

STANDARD INFORMATION

Standard Number: UL 891 / CSA C22.2 No. 244

Standard Name: Switchboards

Standard Edition and Issue Date: 12th Edition dated July 19, 2019

Date of Revision: July 19, 2019

Date of Previous Revision of Standard: 11th Edition revised October 21, 2012

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **January 31, 2022**

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requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revised requirements.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: Additional requirements for switchboards with inlets. 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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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
		<i>Additions to existing requirements are <u>underlined</u> and deletions are shown lined out below.</i>
6	Info	Information to be given regarding the assembly
6.2	Info	Markings
6.2.1	Info	General
		<i>New clause added;</i>
6.2.1.12.2		Switchboards with inlets (see 8.8.4.2) shall be marked with an additional short circuit rating where a different rating exists when connected to the inlets.
		<i>New clause added;</i>
6.2.1.15.4		For switchboards with inlets (see 8.8.4.2) and an additional short circuit current rating as specified in 6.2.1.12.2, that portion of the switchboard circuit which will only be powered when connected to the alternate source may include components with short circuit current ratings less than the rating marked on the section or interior, but not less than the rating noted in 6.2.1.12.2.
6.2.17	Info	Restricted access switchboards
		<i>New clause added;</i>
6.2.17.1		A switchboard intended to be accessible only to qualified persons shall be marked: "This switchboard shall be located where accessible only to qualified persons," or equivalent. See 8.4.2.1.
		<i>New section added;</i>
6.2.18	Info	Switchboards with provisions for cord connections
		Switchboards provided with single pole separable connectors (input or output connections) that are not mechanically interlocked shall be marked:
		a) "FOR USE BY QUALIFIED PERSONNEL ONLY", or equivalent, and b) With instructions as to the proper order of connection and disconnection, as noted in the below example:
6.2.18.1		WARNING – Risk of Electric Shock Plug connection should be in the following order; 1) Equipment grounding conductor connectors; 2) Grounded circuit conductor connectors; and 3) Ungrounded conductor connectors. Disconnection should be in the reverse order.



CLAUSE	VERDICT	COMMENT
6.2.18.2		The marking required by 6.2.18.1 shall be located adjacent to the point of connection.
6.2.18.3		Switchboards with inlets shall be marked to indicate the type of derived system that the switchboard is intended to interconnect in accordance with either (a) or (b): a) Switchboards that do not switch the neutral conductor shall be marked with the following: "WARNING - For Connection of a Nonseparately Derived (Floating Neutral) System Only." b) Switchboards that switch the neutral conductor shall be marked with the following: "WARNING - For Connection of a Separately Derived (Bonded Neutral) System Only"
6.2.18.4		Switchboards with inlets shall be marked to indicate the short circuit current rating when the switchboard is powered by a source that is connected through the use of the inlets. See 6.2.1.12.2.
8	Info	Design and construction
8.1	Info	Mechanical design
8.1.12	Info	Service equipment for use in Canada
8.1.12.11		<i>New clause added;</i> Where the service equipment also functions as a transfer switch and where the neutral assembly is located within the service-disconnecting compartment a second neutral assembly may be installed outside the service-disconnecting compartment and within the service equipment enclosure and be connected to the neutral assembly located in the service-disconnecting compartment by the conductor sized in accordance with the Canadian Electrical Code, Part I. Note: Examples of situations where a second neutral assembly may be installed are: a) if the metering is supplied ahead of the switchboard; or b) if it is known that the emergency generator will be installed after commissioning of the switchboard is completed.



CLAUSE	VERDICT	COMMENT
8.8	Info	Electrical connections inside an assembly: bars and insulated conductors
8.8.2	Info	Wiring terminals
8.8.2.3	Info	Pressure wire connectors
		Load terminals for field wiring, including neutral load terminals and connections to the ground bus for load equipment grounding conductors, shall be located so that: a) there will be no need to reach across or beyond an uninsulated ungrounded line bus in order to make a load connection; and b) a tool not longer than 254 mm (10 in) used to tighten a load connection, will not contact a live part that is not obvious to the person making the connection. This shall be determined with branch units connected. <u>Load terminals for field wiring shall be located as follows:</u> a) <u>Connections to the ground bus for load equipment grounding conductors shall be so located that it is not necessary to reach across uninsulated ungrounded bus in order to make connections.</u> b) <u>Where multiple branch or feeder neutral load terminals are grouped together in one location, these terminals shall be so located that it is not necessary to reach across uninsulated ungrounded bus in order to make connections.</u> c) <u>Where only one branch or feeder set of neutral load terminals are grouped with its associated ungrounded load terminals, they shall be so located that it is not necessary to reach across energized uninsulated bus in order to make connections. Bus on the line side of service, branch, or feeder disconnects is considered energized with respect to its associated load side circuits.</u> d) <u>Ungrounded load terminals shall be so located that it is not necessary to reach across energized uninsulated bus in order to make connections. Bus on the line side of service, branch, or feeder disconnects is considered energized with respect to its associated load side circuits.</u> e) <u>Connections referenced in b, c, or d shall be so located that a tool not longer than 254 mm (10 inches) used to tighten these connections will not contact a live part that is not obvious to the person making the connection. This shall be determined with branch units connected.</u>
8.8.2.3.14		
		<i>New section added;</i>
8.8.4		Switchboards with Inlets and Outlets See standard for details.



CLAUSE VERDICT COMMENT

New table added;

Receptacle ratings when branch circuit supplying two or more receptacles

Table 34

Branch circuit rating, A	Receptacle rating, A
15	Not over 15
20	15 or 20
30	30
40	40 or 50
50 and higher	Receptacle rating shall not be less than the branch circuit rating

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.