 in) on this key along an accoming on
		d) 3 mm (0.118 in) or thicker glass or ceramic; or
		e) 0.7 mm (0.028 in) or thick moulded polymeric material rated for subjected temperature.
4.14	Info	Sizes of conductors and methods of wiring for high-voltage luminous discharge tube
7.17	11110	signs
		New clause added;
4.14.4		Flexible metal conduit used to enclose high-voltage cables shall be of trade size 16 mm (1/2
		in) or larger.
4.15	Info	Spacings for high-voltage wiring
		New clause added;
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4.15.8		Flexible non-metallic tubing, associated non-metallic fittings for use with GTO cable, non-metallic caps, and sleeves used to enclose high voltage connections between electrode leads and GTO cable conductors shall comply with the requirements in Annexes A and B
		respectively.
		Additions to existing requirements are <u>underlined</u> and deletions are shown <del>lined out</del> below.
		Marking
4.20		Signs shall be legibly marked in a permanent manner with text of a 2.4 mm minimum height, and shall be where it will be readily visible after installation with the following:
		a) the manufacturer's name, tradename, trademark, or other recognized symbol of identification;
		b) the month and year of manufacture, at least, in a location accessible without the use of tools. Date coding, serial numbers or equivalent means may be used;
		c) signs suitable for indoor use only shall be so marked in French and English; and
		d) the rated input voltage, frequency, total amperes or volt amperes input, and the number of circuits if more than one.



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Clause	Verdict	Comment
		New clause added;
4.21.1.2		A sign utilizing a lamp type covered by temperature tests in CSA C22.2 No. 250.0 shall be
		temperature tested using test method specified in that Standard.
4.21.1.3		New clause added;
		A sign utilizing light emitting diode (LED) equipment shall comply with the normal temperature tested as specified in CSA C22.2 No. 250.0, with the following conditions:
		a) The test voltage for the normal temperature test shall be at the minimum nominal voltage within the range marked on the nameplate of the sign, unless testing at the maximum nominal voltage within the marked range represents a more severe condition, in which case the equipment shall also be tested at the maximum nominal voltage.
		b) A sign rated 50 to 60 Hz shall be tested for the normal temperature test in Clause 4.21.1.2 at 50 Hz unless testing at 60 Hz represents a more severe condition, in which case the equipment shall also be tested at 60 Hz.
5.10	Info	Marking
5.10.4		A minimum text height of 2.4 mm is required for markings visible after installation, such as manufacturer's name, date code, indoor use only, and electrical ratings.
6	Info	Device la signa
6	Info	Portable signs New section added;
6.5		Portable signs having rated secondary open-circuit of more than 7500 V  New requirements based on TIL No. B-55 have been added, covering construction, marking
		and tests.  New section added;
6.6.5		Additional marking applicable to signs in accordance with Clause 6.5.
0.0.5		The marking specified in Clauses 6.6.5.1 to 6.6.5.4, shall appear in English and French. The marking specified in Clause 6.6.5.3 shall be visible after installation. The marking specified in Clauses 6.6.5.1 and 6.6.5.2 may accompany the sign.
0.7.0		New section added;
6.7.2		Impact
6.7.2.1		Nonmetallic panels and faces intended to provide mechanical protection for neon tubes shall be subjected to an impact of 3.5 J, using a steel ball having a diameter of approximately 50 mm and a mass of approximately 0.5 kg.
6.7.2.2		The nonmetallic panels and faces when subjected to the test of Clause 6.7.2.1, shall not crack or break and expose parts that are required to be protected in accordance with Clause 6.5.1.1a). The probe, as specified in Clause 4.3.2.2, shall be used to determine parts that might be exposed.



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Clause	Verdict	Comment
		New clause added;
6.7.3		Loading  Where required by Clause 6.5.1.10 b), a sign-supporting device shall be capable of supporting for 1 h a steady pull of six times the total mass supported, applied vertically regardless of actual loading conditions.
6.7.4		New clause added;  Probe  The probe illustrated in Figure 3 shall not contact neon tubes when inserted through any openings in a protective panel or face and the equivalent, with the probe in positions most likely to cause mechanical damage to the neon tubes.
Annex A		New section added;  Requirements for non-metallic tubing and associated non-metallic fittings for use with GTO cable in high-voltage luminous-discharge-tube signs  This new section includes new construction requirements, performance test requirements, markings, and instructions for non-metallic tubing and associated non-metallic fittings for use with GTO cable in high-voltage luminous-discharge-tube signs (see standard for section details).
Annex B		New section added;  Requirements for component nonmetallic caps and sleeves used to enclose high voltage connections  This new section includes new construction requirements, performance test requirements, markings, and instructions for component nonmetallic caps and sleeves used to enclose high voltage connections (see standard for section details).
Annex C		New section added;  Retrofit kits for sign conversion  This new section includes new construction requirements, performance test requirements, markings, and instructions for Retrofit kits for sign conversion (see standard for section details).
Annex D		New section added;  Requirements for photovoltaic powered signs  This new section includes new construction requirements for photovoltaic powered signs (see standard for section details).  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.