

## STANDARD INFORMATION

**Standard:** CSA C22.2 No. 158

**Standard ID:** Terminal Blocks [CSA C22.2#158:2023 Ed.4]

**Previous Standard ID:** Terminal Blocks [CSA C22.2#158:2010 Ed.3]

## EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

**Effective Date:** **March 8, 2025**

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 Reports not updated to this version by the effective date above will be withdrawn.

### Overview of Changes:

- New requirements for spacings for LED lighting equipment
- Revisions to short-circuit current evaluation

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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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 <del>lined out</del> below.</i>
1	Info	<b>Scope</b> <i><b>New clause added;</b></i>
1.5		Protective conductor terminal blocks (PCTB) are covered under CSA C22.2 No. 60947-7-2.
5	Info	<b>Construction</b>
5.5	Info	<b>Spacings</b> For terminal blocks used in LED lighting equipment (see Table 1, Item F), where the rated potential voltage is greater than 300 V, linear interpolation shall be done using the following to calculate minimum spacings:  5.5.9 a) through-air minimum spacing: $\text{mm} = 0.0107 (V) - 1.6$ ; and b) over-surface minimum spacing: $\text{mm} = 0.0210 (V) - 3.1$ .  The calculated minimum spacings using this method shall be rounded up to the next higher 0.1 mm increment.
Annex A	Info	<b>Terminal blocks with short-circuit current ratings</b>
A.2	Info	<b>Short-circuit current evaluation</b> Line connections and load connections to the shorting point shall be made with conductors 1.22 m (4 ft) in length per connector. <u>Conductor size shall be determined in accordance with Table A.2, based on the wire temperature rating marked on the terminal block. If the terminal will not receive that size of wire, the maximum allowable wire size shall be used.</u> The conductors shall be routed through conduit no greater than 305 mm (12 in) in length installed on the enclosure. There shall be no lashing or additional support of the conductor within the enclosure. <u>Lashing may be used outside the enclosure. Line connections longer than 1.22 m (4 ft) may be provided if the additional length is included in the circuit calibration.</u>  <u>Note: Short-circuit tests conducted with copper conductors are representative of terminal blocks rated for use with copper, aluminum, and copper-clad aluminum conductors that have the same size, type, and torque ratings.</u>
A.2.5		
A.2.7		All terminals shall be torqued, crimped, or connected according to the manufacturer's instructions. <u>Where tightening torque values are not marked on the equipment or included in the installation instructions, the values specified in CSA C22.1, Tables D6 and D7 may be used.</u>



CLAUSE	VERDICT	COMMENT
A.2.10		<p><b><i>New clause added;</i></b></p> <p>A 30 A one-time, no-delay fuse shall be connected between the mounting plate or metal enclosure and the test station ground terminal.</p>
A.2.11		<p><b><i>New clause added;</i></b></p> <p>Tests conducted using stranded conductors in the range of 30 to 10 AWG (0.05 to 5.3 mm<sup>2</sup>) shall be representative of testing with solid conductors of the same size. Terminal blocks rated for solid conductors greater than 10 AWG (5.3 mm<sup>2</sup>) shall have separate samples to test for solid and stranded conductors.</p>
A.2.12		<p><b><i>New clause added;</i></b></p> <p>Stranded conductors shall be in accordance with Table 3 for 22 to 10 AWG (0.32 to 5.3 mm<sup>2</sup>).</p>